WIDIA

WIDIA™

TOOLING SYSTEMS

TOOLING SYSTEMS

WIDIA

WIDIA™ Means Complete Quality

As an innovator for more than 80 years, the WIDIA Products Group has been designing and manufacturing metalcutting products that make customer machining processes more efficient and effective.

With thousands of products in our portfolio, the WIDIA Products Group offers competitive advantages that will enhance your productivity and bolster your profitability.

To learn more, contact your local Authorized WIDIA Distributor or visit **www.widia.com**.

TOOLING SYSTEMS

WIDIA

Tooling Systems

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HSK Shank Tools B1–B183
BTKV Shank Tools C1–C37
CVKV Shank Tools C38–C67
BT Shank Tools D1–D91
CV Shank Tools E1–E79
DV Shank Tools F1–F71
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WIDIA™ means complete quality

When you buy products from the WIDIA family of brands, you're not just buying speed, power, and precision — you're buying complete quality.

The WIDIA Products Group brands offer the most complete portfolio of precision-engineered products and engineered-solution services available today. With more than 14,000 turning, milling, and holemaking products in our portfolio and a skilled network of Authorized Distributor partners, you'll find everything you need from one single source.

80+ Years of Quality

1925
Application to register "WIDIA" as a trademark

1926
Tungsten carbide production begins

1930
WIDIA wins the Grand Prix at the world exposition EXPO in Liege

1962
First patent granted for coated carbide inserts

1968
Launch of first global coated grade

1987
Launch of the Widaflex™ tooling system for turning, holemaking, and milling

2000
QS 9000 TES and VDA 6.4 certification for the WIDIA operations in Essen and Lichtenau

2006
WIDIA celebrates 80 years

2009
Launch of the TN5100 and TN7100 Series grades for turning

2011
Launch KM™ and Erickson™ Portfolio

Technical expertise
you can count on

WIDIA™ brand cutting tools are available exclusively through a specialized network of Authorized Distributor partners whom you can count on to deliver much more than products.

They will show you how to:

- Significantly reduce cycle time.
- Improve machine tool utilization.
- Achieve measurable productivity improvements.
- Take advantage of proven supply chain solutions.
- Access local inventory and best-in-class technical support.
- Request onsite demonstrations of the latest tooling technology.

The most powerful
family of brands in the industry

The WIDIA family of brands is well served by a global network of the finest Authorized Distributors in the industry, selected for their specialized expertise in the areas of:

Turning, Holemaking, Indexable Milling, and Tooling Systems

WIDIA™ | WIDIA™ MANCHESTER™ | WIDIA™ CLAPPDICO™ | WIDIA™ CIRCLE™ | WIDIA™ METCUT™

Solid Carbide End Milling and Solid Carbide Drilling and Reaming

WIDIA™ HANITA™ | WIDIA™ RÜBIG™ | WIDIA™ METAL REMOVAL™

Tapping Operations

WIDIA™ GTD™

Easy to order

Finding the right WIDIA™ products for your machining applications has never been easier. Our engineers and Authorized Distributor partners are experts in high-performance machining. They will work with you to determine the correct product for your application, then order, ship, and deliver the product with the attention to customer service you would expect from a world-leading brand.

Supply chain services

Whether your manufacturing enterprise involves batch processes or mass production, or your metalcutting machines are organized in lines, cells, or as standalone units, our supply chain services program will eliminate unnecessary overhead, ensure tooling availability, shorten setup times, and minimize costs by 30–90%.

In fact, our solutions often quickly pay for themselves by delivering savings that well exceed your annual spend on cutting tools and supplies.

Global manufacturing

WIDIA products are developed and manufactured at our Centers of Manufacturing Excellence in:

- Essen, Germany
- Lichtenau, Germany
- Nabburg, Germany
- Johnson City, Tennessee, USA
- New Market, Virginia, USA
- Orwell, Ohio, USA
- Solon, Ohio, USA
- Bangalore, India
- Shlomi, Israel

Robust training programs

As a WIDIA™ customer, you can gain access to our exclusive online training program, where you'll find dozens of training courses on our newest products and services.

On the web

Visit our website to read up-to-the-minute information about new products, download electronic copies of product literature, and see a list of industry events in which we are participating. Visit www.widia.com and use the Distributor Finder to locate the Authorized Distributor nearest you.

When you think speed, power, and precision, think complete quality — think WIDIA.

To find the Authorized WIDIA Distributor nearest you, use the Distributor Finder at **www.widia.com**.

Environmental responsibility

We are deeply committed to offering environmentally responsible products that deliver high performance and proven value. With decades of experience in tooling and manufacturing, combined with the synergy of superior engineering, we offer customers some of the most effective opportunities for sustainable manufacturing in the industry.

Sustainable engineering

Leading the way with innovation, engineering, and service in standard and custom tooling. A proven methodology and partnership.

Successful project engineering requires planning, teamwork, and disciplined execution. Through our extensive experience in developing and implementing new project engineering strategies, we have pioneered a proven methodology to help you manufacture new products and bring them to market quickly. Service deliverables are carefully outlined and jointly agreed to before the project begins. We formally evaluate progress and results with you throughout the project through our stage-gate management systems.

With our best-in-class process, you'll experience accelerated time to market, lower overall costs, and reduced risks to implement new technologies.

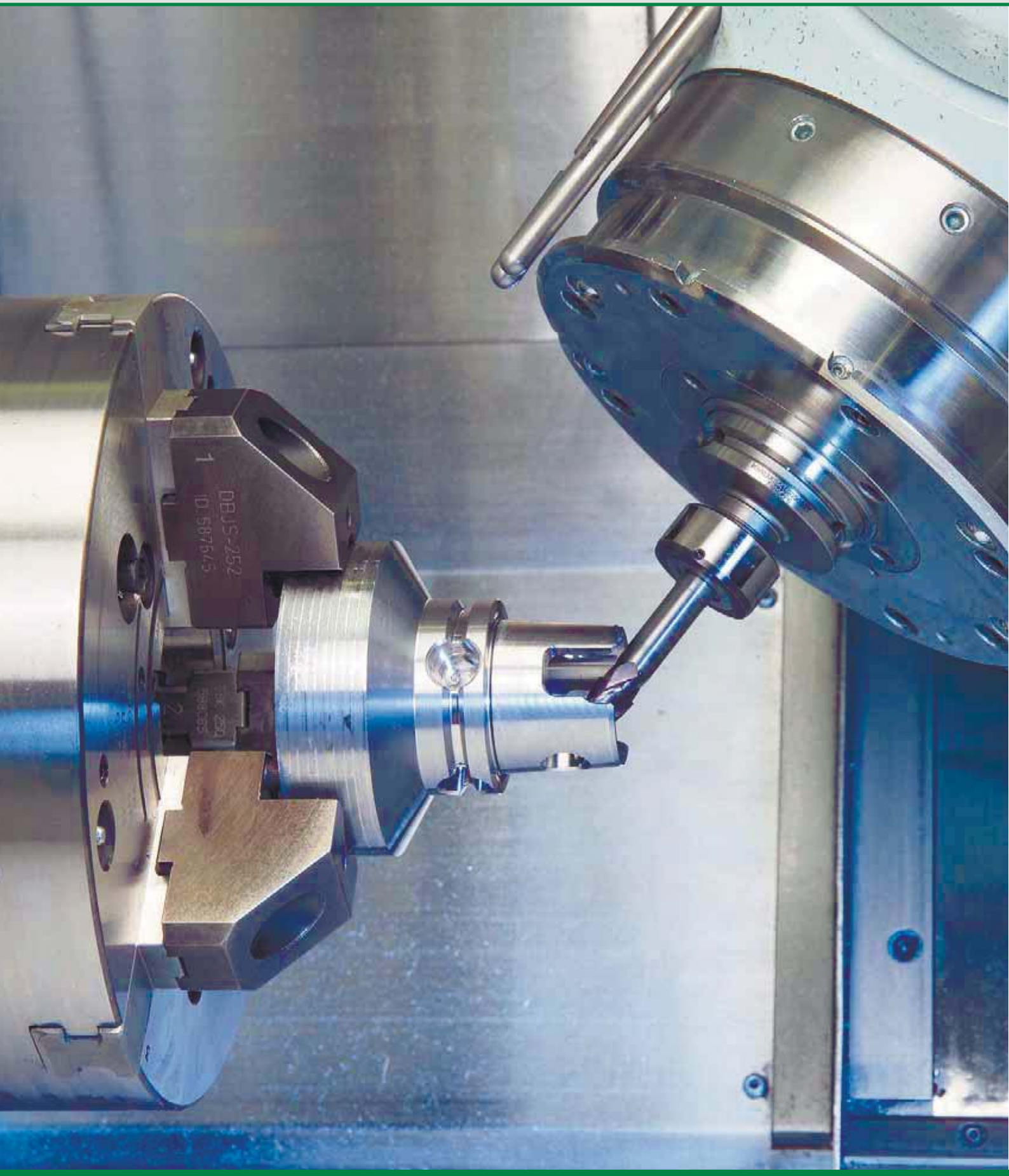
Vendor of choice

We serve every major industrial market throughout the world and are a brand of choice in the most demanding industries, including aerospace, die and mold, automotive, heavy equipment, medical, and general engineering. Throughout our more than 80-year history, we have achieved a reputation for providing our customers with a constant flow of new and unique products and services, specially designed for maximum efficiency and performance. We have enabled customers to become more competitive and more profitable in their own industries, producing parts in less time, with fewer tool changes and longer tool life.

We are committed to providing you with tools and services that deliver the ultimate in customer satisfaction, and we are pleased to feature some of our latest breakthroughs in this catalog. For more information about how these products can impact your bottom line, please contact your local Authorized WIDIA™ Distributor today.

To find the Authorized WIDIA Distributor nearest you, use the Distributor Finder at **www.widia.com**.

WIDIA



KM™ Quick Change

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KM™ Quick Change

KM™ Quick Change Tooling is a central component in achieving dramatic improvement in machine and cutting tool use. It's the choice of manufacturers requiring maximum machine output.

The necessary tasks of changing, setting up, and gaging tools create an excess of machine downtime. For small batch manufacturing operations requiring these frequent setups, KM™ Quick Change Tooling is the most efficient method for reducing lost time and improving the overall quality of the machining process by generating greater productivity and increasing profits.

Aside from Quick Change Clamping units, KM™ has other economical means to improving machine utility. For example, Shrink Fit technology and Hydraulic Chucks are other methods offered for Quick Change Tooling.

There's no better way to begin maximizing production than switching to KM™ Quick Change Tooling. Whether you're looking to purchase a new machine or to gain greater output from your current equipment, WIDIA offers a variety of methods to upgrade your tooling system. The cost of these improvements will be justified by time saved, production increased, and profits.

Uniquely Designed

A uniquely designed clamping mechanism is the driving force of KM™ Quick Change Tooling technology, which is designed around a single shank tapered at a shallow angle.

Using a simple mechanism involving lock rods and a ball track, a high clamping force is generated from a minimal amount of input force. This design is universal, and enables faster tool changes, reducing downtime.

KM™ QUICK CHANGE

Extremely Rigid

The most heavy-duty, rigid modular quick-change tooling available on the market today. The strength of the metal-to-metal locking device is extremely rigid, reducing vibration between components.

Reliability

Not only is KM™ Quick Change Tooling faster and more economical, it's also more reliable. The rigid coupling design enables a high degree of accuracy and repeatability. Low activation forces and decreased vibration provide longer life for clamping units and protect the mechanism in the event of a crash. Clamp strength enables operators to run machines at high maximum speeds without loss of force after continuous use.

Versatility

The KM™ System is a true modular system. It has been designed for all metalcutting operations and provides a standard platform for use throughout your shop. The KM™ clamping mechanism is designed to be used on all types of manufacturing equipment. Available in manual, VDI, KM-LOC-II™, automatic and rotating spindles.

KM™ QUICK CHANGE

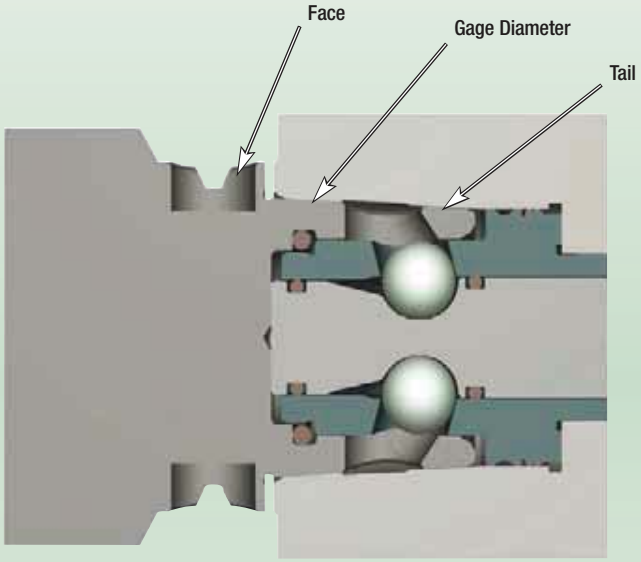
Which KM Backend?

KM Mechanism

The KM Quick Change clamp is a self-locking system with a mechanical amplification of 3:1 to 7:1. This system is effective because it locks by having three contact areas, and the mechanism is sealed with Viton® O-rings to prevent component contamination.

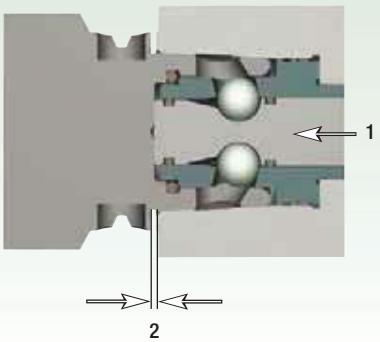
When in the locked position, there is increased interference between contact surfaces, resulting in superior rigidity. Because the face and taper contact within the unit is simultaneous, this provides accurate radial and axial repeatability. Elastic deformation provides greater static and dynamic stiffness.

Three effective contact areas:



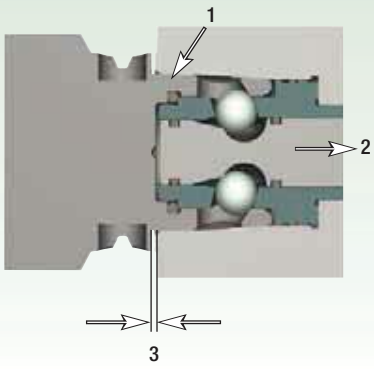
Load/Release Position

1. Bump-off force
2. Bump-off



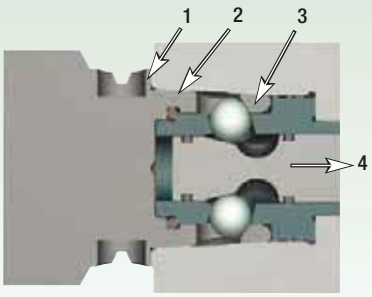
First Contact Position

1. Point of first contact
2. Clamping force
3. Stand-off



Locked Position

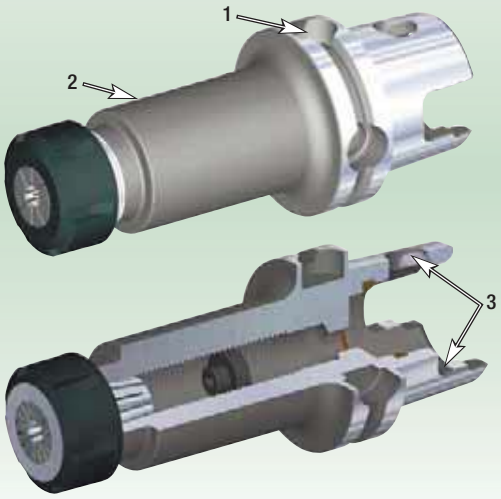
1. Face contact
2. Interference at gage line
3. Tail contact
4. Clamping force



KM Today

All KM Quick Change tooling is made from H13 high-strength steel and comes in a silver satin finish. After the parts are heat treated, qualified pads are machined into the part, which increases the repeatability of the clamping mechanism. KM is an ISO standard (26622).

The addition of the ATC configuration and data carrier capability provides machine tool builders with one standard KM design. Integrating these components also enables customers to use data carriers to record tool offsets and tool life information on the tool.



KM-TS Standardized System

1. Addition of ATC configuration and data carrier capability:

a. Provides machine tool builders with one standard KM design.
b. Enables customers to use data carriers to record tool offsets and tool life information on the tool.

2. H13 high-strength steel, silver satin finish.

3. Qualification after heat-treat process:

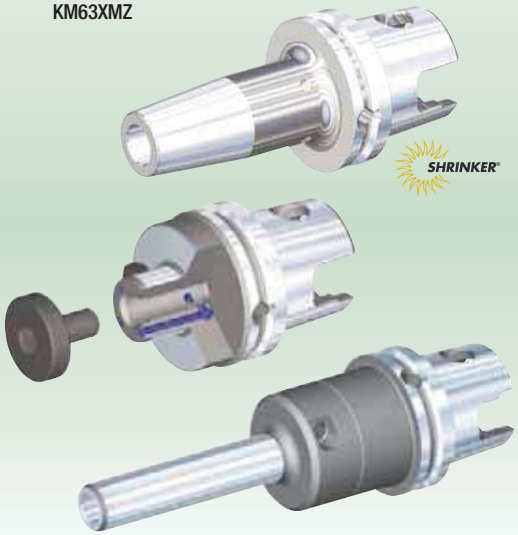
a. Heat-treated, qualified pads are machined into the part, increasing the repeatability.
b. Qualification of the ball tracks after heat treat.

KM Specific Systems

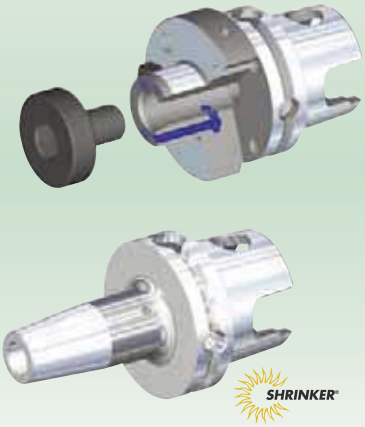
KM63XMZ™ — Designed and used exclusively on Mazak® INTEGREX® Mark IV Series, i-Series, and J-Series machines.

KM80ATC™ — Designed and used on Giddings & Lewis™ VTLs.

KM63XMZ

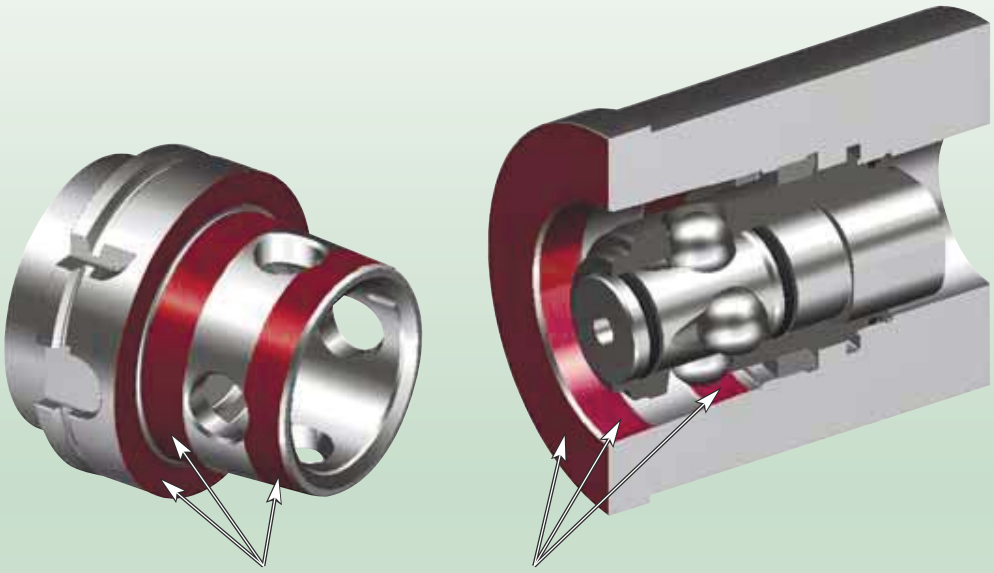


KM80ATC



KM4X — The Next Generation Spindle Connection System

- Heavy-duty, rigid configuration with evenly distributed clamping force.
- Simple design enables front-loaded spindle configuration.
- Balanced-by-design for high spindle speed capacity.
- Capable of performing in a wide range of operations from low speed, high torque to high speed, low torque.



**KM4X three-surface contact for improved stability and accuracy.
Optimized clamping force distribution and interference fit provides higher stiffness.**

Figure 1 represents the load capacity of HSK, PSC, and KM4X. The shaded areas represent the typical requirements for heavy duty in various machining processes. KM4X is the only system that can deliver the torque and bending required to achieve high-performance machining. Some systems may be able to transmit considerable amount of torque, but the cutting forces also generate bending moments that will exceed the interface's limits before torque limits are exceeded.

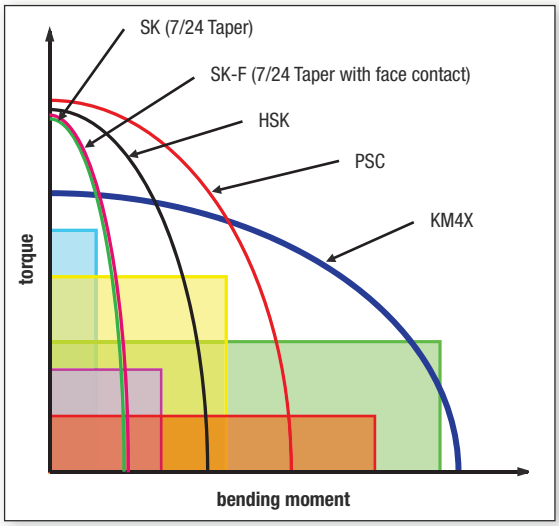


Figure 1

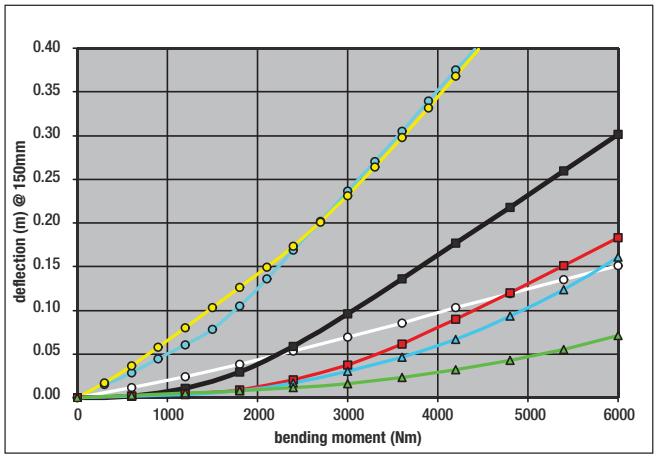
Choosing What's Right

When machining tough materials like titanium, cutting speeds are relatively low due to thermal effects on cutting tools. In response, machine tool builders have improved stiffness and damping on spindles and machine structures over the years. Spindles have been designed with abundant torque at low rotational speeds. Nevertheless, the spindle connection remains the weak link in the system.

The spindle connection must provide torque and bending capacity compatible with the machine tool specifications and the requirements for higher productivity. It becomes obvious that in end-milling applications where the projection lengths are typically greater, the limiting factor is bending capacity of the spindle interface.

With more materials that are tougher to machine and require considerably higher cutting forces from the machine tool, choosing wisely on the spindle interface to maximize cutting edge performance is the key to success.

The KM spindle connections greatly outperform the conventional 7/24 steep taper and its face taper contact derivative, HSK and PSC systems with their greater stiffness advantages to help minimize undesirable vibrations, gaining the best possible productivity from the machine tool. The KM4X is the best large, heavy-duty spindle connection, where optimal rigidity is necessary. It has superb balance between bending and torsion capabilities from the machine tool.



As an example, an indexable helical cutter with 250mm projection from spindle face and 80mm in diameter generates 4620 Nm of bending moment and less than 900 Nm of torque.

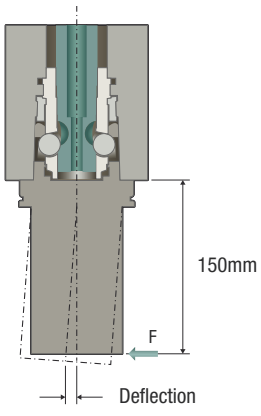
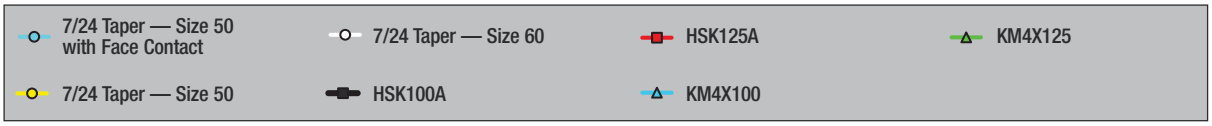


Chart shows a comparison of Steep Taper with and without face contact, HSK, and KM4X.

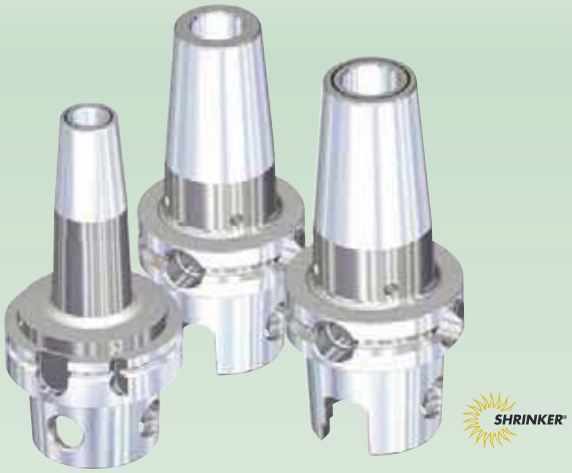


Milling and Holemaking

WIDIA™ Shrink Fit Technology
How it works...

Heat shrinking is not new technology in the tooling industry, but only recently has it been applied to quick-change toolholding systems. Shrink fitting works by having toolholders with an internal bore that is slightly smaller than the connecting end of a cutting shank.

When the toolholder is heated, the bore expands and the shank is able to slip inside the bore. As the toolholder cools, it shrinks, clamping the two pieces together. This creates evenly distributed pressure with minimal vibration between the toolholder and shank that resembles a monoblock tool.

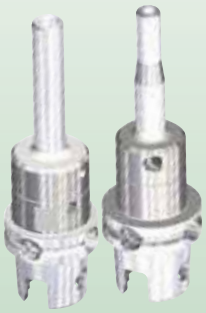


Advantages of Shrink Fit Tooling:

- Evenly distributed pressure 360° along the length of the cutting tool.
- Slim and short toolholder designs can be achieved due to the lack of moveable parts.
- Absolute symmetry of the grip provides the best possible balance for high-speed operations.
- Stronger clamping force than collet or hydraulic chucks.
- Can be repeated thousands of times.
- Capable of greater speeds and feeds.
- Adapts to various shank types.
- Increased productivity.

WIDIA™ Hydraulic Chucks

WIDIA Hydraulic Chucks provide optimum performance when clamping full-cylindrical straight shanks such as solid carbide drills and end mills. Turning a piston pressurizes hydraulic fluid, which expands a thin-walled membrane along the length of the clamping bore. This creates a secure grip that reduces vibration and eliminates micro-cracking on cutting tools. All chucks are capable of utilizing reducer sleeves to maximize their versatility. Hydraulic chucks require virtually no maintenance, aside from routinely cleaning the bore and removing any grease.



Slim Line

Slim-shaped hydraulic chucks for universal use with maximum precision.

Standard/HP Line

Prebalanced chucks with an external screw for radial adjustments. This eliminates the need for removing cutting tools to make fine adjustments.

Trend Line

Like the Standard Line chucks but with 3/8" radial adjustment of the cutting tool length by use of an axial back-up screw through the chuck bore.

Basic Line

Similar to the Trend Line but with larger body diameters that translate to higher stability and increased torque transmission.

WIDIA Collet Chucks

TG Collet Series

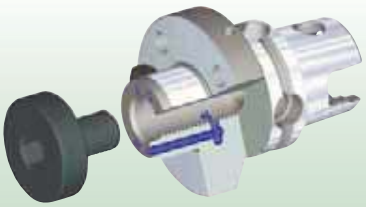
A single angle collet that grips 1:3 tightening torque versus grip torque without a stop screw.

ER Collet Series

An international standard-style collet that can be used in machining applications such as milling, reaming, tapping, and grinding.

WIDIA Shell Mill Adapters

All units come standard with a new coolant to the cutting edge capability. This improves tool life and chip control. Shell mill adapters are available in extended lengths and a range of small mounting diameters.



Turning • Tooling a Turret-Style Lathe

Selection Guide for Turning Products

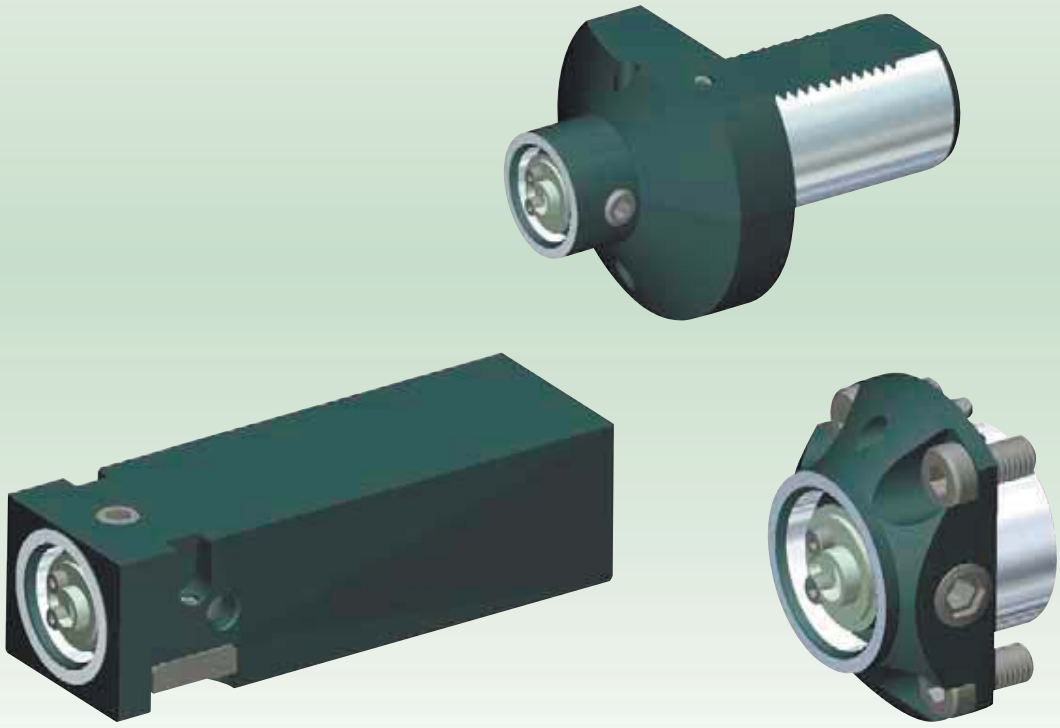
There are several things to consider before choosing the correct KM clamping mechanism. Manufacturers should take an account of how much time is spent setting up a machine or changing the tool. Customers should know if they are comfortable with using a torque wrench regularly, as well.

Other issues may arise when considering the machine tool mounting configurations needed to maximize production and cut downtime. KM clamping has options for manufacturers to upgrade their existing machinery and customize it to fit their needs.

KM Manual Clamping Units

KM Manual Quick Change Tooling is the most economical way to reduce costly downtime caused by setup and tool change. With approximately three turns of a readily accessible activation screw, a specified amount of torque is generated, locking the device. KM Manual Clamping Units accept internal and external cutting tools, as well as left- and right-handed tools.

The units also enable tools to be inverted if necessary. Variants of machine tool mounting configurations for KM Manual Quick Change Tooling include flange mounts, square, round, and VDI shanks.



KM-LOC II™ Clamping Units

KM-LOC II Quick Change units have an increased mechanical advantage of up to 7:1. Due to the compact styling of these units, users are able to mount the clamping unit directly into the machine turret. KM-LOC II units require less activation torque when clamping tools, which reduces the overall stress on the component's clamping mechanism.

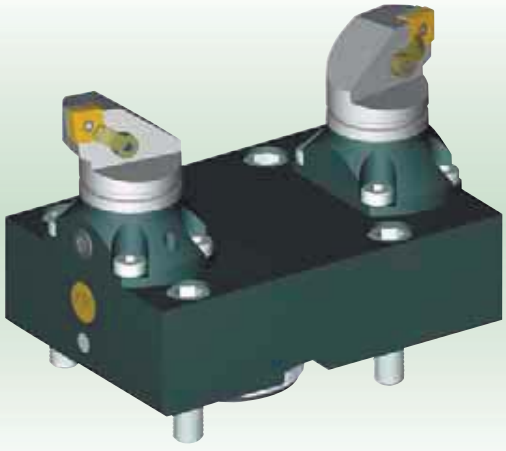
The KM-LOC II Quick Change system is available in various square shank sizes that have a 40–50% greater wedge surface area than comparable units. The cartridge style of these units enables the user to manufacture their own machine-specific blocks. A flange style is available as well.

VDI to KM Clamping Units

KM Quick Change lets users upgrade VDI tooling without the need to modify their machines. This is because the KM clamping units act as a direct replacement for standard VDI tooling. VDI-style units are available to be used with KM Manual, KM-LOC, and KM-LOC II clamps.

Builder-Specific Blocks

There are a variety of builder-specific blocks offered that provide customers a way to easily modify and upgrade their current tooling system to the KM Quick Change. These blocks are supported by Mori Seiki®, Mazak®, Hardinge™, Daewoo™, Nakamura-Tome™, OKUMA®, HAAS, and other machine builders.



The KM Mechanical Advantage

A comparatively increased mechanical advantage is one of the central reasons why the KM Quick Change Tooling system is superior to other tooling methods. The high mechanical advantage is achieved through the system's rigid interference fit that is generated by additional forces in the clamping mechanism. A clamping device with greater than ordinary mechanical advantage offers many benefits in regard to tool life, downtime, and overall machine cost.

In the following sections, you'll find expanded information about the KM Quick Change Tooling system's mechanical advantage and how enhanced levels of these forces make WIDIA tooling superior to other quick-change systems.

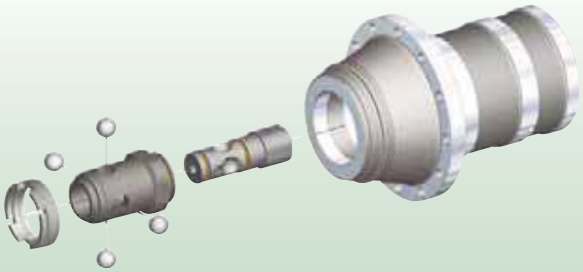
Front-Loading Spindle Design

The KM Advantage

KM spindle designs are front loading; this enables easy access to the KM spindle if repairs are necessary.

The Competitor Disadvantage

Most other spindle systems are not a front-load design, and when repairs are necessary, the entire spindle must be removed. This causes the machine to be down for an extended period of time.



Side-Activated Tools

The KM Advantage

All KM extensions and reducers are side activated. This enables you to change tools without disassembling the entire setup.

The Competitor Disadvantage

Competing modular systems do not offer side activation. For these systems, you must completely disassemble tooling in order to change cutting units.

Mechanical Advantage in Clamping Force

The KM Advantage

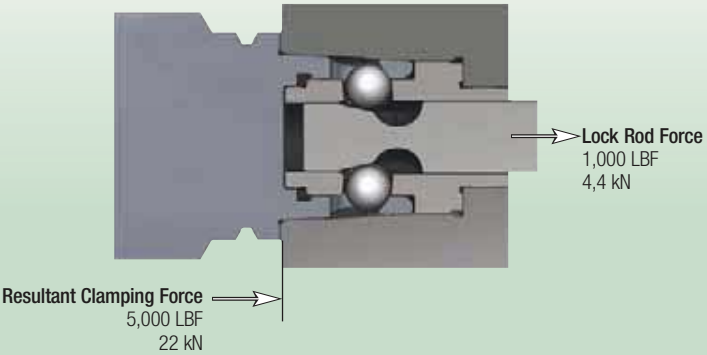
The KM design is an interference fit that enables the KM system to generate 4:1 and upwards of 7:1 mechanical advantage in clamping force.

The Competitor Disadvantage

CV, BT, HSK, and PSC mechanisms requires a high degree of pull-back force to generate clamping force. The design generates a high amount of pent-up force within the spindle. When a crash occurs, the forces are released and could possibly damage the entire spindle mechanism.

Mechanical Advantage Provides:

- Lower tool release forces.
- Smaller clamping mechanism envelope.



Machine Utilization Strategy (MUS)

Tool change and setup/gaging can significantly decrease production time. WIDIA recommends the implementation of a Machine Utilization Strategy (MUS). This system incorporates the products, technologies, and procedures that generate the maximum utility from capital equipment.

Listed below are the products and services WIDIA recommends to provide the most time and cost savings, which are principle to the MUS.

This manufacturing strategy hastens every aspect of the production process from the machine to the tool room. It will improve tool maintenance, increase machining time and productivity, and decrease non-conforming percentages.

1. **KM Quick Change Tooling**
   Reduces downtime and increases productivity by cutting the time spent on tool change and setup.

2. **Advanced Cutting Tool Materials**
   Increase production through the utilization of the most advanced cutting tools that enable machines to run longer and faster between tool changes.

3. **Tool Kitting**
   Provides all the tooling (fixturing included) required to complete a production run or shift operation.

4. **Pregaged Tooling**
   Eliminates measuring cuts from the setup process, reduces the risk of human error at the machine control, and provides a quick and efficient method for changing worn tools.

5. **Advanced Tool Management Systems**
   Specifically designed to facilitate the effective management of cutting tools but are equally capable of controlling other types of inventory and consumable goods.

ISO 26622

The power of the WIDIA™ enterprise

As a world leader in the development, manufacture, application, and supply of metalcutting tools and services, WIDIA is the trusted source for top-quality quick-change products designed with the manufacturer in mind.

Our products are proven to significantly increase machining productivity and competiveness, as well as generate cost-savings of up to 30% annually. Our unique Productivity Worksheet can calculate just how much time and money WIDIA KM™ Quick Change products can save. Enter your data to see how WIDIA can maximize your competiveness!

Benefits of the Productivity Worksheet:

- See documented savings of 10–30% in machining costs.
- Uses your unique data to compare current productivity to potential savings.
- Relative and flexible to your specific machines and operation rates.
- Highlights how lost time can cost your business.
- Tracks weaknesses in machining setup that can reduce production time.
- Proves the WIDIA Machine Utilization Strategy (MUS) is the ultimate way to optimize performance.

The way to increase productivity is simple — complete the Productivity Worksheet and see how much WIDIA could be saving you. If you're impressed by the increase in manufacturing productivity that the calculations show, contact us. Our application experts are accessible when you need them and will work with you to solve production problems. Switching to WIDIA will bring about the manufacturing capability and profits your business needs to strengthen customer loyalty and thrive in an increasingly competitive marketplace.

KM QUICK CHANGE

KM Tooling Increase Your Productivity

Issued by: _____

Machine Manufacturer: _____ Date: _____

Hourly Cost for Machine: _____ Model and Year: _____

Step 1 • Enter number of setups on machine per shift:	1					
Step 2 • Enter number of shifts per day:	2					
Step 3 • Enter number of insert changes per shift:	10					
	conventional tooling		KM Quick Change Tooling*		time savings (minutes)	
Step 4 • Enter set-up time for conventional tooling (minutes):	10	-	2.5	=	7.5	
Step 5 • Enter insert change time (minutes):	3	-	0.5	=	2.5	
Step 6 • Enter trial cut time (minutes):	5	-	0	=	5	
	shifts per day		days per year		shifts per year	
Step 7 • Multiply the number of shifts per day (see Step 2) by number of days per year the machine will be used.	2	x	200	=	400	
	insert changes per shift		shifts per year		insert changes per year	
Step 8 • Multiply the number of insert changes per shift (see Step 3) by the number of shifts per year (see Step 7).	10	x	400	=	4,000	
	insert changes per year		% required trial cuts		trial cuts per year	
Step 9 • Multiply the number of insert changes per year (see Step 8) by the % of required trial cuts.	4,000	x	0.25	=	1,000	

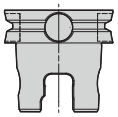
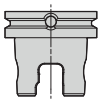
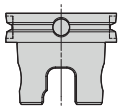
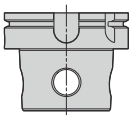
Annual Time Savings with KM Quick Change Tooling Package

	number		time savings (minutes)		total (minutes)	
Step 10 • Enter shifts per year from Step 7.	400	x	7.5	=	3,000	
Step 11 • Enter insert changes per year from Step 8.	4,000	x	2.5	=	10,000	
Step 12 • Enter trial cuts per year from Step 9.	1,000	x	5	=	5,000	
					18,000	
	18,000 minutes divided by 60 minutes			=	300 hours	

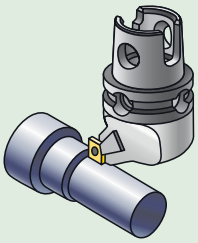
total hours saved		hourly machine cost		annual $$ saved**
300	x	$50.00	=	$15,000.00

*Data provided by your Authorized WIDIA Representative. **Annual savings per machine. Multiply by number of machines to see total overall annual savings.

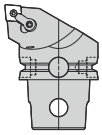
KM Quick Change Toolholder Options

KM40TS	KM50TS	KM63TS	KM80TS	KM63XMZ	KM80ATC	KM4X100
						

External Turning

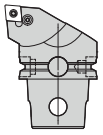


M-Clamping System



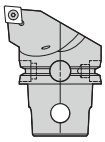
KM40TS	Page: A71
KM50TS	Pages: A119–A130
KM63TS	Pages: A181–A192
KM80TS	Pages: A245–A251
KM63XMZ	Pages: A277–A280
KM80ATC	Pages: A310–A313
KM4X100	▽

P-Clamping System



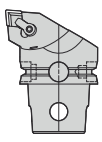
KM40TS	Pages: A71–A78
KM50TS	Pages: A130–A136
KM63TS	Pages: A192–A200
KM80TS	Pages: A252–A254
KM63XMZ	Pages: A280–A281
KM80ATC	Page: A314
KM4X100	▽

S-Clamping System



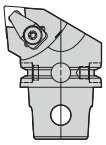
KM40TS	Pages: A80–A85
KM50TS	Pages: A136–A137
KM63TS	Pages: A200–A202
KM80TS	▽
KM63XMZ	Page: A335
KM80ATC	▽
KM4X100	

C-Clamping System



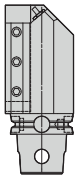
KM40TS	▽
KM50TS	Page: A138
KM63TS	Page: A203
KM80TS	▽
KM63XMZ	
KM80ATC	
KM4X100	

C-MX Clamping Ceramic



KM40TS	▽
KM50TS	Pages: A139–A142
KM63TS	▽
KM80TS	
KM63XMZ	
KM80ATC	
KM4X100	

STA, ETA, and 45° TA Square Shank Adapters



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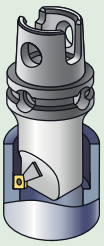
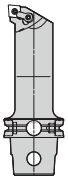
KM50TS	
KM63TS	Pages: A179–A180
KM80TS	Pages: A243–A244
KM63XMZ	Pages: A273–A276
KM80ATC	Pages: A309–A310
KM4X100	▽

Internal Turning

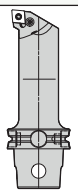


M-Clamping System



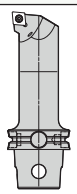
KM40TS	Pages: A92–A94
KM50TS	Pages: A148–A152
KM63TS	Pages: A212–A215
KM80TS	▽
KM63XMZ	
KM80ATC	
KM4X100	

P-Clamping System



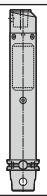
KM40TS	Pages: A95–A97
KM50TS	Pages: A153–A154
KM63TS	Pages: A216–A218
KM80TS	▽
KM63XMZ	Pages: A283–A284
KM80ATC	▽
KM4X100	

S-Clamping System



KM40TS	▽
KM50TS	Page: A155
KM63TS	Pages: A219–A220
KM80TS	▽
KM63XMZ	
KM80ATC	
KM4X100	

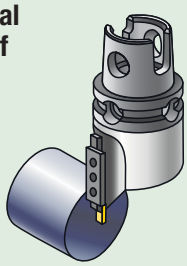
Tunable System



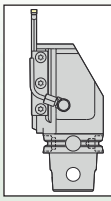
KM40TS	▽
KM50TS	
KM63TS	Page: A222
KM80TS	▽
KM63XMZ	Page: A287
KM80ATC	▽
KM4X100	

▽ Indicates "Not Available".

External Cut-Off

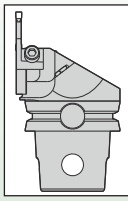


ProGroove™



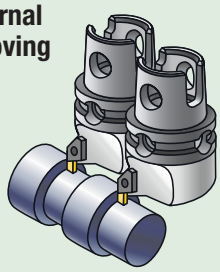
KM40TS	Page: A90
KM50TS	Page: A146
KM63TS	Pages: A209–A210
KM80TS	▽
KM63XMZ	Page: A282
KM80ATC	▽
KM4X100	

WMT™ SLS

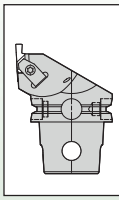


KM40TS	Page: A91
KM50TS	Page: A147
KM63TS	Page: A211
KM80TS	Page: A256
KM63XMZ	Pages: A282–A283
KM80ATC	▽
KM4X100	

External Grooving

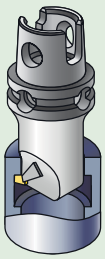


TopGroove™

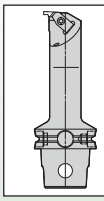


KM40TS	Pages: A86–A87
KM50TS	Pages: A142–A143
KM63TS	Page: A207
KM80TS	Page: A255
KM63XMZ	▽
KM80ATC	Page: A315
KM4X100	▽

Internal Grooving

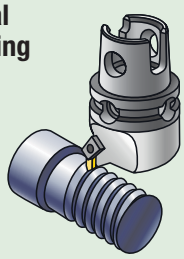


TopGroove

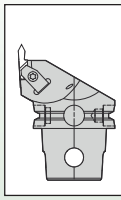


KM40TS	Pages: A98–A100
KM50TS	Page: A156
KM63TS	Page: A220
KM80TS	▽
KM63XMZ	
KM80ATC	
KM4X100	

External Threading

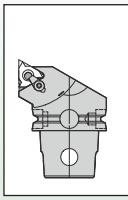


TopThread™



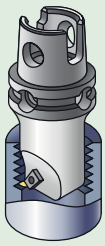
KM40TS	Pages: A86–A87
KM50TS	Pages: A142–A143
KM63TS	Page: A207
KM80TS	Page: A255
KM63XMZ	▽
KM80ATC	Page: A315
KM4X100	▽

Laydown Threading

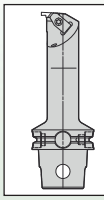


KM40TS	Pages: A88–A89
KM50TS	Pages: A144–A145
KM63TS	Page: A208
KM80TS	▽
KM63XMZ	
KM80ATC	
KM4X100	

Internal Threading

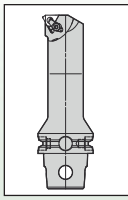


TopThread



KM40TS	Pages: A98–A100
KM50TS	Page: A156
KM63TS	Page: A220
KM80TS	▽
KM63XMZ	
KM80ATC	
KM4X100	

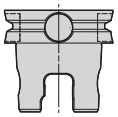
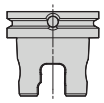
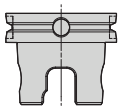
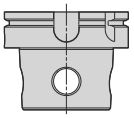
Laydown Threading



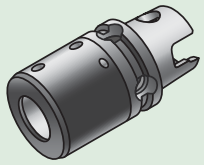
KM40TS	Page: A101
KM50TS	Page: A158
KM63TS	▽
KM80TS	
KM63XMZ	
KM80ATC	
KM4X100	

▽ Indicates "Not Available".

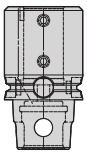
KM Quick Change Toolholder Options

KM40TS	KM50TS	KM63TS	KM80TS	KM63XMZ	KM80ATC	KM4X100
						

Turning Adapters

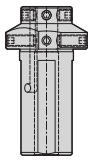


Boring Bar Adapters



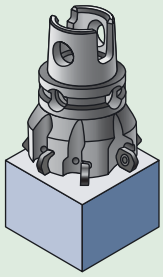
KM40TS	Pages: A102–A103
KM50TS	Pages: A159–A160
KM63TS	Page: A223
KM80TS	Page: A257
KM63XMZ	Page: A285
KM80ATC	Page: A316
KM4X100	▽

Boring Bar Sleeves

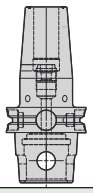


KM40TS	Page: A286
KM50TS	Page: A286
KM63TS	Page: A286
KM80TS	Page: A286
KM63XMZ	Page: A286
KM80ATC	Page: A286
KM4X100	Page: A286

Milling

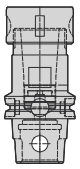


Shrink Fit



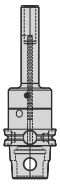
KM40TS	▽
KM50TS	
KM63TS	Pages: A224–A227
KM80TS	Pages: A258–A261
KM63XMZ	Pages: A288–A291
KM80ATC	Pages: A318–A321
KM4X100	Page: A333

TG Collet Chucks



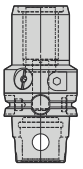
KM40TS	Pages: A105–A106
KM50TS	Pages: A162–A163
KM63TS	Page: A230
KM80TS	Page: A262
KM63XMZ	Page: A295
KM80ATC	Page: A322
KM4X100	Page: A336

Slim Line Hydraulic



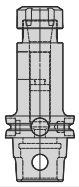
KM40TS	▽
KM50TS	
KM63TS	Page: A228
KM80TS	▽
KM63XMZ	Page: A294
KM80ATC	▽
KM4X100	

Hydraulic Chucks



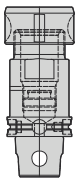
KM40TS	Page: A104
KM50TS	Page: A161
KM63TS	Page: A229
KM80TS	▽
KM63XMZ	Page: A292
KM80ATC	▽
KM4X100	

ER Collet Chucks



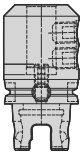
KM40TS	Page: A107
KM50TS	Page: A164
KM63TS	Pages: A231–A232
KM80TS	Pages: A263–A264
KM63XMZ	Pages: A296–A297
KM80ATC	Page: A323
KM4X100	Page: A337

DA Collet Chucks



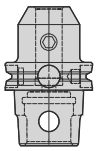
KM40TS	Page: A108
KM50TS	Pages: A165–A166
KM63TS	▽
KM80TS	
KM63XMZ	
KM80ATC	
KM4X100	

Whistle Notch™ Adapters



KM40TS	Page: A110
KM50TS	Page: A167
KM63TS	Page: A233
KM80TS	Page: A265
KM63XMZ	Page: A298
KM80ATC	Page: A324
KM4X100	Page: A338

End Mill Adapters

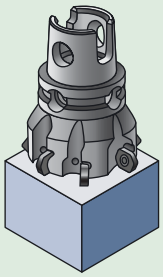


KM40TS	Page: A113
KM50TS	Page: A172
KM63TS	Page: A234
KM80TS	Page: A266
KM63XMZ	Pages: A299–A300
KM80ATC	Pages: A224–A225
KM4X100	Page: A339

(continued)

▽ Indicates "Not Available".

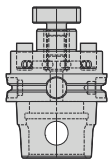
Milling *(continued)*



Tunable Shell Mill Adapters

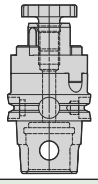
KM40TS	
KM50TS	
KM63TS	
KM80TS	
KM63XMZ	
KM80ATC	
KM4X100	Page: A342

Shell Mill Adapters



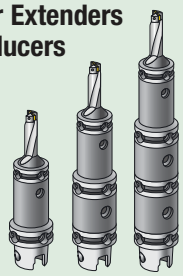
KM40TS	Page: A114
KM50TS	Page: A173
KM63TS	Page: A235
KM80TS	Page: A267
KM63XMZ	Page: A304
KM80ATC	Page: A327
KM4X100	Page: A340

Combi-Shell Mill Adapters

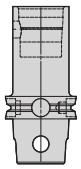


KM40TS	Page: A115
KM50TS	Page: A174
KM63TS	Page: A236
KM80TS	Page: A268
KM63XMZ	Page: A304
KM80ATC	
KM4X100	

Modular Extenders and Reducers

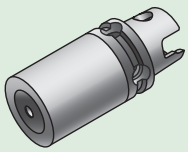


KM Modular

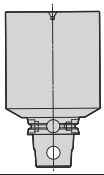


KM40TS	Pages: A116–A117
KM50TS	Page: A176
KM63TS	Pages: A238–A239
KM80TS	Pages: A269–A270
KM63XMZ	Pages: A305–A307
KM80ATC	Pages: A328–A329
KM4X100	Page: A343

Auxilliary

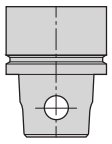


Blanks



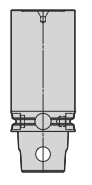
KM40TS	Page: A117
KM50TS	Page: A177
KM63TS	Page: A240
KM80TS	Page: A271
KM63XMZ	Page: A307
KM80ATC	Page: A329
KM4X100	Page: A344

Plugs



KM40TS	Page: J30
KM50TS	Page: J30
KM63TS	Page: J30
KM80TS	Page: J30
KM63XMZ	
KM80ATC	
KM4X100	

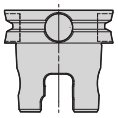
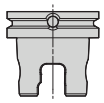
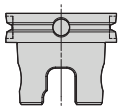
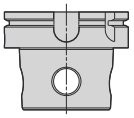
Gage Bars



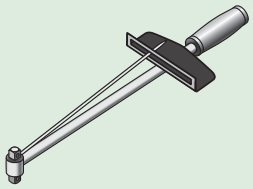
KM40TS	Page: A117
KM50TS	Page: A177
KM63TS	Page: A240
KM80TS	
KM63XMZ	Page: A240
KM80ATC	
KM4X100	Page: A344

Indicates "Not Available".

KM Quick Change Toolholder Options

KM40TS	KM50TS	KM63TS	KM80TS	KM63XMZ	KM80ATC	KM4X100
						

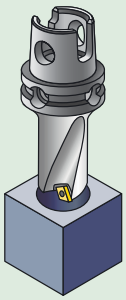
Accessories



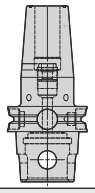
Torque Wrenches

KM40TS	Page: J40
KM50TS	Page: J40
KM63TS	Page: J40
KM80TS	Page: J40
KM63XMZ	Page: J40
KM80ATC	Page: J40
KM4X100	▽

Drilling

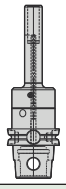


Shrink Fit



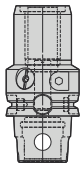
KM40TS	▽
KM50TS	
KM63TS	Pages: A224–A227
KM80TS	Pages: A258–A261
KM63XMZ	Pages: A288–A291
KM80ATC	Pages: A318–A321
KM4X100	Page: A333

Slim Line Hydraulic



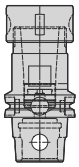
KM40TS	▽
KM50TS	
KM63TS	Page: A228
KM80TS	▽
KM63XMZ	Page: A294
KM80ATC	▽
KM4X100	

Hydraulic Chucks



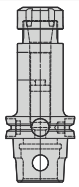
KM40TS	Page: A104
KM50TS	Page: A161
KM63TS	Page: A229
KM80TS	▽
KM63XMZ	Page: A292
KM80ATC	▽
KM4X100	

TG Collet Chucks



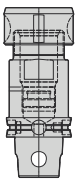
KM40TS	Pages: A105–A106
KM50TS	Pages: A162–A163
KM63TS	Page: A230
KM80TS	Page: A262
KM63XMZ	Page: A295
KM80ATC	Page: A322
KM4X100	Page: A336

ER Collet Chucks



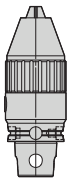
KM40TS	Page: A107
KM50TS	Page: A164
KM63TS	Pages: A231–A232
KM80TS	Pages: A263–A264
KM63XMZ	Pages: A296–A297
KM80ATC	Page: A323
KM4X100	Page: A337

DA Collet Chucks



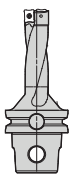
KM40TS	Page: A108
KM50TS	Pages: A165–A166
KM63TS	
KM80TS	
KM63XMZ	▽
KM80ATC	
KM4X100	

Drill Chucks



KM40TS	Page: A109
KM50TS	Page: A167
KM63TS	▽
KM80TS	
KM63XMZ	Page: A298
KM80ATC	▽
KM4X100	

Top Cut™

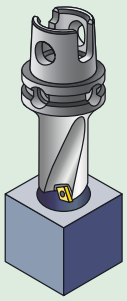


KM40TS	Page: A112
KM50TS	Page: A169
KM63TS	
KM80TS	
KM63XMZ	▽
KM80ATC	
KM4X100	

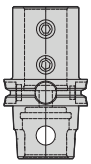
(continued)

▽ Indicates "Not Available".

Drilling *(continued)*

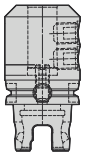


Top Cut Plus™ Adapters



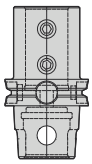
KM40TS	Page: A111
KM50TS	Page: A168
KM63TS	Page: A236
KM80TS	Page: A268
KM63XMZ	Page: A301
KM80ATC	▽
KM4X100	

Whistle Notch™ Adapters



KM40TS	Page: A110
KM50TS	Page: A167
KM63TS	Page: A233
KM80TS	Page: A265
KM63XMZ	Page: A298
KM80ATC	Page: A324
KM4X100	Page: A338

Straight Shanks



KM40TS	▽
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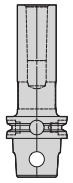
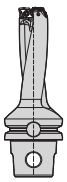
KM80TS	Page: A269
KM63XMZ	▽
KM80ATC	Page: A326
KM4X100	▽

Morse Tapers



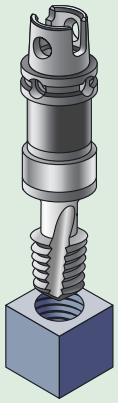
KM40TS	Page: A116
KM50TS	Page: A175
KM63TS	▽
KM80TS	
KM63XMZ	
KM80ATC	
KM4X100	

Top Cut Plus

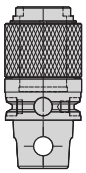


KM40TS	▽
KM50TS	Page: A170
KM63TS	Page: A237
KM80TS	▽
KM63XMZ	Pages: A302–A303
KM80ATC	▽
KM4X100	

Tapping

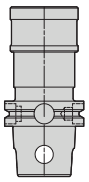


Solid Tapping



KM40TS	Page: A116
KM50TS	Page: A175
KM63TS	▽
KM80TS	
KM63XMZ	
KM80ATC	
KM4X100	

RC Rapid Change



KM40TS	▽
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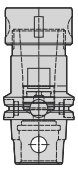
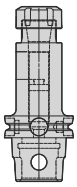
KM63TS	Page: A238
KM80TS	▽
KM63XMZ	
KM80ATC	
KM4X100	

TG Collet Chucks



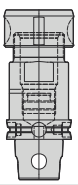
KM40TS	Pages: A105–A106
KM50TS	Pages: A162–A163
KM63TS	Page: A230
KM80TS	Page: A263
KM63XMZ	Page: A295
KM80ATC	Page: A322
KM4X100	Page: A336

ER Collet Chucks



KM40TS	Page: A107
KM50TS	Page: A164
KM63TS	Pages: A231–A232
KM80TS	Pages: A263–A264
KM63XMZ	Pages: A296–A297
KM80ATC	Page: A323
KM4X100	Page: A337

DA Collet Chucks

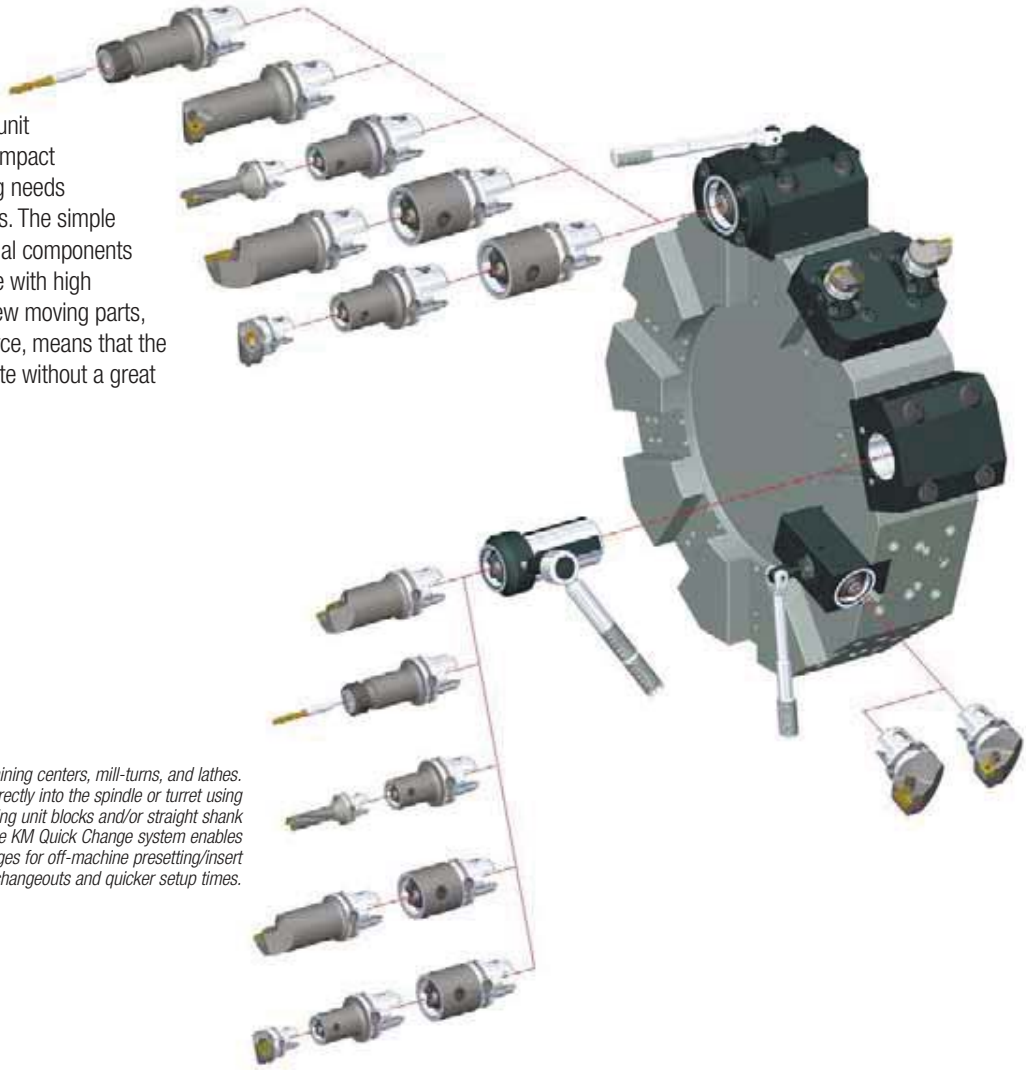


KM40TS	Page: A108
KM50TS	Pages: A165–A166
KM63TS	▽
KM80TS	
KM63XMZ	
KM80ATC	
KM4X100	

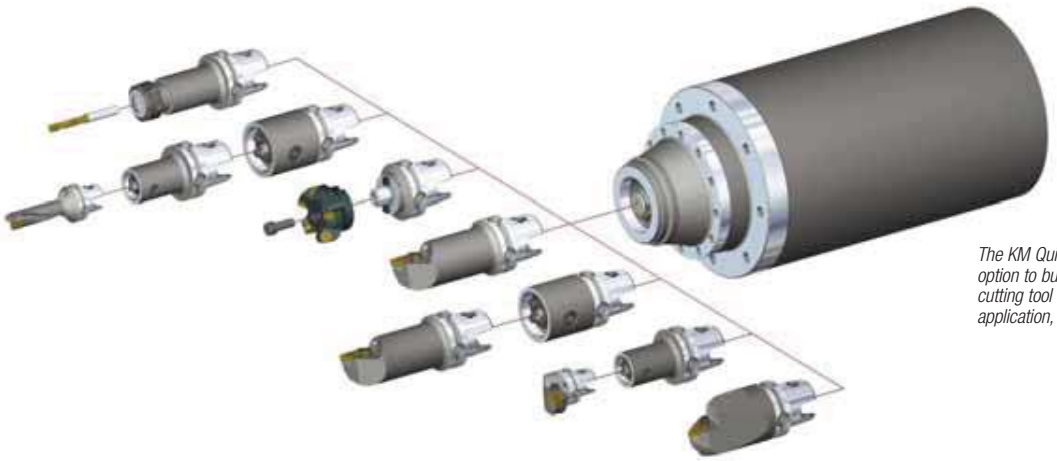
▽ Indicates "Not Available".

Conversion and Clamping System
Clamping Units

KM™ offers a variety of different clamping designs to suit manufacturing needs. Each unit design comes in a portfolio of compact options to further diversify tooling needs across a multitude of applications. The simple design of the units utilizes minimal components to create a strong clamping force with high mechanical advantage. Having few moving parts, and requiring a low activation force, means that the KM Quick Change Clamps operate without a great deal of maintenance or error.



One system for machining centers, mill-turns, and lathes. Can be integrated directly into the spindle or turret using standardized clamping unit blocks and/or straight shank conversions to KM. The KM Quick Change system enables speedy tool changes for off-machine presetting/insert changeouts and quicker setup times.



The KM Quick Change modular system offers the option to build a combination of many possible cutting tool lengths for best rigidity for the application, optimizing costs and inventory.

Manual and Automatic Clamping Units

Manual Square Shank Replacements

Manual Round Shanks

Manual Flange Mounts

LOC II Square Shanks

LOC II Round Shanks

LOC II VDI Axial

Automatic Static

Manual Clamping Units

- Simple, compact design for use in many applications.
- Single- or four-pin clamping mechanisms.
- Torque values used to clamp/unclamp tooling — 2-1/2 turns to activate.
- Available options: square shank, straight shank, flange mount, VDI, extensions/reduces, and machine tool blocks.

LOC II Clamping Units

- Newest design in turn-to-turn clamping.
- Compact design with fewer components.
- Single- and two-piece designs.
- Virtually maintenance free.
- Increased clamping force.
- Available options: flange cartridge, boring cartridge, straight shank, and VDI.
- 100 bar (1,500 psi) coolant capability standard on all LOC II units.

LOC Clamping Units

- First generation of turn-to-turn clamping units.
- Low activation torque required.
- Stop-to-stop activation.
- Cam-driven spring pack.

LOC Clamping units are available in a limited portfolio to meet the needs of previous installations.

Automatic Spring Packs

NACA, RACA Units

- Based on VDI turret concept.
- Common release point.
- Flexible turret.
- Right-angle mechanism.

KM80 Pancake Design

- Compact and rigid.
- More than 14,000 lbs of clamping force.

Rotating Spindle

- Easily incorporated into machine tool applications.
- Over 5:1 mechanical clamping force.
- Front-loading design for easy access maintenance that reduces downtime.
- No gripping fingers or retention knobs to reduce long-term performance.

Toolholding Systems

45° Centerline

Single-Square Shank Adapters

Single-Square Shank Adapters

Cutting Units

Boring Bar Adapters

Shrink Fit Toolholders

Slim Line Hydraulic Chucks

Single-Angle Collet Chucks

Top Cut™ Drills

KM Reducers

Clamping Units

KM offers a variety of different clamping designs to suit manufacturing needs. Each unit design comes in a portfolio of compact options to further diversify tooling needs across a multitude of applications.

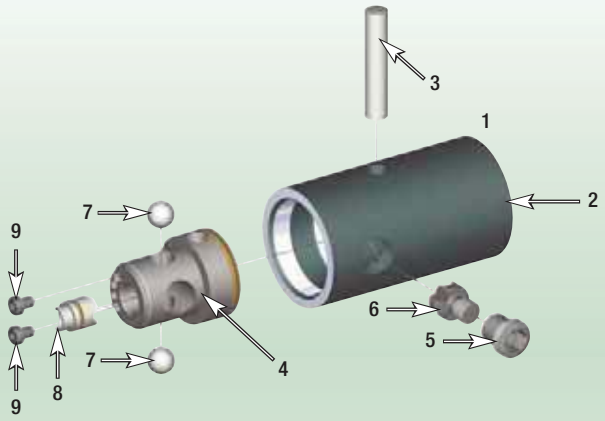
The simple design of the units utilizes minimal components to create a strong clamping force with high mechanical advantage. Having few moving parts and requiring a low activation force, means that the KM Quick Change clamps operate without a great deal of maintenance or error.

Manual Clamping Units

- Simple, compact design for use in many applications.
- Single- or four-pin clamping mechanisms.
- Torque values used to clamp/unclamp tooling — 2-1/2 turns to activate.
- Available options: square shank, straight shank, flange mount, VDI, extensions/reducers, and machine tool blocks.

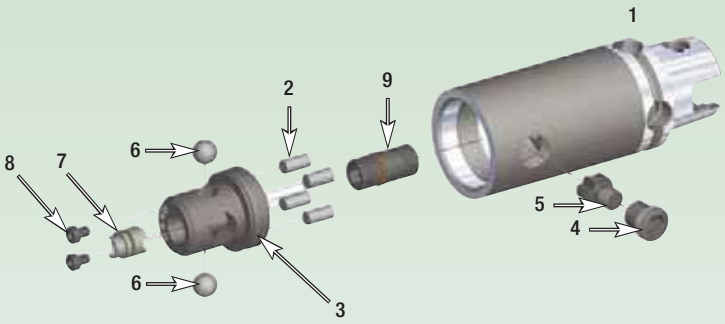
Single-Pin Design

1. KM Clamping Unit Assembly
2. Clamping Unit Body
3. Canister Pin
4. Canister
5. Torque Screw
6. Lockrod
7. Locking Balls
8. Bump-Off Pin
9. Bump-Off Pin Screws



Four-Pin Design

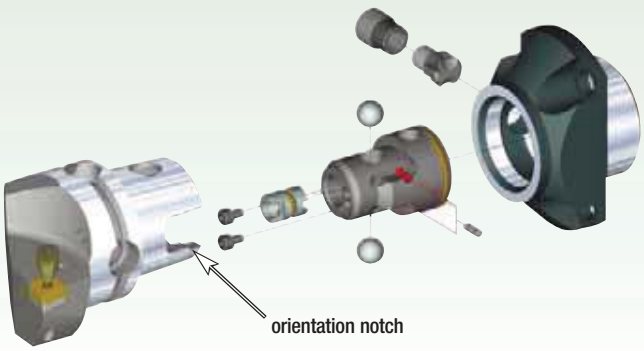
1. KM Clamping Unit Assembly
2. Canister Pin (4x)
3. Canister
4. Torque Screw
5. Lockrod
6. Locking Balls
7. Bump-Off Pin
8. Bump-Off Pin Screws
9. Canister Screw



Error-Proofing Capability for KM Manual Clamping Units

KM Manual units must be disassembled in order to be error proofed. After disassembling the unit, you will find two holes within the canister. To error-proof the unit, insert a metric slotted pin into one of the holes within the canister. Reassemble, and the clamping unit is now error-proofed.

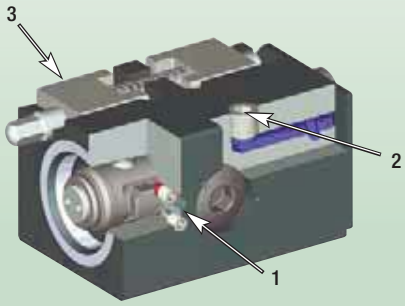
- KM40TS — 3mm x 6mm metric slotted pin
- KM50TS — 4mm x 8mm metric slotted pin
- KM63TS — 5mm x 10mm metric slotted pin
- KM80TS — 5mm x 10mm metric slotted pin
- KM63XMZ — 5mm x 10mm metric slotted pin
- KM80ATC — 5mm x 10mm metric slotted pin



KM LOC II™ Clamping Units

- Newest design in turn-to-turn clamping.
- Compact design with fewer components.
- Single- and two-piece designs.
- Virtually maintenance free.
- Increased clamping force.
- Available options: flange cartridge, boring cartridge, straight shank, and VDI.
- 100 bar (1,500 psi) coolant.

1. Error Proofing
2. Coolant Port
3. Locking Wedges



KM LOC II clamping units offer an increased mechanical advantage of up to 7:1. They require less activation torque, which creates less stress on the clamp's components. The readily adaptable design of the KM LOC II clamping unit enables the device's user to manufacture the tool block as they choose.

Automatic Spring Packs

NACA, RACA Units

- Based on VDI turret concept.
- Common release point.
- Flexible turret.
- Axial and right-angle mechanism.

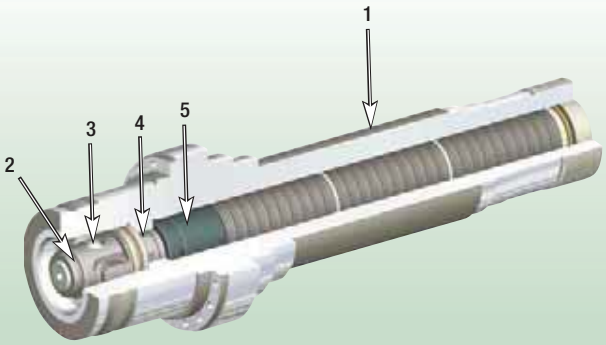
KM80 XGL Static

- Compact and rigid.
- More than 14,000 lbs of clamping force.

Rotating Spindle

- Easily incorporated into machine tool applications.
- Over 5:1 mechanical clamping force.
- Front-loading design for easy access maintenance that reduces downtime.
- No gripping fingers or retention knobs to reduce long-term performance.

1. KM Spindle Cartridge
2. Canister
3. Clamping Balls
4. Lockrod
5. Canister Nut



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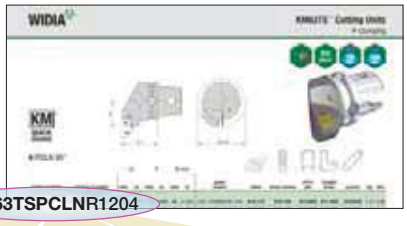


KM
KM Quick Change

63
System Size

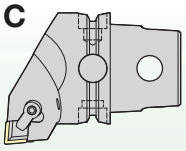
40 = 40mm
50 = 50mm
63 = 63mm
80 = 80mm
100 = 100mm

TS
Feature

TS
XMZ
ATC
4X

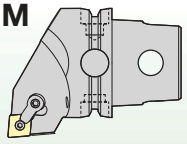
P
Insert Holding Method

C



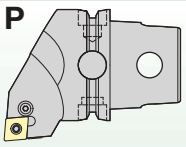
Top clamping by clamping finger for inserts without hole

M



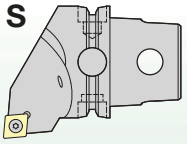
Top and hole clamping for inserts with hole

P



Insert clamping by toggle lever for insert with hole

S



Center clamping by screw for inserts with hole

C
Insert Shape

C 80°
D 55°
K 55°
R
S 90°
T 60°
V 35°
W 80°

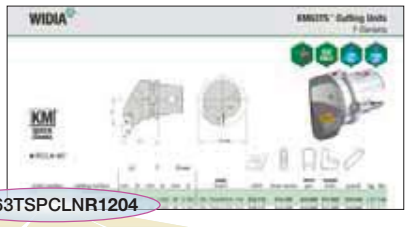
L
Toolholder Style

D 45°
E 30°
F 0°
G 0°
H 50°
J 3°
K 15°
L 5° 5°
N 63°
P 27° 30'
Q 17° 30'
R 15°
S 45°
U 3°
V 17° 30'
X 120°

N
Insert Clearance Angle

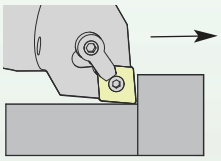
B 5°
C 7°
N 0°
P 11°

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.

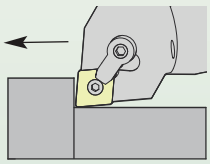


R	12		04		
Hand of Tool	Insert Size Cutting Edge Length L10	Additional Information	Insert Thickness	Gage Length	Special Features
R = Right hand **L** = Left hand **N** = Neutral		**MX** = Ceramic inserts	**03** = .125" **04** = .188" **06** = .250" **07** = .312"	**30** = 30mm **45** = 45mm **120** = 120mm	**Y** = Mazak® INTEGREX® **M** = Metric

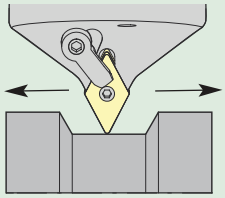
R



L



N



Metric

IC	C	D	K	R	S	T	V	W
3,97		04		03	03	06		
4,76	04	05		04	04	08	08	S3
5,56	05	06	03	05	05	09	09	03
6,00				06				
6,35	06	07	04	06	06	11	11	04
7,94	08	09	05	07	07	13	13	05
8,00				08			11	
9,52	09	11	06	09	09	16	16	06
9,52								
10,00				10				
11,11	11	13	07	11	11	19	19	07
12,00				12				
12,70	12	15	08	12	12	22	22	08
14,29	14	17	09	14	14	24	24	09
15,88	16	19	10	15	15	27	27	10
16,00				16				
17,46	17	21	11	17	17	30	30	11
19,05	19	23	13	19	19	33	33	13
20,00				20				
22,22	22	27	15	22	22	38	38	15
25,00				25				
25,40	25	31	17	25	25	44	44	17
31,75	32	38	21	31	31	54	54	21
32,00				32				

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

KM — KM Quick Change

63 — System Size

40 = 40mm
50 = 50mm
63 = 63mm
80 = 80mm
100 = 100mm

TS — Feature

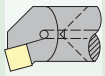
TS
XMZ
ATC
4X

S — Bar Type

S

Steel with through coolant

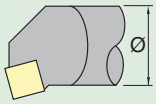
E



Carbide with through coolant

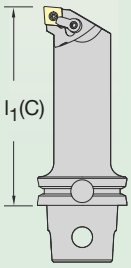
25 — Bar Diameter

10 = 10mm
12 = 12mm
16 = 16mm
20 = 20mm
25 = 25mm
32 = 32mm
40 = 40mm
50 = 50mm



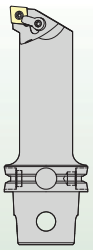
G — Bar Gage Length

C	50
D	60
E	70
F	80
G	90
H	100
J	110
K	125
L	140
M	150
N	160
P	170
Q	180
R	200
S	250
T	300
U	350
V	400
W	450
Y	500
X	special



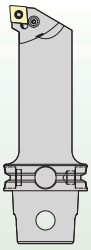
M — Insert Holding Method

M



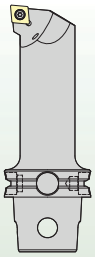
Top and hole clamping for inserts with hole

P



Insert clamping by toggle lever for insert with hole

S

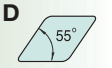


Center clamping by screw for inserts with hole

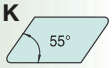
C — Insert Shape

C

D



K

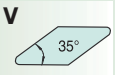


R

S

T

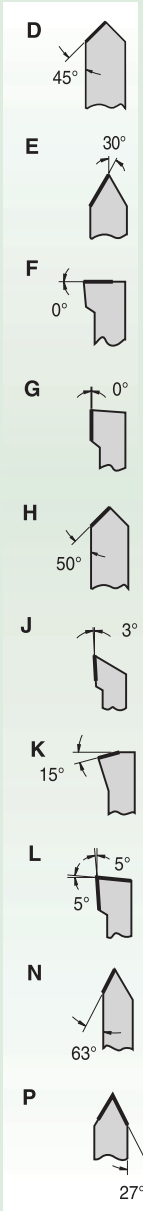
V



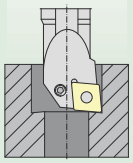
W

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.

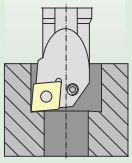
L	N	R	12	04	
Toolholder Style or Lead Angle	Insert Clearance Angle	Hand of Tool	Insert Size Cutting Edge Length L10	Insert Thickness	Special Features



R = Right hand



L = Left hand



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04 = .188"
06 = .250"
07 = .312"

Y = Mazak® INTEGREX®
M = Metric

Metric

IC	C	D	K	R	S	T	V	W
3,97		04		03	03	06		
4,76	04	05		04	04	08	08	S3
5,56	05	06	03	05	05	09	09	03
6,00				06				
6,35	06	07	04	06	06	11	11	04
7,94	08	09	05	07	07	13	13	05
8,00				08			11	
9,52	09	11	06	09	09	16	16	06
9,52								
10,00				10				
11,11	11	13	07	11	11	19	19	07
12,00				12				
12,70	12	15	08	12	12	22	22	08
14,29	14	17	09	14	14	24	24	09
15,88	16	19	10	15	15	27	27	10
16,00				16				
17,46	17	21	11	17	17	30	30	11
19,05	19	23	13	19	19	33	33	13
20,00				20				
22,22	22	27	15	22	22	38	38	15
25,00				25				
25,40	25	31	17	25	25	44	44	17
31,75	32	38	21	31	31	54	54	21
32,00				32				

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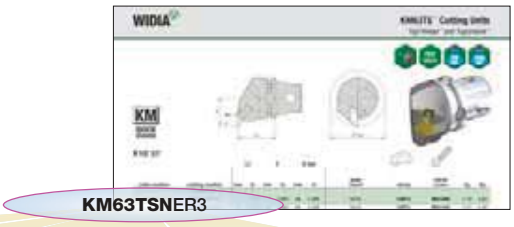

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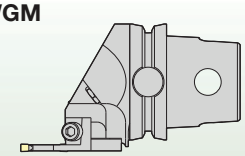
TS — Feature

- **TS**
- **XMZ**
- **ATC**
- **4X**

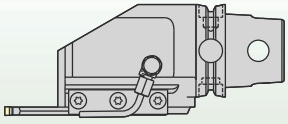
N — Insert Holding Method

WGM



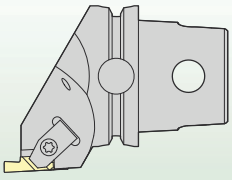
WMT™ SLS

B



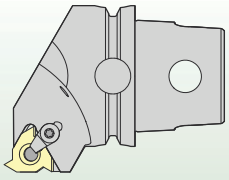
ProGroove™

N



TopGroove™/TopThread™ clamping

LS

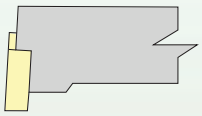


Laydown

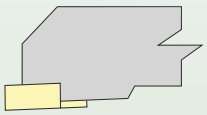
S — Insert Location

- **E** = End mount
- **S** = Side mount
- **R** = Angle mount

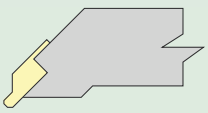
E



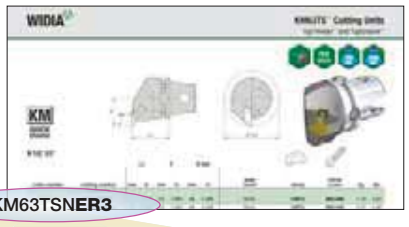
S



R



By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



KM63TSN**ER3**

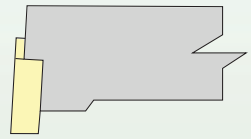
R	3	E	
Hand of Tool	Insert Cutting Edge Length	Additional Information	Special Features

R = Right hand

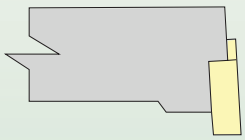
L = Left hand

End mount

R

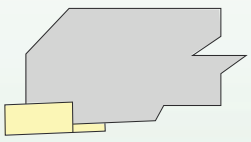


L

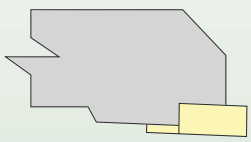


Side mount

R



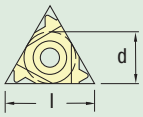
L



N = Insert size

2	3,18
3	4,95
4	6,48
5	9,65
6	11,13

LT = Cutting edge length



l	d (IC)
16	9,52
22	12,70
—	—
—	—

E = External only

N = Internal only

C = GC-style insert

Y = Mazak® INTEGREX®

M = Metric

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

KM63TSS25GNER3

KM — KM Quick Change

63 — System Size

40 = 40mm
50 = 50mm
63 = 63mm
80 = 80mm
100 = 100mm

TS — Feature

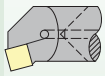
TS
XMZ
ATC
4X

S — Bar Type

S

Steel with through coolant

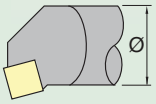
E



Carbide with through coolant

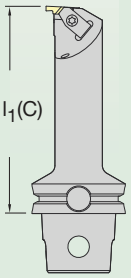
25 — Bar Diameter

10 = 10mm
12 = 12mm
16 = 16mm
20 = 20mm
25 = 25mm
32 = 32mm
40 = 40mm
50 = 50mm



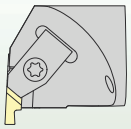
G — Bar Gage Length

C	50
D	60
E	70
F	80
G	90
H	100
J	110
K	125
L	140
M	150
N	160
P	170
Q	180
R	200
S	250
T	300
U	350
V	400
W	450
Y	500
X	special



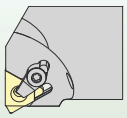
N — Insert Holding Method

N



TopGroove™/ TopThread™ clamping

LS

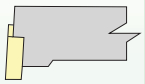


Laydown

E — Insert Location

E = End mount

E



By referencing this easy-to-use guide, you can identify the correct product to meet your needs.

KM63TSS25GNER**3**

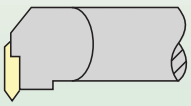
R	3	E	
Hand of Tool	Insert Cutting Edge Length	Additional Information	Special Features

R = Right hand

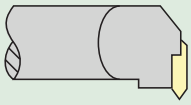
L = Left hand

End mount

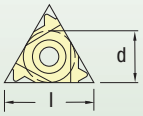
R



L



N = Insert size **LT** = Cutting edge length



N	LT	l	d (IC)	KGM blade size
2	3,18	l	d (IC)	50
3	4,95	16	9,52	50
4	6,48	22	12,70	50
5	9,65	—	—	50
6	11,13	—	—	50

E = External

N = Internal

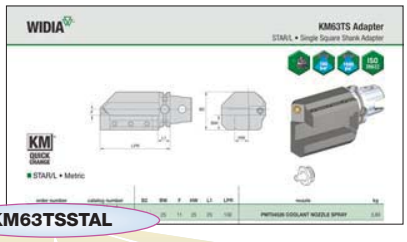
C = GC-style insert

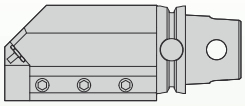
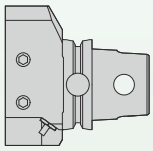
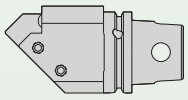
Y = Mazak® INTEGREX®

M = Metric

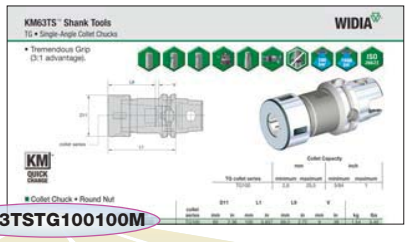
How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



KM	63	TS		STA	L	
KM Quick Change	System Size	Feature	Variance	Toolholder Style	Hand of Tool	Special Features
	40 = 40mm **50** = 50mm **63** = 63mm **80** = 80mm **100** = 100mm 	**TS** **XMZ** **ATC** **4X**	**2X** **4X** **45**	**STA**  **ETA**  **TA** 	**L** = Left hand **R** = Right hand	**Y** = Mazak® INTEGREX®

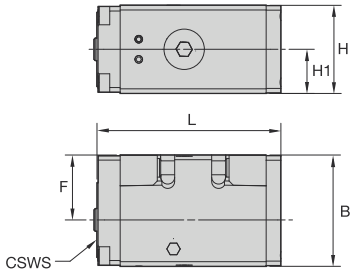
By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



KM63TSTG100100M

KM	63	TS	TG	100	100	M	
KM Quick Change	System Size	Feature	Toolholder Style	Toolholder Style Size	Tool Gage Length	Metric	Special Features
	40 = 40mm **50** = 50mm **63** = 63mm **80** = 80mm **100** = 100mm	**TS** **XMZ** **ATC** **4X**		Varies according to toolholder style	**100** = 100mm		**Y** = Mazak® INTEGREX®

BN	=	Blank	**P**	=	Spindle plug
CS	=	Combi shell mill adapter	**RDC**	=	Drill chuck
DA	=	Double-angle collet chuck	**S**	=	KM extensions-reducers
DAT	=	Drill adapter	**SMC**	=	Shell Mill adapter with coolant
EM	=	Weldon® end mill adapter	**SSF**	=	Adapter for straight shanks with flat (drills)
ER	=	DIN 6499 single-angle collet chuck	**ST**	=	Solid tap adapter
ES	=	KM offset extensions	**SWN**	=	Whistle Notch™ 2° — short — not to DIN standard
GB	=	Gage bar	**TC**	=	Tension-compression tap adapter
HC	=	Hydraulic chuck — Standard Line	**TCD**	=	Top Cut™ drill
HCSL	=	Hydraulic chuck — Slim Line	**TCP**	=	Top Cut Plus™
HCSLT	=	Hydraulic chuck — Slim Line — Trend	**TG**	=	Tremendous Grip single-angle collet chuck
HPHC	=	Hydraulic chuck — high performance	**TT**	=	Shrink Fit thermo toolholder
HPMC	=	Milling chuck — high performance	**WD**	=	Drill adapter
JT	=	Jacobs taper adapter	**WN**	=	Whistle Notch (2° metric; 5° inch)
MT	=	Morse taper adapter	**WN/EM**	=	Whistle Notch — Weldon chuck



CLS • Square Shank • Metric

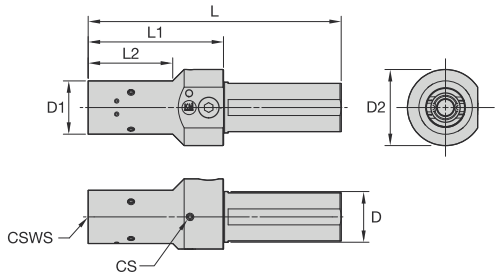
order number	catalog number	CSWS system size	B	F	H	H1	L	wrench size actuation screw
	right hand							
1024718	KM32CLSR2050K	KM32	48	28	40,0	20,0	90,0	6mm
	left hand							
1024719	KM32CLSL2050K	KM32	48	28	40,0	20,0	90,0	6mm

CLS • Square Shank • Inch

order number	catalog number	CSWS system size	B	F	H	H1	L	wrench size actuation screw
	right hand							
1024682	KM32CLSR1250B	KM32	1.890	1.102	1.500	.75	3.122	6mm
1024714	KM32CLSR1250C	KM32	1.890	1.102	1.500	.75	3.622	6mm
1024716	KM32CLSR1650C	KM32	1.890	1.102	2.000	1.00	3.622	6mm

Wedge Tightening Torque

catalog number	KM size	torque range (Nm)	torque range (ft. lbs.)	wedge hex size
KM32CLSR/L...	32	14-18	10-14	4mm

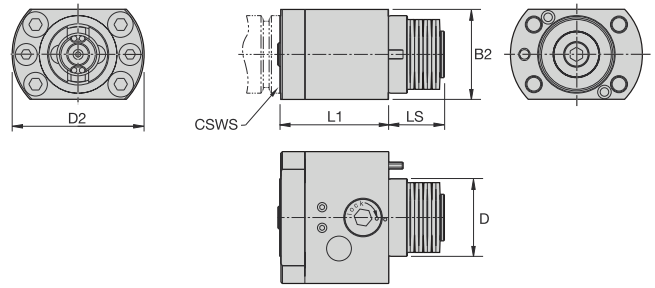


CLN-SS • Round Shank • Metric

order number	catalog number	CSWS system size	D	D1	D2	L1	L	L2	CS	wrench size actuation screw
1279247	**KM32CLNSS3255**	KM32	32	32	45	55	125	18	RP1/8	6mm
1145081	**KM40CLNSS5070**	KM40	50	40	63	70	155	20	RP1/8	8mm
1145073	**KM50CLNSS5080**	KM50	50	50	63	80	190	25	RP1/8	10mm
1145087	**KM63CLNSS6090**	KM63	60	63	90	90	229	30	RP1/8	10mm

CLN-SS • Round Shank • Inch

order number	catalog number	CSWS system size	D	D1	D2	L1	L	L2	CS	wrench size actuation screw
1330758	**KM32CLNSS20217**	KM32	1.25	1.260	1.77	2.165	4.92	.69	1/8-27 NPSC	6mm
1330759	**KM32CLNSS24217**	KM32	1.50	1.260	2.01	2.165	4.92	.69	1/8-27 NPSC	6mm
1145079	**KM40CLNSS32274**	KM40	2.00	1.575	2.48	2.737	6.10	.79	1/8-27 NPSC	8mm
1145072	**KM50CLNSS40316**	KM50	2.50	1.969	3.15	3.156	7.47	.98	1/8-27 NPSC	10mm
1145088	**KM63CLNSS60160**	KM63	2.36	2.480	3.54	6.299	11.78	3.94	1/8-27 NPSC	10mm
1145084	**KM63CLNSS40630**	KM63	2.50	2.480	3.54	6.299	11.78	3.94	1/8-27 NPSC	10mm
1145086	**KM63CLNSS48630**	KM63	3.00	2.480	3.54	6.299	11.78	3.94	1/8-27 NPSC	10mm

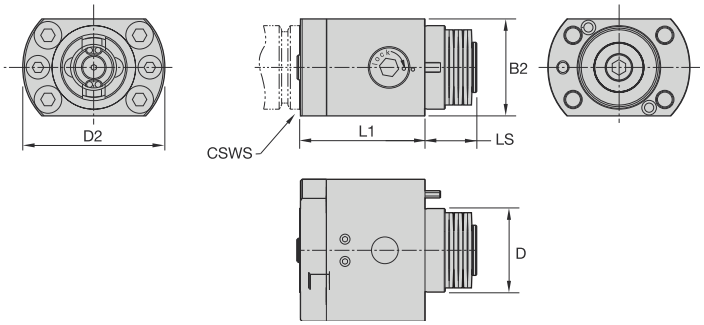


CLNS-EF • Flange Mount, Side Access • Metric

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1330780	**KM32CLNSEF**	KM32	32	60	40	50	28,3	6mm	**MS1936**
1024679	**KM40CLNSEF**	KM40	40	70	48	55	41,4	8mm	**DWG MS1365**
1024646	**KM50CLNSEF**	KM50	50	85	58	70	46,6	10mm	**DWG MS1585**

CLNS-EF • Flange Mount, Side Access • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1330780	**KM32CLNSEF**	KM32	1.260	2.36	1.58	1.969	1.11	6mm	**MS1936**
1024679	**KM40CLNSEF**	KM40	1.575	2.76	1.89	2.165	1.63	8mm	**DWG MS1365**
1024646	**KM50CLNSEF**	KM50	1.969	3.35	2.28	2.756	1.83	10mm	**DWG MS1585**



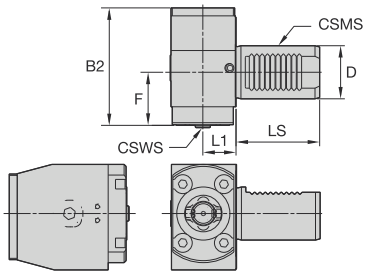
KM QUICK CHANGE

CLNT-EF • Flange Mount, Top Access • Metric

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1330781	KM32CLNTEF	KM32	32	60	40	55	23,3	6mm	MS1936
1024681	KM40CLNTEF	KM40	40	70	48	60	36,4	8mm	DWG MS1365
1024680	KM50CLNTEF	KM50	50	85	58	75	41,6	10mm	DWG MS1585

CLNT-EF • Flange Mount, Top Access • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1330781	KM32CLNTEF	KM32	1.260	2.36	1.57	2.165	.92	6mm	MS1936
1024681	KM40CLNTEF	KM40	1.575	2.76	1.89	2.362	1.43	8mm	DWG MS1365
1024680	KM50CLNTEF	KM50	1.969	3.35	2.28	2.953	1.64	10mm	DWG MS1585



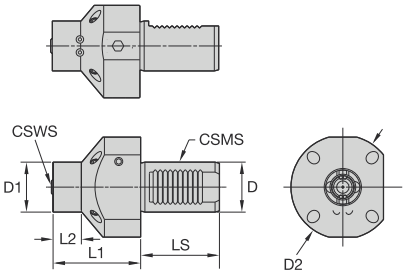
KM QUICK CHANGE

CLRR/L • VDI Right Angle • Metric

order number	catalog number	CSWS system size	CSMS system size	D	F	B2	L1	LS	wrench size actuation screw
	right hand								
1324688	**KM32CLRRVDI3035**	KM32	VDI30	30	35	80,0	23	55	6mm
1145076	**KM40CLRRVDI4040**	KM40	VDI40	40	40	88,5	25	63	8mm
1145069	**KM50CLRRVDI5050**	KM50	VDI50	50	50	113,0	30	78	10mm
1145089	**KM63CLRRVDI6060**	KM63	VDI60	60	60	122,5	37	94	10mm
	left hand								
1330776	**KM32CLRLVDI3035**	KM32	VDI30	30	35	80,0	23	55	6mm
1145077	**KM40CLRLVDI4040**	KM40	VDI40	40	40	88,5	25	63	8mm
1145070	**KM50CLRLVDI5050**	KM50	VDI50	50	50	113,0	30	78	10mm
1145091	**KM63CLRLVDI6060**	KM63	VDI60	60	60	122,5	37	94	10mm

CLRR/L • VDI Right Angle • Inch

order number	catalog number	CSWS system size	CSMS system size	D	F	B2	L1	LS	wrench size actuation screw
	right hand								
1324688	**KM32CLRRVDI3035**	KM32	VDI30	1.181	1.378	3.15	.906	2.17	6mm
1145076	**KM40CLRRVDI4040**	KM40	VDI40	1.575	1.575	3.48	.984	2.48	8mm
1145069	**KM50CLRRVDI5050**	KM50	VDI50	1.969	1.969	4.45	1.181	3.07	10mm
1145089	**KM63CLRRVDI6060**	KM63	VDI60	2.362	2.362	4.82	1.457	3.70	10mm
	left hand								
1330776	**KM32CLRLVDI3035**	KM32	VDI30	1.181	1.378	3.15	.906	2.17	6mm
1145077	**KM40CLRLVDI4040**	KM40	VDI40	1.575	1.575	3.48	.984	2.48	8mm
1145070	**KM50CLRLVDI5050**	KM50	VDI50	1.969	1.969	4.45	1.181	3.07	10mm
1145091	**KM63CLRLVDI6060**	KM63	VDI60	2.362	2.362	4.82	1.457	3.70	10mm

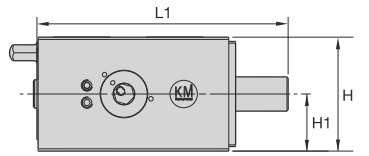


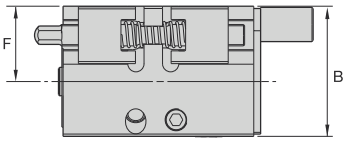
CLAN/V • VDI • Metric

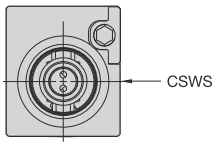
order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw
	right hand									
1228680	**KM32CLANVDI3060**	KM32	VDI30	32	30	68	60	20	55	6mm
1145074	**KM40CLANVDI4070**	KM40	VDI40	40	40	83	70	23	63	8mm
1145067	**KM50CLANVDI5080**	KM50	VDI50	50	50	98	80	25	78	10mm
1145093	**KM63CLANVDI60160**	KM63	VDI60	63	60	123	160	100	94	10mm
1145092	**KM63CLANVDI6090**	KM63	VDI60	63	60	123	90	30	94	10mm
	left hand									
1145075	**KM40CLAVVDI4070**	KM40	VDI40	40	40	83	70	23	63	8mm
1145068	**KM50CLAVVDI5080**	KM50	VDI50	50	50	98	80	25	78	10mm
1145095	**KM63CLAVVDI60160**	KM63	VDI60	63	60	123	160	100	94	10mm
1145094	**KM63CLAVVDI6090**	KM63	VDI60	63	60	123	90	30	94	10mm

CLAN/V • VDI • Inch

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw
	right hand									
1228680	**KM32CLANVDI3060**	KM32	VDI30	1.26	1.181	2.68	2.362	.79	2.17	6mm
1145074	**KM40CLANVDI4070**	KM40	VDI40	1.57	1.575	3.27	2.756	.91	2.48	8mm
1145067	**KM50CLANVDI5080**	KM50	VDI50	1.97	1.969	3.86	3.150	.98	3.07	10mm
1145093	**KM63CLANVDI60160**	KM63	VDI60	2.48	2.362	4.84	6.299	3.94	3.70	10mm
1145092	**KM63CLANVDI6090**	KM63	VDI60	2.48	2.362	4.84	3.543	1.18	3.70	10mm
	left hand									
1145075	**KM40CLAVVDI4070**	KM40	VDI40	1.57	1.575	3.27	2.756	.91	2.48	8mm
1145068	**KM50CLAVVDI5080**	KM50	VDI50	1.97	1.969	3.86	3.150	.98	3.07	10mm
1145095	**KM63CLAVVDI60160**	KM63	VDI60	2.48	2.362	4.84	6.299	3.94	3.70	10mm
1145094	**KM63CLAVVDI6090**	KM63	VDI60	2.48	2.362	4.84	3.543	1.18	3.70	10mm







KM QUICK CHANGE

CL2S • Square Shank • Metric

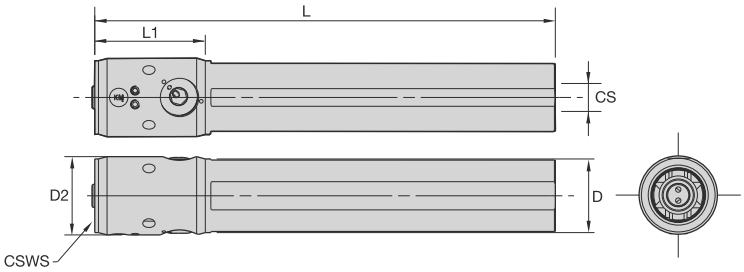
order number	catalog number	CSWS system size	B	F	H	H1	L1	wrench size actuation screw
	right hand							
1785187	KM40CL2SR2560M	KM40	57	33	50	25	110	8mm
1785188	KM40CL2SR3260P	KM40	57	33	64	32	130	8mm
2044928	KM50CL2SR2575M	KM50	70	40	50	25	100	10mm
2044930	KM50CL2SR3275P	KM50	70	40	64	32	120	10mm
2044942	KM63CL2SR3290P	KM63	85	47	64	32	110	10mm
	left hand							
1785189	KM40CL2SL2560M	KM40	57	33	50	25	110	8mm
1785190	KM40CL2SL3260P	KM40	57	33	64	32	130	8mm
2044929	KM50CL2SL2575M	KM50	70	40	50	25	100	10mm
2044931	KM50CL2SL3275P	KM50	70	40	64	32	120	10mm
2044943	KM63CL2SL3290P	KM63	85	47	64	32	110	10mm

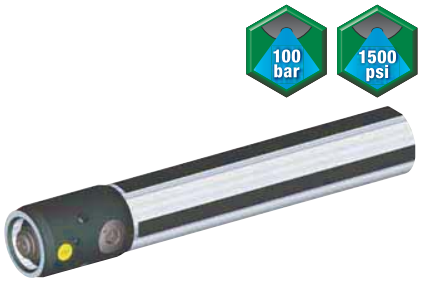
CL2S • Square Shank • Inch

order number	catalog number	CSWS system size	B	F	H	H1	L1	wrench size actuation screw
	right hand							
1785156	KM40CL2SR1260B	KM40	2.244	1.299	1.50	.75	2.925	8mm
1785157	KM40CL2SR1660C	KM40	2.244	1.299	2.00	1.00	3.425	8mm
1785158	KM40CL2SR1660D	KM40	2.244	1.299	2.00	1.00	4.425	8mm
1785159	KM40CL2SR2060D	KM40	2.244	1.299	2.50	1.25	4.425	8mm
2044920	KM50CL2SR1675D	KM50	2.756	1.575	2.00	1.00	4.031	10mm
2044922	KM50CL2SR2075D	KM50	2.756	1.575	2.50	1.25	4.031	10mm
2044938	KM63CL2SR2090E	KM63	3.347	1.850	2.50	1.25	4.638	10mm
	left hand							
1785161	KM40CL2SL1260B	KM40	2.244	1.299	1.50	.75	2.925	8mm
1785162	KM40CL2SL1660C	KM40	2.244	1.299	2.00	1.00	3.425	8mm
1785183	KM40CL2SL1660D	KM40	2.244	1.299	2.00	1.00	4.425	8mm
1785184	KM40CL2SL2060D	KM40	2.244	1.299	2.50	1.25	4.425	8mm
2044921	KM50CL2SL1675D	KM50	2.756	1.575	2.00	1.00	4.031	10mm
2044923	KM50CL2SL2075D	KM50	2.756	1.575	2.50	1.25	4.031	10mm
2044939	KM63CL2SL2090E	KM63	3.347	1.850	2.50	1.25	4.638	10mm

Wedge Tightening Torque

catalog number	KM size	torque range (ft. lbs.)	torque range (Nm)	wedge hex size
KM40CL2SR/L1260B	40	30-34	41-46	6mm
KM40CL2SR/L...	40	43-47	58-64	7mm
KM50CL2SR/L1675D KM50CL2SR/L2575M	50	43-47	58-64	7mm
KM50CL2SR/L2075D KM50CL2SR/L3275P	50	58-62	79-84	8mm
KM63CL2SR/L.....	63	58-62	79-84	8mm



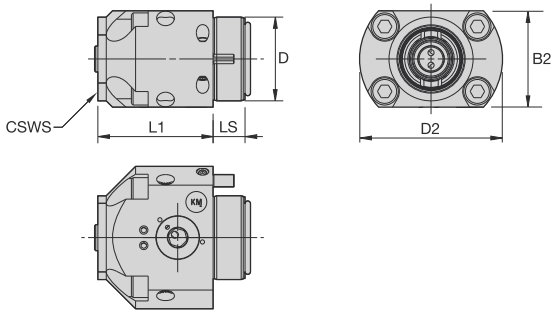


CL2N-SS • Round Shank • Metric

order number	catalog number	CSWS system size	D	D2	L1	L	CS	wrench size actuation screw
1785191	KM40CL2NSS4060	KM40	40	42,5	60	250	RP3/8	8mm
2044932	KM50CL2NSS5075	KM50	50	52,5	75	300	RP3/8	10mm
2044944	KM63CL2NSS6085	KM63	60	64,5	85	350	RP3/8	10mm

CL2N-SS • Round Shank • Inch

order number	catalog number	CSWS system size	D	D2	L1	L	CS	wrench size actuation screw
1785185	KM40CL2NSS24236	KM40	1.500	1.673	2.362	10.000	3/8-18 NPSC	8mm
2044924	KM50CL2NSS32295	KM50	2.000	2.067	2.953	12.000	3/8-18 NPSC	10mm
2044940	KM63CL2NSS40335	KM63	2.500	2.539	3.346	14.000	3/8-18 NPSC	10mm

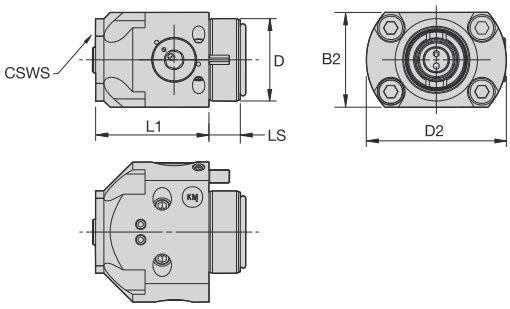


CL2NS-EF • Flange Mount, Side Access • Metric

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785153	KM40CL2NSEF	KM40	40	68	46	55	15,2	8mm	DWG MS1277
2044926	KM50CL2NSEF	KM50	50	84	58	65	20,0	10mm	DWG MS1494
2044936	KM63CL2NSEF	KM63	63	102	76	80	20,0	10mm	MS1252

CL2NS-EF • Flange Mount, Side Access • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785153	KM40CL2NSEF	KM40	1.575	2.68	1.81	2.165	.60	8mm	DWG MS1277
2044926	KM50CL2NSEF	KM50	1.969	3.31	2.28	2.559	.79	10mm	DWG MS1494
2044936	KM63CL2NSEF	KM63	2.480	4.02	2.99	3.150	.79	10mm	MS1252



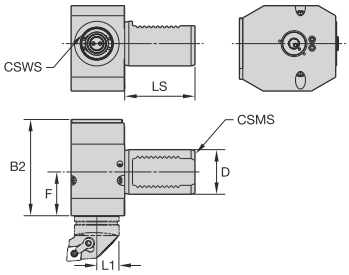
KM QUICK CHANGE

CL2NT-EF • Flange Mount, Top Access • Metric

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785032	**KM40CL2NTEF**	KM40	40	68	46	55	15,2	8mm	**DWG MS1277**
2044927	**KM50CL2NTEF**	KM50	50	84	58	65	20,0	10mm	**DWG MS1494**
2044937	**KM63CL2NTEF**	KM63	63	102	76	80	20,0	10mm	**MS1252**

CL2NT-EF • Flange Mount, Top Access • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785032	**KM40CL2NTEF**	KM40	1.57	2.677	1.811	2.165	.600	8mm	**DWG MS1277**
2044927	**KM50CL2NTEF**	KM50	1.97	3.307	2.284	2.559	.787	10mm	**DWG MS1494**
2044937	**KM63CL2NTEF**	KM63	2.48	4.016	2.992	3.150	.787	10mm	**MS1252**

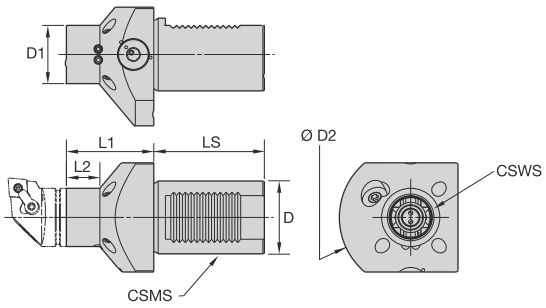


CL2RR/L • VDI Right Angle • Metric

order number	catalog number	CSWS system size	CSMS system size	D	F	B2	L1	LS	wrench size actuation screw
	right hand								
1785233	**KM40CL2RRVDI4040**	KM40	VDI40	40	40	87	25	63	8mm
1785236	**KM40CL2RRVDI5040**	KM40	VDI50	50	40	87	25	78	8mm
	left hand								
1785234	**KM40CL2RLVDI4040**	KM40	VDI40	40	40	87	25	63	8mm
1785240	**KM40CL2RLVDI5040**	KM40	VDI50	50	40	87	25	78	8mm

CL2RR/L • VDI Right Angle • Inch

order number	catalog number	CSWS system size	CSMS system size	D	F	B2	L1	LS	wrench size actuation screw
	right hand								
1785233	**KM40CL2RRVDI4040**	KM40	VDI40	1.575	1.575	3.43	.984	2.48	8mm
1785236	**KM40CL2RRVDI5040**	KM40	VDI50	1.969	1.575	3.43	.984	3.07	8mm
	left hand								
1785234	**KM40CL2RLVDI4040**	KM40	VDI40	1.575	1.575	3.43	.984	2.48	8mm
1785240	**KM40CL2RLVDI5040**	KM40	VDI50	1.969	1.575	3.43	.984	3.07	8mm

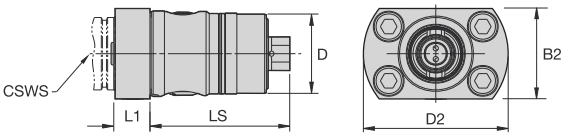


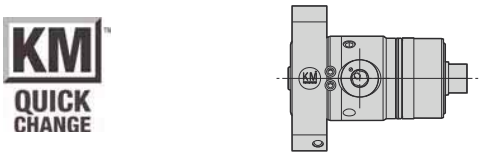
CL2AN/V • VDI Axial • Metric

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw
	right hand									
1785241	**KM40CL2ANVDI4060**	KM40	VDI40	40	40	83	60	23	63	8mm

CL2AN/V • VDI Axial • Inch

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw
	right hand									
1785241	**KM40CL2ANVDI4060**	KM40	VDI40	1.575	1.575	3.27	2.362	.91	2.48	8mm



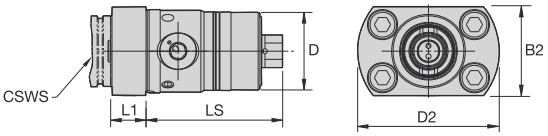


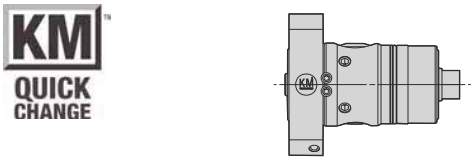
CL2NS-BC • Boring Cartridge, Side Access • Metric

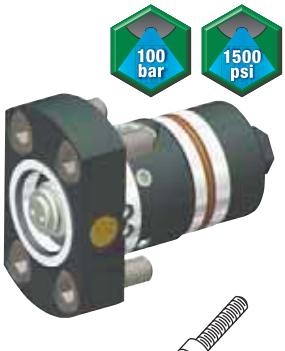
order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785155	KM40CL2NSBC3216B	KM40	47	80	50	20	77,2	8mm	MS1234
1908331	KM50CL2NSBC4010B	KM50	58	96	64	22	86,7	10mm	MS1085PKG
1920417	KM63CL2NSBC5010B	KM63	74	122	78	30	99,5	10mm	MS1239

CL2NS-BC • Boring Cartridge, Side Access • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785155	KM40CL2NSBC3216B	KM40	1.850	3.15	1.97	.787	3.04	8mm	MS1234
1908331	KM50CL2NSBC4010B	KM50	2.293	3.78	2.52	.866	3.41	10mm	MS1085PKG
1920417	KM63CL2NSBC5010B	KM63	2.913	4.80	3.07	1.181	3.92	10mm	MS1239





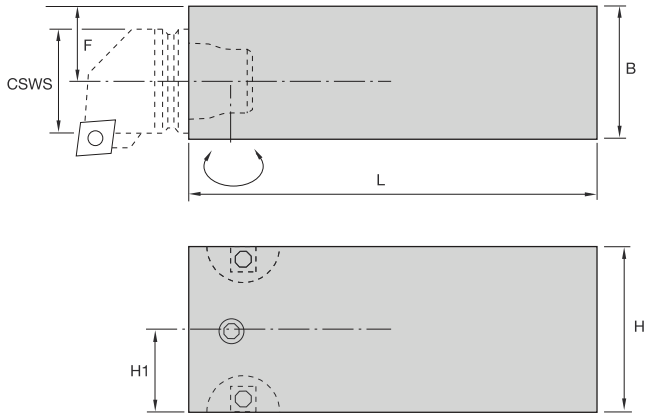


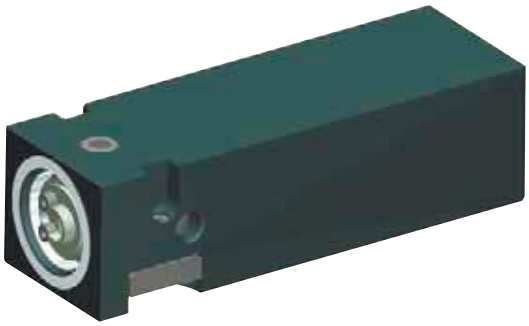
CL2NT-BC • Boring Cartridge, Top Access • Metric

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785154	KM40CL2NTBC3216B	KM40	47	80	50	20	77,2	8mm	MS1234
2044919	KM50CL2NTBC4010B	KM50	58	96	64	22	86,7	10mm	MS1085PKG
1962610	KM63CL2NTBC5010B	KM63	74	122	78	30	99,5	10mm	MS1239

CL2NT-BC • Boring Cartridge, Top Access • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw
1785154	KM40CL2NTBC3216B	KM40	1.850	3.15	1.97	.787	3.04	8mm	MS1234
2044919	KM50CL2NTBC4010B	KM50	2.293	3.78	2.52	.866	3.41	10mm	MS1085PKG
1962610	KM63CL2NTBC5010B	KM63	2.913	4.80	3.07	1.181	3.92	10mm	MS1239





KM™ QUICK CHANGE

NCM • Square Shank Replacement • Metric

order number	catalog number	CSWS system size	B	F	H	H1	L	wrench size actuation screw	spare parts package	Nm
1021574	**KM32NCM4040**	KM32	40	23	40	20	125	5mm	**KM32PKG3S**	8-11
1021575	**KM32NCM5040**	KM32	40	23	50	25	125	5mm	**KM32PKG3S**	8-11
1021641	**KM40NCM5044**	KM40	44	23	50	25	150	6mm	**KM40PKG3S**	12-16
1021640	**KM40NCM6444**	KM40	44	23	64	32	150	6mm	**KM40PKG3S**	12-16
1021748	**KM50NCM6454**	KM50	54	28	64	32	150	10mm	**KM50PKG3S**	27-34

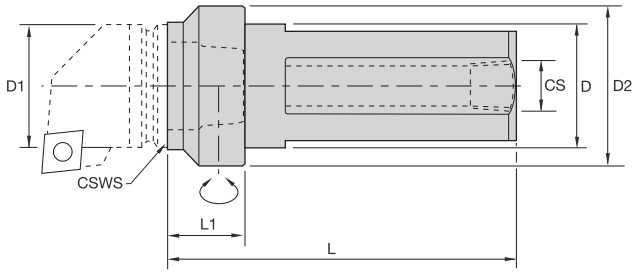
NCM • Square Shank Replacement • Inch

order number	catalog number	CSWS system size	B	F	H	H1	L	wrench size actuation screw	spare parts package	ft. lbs.
1021531	**KM32NCM2425**	KM32	1.562	.884	1.50	.75	5.00	5mm	**KM32PKG3S**	6-8
1021532	**KM32NCM3225**	KM32	1.562	.884	2.00	1.00	5.00	5mm	**KM32PKG3S**	6-8
1021637	**KM40NCM3228**	KM40	1.750	.937	2.00	1.00	6.00	6mm	**KM40PKG3S**	9-12
1021638	**KM40NCM4028**	KM40	1.750	.937	2.50	1.25	6.00	6mm	**KM40PKG3S**	9-12
1021746	**KM50NCM4034**	KM50	2.125	1.122	2.50	1.25	6.00	10mm	**KM50PKG3S**	20-25

Wedge Tightening Torque

KM size CSWS	torque (ft. lbs.)	torque (Nm)
32	12	16
40	25	34
50	35	48

NOTE: Refer to page J40 for torque wrench.



KM QUICK CHANGE

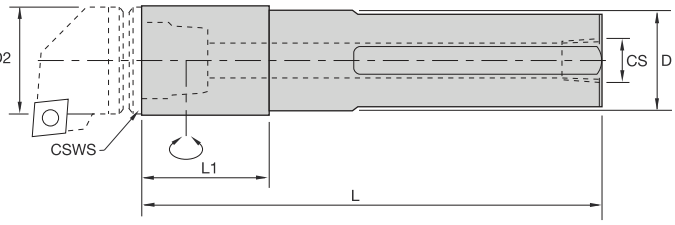
NCM-SS • Round Shank, Standard Length • Metric

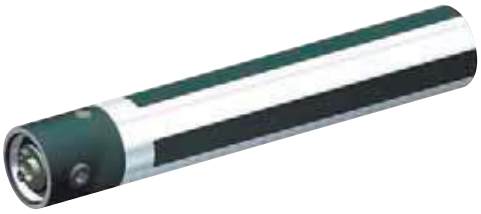
order number	catalog number	CSWS system size	D	D1	D2	L1	L	CS	wrench size actuation screw	spare parts package	Nm
1144817	KM32NCMSS3225	KM32	32	32	40	25	90	RP3/8	5mm	KM32PKG3L	8-11
1144818	KM32NCMSS4025	KM32	40	32	50	25	90	RP3/8	5mm	KM32PKG3L	8-11
1144830	KM40NCMSS4025	KM40	40	40	50	25	110	RP3/8	6mm	KM40PKG3L	12-16
1144831	KM40NCMSS5025	KM40	50	40	63	25	110	RP3/8	6mm	KM40PKG3L	12-16
1144848	KM50NCMSS5032	KM50	50	50	63	32	142	RP3/8	10mm	KM50PKG3L	27-34
1144847	KM50NCMSS6032	KM50	60	50	80	32	142	RP3/8	10mm	KM50PKG3L	27-34

NCM-SS • Round Shank, Standard Length • Inch

order number	catalog number	CSWS system size	D	D1	D2	L1	L	CS	wrench size actuation screw	spare parts package	ft. lbs.
1144815	KM32NCMSS20100	KM32	1.25	1.260	1.57	1.000	3.54	3/8-18NPT	5mm	KM32PKG3L	6-8
1144816	KM32NCMSS24100	KM32	1.50	1.260	1.97	1.000	3.54	3/8-18NPT	5mm	KM32PKG3L	6-8
1144829	KM40NCMSS24100	KM40	1.50	1.575	1.97	1.000	4.33	3/8-18NPT	6mm	KM40PKG3L	9-12
1148349	KM40NCMSS28100	KM40	1.75	1.575	2.48	1.000	4.33	3/8-18NPT	6mm	KM40PKG3L	9-12
1117705	KM40NCMSS32100	KM40	2.00	1.575	2.48	1.000	4.33	3/8-18NPT	6mm	KM40PKG3L	9-12
1085675	KM50NCMSS32125	KM50	2.00	1.969	2.48	1.250	5.59	3/8-18NPT	10mm	KM50PKG3L	20-25
1144846	KM50NCMSS40125	KM50	2.50	1.969	3.15	1.250	5.59	3/8-18NPT	10mm	KM50PKG3L	20-25
1144798	KM63NCMSS40162	KM63	2.50	2.480	3.15	1.625	5.96	3/8-18NPT	12mm	KM63PKG3L	35-40

NOTE: Refer to page J40 for torque wrench.





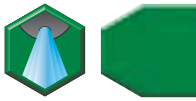
NCM-S • Round Shank, Extended Length • Metric

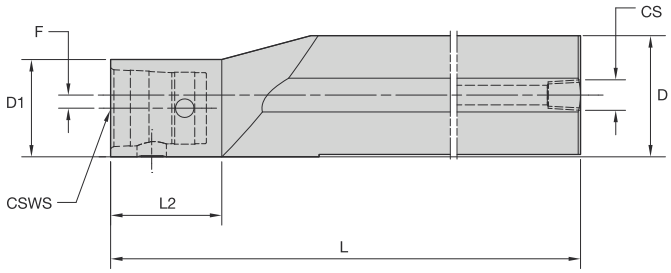
order number	catalog number	CSWS system size	D2	D	L1	L	CS	wrench size actuation screw	spare parts package	Nm
1021533	**KM32NCMS32P**	KM32	32	32	38	170	RP3/8	5mm	**KM32PKG3S**	8-11
1021578	**KM32NCMS32R**	KM32	32	32	38	200	RP3/8	5mm	**KM32PKG3S**	8-11
1021635	**KM40NCMS40S**	KM40	40	40	44	250	RP3/8	6mm	**KM40PKG3S**	12-16
1021744	**KM50NCMS50T**	KM50	50	50	52	300	RP3/8	10mm	**KM50PKG3S**	27-34
1021525	**KM63NCMS60U**	KM63	63	60	72	350	RP3/8	12mm	**KM63PKG3S**	47-54

NCM-S • Round Shank, Extended Length • Inch

order number	catalog number	CSWS system size	D2	D	L1	L	CS	wrench size actuation screw	spare parts package	ft. lbs.
1021530	**KM32NCMS20**	KM32	1.26	1.25	1.50	6.75	3/8-18NPT	5mm	**KM32PKG3S**	6-8
1021636	**KM40NCMS24**	KM40	1.57	1.50	1.75	10.00	3/8-18NPT	6mm	**KM40PKG3S**	9-12
1021747	**KM50NCMS32**	KM50	1.97	2.00	2.05	12.00	3/8-18NPT	10mm	**KM50PKG3S**	20-25
1021528	**KM63NCMS40**	KM63	2.48	2.50	2.83	14.00	3/8-18NPT	12mm	**KM63PKG3S**	35-40

NOTE: Refer to page J40 for torque wrench.





KM QUICK CHANGE

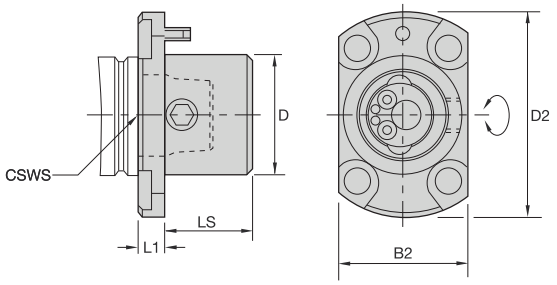
ECM-S • Round Shank, Offset Extended Length • Metric

order number	catalog number	CSWS system size	D1	D	F	L2	L	CS	wrench size actuation screw	spare parts package	Nm
1021699	**KM40ECMS50S**	KM40	40	50	5	45	250	RP3/8	6mm	**KM40PKG3S**	12-16
1021745	**KM50ECMS60U**	KM50	50	60	5	52	350	RP3/8	10mm	**KM50PKG3S**	27-34
1021526	**KM63ECMS80W**	KM63	63	80	8	72	450	RP3/8	12mm	**KM63PKG3S**	47-54

ECM-S • Round Shank, Offset Extended Length • Inch

order number	catalog number	CSWS system size	D1	D	F	L2	L	CS	wrench size actuation screw	spare parts package	ft. lbs.
1021698	**KM40ECMS32**	KM40	1.57	2.00	.21	1.77	10.00	3/8-18 NPT	6mm	**KM40PKG3S**	9-12
1021703	**KM50ECMS40**	KM50	1.97	2.50	.27	2.05	14.00	3/8-18 NPT	10mm	**KM50PKG3S**	20-25
1021527	**KM63ECMS48**	KM63	2.48	3.00	.26	2.83	17.00	3/8-18 NPT	12mm	**KM63PKG3S**	35-40

NOTE: Refer to page J40 for torque wrench.



KM QUICK CHANGE

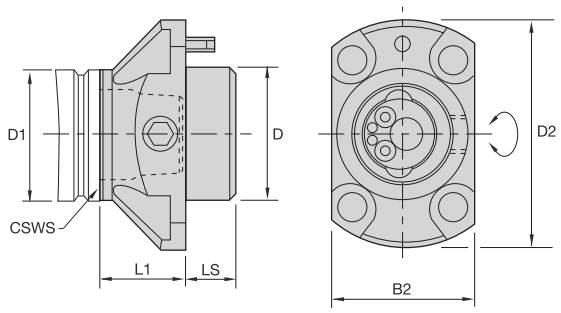
NCM-F • Flange Mount, Standard Length • Metric

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw	spare parts package	Nm
1144814	**KM32NCMF**	KM32	32	54	36	7,5	24,5	5mm	**MS1347**	**KM32PKG3S**	8-11
1013675	**KM40NCMF**	KM40	40	68	44	10,0	30,0	6mm	**MS1217**	**KM40PKG3S**	12-16
1144845	**KM50NCMF**	KM50	50	84	55	12,0	38,0	10mm	**MS1361**	**KM50PKG3S**	27-34
1083015	**KM63NCMF**	KM63	63	102	72	15,0	45,0	12mm	**MS1460**	**KM63PKG3S**	47-54
1144800	**KM80NCMF**	KM80	80	132	90	18,5	57,0	14mm	**DWG MS1599**	**KM80PKG3S**	79-85

NCM-F • Flange Mount, Standard Length • Inch

order number	catalog number	CSWS system size	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw	spare parts package	ft. lbs.
1144814	**KM32NCMF**	KM32	1.260	2.13	1.42	.295	.96	5mm	**MS1347**	**KM32PKG3S**	6-8
1013675	**KM40NCMF**	KM40	1.575	2.68	1.73	.394	1.18	6mm	**MS1217**	**KM40PKG3S**	9-12
1144845	**KM50NCMF**	KM50	1.969	3.31	2.17	.472	1.50	10mm	**MS1361**	**KM50PKG3S**	20-25
1083015	**KM63NCMF**	KM63	2.480	4.02	2.84	.591	1.77	12mm	**MS1460**	**KM63PKG3S**	35-40
1144800	**KM80NCMF**	KM80	3.150	5.20	3.54	.728	2.24	14mm	**DWG MS1599**	**KM80PKG3S**	58-63

NOTE: Refer to page J40 for torque wrench.



KM QUICK CHANGE

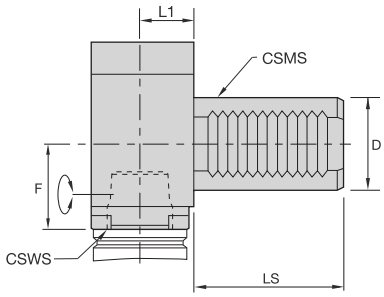
NCM-EF • Flange Mount, Extended Length • Metric

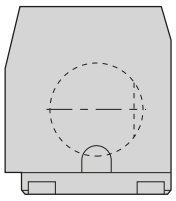
order number	catalog number	CSWS system size	D1	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw	spare parts package	Nm
1021576	**KM32NCMEF**	KM32	32	32	54	36	20	12	5mm	**MS1347**	**KM32PKG3L**	8-11
1021642	**KM40NCMEF**	KM40	40	40	68	44	25	15	6mm	**MS1217**	**KM40PKG3L**	12-16
1021749	**KM50NCMEF**	KM50	50	50	84	55	30	20	10mm	**MS1361**	**KM50PKG3L**	27-34
1021753	**KM63NCMEF**	KM63	63	63	102	72	40	20	12mm	**MS1460**	**KM63PKG3L**	47-54
1144799	**KM80NCMEF**	KM80	80	80	132	90	50	25	14mm	**DWG MS1599**	**KM80PKG3L**	79-85
2420366	**KM100NCMEF**	KM100	100	100	167	112	56	32	17mm	**–**	**–**	100-120

NCM-EF • Flange Mount, Extended Length • Inch

order number	catalog number	CSWS system size	D1	D	D2	B2	L1	LS	wrench size actuation screw	mounting screw	spare parts package	ft. lbs.
1021576	**KM32NCMEF**	KM32	1.260	1.260	2.13	1.42	.787	.47	5mm	**MS1347**	**KM32PKG3L**	6-8
1021642	**KM40NCMEF**	KM40	1.575	1.575	2.68	1.73	.984	.59	6mm	**MS1217**	**KM40PKG3L**	9-12
1021749	**KM50NCMEF**	KM50	1.969	1.969	3.31	2.17	1.181	.79	10mm	**MS1361**	**KM50PKG3L**	20-25
1021753	**KM63NCMEF**	KM63	2.480	2.480	4.02	2.84	1.575	.79	12mm	**MS1460**	**KM63PKG3L**	35-40
1144799	**KM80NCMEF**	KM80	3.150	3.150	5.20	3.54	1.969	.98	14mm	**DWG MS1599**	**KM80PKG3L**	58-63
2420366	**KM100NCMEF**	KM100	3.937	3.937	6.57	4.41	2.205	1.26	17mm	**–**	**–**	75-85

NOTE: Refer to page J40 for torque wrench.





R/LCM • VDI • Right-Angle • Metric

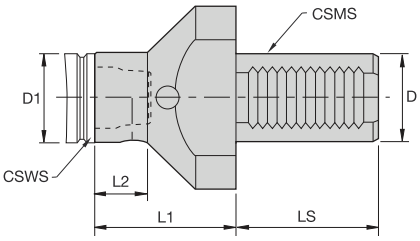
order number	catalog number	CSWS system size	CSMS system size	D	F	L1	LS	wrench size actuation screw	spare parts package	Nm
	right hand									
1144801	**KM32RCMVDI3035**	KM32	VDI30	30	35	23	55	5mm	**KM32PKG3S**	8-11
2420312	**KM40RCMVDI3035**	KM40	VDI30	30	35	25	55	6mm	**KM40PKG3L**	12-16
1144824	**KM40RCMVDI4040**	KM40	VDI40	40	40	25	63	6mm	**KM40PKG3S**	12-16
1144825	**KM40RCMVDI5040**	KM40	VDI50	50	40	25	78	6mm	**KM40PKG3S**	12-16
1144842	**KM50RCMVDI4050**	KM50	VDI40	40	50	30	63	10mm	**KM50PKG3S**	27-34
1144841	**KM50RCMVDI5050**	KM50	VDI50	50	50	30	78	10mm	**KM50PKG3S**	27-34
1144856	**KM63RCMVDI6060**	KM63	VDI60	60	60	37	94	12mm	**KM63PKG3S**	47-54
	left hand									
2420363	**KM40LCMVDI3035**	KM40	VDI30	30	35	25	55	6mm	**KM40PKG3L**	12-16
1144827	**KM40LCMVDI4040**	KM40	VDI40	40	40	25	63	6mm	**KM40PKG3S**	12-16
2420370	**KM40LCMVDI4060**	KM40	VDI40	40	60	25	63	6mm	**KM40PKG3L**	12-16
1144828	**KM40LCMVDI5040**	KM40	VDI50	50	40	25	78	6mm	**KM40PKG3S**	12-16
1144844	**KM50LCMVDI4050**	KM50	VDI40	40	50	30	63	10mm	**KM50PKG3S**	27-34
1144843	**KM50LCMVDI5050**	KM50	VDI50	50	50	30	78	10mm	**KM50PKG3S**	27-34
1144857	**KM63LCMVDI6060**	KM63	VDI60	60	60	37	94	12mm	**KM63PKG3S**	47-54

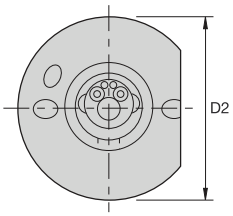
R/LCM • VDI • Right-Angle • Inch

order number	catalog number	CSWS system size	CSMS system size	D	F	L1	LS	wrench size actuation screw	spare parts package	ft. lbs.
	right hand									
1144801	**KM32RCMVDI3035**	KM32	VDI30	1.181	1.378	.906	2.17	5mm	**KM32PKG3S**	6-8
2420312	**KM40RCMVDI3035**	KM40	VDI30	1.181	1.378	.984	2.17	6mm	**KM40PKG3L**	9-12
1144824	**KM40RCMVDI4040**	KM40	VDI40	1.575	1.575	.984	2.48	6mm	**KM40PKG3S**	9-12
1144825	**KM40RCMVDI5040**	KM40	VDI50	1.969	1.575	.984	3.07	6mm	**KM40PKG3S**	9-12
1144842	**KM50RCMVDI4050**	KM50	VDI40	1.575	1.969	1.181	2.48	10mm	**KM50PKG3S**	20-25
1144841	**KM50RCMVDI5050**	KM50	VDI50	1.969	1.969	1.181	3.07	10mm	**KM50PKG3S**	20-25
1144856	**KM63RCMVDI6060**	KM63	VDI60	2.362	2.362	1.457	3.70	12mm	**KM63PKG3S**	35-40
	left hand									
2420363	**KM40LCMVDI3035**	KM40	VDI30	1.181	1.378	.984	2.17	6mm	**KM40PKG3L**	9-12
1144827	**KM40LCMVDI4040**	KM40	VDI40	1.575	1.575	.984	2.48	6mm	**KM40PKG3S**	9-12
2420370	**KM40LCMVDI4060**	KM40	VDI40	1.575	2.362	.984	2.48	6mm	**KM40PKG3L**	9-12
1144828	**KM40LCMVDI5040**	KM40	VDI50	1.969	1.575	.984	3.07	6mm	**KM40PKG3S**	9-12
1144844	**KM50LCMVDI4050**	KM50	VDI40	1.575	1.969	1.181	2.48	10mm	**KM50PKG3S**	20-25
1144843	**KM50LCMVDI5050**	KM50	VDI50	1.969	1.969	1.181	3.07	10mm	**KM50PKG3S**	20-25
1144857	**KM63LCMVDI6060**	KM63	VDI60	2.362	2.362	1.457	3.70	12mm	**KM63PKG3S**	35-40

NOTE: Refer to page J40 for torque wrench.

KM QUICK CHANGE



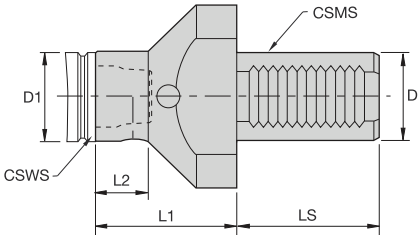


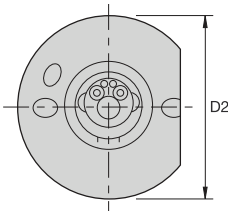
■ R/L • CMI • VDI • Axial • Metric

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw	spare parts package	Nm
	right hand											
1329141	**KM32RCMIVDI30100**	KM32	VDI30	32	30	68	100	70	55	5mm	**KM32PKG3S**	8-11
1144821	**KM32RCMIVDI3050**	KM32	VDI30	32	30	68	50	20	55	5mm	**KM32PKG3S**	8-11
1144823	**KM32RCMIVDI40100**	KM32	VDI40	32	40	83	100	70	63	5mm	**KM32PKG3S**	8-11
1144822	**KM32RCMIVDI4050**	KM32	VDI40	32	40	83	50	20	63	5mm	**KM32PKG3S**	8-11
2420364	**KM40RCMIVDI3050**	KM40	VDI30	40	30	68	50	23	55	6mm	**KM40PKG3S**	12-16
1144840	**KM40RCMIVDI40120**	KM40	VDI40	40	40	83	120	83	63	6mm	**KM40PKG3S**	12-16
1144837	**KM40RCMIVDI4060**	KM40	VDI40	40	40	83	60	23	63	6mm	**KM40PKG3S**	12-16
1144839	**KM40RCMIVDI50120**	KM40	VDI50	40	50	98	120	83	78	6mm	**KM40PKG3S**	12-16
1144838	**KM40RCMIVDI5060**	KM40	VDI50	40	50	98	60	23	78	6mm	**KM40PKG3S**	12-16
1144851	**KM50RCMIVDI40140**	KM50	VDI40	50	40	83	140	95	63	10mm	**KM50PKG3S**	27-34
1144853	**KM50RCMIVDI4070**	KM50	VDI40	50	40	83	70	25	63	10mm	**KM50PKG3S**	27-34
1144854	**KM50RCMIVDI50140**	KM50	VDI50	50	50	98	140	95	78	10mm	**KM50PKG3S**	27-34
1144852	**KM50RCMIVDI5070**	KM50	VDI50	50	50	98	70	25	78	10mm	**KM50PKG3S**	27-34
1144809	**KM63RCMIVDI50160**	KM63	VDI50	63	50	98	160	110	78	12mm	**KM63PKG3S**	47-54
1144807	**KM63RCMIVDI5080**	KM63	VDI50	63	50	98	80	30	78	12mm	**KM63PKG3S**	47-54
1144859	**KM63RCMIVDI60160**	KM63	VDI60	63	60	123	160	110	94	12mm	**KM63PKG3S**	47-54
1144858	**KM63RCMIVDI6080**	KM63	VDI60	63	60	123	80	30	94	12mm	**KM63PKG3S**	47-54
	left hand											
1312285	**KM32LCMIVDI40100**	KM32	VDI40	32	40	83	100	70	63	5mm	**KM32PKG3S**	8-11
1144820	**KM32LCMIVDI4050**	KM32	VDI40	32	40	83	50	20	63	5mm	**KM32PKG3S**	8-11
1144836	**KM40LCMIVDI40120**	KM40	VDI40	40	40	83	120	83	63	6mm	**KM40PKG3S**	12-16
1144833	**KM40LCMIVDI4060**	KM40	VDI40	40	40	83	60	23	63	6mm	**KM40PKG3S**	12-16
1144835	**KM40LCMIVDI50120**	KM40	VDI50	40	50	98	120	83	78	6mm	**KM40PKG3S**	12-16
1144834	**KM40LCMIVDI5060**	KM40	VDI50	40	50	98	60	23	78	6mm	**KM40PKG3S**	12-16
1144797	**KM50LCMIVDI40140**	KM50	VDI40	50	40	83	140	95	63	10mm	**KM50PKG3S**	27-34
1144850	**KM50LCMIVDI4070**	KM50	VDI40	50	40	83	70	25	63	10mm	**KM50PKG3S**	27-34
1144849	**KM50LCMIVDI5070**	KM50	VDI50	50	50	98	70	25	78	10mm	**KM50PKG3S**	27-34
1144810	**KM63LCMIVDI50160**	KM63	VDI50	63	50	98	160	110	78	12mm	**KM63PKG3S**	47-54
1144808	**KM63LCMIVDI5080**	KM63	VDI50	63	50	98	80	30	78	12mm	**KM63PKG3S**	47-54
1144861	**KM63LCMIVDI60160**	KM63	VDI60	63	60	123	160	110	94	12mm	**KM63PKG3S**	47-54
1144860	**KM63LCMIVDI6080**	KM63	VDI60	63	60	123	80	30	94	12mm	**KM63PKG3S**	47-54

(continued)

(R/L • CMI • VDI • Axial continued)

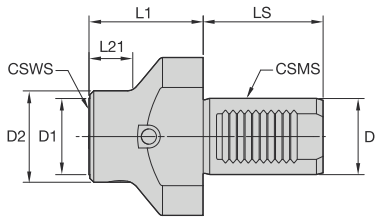


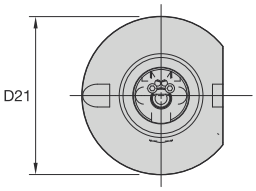


R/L • CMI • VDI • Axial • Inch

order number	catalog number	CSWS system size	CSMS system size	D1	D	D2	L1	L2	LS	wrench size actuation screw	spare parts package	ft. lbs.
	right hand											
1329141	**KM32RCMIVDI30100**	KM32	VDI30	1.26	1.181	2.677	3.94	2.76	2.17	5mm	**KM32PKG3S**	6-8
1144821	**KM32RCMIVDI3050**	KM32	VDI30	1.26	1.181	2.677	1.97	.79	2.17	5mm	**KM32PKG3S**	6-8
1144823	**KM32RCMIVDI40100**	KM32	VDI40	1.26	1.575	3.268	3.94	2.76	2.48	5mm	**KM32PKG3S**	6-8
1144822	**KM32RCMIVDI4050**	KM32	VDI40	1.26	1.575	3.268	1.97	.79	2.48	5mm	**KM32PKG3S**	6-8
2420364	**KM40RCMIVDI3050**	KM40	VDI30	1.57	1.181	2.677	1.97	.91	2.17	6mm	**KM40PKG3S**	9-12
1144840	**KM40RCMIVDI40120**	KM40	VDI40	1.57	1.575	3.268	4.72	3.27	2.48	6mm	**KM40PKG3S**	9-12
1144837	**KM40RCMIVDI4060**	KM40	VDI40	1.57	1.575	3.268	2.36	.91	2.48	6mm	**KM40PKG3S**	9-12
1144839	**KM40RCMIVDI50120**	KM40	VDI50	1.57	1.969	3.858	4.72	3.27	3.07	6mm	**KM40PKG3S**	9-12
1144838	**KM40RCMIVDI5060**	KM40	VDI50	1.57	1.969	3.858	2.36	.91	3.07	6mm	**KM40PKG3S**	9-12
1144851	**KM50RCMIVDI40140**	KM50	VDI40	1.97	1.575	3.268	5.51	3.74	2.48	10mm	**KM50PKG3S**	20-25
1144853	**KM50RCMIVDI4070**	KM50	VDI40	1.97	1.575	3.268	2.76	.98	2.48	10mm	**KM50PKG3S**	20-25
1144854	**KM50RCMIVDI50140**	KM50	VDI50	1.97	1.969	3.858	5.51	3.74	3.07	10mm	**KM50PKG3S**	20-25
1144852	**KM50RCMIVDI5070**	KM50	VDI50	1.97	1.969	3.858	2.76	.98	3.07	10mm	**KM50PKG3S**	20-25
1144809	**KM63RCMIVDI50160**	KM63	VDI50	2.48	1.969	3.858	6.30	4.33	3.07	12mm	**KM63PKG3S**	35-40
1144807	**KM63RCMIVDI5080**	KM63	VDI50	2.48	1.969	3.858	3.15	1.18	3.07	12mm	**KM63PKG3S**	35-40
1144859	**KM63RCMIVDI60160**	KM63	VDI60	2.48	2.362	4.843	6.30	4.33	3.70	12mm	**KM63PKG3S**	35-40
1144858	**KM63RCMIVDI6080**	KM63	VDI60	2.48	2.362	4.843	3.15	1.18	3.70	12mm	**KM63PKG3S**	35-40
	left hand											
1312285	**KM32LCMIVDI40100**	KM32	VDI40	1.26	1.575	3.268	3.94	2.76	2.48	5mm	**KM32PKG3S**	6-8
1144820	**KM32LCMIVDI4050**	KM32	VDI40	1.26	1.575	3.268	1.97	.79	2.48	5mm	**KM32PKG3S**	6-8
1144836	**KM40LCMIVDI40120**	KM40	VDI40	1.57	1.575	3.268	4.72	3.27	2.48	6mm	**KM40PKG3S**	9-12
1144833	**KM40LCMIVDI4060**	KM40	VDI40	1.57	1.575	3.268	2.36	.91	2.48	6mm	**KM40PKG3S**	9-12
1144835	**KM40LCMIVDI50120**	KM40	VDI50	1.57	1.969	3.858	4.72	3.27	3.07	6mm	**KM40PKG3S**	9-12
1144834	**KM40LCMIVDI5060**	KM40	VDI50	1.57	1.969	3.858	2.36	.91	3.07	6mm	**KM40PKG3S**	9-12
1144797	**KM50LCMIVDI40140**	KM50	VDI40	1.97	1.575	3.268	5.51	3.74	2.48	10mm	**KM50PKG3S**	20-25
1144850	**KM50LCMIVDI4070**	KM50	VDI40	1.97	1.575	3.268	2.76	.98	2.48	10mm	**KM50PKG3S**	20-25
1144849	**KM50LCMIVDI5070**	KM50	VDI50	1.97	1.969	3.858	2.76	.98	3.07	10mm	**KM50PKG3S**	20-25
1144810	**KM63LCMIVDI50160**	KM63	VDI50	2.48	1.969	3.858	6.30	4.33	3.07	12mm	**KM63PKG3S**	35-40
1144808	**KM63LCMIVDI5080**	KM63	VDI50	2.48	1.969	3.858	3.15	1.18	3.07	12mm	**KM63PKG3S**	35-40
1144861	**KM63LCMIVDI60160**	KM63	VDI60	2.48	2.362	4.843	6.30	4.33	3.70	12mm	**KM63PKG3S**	35-40
1144860	**KM63LCMIVDI6080**	KM63	VDI60	2.48	2.362	4.843	3.15	1.18	3.70	12mm	**KM63PKG3S**	35-40

NOTE: Refer to page J40 for torque wrench.





KM QUICK CHANGE

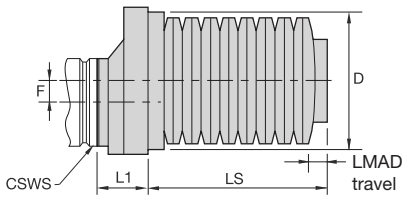
RCML • Axial VDI, Large Body Diameter • Metric

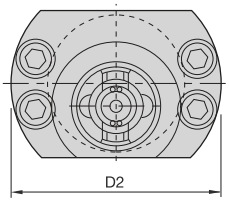
order number	catalog number	CSWS system size	CSMS system size	D1	D2	D	L1	L21	LS	D21	wrench size actuation screw	Nm	spare parts package
2032697	KM32RCMLVDI2050	KM32	VDI20	32	38	20	50	20	40	50	5mm	8-11	KM32PKG3L
2032703	KM32RCMLVDI4060	KM32	VDI40	32	38	40	60	21	63	83	5mm	8-11	KM32PKG3L
2013052	KM40RCMLVDI3050	KM40	VDI30	40	48	30	50	23	55	68	6mm	12-16	KM40PKG3L
2013076	KM40RCMLVDI40120	KM40	VDI40	40	48	40	120	83	63	83	6mm	12-16	KM40PKG3L
2013075	KM40RCMLVDI4060	KM40	VDI40	40	48	40	60	23	63	83	6mm	12-16	KM40PKG3L
2032762	KM40RCMLVDI50120	KM40	VDI50	40	48	50	120	77	78	98	6mm	12-16	KM40PKG3L
2013079	KM40RCMLVDI5060	KM40	VDI50	40	48	50	60	17	78	98	6mm	12-16	KM40PKG3L
2032763	KM40RCMLVDI6080	KM40	VDI60	40	48	60	80	42	94	123	6mm	12-16	KM40PKG3L
2032952	KM50RCMLVDI40120	KM50	VDI40	50	60	40	120	87	63	83	10mm	27-34	KM50PKG3L
2032951	KM50RCMLVDI4060	KM50	VDI40	50	60	40	60	30	63	83	10mm	27-34	KM50PKG3L
2032954	KM50RCMLVDI50140	KM50	VDI50	50	60	50	140	97	78	98	10mm	27-34	KM50PKG3L
2032953	KM50RCMLVDI5070	KM50	VDI50	50	60	50	70	32	78	98	10mm	27-34	KM50PKG3L
2033100	KM63RCMLVDI60160	KM63	VDI60	63	75	60	160	112	94	123	12mm	47-54	KM63PKG3L

RCML • Axial VDI, Large Body Diameter • Inch

order number	catalog number	CSWS system size	CSMS system size	D1	D2	D	L1	L21	LS	D21	wrench size actuation screw	ft. lbs.	spare parts package
2032697	KM32RCMLVDI2050	KM32	VDI20	1.260	1.50	.787	1.969	.79	1.57	1.97	5mm	6-8	KM32PKG3L
2032703	KM32RCMLVDI4060	KM32	VDI40	1.260	1.50	1.575	2.362	.83	2.48	3.27	5mm	6-8	KM32PKG3L
2013052	KM40RCMLVDI3050	KM40	VDI30	1.575	1.89	1.181	1.969	.91	2.17	2.68	6mm	9-12	KM40PKG3L
2013076	KM40RCMLVDI40120	KM40	VDI40	1.575	1.89	1.575	4.724	3.27	2.48	3.27	6mm	9-12	KM40PKG3L
2013075	KM40RCMLVDI4060	KM40	VDI40	1.575	1.89	1.575	2.362	.91	2.48	3.27	6mm	9-12	KM40PKG3L
2032762	KM40RCMLVDI50120	KM40	VDI50	1.575	1.89	1.969	4.724	3.03	3.07	3.86	6mm	9-12	KM40PKG3L
2013079	KM40RCMLVDI5060	KM40	VDI50	1.575	1.89	1.969	2.362	.67	3.07	3.86	6mm	9-12	KM40PKG3L
2032763	KM40RCMLVDI6080	KM40	VDI60	1.575	1.89	2.362	3.150	1.65	3.70	4.84	6mm	9-12	KM40PKG3L
2032952	KM50RCMLVDI40120	KM50	VDI40	1.969	2.36	1.575	4.724	3.43	2.48	3.27	10mm	20-25	KM50PKG3L
2032951	KM50RCMLVDI4060	KM50	VDI40	1.969	2.36	1.575	2.362	1.18	2.48	3.27	10mm	20-25	KM50PKG3L
2032954	KM50RCMLVDI50140	KM50	VDI50	1.969	2.36	1.969	5.512	3.82	3.07	3.86	10mm	20-25	KM50PKG3L
2032953	KM50RCMLVDI5070	KM50	VDI50	1.969	2.36	1.969	2.756	1.26	3.07	3.86	10mm	20-25	KM50PKG3L
2033100	KM63RCMLVDI60160	KM63	VDI60	2.480	2.95	2.362	6.299	4.41	3.70	4.84	12mm	35-40	KM63PKG3L

NOTE: Refer to page J40 for torque wrench.





KM™ QUICK CHANGE

NCA • DS • Axial Disk Spring Unit • Metric

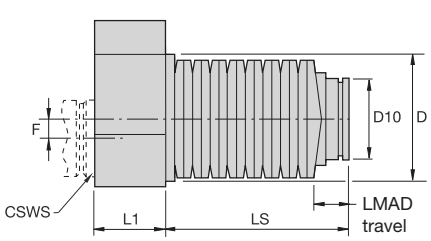
order number	catalog number	CSWS system size	D	F	L1	LS	D2	LMAD travel
1021579	**KM32NCADS16T**	KM32	51	8	16,0	66	78	5,08
1021697	**KM40NCADS40**	KM40	62	10	40,0	53	114	5,60
1021750	**KM50NCADS50**	KM50	78	11	50,0	74	138	7,62

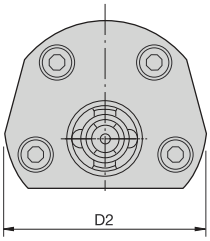
NCA • DS • Axial Disk Spring Unit • Inch

order number	catalog number	CSWS system size	D	F	L1	LS	D2	LMAD travel
1021579	**KM32NCADS16T**	KM32	2.007	.315	.630	2.60	3.07	.200
1021697	**KM40NCADS40**	KM40	2.439	.394	1.575	2.09	4.49	.220
1021750	**KM50NCADS50**	KM50	3.069	.433	1.969	2.92	5.43	.300

Actuating Force

catalog number	actuating force (kN)	actuating force (lbs)
KM32NCADS16T	14,2	3200
KM40NCADS40	16,9	3800
KM50NCADS50	26	6000





KM QUICK CHANGE

NACA • DS • Axial Disk Spring Unit • Metric

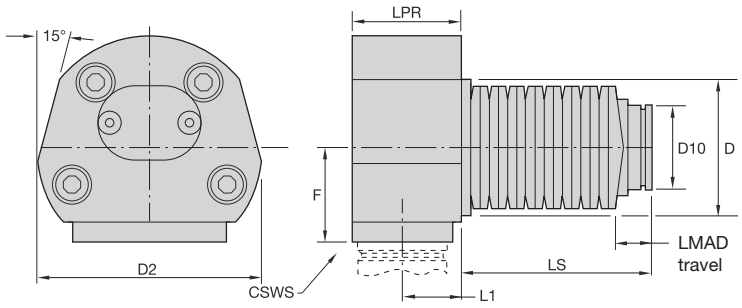
order number	catalog number	CSWS system size	D	D10	F	L1	LS	D2	LMAD travel
1021700	**KM40NACADS55**	KM40	62	38	10	55	90	100	6,50
1021702	**KM40NACADS55DT**	KM40	62	55	10	55	90	100	5,64
1021752	**KM50NACADS70DT**	KM50	72	65	11	70	111	120	7,62
1021529	**KM63NACADS85DT**	KM63	85	75	12	85	145	140	9,00

NACA • DS • Axial Disk Spring Unit • Inch

order number	catalog number	CSWS system size	D	D10	F	L1	LS	D2	LMAD travel
1021700	**KM40NACADS55**	KM40	2.441	1.496	.394	2.165	3.53	3.94	.256
1021702	**KM40NACADS55DT**	KM40	2.439	2.159	.394	2.165	3.53	3.94	.222
1021752	**KM50NACADS70DT**	KM50	2.833	2.553	.433	2.756	4.36	4.72	.300
1021529	**KM63NACADS85DT**	KM63	3.345	2.947	.472	3.346	5.71	5.51	.354

Actuating Force

catalog number	actuating force (kN)	actuating force (lbs)
KM40NACADS55DT	16,9	3800
KM50NACADS70DT	18	4000
KM63NACADS85DT	27	6000



KM QUICK CHANGE

RACA • DS • Right-Angle Disk Spring Unit • Metric

order number	catalog number	CSWS system size	D	D10	F	L1	LPR	LS	D2	LMAD travel
1021701	KM40RACADS40DT	KM40	62	55	40,0	28	52	94	100	10,67
1021524	KM63RACADS60DT	KM63	85	75	60,0	42	80	150	140	14,00

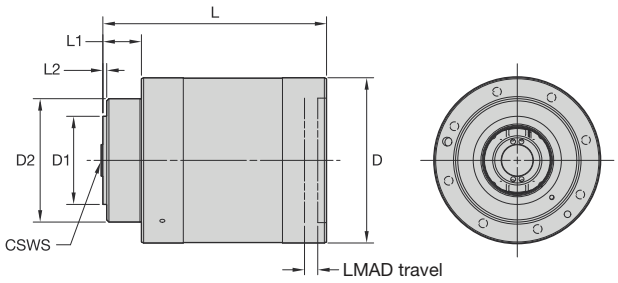
RACA • DS • Right-Angle Disk Spring Unit • Inch

order number	catalog number	CSWS system size	D	D10	F	L1	LPR	LS	D2	LMAD travel
1021701	KM40RACADS40DT	KM40	2.441	2.16	1.575	1.102	2.047	3.70	3.94	.420
1021524	KM63RACADS60DT	KM63	3.347	2.95	2.362	1.654	3.150	5.91	5.51	.551

Actuating Force

system size	actuating force (kN)	actuating force (lbs)
KM40	12,5	2800
KM50	39,5	8875

KM QUICK CHANGE



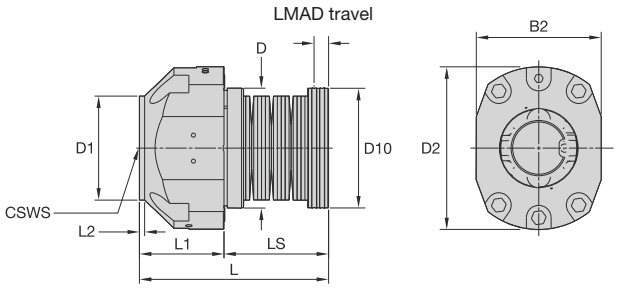
XGL • KM80 Rotating • Metric

order number	catalog number	CSWS system size	D1	D2	D	L1	L2	L	LMAD travel	kg
2247834	KM80XGL1062756	KM80	80	112	150	35	3,5	203	12	21,81
2452550	KM80XGL1560573	KM80	80	112	150	35	3,5	203	12	21,81

XGL • KM80 Rotating • Inch

order number	catalog number	CSWS system size	D1	D2	D	L1	L2	L	LMAD travel	lbs
2247834	KM80XGL1062756	KM80	3.15	4.41	5.906	1.378	.14	7.99	.472	48.08
2452550	KM80XGL1560573	KM80	3.15	4.41	5.906	1.378	.14	7.99	.472	48.08

KM QUICK CHANGE



XGL • KM80 Static • Metric

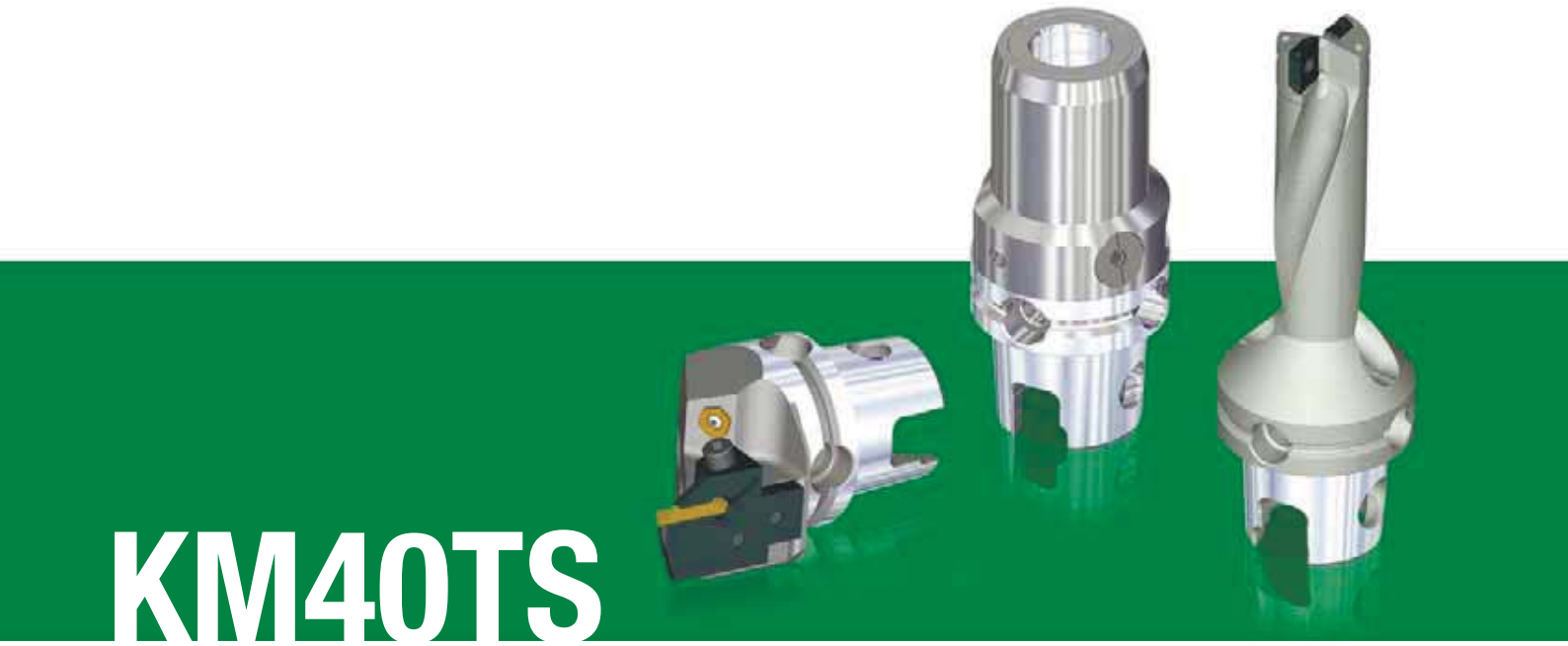
order number	catalog number	CSWS system size	D1	D	D10	D2	L1	LS	L	L2	B2	LMAD travel	kg
3449440	KM80XGL1724179	KM80	80	92	92,0	125	65	80,00	145,00	4	96	11,19	6,77
1954766	KM80XGL1064593	KM80	80	108	101,4	165	60	62,75	122,75	2	140	11,00	11,07
2500998	KM80XGL1555011	KM80	80	108	101,4	165	60	62,75	122,75	2	140	11,00	11,07

XGL • KM80 Static • Inch

order number	catalog number	CSWS system size	D1	D	D10	D2	L1	LS	L	L2	B2	LMAD travel	lbs
3449440	KM80XGL1724179	KM80	3.15	3.622	3.622	4.92	2.559	3.15	5.71	.16	3.78	.440	14.92
1954766	KM80XGL1064593	KM80	3.15	4.253	3.992	6.50	2.362	2.47	4.83	.06	5.49	.433	24.35
2500998	KM80XGL1555011	KM80	3.15	4.253	3.992	6.50	2.362	2.47	4.83	.06	5.49	.433	24.35

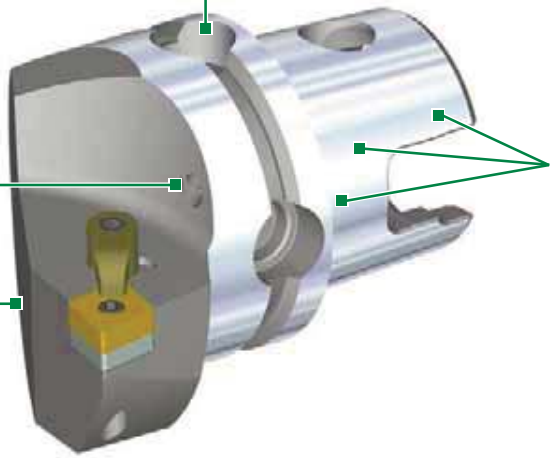
KM™ Quick Change Clamping System • **KM40TS™ Series**

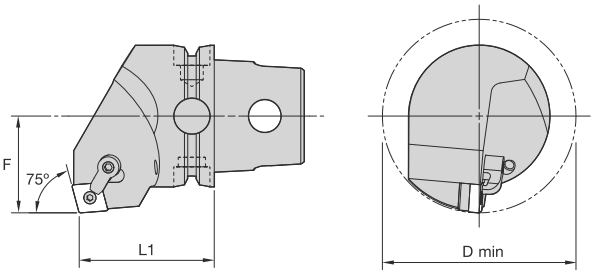
The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



KM40TS

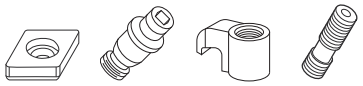
- KM is an ISO standard (ISO 26622).
- KM clamping units provide a 4:1 mechanical advantage.
- KM cutting units are capable of 100 bar (1,500 psi) coolant pressure.



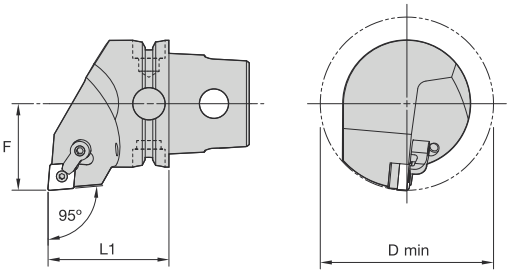


KM QUICK CHANGE

MCKN 75°

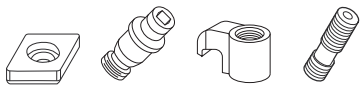


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3901336	KM40TSMCKNR12	40	1.575	27	1.063	54	2.126	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,36	.79
	left hand													
3901335	KM40TSMCKNL12	40	1.575	27	1.063	54	2.126	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,36	.79

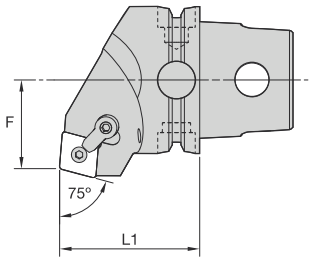


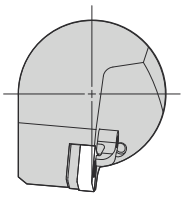
KM QUICK CHANGE

MCLN 95°



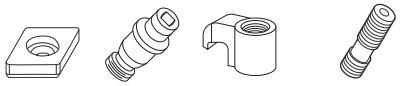
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2647737	KM40TSMCLNR12	40	1.575	27	1.063	54	2.126	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,33	.72
3901339	KM40TSMCLNR16	40	1.575	27	1.063	120	4.724	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,33	.73
	left hand													
3901337	KM40TSMCLNL12	40	1.575	27	1.063	54	2.126	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,33	.72
3901338	KM40TSMCLNL16	40	1.575	27	1.063	120	4.724	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,33	.73



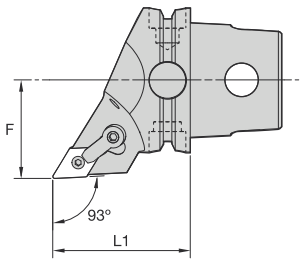


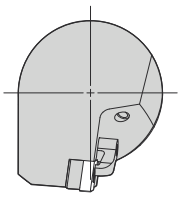
KM QUICK CHANGE

■ MCRN 75°



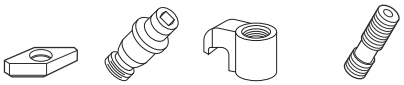
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3901341	KM40TSMCRNR12	40	1.575	24	.945	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,33	.72
	left hand											
3901340	KM40TSMCRNL12	40	1.575	24	.945	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,33	.72



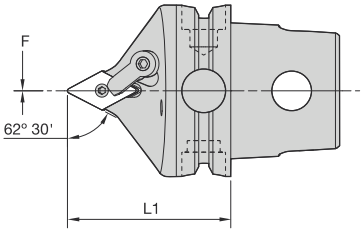


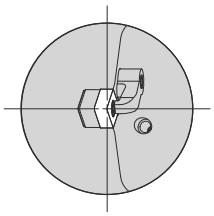
KM QUICK CHANGE

■ MDJN 93°



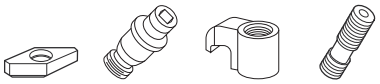
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3901291	KM40TSMDJNR1504	40	1.575	27	1.063	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,26	.570
3901292	KM40TSMDJNR1506	40	1.575	27	1.063	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,26	.570
	left hand											
3901289	KM40TSMDJNL1504	40	1.575	27	1.063	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,26	.570
3901290	KM40TSMDJNL1506	40	1.575	27	1.063	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,26	.570



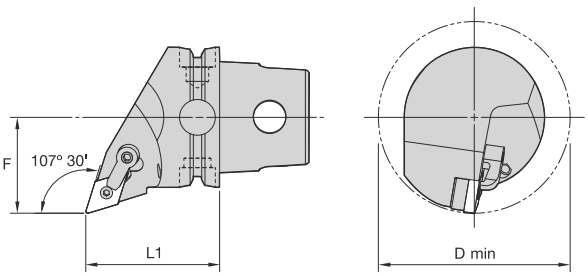


KM QUICK CHANGE

■ MDPN 62° 30'

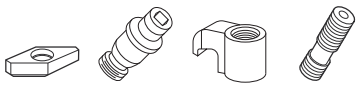


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3901293	KM40TSMDPNN1504	40	1.575	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM20LP	STCM11	0,23	.50
3901294	KM40TSMDPNN1506	40	1.575	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM20LP	STCM11	0,22	.49

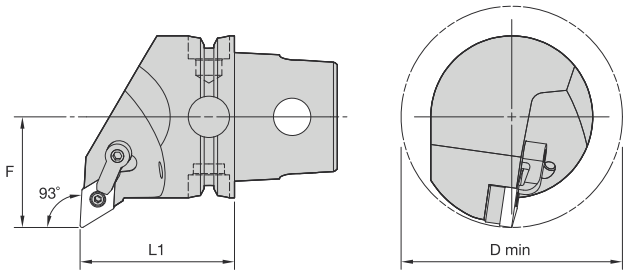


KM QUICK CHANGE

■ MDQN 107° 30'

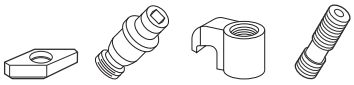


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3901297	KM40TSMDQNR1504	40	1.575	27	1.063	54	2.126	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,29	.63
3901298	KM40TSMDQNR1506	40	1.575	27	1.063	54	2.126	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,28	.62
	left hand													
3901295	KM40TSMDQNL1504	40	1.575	27	1.063	54	2.126	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,28	.63
3901296	KM40TSMDQNL1506	40	1.575	27	1.063	54	2.126	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,28	.62

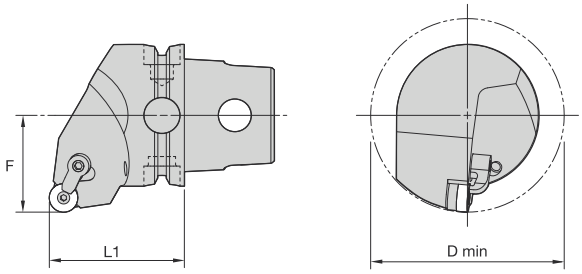


KM QUICK CHANGE

MDUN 93°

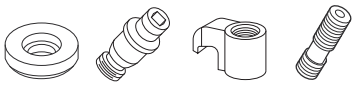


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3901301	KM40TSMDUNR1504	40	1.575	27	1.063	54	2.126	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,31	.69
3901302	KM40TSMDUNR1506	40	1.575	27	1.063	54	2.126	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,31	.68
	left hand													
3901299	KM40TSMDUNL1504	40	1.575	27	1.063	54	2.126	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,31	.69
3901300	KM40TSMDUNL1506	40	1.575	27	1.063	54	2.126	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,31	.68

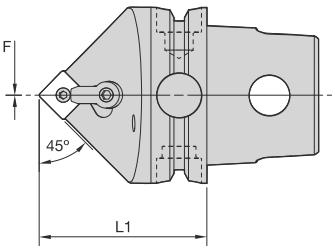


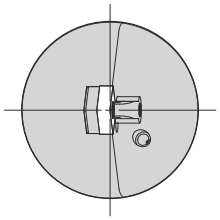
KM QUICK CHANGE

MRGN 0°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3901306	KM40TSMRGNR12	40	1.575	27	1.063	100	3.937	RN..120400/RN..43	IRSN43	KLM46	CKM20LP	STCM11	0,32	.71
	left hand													
3901305	KM40TSMRGNL12	40	1.575	27	1.063	100	3.937	RN..120400/RN..43	IRSN43	KLM46	CKM20LP	STCM11	0,32	.71

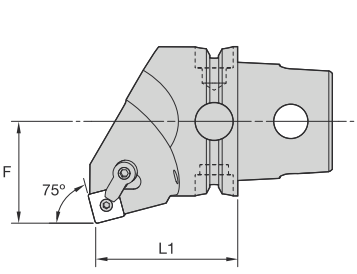


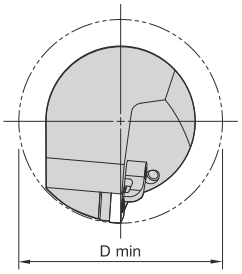


KM QUICK CHANGE

MSDN 45°

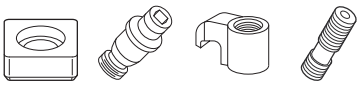
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3901307	KM40TSMSDNN12	40	1.575	0	.000	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,26	.57



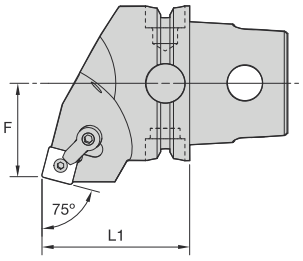


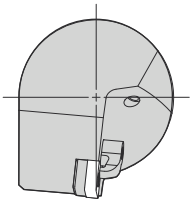
KM QUICK CHANGE

MSKN 75°



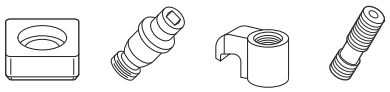
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3901309	KM40TSMSKNR12	40	1.575	27	1.063	54	2.126	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,36	.80
	left hand													
3901308	KM40TSMSKNL12	40	1.575	27	1.063	54	2.126	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,36	.80



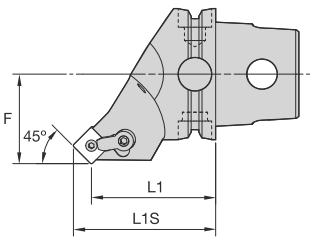


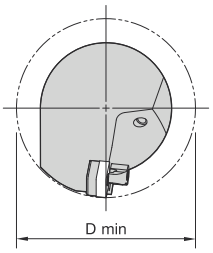
KM QUICK CHANGE

■ MSRN 75°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3901311	KM40TSMSRNR12	40	1.575	24	.945	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,31	.67
3901312	KM40TSMSRNR15	40	1.575	24	.945	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,33	.73
	left hand											
3901310	KM40TSMSRNL12	40	1.575	24	.945	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,31	.68

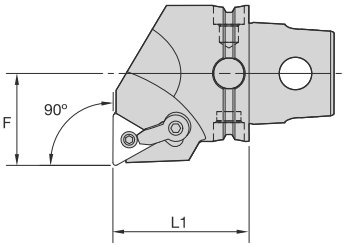


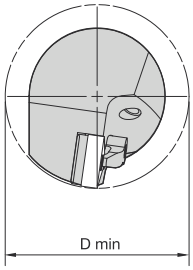


KM QUICK CHANGE

■ MSSN 45°

order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand															
3901314	KM40TSMSSNR12	40	1.575	48,3	1.903	27	1.063	80	3.150	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,32	.72
	left hand															
3901313	KM40TSMSSNL12	40	1.575	48,3	1.903	27	1.063	80	3.150	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,32	.71

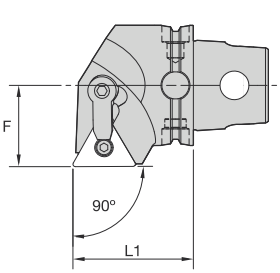


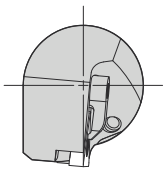


KM QUICK CHANGE

MTFN 90°

		L1		F		D min								
order number	catalog number	mm	in	mm	in	mm	in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3902249	KM40TSMTFNR16	40	1.575	27	1.063	54	2.126	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,35	.78
	left hand													
3902247	KM40TSMTFNL16	40	1.575	27	1.063	54	2.126	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,35	.78

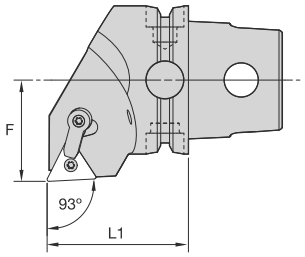


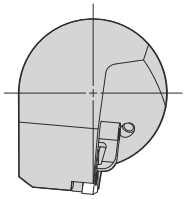


KM QUICK CHANGE

MTGN 90°

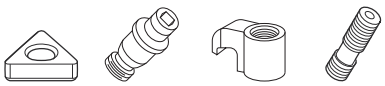
		L1		F							
order number	catalog number	mm	in	mm	in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3902251	KM40TSMTGNR22	40	1.575	27	1.063	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,35	.78
	left hand											
3902250	KM40TSMTGNL22	40	1.575	27	1.063	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,35	.78



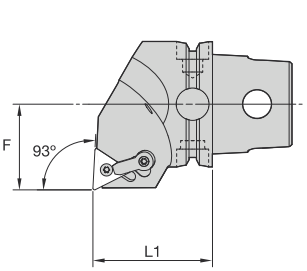


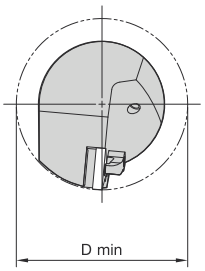
KM QUICK CHANGE

MTJN 93°



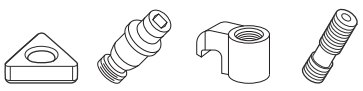
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3902274	KM40TSMTJNR16	40	1.575	27	1.063	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,33	.73
3902275	KM40TSMTJNR22	40	1.575	27	1.063	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,36	.79
	left hand											
3902252	KM40TSMTJNL16	40	1.575	27	1.063	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,33	.73
3902273	KM40TSMTJNL22	40	1.575	27	1.063	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,36	.79



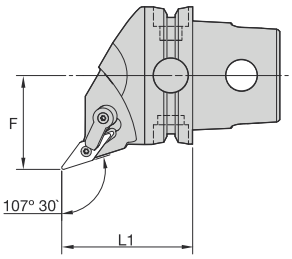


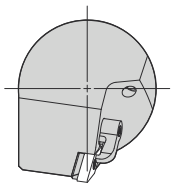
KM QUICK CHANGE

MTUN 93°



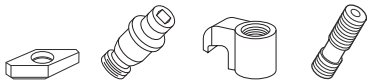
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3902278	KM40TSMTUNR16	40	1.575	27	1.063	54	2.126	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,34	.76
	left hand													
3902276	KM40TSMTUNL16	40	1.575	27	1.063	54	2.126	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,34	.76
3902277	KM40TSMTUNL22	40	1.575	27	1.063	54	2.126	TN..220408/TN..432	ITSN433	KLM46	CKM20LP	STCM11	0,34	.75



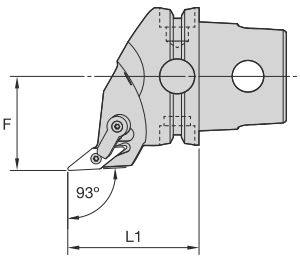


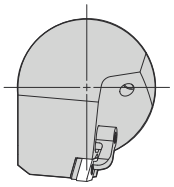
KM QUICK CHANGE

MVHN 107° 30'



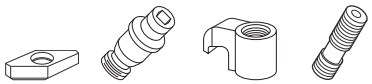
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3902239	KM40TSMVHNR16050M	50	1.969	27	1.063	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,35	.77
	left hand											
3902238	KM40TSMVHNL16050M	50	1.969	27	1.063	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,35	.77



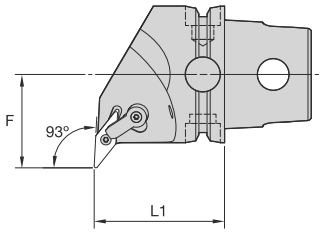


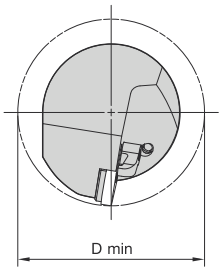
KM QUICK CHANGE

MVJN 93°



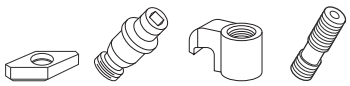
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3902241	KM40TSMVJNR16045M	45	1.772	27	1.063	VN..160408/VN..332	IVSN322	KLM34L	CKM20LP	STCM11	0,30	.65
	left hand											
3902240	KM40TSMVJNL16045M	45	1.772	27	1.063	VN..160408/VN..332	IVSN322	KLM34L	CKM20LP	STCM11	0,30	.65



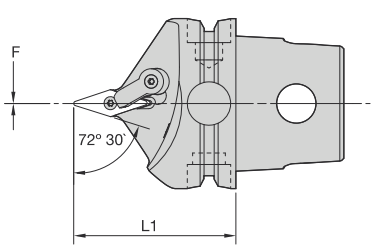


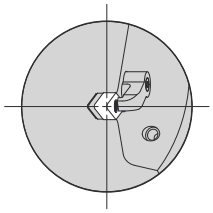
KM QUICK CHANGE

MVUN 93°



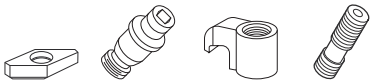
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3902253	KM40TSMVUNR16045M	45	1.772	27	1.063	54	2.126	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,36	.79
	left hand													
3902242	KM40TSMVUNL16045M	45	1.772	27	1.063	54	2.126	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,36	.79



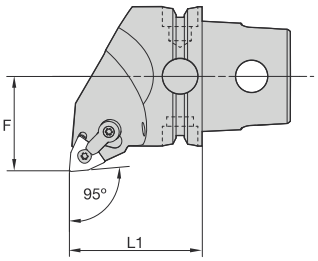


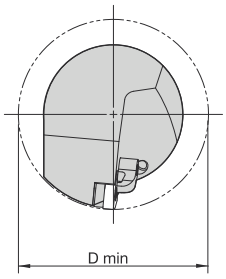
KM QUICK CHANGE

MVVN 72° 30'



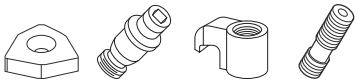
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3902254	KM40TSMVVNN16050M	50	1.969	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM20LP	STCM11	0,29	.64



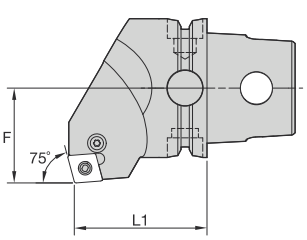


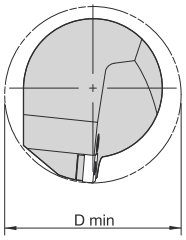
KM QUICK CHANGE

MWLN 95°



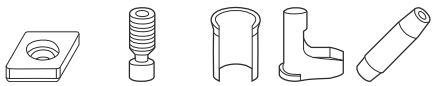
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3902256	**KM40TSMWLNR08**	40	1.575	27	1.063	54	2.126	WN..080408/WN..432	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**	0,34	.76
	left hand													
3902255	**KM40TSMWLNL08**	40	1.575	27	1.063	54	2.126	WN..080408/WN..432	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**	0,34	.76



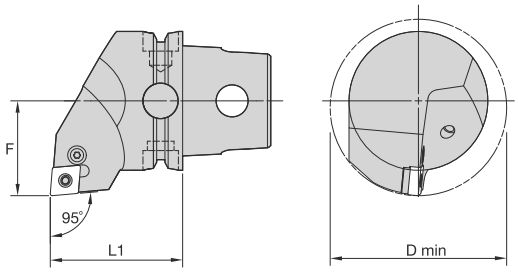


KM QUICK CHANGE

PCKN 75°

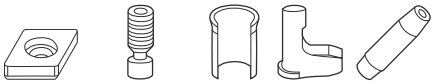


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3902261	**KM40TSPCKNR12**	40	1.575	27	1.063	50	1.969	CN..120408/CN..432	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**	0,36	.78
	left hand														
3902260	**KM40TSPCKNL12**	40	1.575	27	1.063	50	1.969	CN..120408/CN..432	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**	0,35	.77

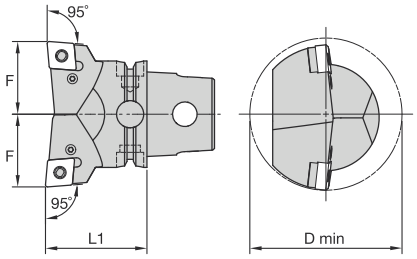


KM QUICK CHANGE

PCLN 95°

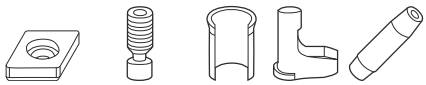


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3902315	KM40TSPCLNR09	40	1.575	27	1.063	50	1.969	CN..090308/CN..322	512.111	514.118	513.019	511.018	515.018	0,32	.71
3902316	KM40TSPCLNR12	40	1.575	27	1.063	50	1.969	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,32	.70
	left hand														
3902262	KM40TSPCLNL09	40	1.575	27	1.063	50	1.969	CN..090308/CN..322	512.111	514.118	513.019	511.018	515.018	0,33	.72
3902313	KM40TSPCLNL12	40	1.575	27	1.063	50	1.969	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,32	.71

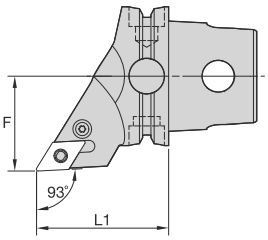


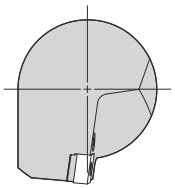
KM QUICK CHANGE

PCLN-2W 95°



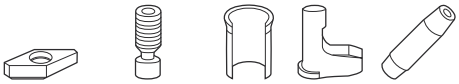
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3902317	KM40TSPCLNR122W	40	1.575	27	1.063	60	2.362	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,35	.77
	left hand														
3902314	KM40TSPCLNL122W	40	1.575	27	1.063	60	2.362	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,35	.77



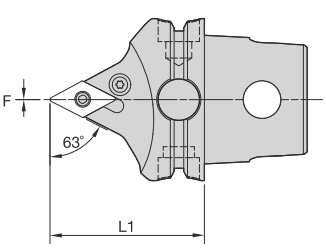


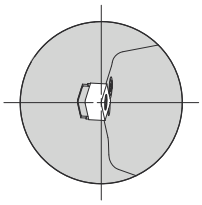
KM QUICK CHANGE

PDJN 93°



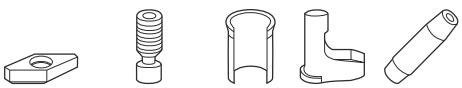
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
3902312	KM40TSPDJNR11	40	1.575	27	1.063	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,26	.56
3902323	KM40TSPDJNR15	40	1.575	27	1.063	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,26	.56
	left hand												
3902310	KM40TSPDJNL11	40	1.575	27	1.063	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,25	.56
3902311	KM40TSPDJNL15	40	1.575	27	1.063	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,26	.56





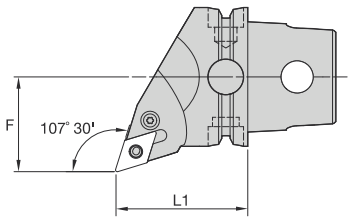
KM QUICK CHANGE

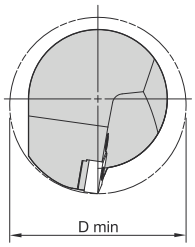
PDNN 63°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
3902325	KM40TSPDNNR15	45	1.772	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,24	.52
	left hand												
3902324	KM40TSPDNNL15	45	1.772	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,24	.52

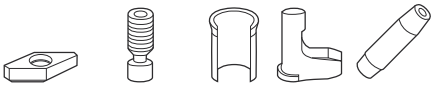
TS ISO 26622 100 bar 1500 psi





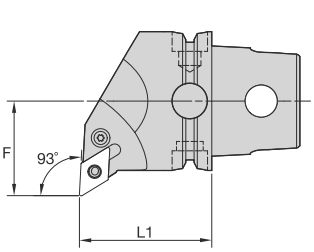
KM QUICK CHANGE

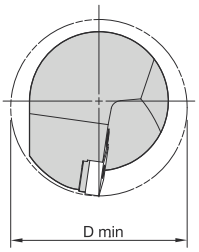
■ PDQN 107° 30'



		L1		F		D min									
order number	catalog number	mm	in	mm	in	mm	in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3902327	KM40TSPDQNR11	40	1.575	27	1.063	50	1.969	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,29	.63
	left hand														
3902326	KM40TSPDQNL11	40	1.575	27	1.063	50	1.969	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,29	.63

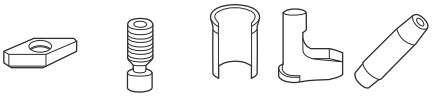
TS ISO 26622 100 bar 1500 psi



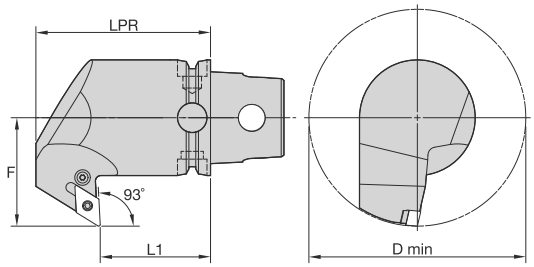


KM QUICK CHANGE

■ PDUN 93°

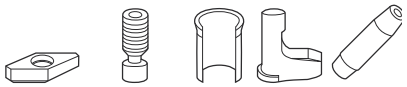


		L1		F		D min									
order number	catalog number	mm	in	mm	in	mm	in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3902330	KM40TSPDUNR11	40	1.575	27	1.063	50	1.969	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,33	.72
3902331	KM40TSPDUNR15	40	1.575	27	1.063	50	1.969	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,32	.71
	left hand														
3902328	KM40TSPDUNL11	40	1.575	27	1.063	50	1.969	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,31	.68
3902329	KM40TSPDUNL15	40	1.575	27	1.063	50	1.969	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,32	.71

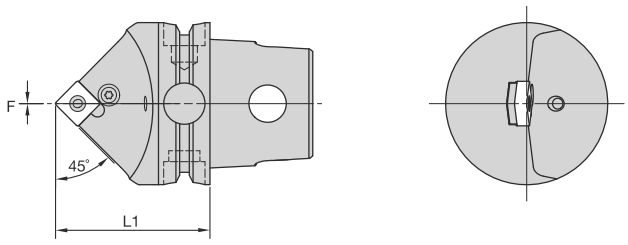


KM QUICK CHANGE

PDXN 93°

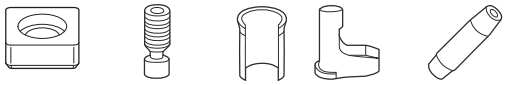


order number	catalog number	L1 mm	L1 in	LPR mm	LPR in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand																
3902333	KM40TSPDXNR15	40	1.575	65	2.559	47	1.850	94	3.701	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,66	1.45
	left hand																
3902332	KM40TSPDXNL15	40	1.575	65	2.559	47	1.850	94	3.701	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,65	1.44

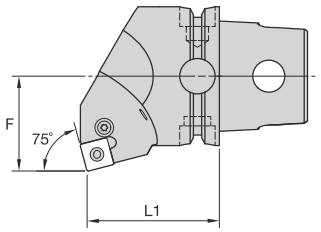


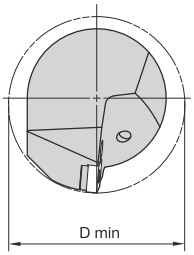
KM QUICK CHANGE

PSDN 45°



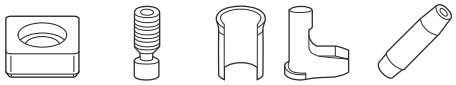
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
3950775	KM40TSPSDNN09	40	1.575	0	.000	SN..090308/SN..322	512.053	514.118	513.019	511.018	515.018	0,26	.57
3950776	KM40TSPSDNN12	40	1.575	0	.000	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,25	.54



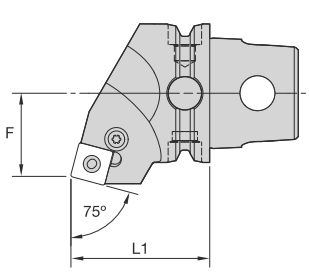


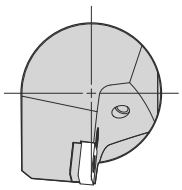
KM QUICK CHANGE

PSKN 75°



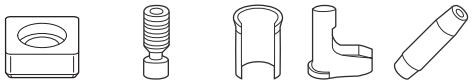
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3950778	KM40TSPSKNR12	40	1.575	27	1.063	50	1.969	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,36	.79
	left hand														
3950777	KM40TSPSKNL12	40	1.575	27	1.063	50	1.969	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,36	.79





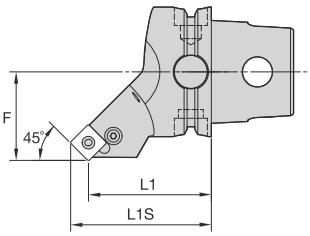
KM QUICK CHANGE

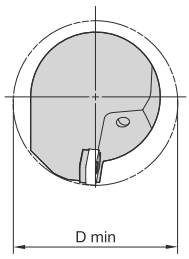
PSRN 75°



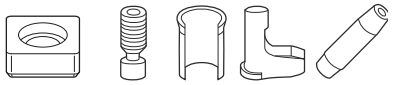
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
3950780	KM40TSPSRNR12	40	1.575	24	.945	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,31	.69
	left hand												
3950779	KM40TSPSRNL12	40	1.575	24	.945	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,31	.69

KM QUICK CHANGE



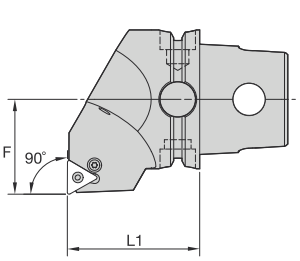


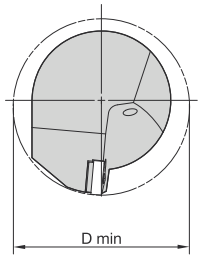
PSSN 45°



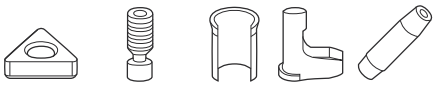
order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand																
3950781	KM40TSPSSNR12	40	1.575	48,3	1.903	27	1.063	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,31	.69

KM QUICK CHANGE

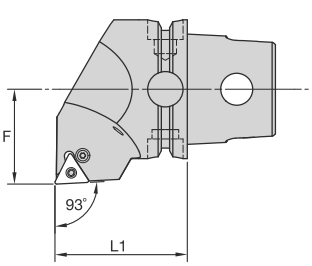


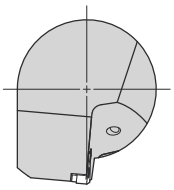


PTFN 90°



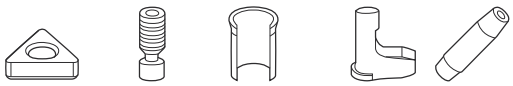
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3950783	KM40TSPTFNR16	40	1.575	27	1.063	50	1.969	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	0,36	.78
	left hand														
3950782	KM40TSPTFNL16	40	1.575	27	1.063	50	1.969	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	0,36	.79



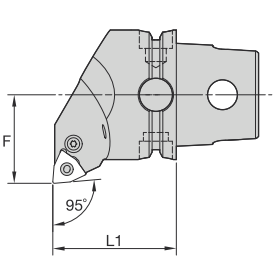


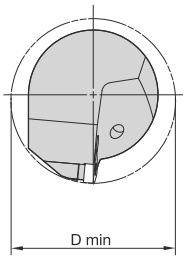
KM QUICK CHANGE

PTJN 93°



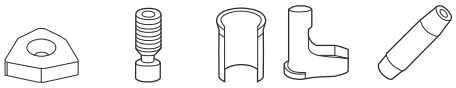
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
3950785	KM40TSPTJNR16	40	1.575	27	1.063	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	0,34	.75
	left hand												
3950784	KM40TSPTJNL16	40	1.575	27	1.063	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	0,34	.75



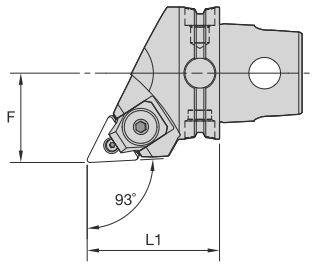


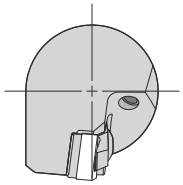
KM QUICK CHANGE

PWLN 95°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3950788	KM40TSPWLNR06	40	1.575	27	1.063	50	1.969	WN..060408/WN..332	512.134	514.118	513.018	511.018	515.018	0,33	.73
3950789	KM40TSPWLNR08	40	1.575	27	1.063	50	1.969	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	0,32	.70
	left hand														
3950786	KM40TSPWLNL06	40	1.575	27	1.063	50	1.969	WN..060408/WN..332	512.134	514.118	513.018	511.018	515.018	0,33	.73
3950787	KM40TSPWLNL08	40	1.575	27	1.063	50	1.969	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	0,32	.71

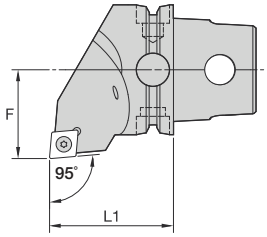


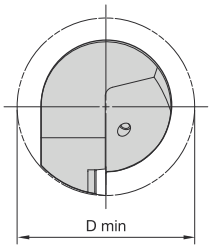


KM QUICK CHANGE

WTJN

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	clamp	lock pin	shim	retaining ring	Wedgelock screw	kg	lbs
	right hand												
3964067	**KM40TSWTJNR16**	40	1.575	27	1.063	TN..160408/TN..332	**WC4**	**FP4**	**SM290**	**MRA5**	**MS988**	0,28	.63
	left hand												
3964066	**KM40TSWTJNL16**	40	1.575	27	1.063	TN..160408/TN..332	**WC4**	**FP4**	**SM290**	**MRA5**	**MS988**	0,28	.63

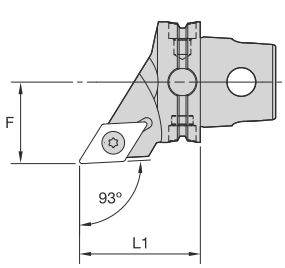


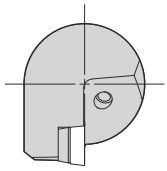


KM QUICK CHANGE

SCLC 95°

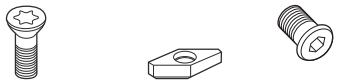
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand												
3960003	KM40TSSCLCR12	40	1.575	27	1.063	50	1.969	CC..120408/CC..432	MS1158	SKCP453	SRS4	0,32	.70
	left hand												
3959952	KM40TSSCLCL12	40	1.575	27	1.063	50	1.969	CC..120408/CC..432	MS1158	SKCP453	SRS4	0,32	.70



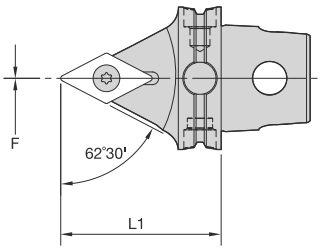


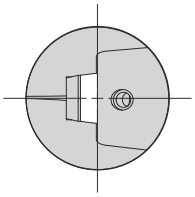
KM QUICK CHANGE

SDJC 93°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand										
3960005	KM40TSSDJCR11	40	1.575	27	1.063	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,25	.55
3960007	KM40TSSDJCR15	40	1.575	27	1.063	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,24	.53
	left hand										
3960004	KM40TSSDJCL11	40	1.575	27	1.063	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,25	.55
3960006	KM40TSSDJCL15	40	1.575	27	1.063	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,24	.52

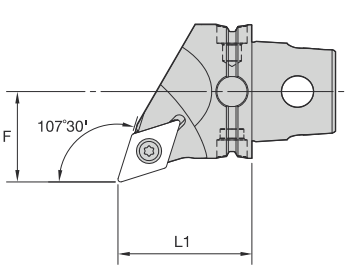


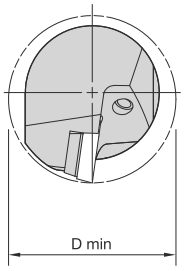


KM QUICK CHANGE

SDNC 62° 30'

		L1		F							
order number	catalog number	mm	in	mm	in	gage insert	insert screw	shim	shim screw	kg	lbs
3960008	KM40TSSDNCN15045M	45	1.772	0	.000	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,23	.50

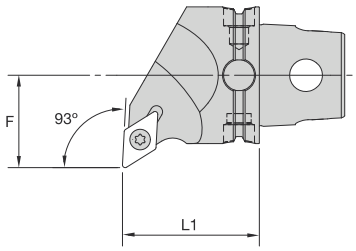


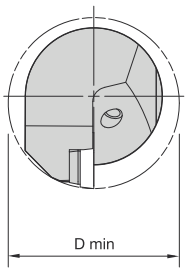


KM QUICK CHANGE

SDQC 107° 30'

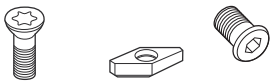
		L1		F		D min						
order number	catalog number	mm	in	mm	in	mm	in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand												
3960010	KM40TSSDQCR11	40	1.575	27	1.063	50	1.969	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,27	.61
3960012	KM40TSSDQCR15	40	1.575	27	1.063	50	1.969	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,27	.60
	left hand												
3960009	KM40TSSDQCL11	40	1.575	27	1.063	50	1.969	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,27	.61
3960011	KM40TSSDQCL15	40	1.575	27	1.063	50	1.969	DC..150408/DC..432	MS1158	SKDP453	SRS4	0,27	.60



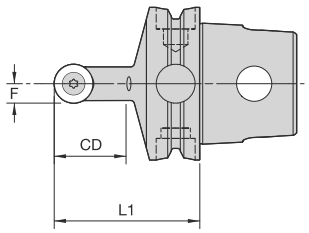


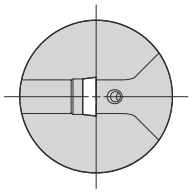
KM QUICK CHANGE

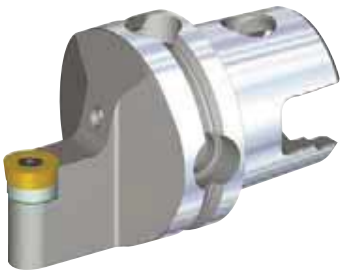
■ SDUC 93°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand												
3960014	KM40TSSDUCR11	40	1.575	27	1.063	50	1.969	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,30	.66
	left hand												
3960013	KM40TSSDUCL11	40	1.575	27	1.063	50	1.969	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	0,30	.66

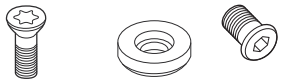




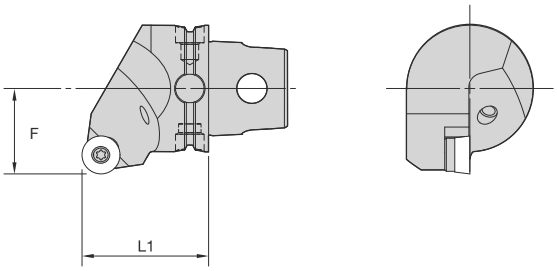


KM QUICK CHANGE

■ SRDC 0°



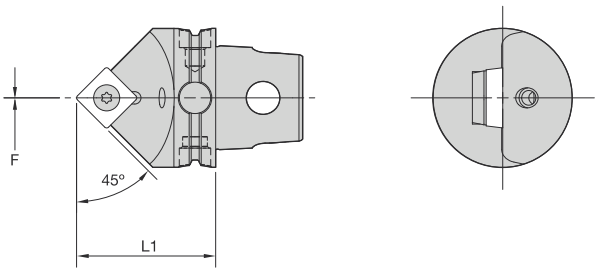
order number	catalog number	L1 mm	L1 in	F mm	F in	CD mm	CD in	gage insert	insert screw	shim	shim screw	kg	lbs
3960015	KM40TSSRDCN06	40	1.575	3	.118	12	.472	RC..0602M0	MS1153	–	–	0,22	.48
3960016	KM40TSSRDCN08	40	1.575	4	.158	16	.630	RC..0803M0	MS1154	–	–	0,22	.48
3960017	KM40TSSRDCN10	40	1.575	5	.197	20	.787	RC..10T3M0	MS1156	SKRN100300	SRS3	0,21	.47



KM QUICK CHANGE

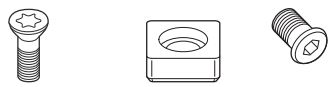
SRGC 0°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand										
3960019	KM40TSSRGCR10	40	1.575	27	1.063	RC..10T3M0	MS1156	SKRN100300	SRS3	0,31	.69
3960021	KM40TSSRGCR12	40	1.575	27	1.063	RC..1204M0	MS1156	SKRN1203M0	SRS3	0,31	.69
	left hand										
3960018	KM40TSSRGCL10	40	1.575	27	1.063	RC..10T3M0	MS1156	SKRN100300	SRS3	0,32	.70
3960020	KM40TSSRGCL12	40	1.575	27	1.063	RC..1204M0	MS1156	SKRN1203M0	SRS3	0,31	.69

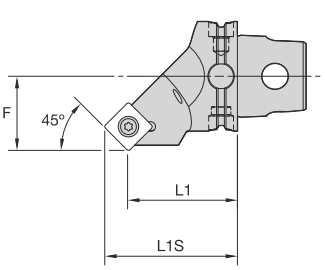


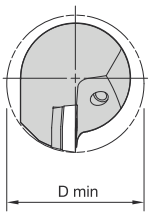
KM QUICK CHANGE

SSDC 45°



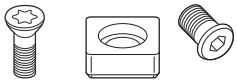
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
3960022	KM40TSSSDCN12	40	1.575	0	.000	SC..120408/SC..432	MS1158	SKSP453	SRS4	0,25	.55



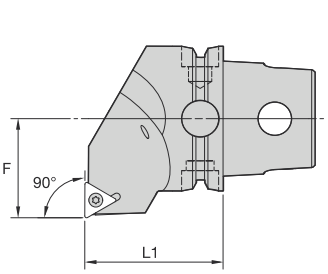


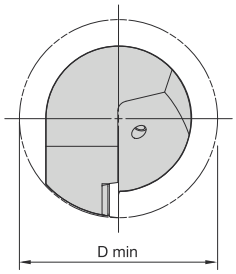
KM QUICK CHANGE

SSSC 45°



order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand														
3960034	KM40TSSSSCR12	40	1.575	48,3	1.902	27	1.063	50	1.969	SC..120408/SC..432	MS1158	SKSP453	SRS4	0,29	.64
	left hand														
3960033	KM40TSSSSCL12	40	1.575	48,3	1.902	27	1.063	50	1.969	SC..120408/SC..432	MS1158	SKSP453	SRS4	0,29	.64

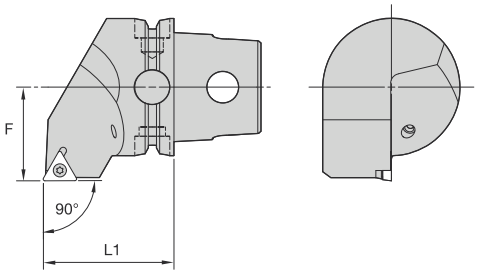




KM QUICK CHANGE

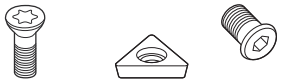
STFC 90°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand												
3960036	KM40TSSTFCR16	40	1.575	27	1.063	50	1.969	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	0,33	.72
	left hand												
3960035	KM40TSSTFCL16	40	1.575	27	1.063	50	1.969	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	0,33	.73

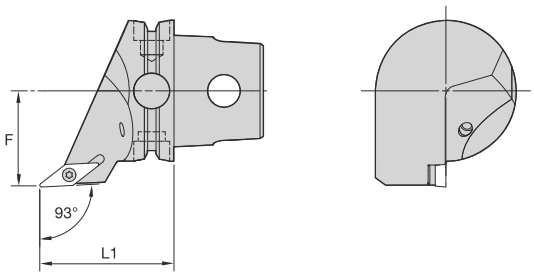


KM QUICK CHANGE

STGC 90°

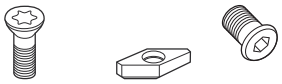


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand										
3960038	KM40TSSTGCR16	40	1.575	27	1.063	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	0,33	.73
	left hand										
3960037	KM40TSSTGCL16	40	1.575	27	1.063	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	0,33	.73

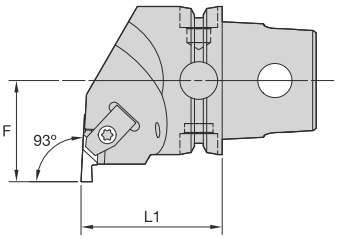


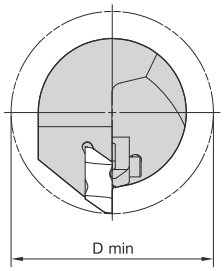
KM QUICK CHANGE

SVJB 93°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand										
3960040	KM40TSSVJBR16	47	1.850	27	1.063	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,27	.59
	left hand										
3960039	KM40TSSVJBL16	47	1.850	27	1.063	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,27	.59

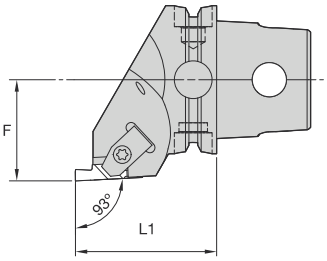


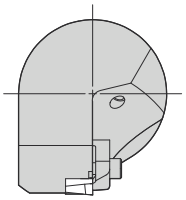


KM QUICK CHANGE

NE 93°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	clamp	clamp screw	kg	lbs
	right hand											
3902285	**KM40TSNER2**	40	1.575	27	1.063	54	2.126	NG2L	**CM75**	**MS1488**	0,31	.68
3902286	**KM40TSNER3**	40	1.575	27	1.063	54	2.126	NG3L	**CM73**	**MS1489**	0,32	.70
3902287	**KM40TSNER4**	40	1.575	27	1.063	54	2.126	NG4L	**CM73**	**MS1489**	0,30	.66
	left hand											
3902132	**KM40TSNEL2**	40	1.575	27	1.063	54	2.126	NG2R	**CM74**	**MS1488**	0,31	.68
3902283	**KM40TSNEL3**	40	1.575	27	1.063	54	2.126	NG3R	**CM72**	**MS1489**	0,32	.70
3902284	**KM40TSNEL4**	40	1.575	27	1.063	54	2.126	NG4R	**CM72**	**MS1489**	0,30	.66

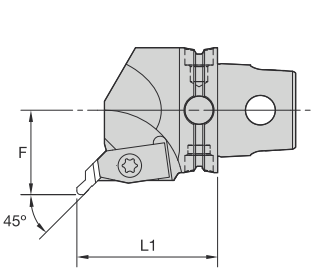


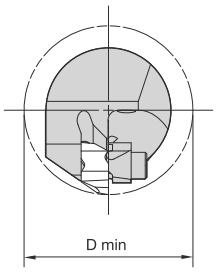


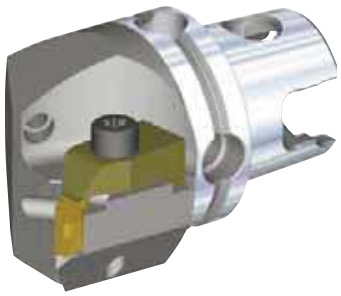
KM QUICK CHANGE

NS 93°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	clamp	clamp screw	kg	lbs
	right hand									
3902293	**KM40TSNSR2**	40	1.575	27	1.063	NG2R	**CM74**	**MS1488**	0,32	.70
3902294	**KM40TSNSR3**	47	1.850	27	1.063	NG3R	**CM72**	**MS1489**	0,32	.71
3902295	**KM40TSNSR4**	47	1.850	27	1.063	NG4R	**CM72**	**MS1489**	0,31	.68
	left hand									
3902290	**KM40TSNSL2**	40	1.575	27	1.063	NG2L	**CM75**	**MS1488**	0,32	.70
3902291	**KM40TSNSL3**	47	1.850	27	1.063	NG3L	**CM73**	**MS1489**	0,33	.72
3902292	**KM40TSNSL4**	47	1.850	27	1.063	NG4L	**CM73**	**MS1489**	0,31	.68



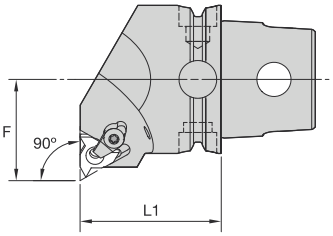


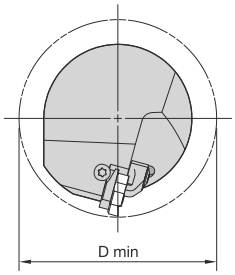


KM QUICK CHANGE

NR 45°

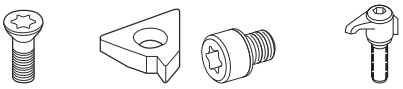
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	clamp	clamping screw	kg	lbs
	right hand											
3902289	**KM40TSNRR3045M**	45	1.772	27	1.063	54	2.126	NU3L	**CM73**	**MS1489**	0,34	.75
	left hand											
3902288	**KM40TSNRL3045M**	45	1.772	27	1.063	54	2.126	NU3R	**CM72**	**MS1489**	0,33	.74





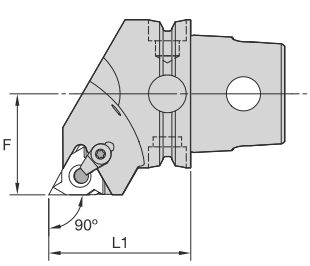
KM QUICK CHANGE

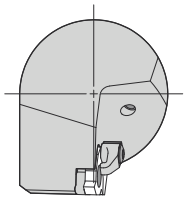
■ LSE-N 90° • Internal Only



		L1		F		D min								
order number	catalog number	mm	in	mm	in	mm	in	gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
	right hand													
3950832	**KM40TSLSER16N**	40	1.575	27	1.063	54	2.126	LT16NR	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**	0,35	.77
3950854	**KM40TSLSER22N**	40	1.575	27	1.063	54	2.126	LT22NR	**SSA4T**	**SMYI4**	**SSY4T**	**CKC4**	0,35	.77
3959399	**KM40TSLSER27N**	45	1.772	27	1.063	54	2.126	LT27NR	**SSA5T**	**SMYI5**	**SSY5T**	**CKC5**	0,39	.86
	left hand													
3950831	**KM40TSLSEL16N**	40	1.575	27	1.063	54	2.126	LT16NL	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**	0,35	.77
3950853	**KM40TSLSEL22N**	40	1.575	27	1.063	54	2.126	LT22NL	**SSA4T**	**SMYE4**	**SSY4T**	**CKC4**	0,35	.77
3959398	**KM40TSLSEL27N**	45	1.772	27	1.063	54	2.126	LT27NL	**SSA5T**	**SMYE5**	**SSY5T**	**CKC5**	0,39	.86

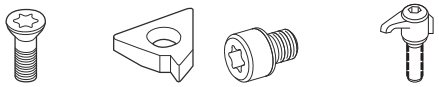
NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.





KM QUICK CHANGE

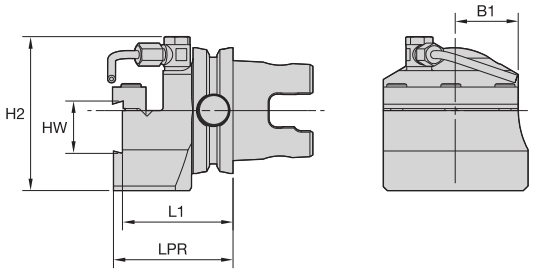
■ LSS 90°

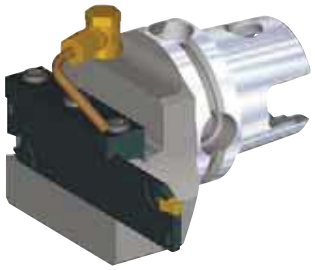


		L1		F								
order number	catalog number	mm	in	mm	in	gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
	right hand											
3950857	**KM40TSLSSR16**	40	1.575	27	1.063	LT16ER	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**	0,31	.68
3950858	**KM40TSLSSR22**	40	1.575	27	1.063	LT22ER	**SSA4T**	**SMYE4**	**SSY4T**	**CKC4**	0,30	.66
3959401	**KM40TSLSSR27**	45	1.772	27	1.063	LT27ER	**SSA5T**	**SMYE5**	**SSY5T**	**CKC5**	0,37	.82
	left hand											
3950855	**KM40TSLSSL16**	40	1.575	27	1.063	LT16EL	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**	0,32	.70
3950856	**KM40TSLSSL22**	40	1.575	27	1.063	LT22EL	**SSA4T**	**SMYI4**	**SSY4T**	**CKC4**	0,31	.68
3959400	**KM40TSLSSL27**	45	1.772	27	1.063	LT27EL	**SSA5T**	**SMYI5**	**SSY5T**	**CKC5**	0,37	.82

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.

KM QUICK CHANGE





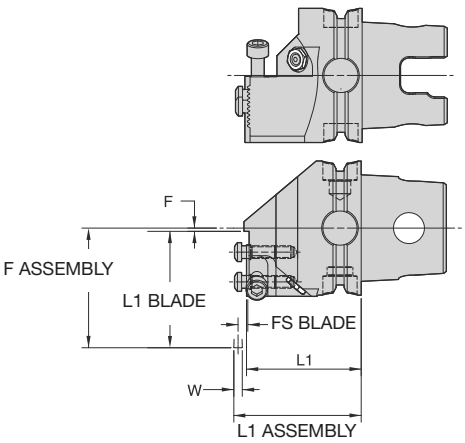
BE • End Mount

order number	catalog number	L1 mm	L1 in	LPR mm	LPR in	H2 mm	H2 in	HW mm	HW in	B1 mm	B1 in	cartridge size	cartridge 1	kg	lbs
	right hand														
3950835	KM40TSBER	50,3	1.980	55	2.16	66	2.58	26	1.02	20	.79	26	A2BNSN26...	1,07	2.36
	left hand														
3950834	KM40TSBEL	50,3	1.980	55	2.16	66	2.58	26	1.02	20	.79	26	A2BNSN26...	1,07	2.36

Spare Parts

catalog number	clamp	clamp screw	coolant tube	coolant swivel base
right hand				
KM40TSBER	CGS4	MS1595	12649910900	12649910800
left hand				
KM40TSBEL	CGS4	MS1595	12649910900	12649910800

NOTE: For cut-off blades, see the WIDIA Turning (A-09-02078) catalog.



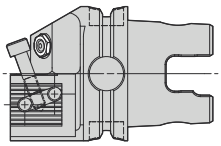
KM QUICK CHANGE

F ASSEMBLY = L1 BLADE - F
L1 ASSEMBLY = W/2 + L1 + FS BLADE - 0,787mm

WGME

order number	catalog number	L1 mm	L1 in	F mm	F in	button-head cap screw	nozzle	socket-head cap screw	kg	lbs
	right hand									
3949874	**KM40TSWGMER55M**	53,79	2.118	-9,98	-0.393	**606256**	**PMT08430**	**MS337**	0,56	1.24
	left hand									
3949875	**KM40TSWGMEL55M**	53,79	2.118	-9,98	-0.393	**606256**	**PMT08430**	**MS337**	0,56	1.24

NOTE: For SLS cartridges and WMT inserts, see WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.



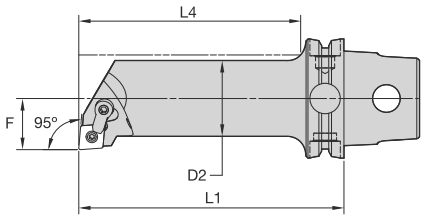
KM QUICK CHANGE

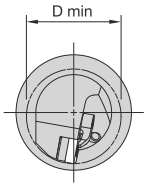
F ASSEMBLY = W/2 + F + FS BLADE - 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE

WGMS

order number	catalog number	L1 mm	L1 in	F mm	F in	nozzle	socket-head cap screw	kg	lbs
	right hand								
3949802	**KM40TSWGMSR55M**	24,52	.965	15,79	.622	**PMT08430**	**MS337**	0,49	1.08
	left hand								
3949873	**KM40TSWGMSL55M**	24,52	.965	15,79	.622	**PMT08430**	**MS337**	0,49	1.08

NOTE: For SLS cartridges and WMT inserts, see WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.





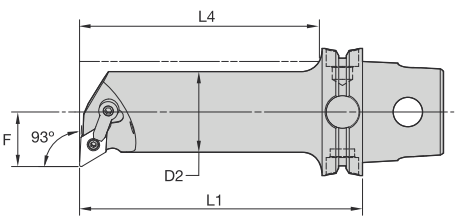
KM QUICK CHANGE

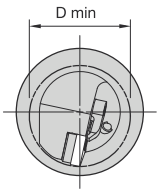
MCLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3955549	KM40TSS25EMCLNR12	25	.98	32	1.26	17	.669	55	2.17	70	2.756	CN..120408/CN..432	0,35	.76
3955551	KM40TSS25HMCLNR12	25	.98	32	1.26	17	.669	75	2.95	100	3.937	CN..120408/CN..432	0,50	1.10
3955553	KM40TSS32GMCLNR12	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	CN..120408/CN..432	0,59	1.29
3955555	KM40TSS32JMCLNR12	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	CN..120408/CN..432	0,71	1.56
	left hand													
3955548	KM40TSS25EMCLNL12	25	.98	32	1.26	17	.669	55	2.17	70	2.756	CN..120408/CN..432	0,35	.76
3955550	KM40TSS25HMCLNL12	25	.98	32	1.26	17	.669	75	2.95	100	3.937	CN..120408/CN..432	0,50	1.10
3955552	KM40TSS32GMCLNL12	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	CN..120408/CN..432	0,59	1.29
3955554	KM40TSS32JMCLNL12	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	CN..120408/CN..432	0,71	1.56

Spare Parts

catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM40TSS25EMCLNR12	–	KLM43	CKM20LP	STCM11
KM40TSS25HMCLNR12	–	KLM43	CKM20LP	STCM11
KM40TSS32GMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM40TSS32JMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
left hand				
KM40TSS25EMCLNL12	–	KLM43	CKM20LP	STCM11
KM40TSS25HMCLNL12	–	KLM43	CKM20LP	STCM11
KM40TSS32GMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM40TSS32JMCLNL12	ICSN432	KLM46	CKM20LP	STCM11





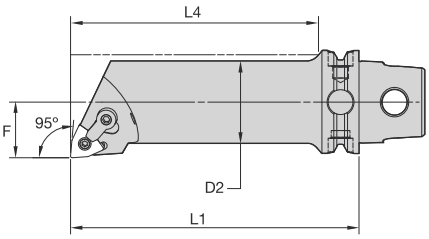
KM QUICK CHANGE

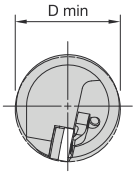
MDUN 93°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3959375	KM40TSS25EMDUNR15	25	.98	32	1.26	17	.669	55	2.17	70	2.756	DN..150408/DN..432	0,33	.74
3959377	KM40TSS25HMDUNR15	25	.98	32	1.26	17	.669	75	2.95	100	3.937	DN..150408/DN..432	0,49	1.07
3959379	KM40TSS32GMDUNR15	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	DN..150408/DN..432	0,57	1.26
3959381	KM40TSS32JMDUNR15	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	DN..150408/DN..432	0,69	1.53
	left hand													
3959374	KM40TSS25EMDUNL15	25	.98	32	1.26	17	.669	55	2.17	70	2.756	DN..150408/DN..432	0,33	.74
3959376	KM40TSS25HMDUNL15	25	.98	32	1.26	17	.669	75	2.95	100	3.937	DN..150408/DN..432	0,49	1.08
3959378	KM40TSS32GMDUNL15	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	DN..150408/DN..432	0,57	1.26
3959380	KM40TSS32JMDUNL15	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	DN..150408/DN..432	0,69	1.53

Spare Parts

catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM40TSS25EMDUNR15	–	KLM43	CKM20LP	STCM11
KM40TSS25HMDUNR15	–	KLM43	CKM20LP	STCM11
KM40TSS32GMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM40TSS32JMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
left hand				
KM40TSS25EMDUNL15	–	KLM43	CKM20LP	STCM11
KM40TSS25HMDUNL15	–	KLM43	CKM20LP	STCM11
KM40TSS32GMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM40TSS32JMDUNL15	IDSN432	KLM46	CKM23LP	STCM11





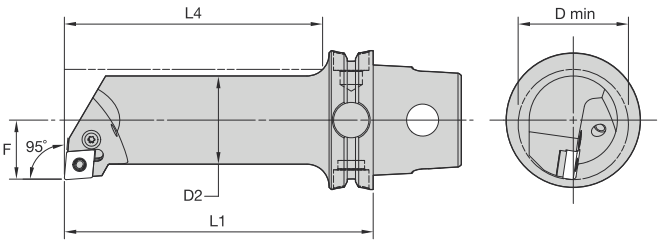
MWLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3959331	**KM40TSS25HMWLNR08**	25	.98	32	1.26	17	.669	75	2.95	100	3.937	WN..080408/WN..432	0,50	1.10
3959373	**KM40TSS32JMWLNR08**	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	WN..080408/WN..432	0,69	1.53
	left hand													
3959330	**KM40TSS25HMWLNL08**	25	.98	32	1.26	17	.669	75	2.95	100	3.937	WN..080408/WN..432	0,50	1.10
3959332	**KM40TSS32JMWLNL08**	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	WN..080408/WN..432	0,69	1.53

Spare Parts

catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM40TSS25HMWLNR08	**–**	**KLM43**	**CKM20LP**	**STCM11**
KM40TSS32JMWLNR08	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**
left hand				
KM40TSS25HMWLNL08	**–**	**KLM43**	**CKM20LP**	**STCM11**
KM40TSS32JMWLNL08	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**

KM QUICK CHANGE

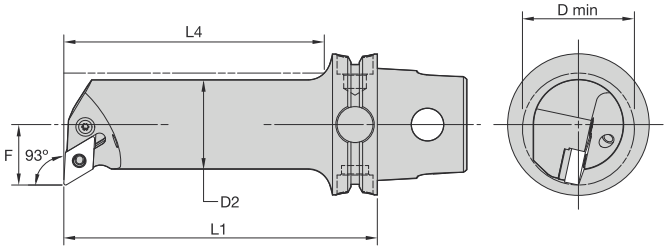


PCLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3959339	**KM40TSS25HPCLNR12**	25	.98	32	1.26	17	.669	75	2.95	100	3.937	CN..120408/CN..432	0,49	1.09
3959337	**KM40TSS25GPCLNR12**	25	.98	32	1.26	17	.669	77	3.04	90	3.543	CN..120408/CN..432	0,41	.90
3959341	**KM40TSS32GPCLNR12**	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	CN..120408/CN..432	0,59	1.29
	left hand													
3959338	**KM40TSS25HPCLNL12**	25	.98	32	1.26	17	.669	75	2.95	100	3.937	CN..120408/CN..432	0,49	1.09
3959336	**KM40TSS25GPCLNL12**	25	.98	32	1.26	17	.669	77	3.04	90	3.543	CN..120408/CN..432	0,41	.90
3959340	**KM40TSS32GPCLNL12**	32	1.26	40	1.57	22	.866	76	2.99	90	3.543	CN..120408/CN..432	0,59	1.29

Spare Parts

catalog number	shim	lever screw	shim pin	toggle lever	punch
right hand					
KM40TSS25GPCLNR12	–	514.122	–	511.022	–
KM40TSS25HPCLNR12	–	514.122	–	511.022	–
KM40TSS32GPCLNR12	512.112	514.123	513.023	511.023	515.018
left hand					
KM40TSS25GPCLNL12	–	514.122	–	511.022	–
KM40TSS25HPCLNL12	–	514.122	–	511.022	–
KM40TSS32GPCLNL12	512.112	514.123	513.023	511.023	515.018



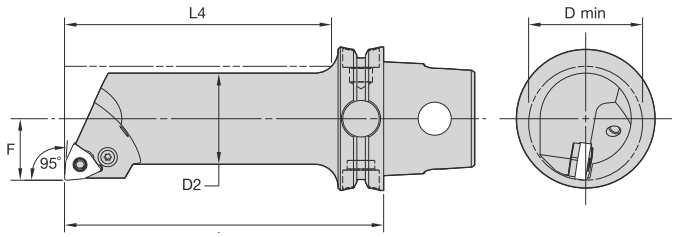
KM QUICK CHANGE

PDUN 93°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3959343	KM40TSS25GPDUNR11	25	.98	32	1.26	17	.669	77	3.04	90	3.543	DN..110408/DN..332	0,41	.900
	left hand													
3959342	KM40TSS25GPDUNL11	25	.98	32	1.26	17	.669	77	3.04	90	3.543	DN..110408/DN..332	0,41	.900

Spare Parts

catalog number	lever screw	toggle lever
right hand KM40TSS25GPDUNR11	514.112	511.015
left hand KM40TSS25GPDUNL11	514.112	511.015



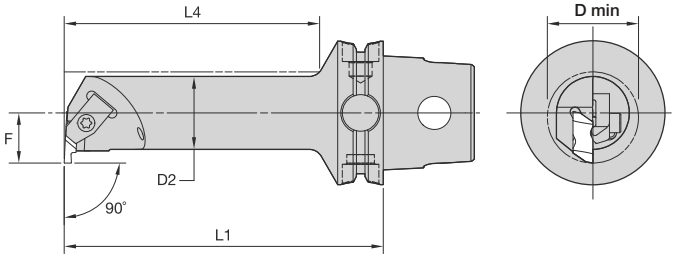
KM QUICK CHANGE

PWLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3959345	KM40TSS25EPWLNR08	25	.98	32	1.26	17	.669	55	2.17	70	2.756	WN..080408/WN..432	0,34	.75
3959351	KM40TSS25HPWLNR08	25	.98	32	1.26	17	.669	75	2.95	100	3.937	WN..080408/WN..432	0,49	1.08
3959347	KM40TSS25GPWLNR06	25	.98	32	1.26	17	.669	77	3.04	90	3.543	WN..060408/WN..332	0,41	.90
3959349	KM40TSS25GPWLNR08	25	.98	32	1.26	17	.669	77	3.04	90	3.543	WN..080408/WN..432	0,40	.89
	left hand													
3959344	KM40TSS25EPWLNL08	25	.98	32	1.26	17	.669	55	2.17	70	2.756	WN..080408/WN..432	0,34	.75
3959350	KM40TSS25HPWLNL08	25	.98	32	1.26	17	.669	75	2.95	100	3.937	WN..080408/WN..432	0,49	1.08
3959346	KM40TSS25GPWLNL06	25	.98	32	1.26	17	.669	77	3.04	90	3.543	WN..060408/WN..332	0,41	.90
3959348	KM40TSS25GPWLNL08	25	.98	32	1.26	17	.669	77	3.04	90	3.543	WN..080408/WN..432	0,40	.89

Spare Parts

catalog number	lever screw	toggle lever
right hand		
KM40TSS25EPWLNR08	514.122	511.022
KM40TSS25GPWLNR06	514.112	511.030
KM40TSS25GPWLNR08	514.122	511.022
KM40TSS25HPWLNR08	514.122	511.022
left hand		
KM40TSS25EPWLNL08	514.122	511.022
KM40TSS25GPWLNL06	514.112	511.030
KM40TSS25GPWLNL08	514.122	511.022
KM40TSS25HPWLNL08	514.122	511.022



KM QUICK CHANGE

■ NE 90° • Steel

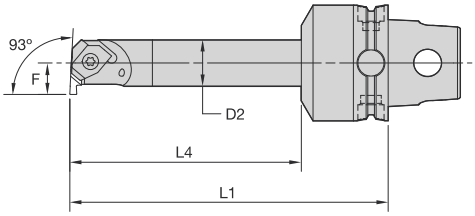
order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3955481	**KM40TSS12ENER2**	12	.47	19	.73	11	.433	42	1.655	70	2.756	NG2L	0,27	.58
3955483	**KM40TSS16FNER2**	16	.63	20	.79	11	.433	56	2.209	80	3.150	NG2L	0,28	.62
3955485	**KM40TSS20GNER2**	20	.79	25	.98	13	.512	70	2.757	90	3.543	NG2L	0,35	.76
3955487	**KM40TSS25ENER2**	25	.98	32	1.26	17	.669	55	2.169	70	2.756	NG2L	0,34	.75
3955491	**KM40TSS25ENER3**	25	.98	34	1.34	17	.669	55	2.169	70	2.756	NG3L	0,35	.77
3955489	**KM40TSS25HNER2**	25	.98	32	1.26	17	.669	75	2.954	100	3.937	NG2L	0,49	1.08
3955493	**KM40TSS25HNER3**	25	.98	34	1.34	17	.669	75	2.954	100	3.937	NG3L	0,49	1.09
3955497	**KM40TSS32GNER3**	32	1.26	40	1.57	22	.866	76	2.993	90	3.543	NG3L	0,55	1.21
3955495	**KM40TSS32JNER3**	32	1.26	40	1.57	22	.866	96	3.780	110	4.331	NG3L	0,67	1.48
	left hand													
3955480	**KM40TSS12ENEL2**	12	.47	19	.73	11	.433	42	1.655	70	2.756	NG2R	0,27	.59
3955482	**KM40TSS16FNEL2**	16	.63	20	.79	11	.433	56	2.209	80	3.150	NG2R	0,28	.62
3955484	**KM40TSS20GNEL2**	20	.79	25	.98	13	.512	70	2.757	90	3.543	NG2R	0,35	.76
3955486	**KM40TSS25ENEL2**	25	.98	32	1.26	17	.669	55	2.169	70	2.756	NG2R	0,34	.75
3955490	**KM40TSS25ENEL3**	25	.98	34	1.34	17	.669	55	2.169	70	2.756	NG3R	0,35	.77
3955492	**KM40TSS25HNEL3**	25	.98	34	1.34	17	.669	75	2.954	100	3.937	NG3R	0,49	1.09
3955488	**KM40TSS25HNEL2**	25	.98	32	1.26	17	.669	75	2.954	100	3.937	NG2R	0,49	1.08
3955496	**KM40TSS32GNEL3**	32	1.26	40	1.57	22	.866	76	2.993	90	3.543	NG3R	0,55	1.21
3955494	**KM40TSS32JNEL3**	32	1.26	40	1.57	22	.866	96	3.780	110	4.331	NG3R	0,67	1.48

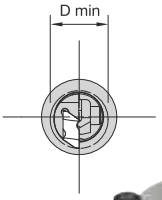
(continued)

(NE 90° • Steel continued)

Spare Parts

catalog number	clamp	clamp screw
right hand		
KM40TSS12ENER2	CM147	MS1488
KM40TSS16FNER2	CM147	MS1488
KM40TSS20GNER2	CM75	MS1488
KM40TSS25ENER2	CM75	MS1488
KM40TSS25ENER3	CM73	MS1489
KM40TSS25HNER2	CM75	MS1488
KM40TSS25HNER3	CM73	MS1489
KM40TSS32GNER3	CM73	MS1489
KM40TSS32JNER3	CM73	MS1489
left hand		
KM40TSS12ENEL2	CM146	MS1488
KM40TSS16FNEL2	CM146	MS1488
KM40TSS20GNEL2	CM74	MS1488
KM40TSS25ENEL2	CM74	MS1488
KM40TSS25ENEL3	CM72	MS1489
KM40TSS25HNEL2	CM74	MS1488
KM40TSS25HNEL3	CM72	MS1489
KM40TSS32GNEL3	CM72	MS1489
KM40TSS32JNEL3	CM72	MS1489





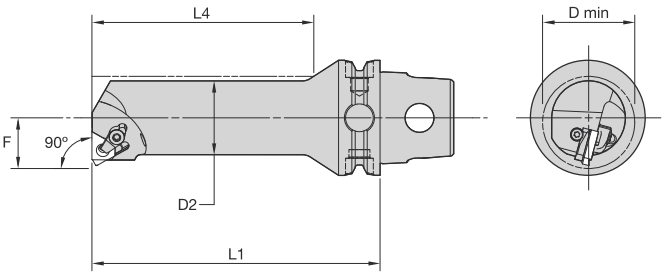
KM QUICK CHANGE

NE 90° • Carbide

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3951836	**KM40TSE16JNER2**	16	.63	20	.79	11	.433	80	3.15	110	4.331	NG2L	0,41	.90
	left hand													
3951835	**KM40TSE16JNEL2**	16	.63	20	.79	11	.433	80	3.15	110	4.331	NG2R	0,41	.90

Spare Parts

catalog number	clamp	clamp screw
right hand		
KM40TSE16JNER2	**CM146**	**MS1488**
left hand		
KM40TSE16JNEL2	**CM147**	**MS1488**



KM QUICK CHANGE

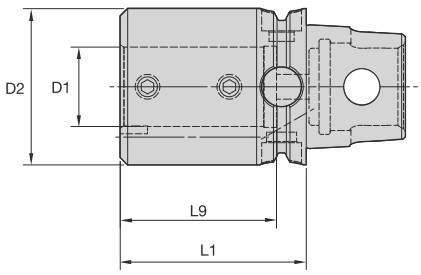
LSE 90°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3955464	**KM40TSS10DLSER11**	10	.39	13	.51	7	.276	35	1.38	60	2.362	LT11NR	0,22	.49
3955466	**KM40TSS12ELSER11**	12	.47	16	.63	9	.354	42	1.66	70	2.756	LT11NR	0,25	.56
3955468	**KM40TSS16FLSER16**	16	.63	20	.79	11	.433	56	2.21	80	3.150	LT16NR	0,28	.61
3955470	**KM40TSS20GLSER16**	20	.79	25	.98	13	.512	70	2.76	90	3.543	LT16NR	0,34	.75
3955472	**KM40TSS25HLSER16**	25	.98	32	1.26	17	.669	75	2.95	100	3.937	LT16NR	0,50	1.11
3955474	**KM40TSS32JLSER16**	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	LT16NR	0,72	1.58
3955476	**KM40TSS32JLSER22**	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	LT22NR	0,71	1.56
	left hand													
3955463	**KM40TSS10DLSEL11**	10	.39	13	.51	7	.276	35	1.38	60	2.362	LT11NL	0,22	.49
3955465	**KM40TSS12ELSEL11**	12	.47	16	.63	9	.354	42	1.65	70	2.756	LT11NL	0,25	.55
3955467	**KM40TSS16FLSEL16**	16	.63	20	.79	11	.433	56	2.21	80	3.150	LT16NL	0,28	.61
3955469	**KM40TSS20GLSEL16**	20	.79	25	.98	13	.512	70	2.76	90	3.543	LT16NL	0,34	.75
3955471	**KM40TSS25HLSEL16**	25	.98	32	1.26	17	.669	75	2.95	100	3.937	LT16NL	0,50	1.11
3955473	**KM40TSS32JLSEL16**	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	LT16NL	0,72	1.58
3955475	**KM40TSS32JLSEL22**	32	1.26	40	1.57	22	.866	96	3.78	110	4.331	LT22NL	0,71	1.56

Spare Parts

catalog number	insert screw	shim	shim screw	clamp assembly
right hand				
KM40TSS10DLSER11	**SSN2T**	**–**	**–**	**–**
KM40TSS12ELSER11	**SSN2T**	**–**	**–**	**–**
KM40TSS16FLSER16	**SN3TPKG**	**–**	**–**	**–**
KM40TSS20GLSER16	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**
KM40TSS25HLSER16	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**
KM40TSS32JLSER16	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**
KM40TSS32JLSER22	**SSA4T**	**SMYI4**	**SSY4T**	**CKC4**
left hand				
KM40TSS10DLSEL11	**SSN2T**	**–**	**–**	**–**
KM40TSS12ELSEL11	**SSN2T**	**–**	**–**	**–**
KM40TSS16FLSEL16	**SN3TPKG**	**–**	**–**	**–**
KM40TSS20GLSEL16	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**
KM40TSS25HLSEL16	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**
KM40TSS32JLSEL16	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**
KM40TSS32JLSEL22	**SSA4T**	**SMYE4**	**SSY4T**	**CKC4**

NOTE: Items listed without a shim are designed for a 1.5° inclination angle.
Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



BA • Boring Bar Adapter • Internal and External Coolant • Metric

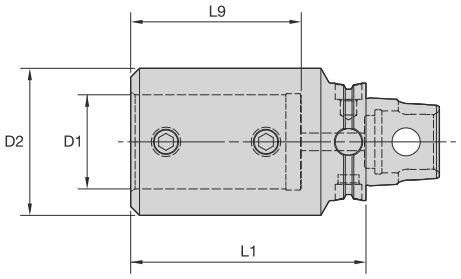
order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
3950818	KM40TSBA06050M	6	40	50	36	MS1210	2,5mm	3	0,50
3950819	KM40TSBA08050M	8	40	50	36	MS1210	2,5mm	3	0,50
3950820	KM40TSBA10060M	10	40	60	48	MS1211	4mm	12	0,58
3950821	KM40TSBA12065M	12	40	65	52	MS1211	4mm	12	0,61
3950822	KM40TSBA16070M	16	40	70	55	MS1081	5mm	25	0,61
3950823	KM40TSBA20075M	20	40	75	58	MS1213	5mm	25	0,60
3950824	KM40TSBA25075M	25	50	75	56	MS1081	5mm	25	0,87

BA • Boring Bar Adapter • Internal and External Coolant • Inch

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
3950813	KM40TSBA06236	3/8	1.58	2.362	1.89	S843	1/8	5	1.27
3950814	KM40TSBA08256	1/2	1.58	2.559	2.05	S852	5/32	10	1.33
3950815	KM40TSBA10276	5/8	1.58	2.756	2.17	S862	3/16	15	1.35
3950816	KM40TSBA12295	3/4	1.58	2.953	2.28	S862	3/16	15	1.37
3950817	KM40TSBA16295	1	1.97	2.953	2.21	S862	3/16	15	1.90

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.

KM QUICK CHANGE



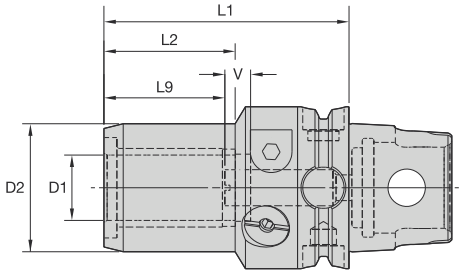
BAI • Boring Bar Adapter • Internal Coolant Only • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
3950158	**KM40TSBAI32080M**	32	50	80	58	**MS1213**	5mm	25	0,81
3950159	**KM40TSBAI40090M**	40	58	90	68	**MS1213**	5mm	25	1,04

BAI • Boring Bar Adapter • Internal Coolant Only • Inch

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
3950156	**KM40TSBAI20315**	1 1/4	1.97	3.150	2.28	**S861**	3/16	15	1.78
3950157	**KM40TSBAI24354**	1 1/2	2.28	3.543	2.68	**S861**	3/16	15	2.43

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



KM QUICK CHANGE

HC • Metric

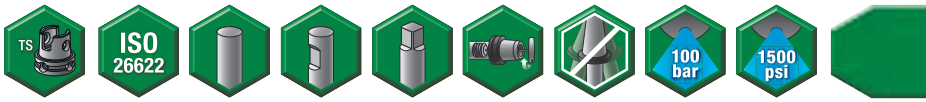
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
3960498	KM40TSHC06065M	6	26	65	34	27	10	170.135	5mm	170.002	2,5mm	0,43
3960499	KM40TSHC08065M	8	28	65	34	27	10	170.135	5mm	170.002	2,5mm	0,44
3960500	KM40TSHC10070M	10	30	70	38	31	10	170.135	5mm	170.002	2,5mm	0,49
3960501	KM40TSHC12075M	12	32	75	41	36	10	170.135	5mm	170.002	2,5mm	0,53

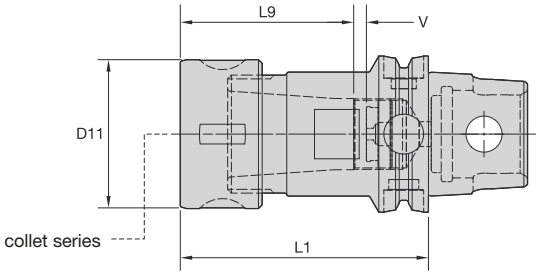
HC • Inch

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	lbs
3960497	KM40TSHC050300	1/2	1.24	3.000	1.75	1.42	.39	170.135	5mm	170.002	2,5mm	1.16

NOTE: Do not overtorque clamp screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Reduction sleeves are available and must be ordered separately; see page I2.
Wrenches must be ordered separately.

• Tremendous Grip (3:1 advantage).





KM QUICK CHANGE

TG collet series	Collet Capacity mm min	mm max	inch min	inch max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

Collet Chuck • Round Nut

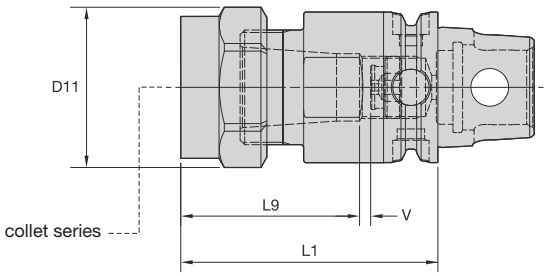
order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
3969764	**KM40TSTG075075M**	TG75	50	1.97	75	2.953	53	2.09	2	.08	0,64	1.41
3969765	**KM40TSTG100100M**	TG100	60	2.36	100	3.937	69	2.72	5	.20	1,17	2.58

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM40TSTG075075M	**LNA075M**	**HSW45M**	136	100	**SS081041G**	4mm & 5/32
KM40TSTG100100M	**LNA100M**	**HSW58M**	203	150	**SS112041G**	4mm & 5/32

(continued)

(Collet Chuck continued)



	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

Collet Chuck • Hex Nut

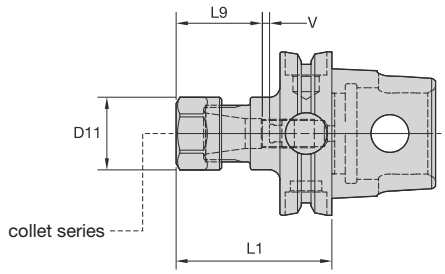
order number	catalog number	collet series	D11		L1		L9		V			
				in	mm	in	mm	in	mm	in	kg	lbs
3969763	**KM40TSTG075316**	TG75	53	2.09	80	3.161	58	2.28	2	.08	0,63	1.39
3969766	**KM40TSTG100417**	TG100	62	2.44	106	4.173	75	2.95	5	.20	1,21	2.67

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM40TSTG075316	**NPA075**	**OEW188**	136	100	**SS081041G**	4mm & 5/32
KM40TSTG100417	**NPA100**	**OEW225**	203	150	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/Interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.

• Grip (2:1 advantage).

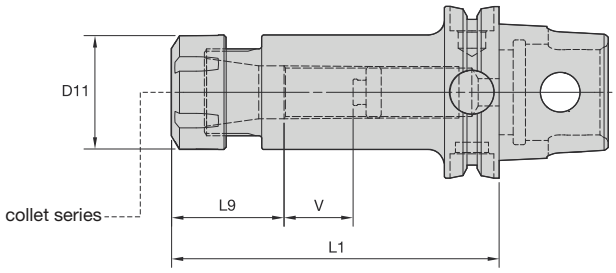


	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41

Collet Chuck • Hex Nut

			D11		L1		L9		V				straight collet torque		counterbore collet torque			
order number	catalog number	collet series	mm	in	mm	in	mm	in	mm	in	locknut	wrench	Nm	ft. lbs.	Nm	ft. lbs.	kg	lbs
3950246	KM40TSER16038M	ER16	28	1.10	38	1.496	32,8	1.29	—	—	LNHSER16M	OEW25M	56	42	384	30	0,20	.44

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.



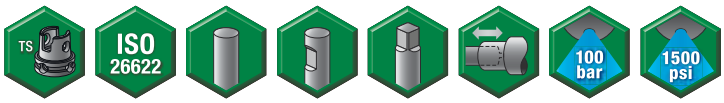
KM QUICK CHANGE

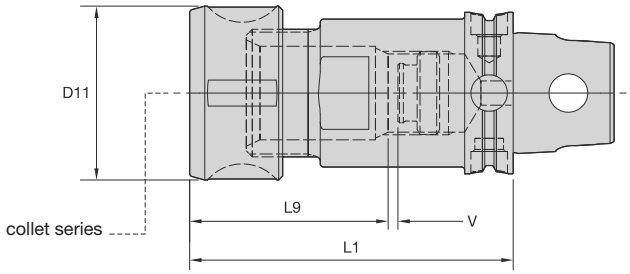
	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

Collet Chuck • Round Nut

			D11		L1		L9		V							
order number	catalog number	collet series	mm	in	mm	in	mm	in	mm	in	locknut	wrench	Nm	ft. lbs.	kg	lbs
3950247	KM40TSER25045M	ER25	42	1.65	45	1.772	41,2	1.62	—	—	LNSER25M	ER25WM	104	77	0,29	.64
3950248	KM40TSER32060M	ER32	50	1.97	60	2.362	47,3	1.86	—	—	LNSER32M	ER32WM	136	100	0,46	1.01

• Grip 1:1.





KM QUICK CHANGE

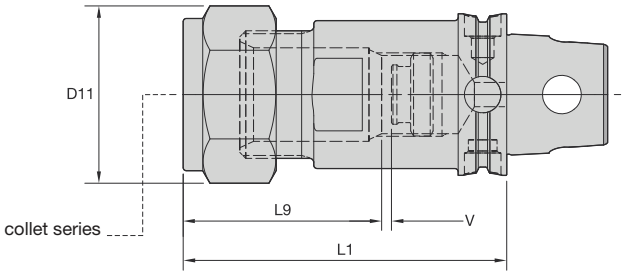
DA collet series	Collet Capacity mm min	mm max	inch min	inch max
200DA	0,2	10,0	1/64	25/64
180DA	2,2	20,0	1/64	3/4

Collet Chuck • Round Nut

order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
3950189	KM40TSDA188065M	DA180	43	1.69	65	2.559	49,0	1.93	—	—	0,48	1.05
3950190	KM40TSDA188080M	DA180	43	1.69	80	3.150	49,0	1.93	5	.20	0,58	1.28

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM40TSDA188065M	LNA188M	HSW45M	80-100	60-75	—	—
KM40TSDA188080M	LNA188M	HSW45M	80-100	60-75	SS081041G	M4 & 5/32



Collet Chuck • Hex Nut

order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
3950191	KM40TSDA208236	DA200	29	1.15	60	2.362	35,0	1.38	8	.32	0,28	.61
3950187	KM40TSDA188256	DA180	44	1.73	65	2.559	49,0	1.93	—	—	0,39	.85
3950188	KM40TSDA188315	DA180	44	1.73	80	3.150	49,0	1.93	5	.20	0,49	1.09

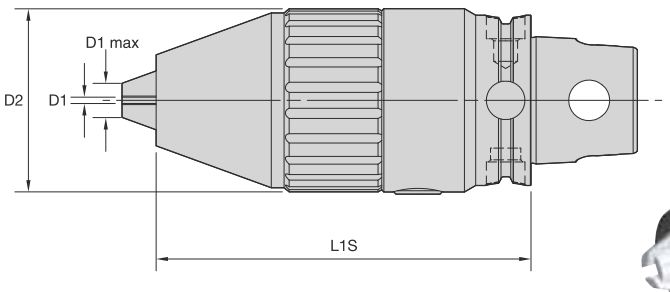
(continued)

(Collet Chuck continued)

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM40TSDA188256	**NPA188**	**OEW150**	80-100	60-75	**—**	—
KM40TSDA188315	**NPA188**	**OEW150**	80-100	60-75	**SS081041G**	M4 & 5/32
KM40TSDA208236	**NPA208**	**OEW100**	45-55	32-40	**SS038031G**	M2 & 5/64

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.

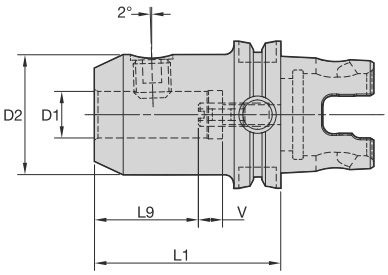


KM QUICK CHANGE

RDC • Drill Chucks

		D1		D1 max		D2		L1S	
order number	catalog number	mm	in	mm	in	mm	in	mm	in
4053778	**KM40TSRDC13092M**	1	.039	13	.512	43	1.693	91,9	3.618

NOTE: Activation size is 6mm.
Activation wrench included.
Wrench reorder number is 170.136.

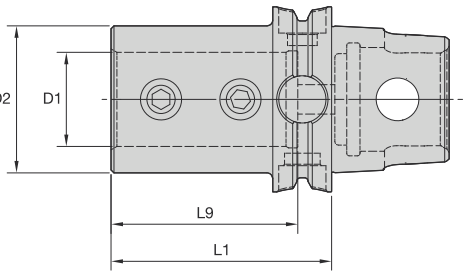


KM QUICK CHANGE

WN • Whistle Notch Adapter

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg	lbs
3950205	**KM40TSWN06065M**	6	25	65	30	10	**SS03M012**	3mm	7	**571.060**	2,5mm	0,32	.71
3950206	**KM40TSWN08065M**	8	28	65	30	10	**SS03M014**	4mm	15	**571.067**	3mm	0,37	.81
3950207	**KM40TSWN10070M**	10	35	70	35	10	**SS03M018**	5mm	25	**571.068**	4mm	0,52	1.15
3950208	**KM40TSWN12080M**	12	42	80	40	10	**SS03M023**	6mm	35	**571.074**	5mm	0,78	1.72
3950209	**KM40TSWN14080M**	14	44	80	40	10	**SS03M023**	6mm	35	**571.074**	5mm	0,83	1.84
3950210	**KM40TSWN16085M**	16	48	85	43	10	**SS03M025**	6mm	50	**571.075**	6mm	1,02	2.25
3950211	**KM40TSWN18085M**	18	50	85	43	10	**SS03M025**	6mm	50	**571.075**	6mm	1,08	2.38
3950212	**KM40TSWN20095M**	20	52	95	45	10	**SS03M026**	8mm	95	**571.076**	6mm	1,28	2.83

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.



KM QUICK CHANGE

DAT Adapter • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	cone point socket set screw	wrench size clamp screw	Nm	kg
3904029	KM40TSDAT25075M	25	45	75	60	12166903900	6mm	40	12166903700	6mm	40	0,69

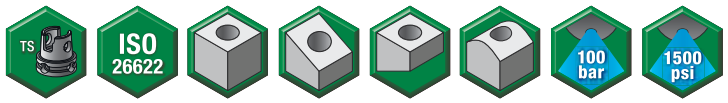
NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamping screw.
Clamp screw wrench is not included.

KM40TS™ Shank Tools

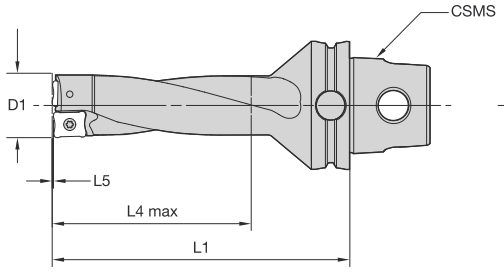
Top Cut™ Drill 3 x D

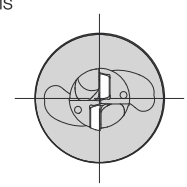
WIDIA

- Drill shipped with insert screws and Torx wrench.



KM QUICK CHANGE





3 x D • Metric

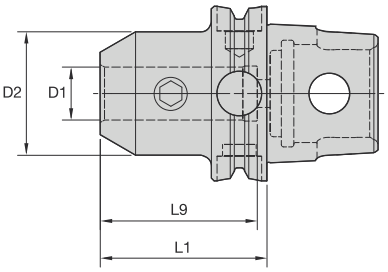
order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3895545	KM40TSTCD110R3M	KM40TS	11,0	59,0	33,00	0,22	LPGX06T103	12146011800	12146010000	T5
3895546	KM40TSTCD120R3M	KM40TS	12,0	62,0	36,00	0,06	LPGX06T103	12146011800	12146010000	T5
3895547	KM40TSTCD130R3M	KM40TS	13,0	65,0	39,00	0,08	LPGX06T103	12146011800	12146010000	T5
3895548	KM40TSTCD140R3M	KM40TS	14,0	68,0	42,00	0,07	LPGX07T204	12146012500	12147549000	T7
3895549	KM40TSTCD150R3M	KM40TS	15,0	71,0	45,00	0,05	LPGX07T204	12146012500	12147549000	T7
3895550	KM40TSTCD160R3M	KM40TS	16,0	74,0	48,00	0,18	LPGX07T204	12146012500	12147549000	T7
3895551	KM40TSTCD170R3M	KM40TS	17,0	79,0	51,00	0,31	LPGX07T204	12146012500	12147549000	T7
3895552	KM40TSTCD180R3M	KM40TS	18,0	82,0	54,00	0,31	LPGX07T204	12146012500	12147549000	T7
3895653	KM40TSTCD190R3M	KM40TS	19,0	85,0	57,00	0,06	LPGX100308	12148068700	12148086600	T8
3895654	KM40TSTCD200R3M	KM40TS	20,0	88,0	60,00	0,10	LPGX100308	12148068700	12148086600	T8
3895655	KM40TSTCD210R3M	KM40TS	21,0	93,0	63,00	0,28	LPGX100308	12148068700	12148086600	T8
3895656	KM40TSTCD220R3M	KM40TS	22,0	96,0	66,00	0,28	LPGX100308	12148068700	12148086600	T8
3895657	KM40TSTCD230R3M	KM40TS	23,0	99,0	69,00	0,45	LPGX100308	12148068700	12148086600	T8
3895658	KM40TSTCD240R3M	KM40TS	24,0	102,0	72,00	0,45	LPGX100308	12148068700	12148086600	T8
3895659	KM40TSTCD250R3M	KM40TS	25,0	106,0	75,00	0,45	LPGX100308	12148068700	12148086600	T8

3 x D • Inch

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898334	KM40TSTCD0438R3	KM40TS	.438	2.375	1.314	.009	LPGX06T103	12146011800	12146010000	T5
3898335	KM40TSTCD0469R3	KM40TS	.469	2.500	1.407	.009	LPGX06T103	12146011800	12146010000	T5
3898336	KM40TSTCD0500R3	KM40TS	.500	2.500	1.500	.002	LPGX06T103	12146011800	12146010000	T5
3898337	KM40TSTCD0531R3	KM40TS	.531	2.625	1.593	.003	LPGX06T103	12146011800	12146010000	T5
3898338	KM40TSTCD0563R3	KM40TS	.563	2.750	1.689	.003	LPGX07T204	12146012500	12147549000	T7
3898339	KM40TSTCD0594R3	KM40TS	.594	2.875	1.782	.002	LPGX07T204	12146012500	12147549000	T7
3898340	KM40TSTCD0625R3	KM40TS	.625	3.000	1.875	.002	LPGX07T204	12146012500	12147549000	T7
3898341	KM40TSTCD0656R3	KM40TS	.656	3.125	1.968	.007	LPGX07T204	12146012500	12147549000	T7
3898342	KM40TSTCD0688R3	KM40TS	.688	3.250	2.064	.012	LPGX07T204	12146012500	12147549000	T7
3898353	KM40TSTCD0719R3	KM40TS	.719	3.375	2.157	.012	LPGX07T204	12146012500	12147549000	T7
3898354	KM40TSTCD0750R3	KM40TS	.750	3.500	2.250	.002	LPGX100308	12148068700	12148086600	T8
3898370	KM40TSTCD0813R3	KM40TS	.813	3.875	2.439	.004	LPGX100308	12148068700	12148086600	T8
3898371	KM40TSTCD0875R3	KM40TS	.875	4.000	2.625	.011	LPGX100308	12148068700	12148086600	T8
3898372	KM40TSTCD0938R3	KM40TS	.938	4.250	2.814	.018	LPGX100308	12148068700	12148086600	T8
3898373	KM40TSTCD1000R3	KM40TS	1.000	4.375	3.000	.018	LPGX100308	12148068700	12148086600	T8

WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.

KM QUICK CHANGE



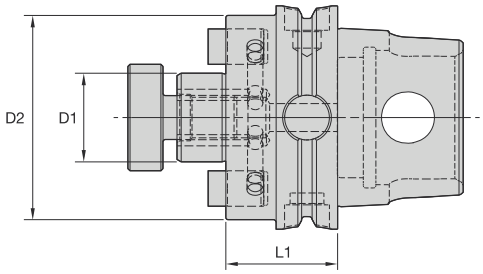
EM • Metric

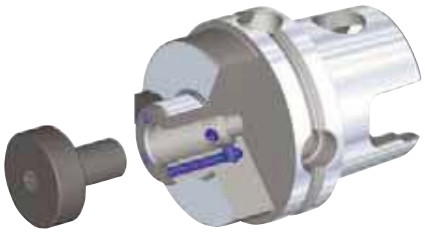
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
3950196	KM40TSEM06045M	6	25	45	40	SS03M012	3mm	7	0,25
3950197	KM40TSEM08045M	8	28	45	40	SS03M014	4mm	15	0,28
3950198	KM40TSEM10050M	10	35	50	45	SS03M018	5mm	25	0,38
3950199	KM40TSEM12055M	12	42	55	50	SS03M023	6mm	35	0,52
3950200	KM40TSEM16060M	16	48	60	53	SS03M025	6mm	50	0,68
3950201	KM40TSEM20065M	20	52	65	55	SS03M026	8mm	95	0,81

EM • Inch

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3950139	KM40TSEM038197	3/8	1.00	1.969	1.73	ELS038031PKG	3/16	15	.58
3950140	KM40TSEM050216	1/2	1.38	2.165	1.97	ELS044038PKG	7/32	20	.84
3950141	KM40TSEM062236	5/8	1.63	2.362	2.09	ELS056050PKG	1/4	40	1.16
3950142	KM40TSEM075256	3/4	1.75	2.559	2.22	ELS062050PKG	5/16	70	1.35

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.

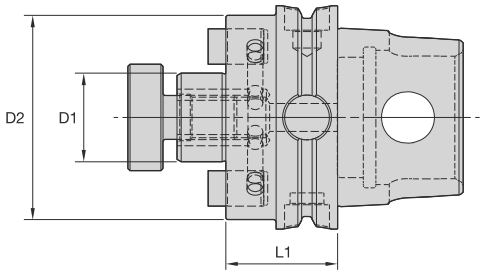


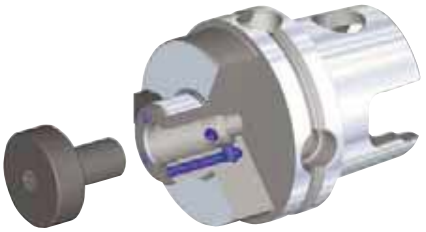


KM QUICK CHANGE

SMC • Metric

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3950261	KM40TSSMC16026M	16	44	26	MS1294	KDK16M	6mm	0,34
3950262	KM40TSSMC22028M	22	49	28	MS1234	KDK22M	8mm	0,44
3950263	KM40TSSMC27032M	27	60	32	KLSS27M	KDK27M	10mm	0,68



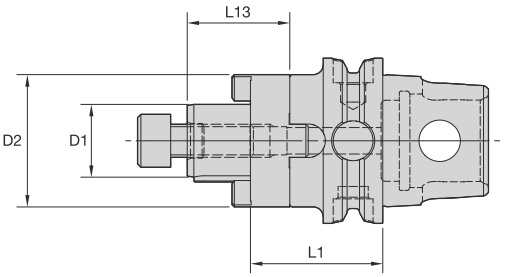


SMC/SM2C • Inch

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3950256	KM40TSSMC050102	1/2	1.44	1.024	KLS05	KDK04	3/16	.63
3950257	KM40TSSM2C075102	3/4	1.46	1.024	KLS07	—	1/4	.71
3950258	KM40TSSMC075102	3/4	1.75	1.024	KLS07	KDK05	1/4	.82
3950259	KM40TSSM2C100126	1	2.19	1.260	KLS10	KDK06	5/16	1.33
3950260	KM40TSSMC100126	1	2.75	1.260	KLS10	KDK06	5/16	1.64

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.

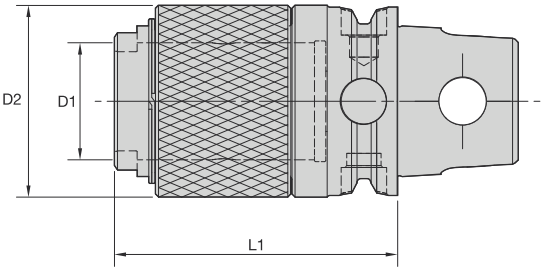
KM QUICK CHANGE



CS • Metric

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	drive ring	key	kg
3951833	**KM40TSCS16036M**	16	32	36	27	**MS1294**	6mm	**CDR16M**	**CDK16M**	0,33
3951834	**KM40TSCS22038M**	22	40	38	31	**MS1234**	8mm	**CDR22M**	**CDK22M**	0,47

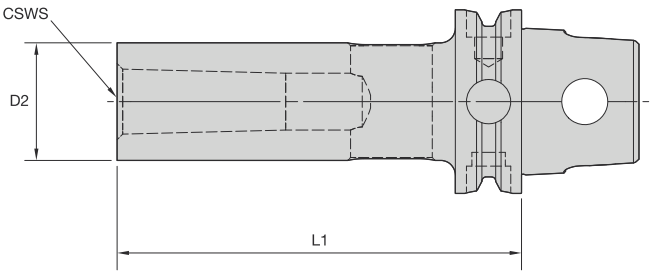
NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and key.
Lock screw wrench not included.



ST • Solid Tap Chuck

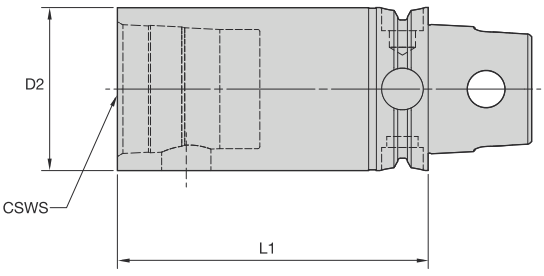
order number	catalog number	TQCS adapter size	D1 mm	D1 in	D2 mm	D2 in	L1 mm	L1 in	kg	lbs
3964071	KM40TSST1045M	1	19	.749	35	1.375	45	1.774	0,30	.65
3964072	KM40TSST2070M	2	31	1.222	51	2.000	70	2.758	0,71	1.56

NOTE: Quick-change tap adapters available and must be ordered separately; see page I76.



MT • Morse Taper Adapter

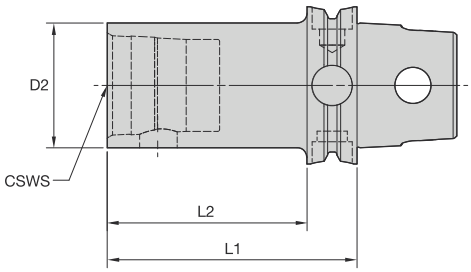
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	kg	lbs
3950809	KM40TSMT1090M	1	25	.984	90	3.543	0,39	.86
3950810	KM40TSMT2105M	2	32	1.260	105	4.134	0,59	1.30
3950811	KM40TSMT3125M	3	40	1.575	125	4.921	0,95	2.09



S • KM Extension

order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
3950179	KM40TSS40060M	KM40	40	1.575	60	2.362	6mm	12-16	9-12	KM40PKG3S	0,52	1.15
3950180	KM40TSS40080M	KM40	40	1.575	80	3.150	6mm	12-16	9-12	KM40PKG3S	0,71	1.57

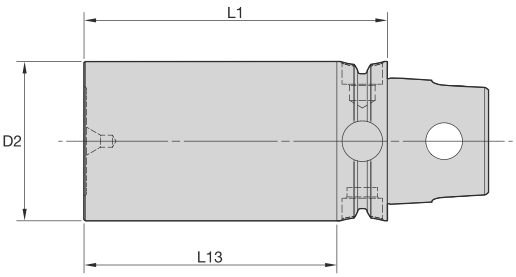
KM QUICK CHANGE



S • KM Reducer

order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	L2 mm	L2 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
3950178	KM40TSS32070M	KM32	32	1.260	70	2.756	58	2.284	5mm	8-11	6-8	KM32PKG3S	0,46	1.01

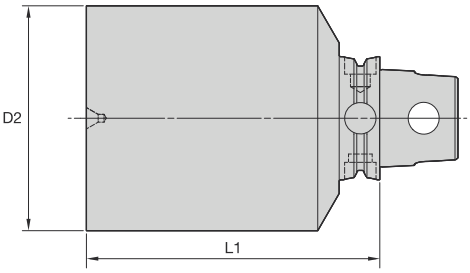
KM QUICK CHANGE



GB • Gage Bar

order number	catalog number	D2 mm	D2 in	L1 mm	L1 in	L13 mm	L13 in	kg	lbs
3959981	KM40TSGB40080M	40	1.58	80	3.15	68	2.68	0,81	1.79

KM QUICK CHANGE

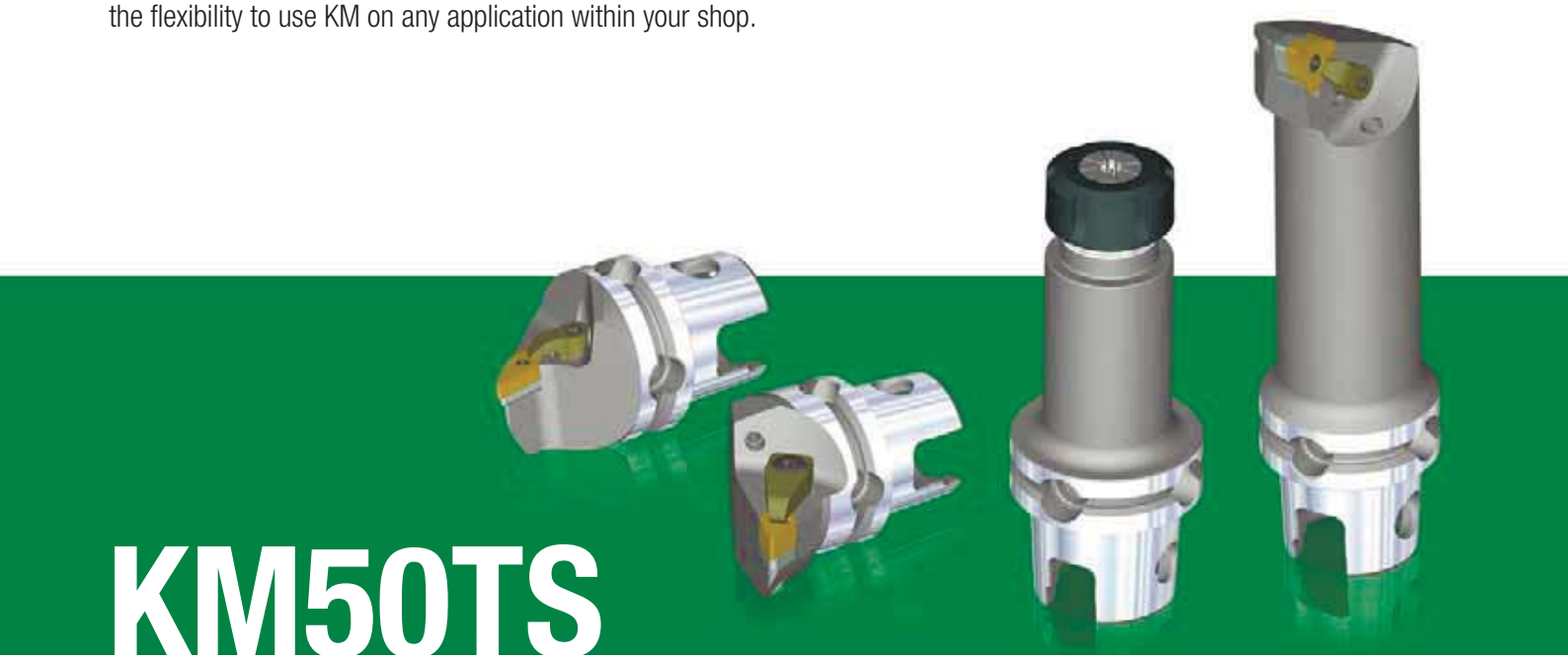


BN • Blank

order number	catalog number	D2 mm	D2 in	L1 mm	L1 in	hardness range	kg	lbs
3950194	KM40TSBN63052M	63	2.480	52	2.047	32–38 HRC	1,11	2.45
3950193	KM40TSBN63125M	63	2.480	125	4.921	32–38 HRC	2,89	6.38
3950195	KM40TSBN90052M	90	3.543	52	2.047	32–38 HRC	2,00	4.42

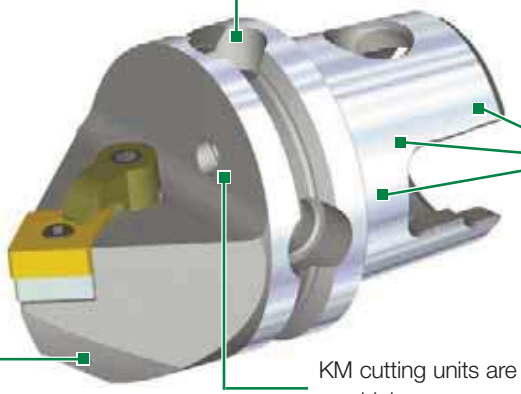
KM™ Quick Change Clamping System • **KM50TS™ Series**

The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.

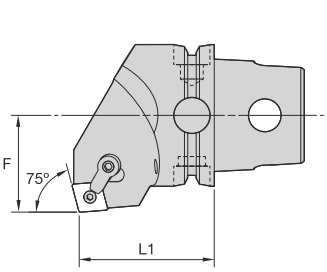


KM50TS

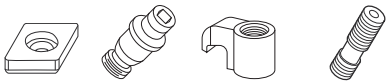
- KM is an ISO standard (ISO 26622).
- KM clamping units provide a 4:1 mechanical advantage.
- KM cutting units are capable of 100 bar (1,500 psi) coolant pressure.



KM QUICK CHANGE

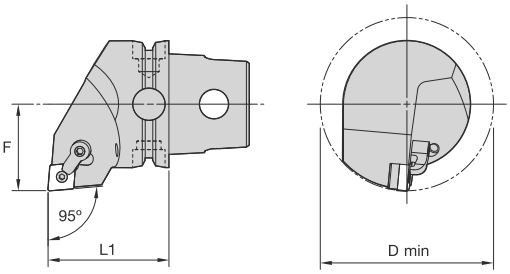


MCKN 75°



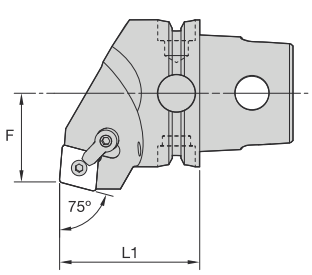
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738139	KM50TSMCKNR12	50	1.969	35	1.378	70	2.756	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,68	1.51
3738140	KM50TSMCKNR16	50	1.969	35	1.378	70	2.756	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,71	1.57
	left hand													
3738137	KM50TSMCKNL12	50	1.969	35	1.378	70	2.756	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,68	1.51
3738138	KM50TSMCKNL16	50	1.969	35	1.378	70	2.756	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,71	1.57

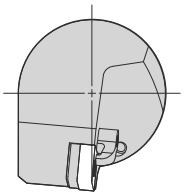
KM QUICK CHANGE



MCLN 95°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738164	KM50TSMCLNR12	50	1.969	35	1.378	70	2.756	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,64	1.42
3738165	KM50TSMCLNR16	50	1.969	35	1.378	90	3.543	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,64	1.41
3738166	KM50TSMCLNR19	50	1.969	35	1.378	90	3.543	CN..190612/CN..643	ICSN633	KLM68	CKM13LP	STCM8	0,63	1.39
	left hand													
3738141	KM50TSMCLNL12	50	1.969	35	1.378	70	2.756	CN..120408/CN..432	ICSN432	KLM46	CKM20LP	STCM11	0,64	1.41
3738142	KM50TSMCLNL16	50	1.969	35	1.378	90	3.543	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,64	1.41
3738163	KM50TSMCLNL19	50	1.969	35	1.378	90	3.543	CN..190612/CN..643	ICSN633	KLM68	CKM13LP	STCM8	0,63	1.39

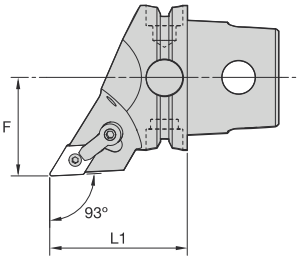


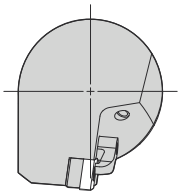


KM QUICK CHANGE

MCRN 75°

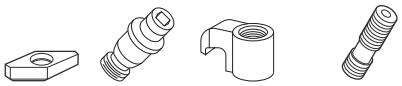
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3738182	KM50TSMCRNR12	50	1.969	30	1.181	CN..120408/CN..432	ICSN433	KLM46	CKM20LP	STCM11	0,66	1.44
3838383	KM50TSMCRNR16	50	1.969	30	1.181	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,66	1.45
3738183	KM50TSMCRNR19	50	1.969	30	1.181	CN..190612/CN..643	ICSN633	KLM68	CKM13LP	STCM8	0,66	1.45
	left hand											
3738179	KM50TSMCRNL12	50	1.969	30	1.181	CN..120408/CN..432	ICSN433	KLM46	CKM20LP	STCM11	0,66	1.45
3738181	KM50TSMCRNL16	50	1.969	30	1.181	CN..160612/CN..543	ICSN533	KLM58	CKM20LP	STCM11	0,64	1.41
3838384	KM50TSMCRNL19	50	1.969	30	1.181	CN..190612/CN..643	ICSN633	KLM68	CKM13LP	STCM8	0,66	1.44



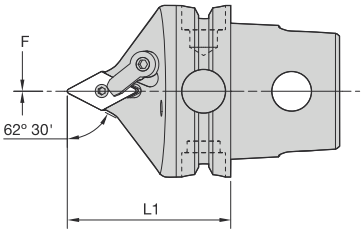


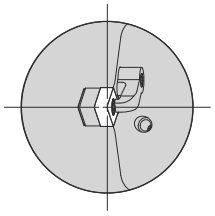
KM QUICK CHANGE

MDJN 93°



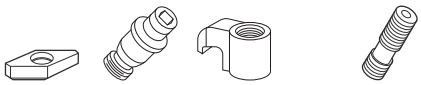
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3738151	KM50TSMDJNR1504	50	1.969	35	1.378	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,50	1.110
3738152	KM50TSMDJNR1506	50	1.969	35	1.378	DN..150408/DN..432	IDSN432	KLM46L	CKM23LP	STCM11	0,50	1.110
3738153	KM50TSMDJNR1906	50	1.969	35	1.378	DN..190612/DN..532	IDSN532	KLM58	CKM13LP	STCM8	0,55	1.200
	left hand											
3738149	KM50TSMDJNL1504	50	1.969	35	1.378	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,51	1.110
3738150	KM50TSMDJNL1506	50	1.969	35	1.378	DN..150408/DN..432	IDSN432	KLM46L	CKM23LP	STCM11	0,50	1.110



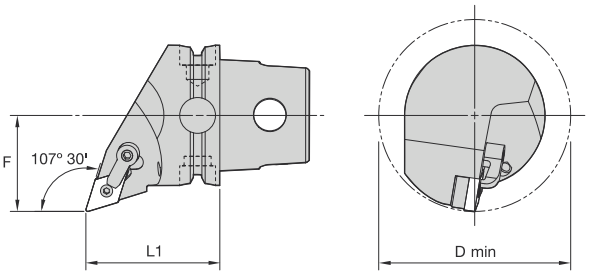


KM QUICK CHANGE

■ MDPN 62° 30'

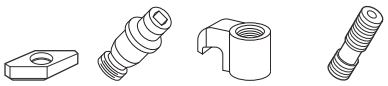


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3738489	KM50TSMDPNN1504	50	1.969	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	0,46	1.02
3738509	KM50TSMDPNN1506	50	1.969	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	0,46	1.02

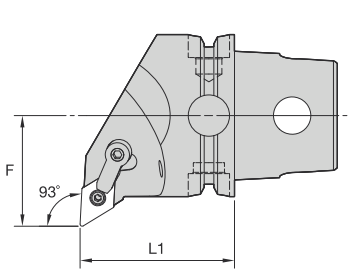


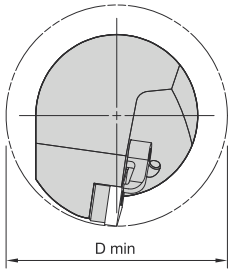
KM QUICK CHANGE

■ MDQN 107° 30'



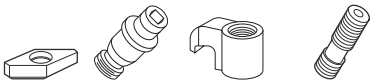
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738522	KM50TSMDQNR1504	50	1.969	35	1.378	70	2.756	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,59	1.30
3738524	KM50TSMDQNR1506	50	1.969	35	1.378	70	2.756	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,59	1.29
	left hand													
3738515	KM50TSMDQNL1504	50	1.969	35	1.378	70	2.756	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,59	1.30
3738519	KM50TSMDQNL1506	50	1.969	35	1.378	70	2.756	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,59	1.29



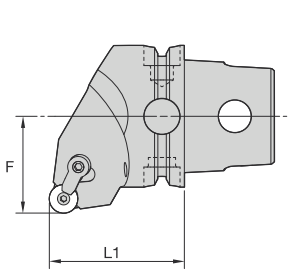


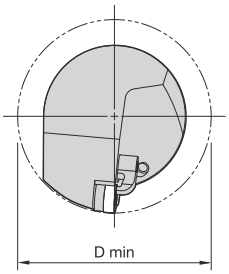
KM QUICK CHANGE

■ MDUN 93°



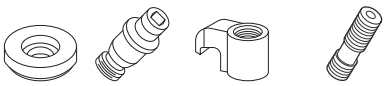
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738529	KM50TSMDUNR1504	50	1.969	35	1.378	70	2.756	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,64	1.41
3738530	KM50TSMDUNR1506	50	1.969	35	1.378	70	2.756	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,64	1.40
	left hand													
3738526	KM50TSMDUNL1504	50	1.969	35	1.378	70	2.756	DN..150408/DN..432	IDSN442	KLM46L	CKM23LP	STCM11	0,64	1.41
3738528	KM50TSMDUNL1506	50	1.969	35	1.378	70	2.756	DN..150608/DN..442	IDSN432	KLM46L	CKM23LP	STCM11	0,64	1.40



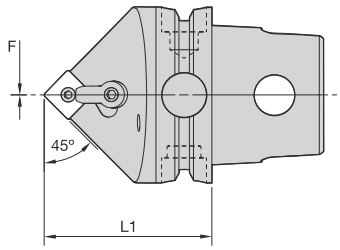


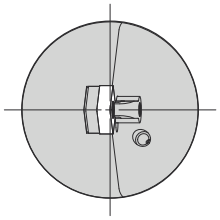
KM QUICK CHANGE

■ MRGN 0°



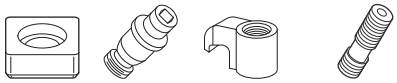
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738485	KM50TSMRGNR12	50	1.969	35	1.378	100	3.937	RN..1204000/RN..43	IRSN43	KLM46	CKM20LP	STCM11	0,64	1.41
	left hand													
3738484	KM50TSMRGNL12	50	1.969	35	1.378	100	3.937	RN..1204000/RN..43	IRSN43	KLM46	CKM20LP	STCM11	0,64	1.41



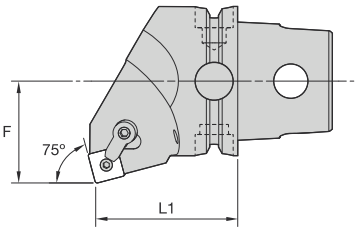


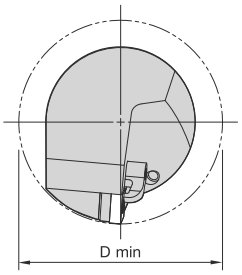
KM QUICK CHANGE

MSDN 45°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3738567	KM50TSMSDNN12	50	1.969	0	.000	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,51	1.13

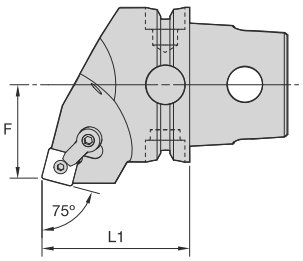


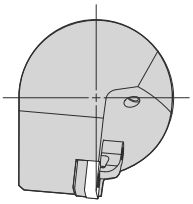


KM QUICK CHANGE

MSKN 75°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738572	KM50TSMSKNR12	50	1.969	35	1.378	70	2.756	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,69	1.52
3738583	KM50TSMSKNR15	50	1.969	35	1.378	70	2.756	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,71	1.57
3738585	KM50TSMSKNR19	50	1.969	35	1.378	70	2.756	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,72	1.59
	left hand													
3738568	KM50TSMSKNL12	50	1.969	35	1.378	70	2.756	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,69	1.53
3738569	KM50TSMSKNL15	50	1.969	35	1.378	70	2.756	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,71	1.57
3738571	KM50TSMSKNL19	50	1.969	35	1.378	70	2.756	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,72	1.59

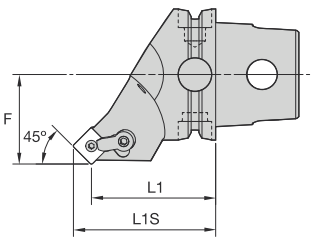


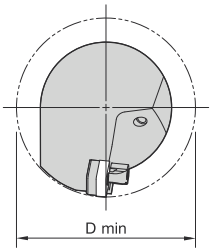


KM QUICK CHANGE

MSRN 75°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3738615	KM50TSMSRNR12	50	1.969	30	1.181	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,58	1.28
3738616	KM50TSMSRNR15	50	1.969	30	1.181	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,60	1.32
3738617	KM50TSMSRNR19	50	1.969	30	1.181	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,60	1.31
	left hand											
3738592	KM50TSMSRNL12	50	1.969	30	1.181	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,58	1.28
3738613	KM50TSMSRNL15	50	1.969	30	1.181	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,60	1.32
3738614	KM50TSMSRNL19	50	1.969	30	1.181	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,60	1.31

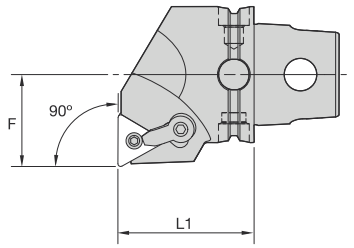


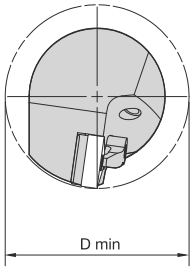


KM QUICK CHANGE

MSSN 45°

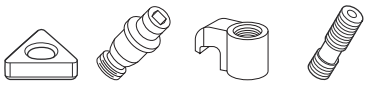
order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand															
3738621	KM50TSMSSNR12	50	1.969	58,3	2.297	35	1.378	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,60	1.30
3738622	KM50TSMSSNR15	50	1.969	60,2	2.372	35	1.378	100	3.937	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,63	1.38
3738623	KM50TSMSSNR19	50	1.969	62,5	2.460	35	1.378	100	3.937	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,67	1.47
	left hand															
3738618	KM50TSMSSNL12	50	1.969	58,3	2.297	35	1.378	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20LP	STCM11	0,60	1.30
3738619	KM50TSMSSNL15	50	1.969	60,2	2.372	35	1.378	100	3.937	SN..150612/SN..543	ISSN533	KLM58	CKM20LP	STCM11	0,63	1.38
3738620	KM50TSMSSNL19	50	1.969	62,5	2.460	35	1.378	100	3.937	SN..190612/SN..643	ISSN633	KLM68	CKM13LP	STCM8	0,67	1.47



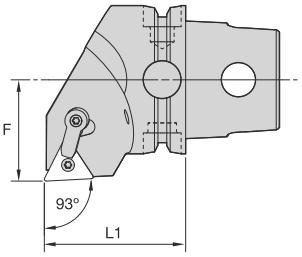


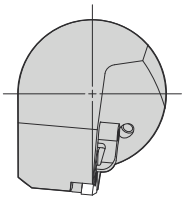
KM QUICK CHANGE

MTFN 90°



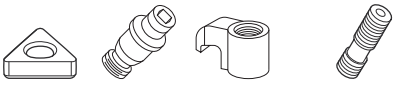
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738587	KM50TSMTFNR16	50	1.969	35	1.378	70	2.756	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,66	1.46
3738588	KM50TSMTFNR22	50	1.969	35	1.378	70	2.756	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,68	1.50
	left hand													
3838530	KM50TSMTFNL16	50	1.969	35	1.378	70	2.756	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,66	1.44
3838532	KM50TSMTFNL22	50	1.969	35	1.378	70	2.756	TN..220408/TN..432	ITSN433	KLM46	CKM23LP	STCM11	0,68	1.50



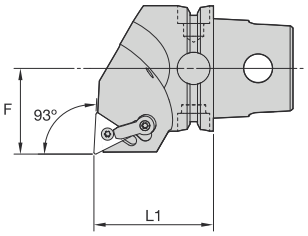


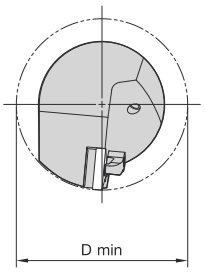
KM QUICK CHANGE

MTJN 93°



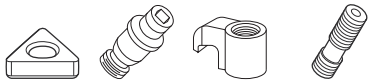
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3738590	KM50TSMTJNR16	50	1.969	35	1.378	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,64	1.41
	left hand											
3738589	KM50TSMTJNL16	50	1.969	35	1.378	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,64	1.41



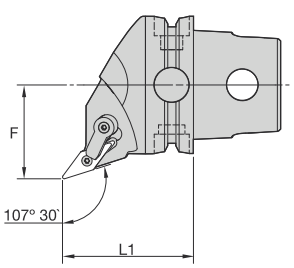


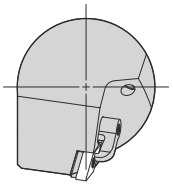
KM QUICK CHANGE

■ MTUN 93°



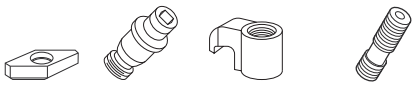
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	left hand													
3738591	KM50TSMTUNL16	50	1.969	35	1.378	70	2.756	TN..160408/TN..332	ITSN322	KLM34L	CKM7LP	STCM9	0,63	1.39



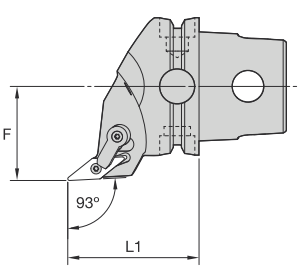


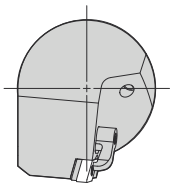
KM QUICK CHANGE

■ MVHN 107° 30'



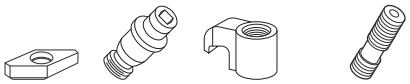
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3738558	KM50TSMVHNR16	50	1.969	35	1.378	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,56	1.23
	left hand											
3738557	KM50TSMVHNL16	50	1.969	35	1.378	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,55	1.22



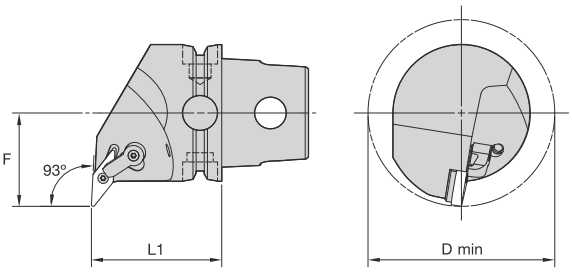


KM QUICK CHANGE

MVJN 93°

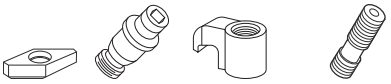


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3738560	KM50TSMVJNR16	50	1.969	35	1.378	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,53	1.16
	left hand											
3738559	KM50TSMVJNL16	50	1.969	35	1.378	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,53	1.16

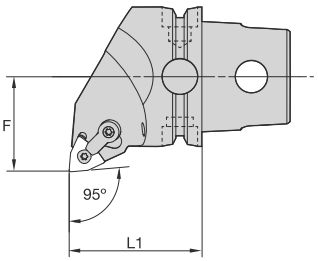


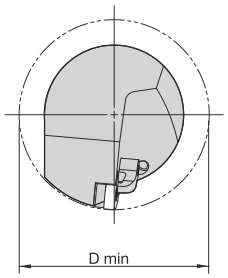
KM QUICK CHANGE

MVUN 93°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738593	KM50TSMVUNR16	50	1.969	35	1.378	70	2.756	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,63	1.38
	left hand													
3738562	KM50TSMVUNL16	50	1.969	35	1.378	70	2.756	VN..160408/VN..332	IVSN322	KLM34L	CKM23LP	STCM11	0,63	1.39

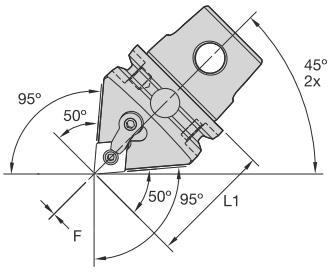




KM QUICK CHANGE

MWLN 95°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3738596	**KM50TSMWLNR08**	50	1.969	35	1.378	70	2.756	WN..080408/WN..432	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**	0,64	1.41
	left hand													
3738595	**KM50TSMWLNL08**	50	1.969	35	1.378	70	2.756	WN..080408/WN..432	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**	0,64	1.41

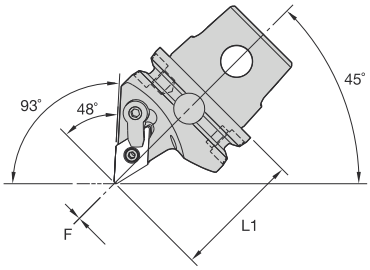


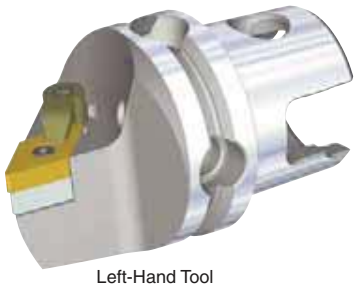
KM QUICK CHANGE

MCMN 50° • 95° Application • Centerline

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3738167	**KM50TSMCMNN12**	50	1.969	0	.000	CN..120408/CN..432	**ICSN432**	**KLM46**	**CKM20**	**STCM11**	0,47	1.03

NOTE: Use the KM63TSS5065 reducer to produce an L1 of 115mm.





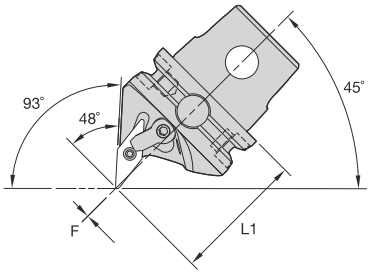
Left-Hand Tool

KM QUICK CHANGE

MDMN 48° • 93° Application • Centerline

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3738154	**KM50TSMDMNL1504**	50	1.969	0	.000	DN..150408/DN..432	**IDSN442**	**KLM46L**	**CKM20**	**STCM11**	0,45	.98
3738155	**KM50TSMDMNL1506**	50	1.969	0	.000	DN..150408/DN..432	**IDSN432**	**KLM46L**	**CKM20**	**STCM11**	0,44	.97

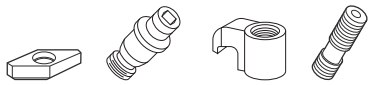
NOTE: Use the KM63TSS5065 reducer to produce an L1 of 115mm.



Left-Hand Tool

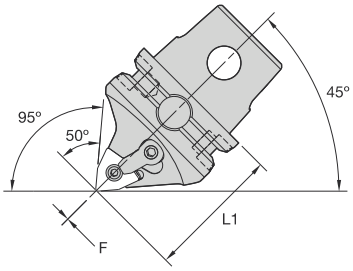
KM QUICK CHANGE

MVMN 48° • 93° Application • Centerline



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	left hand											
3738561	**KM50TSMVMNL16**	50	1.969	0	.000	VN..160408/VN..332	**IVSN322**	**KLM34L**	**CKM20LP**	**STCM11**	0,44	.98

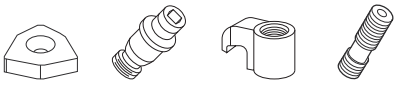
NOTE: Use the KM63TSS5065 reducer to produce an L1 of 115mm.



KM QUICK CHANGE

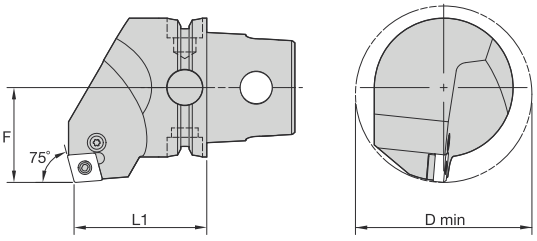
Left-Hand Tool

■ MWMN 50° • 95° Application • Centerline



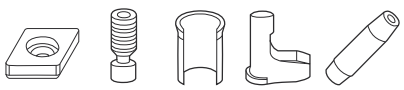
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3738598	KM50TSMWMNR08	50	1.969	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20LP	STCM11	0,49	1.08
	left hand											
3738597	KM50TSMWMNL08	50	1.969	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20LP	STCM11	0,49	1.08

NOTE: Use the KM63TSS5065 reducer to produce an L1 of 115mm.

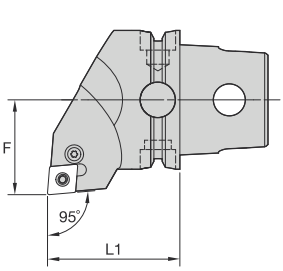


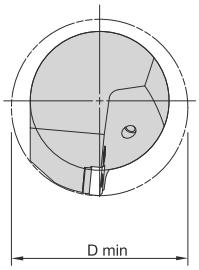
KM QUICK CHANGE

■ PCKN 75°



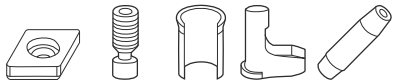
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3738514	KM50TSPCKNR12	50	1.969	35	1.378	63	2.480	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,68	1.50
	left hand														
3738513	KM50TSPCKNL12	50	1.969	35	1.378	63	2.480	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,68	1.50



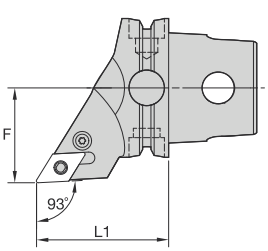


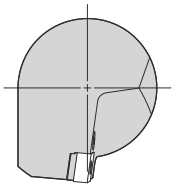
KM QUICK CHANGE

PCLN 95°



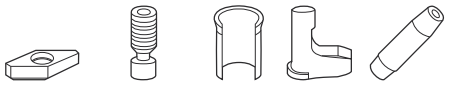
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3738517	KM50TSPCLNR12	50	1.969	35	1.378	63	2.480	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,63	1.39
3738520	KM50TSPCLNR16	50	1.969	35	1.378	63	2.480	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	0,63	1.38
	left hand														
3738516	KM50TSPCLNL12	50	1.969	35	1.378	63	2.480	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	0,63	1.39
3738518	KM50TSPCLNL16	50	1.969	35	1.378	63	2.480	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	0,63	1.38



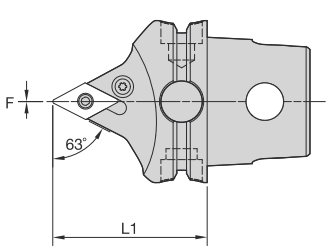


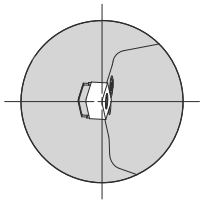
KM QUICK CHANGE

PDJN 93°



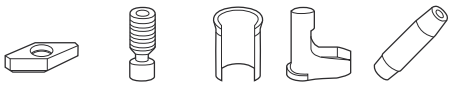
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
3741390	KM50TSPDJNR11	50	1.969	35	1.378	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,52	1.15
3741392	KM50TSPDJNR15	50	1.969	35	1.378	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,51	1.12
	left hand												
3741362	KM50TSPDJNL11	50	1.969	35	1.378	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,52	1.15
3741388	KM50TSPDJNL15	50	1.969	35	1.378	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,51	1.12



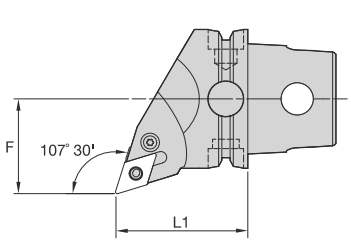


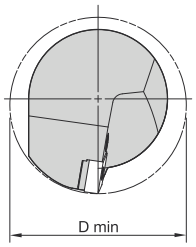
KM QUICK CHANGE

PDNN 63°



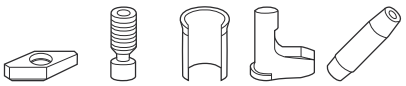
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
3741394	KM50TSPDNNR15	50	1.969	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,42	.93
	left hand												
3741393	KM50TSPDNNL15	50	1.969	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,43	.94



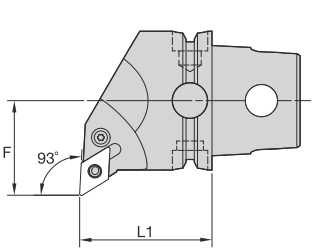


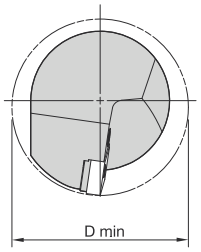
KM QUICK CHANGE

PDQN 107° 30'



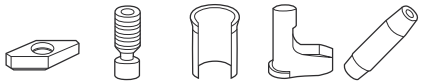
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3741396	KM50TSPDQNR11	50	1.969	35	1.378	63	2.480	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,57	1.25
	left hand														
3741395	KM50TSPDQNL11	50	1.969	35	1.378	63	2.480	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,57	1.25



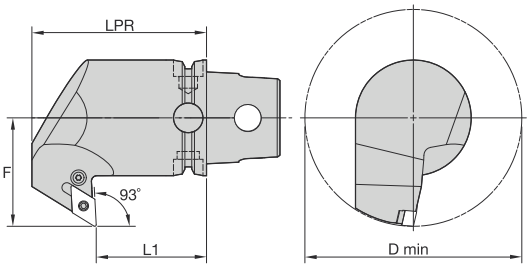


KM QUICK CHANGE

PDUN 93°

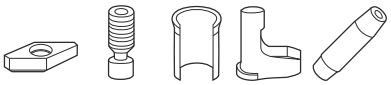


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3741398	KM50TSPDUNR15	50	1.969	35	1.378	63	2.480	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,64	1.40
	left hand														
3741397	KM50TSPDUNL15	50	1.969	35	1.378	63	2.480	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,64	1.40

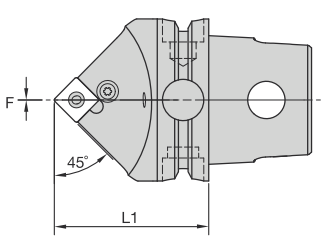


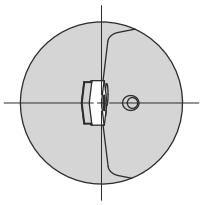
KM QUICK CHANGE

PDXN 93°



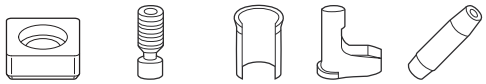
order number	catalog number	L1 mm	L1 in	LPR mm	LPR in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand																
3741400	KM50TSPDXNR15	50	1.969	75	2.953	52	2.047	104	4.095	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,17	2.57
	left hand																
3741399	KM50TSPDXNL15	50	1.969	75	2.953	52	2.047	104	4.095	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,17	2.57



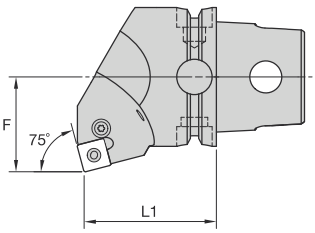


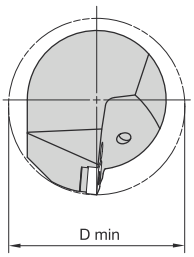
KM QUICK CHANGE

■ PSDN 45°



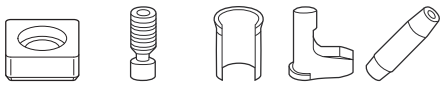
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
3752980	**KM50TSPSDNN12**	50	1.969	0	.000	SN..120408/SN..432	**512.063**	**514.123**	**513.023**	**511.023**	**515.018**	0,50	1.09
3752981	**KM50TSPSDNN15**	50	1.969	0	.000	SN..150612/SN..543	**512.025**	**514.125**	**513.025**	**511.025**	**515.022**	0,50	1.08



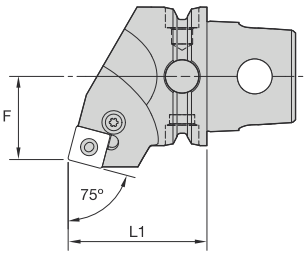


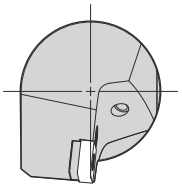
KM QUICK CHANGE

■ PSKN 75°



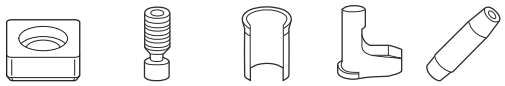
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3753153	**KM50TSPSKNR12**	50	1.969	35	1.378	63	2.480	SN..120408/SN..432	**512.063**	**514.123**	**513.023**	**511.023**	**515.018**	0,69	1.52
3753155	**KM50TSPSKNR15**	50	1.969	35	1.378	63	2.480	SN..150612/SN..543	**512.025**	**514.125**	**513.025**	**511.025**	**515.022**	0,69	1.53
	left hand														
3752982	**KM50TSPSKNL12**	50	1.969	35	1.378	63	2.480	SN..120408/SN..432	**512.063**	**514.123**	**513.023**	**511.023**	**515.018**	0,69	1.52
3753154	**KM50TSPSKNL15**	50	1.969	35	1.378	63	2.480	SN..150612/SN..543	**512.025**	**514.125**	**513.025**	**511.025**	**515.022**	0,69	1.53



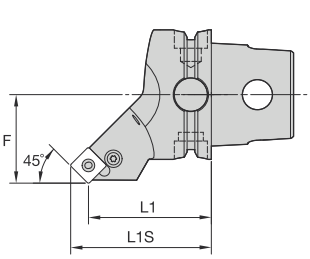


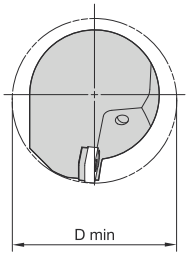
KM QUICK CHANGE

PSRN 75°



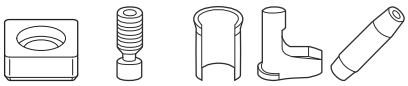
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
3752977	KM50TSPSRNR12	50	1.969	30	1.181	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,61	1.34
3752979	KM50TSPSRNR15	50	1.969	30	1.181	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	0,60	1.31
	left hand												
3752976	KM50TSPSRNL12	50	1.969	30	1.181	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,61	1.34
3752978	KM50TSPSRNL15	50	1.969	30	1.181	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	0,60	1.31



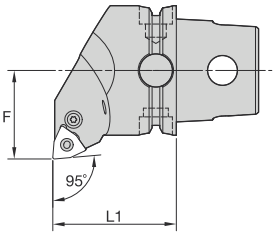


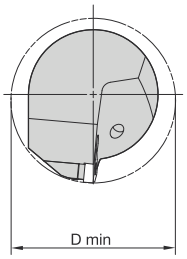
KM QUICK CHANGE

PSSN 45°



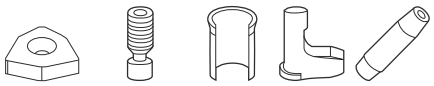
order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand																
3753157	KM50TSPSSNR12	50	1.969	58,3	2.30	35	1.38	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,55	1.22
	left hand																
3753156	KM50TSPSSNL12	50	1.969	58,3	2.30	35	1.38	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,55	1.22



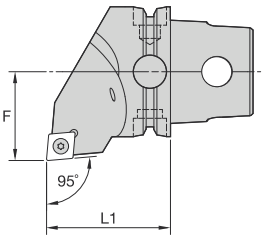


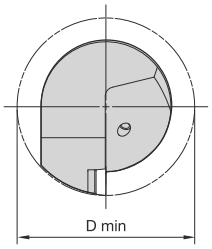
KM QUICK CHANGE

PWLN 95°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3753159	KM50TSPWLNR08	50	1.969	35	1.378	63	2.480	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	0,67	1.48
	left hand														
3753158	KM50TSPWLNL08	50	1.969	35	1.378	63	2.480	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	0,67	1.48

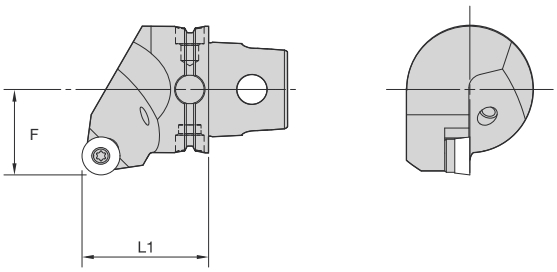




KM QUICK CHANGE

SCLC 95°

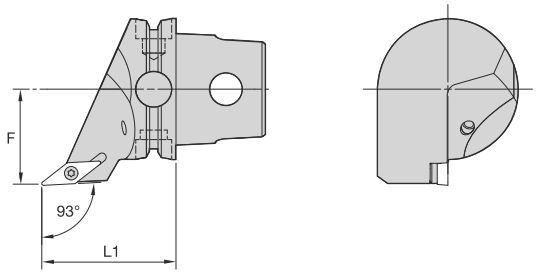
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand												
3746594	KM50TSSCLCR12	50	1.969	35	1.378	70	2.756	CC..120408/CC..432	MS1158	SKCP453	SRS4	0,64	1.40
	left hand												
3746593	KM50TSSCLCL12	50	1.969	35	1.378	70	2.756	CC..120408/CC..432	MS1158	SKCP453	SRS4	0,64	1.40



KM QUICK CHANGE

SRGC 0°

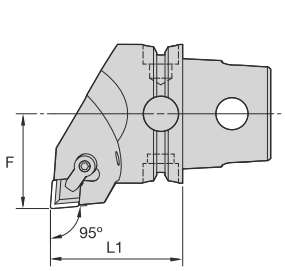
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand										
3746595	KM50TSSRGCR12	50	1.969	35	1.378	RC..1204M0	MS1156	SKRN1203M0	SRS3	0,65	1.43
	left hand										
3838582	KM50TSSRGCL12	50	1.969	35	1.378	RC..1204M0	MS1156	SKRN1203M0	SRS3	0,65	1.43

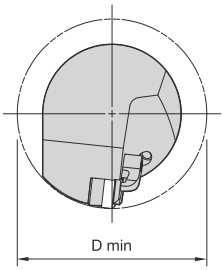


KM QUICK CHANGE

SVJB 93°

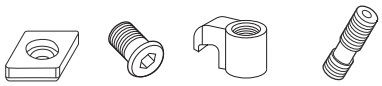
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand										
3746597	KM50TSSVJBR16	50	1.969	35	1.378	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,51	1.13
	left hand										
3746596	KM50TSSVJBL16	50	1.969	35	1.378	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,51	1.13





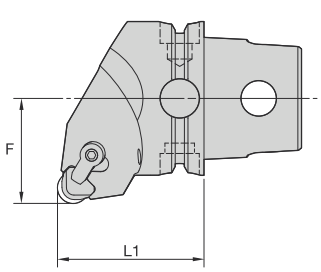
KM QUICK CHANGE

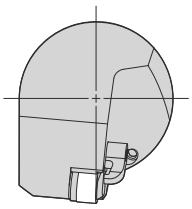
■ CCLN 95°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand													
3746732	**KM50TSCCLNR12**	50	1.969	35	1.378	70	2.756	CN..120408/CN.432	**ICSN442**	**KMS4**	**CKM20**	**STCM11**	0,70	1.55
	left hand													
3746726	**KM50TSCCLNL12**	50	1.969	35	1.378	70	2.756	CN..120408/CN.432	**ICSN442**	**KMS4**	**CKM20**	**STCM11**	0,70	1.54

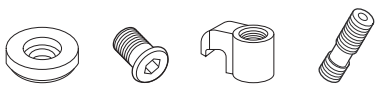
NOTE: Chipbreakers must be ordered separately. Chipbreaker catalog number is CBD-16F.





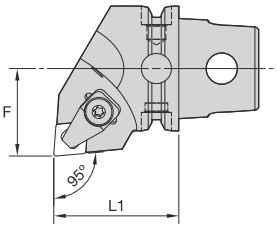
KM QUICK CHANGE

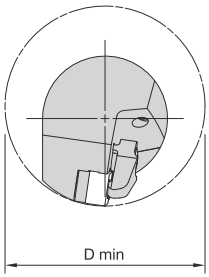
■ CRGN 0°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand											
3746739	**KM50TSCRGNR12**	50	1.969	35	1.378	RN..120700/RN.45	**IRSN42**	**KMS4**	**CKM23**	**STCM11**	0,67	1.47
	left hand											
3746735	**KM50TSCRGNL12**	50	1.969	35	1.378	RN..120700/RN.45	**IRSN42**	**KMS4**	**CKM23**	**STCM11**	0,67	1.47

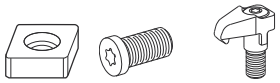
NOTE: Chipbreakers must be ordered separately. Chipbreaker catalog number is CBR-16.



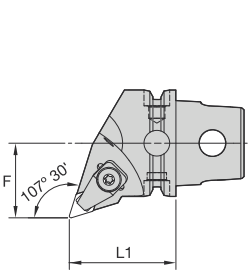


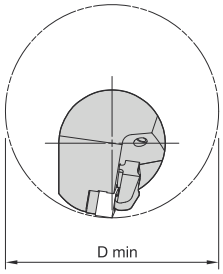
KM QUICK CHANGE

■ CCLN • MX 95°



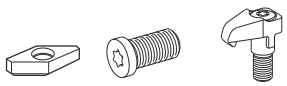
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	shim screw	clamp assembly	kg	lbs
	right hand												
3746972	KM50TSCCLNR12MX7	50	1.969	35	1.378	80	3.150	CN.X120708/CN.X452	552.221	554.260	551.326	0,67	1.48
	left hand												
3746966	KM50TSCCLNL12MX7	50	1.969	35	1.378	80	3.150	CN.X120708/CN.X452	552.221	554.260	551.326	0,67	1.48



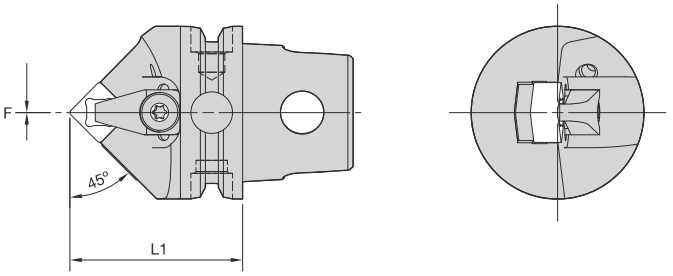


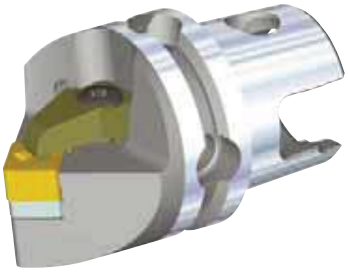
KM QUICK CHANGE

■ CDQN • MX 107° 30'



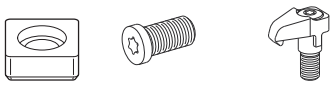
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	shim screw	clamp screw	kg	lbs
	right hand												
3746978	KM50TSCDQNR12MX7	50	1.969	35	1.378	100	3.937	DNGX120708	552.225	554.254	551.326	0,60	1.31
	left hand												
3746975	KM50TSCDQNL12MX7	50	1.969	35	1.378	100	3.937	DNGX120708	552.225	554.254	551.326	0,60	1.31



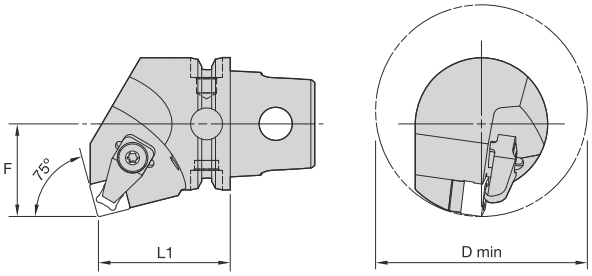


KM QUICK CHANGE

■ CSDN • MX 45°

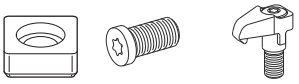


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp assembly	kg	lbs
3746980	**KM50TSCSDNN12MX7**	50	1.969	0	.000	SN.X120708/SN.X452	**552.232**	**554.260**	**551.326**	0,52	1.15

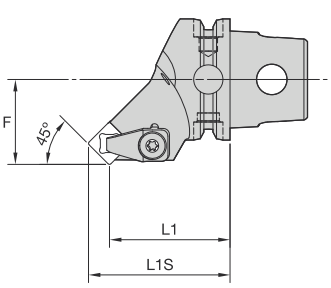


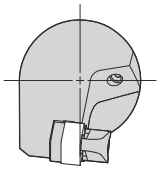
KM QUICK CHANGE

■ CSKN • MX 75°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	shim screw	clamp assembly	kg	lbs
	right hand												
3746986	**KM50TSCSKNR12MX7**	50	1.969	35	1.378	80	3.150	SN.X120708/SN.X452	**552.232**	**554.260**	**551.326**	0,74	1.62
	left hand												
3746984	**KM50TSCSKNL12MX7**	50	1.969	35	1.378	80	3.150	SN.X120708/SN.X452	**552.232**	**554.260**	**551.326**	0,74	1.62

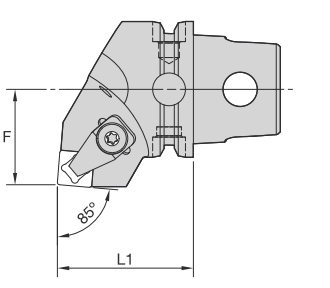


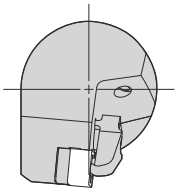


KM QUICK CHANGE

■ CSSN • MX 45°

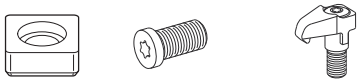
order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	gage insert	shim	shim screw	clamp assembly	kg	lbs
	right hand												
3746992	**KM50TSCSSNR12MX7**	50	1.969	58	2.297	35	1.378	SN.X120708/SN.X452	552.232	**554.252**	**551.326**	0,60	1.32
	left hand												
3746989	**KM50TSCSSNL12MX7**	50	1.969	58	2.297	35	1.378	SN.X120708/SN.X452	552.232	**554.252**	**551.326**	0,60	1.32





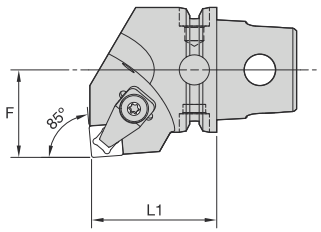
KM QUICK CHANGE

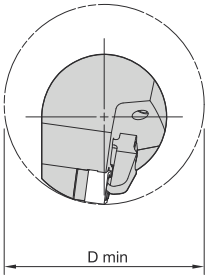
■ CSXN • MX 85°



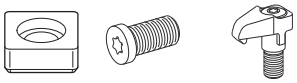
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp assembly	kg	lbs
	right hand										
3746998	**KM50TSCSXNR12MX7**	50	1.969	35	1.378	SN.X120708/SN.X452	**552.232**	**554.260**	**551.326**	0,67	1.48
	left hand										
3746996	**KM50TSCSXNL12MX7**	50	1.969	35	1.378	SN.X120708/SN.X452	**552.232**	**554.260**	**551.326**	0,67	1.48

KM QUICK CHANGE



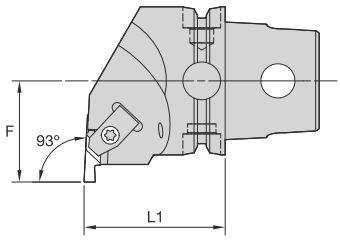


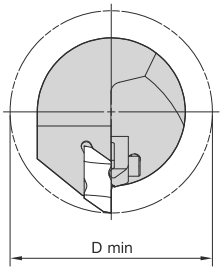
■ CSYN • MX 85°



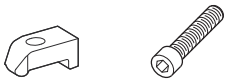
		L1		F		D min							
order number	catalog number	mm	in	mm	in	mm	in	gage insert	shim	shim screw	clamp assembly	kg	lbs
	right hand												
3747004	KM50TSCSYNR12MX7	50	1.969	35	1.378	80	3.150	SN.X120708/SN.X452	552.232	554.260	551.326	0,73	1.60
	left hand												
3747001	KM50TSCSYNL12MX7	50	1.969	35	1.378	80	3.150	SN.X120708/SN.X452	552.232	554.260	551.326	0,73	1.60

KM QUICK CHANGE



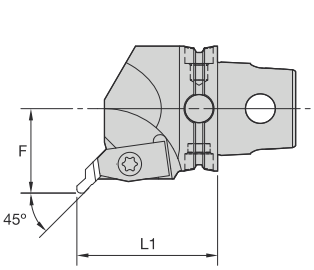


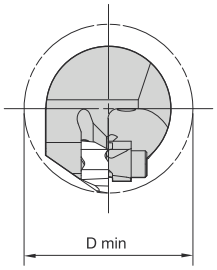
■ NE 93°

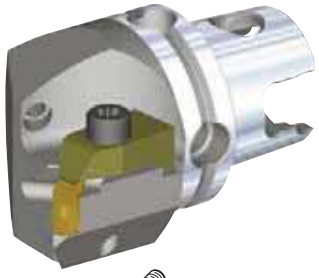


		L1		F		D min						
order number	catalog number	mm	in	mm	in	mm	in	gage insert	clamp	clamp screw	kg	lbs
	right hand											
3753584	KM50TSNER3	50	1.969	35	1.378	70	2.756	NG3L	CM73	MS1489	0,63	1.39
3753585	KM50TSNER4	50	1.969	35	1.378	70	2.756	NG4L	CM73	MS1489	0,63	1.39
	left hand											
3753572	KM50TSNEL3	50	1.969	35	1.378	70	2.756	NG3R	CM72	MS1489	0,65	1.42
3753583	KM50TSNEL4	50	1.969	35	1.378	70	2.756	NG4R	CM72	MS1489	0,63	1.39

KM QUICK CHANGE



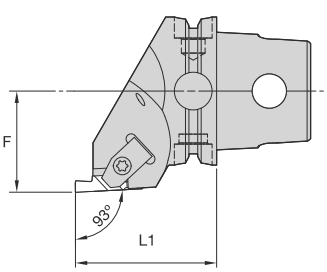


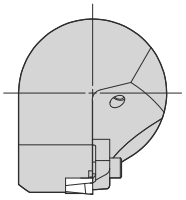


NR 45°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	clamp	clamp screw	kg	lbs
	right hand											
3753587	**KM50TSNRR3**	50	1.969	35	1.378	70	2.756	NU3L	**CM73**	**MS1489**	0,57	1.26
	left hand											
3753586	**KM50TSNRL3**	50	1.969	35	1.378	70	2.756	NU3R	**CM72**	**MS1489**	0,57	1.26

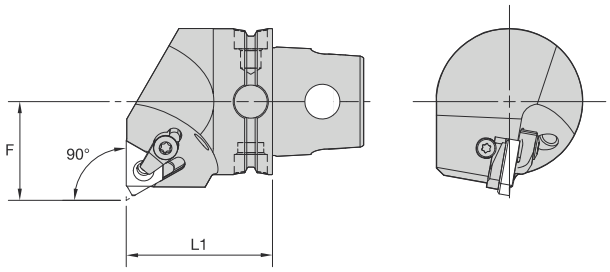
KM QUICK CHANGE





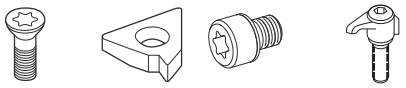
NS 93°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	clamp	clamp screw	kg	lbs
	right hand									
3753590	**KM50TSNSR3**	50	1.969	35	1.378	NG3R	**CM72**	**MS1489**	0,59	1.29
3753591	**KM50TSNSR4**	60	2.362	35	1.378	NG4R	**CM72**	**MS1489**	0,69	1.53
	left hand									
3753588	**KM50TSNSL3**	50	1.969	35	1.378	NG3L	**CM73**	**MS1489**	0,59	1.29
3753589	**KM50TSNSL4**	60	2.362	35	1.378	NG4L	**CM73**	**MS1489**	0,70	1.54



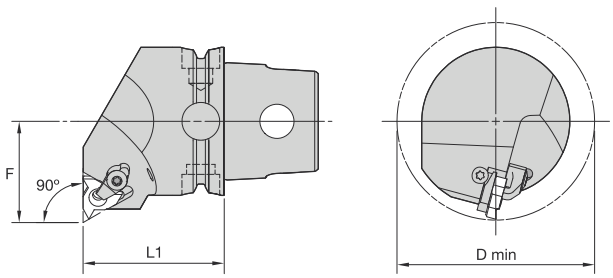
KM QUICK CHANGE

■ LSE-E 90° • External Only



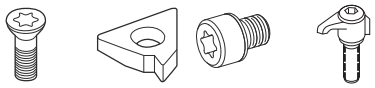
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
	right hand											
3753566	**KM50TSLSER16E**	50	1.969	35	1.378	LT16EL	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**	0,68	1.51
3959391	**KM50TSLSER27E**	50	1.969	35	1.378	LT27EL	**SSA5T**	**SMYI5**	**SSY5T**	**CKC5**	0,70	1.55
	left hand											
3753565	**KM50TSLSEL16E**	50	1.969	35	1.378	LT16ER	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**	0,68	1.51
3959390	**KM50TSLSEL27E**	50	1.969	35	1.378	LT27ER	**SSA5T**	**SMYE5**	**SSY5T**	**CKC5**	0,70	1.55

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



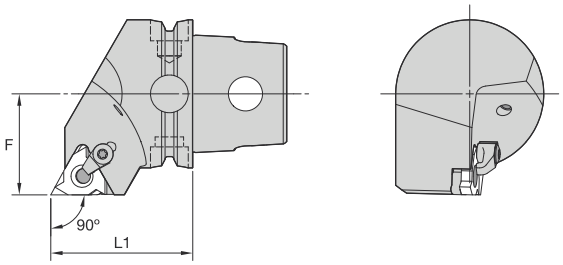
KM QUICK CHANGE

■ LSE-N 90° • Internal Only



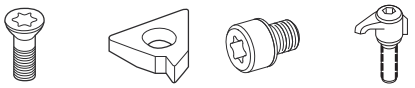
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
	right hand													
3753567	**KM50TSLSER16N**	50	1.969	35	1.378	70	2.756	LT16NR	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**	0,68	1.51
3753568	**KM50TSLSER22N**	50	1.969	35	1.378	70	2.756	LT22NR	**SSA4T**	**SMYI4**	**SSY4T**	**CKC4**	0,67	1.49
3959393	**KM50TSLSER27N**	50	1.969	35	1.378	70	2.756	LT27NR	**SSA5T**	**SMYI5**	**SSY5T**	**CKC5**	0,72	1.59
	left hand													
3867563	**KM50TSLSEL16N**	50	1.969	35	1.378	70	2.756	LT16NL	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**	0,69	1.51
3867564	**KM50TSLSEL22N**	50	1.969	35	1.378	70	2.756	LT22NL	**SSA4T**	**SMYE4**	**SSY4T**	**CKC4**	0,68	1.49
3959392	**KM50TSLSEL27N**	50	1.969	35	1.378	70	2.756	LT27NL	**SSA5T**	**SMYE5**	**SSY5T**	**CKC5**	0,72	1.59

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.



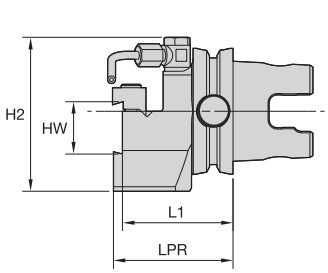
KM QUICK CHANGE

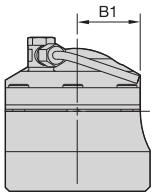
LSS 90°

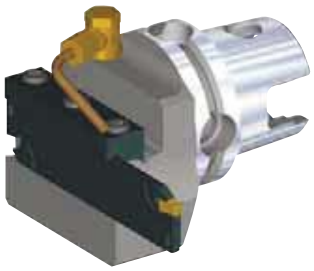


		L1		F								
order number	catalog number	mm	in	mm	in	gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
	right hand											
3753570	**KM50TSLSSR16**	50	1.969	35	1.378	LT16ER	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**	0,60	1.33
3753571	**KM50TSLSSR22**	50	1.969	35	1.378	LT22ER	**SSA4T**	**SMYE4**	**SSY4T**	**CKC4**	0,59	1.30
3959395	**KM50TSLSSR27**	50	1.969	35	1.378	LT27ER	**SSA5T**	**SMYE5**	**SSY5T**	**CKC5**	0,61	1.34
	left hand											
3753569	**KM50TSLSSL16**	50	1.969	35	1.378	LT16EL	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**	0,60	1.31
3959394	**KM50TSLSSL27**	50	1.969	35	1.378	LT27EL	**SSA5T**	**SMYI5**	**SSY5T**	**CKC5**	0,63	1.38

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.







KM QUICK CHANGE

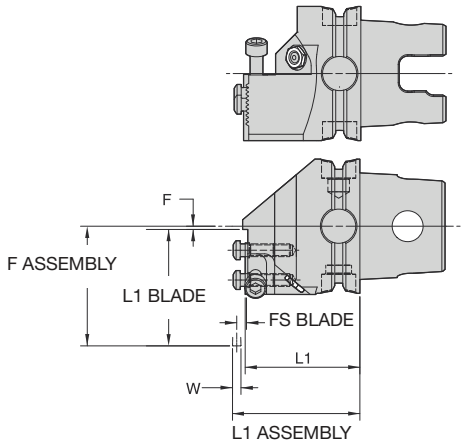
BE • End Mount

order number	catalog number	L1 mm	L1 in	LPR mm	LPR in	H2 mm	H2 in	HW mm	HW in	B1 mm	B1 in	cartridge size	cartridge 1	kg	lbs
	right hand														
3747118	**KM50TSBER**	54,9	2.162	60	2.36	61	2.40	26	1.02	25	.98	26	A2BNSN26...	1,30	2.86
	left hand														
3747117	**KM50TSBEL**	54,9	2.162	60	2.36	61	2.40	26	1.02	25	.98	26	A2BNSN26...	1,30	2.86

Spare Parts

catalog number	clamp	clamp screw	coolant tube	coolant swivel base
right hand				
KM50TSBER	**CGS4**	**MS1595**	**12649910900**	**12649910800**
left hand				
KM50TSBEL	**CGS4**	**MS1595**	**12649910900**	**12649910800**

NOTE: For cut-off blades, see the WIDIA Turning (A-09-02078) catalog.



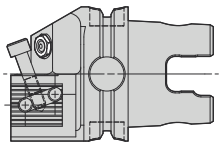
KM QUICK CHANGE

F ASSEMBLY = L1 BLADE - F
L1 ASSEMBLY = W/2 + L1 + FS BLADE - 0,787mm

WGME

order number	catalog number	L1 mm	L1 in	F mm	F in	button-head cap screw	nozzle	socket-head cap screw	kg	lbs
	right hand									
3949882	**KM50TSWGMER55M**	53,79	2.118	-4,98	-0.196	**606256**	**PMT08430**	**MS337**	0,79	1.73
	left hand									
3949893	**KM50TSWGMEL55M**	53,79	2.118	-4,98	-0.196	**606256**	**PMT08430**	**MS337**	0,78	1.73

NOTE: For SLS cartridges and WMT insert, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.



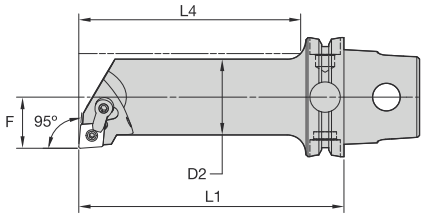
KM QUICK CHANGE

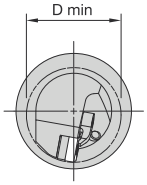
F ASSEMBLY = W/2 + F + FS BLADE - 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE

WGMS

order number	catalog number	L1 mm	L1 in	F mm	F in	nozzle	socket-head cap screw	kg	lbs
	right hand								
3949880	**KM50TSWGMSR55M**	24,52	.965	23,79	.937	**PMT08430**	**MS1132PKG**	0,74	1.64
	left hand								
3949881	**KM50TSWGMSL55M**	24,52	.965	23,79	.937	**PMT08430**	**MS1132PKG**	0,74	1.64

NOTE: For SLS cartridges and WMT insert, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.





KM QUICK CHANGE

MCLN 95°

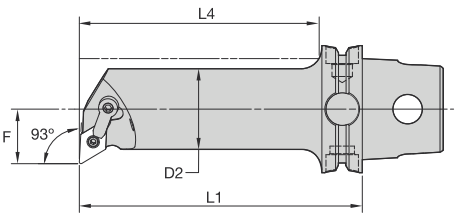
		D2		D min		F		L4		L1				
order number	catalog number	mm	in	mm	in	mm	in	mm	in	mm	in	gage insert	kg	lbs
	right hand													
3753688	KM50TSS25DMCLNR12	25	.98	32	1.26	17	.669	38	1.51	60	2.362	CN..120408/CN..432	0,48	1.06
3753690	KM50TSS25EMCLNR12	25	.98	32	1.26	17	.669	49	1.94	70	2.756	CN..120408/CN..432	0,51	1.13
3753692	KM50TSS25JMCLNR12	25	.98	32	1.26	17	.669	87	3.43	110	4.331	CN..120408/CN..432	0,67	1.48
3753694	KM50TSS32FMCLNR12	32	1.26	40	1.57	22	.866	60	2.38	80	3.150	CN..120408/CN..432	0,67	1.48
3753696	KM50TSS32GMCLNR12	32	1.26	40	1.57	22	.866	70	2.77	90	3.543	CN..120408/CN..432	0,78	1.61
3753698	KM50TSS32KMCLNR12	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	CN..120408/CN..432	1,00	2.20
3753668	KM50TSS40HMCLNR12	40	1.57	50	1.97	27	1.063	81	3.20	100	3.937	CN..120408/CN..432	1,03	2.27
3753670	KM50TSS40JMCLNR12	40	1.57	50	1.97	27	1.063	91	3.59	110	4.331	CN..120408/CN..432	1,13	2.49
3753684	KM50TSS40LMCLNR16	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	CN..160612/CN..543	1,44	3.17
3753683	KM50TSS40LMCLNR12	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	CN..120408/CN..432	1,42	3.14
3753686	KM50TSS50LMCLNR12	50	1.97	63	2.48	35	1.378	140	5.51	140	5.512	CN..120408/CN..432	2,00	4.41
	left hand													
3753687	KM50TSS25DMCLNL12	25	.98	32	1.26	17	.669	38	1.51	60	2.362	CN..120408/CN..432	0,48	1.06
3753689	KM50TSS25EMCLNL12	25	.98	32	1.26	17	.669	49	1.94	70	2.756	CN..120408/CN..432	0,51	1.13
3753691	KM50TSS25JMCLNL12	25	.98	32	1.26	17	.669	87	3.43	110	4.331	CN..120408/CN..432	0,67	1.48
3753693	KM50TSS32FMCLNL12	32	1.26	40	1.57	22	.866	60	2.38	80	3.150	CN..120408/CN..432	0,67	1.48
3753695	KM50TSS32GMCLNL12	32	1.26	40	1.57	22	.866	70	2.77	90	3.543	CN..120408/CN..432	0,78	1.61
3753697	KM50TSS32KMCLNL12	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	CN..120408/CN..432	1,00	2.20
3753667	KM50TSS40HMCLNL12	40	1.57	50	1.97	27	1.063	81	3.20	100	3.937	CN..120408/CN..432	1,03	2.27
3753669	KM50TSS40JMCLNL12	40	1.57	50	1.97	27	1.063	91	3.59	110	4.331	CN..120408/CN..432	1,13	2.48
3753672	KM50TSS40LMCLNL16	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	CN..160612/CN..543	1,44	3.17
3753671	KM50TSS40LMCLNL12	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	CN..120408/CN..432	1,42	3.13
3753685	KM50TSS50LMCLNL12	50	1.97	63	2.48	35	1.378	140	5.51	140	5.512	CN..120408/CN..432	2,00	4.41

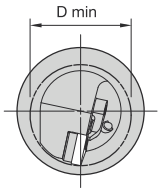
(continued)

(MCLN 95° continued)

Spare Parts

catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM50TSS25DMCLNR12	–	KLM43	CKM20LP	STCM11
KM50TSS25EMCLNR12	–	KLM43	CKM20LP	STCM11
KM50TSS25JMCLNR12	–	KLM43	CKM20LP	STCM11
KM50TSS32FMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS32GMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS32KMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40HMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40JMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40LMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40LMCLNR16	ICSN533	KLM58	CKM20LP	STCM11
KM50TSS50LMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
left hand				
KM50TSS25DMCLNL12	–	KLM43	CKM20LP	STCM11
KM50TSS25EMCLNL12	–	KLM43	CKM20LP	STCM11
KM50TSS25JMCLNL12	–	KLM43	CKM20LP	STCM11
KM50TSS32FMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS32GMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS32KMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40HMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40JMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40LMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM50TSS40LMCLNL16	ICSN533	KLM58	CKM20LP	STCM11
KM50TSS50LMCLNL12	ICSN432	KLM46	CKM20LP	STCM11





KM QUICK CHANGE

■ MDUN 93°

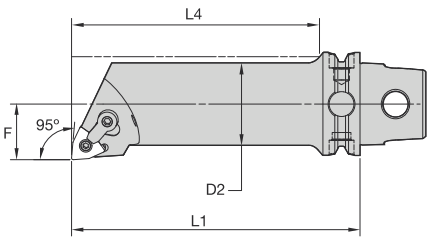
order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3753598	**KM50TSS25DMDUNR15**	25	.98	32	1.26	17	.669	38	1.51	60	2.362	DN..150408/DN..432	0,47	1.03
3753601	**KM50TSS25JMDUNR15**	25	.98	32	1.26	17	.669	87	3.43	110	4.331	DN..150408/DN..432	0,66	1.46
3753603	**KM50TSS32FMDUNR15**	32	1.26	40	1.57	22	.866	60	2.38	80	3.150	DN..150408/DN..432	0,66	1.46
3753605	**KM50TSS32GMDUNR15**	32	1.26	40	1.57	22	.866	70	2.77	90	3.543	DN..150408/DN..432	0,72	1.59
3753607	**KM50TSS32KMDUNR15**	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	DN..150408/DN..432	0,99	2.18
3753485	**KM50TSS40HMDUNR15**	40	1.57	50	1.97	27	1.063	81	3.20	100	3.937	DN..150408/DN..432	1,03	2.27
3753490	**KM50TSS40JMDUNR15**	40	1.57	50	1.97	27	1.063	91	3.59	110	4.331	DN..150408/DN..432	1,13	2.49
3753493	**KM50TSS40LMDUNR15**	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	DN..150408/DN..432	1,42	3.12
	left hand													
3753597	**KM50TSS25DMDUNL15**	25	.98	32	1.26	17	.669	38	1.51	60	2.362	DN..150408/DN..432	0,47	1.03
3753599	**KM50TSS25EMDUNL15**	25	.98	32	1.26	17	.669	48	1.90	70	2.756	DN..150408/DN..432	0,51	1.11
3753600	**KM50TSS25JMDUNL15**	25	.98	32	1.26	17	.669	87	3.43	110	4.331	DN..150408/DN..432	0,66	1.45
3753602	**KM50TSS32FMDUNL15**	32	1.26	40	1.57	22	.866	60	2.38	80	3.150	DN..150408/DN..432	0,66	1.46
3753604	**KM50TSS32GMDUNL15**	32	1.26	40	1.57	22	.866	70	2.77	90	3.543	DN..150408/DN..432	0,72	1.59
3753606	**KM50TSS32KMDUNL15**	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	DN..150408/DN..432	0,99	2.18
3753480	**KM50TSS40HMDUNL15**	40	1.57	50	1.97	27	1.063	81	3.20	100	3.937	DN..150408/DN..432	1,03	2.28
3753488	**KM50TSS40JMDUNL15**	40	1.57	50	1.97	27	1.063	91	3.59	110	4.331	DN..150408/DN..432	1,13	2.49
3753492	**KM50TSS40LMDUNL15**	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	DN..150408/DN..432	1,42	3.12

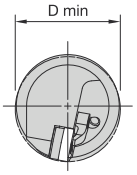
(continued)

(MDUN 93° continued)

Spare Parts

catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM50TSS25DMDUNR15	–	KLM43	CKM20LP	STCM11
KM50TSS25JMDUNR15	–	KLM43	CKM20LP	STCM11
KM50TSS32FMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS32GMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS32KMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40HMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40JMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40LMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
left hand				
KM50TSS25DMDUNL15	–	KLM43	CKM20LP	STCM11
KM50TSS25EMDUNL15	–	KLM43	CKM20LP	STCM11
KM50TSS25JMDUNL15	–	KLM43	CKM20LP	STCM11
KM50TSS32FMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS32GMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS32KMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40HMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40JMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM50TSS40LMDUNL15	IDSN432	KLM46	CKM23LP	STCM11





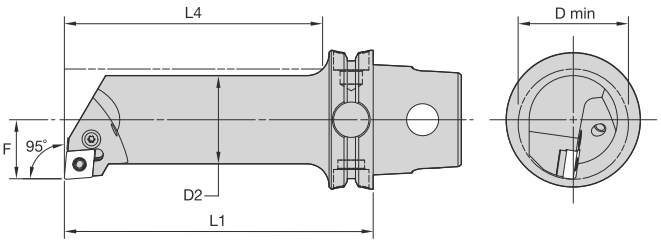
MWLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3747121	**KM50TSS25JMWLNR08**	25	.98	32	1.26	17	.669	87	3.43	110	4.331	WN..080408/WN..432	0,67	1.48
3747123	**KM50TSS32KMWLNR08**	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	WN..080408/WN..432	0,99	2.17
3747120	**KM50TSS40LMWLNR08**	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	WN..080408/WN..432	1,40	3.08
	left hand													
3747122	**KM50TSS25JMWLNL08**	25	.98	32	1.26	17	.669	87	3.43	110	4.331	WN..080408/WN..432	0,67	1.47
3747119	**KM50TSS40LMWLNL08**	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	WN..080408/WN..432	1,40	3.08

Spare Parts

catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM50TSS25JMWLNR08	**–**	**KLM43**	**CKM20LP**	**STCM11**
KM50TSS32KMWLNR08	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**
KM50TSS40LMWLNR08	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**
left hand				
KM50TSS25JMWLNL08	**–**	**KLM43**	**CKM20LP**	**STCM11**
KM50TSS40LMWLNL08	**IWSN433**	**KLM46**	**CKM20LP**	**STCM11**

KM QUICK CHANGE



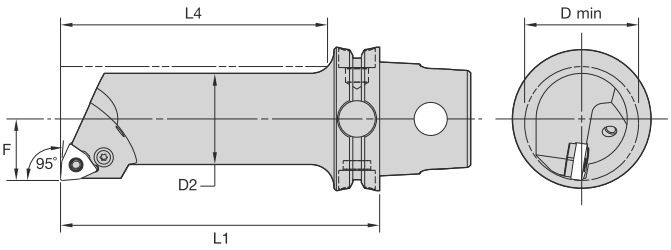
PCLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3789272	KM50TSS25JPCLNR12	25	.98	32	1.26	17	.669	88	3.48	110	4.331	CN..120408/CN..432	0,66	1.46
3789294	KM50TSS32KPCLNR12	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	CN..120408/CN..432	0,99	2.17
	left hand													
3789270	KM50TSS25GPCLNL12	25	.98	32	1.26	17	.669	70	2.77	90	3.543	CN..120408/CN..432	0,57	1.26
3789271	KM50TSS25JPCLNL12	25	.98	32	1.26	17	.669	88	3.48	110	4.331	CN..120408/CN..432	0,66	1.46
3789293	KM50TSS32KPCLNL12	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	CN..120408/CN..432	0,99	2.17

Spare Parts

catalog number	shim	lever screw	shim pin	toggle lever	punch
right hand					
KM50TSS25JPCLNR12	–	514.122	–	511.022	515.018
KM50TSS32KPCLNR12	512.112	514.123	513.023	511.023	515.018
left hand					
KM50TSS25GPCLNL12	–	514.122	–	511.022	515.018
KM50TSS25JPCLNL12	–	514.122	–	511.022	515.018
KM50TSS32KPCLNL12	512.112	514.123	513.023	511.023	515.018

KM QUICK CHANGE



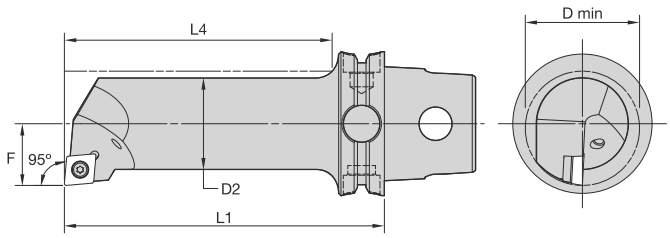
PWLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3789296	KM50TSS40LPWLNR08	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	WN..080408/WN..432	1,39	3.07
	left hand													
3789295	KM50TSS40LPWLNL08	40	1.57	50	1.97	27	1.063	120	4.74	140	5.512	WN..080408/WN..432	1,39	3.07

Spare Parts

catalog number	shim	lever lock screw	shim pin	toggle lever	punch
right hand					
KM50TSS40LPWLNR08	512.135	514.123	513.023	511.023	515.018
left hand					
KM50TSS40LPWLNL08	512.135	514.123	513.023	511.023	515.018

KM QUICK CHANGE

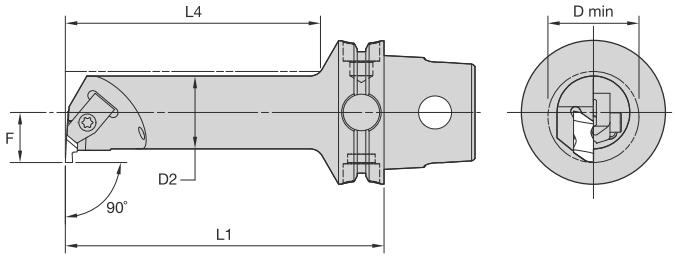


SCLC 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	left hand													
3838715	**KM50TSS32GSCLCL12**	32	1.26	40	1.57	22	.866	70	2.756	90	3.543	CC..120408/CC..432	**0,72**	**1.58**

Spare Parts

catalog number	insert screw	shim	shim screw
left hand **KM50TSS32GSCLCL12**	**MS1158**	**SKCP453**	**SRS4**



KM QUICK CHANGE

■ NE 90° • Steel

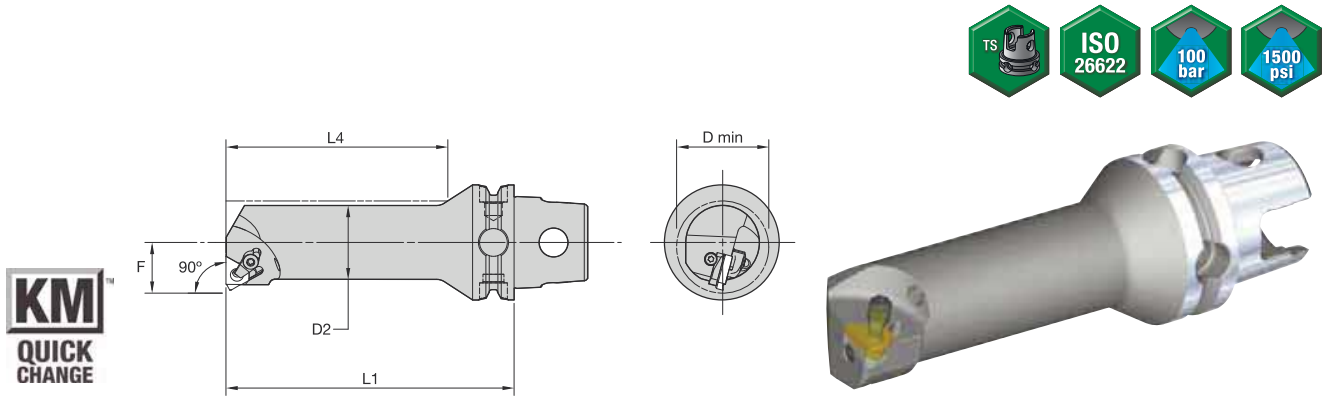
		D2		D min		F		L4		L1				
order number	catalog number	mm	in	mm	in	mm	in	mm	in	mm	in	gage insert	kg	lbs
	right hand													
3790585	**KM50TSS12ENER2**	12	.47	19	.73	11	.433	42	1.654	70	2.756	NG2L	0,44	.97
3790583	**KM50TSS16FNER2**	16	.63	20	.79	11	.433	56	2.211	80	3.150	NG2L	0,44	.97
3790587	**KM50TSS20HNER2**	20	.79	25	.98	13	.512	70	2.769	100	3.937	NG2L	0,58	1.28
3790589	**KM50TSS25JNER3**	25	.98	34	1.34	17	.669	88	3.469	110	4.331	NG3L	0,67	1.48
3790591	**KM50TSS32GNER3**	32	1.26	40	1.57	22	.866	70	2.774	90	3.543	NG3L	0,71	1.57
3790593	**KM50TSS32KNER3**	32	1.26	40	1.57	22	.866	96	3.790	125	4.921	NG3L	0,97	2.14
3790595	**KM50TSS40JNER4**	40	1.57	50	1.97	27	1.063	91	3.593	110	4.331	NG4L	1,09	2.41
3790599	**KM50TSS40LNER4**	40	1.57	50	1.97	27	1.063	120	4.738	140	5.512	NG4L	1,39	3.06
3790598	**KM50TSS40LNER3**	40	1.57	50	1.97	27	1.063	120	4.738	140	5.512	NG3L	1,40	3.09
	left hand													
3790584	**KM50TSS12ENEL2**	12	.47	19	.73	11	.433	42	1.654	70	2.756	NG2R	0,44	.97
3790291	**KM50TSS16FNEL2**	16	.63	20	.79	11	.433	56	2.211	80	3.150	NG2R	0,44	.97
3790586	**KM50TSS20HNEL2**	20	.79	25	.98	13	.512	70	2.769	100	3.937	NG2R	0,58	1.28
3790588	**KM50TSS25JNEL3**	25	.98	34	1.34	17	.669	88	3.469	110	4.331	NG3R	0,67	1.48
3790590	**KM50TSS32GNEL3**	32	1.26	40	1.57	22	.866	70	2.774	90	3.543	NG3R	0,71	1.57
3790592	**KM50TSS32KNEL3**	32	1.26	40	1.57	22	.866	96	3.790	125	4.921	NG3R	0,97	2.14
3790594	**KM50TSS40JNEL4**	40	1.57	50	1.97	27	1.063	91	3.593	110	4.331	NG4R	1,09	2.41
3790596	**KM50TSS40LNEL3**	40	1.57	50	1.97	27	1.063	120	4.738	140	5.512	NG3R	1,40	3.09
3790597	**KM50TSS40LNEL4**	40	1.57	50	1.97	27	1.063	120	4.738	140	5.512	NG4R	1,39	3.06

(continued)

(NE 90° • Steel continued)

Spare Parts

catalog number	clamp	clamp screw
right hand		
KM50TSS12ENER2	CM147	MS1488
KM50TSS16FNER2	CM147	MS1488
KM50TSS20HNER2	CM75	MS1488
KM50TSS25JNER3	CM73	MS1489
KM50TSS32GNER3	CM73	MS1489
KM50TSS32KNER3	CM73	MS1489
KM50TSS40JNER4	CM73	MS1489
KM50TSS40LNER3	CM73	MS1489
KM50TSS40LNER4	CM73	MS1489
left hand		
KM50TSS12ENEL2	CM146	MS1488
KM50TSS16FNEL2	CM146	MS1488
KM50TSS20HNEL2	CM74	MS1488
KM50TSS25JNEL3	CM72	MS1489
KM50TSS32GNEL3	CM72	MS1489
KM50TSS32KNEL3	CM72	MS1489
KM50TSS40JNEL4	CM72	MS1489
KM50TSS40LNEL3	CM72	MS1489
KM50TSS40LNEL4	CM72	MS1489



LSE 90°

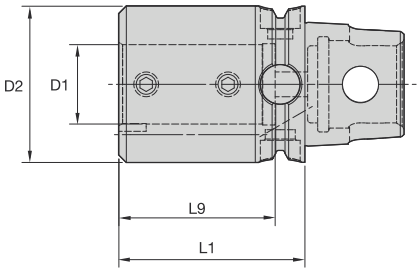
order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
3838705	**KM50TSS20HLSER16**	20	.79	25	.98	13	.512	70	2.77	100	3.937	LT16NR	0,57	1.27
3838724	**KM50TSS25JLSER16**	25	.98	32	1.26	17	.669	88	3.48	110	4.331	LT16NR	0,68	1.49
3838709	**KM50TSS32KLSER16**	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	LT16NR	1,01	2.24
3838710	**KM50TSS40LLSER16**	40	1.57	50	1.97	27	1.063	120	4.73	140	5.512	LT16NR	1,46	3.21
3838711	**KM50TSS40LLSER22**	40	1.57	50	1.97	27	1.063	120	4.73	140	5.512	LT22NR	1,45	3.21
	left hand													
3964139	**KM50TSS20HLSEL16**	20	.79	25	.98	13	.512	70	2.77	100	3.937	LT16NL	0,58	1.27
3838706	**KM50TSS25JLSEL16**	25	.98	32	1.26	17	.669	88	3.48	110	4.331	LT16NL	0,68	1.49
3838708	**KM50TSS32KLSEL16**	32	1.26	40	1.57	22	.866	96	3.79	125	4.921	LT16NL	1,01	2.24
3964141	**KM50TSS40LLSEL22**	40	1.57	50	1.97	27	1.063	120	4.73	140	5.512	LT22NL	1,45	3.21
3964140	**KM50TSS40LLSEL16**	40	1.57	50	1.97	27	1.063	120	4.73	140	5.512	LT16NL	1,46	3.21

Spare Parts

catalog number	insert screw	shim	shim screw	clamp assembly
right hand				
KM50TSS20HLSER16	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**
KM50TSS25JLSER16	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**
KM50TSS32KLSER16	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**
KM50TSS40LLSER16	**SSA3T**	**SMYI3**	**SSY3T**	**CKC3**
KM50TSS40LLSER22	**SSA4T**	**SMYI4**	**SSY4T**	**CKC4**
left hand				
KM50TSS20HLSEL16	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**
KM50TSS25JLSEL16	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**
KM50TSS32KLSEL16	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**
KM50TSS40LLSEL16	**SSA3T**	**SMYE3**	**SSY3T**	**CKC3**
KM50TSS40LLSEL22	**SSA4T**	**SMYE4**	**SSY4T**	**CKC4**

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.

KM QUICK CHANGE



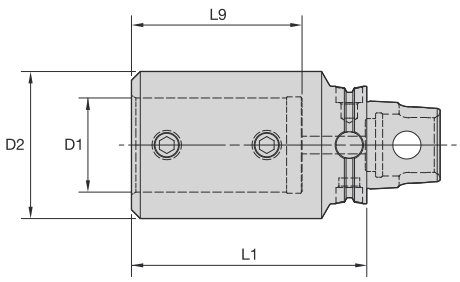
BA • Boring Bar Adapter • Internal and External Coolant • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
3790547	KM50TSBA06045M	6	40	45	36	MS1210	2,5mm	4	0,59
3790548	KM50TSBA08045M	8	40	45	36	MS1210	2,5mm	4	0,58
3790549	KM50TSBA10055M	10	40	55	48	MS1211	4mm	15	0,67
3790550	KM50TSBA12060M	12	40	60	52	MS1211	4mm	15	0,70
3790551	KM50TSBA16065M	16	40	65	55	MS1211	4mm	15	0,70
3790552	KM50TSBA20070M	20	40	70	58	MS1212	5mm	25	0,70
3790573	KM50TSBA25070M	25	50	70	56	MS1212	5mm	25	0,90

BA • Boring Bar Adapter • Internal and External Coolant • Inch

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
3789937	KM50TSBA06217	3/8	1.57	2.165	1.89	S843	1/8	3	1.47
3789938	KM50TSBA08236	1/2	1.57	2.362	2.05	S852	5/32	8	1.53
3789939	KM50TSBA10256	5/8	1.57	2.559	2.17	S862	3/16	11	1.55
3789940	KM50TSBA12276	3/4	1.57	2.756	2.28	S862	3/16	11	1.57
3789941	KM50TSBA16276	1	1.97	2.756	2.20	S862	3/16	11	1.97

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



KM QUICK CHANGE

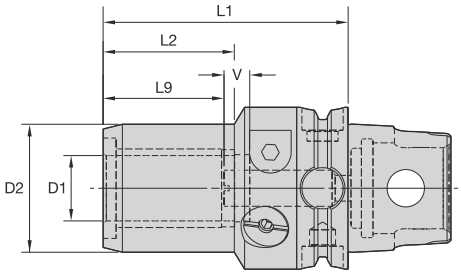
BAI • Boring Bar Adapter • Internal Coolant Only • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
3790289	**KM50TSBAI32080M**	32	50	80	58	**MS1213**	5mm	25	0,91
3790290	**KM50TSBAI40090M**	40	58	90	68	**MS1213**	5mm	25	1,13

BAI • Boring Bar Adapter • Internal Coolant Only • Inch

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
3790287	**KM50TSBAI20315**	1 1/4	1.97	3.150	2.28	**S861**	3/16	11	2.01
3790288	**KM50TSBAI24354**	1 1/2	2.28	3.543	2.68	**S861**	3/16	11	2.62

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



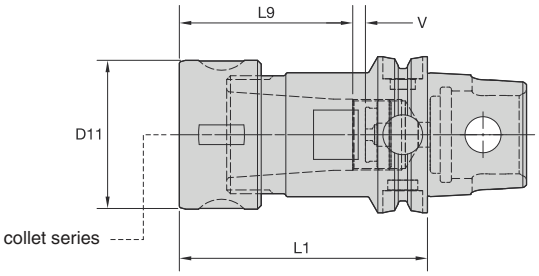
KM QUICK CHANGE

HC • Metric

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
4007723	**KM50TSHC06065M**	6	26	65	30	27	10	**170.135**	5mm	**170.002**	2,5mm	0,63
4007724	**KM50TSHC08065M**	8	28	65	30	27	10	**170.135**	5mm	**170.002**	2,5mm	0,65
4007725	**KM50TSHC10070M**	10	30	70	36	31	10	**170.135**	5mm	**170.002**	2,5mm	0,69
4007726	**KM50TSHC12075M**	12	32	75	40	36	10	**170.135**	5mm	**170.002**	2,5mm	0,73
4007727	**KM50TSHC14075M**	14	34	75	43	36	10	**170.135**	5mm	**170.003**	3mm	0,72
4007728	**KM50TSHC16080M**	16	38	80	47	39	10	**170.135**	5mm	**170.003**	3mm	0,83
4007729	**KM50TSHC18080M**	18	40	80	47	39	10	**170.135**	5mm	**170.003**	3mm	0,85
4007730	**KM50TSHC20085M**	20	42	85	48	71	10	**170.135**	5mm	**170.003**	3mm	0,94

NOTE: Do not overtorque clamp screw; tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Reduction sleeves are available and must be ordered separately; see page I2.
Wrenches must be ordered separately.

• Tremendous Grip (3:1 advantage).



KM QUICK CHANGE

	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

Collet Chuck • Round Nut

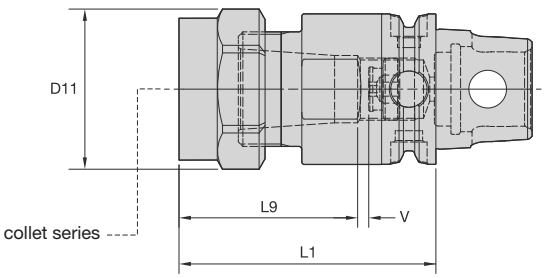
			D11		L1		L9		V			
order number	catalog number	collet series	mm	in	mm	in	mm	in	mm	in	kg	lbs
3790601	KM50TSTG075080M	TG75	50	1.97	80	3.150	53	2.09	10	.39	0,95	2.09
3790602	KM50TSTG100110M	TG100	60	2.36	110	4.331	69	2.72	10	.39	1,40	3.09

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM50TSTG075080M	LNA075M	HSW45M	108 - 136	80 - 100	SS081041G	4mm & 5/32
KM50TSTG100110M	LNA100M	HSW58M	163 - 203	120 - 150	SS112041G	4mm & 5/32

(continued)

(Collet Chuck continued)



KM QUICK CHANGE

TG collet series	Collet Capacity mm min	mm max	inch min	inch max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

Collet Chuck • Hex Nut

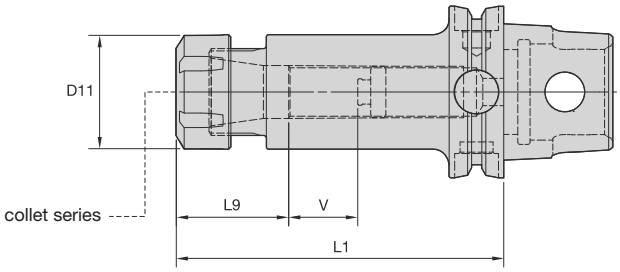
order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
3790600	**KM50TSTG075336**	TG75	53	2.09	85	3.358	58	2.28	10	.39	0,93	2.06
3790613	**KM50TSTG100457**	TG100	62	2.44	116	4.568	75	2.95	10	.39	1,44	3.18

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM50TSTG075336	**NPA075**	**OEW188**	108 - 136	80 - 100	**SS081041G**	4mm & 5/32
KM50TSTG100457	**NPA100**	**OEW225**	163 - 203	120 - 150	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.

• Grip (2:1 advantage).



KM QUICK CHANGE

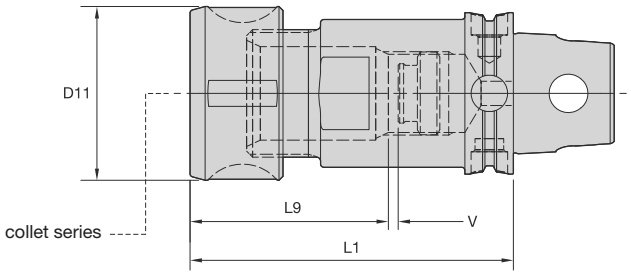
ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER25	1,0	16,0	.04	.63
ER32	1,0	20,0	.08	.81
ER40	3,0	26,0	.08	1.00

■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	locknut	wrench	Nm	ft. lbs.	kg	lbs
3795029	**KM50TSER25050M**	ER25	42	1.65	50	1.969	41,2	1.62	—	—	**LNSER25M**	**ER25WM**	104	77	0,47	1.03
3795030	**KM50TSER32060M**	ER32	50	1.97	60	2.362	47,3	1.86	—	—	**LNSER32M**	**ER32WM**	136	100	0,62	1.36
3795031	**KM50TSER40070M**	ER40	63	2.48	70	2.756	53,3	2.10	—	—	**LNSER40M**	**ER40WM**	176	130	0,88	1.94

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

• Grip 1:1.



DA collet series	Collet Capacity mm min	mm max	inch min	inch max
DA200	0.2	10,0	1/64	25/64
DA180	2.2	20,0	1/64	3/4

KM QUICK CHANGE

Collet Chuck • Round Nut

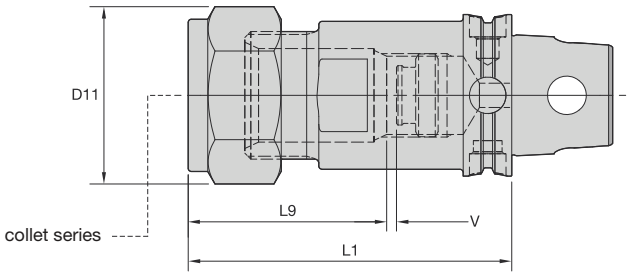
order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
3789365	**KM50TSDA208060M**	DA200	28	1.10	60	2.362	35	1.38	8	.32	0,48	1.05
3789364	**KM50TSDA188075M**	DA180	43	1.69	75	2.953	49	1.93	5	.20	0,69	1.52

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM50TSDA208060M	**LNA208RM**	**—**	32-40	45-55	**SS038031G**	2mm & 5/64
KM50TSDA188075M	**LNA188M**	**HSW45M**	60-75	80-100	**SS081041G**	4mm & 5/32

(continued)

(Collet Chuck continued)



KM QUICK CHANGE

DA collet series	Collet Capacity mm min	mm max	inch min	inch max
DA200	0,2	10,0	1/64	25/64
DA180	2,2	20,0	1/64	3/4

Collet Chuck • Hex Nut

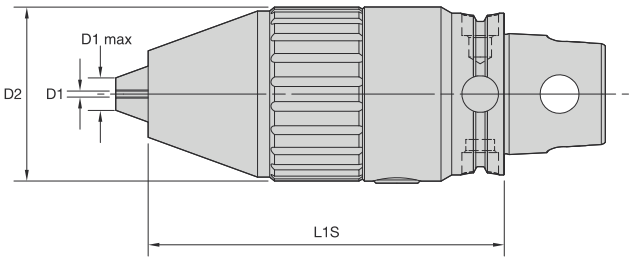
order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
3789365	**KM50TSDA208060M**	DA200	28	1.10	60	2.362	35	1.38	8	.32	0,48	1.05
3789364	**KM50TSDA188075M**	DA180	43	1.69	75	2.953	49	1.93	5	.20	0,69	1.52

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM50TSDA188075M	–	–	60-75	80-100	**SS081041G**	4mm & 5/32
KM50TSDA208060M	–	–	32-40	45-55	**SS038031G**	2mm & 5/64

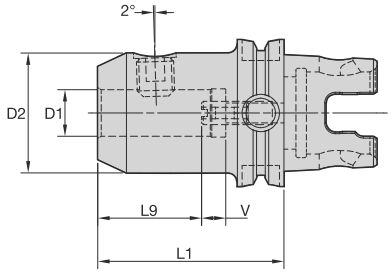
NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.

- Activation size is 6mm.
- Activation wrench included.
- Wrench reorder number is 170.136.



RDC • Drill Chuck

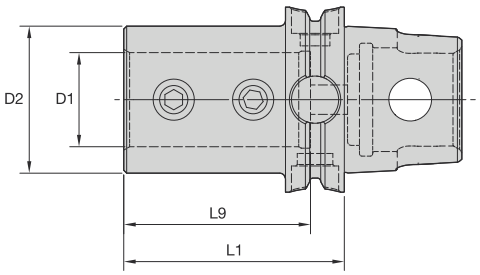
order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2 mm	D2 in	L1S mm	L1S in
4053779	KM50TSRDC16106M	3	.098	16	.630	56	2.205	106,0	4.055



WN • Whistle Notch Adapter

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg	lbs
3795102	KM50TSWN06065M	6	25	65	30	10	SS03M012	3mm	7	571.060	2,5mm	0,49	1.07
3795103	KM50TSWN08065M	8	28	65	30	10	SS03M014	4mm	15	571.067	3mm	0,53	1.16
3795104	KM50TSWN10070M	10	35	70	35	10	SS03M018	5mm	25	571.068	4mm	0,66	1.46
3795105	KM50TSWN12080M	12	42	80	40	10	SS03M023	6mm	35	571.074	5mm	0,91	2.00
3795106	KM50TSWN14080M	14	44	80	40	10	SS03M023	6mm	35	571.074	5mm	0,95	2.10
3795107	KM50TSWN16085M	16	48	85	43	10	SS03M025	6mm	50	571.075	6mm	1,13	2.49
3795108	KM50TSWN18085M	18	50	85	43	10	SS03M025	6mm	50	571.075	6mm	1,18	2.61
3795109	KM50TSWN20095M	20	52	95	45	10	SS03M026	8mm	95	571.076	6mm	1,69	3.05
3795110	KM50TSWN25100M	25	65	100	50	10	SS03M027	10mm	135	571.077	6mm	2,06	4.53
3795111	KM50TSWN32105M	32	72	105	54	10	SS03M029	10mm	160	571.077	6mm	2,50	5.51

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.



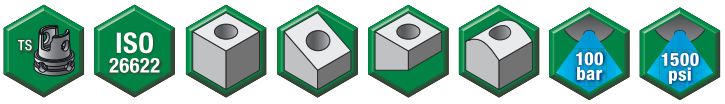
KM™ QUICK CHANGE

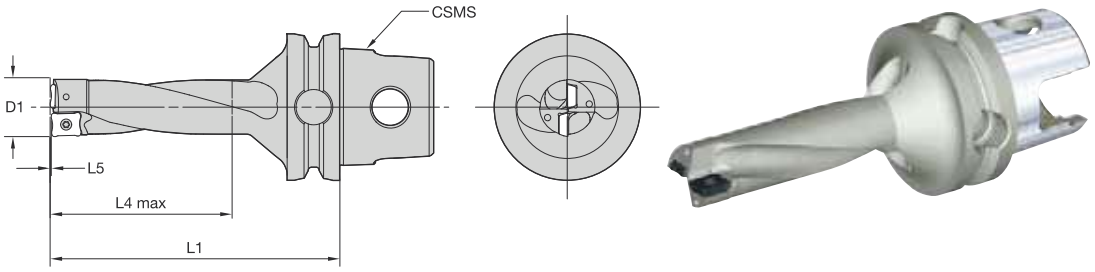
DAT • Metric

order number	catalog number	D1	D2	L1	L9	cone point socket set screw	wrench size clamp screw	Nm	clamp screw	wrench size clamp screw	Nm	kg
3904056	**KM50TSDAT25075M**	25	45	75	60	**12166903700**	6mm	40	**12166903900**	6mm	40	0,80
3904057	**KM50TSDAT32080M**	32	50	80	64	**12166903700**	6mm	40	**12166903900**	6mm	40	0,87

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamping screw.
Clamp screw wrench is not included.
Cone point screw to be tightened first.

- Drill shipped with insert screws and Torx wrench.





TCD • 3 x D • Metric

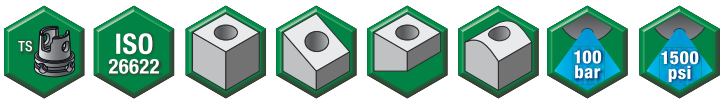
order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3895660	KM50TSTCD110R3M	KM50TS	11,0	63,0	33,0	0,22	LPGX06T103	12146011800	12146010000	T5
3895661	KM50TSTCD120R3M	KM50TS	12,0	66,0	36,0	0,06	LPGX06T103	12146011800	12146010000	T5
3895662	KM50TSTCD130R3M	KM50TS	13,0	69,0	39,0	0,08	LPGX06T103	12146011800	12146010000	T5
3895663	KM50TSTCD140R3M	KM50TS	14,0	72,0	42,0	0,07	LPGX07T204	12146012500	12147549000	T7
3895664	KM50TSTCD150R3M	KM50TS	15,0	75,0	45,0	0,05	LPGX07T204	12146012500	12147549000	T7
3895665	KM50TSTCD160R3M	KM50TS	16,0	78,0	48,0	0,18	LPGX07T204	12146012500	12147549000	T7
3895666	KM50TSTCD170R3M	KM50TS	17,0	83,0	51,0	0,31	LPGX07T204	12146012500	12147549000	T7
3895667	KM50TSTCD180R3M	KM50TS	18,0	86,0	54,0	0,31	LPGX07T204	12146012500	12147549000	T7
3895668	KM50TSTCD190R3M	KM50TS	19,0	89,0	57,0	0,06	LPGX100308	12148068700	12148086600	T8
3895669	KM50TSTCD200R3M	KM50TS	20,0	92,0	60,0	0,10	LPGX100308	12148068700	12148086600	T8
3895670	KM50TSTCD210R3M	KM50TS	21,0	97,0	63,0	0,28	LPGX100308	12148068700	12148086600	T8
3895671	KM50TSTCD220R3M	KM50TS	22,0	100,0	66,0	0,28	LPGX100308	12148068700	12148086600	T8
3895672	KM50TSTCD230R3M	KM50TS	23,0	103,0	69,0	0,45	LPGX100308	12148068700	12148086600	T8
3895693	KM50TSTCD240R3M	KM50TS	24,0	106,0	72,0	0,45	LPGX100308	12148068700	12148086600	T8
3895694	KM50TSTCD250R3M	KM50TS	25,0	110,0	75,0	0,45	LPGX100308	12148068700	12148086600	T8

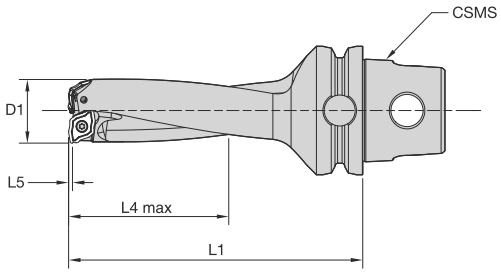
TCD • 3 x D • Inch

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898355	KM50TSTCD0438R3	KM50TS	.438	2.375	1.314	.009	LPGX06T103	12146011800	12146010000	T5
3898356	KM50TSTCD0469R3	KM50TS	.469	2.500	1.407	.009	LPGX06T103	12146011800	12146010000	T5
3898357	KM50TSTCD0500R3	KM50TS	.500	2.625	1.500	.002	LPGX06T103	12146011800	12146010000	T5
3898358	KM50TSTCD0531R3	KM50TS	.531	2.750	1.593	.003	LPGX06T103	12146011800	12146010000	T5
3898359	KM50TSTCD0563R3	KM50TS	.563	2.875	1.689	.003	LPGX07T204	12146012500	12147549000	T7
3898360	KM50TSTCD0594R3	KM50TS	.594	3.000	1.782	.002	LPGX07T204	12146012500	12147549000	T7
3898361	KM50TSTCD0625R3	KM50TS	.625	3.125	1.875	.002	LPGX07T204	12146012500	12147549000	T7
3898362	KM50TSTCD0656R3	KM50TS	.656	3.250	1.968	.007	LPGX07T204	12146012500	12147549000	T7
3898363	KM50TSTCD0688R3	KM50TS	.688	3.375	2.064	.012	LPGX07T204	12146012500	12147549000	T7
3898364	KM50TSTCD0719R3	KM50TS	.719	3.500	2.157	.012	LPGX07T204	12146012500	12147549000	T7
3898365	KM50TSTCD0750R3	KM50TS	.750	3.625	2.250	.002	LPGX100308	12148068700	12148086600	T8
3898366	KM50TSTCD0813R3	KM50TS	.813	3.750	2.439	.004	LPGX100308	12148068700	12148086600	T8
3898367	KM50TSTCD0875R3	KM50TS	.875	4.000	2.625	.011	LPGX100308	12148068700	12148086600	T8
3898368	KM50TSTCD0938R3	KM50TS	.938	4.250	2.814	.018	LPGX100308	12148068700	12148086600	T8
3898369	KM50TSTCD1000R3	KM50TS	1.000	4.500	3.000	.018	LPGX100308	12148068700	12148086600	T8

WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.

- Drill shipped with insert screws and Torx wrench.





■ TCP • 3 x D • Metric

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898290	KM50TSTCP250R3M	KM50TS	25,0	112,0	75,0	0,80	XOMT070304	12148080000	12148086600	T8
3898291	KM50TSTCP260R3M	KM50TS	26,0	116,0	78,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898292	KM50TSTCP270R3M	KM50TS	27,0	120,0	81,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898383	KM50TSTCP280R3M	KM50TS	28,0	123,0	84,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898384	KM50TSTCP290R3M	KM50TS	29,0	127,0	87,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898385	KM50TSTCP300R3M	KM50TS	30,0	131,0	90,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898386	KM50TSTCP310R3M	KM50TS	31,0	135,0	93,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898387	KM50TSTCP320R3M	KM50TS	32,0	138,0	96,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898388	KM50TSTCP330R3M	KM50TS	33,0	142,0	99,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898389	KM50TSTCP340R3M	KM50TS	34,0	146,0	102,0	0,70	XOMT09T306	12148067200	12148086600	T8
3898390	KM50TSTCP350R3M	KM50TS	35,0	150,0	105,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898391	KM50TSTCP360R3M	KM50TS	36,0	153,0	108,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898392	KM50TSTCP370R3M	KM50TS	37,0	157,0	111,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898393	KM50TSTCP380R3M	KM50TS	38,0	160,0	114,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898394	KM50TSTCP390R3M	KM50TS	39,0	165,0	117,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898395	KM50TSTCP400R3M	KM50TS	40,0	168,0	120,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898396	KM50TSTCP410R3M	KM50TS	41,0	172,0	123,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898397	KM50TSTCP420R3M	KM50TS	42,0	176,0	126,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898398	KM50TSTCP430R3M	KM50TS	43,0	180,0	129,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898399	KM50TSTCP440R3M	KM50TS	44,0	183,0	132,0	0,96	XOMT12T308	12148055800	12148082400	T15
3898400	KM50TSTCP450R3M	KM50TS	45,0	187,0	135,0	0,96	XOMT12T308	12148055800	12148082400	T15

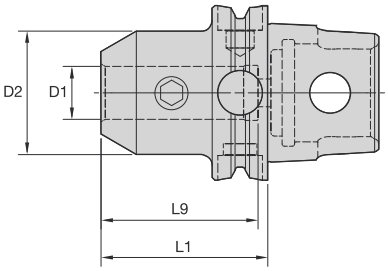
(continued)

(TCP • 3 x D continued)

■ TCP • 3 x D • Inch

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898374	**KM50TSTCP1000R3**	KM50TS	1.000	4.500	3.000	.032	XOMT070304	**12148080000**	**12148086600**	T8
3898375	**KM50TSTCP1125R3**	KM50TS	1.125	5.000	3.375	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898376	**KM50TSTCP1250R3**	KM50TS	1.250	5.500	3.750	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898377	**KM50TSTCP1313R3**	KM50TS	1.313	5.750	3.939	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898378	**KM50TSTCP1375R3**	KM50TS	1.375	5.875	4.125	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898379	**KM50TSTCP1438R3**	KM50TS	1.438	6.125	4.314	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898380	**KM50TSTCP1500R3**	KM50TS	1.500	6.375	4.500	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898381	**KM50TSTCP1563R3**	KM50TS	1.563	6.625	4.689	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898382	**KM50TSTCP1625R3**	KM50TS	1.625	6.875	4.875	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898443	**KM50TSTCP1688R3**	KM50TS	1.688	7.125	5.064	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898444	**KM50TSTCP1750R3**	KM50TS	1.750	7.375	5.250	.038	XOMT12T308	**12148055800**	**12148082400**	T15

WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.



KM QUICK CHANGE

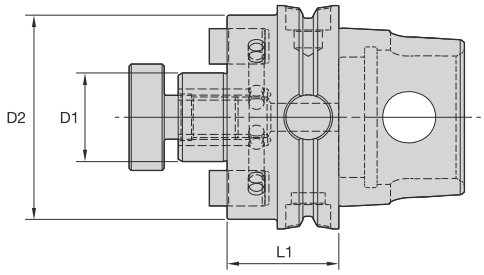
EM • Metric

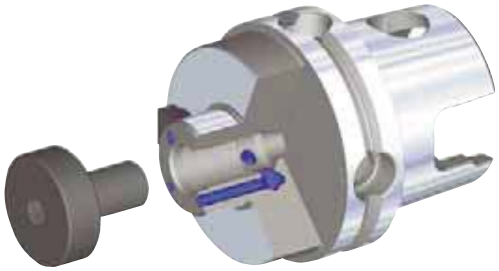
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
3812617	KM50TSEM10050M	10	35	50	45	SS03M018	5mm	25	0,53
3812618	KM50TSEM12055M	12	42	55	50	SS03M023	6mm	35	0,65
3812619	KM50TSEM16060M	16	48	60	53	SS03M025	6mm	50	0,79
3812620	KM50TSEM20060M	20	52	60	55	SS03M026	8mm	95	0,84
3812621	KM50TSEM25080M	25	65	80	60	SS03M027	10mm	135	1,59
3812622	KM50TSEM32085M	32	72	85	65	SS03M029	10mm	160	1,94

EM • Inch

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3812635	KM50TSEM038197	3/8	1.00	1.969	1.73	ELS038031PKG	3/16	15	.95
3812636	KM50TSEM050216	1/2	1.38	2.165	1.97	ELS044038PKG	7/32	20	1.16
3812637	KM50TSEM062236	5/8	1.63	2.362	2.09	ELS056050PKG	1/4	40	1.43
3812638	KM50TSEM075236	3/4	1.75	2.362	2.22	ELS062050PKG	5/16	70	1.48
3812639	KM50TSEM100335	1	2.00	3.347	2.56	ELS075056PKG	3/8	110	2.38
3812640	KM50TSEM125335	1 1/4	2.50	3.347	2.51	ELS075056PKG	3/8	110	3.31

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.





KM QUICK CHANGE

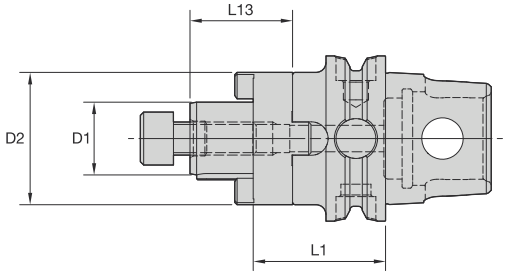
SMC • Metric

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3950842	**KM50TSSMC22028M**	22	49	28	**MS1234**	**KDK22M**	8mm	0,54
3950913	**KM50TSSMC27032M**	27	60	32	**KLSS27M**	**KDK27M**	10mm	0,77
3950914	**KM50TSSMC32040M**	32	78	40	**KLSS32M**	**KDK32M**	14mm	1,30

SMC/SM2C-KM • Inch

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3950836	**KM50TSSMC050102**	1/2	1.44	1.024	**KLS05**	**KDK04**	3/16	.92
3950838	**KM50TSSM2C075102**	3/4	1.46	1.024	**KLS07**	**—**	1/4	1.02
3950837	**KM50TSSMC075102**	3/4	1.75	1.024	**KLS07**	**KDK05**	3/16	1.08
3950840	**KM50TSSM2C100126**	1	2.19	1.260	**KLS10**	**KDK06**	5/16	1.53
3950839	**KM50TSSMC100126**	1	2.75	1.260	**KLS10**	**KDK06**	5/16	1.81
3950841	**KM50TSSMC125157**	1 1/4	2.88	1.575	**KLS12**	**KDK08**	5/16	2.60

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.

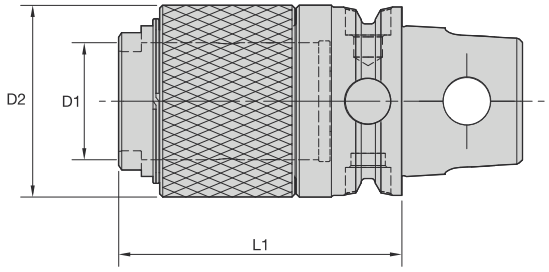


KM QUICK CHANGE

■ CS • Metric

order number	catalog number	D1	D2	L1	L13	lock screw	lock screw	wrench size lock screw	combi driver	combi drive key	kg
3862017	**KM50TSCS22040M**	22	40	40	31	**MS1234**	**–**	8mm	**CDR22M**	**CDK22M**	0,61
3862018	**KM50TSCS27042M**	27	48	42	33	**–**	**KLS27M**	–	**CDR27M**	**CDK27M**	0,79
3862019	**KM50TSCS32050M**	32	58	50	38	**–**	**KLS32M**	–	**CDR32M**	**CDK32M**	1,19

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and key.
Lock screw wrench not included.

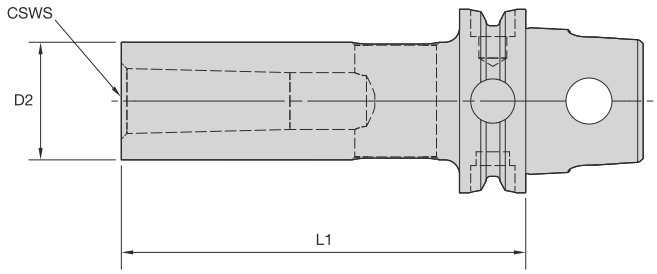


KM QUICK CHANGE

ST • Solid Tap Chuck

order number	catalog number	TQCS adapter size	D1 mm	D1 in	D2 mm	D2 in	L1 mm	L1 in	kg	lbs
3964133	KM50TSST1050M	1	19	.749	35	1.375	50	1.971	0,48	1.06
3964134	KM50TSST2075M	2	31	1.222	51	2.000	75	2.955	0,89	1.95

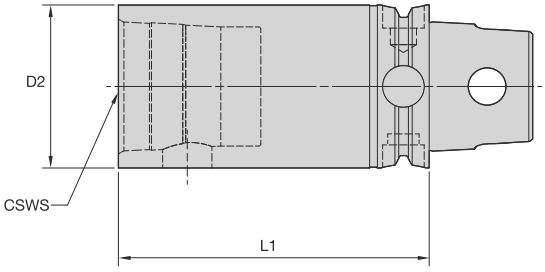
NOTE: Quick-change tap adapters available and must be ordered separately; see page I76.



KM QUICK CHANGE

MT • Morse Taper Adapter

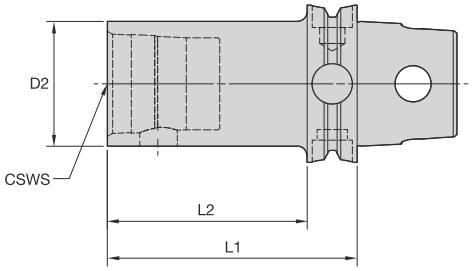
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	kg	lbs
3862043	KM50TSMT1095M	1	25	.984	95	3.740	0,57	1.26
3862044	KM50TSMT2110M	2	32	1.260	110	4.331	0,77	1.70
3862045	KM50TSMT3130M	3	40	1.575	130	5.118	1,12	2.47
3862046	KM50TSMT4150M	4	48	1.890	150	5.906	1,54	3.40



KM QUICK CHANGE

S • KM Extension

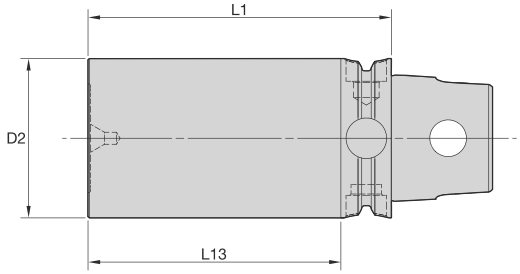
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
3862083	KM50TSS50070M	KM50	50	1.969	70	2.756	10mm	27-34	20-25	KM50PKG3S	0,92	2.03
3862084	KM50TSS50100M	KM50	50	1.969	100	3.937	10mm	27-34	20-25	KM50PKG3S	1,37	3.02



KM QUICK CHANGE

S • KM Reducer

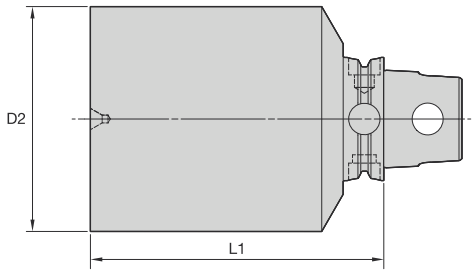
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	L2 mm	L2 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
3862071	KM50TSS32070M	KM32	32	1.260	70	2.756	52	2.047	5mm	8-11	6-8	KM32PKG3S	0,61	1.34
3862072	KM50TSS40080M	KM40	40	1.575	80	3.150	62	2.441	6mm	12-16	9-12	KM40PKG3S	0,84	1.86



KM QUICK CHANGE

GB • Gage Bar

		D2		L1		L13			
order number	catalog number	mm	in	mm	in	mm	in	kg	lbs
3959978	KM50TSGB50100M	50	1.97	100	3.94	82	3.23	1,59	3.49



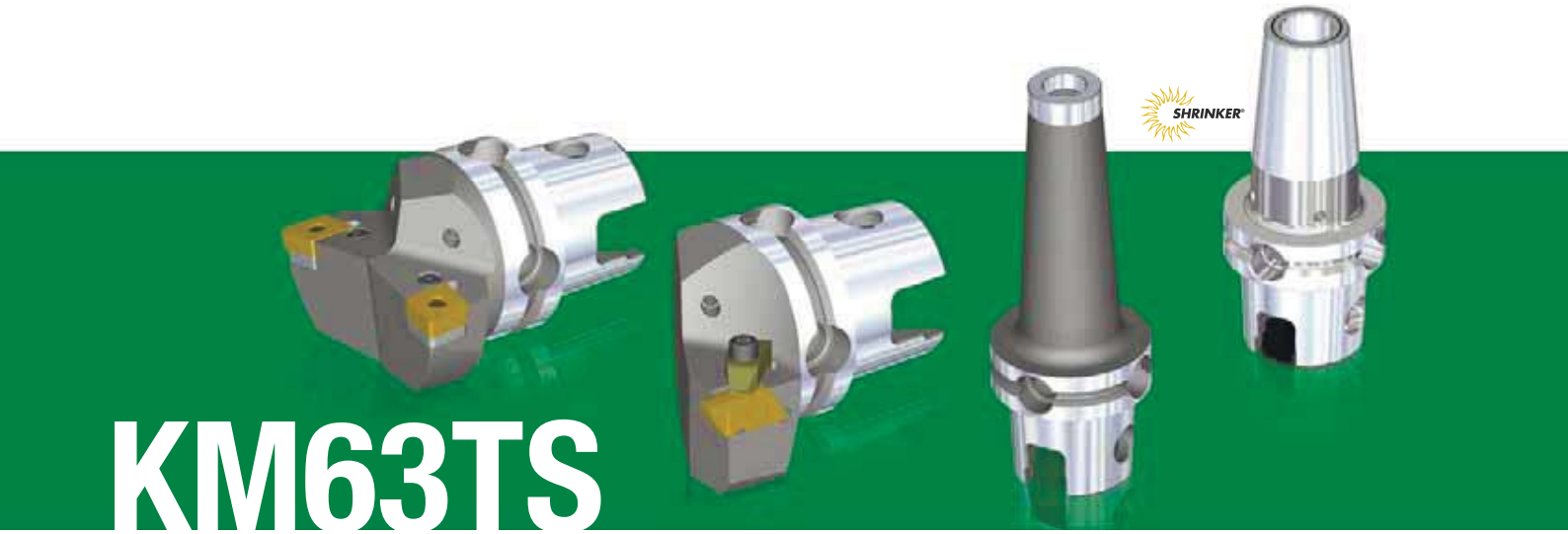
KM QUICK CHANGE

BN • Blank

		D2		L1				
order number	catalog number	mm	in	mm	in	hardness range	kg	lbs
3851267	KM50TSBN73135M	73	2.874	135	5.315	32-38 HRC	4,15	9.16
3851268	KM50TSBN75062M	75	2.953	62	2.441	32-38 HRC	1,84	4.06
3851266	KM50TSBN105062M	105	4.134	62	2.441	32-38 HRC	3,15	6.95

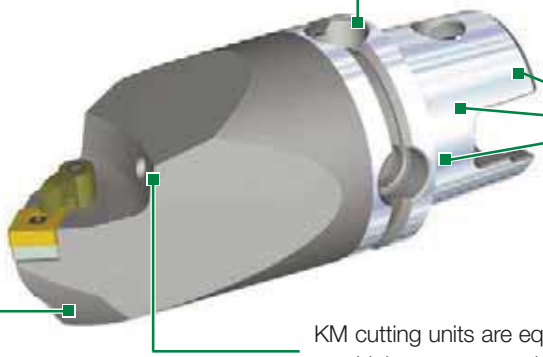
KM™ Quick Change Clamping System • **KM63TS™ Series**

The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



KM63TS

- KM is an ISO standard (ISO 26622).
- KM clamping units provide a 4:1 mechanical advantage.
- KM cutting units are capable of 100 bar (1,500 psi) coolant pressure.

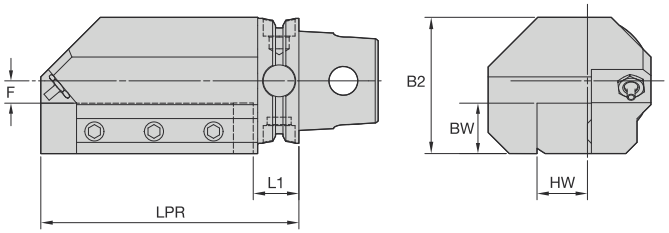


The KM flange is designed to provide ATC capability and to enable use of an RFID chip.

The KM System's superior rigidity is gained by the three points of contact the system develops when clamped.

KM manufactured from high-strength tool steel.

KM cutting units are equipped to use high-pressure coolant nozzles.



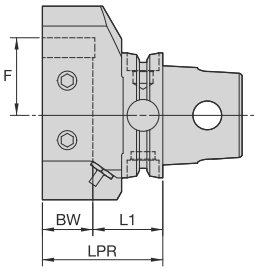
KM QUICK CHANGE

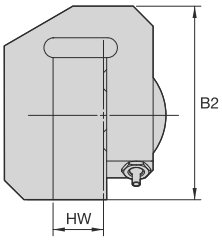
STAR/L • Metric

order number	catalog number	B2	BW	F	HW	L1	LPR	nozzle	kg
	right hand								
2255545	KM63TSSTAR2525M	68	25	11	25	25	130	PMT04526 COOLANT NOZZLE SPRAY	3,83
	left hand								
2255544	KM63TSSTAL2525M	68	25	11	25	25	130	PMT04526 COOLANT NOZZLE SPRAY	3,83

STAR/L • Inch

order number	catalog number	B2	BW	F	HW	L1	LPR	nozzle	lbs
	right hand								
2384740	KM63TSSTAR16	2.703	1.000	.443	1.000	.906	5.118	PMT04526 COOLANT NOZZLE SPRAY	8.46
	left hand								
2384741	KM63TSSTAL16	2.703	1.000	.443	1.000	.906	5.118	PMT04526 COOLANT NOZZLE SPRAY	8.46





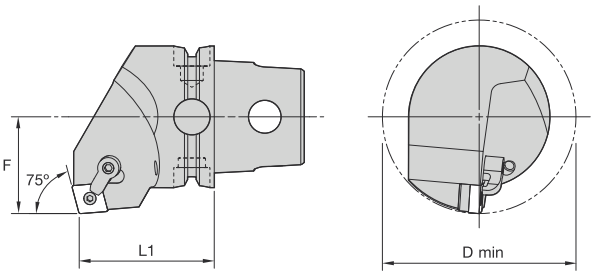
KM QUICK CHANGE

ETAR/L • Metric

order number	catalog number	B2	BW	F	HW	L1	LPR	nozzle	kg
	right hand								
2255547	KM63TSETAR2525M	98	25	37,5	25	35	60	PMT04526 COOLANT NOZZLE SPRAY	2,06
	left hand								
2255546	KM63TSETAL2525M	98	25	37,5	25	35	60	PMT04526 COOLANT NOZZLE SPRAY	2,06

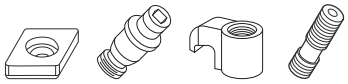
ETAR/L • Inch

order number	catalog number	B2	BW	F	HW	L1	LPR	nozzle	lbs
	right hand								
2384742	KM63TSETAR16	3.839	1.000	1.539	1.000	1.388	2.388	PMT08420 COOLANT NOZZLE SPRAY	4.58
	left hand								
2384743	KM63TSETAL16	3.839	1.000	1.539	1.000	1.388	2.388	PMT08420 COOLANT NOZZLE SPRAY	4.58

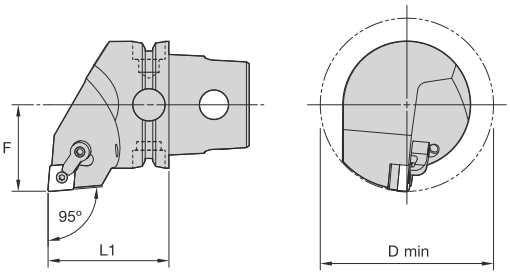


KM QUICK CHANGE

MCKN 75°



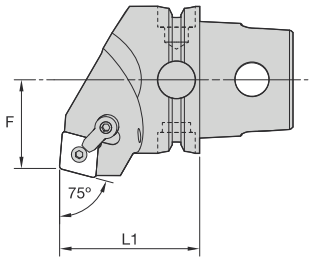
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2265024	**KM63TSMCKNR12**	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	**ICSN432**	**KLM46**	**CKM20**	**STCM11**	1,28	2.83
2265026	**KM63TSMCKNR16**	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	**ICSN533**	**KLM58**	**CKM20**	**STCM11**	1,34	2.95
2265028	**KM63TSMCKNR19**	60	2.362	43	1.693	86	3.386	CN..190612/CN..643	**ICSN633**	**KLM68**	**CKM13**	**STCM8**	1,34	2.95
	left hand													
2265025	**KM63TSMCKNL12**	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	**ICSN432**	**KLM46**	**CKM20**	**STCM11**	1,28	2.83
2265027	**KM63TSMCKNL16**	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	**ICSN533**	**KLM58**	**CKM20**	**STCM11**	1,34	2.95
2265029	**KM63TSMCKNL19**	60	2.362	43	1.693	86	3.386	CN..190612/CN..643	**ICSN633**	**KLM68**	**CKM13**	**STCM8**	1,34	2.95

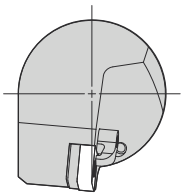


KM QUICK CHANGE

MCLN 95°

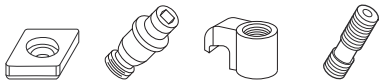
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2265030	**KM63TSMCLNR12**	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	**ICSN432**	**KLM46**	**CKM20**	**STCM11**	1,19	2.62
2265032	**KM63TSMCLNR16**	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	**ICSN533**	**KLM58**	**CKM20**	**STCM11**	1,19	2.62
2265274	**KM63TSMCLNR19**	60	2.362	43	1.693	86	3.386	CN..190612/CN..643	**ICSN633**	**KLM68**	**CKM13**	**STCM8**	1,18	2.61
	left hand													
2265031	**KM63TSMCLNL12**	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	**ICSN432**	**KLM46**	**CKM20**	**STCM11**	1,19	2.62
2265273	**KM63TSMCLNL16**	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	**ICSN533**	**KLM58**	**CKM20**	**STCM11**	1,19	2.62
2265275	**KM63TSMCLNL19**	60	2.362	43	1.693	86	3.386	CN..190612/CN..643	**ICSN633**	**KLM68**	**CKM13**	**STCM8**	1,18	2.61



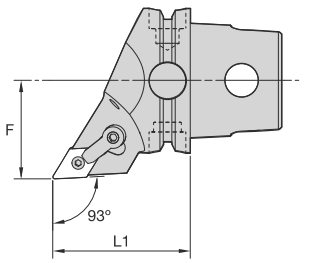


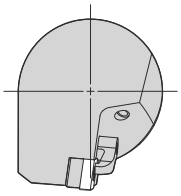
KM QUICK CHANGE

MCRN 75°



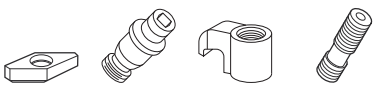
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
2265276	KM63TSMCRNR16	60	2.362	38	1.496	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,19	2.63
2265278	KM63TSMCRNR19	60	2.362	38	1.496	CN..190612/CN..643	ICSN633	KLM68	CKM13	STCM8	1,19	2.62
	left hand											
2265277	KM63TSMCRNL16	60	2.362	38	1.496	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,19	2.63
2265279	KM63TSMCRNL19	60	2.362	38	1.496	CN..190612/CN..643	ICSN633	KLM68	CKM13	STCM8	1,19	2.62



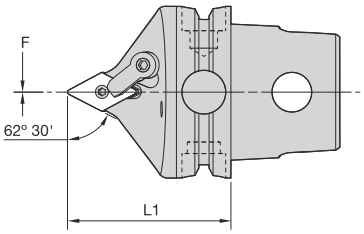


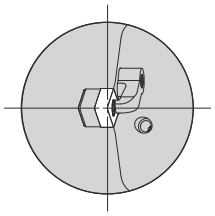
KM QUICK CHANGE

MDJN 93°



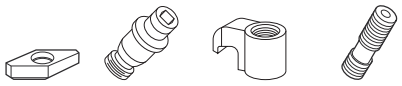
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
2397712	KM63TSMDJNR1504	60	2.362	43	1.693	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,00	2.200
2265280	KM63TSMDJNR1506	60	2.362	43	1.693	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	0,99	2.190
	left hand											
2397713	KM63TSMDJNL1504	60	2.362	43	1.693	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,00	2.200
2265281	KM63TSMDJNL1506	60	2.362	43	1.693	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	0,99	2.190



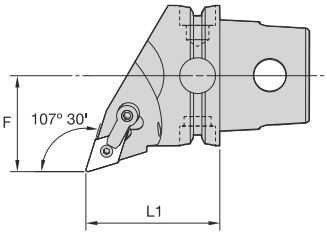


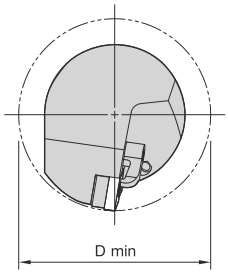
KM QUICK CHANGE

MDPN 62° 30'



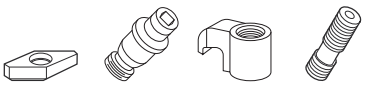
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
2397714	KM63TSMDPNN1504	60	2.362	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	0,92	2.02
2265282	KM63TSMDPNN1506	60	2.362	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	0,92	2.01



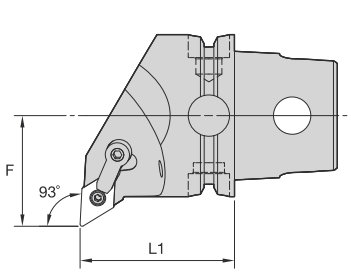


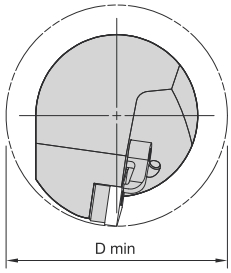
KM QUICK CHANGE

MDQN 107° 30'



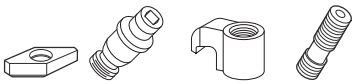
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2397715	KM63TSMDQNR1504	60	2.362	43	1.693	86	3.386	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,07	2.36
2265283	KM63TSMDQNR1506	60	2.362	43	1.693	86	3.386	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,07	2.35
	left hand													
2397716	KM63TSMDQNL1504	60	2.362	43	1.693	86	3.386	DN..150408/DN..432	IDSN442	KLM46	CKM23	STCM11	1,07	2.36
2265284	KM63TSMDQNL1506	60	2.362	43	1.693	86	3.386	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,07	2.35



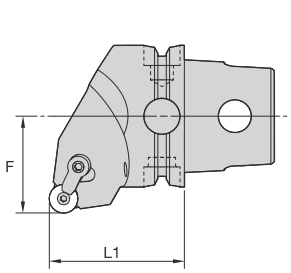


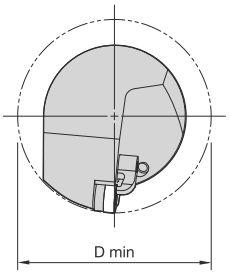
KM QUICK CHANGE

MDUN 93°



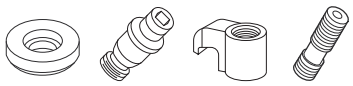
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2397717	KM63TSMDUNR1504	60	2.362	43	1.693	86	3.386	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,17	2.58
2265285	KM63TSMDUNR1506	60	2.362	43	1.693	86	3.386	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,17	2.58
	left hand													
2397718	KM63TSMDUNL1504	60	2.362	43	1.693	86	3.386	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,17	2.58
2265286	KM63TSMDUNL1506	60	2.362	43	1.693	86	3.386	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,17	2.57



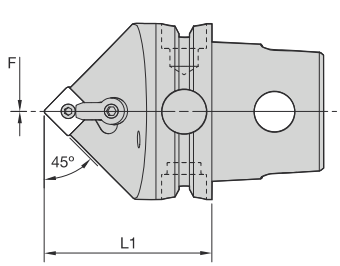


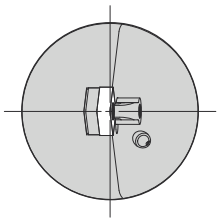
KM QUICK CHANGE

MRGN 0°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2265287	KM63TSMRGNR12	60	2.362	43	1.693	100	3.937	RN..120400/RN..43	IRSN43	KLM46	CKM20	STCM11	1,21	2.66
	left hand													
2265288	KM63TSMRGNL12	60	2.362	43	1.693	100	3.937	RN..120400/RN..43	IRSN43	KLM46	CKM20	STCM11	1,21	2.66

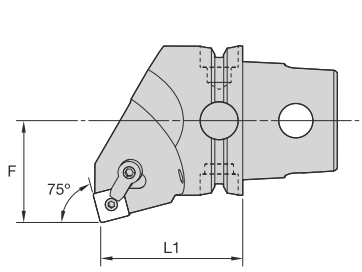


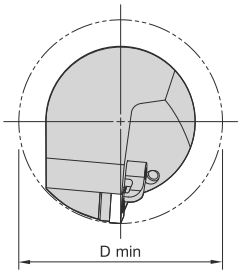


KM QUICK CHANGE

MSDN 45°

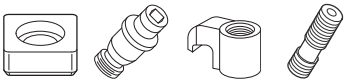
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
2265289	KM63TSMSDNN12	60	2.362	0	.000	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	0,99	2.18
2265290	KM63TSMSDNN15	60	2.362	0	.000	SN..150612/SN..543	ISSN533	KLM58	CKM20	STCM11	0,99	2.18
2265291	KM63TSMSDNN19	60	2.362	0	.000	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	0,97	2.14





KM QUICK CHANGE

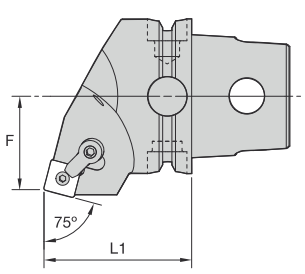
MSKN 75°

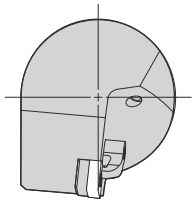


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2265292	KM63TSMSKNR12	60	2.362	43	1.693	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	1,27	2.81
2265294	KM63TSMSKNR19	60	2.362	43	1.693	86	3.386	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	1,35	2.97
	left hand													
2265293	KM63TSMSKNL12	60	2.362	43	1.693	86	3.386	SN..120408/SN..432	ISSN432	KLM46	CKM20	STCM11	1,27	2.81
2265295	KM63TSMSKNL19	60	2.362	43	1.693	86	3.386	SN..190612/SN..643	ISSN633	KLM68	CKM13	STCM8	1,35	2.97

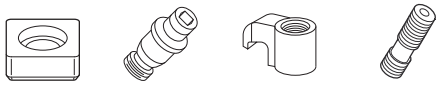
TS ISO 26622 100 bar 1500 psi

KM QUICK CHANGE





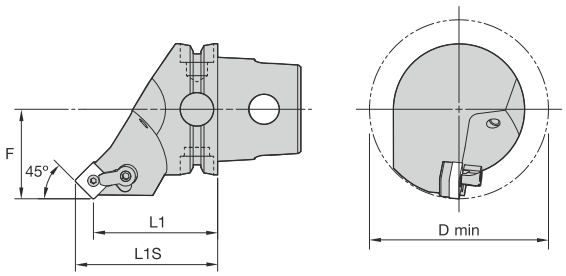
■ MSRN 75°



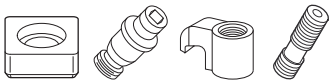
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
2265296	**KM63TSMSRNR12**	60	2.362	38	1.496	SN..120408/SN..432	**ISSN432**	**KLM46**	**CKM20**	**STCM11**	1,18	2.61
2265298	**KM63TSMSRNR19**	60	2.362	38	1.496	SN..190612/SN..643	**ISSN633**	**KLM68**	**CKM13**	**STCM8**	1,15	2.53
	left hand											
2265297	**KM63TSMSRNL12**	60	2.362	38	1.496	SN..120408/SN..432	**ISSN432**	**KLM46**	**CKM20**	**STCM11**	1,19	2.61
2265299	**KM63TSMSRNL19**	60	2.362	38	1.496	SN..190612/SN..643	**ISSN633**	**KLM68**	**CKM13**	**STCM8**	1,15	2.53

TS ISO 26622 100 bar 1500 psi

KM QUICK CHANGE

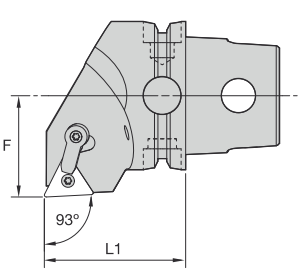


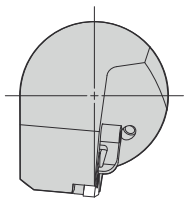
■ MSSN 45°



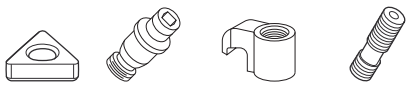
order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand															
2265300	**KM63TSMSSNR12**	60	2.362	68,3	2.690	43	1.693	86	3.386	SN..120408/SN..432	**ISSN432**	**KLM46**	**CKM20**	**STCM11**	1,11	2.45
2265302	**KM63TSMSSNR15**	60	2.362	70,2	2.765	43	1.693	100	3.937	SN..150612/SN..543	**ISSN533**	**KLM58**	**CKM20**	**STCM11**	1,10	2.42
2265304	**KM63TSMSSNR19**	60	2.362	72,5	2.854	43	1.693	100	3.937	SN..190612/SN..643	**ISSN633**	**KLM68**	**CKM13**	**STCM8**	1,14	2.51
	left hand															
2265301	**KM63TSMSSNL12**	60	2.362	68,3	2.690	43	1.693	86	3.386	SN..120408/SN..432	**ISSN432**	**KLM46**	**CKM20**	**STCM11**	1,11	2.45
2265303	**KM63TSMSSNL15**	60	2.362	70,2	2.765	43	1.693	100	3.937	SN..150612/SN..543	**ISSN533**	**KLM58**	**CKM20**	**STCM11**	1,10	2.42
2265305	**KM63TSMSSNL19**	60	2.362	72,5	2.854	43	1.693	100	3.937	SN..190612/SN..643	**ISSN633**	**KLM68**	**CKM13**	**STCM8**	1,15	2.53

KM QUICK CHANGE



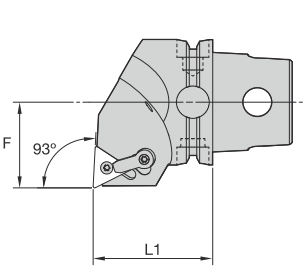


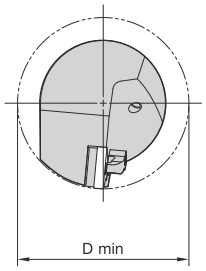
■ MTJN 93°

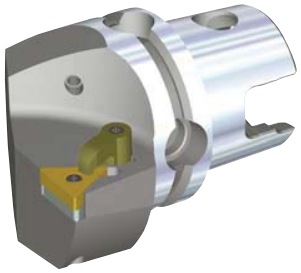


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
2265306	KM63TSMTJNR22	60	2.362	43	1.693	TN..220408/TN..432	ITSN433	KLM46	CKM23	STCM11	1,23	2.72
	left hand											
2265307	KM63TSMTJNL22	60	2.362	43	1.693	TN..220408/TN..432	ITSN433	KLM46	CKM23	STCM11	1,23	2.72

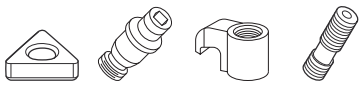
KM QUICK CHANGE



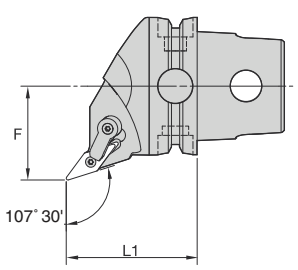


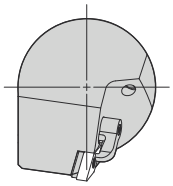


■ MTUN 93°

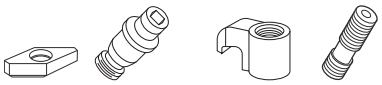


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2265308	KM63TSMTUNR22	60	2.362	43	1.693	86	3.386	TN..220408/TN..432	ITSN433	KLM46	CKM23	STCM11	1,27	2.79
	left hand													
2265309	KM63TSMTUNL22	60	2.362	43	1.693	86	3.386	TN..220408/TN..432	ITSN433	KLM46	CKM23	STCM11	1,27	2.79

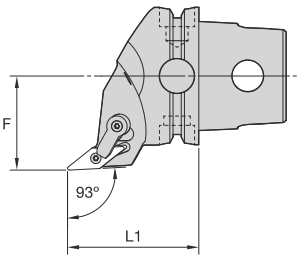


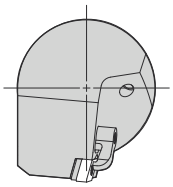


■ MVHN 107° 30'



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
2265310	KM63TSMVHNR16	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,07	2.36
	left hand											
2265311	KM63TSMVHNL16	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,07	2.36



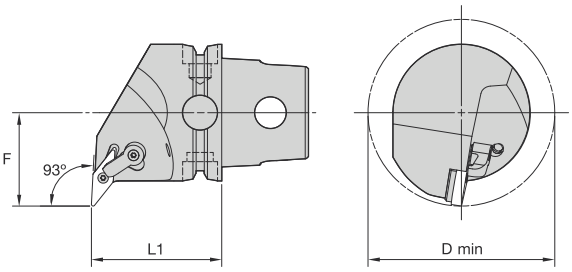


■ MVJN 93°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
2265312	KM63TSMVJNR16	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,00	2.21
	left hand											
2265313	KM63TSMVJNL16	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,00	2.21

TS ISO 26622 100 bar 1500 psi

KM QUICK CHANGE

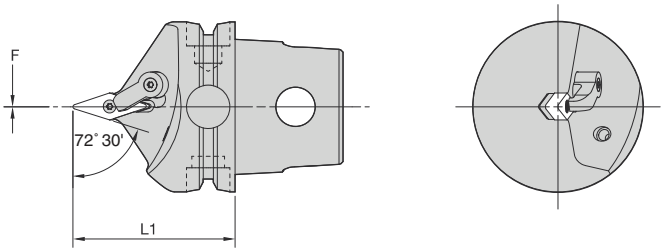


MVUN 93°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2265314	KM63TSMVUNR16	60	2.362	43	1.693	86	3.386	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,17	2.58
	left hand													
2265315	KM63TSMVUNL16	60	2.362	43	1.693	86	3.386	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,17	2.59

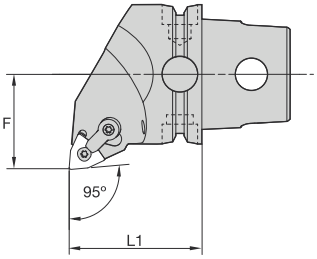
TS ISO 26622 100 bar 1500 psi

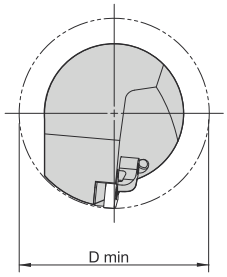
KM QUICK CHANGE



MVVN 72° 30'

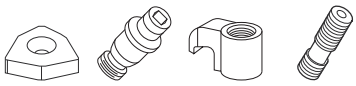
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
2265316	KM63TSMVVNN16	60	2.362	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	0,86	1.90



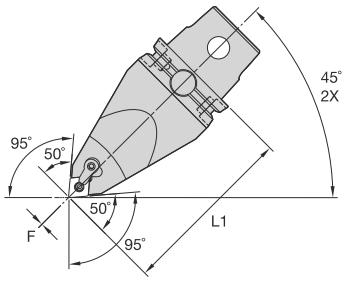


KM QUICK CHANGE

MWLN 95°

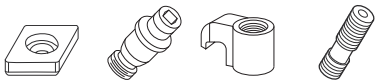


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2265317	KM63TSMWLNR08	60	2.362	43	1.693	86	3.386	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	1,20	2.65
	left hand													
2265318	KM63TSMWLNL08	60	2.362	43	1.693	86	3.386	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	1,20	2.65

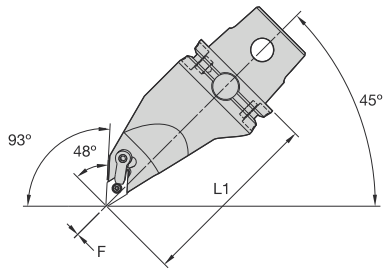


KM QUICK CHANGE

MCMN 50° • 95° Application • Centerline



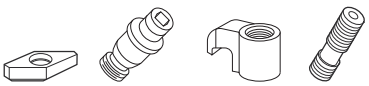
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3487474	KM63TSMCMNN12115	115	4.528	0	.000	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	2,01	4.42



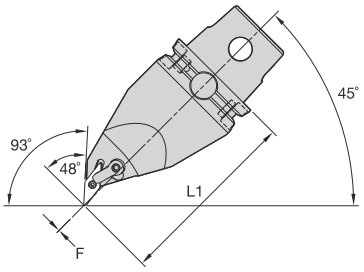
KM QUICK CHANGE

Left-Hand Tool

■ MDMN 48° • 93° Application • Centerline



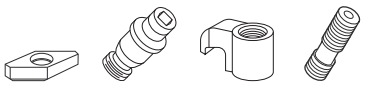
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3487478	KM63TSMDMNR1504115	115	4.528	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,84	4.05
3487479	KM63TSMDMNR1506115	115	4.528	0	.000	DN..150608/DN..442	IDSN442	KLM46L	CKM23	STCM11	1,83	4.04
	left hand											
3487475	KM63TSMDMNL1504115	115	4.528	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,84	4.05
3487476	KM63TSMDMNL1506115	115	4.528	0	.000	DN..150608/DN..442	IDSN442	KLM46L	CKM23	STCM11	1,83	4.04



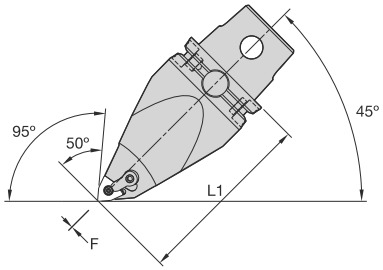
KM QUICK CHANGE

Left-Hand Tool

■ MVMN 48° • 93° Application • Centerline



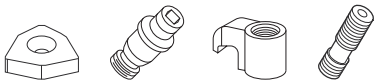
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3487480	KM63TSMVMNR16115	115	4.528	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,93	4.26
	left hand											
3487477	KM63TSMVMNL16115	115	4.528	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,93	4.26



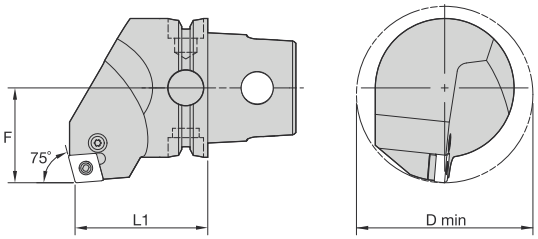
KM QUICK CHANGE

Left-Hand Tool

■ MWMN 50° • 95° Application • Centerline

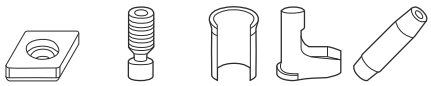


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3487604	KM63TSMWMNR08115	115	4.528	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	1,98	4.37
	left hand											
3487603	KM63TSMWMNL08115	115	4.528	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	1,98	4.37

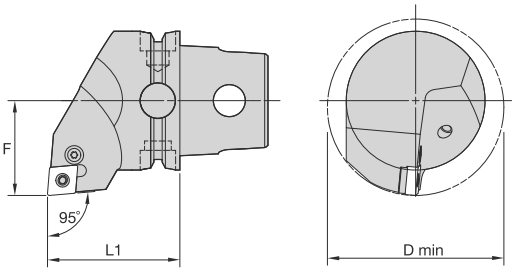


KM QUICK CHANGE

■ PCKN 75°

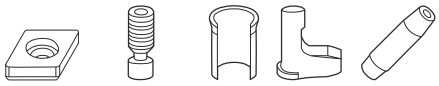


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2407450	KM63TSPCKNR12	60	2.362	43	1.693	80	3.150	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	1,29	2.84
2407452	KM63TSPCKNR16	60	2.362	43	1.693	80	3.150	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	1,32	2.91
2407954	KM63TSPCKNR19	60	2.362	43	1.693	80	3.150	CN..190612/CN..643	512.123	514.133	513.033	511.023	515.022	1,34	2.95
	left hand														
2407451	KM63TSPCKNL12	60	2.362	43	1.693	80	3.150	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	1,29	2.84
2407953	KM63TSPCKNL16	60	2.362	43	1.693	80	3.150	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	1,32	2.91
2407955	KM63TSPCKNL19	60	2.362	43	1.693	80	3.150	CN..190612/CN..643	512.123	514.133	513.033	511.033	515.022	1,34	2.95

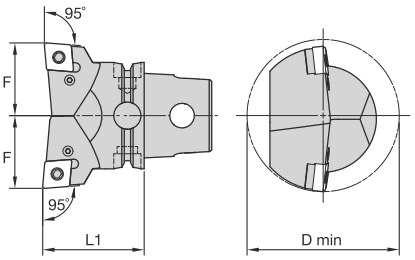


KM QUICK CHANGE

PCLN 95°

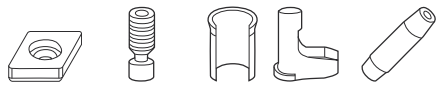


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2257149	**KM63TSPCLNR12**	60	2.362	43	1.693	80	3.150	CN..120408/CN..432	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**	1,21	2.66
2407957	**KM63TSPCLNR16**	60	2.362	43	1.693	80	3.150	CN..160612/CN..543	**512.117**	**514.125**	**513.025**	**511.025**	**515.022**	1,23	2.71
2407959	**KM63TSPCLNR19**	60	2.362	43	1.693	80	3.150	CN..190612/CN..643	**512.123**	**514.133**	**513.033**	**511.033**	**515.022**	1,23	2.71
	left hand														
2407956	**KM63TSPCLNL12**	60	2.362	43	1.693	80	3.150	CN..120408/CN..432	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**	1,21	2.66
2407958	**KM63TSPCLNL16**	60	2.362	43	1.693	80	3.150	CN..160612/CN..543	**512.117**	**514.125**	**513.025**	**511.025**	**515.022**	1,23	2.71
2407960	**KM63TSPCLNL19**	60	2.362	43	1.693	80	3.150	CN..190612/CN..643	**512.123**	**514.133**	**513.033**	**511.033**	**515.022**	1,23	2.71



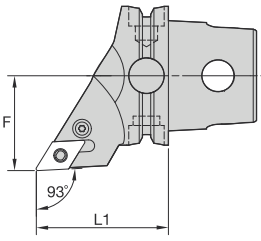
KM QUICK CHANGE

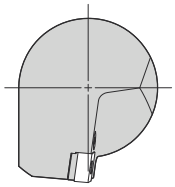
PCLN-2W 95°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2408003	**KM63TSPCLNR162W**	60	2.362	43	1.693	90	3.543	CN..160612/CN..543	**512.117**	**514.125**	**513.025**	**511.025**	**515.022**	1,35	2.97
	left hand														
2408004	**KM63TSPCLNL162W**	60	2.362	43	1.693	90	3.543	CN..160612/CN..543	**512.117**	**514.125**	**513.025**	**511.025**	**515.022**	1,35	2.98

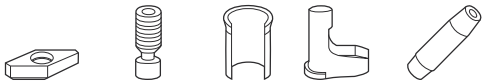
TS ISO 26622 100 bar 1500 psi





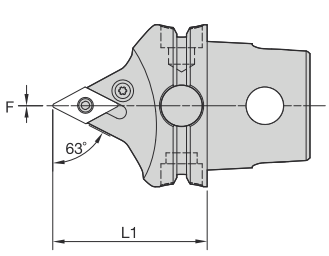
KM QUICK CHANGE

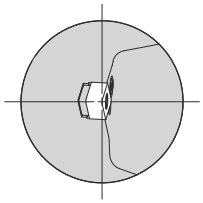
■ PDJN 93°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
2407969	KM63TSPDJNR11	60	2.362	43	1.693	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,95	2.10
2407971	KM63TSPDJNR15	60	2.362	43	1.693	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,94	2.08
	left hand												
2407970	KM63TSPDJNL11	60	2.362	43	1.693	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,97	2.14
2407972	KM63TSPDJNL15	60	2.362	43	1.693	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,94	2.08

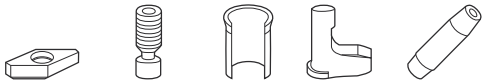
TS ISO 26622 100 bar 1500 psi



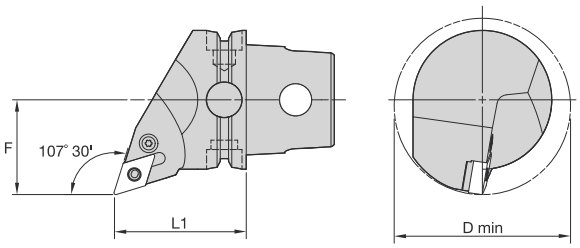


KM QUICK CHANGE

■ PDNN 63°

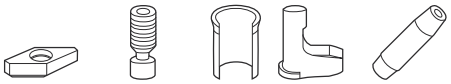


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
2407973	KM63TSPDNNR11	60	2.362	0	.000	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,91	2.01
2407975	KM63TSPDNNR15	60	2.362	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,84	1.86
	left hand												
2407974	KM63TSPDNNL11	60	2.362	0	.000	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	0,91	2.01
2407976	KM63TSPDNNL15	60	2.362	0	.000	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	0,85	1.86

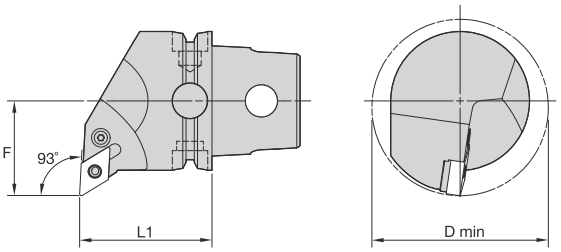


KM QUICK CHANGE

■ PDQN 107° 30'

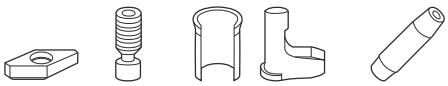


		L1		F		D min									
order number	catalog number	mm	in	mm	in	mm	in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2407977	KM63TSPDQNR11	60	2.362	43	1.693	80	3.150	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	1,11	2.45
2407979	KM63TSPDQNR15	60	2.362	43	1.693	80	3.150	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,08	2.38
	left hand														
2407978	KM63TSPDQNL11	60	2.362	43	1.693	80	3.150	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	1,11	2.45
2407980	KM63TSPDQNL15	60	2.362	43	1.693	80	3.150	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,08	2.38

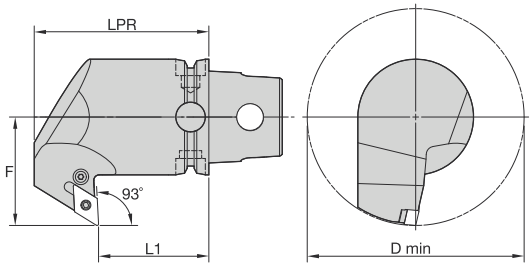


KM QUICK CHANGE

■ PDUN 93°

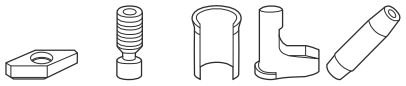


		L1		F		D min									
order number	catalog number	mm	in	mm	in	mm	in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2407981	KM63TSPDUNR11	60	2.362	43	1.693	80	3.150	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	1,19	2.62
2407983	KM63TSPDUNR15	60	2.362	43	1.693	80	3.150	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,23	2.71
	left hand														
2407982	KM63TSPDUNL11	60	2.362	43	1.693	80	3.150	DN..110408/DN..332	512.060	514.118	513.060	511.060	515.018	1,19	2.63
2407984	KM63TSPDUNL15	60	2.362	43	1.693	80	3.150	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	1,23	2.71

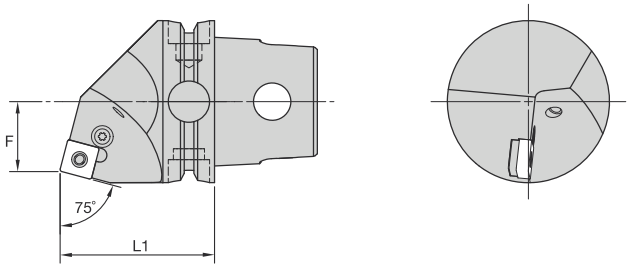


KM QUICK CHANGE

■ PDXN 93°

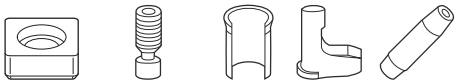


order number	catalog number	L1 mm	L1 in	LPR mm	LPR in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand																
2407992	KM63TSPDXNR15	60	2.362	95	3.740	59	2.323	118	4.646	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	2,21	4.85
	left hand																
2407993	KM63TSPDXNL15	60	2.362	95	3.740	59	2.323	118	4.646	DN..150608/DN..442	512.153	514.128	513.023	511.024	515.018	2,21	4.85

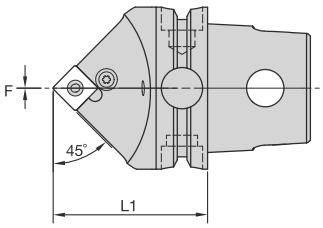


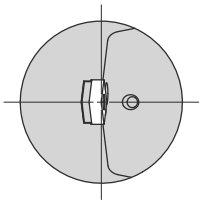
KM QUICK CHANGE

■ PSBN 75°



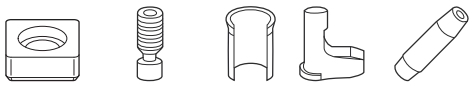
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
2407994	KM63TSPSBNR12	60	2.362	27	1.063	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,15	2.54
2407996	KM63TSPSBNR15	60	2.362	27	1.063	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,11	2.45
2407998	KM63TSPSBNR19	60	2.362	27	1.063	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,10	2.42
	left hand												
2407995	KM63TSPSBNL12	60	2.362	27	1.063	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,10	2.42
2407997	KM63TSPSBNL15	60	2.362	27	1.063	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,10	2.42
2407999	KM63TSPSBNL19	60	2.362	27	1.063	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,10	2.42



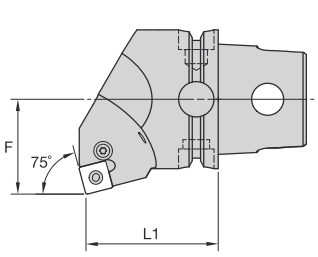


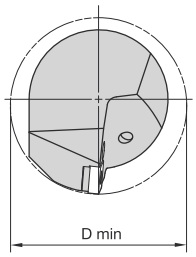
KM QUICK CHANGE

PSDN 45°



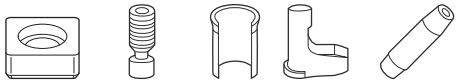
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
2408000	KM63TSPSDNN12	60	2.362	0	.000	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	0,98	2.16
2408001	KM63TSPSDNN15	60	2.362	0	.000	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,01	2.23
2408002	KM63TSPSDNN19	60	2.362	0	.000	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	0,94	2.06



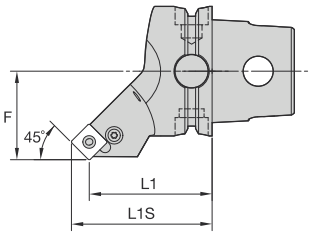


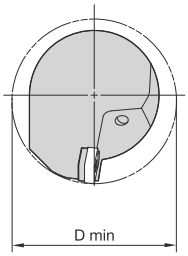
KM QUICK CHANGE

PSKN 75°



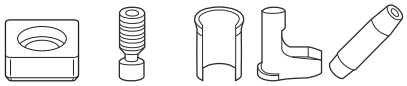
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2408005	KM63TSPSKNR12	60	2.362	43	1.693	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,36	3.01
2408007	KM63TSPSKNR15	60	2.362	43	1.693	80	3.150	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,39	3.06
2408009	KM63TSPSKNR19	60	2.362	43	1.693	80	3.150	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,34	2.95
	left hand														
2408006	KM63TSPSKNL12	60	2.362	43	1.693	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,36	3.00
2408008	KM63TSPSKNL15	60	2.362	43	1.693	80	3.150	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,39	3.06
2408010	KM63TSPSKNL19	60	2.362	43	1.693	80	3.150	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,34	2.95



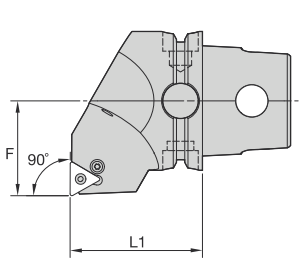


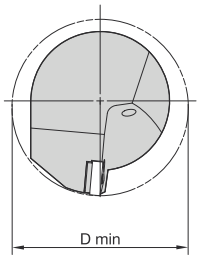
KM QUICK CHANGE

■ PSSN 45°



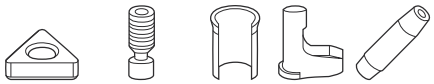
order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand																
2408011	KM63TSPSSNR12	60	2.362	68,3	2.690	43	1.693	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,06	2.33
2408013	KM63TSPSSNR15	60	2.362	70,2	2.765	43	1.693	100	3.937	SN..150612/SN..543	512.025	514.125	513.025	511.025	515.022	1,05	2.32
2408015	KM63TSPSSNR19	60	2.362	72,5	2.854	43	1.693	100	3.937	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,13	2.50
	left hand																
2408012	KM63TSPSSNL12	60	2.362	68,3	2.690	43	1.693	80	3.150	SN..120408/SN..432	512.063	514.123	513.023	511.023	515.018	1,06	2.33
2408016	KM63TSPSSNL19	60	2.362	72,5	2.854	43	1.693	100	3.937	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,13	2.50



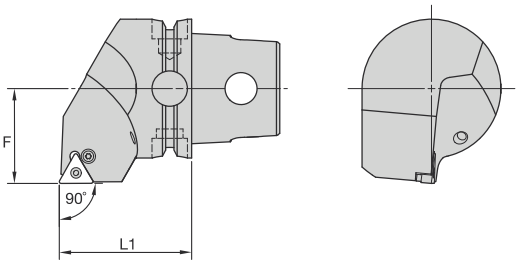


KM QUICK CHANGE

■ PTFN 90°

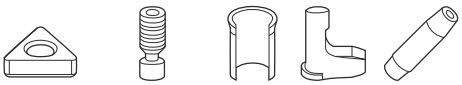


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2408017	KM63TSPTFNR16	60	2.362	43	1.693	80	3.150	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	1,26	2.77
	left hand														
2408018	KM63TSPTFNL16	60	2.362	43	1.693	80	3.150	TN..160408/TN..332	512.013	514.118	513.018	511.018	515.018	1,30	2.86
2408022	KM63TSPTFNL27	60	2.362	43	1.693	80	3.150	TN..270612/TN..543	512.031	514.128	513.025	511.028	515.022	1,27	2.81

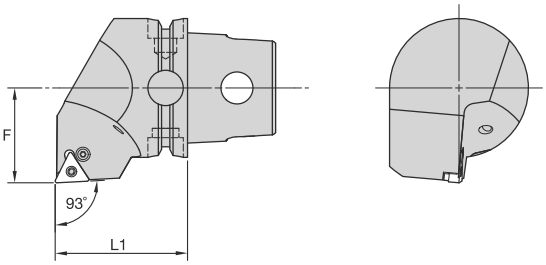


KM QUICK CHANGE

PTGN 90°

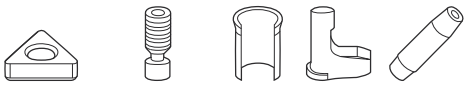


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
2408023	**KM63TSPTGNR16**	60	2.362	43	1.693	TN..160408/TN..332	**512.013**	**514.118**	**513.018**	**511.018**	**515.018**	1,30	2.87
2408025	**KM63TSPTGNR22**	60	2.362	43	1.693	TN..220408/TN..432	**512.023**	**514.123**	**513.023**	**511.023**	**515.018**	1,27	2.80
2408027	**KM63TSPTGNR27**	60	2.362	43	1.693	TN..270612/TN..543	**512.031**	**514.128**	**513.025**	**511.028**	**515.022**	1,27	2.80
	left hand												
2408024	**KM63TSPTGNL16**	60	2.362	43	1.693	TN..160408/TN..332	**512.013**	**514.118**	**513.018**	**511.018**	**515.018**	1,28	2.82
2408026	**KM63TSPTGNL22**	60	2.362	43	1.693	TN..220408/TN..432	**512.013**	**514.123**	**513.023**	**511.023**	**515.018**	1,28	2.82
2408028	**KM63TSPTGNL27**	60	2.362	43	1.693	TN..270612/TN..543	**512.031**	**514.128**	**513.025**	**511.028**	**515.022**	1,27	2.80

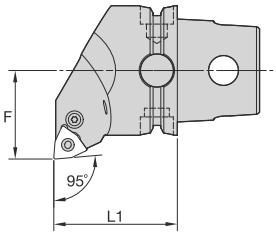


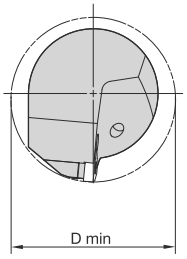
KM QUICK CHANGE

PTJN 93°



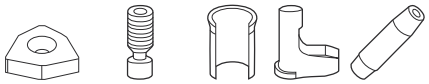
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
2408029	**KM63TSPTJNR16**	60	2.362	43	1.693	TN..160408/TN..332	**512.013**	**514.118**	**513.018**	**511.018**	**515.018**	1,33	2.92
2408031	**KM63TSPTJNR22**	60	2.362	43	1.693	TN..220408/TN..432	**512.023**	**514.123**	**513.023**	**511.023**	**515.018**	1,30	2.86
2408033	**KM63TSPTJNR27**	60	2.362	43	1.693	TN..270612/TN..543	**512.031**	**514.128**	**513.025**	**511.028**	**515.022**	1,26	2.71
	left hand												
2408030	**KM63TSPTJNL16**	60	2.362	43	1.693	TN..160408/TN..332	**512.013**	**514.118**	**513.018**	**511.018**	**515.018**	1,22	2.68
2408032	**KM63TSPTJNL22**	60	2.362	43	1.693	TN..220408/TN..432	**512.023**	**514.123**	**513.023**	**511.023**	**515.018**	1,30	2.86
2408034	**KM63TSPTJNL27**	60	2.362	43	1.693	TN..270612/TN..543	**512.031**	**514.128**	**513.025**	**511.028**	**515.022**	1,26	2.71



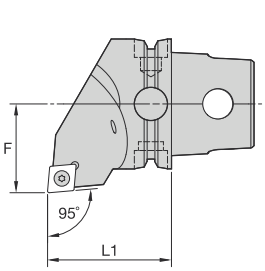


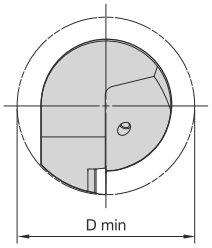
KM QUICK CHANGE

PWLN 95°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2408035	KM63TSPWLNR06	60	2.362	43	1.693	80	3.150	WN..060408/WN..332	512.134	514.118	513.018	511.018	515.018	1,33	2.94
2408037	KM63TSPWLNR08	60	2.362	43	1.693	80	3.150	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	1,24	2.74
	left hand														
2408036	KM63TSPWLNL06	60	2.362	43	1.693	80	3.150	WN..060408/WN..332	512.134	514.118	513.018	511.018	515.018	1,33	2.94
2408038	KM63TSPWLNL08	60	2.362	43	1.693	80	3.150	WN..080408/WN..432	512.135	514.123	513.023	511.023	515.018	1,24	2.74



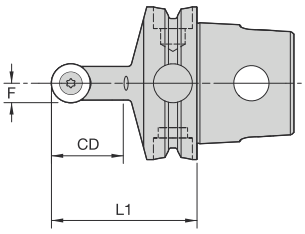


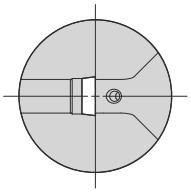
KM QUICK CHANGE

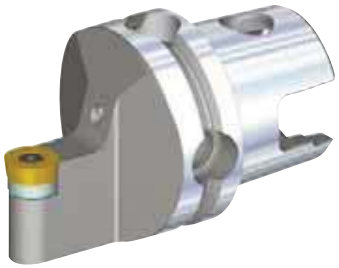
SCLC 95°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand												
2414906	KM63TSSCLCR12	60	2.362	43	1.693	86	3.386	CC..120408/CC..432	MS1158	SKCP453	SRS4	1,14	2.52
	left hand												
2414907	KM63TSSCLCL12	60	2.362	43	1.693	86	3.386	CC..120408/CC..432	MS1158	SKCP453	SRS4	1,14	2.52

KM QUICK CHANGE



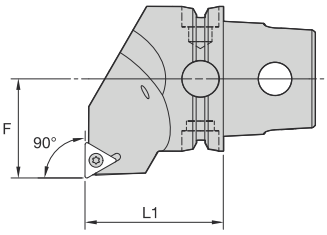


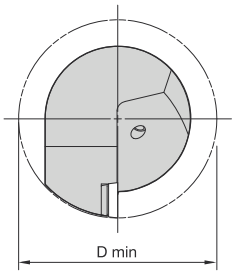


SRDC 0°

		L1		F		CD							
order number	catalog number	mm	in	mm	in	mm	in	gage insert	insert screw	shim	shim screw	kg	lbs
2414896	KM63TSSRDCN16	60	2.362	8	.315	33	1.299	RC..1605M0	MS1160	SKRN160400	SRS5	0,84	1.84

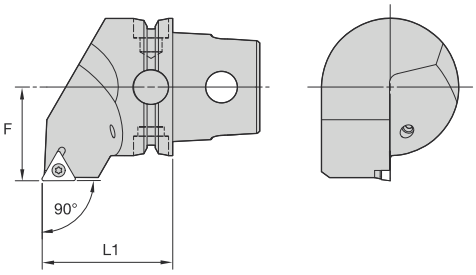
KM QUICK CHANGE





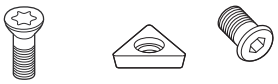
STFC 90°

		L1		F		D min							
order number	catalog number	mm	in	mm	in	mm	in	gage insert	insert screw	shim	shim screw	kg	lbs
2414899	right hand KM63TSSTFCR16	60	2.362	43	1.693	86	3.386	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,23	2.72
2414900	left hand KM63TSSTFCL16	60	2.362	43	1.693	86	3.386	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,23	2.72

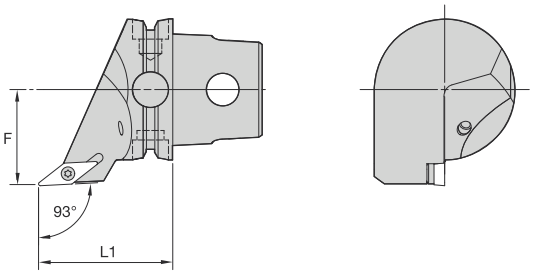


KM QUICK CHANGE

■ STGC 90°

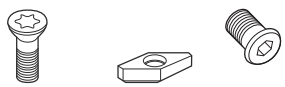


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand										
2414903	KM63TSSTGCR16	60	2.362	43	1.693	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,22	2.69
	left hand										
2414904	KM63TSSTGCL16	60	2.362	43	1.693	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,22	2.69

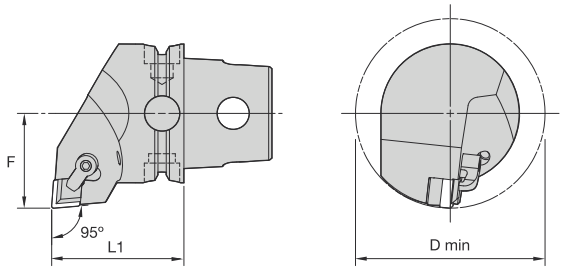


KM QUICK CHANGE

■ SVJB 93°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand										
2414905	KM63TSSVJBR16	60	2.362	43	1.693	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,92	2.02
	left hand										
2257151	KM63TSSVJBL16	60	2.362	43	1.693	VB..160408/VB..332	MS1156	SKVN343	SRS3	0,92	2.02

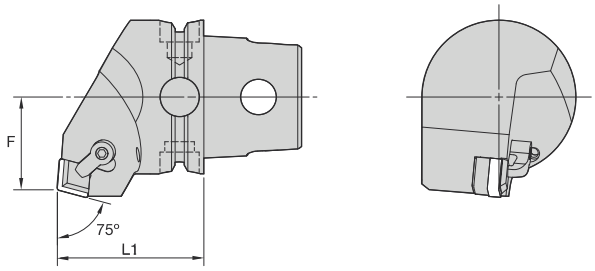


KM QUICK CHANGE

CCLN 95°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand													
3065821	KM63TSCCLNR12	60	2.362	43	1.693	86	3.386	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	1,23	2.70
3065883	KM63TSCCLNR16	60	2.362	43	1.693	86	3.386	CN..160612/CN.543	ICSN533	KMS5	CKM20	STCM11	1,21	2.68
	left hand													
3065820	KM63TSCCLNL12	60	2.362	43	1.693	86	3.386	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	1,23	2.71
3065822	KM63TSCCLNL16	60	2.362	43	1.693	86	3.386	CN..160612/CN.543	ICSN533	KMS5	CKM20	STCM11	1,21	2.68

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.

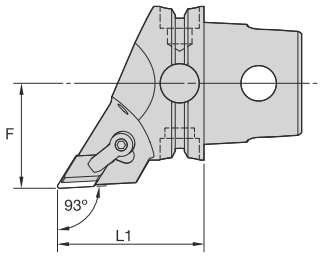


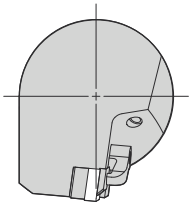
KM QUICK CHANGE

CCRN 75°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand											
3065884	KM63TSCCRNR12	60	2.362	38	1.496	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	1,22	2.70
	left hand											
3065885	KM63TSCCRNL12	60	2.362	38	1.496	CN..120408/CN.432	ICSN442	KMS4	CKM20	STCM11	1,22	2.70
3065886	KM63TSCCRNL16	60	2.362	38	1.496	CN..160612/CN.543	ICSN533	KMS5	CKM20	STCM11	1,22	2.69

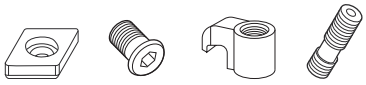
NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.





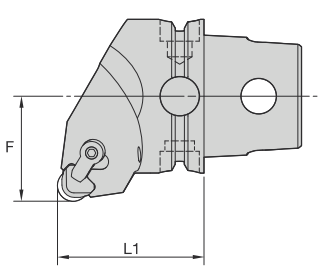
KM QUICK CHANGE

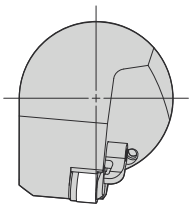
CDJN 93°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand											
3065887	KM63TSCDJNR1504	60	2.362	43	1.693	DN..150408/DN.432	IDSN442	KMS4	CKM23	STCM11	1,01	2.22
	left hand											
3065888	KM63TSCDJNL1504	60	2.362	43	1.693	DN..150408/DN.432	IDSN442	KMS4	CKM23	STCM11	1,01	2.22

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



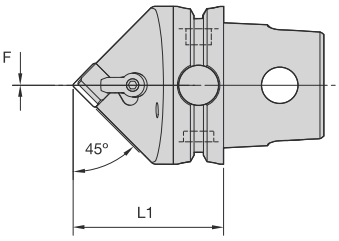


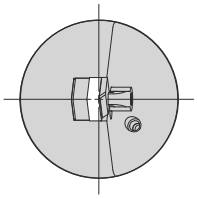
KM QUICK CHANGE

CRGN 0°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand											
3065900	KM63TSCRGNR12	60	2.362	43	1.693	RN..1207/RN.45	IRSN42	KMS4	CKM20	STCM11	1,23	2.72
	left hand											
3065899	KM63TSCRGNL12	60	2.362	43	1.693	RN..1207/RN.45	IRSN42	KMS4	CKM20	STCM11	1,23	2.72

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



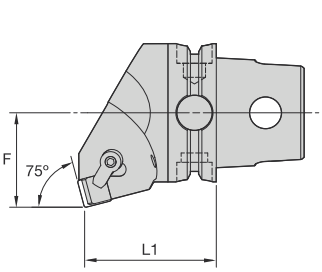


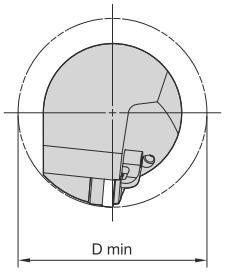
KM QUICK CHANGE

CSDN 45°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	left hand											
3065889	**KM63TSCSDNN12**	60	2.362	0	.000	SN..120408/SN.432	**ISSN442**	**KMS4**	**CKM20**	**STCM11**	1,01	2.23
3065890	**KM63TSCSDNN15**	60	2.362	0	.000	SN..150612/SN.543	**ISSN533**	**KMS5**	**CKM20**	**STCM11**	1,01	2.22

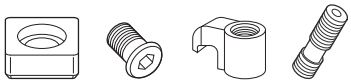
NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.





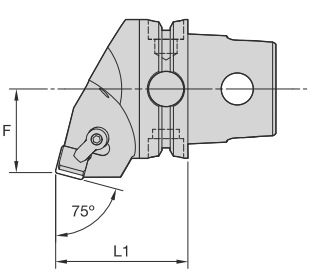
KM QUICK CHANGE

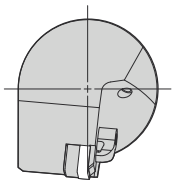
CSKN 75°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand													
3065895	**KM63TSCSKNR12**	60	2.362	43	1.693	86	3.386	SN..120408/SN.432	**ISSN442**	**KMS4**	**CKM20**	**STCM11**	1,32	2.91
	left hand													
3065896	**KM63TSCSKNL12**	60	2.362	43	1.693	86	3.386	SN..120408/SN.432	**ISSN442**	**KMS4**	**CKM20**	**STCM11**	1,32	2.91

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



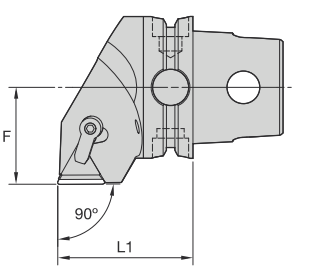


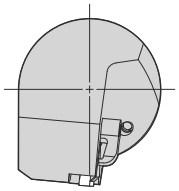
KM QUICK CHANGE

■ CSRN 75°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand											
3065891	KM63TSCSRNR12	60	2.362	38	1.496	SN..120408/SN.432	ISSN442	KMS4	CKM20	STCM11	1,20	2.64
3065893	KM63TSCSRNR15	60	2.362	38	1.496	SN..150612/SN.543	ISSN533	KMS5	CKM20	STCM11	1,19	2.63
	left hand											
3065892	KM63TSCSRNL12	60	2.362	38	1.496	SN..120408/SN.432	ISSN442	KMS4	CKM20	STCM11	1,20	2.64
3065894	KM63TSCSRNL15	60	2.362	38	1.496	SN..150612/SN.543	ISSN533	KMS5	CKM20	STCM11	1,19	2.63

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.





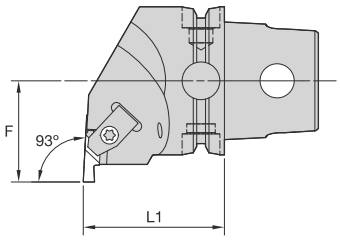
KM QUICK CHANGE

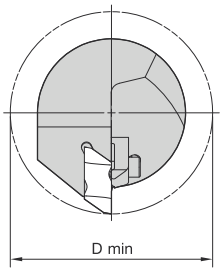
■ CTGN 90°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	shim screw	clamp	clamp screw	kg	lbs
	right hand											
3065897	KM63TSCTGNR22	60	2.362	43	1.693	TN..220408/TN.432	ITSN433	KMS4	CKM23	STCM11	1,25	2.75
	left hand											
3065898	KM63TSCTGNL22	60	2.362	43	1.693	TN..220408/TN.432	ITSN433	KMS4	CKM23	STCM11	1,24	2.73

NOTE: Chipbreakers must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.

KM QUICK CHANGE

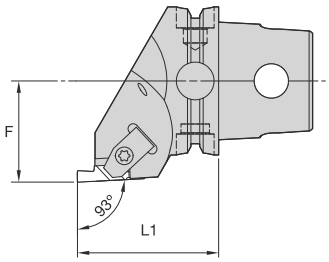


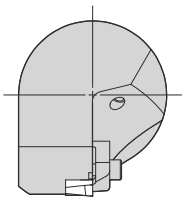


NE 93°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	clamp	clamp screw	kg	lbs
	right hand											
2265406	KM63TSNER3	60	2.362	43	1.693	86	3.386	NG3L	CM73	MS1489	1,19	2.63
2265408	KM63TSNER4	60	2.362	43	1.693	86	3.386	NG4L	CM73	MS1489	1,21	2.66
2265410	KM63TSNER5	60	2.362	43	1.693	86	3.386	NG5L	CM81	MS1490	1,15	2.55
	left hand											
2265407	KM63TSNEL3	60	2.362	43	1.693	86	3.386	NG3R	CM72	MS1489	1,19	2.63
2265409	KM63TSNEL4	60	2.362	43	1.693	86	3.386	NG4R	CM72	MS1489	1,21	2.66
2265411	KM63TSNEL5	60	2.362	43	1.693	86	3.386	NG5R	CM80	MS1490	1,18	2.60

KM QUICK CHANGE

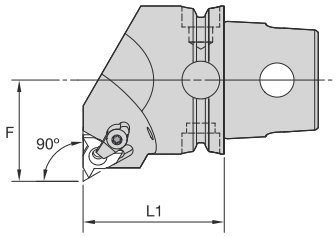


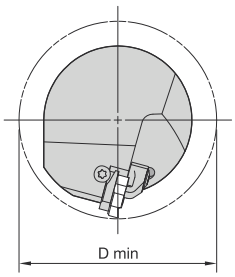


NS 93°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	clamp	clamp screw	kg	lbs
	right hand									
2265412	KM63TSNSR3	60	2.362	43	1.693	NG3R	CM72	MS1489	1,02	2.26
2265414	KM63TSNSR4	60	2.362	43	1.693	NG4R	CM72	MS1489	1,06	2.34
	left hand									
2265413	KM63TSNSL3	60	2.362	43	1.693	NG3L	CM73	MS1489	1,02	2.26
2265415	KM63TSNSL4	60	2.362	43	1.693	NG4L	CM73	MS1489	1,06	2.34

KM QUICK CHANGE



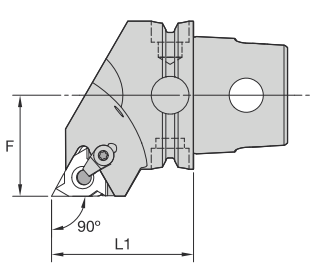


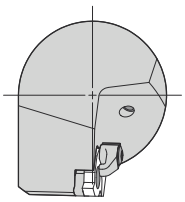
■ LSE-N 90° • Internal Only

		L1		F		D min								
order number	catalog number	mm	in	mm	in	mm	in	gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
	right hand													
2265416	KM63TSLSER16N	60	2.362	43	1.693	86	3.386	LT16NR	SSA3T	SMYI3	SSY3T	CKC3	1,34	2.96
2265418	KM63TSLSER22N	60	2.362	43	1.693	86	3.386	LT22NR	SSA4T	SMYI4	SSY4T	CKC4	1,32	2.92
3959387	KM63TSLSER27N	60	2.362	43	1.693	86	3.386	LT27NR	SSA5T	SMYI5	SSY5T	CKC5	1,38	3.05
	left hand													
2265417	KM63TSLSEL16N	60	2.362	43	1.693	86	3.386	LT16NL	SSA3T	SMYE3	SSY3T	CKC3	1,34	2.96
2265419	KM63TSLSEL22N	60	2.362	43	1.693	86	3.386	LT22NL	SSA4T	SMYE4	SSY4T	CKC4	1,32	2.92
3959386	KM63TSLSEL27N	60	2.362	43	1.693	86	3.386	LT27NL	SSA5T	SMYE5	SSY5T	CKC5	1,36	3.00

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.

KM QUICK CHANGE

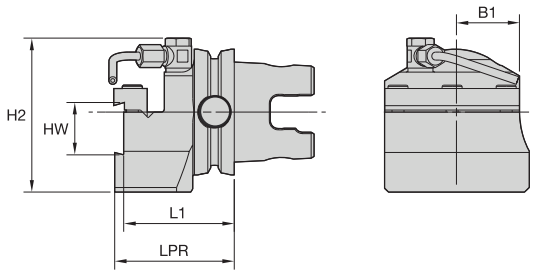


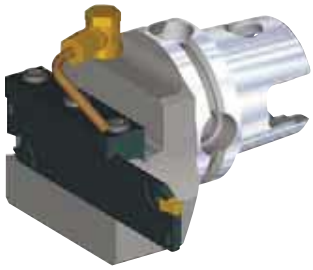


■ LSS 90°

		L1		F							
order number	catalog number	mm	in	mm	in	gage insert	insert screw	shim	shim screw	clamp assembly	kg	lbs
	right hand											
2265420	KM63TSLSSR16	60	2.362	43	1.693	LT16ER	SSA3T	SMYE3	SSY3T	CKC3	1,21	2.68
2265422	KM63TSLSSR22	60	2.362	43	1.693	LT22ER	SSA4T	SMYE4	SSY4T	CKC4	1,20	2.64
3959389	KM63TSLSSR27	60	2.362	43	1.693	LT27ER	SSA5T	SMYE5	SSY5T	CKC5	1,19	2.61
	left hand											
2265421	KM63TSLSSL16	60	2.362	43	1.693	LT16EL	SSA3T	SMYI3	SSY3T	CKC3	1,21	2.66
2265423	KM63TSLSSL22	60	2.362	43	1.693	LT22EL	SSA4T	SMYI4	SSY4T	CKC4	1,20	2.64
3959388	KM63TSLSSL27	60	2.362	43	1.693	LT27EL	SSA5T	SMYI5	SSY5T	CKC5	1,19	2.62

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.





KM QUICK CHANGE

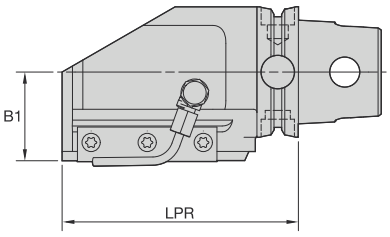
BE • End Mount

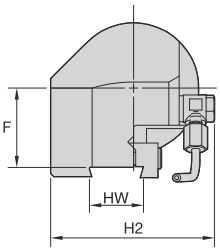
order number	catalog number	L1 mm	L1 in	LPR mm	LPR in	H2 mm	H2 in	HW mm	HW in	B1 mm	B1 in	cartridge size	cartridge 1	kg	lbs
	right hand														
2265372	**KM63TSBER4**	55,3	2.177	60	2.35	63	2.48	26	1.02	32	1.24	26	A2BNSN26...	1,68	3.71
	left hand														
2265393	**KM63TSBEL4**	55,3	2.177	60	2.35	63	2.48	26	1.02	32	1.24	26	A2BNSN26...	1,68	3.71

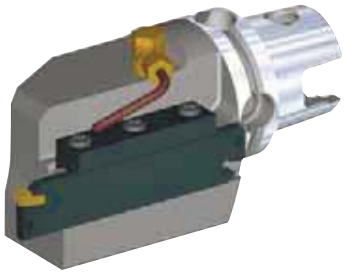
Spare Parts

catalog number	clamp	clamp screw	coolant tube	coolant swivel base
right hand				
KM63TSBER4	**CGS4**	**MS1595**	**12649910900**	**12649910800**
left hand				
KM63TSBEL4	**CGS4**	**MS1595**	**12649910900**	**12649910800**

NOTE: For blades, see the WIDIA Turning (A-09-02078) catalog.







KM QUICK CHANGE

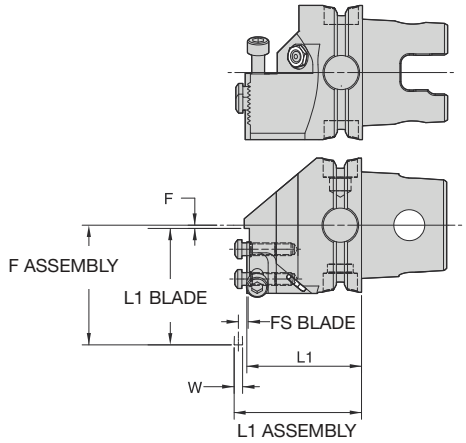
BS • Side Mount

order number	catalog number	F mm	F in	LPR mm	LPR in	H2 mm	H2 in	HW mm	HW in	B1 mm	B1 in	cartridge size	cartridge 1	kg	lbs
	right hand														
2265394	KM63TSBSR4	38,3	1.508	114	4.49	79	3.11	26	1.02	43	1.69	26	A2BNSN26...	3,00	6.62
2265396	KM63TSBSR5	37,3	1.469	135	5.30	84	3.31	32	1.26	43	1.69	32	A2BNSN32...	3,73	8.23
	left hand														
2265395	KM63TSBSL4	38,3	1.508	114	4.49	79	3.11	26	1.02	43	1.69	26	A2BNSN26...	3,00	6.62
2265397	KM63TSBSL5	37,3	1.469	135	5.30	84	3.31	32	1.26	43	1.69	32	A2BNSN32...	3,73	8.23

Spare Parts

catalog number	clamp	clamp screw	coolant tube	coolant swivel base
right hand				
KM63TSBSR4	CGS4	MS1595	12649910900	12649910800
KM63TSBSR5	CGS5	MS1595	12649910900	12649910800
left hand				
KM63TSBSL4	CGS4	MS1595	12649910900	12649910800
KM63TSBSL5	CGS5	MS1595	12649910900	12649910800

NOTE: For blades, see the WIDIA Turning (A-09-02078) catalog.



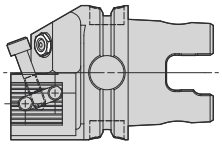
KM QUICK CHANGE

F ASSEMBLY = L1 BLADE - F
L1 ASSEMBLY = W/2 + L1 + FS BLADE - 0,787mm

WGME

order number	catalog number	L1 mm	L1 in	F mm	F in	button-head cap screw	nozzle	socket-head cap screw	kg	lbs
	right hand									
3949903	KM63TSWGMER55M	53,79	2.118	1,52	.060	606256	PMT08430	MS337	1,16	2.57
	left hand									
3949904	KM63TSWGMEL55M	53,79	2.118	1,52	.060	606256	PMT08430	MS337	1,16	2.57

NOTE: For SLS cartridges and WMT inserts, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.



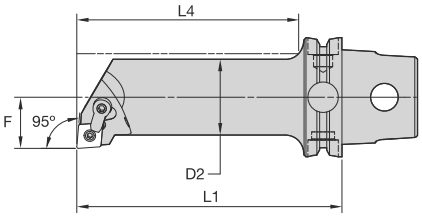
KM QUICK CHANGE

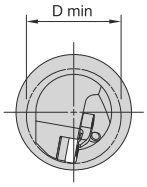
F ASSEMBLY = W/2 + F + FS BLADE - 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE

WGMS

order number	catalog number	L1 mm	L1 in	F mm	F in	nozzle	socket-head cap screw	kg	lbs
	right hand								
3949851	KM63TSWGMSR55M	24,52	.965	31,79	1.252	PMT08430	MS1132PKG	1,12	2.46
	left hand								
3949852	KM63TSWGMSL55M	24,52	.965	31,79	1.252	PMT08430	MS1132PKG	1,12	2.46

NOTE: For SLS cartridges and WMT inserts, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.





KM QUICK CHANGE

MCLN 95°

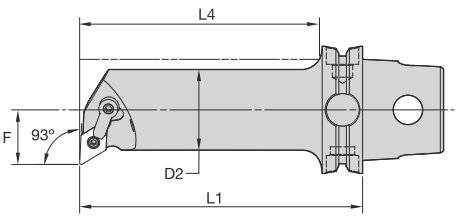
order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
2265329	**KM63TSS25FMCLNR12**	25	.98	32	1.26	17	.669	50	1.99	80	3.150	CN..120408/CN..432	0,90	1.99
2265327	**KM63TSS25KMCLNR12**	25	.98	32	1.26	17	.669	88	3.47	125	4.921	CN..120408/CN..432	1,14	2.52
2265343	**KM63TSS32GMCLNR12**	32	1.26	40	1.57	22	.866	62	2.44	90	3.543	CN..120408/CN..432	1,05	2.32
2265331	**KM63TSS32LMCLNR12**	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	CN..120408/CN..432	1,37	3.01
2265347	**KM63TSS40HMCLNR12**	40	1.57	50	1.97	27	1.063	77	3.04	100	3.937	CN..120408/CN..432	1,30	2.87
2265345	**KM63TSS40LMCLNR12**	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	CN..120408/CN..432	1,69	3.72
2265351	**KM63TSS50KMCLNR12**	50	1.97	63	2.48	35	1.378	104	4.11	125	4.921	CN..120408/CN..432	1,99	4.40
2265349	**KM63TSS50PMCLNR12**	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	CN..120408/CN..432	2,68	5.91
	left hand													
2265330	**KM63TSS25FMCLNL12**	25	.98	32	1.26	17	.669	50	1.99	80	3.150	CN..120408/CN..432	0,90	1.99
2265328	**KM63TSS25KMCLNL12**	25	.98	32	1.26	17	.669	88	3.47	125	4.921	CN..120408/CN..432	1,14	2.52
2265344	**KM63TSS32GMCLNL12**	32	1.26	40	1.57	22	.866	62	2.44	90	3.543	CN..120408/CN..432	1,06	2.34
2265332	**KM63TSS32LMCLNL12**	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	CN..120408/CN..432	1,37	3.01
2265348	**KM63TSS40HMCLNL12**	40	1.57	50	1.97	27	1.063	77	3.04	100	3.937	CN..120408/CN..432	1,33	2.93
2265346	**KM63TSS40LMCLNL12**	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	CN..120408/CN..432	1,69	3.72
2265352	**KM63TSS50KMCLNL12**	50	1.97	63	2.48	35	1.378	104	4.11	125	4.921	CN..120408/CN..432	2,01	4.43
2265350	**KM63TSS50PMCLNL12**	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	CN..120408/CN..432	2,68	5.91

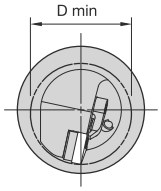
(continued)

(MCLN 95° continued)

Spare Parts

catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM63TSS25FMCLNR12	–	KLM43	CKM20LP	STCM11
KM63TSS25KMCLNR12	–	KLM43	CKM20LP	STCM11
KM63TSS32GMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS32LMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS40HMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS40LMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS50KMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS50PMCLNR12	ICSN432	KLM46	CKM20LP	STCM11
left hand				
KM63TSS25FMCLNL12	–	KLM43	CKM20LP	STCM11
KM63TSS25KMCLNL12	–	KLM43	CKM20LP	STCM11
KM63TSS32GMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS32LMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS40HMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS40LMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS50KMCLNL12	ICSN432	KLM46	CKM20LP	STCM11
KM63TSS50PMCLNL12	ICSN432	KLM46	CKM20LP	STCM11





KM QUICK CHANGE

MDUN 93°

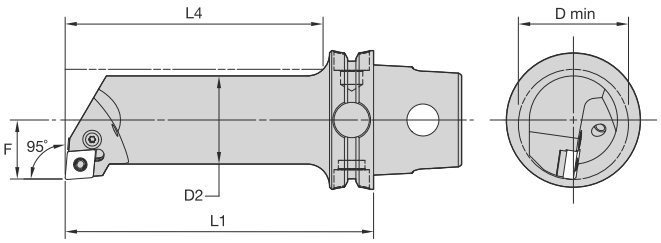
order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
2265355	**KM63TSS25FMDUNR15**	25	.98	32	1.26	17	.669	45	1.99	80	3.150	DN..150408/DN..432	0,95	2.09
2265353	**KM63TSS25KMDUNR15**	25	.98	32	1.26	17	.669	88	3.47	125	4.921	DN..150408/DN..432	1,13	2.50
2265359	**KM63TSS32GMDUNR15**	32	1.26	40	1.57	22	.866	62	2.44	90	3.543	DN..150408/DN..432	1,05	2.30
2265357	**KM63TSS32LMDUNR15**	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	DN..150408/DN..432	1,36	2.99
2265363	**KM63TSS40HMDUNR15**	40	1.57	50	1.97	27	1.063	77	3.04	100	3.937	DN..150408/DN..432	1,31	2.89
2265361	**KM63TSS40LMDUNR15**	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	DN..150408/DN..432	1,69	3.73
2265367	**KM63TSS50KMDUNR15**	50	1.97	63	2.48	35	1.378	104	4.11	125	4.921	DN..150408/DN..432	1,97	4.34
2265365	**KM63TSS50PMDUNR15**	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	DN..150408/DN..432	2,63	5.80
	left hand													
2265356	**KM63TSS25FMDUNL15**	25	.98	32	1.26	17	.669	45	1.99	80	3.150	DN..150408/DN..432	0,94	2.08
2265354	**KM63TSS25KMDUNL15**	25	.98	32	1.26	17	.669	88	3.47	125	4.921	DN..150408/DN..432	1,13	2.50
2265360	**KM63TSS32GMDUNL15**	32	1.26	40	1.57	22	.866	62	2.44	90	3.543	DN..150408/DN..432	1,05	2.30
2265358	**KM63TSS32LMDUNL15**	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	DN..150408/DN..432	1,36	2.99
2265364	**KM63TSS40HMDUNL15**	40	1.57	50	1.97	27	1.063	77	3.04	100	3.937	DN..150408/DN..432	1,32	2.90
2265362	**KM63TSS40LMDUNL15**	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	DN..150408/DN..432	1,70	3.74
2265368	**KM63TSS50KMDUNL15**	50	1.97	63	2.48	35	1.378	104	4.11	125	4.921	DN..150408/DN..432	1,97	4.34
2265366	**KM63TSS50PMDUNL15**	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	DN..150408/DN..432	2,63	5.80

(continued)

(MDUN 93° continued)

Spare Parts

catalog number	shim	lock pin	clamp	clamp screw
right hand				
KM63TSS25FMDUNR15	–	KLM43	CKM20LP	STCM11
KM63TSS25KMDUNR15	–	KLM43	CKM20LP	STCM11
KM63TSS32GMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS32LMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS40HMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS40LMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS50KMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS50PMDUNR15	IDSN432	KLM46	CKM23LP	STCM11
left hand				
KM63TSS25FMDUNL15	–	KLM43	CKM20LP	STCM11
KM63TSS25KMDUNL15	–	KLM43	CKM20LP	STCM11
KM63TSS32GMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS32LMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS40HMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS40LMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS50KMDUNL15	IDSN432	KLM46	CKM23LP	STCM11
KM63TSS50PMDUNL15	IDSN432	KLM46	CKM23LP	STCM11



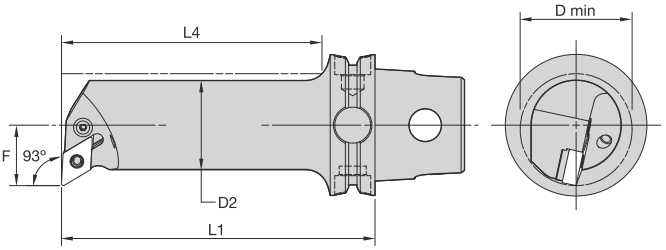
KM QUICK CHANGE

PCLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
2407961	**KM63TSS25KPDUNR11**	25	.98	32	1.26	17	.669	88	3.47	125	4.921	CN..120408/CN..432	1,11	2.45
2407963	**KM63TSS32LPCLNR12**	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	CN..120408/CN..432	1,36	3.00
2407965	**KM63TSS40LPCLNR12**	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	CN..120408/CN..432	1,68	3.70
2407967	**KM63TSS50PPCLNR12**	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	CN..120408/CN..432	2,67	5.89
	left hand													
2407962	**KM63TSS25KPDUNL11**	25	.98	32	1.26	17	.669	88	3.47	125	4.921	CN..120408/CN..432	1,13	2.50
2407964	**KM63TSS32LPCLNL12**	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	CN..120408/CN..432	1,36	3.00
2407966	**KM63TSS32LPDUNR15**	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	CN..120408/CN..432	1,68	3.70
2407968	**KM63TSS32LPDUNL15**	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	CN..120408/CN..432	2,67	5.89

Spare Parts

catalog number	shim	lever screw	shim pin	toggle lever	punch
right hand					
KM63TSS32LPCLNR12	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**
KM63TSS50PPCLNR12	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**
KM63TSS25KPDUNR11	**–**	**514.122**	**–**	**511.022**	**–**
KM63TSS40LPCLNR12	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**
left hand					
KM63TSS32LPCLNL12	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**
KM63TSS25KPDUNL11	**–**	**514.122**	**–**	**511.022**	**–**
KM63TSS32LPDUNR15	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**
KM63TSS32LPDUNL15	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**



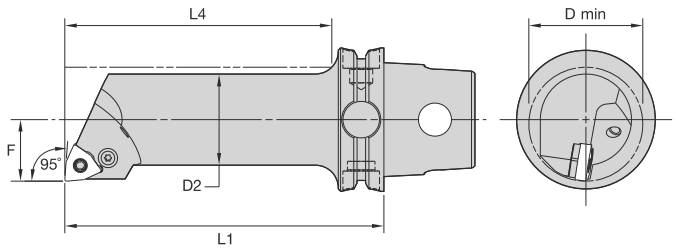
KM QUICK CHANGE

PDUN 93°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
2407985	**KM63TSS25KPDUNR11**	25	.98	32	1.26	17	.669	89	3.49	125	4.921	DN..110408/DN..332	1,06	2.340
2407986	**KM63TSS32LPDUNR15**	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	DN..150608/DN..442	1,35	2.980
2407988	**KM63TSS40LPDUNR15**	40	1.57	50	1.97	27	1.063	117	4.62	140	5.512	DN..150608/DN..442	1,70	3.750
2407990	**KM63TSS50PPDUNR15**	50	1.97	63	2.48	35	1.378	149	5.87	170	6.693	DN..150608/DN..442	2,73	6.030
	left hand													
2257147	**KM63TSS25KPDUNL11**	25	.98	32	1.26	17	.669	89	3.49	125	4.921	DN..110408/DN..332	1,06	2.340
2407987	**KM63TSS32LPDUNL15**	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	DN..150608/DN..442	1,35	2.970
2407989	**KM63TSS40LPDUNL15**	40	1.57	50	1.97	27	1.063	113	4.46	140	5.512	DN..150608/DN..442	1,70	3.750
2407991	**KM63TSS50PPDUNL15**	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	DN..150608/DN..442	2,73	6.030

Spare Parts

catalog number	shim	lever screw	shim pin	toggle lever	punch
right hand					
KM63TSS25KPDUNR11	–	**514.112**	–	**511.015**	–
KM63TSS32LPDUNR15	**512.153**	**514.128**	**513.023**	**511.024**	**515.018**
KM63TSS40LPDUNR15	**512.153**	**514.128**	**513.023**	**511.024**	**515.018**
KM63TSS50PPDUNR15	**512.153**	**514.128**	**513.023**	**511.024**	**515.018**
left hand					
KM63TSS25KPDUNL11	–	**514.112**	–	**511.015**	–
KM63TSS32LPDUNL15	**512.153**	**514.128**	**513.023**	**511.024**	**515.018**
KM63TSS40LPDUNL15	**512.153**	**514.128**	**513.023**	**511.024**	**515.018**
KM63TSS50PPDUNL15	**512.153**	**514.128**	**513.023**	**511.024**	**515.018**



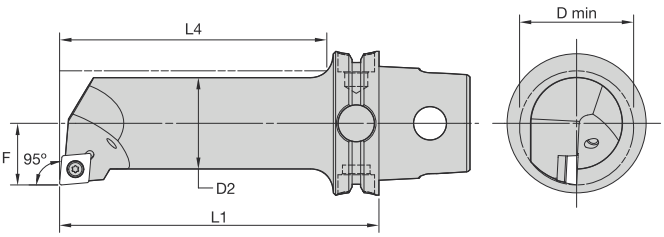
KM QUICK CHANGE

PWLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
2408039	KM63TSS25KPWLNR08	25	.98	32	1.26	17	.669	88	3.47	125	4.921	WN..080408/WN..432	1,14	2.52
2408041	KM63TSS32LPWLNR08	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	WN..080408/WN..432	1,36	2.99
2408043	KM63TSS40LPWLNR08	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	WN..080408/WN..432	1,67	3.67
2408045	KM63TSS50PPWLNR08	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	WN..080408/WN..432	2,62	5.77
	left hand													
2408040	KM63TSS25KPWLNL08	25	.98	32	1.26	17	.669	88	3.47	125	4.921	WN..080408/WN..432	1,13	2.48
2408042	KM63TSS32LPWLNL08	32	1.26	40	1.57	22	.866	112	4.41	140	5.512	WN..080408/WN..432	1,36	2.99
2408044	KM63TSS40LPWLNL08	40	1.57	50	1.97	27	1.063	117	4.61	140	5.512	WN..080408/WN..432	1,67	3.67
2408046	KM63TSS50PPWLNL08	50	1.97	63	2.48	35	1.378	149	5.88	170	6.693	WN..080408/WN..432	2,61	5.75

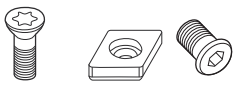
Spare Parts

catalog number	shim	lever lock screw	shim pin	toggle lever	punch
right hand					
KM63TSS25KPWLNR08	–	514.122	–	511.022	–
KM63TSS32LPWLNR08	512.135	514.123	513.023	511.023	515.018
KM63TSS40LPWLNR08	512.135	514.123	513.023	511.023	515.018
KM63TSS50PPWLNR08	512.135	514.123	513.023	511.023	515.018
left hand					
KM63TSS25KPWLNL08	–	514.122	–	511.022	–
KM63TSS32LPWLNL08	512.135	514.123	513.023	511.023	515.018
KM63TSS40LPWLNL08	512.135	514.123	513.023	511.023	515.018
KM63TSS50PPWLNL08	512.135	514.123	513.023	511.023	515.018

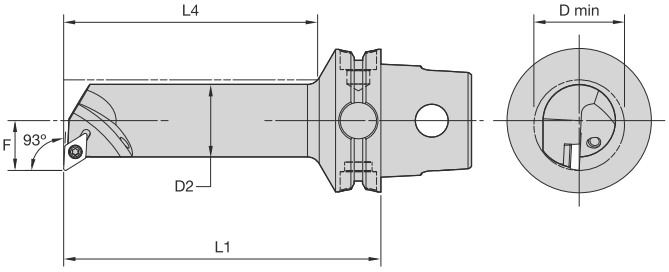


KM QUICK CHANGE

SCLC 95°

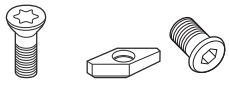


order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand																
2414908	KM63TSS40LSCLCR12	40	1.57	50	1.97	27	1.063	117	4.612	140	5.512	CC..120408/CC..432	MS1158	SKCP453	SRS4	1,71	3.76
	left hand																
2414909	KM63TSS40LSCLCL12	40	1.57	50	1.97	27	1.063	117	4.612	140	5.512	CC..120408/CC..432	MS1158	SKCP453	SRS4	1,70	3.76

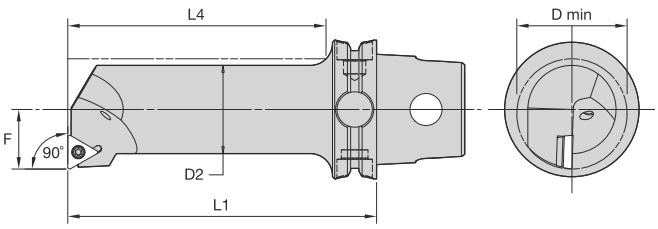


KM QUICK CHANGE

SDUC 93°



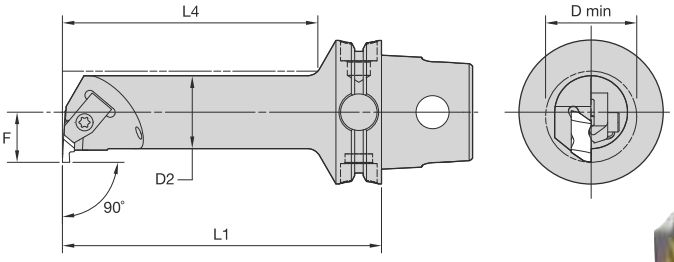
order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand																
2414894	KM63TSS32LSDUCR11	32	1.26	40	1.57	22	.866	112	4.418	140	5.512	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	1,35	2.98
	left hand																
2414895	KM63TSS32LSDUCL11	32	1.26	40	1.57	22	.866	112	4.418	140	5.512	DC..11T308/DC..3252	MS1156	SKDP343	SRS3	1,35	2.98



KM QUICK CHANGE

STFC 90°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	insert screw	shim	shim screw	kg	lbs
	right hand																
2414901	KM63TSS40LSTFCR16	40	1.57	50	1.97	27	1.063	117	4.612	140	5.512	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,71	3.77
	left hand																
2414902	KM63TSS40LSTFCL16	40	1.57	50	1.97	27	1.063	117	4.612	140	5.512	TC..16T308/TC..3252	MS1156	SKTP343	SRS3	1,71	3.77



KM QUICK CHANGE

NE 90° • Steel

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
2265369	KM63TSS32LNER3	32	1.26	40	1.57	22	.866	112	4.412	140	5.512	NG3L	1,34	2.95
	left hand													
2265370	KM63TSS32LNEL3	32	1.26	40	1.57	22	.866	112	4.412	140	5.512	NG3R	1,34	2.95

Spare Parts

catalog number	clamp	clamp screw
right hand		
KM63TSS32LNER3	CM73	MS1489
left hand		
KM63TSS32LNEL3	CM72	MS1489

Common Challenges in Internal Machining

Internal machining operations are very sensitive to chatter and vibrations.

Common challenges include:

- Unfavorable geometric circumstances.
- Machining at extended length-to-diameter ratios.

Additionally, internal machining offers little space for a stable tool and has restrictions for coolant supply and chip removal. These factors can lead to chattering, poor surface finish, noisy vibrations, and workpieces that are out of tolerance. WIDIA™ solves these problems with our portfolio of Tunable Boring Bars.

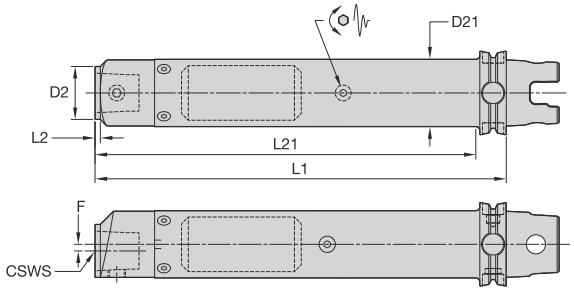
WIDIA Tunable Tooling

WIDIA Tunable Boring Bars are manufactured with an internal dampening package designed to eliminate chatter in deep-hole boring applications. We manufacture standard tunable bars and have extensive capabilities to design and produce almost any style of tunable product, including boring bars, extensions, holders, rotating adapters, and modular sections.

Advantages of WIDIA Tunable Tooling

The features of the WIDIA proprietary Tunable Boring Bar system provide significant advantages:

- **Optimal rigidity**
  Improved surface quality and close tolerances due to vibration-free machining.
- **Increased productivity**
  Larger depth of cut and better chip removal by up to 10:1 (steel) and 15:1 (carbide) length-to-diameter ratio.
- **Machining without chatter or vibration**
  Less noise exposure and improved machining results.
- **Tunable damping mechanism**
  Bar can be tuned on the machine, and tool can be adjusted to account for different vibration behavior.

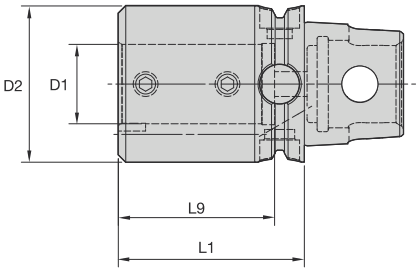


KM QUICK CHANGE

■ TTB • KM Tunable Bar • KM™

order number	catalog number	CSWS system size	D2 mm	D2 in	D21 mm	D21 in	F mm	F in	L1 mm	L1 in	L2 mm	L2 in	L21 mm	L21 in
3901267	**KM63TSD40TTB15KM40**	KM40	40,00	1.575	63,50	2.500	11,75	.463	386,92	15.233	4,00	.157	386,92	15.233
3901269	**KM63TSD32TTB16KM40**	KM40	40,00	1.575	50,00	1.969	5,00	.197	412,32	16.233	4,00	.157	392,32	15.446
3901268	**KM63TSD28TTB14KM40**	KM40	40,00	1.575	44,45	1.750	0,00	.000	361,52	14.233	4,00	.157	341,52	13.446
3901270	**KM63TSD40TTB20KM40**	KM40	40,00	1.575	63,50	2.500	11,75	.463	513,92	20.233	4,00	.157	513,92	20.233
3901266	**KM63TSD32TTB12KM40**	KM40	40,00	1.575	50,00	1.969	5,00	.197	310,71	12.233	4,00	.157	290,71	11.445
3901265	**KM63TSD24TTB9KM40**	KM40	40,00	1.575	38,10	1.500	0,00	.000	234,55	9.234	214,55	8.447	—	—

NOTE: For technical information, refer to page K66.



KM QUICK CHANGE

BA • Boring Bar Adapter • Internal and External Coolant • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm	kg
2269898	**KM63TSBA10055M**	10	40	55	48	**MS1211**	4mm	15	0,98
2269899	**KM63TSBA12060M**	12	40	60	52	**MS1211**	4mm	15	1,01
2269900	**KM63TSBA16065M**	16	40	65	55	**MS1212**	5mm	25	1,02
2269901	**KM63TSBA20070M**	20	40	70	58	**MS1212**	5mm	25	0,99
2269902	**KM63TSBA25070M**	25	50	70	58	**MS1212**	5mm	25	1,17
2269903	**KM63TSBA32075M**	32	63	75	63	**MS1205**	5mm	25	1,60
2255549	**KM63TSBA40105M**	40	70	105	75	**MS1935**	6mm	45	2,43

BA • Boring Bar Adapter • Internal and External Coolant • Inch

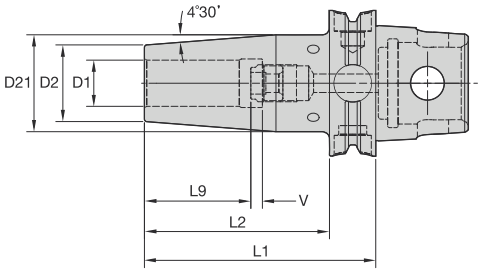
order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.	lbs
2269893	**KM63TSBA10256**	5/8	1.58	2.559	2.17	**S862**	3/16	25	2.22
2269895	**KM63TSBA16276**	1	1.97	2.756	2.28	**S862**	3/16	25	2.54
2269891	**KM63TSBA06217**	3/8	1.58	2.165	1.89	**S843**	1/8	8	2.15
2269892	**KM63TSBA08236**	1/2	1.58	2.362	2.05	**S852**	5/32	15	2.21
2269894	**KM63TSBA12276**	3/4	1.58	2.756	2.28	**S862**	3/16	25	2.23
2269896	**KM63TSBA20295**	1 1/4	2.48	2.953	2.48	**S863**	3/16	25	3.41
2269897	**KM63TSBA24413**	1 1/2	2.76	4.134	2.95	**S884**	1/4	60	5.45

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.

KM63TS™ Shank Tools

Shrink Fit Toolholders General Purpose (GP)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

KM™ QUICK CHANGE

■ HPV TT • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3869194	KM63TSHPVTT06080M	6	21	27	80	60	26	10	TTSS05014M	2,5mm	0,83
3869195	KM63TSHPVTT08080M	8	21	27	80	60	26	10	TTSS06014M	3mm	0,83
3869196	KM63TSHPVTT10090M	10	24	32	90	70	31	10	TTSS08014M	4mm	0,95
3869197	KM63TSHPVTT12090M	12	24	32	90	70	36	10	TTSS10014M	5mm	0,93
3869198	KM63TSHPVTT14100M	14	27	34	100	80	36	10	TTSS10014M	5mm	1,05
3869199	KM63TSHPVTT16100M	16	27	34	100	80	39	10	TTSS12014M	6mm	1,03
3869200	KM63TSHPVTT18100M	18	33	42	100	80	39	10	TTSS12014M	6mm	1,24
3869201	KM63TSHPVTT20100M	20	33	42	100	80	41	10	TTSS16014M	8mm	1,21
3869202	KM63TSHPVTT25120M	25	44	53	120	100	47	10	TTSS16014M	8mm	1,92
3869203	KM63TSHPVTT32120M	32	44	53	120	100	51	10	TTSS16014M	8mm	1,76

(continued)

(HPV TT continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameter	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

HPV TT • Inch

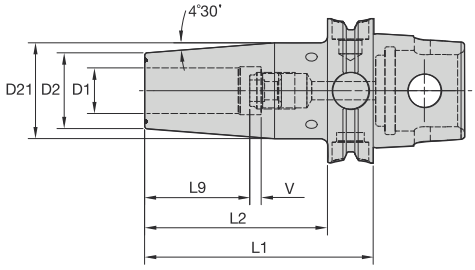
order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3869253	**KM63TSHPVTT025315**	1/4	.827	1.059	3.150	2.362	1.024	.394	**TTSS05014M**	2,5mm	1.84
3869254	**KM63TSHPVTT031315**	5/16	.827	1.059	3.150	2.362	1.024	.394	**TTSS06014M**	3mm	1.82
3869255	**KM63TSHPVTT038335**	3/8	.945	1.256	3.347	2.559	1.221	.394	**TTSS08014M**	4mm	2.02
3869256	**KM63TSHPVTT044354**	7/16	.945	1.256	3.543	2.756	1.417	.394	**TTSS10014M**	5mm	2.06
3869257	**KM63TSHPVTT050354**	1/2	.945	1.256	3.543	2.756	1.417	.394	**TTSS10014M**	5mm	2.04
3869258	**KM63TSHPVTT056354**	9/16	1.063	1.335	3.543	2.756	1.417	.394	**TTSS10014M**	5mm	2.16
3869259	**KM63TSHPVTT062374**	5/8	1.063	1.335	3.740	2.953	1.535	.394	**TTSS12014M**	6mm	2.19
3869260	**KM63TSHPVTT068374**	11/16	1.299	1.650	3.740	2.953	1.535	.394	**TTSS12014M**	6mm	2.63
3869261	**KM63TSHPVTT075394**	3/4	1.299	1.650	3.937	3.150	1.614	.394	**TTSS16014M**	8mm	2.68
3869262	**KM63TSHPVTT088394**	7/8	1.299	1.650	3.937	3.150	1.614	.394	**TTSS16014M**	8mm	2.59
3869263	**KM63TSHPVTT100453**	1	1.732	2.083	4.528	3.740	1.850	.394	**TTSS16014M**	8mm	4.03
3869264	**KM63TSHPVTT125472**	1 1/4	1.732	2.083	4.724	3.937	2.008	.394	**TTSS16014M**	8mm	3.88

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available.
Order number is MS1276PKG and must be ordered separately.

KM63TS™ Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000 -0,016

KM QUICK CHANGE

■ HPV TT HT • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3869209	KM63TSHPVTTHT12090M	12	24	1	90	70	36	10	TTSS10014M	5mm	0,93
3869210	KM63TSHPVTTHT14100M	14	27	1	100	80	36	10	TTSS10014M	5mm	1,05
3869211	KM63TSHPVTTHT16100M	16	27	1	100	80	39	10	TTSS12014M	6mm	1,03
3869212	KM63TSHPVTTHT18100M	18	33	2	100	80	39	10	TTSS12014M	6mm	1,24
3869213	KM63TSHPVTTHT20100M	20	33	2	100	80	41	10	TTSS16014M	8mm	1,21
3869214	KM63TSHPVTTHT25120M	25	44	2	120	100	47	10	TTSS16014M	8mm	1,92
3869215	KM63TSHPVTTHT32120M	32	44	2	120	100	51	10	TTSS16014M	8mm	1,76

(continued)

(HPV TT HT continued)

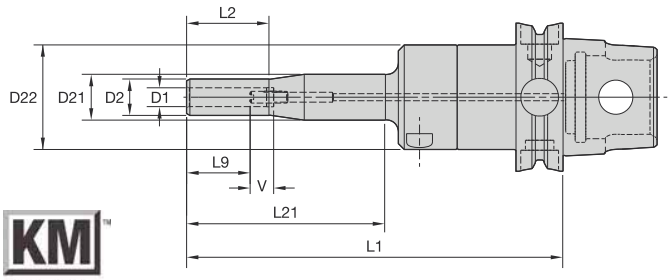
Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameter	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

HPV TT HT • Inch

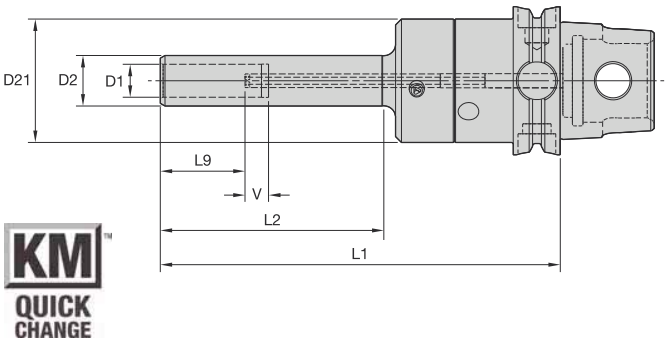
order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3869234	**KM63TSHPVTTHT050354**	1/2	.945	1.256	3.543	2.756	1.417	.394	**TTSS10014M**	5mm	2.04
3869235	**KM63TSHPVTTHT056354**	9/16	1.063	1.335	3.543	2.756	1.417	.394	**TTSS10014M**	5mm	2.16
3869236	**KM63TSHPVTTHT062374**	5/8	1.063	1.335	3.740	2.953	1.535	.394	**TTSS12014M**	6mm	2.19
3869237	**KM63TSHPVTTHT068374**	11/16	1.299	1.650	3.740	2.953	1.535	.394	**TTSS12014M**	6mm	2.63
3869238	**KM63TSHPVTTHT075394**	3/4	1.299	1.650	3.937	3.150	1.614	.394	**TTSS16014M**	8mm	2.68
3869239	**KM63TSHPVTTHT088394**	7/8	1.299	1.650	3.937	3.150	1.614	.394	**TTSS16014M**	8mm	2.59
3869240	**KM63TSHPVTTHT100453**	1	1.732	2.083	4.528	3.740	1.850	.394	**TTSS16014M**	8mm	4.03
3869241	**KM63TSHPVTTHT125472**	1 1/4	1.732	2.083	4.724	3.937	2.008	.394	**TTSS16014M**	8mm	3.88

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available.
Order number is MS1276PKG and must be ordered separately.



HCSLT • Metric

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
3055503	KM63TSHCSLT06160M	6	14	20	44	160	35	85	27	10	170.135	5 mm	170.002	2.5 mm	1,36
3055504	KM63TSHCSLT08160M	8	16	20	44	160	35	85	27	10	170.135	5 mm	170.002	2.5 mm	1,37
3055505	KM63TSHCSLT10160M	10	18	44	—	160	85	140	31	10	170.135	5 mm	170.003	3 mm	1,35

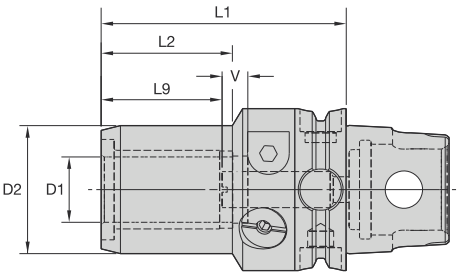


HCSL • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
3055506	KM63TSHCSL12170M	12	20	44	170	95	36	10	170.135	5mm	170.002	2,5mm	1,40
3055507	KM63TSHCSL14170M	14	22	52	170	95	36	10	170.135	5mm	170.002	2,5mm	1,66
3055508	KM63TSHCSL16170M	16	24	52	170	95	39	10	170.135	5mm	170.002	2,5mm	1,67
3055509	KM63TSHCSL18170M	18	26	52	170	95	39	10	170.135	5mm	170.002	2,5mm	1,71
3055510	KM63TSHCSL20170M	20	28	52	170	95	41	10	170.135	5mm	170.002	2,5mm	1,75

NOTE: Do not overtorque clamp screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Reduction sleeves are available and must be ordered separately; see page I2.

KM QUICK CHANGE



HC • Metric

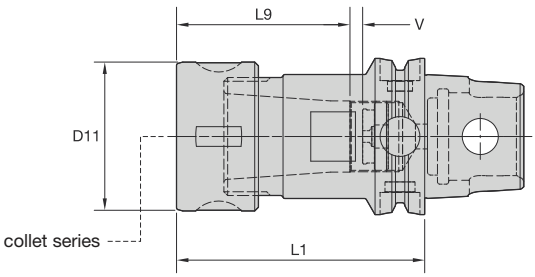
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
2388650	KM63TSHC06070M	6	26	70	33	27	10	170.135	5mm	170.002	2,5mm	1,08
2388651	KM63TSHC08070M	8	28	70	33	27	10	170.135	5mm	170.002	2,5mm	1,10
2388652	KM63TSHC10075M	10	30	75	36	31	10	170.135	5mm	170.002	2,5mm	1,17
2388653	KM63TSHC12080M	12	32	80	41	36	10	170.135	5mm	170.002	2,5mm	1,21
2388654	KM63TSHC14080M	14	34	80	43	36	10	170.135	5mm	170.003	2,5mm	1,18
2388655	KM63TSHC16080M	16	38	80	48	39	10	170.135	5mm	170.003	3mm	1,17
2388656	KM63TSHC18080M	18	40	80	47	39	10	170.135	5mm	170.003	3mm	1,19
2388657	KM63TSHC20085M	20	42	85	48	41	10	170.135	5mm	170.003	3mm	1,32
2388658	KM63TSHC25095M	25	50	95	51	47	10	170.136	6mm	170.004	4mm	1,64
2388659	KM63TSHC32100M	32	60	100	59	51	10	170.136	6mm	170.004	4mm	1,92

HC • Inch

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	lbs
2388643	KM63TSHC025288	1/4	1.01	2.875	1.30	1.06	.39	170.135	5mm	170.002	2,5mm	2.53
2388644	KM63TSHC038300	3/8	1.17	3.000	1.42	1.22	.39	170.135	5mm	170.002	2,5mm	2.64
2388645	KM63TSHC050325	1/2	1.24	3.250	1.61	1.42	.39	170.135	5mm	170.002	2,5mm	2.79
2388646	KM63TSHC062325	5/8	1.48	3.250	1.87	1.54	.39	170.135	5mm	170.003	3mm	2.71
2388647	KM63TSHC075338	3/4	1.64	3.375	1.89	1.61	.39	170.135	5mm	170.003	3mm	2.97
2388648	KM63TSHC100375	1	1.96	3.750	2.01	1.85	.39	170.136	6mm	170.004	4mm	3.61
2388649	KM63TSHC125400	1 1/4	2.35	4.000	2.32	2.01	.39	170.136	6mm	170.004	4mm	4.33

NOTE: Do not overtorque clamp screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I2.

- Tremendous Grip (3:1 advantage).



KM QUICK CHANGE

TG collet series	Collet Capacity mm min	mm max	inch min	inch max
TG100	2,6	25,5	5/64	1

Collet Chuck • Round Nut

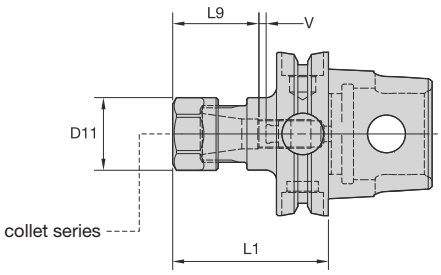
order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
2384711	KM63TSTG100100M	TG100	60	2.36	100	3.937	69,0	2.72	9	.36	1,54	3.40

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw
KM63TSTG100100M	LNA100M	HSW58M	203	150	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.

• Grip (2:1 advantage).



KM QUICK CHANGE

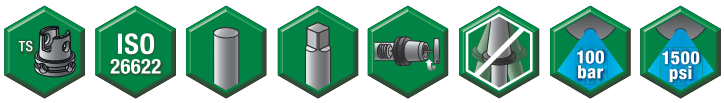
	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41

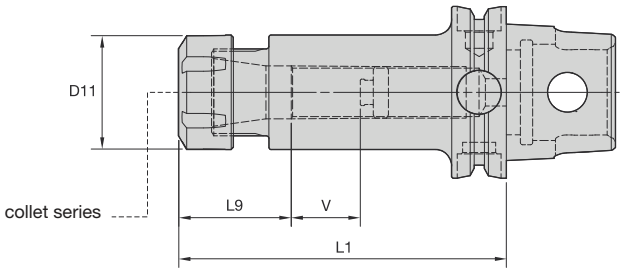
Collet Chuck • Hex Nut

			D11		L1		L9		V					counterbore collet torque		straight collet torque			
order number	catalog number	collet series	mm	in	mm	in	mm	in	mm	in	locknut	OEW	stop screw	Nm	ft. lbs.	Nm	ft. lbs.	kg	lbs
2255039	KM63TSER16060M	ER16	28	1.10	60	2.362	32	1.26	13	.51	LNHSER16M	OEW25M	SS044038G	40	30	56	42	0,73	1.61
2255041	KM63TSER16120M	ER16	28	1.10	120	4.724	32	1.26	48	1.89	LNHSER16M	OEW25M	SS044038G	40	30	56	42	0,98	2.17

(continued)

(Collet Chuck continued)





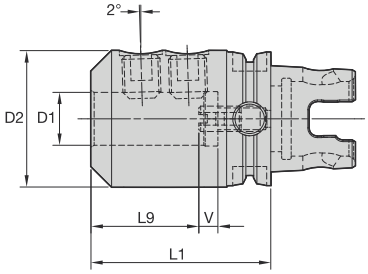
KM QUICK CHANGE

ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

■ Collet Chuck • Round Nut

order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	locknut	wrench	stop screw	Nm	ft. lbs.	kg	lbs
2255042	**KM63TSER25065M**	ER25	42	1.65	65	2.559	40,0	1.57	—	—	**LNSER25M**	**ER25WM**	**—**	104	77	0,88	1.93
2255053	**KM63TSER25120M**	ER25	42	1.65	120	4.724	40,0	1.57	47	1.85	**LNSER25M**	**ER25WM**	**SS075041G**	104	77	1,37	3.03
2255551	**KM63TSER32065M**	ER32	50	1.97	65	2.559	46,0	1.81	—	—	**LNSER32M**	**ER32WM**	**—**	136	100	0,94	2.08
2253812	**KM63TSER32120M**	ER32	50	1.97	120	4.724	46,0	1.81	34	1.34	**LNSER32M**	**ER32WM**	**SS094041G**	136	100	1,64	3.62
2255056	**KM63TSER40065M**	ER40	63	2.48	65	2.559	52,0	2.05	—	—	**LNSER40M**	**ER40WM**	**—**	176	130	1,04	2.30

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

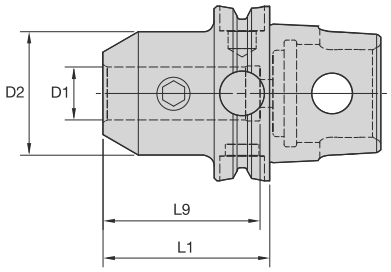


KM QUICK CHANGE

WN • Whistle Notch Adapter

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
2253809	**KM63TSWN20080M**	20	52	80	45	10	**SS03M026**	8mm	95	**571.063**	5mm	1,41
2253810	**KM63TSWN25085M**	25	65	85	50	10	**SS03M027**	10mm	135	**571.069**	6mm	1,95
2253905	**KM63TSWN32095M**	32	72	95	54	10	**SS03M029**	10mm	160	**571.069**	6mm	2,46

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.



KM QUICK CHANGE

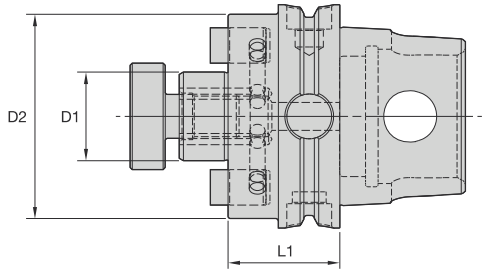
EM • Metric

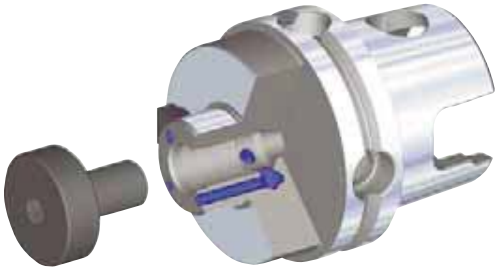
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
2253910	KM63TSEM12055M	12	42	55	50	SS03M023	6mm	35	0,91
2253676	KM63TSEM16060M	16	48	60	53	SS03M025	6mm	50	1,05
2269911	KM63TSEM20060M	20	52	60	55	SS03M026	8mm	95	1,10
2258495	KM63TSEM25080M	25	65	80	60	SS03M027	10mm	135	1,82
2255038	KM63TSEM32090M	32	72	90	65	SS03M029	10mm	160	2,31
2269912	KM63TSEM40095M	40	80	95	75	SS03M029	10mm	160	2,74

EM • Inch

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
2269904	KM63TSEM050216	1/2	1.38	2.165	1.97	ELS044038PKG	7/32	20	1.76
2269905	KM63TSEM062236	5/8	1.63	2.362	2.09	ELS056050PKG	1/4	40	2.04
2269906	KM63TSEM075236	3/4	1.75	2.362	2.22	ELS062050PKG	5/16	70	2.07
2269907	KM63TSEM088236	7/8	2.00	2.362	2.22	ELS062050PKG	5/16	70	2.28
2269908	KM63TSEM100315	1	2.00	3.150	2.46	ELS075056PKG	3/8	110	2.80
2269909	KM63TSEM125354	1 1/4	2.50	3.543	2.51	ELS075062PKG	3/8	110	4.13
2269910	KM63TSEM150374	1 1/2	2.75	3.740	2.93	ELS075069PKG	3/8	110	4.68

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.

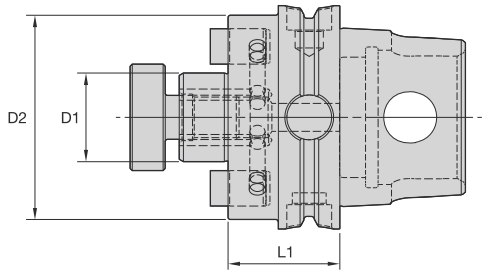


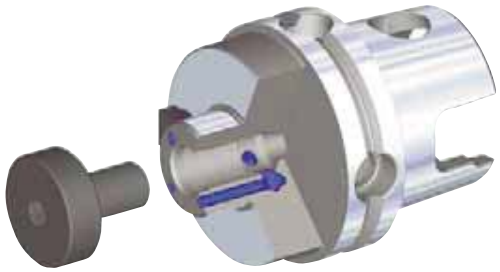


KM QUICK CHANGE

SMC • Metric

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3950894	KM63TSSMC22028M	22	49	28	MS1234	KDK22M	8mm	0,81
3950895	KM63TSSMC27032M	27	60	32	KLSS27M	KDK27M	10mm	1,02
3950896	KM63TSSMC32040M	32	78	40	KLSS32M	KDK32M	14mm	1,56
3950897	KM63TSSMC40045M	40	89	45	KLSS40M	KDK40M	17mm	2,10

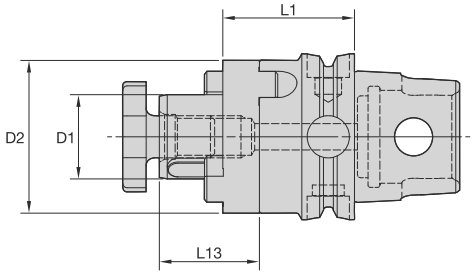




SMC • Inch

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3950864	KM63TSSMC050102	1/2	1.44	1.024	KLS05	KDK04	3/16	1.53
3950866	KM63TSSM2C075126	3/4	1.46	1.260	KLS07	—	1/4	1.77
3950865	KM63TSSMC075126	3/4	1.75	1.260	KLS07	KDK05	1/4	1.84
3950868	KM63TSSM2C100126	1	2.19	1.260	KLS10	KDK06	5/16	2.10
3950867	KM63TSSMC100126	1	2.75	1.260	KLS10	KDK06	5/16	2.35
3950869	KM63TSSMC125157	1 1/4	2.88	1.575	KLS12	KDK08	5/16	3.19
3950870	KM63TSSMC150177	1 1/2	3.81	1.772	KLS15	KDK10	3/8	4.86

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.

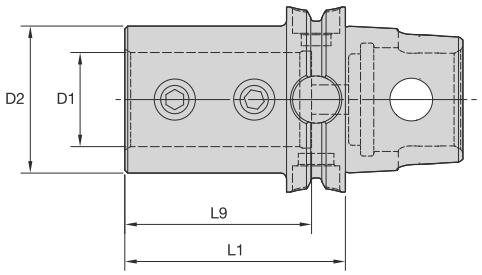


KM QUICK CHANGE

CS • Metric

order number	catalog number	D1	D2	L1	L13	lock screw	combi driver	combi drive key	kg
2384735	KM63TSCS27040M	27	48	40	21	KLS27MPKG	CDR27M	CDK27M	1,03
2384736	KM63TSCS32050M	32	58	50	24	KLS32M	CDR32M	CDK32M	1,43
2384737	KM63TSCS40050M	40	70	50	27	KLS40M	CDR40M	CDK40M	1,87

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and key.
Lock screw wrench not included.

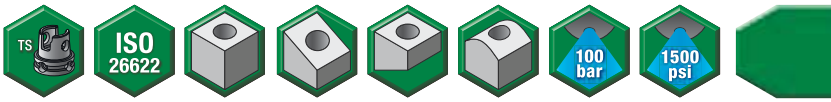


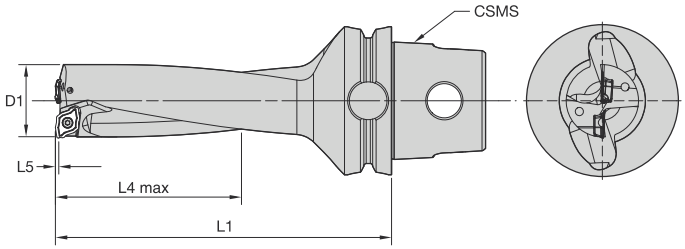
KM QUICK CHANGE

DAT • Metric

order number	catalog number	D1	D2	L1	L9	cone point socket set screw	wrench size clamp screw	Nm	clamp screw	wrench size clamp screw	Nm	kg
3959949	KM63TSDAT2575M	25	45	75	60	12166903700	6mm	40	12166903900	6mm	40	1,06
3959950	KM63TSDAT32075M	32	50	75	64	12166903700	6mm	40	12166903900	6mm	40	1,06
3959951	KM63TSDAT40095M	40	60	95	74	12166903800	8mm	50	12166904000	8mm	50	1,53

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamping screw.
Clamp screw wrench is not included.
Cone point screw to be tightened first.





3 x D • Metric

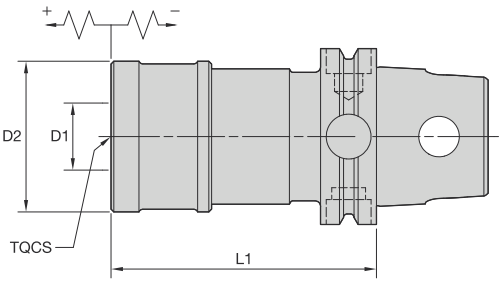
order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898417	**KM63TSTCP350R3M**	KM63TS	35,0	154,0	105,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898418	**KM63TSTCP360R3M**	KM63TS	36,0	157,0	108,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898419	**KM63TSTCP370R3M**	KM63TS	37,0	161,0	111,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898420	**KM63TSTCP380R3M**	KM63TS	38,0	165,0	114,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898421	**KM63TSTCP390R3M**	KM63TS	39,0	169,0	117,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898423	**KM63TSTCP400R3M**	KM63TS	40,0	172,0	120,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898424	**KM63TSTCP410R3M**	KM63TS	41,0	176,0	123,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898425	**KM63TSTCP420R3M**	KM63TS	42,0	180,0	126,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898426	**KM63TSTCP430R3M**	KM63TS	43,0	184,0	129,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898427	**KM63TSTCP440R3M**	KM63TS	44,0	187,0	132,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898428	**KM63TSTCP450R3M**	KM63TS	45,0	191,0	135,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898429	**KM63TSTCP460R3M**	KM63TS	46,0	195,0	138,0	1,48	XOMT160508	**12148007200**	**12148082400**	T20
3898430	**KM63TSTCP470R3M**	KM63TS	47,0	199,0	141,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20
3898431	**KM63TSTCP480R3M**	KM63TS	48,0	202,0	144,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20
3898432	**KM63TSTCP490R3M**	KM63TS	49,0	206,0	147,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20
3898433	**KM63TSTCP500R3M**	KM63TS	50,0	210,0	150,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20

3 x D • Inch

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898457	**KM63TSTCP1250R3**	KM63TS	1.250	5.625	3.750	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898458	**KM63TSTCP1313R3**	KM63TS	1.313	5.750	3.939	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898459	**KM63TSTCP1375R3**	KM63TS	1.375	6.125	4.125	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898460	**KM63TSTCP1438R3**	KM63TS	1.438	6.375	4.314	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898461	**KM63TSTCP1500R3**	KM63TS	1.500	6.500	4.500	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898462	**KM63TSTCP1563R3**	KM63TS	1.563	6.750	4.689	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898463	**KM63TSTCP1625R3**	KM63TS	1.625	7.000	4.875	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898464	**KM63TSTCP1688R3**	KM63TS	1.688	7.250	5.064	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898465	**KM63TSTCP1750R3**	KM63TS	1.750	7.500	5.250	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898466	**KM63TSTCP1875R3**	KM63TS	1.875	8.000	5.625	.058	XOMT160508	**12148007200**	**12148007500**	T20
3898467	**KM63TSTCP1938R3**	KM63TS	1.938	8.250	5.814	.058	XOMT160508	**12148007200**	**12148007500**	T20
3898468	**KM63TSTCP2000R3**	KM63TS	2.000	8.375	6.000	.058	XOMT160508	**12148007200**	**12148007500**	T20

NOTE: Drill shipped with insert screws and Torx wrench.
See the WIDIA Indexable Milling and Holemaking (A-09-02081) catalog.

WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.

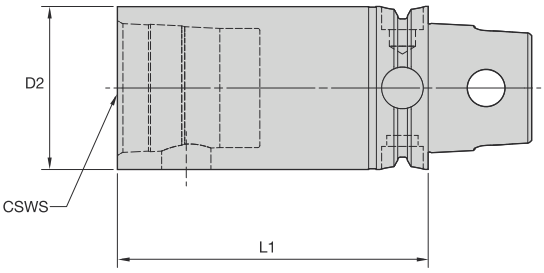


KM QUICK CHANGE

TC • Tension and Compression

order number	catalog number	TQCS adapter size	D1 mm	D1 in	D2 mm	D2 in	L1 mm	L1 in	kg	lbs
1126271	**KM63TSTC2095M**	2	31	1.220	53	2.090	95	3.740	0,96	2.12
1126272	**KM63TSTC3147M**	3	48	1.890	78	3.070	147	5.790	1,97	4.34

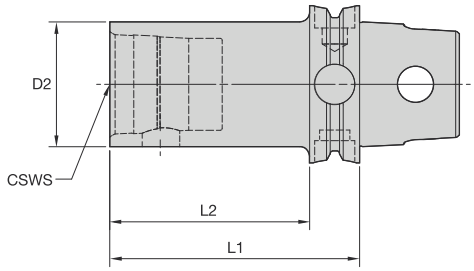
NOTE: Quick-change tap adapters available and must be ordered separately; see page I76.



KM QUICK CHANGE

S • KM™ Extension

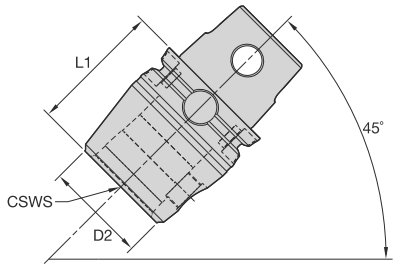
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
2253808	**KM63TSS63080M**	KM63	63	2.480	80	3.150	12mm	47-54	35-40	**KM63PKG3S**	1,69	3.73
2397720	**KM63TSS63120M**	KM63	63	2.480	120	4.724	12mm	47-54	35-40	**KM63PKG3S**	2,63	5.81



KM QUICK CHANGE

S • KM Reducer

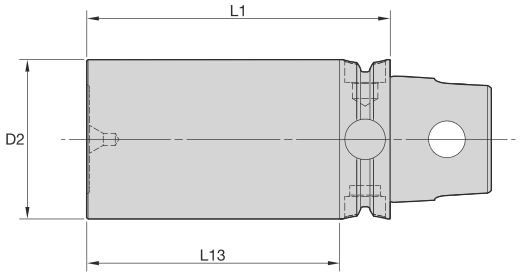
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	L2 mm	L2 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
2397719	**KM63TSS32070M**	KM32	32	1.258	70	2.756	50	1.969	5mm	8-11	6-8	**KM32PKG3S**	0,90	1.97
2253907	**KM63TSS40080M**	KM40	40	1.573	80	3.150	60	2.362	6mm	12-16	9-12	**KM40PKG3S**	1,12	2.47
2253906	**KM63TSS50100M**	KM50	50	1.967	100	3.937	80	3.150	10mm	27-34	20-25	**KM50PKG3S**	1,63	3.58



S • KM Reducer • Centerline

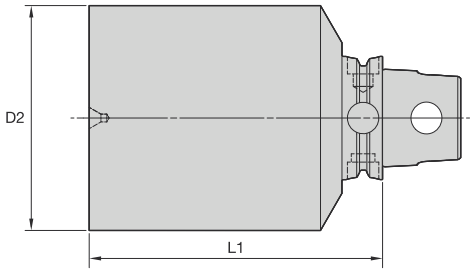
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
3503748	**KM63TSS50065M**	KM50	50	1.967	65	2.559	10mm	27-34	20-25	**KM50PKG3L**	1,37	3.02

NOTE: Designed for centerline KM cutting units.



GB • Gage Bar

		D2		L1		L13			
order number	catalog number	mm	in	mm	in	mm	in	kg	lbs
3959981	KM40TSGB40080M	40	1.58	80	3.15	68	2.68	0,81	1.79



BN • Blank

		D2		L1				
order number	catalog number	mm	in	mm	in	hardness range	kg	lbs
2397722	KM63TSBN65200M	65	2.559	200	7.874	32–38 HRC	5,30	11.68
2397721	KM63TSBN115150M	115	4.528	150	5.906	32–38 HRC	10,89	24.01

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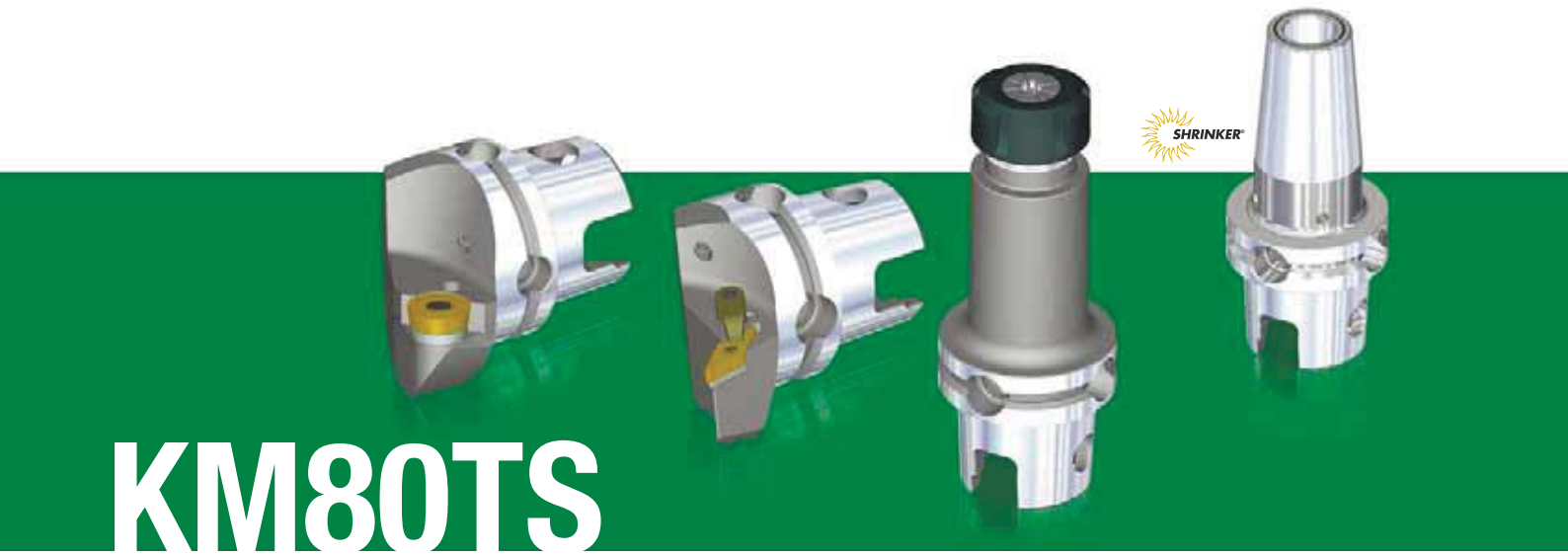
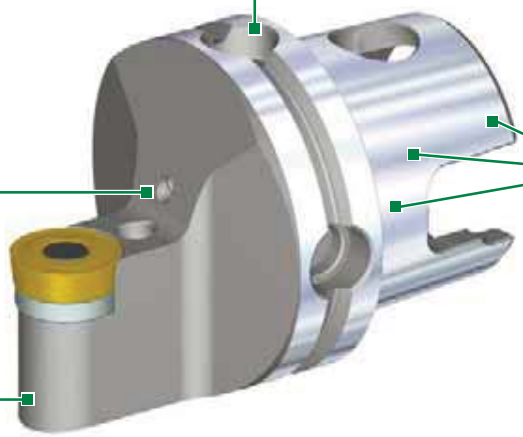
The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



KM80TS

- KM is an ISO standard (ISO 26622).
- KM clamping units provide a 4:1 mechanical advantage.
- KM cutting units are capable of 100 bar (1,500 psi) coolant pressure.

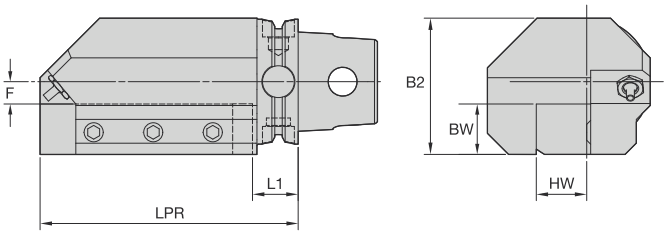


The KM flange is designed to provide ATC capability and to enable use of an RFID chip.

KM cutting units are equipped to use high-pressure coolant nozzles.

The KM System's superior rigidity is gained by the three points of contact the system develops when clamped.

KM manufactured from high-strength tool steel.



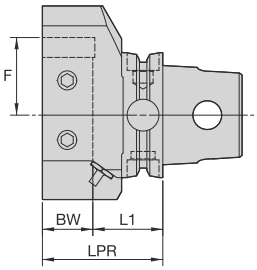
KM QUICK CHANGE

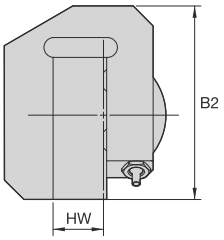
STA • Metric

order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	Nm	kg
	right hand										
3670073	KM80TSSTAR2525M	99	25	33	25	45	150	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	9,48
3670074	KM80TSSTAR3232M	98	32	25	32	45	150	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	8,95
	left hand										
3670059	KM80TSSTAL2525M	99	25	33	25	45	150	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	9,48
3670060	KM80TSSTAL3232M	98	32	25	32	45	150	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	8,95

STA • Inch

order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	ft. lbs.	lbs
	right hand										
3670061	KM80TSSTAR20	3.904	1.250	1.059	1.250	1.693	5.906	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	20.70
3670062	KM80TSSTAR24	3.654	1.500	.559	1.500	1.480	6.693	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	21.37
	left hand										
3670057	KM80TSSTAL20	3.904	1.250	1.059	1.250	1.693	5.906	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	20.70
3670058	KM80TSSTAL24	3.654	1.500	.559	1.500	1.480	6.693	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	21.37





KM QUICK CHANGE

ETA • Metric

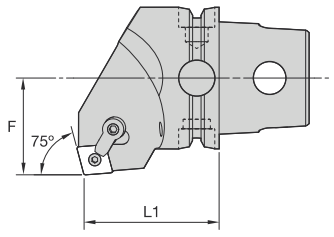
order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	Nm	kg
	right hand										
3670108	KM80TSETAR2525M	96	25	-37,5	25	48	73	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	3,51
3670109	KM80TSETAR3232M	111	32	-55,0	32	45	77	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	4,53
	left hand										
3670103	KM80TSETAL2525M	96	25	-37,5	25	48	73	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	3,51
3670104	KM80TSETAL3232M	111	32	-55,0	32	45	77	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	4,53

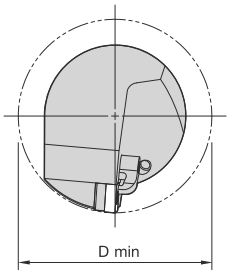
ETA • Inch

order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	ft. lbs.	lbs
	right hand										
3670105	KM80TSETAR16	3.780	1.000	-1.539	1.000	1.900	2.900	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	7.78
3670106	KM80TSETAR20	4.370	1.250	-2.244	1.250	1.846	3.096	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.28
3670107	KM80TSETAR24	4.370	1.500	-2.244	1.500	1.937	3.437	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.82
	left hand										
3670078	KM80TSETAL16	3.780	1.000	-1.539	1.000	1.900	2.900	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	7.78
3670080	KM80TSETAL20	4.370	1.250	-2.244	1.250	1.846	3.096	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.28
3670082	KM80TSETAL24	4.370	1.500	-2.244	1.500	1.937	3.437	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.83

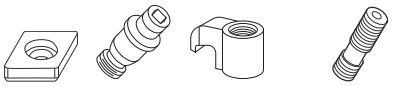
TS ISO 26622 100 bar 1500 psi

KM QUICK CHANGE





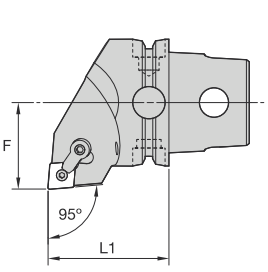
MCKN 75°

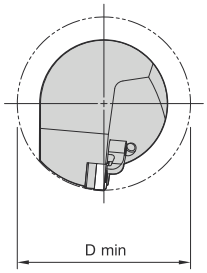


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3662524	KM80TSMCKNR19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,39	5.28
	left hand													
3662523	KM80TSMCKNL19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,39	5.28

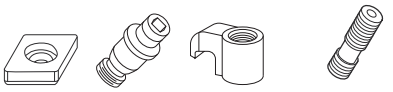
TS ISO 26622 100 bar 1500 psi

KM QUICK CHANGE

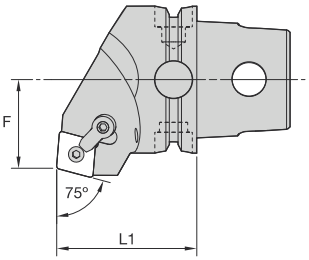


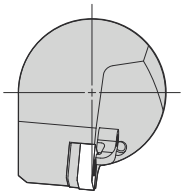


MCLN 95°



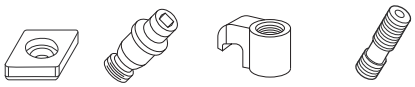
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3662529	KM80TSMCLNR12	70	2.756	53	2.087	106	4.173	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	2,21	4.87
3662530	KM80TSMCLNR16	70	2.756	53	2.087	106	4.173	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	2,20	4.86
3662531	KM80TSMCLNR19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,20	4.85
3662532	KM80TSMCLNR25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,21	4.86
	left hand													
3662525	KM80TSMCLNL12	70	2.756	53	2.087	106	4.173	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	2,21	4.87
3662526	KM80TSMCLNL16	70	2.756	53	2.087	106	4.173	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	2,20	4.86
3662527	KM80TSMCLNL19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,20	4.85
3662528	KM80TSMCLNL25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,21	4.86



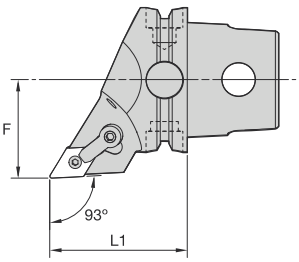


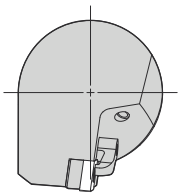
KM QUICK CHANGE

MCRN 75°



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3662536	KM80TSMCRNR16	70	2.756	48	1.890	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	2,27	5.00
3662537	KM80TSMCRNR19	70	2.756	48	1.890	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,26	4.99
3662538	KM80TSMCRNR25	70	2.756	48	1.890	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,25	4.97
	left hand											
3662533	KM80TSMCRNL16	70	2.756	48	1.890	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	2,27	5.00
3662534	KM80TSMCRNL19	70	2.756	48	1.890	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,26	4.99
3662535	KM80TSMCRNL25	70	2.756	48	1.890	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,25	4.97

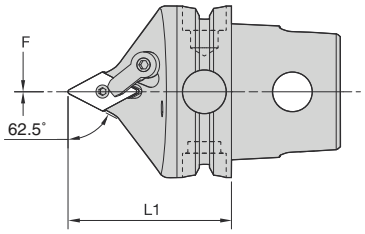


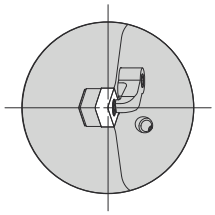


KM QUICK CHANGE

MDJN 93°

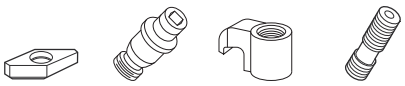
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3662542	KM80TSMDJNR1504	70	2.756	53	2.087	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	1,85	4.07
3662564	KM80TSMDJNR1506	70	2.756	53	2.087	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	1,84	4.06
	left hand											
3662541	KM80TSMDJNL1504	70	2.756	53	2.087	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	1,85	4.07
3662563	KM80TSMDJNL1506	70	2.756	53	2.087	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	1,84	4.06



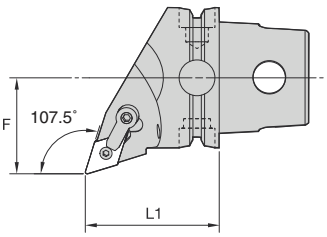


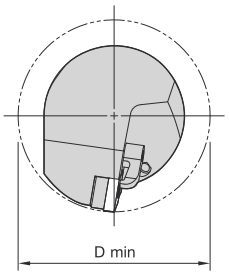
KM QUICK CHANGE

MDPN 62.5°



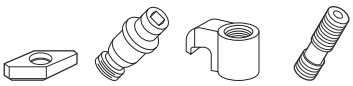
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3662565	KM80TSMDPNN1504	70	2.756	0	.000	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	1,73	3.81
3662566	KM80TSMDPNN1506	70	2.756	0	.000	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	1,72	3.80



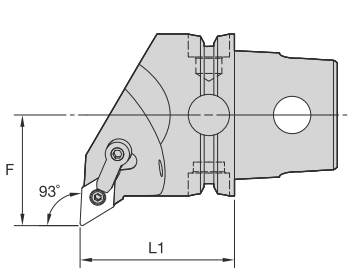


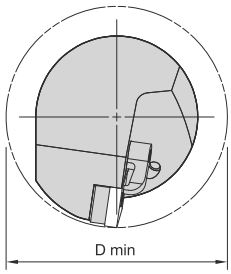
KM QUICK CHANGE

MDQN 107.5°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3662568	KM80TSMDQNR1504	70	2.756	53	2.087	106	4.173	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	2,01	4.44
3662570	KM80TSMDQNR1506	70	2.756	53	2.087	106	4.173	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	2,01	4.43
	left hand													
3662567	KM80TSMDQNL1504	70	2.756	53	2.087	106	4.173	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	2,01	4.44
3662569	KM80TSMDQNL1506	70	2.756	53	2.087	106	4.173	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	2,01	4.43

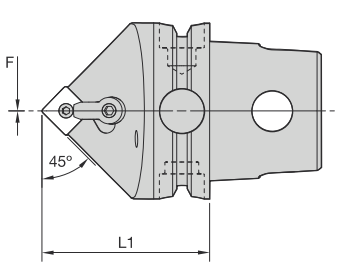


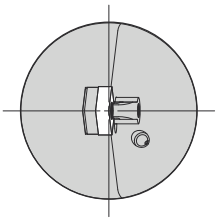


KM QUICK CHANGE

■ MDUN 93°

		L1		F		D min								
order number	catalog number	mm	in	mm	in	mm	in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3662572	KM80TSMDUNR1504	70	2.756	53	2.087	106	4.173	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	2,28	5.02
3662574	KM80TSMDUNR1506	70	2.756	53	2.087	106	4.173	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	2,27	5.01
	left hand													
3662571	KM80TSMDUNL1504	70	2.756	53	2.087	106	4.173	DN..150408/DN.432	IDSN442	KLM46L	CKM23	STCM11	2,27	5.02
3662573	KM80TSMDUNL1506	70	2.756	53	2.087	106	4.173	DN..150608/DN.442	IDSN432	KLM46L	CKM23	STCM11	2,27	5.01

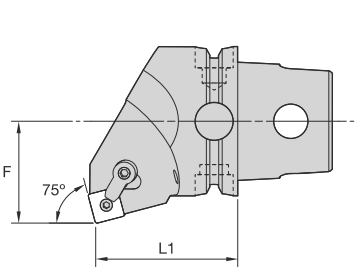


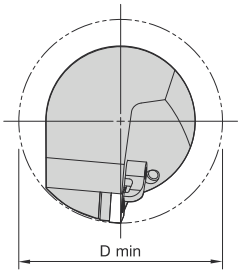


KM QUICK CHANGE

■ MSDN 45°

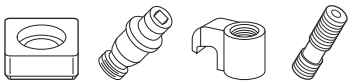
		L1		F							
order number	catalog number	mm	in	mm	in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3662577	KM80TSMSDNN19	70	2.756	0	.000	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	1,85	4.08
3662578	KM80TSMSDNN25	70	2.756	0	.000	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	1,76	3.88



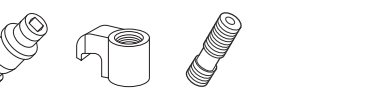


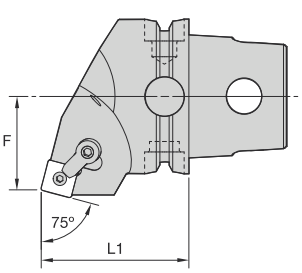
KM QUICK CHANGE

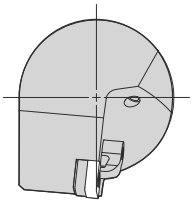
MSKN 75°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3662581	KM80TSMSKNR19	70	2.756	53	2.087	106	4.17	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	2,37	5.23
3662582	KM80TSMSKNR25	70	2.756	53	2.087	106	4.17	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,47	5.45
	left hand													
3662579	KM80TSMSKNL19	70	2.756	53	2.087	106	4.17	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	2,37	5.23
3662580	KM80TSMSKNL25	70	2.756	53	2.087	106	4.17	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,47	5.45



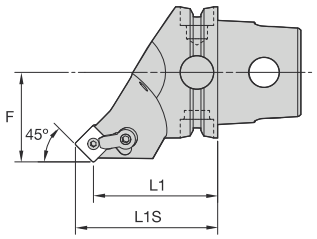


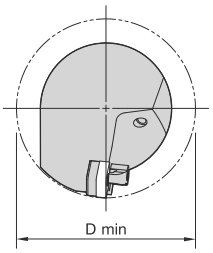


KM QUICK CHANGE

MSRN 75°

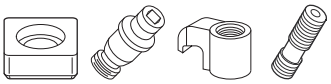
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3662585	KM80TSMSRNR19	70	2.756	48	1.890	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	2,12	4.67
3662586	KM80TSMSRNR25	70	2.756	48	1.890	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	2,19	4.82
	left hand											
3662583	KM80TSMSRNL19	70	2.756	48	1.890	SN..190512/SN.643	ISSN633	KLM68	CKM12	STCM4	2,12	4.67
3662584	KM80TSMSRNL25	70	2.756	48	1.890	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	2,19	4.82



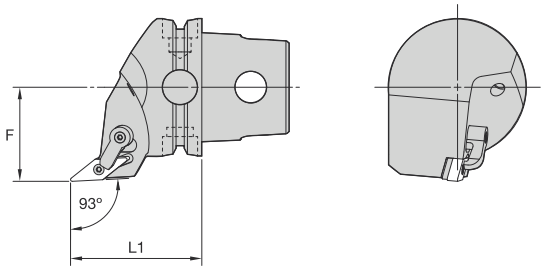


KM QUICK CHANGE

MSSN 45°



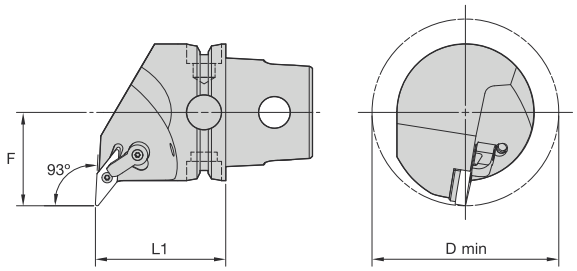
order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand															
3662588	KM80TSMSSNR25	70	2.756	86	3.386	53	2.09	150	5.906	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	2,18	4.81
	left hand															
3662587	KM80TSMSSNL25	70	2.756	86	3.386	53	2.09	150	5.906	SN..250924/SN.866	ISSN846	KLM810	CKM24	STCM19	2,18	4.81



KM QUICK CHANGE

MVJN 93°

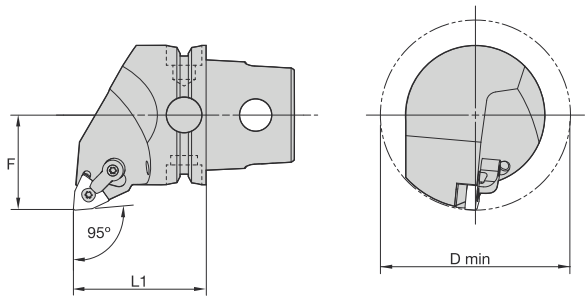
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3662562	KM80TSMVJNR16	70	2.756	53	2.087	VN..160408/VN.332	IVSN322	KLM34L	CKM23	STCM11	1,79	3.94
	left hand											
3662561	KM80TSMVJNL16	70	2.756	53	2.087	VN..160408/VN.332	IVSN322	KLM34L	CKM23	STCM11	1,79	3.94



KM QUICK CHANGE

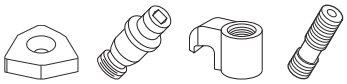
MVUN 93°

order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3662594	KM80TSMVUNR16	70	2.756	53	2.087	106	4.173	VN..160408/VN.332	IVSN322	KLM34L	CKM23	STCM11	2,11	4.64
	left hand													
3662593	KM80TSMVUNL16	70	2.756	53	2.087	106	4.173	VN..160408/VN.332	IVSN322	KLM34L	CKM23	STCM11	2,11	4.64

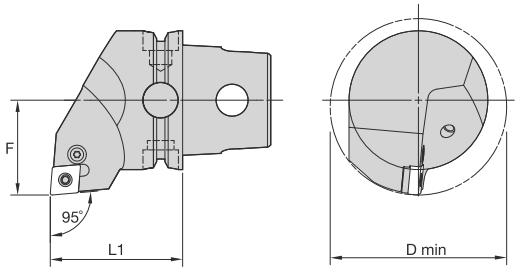


KM QUICK CHANGE

MWLN 95°

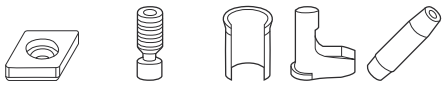


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
3662596	KM80TSMWLNR08	70	2.756	53	2.087	106	4.173	WN..080408/WN.432	IWSN433	KLM46	CKM20	STCM11	2,15	4.74
	left hand													
3662595	KM80TSMWLNL08	70	2.756	53	2.087	106	4.173	WN..080408/WN.432	IWSN433	KLM46	CKM20	STCM11	2,15	4.74

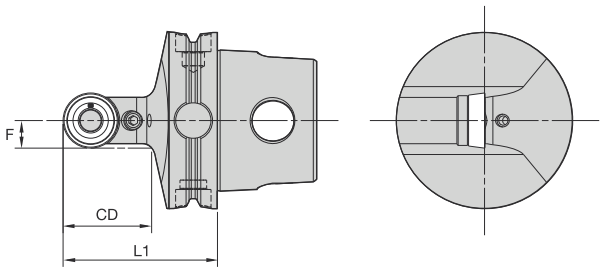


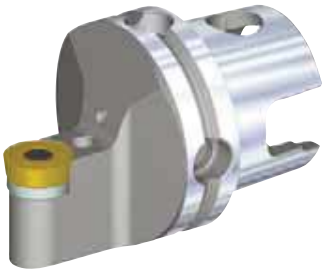
KM QUICK CHANGE

■ PCLN 95°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
3662602	KM80TSPCLNR12	70	2.756	53	2.087	100	3.937	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	2,19	4.82
3662603	KM80TSPCLNR16	70	2.756	53	2.087	100	3.937	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	2,18	4.81
3662604	KM80TSPCLNR19	70	2.756	53	2.087	100	3.937	CN..190612/CN..643	512.123	514.133	513.033	511.033	515.022	2,17	4.79
3662605	KM80TSPCLNR25	70	2.756	53	2.087	100	3.937	CN..250924/CN..866	512.024	12148562500	513.038	511.038	515.028	2,15	4.74
	left hand														
3662598	KM80TSPCLNL12	70	2.756	53	2.087	100	3.937	CN..120408/CN..432	512.112	514.123	513.023	511.023	515.018	2,19	4.82
3662599	KM80TSPCLNL16	70	2.756	53	2.087	100	3.937	CN..160612/CN..543	512.117	514.125	513.025	511.025	515.022	2,18	4.81
3662600	KM80TSPCLNL19	70	2.756	53	2.087	100	3.937	CN..190612/CN..643	512.123	514.133	513.033	511.033	515.022	2,17	4.79
3662601	KM80TSPCLNL25	70	2.756	53	2.087	100	3.937	CN..250924/CN..866	512.024	12148562500	513.038	511.038	515.028	2,15	4.74

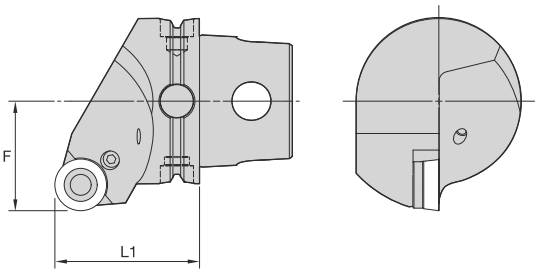




KM QUICK CHANGE

■ PRDC 90°

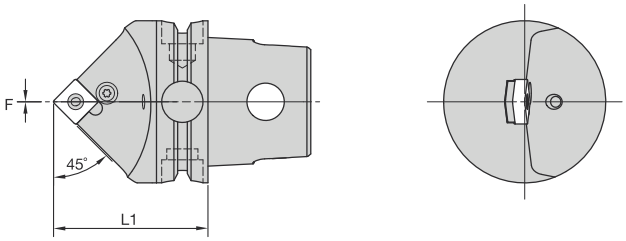
order number	catalog number	L1 mm	L1 in	F mm	F in	CD mm	CD in	gage insert	shim	clamp screw	clamp stud	kg	lbs
	left hand												
3662606	KM80TSPRDCN20	70	2.756	10	.394	40	1.581	RCMT2006M0	169.333	121.820	119.073	1,48	3.26
3662607	KM80TSPRDCN25	70	2.756	13	.492	40	1.581	RCMX2507M0RP	169.337	121.820	118.404	1,55	3.42



KM QUICK CHANGE

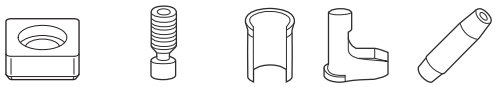
PRGC 0°

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	clamp screw	clamp stud	kg	lbs
	right hand										
3662625	KM80TSPRGCR25	70	2.756	53	2.087	RC..2507M0	169.337	121.820	118.404	2,02	4.46
3662626	KM80TSPRGCR32	80	3.150	53	2.087	RC..320900	169.339	121.030	118.604	2,63	5.79
	left hand										
3662623	KM80TSPRGCL25	70	2.756	53	2.087	RC..2507M0	169.337	121.820	118.404	2,02	4.45
3662624	KM80TSPRGCL32	80	3.150	53	2.087	RC..320900	169.339	121.030	118.604	2,63	5.79

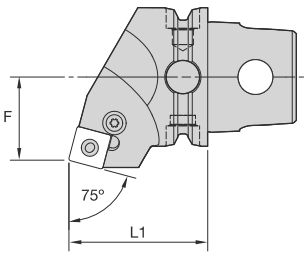


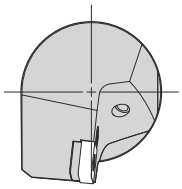
KM QUICK CHANGE

PSDN 45°



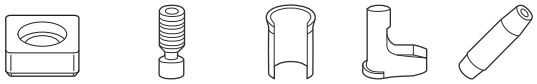
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg	lbs
	left hand												
3662627	KM80TSPSDNN19	70	2.756	0	.000	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,76	3.87
3662628	KM80TSPSDNN25	70	2.756	0	.000	SN..250724/SN..856	512.092	514.138	513.038	511.038	515.028	1,75	3.85



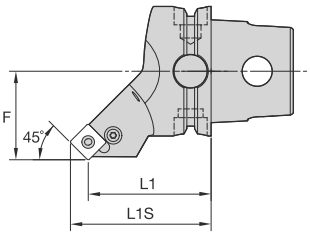


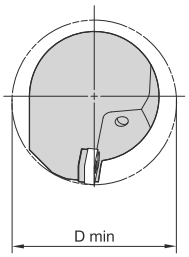
KM QUICK CHANGE

PSRN 75°



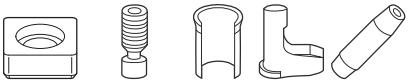
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
3662631	KM80TSPSRNR19	70	2.756	48	1.890	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	2,11	4.66
3662632	KM80TSPSRNR25	70	2.756	48	1.890	SN..250724/SN..-856	512.092	514.138	513.038	511.038	515.028	2,13	4.69
	left hand												
3662629	KM80TSPSRNL19	70	2.756	48	1.890	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	2,07	4.56
3662630	KM80TSPSRNL25	70	2.756	48	1.890	SN..250724/SN..-856	512.092	514.138	513.038	511.038	515.028	2,13	4.69





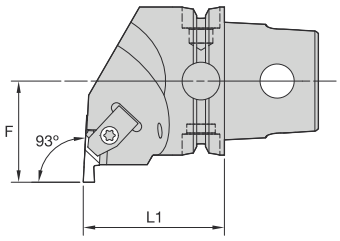
KM QUICK CHANGE

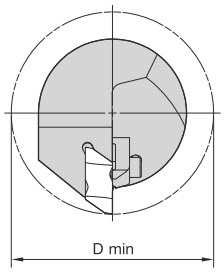
PSSN 45°



order number	catalog number	L1 mm	L1 in	L1S mm	L1S in	F mm	F in	D min mm	D min in	gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg	lbs
	right hand																
3662636	KM80TSPSSNR19	70	2.756	82,49	3.248	53	2.087	100	3.94	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	2,00	4.41
3662637	KM80TSPSSNR25	70	2.756	85,98	3.385	53	2.087	150	5.91	SN..250724/SN..856	512.092	514.138	513.038	511.038	515.028	2,13	4.70
	left hand																
3662633	KM80TSPSSNL19	70	2.756	82,49	3.248	53	2.087	100	3.94	SN..190612/SN..643	512.083	514.133	513.033	511.033	515.022	1,94	4.29
3662634	KM80TSPSSNL25	70	2.756	86,00	3.386	53	2.087	150	5.91	SN..250724/SN..856	512.092	514.138	513.038	511.038	515.028	2,09	4.61

KM QUICK CHANGE

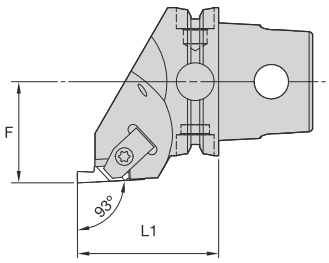


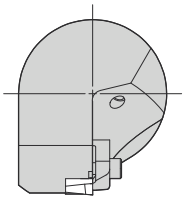


NE 93° • Metric

		L1		F		D min						
order number	catalog number	mm	in	mm	in	mm	in	gage insert	clamp	clamp screw	kg	lbs
	right hand											
3665054	KM80TSNER3	70	2.756	53	2.087	106	4.173	NG3L	CM73	MS1489	2,14	4.72
3665056	KM80TSNER4	70	2.756	53	2.087	106	4.173	NG4L	CM73	MS1489	2,18	4.81
3665058	KM80TSNER5	70	2.756	53	2.087	106	4.173	NG5L	CM81	MS1490	2,28	5.02
3665060	KM80TSNER6	70	2.756	53	2.087	106	4.173	NG6L	CM121	MS1489	2,28	5.02
	left hand											
3665053	KM80TSNEL3	70	2.756	53	2.087	106	4.173	NG3R	CM72	MS1489	2,14	4.72
3665055	KM80TSNEL4	70	2.756	53	2.087	106	4.173	NG4R	CM72	MS1489	2,18	4.81
3665057	KM80TSNEL5	70	2.756	53	2.087	106	4.173	NG5R	CM80	MS1490	2,28	5.02
3665059	KM80TSNEL6	70	2.756	53	2.087	106	4.173	NG6R	CM120	MS1489	2,18	4.80

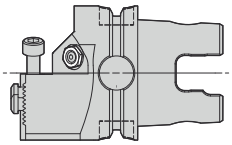
KM QUICK CHANGE

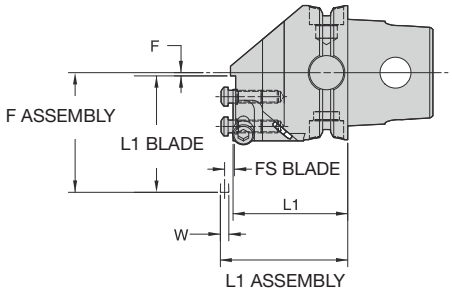




NS 93° • Metric

		L1		F					
order number	catalog number	mm	in	mm	in	gage insert	clamp	clamp screw	kg	lbs
	right hand									
3668864	KM80TSNSR3	70	2.756	53	2.087	NG3R	CM72	MS1489	1,96	4.32
3668866	KM80TSNSR4	70	2.756	53	2.087	NG4R	CM72	MS1489	1,94	4.28
3668868	KM80TSNSR5	80	3.150	53	2.087	NG5R	CM80	MS1490	2,25	4.95
	left hand									
3668863	KM80TSNSL3	70	2.756	53	2.086	NG3L	CM73	MS1489	1,96	4.32
3668865	KM80TSNSL4	70	2.756	53	2.087	NG4L	CM73	MS1489	1,97	4.35
3668867	KM80TSNSL5	80	3.150	53	2.087	NG5L	CM81	MS1490	2,27	5.01





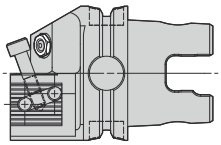
KM QUICK CHANGE

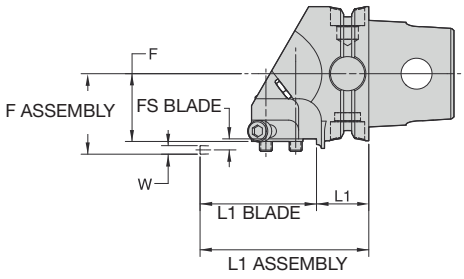
F ASSEMBLY = L1 BLADE — F
L1 ASSEMBLY = W/2 + L1 + FS BLADE — 0,787mm

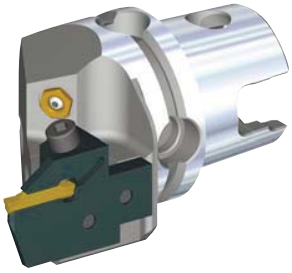
WGME

order number	catalog number	L1 mm	L1 in	F mm	F in	button-head cap screw	nozzle	socket-head cap screw	kg	lbs
	right hand									
3949924	**KM80TSWGMER55M**	53,79	2.118	9,52	.375	**606256**	**PMT08430**	**MS337**	1,92	4.24
	left hand									
3949925	**KM80TSWGMEL55M**	53,79	2.118	9,52	.375	**606256**	**PMT08430**	**MS337**	1,92	4.24

NOTE: For SLS cartridges and WMT inserts, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.







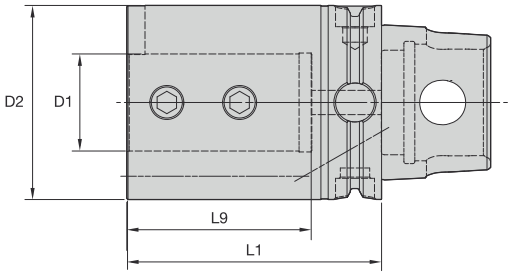
KM QUICK CHANGE

F ASSEMBLY = W/2 + F + FS BLADE — 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE

WGMS

order number	catalog number	L1 mm	L1 in	F mm	F in	nozzle	socket-head cap screw	kg	lbs
	right hand								
3949662	**KM80TSWGMSR55M**	24,52	.965	40,79	1.606	**PMT08430**	**MS1132PKG**	1,90	4.19
	left hand								
3949923	**KM80TSWGMSL55M**	24,52	.965	40,79	1.606	**PMT08430**	**MS1132PKG**	1,90	4.19

NOTE: For SLS cartridges and WMT inserts, see the WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.



KM QUICK CHANGE

BA • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	nozzle	wrench size clamp screw	Nm	kg
3670392	KM80TSBA25075M	25	65	75	58	MS1561	PWZ1012	5mm	35	2,23
3670423	KM80TSBA32075M	32	72	75	63	190.228	PWZ1012	–	55	2,36
3670424	KM80TSBA40105M	40	80	105	76	MS1947	PWZ1012	8mm	125	3,55

BA • Inch

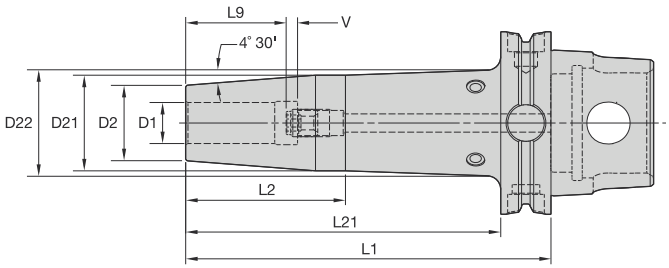
order number	catalog number	D1	D2	L1	L9	clamp screw	nozzle	wrench size clamp screw	ft. lbs.	lbs
3670350	KM80TSBA100276	1	2.559	2.756	2.244	MS1561	PWZ1012	5mm	25	4.63
3670351	KM80TSBA125295	1 1/4	2.835	2.953	2.480	MS1561	PWZ1012	5mm	25	5.21
3670352	KM80TSBA150413	1 1/2	3.150	4.134	2.953	MS1947	PWZ1012	8mm	90	7.99
3670363	KM80TSBA200512	2	3.543	5.118	3.976	MS1947	PWZ1012	8mm	90	10.56

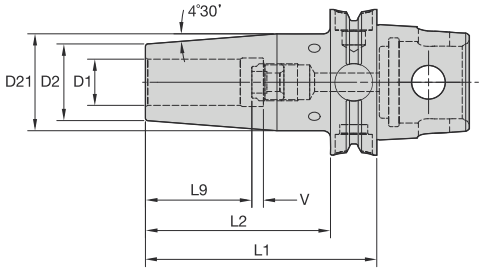
NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For boring bar reducers, see page A286.

KM80TS™ Shank Tools

Shrink Fit Toolholders General Purpose (GP)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





KM QUICK CHANGE

Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

■ HPV TT • Metric

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg	lbs
3681408	KM80TSHPVTT10090M	10	24	32	—	90	68	—	31	10	TTSS08014M	4mm	1,44	3.16
3681409	KM80TSHPVTT10170M	10	24	32	38	170	63	148	31	10	TTSS08014M	4mm	2,03	4.48
3681410	KM80TSHPVTT12095M	12	24	32	—	95	73	—	36	10	TTSS10014M	5mm	1,45	3.19
3681411	KM80TSHPVTT12160M	12	24	32	37	160	63	138	36	10	TTSS10014M	5mm	1,93	4.26
3681412	KM80TSHPVTT14095M	14	27	34	—	95	73	—	36	10	TTSS10014M	5mm	1,51	3.32
3682733	KM80TSHPVTT16100M	16	27	34	—	100	78	—	39	10	TTSS12014M	6mm	1,51	3.34
3682734	KM80TSHPVTT18100M	18	33	42	—	100	78	—	39	10	TTSS12014M	6mm	1,72	3.80
3682735	KM80TSHPVTT18160M	18	33	42	47	160	70	138	39	10	TTSS12014M	6mm	2,44	5.37
3682736	KM80TSHPVTT20105M	20	33	42	—	105	83	—	41	10	TTSS16014M	8mm	1,74	3.83
3682737	KM80TSHPVTT25115M	25	44	53	—	115	93	—	47	10	TTSS16014M	8mm	2,31	5.09
3682738	KM80TSHPVTT32120M	32	44	53	—	120	98	—	51	10	TTSS16014M	8mm	2,23	4.91
3682739	KM80TSHPVTT40130M	40	60	70	—	130	108	—	51	10	TTSS20014M	10mm	3,42	7.55
3682740	KM80TSHPVTT50140M	50	69	79	—	140	118	—	56	10	TTSS20014M	10mm	4,23	9.34

(continued)

(HPV TT continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameter	tolerance
5/16 & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

HPV TT • Inch

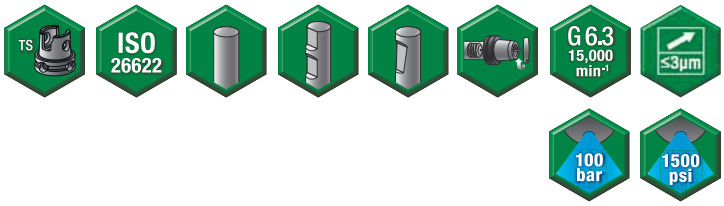
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg	lbs
3683469	**KM80TSHPVTT031335**	5/16	.827	1.059	—	3.346	2.480	—	1.024	.394	**TTSS06014M**	3mm	1,34	2.96
3683470	**KM80TSHPVTT038630**	3/8	.945	1.256	1.462	6.299	2.480	5.433	1.220	.394	**TTSS08014M**	4mm	1,95	4.30
3683471	**KM80TSHPVTT044374**	7/16	.945	1.256	—	3.740	2.874	—	1.417	.394	**TTSS10014M**	5mm	1,45	3.21
3683038	**KM80TSHPVTT050374**	1/2	.945	1.256	—	3.740	2.874	—	1.417	.394	**TTSS10014M**	5mm	1,44	3.18
3683039	**KM80TSHPVTT056374**	9/16	1.063	1.335	—	3.740	2.874	—	1.417	.394	**TTSS10014M**	5mm	1,50	3.31
3683040	**KM80TSHPVTT062394**	5/8	1.063	1.335	—	3.937	3.071	—	1.535	.394	**TTSS12014M**	6mm	1,52	3.34
3683041	**KM80TSHPVTT062850**	5/8	1.063	1.335	1.695	8.500	2.480	7.638	1.535	.394	**TTSS12014M**	6mm	2,56	5.65
3683042	**KM80TSHPVTT075413**	3/4	1.299	1.650	—	4.134	3.267	—	1.614	.394	**TTSS16014M**	8mm	1,75	3.86
3683463	**KM80TSHPVTT075630**	3/4	1.299	1.650	1.837	6.299	2.756	5.433	1.614	.394	**TTSS16014M**	8mm	2,40	5.28
3683464	**KM80TSHPVTT088413**	7/8	1.299	1.650	—	4.134	3.268	—	1.614	.394	**TTSS16014M**	8mm	1,71	3.77
3683465	**KM80TSHPVTT100453**	1	1.732	2.083	—	4.528	3.662	—	1.850	.394	**TTSS16014M**	8mm	2,30	5.07
3683466	**KM80TSHPVTT125472**	1 1/4	1.732	2.083	—	4.724	3.858	—	2.008	.394	**TTSS16014M**	8mm	2,23	4.92
3683467	**KM80TSHPVTT150512**	1 1/2	2.362	2.752	—	5.118	4.252	—	2.008	.394	**TTSS20014M**	10mm	3,49	7.70
3683468	**KM80TSHPVTT200551**	2	2.717	3.106	—	5.512	4.646	—	2.205	.394	**TTSS20014M**	10mm	4,22	9.30

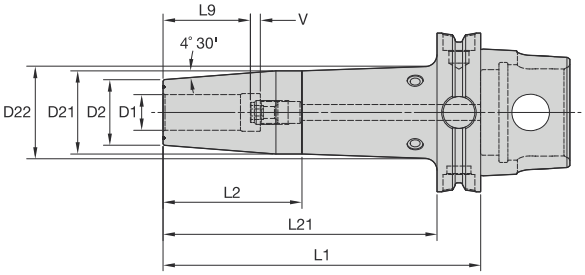
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

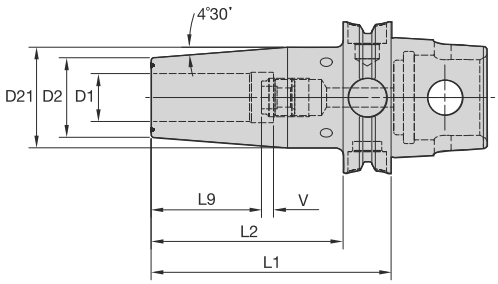
KM80TS™ Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.







KM QUICK CHANGE

Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/ -0,011
20 & 25	h6	0,000/ -0,013
32	h6	0,000/ -0,016

HPV TT HT • Metric

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg	lbs
3682747	KM80TSHPVTTHT12095M	12	24	32	—	95	73	—	36	10	TTSS10014M	5mm	1,45	3.19
3682748	KM80TSHPVTTHT12160M	12	24	32	37	160	63	138	36	10	TTSS10014M	5mm	1,92	4.22
3682749	KM80TSHPVTTHT14095M	14	27	34	—	95	73	—	36	10	TTSS10014M	5mm	1,51	3.32
3682750	KM80TSHPVTTHT16100M	16	27	34	—	100	78	—	39	10	TTSS12014M	6mm	1,51	3.34
3682751	KM80TSHPVTTHT18100M	18	33	42	—	100	78	—	39	10	TTSS12014M	6mm	1,72	3.80
3682752	KM80TSHPVTTHT18160M	18	33	42	47	160	70	138	39	10	TTSS12014M	6mm	2,44	5.37
3682773	KM80TSHPVTTHT20105M	20	33	42	—	105	83	—	41	10	TTSS16014M	8mm	1,74	3.83
3682774	KM80TSHPVTTHT25115M	25	44	53	—	115	93	—	47	10	TTSS16014M	8mm	2,31	5.09
3682775	KM80TSHPVTTHT32120M	32	44	53	—	120	98	—	51	10	TTSS16014M	8mm	2,23	4.91

(continued)

KM80TS Shank Tools

(HPV TT HT continued)

Cutting Tool Shank Requirements inch (industry standard)

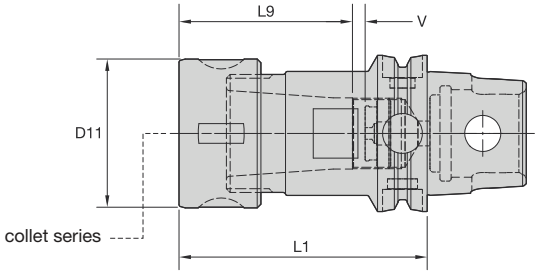
cutting tool shank diameter	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

HPV TT HT • Inch

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg	lbs
3684074	**KM80TSHPVTTHT050374**	1/2	.945	1.256	—	3.740	2.874	—	1.417	.394	**TTSS10014M**	5mm	1,44	3.18
3684075	**KM80TSHPVTTHT056374**	9/16	1.063	1.335	—	3.740	2.874	—	1.417	.394	**TTSS10014M**	5mm	1,50	3.31
3684076	**KM80TSHPVTTHT062394**	5/8	1.063	1.335	—	3.937	3.071	—	1.535	.394	**TTSS12014M**	6mm	1,52	3.34
3684077	**KM80TSHPVTTHT062850**	5/8	1.063	1.335	1.695	8.500	2.480	7.638	1.535	.394	**TTSS12014M**	6mm	2,56	5.65
3684078	**KM80TSHPVTTHT075413**	3/4	1.299	1.650	—	4.134	3.268	—	1.614	.394	**TTSS16014M**	8mm	1,75	3.86
3684079	**KM80TSHPVTTHT075630**	3/4	1.299	1.650	1.837	6.299	2.756	5.433	1.614	.394	**TTSS16014M**	8mm	2,41	5.32
3684080	**KM80TSHPVTTHT088413**	7/8	1.299	1.650	—	4.134	3.268	—	1.614	.394	**TTSS16014M**	8mm	1,71	3.77
3684081	**KM80TSHPVTTHT100453**	1	1.732	2.083	—	4.528	3.662	—	1.850	.394	**TTSS16014M**	8mm	2,30	5.07
3684082	**KM80TSHPVTTHT125472**	1 1/4	1.732	2.083	—	4.724	3.858	—	2.008	.394	**TTSS16014M**	8mm	2,23	4.92

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Tremendous Grip (3:1 advantage).



KM QUICK CHANGE

TG collet series	Collet Capacity mm min	mm max	inch min	inch max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

TG

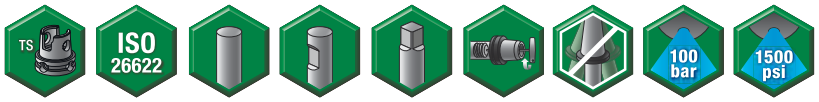
order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
3670114	**KM80TSTG075160M**	TG75	50	1.969	160	6.299	53	2.087	47	1.850	2,89	6.37
3670115	**KM80TSTG100100M**	TG100	60	2.362	100	3.937	71	2.795	—	—	2,29	5.04
3670116	**KM80TSTG150125M**	TG150	85	3.346	125	4.921	83	3.268	—	—	4,28	9.43

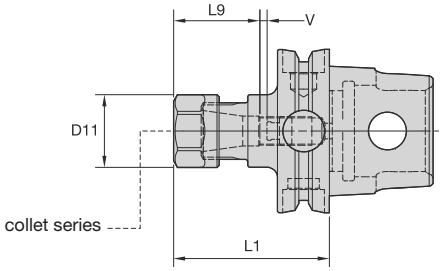
Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.	stop screw	wrench size stop screw	Nm	ft. lbs.
KM80TSTG075160M	**LNA075M**	**HSW45M**	108	80	**SS081041G**	4mm & 5/32	108 - 136	80 - 100
KM80TSTG100100M	**LNA100M**	**HSW58M**	163	120	**—**	—	163 - 203	120 - 150
KM80TSTG150125M	**LNA150M**	**HSW80M**	217	160	**—**	—	217 - 271	160 - 200

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.

• Grip (2:1 advantage).





KM QUICK CHANGE

	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER20	0,5	13,0	.02	.50

ER • Hex Nut

			D11		L1		L9		V			
order number	catalog number	collet series	mm	in	mm	in	mm	in	mm	in	kg	lbs
3683339	KM80TSER20100M	ER20	34	1.339	100	3.937	36	1.417	43	1.693	1,49	3.29

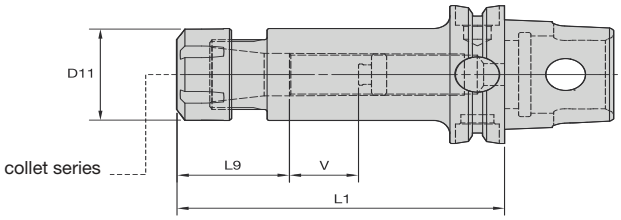
Spare Parts

				counterbore collet torque		straight collet torque	
catalog number	hex locknut	OEW	stop screw	Nm	ft. lbs.	Nm	ft. lbs.
KM80TSER20100M	LNHSER20M	OEW30M	SS056041G	32	24	80	59

(continued)

(ER continued)

• Grip (2:1 advantage).



KM QUICK CHANGE

ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

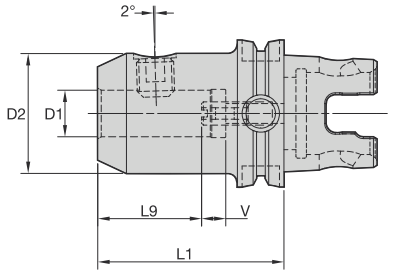
ER • Round Nut

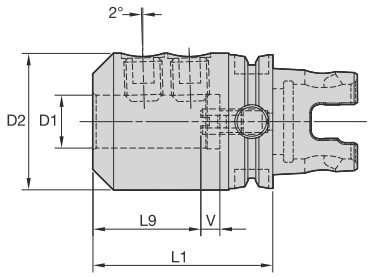
order number	catalog number	collet series	D11 mm	D11 in	L1 mm	L1 in	L9 mm	L9 in	V mm	V in	kg	lbs
3683341	**KM80TSER25100M**	ER25	42	1.654	100	3.937	40	1.575	37	1.457	1,67	3.67
3683342	**KM80TSER32065M**	ER32	50	1.969	65	2.559	47	1.862	—	—	1,42	3.13
3683354	**KM80TSER32100M**	ER32	50	1.969	100	3.937	46	1.811	28	1.102	1,85	4.08
3683353	**KM80TSER40090M**	ER40	63	2.480	90	3.543	70	2.768	—	—	2,06	4.53
3683355	**KM80TSER40140M**	ER40	63	2.480	140	5.512	52	2.047	48	1.890	3,12	6.87

Spare Parts

catalog number	locknut	wrench	stop screw	Nm	ft. lbs.
KM80TSER25100M	**LNSER25M**	**ER25WM**	**SS075041G**	104	77
KM80TSER32065M	**LNSER32M**	**ER32WM**	**—**	136	100
KM80TSER32100M	**LNSER32M**	**ER32WM**	**SS094041G**	136	100
KM80TSER40090M	**LNSER40M**	**ER40WM**	**—**	176	130
KM80TSER40140M	**LNSER40M**	**ER40WM**	**SS112041G**	176	130

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.



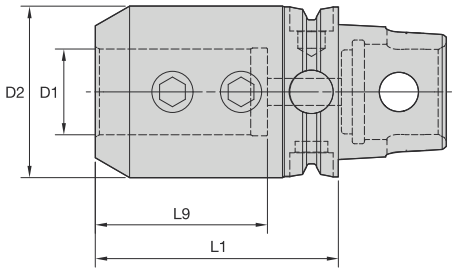


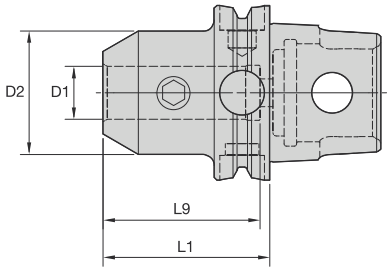
KM QUICK CHANGE

WN • Metric

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
3670133	**KM80TSWN12075M**	12	42	75	40	10	**SS03M023**	6mm	35	**571.074**	5mm	1,61
3670134	**KM80TSWN20085M**	20	52	85	45	10	**SS03M026**	8mm	95	**571.076**	6mm	1,96
3670135	**KM80TSWN25100M**	25	65	100	50	10	**SS03M027**	10mm	135	**571.077**	6mm	2,78
3670136	**KM80TSWN32105M**	32	72	105	54	10	**SS03M029**	10mm	160	**571.077**	6mm	3,22

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.





KM™ QUICK CHANGE

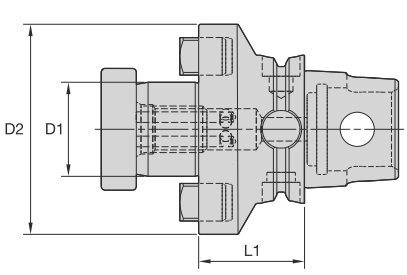
EM • Metric

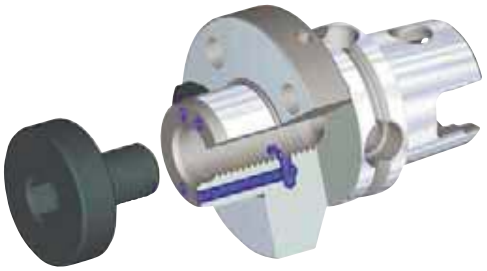
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
3683878	KM80TSEM12070M	12	42	70	50	SS03M023	6mm	35	1,55
3683879	KM80TSEM14070M	14	44	70	50	SS03M023	6mm	35	1,59
3683880	KM80TSEM16070M	16	48	70	53	SS03M025	6mm	50	1,67
3683881	KM80TSEM18070M	18	50	70	53	SS03M025	6mm	50	1,70
3683882	KM80TSEM20070M	20	52	70	55	SS03M026	8mm	95	1,73
3683903	KM80TSEM25090M	25	65	90	60	SS03M027	10mm	135	2,53
3683904	KM80TSEM32090M	32	72	90	65	SS03M029	10mm	160	2,76
3683905	KM80TSEM40100M	40	90	100	75	SS03M032	10mm	160	4,09

EM • Inch

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3670301	KM80TSEM050354	1/2	1.375	3.543	1.974	ELS044038PKG	7/32	20	3.39
3670343	KM80TSEM062354	5/8	1.625	3.543	2.094	ELS056050PKG	1/4	40	3.76
3670344	KM80TSEM075354	3/4	1.750	3.543	2.224	ELS062050PKG	5/16	70	3.90
3670345	KM80TSEM088354	7/8	2.000	3.543	2.224	ELS062050PKG	5/16	70	4.34
3670346	KM80TSEM100354	1	2.000	3.543	2.559	ELS075056PKG	3/8	110	4.13
3670347	KM80TSEM125354	1 1/4	2.500	3.543	2.509	ELS075056PKG	3/8	110	5.10
3670348	KM80TSEM150382	1 1/2	2.750	3.819	2.931	ELS075056PKG	3/8	110	5.74
3670349	KM80TSEM200492	2	3.750	4.921	3.533	ELS100088PKG	1/2	150	11.57

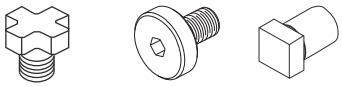
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.





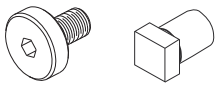
KM QUICK CHANGE

SMC • Metric



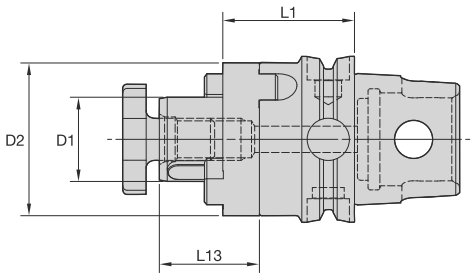
order number	catalog number	D1	D2	D4	G1	L1	lock screw	lock screw	drive key	wrench size lock screw	kg
3683472	KM80TSSMC27050M	27	60	–	–	50	–	KLSS27M	KDK27M	10mm	1,86
3683483	KM80TSSMC32060M	32	78	–	–	60	–	KLSS32M	KDK32M	14mm	2,62
3683484	KM80TSSMC32100M	32	78	–	–	100	–	KLSS32M	KDK32M	14mm	3,79
3683485	KM80TSSMC40060M	40	89	67	M12X1.75	60	–	KLSS40M	KDK40M	17mm	3,21
3683486	KM80TSSMC40100M	40	89	67	M12X1.75	100	–	KLSS40M	KDK40M	17mm	4,56
3683487	KM80TSSMC50070M	50	98	–	–	70	KLS50M	–	KDK40M	–	4,26
3683488	KM80TSSMC60070M	60	129	102	M16X2.0	70	–	–	KDK60M	–	5,81

SMC • Inch



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
3670508	KM80TSSMC100158	1	2.752	–	–	1.575	KLS10	KDK06	5/16	3.88
3670509	KM80TSSMC125158	1 1/4	2.878	–	–	1.575	KLS12	KDK08	5/16	4.19
3670510	KM80TSSMC125394	1 1/4	2.878	–	–	3.937	KLS12	KDK08	5/16	8.45
3670511	KM80TSSMC150158	1 1/2	3.386	–	–	1.575	KLS15	KDK10	3/8	5.00
3670512	KM80TSSMC200216	2	4.882	4.000	5/8 - 11	2.165	KLS20	KDK12	9/16	9.48
3670533	KM80TSSMC250225	2 1/2	4.882	4.000	5/8 - 11	2.250	–	KDK16	–	10.74
3670534	KM80TSSMC250450	2 1/2	4.882	4.000	5/8 - 11	4.500	–	KDK16	–	22.55

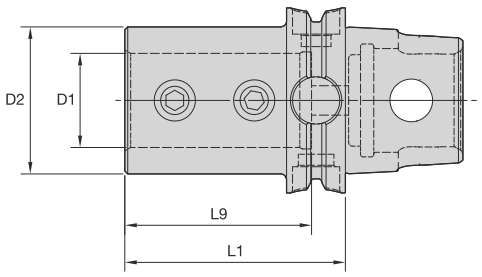
NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.



KM QUICK CHANGE

CS • Metric

order number	catalog number	D1	D2	L1	L13	lock screw	Nm	combi driver	combi drive key	kg
3735656	KM80TSCS32050M	32	58	50	38	KLS32M	95	CDR32M	CDK32M	1,89
3735658	KM80TSCS40060M	40	70	60	41	KLS40M	100	CDR40M	CDK40M	2,62

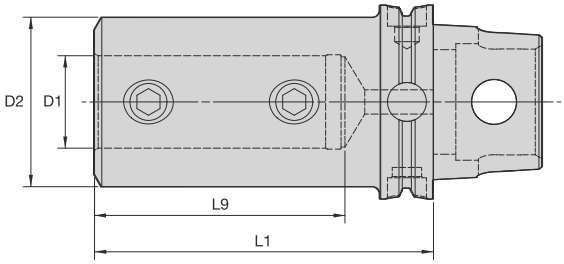


KM QUICK CHANGE

DAT • Metric

order number	catalog number	D1	D2	L1	L9	cone point socket set screw	wrench size clamp screw	Nm	clamp screw	wrench size clamp screw	Nm	kg
3904031	KM80TSDAT2575M	25	45	75	60	12166903700	6mm	40	12166903900	6mm	40	1,54
3904032	KM80TSDAT3275M	32	50	75	64	12166903700	6mm	40	12166903900	6mm	40	1,52
3904054	KM80TSDAT4085M	40	60	85	74	12166903800	8mm	50	12166904000	8mm	50	1,77

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamping screw.
Clamp screw wrench is not included.

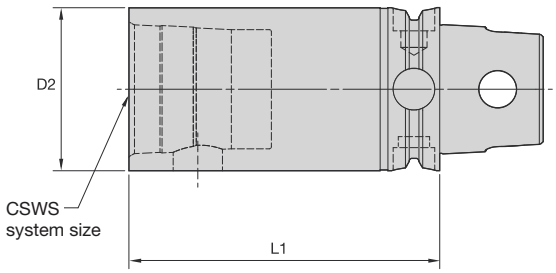


KM QUICK CHANGE

SSF • Inch

order number	catalog number	D1	D2	L1	L9	flat point socket set screw	ft. lbs.	lbs
3683935	KM80TSSSF075350	3/4	1.750	3.500	2.311	ELS062050PKG	70	3.94
3683936	KM80TSSSF100450	1	2.000	4.500	3.307	–	110	4.91
3683937	KM80TSSSF125500	1 1/4	2.500	5.000	3.563	ELS075056PKG	110	6.88
3683938	KM80TSSSF150550	1 1/2	2.750	5.500	4.063	ELS075056PKG	110	8.08
3683939	KM80TSSSF200650	2	3.750	6.500	4.311	ELS100088PKG	150	15.88

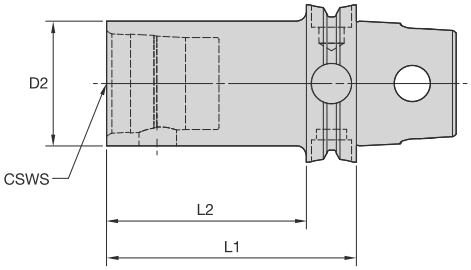
WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.



KM QUICK CHANGE

S • KM™ Extension

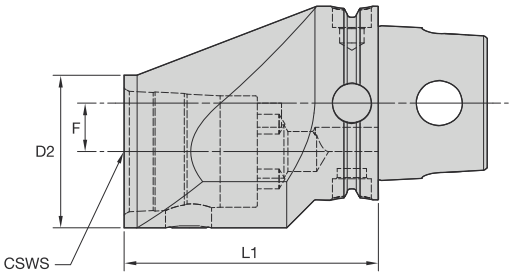
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	spare parts package	Nm	ft. lbs.	kg	lbs
3668965	KM80TSS80120M	KM80	80	3.150	120	4.724	KM80PKG3S	78-84	58-64	4,23	9.32
3668967	KM80TSS80160M	KM80	80	3.150	160	6.299	KM80PKG3S	78-84	58-64	5,76	12.71



KM QUICK CHANGE

S • KM Reducer

order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	L2 mm	L2 in	spare parts package	Nm	ft. lbs.	kg	lbs
3668961	KM80TSS40060M	KM40	40	1.575	60	2.362	38	1.496	KM40PKG3S	12-16	9-12	1,41	3.10
3668963	KM80TSS50080M	KM50	50	1.969	80	3.150	58	2.283	KM50PKG3S	27-34	20-25	1,81	3.99
3668964	KM80TSS63080M	KM63	63	2.480	80	3.150	58	2.283	KM63PKG3S	47-54	35-40	2,14	4.71

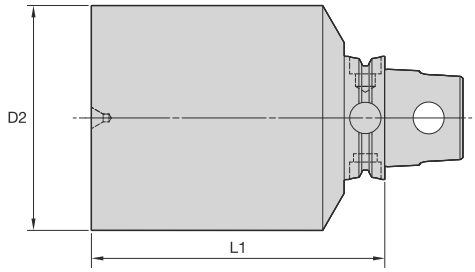


KM QUICK CHANGE

ES • KM Offset Reducer

order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	F mm	F in	spare parts package	wrench size actuation screw	Nm	ft. lbs.	kg	lbs
	right hand													
3734754	KM80TSESR63105M	KM63	63	2.4803	105	4.134	20	.787	KM63PKG3S	12mm	47-54	35-40	3,81	8.40
	left hand													
3734753	KM80TSESL63105M	KM63	63	2.4803	105	4.134	20	.787	KM63PKG3S	12mm	47-54	35-40	3,81	8.40

• Machinable front 32–38 HRC.



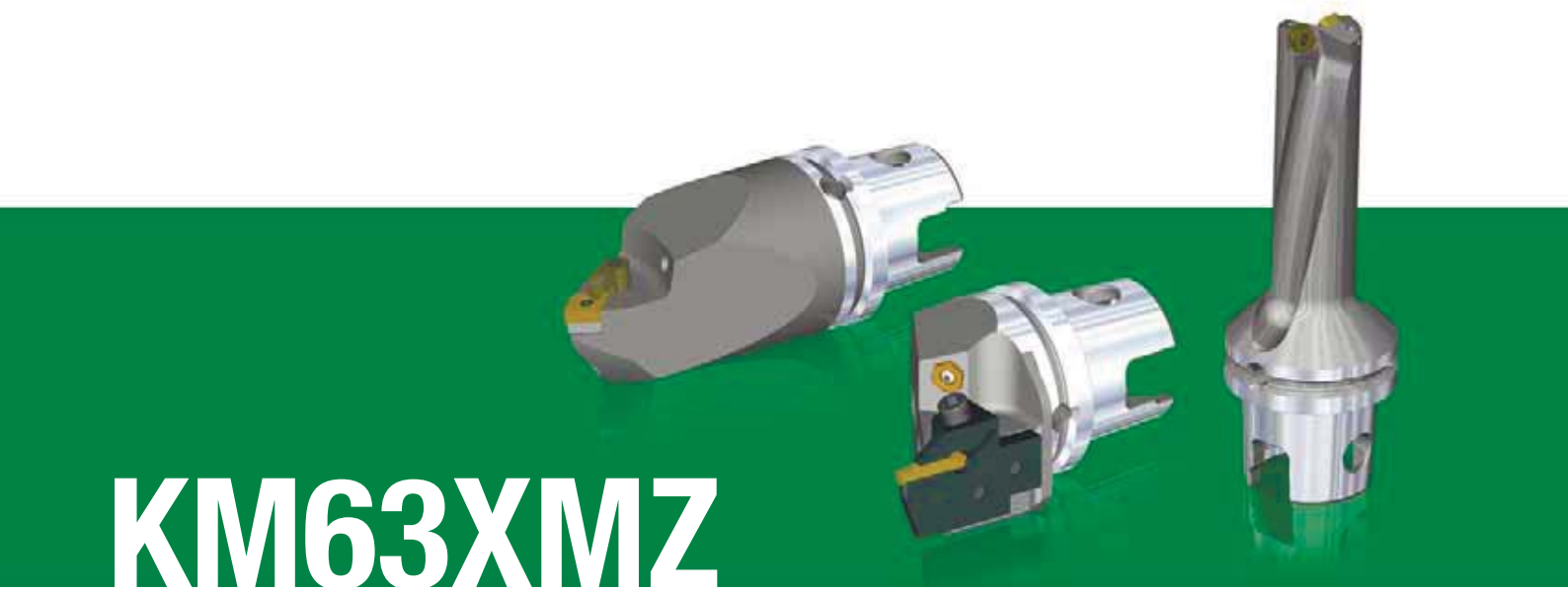
KM QUICK CHANGE

BN

order number	catalog number	D2 mm	D2 in	L1 mm	L1 in	hardness range	kg	lbs
3653264	**KM80TSBN125075M**	125	4.921	75	2.953	32–38 HRC	6,17	13.60
3653265	**KM80TSBN140130M**	140	5.512	130	5.118	32–38 HRC	14,08	31.04
3653266	**KM80TSBN150160M**	150	5.906	160	6.299	32–38 HRC	20,13	44.39
3653267	**KM80TSBN150250M**	150	5.906	250	9.843	32–38 HRC	32,59	71.85
3653268	**KM80TSBN175175M**	175	6.890	175	6.890	32–38 HRC	29,56	65.17

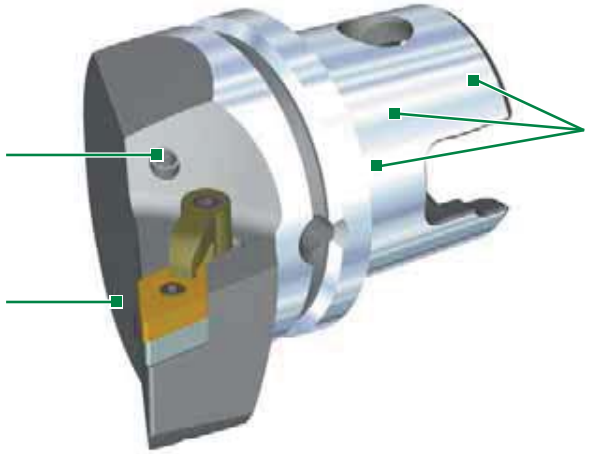
KM™ Quick Change Clamping System • **KM63XMZ™ Series**

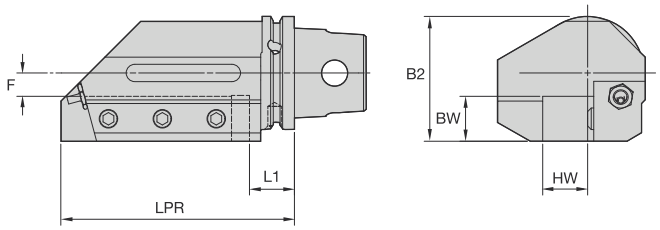
The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.



KM63XMZ

- KM63XMZ is designed to be used on Mazak® Mark IV Series and I- and J-Series INTEGREX® Machines.
- KM63XMZ is your solution for multitasking.





KM QUICK CHANGE

■ STA • Straight Side Mount • Metric

order number	catalog number	L1	LPR	F	HW	BW	B2	cup point socket set screw	nozzle	Nm	kg
1855652	KM63XMZSTALF2020Y	25	100	10	20	20	62	MS2049	PMT04526 COOLANT NOZZLE SPRAY	35	2,46
1506498	KM63XMZSTALF2525Y	25	130	13	25	25	70	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	3,54
1850241	KM63XMZSTAR2020Y	25	100	10	20	20	62	MS2049	PMT04526 COOLANT NOZZLE SPRAY	35	2,43
1514567	KM63XMZSTAR2525Y	25	130	13	25	25	70	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	3,58

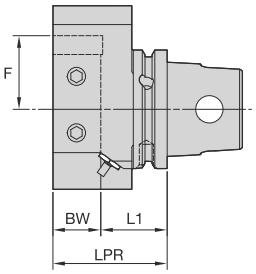
■ STA • Straight Side Mount • Inch

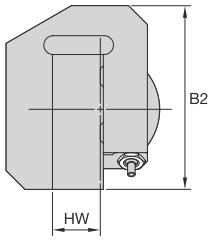
order number	catalog number	L1	LPR	F	HW	BW	B2	cup point socket set screw	nozzle	ft. lbs.	lbs
1855684	KM63XMZSTALF12Y	.921	3.937	.378	.750	.750	2.421	MS2049	PMT04526 COOLANT NOZZLE SPRAY	26	5.38
1516687	KM63XMZSTALF16Y	.906	5.118	.522	1.000	1.000	2.762	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	7.83
1855683	KM63XMZSTAR12Y	.921	3.937	.378	.750	.750	2.421	MS2049	PMT04526 COOLANT NOZZLE SPRAY	26	5.32
1516683	KM63XMZSTAR16Y	.906	5.118	.522	1.000	1.000	2.762	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	7.92

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.

KM63XMZ™ Cutting Units

Single Square Shank Adapters





KM QUICK CHANGE

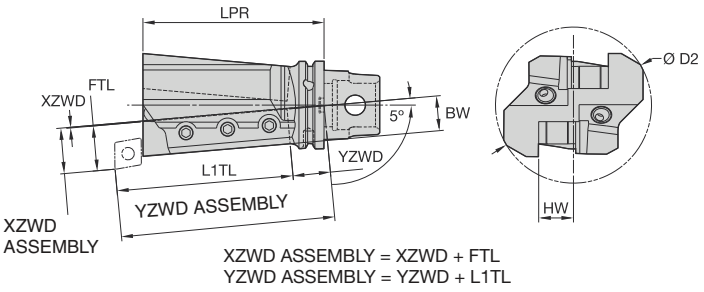
ETA • Straight End Mount • Inch

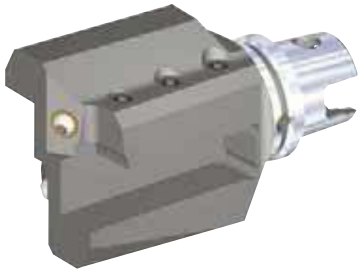
order number	catalog number	L1	LPR	F	HW	BW	B2	ft. lbs.	lbs
	right hand								
3103491	KM63XMZETAR16Y	1.388	2.388	-1.539	1.000	1.000	3.839	40	4.97
	left hand								
3103492	KM63XMZETALF16Y	1.388	2.388	-1.539	1.000	1.000	3.839	40	4.85

Spare Parts

catalog number	cup point socket set screw	nozzle
right hand		
KM63XMZETAR16Y	DWG 249618-23R05	PMT04526 COOLANT NOZZLE SPRAY
left hand		
KM63XMZETALF16Y	DWG 249618-23R05	PMT04526 COOLANT NOZZLE SPRAY

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



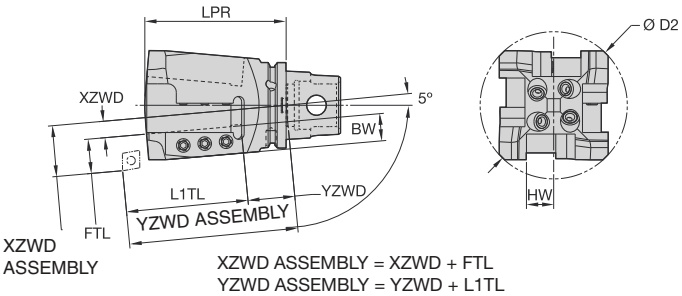


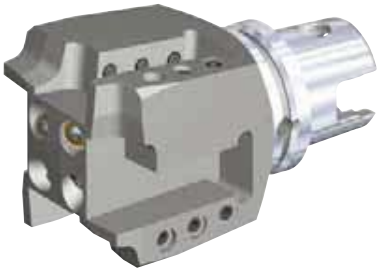
KM QUICK CHANGE

■ STA • 2x Straight Side Mount • Metric

order number	catalog number	D2	LPR	XZWD	YZWD	HW	BW	cup point socket set screw	Nm	nozzle	kg
	right hand										
1847363	KM63XMZ2XSTAR2525Y	112	130	1	28	25	25	MS1430	55	PWZ1012	3,85
	left hand										
1868533	KM63XMZ2XSTALF2525Y	112	130	1	28	25	25	MS1430	55	PWZ1012	3,85

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



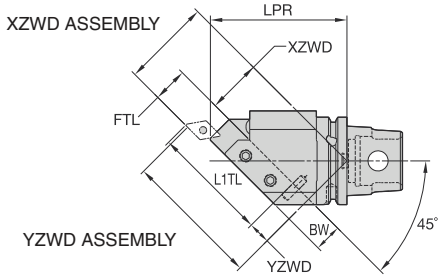


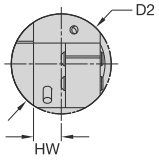
KM QUICK CHANGE

■ STA • 4x Straight Side Mount • Metric

order number	catalog number	D2	LPR	XZWD	YZWD	HW	BW	cup point socket set screw	Nm	nozzle	kg
1725301	KM63XMZ4XSTAR2020Y	108	104	12	34	20	20	121.830	18	PWZ1008	2,92

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.





XZWD ASSEMBLY = XZWD + FTL
YZWD ASSEMBLY = YZWD + L1TL

KM QUICK CHANGE

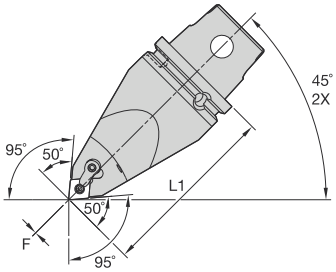
45TA • 45° Mount • Metric

order number	catalog number	D2	LPR	XZWD	YZWD	HW	BW	cup point socket set screw	nozzle	Nm	kg
	right hand										
1855665	KM63XMZ45TAR2020Y	72	99	39	16	20	20	MS2049	PWZ1012	25	2,01
	left hand										
1855669	KM63XMZ45TALF2020Y	72	99	39	16	20	20	MS2049	PWZ1012	25	2,01

45TA • 45° Mount • Inch

order number	catalog number	D2	LPR	XZWD	YZWD	HW	BW	cup point socket set screw	nozzle	ft. lbs.	lbs
	right hand										
1855685	KM63XMZ45TAR12Y	2.835	3.887	1.518	.451	.750	.750	MS2049	PWZ1012	18	4.38
	left hand										
1855686	KM63XMZ45TALF12Y	2.835	3.887	1.518	.451	.750	.750	MS2049	PWZ1012	18	4.38

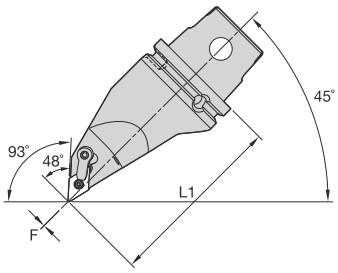
NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



KM QUICK CHANGE

MCMN 50° • 95° Application • Centerline

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
3180556	KM63XMZMCMNNF12115Y	115	4.528	0	.000	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	2,07	4.57

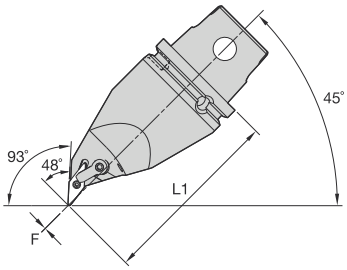


Left-Hand Tool

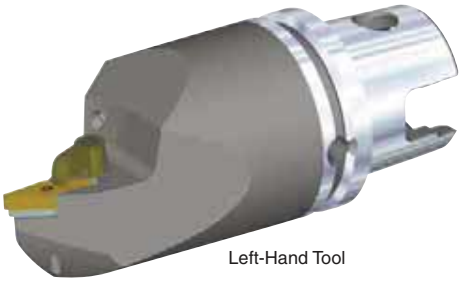
KM QUICK CHANGE

MDMN 48° • 93° Application • Centerline

order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3487461	KM63XMZMDMNR1504115Y	115	4.528	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,88	4.14
3487462	KM63XMZMDMNR1506115Y	115	4.528	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,88	4.13
	left hand											
3487458	KM63XMZMDMNLF1504115Y	115	4.528	0	.000	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,87	4.11
3487459	KM63XMZMDMNLF1506115Y	115	4.528	0	.000	DN..150608/DN..442	IDSN432	KLM46L	CKM23	STCM11	1,86	4.10

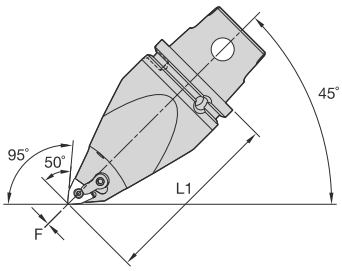


KM QUICK CHANGE


Left-Hand Tool

■ MVMN 48° • 93° Application • Centerline

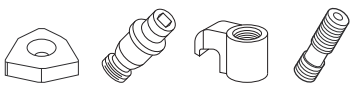
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3487473	KM63XMZMVMNR16115Y	115	4.528	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,97	4.35
	left hand											
3487460	KM63XMZMVMNLF16115Y	115	4.528	0	.000	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,97	4.35



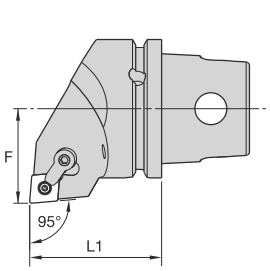
KM QUICK CHANGE

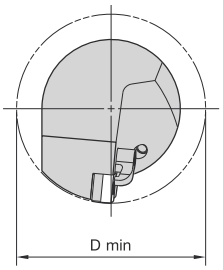
Left-Hand Tool

■ MWMN 50° • 95° Application • Centerline



order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3487572	KM63XMZMWMNR08115Y	115	4.528	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	2,03	4.47
	left hand											
3487571	KM63XMZMWMNLF08115Y	115	4.528	0	.000	WN..080408/WN..432	IWSN433	KLM46	CKM20	STCM11	2,02	4.46

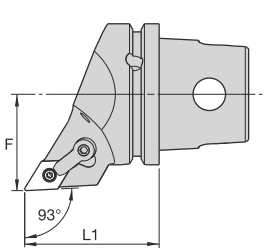


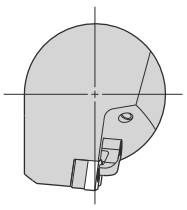


KM QUICK CHANGE

MCLN 95°

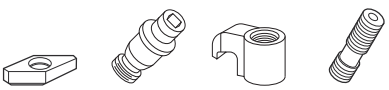
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
1551813	KM63XMZMCLNR12Y	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,24	2.73
1603738	KM63XMZMCLNR16Y	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,24	2.74
	left hand													
3103485	KM63XMZMCLNLF12Y	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,24	2.73
3103486	KM63XMZMCLNLF16Y	60	2.362	43	1.693	86	3.386	CN..160612/CN..543	ICSN533	KLM58	CKM20	STCM11	1,24	2.74



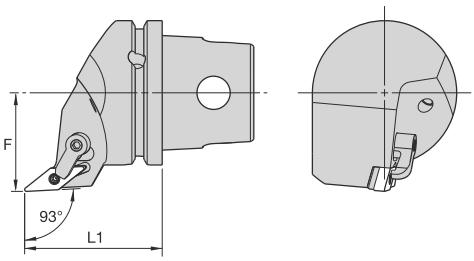


KM QUICK CHANGE

MDJN 93°

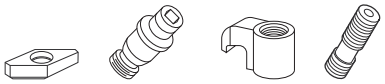


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3103487	KM63XMZMDJNR1504Y	60	2.362	43	1.693	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,07	2.360
	left hand											
3103488	KM63XMZMDJNLF1504Y	60	2.362	43	1.693	DN..150408/DN..432	IDSN442	KLM46L	CKM23	STCM11	1,07	2.360

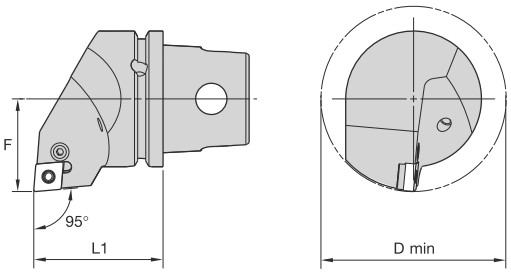


KM QUICK CHANGE

■ MVJN 93°

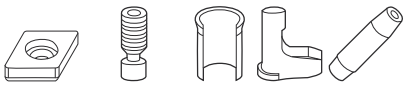


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
3103489	KM63XMZMVJNR16Y	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,05	2.32
	left hand											
3103490	KM63XMZMVJNLF16Y	60	2.362	43	1.693	VN..160408/VN..332	IVSN322	KLM34L	CKM23	STCM11	1,05	2.32

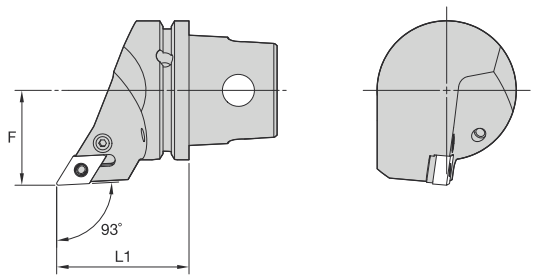


KM QUICK CHANGE

■ PCLN 95°

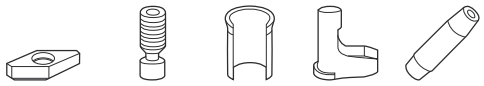


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand														
2231263	KM63XMZPCLNR12Y	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	512.112	514.023	513.023	511.023	515.018	1,23	2.71
	left hand														
2231264	KM63XMZPCLNLF12Y	60	2.362	43	1.693	86	3.386	CN..120408/CN..432	512.112	514.023	513.023	511.023	515.018	1,23	2.71

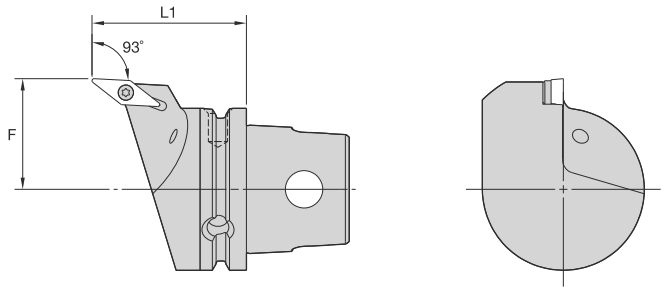


KM QUICK CHANGE

■ PDJN 93°



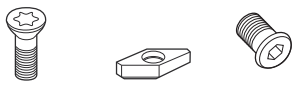
		L1		F									
order number	catalog number	mm	in	mm	in	gage insert	shim	lever screw	shim pin	toggle lever	punch	kg	lbs
	right hand												
2231265	KM63XMZPDJNR15Y	60	2.362	43	1.693	DN..150608/DN..442	512.153	514.028	513.023	511.024	515.018	1,04	2.29



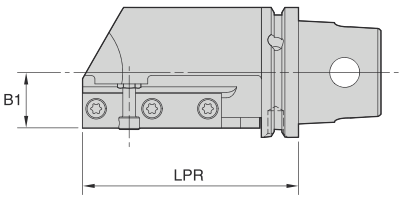
Left-Hand Tool

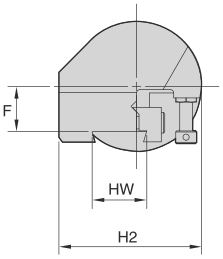
KM QUICK CHANGE

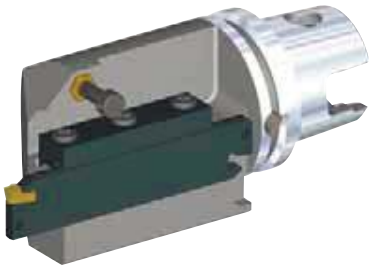
■ SVJB 93°



		L1		F							
order number	catalog number	mm	in	mm	in	gage insert	insert screw	shim	shim screw	kg	lbs
2231270	KM63XMZSVJBLF16Y	60	2.362	43	1.693	VB..160408/VB..332	MS1156	SKVN343	SRS3	1,07	2.35





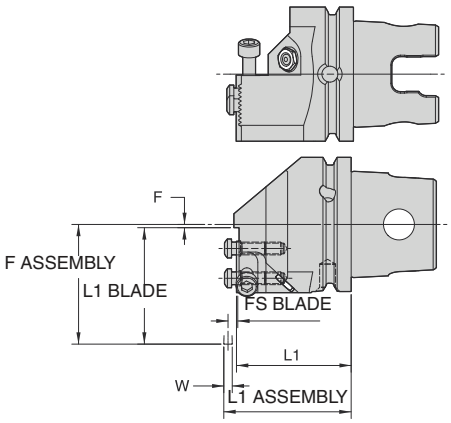


KM QUICK CHANGE

■ BS • Side Mount

order number	catalog number	F mm	F in	LPR mm	LPR in	H2 mm	H2 in	HW mm	HW in	B1 mm	B1 in	cartridge size	cartridge 1	clamp	coolant screw	kg	lbs
	right hand																
1982386	**KM63XMZBSR4Y**	21,9	.863	105	4.12	69	2.72	26	1.02	38	1.48	26	A2BNSN26...	**CGS4**	**MS1595**	2,27	5.00
1831638	**KM63XMZBSR5Y**	39,9	1.572	124	4.87	71	2.81	32	1.26	40	1.57	32	A2BNSN32...	**CGS5**	**MS1595**	3,64	8.04
	left hand																
1982387	**KM63XMZBSLF4Y**	21,9	.863	105	4.12	69	2.72	26	1.02	38	1.48	26	A2BNSN26...	**CGS4**	**MS1595**	2,31	5.10
1831634	**KM63XMZBSLF5Y**	39,9	1.572	124	4.87	71	2.81	32	1.26	40	1.57	32	A2BNSN32...	**CGS5**	**MS1595**	3,63	7.99

NOTE: Blades must be ordered separately. See the WIDIA Turning (A-09-02078) catalog.



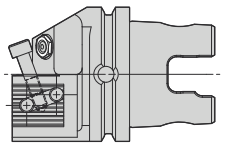
F ASSEMBLY = L1 BLADE + F
L1 ASSEMBLY = W/2 + L1 + FS BLADE + L1 — 0,787mm

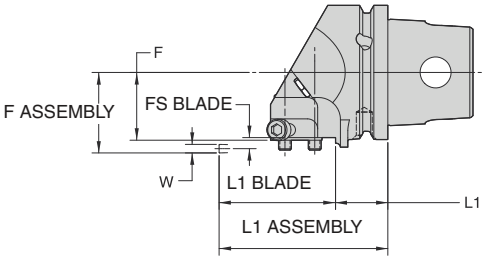
KM QUICK CHANGE

■ WGME

order number	catalog number	L1 mm	L1 in	F mm	F in	button-head cap screw	nozzle	socket-head cap screw	kg	lbs
	right hand									
3949660	**KM63XMZWGMER55MY**	53,79	2.118	1,52	.060	**606256**	**PMT08430**	**MS337**	1,24	2.73
	left hand									
3949661	**KM63XMZWGMELF55MY**	53,79	2.118	1,52	.060	**606256**	**PMT08430**	**MS337**	1,24	2.73

NOTE: For SLS cartridges and WMT insert, see WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use left-hand cartridges.

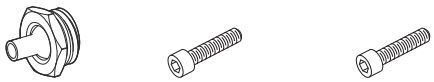




F ASSEMBLY = W/2 + F + FS BLADE — 0,787mm
L1 ASSEMBLY = L1 + L1 BLADE

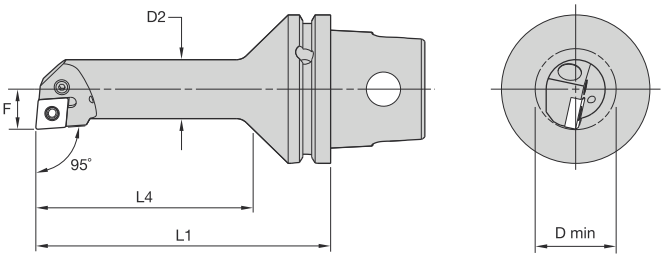
KM QUICK CHANGE

WGMS



order number	catalog number	L1 mm	L1 in	F mm	F in	nozzle	socket-head cap screw	socket-head cap screw	kg	lbs
	right hand									
3949658	KM63XMZWGMSR55MY	24,52	.965	31,79	1.252	PMT08430	MS1132PKG	MS337	1,17	2.58
	left hand									
3949659	KM63XMZWGMSLF55MY	24,52	.965	31,79	1.252	PMT08430	MS1132PKG	MS337	1,17	2.58

NOTE: For SLS cartridges and WMT insert, see WIDIA Turning (A-09-02078) catalog.
Right-hand cutting units use right-hand cartridges.



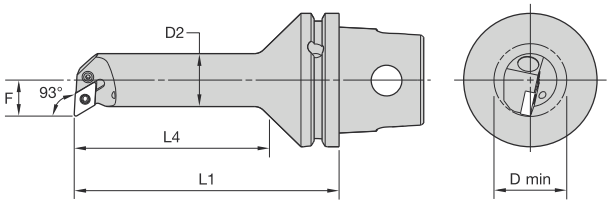
KM QUICK CHANGE

PCLN 95°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
2231271	KM63XMZS25KPCLNR12Y	25	.98	32	1.26	17	.669	88	3.45	125	4.921	CN..120408/CN..432	1,17	2.57
	left hand													
2231272	KM63XMZS25KPCLNLF12Y	25	.98	32	1.26	17	.669	88	3.45	125	4.921	CN..120408/CN..432	1,17	2.57

Spare Parts

catalog number	lever screw	toggle lever
right hand		
KM63XMZS25KPCLNR12Y	514.022	511.022
left hand		
KM63XMZS25KPCLNLF12Y	514.022	511.022



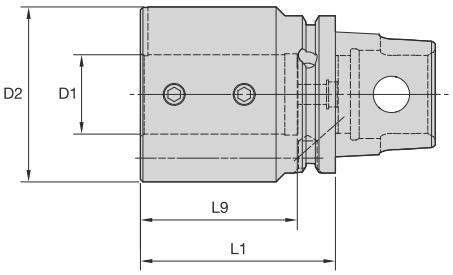
KM QUICK CHANGE

PDUN 93°

order number	catalog number	D2 mm	D2 in	D min mm	D min in	F mm	F in	L4 mm	L4 in	L1 mm	L1 in	gage insert	kg	lbs
	right hand													
2231273	**KM63XMZS25KPDUNR11Y**	25	.98	32	1.26	17	.669	88	3.45	125	4.921	DN..110408/DN..332	1,15	2.530
	left hand													
2231274	**KM63XMZS25KPDUNLF11Y**	25	.98	32	1.26	17	.669	88	3.45	125	4.921	DN..110408/DN..332	1,15	2.530

Spare Parts

catalog number	lever screw	toggle lever
right hand		
KM63XMZS25KPDUNR11Y	**514.012**	**511.015**
left hand		
KM63XMZS25KPDUNLF11Y	**514.012**	**511.015**



BA • Boring Bar Adapter • Internal and External Coolant • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	nozzle	wrench size clamp screw	Nm	kg
1855688	**KM63XMZBA3278Y**	32	70	78	63	**MS1561**	**PWZ1012**	5mm	25	2
1510611	**KM63XMZBA40105Y**	40	80	105	76	**MS1858**	**PWZ1012**	6mm	45	3

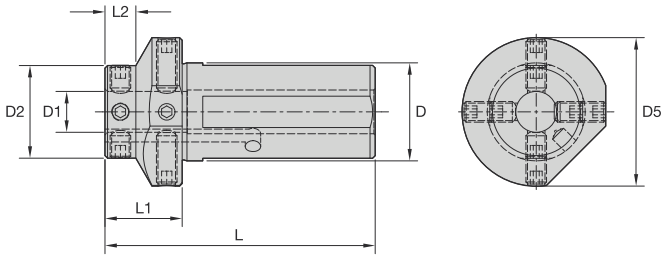
BA • Boring Bar Adapter • Internal and External Coolant • Inch

order number	catalog number	D1	D2	L1	L9	clamp screw	nozzle	wrench size clamp screw	ft. lbs.	lbs
1855692	**KM63XMZBA125307Y**	1 1/4	2.76	3.071	2.48	**MS1561**	**PWZ1012**	5mm	18	4
1516678	**KM63XMZBA150413Y**	1 1/2	3.15	4.134	2.99	**MS1858**	**PWZ1012**	6mm	33	7
1831641	**KM63XMZBA200512Y**	2	3.54	5.118	3.98	**MS1858**	**PWZ1012**	6mm	33	9

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For boring bar reducers, see page A286.

KM63XMZ™ Adapters

Boring Bar Reducers



KM QUICK CHANGE

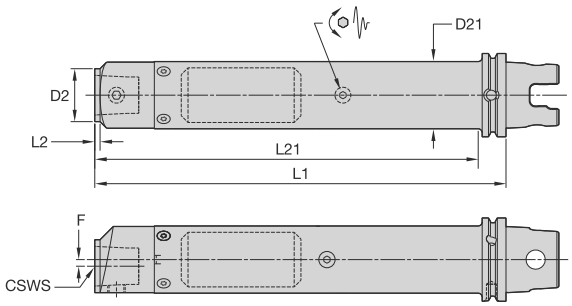
BR • Boring Bar Reducer • Metric

order number	catalog number	D	D1	D2	D5	L	L1	L2	flat point socket set screw	wrench size clamp screw	Nm	kg
1521853	KM63XMZBR4008Y	40	8	36	58	105	30	12	–	3mm	7	1,07
1521854	KM63XMZBR4010Y	40	10	36	58	105	30	12	–	3mm	7	1,04
1521857	KM63XMZBR4012Y	40	12	36	58	105	30	12	MS1109	4mm	15	0,93
1521859	KM63XMZBR4016Y	40	16	36	58	105	30	12	MS1109	4mm	15	0,85
1521860	KM63XMZBR4020Y	40	20	58	58	105	30	30	MS1878	4mm	15	0,62
1521858	KM63XMZBR4025Y	40	25	54	54	105	30	30	MS1878	4mm	15	1,03
1521856	KM63XMZBR4032Y	40	32	54	54	105	30	30	MS1878	4mm	15	0,99

BR • Boring Bar Reducer • Inch

order number	catalog number	D	D1	D2	D5	L	L1	L2	flat point socket set screw	wrench size clamp screw	ft. lbs.	lbs
1566093	KM63XMZBR150031Y	1.50	5/16	1.42	2.27	4.13	1.181	.472	–	3mm	5	2.21
1566078	KM63XMZBR150038Y	1.50	3/8	1.42	2.27	4.13	1.181	.472	–	3mm	5	2.14
1566079	KM63XMZBR150050Y	1.50	1/2	1.42	2.27	4.13	1.181	.472	MS1109	4mm	11	2.03
1566080	KM63XMZBR150062Y	1.50	5/8	1.42	2.27	4.13	1.181	.472	MS1109	4mm	11	1.90
1566211	KM63XMZBR150075Y	1.50	3/4	2.27	2.27	4.13	1.181	1.181	MS1878	4mm	11	2.13
1566212	KM63XMZBR150100Y	1.50	1	2.27	2.27	4.13	1.181	1.181	MS1878	4mm	11	1.73
1566213	KM63XMZBR150125Y	1.50	1 1/4	2.27	2.27	4.13	1.181	1.181	MS-1879	4mm	11	1.21

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



KM QUICK CHANGE

■ TTB • KM Tunable Bar • KM

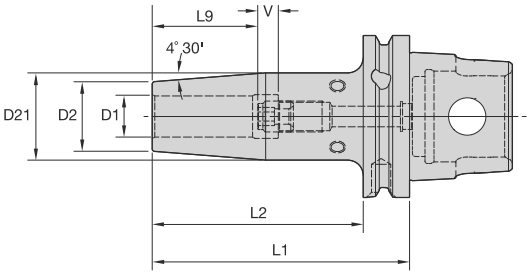
order number	catalog number	CSWS system size	D2 mm	D2 in	D21 mm	D21 in	F mm	F in	L1 mm	L1 in	L2 mm	L2 in	L21 mm	L21 in
3901271	**KM63XMZD24TTB9KM40**	KM40	38,10	1.500	—	—	0,00	.000	234,55	9.234	216,55	8.526	—	—
3901274	**KM63XMZD28TTB14KM40**	KM40	44,45	1.750	—	—	0,00	.000	361,52	14.233	4,00	.157	341,52	13.446
3901272	**KM63XMZD32TTB12KM40**	KM40	50,00	1.969	—	—	5,00	.197	310,71	12.233	4,00	.157	290,71	11.445
3901275	**KM63XMZD32TTB16KM40**	KM40	50,00	1.969	—	—	5,00	.197	412,32	16.233	4,00	.157	392,32	15.446
3901273	**KM63XMZD40TTB15KM40**	KM40	63,50	2.500	—	—	11,75	.463	386,92	15.233	4,00	.157	368,92	14.524
3901276	**KM63XMZD40TTB20KM40**	KM40	63,50	2.500	—	—	11,75	.463	513,92	20.233	4,00	.157	495,92	19.524

NOTE: Tunable technical section, see page K66.

KM63XMZ™ Shank Tools

Shrink Fit Toolholders General Purpose (GP)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
4	h4	0,000/-0,004
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

KM™ QUICK CHANGE

■ HPV TT • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3661833	KM63XMZHPVTT04080MY	4	9		80	52	15	10	TTSS05014M	2,5mm	0,74
3661823	KM63XMZHPVTT06080MY	6	21	1	80	62	26	10	TTSS05014M	2,5mm	0,85
3661824	KM63XMZHPVTT08080MY	8	21	1	80	62	26	10	TTSS06014M	3mm	0,84
3661825	KM63XMZHPVTT10090MY	10	24	1	90	72	31	10	TTSS08014M	4mm	0,97
3661826	KM63XMZHPVTT12090MY	12	24	1	90	72	36	10	TTSS10014M	5mm	0,95
3661827	KM63XMZHPVTT14100MY	14	27	1	100	82	36	10	TTSS10014M	5mm	1,08
3661828	KM63XMZHPVTT16100MY	16	27	1	100	82	39	10	TTSS12014M	6mm	1,05
3661829	KM63XMZHPVTT18100MY	18	33	2	100	82	39	10	TTSS12014M	6mm	1,27
3661830	KM63XMZHPVTT20100MY	20	33	2	100	82	41	10	TTSS16014M	8mm	1,24
3661831	KM63XMZHPVTT25120MY	25	44	2	120	102	47	10	TTSS16014M	8mm	1,96
3661832	KM63XMZHPVTT32120MY	32	44	2	120	102	51	10	TTSS16014M	8mm	1,79

(continued)

(HPV TT continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameter	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

HPV TT • Inch

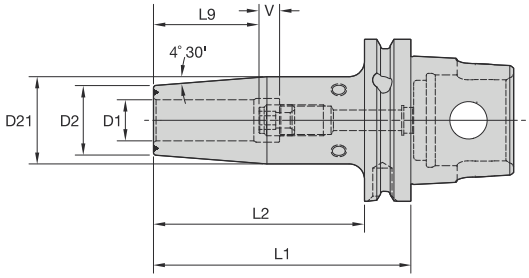
order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3858932	**KM63XMZHPVTT025315Y**	1/4	.827	1.059	3.150	2.441	1.024	.394	**TTSS05014M**	2,5mm	1.85
3858943	**KM63XMZHPVTT031315Y**	5/16	.827	1.059	3.150	2.441	1.024	.394	**TTSS06014M**	3mm	1.84
3858944	**KM63XMZHPVTT038335Y**	3/8	.945	1.256	3.347	2.638	1.221	.394	**TTSS08014M**	4mm	2.05
3858945	**KM63XMZHPVTT044354Y**	7/16	.945	1.256	3.543	2.835	1.417	.394	**TTSS10014M**	5mm	2.09
3858946	**KM63XMZHPVTT050354Y**	1/2	.945	1.256	3.543	2.835	1.417	.394	**TTSS10014M**	5mm	2.06
3858947	**KM63XMZHPVTT056354Y**	9/16	1.063	1.335	3.543	2.835	1.417	.394	**TTSS10014M**	5mm	2.19
3858948	**KM63XMZHPVTT062374Y**	5/8	1.063	1.335	3.740	3.032	1.535	.394	**TTSS12014M**	6mm	2.22
3858949	**KM63XMZHPVTT068374Y**	11/16	1.299	1.650	3.740	3.032	1.535	.394	**TTSS12014M**	6mm	2.68
3858950	**KM63XMZHPVTT075394Y**	3/4	1.299	1.650	3.937	3.228	1.614	.394	**TTSS16014M**	8mm	2.73
3858951	**KM63XMZHPVTT088394Y**	7/8	1.299	1.650	3.937	3.228	1.614	.394	**TTSS16014M**	8mm	2.64
3858952	**KM63XMZHPVTT100453Y**	1	1.732	2.083	4.528	3.819	1.850	.394	**TTSS16014M**	8mm	4.10
3858953	**KM63XMZHPVTT125472Y**	1 1/4	1.732	2.083	4.724	4.016	2.008	.394	**TTSS16014M**	8mm	3.96

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.

KM63XMZ™ Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.



KM QUICK CHANGE

Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

■ HPV TT HT • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3661834	KM63XMZHPVTTHT12090MY	12	24	1	90	72	36	10	TTSS10014M	5mm	0,95
3661835	KM63XMZHPVTTHT14100MY	14	27	1	100	82	36	10	TTSS10014M	5mm	1,08
3661836	KM63XMZHPVTTHT16100MY	16	27	1	100	82	39	10	TTSS12014M	6mm	1,05
3661837	KM63XMZHPVTTHT18100MY	18	33	2	100	82	39	10	TTSS12014M	6mm	1,27
3661838	KM63XMZHPVTTHT20100MY	20	33	2	100	82	41	10	TTSS16014M	8mm	1,24
3661839	KM63XMZHPVTTHT25120MY	25	44	2	120	102	47	10	TTSS16014M	8mm	1,96
3661840	KM63XMZHPVTTHT32120MY	32	44	2	120	102	51	10	TTSS16014M	8mm	1,79

(continued)

(HPV TT HT continued)

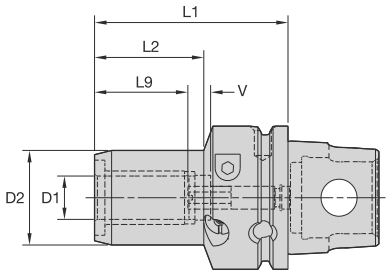
Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameter	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

HPV TT HT • Inch

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3858954	**KM63XMZHPVTTHT050354Y**	1/2	.94	1.26	3.543	2.83	1.42	.39	**TTSS10014M**	5mm	2.06
3858955	**KM63XMZHPVTTHT056354Y**	9/16	1.06	1.33	3.543	2.83	1.42	.39	**TTSS10014M**	5mm	2.19
3858956	**KM63XMZHPVTTHT062374Y**	5/8	1.06	1.33	3.740	3.03	1.54	.39	**TTSS12014M**	6mm	2.22
3858957	**KM63XMZHPVTTHT068374Y**	11/16	1.30	1.65	3.740	3.03	1.54	.39	**TTSS12014M**	6mm	2.68
3858958	**KM63XMZHPVTTHT075394Y**	3/4	1.30	1.65	3.937	3.23	1.61	.39	**TTSS16014M**	8mm	2.73
3858959	**KM63XMZHPVTTHT088394Y**	7/8	1.30	1.65	3.937	3.23	1.61	.39	**TTSS16014M**	8mm	2.64
3858960	**KM63XMZHPVTTHT100453Y**	1	1.73	2.08	4.528	3.82	1.85	.39	**TTSS16014M**	8mm	4.10
3858961	**KM63XMZHPVTTHT125472Y**	1 1/4	1.73	2.08	4.724	4.02	2.01	.39	**TTSS16014M**	8mm	3.96

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.



KM QUICK CHANGE

HC • Metric

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
1514516	**KM63XMZHC2085Y**	20	42	85	48	41	10	**170.135**	5mm	**170.003**	3mm	1,36
1514517	**KM63XMZHC32100Y**	32	60	100	59	51	10	**170.136**	6mm	**170.004**	4mm	1,97

HC • Inch

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	lbs
1514514	**KM63XMZHC075335Y**	3/4	1.64	3.347	1.89	1.61	.39	**170.135**	5mm	**170.003**	3mm	3.04
1514515	**KM63XMZHC125394Y**	1 1/4	2.35	3.937	2.32	2.01	.39	**170.136**	6mm	**170.004**	4mm	4.39

NOTE: Do not overtorque clamp screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I7.

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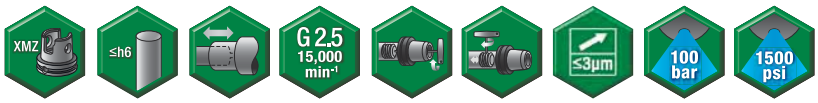
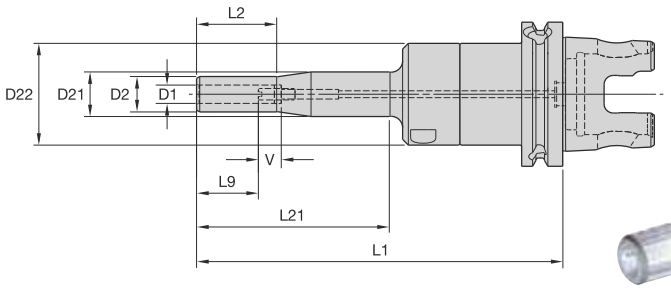


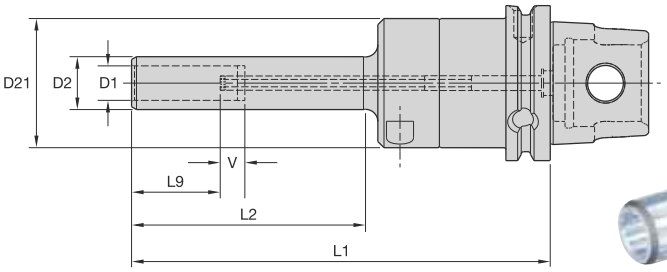


KM QUICK CHANGE

■ HCSLT • Metric

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
3055511	**KM63XMZHCSLT06160MY**	6	14	20	44	160	35	85	27	10	**170.135**	5mm	**170.002**	2,5mm	1,38
3055512	**KM63XMZHCSLT08160MY**	8	16	20	44	160	35	85	27	10	**170.135**	5mm	**170.002**	2,5mm	1,39
3055513	**KM63XMZHCSLT10160MY**	10	18	44	—	160	85	142	31	10	**170.135**	5mm	**170.003**	3mm	1,37

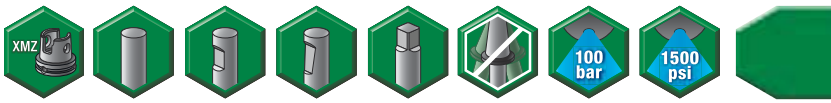
NOTE: Do not overtorque clamp screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I2.

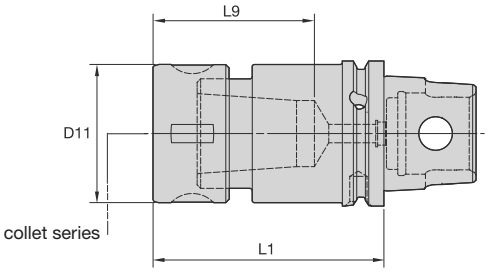


■ HCSL • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length adjustment wrench	wrench size stop screw	kg
3055514	**KM63XMZHCSL12170MY**	12	20	44	170	95	36	10	**170.135**	5mm	**170.002**	2,5mm	1,41
3055515	**KM63XMZHCSL14170MY**	14	22	52	170	95	36	10	**170.135**	5mm	**170.002**	2,5mm	1,69
3055516	**KM63XMZHCSL16170MY**	16	24	52	170	95	39	10	**170.135**	5mm	**170.002**	2,5mm	1,70
3055517	**KM63XMZHCSL18170MY**	18	26	52	170	95	39	10	**170.135**	5mm	**170.002**	2,5mm	1,75
3055518	**KM63XMZHCSL20170MY**	20	28	52	170	95	41	10	**170.135**	5mm	**170.002**	2,5mm	1,78

• Tremendous grip (3:1 advantage).





KM QUICK CHANGE

	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

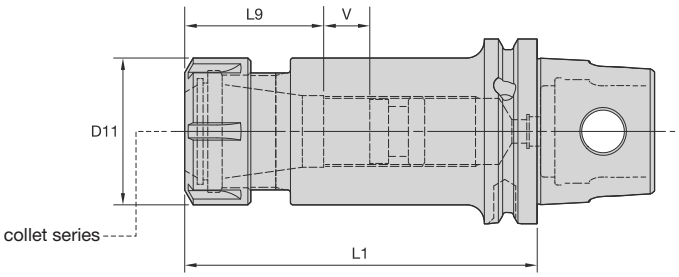
TG Collet Chuck • Round Nut

			D11		L1		L9			
order number	catalog number	collet series	mm	in	mm	in	mm	in	kg	lbs
1566225	**KM63XMZTG05050Y**	TG50	38	1.50	50	1.969	42,0	1.65	0,74	1.63
1516675	**KM63XMZTG07575Y**	TG75	50	1.97	75	2.953	54,0	2.13	1,30	2.88
1516677	**KM63XMZTG100100Y**	TG100	60	2.36	100	3.937	70,0	2.72	1,87	4.12

Spare Parts

catalog number	locknut	wrench	Nm	ft. lbs.
KM63XMZTG05050Y	**LNA050M**	**HSW34M**	55 - 68	40 - 50
KM63XMZTG07575Y	**LNA075M**	**HSW45M**	108 - 136	80 - 100
KM63XMZTG100100Y	**LNA100M**	**HSW58M**	163 - 203	120 - 150

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER11	0,5	7,0	.02	.28
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

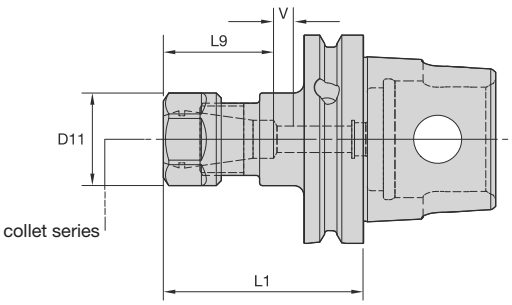
KM™ QUICK CHANGE

ER Collet Chuck • Round Nut

			D11		L1		L9		V								
order number	catalog number	collet series	mm	in	mm	in	mm	in	mm	in	locknut	wrench	stop screw	Nm	ft. lbs.	kg	lbs
1826965	**KM63XMZER1160Y**	ER11	16	.63	60	2.362	24,0	.94	—	—	**LER11M**	**ER11WEM**	**—**	16	12	0,71	1.56
1822413	**KM63XMZER1190Y**	ER11	16	.63	90	3.543	24,0	.94	—	—	**LER11M**	**ER11WEM**	**—**	16	12	0,82	1.81
1504983	**KM63XMZER2560Y**	ER25	42	1.65	60	2.362	40,0	1.57	—	—	**LNSER25M**	**ER25WM**	**—**	104	77	0,85	1.88
1714892	**KM63XMZER25120Y**	ER25	42	1.65	120	4.724	40,0	1.57	40	1.57	**LNSER25M**	**ER25WM**	**SS075041G**	104	77	1,41	3.11
1516809	**KM63XMZER3260Y**	ER32	50	1.97	60	2.362	47,0	1.83	—	—	**LNSER32M**	**ER32WM**	**—**	136	100	0,91	2.00
1798651	**KM63XMZER32120Y**	ER32	50	1.97	120	4.724	46,0	1.81	34	1.34	**LNSER32M**	**ER32WM**	**SS094041G**	136	100	1,69	3.72
1714893	**KM63XMZER4090Y**	ER40	63	2.48	90	3.543	70,3	2.77	—	—	**LNSER40M**	**ER40WM**	**—**	176	130	1,65	3.64

(continued)

(ER Collet Chuck continued)



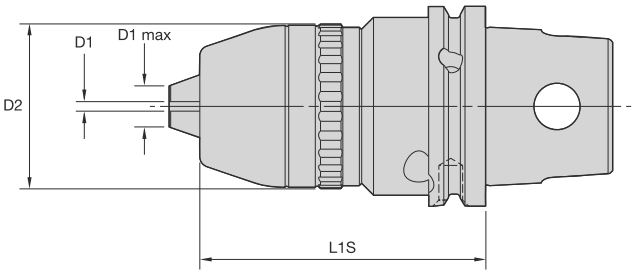
	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41

KM QUICK CHANGE

ER Collet Chuck • Hex Nut

		D11		L1		L9		V								
order number	catalog number	collet series	mm	in	mm	in	mm	in	mm	in	locknut	wrench	stop screw	Nm	ft. lbs.	kg	lbs
1532048	**KM63XMZER16120Y**	ER16	28	1.10	120	4.724	32	1.26	48	1.89	**LNHSER16M**	**OEW25M**	**SS044038G**	56	42	1,00	2.21
1516808	**KM63XMZER1660Y**	ER16	28	1.10	60	2.362	32	1.26	9	.35	**LNHSER16M**	**OEW25M**	**SS044038G**	56	42	0,74	1.63

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

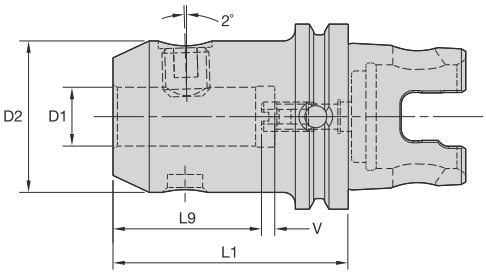


KM QUICK CHANGE

RDC • Drill Chuck

		D1		D1 max		D2		L1S	
order number	catalog number	mm	in	mm	in	mm	in	mm	in
1921511	KM63XMZRDC1390Y	1	.031	13	.500	50	1.949	90,0	3.543
3049855	KM63XMZRDC1690Y	3	.125	16	.625	52	2.047	90,0	3.543

NOTE: Activation size is 6mm.
Activation wrench included.
Wrench reorder number is 170.136.

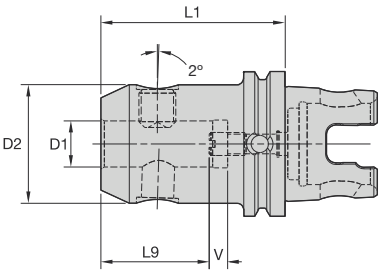


KM QUICK CHANGE

WN • Whistle Notch Adapter

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1982384	KM63XMZWN0660Y	6	25	60	30	8	SS03M012	3mm	7	571.060	2,5mm	0,76
1831642	KM63XMZWN0865Y	8	28	65	30	8	SS03M014	4mm	15	571.067	3mm	0,82
1831703	KM63XMZWN1070Y	10	35	70	35	7	SS03M018	5mm	25	571.068	4mm	0,96
1831704	KM63XMZWN1275Y	12	42	75	40	7	SS03M023	6mm	35	571.074	5mm	1,15
1831705	KM63XMZWN1475Y	14	44	75	40	7	SS03M023	6mm	35	571.074	5mm	1,19
1831706	KM63XMZWN1680Y	16	48	80	43	7	SS03M025	6mm	50	571.074	5mm	1,37
1982385	KM63XMZWN1880Y	18	50	80	43	7	SS03M025	6mm	50	571.074	5mm	1,41
1714887	KM63XMZWN2080Y	20	52	80	45	7	SS03M026	8mm	95	571.074	5mm	1,45
1714888	KM63XMZWN2585Y	25	65	85	50	8	SS03M027	10mm	135	571.074	5mm	2,01
1714889	KM63XMZWN3295Y	32	72	95	54	10	SS03M029	10mm	160	571.075	6mm	2,54

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.

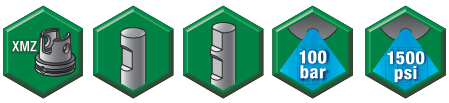


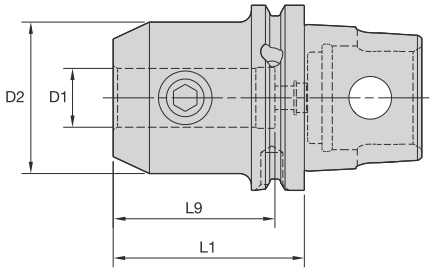
KM QUICK CHANGE

■ WN/EM • Whistle Notch and End Mill Adapter

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
2231550	**KM63XMZWNEM0680Y**	6	25	80	32	8	**SS03M012**	3mm	7	**571.060**	2,5mm	0,88
2231551	**KM63XMZWNEM0880Y**	8	28	80	32	8	**SS03M014**	4mm	15	**571.067**	3mm	0,94
2231552	**KM63XMZWNEM1080Y**	10	35	80	37	8	**SS03M018**	5mm	25	**571.068**	4mm	1,07
2231593	**KM63XMZWNEM1280Y**	12	42	80	42	8	**SS03M023**	6mm	35	**571.074**	5mm	1,24
2231594	**KM63XMZWNEM1480Y**	14	44	80	42	8	**SS03M023**	6mm	35	**571.074**	5mm	1,29
2231595	**KM63XMZWNEM1680Y**	16	48	80	45	8	**SS03M025**	6mm	50	**571.074**	5mm	1,39
2231596	**KM63XMZWNEM1880Y**	18	50	80	45	8	**SS03M025**	6mm	50	**571.074**	5mm	1,44
2231597	**KM63XMZWNEM2080Y**	20	52	80	47	8	**SS03M026**	8mm	95	**571.074**	5mm	1,49
2231598	**KM63XMZWNEM2580Y**	25	65	80	52	8	**SS03M027**	10mm	135	**571.074**	5mm	1,85
2231599	**KM63XMZWNEM3280Y**	32	72	80	56	8	**SS03M029**	10mm	160	**571.074**	5mm	2,10
2231600	**KM63XMZWNEM4095Y**	40	80	95	67	8	**SS03M029**	10mm	160	**571.074**	5mm	2,75

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.





KM QUICK CHANGE

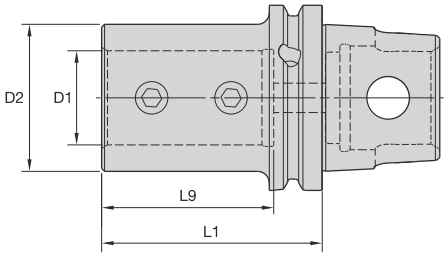
EM • Metric

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1621006	KM63XMZEM06100Y	6	25	100	40	SS03M012	3mm	7	0,98
1621010	KM63XMZEM08100Y	8	28	100	40	SS03M014	4mm	15	1,05
1621054	KM63XMZEM10100Y	10	35	100	45	SS03M018	5mm	25	1,22
1510191	KM63XMZEM1255Y	12	42	55	50	SS03M023	6mm	35	0,94
1511879	KM63XMZEM1660Y	16	48	60	53	SS03M025	6mm	50	1,09
1844636	KM63XMZEM1860Y	18	50	60	53	SS03M025	6mm	50	1,12
1511880	KM63XMZEM2065Y	20	52	65	55	SS03M026	8mm	95	1,21
1512091	KM63XMZEM2580Y	25	65	80	60	SS03M027	10mm	135	1,88
1714890	KM63XMZEM3290Y	32	72	90	65	SS03M029	10mm	160	2,38

EM • Inch

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1723304	KM63XMZEM050216Y	1/2	1.38	2.165	1.97	ELS044038PKG	7/32	20	1.80
1516667	KM63XMZEM062236Y	5/8	1.63	2.362	2.09	ELS056050PKG	1/4	40	2.07
1516669	KM63XMZEM075256Y	3/4	1.75	2.559	2.22	ELS062050PKG	5/16	70	2.25
1516672	KM63XMZEM100315Y	1	2.00	3.150	2.46	ELS075056PKG	3/8	110	2.87
1516673	KM63XMZEM125335Y	1 1/4	2.50	3.346	2.51	ELS075062PKG	3/8	110	3.97
1831838	KM63XMZEM200492Y	2	3.75	4.921	3.53	ELS100088PKG	1/2	150	10.47

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.

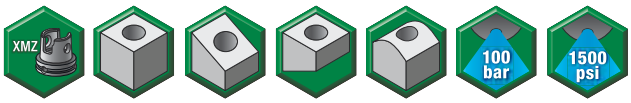


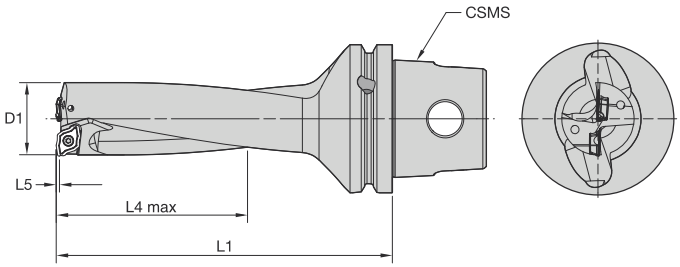
KM QUICK CHANGE

DAT • Metric

order number	catalog number	D1	D2	L1	L9	cone point socket set screw	wrench size clamp screw	Nm	clamp screw	wrench size clamp screw	Nm	kg
2231624	**KM63XMZDAT2575Y**	25	45	75	60	**12166903700**	6mm	40	**12166903900**	6mm	40	1,10
2231625	**KM63XMZDAT3275Y**	32	50	75	64	**12166903700**	6mm	40	**12166903900**	6mm	40	1,11
2231626	**KM63XMZDAT4090Y**	40	60	90	74	**12166903800**	8mm	50	**12166904000**	8mm	50	1,48

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamping screw.
Clamp screw wrench is not included.
Cone point screw to be tightened first.





■ TCP 3 x D • Metric

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898401	**KM63XMZTCP350R3YM**	KM63XMZ	35,0	154,0	105,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898402	**KM63XMZTCP360R3YM**	KM63XMZ	36,0	157,0	108,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898403	**KM63XMZTCP370R3YM**	KM63XMZ	37,0	161,0	111,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898404	**KM63XMZTCP380R3YM**	KM63XMZ	38,0	165,0	114,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898405	**KM63XMZTCP390R3YM**	KM63XMZ	39,0	169,0	117,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898406	**KM63XMZTCP400R3YM**	KM63XMZ	40,0	172,0	120,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898407	**KM63XMZTCP410R3YM**	KM63XMZ	41,0	176,0	123,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898408	**KM63XMZTCP420R3YM**	KM63XMZ	42,0	180,0	126,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898409	**KM63XMZTCP430R3YM**	KM63XMZ	43,0	184,0	129,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898410	**KM63XMZTCP440R3YM**	KM63XMZ	44,0	190,0	132,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898411	**KM63XMZTCP450R3YM**	KM63XMZ	45,0	191,0	135,0	0,96	XOMT12T308	**12148055800**	**12148082400**	T15
3898412	**KM63XMZTCP460R3YM**	KM63XMZ	46,0	195,0	138,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20
3898413	**KM63XMZTCP470R3YM**	KM63XMZ	47,0	199,0	141,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20
3898414	**KM63XMZTCP480R3YM**	KM63XMZ	48,0	202,0	144,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20
3898415	**KM63XMZTCP490R3YM**	KM63XMZ	49,0	206,0	147,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20
3898416	**KM63XMZTCP500R3YM**	KM63XMZ	50,0	210,0	150,0	1,48	XOMT160508	**12148007200**	**12148007500**	T20

NOTE: Drill shipped with insert screws and Torx wrench.
See WIDIA Indexable Milling and Holemaking (A-09-02081) catalog for inserts.

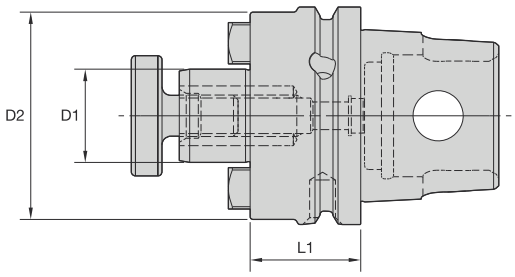
(continued)

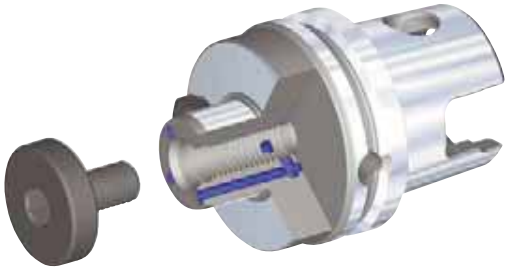
(TCP 3 x D continued)

TCP 3 x D • Inch

order number	catalog number	CSMS system size	D1	L1	L4 max	L5	gage insert	insert screw	Torx driver	Torx size
3898445	**KM63XMZTCP1250R3Y**	KM63XMZ	1.250	5.625	3.750	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898446	**KM63XMZTCP1313R3Y**	KM63XMZ	1.313	5.750	3.939	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898447	**KM63XMZTCP1375R3Y**	KM63XMZ	1.375	6.125	4.125	.028	XOMT09T306	**12148067200**	**12148086600**	T8
3898448	**KM63XMZTCP1438R3Y**	KM63XMZ	1.438	6.375	4.314	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898449	**KM63XMZTCP1500R3Y**	KM63XMZ	1.500	6.500	4.500	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898450	**KM63XMZTCP1563R3Y**	KM63XMZ	1.563	6.750	4.689	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898451	**KM63XMZTCP1625R3Y**	KM63XMZ	1.625	7.000	4.875	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898452	**KM63XMZTCP1688R3Y**	KM63XMZ	1.688	7.250	5.064	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898453	**KM63XMZTCP1750R3Y**	KM63XMZ	1.750	7.500	5.250	.038	XOMT12T308	**12148055800**	**12148082400**	T15
3898454	**KM63XMZTCP1875R3Y**	KM63XMZ	1.875	8.000	5.625	.058	XOMT160508	**12148007200**	**12148007500**	T20
3898455	**KM63XMZTCP1938R3Y**	KM63XMZ	1.938	8.250	5.814	.058	XOMT160508	**12148067200**	**12148007500**	T20
3898456	**KM63XMZTCP2000R3Y**	KM63XMZ	2.000	8.375	6.000	.058	XOMT160508	**12148067200**	**12148007500**	T20

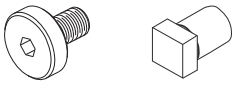
WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.





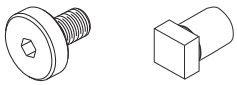
KM QUICK CHANGE

SMC • Metric



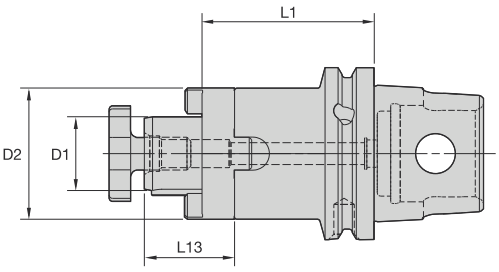
order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3950758	KM63XMZSMC16028MY	16	44	28	MS1294	KDK16M	6mm	0,78
3950759	KM63XMZSMC22028MY	22	49	28	MS1234	KDK22M	8mm	0,84
3950760	KM63XMZSMC27032MY	27	60	32	KLSS27M	KDK27M	10mm	1,05
3950761	KM63XMZSMC32040MY	32	78	40	KLSS32M	KDK32M	14mm	1,60

SMC • Inch



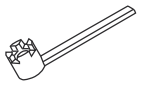
order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3950898	KM63XMZSMC050102Y	1/2	1.44	1.024	KLS05	KDK04	3/16	1.56
3950900	KM63XMZSM2C075102Y	3/4	1.46	1.024	KLS07	—	1/4	1.63
3950899	KM63XMZSMC075102Y	3/4	1.75	1.024	KLS07	KDK05	3/16	1.70
3950902	KM63XMZSM2C100126Y	1	2.19	1.260	KLS10	KDK06	5/16	2.19
3950901	KM63XMZSMC100126Y	1	2.75	1.260	KLS10	KDK06	5/16	2.49
3950903	KM63XMZSMC125157Y	1 1/4	2.88	1.575	KLS12	KDK08	5/16	3.35
3950904	KM63XMZSMC150177Y	1 1/2	3.69	1.770	KLS15	KDK10	3/8	5.11

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.



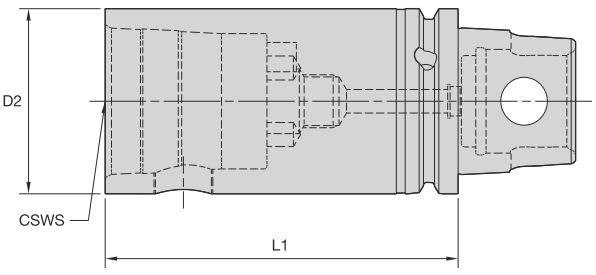
KM QUICK CHANGE

CS • Metric



order number	catalog number	D1	D2	L1	L13	lock screw	lock screw	wrench size lock screw	wrench	kg
2231604	**KM63XMZCS1663Y**	16	32	63	17	**MS1294**	**–**	6mm	**–**	0,98
2231606	**KM63XMZCS22110Y**	22	50	110	19	**MS1234**	**–**	8mm	**–**	2,29
2231601	**KM63XMZCS2228Y**	22	50	28	19	**MS1234**	**–**	8mm	**–**	1,87
2231605	**KM63XMZCS2263Y**	22	50	63	19	**MS1234**	**–**	8mm	**–**	0,88
2231608	**KM63XMZCS27110Y**	27	63	110	21	**–**	**KLS27M**	–	**SMW27M**	1,70
2231602	**KM63XMZCS2732Y**	27	63	32	21	**–**	**KLS27M**	–	**SMW27M**	2,98
2231607	**KM63XMZCS2763Y**	27	63	63	21	**–**	**KLS27M**	–	**SMW27M**	3,46
2231610	**KM63XMZCS32110Y**	32	78	110	24	**–**	**KLS32M**	–	**SMW32M**	2,20
2231603	**KM63XMZCS3240Y**	32	78	40	24	**–**	**KLS32M**	–	**SMW32M**	1,10
2231609	**KM63XMZCS3263Y**	32	78	63	24	**–**	**KLS32M**	–	**SMW32M**	1,42

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and key.
Lock screw wrench not included.



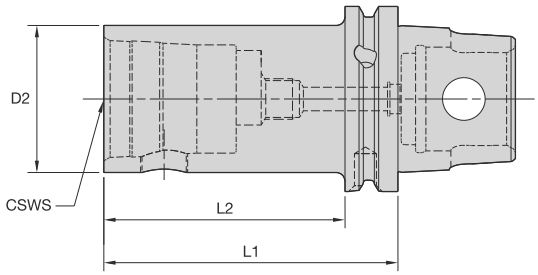
KM QUICK CHANGE

S • KM Extensions

order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
1319536	**KM63XMZS6380Y**	KM63	63	2.480	80	3.150	12mm	47-54	35-40	**KM63PKG3S**	1,73	3.81
1511923	**KM63XMZS63120Y**	KM63	63	2.480	120	4.724	12mm	47-54	35-40	**KM63PKG3S**	2,68	5.92

KM63XMZ™ Adapters

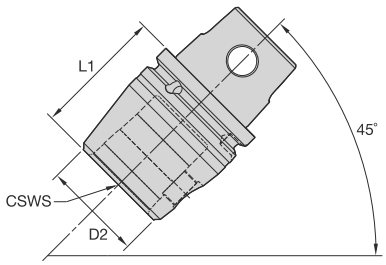
KM™ Reducers



KM QUICK CHANGE

■ S • KM Reducer

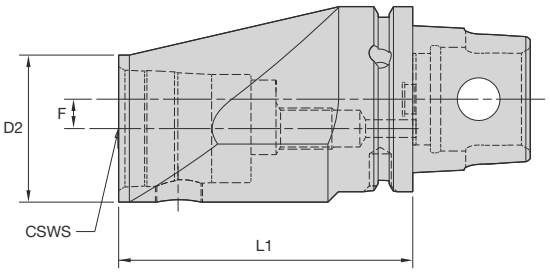
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	L2 mm	L2 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
1512243	**KM63XMZS3270Y**	KM32	32	1.260	70	2.756	46	1.811	5mm	8-11	6-8	**KM32PKG3S**	0,91	2.00
1511925	**KM63XMZS4080Y**	KM40	40	1.575	80	3.150	59	2.323	6mm	12-16	9-12	**KM40PKG3S**	1,14	2.51
1831639	**KM63XMZS5058Y**	KM50	50	1.969	58	2.299	36	1.417	10mm	27-34	20-25	**KM50PKG3S**	0,87	1.91
1509861	**KM63XMZS50100Y**	KM50	50	1.969	100	3.937	79	3.110	10mm	27-34	20-25	**KM50PKG3S**	1,67	3.68



■ S • KM Reducer • Centerline

order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
3306139	**KM63XMZS5065Y**	KM50	50	1.969	65	2.559	10mm	27-34	20-25	**KM50PKG3L**	1,42	3.13

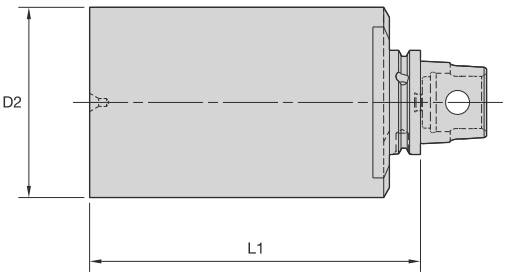
NOTE: Designed for centerline KM cutting units.



KM QUICK CHANGE

ES • KM Offset Reducer

order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	F mm	F in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
1831587	**KM63XMZES40110Y**	KM40	40	1.575	110	4.331	18	.709	6mm	12-16	9-12	**KM40PKG3S**	2,38	5.25
1516814	**KM63XMZES50100Y**	KM50	50	1.969	100	3.937	10	.394	10mm	27-34	20-25	**KM50PKG3S**	2,21	4.87



KM QUICK CHANGE

BN • Blank

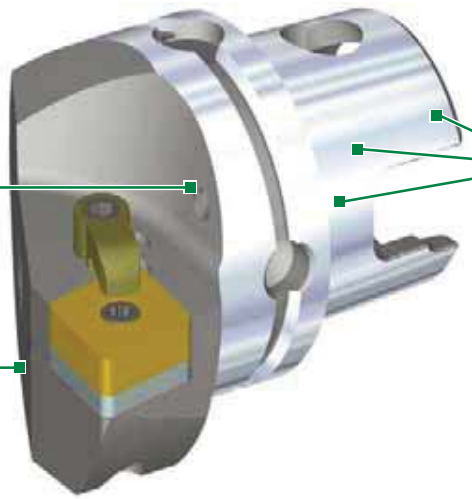
order number	catalog number	D2 mm	D2 in	L1 mm	L1 in	hardness range	kg	lbs
1831586	**KM63XMZBN115200Y**	115	4.528	200	7.874	32–38 RW C	15,21	33.54

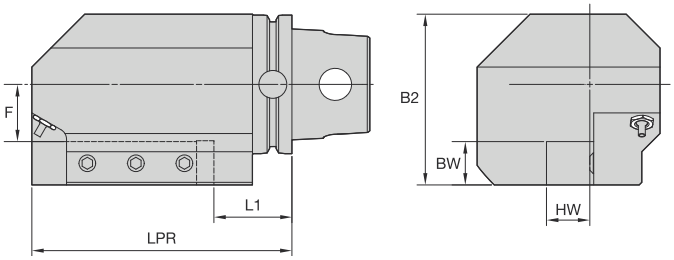
KM™ Quick Change Clamping System • **KM80ATC™ Series**

The KM Quick Change Clamping System is the best system on the market suitable for static, rotating, and multitasking operations. With its industry-leading design, the KM Quick Change System provides greater clamping forces than other quick-change systems. The KM Quick Change System gives you the flexibility to use KM on any application within your shop.

KM80ATC

- KM80ATC is designed to be used on MAG Corporation VTL machines.
- KM80ATC is your solution for multitasking.





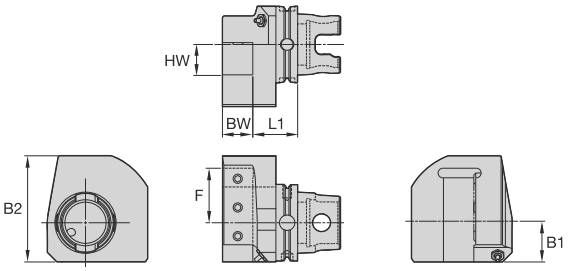
KM QUICK CHANGE

STA • Straight Side Mount • Metric

order number	catalog number	L1	LPR	F	HW	BW	B2	cup point socket set screw	nozzle	Nm	kg
	right hand										
3545087	KM80ATCSTAR2525	45	150	33	25	25	99	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	9,51
3545089	KM80ATCSTAR3232	45	150	25	32	32	98	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	8,98
	left hand										
3545088	KM80ATCSTAL2525	45	150	33	25	25	99	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	9,51
3545090	KM80ATCSTAL3232	45	150	25	32	32	98	MS1430	PMT04526 COOLANT NOZZLE SPRAY	55	8,98

STA • Straight Side Mount • Inch

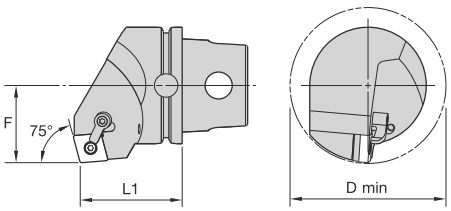
order number	catalog number	L1	LPR	F	HW	BW	B2	cup point socket set screw	nozzle	ft. lbs.	lbs
	right hand										
3480215	KM80ATCSTAR20	1.693	5.906	1.059	1.250	1.250	3.904	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	20.17
2601528	KM80ATCSTAR24	1.480	6.693	.559	1.500	1.500	3.654	MS1954	PMT04526 COOLANT NOZZLE SPRAY	90	21.44
	left hand										
2628561	KM80ATCSTAL20	1.693	5.906	1.059	1.250	1.250	3.904	MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	20.14
2601530	KM80ATCSTAL24	1.480	6.693	.559	1.500	1.500	3.654	MS1954	PMT04526 COOLANT NOZZLE SPRAY	90	21.44



KM QUICK CHANGE

ETA • Straight End Mount • Inch

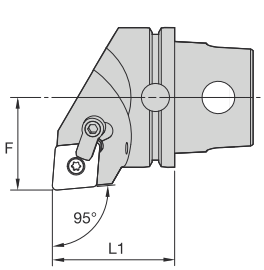
order number	catalog number	L1	B1	F	HW	BW	B2	cup point socket set screw	nozzle	ft. lbs.	lbs
	right hand										
2203618	KM80ATCETAR20	1.846	1.614	2.244	1.25	1.25	4	DWG MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.32
	left hand										
2203619	KM80ATCETAL20	1.846	1.614	2.244	1.25	1.25	4	DWG MS1430	PMT04526 COOLANT NOZZLE SPRAY	40	10.32

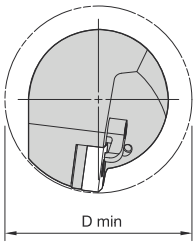


KM QUICK CHANGE

MCKN 75°

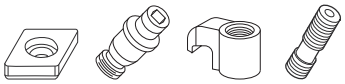
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2036393	KM80ATCMCKNR19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,40	5.30
3758113	KM80ATCMCKNR25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,54	5.61
	left hand													
1961291	KM80ATCMCKNL19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,41	5.30
3684524	KM80ATCMCKNL25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,54	5.61



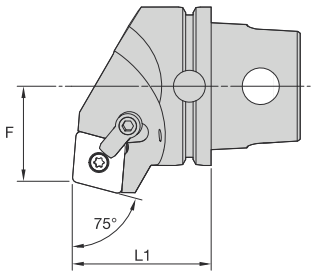


KM QUICK CHANGE

MCLN 95°

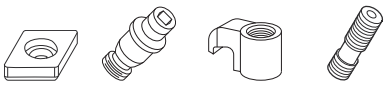


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2036373	KM80ATCMCLNR19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,19	4.83
2036374	KM80ATCMCLNR25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,20	4.84
	left hand													
1958408	KM80ATCMCLNL19	70	2.756	53	2.087	106	4.173	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,19	4.83
1958411	KM80ATCMCLNL25	70	2.756	53	2.087	106	4.173	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,20	4.84

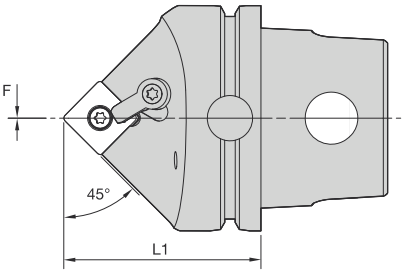


KM QUICK CHANGE

MCRN 75°



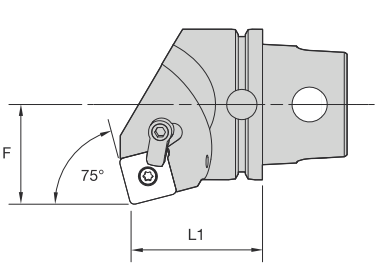
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
2036375	KM80ATCMCRNR19	70	2.756	48	1.890	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,29	5.06
2036376	KM80ATCMCRNR25	70	2.756	48	1.890	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,31	5.09
	left hand											
1960916	KM80ATCMCRNL19	70	2.756	48	1.890	CN..190612/CN..643	ICSN633	KLM68	CKM12	STCM4	2,29	5.06
2033887	KM80ATCMCRNL25	70	2.756	48	1.890	CN..250924/CN..866	ICSN846	KLM810	CKM24	STCM19	2,31	5.09

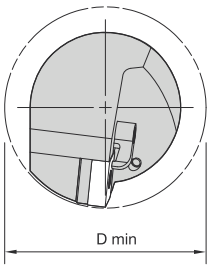


KM QUICK CHANGE

MSDN 45°

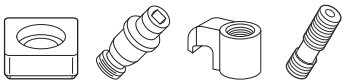
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
2036383	KM80ATCMSDNN19	70	2.756	0	.000	SN..190612/SN..643	ISSN633	KLM68	CKM12	STCM4	1,88	4.14
2036384	KM80ATCMSDNN25	70	2.756	0	.000	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	1,79	3.95



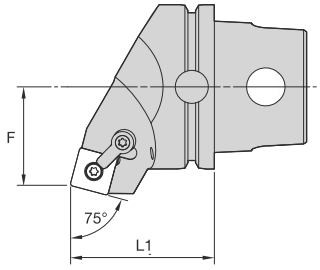


KM QUICK CHANGE

MSKN 75°

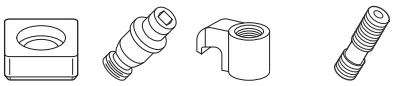


order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2036385	KM80ATCMSKNR19	70	2.756	53	2.087	106	4.173	SN..190612/SN..643	ISSN633	KLM68	CKM12	STCM4	2,52	5.55
2036387	KM80ATCMSKNR25	70	2.756	53	2.087	106	4.173	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,47	5.44
	left hand													
2036386	KM80ATCMSKNL19	70	2.756	53	2.087	106	4.173	SN..190612/SN..643	ISSN633	KLM68	CKM12	STCM4	2,52	5.55
1960917	KM80ATCMSKNL25	70	2.756	53	2.087	106	4.173	SN..250924/SN..866	ISSN846	KLM810	CKM24	STCM19	2,53	5.57

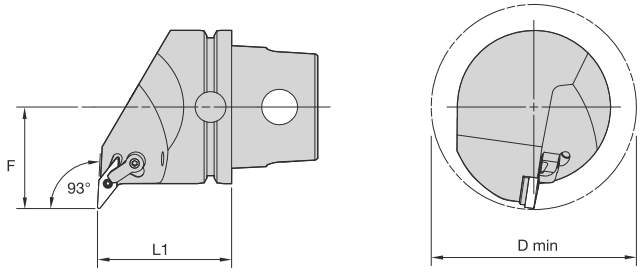


KM QUICK CHANGE

MSRN 75°

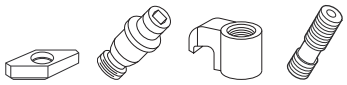


order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand											
2036388	**KM80ATCMSRNR19**	70	2.756	48	1.890	SN..190612/SN..643	**ISSN633**	**KLM68**	**CKM12**	**STCM4**	2,11	4.66
2036390	**KM80ATCMSRNR25**	70	2.756	48	1.890	SN..250924/SN..866	**ISSN846**	**KLM810**	**CKM24**	**STCM19**	2,08	4.59
	left hand											
2036389	**KM80ATCMSRNL19**	70	2.756	48	1.890	SN..190612/SN..643	**ISSN633**	**KLM68**	**CKM12**	**STCM4**	2,11	4.66
1961718	**KM80ATCMSRNL25**	70	2.756	48	1.890	SN..250924/SN..866	**ISSN846**	**KLM810**	**CKM24**	**STCM19**	2,08	4.59



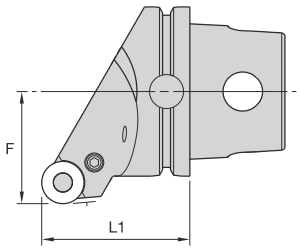
KM QUICK CHANGE

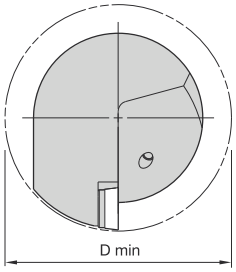
MVUN 93°



order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	shim	lock pin	clamp	clamp screw	kg	lbs
	right hand													
2036391	**KM80ATCMVUNR16**	70	2.756	53	2.087	106	4.173	VN..160408/VN..332	**IVSN322**	**KLM34L**	**CKM22**	**STCM20**	2,23	4.92
	left hand													
1961335	**KM80ATCMVUNL16**	70	2.756	53	2.087	106	4.173	VN..160408/VN..332	**IVSN322**	**KLM34L**	**CKM22**	**STCM20**	2,23	4.92

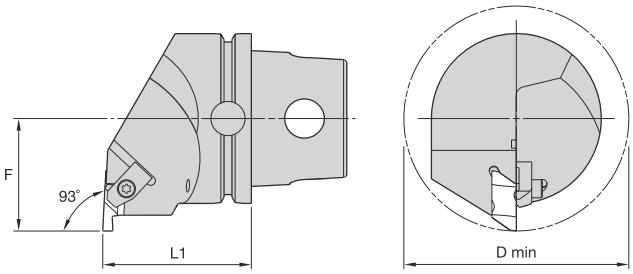
KM QUICK CHANGE





PRGC 0°

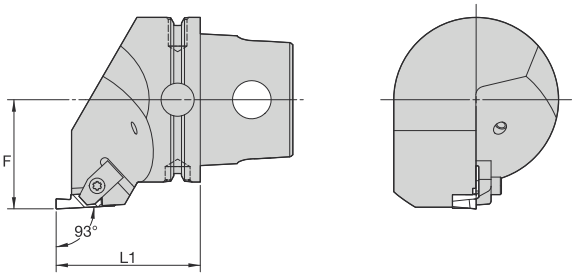
		L1		F		D min							
order number	catalog number	mm	in	mm	in	mm	in	gage insert	shim	clamp screw	clamp stud	kg	lbs
1961340	**KM80ATCPRGCL20**	70	2.756	53	2.087	106	4.173	RC..2006M0	**169.333**	**121.820**	**119.073**	1,87	4.12
3897198	**KM80ATCPRGCL25**	70	2.756	53	2.087	—	—	RC..2507M0..	**169.337**	**121.820**	**118.404**	2,08	4.58
3897200	**KM80ATCPRGCL32**	80	3.150	53	2.087	—	—	RC..3209M0..	**169.339**	**121.030**	**118.604**	2,66	5.86
2203621	**KM80ATCPRGCR20**	70	2.756	53	2.087	106	4.173	RC..2006M0	**169.333**	**121.820**	**119.073**	1,87	4.12
3897199	**KM80ATCPRGCR25**	70	2.756	53	2.087	—	—	RC..2507M0..	**169.337**	**121.820**	**118.404**	2,08	4.58
3897201	**KM80ATCPRGCR32**	80	3.150	53	2.087	—	—	RC..3209M0..	**169.339**	**121.030**	**118.604**	2,66	5.86



KM QUICK CHANGE

NE 93°

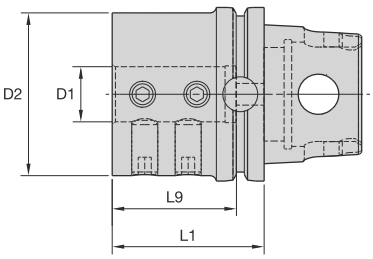
order number	catalog number	L1 mm	L1 in	F mm	F in	D min mm	D min in	gage insert	clamp	clamp screw	kg	lbs
	right hand											
2036394	KM80ATCNER3	70	2.756	53	2.087	106	4.173	NG3L	CM73	MS2091	2,12	4.67
2036395	KM80ATCNER4	70	2.756	53	2.087	106	4.173	NG4L	CM73	MS2091	2,19	4.83
2036396	KM80ATCNER5	70	2.756	53	2.087	106	4.173	NG5L	CM81	MS1490	2,26	4.99
2036397	KM80ATCNER6	70	2.756	53	2.087	106	4.173	NG6L	CM121	MS2091	2,15	4.74
	left hand											
1961333	KM80ATCNEL3	70	2.756	53	2.087	106	4.173	NG3R	CM72	MS2091	2,12	4.67
1960915	KM80ATCNEL4	70	2.756	53	2.087	106	4.173	NG4R	CM72	MS2091	2,19	4.83
2036400	KM80ATCNEL5	70	2.756	53	2.087	106	4.173	NG5R	CM80	MS1490	2,26	4.99
2036398	KM80ATCNEL6	70	2.756	53	2.087	106	4.173	NG6R	CM120	MS2091	2,15	4.74

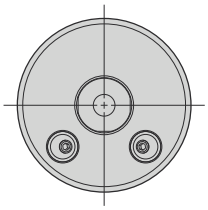


KM QUICK CHANGE

NS 93°

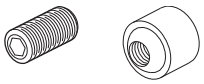
order number	catalog number	L1 mm	L1 in	F mm	F in	gage insert	clamp	clamp screw	kg	lbs
	right hand									
3330949	KM80ATCNSR3	70	2.756	53	2.087	NG3R	CM72	MS1489	2,16	4.77
2203622	KM80ATCNSR4	70	2.756	53	2.087	NG4R	CM72	MS2091	2,17	4.77
	left hand									
2398753	KM80ATCNSL3	70	2.756	53	2.087	NG3L	CM73	MS1489	2,16	4.77
2044321	KM80ATCNSL4	70	2.756	53	2.087	NG4L	CM73	MS2091	2,17	4.77





KM QUICK CHANGE

■ BA • Boring Bar Adapter • Internal and External Coolant • Metric



order number	catalog number	D1	D2	L1	L9	lock screw	nozzle	wrench size clamp screw	Nm	kg
3896952	**KM80ATCBA40105M**	40	80	105	76	**MS1947**	**PWZ1012**	8mm	125	3,58
3897203	**KM80ATCBA50130M**	50	90	130	95	**MS1947**	**PWZ1012**	8mm	125	4,96

■ BA • Boring Bar Adapter • Internal and External Coolant • Inch

order number	catalog number	D1	D2	L1	L9	lock screw	nozzle	wrench size clamp screw	ft. lbs.	lbs
2024399	**KM80ATCBA100276**	1	2.95	2.756	2.24	**—**	**PWZ1012**	6mm	30	5.57
2024400	**KM80ATCBA125295**	1 1/4	3.15	2.953	2.48	**—**	**PWZ1012**	6mm	30	6.11
2024401	**KM80ATCBA150413**	1 1/2	3.15	4.134	2.99	**MS1947**	**PWZ1012**	8mm	90	8.04
2024402	**KM80ATCBA200512**	2	3.54	5.118	3.98	**MS1947**	**PWZ1012**	8mm	90	10.57

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For boring bar reducers, see page A286.

WIN WITH WIDIA™

WIDIA-CIRCLE™ Small-Hole Tooling Series

The WIDIA™ line of small-hole boring tools is an excellent, economical choice for a wide range of applications. Our solid carbide bars provide exceptional machining versatility and rupture strength. Indexable inserts are available in both steel and carbide shanks.

A/B Series

- Unique locking system enables quick, accurate insert changes.

Quadralock™

- V-slots and limit-stop bolts for increased indexability.

Micro Boring Bars

- Free cutting action, better surface finishes, and greater chip evacuation.

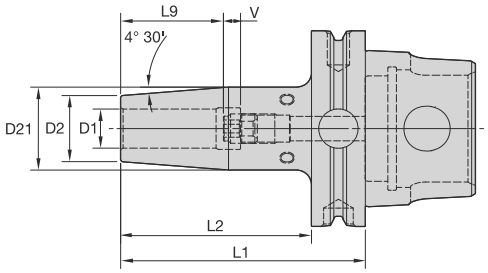
Solid Carbide Bars

- Accurate, quick-change tooling and toolholders are ideal for small parts machining applications.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA™

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).



Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

KM QUICK CHANGE

■ HPV TT • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3661841	**KM80ATCHPVTT10090M**	10	24	32	90	68	31	10	**TTSS08014M**	4mm	1,47
3661842	**KM80ATCHPVTT10170M**	10	24	32	170	63	31	10	**TTSS08014M**	4mm	2,02
3662743	**KM80ATCHPVTT12095M**	12	24	32	95	73	36	10	**TTSS10014M**	5mm	1,48
3662744	**KM80ATCHPVTT12160M**	12	24	32	160	63	36	10	**TTSS10014M**	5mm	1,93
3662745	**KM80ATCHPVTT14095M**	14	27	34	95	73	36	10	**TTSS10014M**	5mm	1,54
3662746	**KM80ATCHPVTT16100M**	16	27	34	100	78	39	10	**TTSS12014M**	6mm	1,55
3662747	**KM80ATCHPVTT18100M**	18	33	42	100	78	39	10	**TTSS12014M**	6mm	1,75
3662748	**KM80ATCHPVTT18160M**	18	33	42	160	70	39	10	**TTSS12014M**	6mm	2,45
3662749	**KM80ATCHPVTT20105M**	20	33	42	105	83	41	10	**TTSS16014M**	8mm	1,77
3662750	**KM80ATCHPVTT25115M**	25	44	53	115	93	47	10	**TTSS16014M**	8mm	2,34
3662751	**KM80ATCHPVTT32120M**	32	44	53	120	98	51	10	**TTSS16014M**	8mm	2,26
3662752	**KM80ATCHPVTT40130M**	40	60	61	130	108	51	10	**TTSS20014M**	10mm	3,47
3662753	**KM80ATCHPVTT50140M**	50	69	79	140	118	56	10	**TTSS20014M**	10mm	4,28

(continued)

(HPV TT continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameter	tolerance
5/16 & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

HPV TT • Inch

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3599309	**KM80ATCHPVTT031335**	5/16	.83	1.06	3.347	2.48	1.02	.39	**TTSS06014M**	3mm	3.03
3599310	**KM80ATCHPVTT038630**	3/8	.95	1.26	6.299	2.48	1.22	.39	**TTSS08014M**	4mm	4.29
3599311	**KM80ATCHPVTT044374**	7/16	.95	1.26	3.740	2.87	1.42	.39	**TTSS10014M**	5mm	3.28
3599304	**KM80ATCHPVTT050374**	1/2	.95	1.26	3.740	2.87	1.42	.39	**TTSS10014M**	5mm	3.25
3594191	**KM80ATCHPVTT056374**	9/16	1.06	1.34	3.740	2.87	1.42	.39	**TTSS10014M**	5mm	3.38
3599305	**KM80ATCHPVTT062394**	5/8	1.06	1.34	3.937	3.07	1.54	.39	**TTSS12014M**	6mm	3.41
3594317	**KM80ATCHPVTT062850**	5/8	1.06	1.34	8.500	2.48	1.54	.39	**TTSS12014M**	6mm	5.65
3594316	**KM80ATCHPVTT075413**	3/4	1.30	1.65	4.134	3.27	1.61	.39	**TTSS16014M**	6mm	3.93
3599306	**KM80ATCHPVTT075630**	3/4	1.30	1.65	6.299	2.76	1.61	.39	**TTSS16014M**	8mm	5.35
3599307	**KM80ATCHPVTT088413**	7/8	1.30	1.65	4.134	3.27	1.61	.39	**TTSS16014M**	8mm	3.84
3594315	**KM80ATCHPVTT100453**	1	1.73	2.08	4.528	3.66	1.85	.39	**TTSS16014M**	8mm	5.14
3594313	**KM80ATCHPVTT125472**	1 1/4	1.73	2.08	4.724	3.86	2.01	.39	**TTSS16014M**	8mm	4.99
3594314	**KM80ATCHPVTT150512**	1 1/2	2.36	2.75	5.118	4.25	2.01	.39	**TTSS20014M**	10mm	7.78
3599308	**KM80ATCHPVTT200551**	2	2.72	3.11	5.512	4.65	2.20	.39	**TTSS20014M**	10mm	9.37

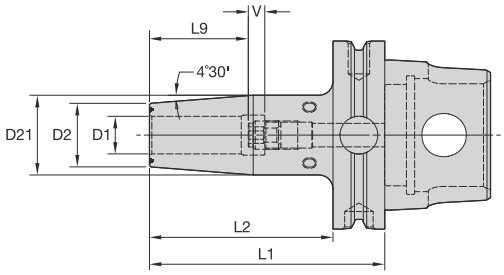
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine balancing screw set (10 pieces) is available.
Order number is MS1276PKG and must be ordered separately.

KM80ATC™ Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.

SHRINKER®



Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

KM QUICK CHANGE

■ HPV TT HT • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3662754	KM80ATCHPVTTHT12095M	12	24	32	95	73	36	10	TTSS10014M	5mm	1,48
3662755	KM80ATCHPVTTHT12160M	12	24	32	160	63	36	10	TTSS10014M	5mm	1,96
3662756	KM80ATCHPVTTHT14095M	14	27	34	95	73	36	10	TTSS10014M	5mm	1,54
3662757	KM80ATCHPVTTHT16100M	16	27	34	100	78	39	10	TTSS12014M	6mm	1,55
3662758	KM80ATCHPVTTHT18100M	18	33	42	100	78	39	10	TTSS12014M	6mm	1,75
3662759	KM80ATCHPVTTHT18160M	18	33	42	160	70	39	10	TTSS12014M	6mm	2,45
3662760	KM80ATCHPVTTHT20105M	20	33	42	105	83	41	10	TTSS16014M	8mm	1,77
3662761	KM80ATCHPVTTHT25115M	25	44	53	115	93	47	10	TTSS16014M	8mm	2,34
3662762	KM80ATCHPVTTHT32120M	32	44	53	120	98	51	10	TTSS16014M	8mm	2,26

(continued)

(HPV TT HT continued)

Cutting Tool Shank Requirements inch (industry standard)

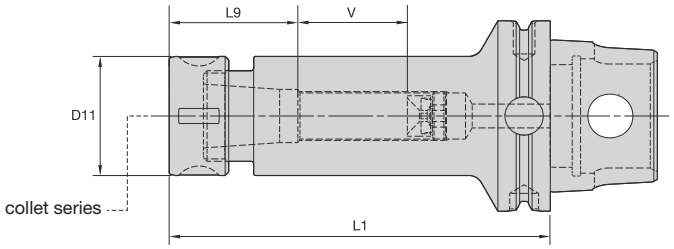
cutting tool shank diameter	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

HPV TT HT • Inch

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3598813	**KM80ATCHPVTTHT050374**	1 /2	.95	1.26	3.740	2.87	1.42	.39	**TTSS10014M**	5mm	3.25
3598814	**KM80ATCHPVTTHT056374**	9/16	1.06	1.34	3.740	2.87	1.42	.39	**TTSS10014M**	5mm	3.38
3598815	**KM80ATCHPVTTHT062394**	5/8	1.06	1.34	3.937	3.07	1.54	.39	**TTSS12014M**	6mm	3.41
3598816	**KM80ATCHPVTTHT062850**	5/8	1.06	1.34	8.500	2.48	1.54	.39	**TTSS12014M**	6mm	5.65
3598817	**KM80ATCHPVTTHT075413**	3/4	1.30	1.65	4.134	3.27	1.61	.39	**TTSS16014M**	8mm	3.93
3598818	**KM80ATCHPVTTHT075630**	3/4	1.30	1.65	6.299	2.76	1.61	.39	**TTSS16014M**	8mm	5.35
3598819	**KM80ATCHPVTTHT088413**	7/8	1.30	1.65	4.134	3.27	1.61	.39	**TTSS16014M**	8mm	3.84
3598820	**KM80ATCHPVTTHT100453**	1	1.73	2.08	4.528	3.66	1.85	.39	**TTSS16014M**	8mm	5.14
3598821	**KM80ATCHPVTTHT125472**	1 1/4	1.73	2.08	4.724	3.86	2.01	.39	**TTSS16014M**	8mm	4.99

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available.
Order number is MS1276PKG and must be ordered separately.

- Tremendous Grip (3:1 advantage).



	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

KM QUICK CHANGE

TG • Single-Angle Collet Chucks

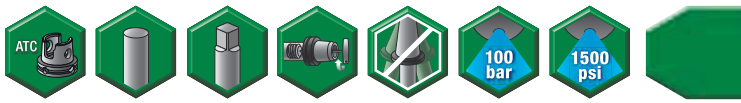
			D11		L1		L9		V			
order number	catalog number	collet series	mm	in	mm	in	mm	in	mm	in	kg	lbs
3138953	KM80ATCTG075160	TG75	50	1.97	160	6.299	53	2.09	47	1.85	2,96	6.52
2022194	KM80ATCTG100394	TG100	60	2.36	100	3.937	70	2.75	—	—	2,32	5.11
2022195	KM80ATCTG150492	TG150	85	3.35	125	4.921	83	3.27	—	—	4,31	9.50

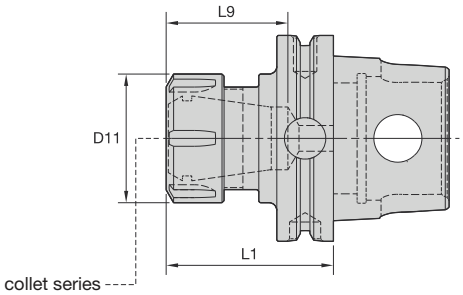
Spare Parts

catalog number	locknut	wrench	stop screw	wrench size stop screw	coolant cap	Nm	ft. lbs.
KM80ATCTG075160	LNA075M	HSW45M	SS081041G	4mm & 5/32	SSCC081	108-136	80-100
KM80ATCTG100394	LNA100M	HSW58M	—	—	—	163-203	120-150
KM80ATCTG150492	LNA150M	HSW80M	—	—	—	217-271	160-200

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.

• Grip (2:1 advantage).





	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

KM QUICK CHANGE

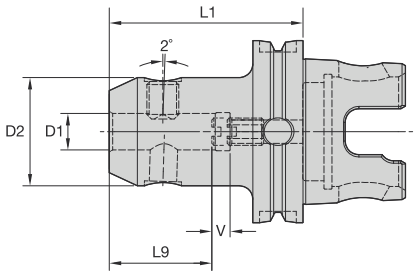
ER • Single-Angle Collet Chucks

			D11		L1		L9							
order number	catalog number	collet series	mm	in	mm	in	mm	in	locknut	wrench	Nm	ft. lbs.	kg	lbs
1953471	**KM80ATCER3265**	ER32	50	1.97	65	2.559	46,0	1.81	**LNSER32M**	**ER32WM**	136	100	1,45	3.20
2022196	**KM80ATCER4090**	ER40	50	1.97	90	3.543	70,3	2.77	**LNSER40M**	**ER40WM**	176	130	2,09	4.61

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable coolant-style locknuts and coolant disks are available and must be ordered separately; see page J9.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

KM80ATC™ Shank Tools

Whistle Notch™/End Mill Combination Adapters



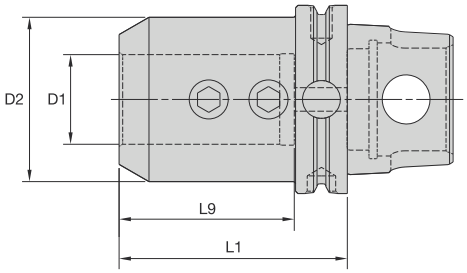
KM QUICK CHANGE

■ WN/EM • Whistle Notch/End Mill Combination Adapter

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	stop screw	stop screw wrench size	Nm	kg
3901247	KM80ATCWNEM06065M	6	25	65	30	10	SS03M012	3mm	571.060	2,5mm	7	1,29
3901248	KM80ATCWNEM08065M	8	28	65	30	10	SS03M014	4mm	571.067	3mm	15	1,33
3901249	KM80ATCWNEM10075M	10	35	75	35	10	SS03M018	5mm	571.068	4mm	25	1,49
3901250	KM80ATCWNEM12080M	12	42	80	40	10	SS03M023	6mm	571.074	5mm	35	1,68
3901251	KM80ATCWNEM14080M	14	44	80	41	8	SS03M023	6mm	571.074	5mm	35	1,72
3901252	KM80ATCWNEM16085M	16	48	85	44	8	SS03M025	6mm	571.075	6mm	50	1,89
3901283	KM80ATCWNEM18085M	18	50	85	43	10	SS03M025	6mm	571.075	6mm	50	1,94
3901284	KM80ATCWNEM20085M	20	52	85	45	10	SS03M026	8mm	571.076	6mm	95	1,98
3901285	KM80ATCWNEM25100M	25	65	100	50	10	SS03M027	10mm	571.077	6mm	135	2,76
3901286	KM80ATCWNEM32105M	32	72	105	55	10	SS03M029	10mm	571.077	6mm	160	3,18
3901287	KM80ATCWNEM40115M	40	90	115	65	10	SS03M029	10mm	571.077	6mm	160	4,71

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches are not included.

KM QUICK CHANGE

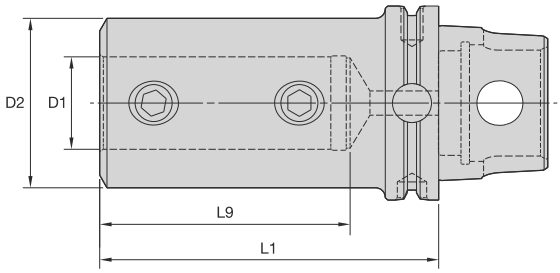


■ EM • Inch

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
2022197	**KM80ATCEM100354**	1	2.00	3.543	2.46	**ELS075056PKG**	3/8	110	4.26
2022198	**KM80ATCEM125354**	1 1/4	2.50	3.543	2.51	**ELS075062PKG**	3/8	110	5.21
1961336	**KM80ATCEM150382**	1 1/2	2.75	3.819	2.93	**ELS075069PKG**	3/8	110	5.88
2022199	**KM80ATCEM200492**	2	3.74	4.921	3.53	**ELS100088PKG**	1/2	150	11.61

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.

KM QUICK CHANGE

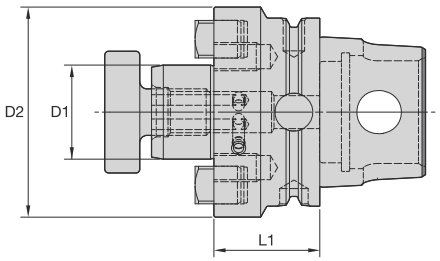


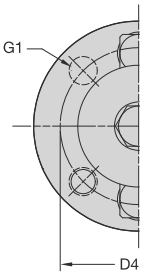
■ SSF • Straight Shank Adapter for Drill Shanks with Flats

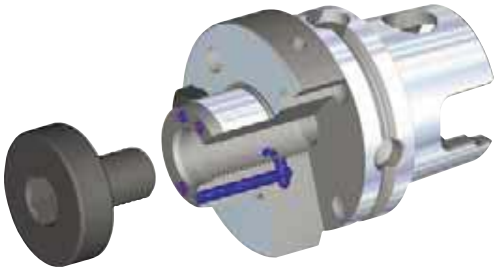
order number	catalog number	D1	L1	D2	L9	lock screw	wrench size stop screw	ft. lbs.	lbs
2024413	**KM80ATCSSF075350**	.750	3.500	3.150	2.250	**ELS062050PKG**	5/16	70	4.02
2024414	**KM80ATCSSF100450**	1.000	4.500	3.150	3.250	**—**	3/8	110	4.99
2024415	**KM80ATCSSF125500**	1.250	5.000	3.150	3.500	**ELS075056PKG**	3/8	110	6.96
2024416	**KM80ATCSSF150550**	1.500	5.500	3.150	4.000	**ELS075056PKG**	3/8	110	8.18
2024417	**KM80ATCSSF200650**	2.000	6.500	3.150	4.250	**ELS100088PKG**	1/8	150	15.93

WARNING
During through-hole operations, a slug or disk is produced as the tool breaks through the workpiece. When the drill is stationary and the workpiece is rotating, this slug may be hurled from the chuck by centrifugal force. Provide adequate shielding to protect bystanders.

KM QUICK CHANGE







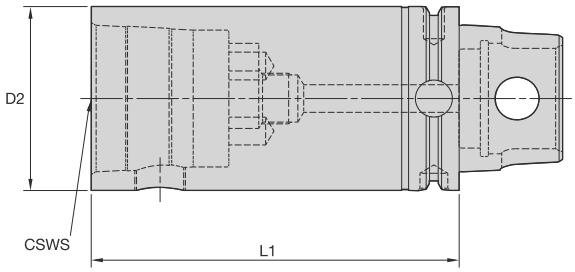
SMC • Metric

order number	catalog number	D1	D2	D4	G1	L1	socket-head cap screw	lock screw	drive key	wrench size lock screw	kg
3897160	KM80ATCSMC22040M	22	49	–	–	40	MS1234	–	KDK22M	8mm	1,52
3897161	KM80ATCSMC27040M	27	60	–	–	40	–	KLSS27M	KDK27M	10mm	1,70
3897162	KM80ATCSMC32040M	32	78	–	–	40	–	KLSS32M	KDK32M	12mm	2,02
3897193	KM80ATCSMC40045M	40	89	67	M12 X 1.75	45	–	KLSS40M	KDK40M	12mm	2,55
3897194	KM80ATCSMC50055M	50	98	–	–	55	–	KLS50M	–	–	3,60
3897195	KM80ATCSMC60060M	60	129	102	M16 X 2.0	60	–	–	KDK60M	–	5,28

SMC • Inch

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
3955375	KM80ATCSM2C100158	1	2.19	–	–	1.575	KLS10	KDK06	5/16	3.52
3955376	KM80ATCSMC125158	1 1/4	2.88	–	–	1.575	KLS12	KDK08	5/16	4.26
3955377	KM80ATCSMC125394	1 1/4	2.88	–	–	3.937	KLS12	KDK08	5/16	8.49
3955378	KM80ATCSMC150158	1 1/2	3.81	–	–	1.575	KLS15	KDK10	3/8	5.46
3955379	KM80ATCSMC200216	2	4.88	4.000	.625-11 UNC	2.165	KLS20	KDK12	9/16	9.55
3955380	KM80ATCSMC250225	2 1/2	4.88	4.000	.625-11 UNC	2.250	–	KDK16	9/16	10.82
3955381	KM80ATCSMC250450	2 1/2	4.88	4.000	.625-11 UNC	4.500	–	KDK16	9/16	14.77

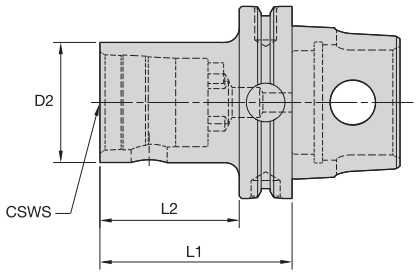
NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.



KM QUICK CHANGE

S • KM Extension

order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
2024394	KM80ATCS80120	KM80	80	3.150	120	4.724	14mm	78-84	58-64	KM80PKG3S	4,28	9.43
2024395	KM80ATCS80160	KM80	80	3.150	160	6.299	14mm	78-84	58-64	KM80PKG3S	5,82	12.82

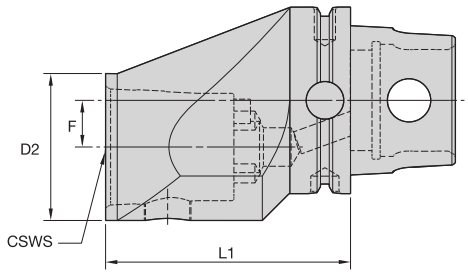


KM QUICK CHANGE

S • KM Reducer

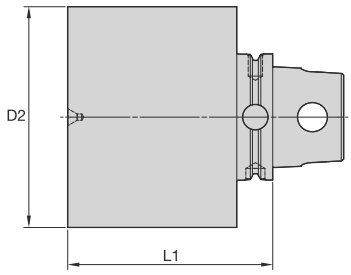
order number	catalog number	CSWS system size	D2 mm	D2 in	L1 mm	L1 in	L2 mm	L2 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
2024396	KM80ATCS4060	KM40	40	1.575	60	2.362	38	1.496	6mm	12-16	9-12	KM40PKG3S	1,45	3.20
2024397	KM80ATCS5080	KM50	50	1.969	80	3.150	58	2.284	10mm	27-34	20-25	KM50PKG3S	1,86	4.09
2024398	KM80ATCS6380	KM63	63	2.480	80	3.150	58	2.284	12mm	47-54	35-40	KM63PKG3S	2,18	4.81

NOTE: Designed for centerline KM cutting units.



ES • KM Offset Reducer

order number	catalog number	CSWS system size	D2 mm	D2 in	F mm	F in	L1 mm	L1 in	wrench size actuation screw	Nm	ft. lbs.	spare parts package	kg	lbs
2203620	KM80ATCESL63105	KM63	80	3.150	20	.787	105	4.134	12mm	47-54	35-40	KM63PKG3S	3,87	8.50
2048377	KM80ATCESR63105	KM63	80	3.150	20	.787	105	4.134	12mm	47-54	35-40	KM63PKG3S	3,87	8.50



BN • Blank

order number	catalog number	D2 mm	D2 in	L1 mm	L1 in	hardness range	kg	lbs
2873209	KM80ATCBN125075M	125	4.921	75	2.953	32–38 HRC	6,20	13.68
2879350	KM80ATCBN140130M	140	5.512	130	5.118	32–38 HRC	14,11	31.11

WIN WITH WIDIA™

KM4X™ • The New Choice for Heavy-Duty Milling

KM4X Spindle Interface

KM4X is the latest version of the KM™ spindle interface targeted at heavy-duty machining operations and is a top choice for machining large, structural, tough-to-machine materials, like titanium, for the aerospace industry.

Portfolio

The portfolio consists of rotating adapters and static tooling to support the tough and heavy machining markets. Additional products to include spindle component packages as well as static clamping units to support turning and mill/turn opportunities.

The Latest Innovation in Spindle Interface Technology

- KM4X™ offers the most rigid connection able to withstand extremely high bending due to a combination of high interference and high clamping forces.
- KM4X provides 3x more bending capacity than comparable face contact systems.
- KM™ is the only connection that maintains stiffness at elevated rotational speeds and is suitable for a range of applications from low speeds with high torque to very high spindle speeds.
- KM4X is better balanced between bending and torsion capabilities.
- The ability to retrofit KM4X to an existing machine tool offers the added advantage of increasing throughput.

Design Advantages

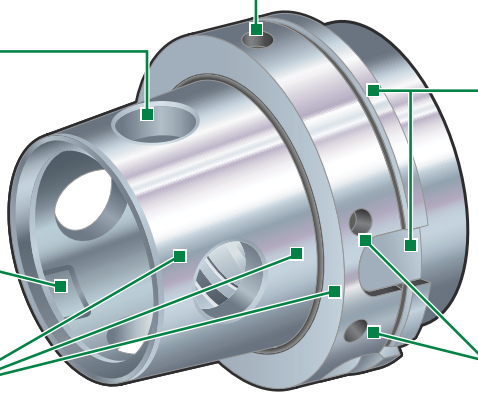
- The new screw-on KM4X is designed for high stability.
- Universal design enables old-style tools to be used interchangeably with new styles and many competitor screw-on cutters and extensions.
- Clamping method utilizes face contact to create a rigid connection.

KM4X™

The KM4X 4-ball spindle interface provides 3x more bending capacity than comparable systems. The greater bending capacity enables customers to fully utilize the capabilities of their machine and cutting tools when working with tough materials like titanium or during heavy machining. Increased metal removal rates optimize machine production and decrease overall manufacturing cost.

KM4X™

- Heavy-duty, rigid configuration.
- 3x more bending capability.
- Increased metal removal rates.
- Full utilization of machine tools.
- Decreased manufacturing costs.
- Balanced-by-design for higher spindle speeds.



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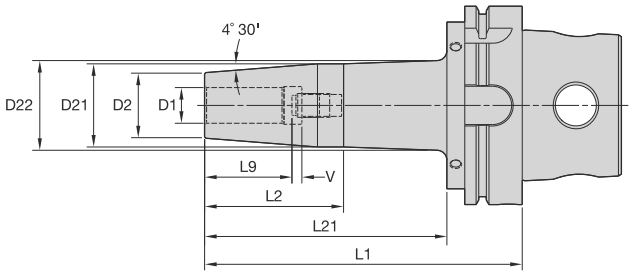


- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools.

Cutting Tool Shank Requirements
metric (ISO standard)

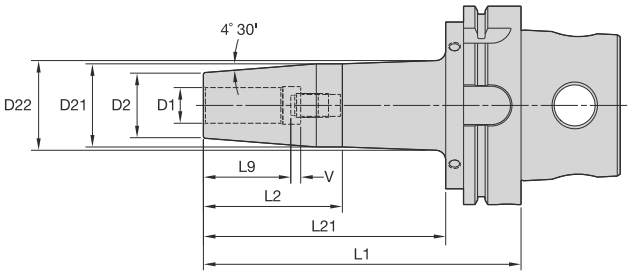
cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

TT GP HPV MM-KM4X • Metric

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4156046	KM4X100HPVTT06085M	6	21	27	—	85	56	26	—	10	TTSS05014M	2,5mm
4156047	KM4X100HPVTT06160M	6	21	27	32	160	50	26	122	10	TTSS05014M	2,5mm
4156048	KM4X100HPVTT08085M	8	21	27	—	85	56	26	—	10	TTSS06014M	3mm
4156049	KM4X100HPVTT08160M	8	21	27	32	160	50	26	122	10	TTSS06014M	3mm
4156050	KM4X100HPVTT10090M	10	24	32	—	90	61	31	—	10	TTSS08014M	4mm
4156051	KM4X100HPVTT10160M	10	24	32	36	160	63	31	122	10	TTSS08014M	4mm
4156052	KM4X100HPVTT12095M	12	24	32	—	95	66	36	—	10	TTSS10014M	5mm
4156113	KM4X100HPVTT12160M	12	24	32	36	160	63	36	122	10	TTSS10014M	5mm
4156114	KM4X100HPVTT14095M	14	27	34	—	95	66	36	—	10	TTSS10014M	5mm
4156115	KM4X100HPVTT14160M	14	27	34	38	160	57	36	122	10	TTSS10014M	5mm
4156116	KM4X100HPVTT16100M	16	27	34	—	100	71	39	—	10	TTSS12014M	6mm
4156117	KM4X100HPVTT16160M	16	27	34	38	160	57	39	122	10	TTSS12014M	6mm
4156118	KM4X100HPVTT18100M	18	33	42	—	100	71	39	—	10	TTSS12014M	6mm
4156119	KM4X100HPVTT18160M	18	33	42	46	160	69	39	122	10	TTSS12014M	6mm
4156120	KM4X100HPVTT20105M	20	33	42	—	105	76	41	—	10	TTSS16014M	8mm
4156121	KM4X100HPVTT20160M	20	33	42	46	160	69	41	122	10	TTSS16014M	8mm
4156122	KM4X100HPVTT25115M	25	44	53	—	115	86	47	—	10	TTSS16014M	8mm
4156123	KM4X100HPVTT25160M	25	44	53	57	160	69	47	122	10	TTSS16014M	8mm
.4156124	KM4X100HPVTT32120M	32	44	53	—	120	91	51	—	10	TTSS16014M	8mm
4156125	KM4X100HPVTT32160M	32	44	53	57	160	69	51	122	10	TTSS16014M	8mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.

KM



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools.

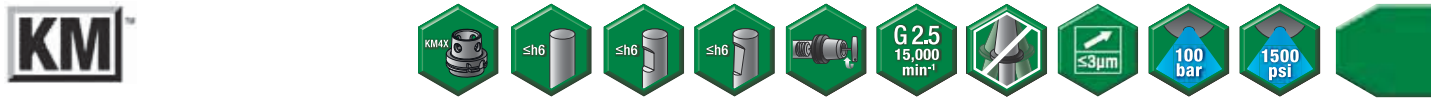
Cutting Tool Shank Requirements
inch (industry standard)

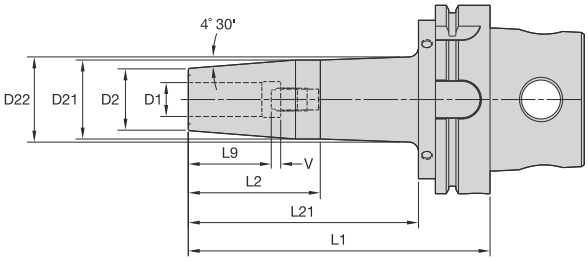
cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

TT GP HPV IN-KM4X • Inch

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4155746	**KM4X100HPVTT025335**	1/4	0.83	1.06	—	3.35	2.21	1.02	—	0.39	**TTSS05014M**	2,5mm
4155747	**KM4X100HPVTT025630**	1/4	0.83	1.06	1.26	6.30	1.97	1.02	4.81	0.39	**TTSS05014M**	2,5mm
4155748	**KM4X100HPVTT031335**	5/16	0.83	1.06	—	3.35	2.21	1.02	—	0.39	**TTSS06014M**	3mm
4155749	**KM4X100HPVTT031630**	5/16	0.83	1.06	1.26	6.30	1.97	1.02	4.81	0.39	**TTSS06014M**	3mm
4155750	**KM4X100HPVTT038354**	3/8	0.95	1.24	—	3.54	2.40	1.22	—	0.39	**TTSS08014M**	4mm
4155751	**KM4X100HPVTT038630**	3/8	0.95	1.26	1.42	6.30	2.48	1.22	4.81	0.39	**TTSS08014M**	4mm
4155752	**KM4X100HPVTT050374**	1/2	0.95	1.26	—	3.74	2.60	1.42	—	0.39	**TTSS10014M**	5mm
4156153	**KM4X100HPVTT050630**	1/2	0.95	1.26	1.42	6.30	2.48	1.42	4.81	0.39	**TTSS10014M**	5mm
4156154	**KM4X100HPVTT062394**	5/8	1.06	1.34	—	3.94	2.80	1.54	—	0.39	**TTSS12014M**	6mm
4156155	**KM4X100HPVTT062630**	5/8	1.06	1.34	1.51	6.30	2.24	1.54	4.81	0.39	**TTSS12014M**	6mm
4156156	**KM4X100HPVTT075413**	3/4	1.30	1.65	—	4.13	2.99	1.61	—	0.39	**TTSS16014M**	8mm
4156157	**KM4X100HPVTT075630**	3/4	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	**TTSS16014M**	8mm
4156158	**KM4X100HPVTT088413**	7/8	1.30	1.65	—	4.13	2.99	1.61	—	0.39	**TTSS16014M**	8mm
4156159	**KM4X100HPVTT088630**	7/8	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	**TTSS16014M**	8mm
4156160	**KM4X100HPVTT100453**	1	1.73	2.08	—	4.53	3.39	1.85	—	0.39	**TTSS16014M**	8mm
4156161	**KM4X100HPVTT100630**	1	1.73	2.08	2.23	6.30	2.72	1.85	4.81	0.39	**TTSS16014M**	8mm
4156162	**KM4X100HPVTT125472**	1 1/4	1.73	2.08	—	4.72	3.59	2.01	—	0.39	**TTSS16014M**	8mm
4156163	**KM4X100HPVTT125630**	1 1/4	1.73	2.08	2.23	6.30	2.72	2.01	4.81	0.39	**TTSS16014M**	8mm
4156164	**KM4X100HPVTT150531**	1 1/2	2.36	2.75	—	5.31	4.18	2.01	—	0.39	**TTSS20014M**	10mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.





- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face.
- 10 kW power or greater Shrink Fit device must be used.

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, & 1-1/2	.0000/-.0005

Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

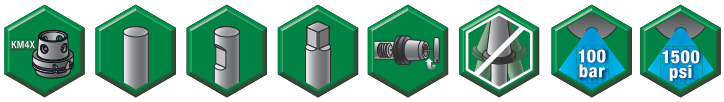
TT HT HPV MM-KM4X • Metric

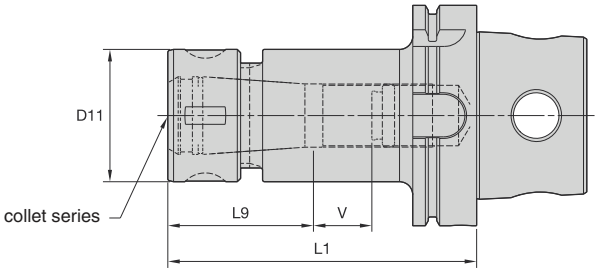
order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw
4156182	KM4X100HPVTTHT12095M	12	24	31,9	95	66	36	10	TTSS10014M	5mm
4156193	KM4X100HPVTTHT14095M	14	27	33,9	95	66	36	10	TTSS10014M	5mm
4156194	KM4X100HPVTTHT16100M	16	27	33,9	100	71	39	10	TTSS12014M	6mm
4156195	KM4X100HPVTTHT18100M	18	33	41,9	100	71	39	10	TTSS12014M	6mm
4156196	KM4X100HPVTTHT20105M	20	33	41,9	105	76	41	10	TTSS16014M	8mm
4156197	KM4X100HPVTTHT25115M	25	44	52,9	115	86	47	10	TTSS16014M	8mm
4156198	KM4X100HPVTTHT32120M	32	44	52,9	120	91	51	10	TTSS16014M	8mm

TT HT HPV IN-KM4X • Inch

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4156166	KM4X100HPVTTHT050374	1/2	0.95	1.26	—	3.74	2.60	1.42	—	0.39	TTSS10014M	5mm
4156167	KM4X100HPVTTHT050630	1/2	0.95	1.26	1.42	6.30	2.48	1.42	4.81	0.39	TTSS10014M	5mm
4156168	KM4X100HPVTTHT062394	5/8	1.06	1.34	—	3.94	2.80	1.54	—	0.39	TTSS12014M	6mm
4156169	KM4X100HPVTTHT062630	5/8	1.06	1.34	1.51	6.30	2.24	1.54	4.81	0.39	TTSS12014M	6mm
4156170	KM4X100HPVTTHT075413	3/4	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156171	KM4X100HPVTTHT075630	3/4	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156172	KM4X100HPVTTHT088413	7/8	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156203	KM4X100HPVTTHT088630	7/8	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156204	KM4X100HPVTTHT100453	1	1.73	2.08	—	4.53	3.39	1.85	—	0.39	TTSS16014M	8mm
4156205	KM4X100HPVTTHT100630	1	1.73	2.08	2.23	6.30	2.72	1.85	4.81	0.39	TTSS16014M	8mm
4156206	KM4X100HPVTTHT125472	1 1/4	1.73	2.08	—	4.72	3.59	2.01	—	0.39	TTSS16014M	8mm
4156207	KM4X100HPVTTHT125630	1 1/4	1.73	2.08	2.23	6.30	2.72	2.01	4.81	0.39	TTSS16014M	8mm
4156208	KM4X100HPVTTHT150531	1 1/2	2.36	2.75	—	5.31	4.18	2.01	—	0.39	TTSS20014M	10mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.





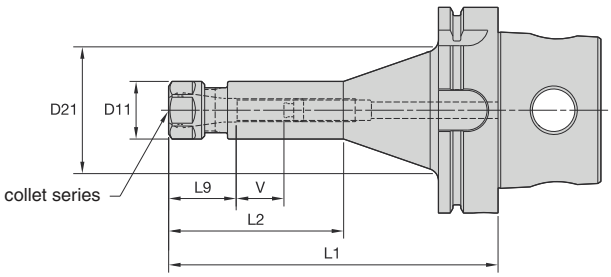
- Tremendous Grip (3:1 advantage).

	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

TG Round-KM4X

order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
4156445	**KM4X100TG050105M**	TG50	38	105	42	40	**LNA050M**	**HSW34M**	68	**SS056041G**	4mm & 5/32
4156446	**KM4X100TG050160M**	TG50	38	160	42	58	**LNA050M**	**HSW34M**	68	**SS056041G**	4mm & 5/32
4156447	**KM4X100TG075120M**	TG75	50	120	54	46	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32
4156448	**KM4X100TG100140M**	TG100	60	140	70	45	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32
4156449	**KM4X100TG150165M**	TG150	85	165	84	46	**LNA150M**	**HSW80M**	271	**SS162062G**	4mm & 5/32

NOTE: First, load collet into locknut. Before loading into the chuck body, insert cutting tool, then tighten to recommended tightening torque.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.

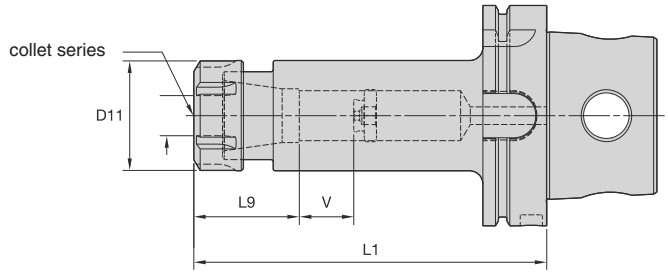


- Grip (2:1 advantage).

	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ER Hex-KM4X

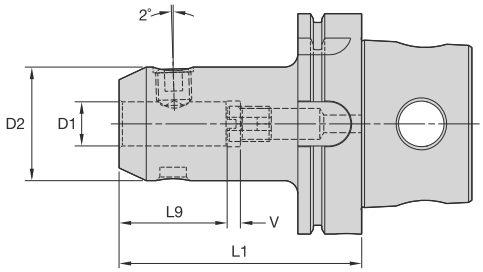
order number	catalog number	collet series	D11	D21	L1	L2	L9	V	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
4159999	KM4X100ER16100M	ER16	28	—	100	—	32	53	LNHSER16M	OEW25M	56	SS044038G	4mm & 5/32
4160000	KM4X100ER16160M	ER16	28	60	160	85	32	68	LNHSER16M	OEW25M	56	SS044038G	4mm & 5/32
4160001	KM4X100ER20100M	ER20	34	—	100	—	36	35	LNHSER20M	OEW30M	80	SS056041G	4mm & 5/32



ER Round-KM4X

order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
4160002	KM4X100ER25100M	ER25	42	100	40	33	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
4160043	KM4X100ER32100M	ER32	50	100	45	32	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
4160044	KM4X100ER32160M	ER32	50	160	45	92	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
4160045	KM4X100ER40120M	ER40	63	120	52	38	LNSER40M	ER40WM	175	SS112041G	4mm & 5/32

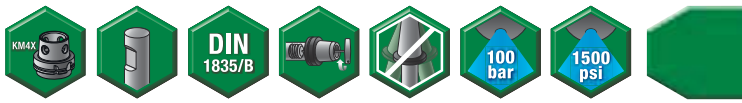
NOTE: First, load collet into locknut. Before loading into the chuck body, insert cutting tool, then tighten to recommended tightening torque.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.

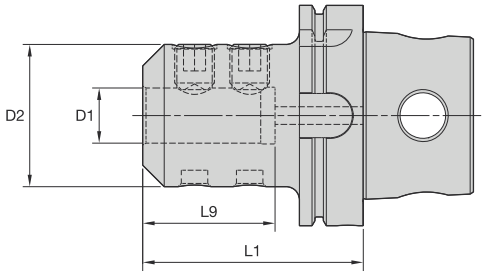


WN MM-KM4X • Metric

order number	catalog number	D1	D2	L1	L9	V	clamp screw	wrench size clamp screw	Nm	stop screw	wrench size stop screw
4160047	**KM4X100WN06090M**	6	24,5	90	30	10	**SS03M012**	3mm	7	**571.060**	2,5mm
4160048	**KM4X100WN08090M**	8	27,5	90	30	10	**SS03M014**	4mm	15	**571.067**	3mm
4160049	**KM4X100WN10090M**	10	34,5	90	35	10	**SS03M018**	5mm	25	**571.068**	4mm
4160050	**KM4X100WN12100M**	12	41,5	100	40	10	**SS03M023**	6mm	35	**571.074**	5mm
4160051	**KM4X100WN14100M**	14	43,5	100	40	10	**SS03M023**	6mm	35	**571.074**	5mm
4160052	**KM4X100WN16100M**	16	47,5	100	43	10	**SS03M025**	6mm	50	**571.069**	6mm
4160073	**KM4X100WN18100M**	18	49,5	100	43	10	**SS03M025**	6mm	50	**571.069**	6mm
4160074	**KM4X100WN20110M**	20	51,5	110	45	10	**SS03M026**	8mm	95	**571.076**	6mm
4160075	**KM4X100WN25120M**	25	64,5	120	50	10	**SS03M027**	10mm	135	**571.077**	6mm
4160076	**KM4X100WN32120M**	32	71,5	120	54	10	**SS03M029**	10mm	160	**571.077**	6mm

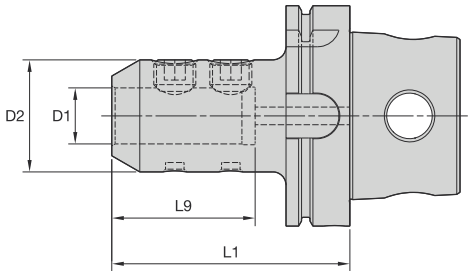
NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw and stop screw.
Clamp screw and stop screw wrenches not included.





EM MM-KM4X • Metric

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm
4160510	KM4X100EM06080M	6	24,5	80	52	SS03M012	3mm	7
4160511	KM4X100EM08080M	8	27,5	80	52	SS03M014	4mm	15
4160512	KM4X100EM10080M	10	34,5	80	52	SS03M018	5mm	25
4160533	KM4X100EM12080M	12	41,5	80	49	SS03M023	6mm	35
4160534	KM4X100EM14080M	14	43,5	80	49	SS03M023	6mm	35
4160535	KM4X100EM16100M	16	47,5	100	53	SS03M025	6mm	50
4160536	KM4X100EM18100M	18	49,5	100	53	SS03M025	6mm	50
4160537	KM4X100EM20100M	20	51,5	100	55	SS03M026	8mm	95
4160538	KM4X100EM25100M	25	64,5	100	60	SS03M027	10mm	135
4160539	KM4X100EM32100M	32	71,5	100	65	SS03M029	10mm	160
4160540	KM4X100EM40120M	40	89,5	120	75	SS03M032	10mm	160
4160541	KM4X100EM50130M	50	99,5	130	85	SS03M030	12mm	200

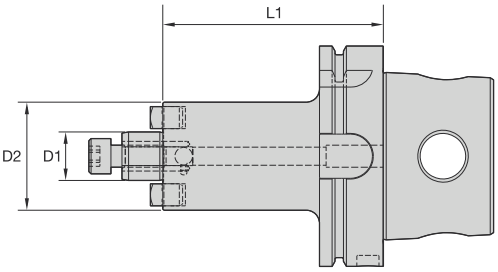


EM IN-KM4X • Inch

order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.
4160518	KM4X100EM025300	1/4	1.000	3.000	1.89	ELS025025	1/8	8
4160519	KM4X100EM038300	3/8	1.000	3.000	1.89	ELS038031	3/16	15
4160520	KM4X100EM050325	1/2	1.375	3.250	1.97	ELS044038	7/32	20
4160521	KM4X100EM062375	5/8	1.625	3.750	2.09	ELS056050	1/4	40
4160522	KM4X100EM075375	3/4	1.750	3.750	2.22	ELS062050	5/16	70
4160573	KM4X100EM100425	1	2.000	4.250	2.46	ELS075056	3/8	110
4160574	KM4X100EM125425	1 1/4	2.500	4.250	2.51	ELS075062	3/8	110
4160575	KM4X100EM150450	1 1/2	2.750	4.500	2.93	ELS075069	3/8	110
4160576	KM4X100EM200550	2	3.750	5.500	3.53	ELS100088	1/2	150
4160577	KM4X100EM250575	2 1/2	4.188	5.750	3.63	ELS100088	1/2	150

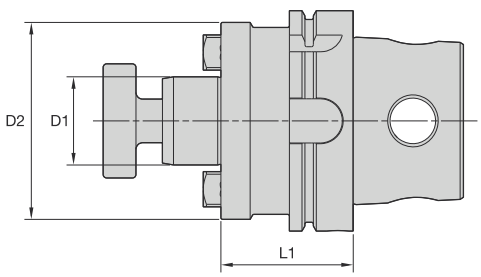
NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.

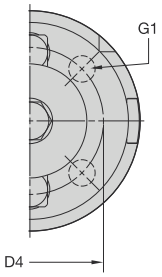
KM

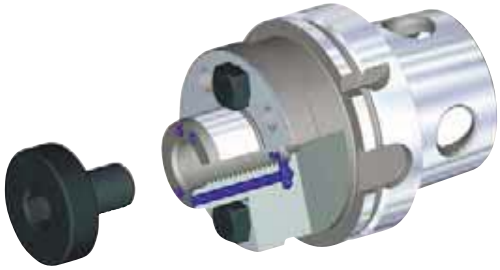


SMC CAP MM-KM4X • Metric

order number	catalog number	D1	D2	L1	lock screw	wrench size lock screw
4160335	KM4X100SMC22050M	22	49	50	MS1234	8mm
4160337	KM4X100SMC22100M	22	49	100	MS1234	8mm
4160338	KM4X100SMC22160M	22	49	160	MS1234	8mm

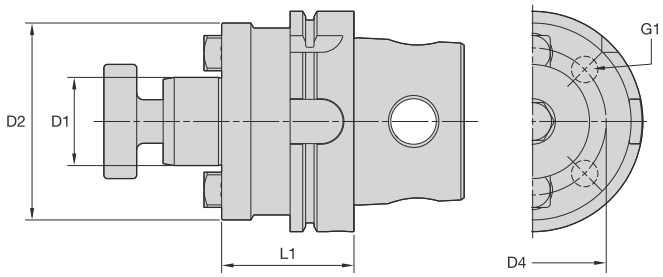


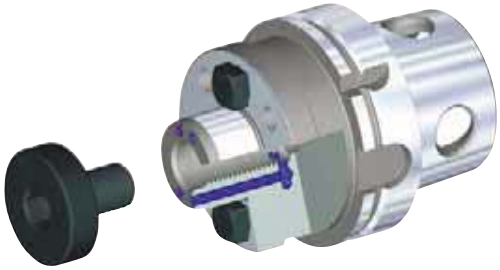




SMC Lock MM-KM4X • Metric

order number	catalog number	D1	D2	D4	G1	L1	lock screw	wrench size lock screw
4160340	KM4X100SMC27050M	27	60	–	–	50	KLSS27M	10mm
4160341	KM4X100SMC27100M	27	60	–	–	100	KLSS27M	10mm
4160342	KM4X100SMC27160M	27	60	–	–	160	KLSS27M	10mm
4160343	KM4X100SMC32050M	32	78	–	–	50	KLSS32M	14mm
4160344	KM4X100SMC32100M	32	78	–	–	100	KLSS32M	14mm
4160345	KM4X100SMC32160M	32	78	–	–	160	KLSS32M	14mm
4160346	KM4X100SMC40060M	40	89	67	M12x1,75	60	KLSS40M	17mm
4160347	KM4X100SMC40100M	40	89	67	M12x1,75	100	KLSS40M	17mm
4160348	KM4X100SMC40160M	40	89	67	M12x1,75	160	KLSS40M	17mm
4160350	KM4X100SMC50070M	50	98	–	–	70	KLS50M	SMW50M
4160351	KM4X100SMC50100M	50	98	–	–	100	KLS50M	SMW50M
4160352	KM4X100SMC50160M	50	98	–	–	160	KLS50M	SMW50M
4160353	KM4X100SMC60070M	60	129	102	M16x2,0	70	–	–
4160354	KM4X100SMC60100M	60	129	102	M16x2,0	100	–	–
4160355	KM4X100SMC60160M	60	129	102	M16x2,0	160	–	–



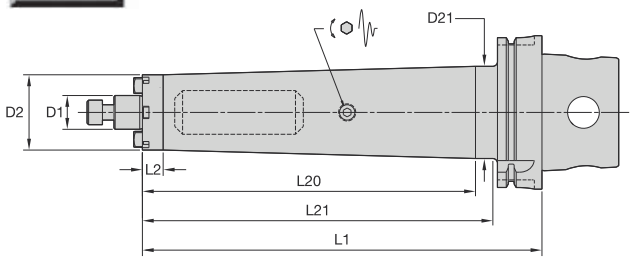


SMC Lock IN-KM4X • Inch

order number	catalog number	D1	D2	D4	G1	L1	lock screw	wrench size lock screw
4160286	**KM4X100SMC075400**	3/4	1.75	–	–	4.00	**KLS07**	1/4
4160287	**KM4X100SM2C075400**	3/4	1.46	–	–	4.00	**KLS07**	1/4
4160289	**KM4X100SMC075600**	3/4	1.75	–	–	6.00	**KLS07**	1/4
4160290	**KM4X100SM2C075600**	3/4	1.46	–	–	6.00	**KLS07**	1/4
4160291	**KM4X100SMC100400**	1	2.75	–	–	4.00	**KLS10**	5/16
4160292	**KM4X100SM2C100400**	1	2.19	–	–	4.00	**KLS10**	5/16
4160313	**KM4X100SMC100600**	1	2.75	–	–	6.00	**KLS10**	5/16
4160314	**KM4X100SM2C100600**	1	2.19	–	–	6.00	**KLS10**	5/16
4160315	**KM4X100SMC125400**	1 1/4	2.88	–	–	4.00	**KLS12**	5/16
4160316	**KM4X100SMC125600**	1 1/4	2.88	–	–	6.00	**KLS12**	5/16
4160317	**KM4X100SMC150400**	1 1/2	3.81	–	–	4.00	**KLS15**	3/8
4160318	**KM4X100SMC150600**	1 1/2	3.81	–	–	6.00	**KLS15**	3/8
4160319	**KM4X100SMC200400**	2	4.88	4.00	5/8 - 11	4.00	**KLS20**	9/16
4160320	**KM4X100SMC200600**	2	4.88	4.00	5/8 - 11	6.00	**KLS20**	9/16
4160321	**KM4X100SMC250400**	2 1/2	4.88	4.00	5/8 - 11	4.00	**–**	1/2
4160322	**KM4X100SMC250600**	2 1/2	4.88	4.00	5/8 - 11	6.00	**–**	1/2

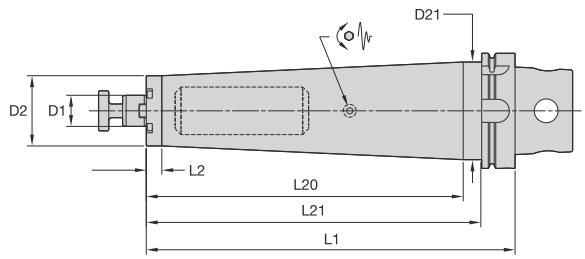
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Lock screw wrench not included.

KM



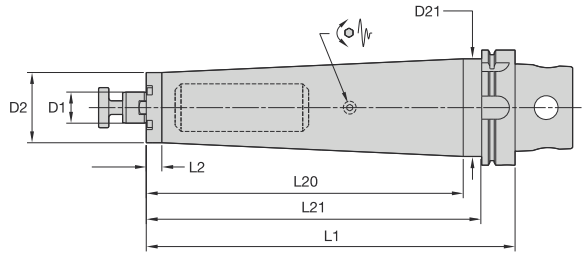
SMC TD CAP MM-KM4X • Metric

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	wrench size lock screw
4169583	KM4X100TDSMC22260M	22	49	65	260	13,5	215	231	MS-1234	8mm



SMC TD Lock MM-KM4X • Metric

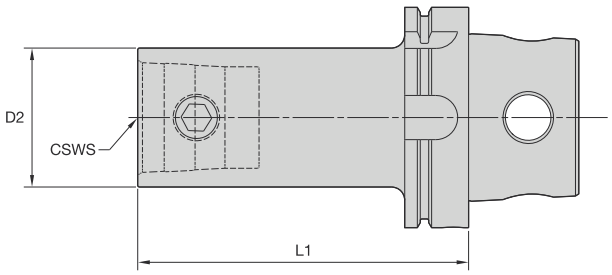
order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	wrench size lock screw
4169584	KM4X100TDSMC27320M	27	61	85	320	13,5	275	291	KLSS27M	10mm
4169585	KM4X100TDSMC32330M	32	78	—	330	299	—	—	KLSS32M	14mm



SMC TD Lock IN-KM4X • Inch

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	clamp screw	wrench size clamp screw
4169586	KM4X100TDSMC0751050	3/4	1.75	2.56	10.5	.53	8.73	9.24	KLS07	1/4
4169587	KM4X100TDSMC1001250	1	2.75	3.33	12.5	.53	10.73	11.36	KLS10	5/16
4169588	KM4X100TDSMC1251300	1 1/4	2.88	3.33	13	.63	11.23	11.86	KLS12	5/16

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Lock screw wrench not included.

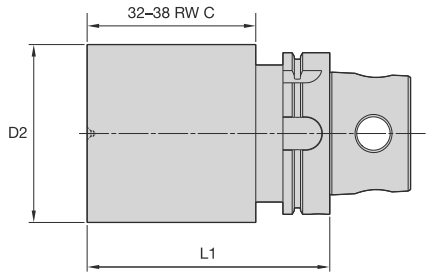


KM-KM4X

order number	catalog number	CSWS	D2	L1	spare parts package	wrench size actuation screw	Nm
4161856	**KM4X100KM32075M**	32	32	75	**KM32PKGS**	5mm	8 - 11
4161858	**KM4X100KM40080M**	40	40	80	**KM40PKGS**	6mm	12 - 16
4161859	**KM4X100KM40100M**	40	40	100	**KM40PKGS**	6mm	12 - 16
4161860	**KM4X100KM40150M**	40	40	150	**KM40PKGS**	6mm	12 - 16
4161861	**KM4X100KM50100M**	50	50	100	**KM50PKGS**	10mm	27 - 34
4161862	**KM4X100KM50150M**	50	50	150	**KM50PKGS**	10mm	27 - 34
4161863	**KM4X100KM50200M**	50	50	200	**KM50PKGS**	10mm	27 - 34
4161864	**KM4X100KM63100M**	63	63	100	**KM63PKGS**	12mm	47 - 54
4161865	**KM4X100KM63150M**	63	63	150	**KM63PKGS**	12mm	47 - 54
4161866	**KM4X100KM63200M**	63	63	200	**KM63PKGS**	12mm	47 - 54
4161867	**KM4X100KM80100M**	80	80	100	**KM80PKGS**	14mm	79 - 85
4161868	**KM4X100KM80150M**	80	80	150	**KM80PKGS**	14mm	79 - 85
4161869	**KM4X100KM80200M**	80	80	200	**KM80PKGS**	14mm	79 - 85

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.

KM

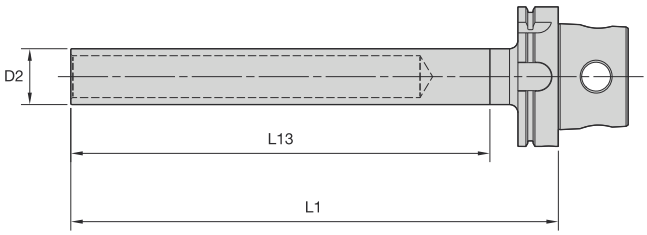


- Machinable front 32–38 RW C.

BB-KM4X

order number	catalog number	D2	L1
4160571	**KM4X100BN080150M**	80	150
4160572	**KM4X100BN110150M**	110	150
4160613	**KM4X100BN130200M**	130	200

KM



- For acceptance testing on machine tool spindles.
- 0,003mm (.0001") maximum TIR.
- Precision ground.

GB-KM4X

order number	catalog number	D2	L1	L13
4160529	**KM4X100GB40349M**	40	349	330

WIN WITH WIDIA™

KM™ Quick Change

KM Quick Change Tooling is a central component in achieving dramatic improvement in machine and cutting tool use. It's the choice of manufacturers requiring maximum machine output.

- Uniquely designed to have a high clamping force generated from a minimal amount of input force.
- The extremely rigid locking device reduces vibration between components.
- Reliability to run machines at high maximum speeds without loss of force after continuous use.
- Versatile clamping mechanism is designed to be used on all types of manufacturing equipment.

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Erickson™ Shank Tools

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Drilling B10–B13
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BTKV Shank Tools **C1–C37**
CVKV Shank Tools **C38–C67**
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CV Shank Tools **E1–E79**
DV Shank Tools **F1–F71**
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R8 Shank Tools **G24–G27**
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The power of the WIDIA™ enterprise

Tooling Systems

WIDIA proudly offers premium quality Erickson™ toolholder products, so you can be sure that you're buying the best the industry has to offer. The entire portfolio — including steep taper, HSK, straight shank extensions, collets, sleeves, and accompanying products — offers high productivity, increased accuracy, and application flexibility.

Designed for both manual and automatic tool changing, Erickson interfaces are ideally suited for most machine tools and feature a compact and rigid construction guaranteed to handle high torque and deliver optimal metal removal rates.

Machinists have relied on the Erickson name for more than 60 years. With one of the broadest product offerings in the industry, Erickson tools may be used on all types of machine tools and in applications ranging from low-speed, heavy-milling jobs to high-speed operations greater than 20,000 RPMs.

WIDIA Shrink Fit Technology

Heat shrinking is not new technology in the tooling industry, but only recently has it been applied to quick-change toolholding systems. Shrink fitting works by having toolholders with an internal bore that is slightly smaller than the connecting end of a cutting shank.

When the toolholder is heated, the bore expands and the shank is able to slip inside the bore. As the toolholder cools, it shrinks, clamping the two pieces together. This creates evenly distributed pressure with minimal vibration between the toolholder and shank that resembles a monoblock tool.

Advantages of Shrink Fit Tooling

- Evenly distributed pressure 360° along the length of the cutting tool.
- Slim and short toolholder designs can be achieved due to the lack of moveable parts.
- Absolute symmetry of the grip provides the best possible balance for high-speed operations.
- Stronger clamping force than collet or hydraulic chucks.
- Can be repeated thousands of times.
- Capable of greater speeds and feeds.
- Adapts to various shank types.
- Increased productivity.

WIDIA™ Hydraulic Chucks

WIDIA Hydraulic Chucks provide optimum performance when clamping full-cylindrical straight shanks such as solid carbide drills and end mills. Turning a piston pressurizes hydraulic fluid, which expands a thin-walled membrane along the length of the clamping bore. This creates a secure grip that reduces vibration and eliminates microcracking on cutting tools.

All chucks are capable of utilizing reducer sleeves to maximize their versatility. Hydraulic chucks require virtually no maintenance, aside from routinely cleaning the bore and removing any grease.

Slim Line

Slim-shaped hydraulic chucks for universal use with maximum precision.

Standard/HP Line

Prebalanced chucks with an external screw for radial adjustments. This eliminates the need for removing cutting tools to make fine adjustments.

Trend Line

Similar to the Standard Line chucks but with 3/8" radial adjustment of the cutting tool length by use of an axial back-up screw through the chuck bore.

Basic Line

Similar to the Trend Line but with larger body diameters that translate to higher stability and increased torque transmission.

WIDIA Collet Chucks

TG Collet Series

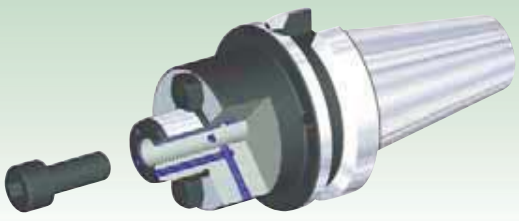
A single-angle collet that grips 1:3 tightening torque versus grip torque without a stop screw.

ER Collet Series

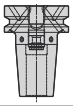
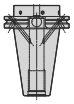
An international standard-style collet that can be used in machining applications such as milling, reaming, tapping, and grinding.

WIDIA Shell Mill Adapters

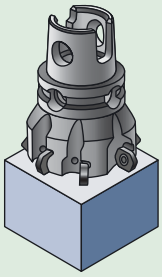
All units come standard with a new coolant to the cutting edge capability. This improves tool life and chip control. Shell mill adapters are available in extended lengths and a range of small mounting diameters.



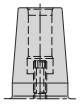
Erickson Toolholder Options

HSK40A • HSK50A • HSK63T HSK63A • HSK80A • HSK100A	HSK32C • HSK40C HSK50C • HSK63C	HSK40E • HSK50E	HSK63FP • HSK80FP	BTKV40 • BTKV50	CVKV40 • CVKV50
					

Milling

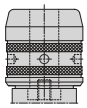


Shrink Fit



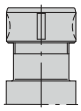
HSK40A	Pages: B26–B29	HSK40E	Pages: B164–B166	BT50	Pages: D62–D65
HSK50A	Pages: B42–B43	HSK50E	Page: B173	CV40	Pages: E4–E7
HSK63T	▽	HSK63F	Page: B177	CV50	Pages: E40–E43
HSK63A	Pages: B62–B66	HSK80F	Page: B181	DV40	Pages: F4–F7
HSK80A	Pages: B94–B97	BTKV40	Pages: C4–C7	DV50	Pages: F40–F43
HSK100A	Pages: B112–B115	BTKV50	Pages: C22–C25	QC30	▽
HSK32C	▽	CVKV40	Pages: C40–C43	QC40	
HSK40C		CVKV50	Pages: C54–C57	QC50	
HSK50C		BT30	Pages: D4–D6	R8	
HSK63C		BT40	Pages: D22–D25	Straight Shanks	Pages: H4–H5

Milling Chucks



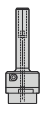
HSK40A	▽	HSK40E	▽	BT50	Page: D71
HSK50A		HSK50E		CV40	Page: E15
HSK63T		HSK63F		CV50	Page: E51
HSK63A	Page: B72	HSK80F		DV40	Page: F13
HSK80A	▽	BTKV40		DV50	Page: F48
HSK100A	Page: B120	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30	Page: D8	R8	
HSK63C		BT40	Page: D31	Straight Shanks	

TG Collet Chucks



HSK40A	Page: B34	HSK40E	▽	BT50	Page: D72
HSK50A	Page: B45	HSK50E		CV40	Pages: E16–E18
HSK63T	▽	HSK63F		CV50	Pages: E52–E56
HSK63A	Page: B73	HSK80F		DV40	Pages: F14–F15
HSK80A	Page: B100	BTKV40	Page: C8	DV50	Pages: F49–F50
HSK100A	Page: B121	BTKV50	Page: C26	QC30	Page: G4
HSK32C	▽	CVKV40	Page: C45	QC40	Page: G11
HSK40C		CVKV50	Page: C58	QC50	Page: G19
HSK50C		BT30	Page: D9	R8	▽
HSK63C		BT40	Page: D32	Straight Shanks	Pages: H6–H7

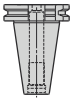
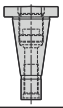
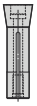
Slim Line Hydraulic



HSK40A	Pages: B30–B31	HSK40E	▽	BT50	Pages: D66–D67
HSK50A	▽	HSK50E		CV40	Pages: E8–E9
HSK63T		HSK63F		CV50	Pages: E44–E45
HSK63A	Pages: B68–B69	HSK80F		DV40	Pages: F8–F9
HSK80A	▽	BTKV40		DV50	Pages: F44–F45
HSK100A	Pages: B116–B117	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	
HSK40C	Pages: B144–B145	CVKV50		QC50	
HSK50C	▽	BT30		R8	
HSK63C		BT40	Pages: D26–D27	Straight Shanks	

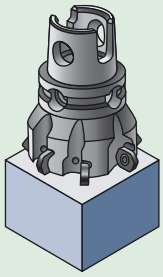
▽ Indicates "Not Available".

(continued)

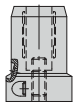
BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS
					

Erickson Toolholder Options

Milling *(continued)*

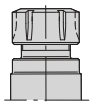


Hydraulic Chucks



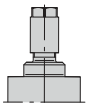
HSK40A	Pages: B32–B33	HSK40E	Page: B167	BT50	Pages: D68–D70
HSK50A	Page: B44	HSK50E	Page: B174	CV40	Pages: E10–E14
HSK63T	▽	HSK63F		CV50	Pages: E47–E50
HSK63A	Pages: B70–B71	HSK80F		DV40	Pages: F10–F12
HSK80A	Pages: B98–B99	BTKV40	▽	DV50	Pages: F46–F47
HSK100A	Pages: B118–B119	BTKV50		QC30	
HSK32C	Page: B139	CVKV40		QC40	
HSK40C	Page: B146	CVKV50		QC50	▽
HSK50C	Pages: B151–B152	BT30	Page: D7	R8	
HSK63C	Pages: B157–B158	BT40	Pages: D28–D30	Straight Shanks	

ER Collet Chucks



HSK40A	Page: B35	HSK40E	Page: B168	BT50	Pages: D73–D75
HSK50A	Pages: B46–B47	HSK50E	▽	CV40	Pages: E19–E21
HSK63T	▽	HSK63F	Page: B178	CV50	Pages: E57–E59
HSK63A	Pages: B74–B75	HSK80F	Page: B182	DV40	Pages: F16–F19
HSK80A	Pages: B102–B103	BTKV40	Pages: C10–C11	DV50	Pages: F51–F53
HSK100A	Pages: B122–B123	BTKV50	Pages: C28–C29	QC30	
HSK32C	Page: B140	CVKV40	Pages: C46–C47	QC40	
HSK40C	Page: B147	CVKV50	Pages: C60–C61	QC50	▽
HSK50C	Page: B153	BT30	Pages: D10–D11	R8	
HSK63C	Page: B159	BT40	Pages: D33–D35	Straight Shanks	Pages: H8–H11

DA Collet Chucks



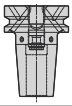
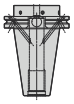
HSK40A		HSK40E		BT50	Page: D76
HSK50A		HSK50E		CV40	Page: E22
HSK63T		HSK63F		CV50	Page: E60
HSK63A		HSK80F		DV40	Pages: F20–F23
HSK80A		BTKV40	▽	DV50	Pages: F54–F55
HSK100A		BTKV50		QC30	Page: G5
HSK32C		CVKV40		QC40	Page: G12
HSK40C		CVKV50		QC50	▽
HSK50C	▽	BT30	Pages: D12–D13	R8	Page: G26
HSK63C		BT40	Pages: D36–D37	Straight Shanks	Pages: H12–H22

Whistle Notch™ Adapters

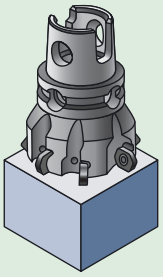
HSK40A	Page: B36	HSK40E		BT50	Pages: D77–D78
HSK50A		HSK50E		CV40	Pages: E24–E25
HSK63T	▽	HSK63F		CV50	Pages: E62–E65
HSK63A	Pages: B76–B77	HSK80F		DV40	Pages: F25–F26
HSK80A	Page: B104	BTKV40	▽	DV50	Pages: F57–F58
HSK100A	Pages: B124–B125	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	Page: G13
HSK40C	Page: B148	CVKV50		QC50	
HSK50C	Page: B154	BT30	Page: D14	R8	▽
HSK63C	Page: B160	BT40	Pages: D39–D40	Straight Shanks	

▽ Indicates "Not Available".

Erickson Toolholder Options

HSK40A • HSK50A • HSK63T HSK63A • HSK80A • HSK100A	HSK32C • HSK40C HSK50C • HSK63C	HSK40E • HSK50E	HSK63FP • HSK80FP	BTKV40 • BTKV50	CVKV40 • CVKV50
					

Milling *(continued)*



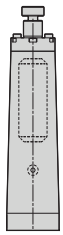
End Mill Adapters

HSK40A	Page: B37	HSK40E		BT50	Page: D79
HSK50A		HSK50E		CV40	Pages: E26–E27
HSK63T		HSK63F		CV50	Pages: E66–E68
HSK63A	Page: B78	HSK80F		DV40	Pages: F27–F28
HSK80A	Page: B105	BTKV40	Pages: C12–C13	DV50	Pages: F59–F60
HSK100A	Page: B126	BTKV50	Pages: C30–C31	QC30	Page: G6
HSK32C		CVKV40	Page: C48	QC40	Page: G14
HSK40C		CVKV50	Page: C63	QC50	Page: G20
HSK50C		BT30	Page: D15	R8	Page: G27
HSK63C		BT40	Pages: D41–D43	Straight Shanks	

Shell Mill Adapters

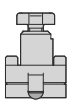
HSK40A	Page: B38	HSK40E	Page: B169	BT50	Pages: D82–D84
HSK50A	Page: B48	HSK50E		CV40	Page: E30
HSK63T		HSK63F	Page: B179	CV50	Pages: E72–E73
HSK63A	Pages: B82–B83	HSK80F	Page: B183	DV40	Pages: F30–F31
HSK80A	Pages: B106–B107	BTKV40	Pages: C16–C17	DV50	Pages: F62–F63
HSK100A	Pages: B130–B131	BTKV50	Pages: C34–C35	QC30	Page: G7
HSK32C		CVKV40	Page: C50	QC40	Page: G15
HSK40C		CVKV50	Page: C65	QC50	Page: G21
HSK50C		BT30	Pages: D16–D17	R8	Page: G27
HSK63C		BT40	Pages: D48–D50	Straight Shanks	

Tunable Shell Mill Adapters



HSK40A		HSK40E		BT50	Pages: D80–D81
HSK50A		HSK50E		CV40	Page: E29
HSK63T		HSK63F		CV50	Page: E71
HSK63A	Page: B80	HSK80F		DV40	Page: F29
HSK80A		BTKV40	Page: C14	DV50	Page: F61
HSK100A	Pages: B128–B129	BTKV50	Page: C32	QC30	
HSK32C		CVKV40	Page: C49	QC40	
HSK40C		CVKV50	Page: C64	QC50	
HSK50C		BT30		R8	
HSK63C		BT40	Pages: D45–D46	Straight Shanks	

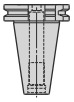
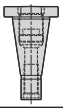
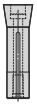
Combi Shell Adapters



HSK40A		HSK40E		BT50	Page: D85
HSK50A		HSK50E		CV40	
HSK63T		HSK63F		CV50	
HSK63A	Page: B84	HSK80F		DV40	Page: F32
HSK80A	Page: B108	BTKV40		DV50	Page: F64
HSK100A	Page: B132	BTKV50		QC30	
HSK32C		CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30		R8	
HSK63C		BT40	Page: D51	Straight Shanks	

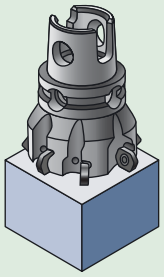
Indicates "Not Available".

(continued)

BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS
					

Erickson Toolholder Options

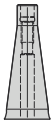
Milling *(continued)*



Slotting Cutter Adapters

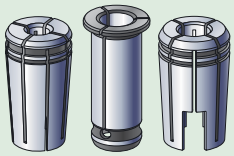
HSK40A	▽	HSK40E	▽	BT50	Page: D86
HSK50A		HSK50E		CV40	Page: E31
HSK63T		HSK63F		CV50	Page: E73
HSK63A	Page: B85	HSK80F		DV40	▽
HSK80A	▽	BTKV40		DV50	
HSK100A	Page: B133	BTKV50		QC30	
HSK32C	▽	CVKV40		QC40	
HSK40C		CVKV50		QC50	Page: G22
HSK50C		BT30		R8	▽
HSK63C		BT40	Page: D52	Straight Shanks	Page: H27

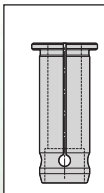
Screw-On Adapters



HSK40A	Page: B39	HSK40E	Page: B170	BT50	Page: D86
HSK50A	Page: B49	HSK50E	Page: B175	CV40	Page: E32
HSK63T	▽	HSK63F	▽	CV50	Page: E74
HSK63A	Page: B86	HSK80F		DV40	Page: F33
HSK80A	▽	BTKV40		DV50	Page: F65
HSK100A	Page: B133	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30	Page: D18	R8	
HSK63C		BT40	Page: D53	Straight Shanks	Pages: H23–H26

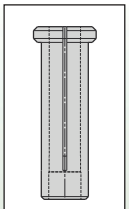
Milling Collets and Sleeves





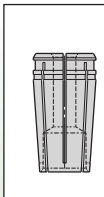
Milling Sleeves

Pages: I8–19



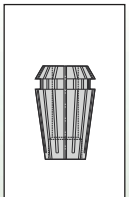
Hydraulic Sleeves

Pages: I4–I5



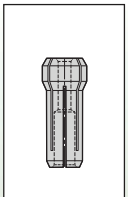
TG Collets

Pages: I14–I48



ER Collets

Pages: I54–I60

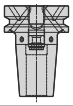
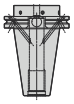


DA Collets

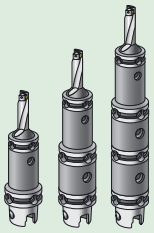
Pages: I65–I75

▽ Indicates "Not Available".

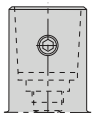
Erickson Toolholder Options

HSK40A • HSK50A • HSK63T HSK63A • HSK80A • HSK100A	HSK32C • HSK40C HSK50C • HSK63C	HSK40E • HSK50E	HSK63FP • HSK80FP	BTKV40 • BTKV50	CVKV40 • CVKV50
					

Modular



KM Modular

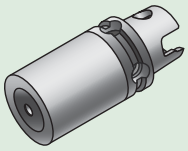


HSK40A	▽	HSK40E	▽	BT50	Page: D90
HSK50A		HSK50E		CV40	Page: E36
HSK63T	Page: B58	HSK63F		CV50	Page: E78
HSK63A	Page: B89	HSK80F		DV40	Page: F36
HSK80A	▽	BTKV40	Page: C18	DV50	Page: F69
HSK100A	Page: B136	BTKV50	Page: C36	QC30	▽
HSK32C	▽	CVKV40	Page: C51	QC40	
HSK40C		CVKV50	Page: C66	QC50	
HSK50C		BT30	Page: D18	R8	
HSK63C		BT40	Page: D58	Straight Shanks	

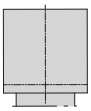
HSK Modular

HSK40A	▽	HSK40E	▽	BT50	Page: D91
HSK50A		HSK50E		CV40	Page: E37
HSK63T		HSK63F		CV50	Page: E79
HSK63A	Page: B89	HSK80F		DV40	Page: F37
HSK80A	▽	BTKV40		DV50	Page: F70
HSK100A	Page: B136	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	
HSK40C	Page: B148	CVKV50		QC50	
HSK50C	▽	BT30		R8	
HSK63C		BT40	Page: D59	Straight Shanks	

Auxilliary



Blanks



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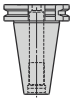
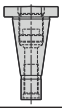
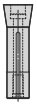
HSK50A	Page: B49	HSK50E	▽	CV40	Page: E37
HSK63T	Page: B57	HSK63F		CV50	Page: E79
HSK63A	Page: B90	HSK80F		DV40	Page: F37
HSK80A	Page: B109	BTKV40	Page: C19	DV50	Page: F71
HSK100A	Page: B137	BTKV50	Page: C37	QC30	▽
HSK32C	Page: B140	CVKV40	Page: C51	QC40	
HSK40C	Page: B149	CVKV50	Page: C67	QC50	
HSK50C	Page: B154	BT30	▽	R8	
HSK63C	Page: B161	BT40	Page: D59	Straight Shanks	

Plugs

HSK40A	▽	HSK40E	▽	BT50	▽
HSK50A		HSK50E		CV40	
HSK63T		HSK63F		CV50	
HSK63A	Page: J30	HSK80F		DV40	
HSK80A	▽	BTKV40		DV50	
HSK100A	Page: J30	BTKV50		QC30	
HSK32C	▽	CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30		R8	
HSK63C		BT40		Straight Shanks	

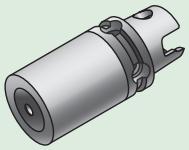
▽ Indicates "Not Available".

(continued)

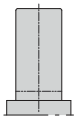
BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS
					

Erickson Toolholder Options

Auxilliary *(continued)*

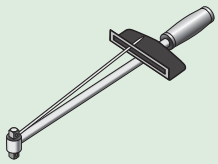


Gage Bars

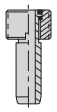


HSK40A	▽	HSK40E	▽	BT50	▽
HSK50A		HSK50E		CV40	
HSK63T		HSK63F		CV50	
HSK63A	Page: B90	HSK80F		DV40	
HSK80A	▽	BTKV40		DV50	
HSK100A	Page: B137	BTKV50		QC30	
HSK32C	▽	CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30		R8	
HSK63C		BT40		Straight Shanks	

Accessories

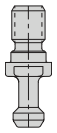


Coolant Units



HSK40A	Page: J32	HSK40E	Page: J32	BT50	▽
HSK50A	Page: J32	HSK50E	Page: J32	CV40	
HSK63T	Page: J32	HSK63F	Page: J32	CV50	
HSK63A	Page: J32	HSK80F	Page: J32	DV40	
HSK80A	Page: J32	BTKV40	▽	DV50	
HSK100A	Page: J32	BTKV50		QC30	
HSK32C	Page: J32	CVKV40		QC40	
HSK40C	Page: J32	CVKV50		QC50	
HSK50C	Page: J32	BT30		R8	
HSK63C	Page: J32	BT40		Straight Shanks	

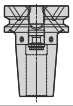
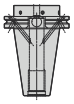
Retention Knobs



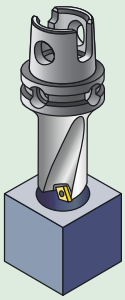
HSK40A	▽	HSK40E	▽	BT50	Pages: J34–J38
HSK50A		HSK50E		CV40	Pages: J34–J38
HSK63T		HSK63F		CV50	Pages: J34–J38
HSK63A		HSK80F		DV40	Pages: J34–J38
HSK80A		BTKV40	Pages: J34–J38	DV50	Pages: J34–J38
HSK100A		BTKV50	Pages: J34–J38	QC30	▽
HSK32C		CVKV40	Pages: J34–J38	QC40	
HSK40C		CVKV50	Pages: J34–J38	QC50	
HSK50C		BT30	Pages: J34–J38	R8	
HSK63C		BT40	Pages: J34–J38	Straight Shanks	

▽ Indicates "Not Available".

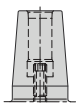
Erickson Toolholder Options

HSK40A • HSK50A • HSK63T HSK63A • HSK80A • HSK100A	HSK32C • HSK40C HSK50C • HSK63C	HSK40E • HSK50E	HSK63FP • HSK80FP	BTKV40 • BTKV50	CVKV40 • CVKV50
					

Drilling

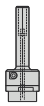


Shrink Fit



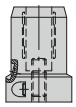
HSK40A	Pages: B26–B29	HSK40E	Pages: B164–B166	BT50	Pages: D62–D65
HSK50A	Pages: B42–B43	HSK50E	Page: B173	CV40	Pages: E4–E7
HSK63T	▽	HSK63F	Page: B177	CV50	Pages: E40–E43
HSK63A	Pages: B62–B66	HSK80F	Page: B181	DV40	Pages: F4–F7
HSK80A	Pages: B94–B97	BTKV40	Pages: C4–C7	DV50	Pages: F40–F43
HSK100A	Pages: B112–B115	BTKV50	Pages: C22–C25	QC30	▽
HSK32C	▽	CVKV40	Pages: C40–C43	QC40	
HSK40C		CVKV50	Pages: C54–C57	QC50	
HSK50C		BT30	Pages: D4–D6	R8	
HSK63C		BT40	Pages: D22–D25	Straight Shanks	Pages: H4–H5

Slim Line Hydraulic



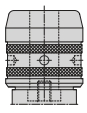
HSK40A	Pages: B30–B31	HSK40E	▽	BT50	Pages: D66–D67
HSK50A	▽	HSK50E		CV40	Pages: E8–E9
HSK63T		HSK63F		CV50	Pages: E44–E45
HSK63A	Pages: B68–B69	HSK80F		DV40	Pages: F8–F9
HSK80A	▽	BTKV40		DV50	Pages: F44–F45
HSK100A	Pages: B116–B117	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	
HSK40C	Pages: B144–B145	CVKV50		QC50	
HSK50C	▽	BT30		R8	
HSK63C		BT40	Pages: D26–D27	Straight Shanks	

Hydraulic Chucks



HSK40A	Pages: B32–B33	HSK40E	Page: B167	BT50	Pages: D68–D70
HSK50A	Page: B44	HSK50E	Page: B174	CV40	Pages: E10–E14
HSK63T	▽	HSK63F	▽	CV50	Pages: E47–E50
HSK63A	Pages: B70–B71	HSK80F		DV40	Pages: F10–F12
HSK80A	Pages: B98–B99	BTKV40		DV50	Pages: F46–F47
HSK100A	Pages: B118–B119	BTKV50		QC30	▽
HSK32C	Page: B139	CVKV40		QC40	
HSK40C	Page: B146	CVKV50		QC50	
HSK50C	Pages: B151–B152	BT30	Page: D7	R8	
HSK63C	Pages: B157–B158	BT40	Pages: D28–D30	Straight Shanks	

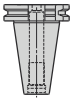
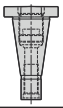
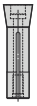
Milling Chucks



HSK40A	▽	HSK40E	▽	BT50	Page: D71
HSK50A		HSK50E		CV40	Page: E15
HSK63T		HSK63F		CV50	Page: E51
HSK63A	Page: B72	HSK80F		DV40	Page: F13
HSK80A	▽	BTKV40		DV50	Page: F48
HSK100A	Page: B120	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30	Page: D8	R8	
HSK63C		BT40	Page: D31	Straight Shanks	

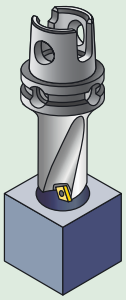
▽ Indicates "Not Available".

(continued)

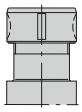
BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS
					

Erickson Toolholder Options

Drilling *(continued)*

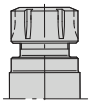


TG Collet Chucks



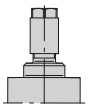
HSK40A	Page: B34	HSK40E	▽	BT50	Page: D72
HSK50A	Page: B45	HSK50E		CV40	Pages: E16–E18
HSK63T	▽	HSK63F		CV50	Pages: E52–E56
HSK63A	Page: B73	HSK80F		DV40	Pages: F14–F15
HSK80A	Page: B100	BTKV40	Page: C8	DV50	Pages: F49–F50
HSK100A	Page: B121	BTKV50	Page: C26	QC30	Page: G4
HSK32C	▽	CVKV40	Page: C45	QC40	Page: G11
HSK40C		CVKV50	Page: C58	QC50	Page: G19
HSK50C		BT30	Page: D9	R8	▽
HSK63C		BT40	Page: D32	Straight Shanks	Pages: H6–H7

ER Collet Chucks



HSK40A	Page: B35	HSK40E	Page: B168	BT50	Pages: D73–D75
HSK50A	Pages: B46–B47	HSK50E	▽	CV40	Pages: E19–E21
HSK63T	▽	HSK63F	Page: B178	CV50	Pages: E57–E59
HSK63A	Pages: B74–B75	HSK80F	Page: B182	DV40	Pages: F16–F19
HSK80A	Pages: B102–B103	BTKV40	Pages: C10–C11	DV50	Pages: F51–F53
HSK100A	Pages: B122–B123	BTKV50	Pages: C28–C29	QC30	▽
HSK32C	Page: B140	CVKV40	Pages: C46–C47	QC40	
HSK40C	Page: B147	CVKV50	Pages: C60–C61	QC50	
HSK50C	Page: B153	BT30	Pages: D10–D11	R8	
HSK63C	Page: B159	BT40	Pages: D33–D35	Straight Shanks	Pages: H8–H11

DA Collet Chucks



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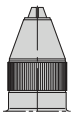
HSK63T		HSK63F		CV50	Page: E60
HSK63A		HSK80F		DV40	Pages: F20–F23
HSK80A		BTKV40		DV50	Pages: F54–F55
HSK100A		BTKV50		QC30	Page: G5
HSK32C		CVKV40		QC40	Page: G12
HSK40C		CVKV50		QC50	▽
HSK50C		BT30	Pages: D12–D13	R8	Page: G26
HSK63C		BT40	Pages: D36–D37	Straight Shanks	Pages: H12–H22

Drill Chucks

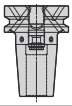
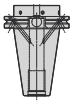


HSK40A	▽	HSK40E	▽	BT50	Page: D76
HSK50A		HSK50E		CV40	Page: E23
HSK63T		HSK63F		CV50	Page: E61
HSK63A	Page: B76	HSK80F		DV40	Page: F24
HSK80A	▽	BTKV40		DV50	Page: F56
HSK100A	Page: B124	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30	Page: D14	R8	
HSK63C		BT40	Page: D38	Straight Shanks	

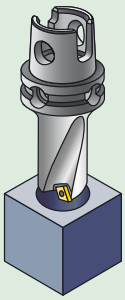
▽ Indicates "Not Available".

(continued)

Erickson Toolholder Options

HSK40A • HSK50A • HSK63T HSK63A • HSK80A • HSK100A	HSK32C • HSK40C HSK50C • HSK63C	HSK40E • HSK50E	HSK63FP • HSK80FP	BTKV40 • BTKV50	CVKV40 • CVKV50
					

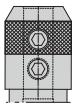
Drilling *(continued)*



Whistle Notch™ Adapters

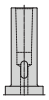
HSK40A	Page: B36	HSK40E		BT50	Pages: D77–D78
HSK50A	▽	HSK50E		CV40	Pages: E24–E25
HSK63T		HSK63F		CV50	Pages: E62–E65
HSK63A	Pages: B76–B77	HSK80F		DV40	Pages: F25–F26
HSK80A	Page: B104	BTKV40		DV50	Pages: F57–F58
HSK100A	Pages: B124–B125	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	Page: G13
HSK40C	Page: B148	CVKV50		QC50	
HSK50C	Page: B154	BT30	Page: D14	R8	▽
HSK63C	Page: B160	BT40	Pages: D39–D40	Straight Shanks	

Straight Shanks



HSK40A		HSK40E		BT50	▽
HSK50A	▽	HSK50E		CV40	Page: E28
HSK63T		HSK63F		CV50	Pages: E69–E70
HSK63A	Page: B79	HSK80F		DV40	
HSK80A	▽	BTKV40	▽	DV50	
HSK100A	Page: B127	BTKV50		QC30	
HSK32C		CVKV40		QC40	▽
HSK40C	▽	CVKV50		QC50	
HSK50C		BT30		R8	
HSK63C		BT40	Page: D44	Straight Shanks	

Morse Tapers

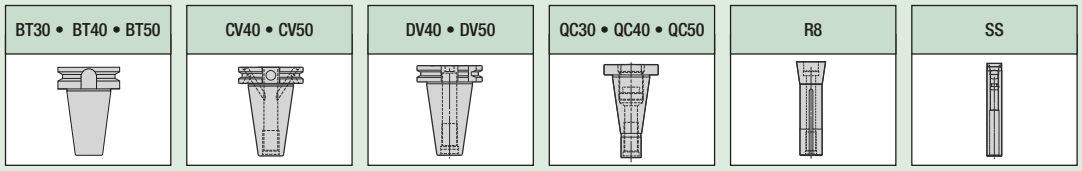


HSK40A		HSK40E		BT50	Page: D88
HSK50A	▽	HSK50E		CV40	Page: E34
HSK63T		HSK63F		CV50	Page: E76
HSK63A	Page: B87	HSK80F		DV40	Page: F35
HSK80A	▽	BTKV40	▽	DV50	Page: F67
HSK100A	Page: B134	BTKV50		QC30	Page: G8
HSK32C		CVKV40		QC40	Page: G16
HSK40C	▽	CVKV50		QC50	Page: G22
HSK50C		BT30		R8	▽
HSK63C		BT40	Page: D55	Straight Shanks	

Jacobs/DIN

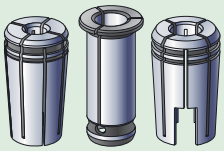
HSK40A		HSK40E		BT50	Page: D88
HSK50A		HSK50E		CV40	Page: E35
HSK63T		HSK63F		CV50	Page: E77
HSK63A		HSK80F		DV40	▽
HSK80A	▽	BTKV40	▽	DV50	
HSK100A		BTKV50		QC30	Page: G9
HSK32C		CVKV40		QC40	Page: G17
HSK40C		CVKV50		QC50	
HSK50C		BT30		R8	▽
HSK63C		BT40	Page: D55	Straight Shanks	

▽ Indicates "Not Available".

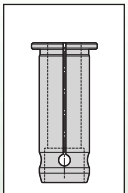


Erickson Toolholder Options

Drilling Collets and Sleeves

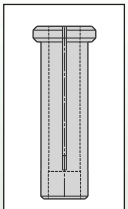


Indicates "Not Available".



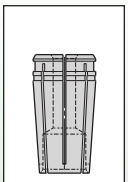
Milling Sleeves

Pages: I8–I9



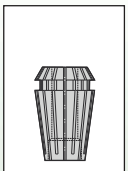
Hydraulic Sleeves

Pages: I4–I5



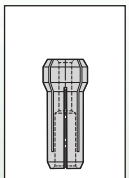
TG Collets

Pages: I14–I48



ER Collets

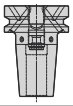
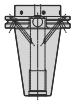
Pages: I54–I60



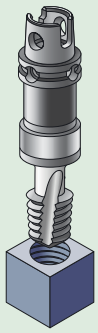
DA Collets

Pages: I65–I75

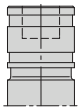
Erickson Toolholder Options

HSK40A • HSK50A • HSK63T HSK63A • HSK80A • HSK100A	HSK32C • HSK40C HSK50C • HSK63C	HSK40E • HSK50E	HSK63FP • HSK80FP	BTKV40 • BTKV50	CVKV40 • CVKV50
					

Tapping

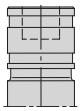


RC Rapid Change • Tension and Compression



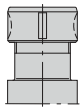
HSK40A	▽	HSK40E	▽	BT50	Page: D87
HSK50A		HSK50E		CV40	Page: E33
HSK63T		HSK63F		CV50	Page: E75
HSK63A	Page: B87	HSK80F		DV40	Page: F34
HSK80A	▽	BTKV40		DV50	Page: F66
HSK100A	Page: B134	BTKV50		QC30	▽
HSK32C	▽	CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30		R8	
HSK63C		BT40	Page: D54	Straight Shanks	

RC Rapid Change • Solid



HSK40A	▽	HSK40E	▽	BT50	Page: D87
HSK50A		HSK50E		CV40	Page: E34
HSK63T		HSK63F		CV50	Page: E76
HSK63A		HSK80F		DV40	Page: F34
HSK80A		BTKV40		DV50	Page: F67
HSK100A		BTKV50		QC30	▽
HSK32C		CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30		R8	
HSK63C		BT40	Page: D54	Straight Shanks	

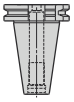
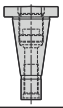
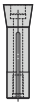
TG Collet Chucks



HSK40A	Page: B34	HSK40E	▽	BT50	Page: D72
HSK50A	Page: B45	HSK50E		CV40	Pages: E16–E18
HSK63T	▽	HSK63F		CV50	Pages: E52–E56
HSK63A	Page: B73	HSK80F		DV40	Pages: F14–F15
HSK80A	Page: B100	BTKV40	Page: C8	DV50	Pages: F49–F50
HSK100A	Page: B121	BTKV50	Page: C26	QC30	Page: G4
HSK32C	▽	CVKV40	Page: C45	QC40	Page: G11
HSK40C		CVKV50	Page: C58	QC50	Page: G19
HSK50C		BT30	Page: D9	R8	▽
HSK63C		BT40	Page: D32	Straight Shanks	Pages: H6–H7

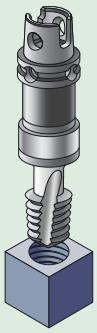
▽ Indicates "Not Available".

(continued)

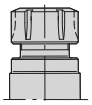
BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS
					

Erickson Toolholder Options

Tapping *(continued)*

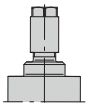


ER Collet Chucks



HSK40A	Page: B35	HSK40E	Page: B168	BT50	Pages: D73–D75
HSK50A	Pages: B46–B47	HSK50E	▽	CV40	Pages: E19–E21
HSK63T	▽	HSK63F	Page: B178	CV50	Pages: E57–E59
HSK63A	Pages: B74–B75	HSK80F	Page: B182	DV40	Pages: F16–F19
HSK80A	Pages: B102–B103	BTKV40	Pages: C10–C11	DV50	Pages: F51–F53
HSK100A	Pages: B122–B123	BTKV50	Pages: C28–C29	QC30	▽
HSK32C	Page: B140	CVKV40	Pages: C46–C47	QC40	
HSK40C	Page: B147	CVKV50	Pages: C60–C61	QC50	
HSK50C	Page: B153	BT30	Pages: D10–D11	R8	
HSK63C	Page: B159	BT40	Pages: D33–D35	Straight Shanks	Pages: H8–H11

DA Collet Chucks



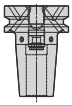
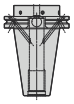
HSK40A	▽	HSK40E	▽	BT50	Page: D76
HSK50A		HSK50E		CV40	Page: E22
HSK63T		HSK63F		CV50	Page: E60
HSK63A		HSK80F		DV40	Pages: F20–F23
HSK80A		BTKV40		DV50	Pages: F54–F55
HSK100A		BTKV50		QC30	Page: G5
HSK32C		CVKV40		QC40	Page: G12
HSK40C		CVKV50		QC50	▽
HSK50C		BT30	Pages: D12–D13	R8	Page: G26
HSK63C		BT40	Pages: D36–D37	Straight Shanks	Pages: H12–H22

TA Adapters

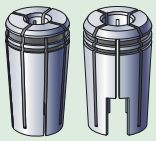
HSK40A	▽	HSK40E	▽	BT50	Page: D78
HSK50A		HSK50E		CV40	Page: E25
HSK63T		HSK63F		CV50	▽
HSK63A		HSK80F		DV40	
HSK80A		BTKV40		DV50	
HSK100A		BTKV50		QC30	
HSK32C		CVKV40		QC40	
HSK40C		CVKV50		QC50	
HSK50C		BT30		R8	
HSK63C		BT40	Page: D40	Straight Shanks	

▽ Indicates "Not Available".

Erickson Toolholder Options

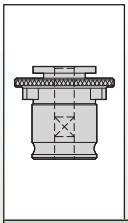
HSK40A • HSK50A • HSK63T HSK63A • HSK80A • HSK100A	HSK32C • HSK40C HSK50C • HSK63C	HSK40E • HSK50E	HSK63FP • HSK80FP	BTKV40 • BTKV50	CVKV40 • CVKV50
					

Tapping Collets and Adapters



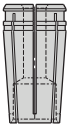
Indicates "Not Available".

RC Rapid Change Adapters



Pages: I78–I81

TG Collets

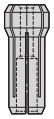


Pages: I14–I48

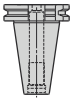
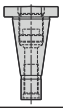
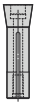
ER Collets

Pages: I54–I60

DA Collets

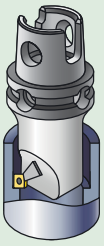


Pages: I65–I75

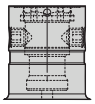
BT30 • BT40 • BT50	CV40 • CV50	DV40 • DV50	QC30 • QC40 • QC50	R8	SS
					

Erickson Toolholder Options

Boring

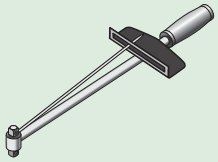


ROTAFLEX™

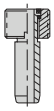


HSK40A	▽	HSK40E		BT50	Page: D89
HSK50A		HSK50E		CV40	Page: E35
HSK63T		HSK63F		CV50	Page: E77
HSK63A	Page: B88	HSK80F		DV40	Page: F35
HSK80A	▽	BTKV40	▽	DV50	Page: F68
HSK100A	Page: B135	BTKV50		QC30	
HSK32C		CVKV40		QC40	
HSK40C	▽	CVKV50		QC50	▽
HSK50C		BT30		R8	
HSK63C		BT40	Page: D56	Straight Shanks	

Accessories

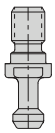


Coolant Units



HSK40A	Page: J32	HSK40E	Page: J32	BT50	
HSK50A	Page: J32	HSK50E	Page: J32	CV40	
HSK63T	Page: J32	HSK63F	Page: J32	CV50	
HSK63A	Page: J32	HSK80F	Page: J32	DV40	
HSK80A	Page: J32	BTKV40		DV50	▽
HSK100A	Page: J32	BTKV50		QC30	
HSK32C	Page: J32	CVKV40	▽	QC40	
HSK40C	Page: J32	CVKV50		QC50	
HSK50C	Page: J32	BT30		R8	
HSK63C	Page: J32	BT40		Straight Shanks	

Retention Knobs



HSK40A		HSK40E		BT50	Pages: J34–J38
HSK50A		HSK50E		CV40	Pages: J34–J38
HSK63T		HSK63F	▽	CV50	Pages: J34–J38
HSK63A		HSK80F		DV40	Pages: J34–J38
HSK80A		BTKV40	Pages: J34–J38	DV50	Pages: J34–J38
HSK100A		BTKV50	Pages: J34–J38	QC30	
HSK32C		CVKV40	Pages: J34–J38	QC40	
HSK40C	▽	CVKV50	Pages: J34–J38	QC50	▽
HSK50C		BT30	Pages: J34–J38	R8	
HSK63C		BT40	Pages: J34–J38	Straight Shanks	

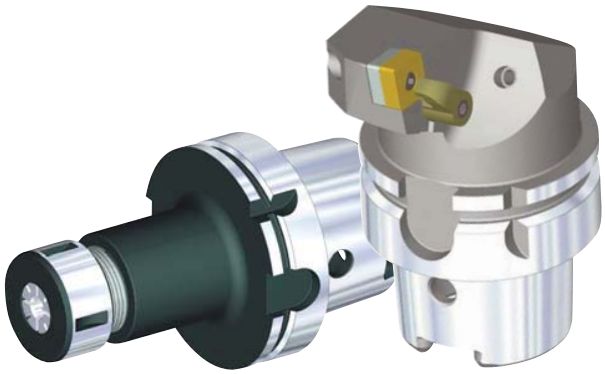
▽ Indicates "Not Available".

WIDIA

WWW.WIDIA.COM

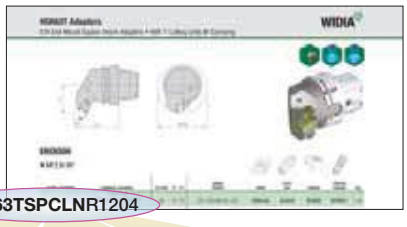
HSK Shank Tools

Catalog Numbering System — External Turning B20–B23
HSK40A Shank Tools B24–B39
HSK50A Shank Tools B40–B49
HSK63T Adapters and Cutting Units B50–B59
HSK63A Shank Tools B60–B90
HSK80A Shank Tools B92–B109
HSK100A Shank Tools B110–B137
HSK32C Shank Tools B138–B140
HSK40C Shank Tools B142–B149
HSK50C Shank Tools B150–B154
HSK63C Shank Tools B156–B161
HSK40E Shank Tools B162–B170
HSK50E Shank Tools B172–B175
HSK63F (Pin) Shank Tools B176–B178
HSK63F Shank Tools B179
HSK80F (Pin) Shank Tools B180–B183



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



KM63TSPCLNR1204

HSK — Shank Style

63 — System Size

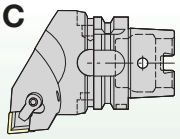
40 = 40mm
50 = 50mm
63 = 63mm
80 = 80mm
100 = 100mm

T — Form

A = Form A
B = Form B
C = Form C
D = Form D
E = Form E
F = Form F
T = Form T

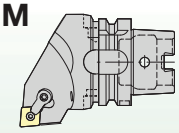
P — Insert Holding Method

C



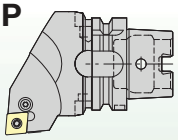
Top clamping by clamping finger for inserts without hole

M



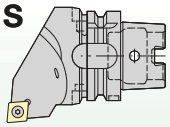
Top and hole clamping for inserts with hole

P



Insert clamping by toggle lever for insert with hole

S



Center clamping by screw for inserts with hole

C — Insert Shape

C 80°
D 55°
K 55°
R
S 90°
T 60°
V 35°
W 80°

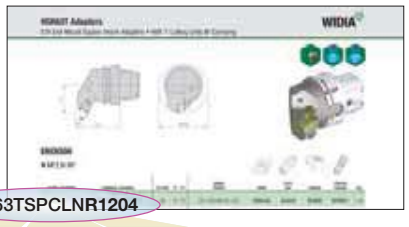
L — Toolholder Style

D 45°
E 30°
F 0°
G 0°
H 50°
J 3°
K 15°
L 5° 5°
N 63°
P 27° 30'
Q 17° 30'
R 15°
S 45°
U 3°
V 17° 30'
X 120°

N — Insert Clearance Angle

B 5°
C 7°
N 0°
P 11°

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.

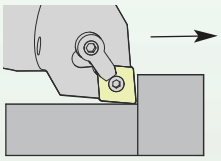


KM63TSPCLNR1204

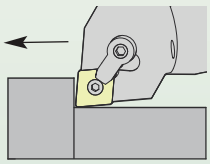
R	12		04		
Hand of Tool	Insert Size Cutting Edge Length L10	Additional Information	Insert Thickness	Gage Length	Special Features

R = Right hand
L = Left hand
N = Neutral

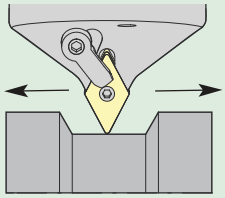
R



L



N



MX = Ceramic inserts

03 = .125"
04 = .188"
06 = .250"
07 = .312"

30 = 30mm
45 = 45mm
120 = 120mm

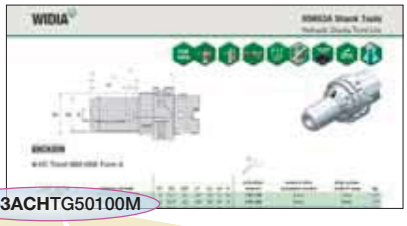
Y = Mazak® Integrex®
M = Metric

Metric

IC	C	D	K	R	S	T	V	W
3,97		04		03	03	06		
4,76	04	05		04	04	08	08	S3
5,56	05	06	03	05	05	09	09	03
6,00				06				
6,35	06	07	04	06	06	11	11	04
7,94	08	09	05	07	07	13	13	05
8,00				08			11	
9,52	09	11	06	09	09	16	16	06
9,52								
10,00				10				
11,11	11	13	07	11	11	19	19	07
12,00				12				
12,70	12	15	08	12	12	22	22	08
14,29	14	17	09	14	14	24	24	09
15,88	16	19	10	15	15	27	27	10
16,00				16				
17,46	17	21	11	17	17	30	30	11
19,05	19	23	13	19	19	33	33	13
20,00				20				
22,22	22	27	15	22	22	38	38	15
25,00				25				
25,40	25	31	17	25	25	44	44	17
31,75	32	38	21	31	31	54	54	21
32,00				32				

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



KM63ACHTG50100M

HSK
Shank Style

JIS 6339

63
Shank Taper Size

- **25** = 25
- **32** = 32
- **40** = 40
- **50** = 50
- **63** = 63
- **80** = 80
- **100** = 100
- **125** = 125
- **160** = 160

A
Form

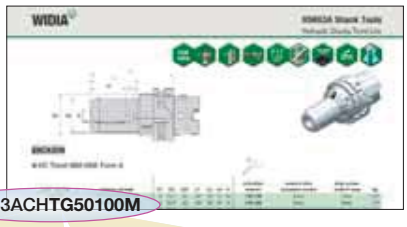
DIN Form

- **A** = Form A
- **B** = Form B
- **C** = Form C
- **D** = Form D
- **E** = Form E
- **F** = Form F

CH
Special Feature *(optional)*

- **CH** = Coolant, high pressure
- **HPV** = High performance and balanceable
- **TD** = Tunable
- **P** = Pin style

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



KM63ACH**TG50100M**

TG
Toolholder Style

50
Toolholder Size

TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

100
Tool Length

(Taper gage line to front of tool)

metric
xxx = xxx

inch
xxx = x.xx

M
Identification Values

(blank) =
Tool built to inch values

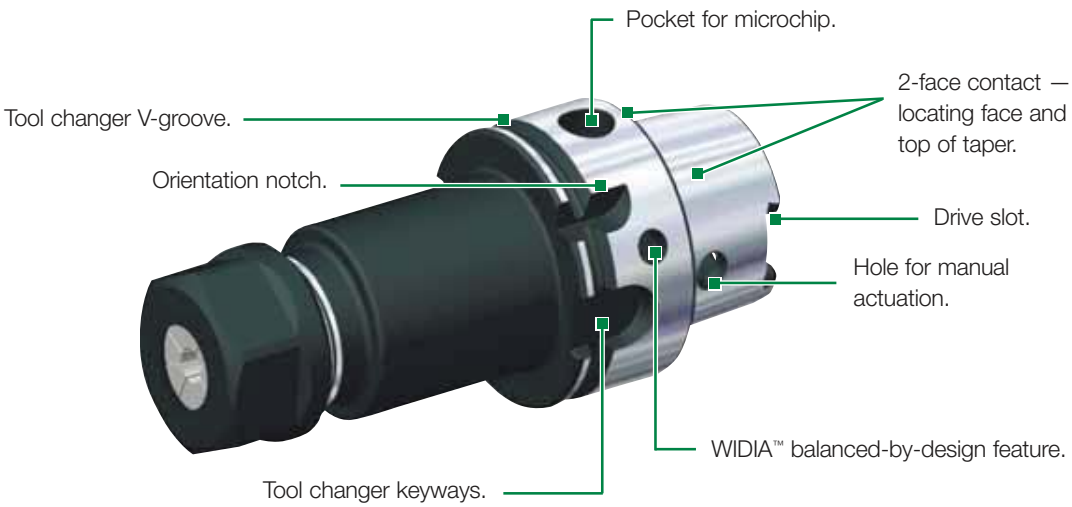
M =
Tool built to metric values

BB = Bar blank	**HPMC** = Bearing milling chuck — high performance	**SSF** = Adapter for straight shanks with flat (drills)
CS = Combination shell mill and slotting cutter adapter	**HSK** = HSK adapter	**ST** = Screw-on adapters
DA = Double-angle collet chuck	**JT** = Jacobs taper adapter	**STRC** = Rapid Change — solid tapping adapter chuck
DAT = Top Cut Plus™	**KM** = KM™ adapter	**SWN** = Whistle Notch™ 2° — short — (not to DIN standard)
DC = Drill chuck	**MT** = Morse taper adapter	**TA** = Tap chuck adapter
EM = End mill adapter	**RC** = Rapid Change — T&C tapping adapter chuck	**TG** = Tremendous Grip single-angle collet chuck
ER = DIN 6499 single-angle collet chuck	**SA** = Slotting cutter adapter	**TT** = Shrink Fit thermo toolholder
GB = Gage bar	**RFX** = ROTAFLEX™ boring adapters	**TTHT** = Shrink Fit thermo toolholder — high torque
HC = Hydraulic chuck — Standard Line	**SM2C** = Shell mill adapter with coolant and small diameter	**WD** = Whistle Notch with drive
HCB = Hydraulic chuck — Basic Line	**SMC** = Shell mill adapter with coolant	**WN** = Whistle Notch (2° metric; 5° inch)
HCSL = Hydraulic chuck — Slim Line	**SS** = Adapter for straight shanks (drills)	
HCSLT = Hydraulic chuck — Slim Line — Trend		
HCT = Hydraulic chuck — Trend Line		

Erickson™ HSK Shank Tooling System • **HSK40A Series**

Erickson HSK Face Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

HSK40A



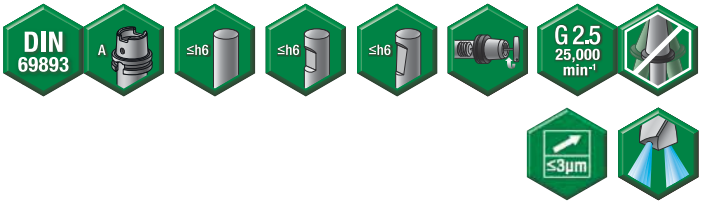
The HSK40A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher then 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.

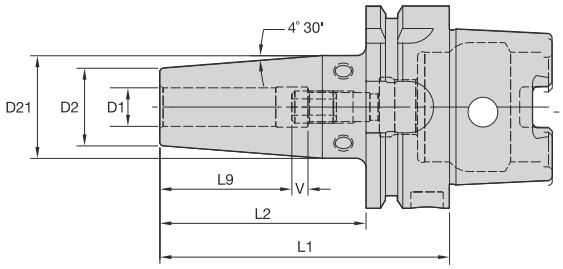
- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 30,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK40A Shank Tools

Shrink Fit Toolholders General Purpose (GP)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

ERICKSON

■ TT GP HPV MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3866456	HSK40AHPVTT03060M	3	9	13	60	32	14	10	TTSS05014M	2,5mm	0,26
3866457	HSK40AHPVTT04060M	4	9	13	60	32	15	10	TTSS05014M	2,5mm	0,26
3866458	HSK40AHPVTT05060M	5	9	13	60	32	15	10	TTSS06014M	3mm	0,26
3866459	HSK40AHPVTT06080M	6	21	27	80	60	26	10	TTSS05014M	2,5mm	0,40
3866460	HSK40AHPVTT08080M	8	21	27	80	60	26	10	TTSS06014M	3mm	0,40
3866461	HSK40AHPVTT10080M	10	24	32	80	60	31	10	TTSS08014M	4mm	0,46
3866462	HSK40AHPVTT12090M	12	24	32	90	70	36	10	TTSS10014M	5mm	0,50
3866563	HSK40AHPVTT14090M	14	27	34	90	70	36	10	TTSS10014M	5mm	0,55
3866564	HSK40AHPVTT16090M	16	27	34	90	70	39	10	TTSS12014M	6mm	0,52
3866565	HSK40AHPVTT18095M	18	33	41	95	95	39	10	TTSS12014M	6mm	0,70
3866566	HSK40AHPVTT20095M	20	33	41	95	95	41	10	TTSS16014M	8mm	0,66

(continued)

(TT GP HPV Form A continued)

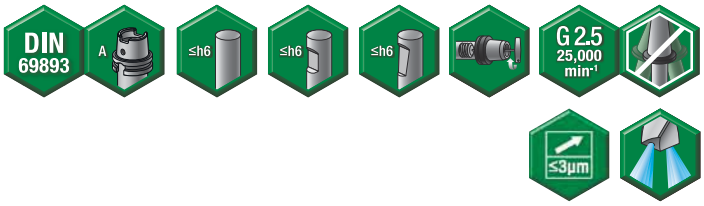
Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameter	**tolerance**
1/4, 5/16, & 3/8	-.0001/-.0004
1/2, 9/16, & 5/8	.0000/-.0004
3/4	.0000/-.0005

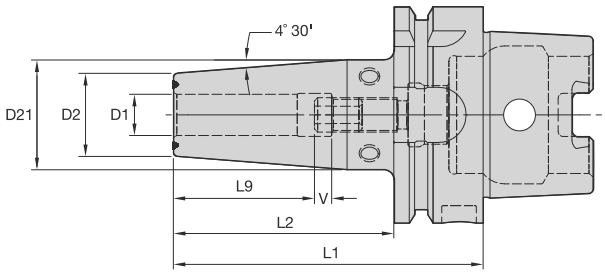
TT GP HPV In-HSK Form A

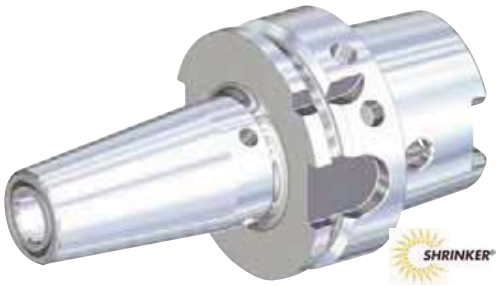
order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3864029	**HSK40AHPVTT025315**	1/4	.83	1.06	3.15	2.36	1.02	.39	**TTSS05014M**	2,5mm	.89
3864031	**HSK40AHPVTT031315**	5/16	.83	1.06	3.15	2.36	1.02	.39	**TTSS06014M**	3mm	.87
3864032	**HSK40AHPVTT038315**	3/8	.94	1.26	3.15	2.36	1.22	.39	**TTSS08014M**	4mm	1.01
3864073	**HSK40AHPVTT050354**	1/2	.94	1.26	3.54	2.76	1.42	.39	**TTSS10014M**	5mm	1.09
3864074	**HSK40AHPVTT056354**	9/16	1.06	1.32	3.54	2.76	1.42	.39	**TTSS10014M**	5mm	1.21
3864075	**HSK40AHPVTT062354**	5/8	1.06	1.32	3.54	2.76	1.54	.39	**TTSS12014M**	6mm	1.16
3864076	**HSK40AHPVTT075374**	3/4	1.30	1.61	3.74	3.74	1.61	.39	**TTSS16014M**	8mm	1.49

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.







Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

ERICKSON

■ TT HT HPV MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3866982	HSK40AHPVTTHT12090M	12	24	32	90	71	36	10	TTSS10014M	5mm	0,50
3867174	HSK40AHPVTTHT14090M	14	27	34	90	71	36	10	TTSS10014M	5mm	0,55
3867175	HSK40AHPVTTHT16090M	16	27	34	90	71	39	10	TTSS12014M	6mm	0,52
3867176	HSK40AHPVTTHT18095M	18	33	41	95	95	39	10	TTSS12014M	6mm	0,70
3867177	HSK40AHPVTTHT20095M	20	33	41	95	95	41	10	TTSS16014M	8mm	0,66

(continued)

(TT HT HPV Form A continued)

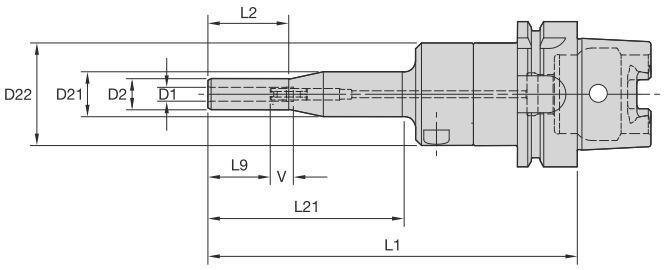
Cutting Tool Shank Requirements inch (industry standard)

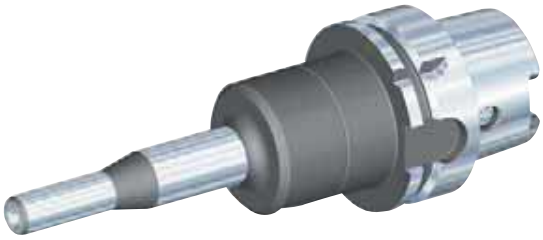
cutting tool shank diameter	tolerance
1/2, 9/16, & 5/8	.0000/-.0004
3/4	.0000/-.0005

TT HT HPV In-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3872696	**HSK40AHPVTTHT050354**	1/2	.94	1.26	3.54	2.76	1.42	.39	**TTSS10014M**	5mm	1.09
3872697	**HSK40AHPVTTHT056354**	9/16	1.06	1.32	3.54	2.76	1.42	.39	**TTSS10014M**	5mm	1.21
3872698	**HSK40AHPVTTHT062354**	5/8	1.06	1.32	3.54	2.76	1.54	.39	**TTSS12014M**	6mm	1.16
3872699	**HSK40AHPVTTHT075374**	3/4	1.30	1.61	3.74	3.74	1.61	.39	**TTSS16014M**	8mm	1.49

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





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HC Slim-T MM-HSK Form A

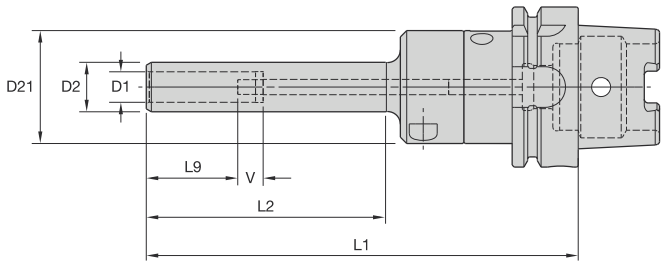
order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3061264	**HSK40AHCSLT06160M**	6	13,5	19,5	44	160	35	27	85	10	0,81
3061265	**HSK40AHCSLT08160M**	8	15,5	19,5	44	160	35	27	85	10	0,82

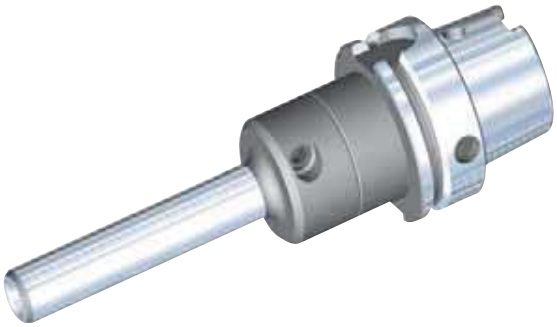
Spare Parts

catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
HSK40AHCSLT06160M	**170.135**	5mm	**170.002**	2,5mm
HSK40AHCSLT08160M	**170.135**	5mm	**170.002**	2,5mm

(continued)

(HC Slim HSK Form A continued)





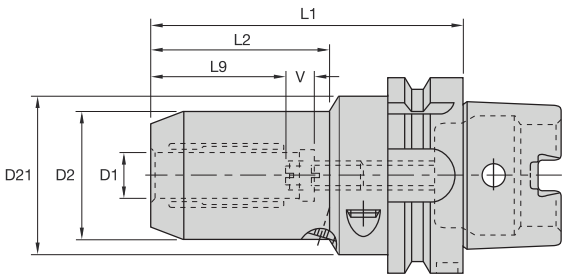
HC Slim MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
3061266	**HSK40AHCSLT10160M**	10	17,5	44,5	160	85	31	10	0,81
3061267	**HSK40AHCSLT12170M**	12	19,5	44,5	170	95	36	10	0,86
3061268	**HSK40AHCSLT14170M**	14	21,5	52,5	170	95	36	10	1,02
3061269	**HSK40AHCSLT16170M**	16	23,5	52,5	170	95	39	10	1,05
3061270	**HSK40AHCSLT18170M**	18	25,5	52,5	170	95	39	10	1,09
3061271	**HSK40AHCSLT20170M**	20	27,5	52,5	170	95	41	10	1,13

Spare Parts

catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
HSK40AHCSLT10160M	**170.135**	5mm	**170.003**	3mm
HSK40AHCSLT12170M	**170.135**	5mm	**170.003**	3mm
HSK40AHCSLT14170M	**170.135**	5mm	**170.003**	3mm
HSK40AHCSLT16170M	**170.135**	5mm	**170.005**	5mm
HSK40AHCSLT18170M	**170.135**	5mm	**170.005**	5mm
HSK40AHCSLT20170M	**170.135**	5mm	**170.005**	5mm

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrenches must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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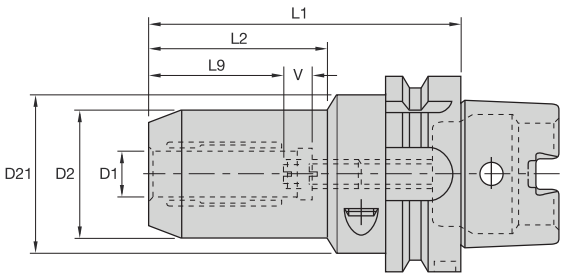
■ HC MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1960118	**HSK40AHC06080M**	6	25,7	32	80	35	27	10	**170.135**	5mm	**170.002**	2,5mm	0,45
1960119	**HSK40AHC08080M**	8	27,7	32	80	36	27	10	**170.254**	4mm	**170.002**	2,5mm	0,47
1960120	**HSK40AHC10085M**	10	29,7	32	85	40	31	10	**170.254**	4mm	**170.002**	2,5mm	0,51
1960121	**HSK40AHC12090M**	12	31,6	32	90	43	36	10	**170.254**	4mm	**170.002**	2,5mm	0,55

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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HC Trend MM-HSK Form A

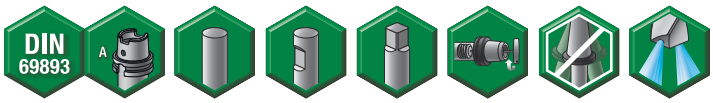
order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	wrench size stop screw	kg
2386931	**HSK40AHCT14100M**	14	33,6	50	100	42	36	10	**170.135**	5mm	**571.063**	5mm	0,79
2386932	**HSK40AHCT16100M**	16	37,6	50	100	47	39	10	**170.135**	5mm	**571.063**	5mm	0,84
2387463	**HSK40AHCT18100M**	18	39,6	50	100	47	39	10	**170.135**	5mm	**571.063**	5mm	0,86
2387464	**HSK40AHCT20100M**	20	41,6	50	100	48	41	10	**170.135**	5mm	**571.063**	5mm	0,87

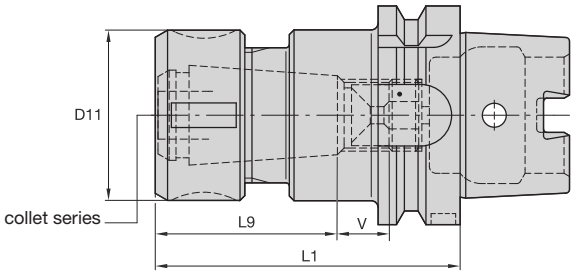
HC Trend In-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
2233132	**HSK40AHCT025315**	1/4	1.01	1.25	3.15	1.38	1.46	.39	**170.135**	5mm	**170.003**	3mm	.99
2233273	**HSK40AHCT038335**	3/8	1.17	1.25	3.35	1.57	1.61	.39	**170.135**	5mm	**170.003**	3mm	1.13
2233274	**HSK40AHCT050354**	1/2	1.24	1.25	3.54	1.69	1.81	.39	**170.135**	5mm	**170.003**	3mm	1.21
2387465	**HSK40AHCT062394**	5/8	1.48	1.96	3.94	1.83	1.54	.39	**170.135**	5mm	**—**	5mm	1.85
2387466	**HSK40AHCT075394**	3/4	1.64	1.96	3.94	1.89	1.61	.39	**170.135**	5mm	**—**	5mm	1.98

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Tremendous Grip (3:1 advantage).





	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4

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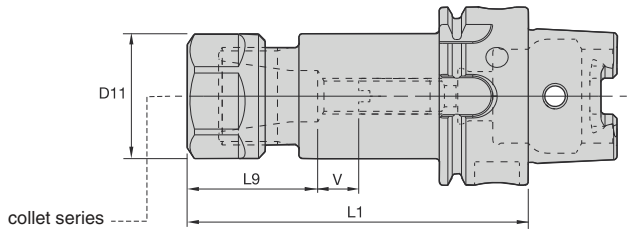
TG Round-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
2455912	**HSK40ATG050080M**	TG50	38	80	42,0	5	**LNA050M**	**HSW34M**	68	**SS056041G**	4mm & 5/32	0,45
2455993	**HSK40ATG075090M**	TG75	50	90	54,0	7	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	0,69

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Grip (2:1 advantage).



ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

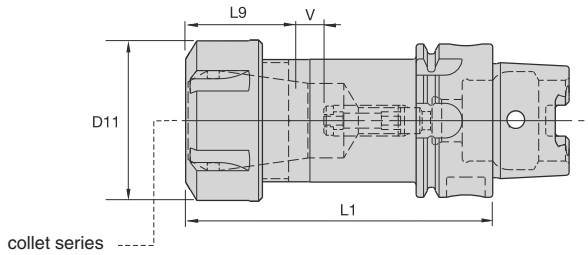
ERICKSON

ER Hex-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
2260343	**HSK40AER16080M**	ER16	28	80	27,0	5	0,40

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK40AER16080M	**LNHSER16M**	**OEW25M**	40	56	**571.068**	4mm & 5/32



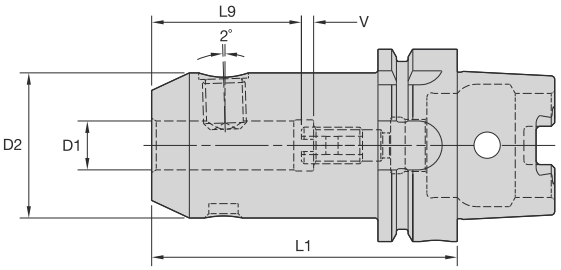
ER Round-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
1833498	**HSK40AER25080M**	ER25	42	80	31,0	5	0,50
2260344	**HSK40AER32090M**	ER32	50	90	46,0	5	0,56
2386935	**HSK40AER32100M**	ER32	50	100	40,0	10	0,69

Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw
HSK40AER25080M	**LNSER25M**	**ER25WM**	104	**571.062**	4mm & 5/32
HSK40AER32090M	**LNSER32M**	**ER32WM**	136	**571.062**	4mm & 5/32
HSK40AER32100M	**LNER32M**	**ER32WM**	136	**571.062**	4mm

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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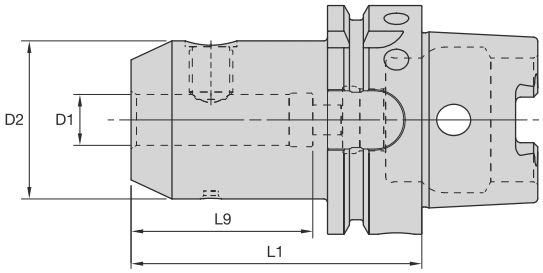
■ WN MM-HSK Form A

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
2260348	**HSK40AWN06080M**	6	25	80	30	10	**SS03M012**	3mm	7	**571.060**	2,5mm	0,39
2260349	**HSK40AWN08080M**	8	28	80	30	10	**SS03M014**	4mm	15	**571.067**	3mm	0,44
2260350	**HSK40AWN10080M**	10	34	80	35	10	**SS03M018**	5mm	25	**571.068**	4mm	0,56
2260351	**HSK40AWN12090M**	12	42	90	40	10	**SS03M023**	6mm	35	**571.074**	5mm	0,71
2260352	**HSK40AWN14090M**	14	44	90	40	10	**SS03M023**	6mm	35	**571.074**	5mm	0,73
2260353	**HSK40AWN16090M**	16	48	90	43	10	**SS03M025**	6mm	50	**571.075**	6mm	0,79

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with clamp screw and stop screw.
Lock screw or stop screw wrenches are not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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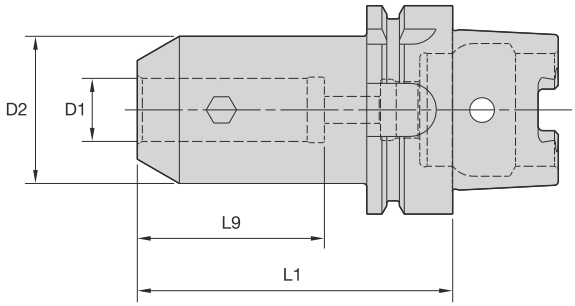
EM MM-HSK Form A

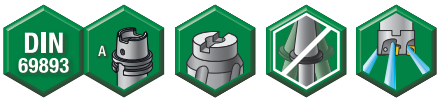
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
2260357	HSK40AEM06060M	6	25	60	40	SS03M012	3mm	7	0,31
2260358	HSK40AEM08060M	8	28	60	40	SS03M014	4mm	15	0,35
2260359	HSK40AEM10060M	10	34	60	42	SS03M018	5mm	25	0,42
2260360	HSK40AEM12070M	12	42	70	50	SS03M023	6mm	35	0,57
2260361	HSK40AEM14075M	14	44	75	50	SS03M023	6mm	35	0,63
1852320	HSK40AEM16075M	16	48	75	53	SS03M025	6mm	50	0,69

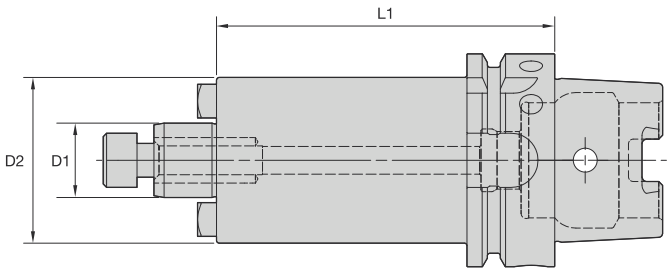


EM IN-HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
2249258	HSK40AEM025250	1/4	1.00	2.50	1.70	ELS025025PKG	1/8	8	.74
2249259	HSK40AEM038250	3/8	1.00	2.50	1.73	ELS038031PKG	3/16	15	.71
2249260	HSK40AEM050275	1/2	1.33	2.75	1.97	ELS044038PKG	7/32	20	.99
2249261	HSK40AEM062300	5/8	1.63	3.00	2.09	ELS056050PKG	1/4	40	1.27

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





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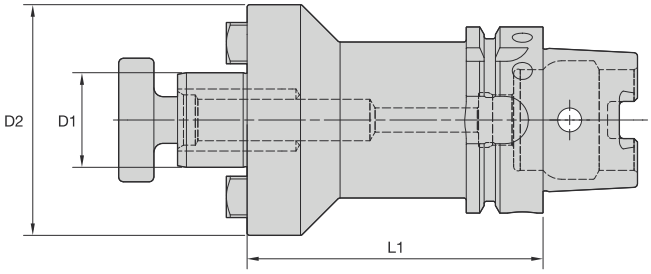
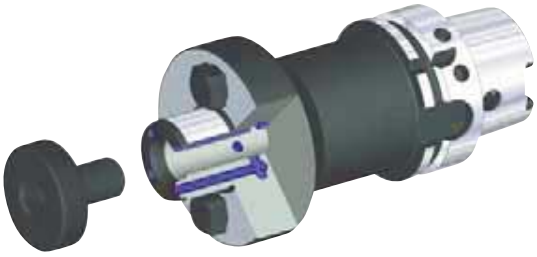
SMC Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872589	HSK40ASM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,44
3872588	HSK40ASMC16050M	16	44	50	MS1294	KDK16M	6mm	0,49
3872591	HSK40ASM2C22050M	22	42	50	MS1234	–	8mm	0,50
3872590	HSK40ASMC22050M	22	49	50	MS1234	KDK22M	8mm	0,55





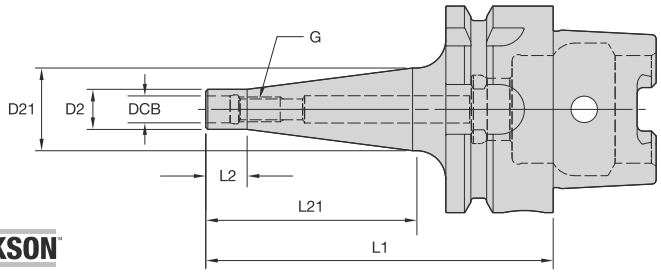
SMC Lock MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872592	HSK40ASMC27075M	27	60	75	KLSS27M	KDK27M	10mm	1,01

SMC Lock IN-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3762350	HSK40ASM2C050200	1/2	1.20	2.00	KLS05	KDK04	3/16	.85
3762349	HSK40ASMC050200	1/2	1.44	2.00	KLS05	KDK04	3/16	.95
3762352	HSK40ASM2C075200	3/4	1.46	2.00	KLS07	–	1/4	1.03
3762351	HSK40ASMC075200	3/4	1.75	2.00	KLS07	KDK05	1/4	1.14
3762404	HSK40ASM2C100200	1	2.19	2.00	KLS10	KDK06	5/16	1.45
3762403	HSK40ASMC100200	1	2.75	2.00	KLS10	KDK06	5/16	1.73

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.



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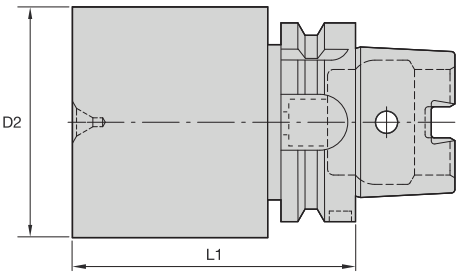
■ ST-HSK Form A

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4061374	HSK40AST06053M	6,5	M6	10	–	53	27	–	0,20
4061375	HSK40AST06078M	6,5	M6	10	20	78	10	50	0,26
4061376	HSK40AST06103M	6,5	M6	10	23	103	10	75	0,32
4061377	HSK40AST08053M	8,5	M8	13	15	53	10	25	0,22
4061378	HSK40AST08078M	8,5	M8	13	23	78	10	50	0,30
4061379	HSK40AST08103M	8,5	M8	13	23	103	10	75	0,34
4061380	HSK40AST08128M	8,5	M8	13	25	128	10	100	0,42
4061381	HSK40AST10053M	10,5	M10	18	20	53	10	25	0,25
4061382	HSK40AST10078M	10,5	M10	18	25	78	10	50	0,33
4061423	HSK40AST10103M	10,5	M10	18	28	103	10	75	0,44
4061424	HSK40AST10128M	10,5	M10	18	30	128	10	100	0,55
4061425	HSK40AST12053M	12,5	M12	21	24	53	10	25	0,27
4061426	HSK40AST12078M	12,5	M12	21	24	78	10	50	0,34
4061427	HSK40AST12103M	12,5	M12	21	31	103	10	75	0,50
4061428	HSK40AST12128M	12,5	M12	21	31	128	10	100	0,61

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Machinable front 32–38 RW C.



ERICKSON

■ BB-HSK Form A

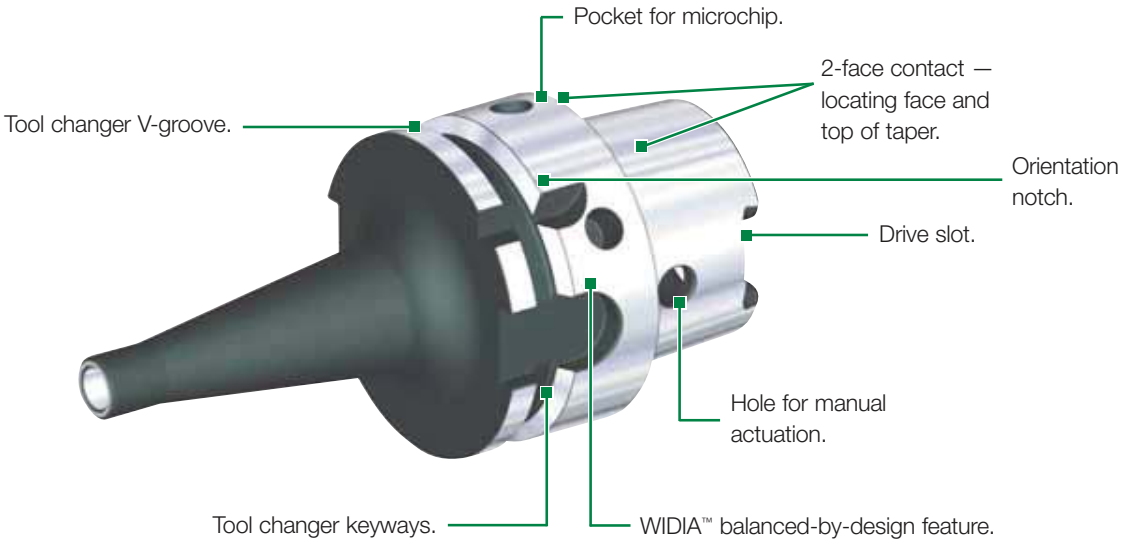
order number	catalog number	D2	L1	kg
2260649	HSK40ABB040120M	40,8	120	1,16

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

Erickson™ HSK Shank Tooling System • **HSK50A Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

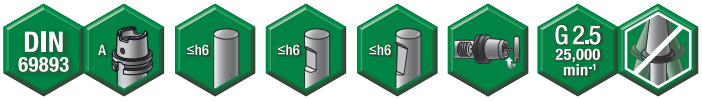
HSK50A

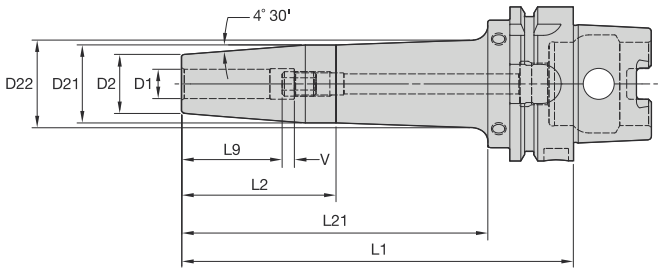


The HSK50A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher then 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.

- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 25,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





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TT GP HPV MM-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3874888	HSK50AHPVTT03080M	3	9	15	—	80	45	54	14	10,0	TTSS05014M	2,5mm	0,50
3874889	HSK50AHPVTT04080M	4	9	15	—	80	45	54	15	10,0	TTSS05014M	2,5mm	0,50
3874890	HSK50AHPVTT05080M	5	9	15	—	80	45	54	15	10,0	TTSS06014M	3mm	0,50
3874891	HSK50AHPVTT06080M	6	21	27	—	80	54	—	26	10,0	TTSS05014M	2,5mm	0,57
3874989	HSK50AHPVTT06120M	6	21	27	—	120	85	94	26	10,0	TTSS05014M	2,5mm	0,79
3874997	HSK50AHPVTT06160M	6	21	27	32	160	50	125	26	10,0	TTSS05014M	2,5mm	1,03
3874892	HSK50AHPVTT08080M	8	21	27	—	80	45	54	26	10,0	TTSS06014M	3mm	0,62
3874990	HSK50AHPVTT08120M	8	21	27	—	120	85	94	26	10,0	TTSS06014M	3mm	0,78
3874998	HSK50AHPVTT08160M	8	21	27	32	160	50	125	26	10,0	TTSS06014M	3mm	1,02
3874983	HSK50AHPVTT10085M	10	24	32	—	85	59	—	31	10,0	TTSS08014M	4mm	0,64
3874991	HSK50AHPVTT10120M	10	24	32	—	120	85	94	31	10,0	TTSS08014M	4mm	0,89
3874999	HSK50AHPVTT10160M	10	24	32	36	160	63	125	31	10,0	TTSS08014M	4mm	1,18
3874984	HSK50AHPVTT12090M	12	24	32	—	90	64	—	36	10,0	TTSS10014M	5mm	0,66
3874992	HSK50AHPVTT12120M	12	24	32	—	120	85	94	36	10,0	TTSS10014M	5mm	0,87
3875000	HSK50AHPVTT12160M	12	24	32	36	160	63	125	36	10,0	TTSS10014M	5mm	1,16
3874985	HSK50AHPVTT14090M	14	27	34	—	90	64	—	36	10,0	TTSS10014M	5mm	0,71
3874993	HSK50AHPVTT14120M	14	27	34	—	120	85	94	36	10,0	TTSS10014M	5mm	0,94
3875001	HSK50AHPVTT14160M	14	27	34	39	160	57	125	36	10,0	TTSS10014M	5mm	1,28
3874986	HSK50AHPVTT16095M	16	27	34	—	95	69	—	39	10,0	TTSS12014M	6mm	0,71
3874994	HSK50AHPVTT16120M	16	27	34	—	120	85	94	39	10,0	TTSS12014M	6mm	0,91
3875002	HSK50AHPVTT16160M	16	27	34	39	160	57	125	39	10,0	TTSS12014M	6mm	1,26
3874987	HSK50AHPVTT18095M	18	33	41	—	95	69	—	39	10,0	TTSS12014M	6mm	0,88
3874995	HSK50AHPVTT18120M	18	33	41	—	120	94	—	39	10,0	TTSS12014M	6mm	1,13
3875003	HSK50AHPVTT18160M	18	33	41	—	160	134	—	39	10,0	TTSS12014M	6mm	1,53
3874988	HSK50AHPVTT20100M	20	33	41	—	100	74	—	41	10,0	TTSS16014M	3mm	0,90
3874996	HSK50AHPVTT20120M	20	33	41	—	120	94	—	41	10,0	TTSS16014M	8mm	1,10
3875004	HSK50AHPVTT20160M	20	33	41	—	160	134	—	41	10,0	TTSS16014M	8mm	1,50

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

(continued)

(TT GP HPV continued)

Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

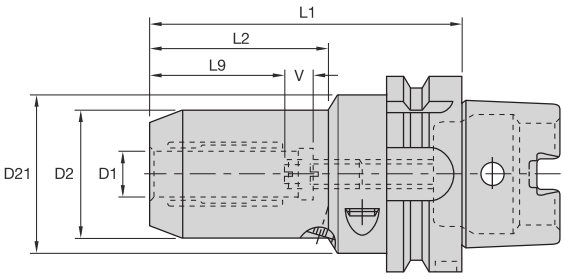
Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameter	tolerance
1/8 & 3/16	-.0001/-.0003
1/4 & 3/8	-.0001/-.0004
1/2 & 5/8	.0000/-.0004
3/4	.0000/-.0005

TT GP HPV In-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3863678	**HSK50AHPVTT012315**	1/8	.35	.59	—	3.15	1.77	—	.63	.39	**TTSS05014M**	2,5mm	1.10
3863705	**HSK50AHPVTT012472**	1/8	.35	.59	.68	4.72	1.97	3.35	.63	.39	**TTSS05014M**	2,5mm	1.22
3863711	**HSK50AHPVTT012630**	1/8	.35	.59	.79	6.30	1.97	4.92	.63	.39	**TTSS05014M**	2,5mm	1.40
3863679	**HSK50AHPVTT018315**	3/16	.35	.59	—	3.15	1.77	—	.59	.39	**TTSS06014M**	3mm	1.10
3863712	**HSK50AHPVTT018630**	3/16	.35	.59	.79	6.30	1.97	4.92	.59	.39	**TTSS06014M**	3mm	1.40
3863680	**HSK50AHPVTT025315**	1/4	.83	1.06	—	3.15	2.13	—	1.02	.39	**TTSS05014M**	2,5mm	1.26
3863706	**HSK50AHPVTT025472**	1/4	.83	1.06	—	4.72	3.35	—	1.02	.39	**TTSS05014M**	2,5mm	1.74
3863713	**HSK50AHPVTT025630**	1/4	.83	1.06	1.27	6.30	1.97	4.92	1.02	.39	**TTSS05014M**	2,5mm	2.26
3863681	**HSK50AHPVTT038335**	3/8	.94	1.26	—	3.35	2.32	—	1.22	.39	**TTSS08014M**	4mm	1.42
3863707	**HSK50AHPVTT038472**	3/8	.94	1.26	—	4.72	3.35	—	1.22	.39	**TTSS08014M**	4mm	1.96
3863714	**HSK50AHPVTT038630**	3/8	.94	1.26	1.43	6.30	2.48	4.92	1.22	.39	**TTSS08014M**	4mm	2.61
3863682	**HSK50AHPVTT050354**	1/2	.94	1.26	—	3.54	2.52	—	1.42	.39	**TTSS10014M**	5mm	1.43
3863708	**HSK50AHPVTT050472**	1/2	.94	1.26	—	4.72	3.35	—	1.42	.39	**TTSS10014M**	5mm	1.91
3863715	**HSK50AHPVTT050630**	1/2	.94	1.26	1.43	6.30	2.48	4.92	1.42	.39	**TTSS10014M**	5mm	2.55
3863703	**HSK50AHPVTT062374**	5/8	1.06	1.33	—	3.74	2.72	—	1.54	.39	**TTSS12014M**	6mm	1.58
3863709	**HSK50AHPVTT062472**	5/8	1.06	1.33	—	4.72	3.35	—	1.54	.39	**TTSS12014M**	6mm	2.01
3863716	**HSK50AHPVTT062630**	5/8	1.06	1.33	1.52	6.30	2.24	4.92	1.54	.39	**TTSS12014M**	6mm	2.77
3863704	**HSK50AHPVTT075394**	3/4	1.30	1.61	—	3.94	2.92	—	1.61	.39	**TTSS16014M**	8mm	2.00
3863710	**HSK50AHPVTT075472**	3/4	1.30	1.61	—	4.72	3.70	—	1.61	.39	**TTSS16014M**	8mm	2.44
3863717	**HSK50AHPVTT075630**	3/4	1.30	1.61	—	6.30	5.28	—	1.61	.39	**TTSS16014M**	8mm	3.33

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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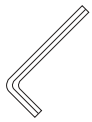
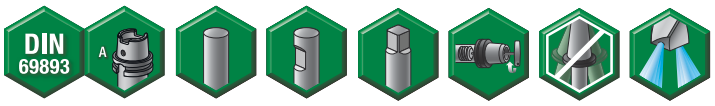
■ HC MM-HSK Form A

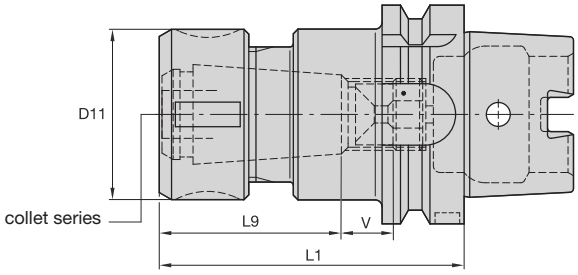


order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1245473	**HSK50AHC06080M**	6	25,7	40	80	35	27	10	**170.135**	5mm	**170.002**	2,5mm	0,80
1245474	**HSK50AHC08080M**	8	27,7	40	80	36	27	10	**170.135**	5mm	**170.002**	2,5mm	0,90
1245475	**HSK50AHC10085M**	10	29,7	40	85	41	31	10	**170.135**	5mm	**170.002**	2,5mm	0,90
1245476	**HSK50AHC12090M**	12	31,6	40	90	47	36	10	**170.135**	5mm	**170.002**	2,5mm	1,30

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
For hydraulic chuck technical section, see page K60.
Chucks supplied with stop screw.
Wrenches must be ordered separately.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I7.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Tremendous Grip (3:1 advantage).





	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4

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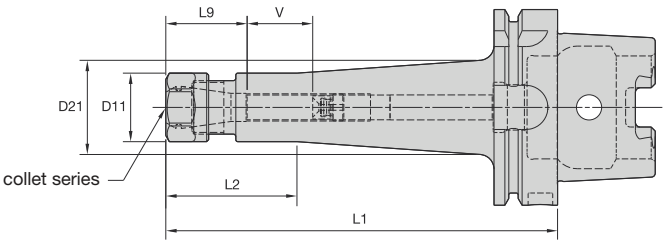
■ TG Round-HSK Form A • Metric

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap	kg
1307819	**HSK50ATG050100M**	TG50	38	100	42	12	**LNA050M**	**HSW34M**	68	**SS056041G**	4mm & 5/32	**SSCC056**	0,86
1307821	**HSK50ATG075115M**	TG75	50	115	54	11	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	**SSCC081**	0,79

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Grip (2:1 advantage).



ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

ERICKSON

ER HEX-HSK Form A

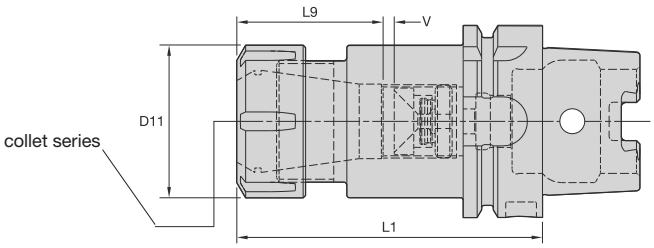
order number	catalog number	collet series	D11	D21	L2	L1	L9	V	kg
1307789	**HSK50AER16100M**	ER16	28	—	71	100	32	24	0,64
1307790	**HSK50AER16160M**	ER16	28	40	71	160	32	48	1,05
1307791	**HSK50AER20100M**	ER20	34	—	73	100	36	17	0,72

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	stop screw cone cap
HSK50AER16100M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32	**SSCC044**
HSK50AER16160M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32	**SSCC044**
HSK50AER20100M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32	**SSCC056**

(continued)

(ER-HSK continued)



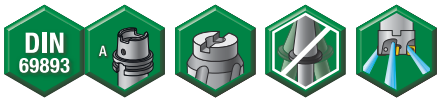
ER Round-HSK Form A

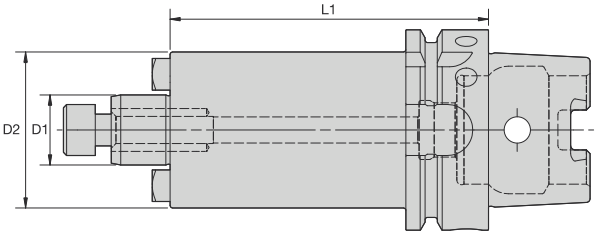
order number	catalog number	collet series	D11	L1	L9	V	kg
1307792	**HSK50AER25100M**	ER25	42	100	40	11	0,91
1134534	**HSK50AER32100M**	ER32	50	100	45	4	0,90

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap
HSK50AER25100M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32	**SSCC075**
HSK50AER32100M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32	**SSCC094**

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





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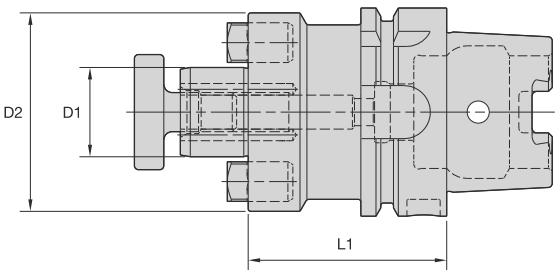
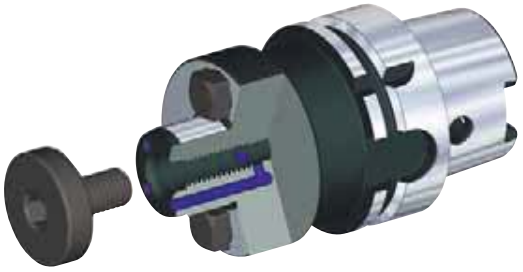
SMC Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
4144667	HSK50ASM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,62
3872678	HSK50ASMC16050M	16	44	50	MS1294	KDK16M	6mm	0,67
4144668	HSK50ASM2C22060M	22	42	60	MS1234	–	8mm	0,80
3872679	HSK50ASMC22060M	22	49	60	MS1234	KDK22M	8mm	0,86





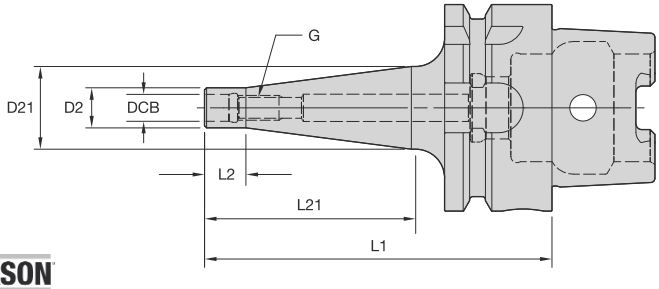
SMC Lock MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872680	HSK50ASMC27060M	27	60	60	KLSS27M	KDK27M	10mm	1,07

SMC Lock IN-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3762406	HSK50ASM2C050200	1/2	1.20	2	KLS05	KDK04	3/16	1.20
3762405	HSK50ASMC050200	1/2	1.44	2	KLS05	KDK04	3/16	1.33
3872517	HSK50ASMC100225	1	2.75	2	KLS10	KDK06	5/16	2.31

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.



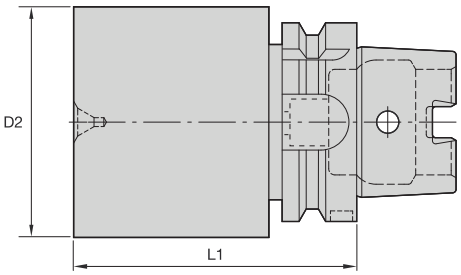
ERICKSON

ST-HSK Form A

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4061440	HSK50AST06059M	6,5	M6	10	10	59	10	25	0,39
4061441	HSK50AST06084M	6,5	M6	10	20	84	10	50	0,45
4061442	HSK50AST06109M	6,5	M6	10	23	109	10	75	0,51
4061443	HSK50AST08059M	8,5	M8	13	15	59	10	25	0,41
4061444	HSK50AST08084M	8,5	M8	13	23	84	10	50	0,48
4061445	HSK50AST08109M	8,5	M8	13	23	109	10	75	0,53
4061446	HSK50AST08134M	8,5	M8	13	25	134	10	100	0,60
4061447	HSK50AST10059M	10,5	M10	18	20	59	10	25	0,44
4061448	HSK50AST10084M	10,5	M10	18	25	84	10	50	0,53
4061449	HSK50AST10109M	10,5	M10	18	28	109	10	75	0,63
4061450	HSK50AST10134M	10,5	M10	18	30	134	10	100	0,74
4061451	HSK50AST12059M	12,5	M12	21	24	59	10	25	0,46
4061452	HSK50AST12084M	12,5	M12	21	24	84	10	50	0,53
4061453	HSK50AST12109M	12,5	M12	21	31	109	10	75	0,69
4061454	HSK50AST12134M	12,5	M12	21	31	134	10	100	0,79

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Machinable front 28–34 RWC.



ERICKSON

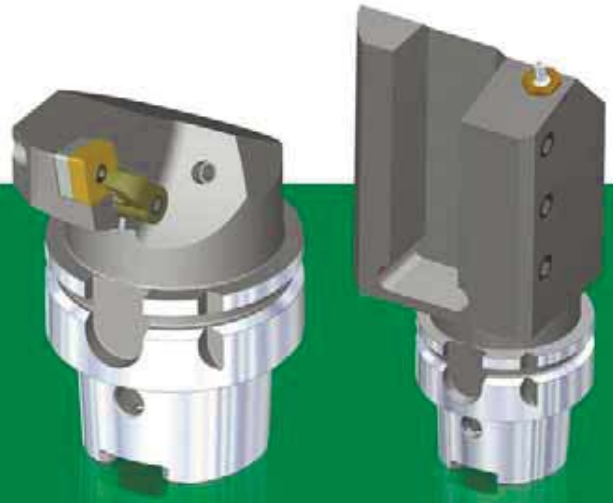
BB-HSK Form A • Metric

order number	catalog number	D2	L1	kg
1256059	HSK50ABB063200M	63,8	200	4,49
1256060	HSK50ABB100125M	100,8	125	5,69

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

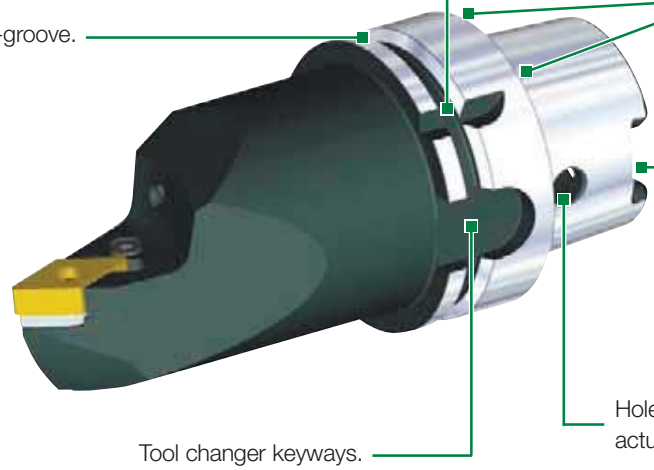
Erickson™ HSK Shank Tooling System • **HSK63T Series**

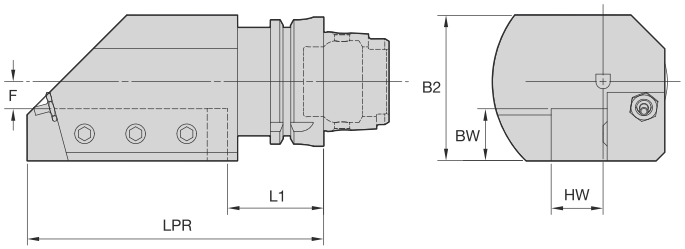
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form T versions are generally used in static and multitasking operations. The HSK63T has qualified drive slot widths for single-point cutting.

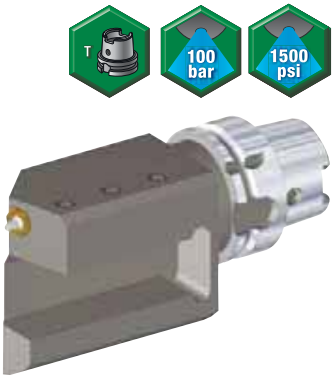


HSK63T

- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability.
- Maximum 100 bar (1,500 psi) coolant pressure.





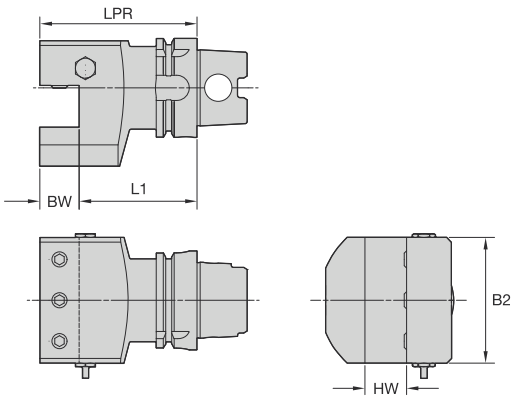


ERICKSON

■ STAR/L • Metric

order number	catalog number	B2	BW	F	HW	L1	LPR	cup point socket set screw	nozzle	kg
	right hand									
3377242	HSK63TSTAR2525M	70	25	13	25	49	145	MS1430	PMT04526 COOLANT NOZZLE SPRAY	3,97
	left hand									
3377313	HSK63TSTAL2525M	70	25	13	25	49	145	MS1430	PMT04526 COOLANT NOZZLE SPRAY	3,96

NOTE: Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

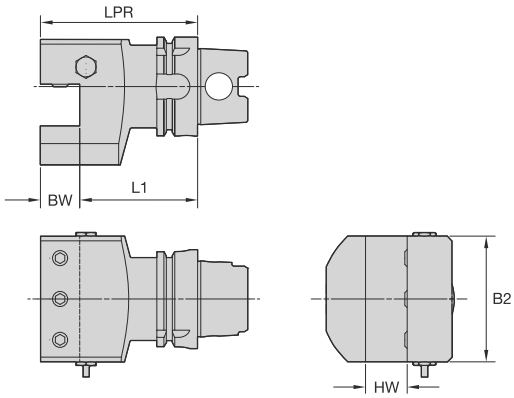


ERICKSON

■ ETAR/L-ETA • Metric

order number	catalog number	B2	BW	HW	L1	LPR	cup point socket set screw	nozzle	plug	kg
3897805	HSK63TETAN2525M	80	25	25	75	100	MS1430	PMT04526 COOLANT NOZZLE SPRAY	PMP08350	3,14

NOTE: Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

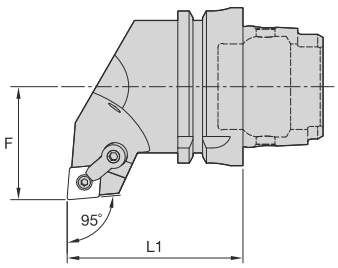


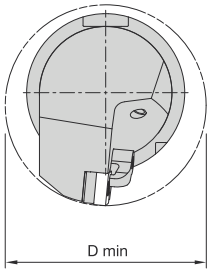
ERICKSON

■ ETAR/L-ETA • Inch

order number	catalog number	B2	BW	HW	L1	LPR	cup point socket set screw	nozzle	plug	kg
3897806	HSK63TETAN16	3.150	1.000	1.000	2.963	3.963	MS1430	PMT04526 COOLANT NOZZLE SPRAY	PMP08350	3,20

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



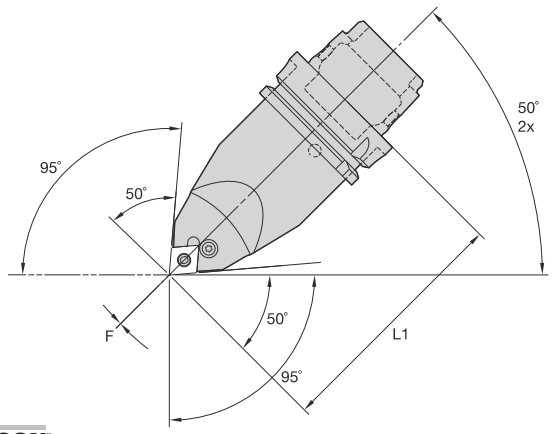


ERICKSON

■ MCLN 95°

order number	catalog number	D min	F	L1	gage insert	shim	lock pin	clamp	clamp screw	kg
	right hand									
3897467	HSK63TMCLNR12070	80	45	70	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,20
	left hand									
3897468	HSK63TMCLNL12070	80	45	70	CN..120408/CN..432	ICSN432	KLM46	CKM20	STCM11	1,20

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

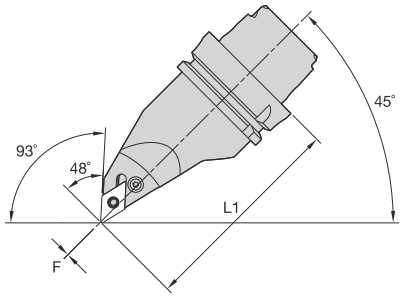


ERICKSON

PCMN 50° • 95° Application • Centerline

order number	catalog number	F	L1	gage insert	shim	lever lock screw	shim pin	toggle lever	punch	kg
3575690	**HSK63TPCMNN12115**	0	115	CN..120408/CN..432	**512.112**	**514.123**	**513.023**	**511.023**	**515.018**	1,64

NOTE: Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



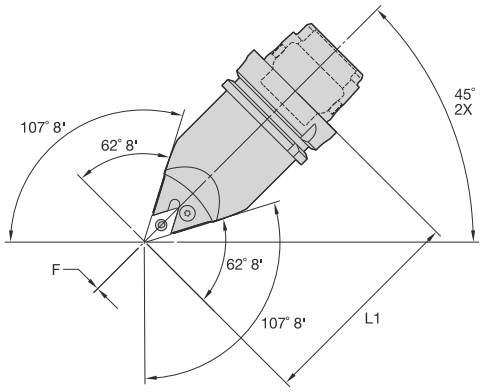
Left-Hand Tool

ERICKSON

PDMN 48° • 93° Application • Centerline

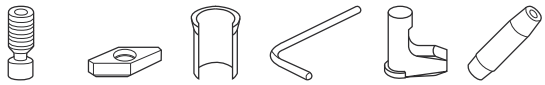
order number	catalog number	F	L1	gage insert	shim	lever lock screw	shim pin	wrench	toggle lever	punch	kg
	right hand										
3897470	**HSK63TPDMNR15115**	0	115	DN..150608/DN..442	**512.153**	**514.128**	**513.023**	**–**	**511.024**	**515.018**	1,46
	left hand										
3575691	**HSK63TPDMNL15115**	0	115	DN..150608/DN..442	**512.153**	**514.128**	**513.023**	**K15IP**	**511.024**	**515.018**	1,62

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



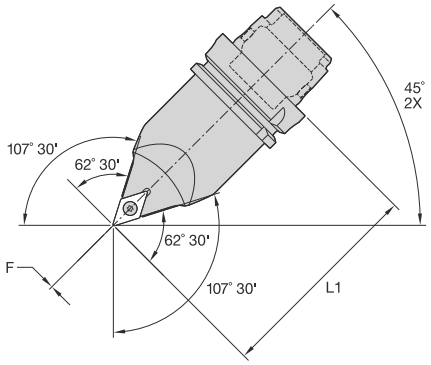
ERICKSON

■ PDNN 45° • Centerline



order number	catalog number	F	L1	gage insert	lever lock screw	shim	shim pin	wrench	toggle lever	punch	kg
3897469	HSK63TPDNNN15115	0	115	DN..150608/DN..442	514.128	512.153	513.023	K15IP	511.024	515.018	1,61

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

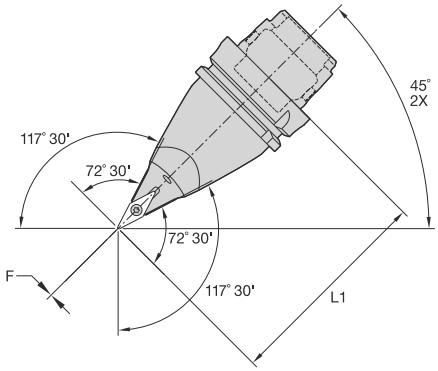


ERICKSON

■ SDNC 45° • Centerline

order number	catalog number	F	L1	gage insert	insert screw	shim	shim screw	kg
3897553	HSK63TSDNCN11115	0	115	DC..11T308DC..3252	MS1156	SKDP343	SRS3	1,59
3897554	HSK63TSDNCN15115	0	115	DC..150408/DC..432	MS1158	SKDP453	SRS4	1,59

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately, see page J32.

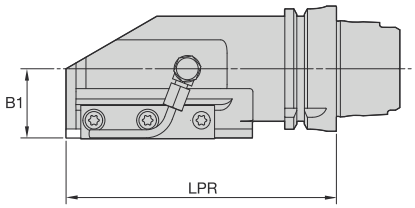


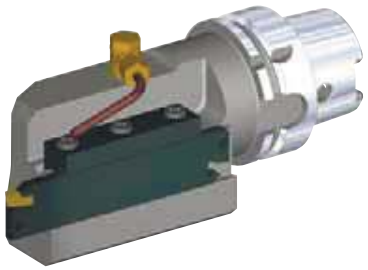
ERICKSON

■ SVVB 45° • Centerline

order number	catalog number	F	L1	gage insert	insert screw	shim	shim screw	kg
3897472	HSK63TSVVBN11115	0	115	VB..110304/VB..221	MS1153	—	—	1,41
3897471	HSK63TSVVBN16115	0	115	VB..160408/VB..332	MS1156	SKVN343	SRS3	1,41

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





ERICKSON

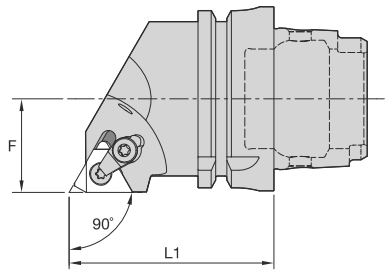
BS Side Mount

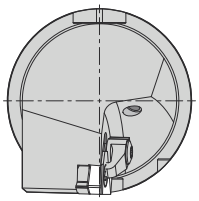
order number	catalog number	B1	F	H2	HW	LPR	cartridge size	cartridge 1	kg
	right hand								
3897571	HSK63TBSR4	35	30	79	26	136	26	A2BNSN26...	2,74
3897573	HSK63TBSR5	45	39	84	32	157	32	A2BNSN32...	3,86
	left hand								
3897572	HSK63TBSL4	35	30	79	26	136	26	A2BNSN26...	2,74
3897574	HSK63TBSL5	45	39	84	32	157	32	A2BNSN32...	3,86

Spare Parts

catalog number	clamp	clamp screw	coolant tube	coolant swivel base
right hand				
HSK63TBSR4	CGS4	MS1595	12649910900	12649910800
HSK63TBSR5	CGS5	MS1595	12649910900	12649910800
left hand				
HSK63TBSL4	CGS4	MS1595	12649910900	12649910800
HSK63TBSL5	CGS5	MS1595	12649910900	12649910800

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
For blades, see the WIDIA Turning (A-09-02078) catalog.





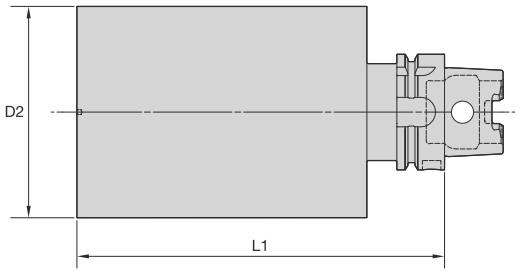
ERICKSON

■ LSS 90°

order number	catalog number	F	L1	gage insert	insert screw	shim screw	shim	clamp assembly	kg
	right hand								
3897556	**HSK63TLSSR16**	32	70	LT16ER	**SSA3T**	**SSY3T**	**SMYE3**	**CKC3**	1,12
3897558	**HSK63TLSSR22**	32	70	LT22ER	**SSA4T**	**SSY4T**	**SMYE4**	**CKC4**	1,11
	left hand								
3897557	**HSK63TLSSL16**	32	70	LT16EL	**SSA3T**	**SSY3T**	**SMYI3**	**CKC3**	1,12
3897559	**HSK63TLSSL22**	32	70	LT22EL	**SSA4T**	**SSY4T**	**SMYI4**	**CKC4**	1,11

NOTE: Cutting units are supplied with insert screw and clamp assembly. However, tools are designed to use either the insert screw or the clamp assembly, not both.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Machinable front 32–38 RW C.

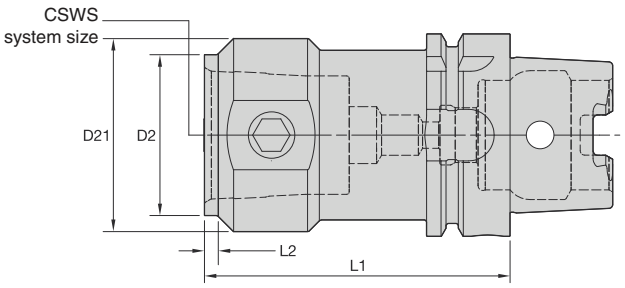


ERICKSON

■ BN

		D2		L1		
order number	catalog number	mm	in	mm	in	kg
3897546	**HSK63TBN115200M**	115,00	4.528	200,00	7.874	13,74

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

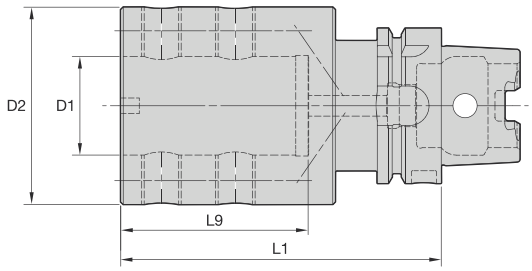


ERICKSON™

■ HSK63T to KM

order number	catalog number	CSWS system size	D2	D21	L1	L2	Nm	KM spare parts package	kg
3387620	**HSK63TKM40070M**	KM40	40	48	70	4,000	12-16	**KM40PKG3L**	1,13
3895298	**HSK63TKM50095M**	KM50	50	60	95	4,000	27-37	**KM50PKG3L**	1,74
3892899	**HSK63TKM63105M**	KM63	63	76	105	4,000	47-54	**KM63PKG3L**	2,54

NOTE: Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

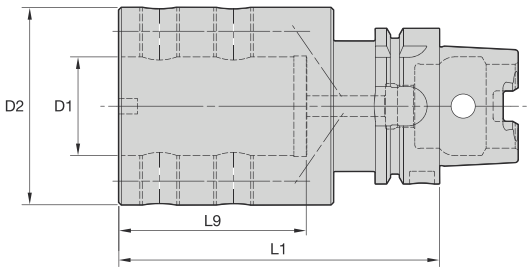


ERICKSON™

■ BA Boring Bar Adapter • Internal and External Coolant • Metric

order number	catalog number	D1	D2	L1	L9	nozzle	Nm	clamp screw	kg
3892897	**HSK63TBA40130M**	40	80	130	76	**PWZ1012**	125	**MS1947**	3,52

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
For bushings, see page A286.



ERICKSON

■ BA Boring Bar Adapter • Internal and External Coolant • Inch

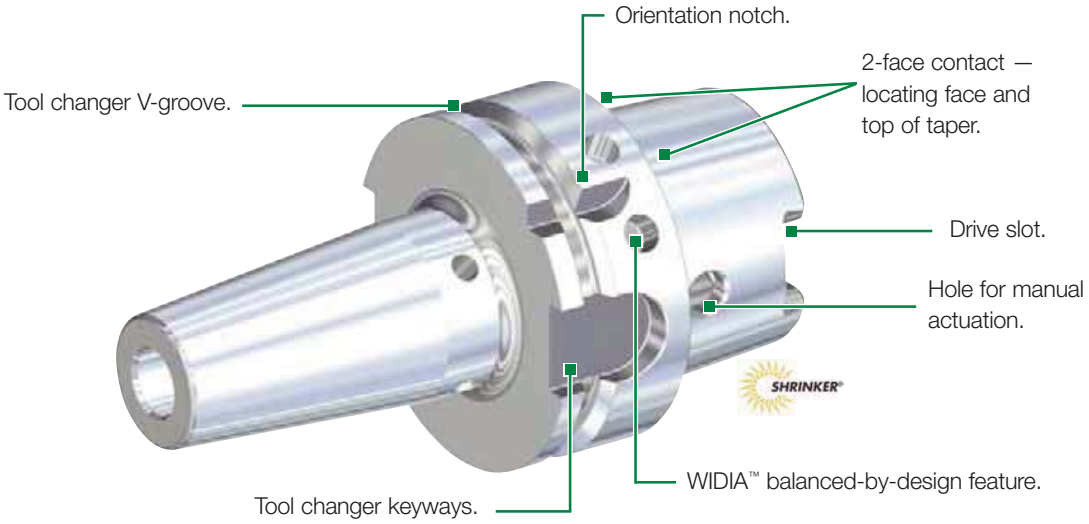
order number	catalog number	D1	D2	L1	L9	nozzle	ft. lbs.	clamp screw	kg
3892898	**HSK63TBA150512**	1.500	3.150	5.118	2.992	**PWZ1012**	90	**MS1947**	3,58

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
For bushings, see page A286.

Erickson™ HSK Shank Tooling System • **HSK63A Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

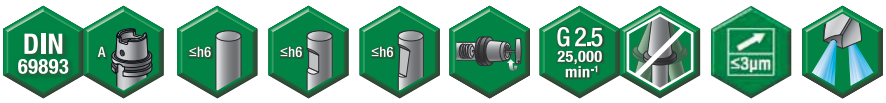
HSK63A

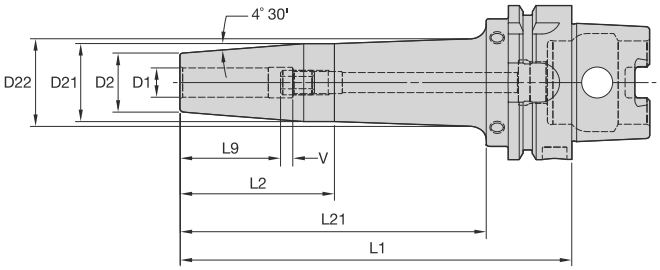


The HSK63A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher then 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.

- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 20,500 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

TT GP HPV MM-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3866567	HSK63AHPVTT03080M	3	9	15	—	80	45	—	14	10,0	TTSS05014M	2,5mm	0,81
3866576	HSK63AHPVTT04080M	4	9	15	—	80	45	—	15	10,0	TTSS05014M	2,5mm	0,81
3866577	HSK63AHPVTT05080M	5	9	15	—	80	45	—	15	10,0	TTSS06014M	3mm	0,81
3866568	HSK63AHPVTT06080M	6	21	27	—	80	54	—	26	10,0	TTSS05014M	2,5mm	0,83
3866569	HSK63AHPVTT06120M	6	21	27	—	120	85	—	26	10,0	TTSS05014M	2,5mm	1,09
3866570	HSK63AHPVTT06160M	6	21	27	32	160	50	125	26	10,0	TTSS05014M	2,5mm	1,33
3866571	HSK63AHPVTT08080M	8	21	27	—	80	54	—	26	10,0	TTSS06014M	3mm	0,82
3866572	HSK63AHPVTT08120M	8	21	27	—	120	85	—	26	10,0	TTSS06014M	3mm	1,09
3866573	HSK63AHPVTT08160M	8	21	27	32	160	50	125	26	10,0	TTSS06014M	3mm	1,32
3866574	HSK63AHPVTT10085M	10	24	32	—	85	59	—	31	10,0	TTSS08014M	4mm	0,90
3866575	HSK63AHPVTT10120M	10	24	32	—	120	85	—	31	10,0	TTSS08014M	4mm	1,19
3866581	HSK63AHPVTT10160M	10	24	32	36	160	63	125	31	10,0	TTSS08014M	4mm	1,48
3866582	HSK63AHPVTT12090M	12	24	32	—	90	64	—	36	10,0	TTSS10014M	5mm	0,91
3866683	HSK63AHPVTT12120M	12	24	32	—	120	85	—	36	10,0	TTSS10014M	5mm	1,18
3866684	HSK63AHPVTT12160M	12	24	32	36	160	63	125	36	10,0	TTSS10014M	5mm	1,47
3866685	HSK63AHPVTT14090M	14	27	34	—	90	64	—	36	10,0	TTSS10014M	5mm	0,96
3866686	HSK63AHPVTT14120M	14	27	34	—	120	85	—	36	10,0	TTSS10014M	5mm	1,25
3866687	HSK63AHPVTT14160M	14	27	34	39	160	57	125	36	10,0	TTSS10014M	5mm	1,58
3866688	HSK63AHPVTT16095M	16	27	34	—	95	69	—	39	10,0	TTSS12014M	6mm	0,97
3866689	HSK63AHPVTT16120M	16	27	34	—	120	85	—	39	10,0	TTSS12014M	6mm	1,22
3866690	HSK63AHPVTT16160M	16	27	34	39	160	57	125	39	10,0	TTSS12014M	6mm	1,56
3866691	HSK63AHPVTT18095M	18	33	42	—	95	69	—	39	10,0	TTSS12014M	6mm	1,14
3866692	HSK63AHPVTT18120M	18	33	42	—	120	85	—	39	10,0	TTSS12014M	6mm	1,45
3866693	HSK63AHPVTT18160M	18	33	42	46	160	69	125	39	10,0	TTSS12014M	6mm	1,92
3866694	HSK63AHPVTT20100M	20	33	42	—	100	74	—	41	10,0	TTSS16014M	8mm	1,16
3866695	HSK63AHPVTT20120M	20	33	42	—	120	85	—	41	10,0	TTSS16014M	8mm	1,42
3866696	HSK63AHPVTT20160M	20	33	42	46	160	69	125	41	10,0	TTSS16014M	8mm	1,89
3866697	HSK63AHPVTT25115M	25	44	53	—	115	89	—	47	10,0	TTSS16014M	8mm	1,74
3866698	HSK63AHPVTT25160M	25	44	53	—	160	134	—	47	10,0	TTSS16014M	8mm	2,49
3866699	HSK63AHPVTT32120M	32	44	53	—	120	94	—	51	10,0	TTSS16014M	8mm	1,66
3866700	HSK63AHPVTT32160M	32	44	53	—	160	134	—	51	10,0	TTSS16014M	8mm	2,32

(continued)

(TT GP HPV continued)

Cutting Tool Shank Requirements inch (industry standard)

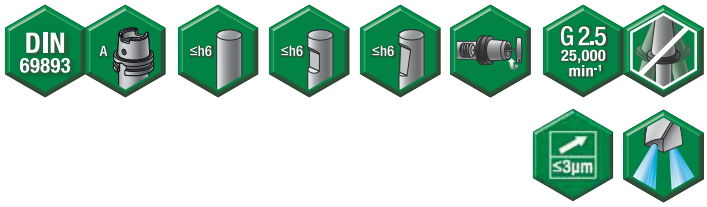
cutting tool shank diameter	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

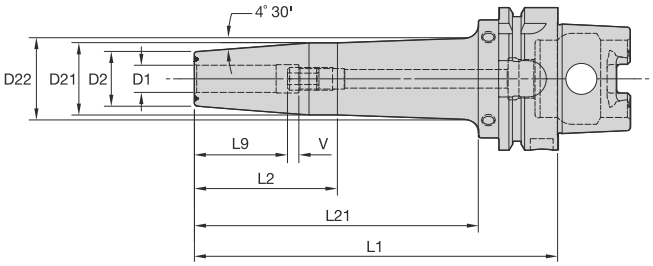
TT GP HPV IN-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3864077	**HSK63AHPVTT025315**	1/4	.83	1.06	—	3.15	2.13	—	1.02	.39	**TTSS05014M**	2,5mm	1.82
3864078	**HSK63AHPVTT025472**	1/4	.83	1.06	—	4.72	3.35	—	1.02	.39	**TTSS05014M**	2,5mm	2.41
3864079	**HSK63AHPVTT025630**	1/4	.83	1.06	1.27	6.30	1.97	4.92	1.02	.39	**TTSS05014M**	2,5mm	2.92
3864080	**HSK63AHPVTT031315**	5/16	.83	1.06	—	3.15	2.13	—	1.02	.39	**TTSS06014M**	3mm	1.81
3864081	**HSK63AHPVTT031472**	5/16	.83	1.06	—	4.72	3.35	—	1.02	.39	**TTSS06014M**	3mm	2.40
3864082	**HSK63AHPVTT031630**	5/16	.83	1.06	1.27	6.30	1.97	4.92	1.02	.39	**TTSS06014M**	3mm	2.91
3864083	**HSK63AHPVTT038335**	3/8	.94	1.24	—	3.35	2.32	—	1.22	.39	**TTSS08014M**	4mm	1.98
3864084	**HSK63AHPVTT038472**	3/8	.94	1.26	—	4.72	3.35	—	1.22	.39	**TTSS08014M**	4mm	2.64
3864085	**HSK63AHPVTT038630**	3/8	.94	1.26	1.43	6.30	2.48	4.92	1.22	.39	**TTSS08014M**	4mm	3.28
3864086	**HSK63AHPVTT044354**	7/16	.94	1.26	—	3.54	2.52	—	1.42	.39	**TTSS10014M**	5mm	2.02
3864087	**HSK63AHPVTT044472**	7/16	.94	1.26	—	4.72	3.35	—	1.42	.39	**TTSS10014M**	5mm	2.61
3864088	**HSK63AHPVTT050354**	1/2	.94	1.26	—	3.54	2.52	—	1.42	.39	**TTSS10014M**	5mm	2.00
3864089	**HSK63AHPVTT050472**	1/2	.94	1.26	—	4.72	3.35	—	1.42	.39	**TTSS10014M**	5mm	2.59
3864090	**HSK63AHPVTT050630**	1/2	.94	1.26	1.43	6.30	2.48	4.92	1.42	.39	**TTSS10014M**	5mm	3.23
3864091	**HSK63AHPVTT056354**	9/16	1.06	1.33	—	3.54	2.52	—	1.42	.39	**TTSS10014M**	5mm	2.11
3864092	**HSK63AHPVTT062374**	5/8	1.06	1.33	—	3.74	2.72	—	1.54	.39	**TTSS12014M**	6mm	2.14
3864093	**HSK63AHPVTT062472**	5/8	1.06	1.33	—	4.72	3.35	—	1.54	.39	**TTSS12014M**	6mm	2.70
3864094	**HSK63AHPVTT062630**	5/8	1.06	1.33	1.52	6.30	2.24	4.92	1.54	.39	**TTSS12014M**	6mm	3.44
3864095	**HSK63AHPVTT075394**	3/4	1.30	1.65	—	3.94	2.92	—	1.61	.39	**TTSS16014M**	8mm	2.59
3864096	**HSK63AHPVTT075630**	3/4	1.30	1.65	1.80	6.30	2.72	4.92	1.61	.39	**TTSS16014M**	8mm	4.19
3864097	**HSK63AHPVTT088394**	7/8	1.30	1.65	—	3.94	2.92	—	1.61	.39	**TTSS16014M**	8mm	2.50
3864098	**HSK63AHPVTT088630**	7/8	1.30	1.65	1.80	6.30	2.72	4.92	1.61	.39	**TTSS16014M**	8mm	4.10
3864099	**HSK63AHPVTT100453**	1	1.73	2.07	—	4.53	3.51	—	1.85	.39	**TTSS16014M**	8mm	3.82
3864100	**HSK63AHPVTT100630**	1	1.73	2.07	—	6.30	5.28	—	1.85	.39	**TTSS16014M**	8mm	5.46
3864101	**HSK63AHPVTT125472**	1 1/4	1.73	2.07	—	4.72	3.70	—	2.01	.39	**TTSS16014M**	8mm	3.67
3864102	**HSK63AHPVTT125630**	1 1/4	1.73	2.07	—	6.30	5.28	—	2.01	.39	**TTSS16014M**	8mm	5.13

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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TT HT HPV MM-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3867178	HSK63AHPVTTHT12090M	12	24	32	—	90	64	—	36	10,00	TTSS10014M	5mm	0,91
3867179	HSK63AHPVTTHT12120M	12	24	32	—	120	85	—	36	10,00	TTSS10014M	5mm	1,18
3867180	HSK63AHPVTTHT12160M	12	24	32	36	160	63	125	36	10,00	TTSS10014M	5mm	1,47
3867181	HSK63AHPVTTHT14090M	14	27	34	—	90	64	—	36	10,00	TTSS10014M	5mm	0,96
3867182	HSK63AHPVTTHT14120M	14	27	34	—	120	85	—	36	10,00	TTSS10014M	5mm	1,25
3867193	HSK63AHPVTTHT14160M	14	27	34	36	160	57	125	36	10,00	TTSS10014M	5mm	1,58
3867194	HSK63AHPVTTHT16095M	16	27	34	—	95	69	—	39	10,00	TTSS12014M	6mm	0,97
3867195	HSK63AHPVTTHT16120M	16	27	34	—	120	85	—	39	10,00	TTSS12014M	6mm	1,22
3867196	HSK63AHPVTTHT16160M	16	27	34	39	160	57	125	39	10,00	TTSS12014M	6mm	1,56
3867197	HSK63AHPVTTHT18095M	18	33	42	—	95	69	—	39	10,00	TTSS12014M	6mm	1,14
3867198	HSK63AHPVTTHT18120M	18	33	42	—	120	85	—	39	10,00	TTSS12014M	6mm	1,45
3867199	HSK63AHPVTTHT18160M	18	33	42	46	160	69	125	39	10,00	TTSS12014M	6mm	1,92
3867200	HSK63AHPVTTHT20100M	20	33	42	—	100	74	—	41	10,00	TTSS16014M	8mm	1,16
3867201	HSK63AHPVTTHT20120M	20	33	42	—	120	85	—	41	10,00	TTSS16014M	8mm	1,42
3867202	HSK63AHPVTTHT20160M	20	33	42	46	160	69	125	41	10,00	TTSS16014M	8mm	1,89
3867206	HSK63AHPVTTHT25115M	25	44	53	—	115	89	—	47	10,00	TTSS16014M	8mm	1,74
3867207	HSK63AHPVTTHT25160M	25	44	53	—	160	134	—	47	10,00	TTSS16014M	8mm	2,49
3867208	HSK63AHPVTTHT32120M	32	44	53	—	120	94	—	51	10,00	TTSS16014M	8mm	1,66
3867209	HSK63AHPVTTHT32160M	32	44	53	—	160	134	—	51	10,00	TTSS16014M	8mm	2,32

(continued)

(TT HT HPV continued)

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameter	tolerance
1/2, 9/16, & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

TT HT HPV IN-HSK Form A

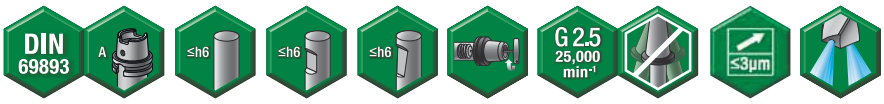
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3872700	**HSK63AHPVTTHT050354**	1/2	.94	1.26	—	3.54	2.52	—	1.42	.39	**TTSS10014M**	5mm	2.00
3872701	**HSK63AHPVTTHT050472**	1/2	.94	1.26	—	4.72	3.35	—	1.42	.39	**TTSS10014M**	5mm	2.59
3872702	**HSK63AHPVTTHT050630**	1/2	.94	1.26	1.43	6.30	2.48	4.92	1.42	.39	**TTSS10014M**	5mm	3.23
3872703	**HSK63AHPVTTHT056354**	9/16	1.06	1.33	—	3.54	2.52	—	1.42	.39	**TTSS10014M**	5mm	2.11
3872704	**HSK63AHPVTTHT062374**	5/8	1.06	1.33	—	3.74	2.72	—	1.54	.39	**TTSS12014M**	6mm	2.14
3872705	**HSK63AHPVTTHT062472**	5/8	1.06	1.33	—	4.72	3.35	—	1.54	.39	**TTSS12014M**	6mm	2.70
3872706	**HSK63AHPVTTHT062630**	5/8	1.06	1.33	1.52	6.30	2.24	4.92	1.54	.39	**TTSS12014M**	6mm	3.44
3872707	**HSK63AHPVTTHT075394**	3/4	1.30	1.65	—	3.94	2.92	—	1.61	.39	**TTSS16014M**	8mm	2.59
3872708	**HSK63AHPVTTHT075630**	3/4	1.30	1.65	1.80	6.30	2.72	4.92	1.61	.39	**TTSS16014M**	8mm	4.19
3872709	**HSK63AHPVTTHT088394**	7/8	1.30	1.65	—	3.94	2.92	—	1.61	.39	**TTSS16014M**	8mm	2.50
3872710	**HSK63AHPVTTHT088630**	7/8	1.30	1.65	1.80	6.30	2.72	4.92	1.61	.39	**TTSS16014M**	8mm	4.10
3872711	**HSK63AHPVTTHT100453**	1	1.73	2.07	—	4.53	3.51	—	1.85	.39	**TTSS16014M**	8mm	3.82
3872712	**HSK63AHPVTTHT100630**	1	1.73	2.07	—	6.30	5.28	—	1.85	.39	**TTSS16014M**	8mm	5.46
3872713	**HSK63AHPVTTHT125472**	1 1/4	1.73	2.07	—	4.72	3.70	—	2.01	.39	**TTSS16014M**	8mm	3.67
3872714	**HSK63AHPVTTHT125630**	1 1/4	1.73	2.07	—	6.30	5.28	—	2.01	.39	**TTSS16014M**	8mm	5.13

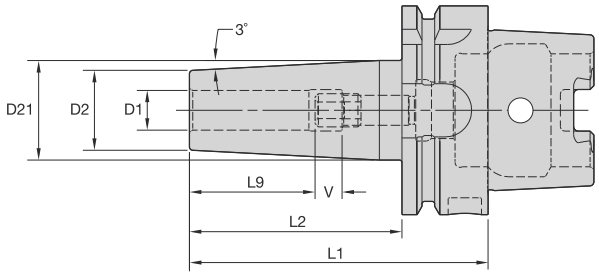
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately, see page J32.

HSK63A Shank Tools

Shrink Fit Toolholders General Purpose (GP)

- Suitable for carbide and HSS cutting tools (requirements below).
- Die and mold.





Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12 & 16	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013

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■ TT MD MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw
1926291	**HSK63ATTMD05080M**	5	10	14,4	80	54	14	10	**TTSS06014M**	3mm
1926292	**HSK63ATTMD06080M**	6	12	16,4	80	54	26	10	**TTSS05014M**	2,5mm
1926293	**HSK63ATTMD08080M**	8	16	20,4	80	54	26	10	**TTSS06014M**	3mm
1926294	**HSK63ATTMD10085M**	10	20	24,9	85	59	31	10	**TTSS08014M**	4mm
1926295	**HSK63ATTMD12090M**	12	24	29,9	90	64	36	10	**TTSS10014M**	5mm
1926296	**HSK63ATTMD16095M**	16	28	33,9	95	69	39	10	**TTSS12014M**	6mm
1926297	**HSK63ATTMD20100M**	20	34	40,9	100	74	41	10	**TTSS16014M**	8mm
1926298	**HSK63ATTMD25115M**	25	39	46,9	115	89	47	10	**TTSS16014M**	8mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

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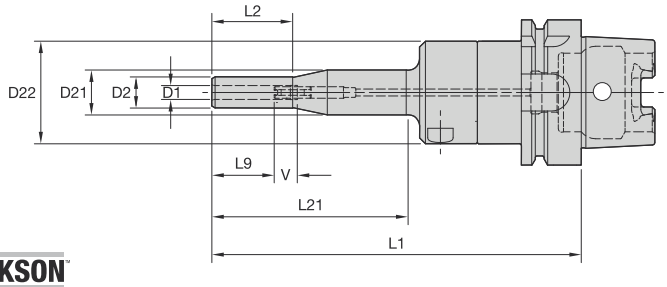

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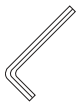
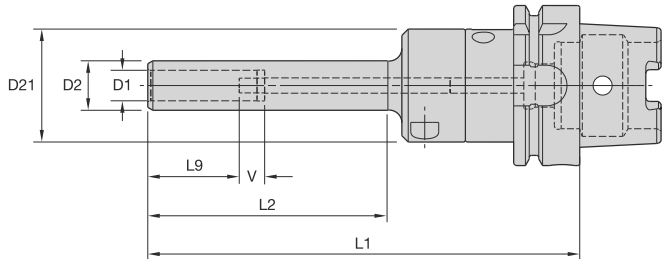
HC Slim-T MM-HSK Form A

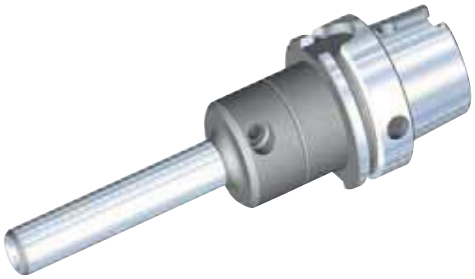
order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
2639015	HSK63AHCSLT06160M	6	13,5	19,5	44	160	35	27	85	10	1,29
2868501	HSK63AHCSLT08160M	8	15,5	19,5	44	160	35	27	85	10	1,30
2638477	HSK63AHCSLT10160M	10	17,5	44,5	–	160	85	31	–	10	1,29

Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK63AHCSLT06160M	170.135	5mm	170.002	2,5mm
HSK63AHCSLT08160M	170.135	5mm	170.002	2,5mm
HSK63AHCSLT10160M	170.135	5mm	170.003	3mm





HC Slim MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2458200	HSK63AHCSL12170M	12	19,5	44,5	170	95	36	10	1,33
2541833	HSK63AHCSL14170M	14	21,5	52,5	170	95	36	10	1,57
2458202	HSK63AHCSL16170M	16	23,5	52,5	170	95	39	10	1,59
2541834	HSK63AHCSL18170M	18	25,5	52,5	170	95	39	10	1,63
2458203	HSK63AHCSL20170M	20	27,5	52,5	170	95	41	10	1,67

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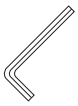
(HC Slim continued)

Spare Parts

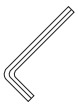


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK63AHCSL12170M	**170.135**	5mm	**170.002**	2,5mm
HSK63AHCSL14170M	**170.135**	5mm	**170.002**	2,5mm
HSK63AHCSL16170M	**170.135**	5mm	**170.002**	2,5mm
HSK63AHCSL18170M	**170.135**	5mm	**170.002**	2,5mm
HSK63AHCSL20170M	**170.135**	5mm	**170.002**	2,5mm

HC Slim IN-HSK Form A

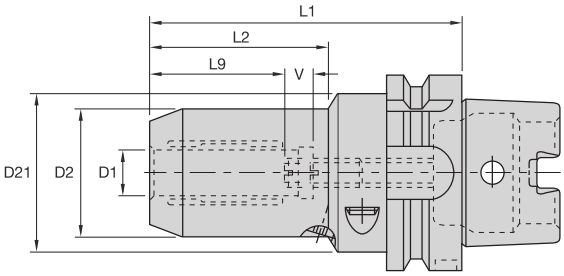
order number	catalog number	D1	D2	D21	L1	L2	L9	V	lbs
2508159	**HSK63AHCSL050669**	1/2	.81	2.07	6.69	3.74	1.42	.39	3.42
2508160	**HSK63AHCSL075669**	3/4	1.06	2.07	6.69	3.74	1.61	.39	3.68

Spare Parts



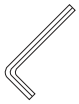
catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK63AHCSL050669	**170.135**	5mm	**170.002**	2,5mm
HSK63AHCSL075669	**170.135**	5mm	**170.002**	2,5mm

NOTE: Do not overtighten actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrenches must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
Unable to use SEFAS™ chamfering rings on these adapters.



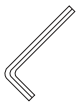
ERICKSON

HC MM-HSK Form A



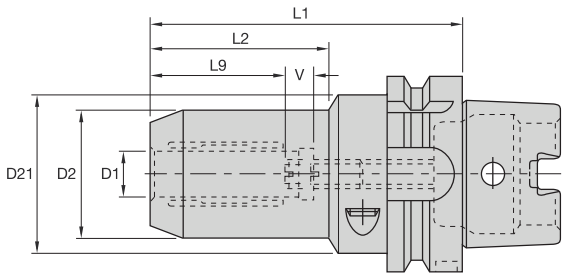
order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1245440	**HSK63AHC06080M**	6	25,7	50	80	33	27	10	**170.135**	5mm	**170.002**	2,5mm	1,00
1245441	**HSK63AHC08080M**	8	27,7	50	80	34	27	10	**170.135**	5mm	**170.002**	2,5mm	1,10
1245477	**HSK63AHC10085M**	10	29,7	50	85	39	31	10	**170.135**	5mm	**170.002**	2,5mm	1,10
1245478	**HSK63AHC12090M**	12	31,6	50	90	45	36	10	**170.135**	5mm	**170.002**	2,5mm	2,00
1245479	**HSK63AHC14090M**	14	33,6	50	90	46	36	10	**170.135**	5mm	**170.003**	3mm	2,00
1245480	**HSK63AHC16095M**	16	37,6	50	95	52	39	10	**170.135**	5mm	**170.003**	3mm	2,00
1245481	**HSK63AHC18095M**	18	39,6	50	95	52	39	10	**170.135**	5mm	**170.003**	3mm	2,10
1191019	**HSK63AHC20100M**	20	41,6	50	100	58	41	10	**170.135**	5mm	**170.003**	3mm	2,10
1245482	**HSK63AHC25120M**	25	49,8	63	120	51	47	10	**170.136**	6mm	**170.004**	4mm	2,30
1192226	**HSK63AHC32125M**	32	59,8	63	125	59	51	10	**170.136**	6mm	**170.004**	4mm	2,26

HC In-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
1246521	**HSK63AHC025325**	1/4	1.01	1.97	3.25	1.30	1.06	–	**170.135**	5mm	**170.002**	2,5mm	2.20
1246525	**HSK63AHC038338**	3/8	1.17	1.97	3.38	1.54	1.22	–	**170.135**	5mm	**170.002**	2,5mm	2.40
1246528	**HSK63AHC050350**	1/2	1.24	1.97	3.50	1.75	1.42	–	**170.135**	5mm	**170.002**	2,5mm	4.40
1246532	**HSK63AHC062375**	5/8	1.48	1.97	3.75	2.03	1.54	–	**170.135**	5mm	**170.003**	3mm	4.40
1246534	**HSK63AHC075400**	3/4	1.64	1.97	4.00	2.28	1.61	–	**170.135**	5mm	**170.003**	3mm	4.60
1246536	**HSK63AHC100475**	1	1.97	2.48	4.75	2.01	1.81	–	**170.136**	6mm	**170.004**	4mm	5.10
1246540	**HSK63AHC125500**	1 1/4	2.35	2.48	5.00	2.32	1.97	–	**170.136**	6mm	**170.004**	4mm	5.30

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Wrenches must be ordered separately.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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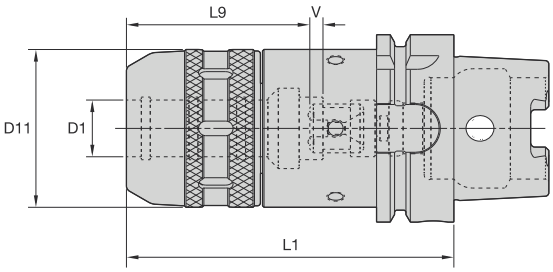
HC Trend MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	wrench size stop screw	kg
1724543	**HSK63AHCT06080M**	6	25,7	50	80	33	27	10	**170.135**	5mm	3mm	1,01
1724615	**HSK63AHCT06150M**	6	25,7	50	150	105	27	10	**170.135**	5mm	3mm	1,27
1724544	**HSK63AHCT08080M**	8	27,7	50	80	34	27	10	**170.135**	5mm	3mm	1,03
1724657	**HSK63AHCT08150M**	8	27,7	50	150	105	27	10	**170.135**	5mm	3mm	1,33
1724545	**HSK63AHCT10085M**	10	29,7	50	85	39	31	10	**170.135**	5mm	3mm	1,07
1724658	**HSK63AHCT10150M**	10	29,7	50	150	105	31	10	**170.135**	5mm	3mm	1,40
1724546	**HSK63AHCT12090M**	12	31,6	50	90	45	36	10	**170.135**	5mm	3mm	1,10
1724660	**HSK63AHCT12150M**	12	31,6	50	150	105	36	10	**170.135**	5mm	3mm	1,46
1724547	**HSK63AHCT14090M**	14	33,6	50	90	46	36	10	**170.135**	5mm	5mm	1,12
1724761	**HSK63AHCT14150M**	14	33,6	50	150	105	36	10	**170.135**	5mm	5mm	1,51
1724548	**HSK63AHCT16095M**	16	37,6	50	95	52	39	10	**170.135**	5mm	5mm	1,22
1724763	**HSK63AHCT16150M**	16	37,6	50	150	105	39	10	**170.135**	5mm	5mm	1,68
1724550	**HSK63AHCT18095M**	18	39,6	50	95	52	39	10	**170.135**	5mm	5mm	1,25
1724764	**HSK63AHCT18150M**	18	39,6	50	150	105	39	10	**170.135**	5mm	5mm	1,76
1724611	**HSK63AHCT20100M**	20	41,6	50	100	58	41	10	**170.135**	5mm	5mm	1,32
1724765	**HSK63AHCT20150M**	20	41,6	50	150	105	41	10	**170.135**	5mm	5mm	1,84
1724612	**HSK63AHCT25120M**	25	49,8	63	120	51	47	10	**170.136**	6mm	5mm	2,00
1724613	**HSK63AHCT32125M**	32	59,8	63	125	59	51	10	**170.136**	6mm	5mm	2,59

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Wrenches must be ordered separately.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Balancable — fine tune with set screws.
- Heavy and fine capabilities.



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HPMC MM-HSK Form A

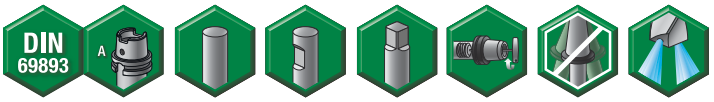
order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3100547	HSK63AHPMC20110M	20	53	110	56	10	PSW52M	MCSS16018M	2,5mm & 5mm	1,77
3100548	HSK63AHPMC32120M	32	70	120	66	10	PSW68M	MCSS16018M	2,5mm & 5mm	2,61

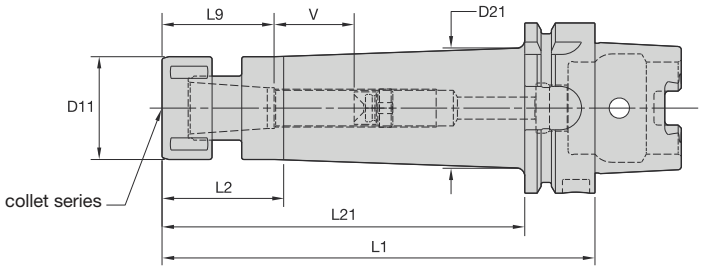
HPMC IN-HSK Form A

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100544	HSK63AHPMC075433	3/4	2.09	4.33	2.20	.39	PSW52M	MCSS16018M	2,5mm & 5mm	3.90
3100545	HSK63AHPMC100472	1	2.40	4.72	2.60	.39	PSW58M	MCSS16018M	2,5mm & 5mm	5.30
3100546	HSK63AHPMC125472	1 1/4	2.76	4.72	2.56	.39	PSW68M	MCSS16018M	2,5mm & 5mm	5.70

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench not included.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
Heavy milling with locknut tightened to face stop.
Fine milling with locknut tightened to face stop then back off one half turn.

• Tremendous Grip (3:1 advantage).





Collet Capacity

TG collet series	mm min	mm max	inch min	inch max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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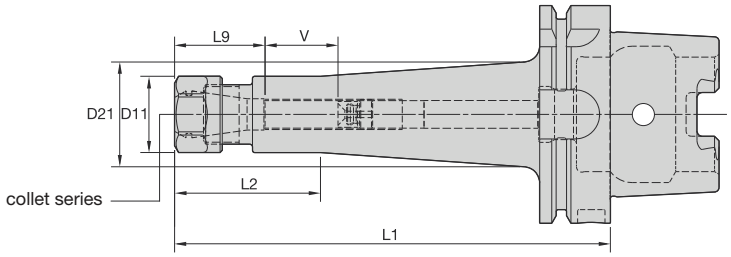
TG Round-HSK Form A

order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap	kg
1119347	**HSK63ATG050100M**	TG50	38	—	100	74	—	42	12	**LNA050M**	**HSW34M**	68	**SS056041G**	4mm & 5/32	**SSCC056**	1,14
1086567	**HSK63ATG050160M**	TG50	38	44,5	160	41	134	42	58	**LNA050M**	**HSW34M**	68	**SS056041G**	4mm & 5/32	**SSCC056**	1,75
1086568	**HSK63ATG075115M**	TG75	50	—	115	89	—	54	13	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	**SSCC081**	1,65
1086559	**HSK63ATG100135M**	TG100	60	—	135	109	—	70	12	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	**SSCC112**	2,05

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON

ER Hex-HSK Form A

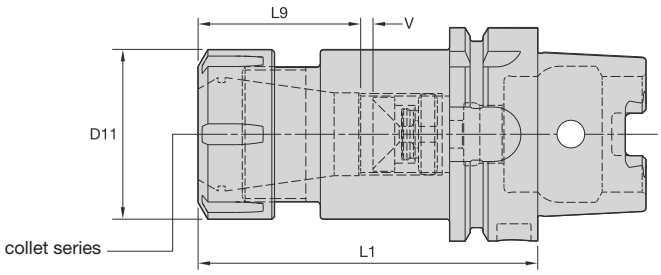
order number	catalog number	collet series	D11	D21	L1	L2	L9	V	kg
1086425	**HSK63AER16100M**	ER16	28	—	100	74	32	24	0,90
1086426	**HSK63AER16160M**	ER16	28	45	160	85	32	48	1,32
1086427	**HSK63AER20100M**	ER20	34	—	100	68	36	17	1,03

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	stop screw cone cap
HSK63AER16100M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32	**SSCC044**
HSK63AER16160M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32	**SSCC044**
HSK63AER20100M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32	**SSCC056**

(continued)

(ER continued)



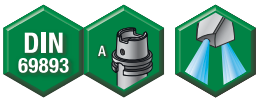
ER Round-HSK Form A

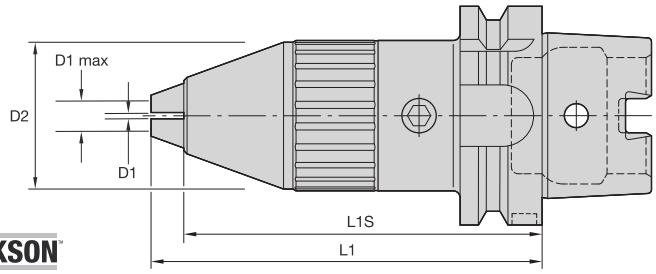
order number	catalog number	collet series	D11	L1	L9	V	kg
1086855	**HSK63AER25100M**	ER25	42	100	40	12	1,18
1086566	**HSK63AER32100M**	ER32	50	100	45	4	1,37
1086856	**HSK63AER40120M**	ER40	63	120	54	15	1,80

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap
HSK63AER25100M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32	**SSCC075**
HSK63AER32100M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32	**SSCC094**
HSK63AER40120M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32	**SSCC112**

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





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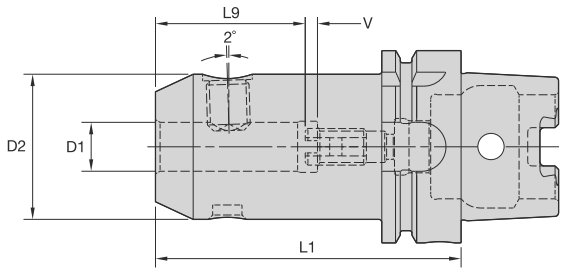
DC-HSK Form A

order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2	L1	L1S
2636451	HSK63ADC13117M	0,5	.020	13,0	.512	50	126	117
2636452	HSK63ADC16117M	3,0	.118	16,0	.630	52	127	117

NOTE: Tighten to the recommended tightening torque.
4mm locking wrench must be ordered separately; order number 170.304.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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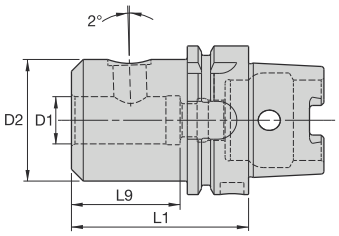
WN MM-HSK Form A

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size clamp screw	Nm	stop screw	wrench size stop screw	kg
1126142	HSK63AWN06080M	6	25	80	30	10	SS03M012	3mm	7	571.060	2,5mm	0,82
1126151	HSK63AWN08080M	8	28	80	30	10	SS03M014	4mm	15	571.067	3mm	0,86
1126161	HSK63AWN10080M	10	35	80	35	7	SS03M018	5mm	25	571.068	4mm	1,00
1126168	HSK63AWN12090M	12	42	90	40	7	SS03M023	6mm	35	571.074	5mm	1,23
1126178	HSK63AWN14090M	14	44	90	40	8	SS03M023	6mm	35	571.074	5mm	1,28
1126187	HSK63AWN16100M	16	48	100	43	10	SS03M025	6mm	50	571.069	6mm	1,53
1130396	HSK63AWN18100M	18	50	100	43	10	SS03M025	6mm	50	571.069	6mm	1,59
1126205	HSK63AWN20100M	20	52	100	45	8	SS03M026	8mm	95	571.076	6mm	1,65
1126220	HSK63AWN25110M	25	65	110	50	9	SS03M027	10mm	135	571.077	6mm	2,31
1126230	HSK63AWN32110M	32	72	110	54	9	SS03M029	10mm	160	571.077	6mm	2,55

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw and stop screw.
Clamp screw or stop screw wrenches not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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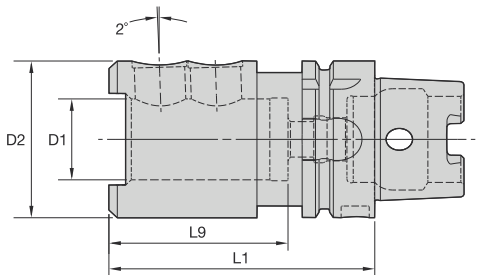
SWN MM-HSK Form A

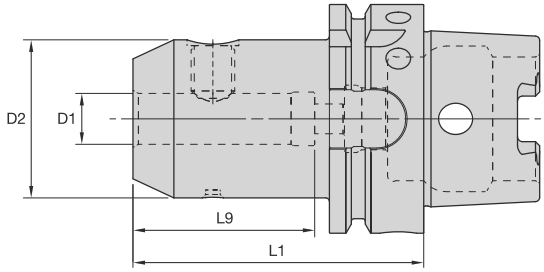
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1254119	HSK63ASWN20075M	20	50	75	48	SS03M026	8mm	95	3,00
1254120	HSK63ASWN25080M	25	55	80	48	SS03M023	6mm	35	2,90



SWN MM • With Drive • HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1254121	HSK63ASWN32090M	32	62	90	66	SS03M023	6mm	35	1,67

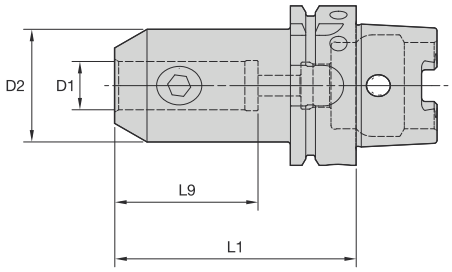
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



ERICKSON

EM MM-HSK Form A

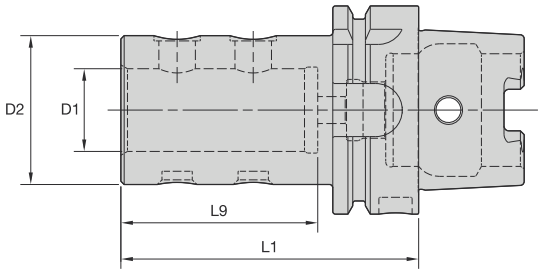
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	Nm	kg
1125914	HSK63AEM06065M	6	25	65	43	SS03M012	3mm	7	0,76
1125924	HSK63AEM08065M	8	28	65	40	SS03M014	4mm	15	0,79
1125931	HSK63AEM10065M	10	35	65	41	SS03M018	5mm	25	0,88
1125940	HSK63AEM12080M	12	42	80	50	SS03M023	6mm	35	1,13
1125951	HSK63AEM14080M	14	44	80	50	SS03M023	6mm	35	1,17
1125958	HSK63AEM16080M	16	48	80	53	SS03M025	6mm	50	1,26
1125987	HSK63AEM18080M	18	50	80	53	SS03M025	6mm	50	1,30
1125997	HSK63AEM20080M	20	52	80	55	SS03M026	8mm	95	1,33
1126005	HSK63AEM25110M	25	65	110	60	SS03M027	10mm	135	2,30
1126012	HSK63AEM32110M	32	72	110	65	SS03M029	10mm	160	2,52



EM IN-HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	ft. lbs.	lbs
1015191	HSK63AEM025300	1/4	1.00	3.00	2.14	ELS025025PKG	1/8	8	1.79
1015192	HSK63AEM038300	3/8	1.00	3.00	1.73	ELS038031PKG	3/16	15	1.76
1015193	HSK63AEM050300	1/2	1.38	3.00	1.97	ELS044038PKG	7/32	20	2.05
1015224	HSK63AEM062375	5/8	1.63	3.75	2.09	ELS056050PKG	1/4	40	2.71
1015225	HSK63AEM075375	3/4	1.75	3.75	2.22	ELS062050PKG	5/16	70	2.85
1015226	HSK63AEM100375	1	2.00	3.75	2.46	ELS075056PKG	3/8	110	3.12
1015227	HSK63AEM125425	1 1/4	2.50	4.25	2.51	ELS075062PKG	3/8	110	4.51

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



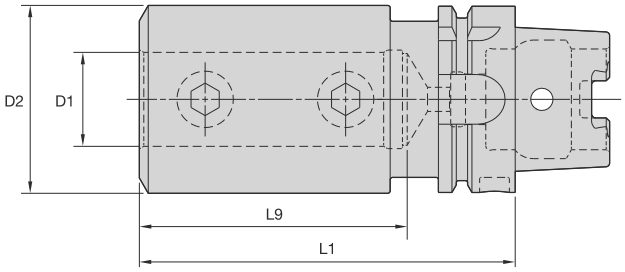
ERICKSON

DAT MM-HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	Nm	cone point socket set screw	kg
2402295	**HSK63ADAT25090M**	25	45	90	60	**12166903900**	6mm	40	**12166903700**	1,19
2402296	**HSK63ADAT32095M**	32	50	95	64	**12166903900**	6mm	40	**12166903700**	1,28
2402297	**HSK63ADAT40105M**	40	60	105	74	**12166904000**	8mm	50	**12166903800**	1,56

NOTE: Do not overtighten clamp screw: use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• For drill with flats.

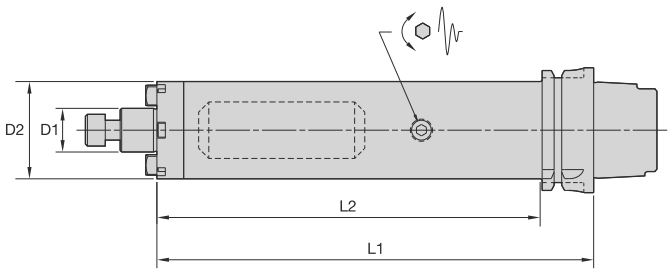


ERICKSON

SSF IN-HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1808884	**HSK63ASSF125500**	1 1/4	2.50	5.00	3.50	**ELS075056PKG**	3/8	110	4.99
1809016	**HSK63ASSF150550**	1 1/2	2.75	5.50	4.00	**ELS075056PKG**	3/8	110	5.99

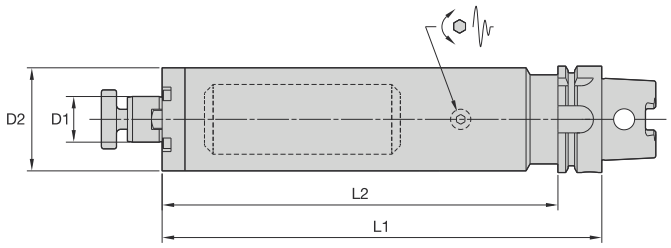
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



ERICKSON

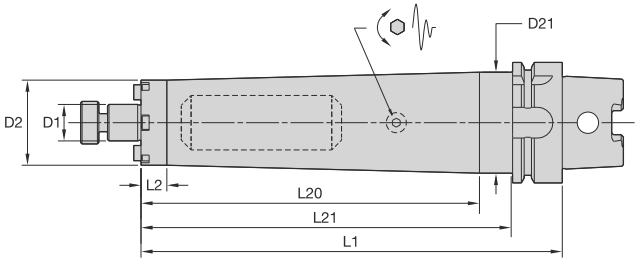
SMC TD Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
4136192	HSK63ATDSMC22220M	22	49	220	194	MS1234	KDK22M	8mm	3,34



SMC TD Lock MM-HSK Form A

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
4135978	HSK63ATDSMC27260M	27	61	260	234	KLSS27M	—	10mm	5,59



SMC TD Lock IN-HSK Form A

order number	catalog number	D1	D2	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135979	HSK63ATDSMC0750866	3/4	1.75	8.66	.53	6.96	7.64	KLS07	KDK05	1/4	7.28
4135980	HSK63ATDSMC1001050	1	2.19	10.50	9.48	—	—	KLS10	KDK06	5/16	11.06

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.

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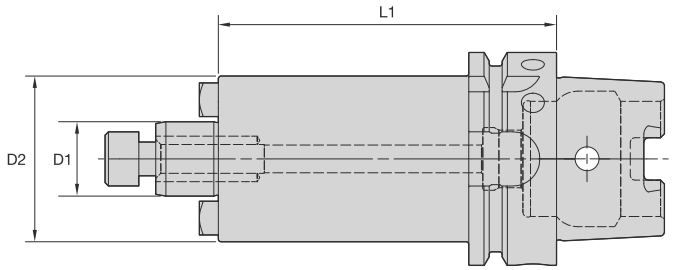

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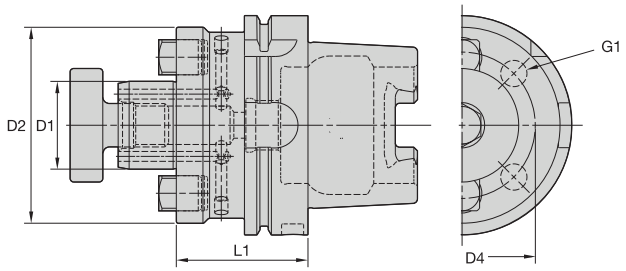
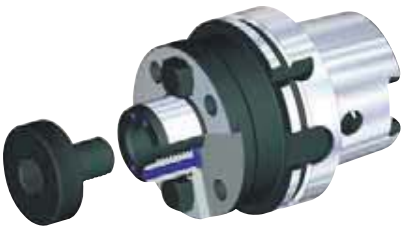
SMC Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872682	HSK63ASM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,88
3872681	HSK63ASMC16050M	16	44	50	MS1294	KDK16M	6mm	0,95
3872684	HSK63ASM2C22050M	22	42	50	MS1234	–	8mm	0,96
3872683	HSK63ASMC22050M	22	49	50	MS1234	KDK22M	8mm	1,05
3872685	HSK63ASMC22100M	22	49	100	MS1234	KDK22M	8mm	1,77
3872686	HSK63ASMC22160M	22	49	160	MS1234	KDK22M	8mm	2,63



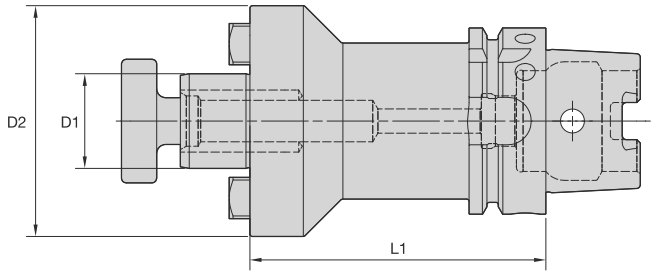


SMC Lock MM-HSK Form A

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	kg
3872687	HSK63ASMC27060M	27	60	–	–	60	KLSS27M	KDK27M	10mm	1,42
3872688	HSK63ASMC27100M	27	60	–	–	100	KLSS27M	KDK27M	10mm	2,11
3872689	HSK63ASMC27160M	27	60	–	–	160	KLSS27M	KDK27M	10mm	3,11
3872690	HSK63ASMC32060M	32	78	–	–	60	KLSS32M	KDK32M	14mm	1,77
3872691	HSK63ASMC32100M	32	78	–	–	100	KLSS32M	KDK32M	14mm	2,59
3872692	HSK63ASMC32160M	32	78	–	–	160	KLSS32M	KDK32M	14mm	3,59
3872693	HSK63ASMC40060M	40	89	67	M12X1.75	60	KLSS40M	KDK40M	17mm	2,14
3872694	HSK63ASMC40100M	40	89	67	M12X1.75	100	KLSS40M	KDK40M	17mm	3,18
3872695	HSK63ASMC40160M	40	89	67	M12X1.75	160	KLSS40M	KDK40M	17mm	4,19

(continued)

(SMC continued)

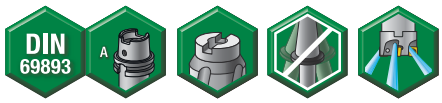


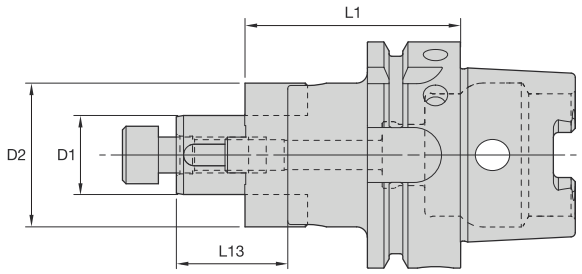
SMC Lock IN-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3762410	**HSK63ASM2C050200**	1/2	1.20	2	**KLS05**	**KDK04**	3/16	1.76
3762409	**HSK63ASMC050200**	1/2	1.44	2	**KLS05**	**KDK04**	3/16	1.89
3762412	**HSK63ASM2C075200**	3/4	1.46	2	**KLS07**	**—**	1/4	1.97
3762411	**HSK63ASMC075200**	3/4	1.75	2	**KLS07**	**KDK05**	1/4	2.17
3762414	**HSK63ASM2C100225**	1	2.19	2	**KLS10**	**KDK06**	5/16	2.83
3762413	**HSK63ASMC100225**	1	2.75	2	**KLS10**	**KDK06**	5/16	3.11
3762415	**HSK63ASMC125225**	1 1/4	2.88	2	**KLS12**	**KDK08**	5/16	3.40
3762416	**HSK63ASMC150225**	1 1/2	3.81	2	**KLS15**	**KDK10**	3/8	4.59

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately, see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.

- Through-the-toolholder coolant capability.





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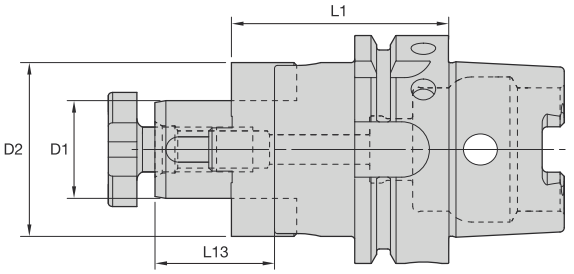
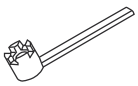
CS MM-HSK Form A

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1126799	HSK63ACS16060M	16	32	60	27	MS1294	6mm	CDR16M	CDK16M	0,88
1126808	HSK63ACS22060M	22	40	60	31	MS1234	8mm	CDR22M	CDK22M	1,03

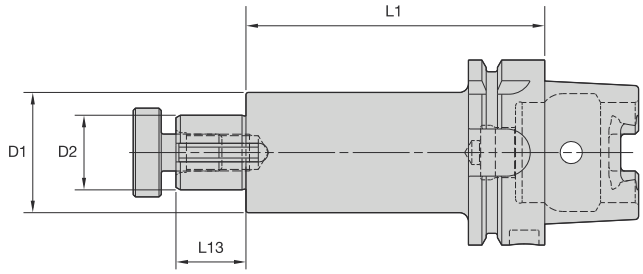


CS Lock MM-HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	locknut wrench	combi driver ring	combi drive key	kg
1126816	HSK63ACS27060M	27	48	60	33	KLS27M	SMW27M	CDR27M	CDK27M	1,23
1126823	HSK63ACS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M	1,48
1126829	HSK63ACS40070M	40	70	70	41	KLS40M	SMW40M	CDR40M	CDK40M	2,08

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.



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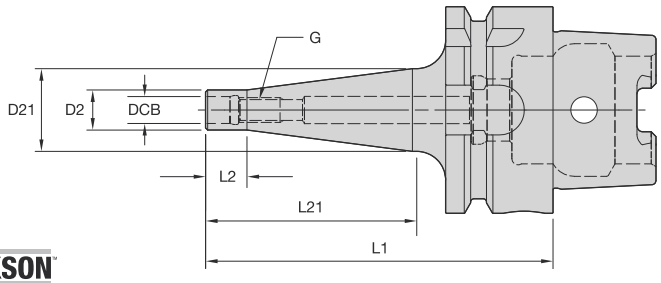
SA IN-HSK Form A

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	drive key	lbs
1307823	**HSK63ASA062400**	5/8	1.25	4.00	.78	**KLS07**	1/4	**DWG SDK062088**	2.22
1307824	**HSK63ASA100400**	1	1.61	4.00	.94	**KLS10**	5/16	**DWG SDK100106**	3.09
1307825	**HSK63ASA125400**	1 1/4	1.86	4.00	1.09	**KLS12**	5/16	**DWG SDK125119**	3.97

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.



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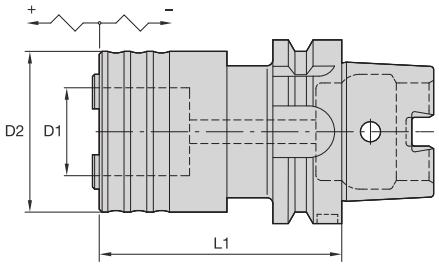
ST-HSK Form A

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4061564	HSK63AST06059M	6,5	M6	10	10	59	10	25	0,65
4061565	HSK63AST06084M	6,5	M6	10	20	84	10	50	0,71
4061566	HSK63AST06109M	6,5	M6	10	23	109	10	75	0,77
4061567	HSK63AST08059M	8,5	M8	13	15	59	10	25	0,66
4061568	HSK63AST08084M	8,5	M8	13	23	84	10	50	0,74
4061569	HSK63AST08109M	8,5	M8	13	23	109	10	75	0,78
4061570	HSK63AST08134M	8,5	M8	13	25	134	10	100	0,85
4061571	HSK63AST10059M	10,5	M10	18	20	59	10	25	0,70
4061572	HSK63AST10084M	10,5	M10	18	25	84	10	50	0,78
4061573	HSK63AST10109M	10,5	M10	18	28	109	10	75	0,88
4061574	HSK63AST10134M	10,5	M10	18	30	134	10	100	1,00
4061575	HSK63AST12059M	12,5	M12	21	24	59	10	25	0,72
4061576	HSK63AST12084M	12,5	M12	21	24	84	10	50	0,78
4061577	HSK63AST12109M	12,5	M12	21	31	109	10	75	0,95
4061578	HSK63AST12134M	12,5	M12	21	31	134	10	100	1,05
4061579	HSK63AST16059M	17,0	M16	29	34	59	10	25	0,79
4061580	HSK63AST16084M	17,0	M16	29	34	84	10	50	0,94
4061581	HSK63AST16109M	17,0	M16	29	34	109	10	75	1,09
4061582	HSK63AST16134M	17,0	M16	29	39	134	10	100	1,35

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Rapid Change style.



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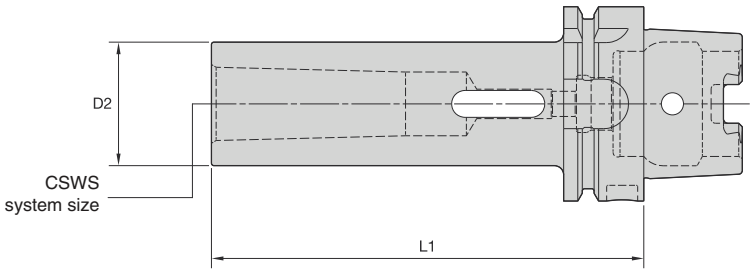
RC-HSK Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	tension	compression	kg
1520637	**HSK63ACHRC1105M**	1	M1.0 - M14	#0 - 9/16	19	39	105	7,5	7,5	1,30
1520639	**HSK63ACHRC2140M**	2	M4.5 - M24	5/16 - 7/8	31	60	140	10,0	10,0	2,20
1520641	**HSK63ACHRC3203M**	3	M14.0 - M36	13/16 - 1 3/8	48	86	203	17,5	17,5	4,90

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
For HSK adapters to DIN 69893-1.
Form A or Form C (coolant pipe must be removed).

• Balanced-by-design.



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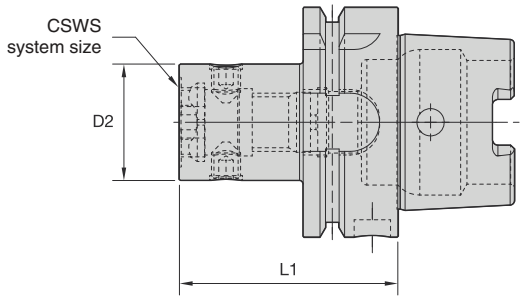
MT-HSK form A

order number	catalog number	CSWS system size	D2	L1	kg
1125543	**HSK63AMT1100M**	1	25	100	0,72
1127318	**HSK63AMT2120M**	2	32	120	0,94
1152347	**HSK63AMT3140M**	3	40	140	1,29
1230360	**HSK63AMT4160M**	4	48	160	1,72

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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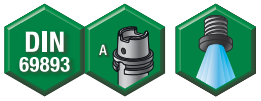
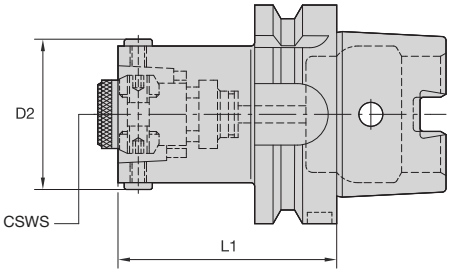
■ RFX-HSK Form A

order number	catalog number	CSWS system size	D2	L1	lock screw	Nm	wrench	kg
3860549	**HSK63ARFX185060M**	RFX185	19	60	**RFX185LS**	6	12148041100	**0,70**
3860550	**HSK63ARFX245060M**	RFX245	25	60	**RFX245LS**	8	12148041100	**0,70**
3860551	**HSK63ARFX320060M**	RFX320	32	60	**RFX320LS**	14	12148041200	**0,80**
3860552	**HSK63ARFX420070M**	RFX420	42	70	**RFX420LS**	16	12148041300	**1,00**
3860623	**HSK63ARFX550080M**	RFX550	55	80	**RFX550LS**	20	12148041400	**1,40**
3860624	**HSK63ARFX720095M**	RFX720	72	95	**RFX720LS**	20	12148041400	**2,00**

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
For HSK adapters to DIN 69893-1 Form A or Form C, coolant pipe must be removed.





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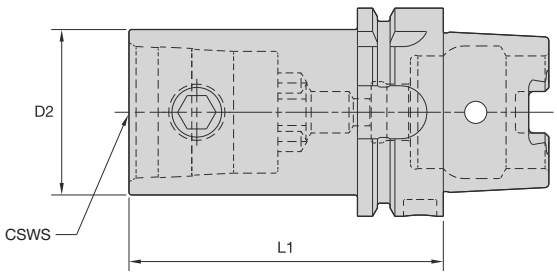
HSK-HSK Form A

order number	catalog number	CSWS system size	D2	L1	wrench size actuation screw	Nm	kg
1520609	HSK63AHSK32070M	HSK32	37	70	3mm	6	1,00
1189415	HSK63AHSK40080M	HSK40	45	80	3mm	8	1,10
1520612	HSK63AHSK50080M	HSK50	55	80	4mm	15	1,20
1188038	HSK63AHSK63080M	HSK63	70	80	5mm	20	1,60
1188027	HSK63AHSK63120M	HSK63	70	120	5mm	20	2,40

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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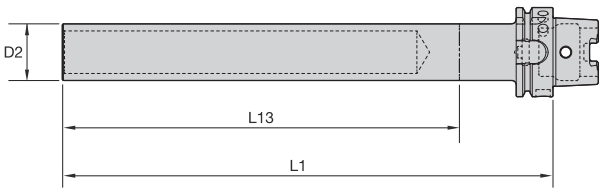
KM-HSK Form A

order number	catalog number	CSWS system size	D2	L1	KM spare parts package	wrench size actuation screw	Nm	kg
1307929	HSK63AKM32070M	KM32	32	70	KM32PKG3S	5mm	8-11	0,87
1151763	HSK63AKM40080M	KM40	40	80	KM40PKG3S	6mm	12-16	1,08
1121672	HSK63AKM50095M	KM50	50	95	KM50PKG3S	10mm	27-34	1,49
1148578	HSK63AKM63105M	KM63	63	105	KM63PKG3S	12mm	47-54	2,03

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

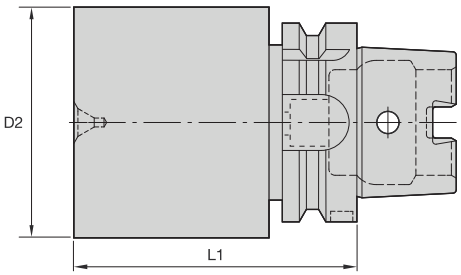
- For acceptance testing on machine tool spindles.
- 0,003mm (.0001") maximum TIR.
- Precision ground.



GB-HSK Form A

order number	catalog number	D2 mm	D2 in	L1 mm	L1 in	L13 mm	L13 in	kg
1228288	HSK63AGB40346M	40,0	1.57	346	13.62	300	11.81	2,38

- Machinable front 32–38 RW C.



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BB-HSK Form A

order number	catalog number	D2	L1	kg
1015288	HSK63ABB080250M	80,8	250	9,09
1015289	HSK63ABB115150M	115,8	150	9,78

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

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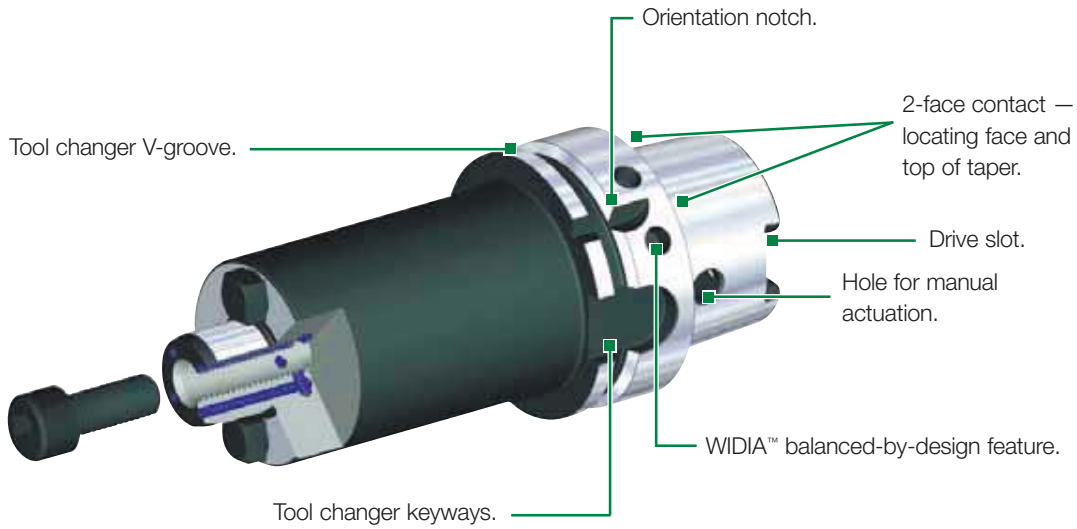
WIDIA™

Erickson™ HSK Shank Tooling System • **HSK80A Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

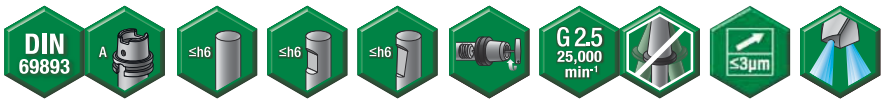
HSK80A

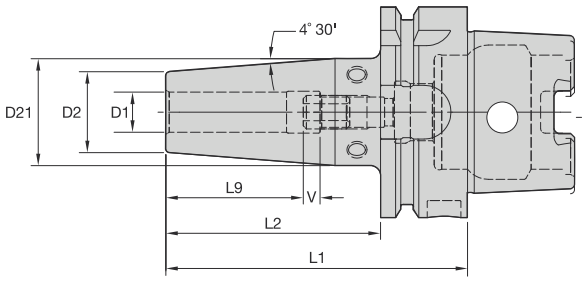


The HSK80A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.

- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 16,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

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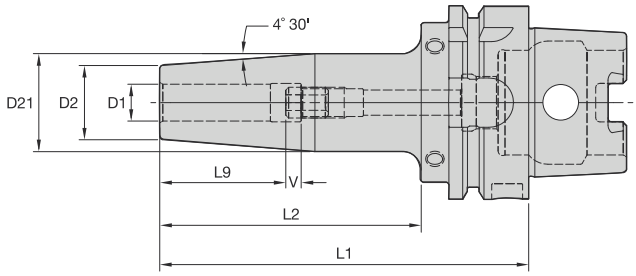
■ TT GP HPV MM-HSK Form A • With Hub

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867270	HSK80AHPVTT06085M	6	21	27	85	59	26	10	TTSS05014M	2,5mm	1,28
3867271	HSK80AHPVTT08085M	8	21	27	85	59	26	10	TTSS06014M	3mm	1,28
3867272	HSK80AHPVTT10090M	10	24	32	90	64	31	10	TTSS08014M	4mm	1,36
3867273	HSK80AHPVTT12095M	12	24	32	95	69	36	10	TTSS10014M	5mm	1,38
3867274	HSK80AHPVTT14095M	14	27	34	95	69	36	10	TTSS10014M	5mm	1,43
3867275	HSK80AHPVTT16100M	16	27	34	100	74	39	10	TTSS12014M	6mm	1,44
3867276	HSK80AHPVTT18100M	18	33	42	100	74	39	10	TTSS12014M	6mm	1,63
3867277	HSK80AHPVTT20105M	20	33	42	105	79	41	10	TTSS16014M	8mm	1,65
3867278	HSK80AHPVTT25115M	25	44	53	115	89	47	10	TTSS16014M	8mm	2,19
3867279	HSK80AHPVTT32120M	32	44	53	120	94	51	10	TTSS16014M	8mm	2,11
3867280	HSK80AHPVTT40130M	40	60	70	130	104	51	10	TTSS20014M	10mm	3,23
3867281	HSK80AHPVTT50140M	50	69	79	140	114	56	10	TTSS20014M	10mm	3,88

(continued)

(TT GP HPV continued)



TT GP HPV MM-HSK Form A • Without Hub

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867282	HSK80AHPVTT03085M	3	9	15	85	50	14	10	TTSS05014M	2,5mm	1,34
3867283	HSK80AHPVTT04085M	4	9	15	85	50	15	10	TTSS05014M	2,5mm	1,34
3867284	HSK80AHPVTT05085M	5	9	15	85	50	15	10	TTSS06014M	3mm	1,34

Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

TT GP HPV In-HSK Form A

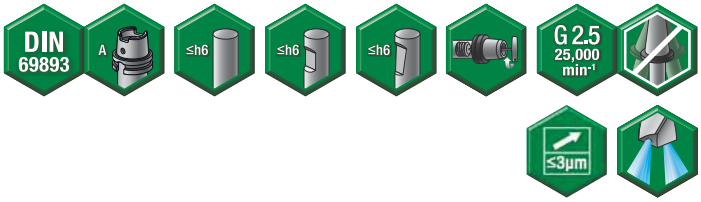
order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3863755	HSK80AHPVTT025335	1/4	.83	1.06	3.35	2.32	1.02	.39	TTSS05014M	2,5mm	2.83
3863756	HSK80AHPVTT031335	5/16	.83	1.06	3.35	2.32	1.02	.39	TTSS06014M	3mm	2.82
3863757	HSK80AHPVTT038354	3/8	.94	1.26	3.54	2.52	1.22	.39	TTSS08014M	4mm	3.01
3863758	HSK80AHPVTT044374	7/16	.94	1.26	3.74	2.72	1.42	.39	TTSS10014M	5mm	3.05
3863759	HSK80AHPVTT050374	1/2	.94	1.26	3.74	2.72	1.42	.39	TTSS10014M	5mm	3.03
3863760	HSK80AHPVTT056374	9/16	1.06	1.33	3.74	2.72	1.42	.39	TTSS10014M	5mm	3.15
3863761	HSK80AHPVTT062394	5/8	1.06	1.33	3.94	2.92	1.54	.39	TTSS12014M	6mm	3.18
3863762	HSK80AHPVTT075413	3/4	1.30	1.65	4.13	3.11	1.61	.39	TTSS16014M	8mm	3.66
3863763	HSK80AHPVTT088413	7/8	1.30	1.65	4.13	3.11	1.61	.39	TTSS16014M	8mm	3.57
3863764	HSK80AHPVTT100453	1	1.73	2.08	4.53	3.51	1.85	.39	TTSS16014M	8mm	4.81
3863765	HSK80AHPVTT125472	1 1/4	1.73	2.08	4.72	3.70	2.01	.39	TTSS16014M	8mm	4.66
3863766	HSK80AHPVTT150512	1 1/2	2.36	2.75	5.12	4.10	2.01	.39	TTSS20014M	10mm	7.25
3863767	HSK80AHPVTT200551	2	2.72	3.11	5.51	4.49	2.20	.39	TTSS20014M	10mm	8.49

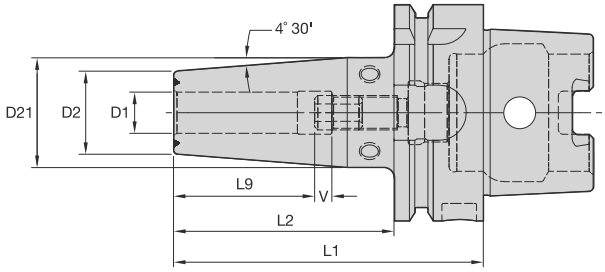
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK80A Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

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■ TT HT HPV MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867213	HSK80AHPVTTHT12095M	12	24	32	95	69	36	10	TTSS10014M	5mm	1,38
3867214	HSK80AHPVTTHT14095M	14	27	34	95	69	36	10	TTSS10014M	5mm	1,44
3867215	HSK80AHPVTTHT16100M	16	27	34	100	74	39	10	TTSS12014M	6mm	1,45
3867216	HSK80AHPVTTHT18100M	18	33	42	100	74	39	10	TTSS12014M	6mm	1,64
3867217	HSK80AHPVTTHT20105M	20	33	42	105	79	41	10	TTSS16014M	8mm	1,65
3867218	HSK80AHPVTTHT25115M	25	44	53	115	89	47	10	TTSS16014M	8mm	2,19
3867219	HSK80AHPVTTHT32120M	32	44	53	120	94	51	10	TTSS16014M	8mm	2,12
3867220	HSK80AHPVTTHT40130M	40	60	70	130	104	51	10	TTSS20014M	10mm	3,23
3867221	HSK80AHPVTTHT50140M	50	69	79	140	114	56	10	TTSS20014M	10mm	3,88

(continued)

(TT HT HPV continued)

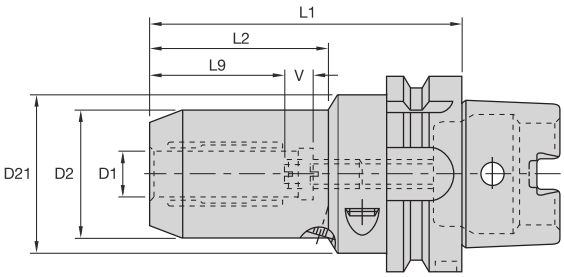
Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2, 9/16 & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

TT HT HPV In-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3862011	**HSK80AHPVTTHT050374**	1/2	.94	1.26	3.74	2.72	1.42	.39	**TTSS10014M**	5mm	3.03
3862012	**HSK80AHPVTTHT056374**	9/16	1.06	1.33	3.74	2.72	1.42	.39	**TTSS10014M**	5mm	3.15
3862393	**HSK80AHPVTTHT062394**	5/8	1.06	1.33	3.94	2.92	1.54	.39	**TTSS12014M**	6mm	3.18
3862394	**HSK80AHPVTTHT075413**	3/4	1.30	1.65	4.13	3.11	1.61	.39	**TTSS16014M**	8mm	3.66
3862395	**HSK80AHPVTTHT088413**	7/8	1.30	1.65	4.13	3.11	1.61	.39	**TTSS16014M**	8mm	3.57
3862396	**HSK80AHPVTTHT100453**	1	1.73	2.08	4.53	3.51	1.85	.39	**TTSS16014M**	8mm	4.81
3862397	**HSK80AHPVTTHT125472**	1 1/4	1.73	2.08	4.72	3.70	2.01	.39	**TTSS16014M**	8mm	4.66
3862398	**HSK80AHPVTTHT150512**	1 1/2	2.36	2.75	5.12	4.10	2.01	.39	**TTSS20014M**	10mm	7.25
3862399	**HSK80AHPVTTHT200551**	2	2.72	3.11	5.51	4.49	2.20	.39	**TTSS20014M**	10mm	8.49

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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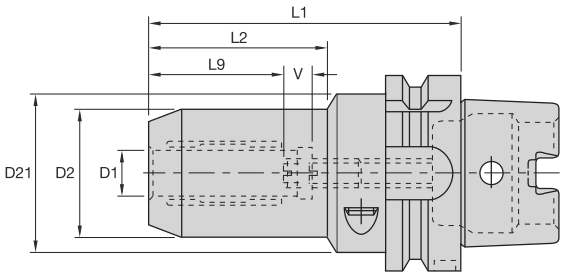
HC MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1960122	**HSK80AHC06085M**	6	25,7	50	85	35	27	10	**170.135**	5mm	**170.002**	2,5mm	1,5
1960133	**HSK80AHC08085M**	8	27,7	50	85	36	27	10	**170.135**	5mm	**170.002**	2,5mm	1,5
1960134	**HSK80AHC10090M**	10	29,7	50	90	38	31	10	**170.135**	5mm	**170.002**	2,5mm	1,6
1960135	**HSK80AHC12095M**	12	31,6	50	95	43	36	10	**170.135**	5mm	**170.002**	2,5mm	1,6
1960136	**HSK80AHC14095M**	14	33,6	50	95	43	36	10	**170.135**	5mm	**170.003**	3mm	1,6
1960137	**HSK80AHC16100M**	16	37,6	50	100	46	39	10	**170.135**	5mm	**170.003**	3mm	1,7
1960138	**HSK80AHC18100M**	18	39,6	50	100	48	39	10	**170.135**	5mm	**170.003**	3mm	1,8
1960139	**HSK80AHC20105M**	20	41,6	50	105	54	41	10	**170.135**	5mm	**170.003**	3mm	1,8
1960140	**HSK80AHC25115M**	25	49,8	63	115	51	47	10	**170.136**	6mm	**170.004**	4mm	2,4
1960141	**HSK80AHC32125M**	32	59,8	63	125	59	51	10	**170.136**	6mm	**170.004**	4mm	2,8

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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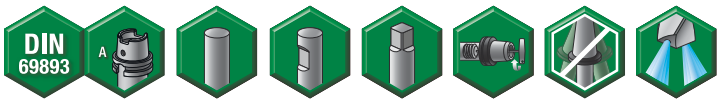
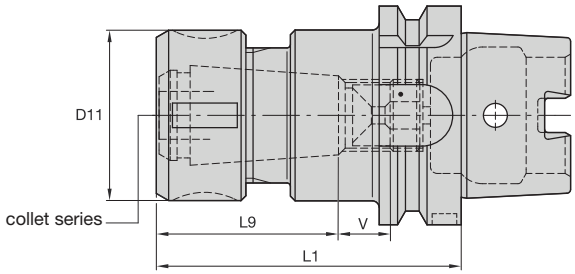
HC Trend MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	kg
1749613	**HSK80AHCT06085M**	6	25,7	50	85	36	27	10	**170.135**	5mm	1,51
1749614	**HSK80AHCT08085M**	8	27,7	50	85	37	27	10	**170.135**	5mm	1,52
1749615	**HSK80AHCT10090M**	10	29,7	50	90	39	31	10	**170.135**	5mm	1,57
1749616	**HSK80AHCT12095M**	12	31,6	50	95	45	36	10	**170.135**	5mm	1,61
1749617	**HSK80AHCT14095M**	14	33,6	50	95	46	36	10	**170.135**	5mm	1,63
1749618	**HSK80AHCT16100M**	16	37,6	50	100	52	39	10	**170.135**	5mm	1,74
1749619	**HSK80AHCT18100M**	18	39,6	50	100	52	39	10	**170.135**	5mm	1,79
1749620	**HSK80AHCT20105M**	20	41,6	50	105	58	41	10	**170.135**	5mm	1,83
1749621	**HSK80AHCT25115M**	25	49,8	63	115	51	47	10	**170.136**	6mm	2,45
1749622	**HSK80AHCT32125M**	32	59,8	63	125	59	51	10	**170.136**	6mm	2,85

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Tremendous Grip (3:1 advantage).





	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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TG Round-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap	kg
1860140	**HSK80ATG075120M**	TG75	50	120	54	13	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	**SSCC081**	2,16
1860141	**HSK80ATG100140M**	TG100	60	140	70	12	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	**SSCC112**	2,92

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

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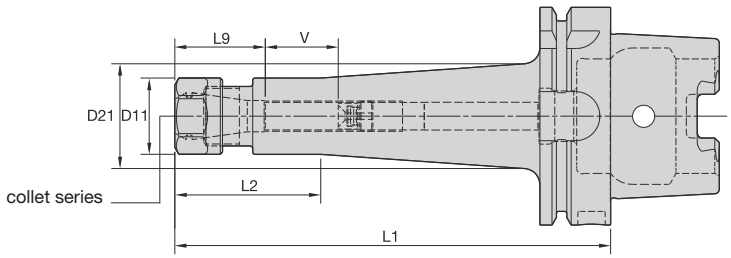


	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON

ER Hex • HSK Form A

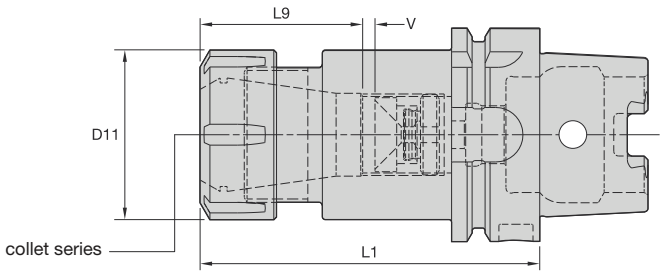
order number	catalog number	collet series	D11	D21	L1	L2	L9	V	kg
1727216	**HSK80AER16100M**	ER16	28	—	100	74	32	22	1,36
1778237	**HSK80AER16160M**	ER16	28	39	160	54	32	38	1,77
1885325	**HSK80AER20100M**	ER20	34	—	100	62	36	14	1,47

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	stop screw cone cap
HSK80AER16100M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32	**SSCC044**
HSK80AER16160M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32	**SSCC044**
HSK80AER20100M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32	**SSCC056**

(continued)

(ER continued)



ERICKSON

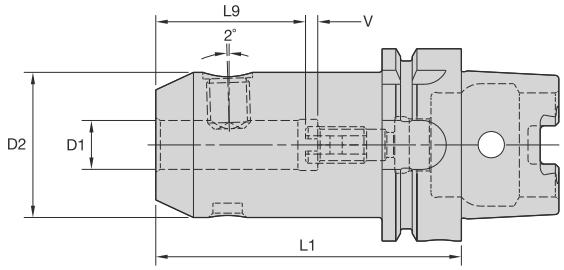
ER Round • HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
1751709	**HSK80AER25100M**	ER25	42	100	40	7	1,63
1727217	**HSK80AER32100M**	ER32	50	100	46	6	1,83
1727218	**HSK80AER40120M**	ER40	63	120	52	6	2,66

Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap
HSK80AER25100M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32	**SSCC075**
HSK80AER32100M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32	**SSCC094**
HSK80AER40120M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32	**SSCC112**

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

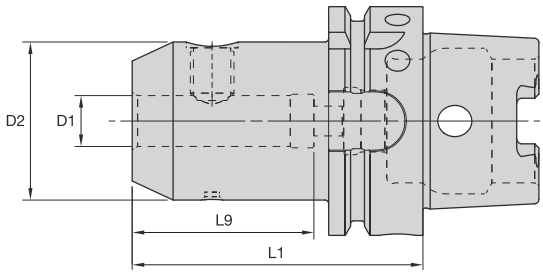


ERICKSON

■ WN MM • HSK Form A

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1885322	**HSK80AWN06090M**	6	25	90	30	10	**SS03M012**	3mm	7	**571.060**	2,5mm	1,30
1885443	**HSK80AWN08090M**	8	28	90	30	10	**SS03M014**	4mm	15	**571.067**	3mm	1,36
1750661	**HSK80AWN10090M**	10	35	90	33	10	**SS03M018**	5mm	25	**571.068**	4mm	1,52
1729444	**HSK80AWN12100M**	12	42	100	40	10	**SS03M023**	6mm	35	**571.074**	5mm	1,78
1885444	**HSK80AWN14100M**	14	44	100	40	10	**SS03M023**	6mm	35	**571.074**	5mm	1,84
1885445	**HSK80AWN16100M**	16	48	100	43	10	**SS03M025**	6mm	50	**571.075**	6mm	1,98
1885446	**HSK80AWN18100M**	18	50	100	43	10	**SS03M025**	6mm	50	**571.075**	6mm	2,04
1748577	**HSK80AWN20110M**	20	52	110	45	10	**SS03M026**	8mm	95	**571.076**	6mm	2,26
1730388	**HSK80AWN25110M**	25	65	110	50	10	**SS03M027**	10mm	135	**571.077**	6mm	2,90
1730699	**HSK80AWN32120M**	32	72	120	54	10	**SS03M029**	10mm	160	**571.077**	6mm	3,45

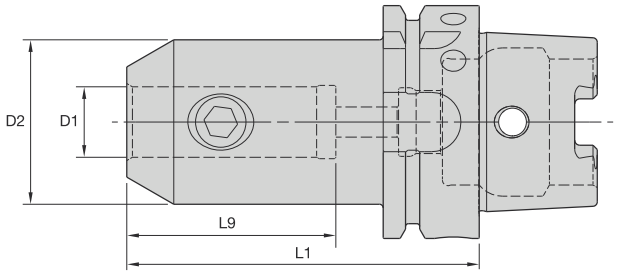
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



ERICKSON

■ EM MM • HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1727202	HSK80AEM06080M	6	25	80	54	SS03M012	3mm	7	1,26
1727203	HSK80AEM08080M	8	28	80	54	SS03M014	4mm	15	1,31
1727204	HSK80AEM10080M	10	35	80	45	SS03M018	5mm	25	1,44
1727205	HSK80AEM12080M	12	42	80	50	SS03M023	6mm	35	1,57
1885447	HSK80AEM14080M	14	44	80	50	SS03M023	6mm	35	1,61
1885448	HSK80AEM16100M	16	48	100	53	SS03M025	6mm	50	1,97
1885449	HSK80AEM18100M	18	50	100	53	SS03M025	6mm	50	2,04
1778182	HSK80AEM20100M	20	52	100	55	SS03M026	8mm	95	2,09
1885450	HSK80AEM25100M	25	65	100	60	SS03M027	10mm	135	2,63
1727209	HSK80AEM32110M	32	72	110	65	SS03M029	10mm	160	3,15



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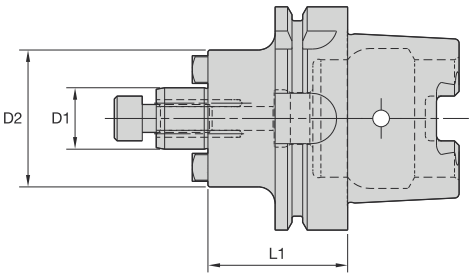
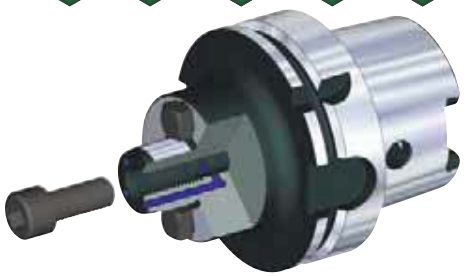
■ EM IN • HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1860166	HSK80AEM038300	3/8	1.00	3.00	2	ELS038031PKG	3/16	15	3
1860167	HSK80AEM050325	1/2	1.38	3.25	2	ELS044038PKG	7/32	20	3
1860168	HSK80AEM062375	5/8	1.63	3.75	2	ELS056050PKG	1/4	40	4
1860169	HSK80AEM075375	3/4	1.75	3.75	2	ELS062050PKG	5/16	70	4
1860170	HSK80AEM100425	1	2.00	4.25	2	ELS075056PKG	3/8	110	5
1860171	HSK80AEM125425	1 1/4	2.50	4.25	3	ELS075062PKG	3/8	110	6

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

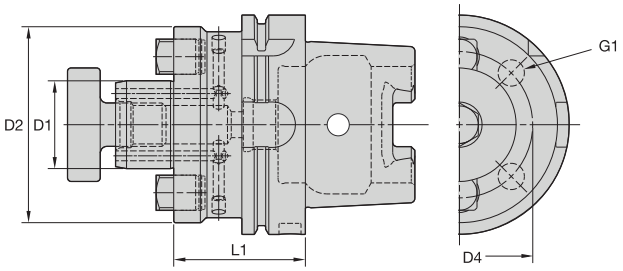


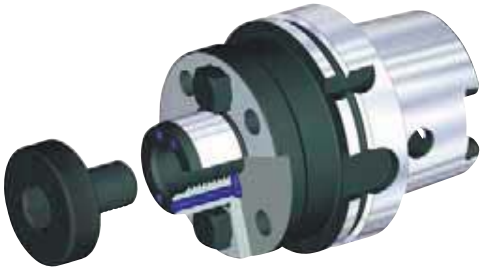


ERICKSON

SMC Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	kg
3872280	HSK80ASM2C22050M	22	42	50	MS1234	–	8mm	1,40
3872279	HSK80ASMC22050M	22	49	50	MS1234	KDK22M	8mm	1,49



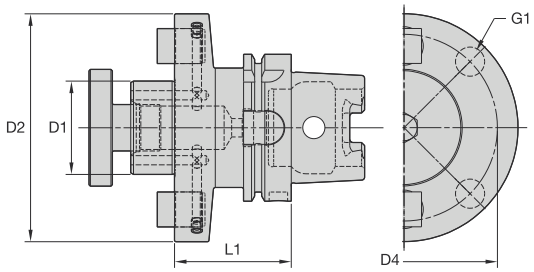


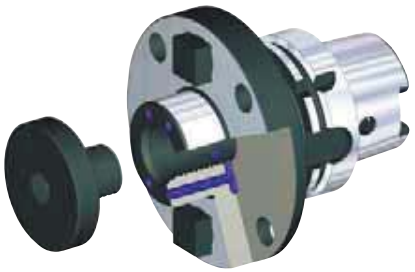
SMC Lock MM-HSK Form A

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	locknut wrench	kg
3872281	HSK80ASMC27050M	27	60	–	–	50	KLSS27M	KDK27M	10mm	–	1,73
3872282	HSK80ASMC32060M	32	78	–	–	60	KLSS32M	KDK32M	14mm	–	2,39
3872493	HSK80ASMC40060M	40	89	67	M12X1.75	60	KLSS40M	KDK40M	17mm	–	2,73
3872494	HSK80ASMC50070M	50	98	–	–	70	KLS50M	–	–	SMW50M	3,42
3872495	HSK80ASMC60070M	60	129	102	M16X2.0	70	–	KDK60M	–	–	4,49

(continued)

(SMC continued)

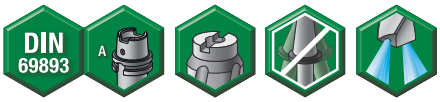


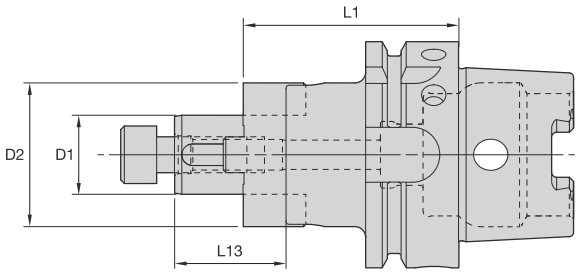


SMC Lock IN-HSK Form A

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
3762772	**HSK80ASM2C075225**	3/4	1.457	—	—	2.250	**KLS07**	**—**	1/4	3.05
3762771	**HSK80ASMC075225**	3/4	1.752	—	—	2.250	**KLS07**	**KDK05**	1/4	3.31
3763064	**HSK80ASM2C100225**	1	2.189	—	—	2.250	**KLS10**	**KDK06**	5/16	3.88
3763063	**HSK80ASMC100225**	1	2.752	—	—	2.250	**KLS10**	**KDK06**	5/16	4.47
3763065	**HSK80ASMC125250**	1 1/4	2.878	—	—	2.500	**KLS12**	**KDK08**	5/16	5.18
3763066	**HSK80ASMC150250**	1 1/2	3.811	—	—	2.500	**KLS15**	**KDK10**	3/8	6.57
3763067	**HSK80ASMC200250**	2	4.882	.158	.625-11 UNC	2.500	**KLS20**	**KDK12**	9/16	8.61
3763068	**HSK80ASMC250250**	2 1/2	4.882	.158	.625-11 UNC	2.500	**KLS25**	**KDK16**	9/16	9.77

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.
HSK80ASMC250250 supplied with four locking bolts (S-388).

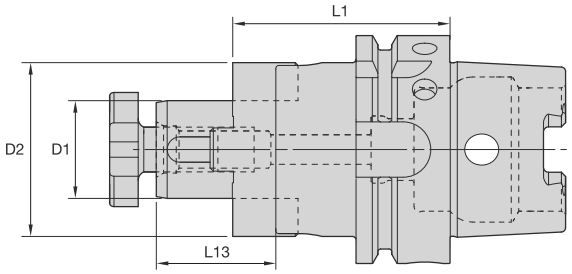




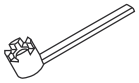
ERICKSON

■ CS • Cap Screw Design • HSK Form A

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	Nm	combi driver ring	combi drive key	kg
1839882	HSK80ACS16060M	16	32	60	27	MS1294	6mm	40	CDR16M	CDK16M	1,33
1778235	HSK80ACS22060M	22	40	60	31	MS1234	8mm	60	CDR22M	CDK22M	1,49



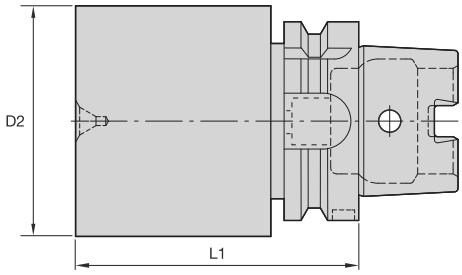
■ CS • Lock Screw Design • HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	wrench	combi driver ring	combi drive key	kg
1730386	HSK80ACS27060M	27	48	60	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	1,67
1730387	HSK80ACS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M	1,96
1878181	HSK80ACS40070M	40	70	70	41	KLS40M	SMW40M	CDR40M	CDK40M	2,69
1126837	HSK80ACS50080M	50	90	80	46	KLS50M	SMW50M	CDR50M	CDK50M	4,01

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.

• Machinable front 32–38 RW C.



ERICKSON

BB-HSK Form A

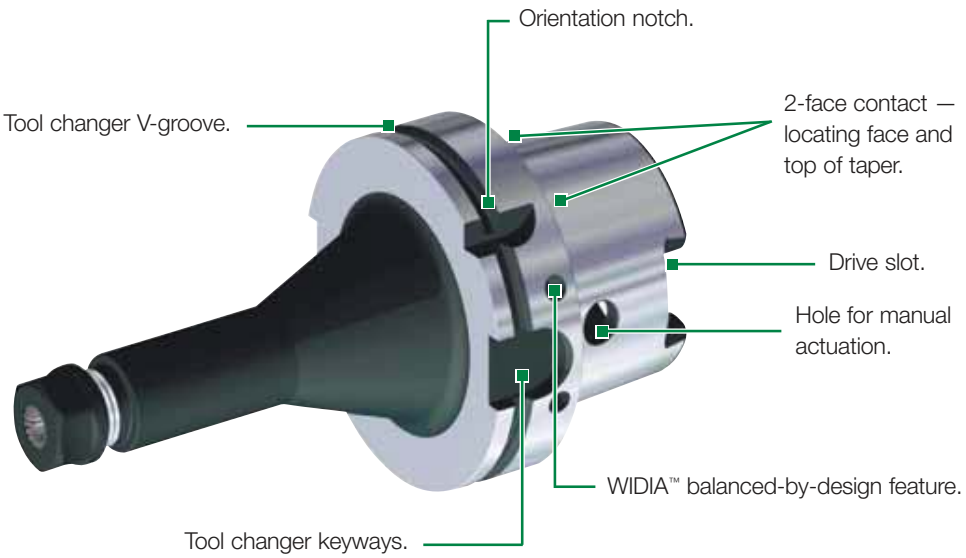
order number	catalog number	D2	L1	kg
1860172	**HSK80ABB100250M**	100,8	250	14,47
1860203	**HSK80ABB150150M**	150,8	150	16,51

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

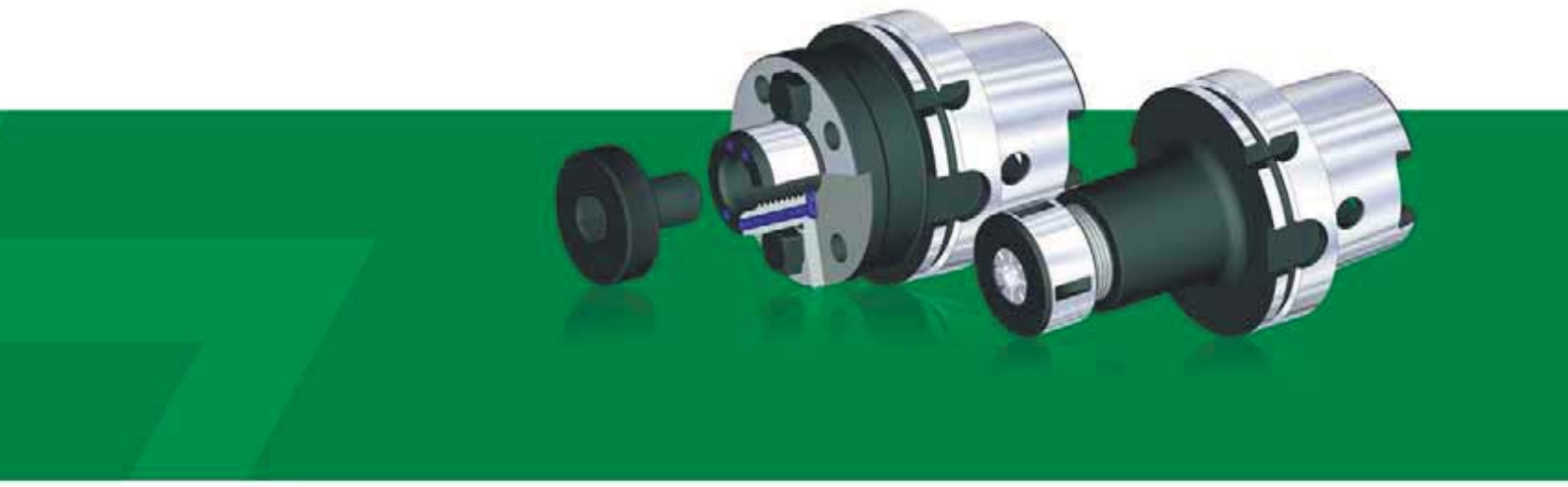
Erickson™ HSK Shank Tooling System • **HSK100A Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form A versions are generally used in machining centers and milling machines with automatic tool changers.

HSK100A



The HSK100A tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, coolant tubes, collets, hardware, and cutting tools) be balanced as one identity.

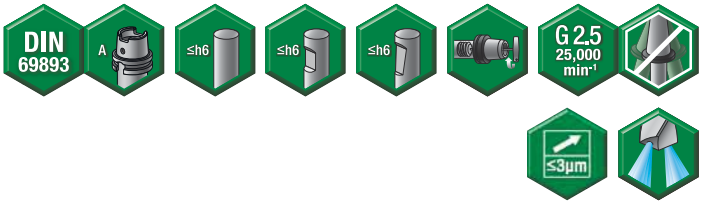


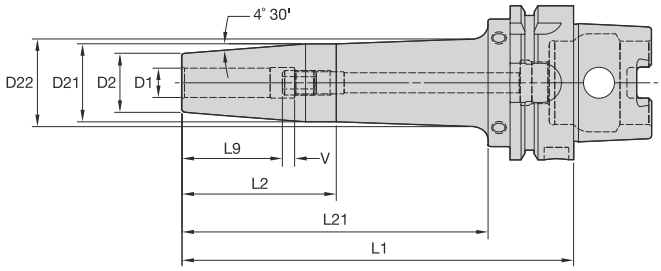
- ISO 12164-1/DIN 69893-1 Form A 1:10 short taper.
- High axial and radial repeatability compared to CAT, BT, and DV V-flange 7/24 taper tooling.
- Maximum 12,500 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK100A Shank Tools

Shrink Fit Toolholders General Purpose (GP)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3866701	HSK100AHPVTT06085M	6	21	27	—	85	56	—	26	10	TTSS05014M	2,5mm	2,18
3866711	HSK100AHPVTT06160M	6	21	27	32	160	50	122	26	10	TTSS05014M	2,5mm	2,86
3866702	HSK100AHPVTT08085M	8	21	27	—	85	56	—	26	10	TTSS06014M	3mm	2,18
3866712	HSK100AHPVTT08160M	8	21	27	32	160	50	122	26	10	TTSS06014M	3mm	2,85
3866703	HSK100AHPVTT10090M	10	24	32	—	90	61	—	31	10	TTSS08014M	4mm	2,26
3866713	HSK100AHPVTT10160M	10	24	32	36	160	63	122	31	10	TTSS08014M	4mm	3,02
3866704	HSK100AHPVTT12095M	12	24	32	—	95	66	—	36	10	TTSS10014M	5mm	2,27
3866714	HSK100AHPVTT12160M	12	24	32	36	160	63	122	36	10	TTSS10014M	5mm	3,00
3866705	HSK100AHPVTT14095M	14	27	34	—	95	66	—	36	10	TTSS10014M	5mm	2,33
3866715	HSK100AHPVTT14160M	14	27	34	38	160	57	122	36	10	TTSS10014M	5mm	3,11
3866706	HSK100AHPVTT16100M	16	27	34	—	100	71	—	39	10	TTSS12014M	6mm	2,33
3866716	HSK100AHPVTT16160M	16	27	34	38	160	57	122	39	10	TTSS12014M	6mm	3,09
3866707	HSK100AHPVTT18100M	18	33	42	—	100	71	—	39	10	TTSS12014M	6mm	2,52
3866717	HSK100AHPVTT18160M	18	33	42	46	160	69	122	39	10	TTSS12014M	6mm	3,45
3866708	HSK100AHPVTT20105M	20	33	42	—	105	76	—	41	10	TTSS16014M	8mm	2,53
3866718	HSK100AHPVTT20160M	20	33	42	46	160	69	122	41	10	TTSS16014M	8mm	3,42
3866709	HSK100AHPVTT25115M	25	44	53	—	115	86	—	47	10	TTSS16014M	8mm	3,06
3866719	HSK100AHPVTT25160M	25	44	53	57	160	69	122	47	10	TTSS16014M	8mm	4,09
3866710	HSK100AHPVTT32120M	32	44	53	—	120	91	—	51	10	TTSS16014M	8mm	2,98
3866720	HSK100AHPVTT32160M	32	44	53	57	160	69	122	51	10	TTSS16014M	8mm	3,93

(continued)

(TT GP HPV continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
1/2 & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, & 1-1/2	.0000/-.0005

TT GP HPV In-HSK Form A

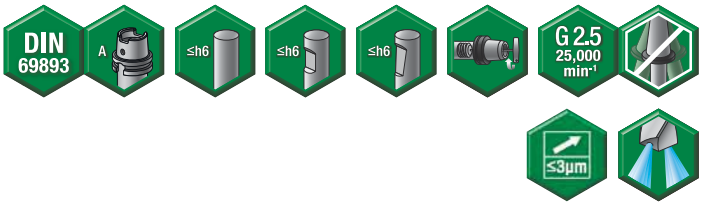
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3863572	**HSK100AHPVTT025335**	1/4	.83	1.06	—	3.35	2.21	—	1.02	.39	**TTSS05014M**	2,5mm	4.81
3863643	**HSK100AHPVTT025630**	1/4	.83	1.06	1.26	6.30	1.97	4.81	1.02	.39	**TTSS05014M**	2,5mm	6.31
3863644	**HSK100AHPVTT031335**	5/16	.83	1.06	—	3.35	2.21	—	1.02	.39	**TTSS06014M**	3mm	4.80
3863645	**HSK100AHPVTT031630**	5/16	.83	1.06	1.26	6.30	1.97	4.81	1.02	.39	**TTSS06014M**	3mm	6.29
3863646	**HSK100AHPVTT038354**	3/8	.94	1.26	—	3.54	2.40	—	1.22	.39	**TTSS08014M**	4mm	4.98
3863647	**HSK100AHPVTT038630**	3/8	.94	1.26	1.42	6.30	2.48	4.81	1.22	.39	**TTSS08014M**	4mm	6.65
3863648	**HSK100AHPVTT050374**	1/2	.94	1.26	—	3.74	2.60	—	1.42	.39	**TTSS10014M**	5mm	5.00
3863649	**HSK100AHPVTT050630**	1/2	.94	1.26	1.42	6.30	2.48	4.81	1.42	.39	**TTSS10014M**	5mm	6.61
3863650	**HSK100AHPVTT062394**	5/8	1.06	1.33	—	3.94	2.80	—	1.54	.39	**TTSS12014M**	6mm	5.15
3863651	**HSK100AHPVTT062630**	5/8	1.06	1.33	1.51	6.30	2.24	4.81	1.54	.39	**TTSS12014M**	6mm	6.82
3863652	**HSK100AHPVTT075413**	3/4	1.30	1.65	—	4.13	2.99	—	1.61	.39	**TTSS16014M**	8mm	5.61
3863653	**HSK100AHPVTT075630**	3/4	1.30	1.65	1.80	6.30	2.72	4.81	1.61	.39	**TTSS16014M**	8mm	7.56
3863654	**HSK100AHPVTT088413**	7/8	1.30	1.65	—	4.13	2.99	—	1.61	.39	**TTSS16014M**	8mm	5.52
3863655	**HSK100AHPVTT088630**	7/8	1.30	1.65	1.80	6.30	2.72	4.81	1.61	.39	**TTSS16014M**	8mm	7.47
3863656	**HSK100AHPVTT100453**	1	1.73	2.08	—	4.53	3.39	—	1.85	.39	**TTSS16014M**	8mm	6.72
3863657	**HSK100AHPVTT100630**	1	1.73	2.08	2.23	6.30	2.72	4.81	1.85	.39	**TTSS16014M**	8mm	9.00
3863658	**HSK100AHPVTT125472**	1 1/4	1.73	2.08	—	4.72	3.58	—	2.01	.39	**TTSS16014M**	8mm	6.57
3863659	**HSK100AHPVTT125630**	1 1/4	1.73	2.08	2.23	6.30	2.72	4.81	2.01	.39	**TTSS16014M**	8mm	8.67
3863660	**HSK100AHPVTT150531**	1 1/2	2.36	2.75	—	5.31	4.18	—	2.01	.39	**TTSS20014M**	10mm	9.50

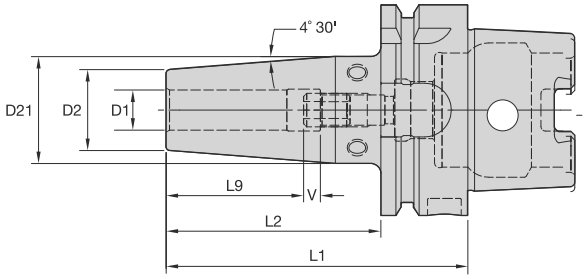
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK100A Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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■ TT HT HPV MM-HSK Form A

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867222	HSK100AHPVTTHT12095M	12	24	32	95	66	36	10	TTSS10014M	5mm	2,28
3867223	HSK100AHPVTTHT14095M	14	27	34	95	66	36	10	TTSS10014M	5mm	2,33
3867224	HSK100AHPVTTHT16100M	16	27	34	100	71	39	10	TTSS12014M	6mm	2,33
3867225	HSK100AHPVTTHT18100M	18	33	42	100	71	39	10	TTSS12014M	6mm	2,52
3867226	HSK100AHPVTTHT20105M	20	33	42	105	76	41	10	TTSS16014M	8mm	2,53
3867227	HSK100AHPVTTHT25115M	25	44	53	115	86	47	10	TTSS16014M	8mm	3,06
3867228	HSK100AHPVTTHT32120M	32	44	53	120	91	51	10	TTSS16014M	8mm	2,98

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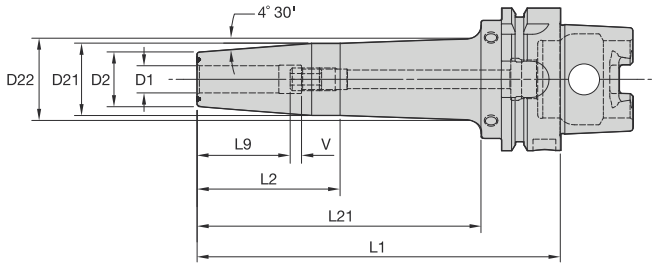
(TT HT HPV continued)



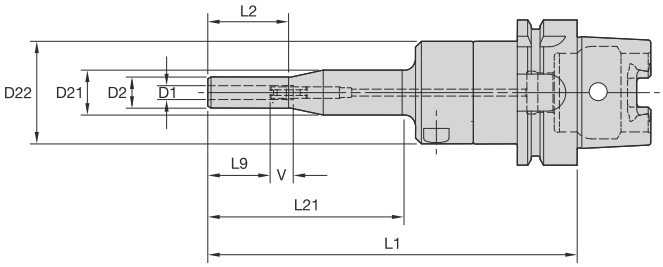
Cutting Tool Shank Requirements
inch (industry standard)

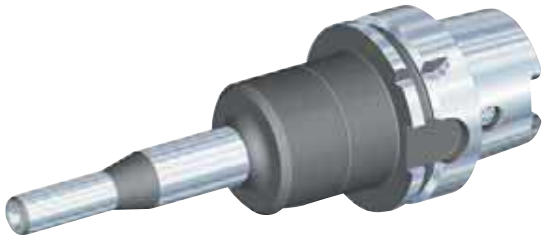
cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/-.0004
3/4, 7/8, 1, 1-1/4, & 1-1/2	.0000/-.0005

TT HT HPV IN-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3862400	**HSK100AHPVTTHT050374**	1/2	.94	1.26	—	3.74	2.60	—	1.42	.39	**TTSS10014M**	5mm	5.00
3862401	**HSK100AHPVTTHT050630**	1/2	.94	1.26	1.42	6.30	2.48	4.81	1.42	.39	**TTSS10014M**	5mm	6.61
3862402	**HSK100AHPVTTHT062394**	5/8	1.06	1.33	—	3.94	2.80	—	1.54	.39	**TTSS12014M**	6mm	5.15
3862403	**HSK100AHPVTTHT062630**	5/8	1.06	1.33	1.51	6.30	2.24	4.81	1.54	.39	**TTSS12014M**	6mm	6.82
3862404	**HSK100AHPVTTHT075413**	3/4	1.30	1.65	—	4.13	2.99	—	1.61	.39	**TTSS16014M**	8mm	5.61
3862405	**HSK100AHPVTTHT075630**	3/4	1.30	1.65	1.80	6.30	2.72	4.81	1.61	.39	**TTSS16014M**	8mm	7.56
3862406	**HSK100AHPVTTHT088413**	7/8	1.30	1.65	—	4.13	2.99	—	1.61	.39	**TTSS16014M**	8mm	5.52
3862407	**HSK100AHPVTTHT088630**	7/8	1.30	1.65	1.80	6.30	2.72	4.81	1.61	.39	**TTSS16014M**	8mm	7.47
3862408	**HSK100AHPVTTHT100453**	1	1.73	2.08	—	4.53	3.39	—	1.85	.39	**TTSS16014M**	8mm	6.72
3862409	**HSK100AHPVTTHT100630**	1	1.73	2.08	2.23	6.30	2.72	4.81	1.85	.39	**TTSS16014M**	8mm	8.99
3862410	**HSK100AHPVTTHT125472**	1 1/4	1.73	2.08	—	4.72	3.58	—	2.01	.39	**TTSS16014M**	8mm	6.57
3862411	**HSK100AHPVTTHT125630**	1 1/4	1.73	2.08	2.23	6.30	2.72	4.81	2.01	.39	**TTSS16014M**	8mm	8.66
3862412	**HSK100AHPVTTHT150531**	1 1/2	2.36	2.75	—	5.31	4.18	—	2.01	.39	**TTSS20014M**	10mm	9.48

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





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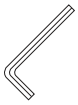
HC Slim-T MM-HSK Form A

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	kg
3061086	**HSK100AHCSLT06200M**	6	13,5	19,5	44	200	35	85	27	10	3,08
3061087	**HSK100AHCSLT08200M**	8	15,5	19,5	44	200	35	85	27	10	3,09
3061088	**HSK100AHCSLT10200M**	10	17,5	44,5	–	200	85	171	31	10	3,08

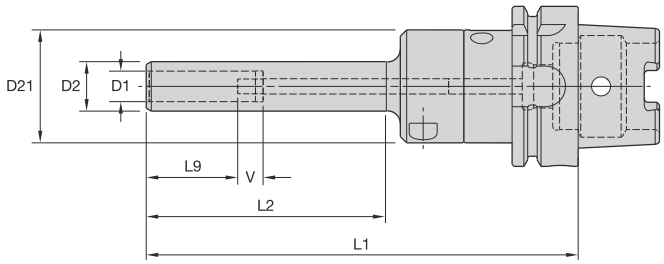
Spare Parts

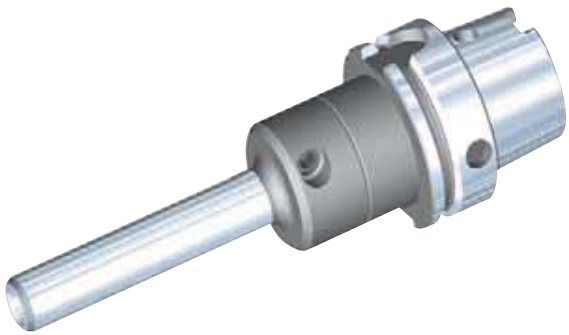


catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
HSK100AHCSLT06200M	**170.135**	5mm	**170.002**	2,5mm
HSK100AHCSLT08200M	**170.135**	5mm	**170.002**	2,5mm
HSK100AHCSLT10200M	**170.135**	5mm	**170.003**	3mm

(continued)

(HC Slim continued)

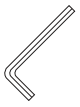




HC Slim MM-HSK Form A

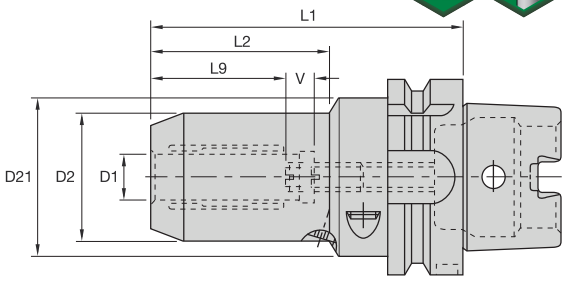
order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
3061089	**HSK100AHCSL12200M**	12	19,5	44,5	200	95	36	10	3,00
3061090	**HSK100AHCSL14200M**	14	21,5	52,5	200	95	36	10	3,37
3061091	**HSK100AHCSL16200M**	16	23,5	52,5	200	95	39	10	3,38
3061092	**HSK100AHCSL18200M**	18	25,5	52,5	200	95	39	10	3,42
3061263	**HSK100AHCSL20200M**	20	27,5	52,5	200	95	41	10	3,46

Spare Parts



catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
HSK100AHCSL12200M	**170.135**	5mm	**170.002**	2,5mm
HSK100AHCSL14200M	**170.135**	5mm	**170.002**	2,5mm
HSK100AHCSL16200M	**170.135**	5mm	**170.002**	2,5mm
HSK100AHCSL18200M	**170.135**	5mm	**170.002**	2,5mm
HSK100AHCSL20200M	**170.135**	5mm	**170.002**	2,5mm

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Activation wrench must be ordered separately.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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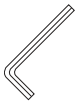
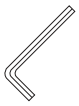
HC MM-HSK Form A



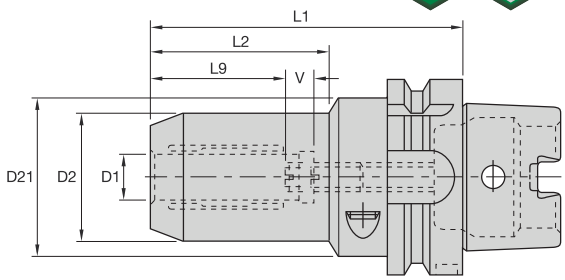
order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1245483	HSK100AHC06085M	6	25,7	63	85	33	27	10	170.135	5mm	170.002	2,5mm	2,57
2229193	HSK100AHC06150M	6	25,7	63	150	90	27	10	170.135	5mm	170.002	2,5mm	2,96
1245484	HSK100AHC08085M	8	27,7	63	85	33	27	10	170.135	5mm	170.002	2,5mm	2,59
2215823	HSK100AHC08150M	8	27,7	63	150	90	27	10	170.135	5mm	170.002	2,5mm	3,00
1245485	HSK100AHC10090M	10	29,7	63	90	38	31	10	170.135	5mm	170.002	2,5mm	2,64
2229194	HSK100AHC10150M	10	29,7	63	150	94	31	10	170.135	5mm	170.002	2,5mm	3,00
1245486	HSK100AHC12095M	12	31,6	63	95	41	36	10	170.135	5mm	170.002	2,5mm	3,80
2229195	HSK100AHC12150M	12	31,6	63	150	100	36	10	170.135	5mm	170.002	2,5mm	2,94
1245487	HSK100AHC14095M	14	33,6	63	95	42	36	10	170.135	5mm	170.003	3mm	4,00
2229196	HSK100AHC14150M	14	33,6	63	150	92	36	10	170.135	5mm	170.003	3mm	3,10
1245488	HSK100AHC16100M	16	37,6	63	100	48	39	10	170.135	5mm	170.003	3mm	4,00
2229197	HSK100AHC16150M	16	37,6	63	150	96	39	10	170.135	5mm	170.003	3mm	3,20
1245489	HSK100AHC18100M	18	39,6	63	100	48	39	10	170.135	5mm	170.003	3mm	2,78
2229198	HSK100AHC18150M	18	39,6	63	150	96	39	10	170.135	5mm	170.003	3mm	3,28
1245490	HSK100AHC20105M	20	41,6	63	105	54	41	10	170.135	5mm	170.003	3mm	4,20
2229199	HSK100AHC20150M	20	41,6	63	150	100	41	10	170.135	5mm	170.003	3mm	3,31
1245491	HSK100AHC25115M	25	49,8	63	115	51	47	10	170.136	6mm	170.004	4mm	3,27
2229200	HSK100AHC25200M	25	49,8	63	200	137	47	10	170.136	6mm	170.004	4mm	4,50
1245492	HSK100AHC32120M	32	59,8	63	120	59	51	10	170.136	6mm	170.004	4mm	3,55
2229201	HSK100AHC32200M	32	59,8	63	200	139	51	10	170.136	6mm	170.004	4mm	5,26

HC IN-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
1246557	HSK100AHC038350	3/8	1.17	2.48	3.50	1.38	1.22	.4	170.135	5mm	170.002	2,5mm	5.84
1246560	HSK100AHC050375	1/2	1.24	2.48	3.75	1.59	1.42	.4	170.135	5mm	170.002	2,5mm	5.95
1246563	HSK100AHC062400	5/8	1.48	2.48	4.00	1.87	1.54	.4	170.135	5mm	170.003	3mm	6.17
1246567	HSK100AHC075425	3/4	1.64	2.48	4.25	2.13	1.61	.4	170.135	5mm	170.003	3mm	6.39
1246569	HSK100AHC100475	1	1.95	2.48	4.75	2.01	1.81	.4	170.136	6mm	170.004	4mm	7.28
1246573	HSK100AHC125500	1 1/4	2.36	2.48	5.00	2.32	1.97	.4	170.136	6mm	170.004	4mm	7.94

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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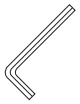
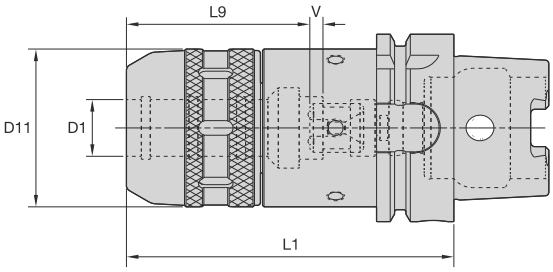
HC Trend MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1749601	**HSK100AHCT06085M**	6	25,7	63	85	33	27	10	**170.135**	5mm	**170.003**	3mm	2,61
1749602	**HSK100AHCT08085M**	8	27,7	63	85	33	27	10	**170.135**	5mm	**170.003**	3mm	2,63
1749603	**HSK100AHCT10090M**	10	29,7	63	90	38	31	10	**170.135**	5mm	**170.003**	3mm	2,66
1749604	**HSK100AHCT12095M**	12	31,6	63	95	40	36	10	**170.135**	5mm	**170.003**	3mm	2,70
1749605	**HSK100AHCT14095M**	14	33,6	63	95	42	36	10	**170.135**	5mm	**170.005**	5mm	2,70
1749606	**HSK100AHCT16100M**	16	37,6	63	100	48	39	10	**170.135**	5mm	**170.005**	5mm	2,80
1749608	**HSK100AHCT18100M**	18	39,6	63	100	48	39	10	**170.135**	5mm	**170.005**	5mm	2,82
1749609	**HSK100AHCT20105M**	20	41,6	63	105	54	41	10	**170.135**	5mm	**170.005**	5mm	2,89
1749611	**HSK100AHCT25115M**	25	49,8	63	115	51	47	10	**170.136**	6mm	**170.005**	5mm	3,29
1749612	**HSK100AHCT32120M**	32	59,8	63	120	59	51	10	**170.136**	6mm	**170.005**	5mm	3,57

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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HPMC MM-HSK Form A

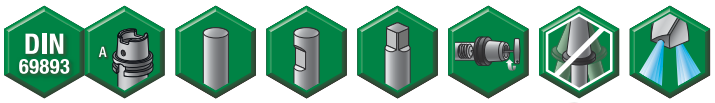
order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3100542	HSK100AHPMC20115M	20	53	115	54	10	PSW52M	MCSS16018M	2,5mm & 5mm	3,13
3100543	HSK100AHPMC32135M	32	70	135	68	10	PSW68M	MCSS16018M	2,5mm & 5mm	4,13

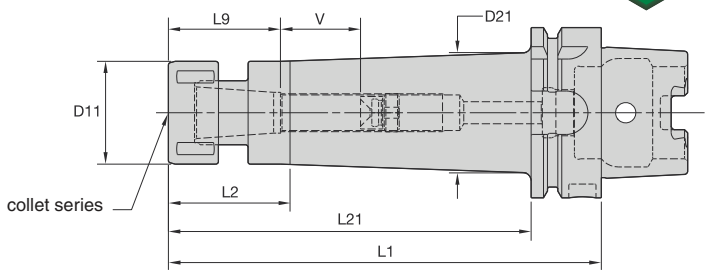
HPMC IN-HSK Form A

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100539	HSK100AHPMC075453	3/4	2.09	4.53	2.05	.4	PSW52M	MCSS16018M	2,5mm & 5mm	7.00
3100540	HSK100AHPMC100512	1	2.40	5.12	2.56	.4	PSW58M	MCSS16018M	2,5mm & 5mm	8.45
3100541	HSK100AHPMC125531	1 1/4	2.76	5.32	2.68	.4	PSW68M	MCSS16018M	2,5mm & 5mm	9.05

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Tremendous Grip (3:1 advantage).





Collet Capacity

TG collet series	mm min	mm max	inch min	inch max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

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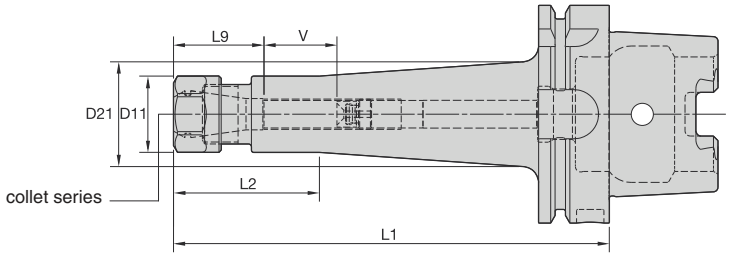
TG Round-HSK Form A

order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap	kg
1086586	**HSK100ATG050105M**	TG50	38	—	105	76	76	42	10	**LNA050M**	**HSW34M**	68	**SS056041G**	4mm & 5/32	**SSCC056**	2,48
1086587	**HSK100ATG050160M**	TG50	38	44	160	41	131	42	58	**LNA050M**	**HSW34M**	68	**SS056041G**	4mm & 5/32	**SSCC056**	3,06
1085040	**HSK100ATG075120M**	TG75	50	—	120	91	91	54	11	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	**SSCC081**	3,04
1086588	**HSK100ATG100140M**	TG100	60	—	140	111	111	70	12	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	**SSCC112**	3,79
1086589	**HSK100ATG150165M**	TG150	85	—	165	136	—	84	11	**LNA150M**	**HSW80M**	271	**SS162062G**	4mm & 5/32	**SSCC162**	6,40

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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ER Hex-HSK Form A

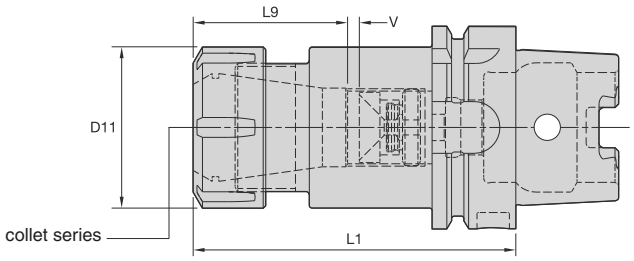
order number	catalog number	collet series	D11	D21	L1	L2	L9	V	kg
1086560	**HSK100AER16100M**	ER16	28	—	100	71	32	27	2,26
1086561	**HSK100AER16160M**	ER16	28	60	160	85	32	48	2,83
1086562	**HSK100AER20100M**	ER20	34	—	100	65	36	7	2,33

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	stop screw cone cap
HSK100AER16100M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32	**SSCC044**
HSK100AER16160M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32	**SSCC044**
HSK100AER20100M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32	**SSCC056**

(continued)

(ER-HSK Form A continued)



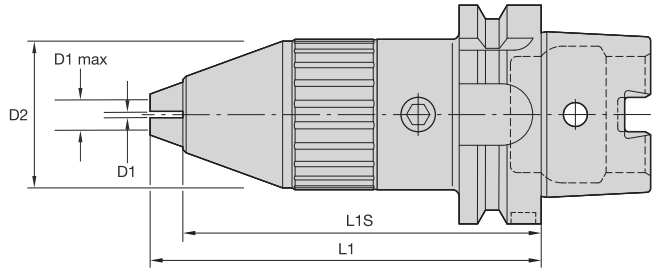
ER Round-HSK Form A

order number	catalog number	collet series	D11	L1	L9	V	kg
1086563	**HSK100AER25100M**	ER25	42	100	40	5	2,51
1086584	**HSK100AER32100M**	ER32	50	100	45	4	2,70
1086585	**HSK100AER40120M**	ER40	63	120	52	8	3,51

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw	stop screw cone cap
HSK100AER25100M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32	**SSCC075**
HSK100AER32100M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32	**SSCC094**
HSK100AER40120M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32	**SSCC112**

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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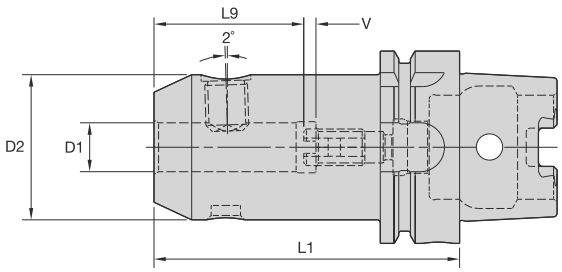
DC-HSK Form A

order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2	L1	L1S
2637153	HSK100ADC13125M	0,5	.020	13,0	.512	50	134	125
2637154	HSK100ADC16125M	3,0	.118	16,0	.630	52	135	125

NOTE: Locking wrench not supplied.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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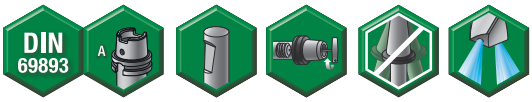
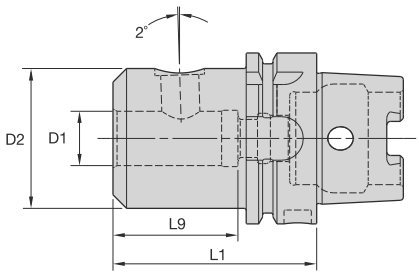
WN MM-HSK Form A

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1155902	HSK100AWN06090M	6	25	90	30	10	SS03M012	3mm	7	571.060	2,5mm	2,20
1155903	HSK100AWN08090M	8	28	90	30	10	SS03M014	4mm	15	571.067	3mm	2,26
1155904	HSK100AWN10090M	10	35	90	35	10	SS03M018	5mm	25	571.068	4mm	2,40
1155905	HSK100AWN12100M	12	42	100	40	10	SS03M023	6mm	35	571.074	5mm	2,65
1155906	HSK100AWN14100M	14	44	100	40	10	SS03M023	6mm	35	571.074	5mm	2,71
1155909	HSK100AWN16100M	16	48	100	43	10	SS03M025	6mm	50	571.069	6mm	2,84
1126240	HSK100AWN18100M	18	50	100	43	10	SS03M025	6mm	50	571.069	6mm	2,91
1155911	HSK100AWN20110M	20	52	110	45	10	SS03M026	8mm	95	571.076	6mm	3,11
1188828	HSK100AWN25120M	25	65	120	50	10	SS03M027	10mm	135	571.077	6mm	3,97
1188829	HSK100AWN32120M	32	72	120	54	10	SS03M029	10mm	160	571.077	6mm	4,34

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





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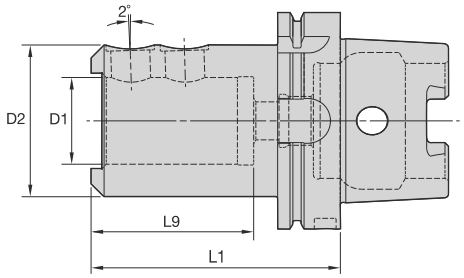
SWN MM-HSK Form A

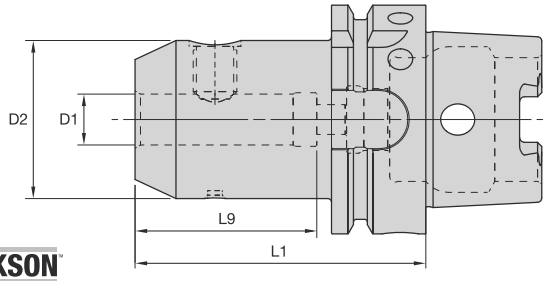
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1254122	HSK100ASWN20085M	20	50	85	48	SS03M026	8mm	95	4,53
1254123	HSK100ASWN25085M	25	55	85	48	SS03M023	6mm	35	4,25



SWN MM • With Drive • HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1254124	HSK100ASWN32100M	32	62	100	66	SS03M023	6mm	35	3,29
1254125	HSK100ASWN40110M	40	70	110	76	SS03M023	6mm	35	3,72
1254126	HSK100ASWN50110M	50	80	110	76	SS03M023	6mm	35	4,08

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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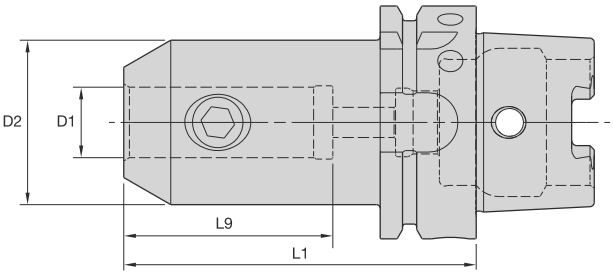
EM MM-HSK Form A

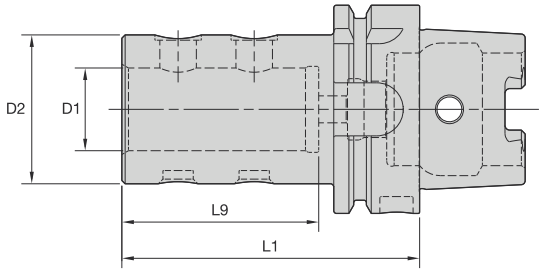
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1188810	HSK100AEM06080M	6	25	80	52	SS03M012	3mm	7	2,16
1333701	HSK100AEM08080M	8	28	80	52	SS03M014	4mm	15	2,19
1188811	HSK100AEM10080M	10	35	80	52	SS03M018	5mm	25	2,31
1155899	HSK100AEM12080M	12	42	80	49	SS03M023	6mm	35	2,45
1188812	HSK100AEM14080M	14	44	80	49	SS03M023	6mm	35	2,49
1155900	HSK100AEM16100M	16	48	100	53	SS03M025	6mm	50	2,84
1188813	HSK100AEM18100M	18	50	100	53	SS03M025	6mm	50	2,90
1126421	HSK100AEM20100M	20	52	100	55	SS03M026	8mm	95	2,95
1149696	HSK100AEM25100M	25	65	100	60	SS03M027	10mm	135	3,46
1126304	HSK100AEM32100M	32	72	100	65	SS03M029	10mm	160	3,73
1188814	HSK100AEM40120M	40	90	120	75	SS03M032	10mm	160	5,51
1322096	HSK100AEM50130M	50	100	130	85	–	12mm	200	6,37



EM I-HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1015228	HSK100AEM025300	1/4	1.00	3.00	2	ELS025025PKG	1/8	8	4.77
1015229	HSK100AEM038300	3/8	1.00	3.00	2	ELS038031PKG	3/16	15	4.74
1015230	HSK100AEM050325	1/2	1.38	3.25	2	ELS044038PKG	7/32	20	5.06
1015231	HSK100AEM062375	5/8	1.63	3.75	2	ELS056050PKG	1/4	40	5.61
1015232	HSK100AEM075375	3/4	1.75	3.75	2	ELS062050PKG	5/16	70	5.75
1015233	HSK100AEM100425	1	2.00	4.25	2	ELS075056PKG	3/8	110	6.43
1015254	HSK100AEM125425	1 1/4	2.50	4.25	3	ELS075062PKG	3/8	110	7.63
1015255	HSK100AEM150450	1 1/2	2.75	4.50	3	ELS075069PKG	3/8	110	8.35
1015285	HSK100AEM200550	2	3.75	5.50	4	ELS100088PKG	1/2	150	14.05
1015286	HSK100AEM250575	2 1/2	4.19	5.75	4	ELS100088PKG	1/2	150	16.04

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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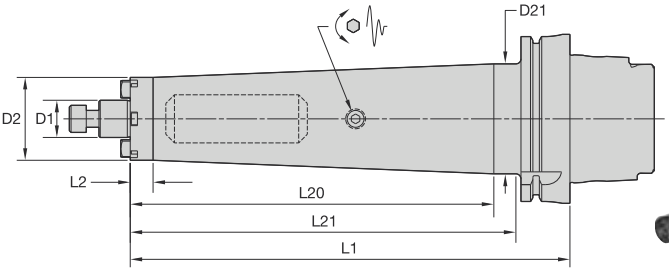
DAT MM-HSK Form A

order number	catalog number	D1	D2	L1	L9	lock screw	lock screw	wrench size lock screw	Nm	kg
2402301	**HSK100ADAT25095M**	25	45	95	60	**12166903900**	**12166903700**	6mm	40	2,57
2402302	**HSK100ADAT32100M**	32	50	100	64	**12166903900**	**12166903700**	6mm	40	2,67
2402353	**HSK100ADAT40110M**	40	60	110	74	**12166904000**	**12166903800**	8mm	50	3,04

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screws.
Lock screw wrench not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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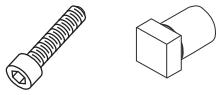
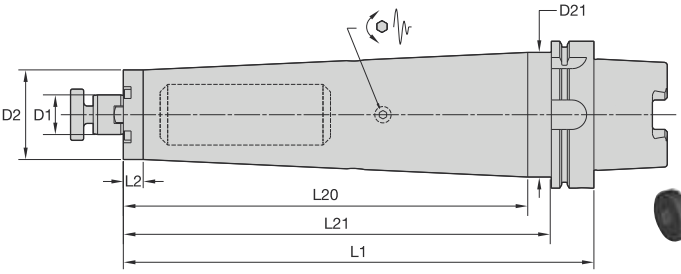
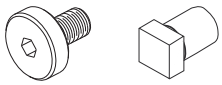
Cap MM-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135981	HSK100ATDSMC22260M	22	49	65	260	14	215	231	MS1234	KDK22M	8mm	6,43



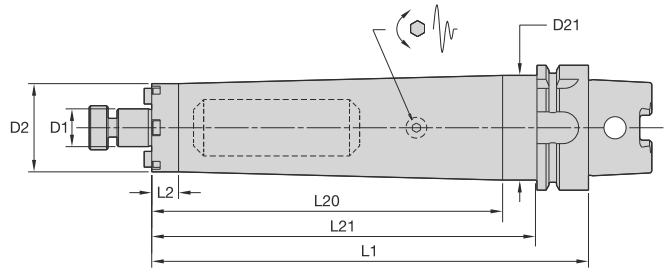
SMC Lock MM-HSK Form A



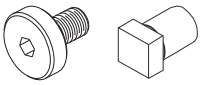
order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135982	HSK100ATDSMC27320M	27	61	85	320	13,5	275	291	KLSS27M	—	10mm	11,22
4136283	HSK100ATDSMC32330M	32	78	—	330	301,1	—	—	KLSS32M	KDK32M	14mm	14,92

(continued)

(SMC continued)

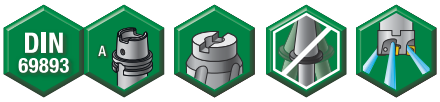


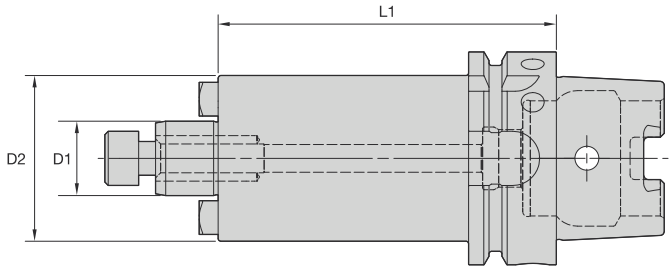
SMC Lock IN-HSK Form A



order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136284	**HSK100ATDSMC0751050**	3/4	1.750	2.559	10.500	.532	8.728	9.360	**KLS07**	**KDK05**	1/4	13.69
4136285	**HSK100ATDSMC1001250**	1	2.752	3.337	12.500	.532	10.728	11.360	**KLS10**	**KDK06**	5/16	26.94
4136286	**HSK100ATDSMC1251300**	1 1/4	2.878	3.337	13.000	.630	11.228	11.860	**KLS12**	**KDK08**	5/16	33.52

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench; see page J32.

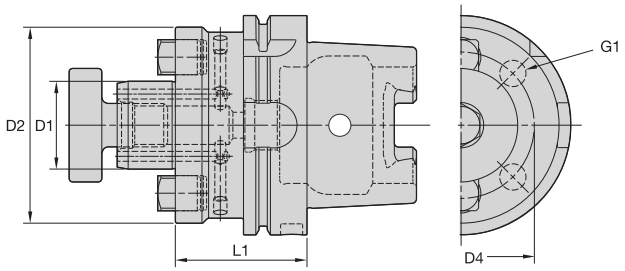




ERICKSON

SMC Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	kg
4144669	HSK100ASM2C16050M	16	38	50	MS1294	KDK16M	6mm	2,20
4144670	HSK100ASM2C22050M	22	42	50	MS1234	–	8mm	2,28
3872496	HSK100ASMC16050M	16	44	50	MS1294	KDK16M	6mm	2,26
3872497	HSK100ASMC16100M	16	44	100	MS1294	KDK16M	6mm	2,81
3872498	HSK100ASMC16160M	16	44	160	MS1294	KDK16M	6mm	3,48
3872499	HSK100ASMC22050M	22	49	50	MS1234	KDK22M	8mm	2,36
3872500	HSK100ASMC22100M	22	49	100	MS1234	KDK22M	8mm	3,05
3872501	HSK100ASMC22160M	22	49	160	MS1234	KDK22M	8mm	3,89

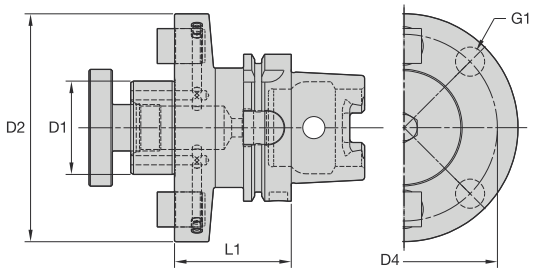


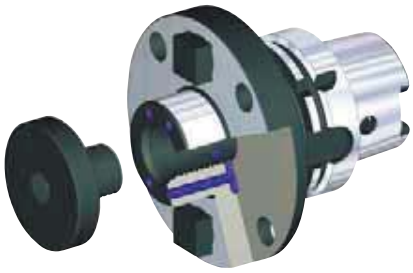
SMC Lock MM-HSK Form A

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	kg
3872502	HSK100ASMC27050M	27	60	–	–	50	KLSS27M	KDK27M	10mm	2,59
3872503	HSK100ASMC27100M	27	60	–	–	100	KLSS27M	KDK27M	10mm	3,65
3872504	HSK100ASMC27160M	27	60	–	–	160	KLSS27M	KDK27M	10mm	4,93
3872505	HSK100ASMC32050M	32	78	–	–	50	KLSS32M	KDK32M	14mm	3,00
3872506	HSK100ASMC32100M	32	78	–	–	100	KLSS32M	KDK32M	14mm	4,82
3872507	HSK100ASMC32160M	32	78	–	–	160	KLSS32M	KDK32M	14mm	7,02
3872508	HSK100ASMC40060M	40	89	67	M12X1.75	60	KLSS40M	KDK40M	17mm	3,78
3872509	HSK100ASMC40100M	40	89	67	M12X1.75	100	KLSS40M	KDK40M	17mm	5,54
3872510	HSK100ASMC40160M	40	89	67	M12X1.75	160	KLSS40M	KDK40M	17mm	8,14
3872511	HSK100ASMC50070M	50	98	–	–	70	KLS50M	–	–	4,67
3872512	HSK100ASMC50100M	50	98	–	–	100	KLS50M	–	–	6,14
3872513	HSK100ASMC50160M	50	98	–	–	160	KLS50M	–	–	8,70
3872514	HSK100ASMC60070M	60	129	102	M16X2.0	70	–	KDK60M	–	5,53
3872515	HSK100ASMC60100M	60	129	102	M16X2.0	100	–	KDK60M	–	7,58
3872516	HSK100ASMC60160M	60	129	102	M16X2.0	160	–	KDK60M	–	10,18

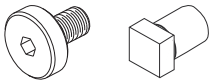
(continued)

(SMC continued)





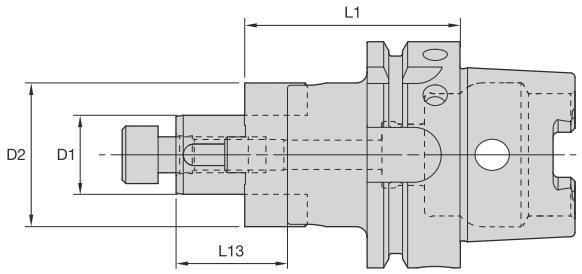
SMC Lock IN-HSK Form A



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	lbs
3763072	**HSK100ASM2C075225**	3/4	1.535	—	—	2.250	**KLS07**	**—**	1/4	4.99
3763071	**HSK100ASMC075225**	3/4	1.752	—	—	2.250	**KLS07**	**KDK05**	1/4	5.23
3763074	**HSK100ASM2C100225**	1	2.189	—	—	2.250	**KLS10**	**KDK06**	5/16	5.77
3763073	**HSK100ASMC100225**	1	2.752	—	—	2.250	**KLS10**	**KDK06**	5/16	6.43
3763075	**HSK100ASMC125250**	1 1/4	2.878	—	—	2.500	**KLS12**	**KDK08**	5/16	7.26
3763076	**HSK100ASMC150250**	1 1/2	3.811	—	—	2.500	**KLS15**	**KDK10**	3/8	8.94
3763077	**HSK100ASMC200250**	2	4.882	4.000	.625-11 UNC	2.500	**KLS20**	**KDK12**	9/16	10.87
3763078	**HSK100ASMC250250**	2 1/2	4.882	4.000	.625-11 UNC	2.500	**KLS25**	**KDK16**	9/16	11.83

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.
Supplied with four locking bolts (S-388).

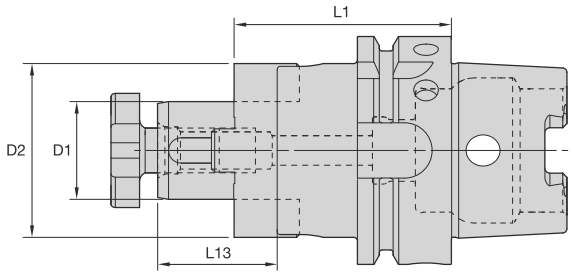
- Through-the-toolholder coolant capability.



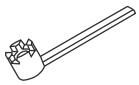
ERICKSON

CS Cap MM-HSK Form A

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1125162	HSK100ACS16060M	16	32	60	27	MS1294	6mm	CDR16M	CDK16M	2,22
1151595	HSK100ACS22060M	22	40	60	31	MS1234	8mm	CDR22M	CDK22M	2,34

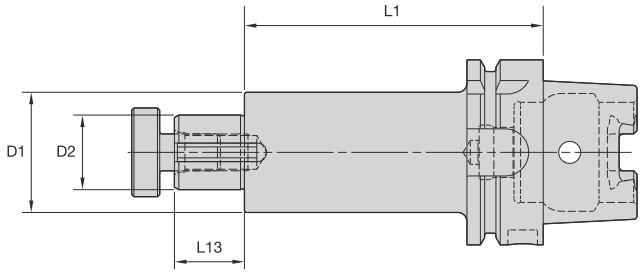


CS Lock MM-HSK Form A



order number	catalog number	D1	D2	L1	L13	lock screw	locknut wrench	combi driver ring	combi drive key
1126856	HSK100ACS27060M	27	48	60	33	KLS27MPKG	SMW27M	CDR27M	CDK27M
1126865	HSK100ACS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M
1126873	HSK100ACS40070M	40	70	70	41	KLS40M	SMW40M	CDR40M	CDK40M
1188682	HSK100ACS50080M	50	90	80	46	KLS50M	SMW50M	CDR50M	CDK50M

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw must be ordered separately.
For HSK coolant unit and wrench, see page J32.

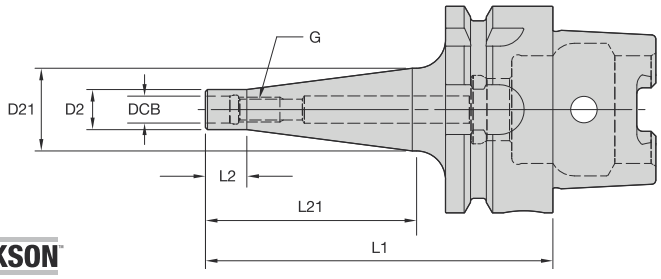


ERICKSON

SA IN-HSK Form A

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	drive key	lbs
1256067	HSK100ASA062400	5/8	1.25	4.00	.78	KLS07	1/4	DWG SDK062088	5.46
1256068	HSK100ASA100400	1	1.61	4.00	.94	KLS10	5/16	DWG SDK100106	6.23
1256069	HSK100ASA125600	1 1/4	1.86	6.00	1.09	KLS12	5/16	DWG SDK125119	8.49
1256070	HSK100ASA150600	1 1/2	2.11	6.00	1.70	KLS15	3/8	DWG SDK150175	10.09
1256071	HSK100ASA200600	2	2.75	6.00	1.70	KLS20	9/16	SDK200169	14.19

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.

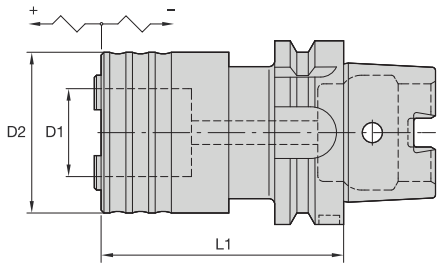


ERICKSON

ST-HSK Form A

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4061397	HSK100AST12087M	12,5	M12	21	24	87	10	50	2,13
4061398	HSK100AST12137M	12,5	M12	21	31	137	10	100	2,40
4061399	HSK100AST12187M	12,5	M12	21	31	187	10	150	2,57
4061400	HSK100AST12237M	12,5	M12	21	36	237	10	200	2,95
4061401	HSK100AST16087M	17,0	M16	29	31	87	10	50	2,24
4061402	HSK100AST16137M	17,0	M16	29	39	137	10	100	2,69
4061413	HSK100AST16187M	17,0	M16	29	39	187	10	150	3,02
4061414	HSK100AST16237M	17,0	M16	29	39	237	10	200	3,36

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.



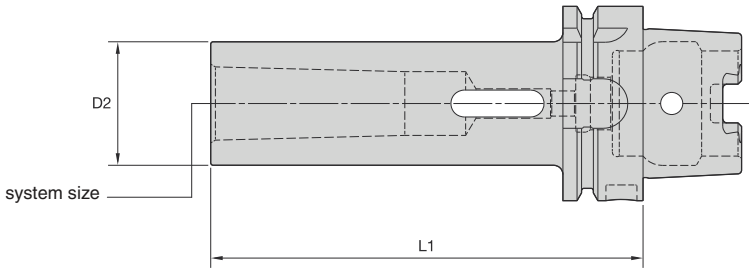
ERICKSON

RC-HSK Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	tension	compression	kg
1520643	**HSK100ACHRC1112M**	1	M1.0 - M14	#0 - 9/16	19	39	112	7,5	7,5	3,60
1520644	**HSK100ACHRC2144M**	2	M4.5 - M24	5/16 - 7/8	31	60	144	10,0	10,0	4,10
1520645	**HSK100ACHRC3210M**	3	M14.0 - M36	13/16 - 1 3/8	48	86	210	17,5	17,5	6,90

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Balanced-by-design.



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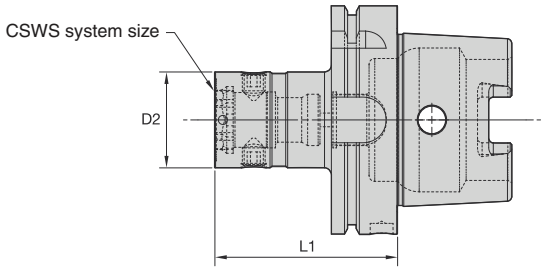
MT-HSK Form A

order number	catalog number	system size	D2	L1	kg
1323373	**HSK100AMT2120M**	2	32,00	120	1,89
1323375	**HSK100AMT3150M**	3	40,00	150	2,31
1507601	**HSK100AMT4170M**	4	48,00	170	2,78
1518711	**HSK100AMT5200M**	5	70,00	200	4,92

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

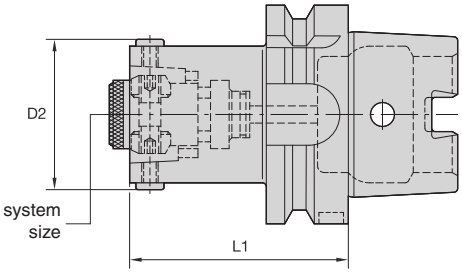


ERICKSON

RFX-HSK Form A

order number	catalog number	CSWS system size	D2	L1	lock screw	Nm	wrench	kg
3881208	**HSK100ARFX420080M**	RFX420	42	80	**RFX420LS**	20	12148041300	**1,00**
3881209	**HSK100ARFX550090M**	RFX550	55	90	**RFX550LS**	25	12148041400	**2,20**
3881210	**HSK100ARFX720105M**	RFX720	72	105	**RFX720LS**	25	12148041400	**2,50**

NOTE: Do not overtorque actuation screw; use recommended torques referenced above.
Supplied with actuation mechanism and sealing ring.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
With HSK adapters to DIN 69893-1 Form A or Form C, coolant pipe must be removed.

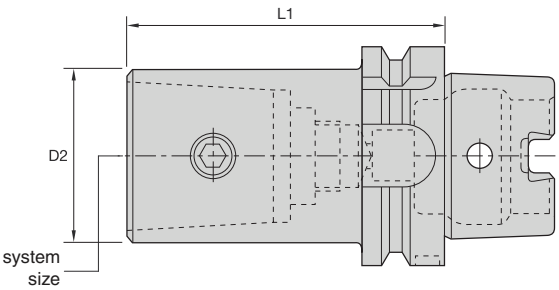


ERICKSON

HSK-HSK Form A

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1318870	**HSK100AHSK50080M**	HSK50	55	80	4mm	15	2
1312947	**HSK100AHSK63100M**	HSK63	70	100	5mm	20	2
1320682	**HSK100AHSK100140M**	HSK100	110	140	8mm	40	7
1520596	**HSK100AHSK100200M**	HSK100	110	200	8mm	40	9

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.
With HSK adapters to DIN 69893-1 Form A or Form C, coolant pipe must be removed.



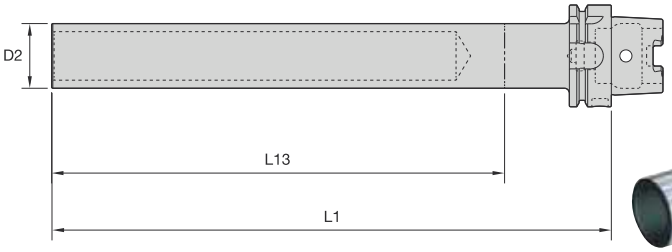
ERICKSON

KM-HSK Form A

order number	catalog number	system size	D2	L1	spare parts package	wrench size actuation screw	Nm	kg
1139877	**HSK100AKM32075M**	KM32	32	75	**KM32PKG3S**	5mm	8	2,25
1140647	**HSK100AKM40080M**	KM40	40	80	**KM40PKG3S**	6mm	12	2,42
1140651	**HSK100AKM50100M**	KM50	50	100	**KM50PKG3S**	10mm	27	2,87
1140655	**HSK100AKM63115M**	KM63	63	115	**KM63PKG3S**	12mm	47	3,67
1255791	**HSK100AKM80125M**	KM80	80	125	**KM80PKG3S**	14mm	79	5,04

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

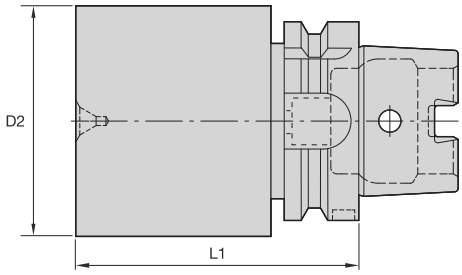
- For acceptance testing on machine tool spindles.
- 0,003mm (.0001") maximum TIR.
- Precision ground.



GB-HSK Form A

		D2		L1		L13		
order number	catalog number	mm	in	mm	in	mm	in	kg
1316356	HSK100AGB40349M	40,0	1.57	349,0	13.74	300,0	11.81	3,73

- Machinable front 32–38 RW C.



ERICKSON

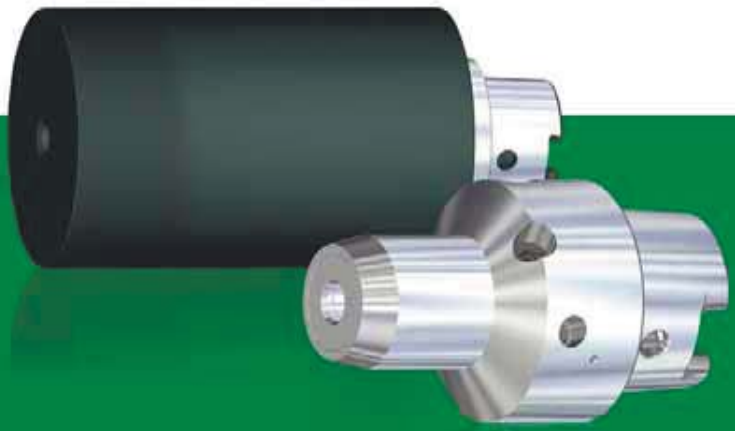
BB-HSK Form A

order number	catalog number	D2	L1	kg
1026681	HSK100ABB100300M	100,8	300	18,11
1015290	HSK100ABB200175M	200,8	175	34,36

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

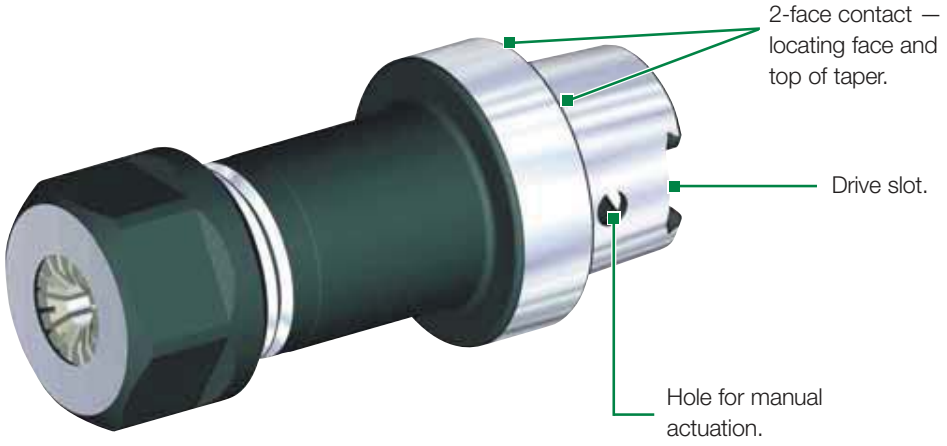
Erickson™ HSK Shank Tooling System • **HSK32C Series**

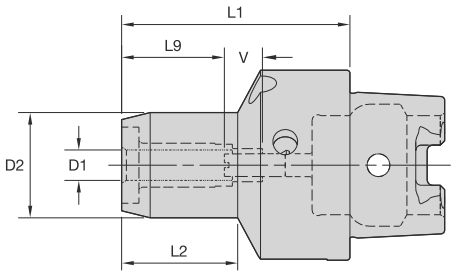
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form C versions are generally used in transfer lines, multispindles, and special machines without automatic tool changers.



HSK32C

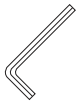
- ISO 12164-1/DIN 69893-1 Form C 1:10 short taper.
- High axial and radial repeatability.
- Maximum 42,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.





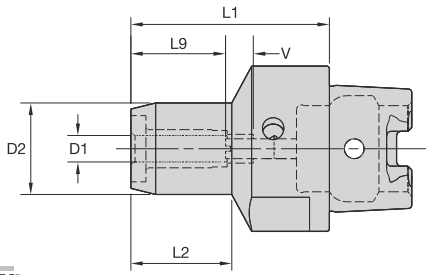
ERICKSON

HC MM-HSK Form C



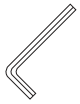
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1245412	**HSK32CHC06060M**	6	25,7	60	33	26	10	**170.254**	4mm	**170.002**	2,5mm	2,77
1245413	**HSK32CHC08060M**	8	27,7	60	33	26	10	**170.254**	4mm	**170.002**	2,5mm	2,92
1245414	**HSK32CHC10065M**	10	29,7	65	38	31	10	**170.254**	4mm	**170.002**	2,5mm	3,30
1245415	**HSK32CHC12070M**	12	31,6	70	43	36	10	**170.254**	4mm	**170.002**	2,5mm	3,67

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.



ERICKSON

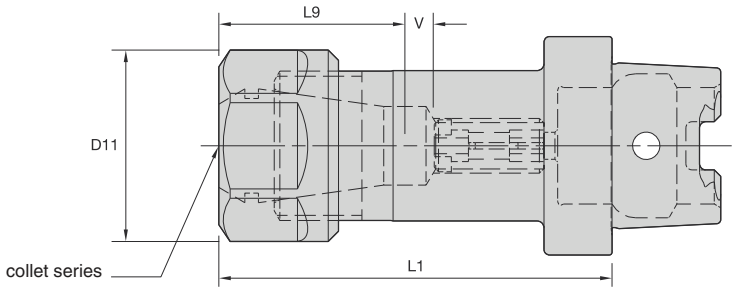
HC Trend MM-HSK Form C



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1809981	**HSK32CHCT06060M**	6	25,7	60	33	26	10	**170.254**	4mm	**170.003**	3mm	0,30
1809982	**HSK32CHCT08060M**	8	27,7	60	33	26	10	**170.254**	4mm	**170.003**	3mm	0,30
1809983	**HSK32CHCT10065M**	10	29,7	65	38	31	10	**170.254**	4mm	**170.003**	3mm	0,40
1809984	**HSK32CHCT12070M**	12	31,6	70	43	36	10	**170.254**	4mm	**170.003**	3mm	0,40

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41

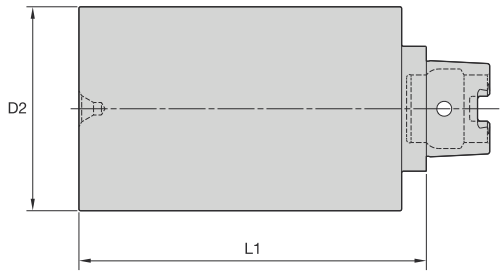
ERICKSON

ER Hex-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw	kg
1139068	**HSK32CER16060M**	ER16	28	60	32	2	**LNHER16M**	**OEW25M**	40	56	**571.068**	4mm	0,19

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

• Machinable front 32–38 RW C.



ERICKSON

BB-HSK Form C

order number	catalog number	D2	L1	kg
1519723	**HSK32CBB034100M**	34,8	100,0	0,73
1519724	**HSK32CBB034200M**	34,8	200,0	1,48
1519725	**HSK32CBB053150M**	53,8	150,0	2,54

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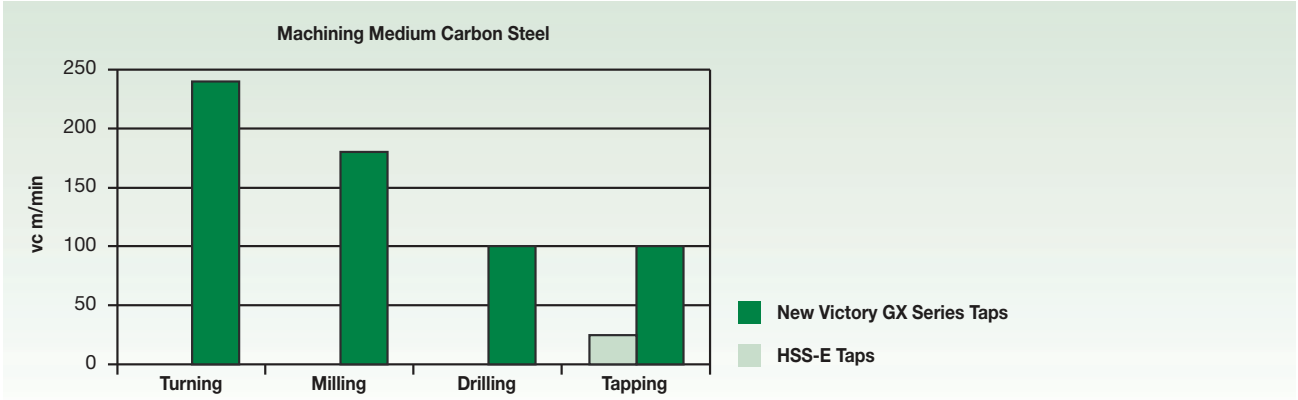
Run up to 4x faster and last up to 4x longer than conventional high-speed steel taps.

- Enhanced precision design delivers more accurately tapped holes.
- A full range of styles and grades for blind hole and through hole applications in ferrous and non-ferrous materials.
- After use, cutting taps can be factory reconditioned to original specifications and tolerances.



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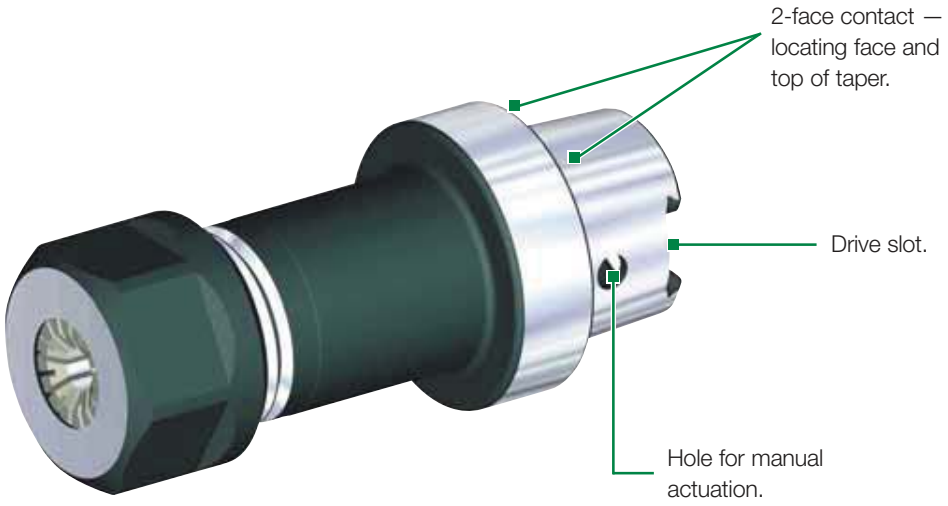
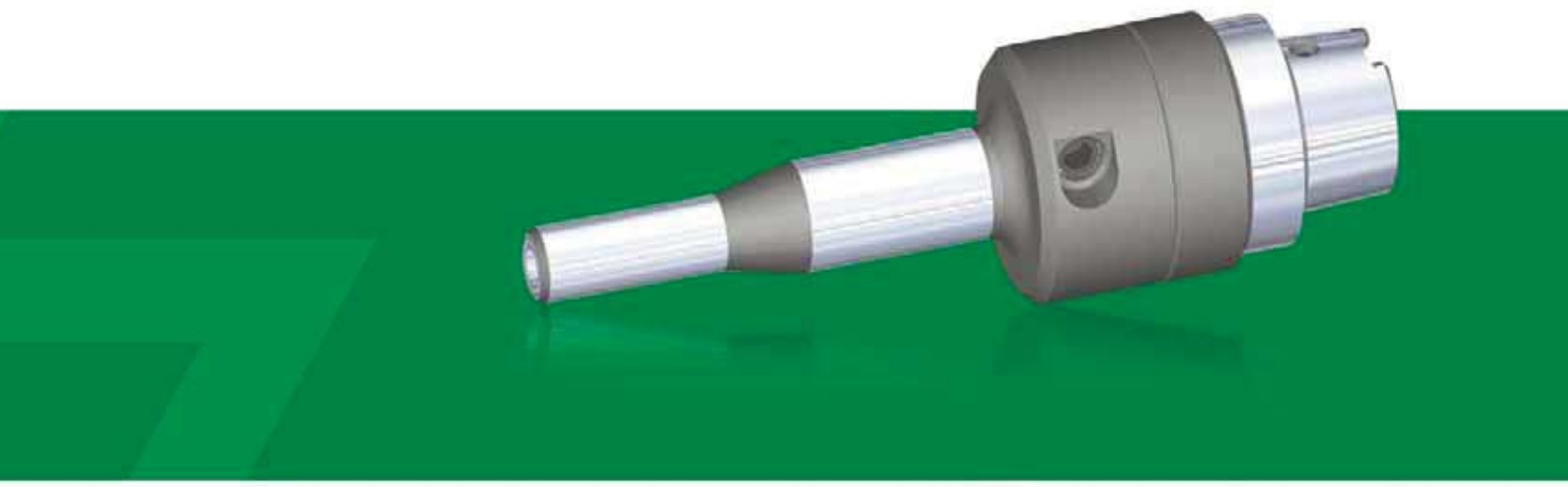
Erickson™ HSK Shank Tooling System • **HSK40C Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards.

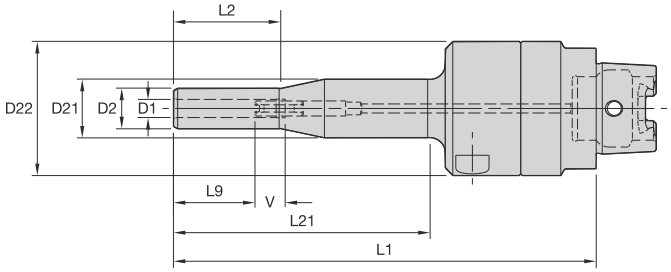
HSK40C



Form C versions are generally used in transfer lines, multispindles, and special machines without automatic tool changers.



- ISO 12164-1/DIN 69893-1 Form C 1:10 short taper.
- High axial and radial repeatability.
- Maximum 30,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



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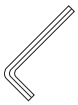
HC Slim-T MM-HSK Form C

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3061272	HSK40CHCSLT06140M	6	13,5	19,5	44,5	140	35	27	85	10	0,72
3061273	HSK40CHCSLT08140M	8	15,5	19,5	44,5	140	35	27	85	10	0,73

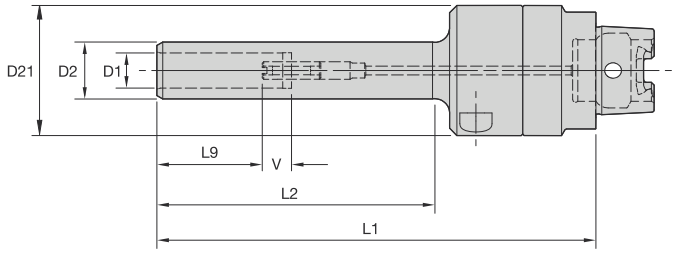
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK40CHCSLT06140M	170.135	5mm	170.002	2,5mm
HSK40CHCSLT08140M	170.135	5mm	170.002	2,5mm

(continued)

(HC Slim HSK Form C continued)



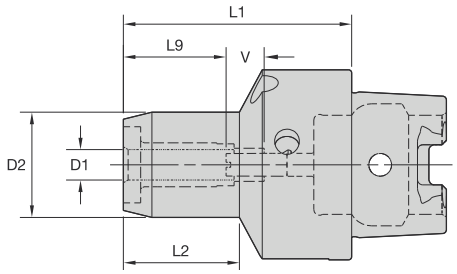
HC Slim MM-HSK Form C

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
3061275	**HSK40CHCSLT12150M**	12	19,5	44,5	150,0	95	36	10	0,76
3061276	**HSK40CHCSLT14150M**	14	21,5	52,5	150,0	95	36	10	0,96
3061277	**HSK40CHCSLT16150M**	16	23,5	52,5	150,0	95	39	10	0,98
3061278	**HSK40CHCSLT18150M**	18	25,5	52,5	150,0	95	39	10	1,02
3061279	**HSK40CHCSLT20150M**	20	27,5	52,5	150,0	95	41	10	1,06

Spare Parts

catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
HSK40CHCSLT12150M	**170.135**	5mm	**170.003**	3mm
HSK40CHCSLT14150M	**170.135**	5mm	**170.003**	3mm
HSK40CHCSLT16150M	**170.135**	5mm	**170.005**	5mm
HSK40CHCSLT18150M	**170.135**	5mm	**170.005**	5mm
HSK40CHCSLT20150M	**170.135**	5mm	**170.005**	5mm

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrenches must be ordered separately.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.



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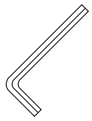
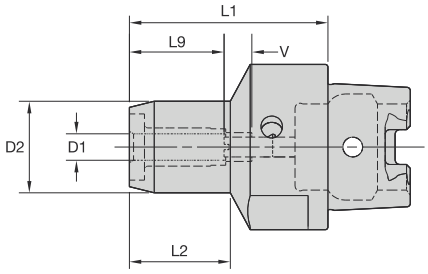
HC MM-HSK Form C



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1245493	**HSK40CHC06060M**	6	25,7	60	33	26	10	**170.135**	5mm	**170.002**	2,5mm	0,30
1245494	**HSK40CHC08060M**	8	27,7	60	33	26	10	**170.135**	5mm	**170.002**	2,5mm	0,30
1245495	**HSK40CHC10065M**	10	29,7	65	39	30	10	**170.135**	5mm	**170.002**	2,5mm	0,50
1245496	**HSK40CHC12070M**	12	31,6	70	44	36	10	**170.135**	5mm	**170.002**	2,5mm	0,60

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.



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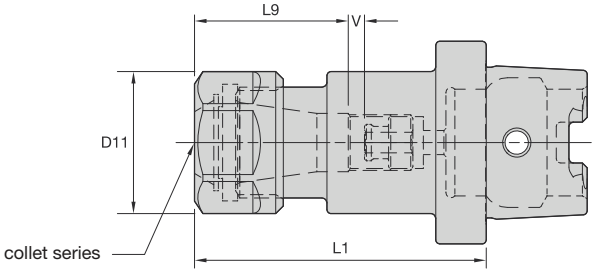
HC Trend MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	wrench size stop screw	kg
1809985	**HSK40CHCT06060M**	6	25,7	60	33	26	10	**170.135**	5mm	3mm	0,30
1809986	**HSK40CHCT08060M**	8	27,7	60	33	26	10	**170.135**	5mm	3mm	0,30
1809987	**HSK40CHCT10065M**	10	29,7	65	39	30	10	**170.135**	5mm	3mm	0,50
1809988	**HSK40CHCT12070M**	12	31,6	70	44	36	10	**170.135**	5mm	3mm	0,60

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Grip (2:1 advantage).



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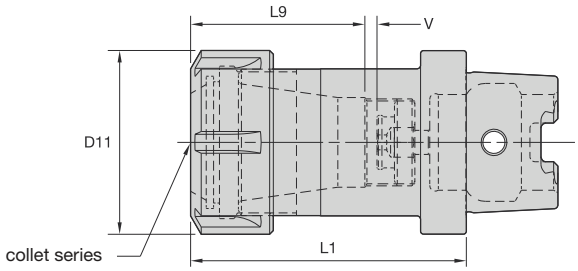
ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

ER Hex-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1253864	HSK40CER16060M	ER16	28	60	32	5,00	0,27

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK40CER16060M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32



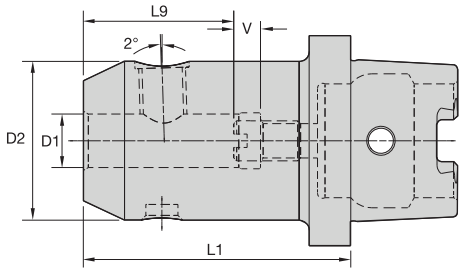
ER Round-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1253866	HSK40CER25070M	ER25	42	70	40	5	0,41
1125645	HSK40CER32075M	ER32	50	75	45	5	0,57

Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw
HSK40CER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
HSK40CER32075M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.



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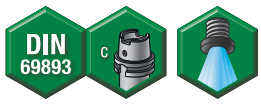
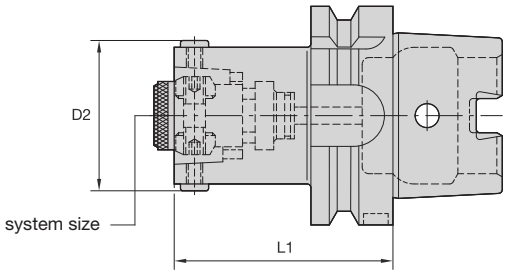
WN MM-HSK Form C

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1123137	HSK40CWN16075M	16	48	75	40	8	–	6mm	24	571.075	6mm	0,86

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches are not included.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





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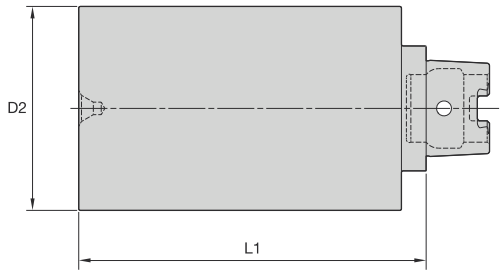
HSK-HSK Form C

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1520613	HSK40CHSK32050M	HSK32	37	50	3mm	6	0,40

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Machinable front 32–38 RW C.



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■ BB-HSK Form C

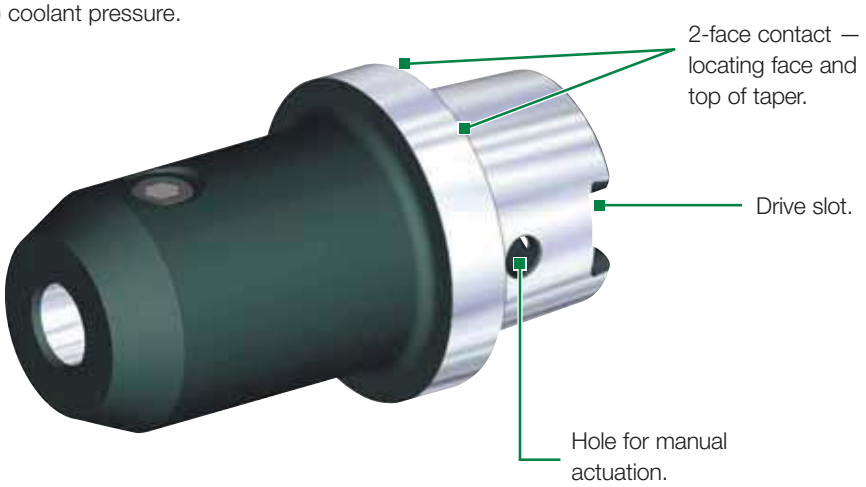
order number	catalog number	D2	L1	kg
1519726	HSK40CBB040100M	40,8	100	0,99
1519727	HSK40CBB040200M	40,8	200	2,02
1519729	HSK40CBB063150M	63,8	150	3,57

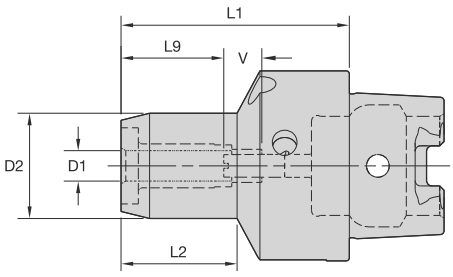
Erickson™ HSK Shank Tooling System • **HSK50C Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form C versions are generally used in transfer lines, multispindles, and special machines without automatic tool changers.

HSK50C

- ISO 12164-1/DIN 69893-1 Form C 1:10 short taper.
- High axial and radial repeatability.
- Maximum 25,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.





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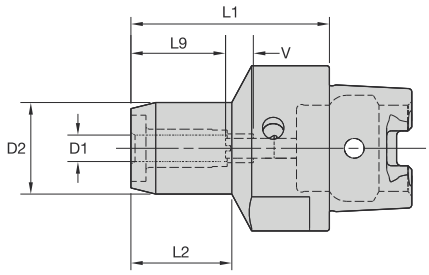
HC MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
1245497	**HSK50CHC06060M**	6	25,7	60	31	27	10	**170.135**	5mm	**170.002**	2,5mm	0,53
1245498	**HSK50CHC08060M**	8	27,7	60	31	27	10	**170.135**	5mm	**170.002**	2,5mm	0,55
1245499	**HSK50CHC10065M**	10	29,7	65	36	30	10	**170.135**	5mm	**170.002**	2,5mm	0,60
1245500	**HSK50CHC12075M**	12	31,6	75	46	36	10	**170.135**	5mm	**170.002**	2,5mm	0,80
1245501	**HSK50CHC14075M**	14	33,6	75	47	36	10	**170.135**	5mm	**170.003**	3mm	0,90
1245502	**HSK50CHC16080M**	16	37,6	80	53	39	10	**170.135**	5mm	**170.003**	3mm	1,00
1245503	**HSK50CHC18080M**	18	39,6	80	54	39	10	**170.135**	5mm	**170.003**	3mm	1,00
1245504	**HSK50CHC20080M**	20	41,6	80	54	40	10	**170.135**	5mm	**170.003**	3mm	1,10

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.



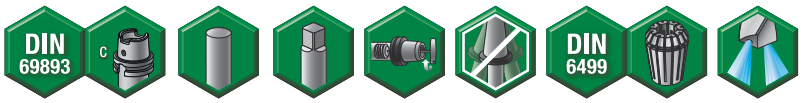
ERICKSON

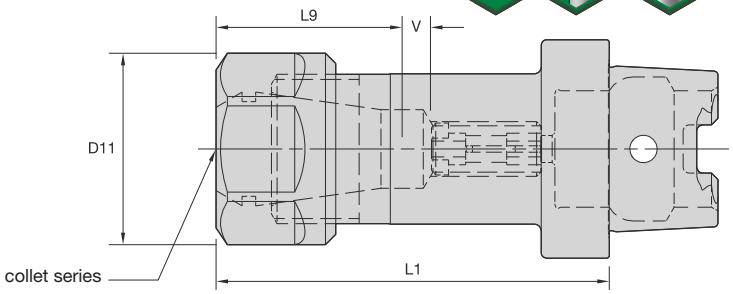
■ HC Trend MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	wrench size stop screw	kg
1809989	**HSK50CHCT06060M**	6	25,7	60	31	27	10	**170.135**	5mm	**571.071**	3mm	0,54
1809990	**HSK50CHCT08060M**	8	27,7	60	31	27	10	**170.135**	5mm	**571.071**	3mm	0,55
1809991	**HSK50CHCT10065M**	10	29,7	65	36	30	10	**170.135**	5mm	**571.071**	3mm	0,60
1809992	**HSK50CHCT12075M**	12	31,6	75	46	36	10	**170.135**	5mm	**571.071**	3mm	0,70
1810013	**HSK50CHCT14075M**	14	33,6	75	47	36	10	**170.135**	5mm	**571.063**	5mm	0,70
1810014	**HSK50CHCT16080M**	16	37,6	80	53	39	10	**170.135**	5mm	**571.063**	5mm	0,80
1810015	**HSK50CHCT18080M**	18	39,6	80	54	39	10	**170.135**	5mm	**571.063**	5mm	0,80
1810016	**HSK50CHCT20080M**	20	41,6	80	54	40	10	**170.135**	5mm	**571.063**	5mm	0,80

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Wrenches must be ordered separately.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.

• Grip (2:1 advantage).





Collet Capacity

ER collet series	mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

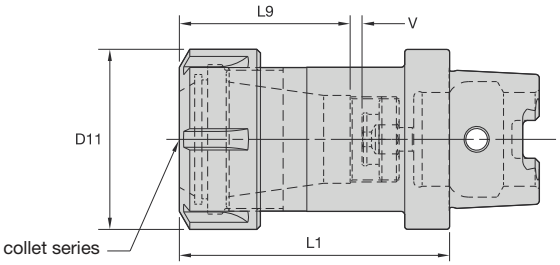
ERICKSON

ER Hex-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1139074	HSK50CER16060M	ER16	28	60	28	5	0,38

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK50CER16060M	LNHSER16M	OEW25M	40	56	TTSS08014M	4mm



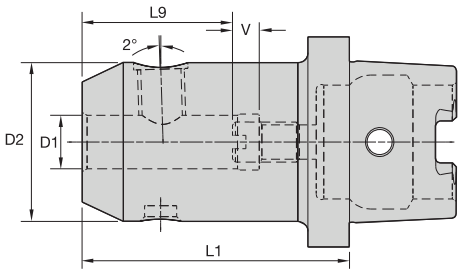
ER Round-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1120659	HSK50CER25070M	ER25	42	70	40	5	0,50
1126932	HSK50CER32075M	ER32	50	75	45	5	0,67

Spare Parts

catalog number	round locknut	wrench	counterbore collet torque (Nm)	stop screw	wrench size stop screw
HSK50CER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
HSK50CER32075M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.



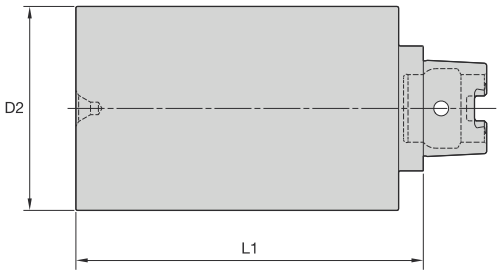
ERICKSON

■ WN MM-HSK Form C

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1519772	**HSK50CWN06060M**	6	25	60	28	6	**SS03M012**	3mm	7	**571.060**	2,5mm	0,38
1519774	**HSK50CWN08060M**	8	28	60	28	6	**SS03M014**	4mm	15	**571.067**	3mm	0,42
1131275	**HSK50CWN10065M**	10	35	65	30	6	**SS03M018**	5mm	25	**571.068**	5mm	0,56
1131266	**HSK50CWN12075M**	12	42	75	38	8	**SS03M023**	6mm	35	**571.074**	5mm	0,80
1519777	**HSK50CWN14075M**	14	44	75	38	8	**SS03M023**	6mm	35	**571.074**	5mm	0,85
1519638	**HSK50CWN16080M**	16	48	80	41	10	**SS03M025**	6mm	50	**571.075**	6mm	1,03
1519639	**HSK50CWN18080M**	18	50	80	41	10	**SS03M025**	6mm	50	**571.075**	6mm	1,10
1519791	**HSK50CWN20080M**	20	52	80	39	8	**SS03M026**	8mm	95	**571.076**	6mm	1,15

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw and stop screw.
Clamp screw or stop screw wrenches are not included.

• Machinable front 32–38 RW C.



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■ BB-HSK Form C

order number	catalog number	D2	L1	kg
1519733	**HSK50CBB053100M**	53,8	100	1,77
1519745	**HSK50CBB053200M**	53,8	200	3,55
1519750	**HSK50CBB083175M**	83,8	175	7,23

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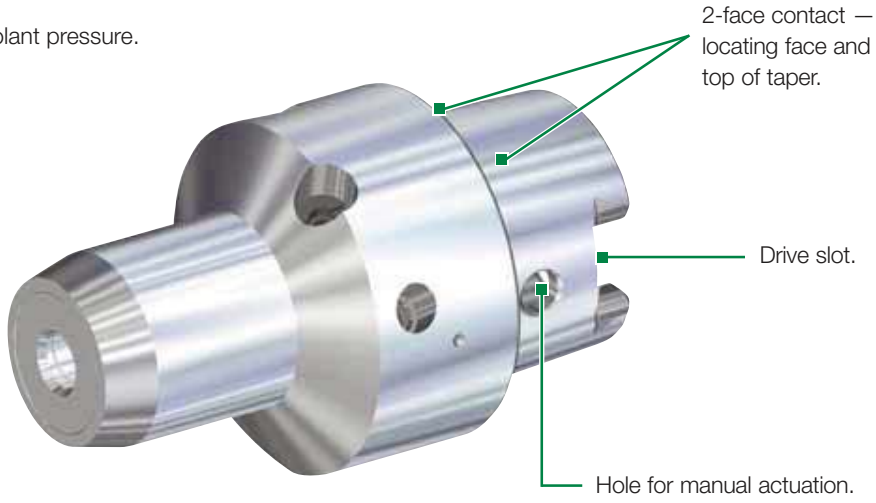
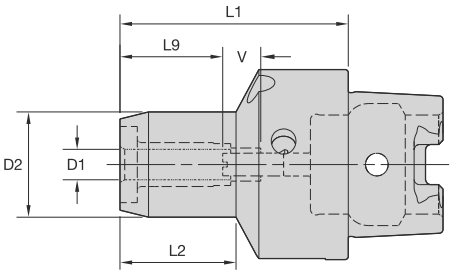
Erickson™ HSK Shank Tooling System • **HSK63C Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form C versions are generally used in transfer lines, multispindles, and special machines without automatic tool changers.

HSK63C

- ISO 12164-1/DIN 69893-1 Form C 1:10 short taper.
- High axial and radial repeatability.
- Maximum 20,500 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.





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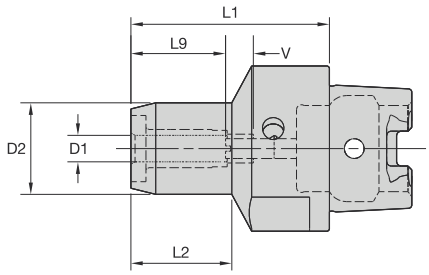
HC MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	wrench size stop screw	kg
1245505	**HSK63CHC06060M**	6	25,7	60	26	26	10	**170.135**	5mm	2,5mm	0,84
1245506	**HSK63CHC08060M**	8	27,7	60	26	26	10	**170.135**	5mm	2,5mm	0,86
1245507	**HSK63CHC10065M**	10	29,7	65	32	30	10	**170.135**	5mm	2,5mm	0,89
1245508	**HSK63CHC12075M**	12	31,6	75	43	36	10	**170.135**	5mm	2,5mm	0,96
1245509	**HSK63CHC14075M**	14	33,6	75	43	36	10	**170.135**	5mm	3mm	0,97
1245510	**HSK63CHC16080M**	16	37,6	80	49	39	10	**170.135**	5mm	3mm	1,07
1245511	**HSK63CHC18080M**	18	39,6	80	50	39	10	**170.135**	5mm	3mm	1,10
1245512	**HSK63CHC20080M**	20	41,6	80	51	40	10	**170.135**	5mm	3mm	1,11
1245513	**HSK63CHC25095M**	25	49,9	95	52	46	10	**170.136**	6mm	4mm	1,57
1191022	**HSK63CHC32100M**	32	59,9	100	60	50	10	**170.136**	6mm	4mm	1,89

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Wrenches must be ordered separately.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I2.



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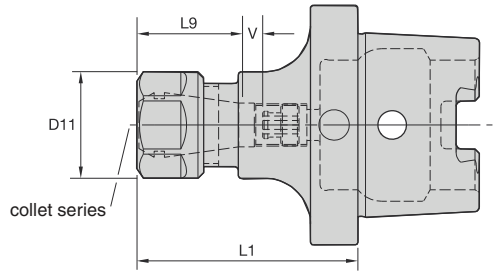
■ HC Trend MM-HSK Form C

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	wrench size stop screw	kg
1810017	**HSK63CHCT06060M**	6	25,7	60	26	26	10	**170.135**	5mm	3mm	0,90
1810018	**HSK63CHCT08060M**	8	27,7	60	26	26	10	**170.135**	5mm	3mm	0,90
1810019	**HSK63CHCT10065M**	10	29,7	65	32	30	10	**170.135**	5mm	3mm	0,90
1810020	**HSK63CHCT12075M**	12	31,6	75	43	36	10	**170.135**	5mm	3mm	1,00
1810021	**HSK63CHCT14075M**	14	33,6	75	43	36	10	**170.135**	5mm	5mm	1,00
1810022	**HSK63CHCT16080M**	16	37,6	80	49	39	10	**170.135**	5mm	5mm	1,10
1810023	**HSK63CHCT18080M**	18	39,6	80	50	39	10	**170.135**	5mm	5mm	1,10
1810024	**HSK63CHCT20080M**	20	41,6	80	51	40	10	**170.135**	5mm	5mm	1,10
1810025	**HSK63CHCT25095M**	25	49,9	95	52	46	10	**170.136**	6mm	5mm	1,60
1810026	**HSK63CHCT32100M**	32	59,9	100	60	50	10	**170.136**	6mm	5mm	1,90

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Wrenches must be ordered separately.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I2.

• Grip (2:1 advantage).



Collet Capacity

ER collet series	mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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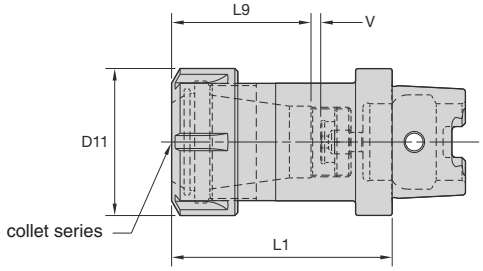
ER Hex-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1253865	HSK63CER16060M	ER16	28	60	32	5	0,55

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK63CER16060M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32



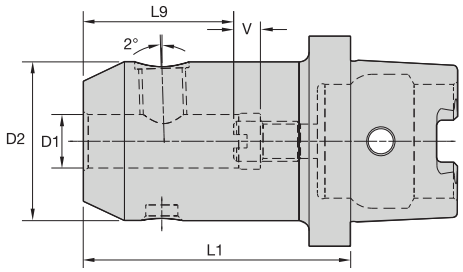
ER Round-HSK Form C

order number	catalog number	collet series	D11	L1	L9	V	kg
1253908	HSK63CER25070M	ER25	42	70	40	5	0,78
1253910	HSK63CER32075M	ER32	50	75	45	5	0,97
1253911	HSK63CER40080M	ER40	63	80	54	3	1,14

Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw
HSK63CER25070M	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
HSK63CER32075M	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
HSK63CER40080M	LNSER40M	ER40WM	176	SS112041G	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.



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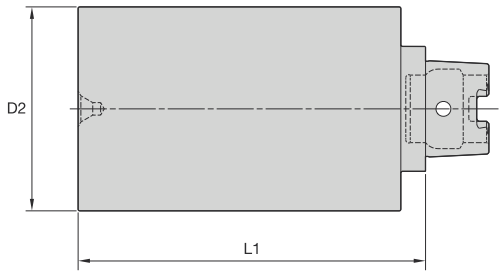
■ WN MM-HSK Form C

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size clamp screw	Nm	stop screw	wrench size stop screw	kg
1519797	**HSK63CWN12075M**	12	42	75	36	10	**SS03M023**	6mm	24	**571.074**	6mm	0,97
1519798	**HSK63CWN14075M**	14	44	75	36	10	**SS03M023**	6mm	24	**571.074**	6mm	1,02
1139503	**HSK63CWN16080M**	16	48	80	40	10	**SS03M025**	6mm	24	**571.075**	6mm	1,20
1519800	**HSK63CWN18080M**	18	50	80	40	10	**SS03M025**	6mm	24	**571.075**	6mm	1,25
1120623	**HSK63CWN20080M**	20	52	80	36	10	**SS03M026**	8mm	58	**571.076**	8mm	1,31
1124323	**HSK63CWN25095M**	25	65	95	50	10	**SS03M027**	10mm	92	**571.077**	10mm	2,17

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches are not included.

• Machinable front 32–38 RW C.



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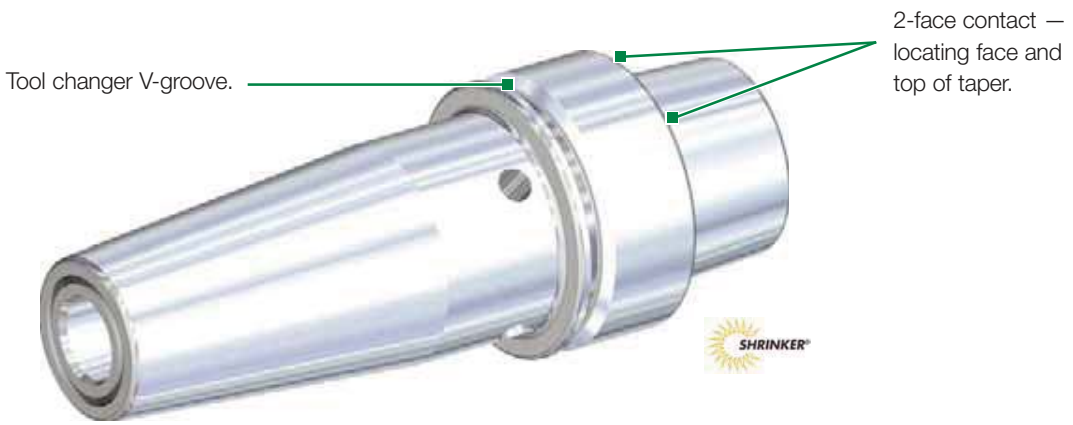
BB-HSK Form C

order number	catalog number	D2	L1	kg
1519755	**HSK63CBB063100M**	63,8	100	2,56
1519756	**HSK63CBB063200M**	63,8	200	5,06
1519757	**HSK63CBB102175M**	102,8	175	10,92

Erickson™ HSK Shank Tooling System • **HSK40E Series**

Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards.

HSK40E



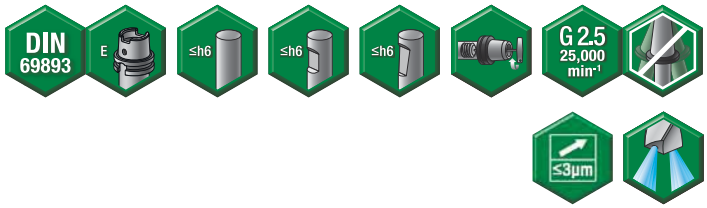
Form E versions do not have drive slots or indexing features and are suited for high speeds in machining centers and milling machines with automatic tool changers.

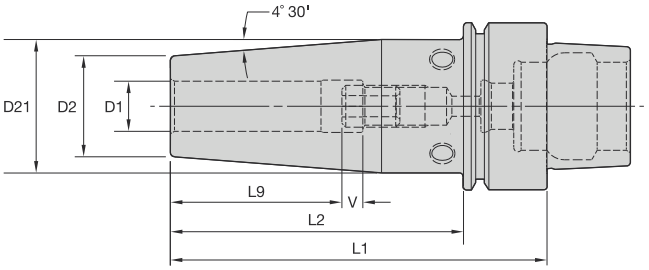
- ISO 12164-1/DIN 69893-1 Form E 1:10 short taper.
- High axial and radial repeatability.
- Maximum 55,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

HSK40E Shank Tools

Shrink Fit Toolholders General Purpose (GP)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

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■ TT GP HPVmm-HSK Form E

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867169	**HSK40EHPVTT03060M**	3	9	13	60	32	14	10	**TTSS05014M**	2,5mm	0,27
3867170	**HSK40EHPVTT04060M**	4	9	13	60	32	15	10	**TTSS05014M**	2,5mm	0,27
3867171	**HSK40EHPVTT05060M**	5	9	13	60	32	15	10	**TTSS06014M**	3mm	0,27
3867172	**HSK40EHPVTT06080M**	6	21	27	80	60	26	10	**TTSS05014M**	2,5mm	0,42
3867263	**HSK40EHPVTT08080M**	8	21	27	80	60	26	10	**TTSS06014M**	3mm	0,41
3867264	**HSK40EHPVTT10080M**	10	24	32	80	60	31	10	**TTSS08014M**	4mm	0,47
3867265	**HSK40EHPVTT12090M**	12	24	32	90	70	36	10	**TTSS10014M**	5mm	0,51
3867266	**HSK40EHPVTT14090M**	14	27	34	90	70	36	10	**TTSS10014M**	5mm	0,57
3867267	**HSK40EHPVTT16090M**	16	27	34	90	70	39	10	**TTSS12014M**	6mm	0,54
3867268	**HSK40EHPVTT18095M**	18	33	41	95	95	39	10	**TTSS12014M**	6mm	0,71
3867269	**HSK40EHPVTT20095M**	20	33	41	95	95	41	10	**TTSS16014M**	8mm	0,68

(continued)

(TT GP HPV HSK Form E continued)

Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	**tolerance**
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4	.0000/-.0005

TT GP HPV IN-HSK Form E

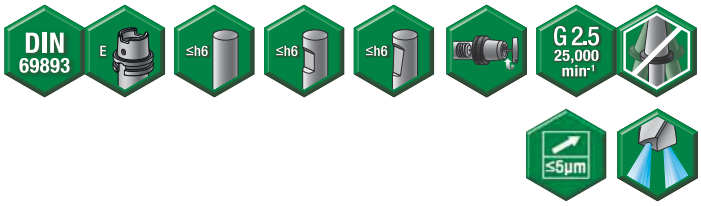
order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3863718	**HSK40EHPVTT025315**	1/4	.83	1.06	3.15	2.36	1.02	.39	**TTSS05014M**	2,5mm	.92
3863719	**HSK40EHPVTT031315**	5/16	.83	1.06	3.15	2.36	1.02	.39	**TTSS06014M**	3mm	.90
3863720	**HSK40EHPVTT038315**	3/8	.94	1.26	3.15	2.36	1.22	.39	**TTSS08014M**	4mm	1.04
3863721	**HSK40EHPVTT050354**	1/2	.94	1.26	3.54	2.76	1.42	.39	**TTSS10014M**	5mm	1.12
3863722	**HSK40EHPVTT056354**	9/16	1.06	1.33	3.54	2.76	1.42	.39	**TTSS10014M**	5mm	1.24
3863753	**HSK40EHPVTT062354**	5/8	1.06	1.33	3.54	2.76	1.54	.39	**TTSS12014M**	6mm	1.20
3863754	**HSK40EHPVTT075374**	3/4	1.30	1.65	3.74	3.74	1.61	.39	**TTSS16014M**	8mm	1.52

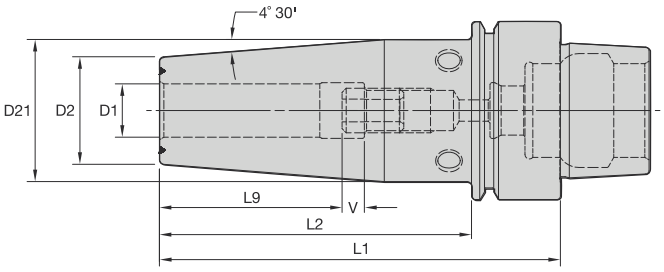
NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

HSK40E Shank Tools

Shrink Fit Toolholders High Torque (HT)

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

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TT-HT-HPV-MM-HSK Form E

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3867229	**HSK40EHPVTTHT12090M**	12	24	32	90	70	36	10	**TTSS10014M**	5mm	0,51
3867230	**HSK40EHPVTTHT14090M**	14	27	34	90	70	36	10	**TTSS10014M**	5mm	0,57
3867231	**HSK40EHPVTTHT16090M**	16	27	34	90	70	39	10	**TTSS12014M**	6mm	0,54
3867232	**HSK40EHPVTTHT18095M**	18	33	41	95	95	39	10	**TTSS12014M**	6mm	0,71
3867233	**HSK40EHPVTTHT20095M**	20	33	41	95	95	41	10	**TTSS16014M**	8mm	0,68

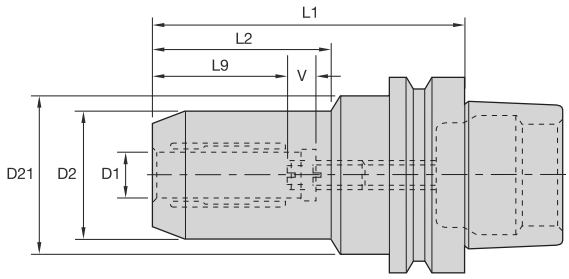
Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/2, 9/16, & 5/8	.0000/-.0004
3/4	.0000/-.0005

TT-HT-HPV-IN-HSK Form E

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3862413	**HSK40EHPVTTHT050354**	1/2	.94	1.26	3.54	2.76	1.42	.39	**TTSS10014M**	5mm	1.12
3862414	**HSK40EHPVTTHT056354**	9/16	1.06	1.33	3.54	2.76	1.42	.39	**TTSS10014M**	5mm	1.25
3862415	**HSK40EHPVTTHT062354**	5/8	1.06	1.33	3.54	2.76	1.54	.39	**TTSS12014M**	6mm	1.20
3862416	**HSK40EHPVTTHT075374**	3/4	1.30	1.61	3.74	3.74	1.61	.39	**TTSS16014M**	8mm	1.52

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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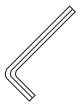
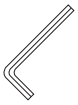
HC Trend MM-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
2288133	HSK40EHCT06080M	6	25,7	32	80	35	27	10	170.135	5mm	170.003	3mm	0,47
2288134	HSK40EHCT08080M	8	27,7	32	80	36	27	10	170.135	5mm	170.003	3mm	0,49
2288135	HSK40EHCT10085M	10	29,7	32	85	38	31	10	170.135	5mm	170.003	3mm	0,53
2288136	HSK40EHCT12090M	12	31,6	32	90	40	36	10	170.135	5mm	170.003	3mm	0,57
2387467	HSK40EHCT14100M	14	33,6	50	100	42	36	10	170.135	5mm	170.005	5mm	0,80
2387468	HSK40EHCT16100M	16	37,6	50	100	47	39	10	170.135	5mm	170.005	5mm	0,85
2387469	HSK40EHCT18100M	18	39,6	50	100	47	39	10	170.135	5mm	170.005	5mm	0,87
2387470	HSK40EHCT20100M	20	41,6	50	100	48	41	10	170.135	5mm	170.005	5mm	0,89

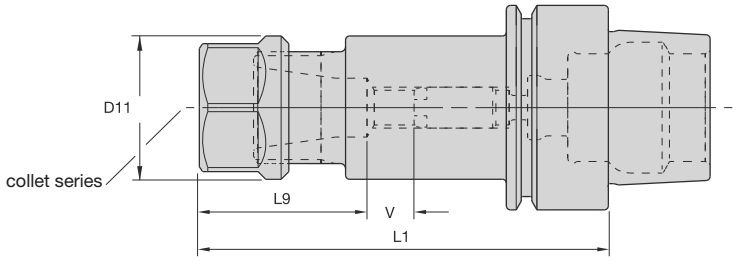
HC Trend In-HSK Form E



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	lbs
2260223	HSK40EHCT025315	1/4	1.01	1.25	3.15	1.38	1.06	.39	170.135	5mm	170.003	3mm	1.03
2260224	HSK40EHCT038335	3/8	1.17	1.25	3.55	1.58	1.22	.39	170.135	5mm	170.003	3mm	1.17
2260225	HSK40EHCT050354	1/2	1.24	1.25	3.54	1.69	1.42	.39	170.135	5mm	170.003	3mm	1.23
2387471	HSK40EHCT062394	5/8	1.48	1.96	3.94	1.83	1.54	.39	170.135	5mm	170.005	5mm	1.87
2387472	HSK40EHCT075394	3/4	1.64	1.96	3.94	1.89	1.61	.39	170.135	5mm	170.005	5mm	1.98

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Grip (2:1 advantage).



Collet Capacity

ER collet series	mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81

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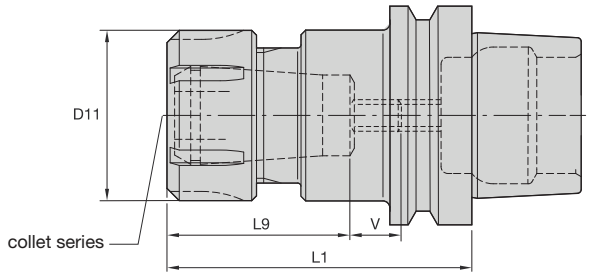
ER Hex-HSK Form E

order number	catalog number	collet series	D11	L1	L9	V	kg
2260355	**HSK40EER16080M**	ER16	28	80	27	5	0,41

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
HSK40EER16080M	**LNHSER16M**	**OEW25M**	40	56	**571.068**	4mm & 5/32



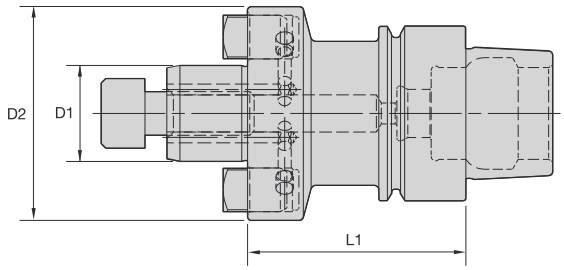
ER Round-HSK Form E

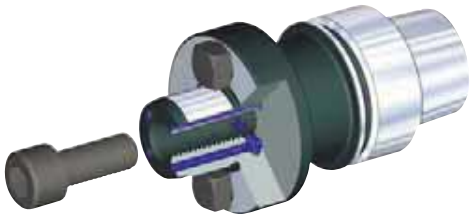
order number	catalog number	collet series	D11	L1	L9	V	kg
1795995	**HSK40EER25080M**	ER25	42	80	31	5	0,51
2386949	**HSK40EER32100M**	ER32	50	100	40	5	0,71

Spare Parts

catalog number	round locknut	wrench	Nm	stop screw	wrench size stop screw
HSK40EER25080M	**LNSER25M**	**ER25WM**	104	**571.062**	4mm & 5/32
HSK40EER32100M	**LNSER32M**	**ER32WM**	136	**571.062**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





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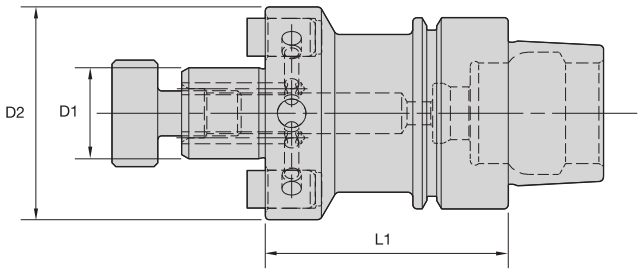
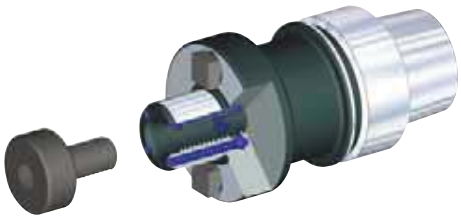
SMC Cap MM-HSK Form E

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3872675	HSK40ESM2C16050M	16	38	50	MS1294	KDK16M	6mm	0,46
3872677	HSK40ESM2C22050M	22	42	50	MS1234	—	8mm	0,52
3872674	HSK40ESMC16050M	16	44	50	MS1294	KDK16M	6mm	0,50
3872676	HSK40ESMC22050M	22	49	50	MS1234	KDK22M	8mm	0,57





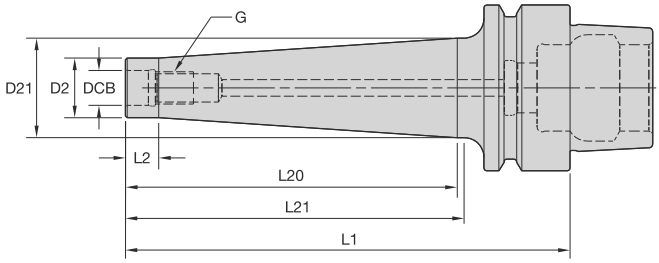
SMC Lock IN-HSK Form E

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	lbs
3762420	HSK40ESM2C050200	1/2	1.20	2.00	KLS05	KDK04	3/16	.88
3762422	HSK40ESM2C075200	3/4	1.46	2.00	KLS07	—	1/4	1.05
3762419	HSK40ESMC050200	1/2	1.44	2.00	KLS05	KDK04	3/16	.98
3762421	HSK40ESMC075200	3/4	1.75	2.00	KLS07	KDK05	1/4	1.16

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.

HSK40E Shank Tools

Screw-On Adapters for Modular Milling Cutters • Bar Blanks



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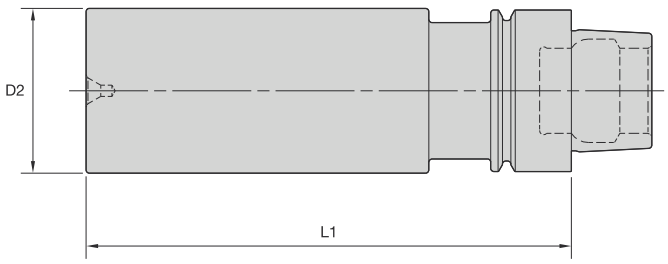
■ ST-HSK Form E

order number	catalog number	DCB	G	D2	D21	L1	L2	L20	L21	kg
4061429	HSK40EST06053M	6,5	M6	10	—	53	27	—	—	0,22
4061430	HSK40EST06078M	6,5	M6	10	20	78	10	50	52	0,28
4061431	HSK40EST06103M	6,5	M6	10	23	103	10	75	77	0,33
4061432	HSK40EST08053M	8,5	M8	13	15	53	10	25	27	0,23
4061433	HSK40EST08078M	8,5	M8	13	23	78	10	50	52	0,31
4061434	HSK40EST08103M	8,5	M8	13	23	103	10	75	77	0,35
4061435	HSK40EST08128M	8,5	M8	13	25	128	10	100	102	0,42
4061436	HSK40EST10053M	10,5	M10	18	20	53	10	25	27	0,26
4061437	HSK40EST10078M	10,5	M10	18	25	78	10	50	52	0,35
4061438	HSK40EST10103M	10,5	M10	18	28	103	10	75	77	0,44
4061439	HSK40EST10128M	10,5	M10	18	30	128	10	100	102	0,55

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Machinable front 32–38 RW C.



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■ BB-HSK Form E

order number	catalog number	D2	L1	kg
2260650	HSK40EBB040120M	40,8	120,0	1,17

NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

WIN WITH WIDIA™

WIDIA-CIRCLE™ Small-Hole Tooling Series

The WIDIA™ line of small-hole boring tools is an excellent, economical choice for a wide range of applications. Our solid carbide bars provide exceptional machining versatility and rupture strength. Indexable inserts are available in both steel and carbide shanks.

A/B Series

- Unique locking system enables quick, accurate insert changes.

Quadralock™

- V-slots and limit-stop bolts for increased indexability.

Micro Boring Bars

- Free cutting action, better surface finishes, and greater chip evacuation.

Solid Carbide Bars

- Accurate, quick-change tooling and toolholders are ideal for small parts machining applications.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

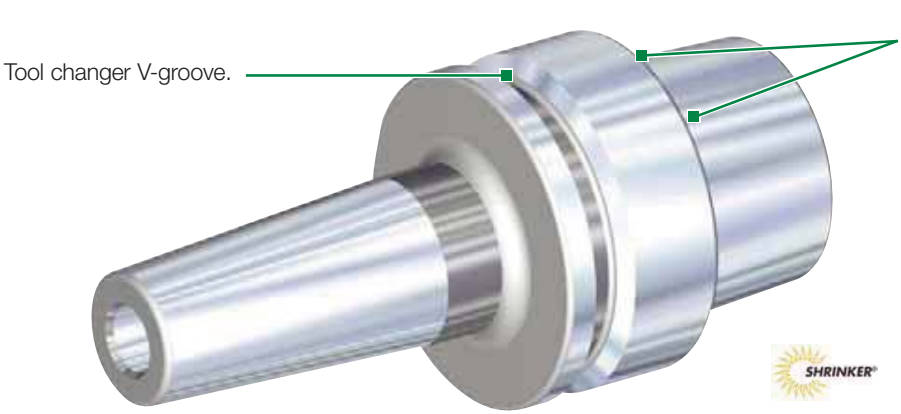
WIDIA™

Erickson™ HSK Shank Tooling System • **HSK50E Series**

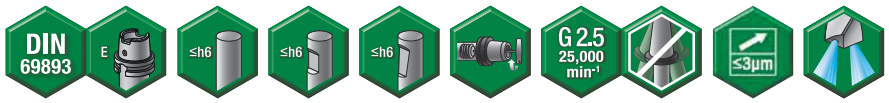
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form E versions do not have drive slots or indexing features and are suited for high speeds in machining centers and milling machines with automatic tool changers.

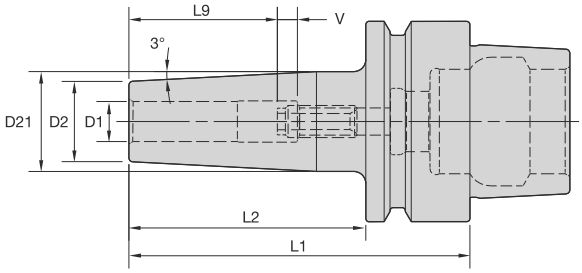
HSK50E

- ISO 12164-1/DIN 69893-1 Form E 1:10 short taper.
- High axial and radial repeatability.
- Maximum 44,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

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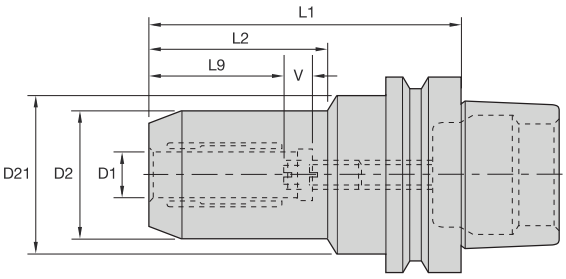
■ TT MDmm-HSK Form E

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
2386938	HSK50ETTMD03080M	3	9	13	80	54	15	5	TTSS05018M	2,5mm	0,44
2386939	HSK50ETTMD04080M	4	9	13	80	54	15	5	TTSS05018M	2,5mm	0,44
2386940	HSK50ETTMD05080M	5	10	14	80	54	15	5	TTSS06020M	3mm	0,45
2386941	HSK50ETTMD06080M	6	12	16	80	54	26	10	TTSS05018M	2,5mm	0,47
2386942	HSK50ETTMD08080M	8	16	20	80	54	26	10	TTSS06020M	3mm	0,51
2386943	HSK50ETTMD10085M	10	20	25	85	59	32	10	TTSS08020M	4mm	0,57
2386944	HSK50ETTMD12090M	12	24	30	90	64	37	10	TTSS08020M	4mm	0,65
2386945	HSK50ETTMD14090M	14	26	31	90	64	37	10	TTSS08020M	4mm	0,68
2386946	HSK50ETTMD16095M	16	28	34	95	69	40	10	TTSS12020M	6mm	0,74
2386947	HSK50ETTMD18095M	18	30	36	95	69	40	10	TTSS12020M	6mm	0,77
2386948	HSK50ETTMD20100M	20	34	41	100	74	42	10	TTSS16020M	8mm	0,91

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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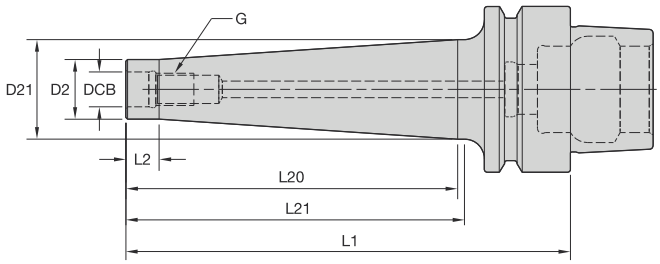
■ HC Trend MM-HSK Form E

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	adjusting screw	wrench size adjusting screw	kg
2288137	**HSK50EHCT06080M**	6	25,7	40	80	35	27	10	**170.135**	5mm	**571.061**	3mm	0,69
2288138	**HSK50EHCT08080M**	8	27,7	40	80	36	27	10	**170.135**	5mm	**571.061**	3mm	0,71
2288139	**HSK50EHCT10085M**	10	29,7	40	85	38	31	10	**170.135**	5mm	**571.061**	3mm	0,76
2288140	**HSK50EHCT12090M**	12	31,6	40	90	40	36	10	**170.135**	5mm	**571.061**	3mm	0,80
2288141	**HSK50EHCT14105M**	14	33,6	50	105	42	36	10	**170.135**	5mm	**571.063**	5mm	1,06
2288142	**HSK50EHCT16105M**	16	37,6	50	105	47	39	10	**170.135**	5mm	**571.063**	5mm	1,10
2288143	**HSK50EHCT18105M**	18	39,6	50	105	47	39	10	**170.135**	5mm	**571.063**	5mm	1,12
2288144	**HSK50EHCT20105M**	20	41,6	50	105	48	41	10	**170.135**	5mm	**571.063**	5mm	1,14

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Wrenches must be ordered separately.
Supplied with stop screw.
Reduction sleeves are available and must be ordered separately; see page I2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.



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ST-HSK Form E

order number	catalog number	DCB	G	D2	D21	L1	L2	L20	L21	kg
4062449	HSK50EST06059M	6,5	M6	10	–	59	27	–	–	0,42
4062450	HSK50EST06084M	6,5	M6	10	20	84	10	50	52	0,48
4062451	HSK50EST06109M	6,5	M6	10	23	109	10	75	77	0,54
4062452	HSK50EST08059M	8,5	M8	13	15	59	10	25	27	0,44
4062843	HSK50EST08084M	8,5	M8	13	23	84	10	50	52	0,51
4062844	HSK50EST08109M	8,5	M8	13	23	109	10	75	77	0,55
4062845	HSK50EST08134M	8,5	M8	13	25	134	10	100	102	0,63
4062846	HSK50EST10059M	10,5	M10	18	20	59	10	25	27	0,46
4062847	HSK50EST10084M	10,5	M10	18	25	84	10	50	52	0,55
4062848	HSK50EST10109M	10,5	M10	18	28	109	10	75	77	0,65
4062849	HSK50EST10134M	10,5	M10	18	30	134	10	100	102	0,75

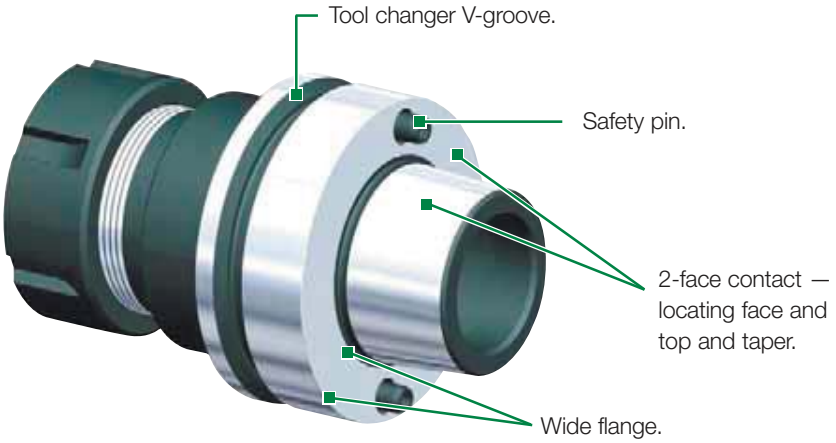
NOTE: HSK coolant unit and wrench are available and must be ordered separately; see page J32.

Erickson™ HSK Shank Tooling System • **HSK63F (Pin) Series**

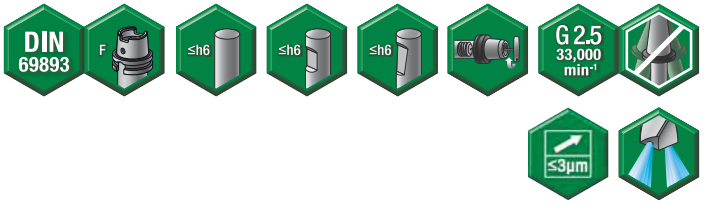
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form F versions with pin do not have drive slots or indexing features and, with their greater flange surface area support, are suited for high speeds in machining centers and milling machines with automatic tool changers.

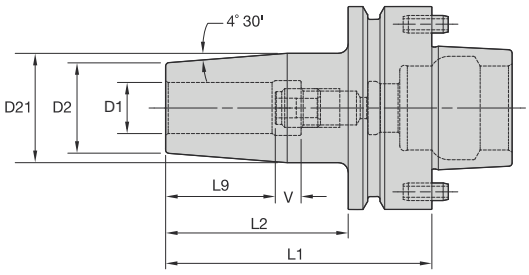
HSK63F

- ISO 12164-1/DIN 69893-1 Form F (with pin) 1:10 short taper.
- High axial and radial repeatability.
- Maximum 31,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



- 30–50% higher clamping torque compared to GP line.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4 & 3/8	-.0001/-.0004
1/2 & 5/8	.0000/-.0004
3/4 & 1	.0000/-.0005

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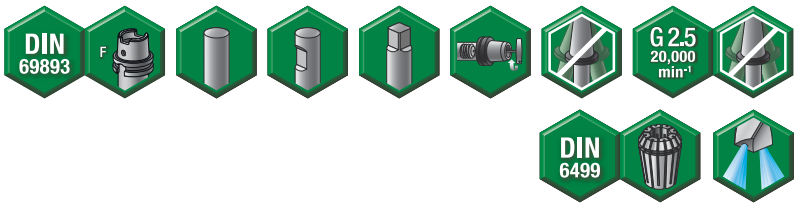
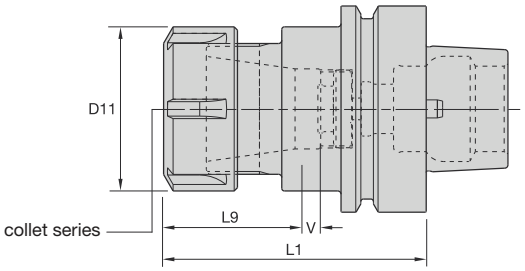
■ TT HT HPV IN-HSK Form F (Pin)

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
2636755	**HSK63FPTTHT025300**	1/4	.87	1.06	3.00	1.98	1.02	.39	**TTSS05014M**	2,5mm	1.81
2636757	**HSK63FPTTHT038300**	3/8	1.02	1.26	3.00	1.86	1.22	.39	**TTSS08014M**	4mm	1.94
2636758	**HSK63FPTTHT050325**	1/2	.98	1.26	3.25	2.11	1.42	.39	**TTSS10014M**	5mm	1.94
2636759	**HSK63FPTTHT062325**	5/8	1.10	1.33	3.25	2.11	1.38	.27	**TTSS12014M**	6mm	2.02
2636761	**HSK63FPTTHT075325**	3/4	1.34	1.61	3.25	2.11	1.38	.20	**TTSS16014M**	8mm	2.29
2636762	**HSK63FPTTHT100325**	1	1.77	2.05	3.25	2.19	1.61	.20	**TTSS16014M**	8mm	2.83

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

- Grip (2:1 advantage).





	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER32	2,0	20,0	.08	.81

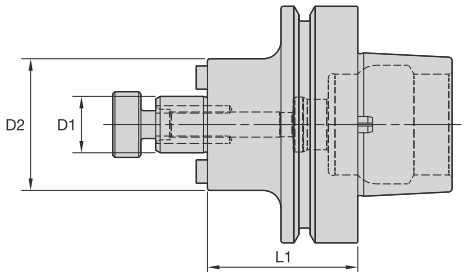
ER Round-HSK Form F (Pin)

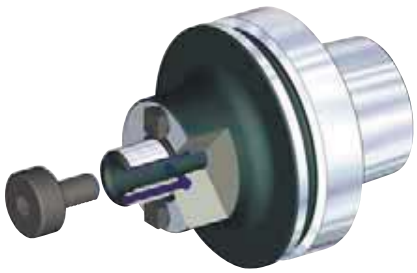
order number	catalog number	collet series	D11	L1	L9	V	kg
2657176	**HSK63FPER32080M**	ER32	50	80	43	4	1,10

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
HSK63FPER32080M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





ERICKSON

SMC Lock Screw IN-HSK Form F (Pin)

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	ft. lbs.	lbs
3762418	**HSK63FPSM2C075175**	3/4	1.46	1.75	—	—	1/4	—	1.85
3762417	**HSK63FPSMC075175**	3/4	1.75	1.75	—	—	1/4	—	2.00

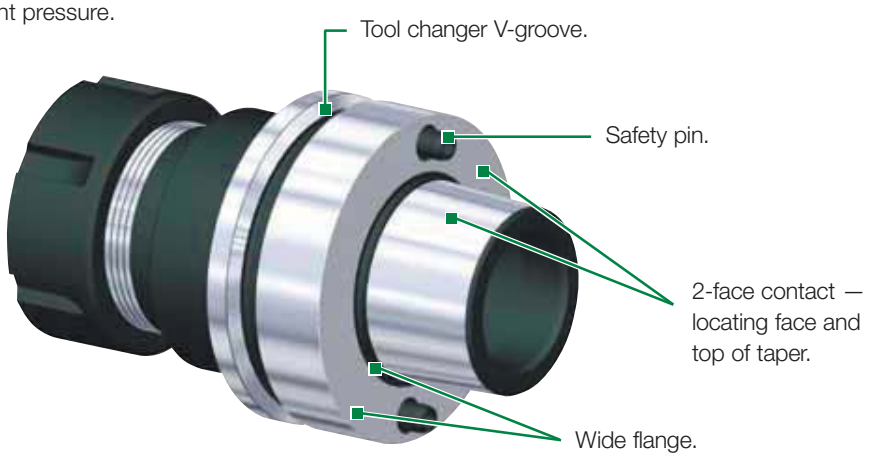
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.

Erickson™ HSK Shank Tooling System • **HSK80F (Pin) Series**

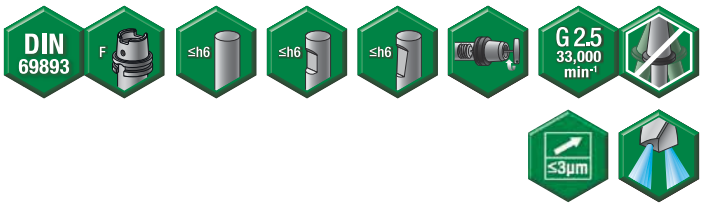
Erickson HSK Face Contact Short Taper Tooling is manufactured from premium materials and to the latest DIN/ISO specification standards. Form F versions with pin do not have drive slots or indexing features and, with their greater flange surface area support, are suited for high speeds in machining centers and milling machines with automatic tool changers.

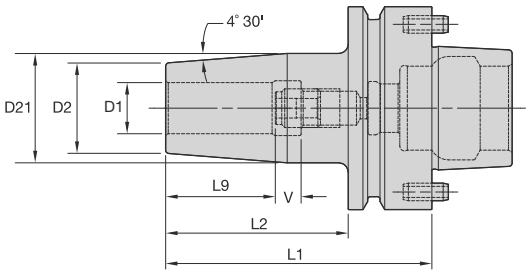
HSK80F

- ISO 12164-1/DIN 69893-1 Form F (with pin) 1:10 short taper.
- High axial and radial repeatability.
- Maximum 25,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



- 30–50% higher clamping torque compared to GP line.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameter	tolerance
1/4 & 3/8	-.0001/-.0004
1/2 & 5/8	.0000/-.0004
3/4, 1, & 1-1/4	.0000/-.0005

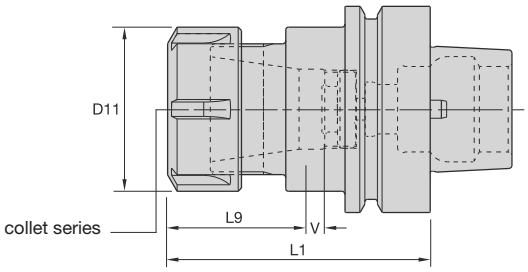
ERICKSON

■ TT HT HPV IN-HSK Form F (Pin)

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
2952218	**HSK80FPTTHT025325**	1/4	.83	1.06	3.25	2.11	1.02	.39	**TTSS05014M**	2,5mm	2.76
2952219	**HSK80FPTTHT038325**	3/8	.98	1.26	3.25	2.11	1.22	.39	**TTSS08014M**	4mm	2.91
2952220	**HSK80FPTTHT050325**	1/2	.98	1.26	3.25	2.11	1.42	.28	**TTSS10014M**	5mm	2.86
2952221	**HSK80FPTTHT062325**	5/8	1.10	1.33	3.25	2.11	1.38	.31	**TTSS12014M**	6mm	2.93
2952222	**HSK80FPTTHT075325**	3/4	1.36	1.65	3.25	2.11	1.38	.31	**TTSS16014M**	8mm	3.23
2952223	**HSK80FPTTHT100350**	1	1.77	2.08	3.50	2.36	1.73	.31	**TTSS16014M**	8mm	3.97
2952224	**HSK80FPTTHT125350**	1 1/4	1.77	2.08	3.50	2.36	1.73	.20	**TTSS16014M**	8mm	3.71

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.

• Grip (2:1 advantage).



ERICKSON

ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER32	2,0	20,0	.08	.81

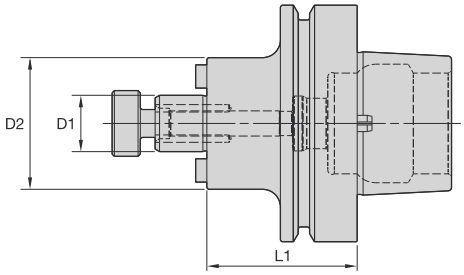
ER Round-HSK Form F (Pin)

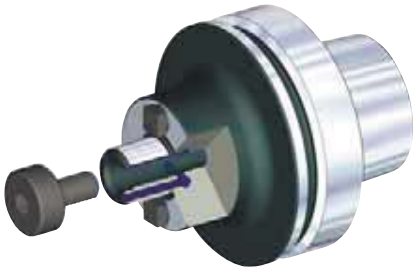
order number	catalog number	collet series	D11	L1	L9	V	kg
2952216	**HSK80FPER32085M**	ER32	50	85	43	4	1,59

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
HSK80FPER32085M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
HSK coolant unit and wrench are available and must be ordered separately; see page J32.





ERICKSON

SMC Lock IN-HSK Form F (Pin)

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3763070	**HSK80FPSM2C075200**	3/4	1.46	2.00	**KLS07**	**—**	1/4	2.89
3763069	**HSK80FPSMC075200**	3/4	1.75	2.00	**KLS07**	**KDK05**	1/4	3.10

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For HSK coolant unit and wrench, see page J32.

WIDIA

WIDIA

BTKV and CVKV Shank Tools

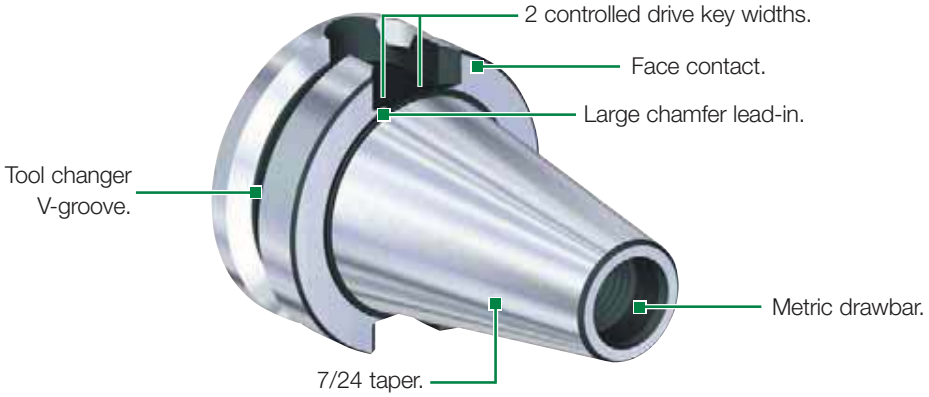
BTKV40 ..... **C2–C19**
BTKV50 ..... **C20–C37**
CVKV40 ..... **C38–C51**
CVKV50 ..... **C52–C67**

Erickson™ Taper Face Contact Shank Tooling System • **BTKV40 Series**

Erickson Taper Face BT Contact Taper Tooling is manufactured from premium materials and to the latest JIS B 6339 specification standard with an AT3 7/24 Taper per ISO-1974. Controlled, increased flange thickness to the rear of the flange gains face contact between spindle and holder. The BTKV40 tools are prebalanced to a high specification that will perform effectively up to 20,000 RPM. For any applications higher than 20,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

BTKV40

- JIS B 6339 7/24 taper.
- Standard M16 metric drawbar thread.
- High axial repeatability due to face contact.
- High radial positioning due to controlled, tighter drive key widths.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 20,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

BTKV40BTG50100M

BTKV — Shank Style

JIS B6339
Face Contact

40 — Shank Taper Size

40 = 40

50 = 50

B — Special Feature *(optional)*

B =
DIN form B coolant feature, tool shipped to AD specification
(design allows conversion to form B style)

(blank) =
(no "B" or "Z") — tool built to form A/AD coolant style

HPV =
High performance and balanceable

TD =
Tunable

TG — Toolholder Style

BB = Bar blank

EM = End mill adapter

ER = DIN 6499 single-angle collet chuck

KM = KM™ adapter

SM2C = Shell mill adapter with coolant and small diameter

SMC = Shell mill adapter with coolant

TG = Tremendous Grip single-angle collet chuck

TT = Shrink Fit thermo toolholder

TTHT = Shrink Fit thermo toolholder — high torque

50 — Toolholder Size

TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

100 — Tool Length

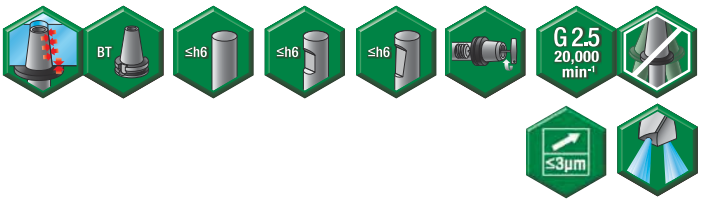
(Gage line on taper to front of tool)

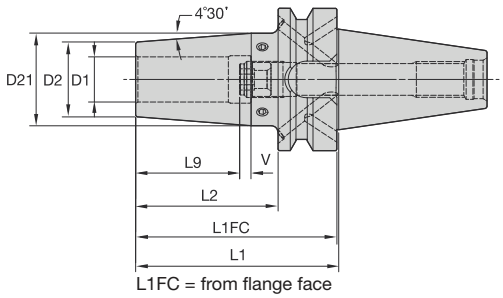
inch
xxx = x.xx

M — Identification Value

M =
Tool built to metric values and has metric retention thread

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





L1FC = from flange face
L1 = from taper gage diameter

Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

TT GP HPV MM-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3854807	**BTKV40BHPVTT06090M**	6	21	27	90	89,0	63,0	26	10	**TTSS05014M**	2,5mm	1,17
3854808	**BTKV40BHPVTT08090M**	8	21	27	90	89,0	63,0	26	10	**TTSS06014M**	3mm	1,16
3854809	**BTKV40BHPVTT10090M**	10	24	32	90	89,0	63,0	31	10	**TTSS08014M**	4mm	1,22
3854810	**BTKV40BHPVTT12090M**	12	24	32	90	89,0	63,0	36	10	**TTSS10014M**	5mm	1,21
3854811	**BTKV40BHPVTT14090M**	14	27	34	90	89,0	63,0	36	10	**TTSS10014M**	5mm	1,26
3854812	**BTKV40BHPVTT16090M**	16	27	34	90	89,0	63,0	39	10	**TTSS12014M**	6mm	1,24
3854823	**BTKV40BHPVTT18090M**	18	33	41	90	89,0	63,0	39	10	**TTSS12014M**	6mm	1,38
3854824	**BTKV40BHPVTT20090M**	20	33	41	90	89,0	63,0	41	10	**TTSS16014M**	8mm	1,35
3854825	**BTKV40BHPVTT25100M**	25	44	52	100	99,0	73,0	47	10	**TTSS16014M**	8mm	1,76
3854826	**BTKV40BHPVTT32105M**	32	44	53	105	104,0	78,0	51	10	**TTSS16014M**	8mm	1,67

(continued)

(TT GP HPV BTKV Form B/AD continued)

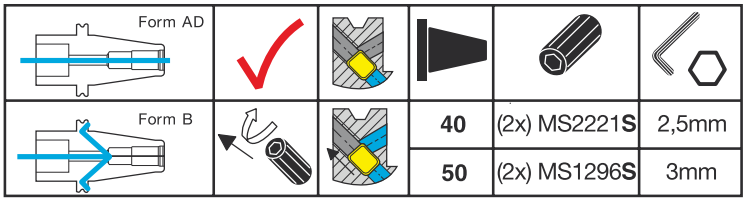
Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

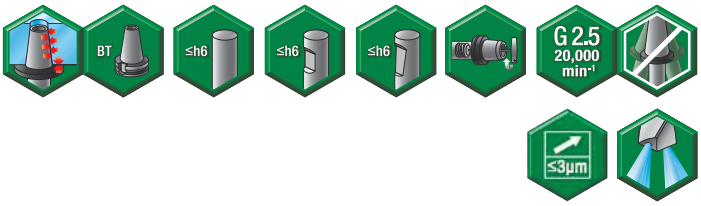
TT HPV IN-BTKV Form B/AD

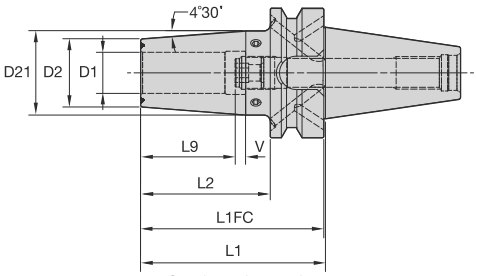
order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3861327	**BTKV40BHPVTT025350**	1/4	.83	1.06	3.50	3.46	2.44	1.02	.39	**TTSS05014M**	2,5mm	2.56
3861328	**BTKV40BHPVTT031350**	5/16	.83	1.06	3.50	3.46	2.44	1.02	.39	**TTSS06014M**	3mm	2.55
3861329	**BTKV40BHPVTT038350**	3/8	.94	1.26	3.50	3.46	2.44	1.22	.39	**TTSS08014M**	4mm	2.68
3861330	**BTKV40BHPVTT044350**	7/16	.94	1.26	3.50	3.46	2.44	1.42	.39	**TTSS10014M**	5mm	2.66
3861331	**BTKV40BHPVTT050350**	1/2	.94	1.26	3.50	3.46	2.44	1.42	.39	**TTSS10014M**	5mm	2.64
3861332	**BTKV40BHPVTT062350**	5/8	1.06	1.33	3.50	3.46	2.44	1.54	.39	**TTSS12014M**	6mm	2.71
3861343	**BTKV40BHPVTT075400**	3/4	1.30	1.65	4.00	3.96	2.94	1.61	.39	**TTSS16014M**	8mm	3.26
3861344	**BTKV40BHPVTT088400**	7/8	1.30	1.65	4.00	3.96	2.94	1.61	.39	**TTSS16014M**	8mm	3.18
3861345	**BTKV40BHPVTT100400**	1	1.73	2.06	4.00	3.96	2.94	1.85	.39	**TTSS16014M**	8mm	3.91
3861346	**BTKV40BHPVTT125425**	1 1/4	1.73	2.08	4.25	4.21	3.19	2.01	.39	**TTSS16014M**	8mm	3.81

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





L1FC = from flange face
L1 = from taper gage diameter

Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

TT HT HPV MM-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3854827	**BTKV40BHPVTTHT12090M**	12	24	32	90,0	89,0	63	36	10	**TTSS10014M**	5mm	1,21
3854828	**BTKV40BHPVTTHT14090M**	14	27	34	90,0	89,0	63	36	10	**TTSS10014M**	5mm	1,26
3854829	**BTKV40BHPVTTHT16090M**	16	27	34	90,0	89,0	63	39	10	**TTSS12014M**	6mm	1,24
3854830	**BTKV40BHPVTTHT18090M**	18	33	41	90,0	89,0	63	39	10	**TTSS12014M**	6mm	1,38
3854831	**BTKV40BHPVTTHT20090M**	20	33	41	90,0	89,0	63	41	10	**TTSS16014M**	8mm	1,35
3854832	**BTKV40BHPVTTHT25100M**	25	44	52	100,0	99,0	73	47	10	**TTSS16014M**	8mm	1,76
3854833	**BTKV40BHPVTTHT32105M**	32	44	53	105,0	104,0	78	51	10	**TTSS16014M**	8mm	1,67

(continued)

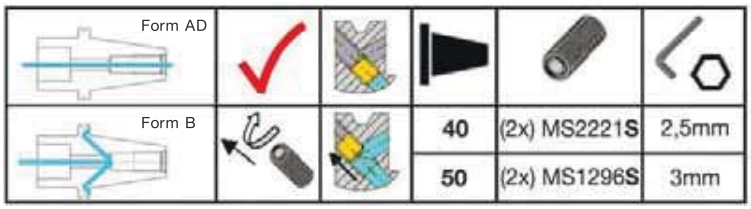
(TT HT HPV BTKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	**tolerance**
1/2 & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

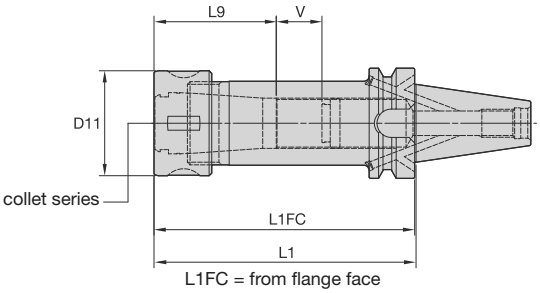
TT HT HPV IN-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3861347	**BTKV40BHPVTTHT050350**	1/2	.94	1.26	3.50	3.46	2.44	1.42	.39	**TTSS10014M**	5mm	2.64
3861348	**BTKV40BHPVTTHT062350**	5/8	1.06	1.33	3.50	3.46	2.44	1.54	.39	**TTSS12014M**	6mm	2.71
3861349	**BTKV40BHPVTTHT075400**	3/4	1.30	1.65	4.00	3.96	2.94	1.61	.39	**TTSS16014M**	8mm	3.26
3861350	**BTKV40BHPVTTHT088400**	7/8	1.30	1.65	4.00	3.96	2.94	1.61	.39	**TTSS16014M**	8mm	3.17
3861351	**BTKV40BHPVTTHT100400**	1	1.73	2.06	4.00	3.96	2.94	1.85	.39	**TTSS16014M**	8mm	3.91
3861352	**BTKV40BHPVTTHT125425**	1 1/4	1.73	2.08	4.25	4.21	3.19	2.01	.39	**TTSS16014M**	8mm	3.81

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- Tremendous Grip (3:1 advantage).



L1FC = from flange face
L1 = from taper gage diameter

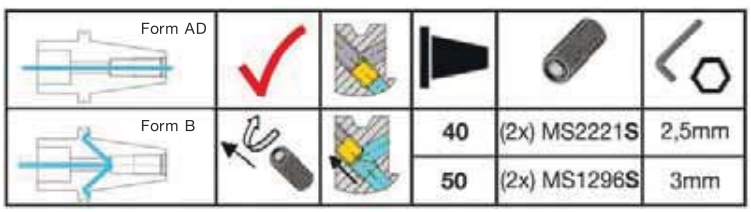
	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

ERICKSON

TG Round-BTKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
3856650	**BTKV40BTG075070M**	TG75	50	70,0	69,0	50	10	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	1,24
3856651	**BTKV40BTG100080M**	TG100	60	80,0	79,0	64	10	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,43
3856652	**BTKV40BTG100100M**	TG100	60	100,0	99,0	64	14	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,71
3856663	**BTKV40BTG100150M**	TG100	60	150,0	149,0	64	64	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	2,19
3856664	**BTKV40BTG150110M**	TG150	85	110,0	109,0	78	15	**LNA150M**	**HSW80M**	271	**SS112041G**	4mm & 5/32	2,40

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



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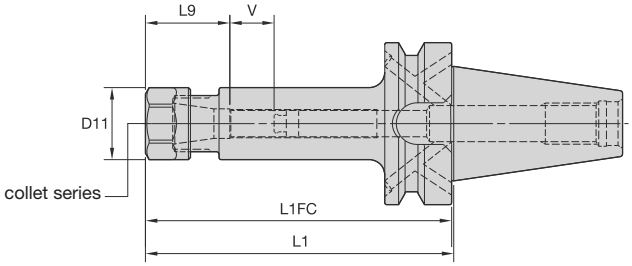


L1FC = from flange face
L1 = from taper gage diameter

	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON

ER Hex-BTKV Form B/AD

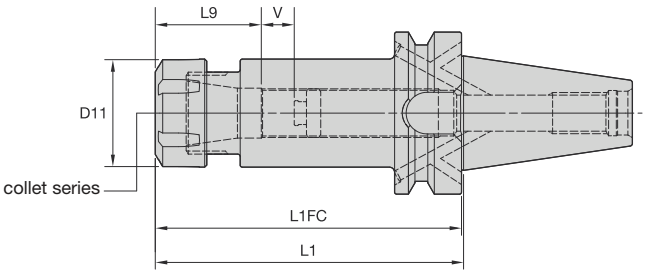
order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3857088	BTKV40BER16060M	ER16	28	60,0	59,0	32	32	1,04
3857089	BTKV40BER16120M	ER16	28	120,0	119,0	32	48	1,29
3857090	BTKV40BER20060M	ER20	34	60,0	59,0	36	27	1,04
3857091	BTKV40BER20120M	ER20	34	120,0	119,0	36	64	1,42

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
BTKV40BER16060M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BTKV40BER16120M	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
BTKV40BER20060M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
BTKV40BER20120M	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32

(continued)

(ER BTKV Form B/AD continued)



L1FC = from flange face
L1 = from taper gage diameter

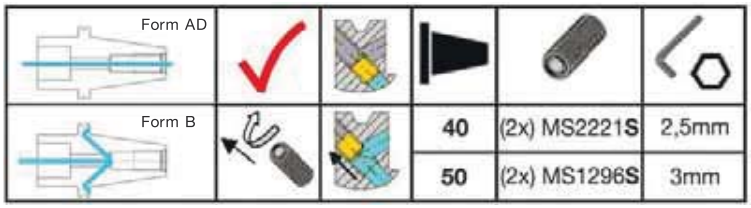
ER Round-BTKV Form B/AD

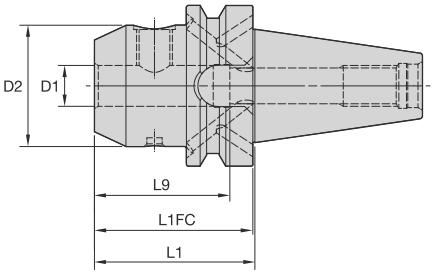
order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3857092	**BTKV40BER25070M**	ER25	42	70,0	69,0	40	22	1,16
3857123	**BTKV40BER25120M**	ER25	42	120,0	119,0	40	60	1,61
3857124	**BTKV40BER32070M**	ER32	50	70,0	69,0	46	12	1,22
3857125	**BTKV40BER32120M**	ER32	50	120,0	119,0	46	54	1,85
3857126	**BTKV40BER40080M**	ER40	63	80,0	79,0	52	9	1,38
3857127	**BTKV40BER40120M**	ER40	63	120,0	119,0	52	41	2,26

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
BTKV40BER25070M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BTKV40BER25120M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BTKV40BER32070M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BTKV40BER32120M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BTKV40BER40080M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32
BTKV40BER40120M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.





L1FC = from flange face
L1 = from taper gage diameter

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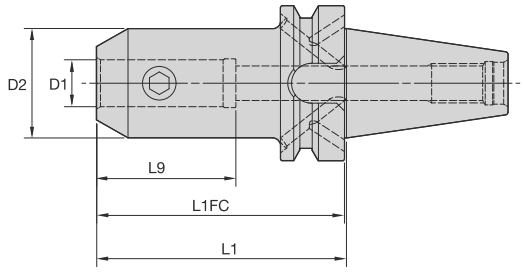
■ EM MM-BTKV Form B/AD

order number	catalog number	D1	D2	L1	L1FC	L9	lock screw	wrench size lock screw	Nm	kg
3856578	**BTKV40BEM06050M**	6	25	50,0	49,0	84	**SS03M012**	3mm	7	1,01
3856579	**BTKV40BEM08050M**	8	28	50,0	49,0	84	**SS03M014**	4mm	15	1,03
3856580	**BTKV40BEM10063M**	10	35	63,0	62,0	97	**SS03M018**	5mm	25	1,16
3856581	**BTKV40BEM12063M**	12	42	63,0	62,0	97	**SS03M023**	6mm	35	1,25
3856582	**BTKV40BEM14063M**	14	44	63,0	62,0	97	**SS03M023**	6mm	35	1,28
3856583	**BTKV40BEM16063M**	16	48	63,0	62,0	53	**SS03M025**	6mm	50	1,33
3856584	**BTKV40BEM18063M**	18	50	63,0	62,0	53	**SS03M025**	6mm	50	1,35
3856585	**BTKV40BEM20063M**	20	52	63,0	62,0	55	**SS03M026**	8mm	95	1,36
3856586	**BTKV40BEM25090M**	25	63	90,0	89,0	60	**SS03M027**	10mm	135	2,16

(continued)

(EM BTKV Form B/AD continued)

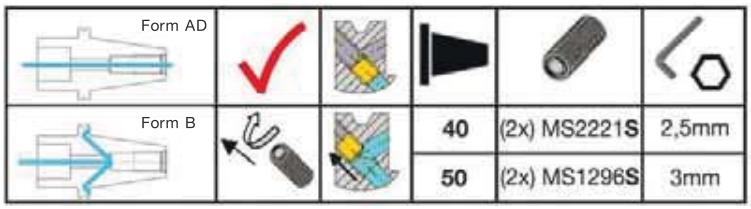


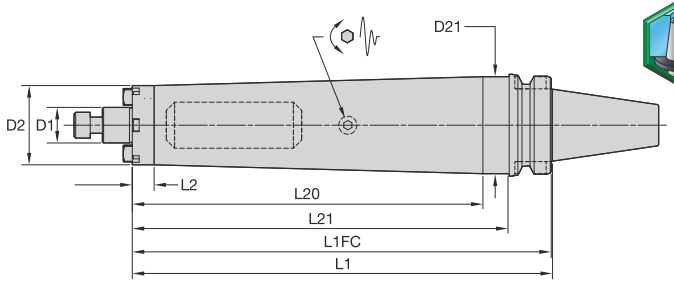
L1FC = from flange face
L1 = from taper gage diameter

EM IN-BTKV Form B/AD

order number	catalog number	D1	D2	L1	L1FC	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3856587	**BTKV40BEM025250**	1/4	1.00	2.50	2.46	3.85	**ELS025025PKG**	1/8	5	2.35
3856588	**BTKV40BEM031250**	5/16	1.00	2.50	2.46	3.85	**ELS031031PKG**	5/32	11	2.31
3856589	**BTKV40BEM038250**	3/8	1.00	2.50	2.46	3.85	**ELS038031PKG**	3/16	15	2.32
3856590	**BTKV40BEM050300**	1/2	1.38	3.00	2.96	4.35	**ELS044038PKG**	7/32	20	2.69
3856591	**BTKV40BEM062300**	5/8	1.63	3.00	2.96	2.09	**ELS056050PKG**	1/4	40	2.93
3856592	**BTKV40BEM075400**	3/4	1.75	4.00	3.96	2.22	**ELS062050PKG**	5/16	70	3.62
3856593	**BTKV40BEM088400**	7/8	2.00	4.00	3.96	2.22	**ELS062050PKG**	5/16	70	4.11
3856594	**BTKV40BEM100400**	1	2.00	4.00	3.96	2.56	**ELS075056PKG**	3/8	110	3.95
3856595	**BTKV40BEM125400**	1 1/4	2.50	4.00	3.96	2.51	**ELS075062PKG**	3/8	110	4.81

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For retention knobs, see page J33.





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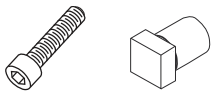
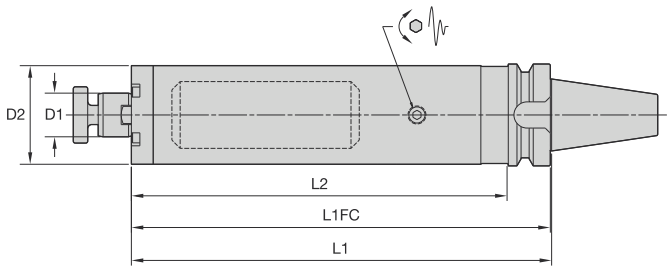
L1FC = from flange face
L1 = from taper gage diameter

SMC TD Cap MM-BTKV Form B/AD

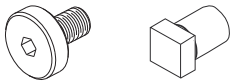


order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4136287	**BTKV40BTDSMC22260M**	22	49	60	260	259	13,5	216,8	233	**MS1234**	**KDK22M**	8mm	5,07

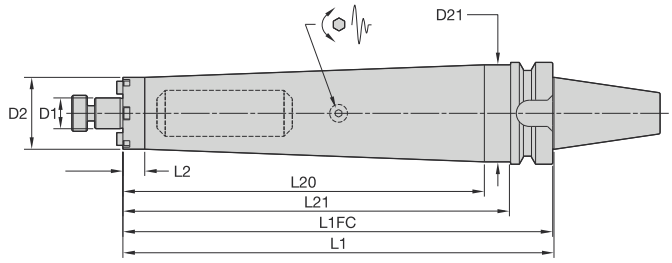


L1FC = from flange face
L1 = from taper gage diameter

SMC TD Lock MM-BTKV Form B/AD

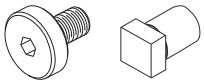


order number	catalog number	D1	D2	L1	L2	L1FC	lock screw	drive key	wrench size lock screw	kg
4136288	**BTKV40BTDSMC27260M**	27	61	260	233	259	**KLSS27M**	**—**	10mm	5,98



L1FC = from flange face
L1 = from taper gage diameter

SMC TD Lock IN-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136289	**BTKV40BTDSMC0751050**	3/4	1.750	2.362	10.500	10.460	.53	8.797	9.437	**KLS07**	**KDK05**	1/4	10.69
4136290	**BTKV40BTDSMC1001050**	1	2.189	—	10.500	10.460	9.44	—	—	**KLS10**	**KDK06**	5/16	11.84

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.

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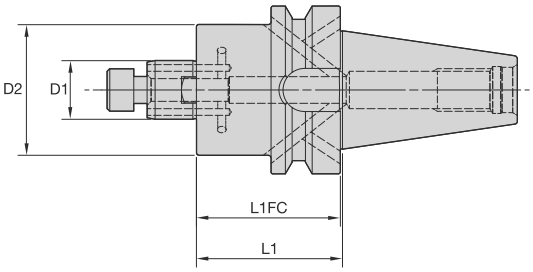

L1FC = from flange face
L1 = from taper gage diameter

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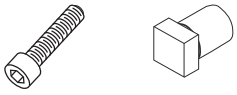
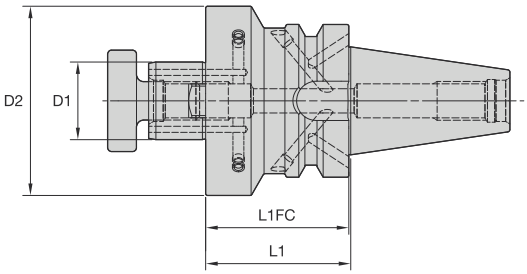
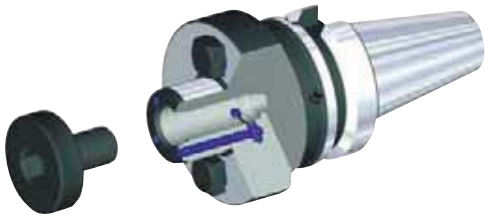
SMC Cap MM-BTKV Form B/AD



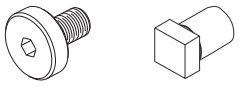
order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	kg
3857109	**BTKV40BSM2C16050M**	16	38	50,0	49,0	**MS1294**	**KDK16M**	6mm	1,17
3857108	**BTKV40BSMC16050M**	16	44	50,0	49,0	**MS1294**	**KDK16M**	6mm	1,24
3857111	**BTKV40BSM2C22055M**	22	42	55,0	54,0	**MS1234**	**–**	8mm	1,31
3857110	**BTKV40BSMC22055M**	22	49	55,0	54,0	**MS1234**	**KDK22M**	8mm	1,42



L1FC = from flange face
L1 = from taper gage diameter



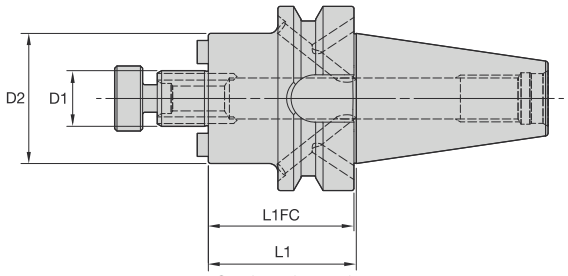
SMC Lock MM-BTKV Form B/AD



order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	kg
3857112	**BTKV40BSMC27055M**	27	60	55,0	54,0	**KLSS27M**	**KDK27M**	10mm	1,68
3857163	**BTKV40BSMC32060M**	32	78	60,0	59,0	**KLSS32M**	**KDK32M**	14mm	2,23

(continued)

(SMC BTKV Form B/AD continued)

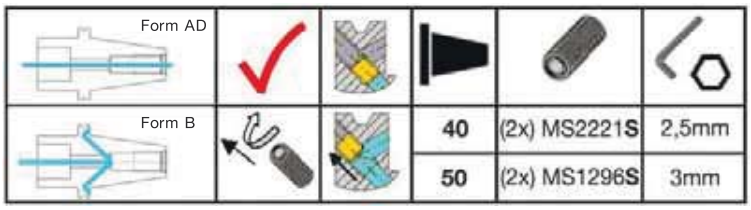


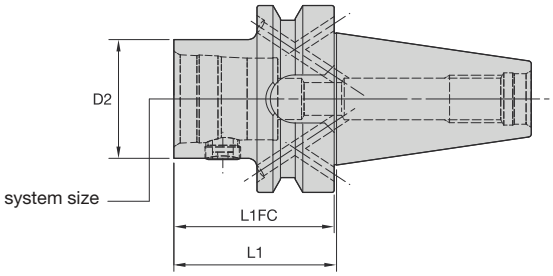
L1FC = from flange face
L1 = from taper gage diameter

SMC TD Lock IN-BTKV Form B/AD

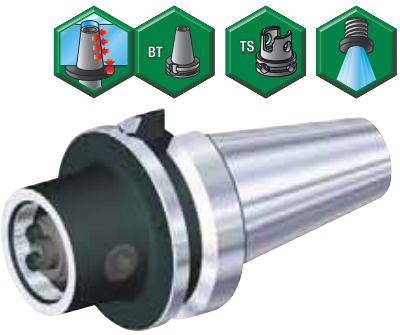
order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	lbs
3857166	**BTKV40BSM2C050175**	1/2	1.20	1.75	1.71	**KLS05**	**KDK04**	3/16	2.37
3857165	**BTKV40BSMC050175**	1/2	1.44	1.75	1.71	**KLS05**	**KDK04**	3/16	2.42
3857168	**BTKV40BSM2C075200**	3/4	1.46	2.00	1.96	**KLS07**	**–**	1/4	2.59
3857167	**BTKV40BSMC075200**	3/4	1.75	2.00	1.96	**KLS07**	**KDK05**	1/4	2.79
3857170	**BTKV40BSM2C100200**	1	2.19	2.00	1.96	**KLS10**	**KDK06**	5/16	3.25
3857169	**BTKV40BSMC100200**	1	2.75	2.00	1.96	**KLS10**	**KDK06**	5/16	3.71
3857171	**BTKV40BSMC125200**	1 1/4	2.88	2.00	1.96	**KLS12**	**KDK08**	5/16	4.05
3857172	**BTKV40BSMC150200**	1 1/2	3.81	2.00	1.96	**KLS15**	**KDK10**	3/8	5.39

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.





L1FC = from flange face
L1 = from taper gage diameter



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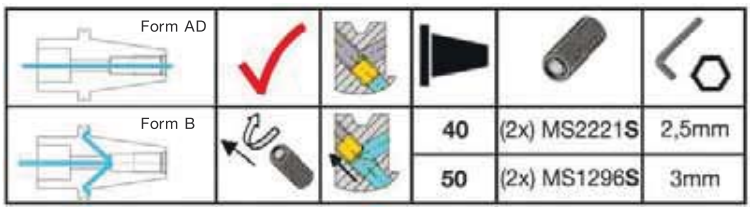
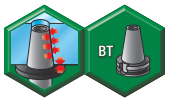
■ KM-BTKV Form B/AD

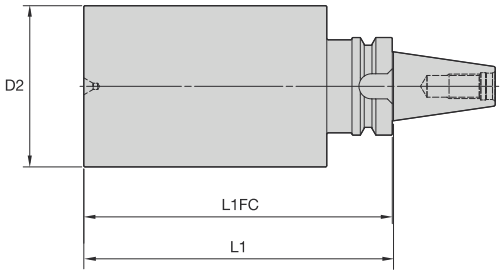
order number	catalog number	system size	D2	L1	L1FC	KM spare parts package	wrench size actuation screw	Nm	kg
3822963	**BTKV40BKM32050M**	KM32	32	50,0	49,0	**KM32PKG3S**	5mm	8-11	1,06
3822964	**BTKV40BKM32090M**	KM32	32	90,0	89,0	**KM32PKG3S**	5mm	8-11	1,28
3822965	**BTKV40BKM40055M**	KM40	40	55,0	54,0	**KM40PKG3S**	6mm	12-16	1,15
3822966	**BTKV40BKM40100M**	KM40	40	100,0	99,0	**KM40PKG3S**	6mm	12-16	1,54
3822967	**BTKV40BKM50065M**	KM50	50	65,0	64,0	**KM50PKG3S**	10mm	27-34	1,34
3822968	**BTKV40BKM50120M**	KM50	50	120,0	119,0	**KM50PKG3S**	10mm	27-34	2,13

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.



• Machinable front 20–30 RW C.





L1FC = from flange face
L1 = from taper gage diameter

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■ BB-BTKV Form A

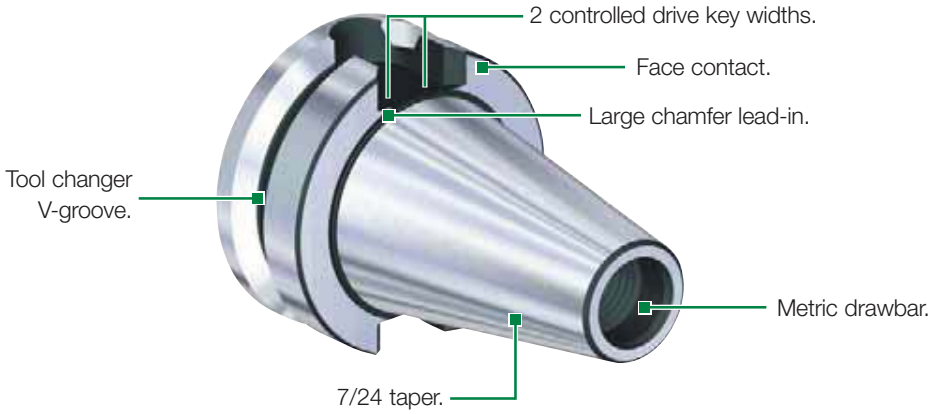
order number	catalog number	D2	L1	L1FC	kg
3815352	**BTKV40BB063280M**	63,0	280,0	279,0	7,13
3815363	**BTKV40BB104200M**	104,0	200,0	199,0	11,78

NOTE: For retention knobs, see page J33.

Erickson™ Taper Face Contact Shank Tooling System • **BTKV50 Series**

Erickson Taper Face BT Contact Taper Tooling is manufactured from premium materials and to the latest JIS B 6339 specification standard. Controlled, increased flange thickness to the rear of the flange gains face contact between spindle and holder.

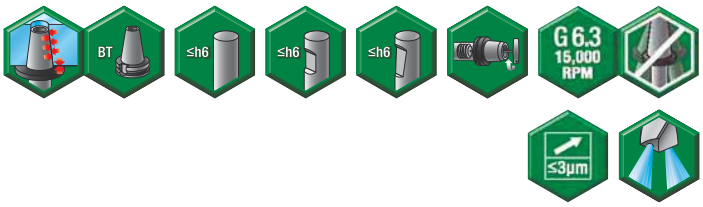
BTKV50

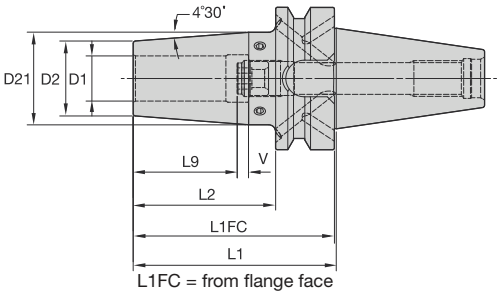


The BTKV50 tools are prebalanced to a high specification that will perform effectively up to 20,000 RPM. For any applications higher than 20,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

- JIS B 6339 7/24 taper.
- Standard M24 metric drawbar thread.
- High axial repeatability due to face contact.
- High radial positioning due to controlled, tighter drive key widths.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 20,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





L1FC = from flange face
L1 = from taper gage diameter

Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

TT GP HPV MM-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3856633	**BTKV50BHPVTT06100M**	6	21	27	100	98,5	62,0	26	10	**TTSS05014M**	2,5mm	3,72
3856634	**BTKV50BHPVTT08100M**	8	21	27	100	98,5	62,0	26	10	**TTSS06014M**	3mm	3,72
3856635	**BTKV50BHPVTT10100M**	10	24	32	100	98,5	62,0	31	10	**TTSS08014M**	4mm	3,78
3856636	**BTKV50BHPVTT12100M**	12	24	32	100	98,5	62,0	36	10	**TTSS10014M**	5mm	3,76
3856637	**BTKV50BHPVTT14100M**	14	27	34	100	98,5	62,0	36	10	**TTSS10014M**	5mm	3,81
3856638	**BTKV50BHPVTT16100M**	16	27	34	100	98,5	62,0	39	10	**TTSS12014M**	6mm	3,79
3856639	**BTKV50BHPVTT18100M**	18	33	41	100	98,5	62,0	39	10	**TTSS12014M**	6mm	3,93
3856640	**BTKV50BHPVTT20100M**	20	33	41	100	98,5	62,0	41	10	**TTSS16014M**	8mm	3,90
3856641	**BTKV50BHPVTT25100M**	25	44	52	100	98,5	62,0	47	10	**TTSS16014M**	8mm	4,19
3856642	**BTKV50BHPVTT32100M**	32	44	52	100	98,5	62,0	51	10	**TTSS16014M**	8mm	4,03

(continued)

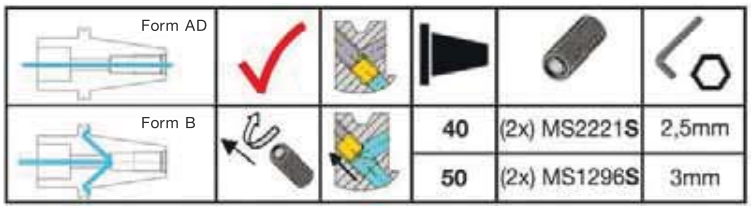
(TT GP HPV BTKV Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	**tolerance**
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

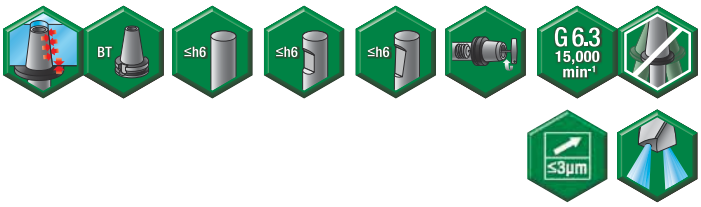
TT GP HPV In-BTKV Form B/AD

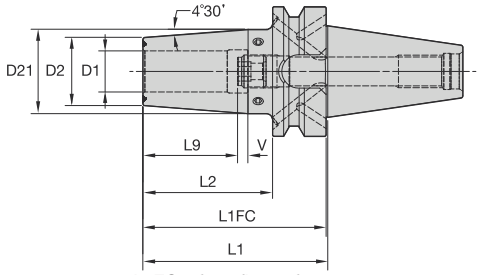
order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3859981	**BTKV50BHPVTT025400**	1/4	.83	1.06	4.00	3.94	2.50	1.02	.39	**TTSS05014M**	2,5mm	8.23
3859982	**BTKV50BHPVTT031400**	5/16	.83	1.06	4.00	3.94	2.50	1.02	.39	**TTSS06014M**	3mm	8.21
3860033	**BTKV50BHPVTT038400**	3/8	.94	1.26	4.00	3.94	2.50	1.22	.39	**TTSS08014M**	4mm	8.36
3860034	**BTKV50BHPVTT044400**	7/16	.94	1.26	4.00	3.94	2.50	1.42	.39	**TTSS10014M**	5mm	8.33
3860035	**BTKV50BHPVTT050400**	1/2	.94	1.26	4.00	3.94	2.50	1.42	.39	**TTSS10014M**	5mm	8.31
3860036	**BTKV50BHPVTT062400**	5/8	1.06	1.33	4.00	3.94	2.50	1.54	.39	**TTSS12014M**	6mm	8.38
3860037	**BTKV50BHPVTT075400**	3/4	1.30	1.61	4.00	3.94	2.50	1.61	.39	**TTSS16014M**	8mm	8.66
3860038	**BTKV50BHPVTT088400**	7/8	1.30	1.61	4.00	3.94	2.50	1.61	.39	**TTSS16014M**	8mm	8.60
3860039	**BTKV50BHPVTT100400**	1	1.73	2.05	4.00	3.94	2.50	1.85	.39	**TTSS16014M**	8mm	9.27
3860040	**BTKV50BHPVTT125400**	1 1/4	1.73	2.05	4.00	3.94	2.50	2.01	.39	**TTSS16014M**	8mm	8.95

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





L1FC = from flange face
L1 = from taper gage diameter

Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

TT HT HPV MM-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3856643	**BTKV50BHPVTTHT12100M**	12	24	32	100	98,5	62,0	36	10	**TTSS10014M**	5mm	3,76
3856644	**BTKV50BHPVTTHT14100M**	14	27	34	100	98,5	62,0	36	10	**TTSS10014M**	5mm	3,81
3856645	**BTKV50BHPVTTHT16100M**	16	27	34	100	98,5	62,0	39	10	**TTSS12014M**	6mm	3,79
3856646	**BTKV50BHPVTTHT18100M**	18	33	41	100	98,5	62,0	39	10	**TTSS12014M**	6mm	3,93
3856647	**BTKV50BHPVTTHT20100M**	20	33	41	100	98,5	62,0	41	10	**TTSS16014M**	8mm	3,90
3856648	**BTKV50BHPVTTHT25100M**	25	44	52	100	98,5	62,0	47	10	**TTSS16014M**	8mm	4,90
3856649	**BTKV50BHPVTTHT32100M**	32	44	52	100	98,5	62,0	51	10	**TTSS16014M**	8mm	4,03

(continued)

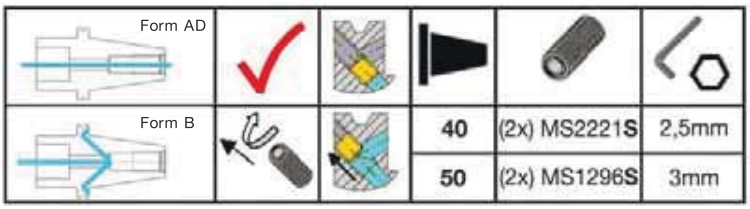
(TT HT HPV BTKV Form B/AD continued)

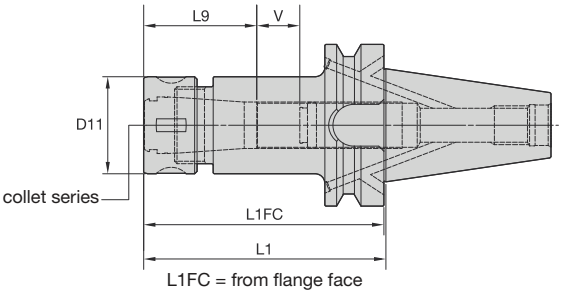
Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	**tolerance**
1/2 & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

TT HT HPV In-BTKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860041	**BTKV50BHPVTTHT050400**	1/2	.94	1.26	4.00	3.94	2.504	1.42	.39	**TTSS10014M**	5mm	8.31
3860042	**BTKV50BHPVTTHT062400**	5/8	1.06	1.33	4.00	3.94	2.504	1.54	.39	**TTSS12014M**	6mm	8.38
3860043	**BTKV50BHPVTTHT075400**	3/4	1.30	1.61	4.00	3.94	2.504	1.61	.39	**TTSS16014M**	8mm	8.66
3860044	**BTKV50BHPVTTHT088400**	7/8	1.30	1.61	4.00	3.94	2.504	1.61	.39	**TTSS16014M**	8mm	8.60
3860045	**BTKV50BHPVTTHT100400**	1	1.73	2.05	4.00	3.94	2.504	1.85	.39	**TTSS16014M**	8mm	9.27
3860046	**BTKV50BHPVTTHT125400**	1 1/4	1.73	2.05	4.00	3.94	2.504	2.01	.39	**TTSS16014M**	8mm	8.95

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.





L1FC = from flange face
L1 = from taper gage diameter

	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

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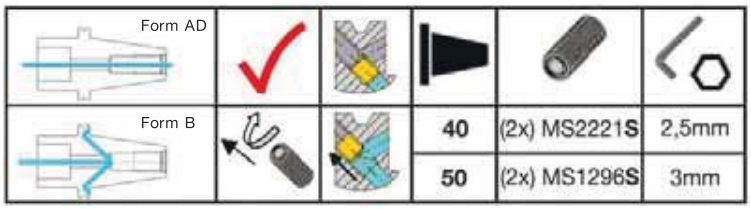
TG Round-BTKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	locknut	wrench	stop screw	wrench size stop screw	Nm	kg
3856665	**BTKV50BTG100090M**	TG100	60	90,0	88,5	64	36	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	203	3,97
3856666	**BTKV50BTG100150M**	TG100	60	150,0	148,5	64	89	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	203	5,15
3856667	**BTKV50BTG150100M**	TG150	85	100,0	98,5	78	13	**LNA150M**	**HSW80M**	**SS162062G**	4mm & 5/32	271	4,43
3856668	**BTKV50BTG150150M**	TG150	85	150,0	148,5	78	49	**LNA150M**	**HSW80M**	**SS162062G**	4mm & 5/32	271	6,08

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



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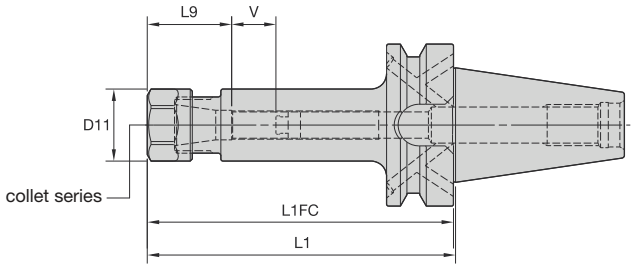

L1FC = from flange face
L1 = from taper gage diameter

	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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ER Hex-BTKV Form B/AD

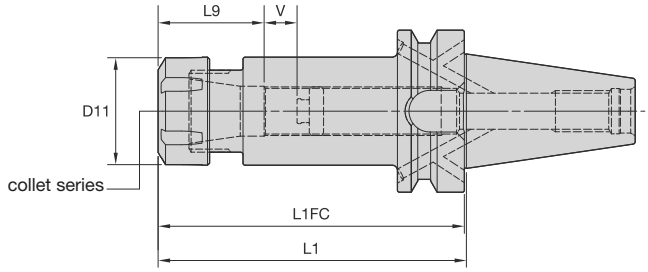
order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3857128	**BTKV50BER16100M**	ER16	28	100	98,5	32	48	3,78
3857129	**BTKV50BER16150M**	ER16	28	150	148,5	32	48	3,97
3857130	**BTKV50BER20070M**	ER20	34	70	68,5	36	24	3,65
3857131	**BTKV50BER20150M**	ER20	34	150	148,5	36	64	4,12

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
BTKV50BER16100M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
BTKV50BER16150M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
BTKV50BER20070M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32
BTKV50BER20150M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32

(continued)

(ER BTKV Form B/AD continued)



L1FC = from flange face
L1 = from taper gage diameter

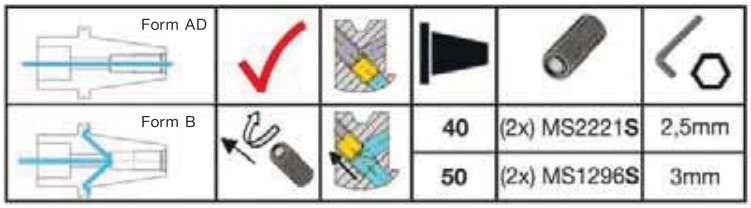
ER Round-BTKV Form B/AD

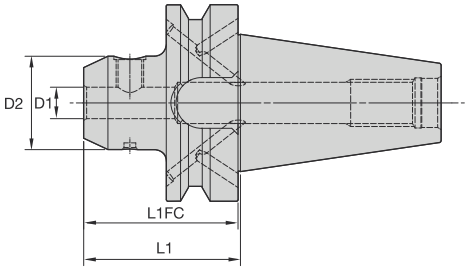
order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3857132	**BTKV50BER25070M**	ER25	42	70,0	68,5	40	40	3,69
3857133	**BTKV50BER25150M**	ER25	42	150,0	148,5	40	60	4,38
3857134	**BTKV50BER32070M**	ER32	50	70,0	68,5	46	38	3,67
3857135	**BTKV50BER32150M**	ER32	50	150,0	148,5	46	54	4,67
3857136	**BTKV50BER40080M**	ER40	63	80,0	78,5	52	38	3,83
3857137	**BTKV50BER40150M**	ER40	63	150,0	148,5	52	48	5,33

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
BTKV50BER25070M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BTKV50BER25150M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BTKV50BER32070M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BTKV50BER32150M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BTKV50BER40080M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32
BTKV50BER40150M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.





L1FC = from flange face
L1 = from taper gage diameter

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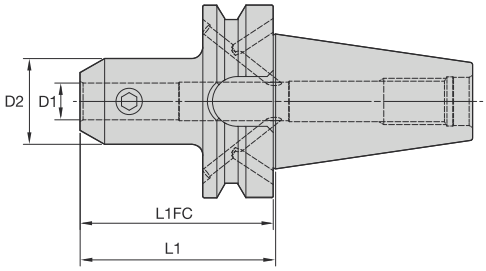
■ EM MM-BTKV Form B/AD

order number	catalog number	D1	D2	L1	L1FC	lock screw	wrench size lock screw	Nm	kg
3856539	**BTKV50BEM06063M**	6	24,5	63,0	61,5	**SS03M012**	3mm	7	3,58
3856541	**BTKV50BEM08063M**	8	27,5	63,0	61,5	**SS03M014**	4mm	15	3,60
3856542	**BTKV50BEM10080M**	10	34,5	80,0	78,5	**SS03M018**	5mm	25	3,79
3856563	**BTKV50BEM12080M**	12	41,5	80,0	78,5	**SS03M023**	6mm	35	3,86
3856564	**BTKV50BEM14080M**	14	43,5	80,0	78,5	**SS03M023**	6mm	35	3,90
3856565	**BTKV50BEM16080M**	16	47,5	80,0	78,5	**SS03M025**	6mm	50	3,97
3856566	**BTKV50BEM18080M**	18	49,5	80,0	78,5	**SS03M025**	6mm	50	4,00
3856567	**BTKV50BEM20080M**	20	51,5	80,0	78,5	**SS03M026**	8mm	95	4,02
3856568	**BTKV50BEM25105M**	25	64,5	105,0	103,5	**SS03M027**	10mm	135	4,80
3856569	**BTKV50BEM32105M**	32	71,5	105,0	103,5	**SS03M029**	10mm	160	5,04
3856570	**BTKV50BEM40120M**	40	89,5	120,0	118,5	**SS03M029**	10mm	160	6,56
3856571	**BTKV50BEM50130M**	50	99,5	130,0	128,5	**–**	12mm	200	7,50

(continued)

(EM BTKV Form B/AD continued)

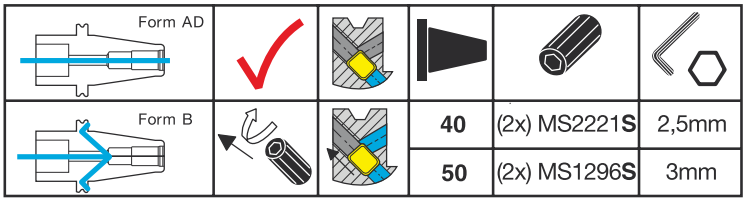


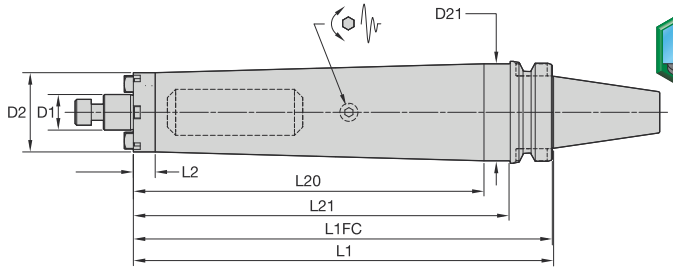
L1FC = from flange face
L1 = from taper gage diameter

EM IN-BTKV Form B/AD

order number	catalog number	D1	D2	L1	L1FC	lock screw	wrench size lock screw	ft. lbs.	lbs
3856572	**BTKV50BEM050300**	1/2	1.37	3.00	2.94	**ELS044038PKG**	7/32	20	8.18
3856573	**BTKV50BEM075400**	3/4	1.75	4.00	3.94	**ELS062050PKG**	5/16	70	8.99
3856574	**BTKV50BEM100400**	1	2.00	4.00	3.94	**ELS075056PKG**	3/8	110	8.95
3856575	**BTKV50BEM125400**	1 1/4	2.50	4.00	3.94	**ELS075062PKG**	3/8	110	10.08
3856576	**BTKV50BEM150450**	1 1/2	2.75	4.50	4.44	**ELS075069PKG**	3/8	110	11.05
3856577	**BTKV50BEM200550**	2	3.75	5.50	5.44	**ELS100088PKG**	1/2	148	16.28

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For retention knobs, see page J33.

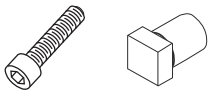




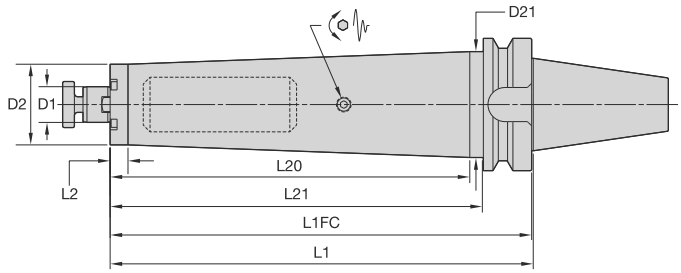
L1FC = from flange face
L1 = from taper gage diameter

ERICKSON

SMC TD Cap MM-BTKV Form B/AD

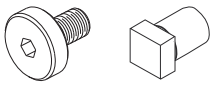


order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4136291	BTKV50BTDSMC22260M	22	49	70	260,0	258,5	13,5	211,8	222	MS1234	KDK22M	8mm	8,27

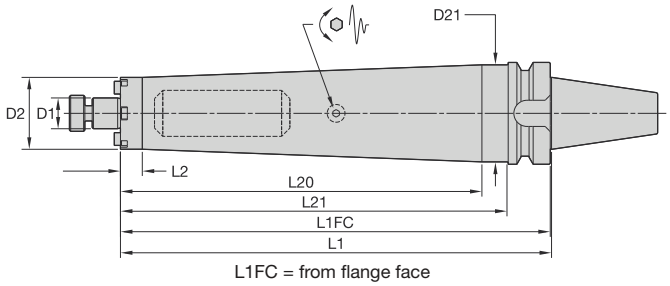


L1FC = from flange face
L1 = from taper gage diameter

SMC TD Lock MM-BTKV Form B/AD

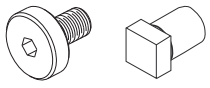


order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4136292	BTKV50BTDSMC27320M	27	61	80	320	318,5	13,5	271,8	282	KLSS27M	—	10mm	11,89
4136303	BTKV50BTDSMC32330M	32	78	—	330	328,5	292,0	—	—	KLSS32M	KDK32M	14mm	16,22



L1FC = from flange face
L1 = from taper gage diameter

SMC TD Lock IN-BTKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136304	BTKV50BTDSMC0751050	3/4	1.75	2.56	10.50	10.44	.53	8.60	9.00	KLS07	KDK05	1/4	16.86
4136305	BTKV50BTDSMC1001250	1	2.75	—	12.50	12.44	11.00	—	—	KLS10	KDK06	5/16	25.60
4136306	BTKV50BTDSMC1251300	1 1/4	2.88	—	13.00	12.94	11.50	—	—	KLS12	KDK08	5/16	32.85

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.

WIN WITH WIDIA™

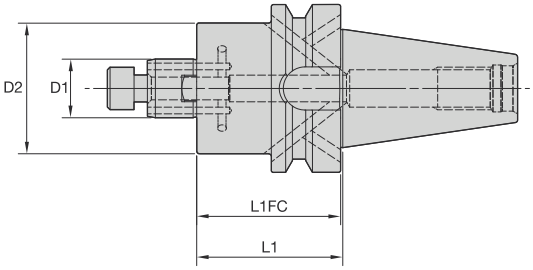
KM™ ROTAFLEX™

The ROTAFLEX high-performance hole finishing system from WIDIA™, with its long history of proven successes, now features a host of new developments that will further its reputation as the premier hole-finishing solution for metalworking manufacturers.

With both roughing and precision finishing heads available, ROTAFLEX represents a single WIDIA system for both roughing and fine-finishing operations over a broad diameter range. The very stable KM-TS coupling and the newly developed RFX coupling are applicable to almost every machine spindle and offer easy assembly and disassembly due to less vibration, resulting in increased machine tool productivity and longer intervals between scheduled maintenance.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA™

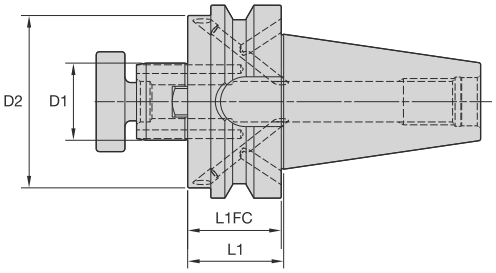


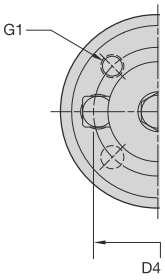
L1FC = from flange face
L1 = from taper gage diameter

ERICKSON

SMC Cap MM-BTKV Form B/AD

order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	kg
3857069	BTKV50BSM2C16045M	16	38	45,0	43,5	MS1294	KDK16M	6mm	3,66
3857068	BTKV50BSMC16045M	16	44	45,0	43,5	MS1294	KDK16M	6mm	3,67
3857071	BTKV50BSM2C22045M	22	42	45,0	43,5	MS1234	—	8mm	3,66
3857070	BTKV50BSMC22045M	22	49	45,0	43,5	MS1234	KDK22M	8mm	3,69





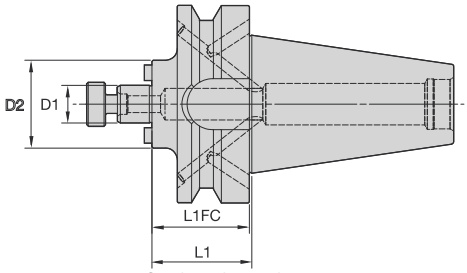
L1FC = from flange face
L1 = from taper gage diameter

SMC Lock MM-BTKV Form B/AD

order number	catalog number	D1	D2	D4	G1	L1	L1FC	lock screw	drive key	wrench size lock screw	kg
3857072	BTKV50BSMC27045M	27	60	—	—	45,0	43,5	KLSS27M	KDK27M	10mm	3,80
3857093	BTKV50BSMC32045M	32	78	—	—	45,0	43,5	KLSS32M	KDK32M	14mm	4,01
3857094	BTKV50BSMC40050M	40	89	66,7	M12X1.75	50,0	48,5	KLSS40M	KDK40M	17mm	4,46
3857095	BTKV50BSMC60090M	60	129	101,6	M16X2.0	90,0	88,5	—	KDK60M	—	8,55

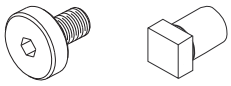
(continued)

(SMC Lock BTKV Form B/AD continued)

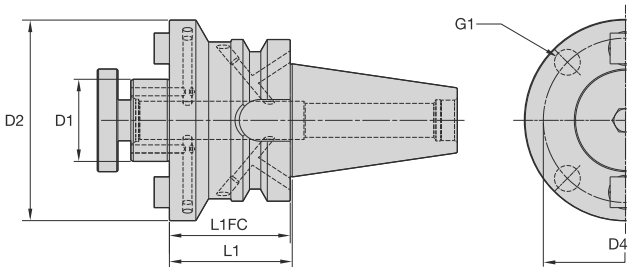


L1FC = from flange face
L1 = from taper gage diameter

SMC Lock MM-BTKV Form B/AD

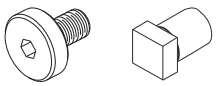


order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size lock screw	lbs
3857097	**BTKV50BSM2C075200**	3/4	1.46	2.00	1.941	**KLS07**	**—**	1/4	8.14
3857096	**BTKV50BSMC075200**	3/4	1.75	2.00	1.941	**KLS07**	**KDK05**	1/4	8.25
3857099	**BTKV50BSM2C100200**	1	2.19	2.00	1.941	**KLS10**	**KDK06**	5/16	8.45
3857098	**BTKV50BSMC100200**	1	2.75	2.00	1.941	**KLS10**	**KDK06**	5/16	8.75
3857100	**BTKV50BSMC125200**	1 1/4	2.88	2.00	1.941	**KLS12**	**KDK08**	5/16	9.05
3857101	**BTKV50BSMC150200**	1 1/2	3.81	2.00	1.941	**KLS15**	**KDK10**	3/8	10.07



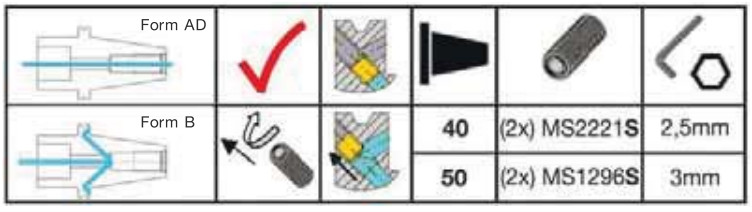
L1FC = from flange face
L1 = from taper gage diameter

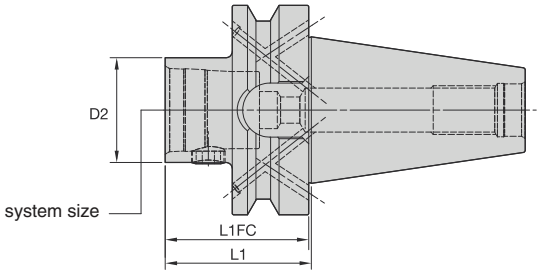
SMC Lock IN-BTKV Form B/AD



order number	catalog number	D1	D2	D4	G1	L1	L1FC	lock screw	drive key	wrench size lock screw	lbs
3857102	**BTKV50BSMC200300**	2	4.88	4.00	5/8-11 UNC	3.00	2.94	**KLS20**	**KDK12**	9/16	15.08
3857103	**BTKV50BSMC250300**	2 1/2	4.88	4.00	5/8-11 UNC	3.00	2.94	**KLS25**	**KDK16**	9/16	16.33

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.





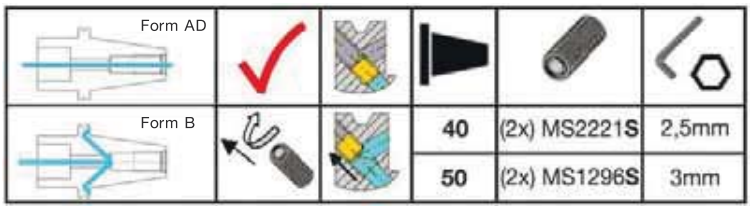
L1FC = from flange face
L1 = from taper gage diameter

ERICKSON

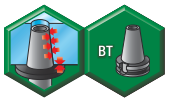
KM-BTKV Form B/AD

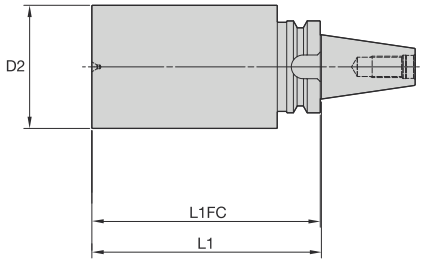
order number	catalog number	system size	D2	L1	L1FC	KM spare parts package	wrench size actuation screw	Nm	kg
3815301	**BTKV50BKM32060M**	KM32	32	60	58,5	**KM32PKG3S**	5mm	8-11	3,63
3815302.	**BTKV50BKM32090M**	KM32	32	90	88,5	**KM32PKG3S**	5mm	8-11	3,78
3815333	**BTKV50BKM40065M**	KM40	40	65	63,5	**KM40PKG3S**	6mm	12-16	3,72
3815334	**BTKV50BKM40100M**	KM40	40	100	98,5	**KM40PKG3S**	6mm	12-16	4,01
3815335	**BTKV50BKM50070M**	KM50	50	70	68,5	**KM50PKG3S**	10mm	27-34	3,86
3815336	**BTKV50BKM50120M**	KM50	50	120	118,5	**KM50PKG3S**	10mm	27-34	4,54
3815337	**BTKV50BKM63080M**	KM63	63	80	78,5	**KM63PKG3S**	12mm	47-54	4,22
3815338	**BTKV50BKM63140M**	KM63	63	140	138,5	**KM63PKG3S**	12mm	47-54	5,55
3815339	**BTKV50BKM80090M**	KM80	80	90	88,5	**KM80PKG3S**	14mm	79-85	5,00

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.
These products are only available in the U.S., Canada, and Japan.



• Machinable front 20–30 RW C.





L1FC = from flange face
L1 = from taper gage diameter

ERICKSON

■ BB-BTKV Form B/AD

order number	catalog number	D2	L1	L1FC	kg
3830226	**BTKV50BB104350M**	104	350	348,5	24,37
3830227	**BTKV50BB134250M**	134	250	248,5	26,58

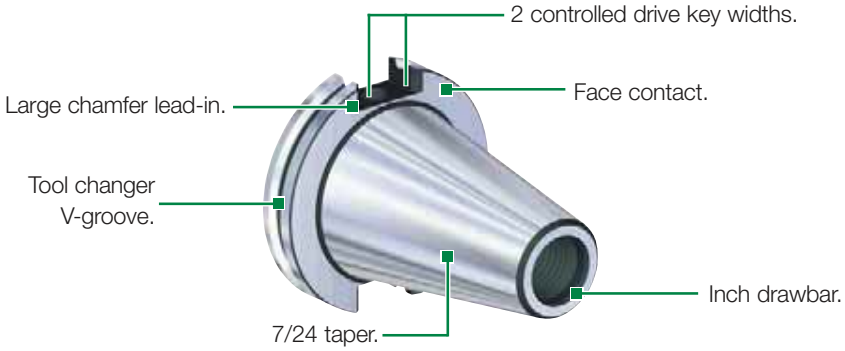
NOTE: For retention knobs, see page J33.

Erickson™ Taper Face Contact Shank Tooling System • **CVKV40 Series**

Erickson Taper Face CV Contact Taper Tooling is manufactured from premium materials and to the latest ANSI B5.50 specification standard. Controlled, increased flange thickness to the rear of the flange gains face contact between spindle and holder. The CVKV40 tools are prebalanced to a high specification that will perform effectively up to 20,000 RPM. For any applications higher than 20,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

CVKV40

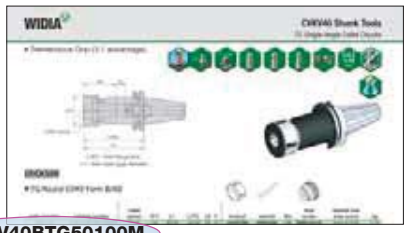
- ANSI B5.50 7/24 taper.
- Standard 5/8-11 drawbar thread.
- High axial repeatability due to face contact.
- High radial positioning due to controlled, tighter drive key widths.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 20,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



Drive key slots are unequal depths. Detent hole identifies shallow drive key slot.

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



CVKV40BTG50100M

CVKV	40	B	TG	50	100	M
Shank Style	Shank Taper Size	Special Feature *(optional)*	Toolholder Style	Toolholder Size	Tool Length	Identification Value
ANSI B5.50 Face Contact	**40** = 40 **50** = 50	**B** = DIN form B coolant feature, tool shipped to AD specification (design allows conversion to form B style) **(blank)** = (no "B" or "Z") — tool built to form A/AD coolant style **HPV** = High performance and balanceable **TD** = Tunable			(Gage line on taper to front of tool) **inch** xxx = x.xx	**M** = Tool built to metric values and has metric retention thread

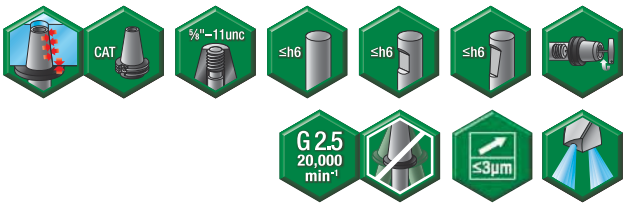
BB = Bar blank
EM = End mill adapter
ER = DIN 6499 single-angle collet chuck
KM = KM™ adapter
SM2C = Shell mill adapter with coolant and small diameter
SMC = Shell mill adapter with coolant
TG = Tremendous Grip single-angle collet chuck
TT = Shrink Fit thermo toolholder
TTHT = Shrink Fit thermo toolholder — high torque

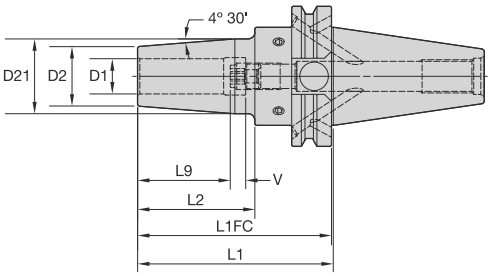
TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





L1FC = from flange face
L1 = from taper gage diameter

Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-CVKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3860164	CVKV40BHPVTT06M350	6	21	26,90	88,90	87,90	53,15	26	10	TTSS05014M	2,5mm	1,18
3860165	CVKV40BHPVTT08M350	8	21	26,90	88,90	87,90	53,15	26	10	TTSS06014M	3mm	1,18
3860166	CVKV40BHPVTT10M350	10	24	31,00	88,90	87,90	53,15	31	10	TTSS08014M	4mm	1,22
3860167	CVKV40BHPVTT12M350	12	24	31,00	88,90	87,90	53,15	36	10	TTSS10014M	5mm	1,21
3860168	CVKV40BHPVTT14M350	14	27	33,90	88,90	87,90	53,15	36	10	TTSS10014M	5mm	1,25
3860169	CVKV40BHPVTT16M350	16	27	33,90	88,90	87,90	53,15	39	10	TTSS12014M	6mm	1,22
3860170	CVKV40BHPVTT18M400	18	33	44,45	101,60	100,60	82,55	39	10	TTSS12014M	6mm	1,47
3860171	CVKV40BHPVTT20M400	20	33	44,45	101,60	100,60	82,55	41	10	TTSS16014M	8mm	1,43
3860172	CVKV40BHPVTT25M400	25	44	52,90	101,60	100,60	82,55	47	10	TTSS16014M	8mm	1,73
3860173	CVKV40BHPVTT32M400	32	44	52,90	101,60	100,60	82,55	51	10	TTSS16014M	8mm	1,56

(continued)

(TT GP HPV CVKV Form B/AD continued)

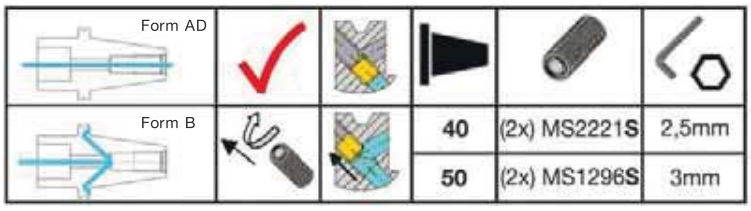
Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

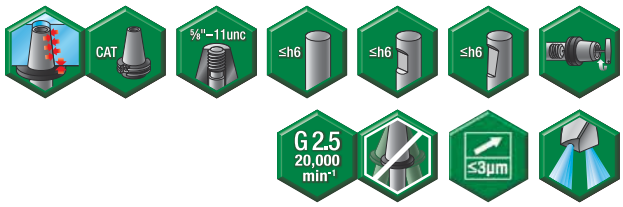
TT GP HPV IN-CVKV Form B/AD

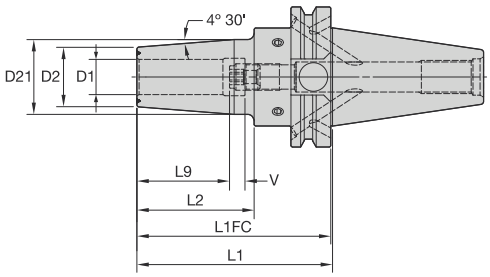
order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860008	**CVKV40BHPVTT025350**	1/4	.83	1.06	3.50	3.46	2.09	1.02	.39	**TTSS05014M**	2,5mm	2.61
3860009	**CVKV40BHPVTT031350**	5/16	.83	1.06	3.50	3.46	2.09	1.02	.39	**TTSS06014M**	3mm	2.59
3860010	**CVKV40BHPVTT038375**	3/4	.94	1.26	3.75	3.71	2.34	1.22	.39	**TTSS08014M**	4mm	2.78
3860011	**CVKV40BHPVTT044375**	7/16	.94	1.26	3.75	3.71	2.34	1.42	.39	**TTSS10014M**	5mm	2.75
3860012	**CVKV40BHPVTT050375**	1/2	.94	1.26	3.75	3.71	2.34	1.42	.39	**TTSS10014M**	5mm	2.73
3860013	**CVKV40BHPVTT056375**	9/16	1.06	1.33	3.75	3.71	2.34	1.42	.39	**TTSS10014M**	5mm	2.84
3860014	**CVKV40BHPVTT062375**	5/8	1.06	1.33	3.75	3.71	2.34	1.54	.39	**TTSS12014M**	6mm	2.79
3860015	**CVKV40BHPVTT068400**	11/16	1.30	1.75	4.00	3.96	3.25	1.54	.39	**TTSS12014M**	6mm	3.25
3860016	**CVKV40BHPVTT075400**	3/4	1.30	1.75	4.00	3.96	3.25	1.61	.39	**TTSS12014M**	8mm	3.17
3860017	**CVKV40BHPVTT088400**	7/8	1.30	1.75	4.00	3.96	3.25	1.61	.39	**TTSS16014M**	8mm	3.09
3860018	**CVKV40BHPVTT100400**	1	1.73	2.08	4.00	3.96	3.25	1.85	.39	**TTSS16014M**	8mm	3.79
3860019	**CVKV40BHPVTT125400**	1 1/4	1.73	2.08	4.00	3.96	3.25	2.01	.39	**TTSS16014M**	8mm	3.46

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





L1FC = from flange face
L1 = from taper gage diameter

Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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TT HT HPV MM-CVKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3860147	CVKV50BHPVTT06M350	6	21	26,90	88,90	87,40	53,15	26	10	TTSS05014M	2,5mm	3,17
3860148	CVKV50BHPVTT08M350	8	21	26,90	88,90	87,40	53,15	26	10	TTSS06014M	3mm	3,17
3860149	CVKV50BHPVTT10M375	10	24	31,90	95,25	93,75	59,50	31	10	TTSS08014M	4mm	3,25
3860150	CVKV50BHPVTT12M400	12	24	31,90	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,27
3860152	CVKV50BHPVTT16M400	16	27	33,90	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,29
3860154	CVKV50BHPVTT20M400	20	33	41,90	101,60	100,10	65,85	41	10	TTSS16014M	8mm	3,42

(continued)

(TT HT HPV CVKV Form B/AD continued)

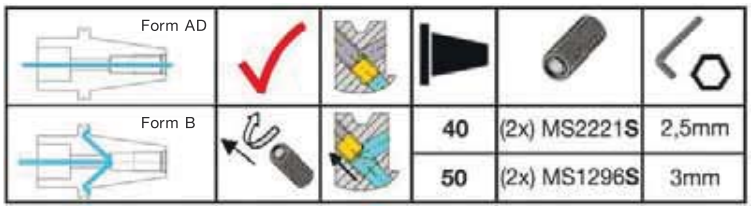
Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4 & 5/16	.0000/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

TT HT HPV IN-CVKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860008	**CVKV40BHPVTT025350**	1/4	.83	1.06	3.50	3.46	2.09	1.02	.39	**TTSS05014M**	2,5mm	2.61
3860009	**CVKV40BHPVTT031350**	5/16	.83	1.06	3.50	3.46	2.09	1.02	.39	**TTSS06014M**	3mm	2.59
3860010	**CVKV40BHPVTT038375**	3/4	.94	1.26	3.75	3.71	2.34	1.22	.39	**TTSS08014M**	4mm	2.78
3860011	**CVKV40BHPVTT044375**	7/16	.94	1.26	3.75	3.71	2.34	1.42	.39	**TTSS10014M**	5mm	2.75
3860012	**CVKV40BHPVTT050375**	1/2	.94	1.26	3.75	3.71	2.34	1.42	.39	**TTSS10014M**	5mm	2.73
3860013	**CVKV40BHPVTT056375**	9/16	1.06	1.33	3.75	3.71	2.34	1.42	.39	**TTSS10014M**	5mm	2.84
3860014	**CVKV40BHPVTT062375**	5/8	1.06	1.33	3.75	3.71	2.34	1.54	.39	**TTSS12014M**	6mm	2.79
3860015	**CVKV40BHPVTT068400**	11/16	1.30	1.75	4.00	3.96	3.25	1.54	.39	**TTSS12014M**	6mm	3.25
3860016	**CVKV40BHPVTT075400**	3/4	1.30	1.75	4.00	3.96	3.25	1.61	.39	**TTSS16014M**	8mm	3.17
3860017	**CVKV40BHPVTT088400**	7/8	1.30	1.75	4.00	3.96	3.25	1.61	.39	**TTSS16014M**	8mm	3.09
3860018	**CVKV40BHPVTT100400**	1	1.73	2.08	4.00	3.96	3.25	1.85	.39	**TTSS16014M**	8mm	3.79
3860019	**CVKV40BHPVTT125400**	1 1/4	1.73	2.08	4.00	3.96	3.25	2.01	.39	**TTSS16014M**	8mm	3.46

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



WIDIA™ is pleased to announce the new VariDrill™ for a wide range of materials.

The VariDrill line is available as non-coolant drills in 3 x D and 5 x D, coolant drills in 3 x D, 5 x D, and 8 x D. "A" and "F" shanks available.

The most extensive solid carbide drill line on the market today.

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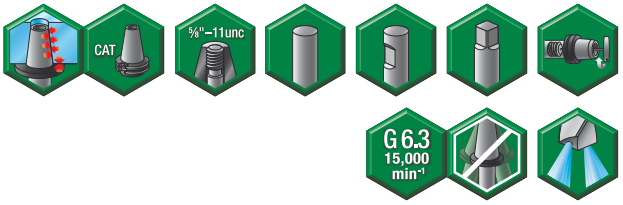
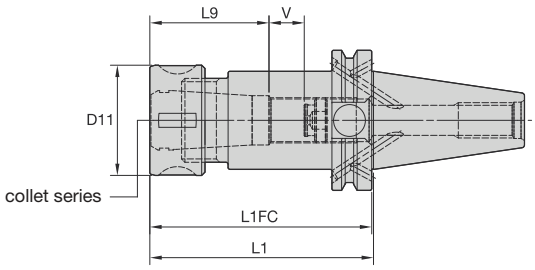
• Tremendous Grip (3:1 advantage).





L1FC = from flange face
L1 = from taper gage diameter

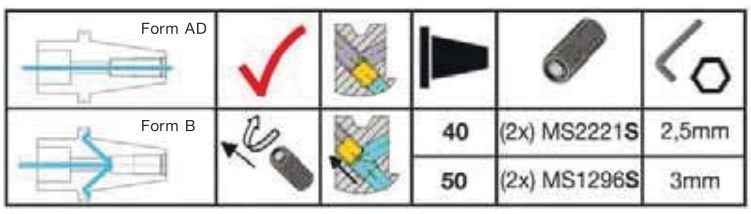
	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

ERICKSON

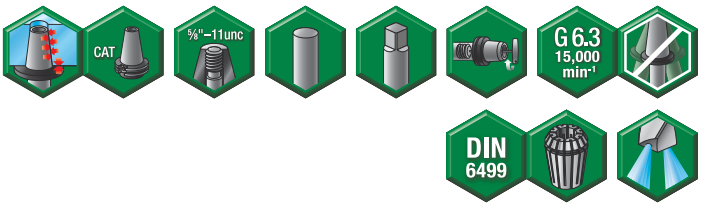
TG Round-CVKV Form B/AD

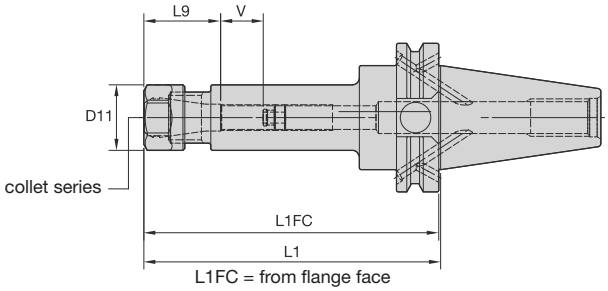
order number	catalog number	collet series	D11	L1	L1FC	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
3860134	**CVKV40BTG075250G**	TG75	50	63,50	62,50	50	13	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	1,15
3860135	**CVKV40BTG075400G**	TG75	50	101,60	100,60	50	33	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	1,55
3860136	**CVKV40BTG075600G**	TG75	50	152,40	151,40	50	93	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	2,04
3860137	**CVKV40BTG100275G**	TG100	60	69,85	68,85	64	8	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,27
3860138	**CVKV40BTG100400G**	TG100	60	101,60	100,60	64	24	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,59
3860139	**CVKV40BTG100600G**	TG100	60	152,40	151,40	64	72	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	2,69

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



• Grip (2:1 advantage).





L1FC = from flange face
L1 = from taper gage diameter

	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON

ER Hex-CVKV Form B/AD

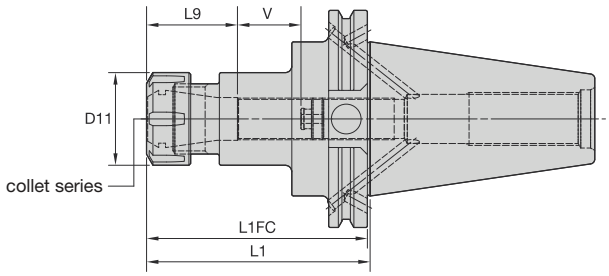
order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3860218	CVKV40BER16250	ER16	28	63,5	62,5	32	33	1,07
3860220	CVKV40BER16500	ER16	28	127,0	126,0	32	38	1,31
3860221	CVKV40BER20250	ER20	34	63,5	62,5	36	26	1,07
3860222	CVKV40BER20600	ER20	34	152,4	151,4	36	44	1,60

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
CVKV40BER16250	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
CVKV40BER16500	LNHSER16M	OEW25M	40	56	SS044038G	4mm & 5/32
CVKV40BER20250	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32
CVKV40BER20600	LNHSER20M	OEW30M	32	80	SS056041G	4mm & 5/32

(continued)

(ER CVKV Form B/AD continued)



L1FC = from flange face
L1 = from taper gage diameter

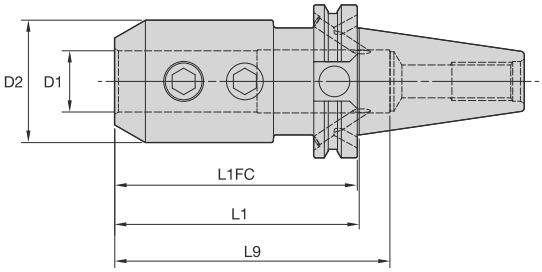
ER Round-CVKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3860223	**CVKV40BER25250**	ER25	42	63,5	62,5	40	16	1,09
3860224	**CVKV40BER25600**	ER25	42	152,4	151,4	40	60	1,89
3860225	**CVKV40BER32275**	ER32	50	69,9	68,9	46	11	1,13
3860226	**CVKV40BER32600**	ER32	50	152,4	151,4	46	54	1,95
3860227	**CVKV40BER40300**	ER40	63	76,2	75,2	52	7	1,27
3860228	**CVKV40BER40600**	ER40	63	152,4	151,4	52	48	2,03

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
CVKV40BER25250	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
CVKV40BER25600	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
CVKV40BER32275	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
CVKV40BER32600	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
CVKV40BER40300	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32
CVKV40BER40600	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.



L1FC = from flange face
L1 = from taper gage diameter

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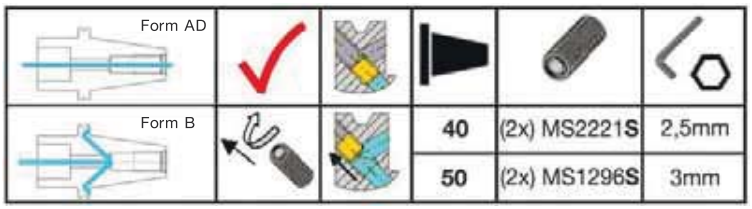
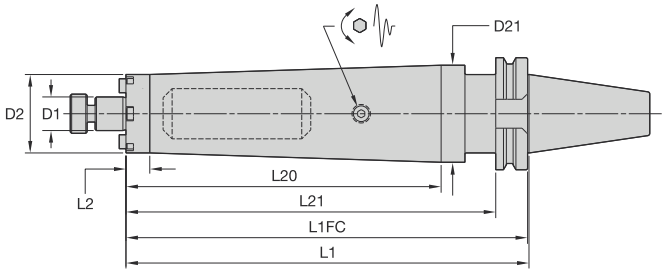
■ EM IN-CVKV Form B/AD

order number	catalog number	D1	D2	L1	L1FC	L2	lock screw	wrench size lock screw	ft. lbs.	lbs
3860087	CVKV40BEM012250	1/8	.69	2.50	2.46	1.09	S1045PKG	3/32	3	2.28
3860088	CVKV40BEM018250	3/16	.69	2.50	2.46	1.09	S1045PKG	3/32	3	2.28
3860089	CVKV40BEM025250	1/4	.78	2.50	2.46	1.09	ELS025025PKG	1/8	5	2.31
3860090	CVKV40BEM031250	5/16	1.00	2.50	2.46	1.09	ELS031031PKG	5/32	11	2.36
3860091	CVKV40BEM038250	3/8	1.00	2.50	2.46	1.09	ELS038031PKG	3/16	15	2.36
3860092	CVKV40BEM044250	7/16	1.25	2.50	2.46	1.09	ELS044038PKG	7/32	20	2.47
3860123	CVKV40BEM050300	1/2	1.38	3.00	2.96	1.59	ELS044038PKG	7/32	20	2.66
3860124	CVKV40BEM050450	1/2	1.38	4.50	4.46	3.09	ELS044038PKG	7/32	20	3.20
3860125	CVKV40BEM062300	5/8	1.63	3.00	2.96	1.59	ELS056050PKG	1/4	40	2.81
3860126	CVKV40BEM062450	5/8	1.63	4.50	4.46	3.09	ELS056050PKG	1/4	40	3.59
3860127	CVKV40BEM075300	3/4	1.75	3.00	2.96	2.25	ELS062050PKG	5/16	70	2.77
3860128	CVKV40BEM075450	3/4	1.75	4.50	4.46	3.75	ELS062050PKG	5/16	70	3.70
3860129	CVKV40BEM088400	7/8	2.00	4.00	3.96	3.25	ELS062050PKG	5/16	70	3.47
3860130	CVKV40BEM100400	1	2.00	4.00	3.96	3.25	ELS075056PKG	3/8	110	3.43
3860131	CVKV40BEM125450	1 1/4	2.50	4.50	4.46	3.75	ELS075062PKG	3/8	110	5.09
3860132	CVKV40BEM150500	1 1/2	2.75	5.00	4.96	5.00	ELS075069PKG	3/8	110	6.08

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





L1FC = from flange face
L1 = from taper gage diameter

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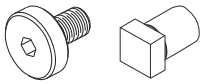
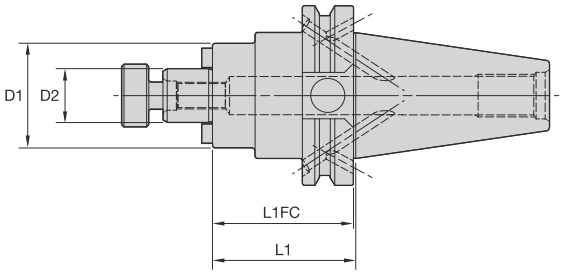
SMC TD Lock IN-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135497	**CVKV40BTDSMC0750900**	.750	1.750	2.165	9.000	8.961	.531	7.031	8.250	**KLS07**	**KDK05**	1/4	8.39
4135498	**CVKV40BTDSMC1000900**	1.000	2.189	—	9.000	8.961	8.250	—	—	**KLS10**	**KDK06**	5/16	10.03

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.



L1FC = from flange face
L1 = from taper gage diameter

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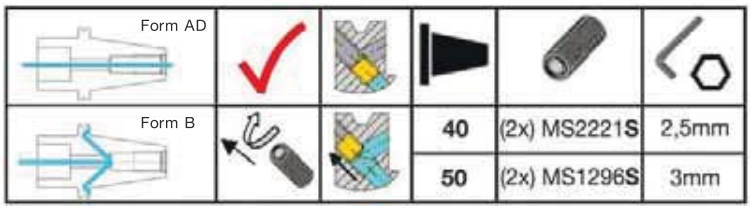
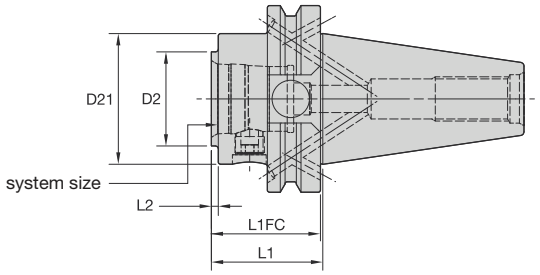
■ SMC TD Lock IN-CVKV Form B/AD

order number	catalog number	D1	D2	L1	L1FC	lock screw	drive key	wrench size retention screw	lbs
3870017	CVKV40BSM2C050200	1/2	1.20	2.000	1.961	KLS05	KDK04	3/16	2.46
3870019	CVKV40BSM2C050400	1/2	1.20	4.000	3.961	KLS05	KDK04	3/16	2.99
3870016	CVKV40BSMC050200	1/2	1.44	2.000	1.961	KLS05	KDK04	3/16	2.51
3870018	CVKV40BSMC050400	1/2	1.44	4.000	3.961	KLS05	KDK04	3/16	3.30
3870021	CVKV40BSM2C075200	3/4	1.46	2.000	1.961	KLS07	—	1/4	2.55
3870023	CVKV40BSM2C075400	3/4	1.46	4.000	3.961	KLS07	—	1/4	3.37
3870025	CVKV40BSM2C075600	3/4	1.46	6.000	5.961	KLS07	—	1/4	4.19
3870020	CVKV40BSMC075200	3/4	1.75	2.000	1.961	KLS07	KDK05	1/4	2.68
3870022	CVKV40BSMC075400	3/4	1.75	4.000	3.961	KLS07	KDK05	1/4	3.91
3870024	CVKV40BSMC075600	3/4	1.75	6.000	5.961	KLS07	KDK05	1/4	5.15
3870027	CVKV40BSM2C100200	1	2.19	2.000	1.961	KLS10	KDK06	5/16	3.00
3870029	CVKV40BSM2C100400	1	2.19	4.000	3.961	KLS10	KDK06	5/16	4.33
3870031	CVKV40BSM2C100600	1	2.19	6.000	5.961	KLS10	KDK06	5/16	5.62
3870026	CVKV40BSMC100200	1	2.75	2.000	1.961	KLS10	KDK06	5/16	3.31
3870028	CVKV40BSMC100400	1	2.75	4.000	3.961	KLS10	KDK06	5/16	4.78
3870030	CVKV40BSMC100600	1	2.75	6.000	5.961	KLS10	KDK06	5/16	6.07
3870032	CVKV40BSMC125200	1 1/4	2.88	2.000	1.961	KLS12	KDK08	5/16	3.98
3870033	CVKV40BSMC125400	1 1/4	2.88	4.000	3.961	KLS12	KDK08	5/16	5.22
3870034	CVKV40BSMC150250	1 1/2	3.81	2.500	2.461	KLS15	KDK10	3/8	5.60
3870035	CVKV40BSMC150400	1 1/2	3.81	4.000	3.961	KLS15	KDK10	3/8	6.86

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.





L1FC = from flange face
L1 = from taper gage diameter

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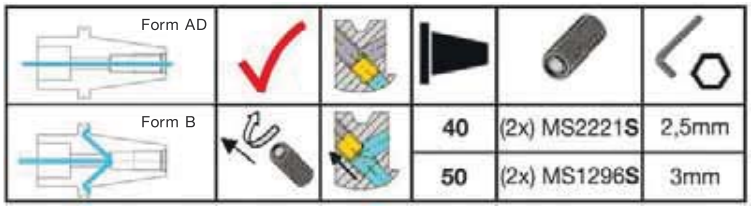
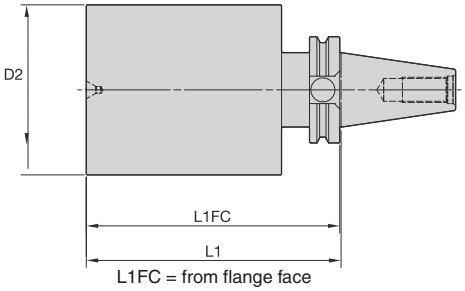
■ KM-CVKV Form B/AD

order number	catalog number	system size	D2	D21	L1	L1FC	L2	KM spare parts package	wrench size actuation screw	Nm	kg
3815241	**CVKV40BKM32150**	KM32	32	44,5	38,1	37,1	2,4	**KM32PKG3L**	5mm	8-11	1,00
3815242	**CVKV40BKM32350**	KM32	32	44,5	88,9	87,9	53,2	**KM32PKG3S**	5mm	8-11	1,27
3815313	**CVKV40BKM40175**	KM40	40	44,5	44,5	43,5	7,7	**KM40PKG3S**	6mm	12-16	1,03
3815314	**CVKV40BKM40400**	KM40	40	44,5	101,6	100,6	65,9	**KM40PKG3S**	6mm	12-16	1,53
3815315	**CVKV40BKM50350**	KM50	50	44,5	88,9	87,9	69,9	**KM50PKG3S**	10mm	27-34	1,60
3815316	**CVKV40BKM50475**	KM50	50	44,5	120,7	119,7	101,6	**KM50PKG3S**	10mm	27-34	1,95

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.



• Machinable front 20–30 RW C.



L1FC = from flange face
L1 = from taper gage diameter

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■ BB-CVKV Form A

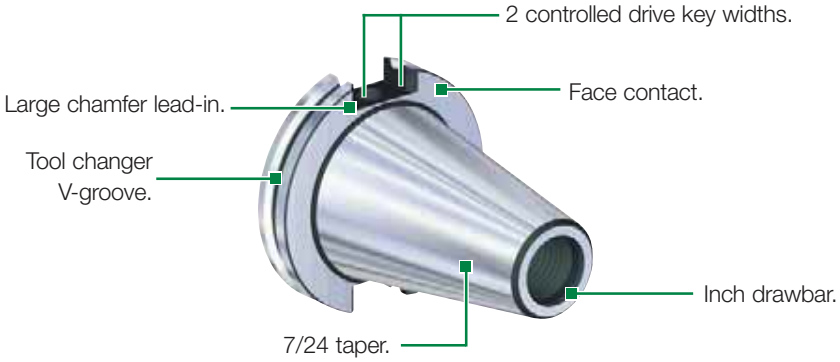
order number	catalog number	D2	L1	L1FC	kg
3815310	**CVKV40BB400600**	101,6	152,4	151,4	8,46
3815311	**CVKV40BB400120**	101,6	304,8	303,8	18,14

NOTE: For retention knobs, see page J33.

Erickson™ Taper Face Contact Shank Tooling System • **CVKV50 Series**

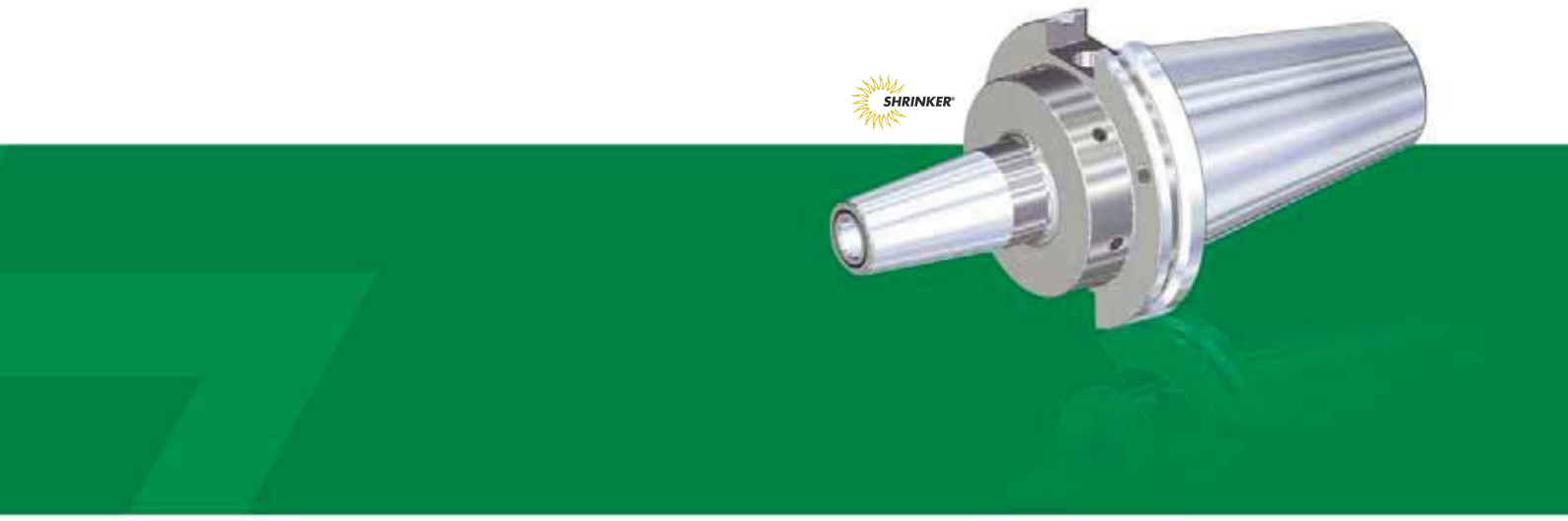
Erickson Taper Face CV Contact Taper Tooling is manufactured from premium materials and to the latest ANSI B5.50 specification standard. Controlled, increased flange thickness to the rear of the flange gains face contact between spindle and holder.

CVKV50



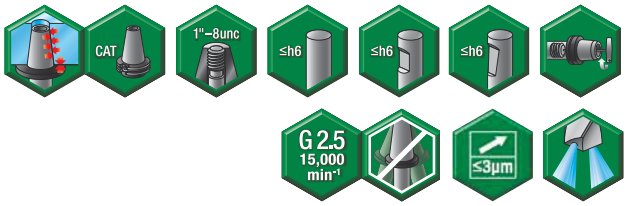
Drive key slots are unequal depths. Detent hole identifies shallow drive key slot.

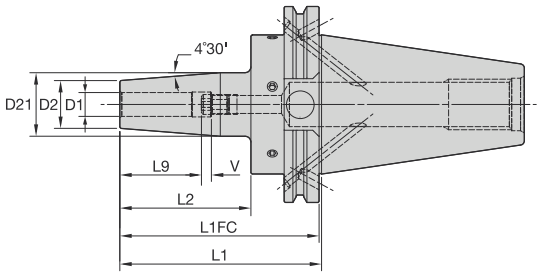
The CVKV50 tools are prebalanced to a high specification that will perform effectively up to 20,000 RPM. For any applications higher than 20,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.



- ANSI B5.50 7/24 taper.
- Standard 1-8 drawbar thread.
- High axial repeatability due to face contact.
- High radial positioning due to controlled, tighter drive key widths.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 20,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





L1FC = from flange face
L1 = from taper gage diameter

Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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TT GP HPV MM-CVKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3860147	CVKV50BHPVTT06M350	6	21	27	88,90	87,40	53,15	26	10	TTSS05014M	2,5mm	3,17
3860148	CVKV50BHPVTT08M350	8	21	27	88,90	87,40	53,15	26	10	TTSS06014M	3mm	3,17
3860149	CVKV50BHPVTT10M375	10	24	32	95,25	93,75	59,50	31	10	TTSS08014M	4mm	3,25
3860150	CVKV50BHPVTT12M400	12	24	32	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,27
3860151	CVKV50BHPVTT14M400	14	27	34	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,32
3860152	CVKV50BHPVTT16M400	16	27	34	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,29
3860153	CVKV50BHPVTT18M400	18	33	42	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,46
3860154	CVKV50BHPVTT20M400	20	33	42	101,60	100,10	65,85	41	10	TTSS16014M	8mm	3,42
3860155	CVKV50BHPVTT25M400	25	44	53	101,60	100,10	65,85	47	10	TTSS16014M	8mm	3,72
3860156	CVKV50BHPVTT32M400	32	44	53	101,60	100,10	65,85	51	10	TTSS16014M	8mm	3,56

(continued)

(TT GP HPV CVKV Form B/AD continued)

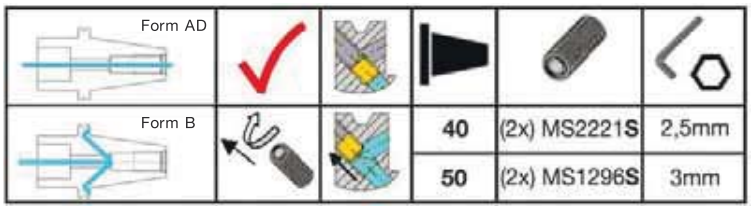
Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

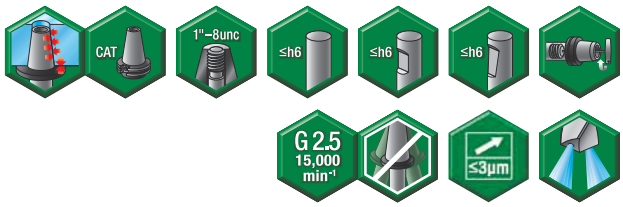
TT GP HPV IN-CVKV Form B/AD

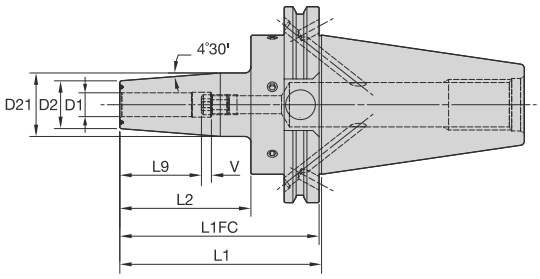
order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860047	**CVKV50BHPVTT025350**	1/4	.83	1.06	3.500	3.441	2.093	1.02	.39	**TTSS05014M**	2,5mm	6.99
3860048	**CVKV50BHPVTT031350**	5/16	.83	1.06	3.500	3.441	2.093	1.02	.39	**TTSS06014M**	3mm	6.98
3860049	**CVKV50BHPVTT038375**	3/8	.94	1.26	3.750	3.691	2.343	1.22	.39	**TTSS08014M**	4mm	7.17
3860050	**CVKV50BHPVTT044375**	7/16	.94	1.26	3.750	3.691	2.343	1.42	.39	**TTSS10014M**	5mm	7.14
3860051	**CVKV50BHPVTT050400**	1/2	.94	1.26	4.000	3.941	2.593	1.42	.39	**TTSS10014M**	5mm	7.20
3860052	**CVKV50BHPVTT056400**	9/16	1.06	1.33	4.000	3.941	2.593	1.42	.39	**TTSS10014M**	5mm	7.31
3860093	**CVKV50BHPVTT062400**	5/8	1.06	1.33	4.000	3.941	2.593	1.54	.39	**TTSS12014M**	6mm	7.26
3860094	**CVKV50BHPVTT068400**	11/16	1.30	1.65	4.000	3.941	2.593	1.54	.39	**TTSS12014M**	6mm	7.63
3860095	**CVKV50BHPVTT075400**	3/4	1.30	1.65	4.000	3.941	2.593	1.61	.39	**TTSS16014M**	8mm	7.56
3860096	**CVKV50BHPVTT088400**	7/8	1.30	1.65	4.000	3.941	2.593	1.61	.39	**TTSS16014M**	8mm	7.47
3860097	**CVKV50BHPVTT100400**	1	1.73	2.08	4.000	3.941	2.593	1.85	.39	**TTSS16014M**	8mm	8.18
3860098	**CVKV50BHPVTT125400**	1 1/4	1.73	2.08	4.000	3.941	2.593	2.01	.39	**TTSS16014M**	8mm	7.86
3860099	**CVKV50BHPVTT150450**	1 1/2	2.36	2.75	4.500	4.441	3.750	2.01	.39	**TTSS20014M**	10mm	9.88
3860100	**CVKV50BHPVTT200450**	2	2.72	3.11	4.500	4.441	3.750	2.20	.39	**TTSS20014M**	10mm	10.15

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





L1FC = from flange face
L1 = from taper gage diameter

Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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■ TT HT HPV MM-CVKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	kg
3860147	CVKV50BHPVTT06M350	6	21	26,90	88,90	87,40	53,15	26	10	TTSS05014M	2,5mm	3,17
3860148	CVKV50BHPVTT08M350	8	21	26,90	88,90	87,40	53,15	26	10	TTSS06014M	3mm	3,17
3860149	CVKV50BHPVTT10M375	10	24	31,90	95,25	93,75	59,50	31	10	TTSS08014M	4mm	3,25
3860150	CVKV50BHPVTT12M400	12	24	31,90	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,27
3860151	CVKV50BHPVTT14M400	14	27	33,90	101,60	100,10	65,85	36	10	TTSS10014M	5mm	3,32
3860152	CVKV50BHPVTT16M400	16	27	33,90	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,29
3860153	CVKV50BHPVTT18M400	18	33	41,90	101,60	100,10	65,85	39	10	TTSS12014M	6mm	3,46
3860154	CVKV50BHPVTT20M400	20	33	41,90	101,60	100,10	65,85	41	10	TTSS16014M	8mm	3,42
3860155	CVKV50BHPVTT25M400	25	44	52,90	101,60	100,10	65,85	47	10	TTSS16014M	8mm	3,72
3860156	CVKV50BHPVTT32M400	32	44	52,90	101,60	100,10	65,85	51	10	TTSS16014M	8mm	3,56

(continued)

(TT HT HPV CVKV Form B/AD continued)

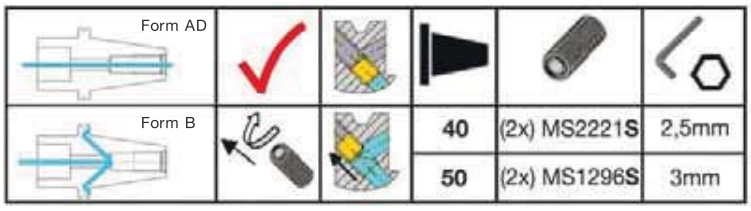
Cutting Tool Shank Requirements
inch (industry standard)

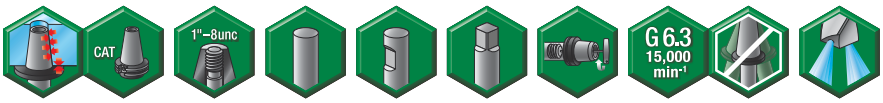
cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

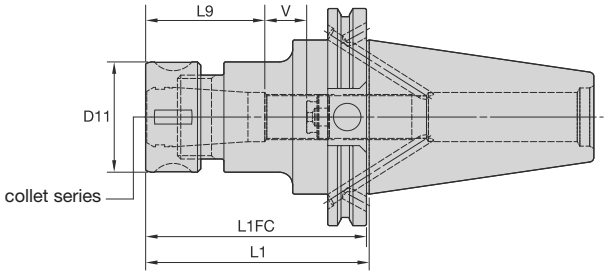
TT HT HPV In-CVKV Form B/AD

order number	catalog number	D1	D2	D21	L1	L1FC	L2	L9	V	stop screw	wrench size stop screw	lbs
3860047	CVKV50BHPVTT025350	1/4	.83	1.059	3.500	3.441	2.093	1.02	.39	TTSS05014M	2,5mm	6.99
3860048	CVKV50BHPVTT031350	5/16	.83	1.059	3.500	3.441	2.093	1.02	.39	TTSS06014M	3mm	6.98
3860049	CVKV50BHPVTT038375	3/8	.94	1.256	3.750	3.691	2.343	1.22	.39	TTSS08014M	4mm	7.17
3860050	CVKV50BHPVTT044375	7/16	.94	1.256	3.750	3.691	2.343	1.42	.39	TTSS10014M	5mm	7.14
3860051	CVKV50BHPVTT050400	1/2	.94	1.256	4.000	3.941	2.593	1.42	.39	TTSS10014M	5mm	7.20
3860052	CVKV50BHPVTT056400	9/16	1.06	1.335	4.000	3.941	2.593	1.42	.39	TTSS10014M	5mm	7.31
3860093	CVKV50BHPVTT062400	5/8	1.06	1.335	4.000	3.941	2.593	1.54	.39	TTSS12014M	6mm	7.26
3860094	CVKV50BHPVTT068400	11/16	1.30	1.650	4.000	3.941	2.593	1.54	.39	TTSS12014M	6mm	7.63
3860095	CVKV50BHPVTT075400	3/4	1.30	1.650	4.000	3.941	2.593	1.61	.39	TTSS16014M	8mm	7.56
3860096	CVKV50BHPVTT088400	7/8	1.30	1.650	4.000	3.941	2.593	1.61	.39	TTSS16014M	8mm	7.47
3860097	CVKV50BHPVTT100400	1	1.73	2.083	4.000	3.941	2.593	1.85	.39	TTSS16014M	8mm	8.18
3860098	CVKV50BHPVTT125400	1 1/4	1.73	2.083	4.000	3.941	2.593	2.01	.39	TTSS16014M	8mm	7.86
3860099	CVKV50BHPVTT150450	1 1/2	2.36	2.750	4.500	4.441	3.750	2.01	.39	TTSS20014M	10mm	9.88
3860100	CVKV50BHPVTT200450	2	2.72	3.106	4.500	4.441	3.750	2.20	.39	TTSS20014M	10mm	10.15

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.







L1FC = from flange face
L1 = from taper gage diameter

	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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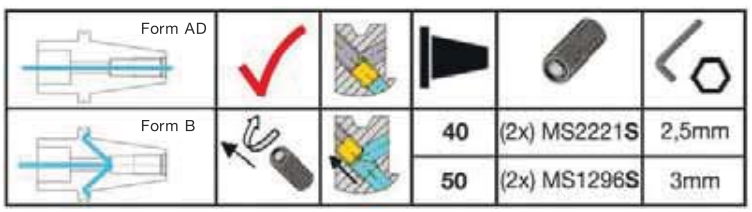
■ TG Round-CVKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	locknut	wrench	stop screw	wrench size stop screw	Nm	kg
3860140	**CVKV50BTG075275G**	TG75	50	69,85	68,35	50	24	**LNA075M**	**HSW45M**	**SS081041G**	4mm & 5/32	136	3,26
3860143	**CVKV50BTG100275G**	TG100	60	69,85	68,35	64	12	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	203	3,26
3860144	**CVKV50BTG100400G**	TG100	60	101,60	100,10	64	38	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	203	3,81
3860141	**CVKV50BTG075400G**	TG75	50	101,60	100,10	50	59	**LNA075M**	**HSW45M**	**SS081041G**	4mm & 5/32	136	3,70
3860142	**CVKV50BTG075600G**	TG75	50	152,40	150,90	50	104	**LNA075M**	**HSW45M**	**SS081041G**	4mm & 5/32	136	4,46
3860145	**CVKV50BTG100600G**	TG100	60	152,40	150,90	64	90	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	203	4,71

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



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WIDIA™ KM Quick Change Tooling is a central component in achieving dramatic improvement in machine and cutting tool use. It's the choice of manufacturers requiring maximum machine output.

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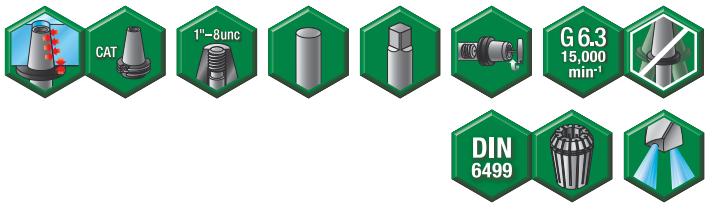
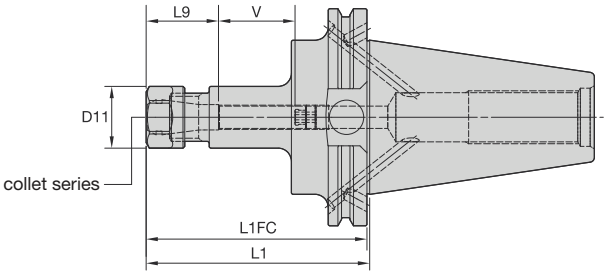
• Grip (2:1 advantage).





L1FC = from flange face
L1 = from taper gage diameter

Collet Capacity

ER collet series	mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON

ER Hex-CVKV Form B/AD

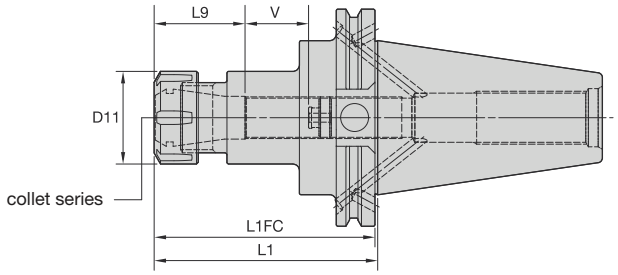
order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3860229	**CVKV50BER16250**	ER16	28	63,50	62,00	32	43	3,14
3860230	**CVKV50BER16400**	ER16	28	101,60	100,10	32	38	3,22
3860231	**CVKV50BER20250**	ER20	34	63,50	62,00	36	42	3,15
3860232	**CVKV50BER20400**	ER20	34	101,60	100,10	36	54	3,35

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
CVKV50BER16250	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
CVKV50BER16400	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
CVKV50BER20250	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32
CVKV50BER20400	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32

(continued)

(ER CVKV Form B/AD continued)



L1FC = from flange face
L1 = from taper gage diameter

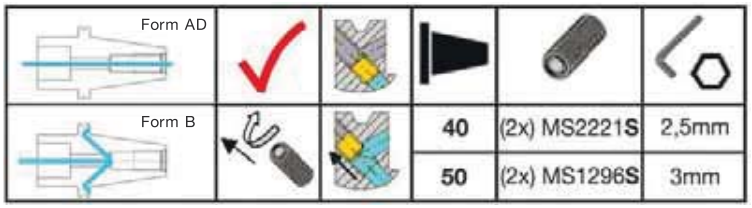
ER Round-CVKV Form B/AD

order number	catalog number	collet series	D11	L1	L1FC	L9	V	kg
3860233	**CVKV50BER25250**	ER25	42	63,50	62,00	40	35	3,14
3860234	**CVKV50BER25400**	ER25	42	101,60	100,10	40	60	3,47
3860235	**CVKV50BER32275**	ER32	50	69,85	68,35	46	31	3,17
3860236	**CVKV50BER32400**	ER32	50	101,60	100,10	46	54	3,57
3860237	**CVKV50BER40300**	ER40	63	76,20	74,70	52	28	3,32
3860238	**CVKV50BER40600**	ER40	63	152,40	150,90	52	98	4,85

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
CVKV50BER25250	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
CVKV50BER25400	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
CVKV50BER32275	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
CVKV50BER32400	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
CVKV50BER40300	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32
CVKV50BER40600	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.



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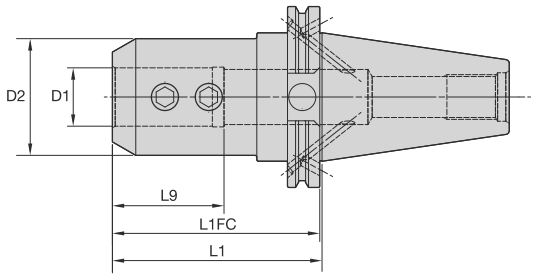


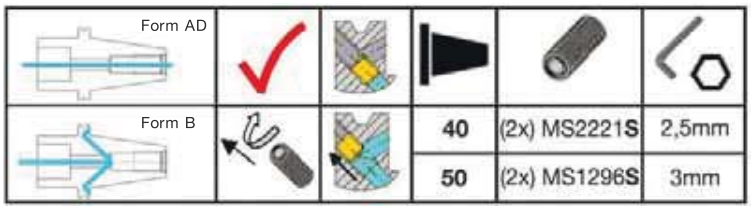
L1FC = from flange face
L1 = from taper gage diameter

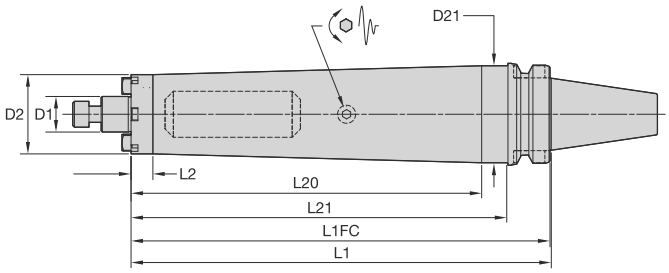
ERICKSON

■ EM IN-CVKV Form B/AD

order number	catalog number	D1	D2	L1	L1FC	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
3860109	CVKV50BEM018250	3/16	.688	2.500	2.441	4.689	S1045PKG	3/32	3	6.66
3860110	CVKV50BEM025250	1/4	.780	2.500	2.441	4.689	ELS025025PKG	1/8	5	6.69
3860111	CVKV50BEM031250	5/16	1.000	2.500	2.441	4.689	ELS031031PKG	5/32	11	6.72
3860112	CVKV50BEM038250	3/8	1.000	2.500	2.441	4.689	ELS038031PKG	3/16	15	6.75
3860183	CVKV50BEM044250	7/16	1.250	2.500	2.441	4.689	ELS044038PKG	7/32	20	6.88
3860184	CVKV50BEM050300	1/2	1.375	3.000	2.941	5.189	ELS044038PKG	7/32	20	7.03
3860185	CVKV50BEM050450	1/2	1.375	4.500	4.441	6.689	ELS044038PKG	7/32	20	7.59
3860186	CVKV50BEM062300	5/8	1.625	3.000	2.941	5.189	ELS056050PKG	1/4	40	7.25
3860187	CVKV50BEM062450	5/8	1.625	4.500	4.441	6.689	ELS056050PKG	1/4	40	7.95
3860188	CVKV50BEM075300	3/4	1.750	3.000	2.941	5.189	ELS062050PKG	5/16	70	7.32
3860189	CVKV50BEM075450	3/4	1.750	4.500	4.441	6.689	ELS062050PKG	5/16	70	8.12
3860190	CVKV50BEM088400	7/8	2.000	4.000	3.941	4.190	ELS062050PKG	5/16	70	8.23
3860191	CVKV50BEM100450	1	2.000	4.500	4.441	4.493	ELS075056PKG	3/8	110	8.32
3860192	CVKV50BEM125450	1 1/4	2.500	4.500	4.441	2.390	ELS075062PKG	3/8	110	9.23
3860193	CVKV50BEM150450	1 1/2	2.750	4.500	4.441	2.820	ELS075069PKG	3/8	110	9.35
3860194	CVKV50BEM200600	2	3.750	6.000	5.941	3.375	ELS100088PKG	1/2	150	15.96

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





L1FC = from flange face
L1 = from taper gage diameter

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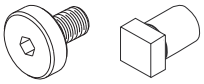
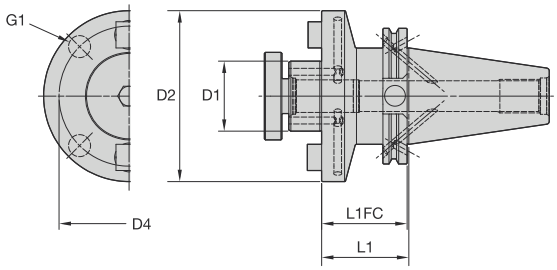
■ SMC TD Lock IN-CVKV Form B/AD



order number	catalog number	D1	D2	D21	L1	L1FC	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135499	**CVKV50BTDSMC0751050**	3/4	1.75	2.75	10.500	10.441	.53	9.09	9.750	**KLS07**	**KDK05**	1/4	16.60
4135500	**CVKV50BTDSMC1001250**	1	2.75	—	12.500	12.441	11.75	—	—	**KLS10**	**KDK06**	5/16	24.68
4135501	**CVKV50BTDSMC1251300**	1 1/4	2.88	—	13.000	12.941	12.25	—	—	**KLS12**	**KDK08**	5/16	31.97

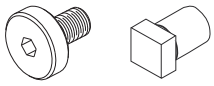
NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.



L1FC = from flange face
L1 = from taper gage diameter

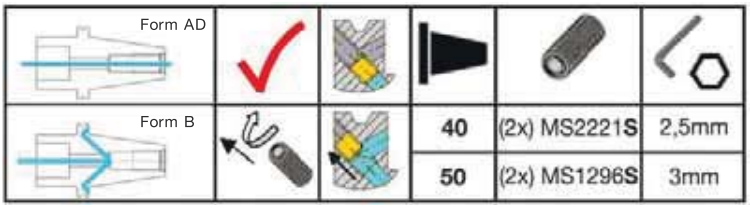
ERICKSON

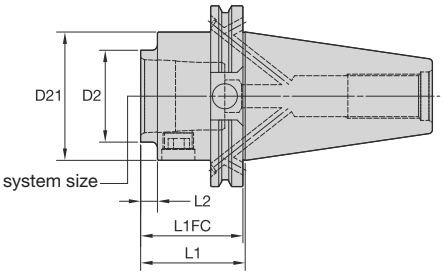
SMC Lock IN-CVKV Form B/AD



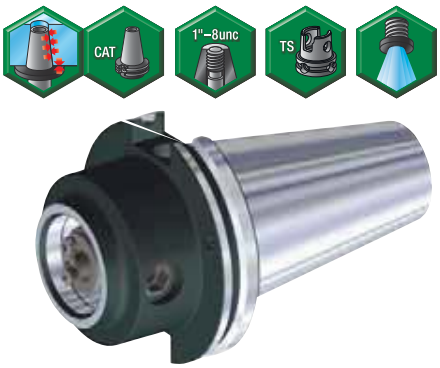
order number	catalog number	D1	D2	D4	G1	L1	L1FC	lock screw	drive key	wrench size retention screw	lbs
3861304	CVKV50BSM2C075200	3/4	1.46	–	–	2.000	1.941	KLS07	–	1/4	7.10
3861306	CVKV50BSM2C075400	3/4	1.46	–	–	4.000	3.941	KLS07	–	1/4	7.69
3861308	CVKV50BSM2C075600	3/4	1.46	–	–	6.000	5.941	KLS07	–	1/4	8.45
3861303	CVKV50BSMC075200	3/4	1.75	–	–	2.000	1.941	KLS07	KDK05	1/4	7.16
3861305	CVKV50BSMC075400	3/4	1.75	–	–	4.000	3.941	KLS07	KDK05	1/4	8.17
3861307	CVKV50BSMC075600	3/4	1.75	–	–	6.000	5.941	KLS07	KDK05	1/4	9.31
3861310	CVKV50BSM2C100200	1	2.19	–	–	2.000	1.941	KLS10	KDK06	5/16	7.35
3861312	CVKV50BSM2C100400	1	2.19	–	–	4.000	3.941	KLS10	KDK06	5/16	9.21
3861314	CVKV50BSM2C100600	1	2.19	–	–	6.000	5.941	KLS10	KDK06	5/16	11.06
3861309	CVKV50BSMC100200	1	2.75	–	–	2.000	1.941	KLS10	KDK06	5/16	7.71
3861311	CVKV50BSMC100400	1	2.75	–	–	4.000	3.941	KLS10	KDK06	5/16	10.80
3861313	CVKV50BSMC100600	1	2.75	–	–	6.000	5.941	KLS10	KDK06	5/16	13.89
3861315	CVKV50BSMC125200	1 1/4	2.88	–	–	2.000	1.941	KLS12	KDK08	5/16	8.02
3861316	CVKV50BSMC125400	1 1/4	2.88	–	–	4.000	3.941	KLS12	KDK08	5/16	11.06
3861317	CVKV50BSMC125600	1 1/4	2.88	–	–	6.000	5.941	KLS12	KDK08	5/16	14.09
3861318	CVKV50BSMC150250	1 1/2	3.81	–	–	2.500	2.441	KLS15	KDK10	3/8	10.31
3861319	CVKV50BSMC150400	1 1/2	3.81	–	–	4.000	3.941	KLS15	KDK10	3/8	12.60
3861320	CVKV50BSMC150600	1 1/2	3.81	–	–	6.000	5.941	KLS15	KDK10	3/8	15.68
3861321	CVKV50BSMC200250	2	4.88	4.00	0.625-11	2.500	2.441	KLS20	KDK12	9/16	12.38
3861322	CVKV50BSMC200400	2	4.88	4.00	0.625-11	4.000	3.941	KLS20	KDK12	9/16	15.02
3861323	CVKV50BSMC200600	2	4.88	4.00	0.625-11	6.000	5.941	KLS20	KDK12	9/16	18.20
3861324	CVKV50BSMC250250	2 1/2	4.88	4.00	0.625-11	2.500	2.441	–	KDK16	–	13.60
3861325	CVKV50BSMC250400	2 1/2	4.88	4.00	0.625-11	4.000	3.941	–	KDK16	–	15.88

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.





L1FC = from flange face
L1 = from taper gage diameter

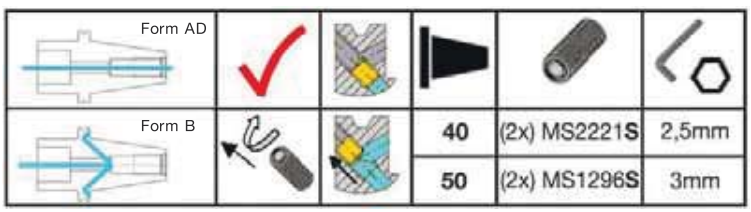


ERICKSON

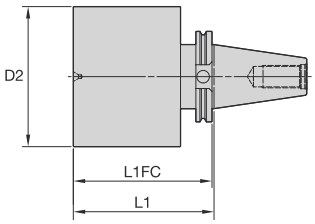
KM-CVKV Form B/AD

order number	catalog number	system size	D2	D21	L1	L1FC	L2	KM spare parts package	wrench size actuation screw	Nm	kg
3815265	**CVKV50BKM32150**	KM32	32	69,85	38,10	36,60	2,4	**KM32PKG3L**	5mm	8-11	3,08
3815266	**CVKV50BKM32350**	KM32	32	69,85	88,90	87,40	53,2	**KM32PKG3L**	5mm	8-11	3,26
3815267	**CVKV50BKM40175**	KM40	40	69,85	44,45	42,95	6,5	**KM40PKG3L**	6mm	12-16	3,15
3815268	**CVKV50BKM40400**	KM40	40	69,85	101,60	100,10	65,9	**KM40PKG3S**	6mm	12-16	3,51
3815269	**CVKV50BKM50225**	KM50	50	69,85	57,15	55,65	9,2	**KM50PKG3L**	10mm	27-34	3,42
3815270	**CVKV50BKM50475**	KM50	50	69,85	120,65	119,15	84,9	**KM50PKG3S**	10mm	27-34	4,05
3815271	**CVKV50BKM63225**	KM63	63	69,85	57,15	55,65	13,2	**KM63PKG3L**	12mm	47-54	3,31
3815272	**CVKV50BKM63550**	KM63	63	69,85	139,70	138,20	104,0	**KM63PKG3S**	12mm	47-54	5,07
3815303	**CVKV50BKM80325**	KM80	80	69,85	82,55	81,05	63,5	**KM80PKG3S**	14mm	79-85	4,29

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.
These products are only available in the U.S., Canada, and Japan.



• Machinable front 20–30 RW C.



L1FC = from flange face
L1 = from taper gage diameter

ERICKSON

BB-CVKV Form A

order number	catalog number	D2	L1	L1FC	kg
3815346	**CVKV50BB400120**	101,6	304,8	303,3	20,28
3815343	**CVKV50BB400600**	101,6	152,4	150,9	10,61
3815345	**CVKV50BB600120**	152,4	304,8	303,3	41,63
3815344	**CVKV50BB600600**	152,4	152,4	150,9	19,86

NOTE: For retention knobs, see page J33.

WIDIA

BT Shank Tools

BT30 ..... D2–D18
BT40 ..... D20–D59
BT50 ..... D60–D91

Erickson™ BT V-Flange Shank Tooling System • **BT30 Series**

Erickson V-Flange BT Taper Tooling is manufactured from premium materials and meets or exceeds the latest JIS B 6339 specification and ISO-1947 taper accuracy of AT3 specification standards. The BT30 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 18,000 RPM. For any applications higher than 18,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

BT30

- JIS B 6339 7/24 taper.
- Standard M12 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- Maximum 18,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

BT — JIS B6339 Shank

NOTE: Inherent balance conditions — all features are symmetrical.

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

BT40BER40120M

BT — Shank Style

JIS 6339

40 — Shank Taper Size

30 = 30

40 = 40

50 = 50

B — Special Feature *(optional)*

B =
DIN form B coolant feature, tool shipped to AD specifications (design allows conversion to form B style)

(blank) =
(no "B" or "Z") — tool built to form A/AD coolant style

CH =
Coolant form AD — high pressure

HPV =
High performance and balanceable

TD =
Tunable

ER — Toolholder Style

40 — Toolholder Size

TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

120 — Tool Length

(Taper gage line to front of tool)

metric
xxx = xxx

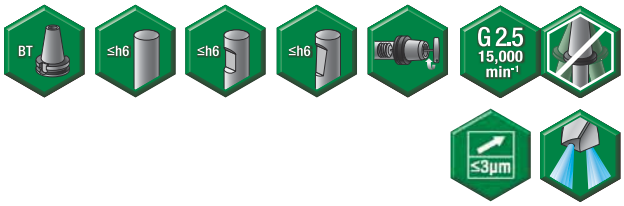
inch
xxx = x.xx

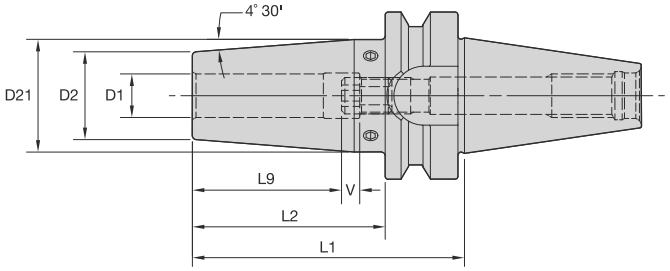
M — Identification Value

M =
Tool built to metric values and has metric retention thread

BB	=	Bar blank
DA	=	Double-angle collet chuck
DC	=	Drill chuck
EM	=	End mill adapter
ER	=	DIN 6499 single-angle collet chuck
HC	=	Hydraulic chuck — Standard Line
HCB	=	Hydraulic chuck — Basic Line
HCSL	=	Hydraulic chuck — Slim Line
HCSLT	=	Hydraulic chuck — Slim Line — Trend
HCT	=	Hydraulic chuck — Trend Line
HPMC	=	Bearing milling chuck — high performance
HSK	=	HSK adapter
JT	=	Jacobs taper adapter
KM	=	KM™ adapter
MT	=	Morse taper adapter
RC	=	Rapid Change — T&C tapping adapter chuck
SA	=	Slotting cutter adapter
RFX	=	ROTAFLEX™ boring adapters
SER	=	DIN 6499 single-angle collet chuck — short with internal locknut
SM2C	=	Shell mill adapter with coolant and small diameter
SMC	=	Shell mill adapter with coolant
SS	=	Adapter for straight shanks (drills)
SSF	=	Adapter for straight shanks with flat (drills)
ST	=	Screw-on adapters
STRC	=	Rapid Change — solid tapping adapter chuck
SWN	=	Whistle Notch™ 2° — short — (not to DIN standard)
TA	=	Tap chuck adapter
TCRC	=	Rapid Change — T&C tapping adapter chuck
TG	=	Tremendous Grip single-angle collet chuck
TGF	=	Tremendous Grip single-angle collet chuck — flush face
TT	=	Shrink Fit thermo toolholder
TTHT	=	Shrink Fit thermo toolholder — high torque
WD	=	Whistle Notch with drive
WN	=	Whistle Notch (2° metric; 5° inch)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

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TT GP HPV MM-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3782116	**BT30HPVTT06075M**	6	21	27	75	53	26	10	**TTSS05014M**	2,5mm	0,56
3782117	**BT30HPVTT08075M**	8	21	27	75	53	26	10	**TTSS06014M**	3mm	0,55
3782118	**BT30HPVTT10075M**	10	24	31	75	53	31	10	**TTSS08014M**	4mm	0,60
3615348	**BT30HPVTT12075M**	12	24	31	75	53	36	10	**TTSS10014M**	5mm	0,58
3615349	**BT30HPVTT14075M**	14	27	34	75	53	36	10	**TTSS10014M**	5mm	0,63
3615350	**BT30HPVTT16075M**	16	27	34	75	53	39	10	**TTSS12014M**	6mm	0,60
3615351	**BT30HPVTT18090M**	18	33	41	90	68	39	10	**TTSS12014M**	6mm	0,84
3615352	**BT30HPVTT20090M**	20	33	41	90	68	41	10	**TTSS16014M**	8mm	0,81

(continued)

(TT HPV Form B/AD continued)

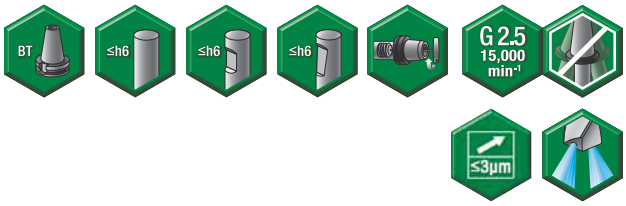
Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	**tolerance**
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4	.0000/-.0005

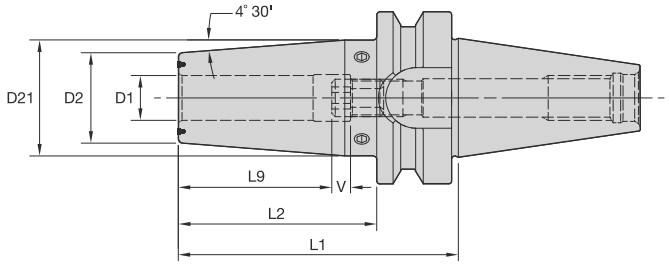
TT HPV IN-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3782119	**BT30HPVTT025295**	1/4	.83	1.06	2.95	2.09	1.02	.39	**TTSS05014M**	2,5mm	1.23
3782120	**BT30HPVTT031295**	5/16	.83	1.06	2.95	2.09	1.02	.39	**TTSS06014M**	3mm	1.22
3782121	**BT30HPVTT038295**	3/8	.95	1.22	2.95	2.09	1.22	.39	**TTSS08014M**	4mm	1.32
3782122	**BT30HPVTT044295**	7/16	.95	1.22	2.95	2.09	1.42	.39	**TTSS10014M**	5mm	1.30
3615343	**BT30HPVTT050295**	1/2	.95	1.22	2.95	2.09	1.42	.39	**TTSS10014M**	5mm	1.27
3615344	**BT30HPVTT056295**	9/16	1.06	1.34	2.95	2.09	1.42	.39	**TTSS10014M**	5mm	1.37
3615345	**BT30HPVTT062295**	5/8	1.06	1.34	2.95	2.09	1.54	.39	**TTSS12014M**	6mm	1.33
3615346	**BT30HPVTT068354**	11/16	1.30	1.61	3.54	2.68	1.54	.39	**TTSS12014M**	6mm	1.87
3615347	**BT30HPVTT075354**	3/4	1.30	1.61	3.54	2.68	1.61	.39	**TTSS16014M**	8mm	1.81

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.

- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

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TT HT HPV MM-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	kg
3615439	BT30HPVTTHT12075M	12	24	31	75	53	36	10	TTSS10014M	5mm	0,58
3615440	BT30HPVTTHT14075M	14	27	34	75	53	36	10	TTSS10014M	5mm	0,63
3615441	BT30HPVTTHT16075M	16	27	34	75	53	39	10	TTSS12014M	6mm	0,60
3615442	BT30HPVTTHT18090M	18	33	41	90	68	39	10	TTSS12014M	6mm	0,84
3615443	BT30HPVTTHT20090M	20	33	41	90	68	41	10	TTSS16014M	8mm	0,81

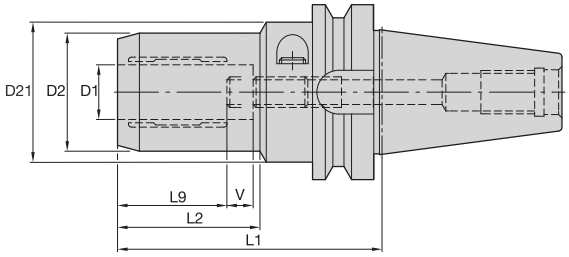
Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4	.0000/-.0005

TT HT HPV IN-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3615434	BT30HPVTTHT050295	1/2	.95	1.22	2.95	2.09	1.42	.39	TTSS10014M	5mm	1.27
3615435	BT30HPVTTHT056295	9/16	1.06	1.34	2.95	2.09	1.42	.39	TTSS10014M	5mm	1.37
3615436	BT30HPVTTHT062295	5/8	1.06	1.34	2.95	2.09	1.54	.39	TTSS12014M	6mm	1.33
3615437	BT30HPVTTHT068354	11/16	1.30	1.61	3.54	2.68	1.54	.39	TTSS12014M	6mm	1.87
3615438	BT30HPVTTHT075354	3/4	1.30	1.61	3.54	2.68	1.61	.39	TTSS16014M	8mm	1.82

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



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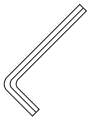
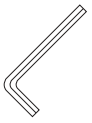
HC Trend MM-BT Form AD



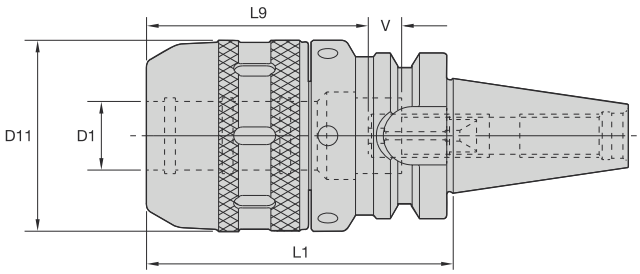
order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw	kg
2255463	**BT30HCT06075M**	6	25,7	32	75	35	27	10	**170.135**	5mm	**571.061**	**170.003**	3mm	0,59
2255464	**BT30HCT08075M**	8	27,7	32	75	35	27	10	**170.135**	5mm	**571.061**	**170.003**	3mm	0,61
2255465	**BT30HCT10080M**	10	29,7	32	80	38	31	10	**170.135**	5mm	**571.061**	**170.003**	3mm	0,63
2255466	**BT30HCT12085M**	12	31,6	32	85	40	36	10	**170.135**	5mm	**571.061**	**170.003**	3mm	0,69
2255467	**BT30HCT14100M**	14	33,6	50	100	46	36	10	**170.135**	5mm	**571.063**	**170.005**	5mm	1,00
2255468	**BT30HCT16100M**	16	37,6	50	100	47	39	10	**170.135**	5mm	**571.063**	**170.005**	5mm	1,06
2255469	**BT30HCT18100M**	18	39,6	50	100	47	39	10	**170.135**	5mm	**571.063**	**170.005**	5mm	1,09
2255470	**BT30HCT20100M**	20	41,6	50	100	48	41	10	**170.135**	5mm	**571.063**	**170.005**	5mm	1,11

HC Trend IN-BT Form AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size stop screw	stop screw	stop screw wrench	wrench size stop screw	lbs
2259953	**BT30HCT025295**	1/4	1.01	1.25	2.95	1.38	1.06	.39	**170.135**	5mm	**571.061**	**170.003**	5mm	1.30
2259954	**BT30HCT038315**	3/8	1.17	1.25	3.15	1.57	1.22	.39	**170.135**	5mm	**571.061**	**170.003**	5mm	1.44
2259955	**BT30HCT050335**	1/2	1.24	1.25	3.35	1.69	1.42	.39	**170.135**	5mm	**571.061**	**170.003**	5mm	1.51
2259956	**BT30HCT062394**	5/8	1.48	1.96	3.94	1.83	1.54	.39	**170.135**	5mm	**571.063**	**170.005**	5mm	2.36
2259957	**BT30HCT075413**	3/4	1.64	1.96	4.13	1.89	1.61	.39	**170.135**	5mm	**571.063**	**170.005**	5mm	2.64

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.



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HPMC MM-BT Form AD

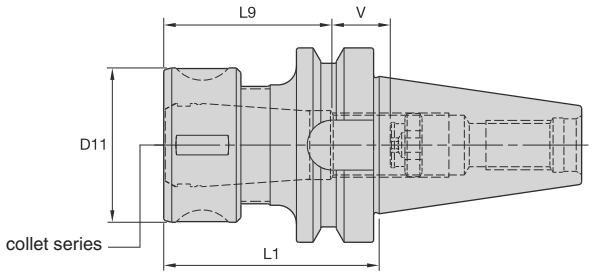
order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3578486	**BT30HPMC20085M**	20	53	85	55	20	**PSW52M**	**MCSS12030M**	2,5mm & 5mm	1,00

HPMC IN-BT Form AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100411	**BT30HPMC075335**	3/4	2.09	3.35	2.17	.59	**PSW52M**	**MCSS12030M**	2,5mm & 5mm	2.50

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench not included.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
For retention knobs, see page J33.

• Tremendous Grip (3:1 advantage).



Collet Capacity

TG collet series	mm min	mm max	inch min	inch max
TG75	2,6	20,0	3/64	3/4

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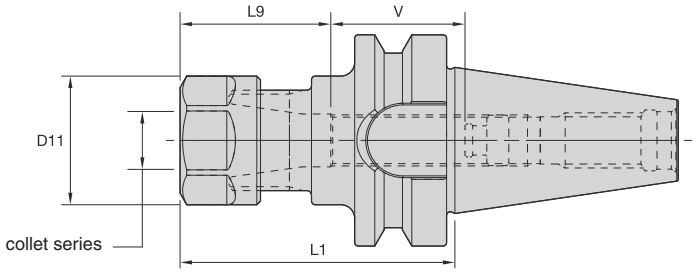
■ TG Round-BT Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1156351	**BT30TG075075M**	TG75	50	75	55	17	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	0,60

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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ER Hex-BT Form AD

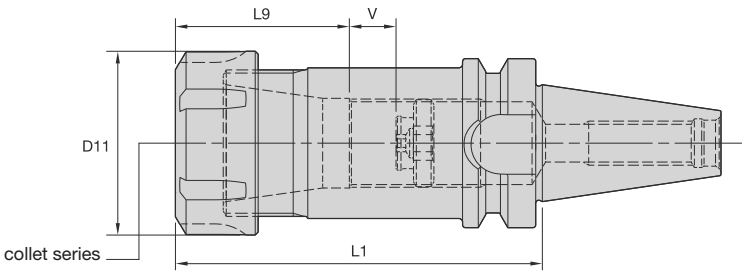
order number	catalog number	collet series	D11	L1	L9	V	kg
1258023	**BT30ER16060M**	ER16	28	60	32	33	0,48
1826220	**BT30ER16100M**	ER16	28	100	32	48	0,64
3847457	**BT30ER16150M**	ER16	28	150	32	48	0,85
1021296	**BT30ER20060M**	ER20	34	60	36	31	0,49
3847458	**BT30ER20100M**	ER20	34	100	36	44	0,74

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
BT30ER16060M	**LNHSER16M**	**OEW25M**	40	**SS044038G**	4mm & 5/32
BT30ER16100M	**LNHSER16M**	**OEW25M**	40	**SS044038G**	4mm & 5/32
BT30ER16150M	**LNHSER16M**	**OEW25M**	40	**SS044038G**	4mm & 5/32
BT30ER20060M	**LNHSER20M**	**OEW30M**	32	**SS056041G**	4mm & 5/32
BT30ER20100M	**LNHSER20M**	**OEW30M**	32	**SS056041G**	4mm & 5/32

(continued)

(ER BT Form AD continued)



ER Round-BT Form AD

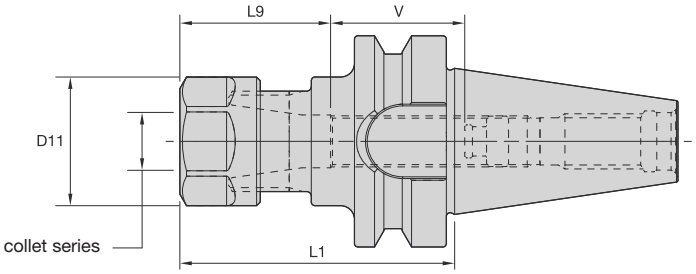
order number	catalog number	collet series	D11	L1	L9	V	kg
1258025	**BT30ER25060M**	ER25	42	60	40	16	0,52
1826221	**BT30ER25100M**	ER25	42	100	40	40	0,73
1156350	**BT30ER32070M**	ER32	50	70	46	10	0,65
3847459	**BT30ER32100M**	ER32	50	100	46	34	0,88
3847460	**BT30ER40100M**	ER40	63	100	52	10	1,15

Spare Parts

catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
BT30ER25060M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BT30ER25100M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BT30ER32070M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BT30ER32100M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BT30ER40100M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

• Grip 1:1.



Collet Capacity

DA collet series	mm min	mm max	inch min	inch max
DA200	0,2	10	1/64	25/64
DA180	2,2	20	1/64	3/4

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DA Hex-BT Form AD

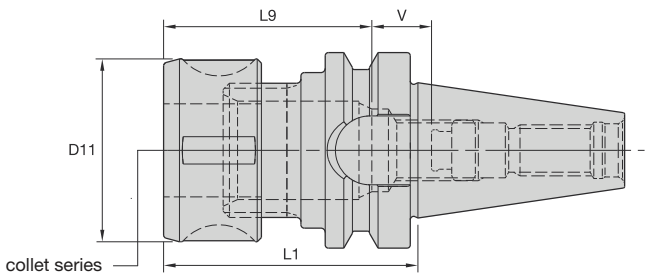
order number	catalog number	collet series	D11	L1	L9	V	lbs
1258011	**BT30DA208060M**	DA200	1.08	2.36	1.50	1.17	1.10

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
BT30DA208060M	**LNA208M**	**OEW24M**	45	**SS038031G**	2mm & 5/64

(continued)

(DA BT Form AD continued)



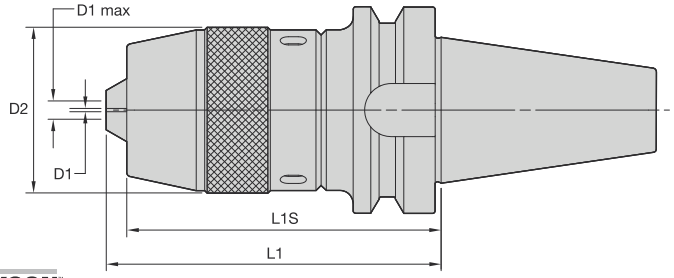
DA Round-BT Form AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
1191712	**BT30DA188060M**	DA180	1.69	2.36	2.13	.35	1.54

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
BT30DA188060M	**LNA188M**	**HSW45M**	100	**SS056041G**	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.
For retention knobs, see page J33.

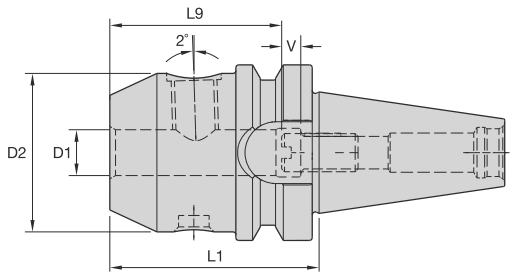


ERICKSON

DC-BT Form AD

order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2	L1	L1S	Nm	lbs
3582592	BT30DC08092M	0,5	.020	8,0	.315	38	100	92	25	2.89

NOTE: Tighten to the recommended tightening torque.
Locknut wrench supplied.
For retention knobs, see page J33.

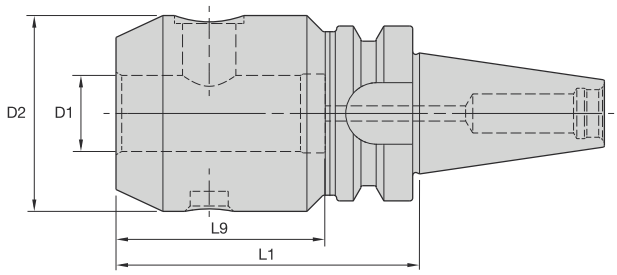


ERICKSON

WN MM-BT Form AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1861102	BT30WN06050M	6	25	50	30	10	SS03M012	3mm	7	571.060	2,5mm	0,47
1861123	BT30WN08050M	8	28	50	30	10	SS03M014	4mm	15	571.067	3mm	0,49
2255556	BT30WN10055M	10	35	55	35	10	SS03M018	5mm	25	571.062	4mm	0,58
2255557	BT30WN12055M	12	42	55	40	10	SS03M023	6mm	35	571.063	5mm	0,67
2255558	BT30WN14055M	14	44	55	40	10	SS03M023	6mm	35	571.063	5mm	0,68
2255559	BT30WN16055M	16	46	55	43	10	SS03M025	6mm	50	571.069	6mm	0,71

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches not included.
For retention knobs, see page J33.



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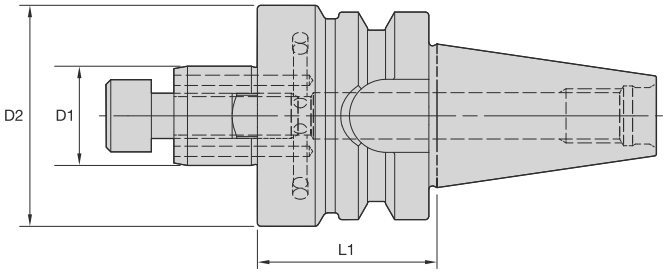
EM MM-BT Form AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1258015	BT30EM06050M	6	25	50	74	SS03M012	3mm	7	0,46
1258018	BT30EM08060M	8	28	60	84	SS03M014	4mm	15	0,52
1258019	BT30EM10060M	10	35	60	84	SS03M018	5mm	25	0,60
1155346	BT30EM12060M	12	42	60	50	SS03M023	6mm	35	0,70
1258020	BT30EM16060M	16	48	60	53	SS03M025	6mm	50	0,77
1258021	BT30EM20080M	20	52	80	55	SS03M026	8mm	95	1,03

EM IN-BT Form AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
2249689	BT30EM012236	1/8	.69	2.36	3.30	S1045PKG	3/32	3	.95
2249690	BT30EM018236	3/16	.69	2.36	3.30	S1045PKG	3/32	3	.94
1258012	BT30EM025236	1/4	1.00	2.36	3.30	ELS025025PKG	1/8	5	1.10
2249691	BT30EM031236	5/16	1.00	2.36	3.30	ELS031031PKG	5/32	11	1.08
1258013	BT30EM038236	3/8	1.00	2.36	3.30	ELS038031PKG	3/16	15	1.08
1258014	BT30EM050236	1/2	1.38	2.36	1.97	ELS044038PKG	7/32	20	1.26
1258016	BT30EM062236	5/8	1.63	2.36	2.09	ELS056050PKG	1/4	40	1.43
1258017	BT30EM075236	3/4	1.75	2.36	2.22	ELS062050PKG	5/16	70	1.46

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



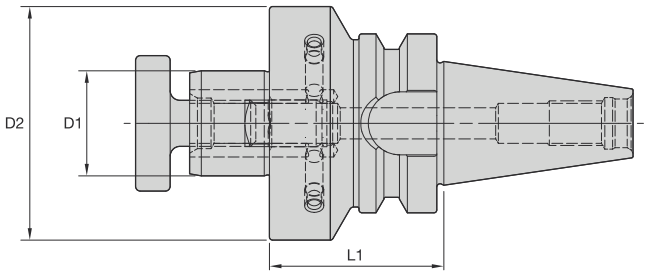
ERICKSON

■ SMC Cap MM-BT Form B/AD

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3752223	**BT30SM2C16035M**	16	38	35	**MS1294**	**KDK16M**	6mm	0,51
3752222	**BT30SMC16035M**	16	44	35	**MS1294**	**KDK16M**	6mm	0,55
3752227	**BT30SM2C22040M**	22	42	40	**MS1234**	**—**	8mm	0,62
3752226	**BT30SMC22040M**	22	49	40	**MS1234**	**KDK22M**	8mm	0,68
3752225	**BT30SM2C16050M**	16	38	50	**MS1294**	**KDK16M**	6mm	0,64
3752229	**BT30SM2C22050M**	22	42	50	**MS1234**	**—**	8mm	0,73
3752224	**BT30SMC16050M**	16	44	50	**MS1294**	**KDK16M**	6mm	0,73
3752228	**BT30SMC22050M**	22	49	50	**MS1234**	**KDK22M**	8mm	0,79

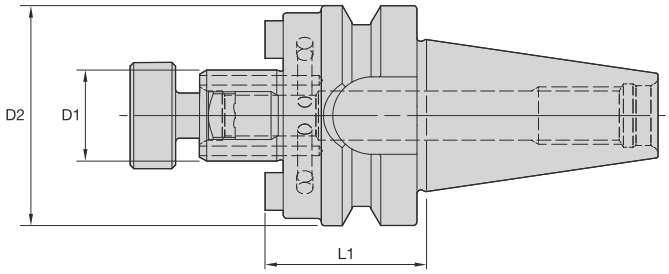
(continued)

(SMC BT Form B/AD continued)



SMC Lock MM-BT Form B/AD

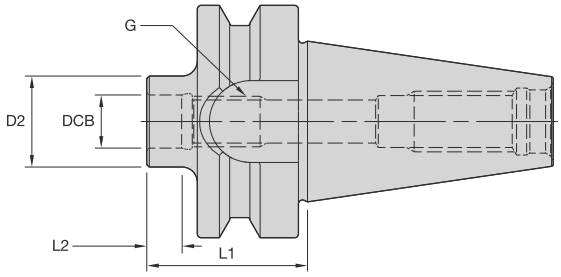
order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3752230	**BT30SMC27045M**	27	60	45	**KLSS27M**	**KDK22M**	10mm	0,97



SMC Lock IN-BT Form B/AD

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
3648599	**BT30SM2C050118**	1/2	1.20	1.18	**KLS05**	**KDK04**	3/16	.97
3648598	**BT30SMC050118**	1/2	1.44	1.18	**KLS05**	**KDK04**	3/16	1.01
3648601	**BT30SM2C075118**	3/4	1.46	1.18	**KLS07**	**—**	1/4	1.08
3648600	**BT30SMC075118**	3/4	1.69	1.18	**KLS07**	**KDK05**	1/4	1.13
3648653	**BT30SM2C100177**	1	2.19	1.77	**KLS10**	**KDK06**	5/16	1.83
3648602	**BT30SMC100177**	1	2.75	1.77	**KLS10**	**KDK06**	5/16	2.16

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.



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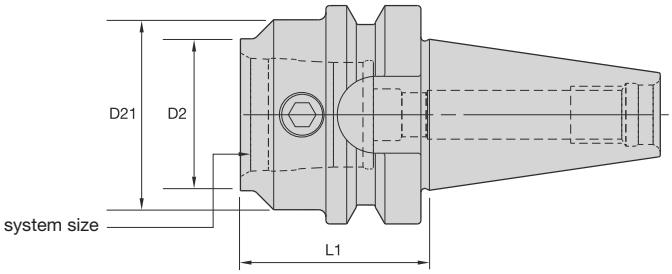
ST-BT Form AD

order number	catalog number	DCB	G	D2	L1	L2	kg
4070054	BT30ST06032M	6,5	M6	10	32	9	0,39
4070055	BT30ST08032M	8,5	M8	13	32	9	0,39
4070056	BT30ST10032M	10,5	M10	18	32	9	0,39
4070057	BT30ST12032M	12,5	M12	21	32	9	0,38

NOTE: For retention knobs, see page J33.



KM QUICK CHANGE ERICKSON

KM-BT Form AD

order number	catalog number	system size	D2	D21	L1	KM spare parts package	wrench size actuation screw	Nm	kg
1013658	BT30KM3240	KM32	32	40	40	KM32PKG3L	5mm	8-11	0,49

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.

WIN WITH WIDIA™

KM™ Quick Change

WIDIA KM Quick Change Tooling is a central component in achieving dramatic improvement in machine and cutting tool use. It's the choice of manufacturers requiring maximum machine output.

- Uniquely designed to have a high clamping force generated from a minimal amount of input force.
- The extremely rigid locking device reduces vibration between components.
- Reliability to run machines at high maximum speeds without loss of force after continuous use.
- Versatile clamping mechanism is designed to be used on all types of manufacturing equipment.

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WIDIA™

Erickson™ BT V-Flange Shank Tooling System • **BT40 Series**

Erickson V-Flange BT Taper Tooling is manufactured from premium materials and meets or exceeds the latest JIS B 6339 specification and ISO-1947 taper accuracy of AT3 specification standards. The BT40 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM.

BT40

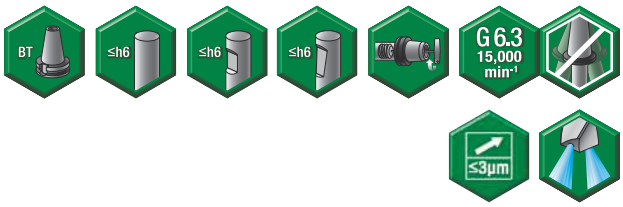
BT — JIS B6339 Shank

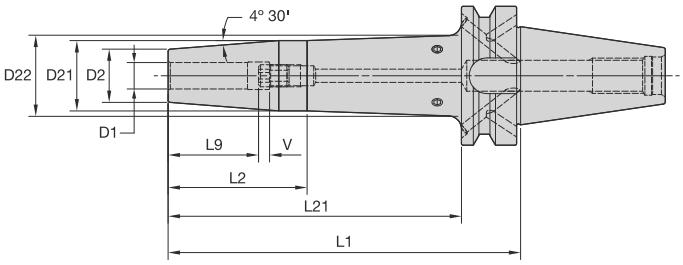
NOTE: Inherent balance conditions — all features are symmetrical.

For any applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

- JIS B 6339 7/24 taper.
- Standard M16 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 15,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-BT Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3782133	BT40BHPVTT06090M	6	21	27	—	90	63	—	26	10	TTSS05014M	2,5mm	1,16
3782134	BT40BHPVTT06120M	6	21	27	—	120	93	—	26	10	TTSS05014M	2,5mm	1,29
3782135	BT40BHPVTT06160M	6	21	27	33	160	50	133	26	10	TTSS05014M	2,5mm	1,54
3782136	BT40BHPVTT08090M	8	21	27	—	90	63	—	26	10	TTSS06014M	3mm	1,15
3782137	BT40BHPVTT08120M	8	21	27	—	120	93	—	26	10	TTSS06014M	3mm	1,28
3782138	BT40BHPVTT08160M	8	21	27	33	160	50	133	26	10	TTSS06014M	3mm	1,54
3782139	BT40BHPVTT10090M	10	24	32	—	90	63	—	31	10	TTSS08014M	4mm	1,22
3782140	BT40BHPVTT10120M	10	24	32	—	120	93	—	31	10	TTSS08014M	4mm	1,40
3782141	BT40BHPVTT10160M	10	24	32	37	160	63	133	31	10	TTSS08014M	4mm	1,71
3615365	BT40BHPVTT12090M	12	24	32	—	90	63	—	36	10	TTSS10014M	5mm	1,20
3615366	BT40BHPVTT12120M	12	24	32	—	120	93	—	36	10	TTSS10014M	5mm	1,38
3615367	BT40BHPVTT12160M	12	24	32	37	160	63	133	36	10	TTSS10014M	5mm	1,70
3615368	BT40BHPVTT14090M	14	27	34	—	90	63	—	36	10	TTSS10014M	5mm	1,25
3615369	BT40BHPVTT14120M	14	27	34	—	120	93	—	36	10	TTSS10014M	5mm	1,45
3615370	BT40BHPVTT14160M	14	27	34	39	160	63	133	36	10	TTSS10014M	5mm	1,81
3615371	BT40BHPVTT16090M	16	27	34	—	90	63	—	39	10	TTSS12014M	6mm	1,23
3615372	BT40BHPVTT16120M	16	27	34	—	120	93	—	39	10	TTSS12014M	6mm	1,43
3615373	BT40BHPVTT16160M	16	27	34	39	160	63	133	39	10	TTSS12014M	6mm	1,77
3615374	BT40BHPVTT18090M	18	33	41	—	90	63	—	39	10	TTSS12014M	6mm	1,38
3615375	BT40BHPVTT18120M	18	33	42	—	120	93	—	39	10	TTSS12014M	6mm	1,69
3615376	BT40BHPVTT18160M	18	33	42	—	160	133	—	39	10	TTSS12014M	6mm	2,10
3615377	BT40BHPVTT20090M	20	33	41	—	90	63	—	41	10	TTSS16014M	8mm	1,35
3615378	BT40BHPVTT20120M	20	33	42	—	120	93	—	41	10	TTSS16014M	8mm	1,65
3615379	BT40BHPVTT20160M	20	33	42	—	160	133	—	41	10	TTSS16014M	8mm	2,05
3615380	BT40BHPVTT25100M	25	44	52	—	100	73	—	47	10	TTSS16014M	8mm	1,75
3615381	BT40BHPVTT32105M	32	44	53	—	105	78	—	51	10	TTSS16014M	8mm	1,67

(continued)

(TT GP HPV BT Form B/AD continued)

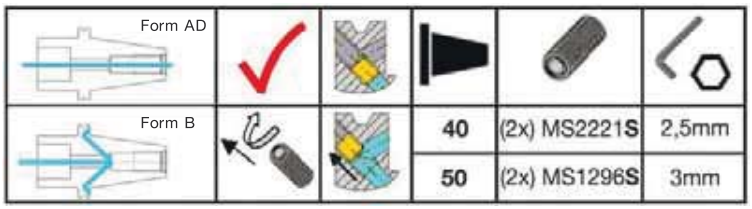
Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	**tolerance**
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

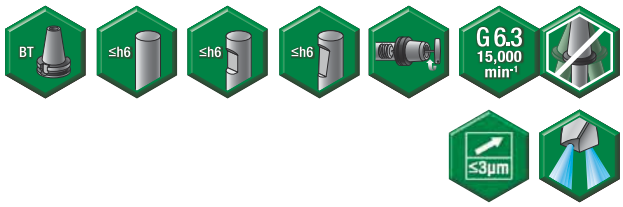
TT GP HPV IN-BT Form B/AD

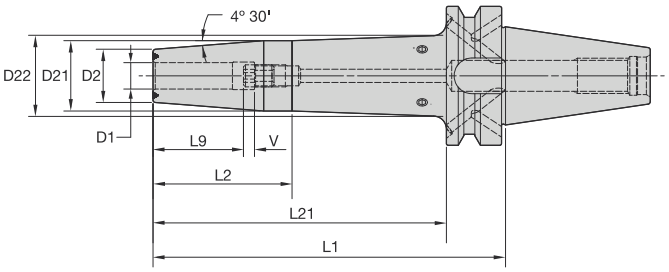
order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3782142	**BT40BHPVTT025354**	1/4	.83	1.06	3.54	2.48	1.02	.39	**TTSS05014M**	2,5mm	2.55
3782143	**BT40BHPVTT025630**	1/4	.83	1.06	6.30	1.97	1.02	.39	**TTSS05014M**	2,5mm	3.39
3782144	**BT40BHPVTT031354**	5/16	.83	1.06	3.54	2.48	1.02	.39	**TTSS06014M**	3mm	2.53
3782145	**BT40BHPVTT031630**	5/16	.83	1.06	6.30	1.97	1.02	.39	**TTSS06014M**	3mm	3.39
3782146	**BT40BHPVTT038354**	3/8	.95	1.26	3.54	2.48	1.22	.39	**TTSS08014M**	4mm	2.69
3782147	**BT40BHPVTT038630**	3/8	.95	1.26	6.30	2.48	1.22	.39	**TTSS08014M**	4mm	3.78
3782148	**BT40BHPVTT044354**	7/16	.95	1.26	3.54	2.48	1.42	.39	**TTSS10014M**	5mm	2.66
3615353	**BT40BHPVTT050354**	1/2	.95	1.26	3.54	2.48	1.42	.39	**TTSS10014M**	5mm	2.64
3615354	**BT40BHPVTT050630**	1/2	.95	1.26	6.30	2.48	1.42	.39	**TTSS10014M**	5mm	3.73
3615355	**BT40BHPVTT062354**	5/8	1.06	1.34	3.54	2.48	1.54	.39	**TTSS12014M**	6mm	2.71
3615356	**BT40BHPVTT062630**	5/8	1.06	1.34	6.30	2.48	1.54	.39	**TTSS12014M**	6mm	3.91
3615357	**BT40BHPVTT075354**	3/4	1.30	1.61	3.54	2.48	1.61	.39	**TTSS16014M**	8mm	2.99
3615358	**BT40BHPVTT075630**	3/4	1.30	1.65	6.30	5.24	1.61	.39	**TTSS16014M**	8mm	4.56
3615359	**BT40BHPVTT088354**	7/8	1.30	1.61	3.54	2.48	1.61	.39	**TTSS16014M**	8mm	2.90
3615360	**BT40BHPVTT088630**	7/8	1.30	1.65	6.30	5.24	1.61	.39	**TTSS16014M**	8mm	4.47
3615361	**BT40BHPVTT100394**	1	1.73	2.06	3.94	2.87	1.85	.39	**TTSS16014M**	8mm	3.84
3615362	**BT40BHPVTT100630**	1	1.73	2.08	6.30	5.24	1.85	.39	**TTSS16014M**	8mm	6.03
3615363	**BT40BHPVTT125413**	1 1/4	1.73	2.08	4.13	3.07	2.01	.39	**TTSS16014M**	8mm	3.69
3615364	**BT40BHPVTT125630**	1 1/4	1.73	2.08	6.30	5.24	2.01	.39	**TTSS16014M**	8mm	5.69

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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■ TT HT HPV MM-BT Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3615457	BT40BHPVTTHT12090M	12	24	32	—	90	63	—	36	10	TTSS10014M	5mm	1,20
3615458	BT40BHPVTTHT12120M	12	24	32	—	120	93	—	36	10	TTSS10014M	5mm	1,38
3615459	BT40BHPVTTHT12160M	12	24	32	37	160	63	133	36	10	TTSS10014M	5mm	1,70
3615460	BT40BHPVTTHT14090M	14	27	34	—	90	63	—	36	10	TTSS10014M	5mm	1,25
3615461	BT40BHPVTTHT14120M	14	27	34	—	120	93	—	36	10	TTSS10014M	5mm	1,45
3615462	BT40BHPVTTHT14160M	14	27	34	39	160	63	133	36	10	TTSS10014M	5mm	1,81
3615463	BT40BHPVTTHT16090M	16	27	34	—	90	63	—	39	10	TTSS12014M	6mm	1,23
3615464	BT40BHPVTTHT16120M	16	27	34	—	120	93	—	39	10	TTSS12014M	6mm	1,43
3615465	BT40BHPVTTHT16160M	16	27	34	39	160	63	133	39	10	TTSS12014M	6mm	1,77
3615466	BT40BHPVTTHT18090M	18	33	41	—	90	63	—	39	10	TTSS12014M	6mm	1,38
3615467	BT40BHPVTTHT18120M	18	33	42	—	120	93	—	39	10	TTSS12014M	6mm	1,69
3615468	BT40BHPVTTHT18160M	18	33	42	—	160	133	—	39	10	TTSS12014M	6mm	2,10
3615469	BT40BHPVTTHT20090M	20	33	41	—	90	63	—	41	10	TTSS16014M	8mm	1,35
3615470	BT40BHPVTTHT20120M	20	33	42	—	120	93	—	41	10	TTSS16014M	8mm	1,65
3615471	BT40BHPVTTHT20160M	20	33	42	—	160	133	—	41	10	TTSS16014M	8mm	2,06
3615472	BT40BHPVTTHT25100M	25	44	52	50	100	73	—	47	10	TTSS16014M	8mm	1,75
3615473	BT40BHPVTTHT32105M	32	44	53	50	105	78	—	51	10	TTSS16014M	8mm	1,66

(continued)

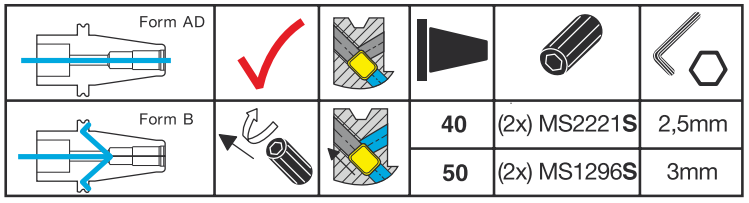
(TT HT HPV BT Form B/AD continued)

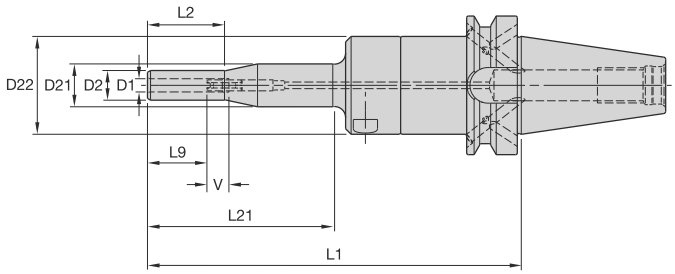
Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	tolerance
1/2 & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

TT HT HPV IN-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw	lbs
3615444	**BT40BHPVTTHT050354**	1/2	.95	1.26	3.54	2.48	1.42	.39	**TTSS10014M**	5mm	2.63
3615445	**BT40BHPVTTHT050630**	1/2	.95	1.26	6.30	2.48	1.42	.39	**TTSS10014M**	5mm	3.73
3615446	**BT40BHPVTTHT062354**	5/8	1.06	1.34	3.54	2.48	1.54	.39	**TTSS12014M**	6mm	2.71
3615447	**BT40BHPVTTHT062630**	5/8	1.06	1.34	6.30	2.48	1.54	.39	**TTSS12014M**	6mm	3.91
3615448	**BT40BHPVTTHT075354**	3/4	1.30	1.61	3.54	2.48	1.61	.39	**TTSS16014M**	8mm	2.99
3615450	**BT40BHPVTTHT075630**	3/4	1.30	1.65	6.30	5.24	1.61	.39	**TTSS16014M**	8mm	4.56
3615451	**BT40BHPVTTHT088354**	7/8	1.30	1.61	3.54	2.48	1.61	.39	**TTSS16014M**	8mm	2.90
3615452	**BT40BHPVTTHT088630**	7/8	1.30	1.65	6.30	5.24	1.61	.39	**TTSS16014M**	8mm	4.47
3615453	**BT40BHPVTTHT100394**	1	1.73	2.06	3.94	2.87	1.85	.39	**TTSS16014M**	8mm	3.84
3615454	**BT40BHPVTTHT100630**	1	1.73	2.08	6.30	5.24	1.85	.39	**TTSS16014M**	8mm	6.03
3615455	**BT40BHPVTTHT125413**	1 1/4	1.73	2.08	4.13	3.07	2.01	.39	**TTSS16014M**	8mm	3.68
3615456	**BT40BHPVTTHT125630**	1 1/4	1.73	2.08	6.30	5.24	2.01	.39	**TTSS16014M**	8mm	5.69

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.





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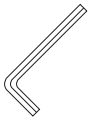
HC Slim-T MM-BT Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	kg
3019236	**BT40BHCSLT06170M**	6	13,5	19,5	44	170	35	85	27	10	1,68
3019237	**BT40BHCSLT08170M**	8	15,5	19,5	44	170	35	85	27	10	1,69
3019238	**BT40BHCSLT10170M**	10	17,5	44,5	–	170	85	145	31	10	1,68

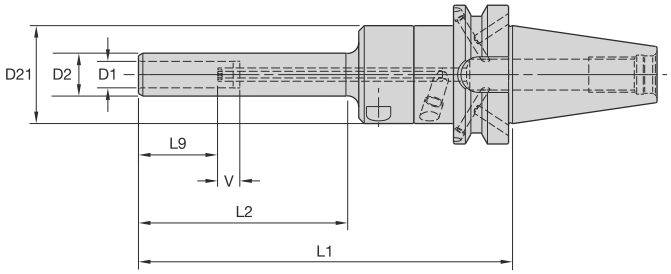
Spare Parts

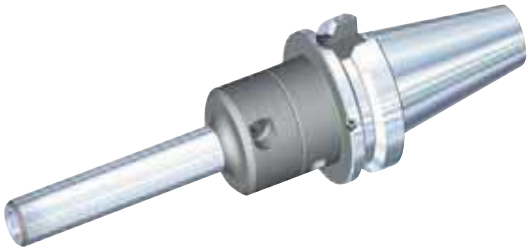


catalog number	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw
BT40BHCSLT06170M	**170.135**	5mm	**571.060**	**170.002**	2,5mm
BT40BHCSLT08170M	**170.135**	5mm	**571.060**	**170.002**	2,5mm
BT40BHCSLT10170M	**170.135**	5mm	**571.061**	**170.003**	3mm

(continued)

(HC Slim MM-BT Form B/AD continued)

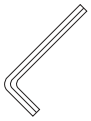




HC Slim MM-BT Form B/AD

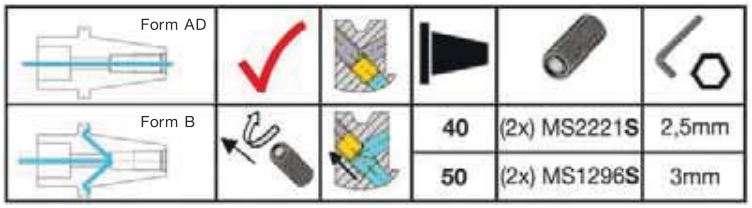
order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2634575	**BT40BHCSL12170M**	12	19,5	44,5	170	95	36	10	1,61
2634576	**BT40BHCSL14170M**	14	21,5	52,5	170	95	36	10	1,84
2634577	**BT40BHCSL16170M**	16	23,5	52,5	170	95	39	10	1,87
2634578	**BT40BHCSL18170M**	18	25,5	52,5	170	95	39	10	1,91
2634579	**BT40BHCSL20170M**	20	27,5	52,5	170	95	41	10	1,95

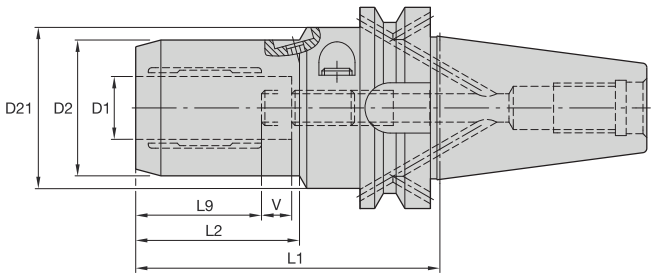
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
BT40BHCSL12170M	**170.135**	5mm	**170.002**	2,5mm
BT40BHCSL14170M	**170.135**	5mm	**170.002**	2,5mm
BT40BHCSL16170M	**170.135**	5mm	**170.002**	2,5mm
BT40BHCSL18170M	**170.135**	5mm	**170.002**	2,5mm
BT40BHCSL20170M	**170.135**	5mm	**170.002**	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw and actuation wrench.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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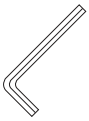
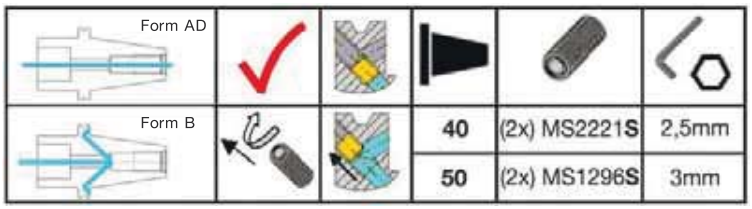
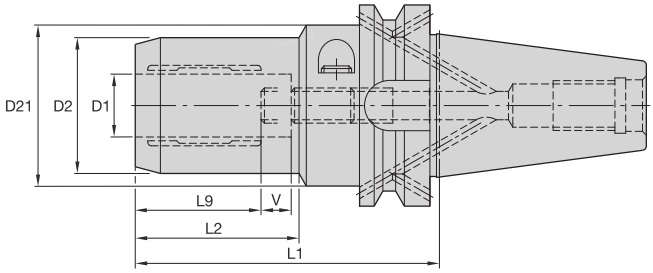
■ HC MM-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1315341	**BT40BHC06080M**	6	25,7	50	80	33	27	10	**170.135**	5mm	**170.002**	2,5mm	1,28
1315342	**BT40BHC08080M**	8	27,7	50	80	34	27	10	**170.135**	5mm	**170.002**	2,5mm	1,30
1315343	**BT40BHC10085M**	10	29,7	50	85	35	31	10	**170.135**	5mm	**170.002**	2,5mm	1,35
1315344	**BT40BHC12090M**	12	31,6	50	90	40	36	10	**170.135**	5mm	**170.002**	2,5mm	1,39
1315345	**BT40BHC14090M**	14	33,6	50	90	42	36	10	**170.135**	5mm	**170.003**	3mm	1,40
1315347	**BT40BHC16090M**	16	37,6	50	90	47	39	10	**170.135**	5mm	**170.003**	3mm	1,44
1315348	**BT40BHC18090M**	18	39,6	50	90	47	39	10	**170.135**	5mm	**170.003**	3mm	1,47
1315349	**BT40BHC20095M**	20	41,6	50	95	48	41	10	**170.135**	5mm	**170.003**	3mm	1,54
1315350	**BT40BHC25115M**	25	49,8	63	115	51	46	10	**170.136**	6mm	**170.004**	4mm	2,18
1315351	**BT40BHC32120M**	32	59,8	63	120	59	50	10	**170.136**	6mm	**170.004**	4mm	2,46

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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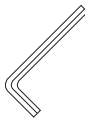
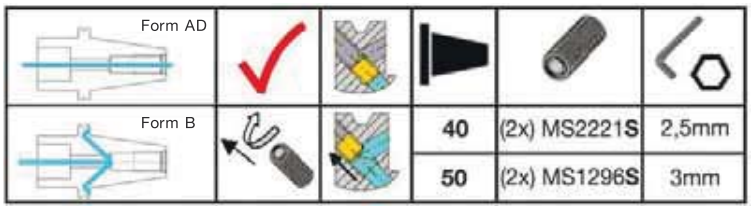
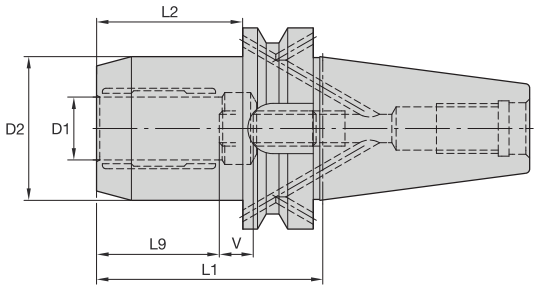
HC Trend IN-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw	lbs
2263075	**BT40BHCT025315**	1/4	1.011	1.963	3.150	1.378	1.063	.394	**170.135**	5mm	**571.061**	**170.003**	3mm	2.85
2263076	**BT40BHCT038335**	3/8	1.168	1.963	3.347	1.496	1.221	.394	**170.135**	5mm	**571.061**	**170.003**	3mm	3.02
2263077	**BT40BHCT050354**	1/2	1.243	1.963	3.543	1.575	1.417	.394	**170.135**	5mm	**571.061**	**170.003**	3mm	3.16
2263078	**BT40BHCT062354**	5/8	1.479	1.963	3.543	1.831	1.535	.394	**170.135**	5mm	**571.063**	**–**	5mm	3.23
2263079	**BT40BHCT075374**	3/4	1.636	1.963	3.740	1.890	1.614	.394	**170.135**	5mm	**571.063**	**–**	5mm	3.49
2263080	**BT40BHCT100453**	1	1.959	2.474	4.528	2.008	1.850	.394	**170.136**	6mm	**571.063**	**170.005**	5mm	4.80
2263081	**BT40BHCT125472**	1 1/4	2.352	2.474	4.724	2.323	2.008	.394	**170.136**	6mm	**571.063**	**170.005**	5mm	5.43

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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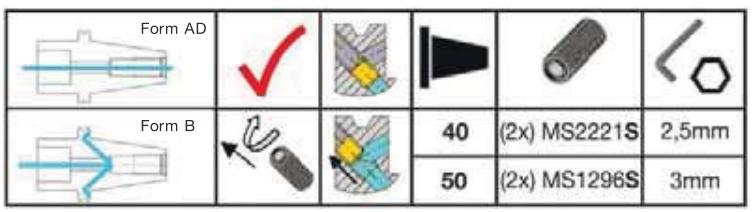
HC Basic MM-BT Form B/AD

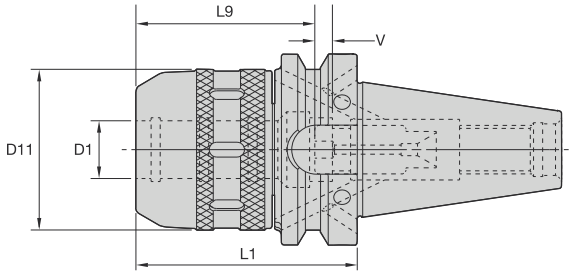
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	wrench size stop screw	kg
1599687	**BT40BHCB20095M**	20	49,9	95	68	41	10	**170.135**	5mm	**280.034**	5mm	1,79

HC Basic IN-BT Form B/AD

order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	wrench size stop screw	lbs
2263074	**BT40BHCB075374**	3/4	1.96	3.74	2.68	1.61	—	**170.135**	5mm	**280.034**	5mm	3.98

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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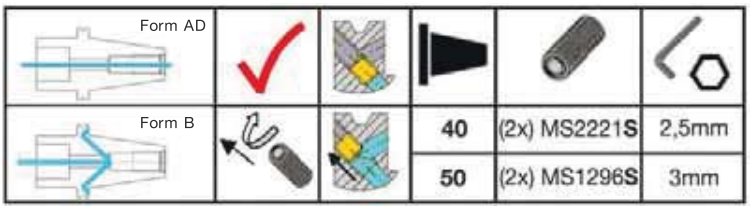
HPMC MM-BT Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3578487	BT40BHPMC20075M	20	53	75	47	20	PSW52M	MCSS16040M	2,5mm & 5mm	1,50
3578488	BT40BHPMC20120M	20	53	120	50	20	PSW52M	MCSS16040M	2,5mm & 5mm	2,20
3578489	BT40BHPMC25085M	25	61	85	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	1,80
3578490	BT40BHPMC25120M	25	61	120	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	2,50
3578491	BT40BHPMC32090M	32	70	90	58	20	PSW68M	MCSS16040M	2,5mm & 5mm	2,10
3578492	BT40BHPMC32120M	32	70	120	58	20	PSW68M	MCSS16040M	2,5mm & 5mm	2,70

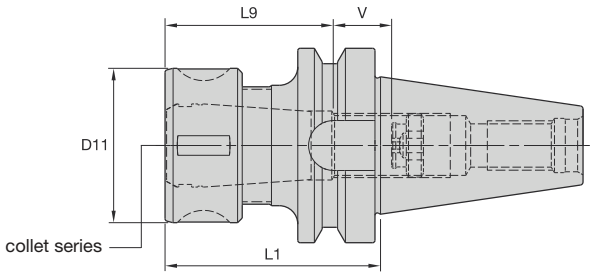
HPMC IN-BT Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100412	BT40BHPMC075295	3/4	2.09	2.95	1.85	.79	PSW52M	MCSS16040M	2,5mm & 5mm	3.30
3100413	BT40BHPMC075472	3/4	2.09	4.72	1.97	.79	PSW52M	MCSS16040M	2,5mm & 5mm	4.90
3100414	BT40BHPMC100335	1	2.40	3.35	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	4.10
3100415	BT40BHPMC100472	1	2.40	4.72	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	5.70
3100416	BT40BHPMC125354	1 1/4	2.76	3.54	2.28	.79	PSW68M	MCSS16040M	2,5mm & 5mm	4.50
3100417	BT40BHPMC125472	1 1/4	2.76	4.72	2.28	.79	PSW68M	MCSS16040M	2,5mm & 5mm	6.10

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench not included.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
For retention knobs, see page J33.



- Tremendous Grip (3:1 advantage).



	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

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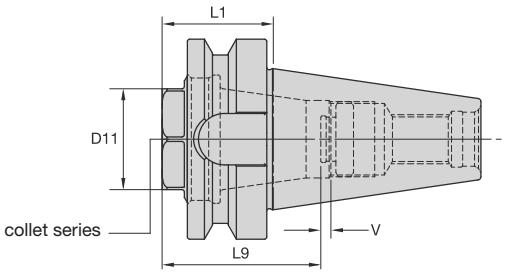
TG Round-BT Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1156366	**BT40TG075070M**	TG75	50	70	54	27	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	1,24
1156367	**BT40TG100080M**	TG100	60	80	70	13	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,44
1191754	**BT40TG100100M**	TG100	60	100	70	33	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,63
1191755	**BT40TG100150M**	TG100	60	150	70	83	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	2,11
1191756	**BT40TG150110M**	TG150	85	110	86	20	**LNA150M**	**HSW80M**	271	**SS112041G**	4mm & 5/32	2,46

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER32	2,0	20,0	.08	.81

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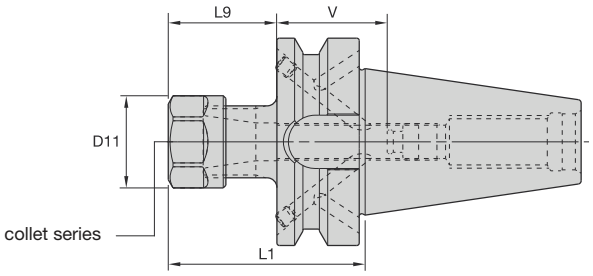
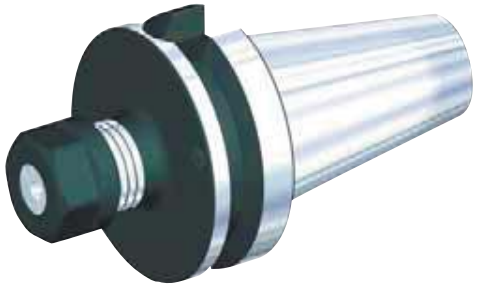
■ ER Short-BT Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
2978765	**BT40SER32035M**	ER32	36	35	50	6	**LNECSER32M**	**OEW32M**	136	**SS094041G**	4mm & 5/32	0,75

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I58.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

• Grip (2:1 advantage).





ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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ER Hex-BT Form B/AD

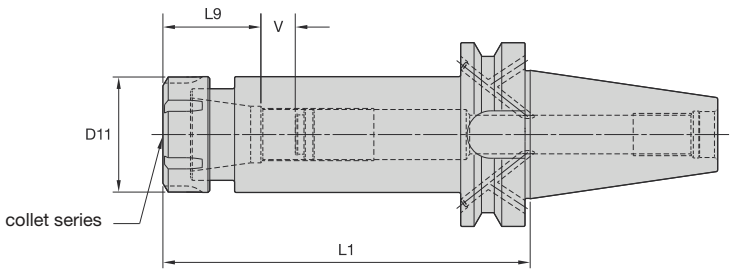
order number	catalog number	collet series	D11	L1	L9	V	kg
1315660	**BT40BER16060M**	ER16	28	60	32	39	1,03
1623345	**BT40BER16120M**	ER16	28	120	32	48	1,27
3847461	**BT40BER16150M**	ER16	28	150	32	48	1,39
3847462	**BT40BER20060M**	ER20	34	60	37	38	1,04
3847513	**BT40BER20120M**	ER20	34	120	37	63	1,41
3847514	**BT40BER20150M**	ER20	34	150	37	63	1,59

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
BT40BER16060M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
BT40BER16120M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
BT40BER16150M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
BT40BER20060M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32
BT40BER20120M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32
BT40BER20150M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32

(continued)

(continued ER BT Form B/AD)



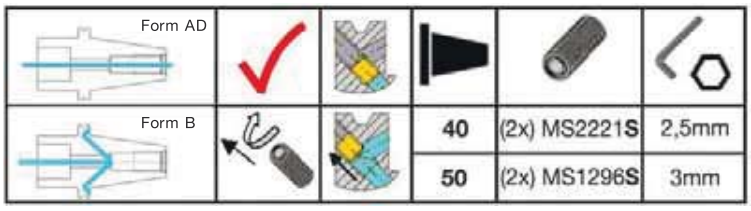
ER Round-BT Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	kg
1718315	**BT40BER25070M**	ER25	42	70	40	38	1,15
1610709	**BT40BER25120M**	ER25	42	120	40	60	1,61
3798342	**BT40BER25150M**	ER25	42	150	40	60	1,90
1538985	**BT40BER32070M**	ER32	50	70	46	40	1,15
1538986	**BT40BER32120M**	ER32	50	120	46	54	1,82
3798343	**BT40BER32150M**	ER32	50	150	46	54	2,26
1871535	**BT40BER40080M**	ER40	63	80	52	28	1,37
1871538	**BT40BER40120M**	ER40	63	120	52	33	2,29

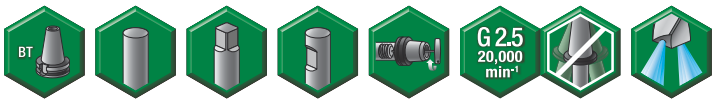
Spare Parts

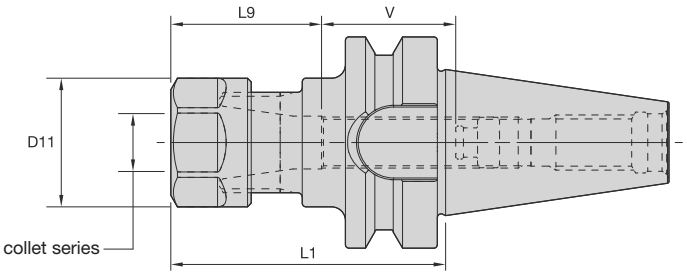
catalog number	locknut	wrench	counterbore collet torque (Nm)	stop screw	wrench size stop screw
BT40BER25070M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BT40BER25120M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BT40BER25150M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
BT40BER32070M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BT40BER32120M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BT40BER32150M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
BT40BER40080M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32
BT40BER40120M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.



• Grip 1:1.





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DA collet series	Collet Capacity mm min	mm max	inch min	inch max
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16

DA Hex-BT form AD

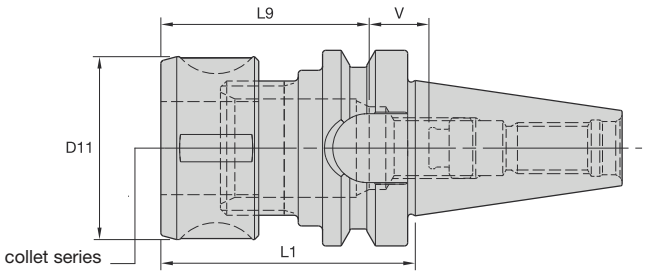
order number	catalog number	collet series	D11	L1	L9	V	lbs
1191725	**BT40DA208070M**	DA200	1.08	2.76	1.50	1.26	2.20
1191722	**BT40DA108070M**	DA100	1.44	2.76	1.77	1.10	2.20

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
BT40DA108070M	**LNA108M**	**OEW32M**	55	**SS056041G**	4mm & 5/32
BT40DA208070M	**LNA208M**	**OEW24M**	44	**SS038031G**	2mm & 5/64

(continued)

(DA BT Form AD continued))



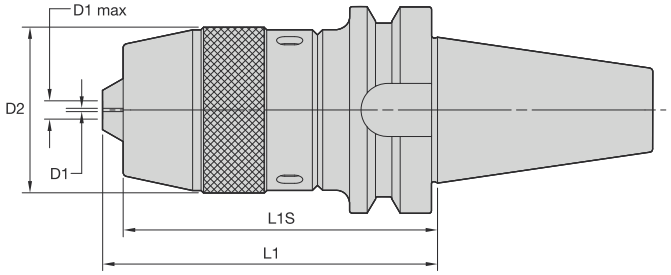
DA Round-BT form AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
1191723	**BT40DA188070M**	DA180	1.69	2.76	1.89	1.30	2.65
1258159	**BT40DA188100M**	DA180	1.69	3.94	1.89	2.05	3.09
1191724	**BT40DA188150M**	DA180	1.69	5.91	1.97	1.77	3.75

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
BT40DA188070M	**LNA188M**	**HSW45M**	100	**SS081041G**	4mm & 5/32
BT40DA188100M	**LNA188M**	**HSW45M**	100	**SS081041G**	4mm & 5/32
BT40DA188150M	**LNA188M**	**HSW45M**	100	**SS081041G**	4mm & 5/32

NOTE: For retention tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.



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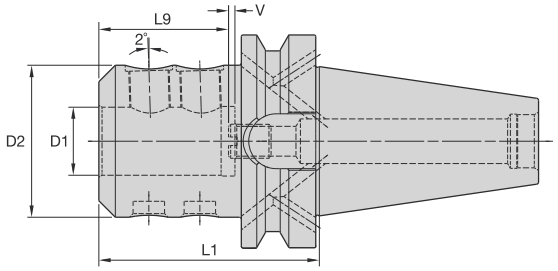
DC-BT Form A

order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2	L1	L1S	locknut wrench	Nm	kg
3583293	**BT40DC13096M**	1,0	.039	13,0	.512	51	108	96	**PSW45M**	55	1,74

NOTE: Tighten to the recommended tightening torque.
Locknut wrench not supplied.
For retention knobs, see page J33.



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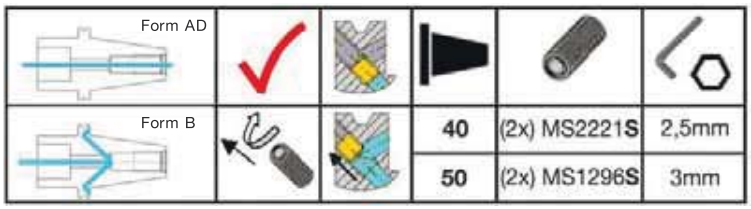
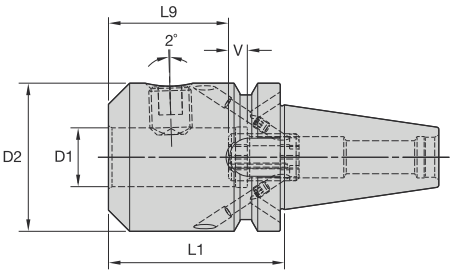
WN MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1126481	BT40BWN06050M	6	25	50	30	10	SS03M012	3mm	7	571.060	2,5mm	1,03
1126482	BT40BWN08050M	8	28	50	30	10	SS03M014	4mm	15	571.067	3mm	1,04
1126850	BT40BWN10063M	10	35	63	35	10	SS03M018	5mm	25	571.068	4mm	1,18
1126483	BT40BWN12063M	12	42	63	40	10	SS03M023	6mm	35	571.074	5mm	1,26
1126844	BT40BWN14063M	14	44	63	40	10	SS03M023	6mm	35	571.074	5mm	1,28
1126845	BT40BWN16063M	16	48	63	43	10	SS03M025	6mm	50	571.075	6mm	1,34
1126846	BT40BWN18063M	18	50	63	43	10	SS03M025	6mm	50	571.075	6mm	1,36
1126847	BT40BWN20063M	20	52	63	45	10	SS03M026	8mm	95	571.076	6mm	1,37
1126848	BT40BWN25090M	25	65	90	55	10	SS03M027	10mm	135	571.077	6mm	2,21
1126849	BT40BWN32100M	32	72	100	54	10	SS03M029	10mm	160	571.077	6mm	2,63

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
For retention knobs, see page J33.





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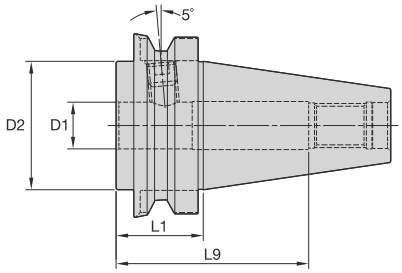
■ SWN MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	stop screw	wrench size stop screw	Nm	kg
1126479	**BT40BSWN25075M**	25	65	75	44	15	**SS03M027**	10mm	**571.066**	10mm	135	1,90
1126480	**BT40BSWN32075M**	32	72	75	46	17	**SS03M029**	10mm	**571.066**	10mm	160	1,98

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
For retention knobs, see page J33.



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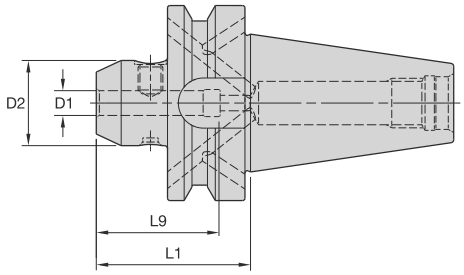
■ SWN IN-BT Form AD (Tap Chuck Adapter)

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1017937	**BT40TA1106**	1	2.48	1.06	2.50	ELS038031PKG	3/16	15	1.79

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



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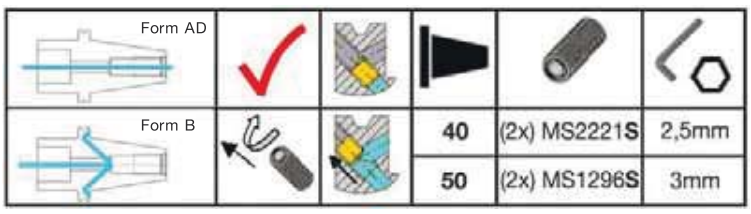
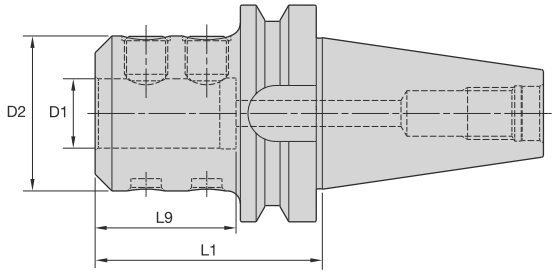
EM MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1126851	**BT40BEM06050M**	6	25	50	40	**SS03M012**	3mm	7	1,02
1126852	**BT40BEM08050M**	8	28	50	40	**SS03M014**	4mm	15	1,03
1126853	**BT40BEM10063M**	10	35	63	45	**SS03M018**	5mm	25	1,17
1127275	**BT40BEM12063M**	12	42	63	50	**SS03M023**	6mm	35	1,26
1126914	**BT40BEM14063M**	14	44	63	50	**SS03M023**	6mm	35	1,28
1126915	**BT40BEM16063M**	16	48	63	53	**SS03M025**	6mm	50	1,33
1126916	**BT40BEM18063M**	18	50	63	53	**SS03M025**	6mm	50	1,35
1126917	**BT40BEM20063M**	20	52	63	55	**SS03M026**	8mm	95	1,36
1126478	**BT40BEM25090M**	25	65	90	60	**SS03M027**	10mm	135	2,24

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





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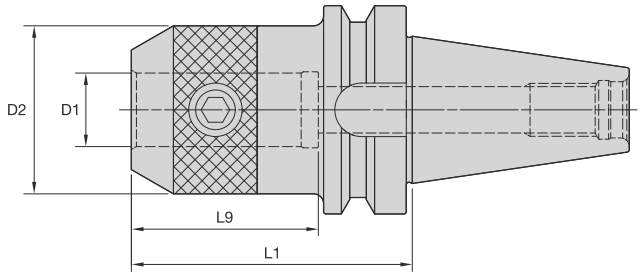
■ EM MM-BT Form AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1156359	**BT40EM32110M**	32	72	110	65	**SS03M029**	10mm	160	2,91

(continued)

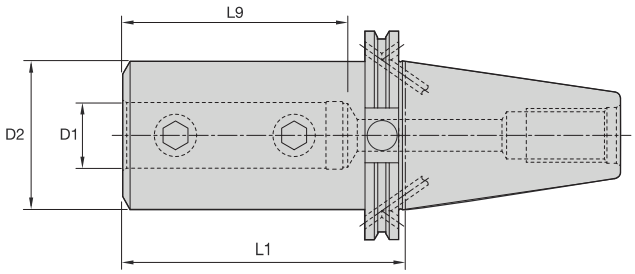
(EM BT Form AD continued)



EM IN-BT Form AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1258164	**BT40EM025255**	1/4	1.00	2.55	3.93	**ELS025025PKG**	1/8	5	2.35
1258165	**BT40EM031255**	5/16	1.00	2.55	3.93	**ELS031031PKG**	5/32	11	2.35
1258166	**BT40EM038255**	3/8	1.00	2.55	3.93	**ELS038031PKG**	3/16	15	2.32
1026620	**BT40EM050255**	1/2	1.38	2.55	3.93	**ELS044038PKG**	7/32	20	2.52
1064863	**BT40EM050400**	1/2	1.38	4.00	5.38	**ELS044038PKG**	7/32	20	3.03
1258176	**BT40EM062255**	5/8	1.63	2.55	2.09	**ELS056050PKG**	1/4	40	2.69
1084589	**BT40EM075150**	3/4	1.68	1.50	2.22	**ELS062050PKG**	5/16	70	2.08
1258177	**BT40EM075255**	3/4	1.75	2.55	2.22	**ELS062050PKG**	5/16	70	2.73
1258184	**BT40EM088335**	7/8	2.00	3.35	2.22	**ELS062050PKG**	5/16	70	3.58
1084590	**BT40EM100162**	1	2.04	1.63	2.46	**DWG ELS075044**	3/8	110	2.00
1150875	**BT40EM100374**	1	2.00	3.74	2.56	**ELS075056PKG**	3/8	110	3.73
1064864	**BT40EM100500**	1	2.00	5.00	4.49	**ELS075056PKG**	3/8	110	4.42
1084591	**BT40EM125250**	1 1/4	2.46	2.50	2.51	**ELS075062PKG**	3/8	110	3.05
1258194	**BT40EM125335**	1 1/4	2.40	3.35	2.51	**ELS075056PKG**	3/8	110	3.95

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



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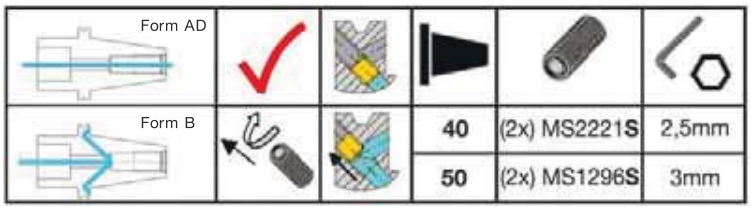
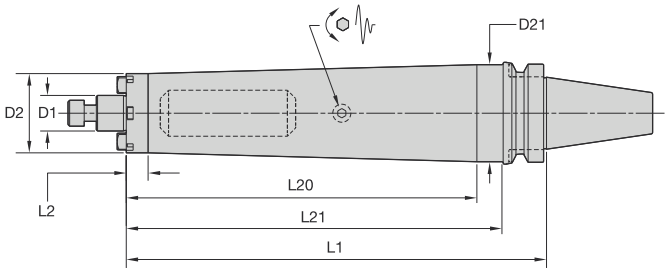
SSF IN-BT Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1749289	**BT40BSSF075325**	3/4	1.75	3.25	2.25	**ELS062050PKG**	5/16	70	3.22
1749290	**BT40BSSF100425**	1	1.97	4.25	3.25	**DWG ELS075050**	3/8	110	4.01
1749292	**BT40BSSF125500**	1 1/4	2.50	5.00	3.50	**ELS075056PKG**	3/8	110	5.83

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





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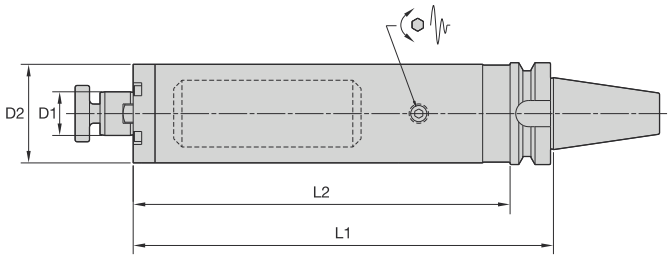
SMC TD Cap MM-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135487	BT40BTDSMC22260M	22	49	60	260	14	217	233	MS1234	KDK22M	8mm	5,06

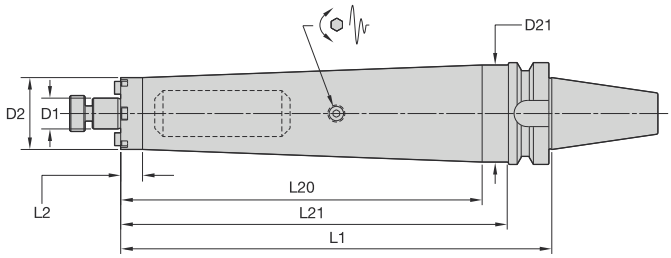


SMC TD Lock MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L2	socket-head cap screw	drive key	wrench size retention screw	Nm	kg
4135488	BT40BTDSMC27260M	27	61	260	233	KLSS27M	–	10mm	–	5,96

(continued)

(SMC TD BT Form B/AD continued)



SMC TD Lock IN-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135489	**BT40BTDSMC0751050**	3/4	1.75	2.36	10.50	.53	8.80	9.44	**KLS07**	**KDK05**	1/4	10.67
4135490	**BT40BTDSMC1001050**	1	2.75	—	10.50	10.50	—	—	**KLS10**	**KDK06**	5/16	16.86

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.

Form AD	✓				
Form B			**40**	(2x) MS2221**S**	2,5mm
			50	(2x) MS1296**S**	3mm

TOOLING SYSTEMS

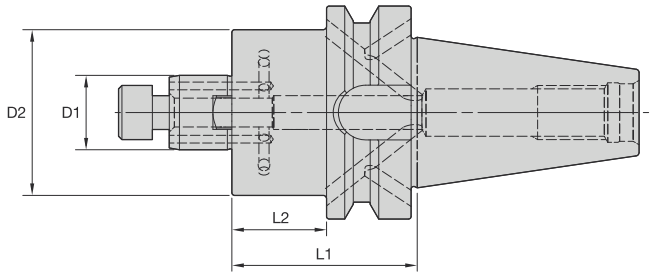
Erickson™ Toolholders

WIDIA™ proudly offers premium quality Erickson toolholder products, so you can be sure that you're buying the best the industry has to offer. The entire portfolio — including steep taper, HSK, straight shank extensions, collets, sleeves, and accompanying products — offers high productivity, increased accuracy, and application flexibility.

Designed for both manual and automatic tool changing, Erickson interfaces are ideally suited for most machine tools and feature a compact and rigid construction guaranteed to handle high torque and deliver optimal metal removal rates.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

ERICKSON™



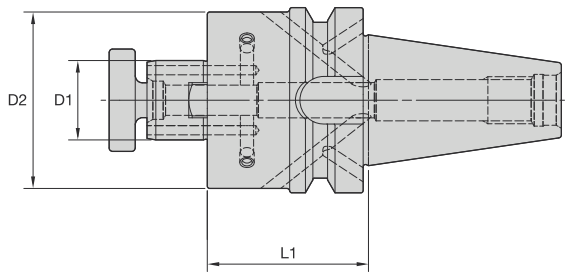
ERICKSON

SMC Cap MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
3752232	**BT40BSM2C16050M**	16	38	50	23	**MS1294**	**KDK16M**	6mm	1,16
3752234	**BT40BSM2C16075M**	16	38	75	48	**MS1294**	**KDK16M**	6mm	1,35
3752236	**BT40BSM2C16100M**	16	38	100	73	**MS1294**	**KDK16M**	6mm	1,55
3752231	**BT40BSMC16050M**	16	44	50	23	**MS1294**	**KDK16M**	6mm	1,23
3752233	**BT40BSMC16075M**	16	44	75	48	**MS1294**	**KDK16M**	6mm	1,50
3752235	**BT40BSMC16100M**	16	44	100	73	**MS1294**	**KDK16M**	6mm	1,77
3752238	**BT40BSM2C22055M**	22	42	55	28	**MS1234**	**–**	8mm	1,30
3752241	**BT40BSM2C22100M**	22	42	100	73	**MS1234**	**–**	8mm	1,75
3752243	**BT40BSM2C22150M**	22	42	150	123	**MS1234**	**–**	8mm	2,26
3752237	**BT40BSMC22055M**	22	49	55	28	**MS1234**	**KDK22M**	8mm	1,41
3752239	**BT40BSMC22100M**	22	49	100	73	**MS1234**	**KDK22M**	8mm	2,03
3752242	**BT40BSMC22150M**	22	49	150	123	**MS1234**	**KDK22M**	8mm	2,74

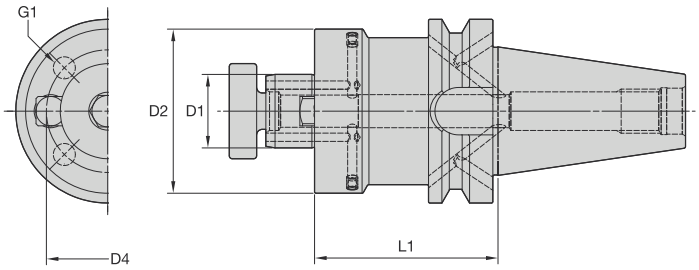
(continued)

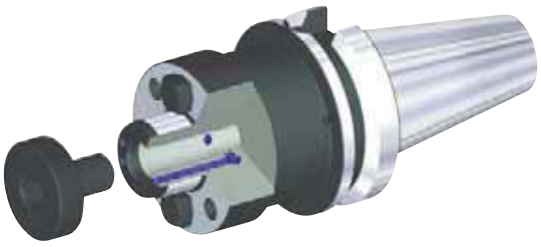
(SMC BT Form B/AD continued)



SMC Lock MM-BT Form B/AD

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3752244	**BT40BSMC27055M**	27	60	55	**KLSS27M**	**KDK22M**	10mm	2
3752245	**BT40BSMC27100M**	27	60	100	**KLSS27M**	**KDK22M**	10mm	3
3752246	**BT40BSMC27150M**	27	60	150	**KLSS27M**	**KDK22M**	10mm	4
3752247	**BT40BSMC32060M**	32	78	60	**KLSS32M**	**KDK32M**	14mm	2
3752248	**BT40BSMC32100M**	32	78	100	**KLSS32M**	**KDK32M**	14mm	3



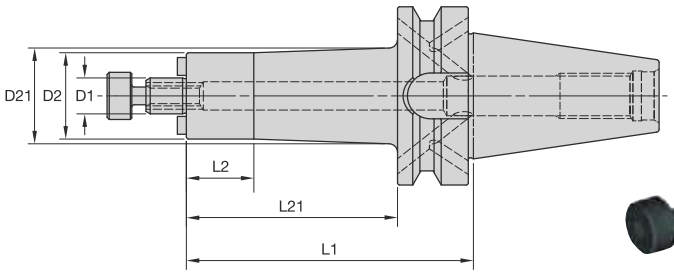


SMC DIR MM-BT Form B/AD

order number	catalog number	D1	D2	L1	G1	D4	lock screw	drive key	wrench size lock screw	kg
3752249	**BT40BSMC40060M**	40	89	60	M12 X 1.75	66,7	**KLSS40M**	**KDK40M**	17mm	3
3752250	**BT40BSMC40100M**	40	89	100	M12 X 1.75	66,7	**KLSS40M**	**KDK40M**	17mm	4

(continued)

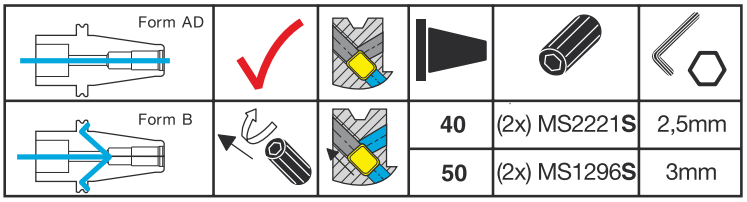
(SMC BT Form B/AD continued)

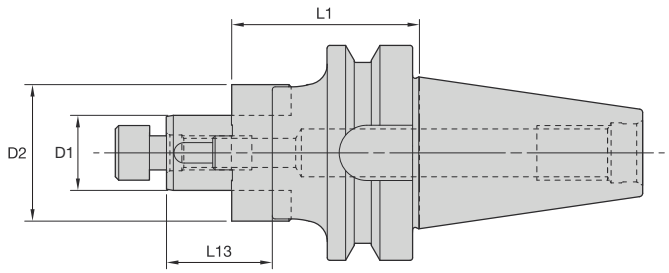


SMC Lock IN-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L21	lock screw	drive key	wrench size lock screw	lbs
3648655	**BT40BSM2C050177**	1/2	1.20	—	1.77	.71	—	**KLS05**	**KDK04**	3/16	2.36
3648657	**BT40BSM2C050400**	1/2	1.20	1.34	4.00	.94	2.94	**KLS05**	**KDK04**	3/16	3.05
3648654	**BT40BSMC050177**	1/2	1.44	—	1.77	.71	—	**KLS05**	**KDK04**	3/16	2.41
3648656	**BT40BSMC050400**	1/2	1.44	1.58	4.00	.94	2.94	**KLS05**	**KDK04**	3/16	3.42
3648659	**BT40BSM2C075177**	3/4	1.46	—	1.77	.71	—	**KLS07**	**—**	1/4	2.47
3648662	**BT40BSM2C075400**	3/4	1.46	—	4.00	2.94	—	**KLS07**	**—**	1/4	3.39
3648658	**BT40BSMC075177**	3/4	1.75	—	1.77	.71	—	**KLS07**	**KDK05**	1/4	2.62
3648661	**BT40BSMC075400**	3/4	1.75	—	4.00	2.94	—	**KLS07**	**KDK05**	1/4	3.99
3648663	**BT40BSMC075600**	3/4	1.75	—	6.00	4.94	—	**KLS07**	**KDK05**	1/4	5.22
3648665	**BT40BSM2C100177**	1	2.19	—	1.77	.71	—	**KLS10**	**KDK06**	5/16	3.00
3648667	**BT40BSM2C100400**	1	2.19	—	4.00	2.94	—	**KLS10**	**KDK06**	5/16	5.30
3648664	**BT40BSMC100177**	1	2.75	—	1.77	1.77	—	**KLS10**	**KDK06**	5/16	3.31
3648666	**BT40BSMC100400**	1	2.75	—	4.00	4.00	—	**KLS10**	**KDK06**	5/16	6.09
3648668	**BT40BSMC100600**	1	2.75	—	6.00	6.00	—	**KLS10**	**KDK06**	5/16	8.50
3648669	**BT40BSMC125236**	1 1/4	2.88	—	2.36	2.36	—	**KLS12**	**KDK08**	5/16	4.41
3648670	**BT40BSMC125500**	1 1/4	2.88	—	5.00	5.00	—	**KLS12**	**KDK08**	5/16	7.65
3648671	**BT40BSMC150236**	1 1/2	3.63	—	2.36	2.36	—	**KLS15**	**KDK10**	3/8	5.59
3648672	**BT40BSMC150500**	1 1/2	3.81	—	5.00	5.00	—	**KLS15**	**KDK10**	3/8	9.11

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.





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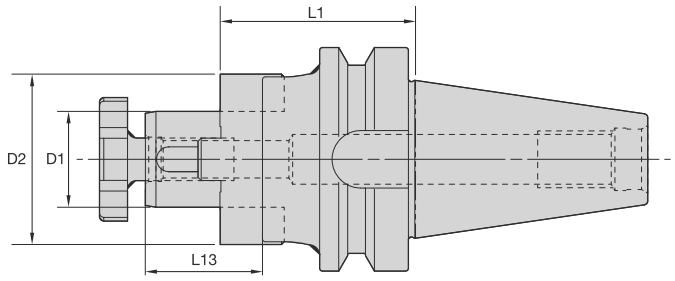
CS MM-BT Form AD

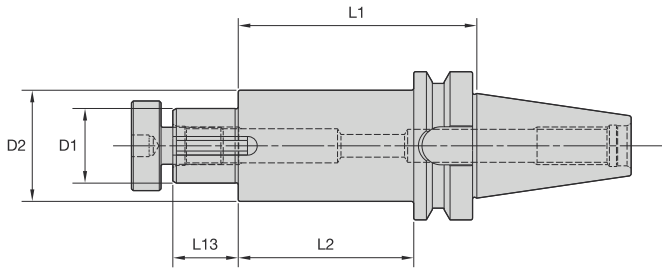
order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1191713	BT40CS16055M	16	32	55	27	MS1294	6mm	CDR16M	CDK16M	1,15
1191714	BT40CS16100M	16	32	100	27	MS1294	6mm	CDR16M	CDK16M	1,41
1191715	BT40CS22055M	22	40	55	31	MS1234	8mm	CDR22M	CDK22M	1,28
1191716	BT40CS22150M	22	40	150	31	MS1234	8mm	CDR22M	CDK22M	2,16



CS Lock MM-BT Form AD

order number	catalog number	D1	D2	L1	L13	lock screw	lock screw wrench	combi driver ring	combi drive key	kg
1191717	BT40CS27055M	27	48	55	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	1,47
1191718	BT40CS27150M	27	48	150	33	KLS27MPKG	SMW27M	CDR27M	CDK27M	2,73
1191719	BT40CS32060M	32	58	60	38	KLS32M	SMW32M	CDR32M	CDK32M	1,80
1191720	BT40CS32150M	32	58	150	38	KLS32M	SMW32M	CDR32M	CDK32M	3,62
1191721	BT40CS40080M	40	70	80	41	KLS40M	SMW40M	CDR40M	CDK40M	2,75

NOTE: Do not overtighten lock screw.
Supplied with lock screw, combi drive ring, and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.



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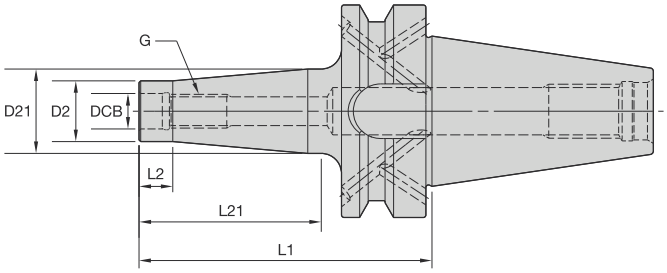
■ SA IN-BT Form AD

order number	catalog number	D1	D2	L1	L13	L2	lock screw	wrench size lock screw	drive key	lbs
1026219	**BT40SA100400**	1	1.61	4.00	.94	2.94	**KLS10**	5/16	**DWG SDK100106**	3.99
1026220	**BT40SA125400**	1 1/4	1.86	4.00	1.09	2.94	**KLS12**	5/16	**DWG SDK125119**	4.86

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For retention knobs, see page J33.
Interchangeable coolant style lock screws are available and must be ordered separately; see page J26.



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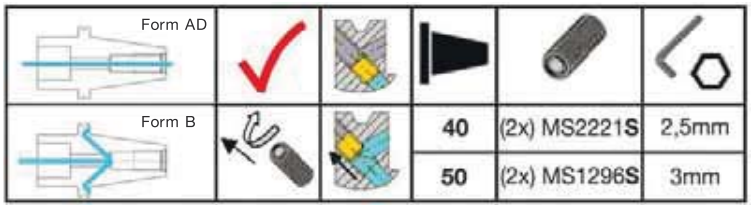
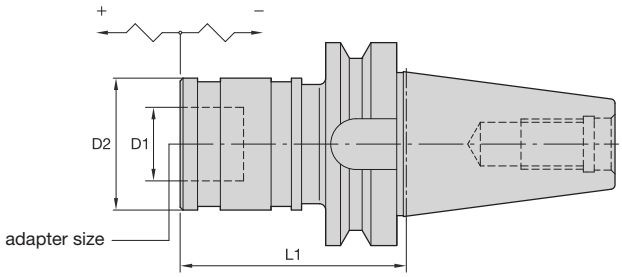
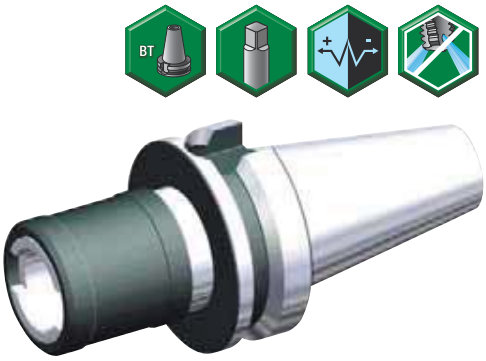
ST-BT Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4066159	BT40BST06047M	6,5	M6	10	–	47	14	–	0,94
4066160	BT40BST06067M	6,5	M6	10	13	67	10	34	0,96
4066161	BT40BST06087M	6,5	M6	10	20	87	10	54	1,01
4066162	BT40BST06107M	6,5	M6	10	23	107	10	74	1,06
4066303	BT40BST08047M	8,5	M8	13	–	47	14	–	0,95
4066304	BT40BST08067M	8,5	M8	13	15	67	10	34	0,99
4066305	BT40BST08087M	8,5	M8	13	23	87	10	54	1,04
4066306	BT40BST08107M	8,5	M8	13	23	107	10	74	1,07
4066307	BT40BST10047M	10,5	M10	18	–	47	14	–	0,98
4066308	BT40BST10067M	10,5	M10	18	20	67	10	34	1,02
4066309	BT40BST10087M	10,5	M10	18	25	87	10	54	1,07
4066310	BT40BST10107M	10,5	M10	18	28	107	10	74	1,20
4066311	BT40BST12047M	12,5	M12	21	–	47	14	–	0,98
4066312	BT40BST12067M	12,5	M12	21	24	67	10	34	1,04
4066313	BT40BST12087M	12,5	M12	21	24	87	10	54	1,10
4066314	BT40BST12107M	12,5	M12	21	31	107	10	74	1,25
4066315	BT40BST12127M	12,5	M12	21	31	127	10	94	1,32
4066316	BT40BST16047M	17,0	M16	29	–	47	14	–	1,01
4066317	BT40BST16067M	17,0	M16	29	–	67	34	–	1,10
4066318	BT40BST16087M	17,0	M16	29	34	87	10	54	1,25
4066319	BT40BST16107M	17,0	M16	29	34	107	10	74	1,36
4066320	BT40BST16127M	17,0	M16	29	39	127	10	94	1,58

NOTE: For retention knobs, see page J33.







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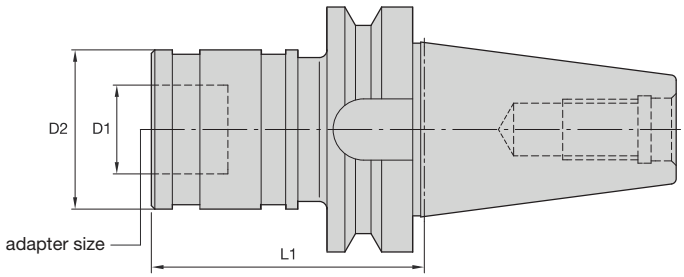
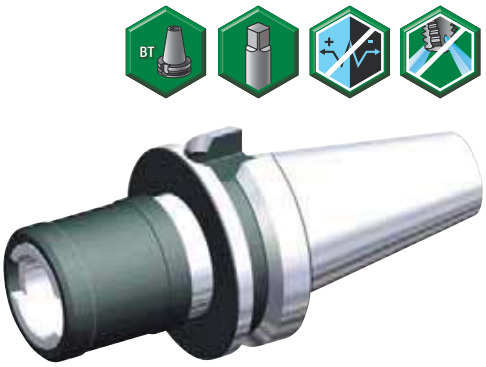
RC-BT Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	tension	compression	kg
1125829	**BT40RC1067M**	1	M1 - M14	#0 - 9/16	19	36	67	7,5	7,5	2,00
1125812	**BT40RC2094M**	2	M5 - M24	5/16 - 7/8	31	53	94	12,5	12,5	2,20

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.





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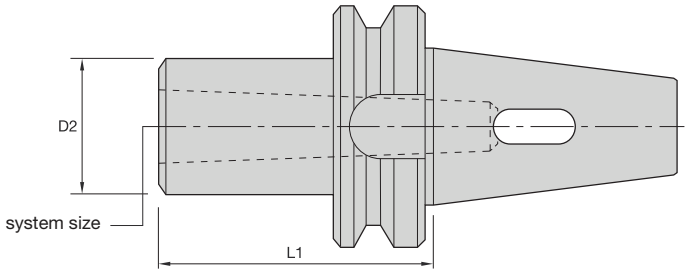
STRC-BT Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	kg
1778911	**BT40STRC1074M**	1	M1 - M14	#0 - 9/16	19	36	74	1,40
1778973	**BT40STRC2089M**	2	M5 - M24	5/16 - 7/8	31	53	89	1,70

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.



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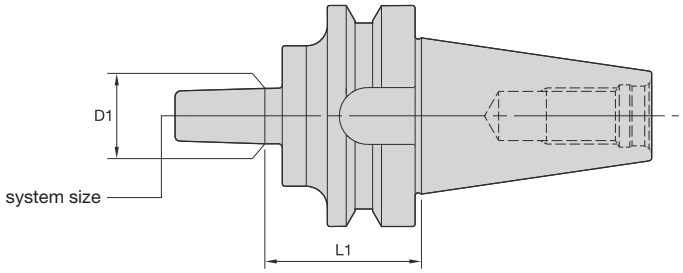
MT-BT Form A

order number	catalog number	system size	D2	L1	kg
1156364	**BT40MT1050M**	1	25	50	1,01
1191735	**BT40MT2050M**	2	32	50	1,06
1191736	**BT40MT3070M**	3	40	70	1,13
1191737	**BT40MT4095M**	4	48	95	1,33

NOTE: For retention knobs; see page J33.



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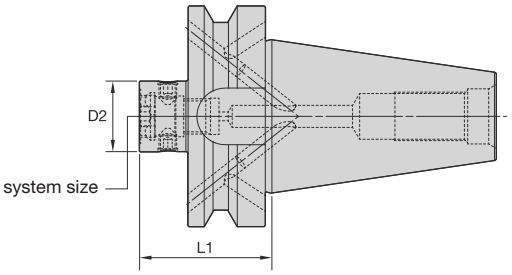
JT-BT Form A

order number	catalog number	system size	D1	L1	kg
1156363	**BT40JT33045M**	33	15,85	45	1,12

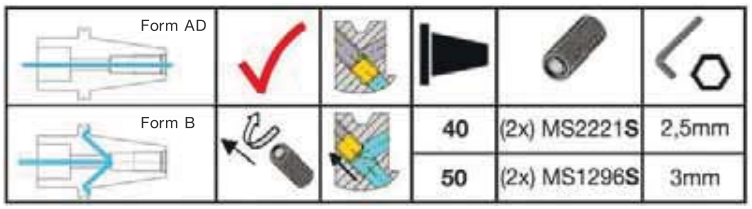
NOTE: For retention knobs, see page J33.



RFX-BT Form B/AD

order number	catalog number	system size	D2	L1	wrench size clamp screw	Nm	kg
3860676	**BT40BRFX185060M**	RFX185	19	60	3mm	8	1,00
3860677	**BT40BRFX245060M**	RFX245	25	60	3mm	8	1,10
3860678	**BT40BRFX320060M**	RFX320	32	60	4mm	12	1,10
3860679	**BT40BRFX420060M**	RFX420	42	60	5mm	20	1,20
3860680	**BT40BRFX550065M**	RFX550	55	65	6mm	25	1,30

NOTE: Do not overtorque actuation screw; use torque recommendations referenced above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.



WIN WITH WIDIA™

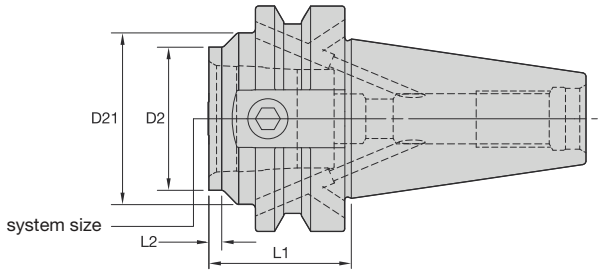
KM™ ROTAFLEX™

The ROTAFLEX high-performance hole finishing system from WIDIA™, with its long history of proven successes, now features a host of new developments that will further its reputation as the premier hole-finishing solution for metalworking manufacturers.

With both roughing and precision finishing heads available, ROTAFLEX represents a single WIDIA system for both roughing and fine-finishing operations over a broad diameter range. The very stable KM-TS coupling and the newly developed RFX coupling are applicable to almost every machine spindle and offer easy assembly and disassembly due to less vibration, resulting in increased machine tool productivity and longer intervals between scheduled maintenance.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA™



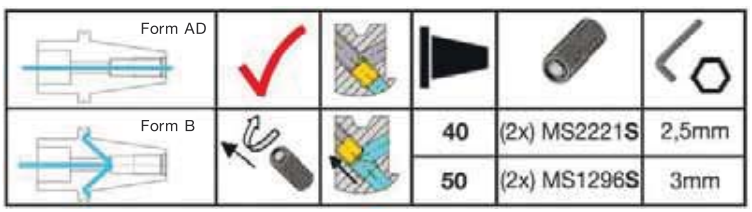
KM QUICK CHANGE

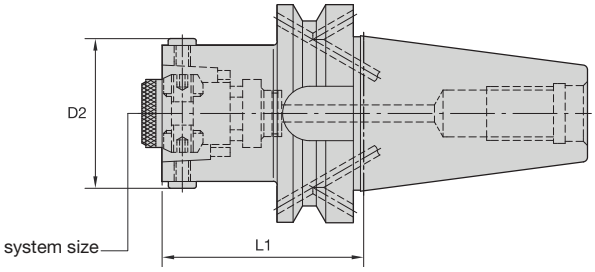
ERICKSON

KM-BT Form B/AD

order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	Nm	kg
3783935	**BT40BKM32040M**	KM32	32	40	40	3	**KM32PKG3L**	5mm	8-11	1,01
3783945	**BT40BKM32090M**	KM32	32	—	90	63	**KM32PKG3S**	5mm	8-11	1,25
3783946	**BT40BKM40040M**	KM40	40	48	40	4	**KM40PKG3L**	6mm	12-16	1,03
3783947	**BT40BKM40100M**	KM40	40	—	100	73	**KM40PKG3S**	6mm	12-16	1,52
3783948	**BT40BKM50060M**	KM50	50	—	60	33	**KM50PKG3S**	10mm	27-34	1,26
3783949	**BT40BKM50120M**	KM50	50	—	120	93	**KM50PKG3S**	10mm	27-34	2,11

NOTE: Do not overtorque actuation screw; use torque recommedations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.



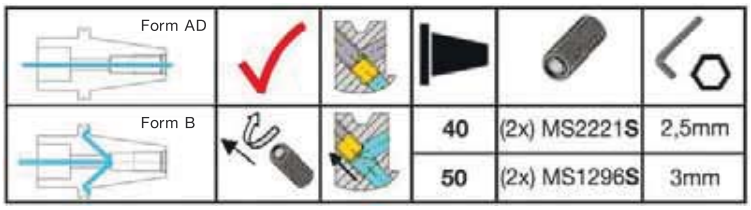


ERICKSON

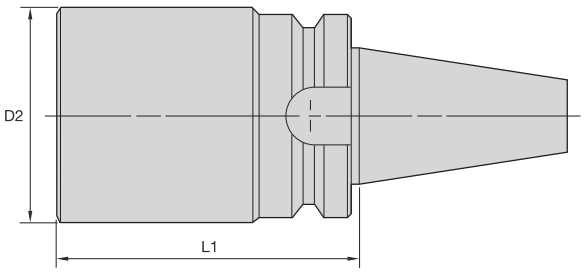
■ HSK-BT Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1519684	**BT40BHSK32050M**	HSK32	37	50	3mm	6	1,00
1519685	**BT40BHSK40060M**	HSK40	45	60	3mm	8	1,10
1499750	**BT40BHSK50070M**	HSK50	55	70	4mm	15	1,10
1519688	**BT40BHSK63075M**	HSK63	70	75	5mm	20	1,40

NOTE: Do not overtorque actuation screw; use torque recommedations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.



• Machinable front 20–30 RW C.



ERICKSON

■ BB-BT Form A

order number	catalog number	D2	L1	kg
1258120	**BT40BB063280M**	63	280	7,12
1258122	**BT40BB104200M**	104	200	11,77

NOTE: For retention knobs, see page J33.

Erickson™ BT V-Flange Shank Tooling System • **BT50 Series**

Erickson V-Flange BT Taper Tooling is manufactured from premium materials and meets or exceeds the latest JIS B 6339 specification and ISO-1947 taper accuracy of AT3 specification standards. The BT50 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 12,000 RPM.

BT50

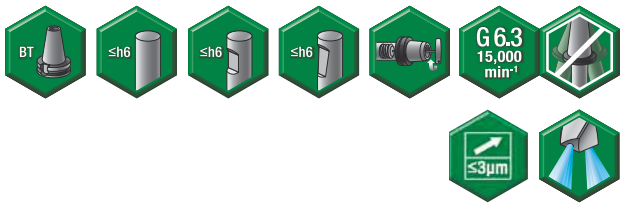
BT — JIS B6339 Shank

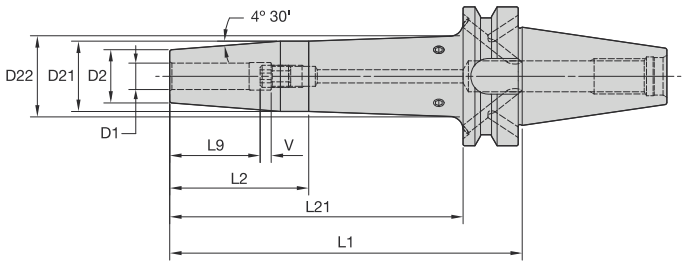
NOTE: Inherent balance conditions — all features are symmetrical.

For any applications higher than 12,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

- JIS B 6339 7/24 taper.
- Standard M24 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 12,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-BT Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3782149	BT50BHPVTT06100M	6	21	27	—	100	62	—	26	10	TTSS05014M	2,5mm	3,69
3782150	BT50BHPVTT06160M	6	21	27	32	160	50	122	26	10	TTSS05014M	2,5mm	4,01
3782151	BT50BHPVTT08100M	8	21	27	—	100	62	—	26	10	TTSS06014M	3mm	3,68
3782152	BT50BHPVTT08160M	8	21	27	32	160	50	122	26	10	TTSS06014M	3mm	4,00
3782153	BT50BHPVTT10100M	10	24	32	—	100	62	—	31	10	TTSS08014M	4mm	3,75
3782154	BT50BHPVTT10160M	10	24	32	36	160	63	122	31	10	TTSS08014M	4mm	4,16
3615394	BT50BHPVTT12100M	12	24	32	—	100	63	—	36	10	TTSS10014M	5mm	3,73
3615395	BT50BHPVTT12160M	12	24	32	36	160	63	122	36	10	TTSS10014M	5mm	4,14
3615396	BT50BHPVTT14100M	14	27	34	—	100	62	—	36	10	TTSS10014M	5mm	3,78
3615397	BT50BHPVTT14160M	14	27	34	38	160	57	122	36	10	TTSS10014M	5mm	4,26
3615398	BT50BHPVTT16100M	16	27	34	—	100	62	—	39	10	TTSS12014M	6mm	3,75
3615399	BT50BHPVTT16160M	16	27	34	39	160	56	122	39	10	TTSS12014M	6mm	4,22
3615400	BT50BHPVTT18100M	18	33	41	—	100	62	—	39	10	TTSS12014M	6mm	3,90
3615401	BT50BHPVTT18160M	18	33	42	46	160	69	122	39	10	TTSS12014M	6mm	4,58
3615402	BT50BHPVTT20100M	20	33	41	—	100	62	—	41	10	TTSS16014M	8mm	3,87
3615403	BT50BHPVTT20160M	20	33	42	46	160	69	122	41	10	TTSS16014M	8mm	4,53
3615404	BT50BHPVTT25100M	25	44	52	—	100	62	—	47	10	TTSS16014M	8mm	4,15
3615405	BT50BHPVTT32100M	32	44	52	—	100	62	—	51	10	TTSS16014M	8mm	4,00

(continued)

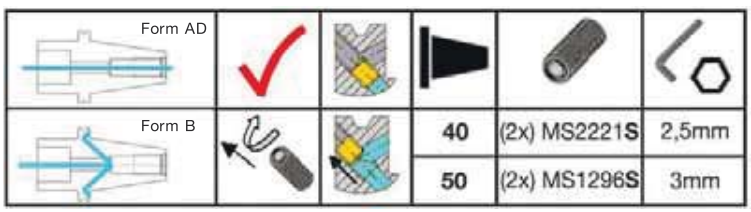
(TT GP HPV BT Form B/AD continued)

Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	**tolerance**
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

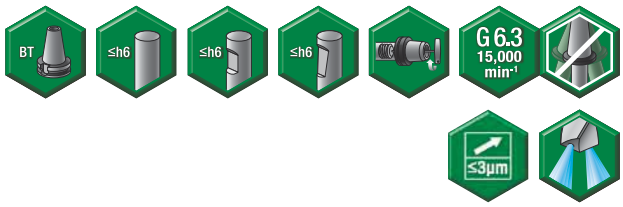
TT GP HPV IN-BT Form B/AD

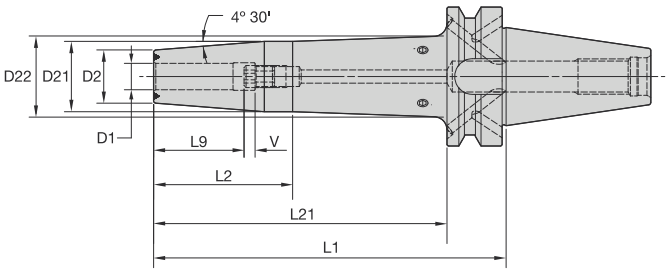
order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3782155	**BT50BHPVTT025394**	1/4	.83	1.06	3.94	2.44	—	1.02	.39	**TTSS05014M**	2,5mm	8.14
3782156	**BT50BHPVTT025787**	1/4	.83	1.06	7.87	1.97	6.38	1.02	.39	**TTSS05014M**	2,5mm	9.42
3782157	**BT50BHPVTT031394**	5/16	.83	1.06	3.94	2.44	—	1.02	.39	**TTSS06014M**	3mm	8.12
3782158	**BT50BHPVTT031787**	5/16	.83	1.06	7.87	1.97	6.38	1.02	.39	**TTSS06014M**	3mm	9.41
3782159	**BT50BHPVTT038394**	3/8	.95	1.26	3.94	2.44	—	1.22	.39	**TTSS08014M**	4mm	8.26
3782160	**BT50BHPVTT038787**	3/8	.95	1.26	7.87	2.48	6.38	1.22	.39	**TTSS08014M**	4mm	9.92
3782161	**BT50BHPVTT044394**	7/16	.95	1.26	3.94	2.44	—	1.42	.39	**TTSS10014M**	5mm	8.24
3615382	**BT50BHPVTT050394**	1/2	.95	1.26	3.94	2.44	—	1.42	.39	**TTSS10014M**	5mm	8.21
3615383	**BT50BHPVTT050787**	1/2	.95	1.26	7.87	2.48	6.38	1.42	.39	**TTSS10014M**	5mm	9.87
3615384	**BT50BHPVTT062394**	5/8	1.06	1.34	3.94	2.44	—	1.54	.39	**TTSS12014M**	6mm	8.28
3615385	**BT50BHPVTT062787**	5/8	1.06	1.34	7.87	2.20	6.38	1.54	.39	**TTSS12014M**	6mm	10.14
3615386	**BT50BHPVTT075394**	3/4	1.30	1.61	3.94	2.44	—	1.61	.39	**TTSS16014M**	8mm	8.55
3615387	**BT50BHPVTT075787**	3/4	1.30	1.65	7.87	2.72	6.38	1.61	.39	**TTSS16014M**	8mm	11.17
3615388	**BT50BHPVTT088394**	7/8	1.30	1.61	3.94	2.44	—	1.61	.39	**TTSS16014M**	8mm	8.46
3615389	**BT50BHPVTT088787**	7/8	1.30	1.65	7.87	2.72	6.38	1.61	.39	**TTSS16014M**	8mm	11.08
3615390	**BT50BHPVTT100394**	1	1.73	2.05	3.94	2.44	—	1.85	.39	**TTSS16014M**	8mm	9.14
3615391	**BT50BHPVTT100787**	1	1.73	2.08	7.87	2.72	6.38	1.85	.39	**TTSS16014M**	8mm	13.21
3615392	**BT50BHPVTT125394**	1 1/4	1.73	2.05	3.94	2.44	—	2.01	.39	**TTSS16014M**	8mm	8.82
3615393	**BT50BHPVTT125787**	1 1/4	1.73	2.08	7.87	2.72	6.38	2.01	.39	**TTSS16014M**	8mm	12.88

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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TT HT HPV MM-BT Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3615487	BT50BHPVTTHT12100M	12	24	32	—	100	62	—	36	10	TTSS10014M	5mm	3,73
3615488	BT50BHPVTTHT12160M	12	24	32	36	160	63	122	36	10	TTSS10014M	5mm	4,15
3615489	BT50BHPVTTHT14100M	14	27	34	—	100	62	—	36	10	TTSS10014M	5mm	3,78
3615490	BT50BHPVTTHT14160M	14	27	34	38	160	57	122	36	10	TTSS10014M	5mm	4,26
3615491	BT50BHPVTTHT16100M	16	27	34	—	100	62	—	39	10	TTSS12014M	6mm	3,76
3615492	BT50BHPVTTHT16160M	16	27	34	39	160	56	122	39	10	TTSS12014M	6mm	4,23
3615493	BT50BHPVTTHT18100M	18	33	41	—	100	62	—	39	10	TTSS12014M	6mm	3,90
3615494	BT50BHPVTTHT18160M	18	33	42	46	160	69	122	39	10	TTSS12014M	6mm	4,58
3615495	BT50BHPVTTHT20100M	20	33	41	—	100	62	—	41	10	TTSS16014M	8mm	3,87
3615496	BT50BHPVTTHT20160M	20	33	42	46	160	69	122	41	10	TTSS16014M	8mm	4,54
3615497	BT50BHPVTTHT25100M	25	44	52	—	100	62	—	47	10	TTSS16014M	8mm	4,16
3615498	BT50BHPVTTHT32100M	32	44	52	—	100	62	—	51	10	TTSS16014M	8mm	4,00

(continued)

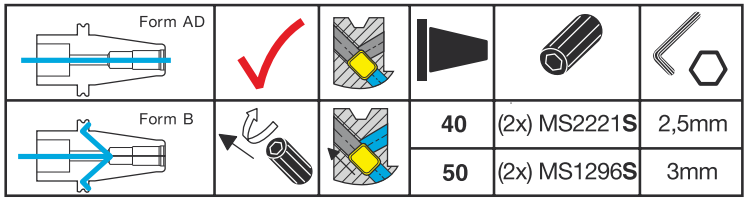
(TT HT HPV BT Form B/AD continued)

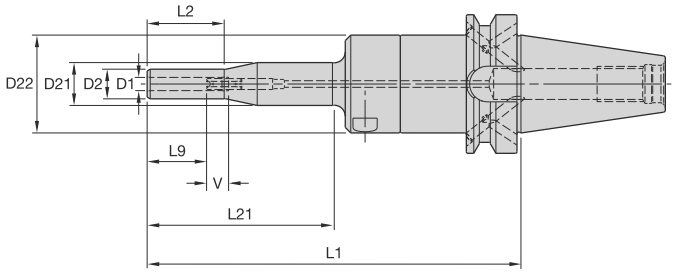
Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	**tolerance**
1/2 & 5/8	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

TT HT HPV IN-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3615474	**BT50BHPVTTHT050394**	1/2	.95	1.26	3.94	2.44	—	1.42	.39	**TTSS10014M**	5mm	8.21
3615475	**BT50BHPVTTHT050787**	1/2	.95	1.26	7.87	2.48	6.38	1.42	.39	**TTSS10014M**	5mm	9.87
3615476	**BT50BHPVTTHT062394**	5/8	1.06	1.34	3.94	2.44	—	1.54	.39	**TTSS12014M**	6mm	8.28
3615477	**BT50BHPVTTHT062787**	5/8	1.06	1.34	7.87	2.20	6.38	1.54	.39	**TTSS12014M**	6mm	10.14
3615479	**BT50BHPVTTHT075394**	3/4	1.30	1.61	3.94	2.44	—	1.61	.39	**TTSS16014M**	8mm	8.55
3615480	**BT50BHPVTTHT075787**	3/4	1.30	1.65	7.87	2.72	6.38	1.61	.39	**TTSS16014M**	8mm	11.17
3615481	**BT50BHPVTTHT088394**	7/8	1.30	1.61	3.94	2.44	—	1.61	.39	**TTSS16014M**	8mm	8.46
3615482	**BT50BHPVTTHT088787**	7/8	1.30	1.65	7.87	2.72	6.38	1.61	.39	**TTSS16014M**	8mm	11.08
3615483	**BT50BHPVTTHT100394**	1	1.73	2.05	3.94	2.44	—	1.85	.39	**TTSS16014M**	8mm	9.14
3615484	**BT50BHPVTTHT100787**	1	1.73	2.08	7.87	2.72	6.38	1.85	.39	**TTSS16014M**	8mm	13.21
3615485	**BT50BHPVTTHT125394**	1 1/4	1.73	2.05	3.94	2.44	—	2.01	.39	**TTSS16014M**	8mm	8.82
3615486	**BT50BHPVTTHT125787**	1 1/4	1.73	2.08	7.87	2.72	6.38	2.01	.39	**TTSS16014M**	8mm	12.88

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



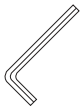


ERICKSON

HC Slim-T MM-BT Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	kg
3019242	**BT50BHCSLT06200M**	6	13,5	19,5	44	200	35	85	27	10	4,55
3019243	**BT50BHCSLT08200M**	8	15,5	19,5	44	200	35	85	27	10	4,56
3019244	**BT50BHCSLT10200M**	10	17,5	44,5	–	200	85	162	31	10	4,55

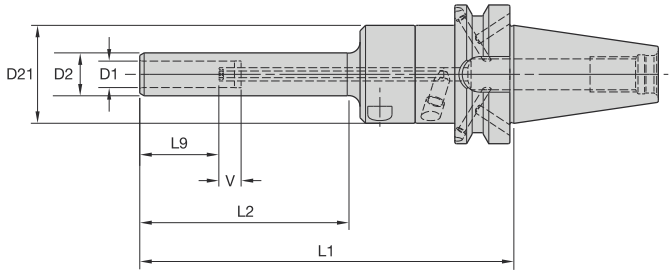
Spare Parts

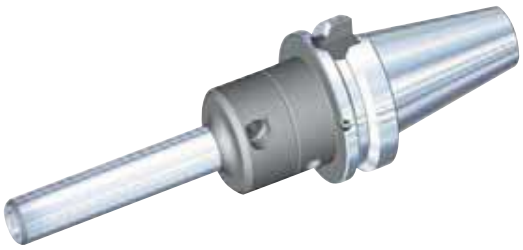


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw
BT50BHCSLT06200M	**170.135**	5mm	**170.002**	2,5mm
BT50BHCSLT08200M	**170.135**	5mm	**170.002**	2,5mm
BT50BHCSLT10200M	**170.135**	5mm	**170.003**	3mm

(continued)

(HC Slim BT continued)

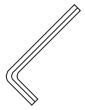




HC Slim MM-BT Form A

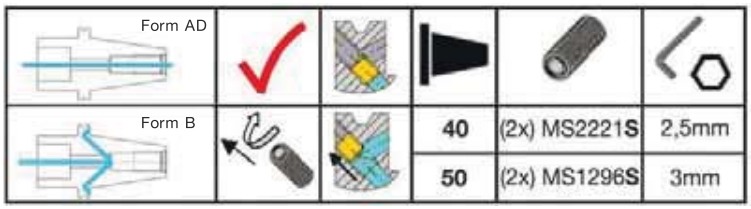
order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2634540	**BT50BHCSL12200M**	12	19,5	44,5	200	95	36	10	4,34
2634541	**BT50BHCSL14200M**	14	21,5	52,5	200	95	36	10	4,66
2634542	**BT50BHCSL16200M**	16	23,5	52,5	200	95	39	10	4,68
2634573	**BT50BHCSL18200M**	18	25,5	52,5	200	95	39	10	4,73
2634574	**BT50BHCSL20200M**	20	27,5	52,5	200	95	41	10	4,77

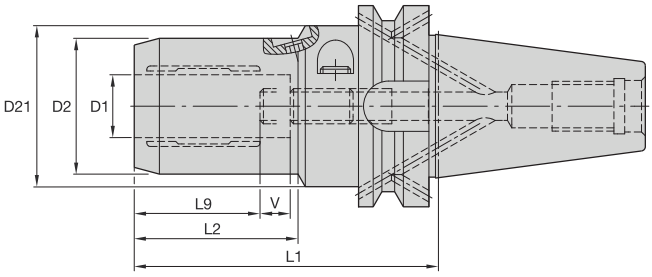
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
BT50BHCSL12200M	**170.135**	5mm	**170.002**	2,5mm
BT50BHCSL14200M	**170.135**	5mm	**170.002**	2,5mm
BT50BHCSL16200M	**170.135**	5mm	**170.002**	2,5mm
BT50BHCSL18200M	**170.135**	5mm	**170.002**	2,5mm
BT50BHCSL20200M	**170.135**	5mm	**170.002**	2,5mm

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrenches must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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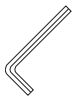
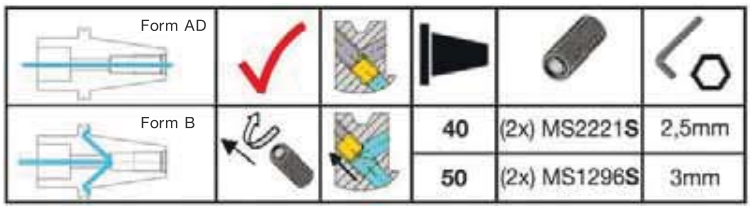
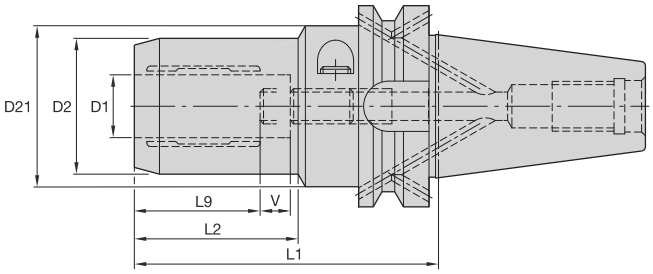
■ HC MM-BT Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw	kg
1315352	**BT50BHC06090M**	6	25,7	50	90	33	27	10	**170.135**	5mm	**170.002**	2,5mm	2,50
1315353	**BT50BHC08090M**	8	27,7	50	90	34	27	10	**170.135**	5mm	**170.002**	2,5mm	2,50
1315354	**BT50BHC10095M**	10	29,7	50	95	39	31	10	**170.135**	5mm	**170.002**	2,5mm	2,50
1315355	**BT50BHC12100M**	12	31,6	50	100	45	36	10	**170.135**	5mm	**170.002**	2,5mm	2,50
1315356	**BT50BHC14100M**	14	33,6	50	100	42	36	10	**170.135**	5mm	**170.003**	3mm	3,00
1315357	**BT50BHC16100M**	16	37,6	50	100	47	39	10	**170.135**	5mm	**170.003**	3mm	3,00
1315358	**BT50BHC18100M**	18	39,6	50	100	47	39	10	**170.135**	5mm	**170.003**	3mm	3,00
1315359	**BT50BHC20105M**	20	41,6	50	105	48	41	10	**170.135**	5mm	**170.003**	3mm	3,00
1315360	**BT50BHC25115M**	25	49,6	63	115	51	46	10	**170.136**	6mm	**170.004**	4mm	4,00
1315778	**BT50BHC32120M**	32	59,9	63	120	59	50	10	**170.136**	6mm	**170.004**	4mm	4,00

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.



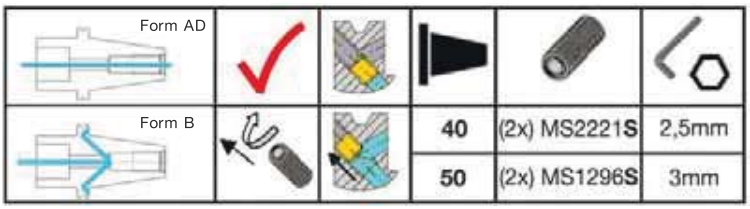


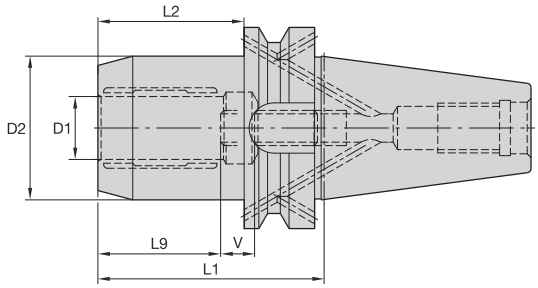
ERICKSON

HC Trend IN-HSK Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw	lbs
2263123	**BT50BHCT025354**	1/4	1.01	1.96	3.54	1.38	1.06	.39	**170.135**	5mm	**170.003**	3mm	8.39
2263124	**BT50BHCT038374**	3/8	1.17	1.96	3.74	1.50	1.22	.39	**170.135**	5mm	**170.003**	3mm	8.57
2263125	**BT50BHCT050394**	1/2	1.24	1.96	3.94	1.57	1.42	.39	**170.135**	5mm	**170.003**	3mm	8.70
2263126	**BT50BHCT062394**	5/8	1.48	1.96	3.94	1.83	1.54	.39	**170.135**	5mm	**170.003**	3mm	8.78
2263127	**BT50BHCT075413**	3/4	1.64	1.96	4.13	1.89	1.61	.39	**170.135**	5mm	**170.005**	5mm	9.03
2263128	**BT50BHCT100453**	1	1.96	2.47	4.53	2.01	1.85	.39	**170.136**	6mm	**170.005**	5mm	10.01
2263129	**BT50BHCT125472**	1 1/4	2.35	2.47	4.72	2.32	2.01	.39	**170.136**	6mm	**170.005**	5mm	10.66

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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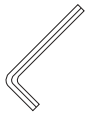
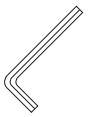
HC Basic MM-BT Form B/AD



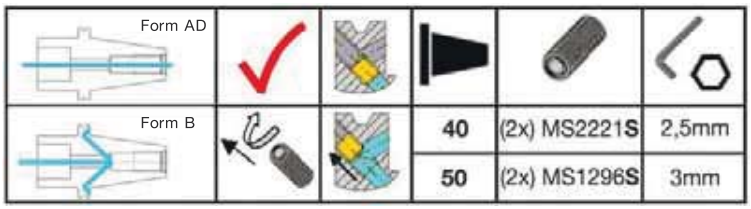
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw	kg
1599688	**BT50BHCB20105M**	20	49,9	105	67	41	10	**170.135**	5mm	**170.005**	5mm	4,30

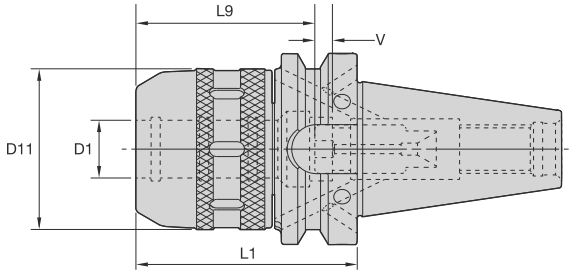
HC Basic IN-BT Form B/AD



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size adjusting screw	lbs
2263082	**BT50BHCB075413**	3/4	1.96	4.13	2.64	1.61	.39	**170.135**	5mm	**170.005**	5mm	9.52

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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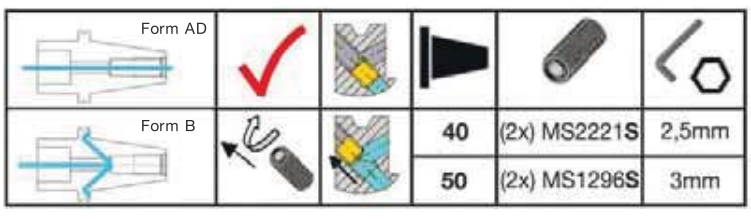
HPMC MM-BT Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3578563	BT50BHPMC20105M	20	53	105	50	20	PSW52M	MCSS16040M	2,5mm & 5mm	4,40
3578564	BT50BHPMC20165M	20	53	165	50	20	PSW52M	MCSS16040M	2,5mm & 5mm	5,30
3578565	BT50BHPMC25105M	25	61	105	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	4,60
3578566	BT50BHPMC25165M	25	61	165	55	20	PSW58M	MCSS16040M	2,5mm & 5mm	5,80
3578567	BT50BHPMC32105M	32	74	105	75	20	PSW68M	MCSS16040M	2,5mm & 5mm	4,90
3578568	BT50BHPMC32165M	32	74	165	75	20	PSW68M	MCSS16040M	2,5mm & 5mm	6,50

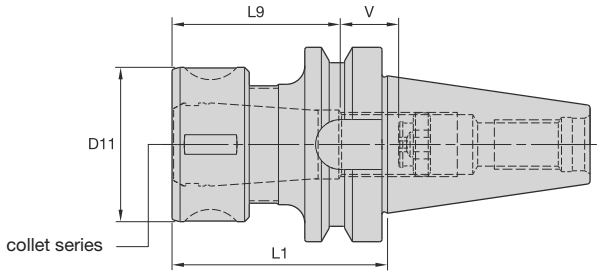
HPMC IN-BT Form A

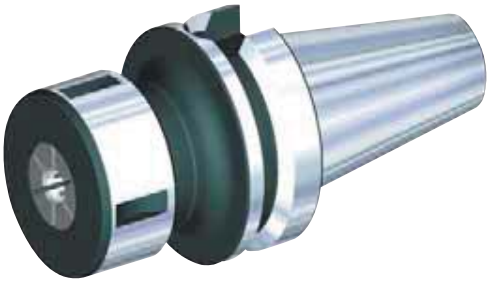
order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100418	BT50BHPMC075413	3/4	2.09	4.13	1.93	.79	PSW52M	MCSS16040M	2,5mm & 5mm	9.70
3100419	BT50BHPMC100413	1	2.40	4.13	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	10.20
3100420	BT50BHPMC125413	1 1/4	2.91	4.13	2.95	.79	PSW68M	MCSS16040M	2,5mm & 5mm	11.80

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench not included.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
For retention knobs, see page J33.



• Tremendous Grip (3:1 advantage).





Collet Capacity

TG collet series	mm min	mm max	inch min	inch max
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

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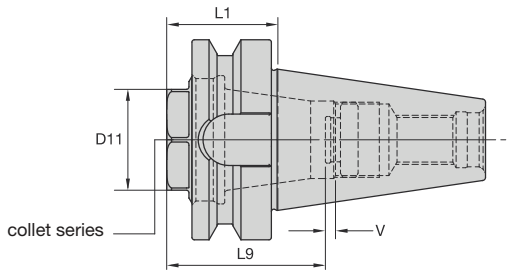
TG Round-BT Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1156372	**BT50TG100090M**	TG100	60	90	70	53	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	3,96
1188173	**BT50TG100150M**	TG100	60	150	70	88	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	5,11
1188172	**BT50TG100200M**	TG100	60	200	70	88	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	6,08
1191801	**BT50TG150100M**	TG150	85	100	83	39	**LNA150M**	**HSW80M**	271	**SS162062G**	4mm & 5/32	4,42
1258570	**BT50TG150150M**	TG150	85	150	83	69	**LNA150M**	**HSW80M**	271	**SS162062G**	4mm & 5/32	6,42

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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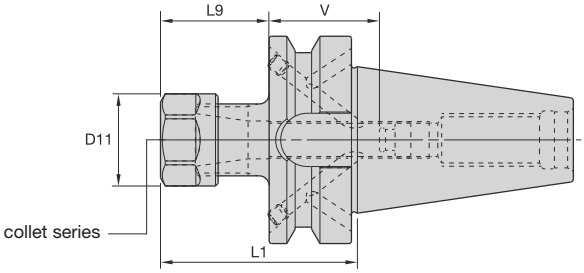
■ ER Short-BT Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
2978766	**BT50SER32046M**	ER32	36	46	50	28	**LNECSER32M**	**OEW32M**	136	**SS094041G**	4mm & 5/32	3,37
2978767	**BT50SER40046M**	ER40	46	46	57	21	**LNECSER40M**	**OEW168**	176	**SS112041G**	4mm & 5/32	3,19

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

• Grip (2:1 advantage).



ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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■ ER Hex-BT Form B/AD

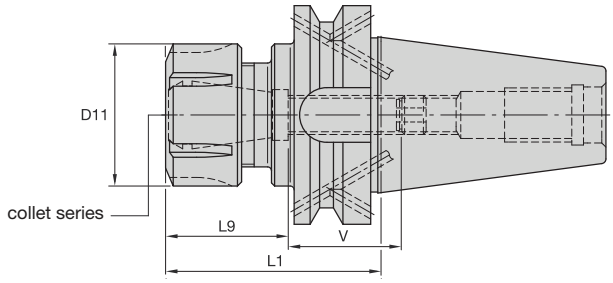
order number	catalog number	collet series	D11	L1	L9	V	kg
1586520	**BT50BER16100M**	ER16	28	100	32	48	3,76
1871539	**BT50BER16150M**	ER16	28	150	32	48	3,93
3847515	**BT50BER20100M**	ER20	34	100	37	43	3,81
3847516	**BT50BER20150M**	ER20	34	150	37	63	4,07

■ Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
BT50BER16100M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
BT50BER16150M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
BT50BER20100M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32
BT50BER20150M	**LNHSER20M**	**OEW30M**	32	80	**SS056041G**	4mm & 5/32

(continued)

(ER BT Form B/AD continued)



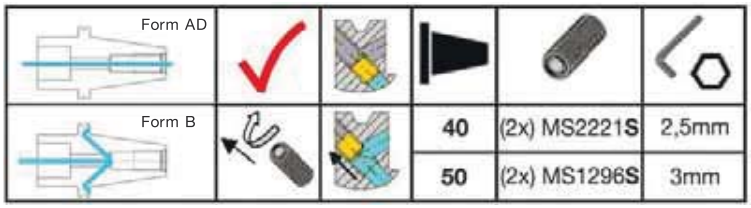
ER Round-BT Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	kg
1871540	**BT50BER25070M**	ER25	42	70	40	60	3,67
1871541	**BT50BER25150M**	ER25	42	150	40	60	4,36
1587031	**BT50BER32070M**	ER32	50	70	46	38	3,65
1729881	**BT50BER32150M**	ER32	50	150	46	54	4,64
1556433	**BT50BER40080M**	ER40	63	80	52	48	3,79
1187371	**BT50BER40150M**	ER40	63	150	52	48	5,32
3847517	**BT50BER40200M**	ER40	63	200	52	48	6,33

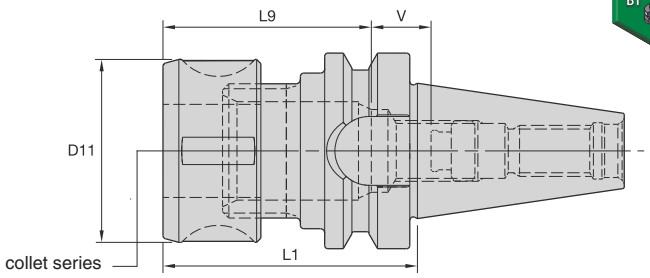
Spare Parts

catalog number	locknut	wrench	stop screw	wrench size stop screw
BT50BER25070M	**LNSER25M**	**ER25WM**	**SS075041G**	4mm & 5/32
BT50BER25150M	**LNSER25M**	**ER25WM**	**SS075041G**	4mm & 5/32
BT50BER32070M	**LNSER32M**	**ER32WM**	**SS094041G**	4mm & 5/32
BT50BER32150M	**LNSER32M**	**ER32WM**	**SS094041G**	4mm & 5/32
BT50BER40080M	**LNSER40M**	**ER40WM**	**SS112041G**	4mm & 5/32
BT50BER40150M	**LNSER40M**	**ER40WM**	**SS112041G**	4mm & 5/32
BT50BER40200M	**LNSER40M**	**ER40WM**	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.



• Grip 1:1.



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DA Round-BT form AD

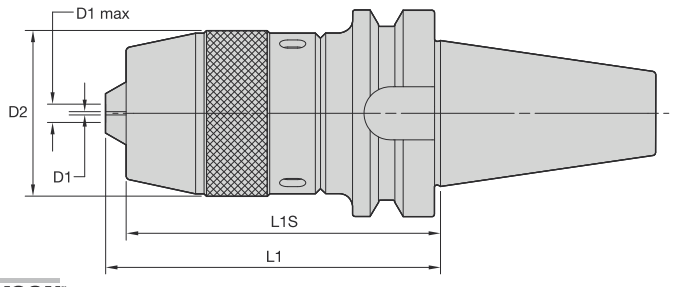
DA collet series	Collet Capacity mm min	mm max	inch min	inch max
DA180	2,2	20	1/64	3/4

order number	catalog number	collet series	D11	L1	L9	V	kg
1258441	**BT50DA188200M**	DA180	1.69	7.87	1.97	1.81	5,00
1197722	**BT50DA188150M**	DA180	1.69	5.91	1.97	1.81	4,50
1191767	**BT50DA188070M**	DA180	1.69	2.76	1.97	1.85	3,70

Spare Parts

catalog number	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
BT50DA188200M	**LNA188M**	**HSW45M**	136	**SS081041G**	4mm & 5/32
BT50DA188150M	**LNA188M**	**HSW45M**	136	**SS081041G**	4mm & 5/32
BT50DA188070M	**LNA188M**	**HSW45M**	136	**SS081041G**	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.
For retention knobs, see page J33.



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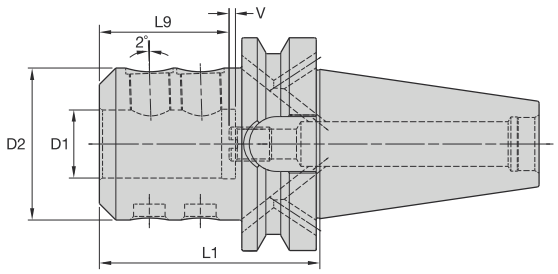
DC-BT Form A

order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2	L1	L1S	wrench	Nm	kg
3583294	**BT50DC13110M**	1,0	.039	13,0	.512	51	122	110	**PSW45M**	55	4,44

NOTE: Tighten to the recommended tightening torque.
Locking wrench not supplied.
For retention knobs, see page J33.



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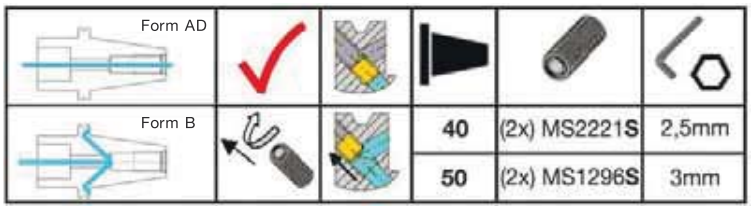
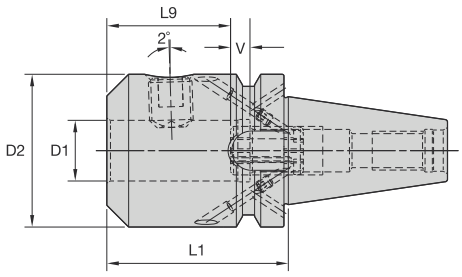
WN MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1175468	BT50BWN06063M	6	25	63	30	10	SS03M012	3mm	7	571.060	2,5mm	3,63
1300426	BT50BWN08063M	8	28	63	30	10	SS03M014	4mm	15	571.067	3mm	3,64
1137510	BT50BWN10063M	10	35	63	35	10	SS03M018	5mm	25	571.068	4mm	3,69
1137518	BT50BWN12080M	12	42	80	40	10	SS03M023	6mm	35	571.074	5mm	3,92
1137526	BT50BWN14080M	14	44	80	40	10	SS03M023	6mm	35	571.074	5mm	3,95
1137535	BT50BWN16080M	16	48	80	43	10	SS03M025	6mm	50	571.075	6mm	4,02
1137543	BT50BWN18080M	18	50	80	43	10	SS03M025	6mm	50	571.075	6mm	4,05
1137550	BT50BWN20080M	20	52	80	45	10	SS03M026	8mm	95	571.076	6mm	4,06
1137558	BT50BWN25100M	25	65	100	50	10	SS03M027	10mm	135	571.076	6mm	4,80
1137576	BT50BWN32105M	32	72	105	54	10	SS03M029	10mm	160	571.076	6mm	5,15

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
For retention knobs, see page J33.





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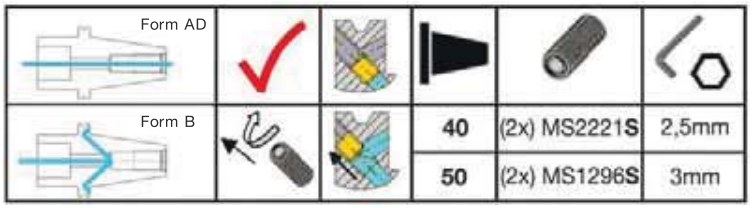
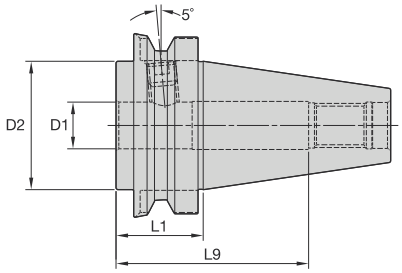
SWN MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1134607	BT50BSWN25075M	25	65	75	44	15	SS03M027	10mm	135	571.066	10mm	4,23
1134608	BT50BSWN32075M	32	72	75	46	17	SS03M029	10mm	160	571.066	10mm	4,31

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
For retention knobs, see page J33.



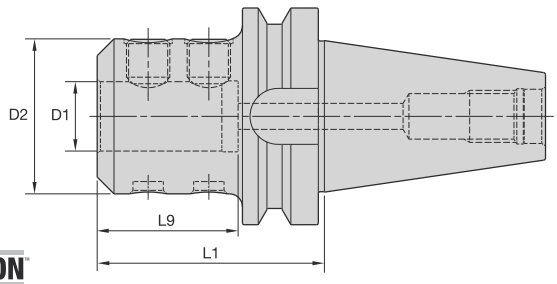


ERICKSON

Tap Chuck Adapter

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	lbs
1017939	BT50TA1187	1	2.75	1.88	4.13	ELS062050PKG	5/16	8.09

NOTE: Do not overtighten drawbar screw.
Supplied with drawbar screw.
Draw bar screw wrench not included.
For retention knobs, see page J33.



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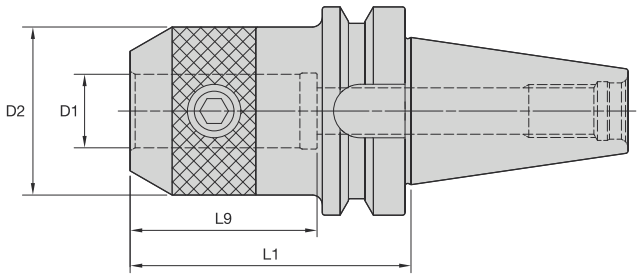
EM MM-BT Form AD

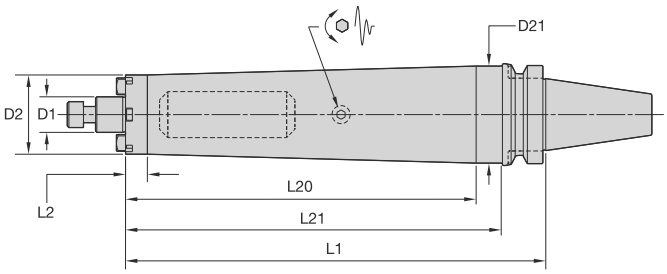
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1191769	BT50EM06063M	6	25	63	119	SS03M012	3mm	7	3,57
1258446	BT50EM06150M	6	25	150	206	SS03M012	3mm	7	3,87
1191770	BT50EM08063M	8	28	63	119	SS03M014	4mm	15	3,59
1191771	BT50EM10080M	10	35	80	136	SS03M018	5mm	25	3,82
1258453	BT50EM10100M	10	35	100	156	SS03M018	5mm	25	3,88
1191772	BT50EM12080M	12	42	80	136	SS03M023	6mm	35	3,85
1191773	BT50EM16080M	16	48	80	136	SS03M025	6mm	50	3,96
1191774	BT50EM20080M	20	52	80	136	SS03M026	8mm	95	4,01
1191776	BT50EM25105M	25	65	105	60	SS03M027	10mm	135	4,88
1156369	BT50EM32105M	32	72	105	65	SS03M029	10mm	160	5,11
1191777	BT50EM40120M	40	90	120	75	SS03M029	10mm	160	6,66
1258473	BT50EM50130M	50	100	130	85	–	12mm	200	7,60



EM IN-BT Form AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1258444	BT50EM050295	1/2	1.38	2.95	5.16	ELS044038PKG	7/32	20	8.14
1258447	BT50EM075295	3/4	1.75	2.95	5.16	ELS062050PKG	5/16	70	8.36
1258450	BT50EM100413	1	2.00	4.13	4.49	ELS075056PKG	3/8	110	9.11
1258451	BT50EM100600	1	2.00	6.00	4.49	ELS075056PKG	3/8	110	10.51
1258456	BT50EM125413	1 1/4	2.50	4.13	2.51	ELS075062PKG	3/8	110	10.23
1258457	BT50EM125600	1 1/4	2.50	6.00	2.51	ELS075062PKG	3/8	110	12.54
1258459	BT50EM150413	1 1/2	2.75	4.13	2.93	ELS075062PKG	3/8	110	10.41
1232393	BT50EM200531	2	3.75	5.31	3.53	ELS100088PKG	1/2	150	16.00

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



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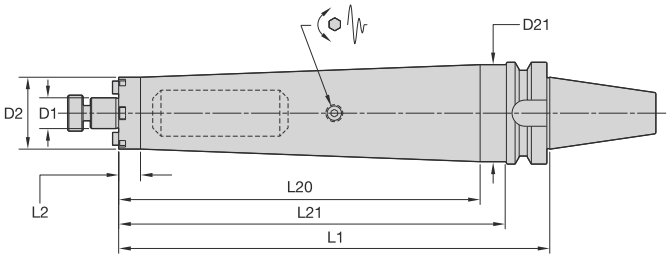
SMC TD Cap MM-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135491	BT50BTDSMC22260M	22	49	70	260	13,5	211,8	222	MS1234	KDK22M	8mm	8,21

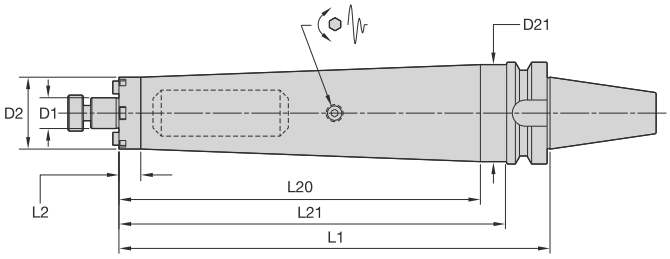


SMC TD Lock MM-BT Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135492	BT50BTDSMC27320M	27	61	80	320	285	271,8	282	KLSS27M	–	10mm	11,83
4135493	BT50BTDSMC32330M	32	78	–	330	292	–	–	KLSS32M	KDK32M	14mm	16,16

(continued)

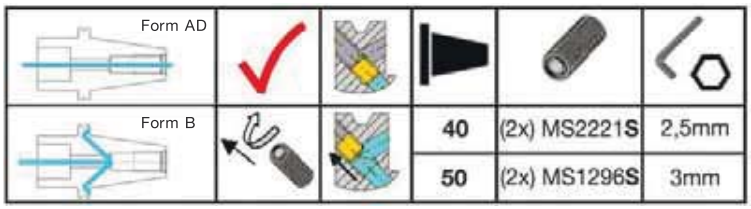
(SMC BT Form B/AD continued)

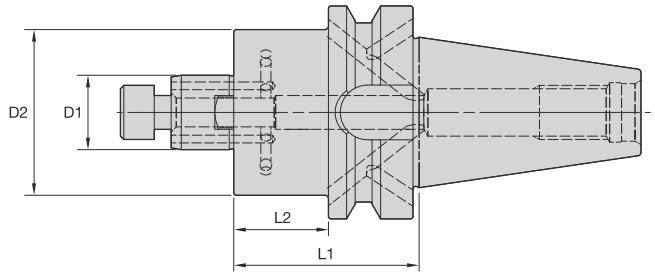


SMC TD Lock IN-BT Form A

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4135494	**BT50BTDSMC0751050**	3/4	1.75	2.56	10.5	.53	8.6	9	**KLS07**	**KDK05**	1/4	16.73
4135495	**BT50BTDSMC1001250**	1	2.75	—	12.5	11.00	—	—	**KLS10**	**KDK06**	5/16	25.46
4135496	**BT50BTDSMC1251300**	1 1/4	2.88	—	13.0	11.50	—	—	**KLS12**	**KDK08**	5/16	32.71

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.





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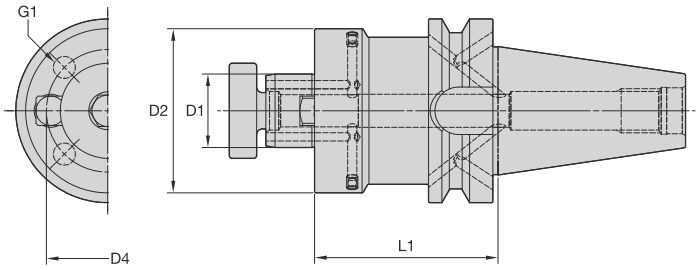
SMC Cap MM-BT Form B/AD

order number	catalog number	D1	D2	L1	L2	lock screw	wrench size lock screw	drive key	kg
3750032	**BT50BSM2C16045M**	16	38	45	7	**MS1294**	6mm	**KDK16M**	3,62
3750034	**BT50BSM2C16100M**	16	38	100	62	**MS1294**	6mm	**KDK16M**	4,01
3750036	**BT50BSM2C16150M**	16	38	150	112	**MS1294**	6mm	**KDK16M**	4,41
3750031	**BT50BSMC16045M**	16	44	45	7	**MS1294**	6mm	**KDK16M**	3,63
3750033	**BT50BSMC16100M**	16	44	100	62	**MS1294**	6mm	**KDK16M**	4,18
3750035	**BT50BSMC16150M**	16	44	150	112	**MS1294**	6mm	**KDK16M**	4,71
3750038	**BT50BSM2C22045M**	22	42	45	7	**MS1234**	8mm	**–**	3,63
3750040	**BT50BSM2C22100M**	22	42	100	62	**MS1234**	8mm	**–**	4,12
3750042	**BT50BSM2C22150M**	22	42	150	112	**MS1234**	8mm	**–**	4,56
3750037	**BT50BSMC22045M**	22	49	45	7	**MS1234**	8mm	**KDK22M**	3,66
3750039	**BT50BSMC22100M**	22	49	100	62	**MS1234**	8mm	**KDK22M**	4,37
3750041	**BT50BSMC22150M**	22	49	150	112	**MS1234**	8mm	**KDK22M**	5,00

(continued)

(SMC BT Form B/AD continued)

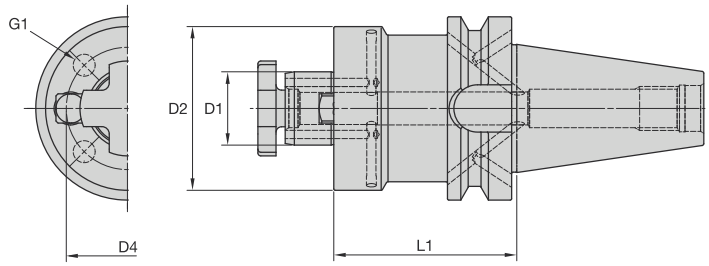


SMC Lock MM-BT Form B/AD

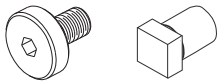
order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	kg
3750043	**BT50BSMC27045M**	27	60	–	–	45	**KLSS27M**	**KDK27M**	3,76
3750044	**BT50BSMC27100M**	27	60	–	–	100	**KLSS27M**	**KDK27M**	4,86
3750045	**BT50BSMC27150M**	27	60	–	–	150	**KLSS27M**	**KDK27M**	5,85
3750046	**BT50BSMC32045M**	32	78	–	–	45	**KLSS32M**	**KDK32M**	3,94
3750047	**BT50BSMC32100M**	32	78	–	–	100	**KLSS32M**	**KDK32M**	5,87
3750048	**BT50BSMC32150M**	32	78	–	–	150	**KLSS32M**	**KDK32M**	7,62
3750049	**BT50BSMC40050M**	40	89	66,7	M12 X 1.75	50	**KLSS40M**	**KDK40M**	4,36
3750050	**BT50BSMC40100M**	40	89	66,7	M12 X 1.75	100	**KLSS40M**	**KDK40M**	6,40
3750051	**BT50BSMC40150M**	40	89	66,7	M12 X 1.75	150	**KLSS40M**	**KDK40M**	8,26
3750052	**BT50BSMC60090M**	60	129	101,6	M16 X 2.0	90	**–**	**KDK60M**	8,53

(continued)

(SMC BT Form B/AD continued)

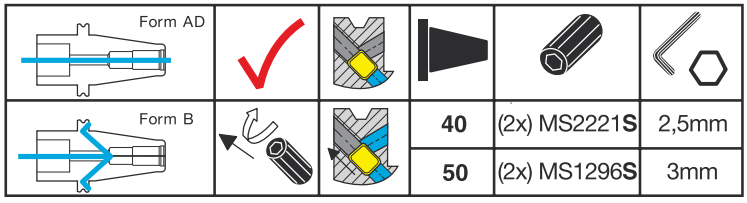


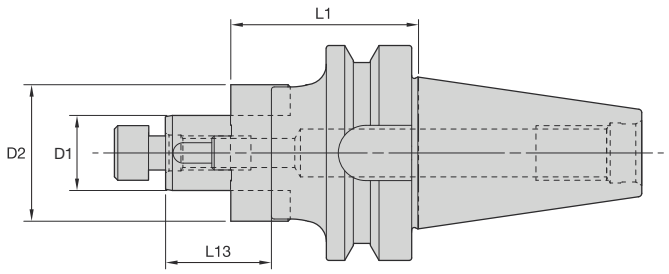
SMC Lock IN-BT Form B/AD



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
3653805	**BT50BSM2C050400**	1/2	1.20	–	–	4.00	**KLS05**	**KDK04**	3/16	8.50
3653772	**BT50BSMC050177**	1/2	1.44	–	–	1.77	**KLS05**	**KDK04**	3/16	7.87
3653804	**BT50BSMC050400**	1/2	1.44	–	–	4.00	**KLS05**	**KDK04**	3/16	8.81
3653809	**BT50BSM2C075400**	3/4	1.46	–	–	4.00	**KLS07**	**–**	1/4	8.80
3653806	**BT50BSMC075177**	3/4	1.75	–	–	1.77	**KLS07**	**KDK05**	1/4	7.98
3653808	**BT50BSMC075400**	3/4	1.75	–	–	4.00	**KLS07**	**KDK05**	1/4	9.34
3653813	**BT50BSM2C100400**	1	2.19	–	–	4.00	**KLS10**	**KDK06**	5/16	10.22
3653810	**BT50BSMC100177**	1	2.75	–	–	1.77	**KLS10**	**KDK06**	5/16	8.32
3653812	**BT50BSMC100400**	1	2.75	–	–	4.00	**KLS10**	**KDK06**	5/16	11.77
3653814	**BT50BSMC100600**	1	2.75	–	–	6.00	**KLS10**	**KDK06**	5/16	14.86
3653815	**BT50BSMC125177**	1 1/4	2.88	–	–	1.77	**KLS12**	**KDK08**	5/16	8.60
3653816	**BT50BSMC125400**	1 1/4	2.88	–	–	4.00	**KLS12**	**KDK08**	5/16	12.46
3653817	**BT50BSMC125600**	1 1/4	2.88	–	–	6.00	**KLS12**	**KDK08**	5/16	15.92
3653818	**BT50BSMC150177**	1 1/2	3.63	–	–	1.77	**KLS15**	**KDK10**	3/8	9.21
3653819	**BT50BSMC150400**	1 1/2	3.81	–	–	4.00	**KLS15**	**KDK10**	3/8	16.36
3653820	**BT50BSMC150600**	1 1/2	3.81	–	–	6.00	**KLS15**	**KDK10**	3/8	22.68
3653823	**BT50BSMC250236**	2 1/2	4.88	4.00	.625-11 UNC	2.36	**KLS25**	**KDK16**	9/16	14.02
3653821	**BT50BSMC200236**	2	4.88	–	–	2.36	**KLS20**	**KDK12**	9/16	13.20
3653824	**BT50BSMC250400**	2 1/2	4.88	4.00	.625-11 UNC	4.00	**KLS25**	**KDK16**	9/16	19.92
3653822	**BT50BSMC200400**	2	4.88	4.00	.625-11 UNC	4.00	**KLS20**	**KDK12**	9/16	19.01

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.





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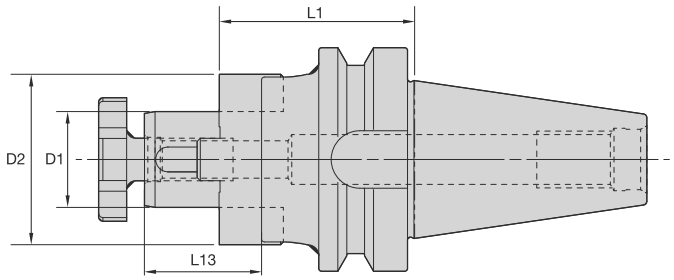
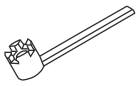
CS Cap MM-BT Form AD

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1258428	BT50CS16070M	16	32	70	27	MS1294	6mm	CDR16M	CDK16M	3,72
1258431	BT50CS16150M	16	32	150	27	MS1294	6mm	CDR16M	CDK16M	4,19
1191760	BT50CS22070M	22	40	70	31	MS1234	8mm	CDR22M	CDK22M	3,87
1258433	BT50CS22150M	22	40	150	31	MS1234	8mm	CDR22M	CDK22M	4,58
1191761	BT50CS22200M	22	40	200	31	MS1234	8mm	CDR22M	CDK22M	5,05

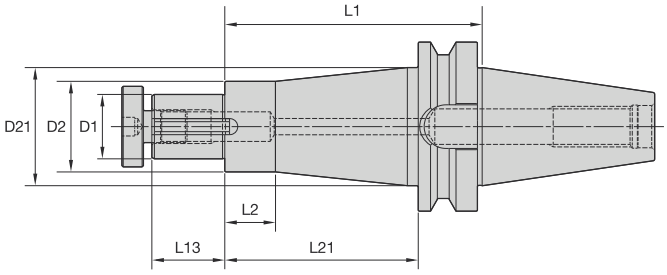


CS Lock MM-BT Form AD



order number	catalog number	D1	D2	L1	L13	lock screw	locknut wrench	combi driver ring	combi drive key	kg
1191763	BT50CS32070M	32	58	70	38	KLS32M	SMW32M	CDR32M	CDK32M	4,33
1258437	BT50CS32150M	32	58	150	38	KLS32M	SMW32M	CDR32M	CDK32M	5,86
1191764	BT50CS40070M	40	70	70	41	KLS40M	SMW40M	CDR40M	CDK40M	4,78
1191765	BT50CS40150M	40	70	150	41	KLS40M	SMW40M	CDR40M	CDK40M	7,17
1258438	BT50CS40200M	40	70	200	41	KLS40M	SMW40M	CDR40M	CDK40M	8,90
1258439	BT50CS50075M	50	90	75	46	KLS50M	SMW50M	CDR50M	CDK50M	7,90
1191766	BT50CS50150M	50	90	150	46	KLS50M	SMW50M	CDR50M	CDK50M	9,20

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.



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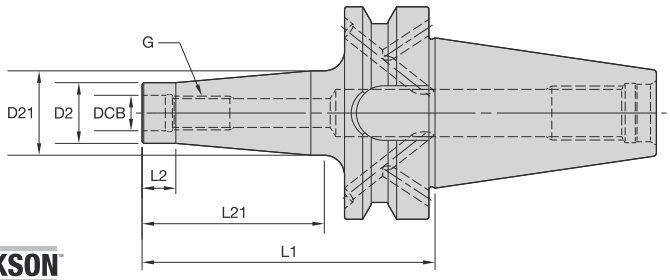
SA IN-BT Form A

order number	catalog number	D1	D2	D21	L1	L2	L13	L21	lock screw	wrench size lock screw	drive key	lbs
1026221	**BT50SA125600**	1 1/4	1.86	2.75	6.00	1.10	1.09	4.50	**KLS12**	5/16	**DWG SDK125119**	13.22
1026340	**BT50SA150600**	1 1/2	2.11	2.75	6.00	1.18	1.70	4.50	**KLS15**	3/8	**DWG SDK150175**	14.27

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive key, and spacer.
Lock screw wrench not included.
For retention knobs, see page J33.



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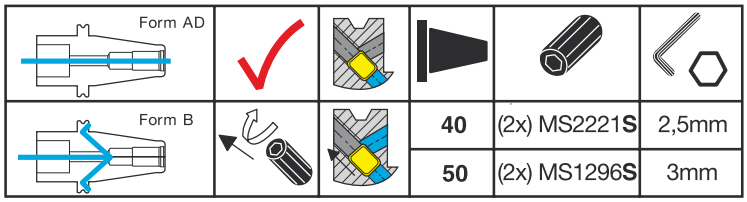
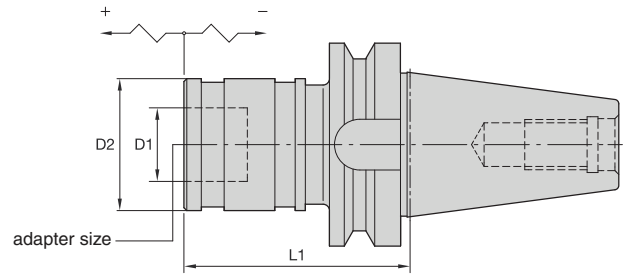
ST-BT Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4067906	**BT50BST12087M**	12,5	M12	21	24	87	10	43	3,67
4067907	**BT50BST12137M**	12,5	M12	21	31	137	10	93	3,97
4067908	**BT50BST12187M**	12,5	M12	21	39	187	10	143	4,34
4067909	**BT50BST16087M**	17,0	M16	21	34	87	10	43	3,79
4067910	**BT50BST16137M**	17,0	M16	29	39	137	10	93	4,11
4067911	**BT50BST16187M**	17,0	M16	29	39	187	10	143	4,53
4067912	**BT50BST16237M**	17,0	M16	29	49	237	10	193	5,40

NOTE: For retention knobs, see page J33.



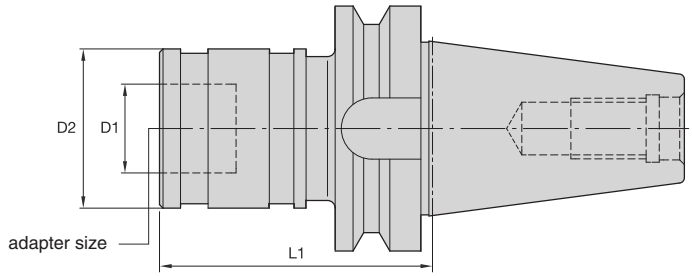


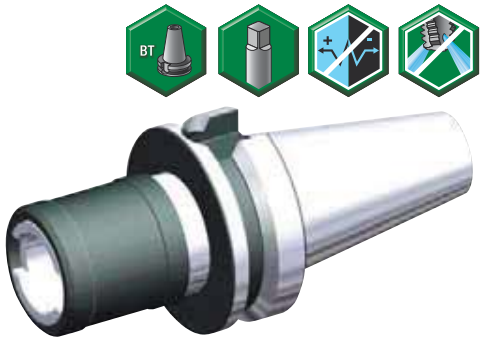
ERICKSON

RC-BT Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	tension	compression	kg
1778908	**BT50RC1075M**	1	M1 - M14	#0 - 9/16	19	36	73	7,5	7,5	3,10
1127889	**BT50RC2102M**	2	M5 - M24	5/16 - 7/8	31	53	102	12,5	12,5	3,90
1135816	**BT50RC3141M**	3	M14 - M27	13/16 - 1 3/8	48	78	141	20,0	20,0	4,70

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.



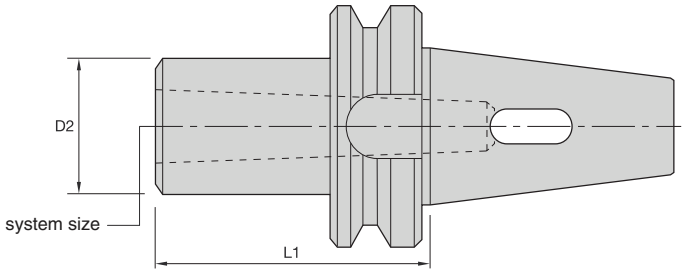


ERICKSON

STRC-BT Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	kg
1778974	**BT50STRC1074M**	1	M1 - M14	#0 - 9/16	19	36	74	3,80
1778975	**BT50STRC2089M**	2	M5 - M24	5/16 - 7/8	31	53	89	4,00

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

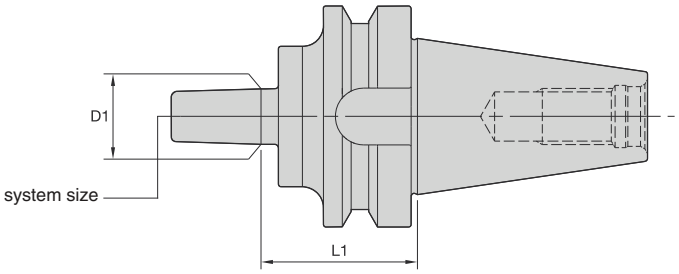


ERICKSON

MT-BT Form A

order number	catalog number	system size	D2	L1	kg
1191785	**BT50MT5105M**	5	70	105	4,28

NOTE: For retention knobs, see page J33.

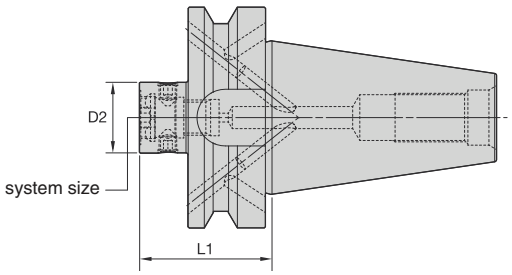


ERICKSON

JT-BT Form A

order number	catalog number	system size	D1	L1	kg
1258492	**BT50JT33041M**	33	15,85	41	3,70

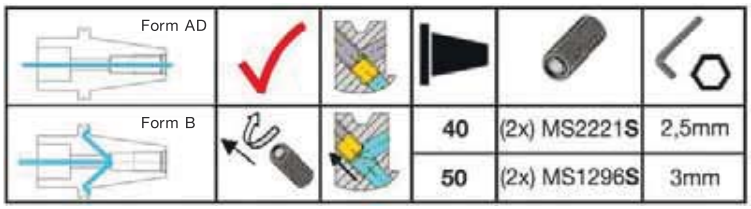
NOTE: For retention knobs, see page J33.

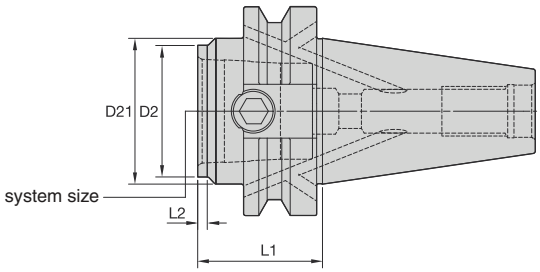


RFX-BT Form B/AD

order number	catalog number	system size	D2	L1	wrench size clamp screw	Nm	kg
3860681	**BT50BRFX320060M**	RFX320	32	60	4mm	12	3,50
3860682	**BT50BRFX420060M**	RFX420	42	60	5mm	20	3,90
3860693	**BT50BRFX550065M**	RFX550	55	65	6mm	25	4,20
3860694	**BT50BRFX720070M**	RFX720	72	70	6mm	25	4,50

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.

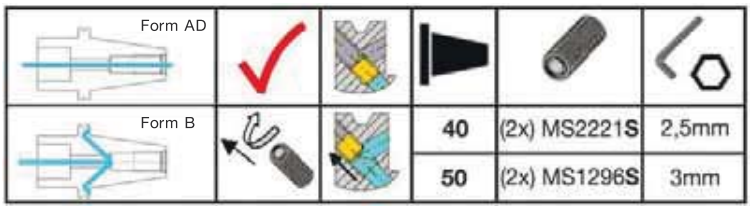


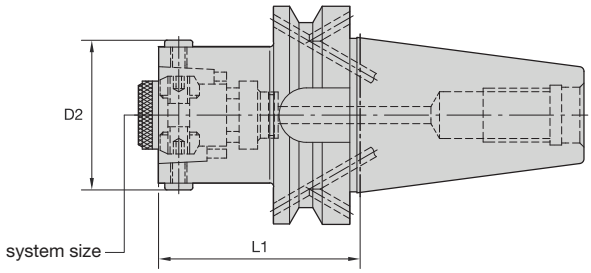


KM-BT Form B/AD

order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	Nm	kg
3783950	**BT50BKM32040M**	KM32	32	—	40	2	**KM32PKG3L**	5mm	8-11	3,50
3783951	**BT50BKM32090M**	KM32	32	—	90	52	**KM32PKG3S**	5mm	8-11	3,74
3783952	**BT50BKM40060M**	KM40	40	48	60	4	**KM40PKG3L**	6mm	12-16	3,72
3783953	**BT50BKM40100M**	KM40	40	—	100	62	**KM40PKG3S**	6mm	12-16	3,98
3783954	**BT50BKM50060M**	KM50	50	63	60	4	**KM50PKG3L**	10mm	27-34	3,80
3783955	**BT50BKM50120M**	KM50	50	—	120	82	**KM50PKG3S**	10mm	27-34	4,51
3783956	**BT50BKM63060M**	KM63	63	70	60	5	**KM63PKG3L**	12mm	47-54	3,78
3783957	**BT50BKM63140M**	KM63	63	—	140	102	**KM63PKG3S**	12mm	47-54	5,50
3783958	**BT50BKM80080M**	KM80	80	—	80	42	**KM80PKG3S**	14mm	79-85	4,50

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.
These products only available in the U.S., Canada, and Japan.





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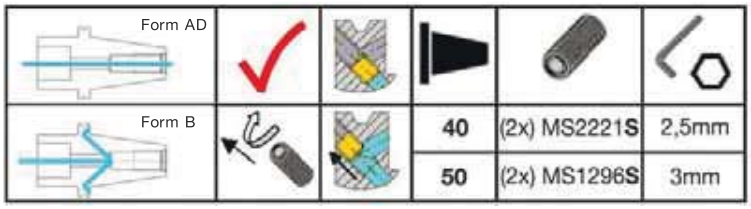
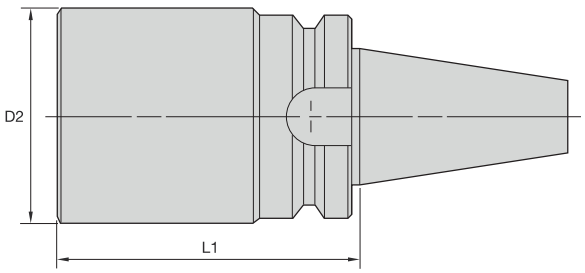
■ HSK-BT Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1519708	**BT50BHSK40060M**	HSK40	45	60	3mm	8	3,70
1519709	**BT50BHSK50065M**	HSK50	55	65	4mm	15	3,80
1510763	**BT50BHSK63075M**	HSK63	70	75	5mm	20	4,00

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.



• Machinable front 20–30 RW C.



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■ BB-BT

order number	catalog number	D2	L1	kg
1258384	**BT50BB104350M**	104	350	24,3
1258386	**BT50BB134250M**	134	250	26,5

NOTE: For retention knobs, see page J33.

WIDIA

WIDIA

CV Shank Tools

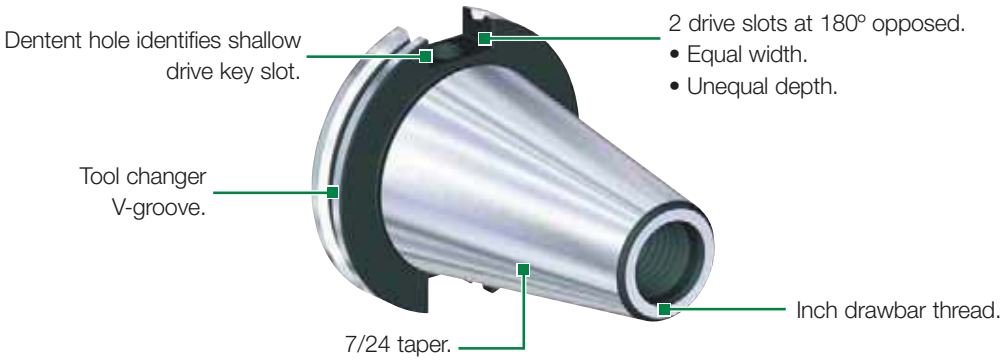
CAT40(CV) **E2–E37**
CAT50(CV) **E38–E79**

Erickson™ CAT V-Flange Shank Tooling System • **CV40 Series**

Erickson V-Flange CAT Taper Tooling is manufactured from premium materials and meets or exceeds the latest ANSI B5.50 and ISO-1947 taper accuracy of AT3 specification standards. CV40 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For any applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

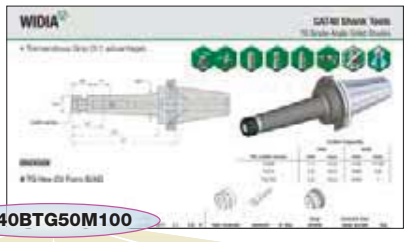
CAT40(CV)

- ANSI B5.50 7/24 taper.
- Standard 5/8-11 drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 15,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



CV40BTG50M100

CV — CAT Shank Style

ANSI B5.50

40 — Shank Taper Size

40 = 40

50 = 50

B — Special Feature *(optional)*

B =
DIN form B coolant feature, tool shipped to AD specifications (design allows conversion to form B style)

Z =
Deviates from ANSI — B5.50 standard — no hub in front of V flange

(blank) =
(no "B" or "Z") — tool built to DIN form A/AD coolant style

CH =
Coolant form AD — high pressure

HPV =
High performance and balanceable

TD =
Tunable

TG — Toolholder Style

50 — Toolholder Size

TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

M — Special Feature

M =
previous 2/3 numbers are metric values (this is an exception where there is a metric bore on an inch shank style)

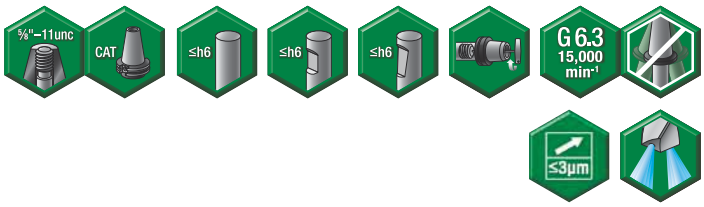
100 — Tool Length

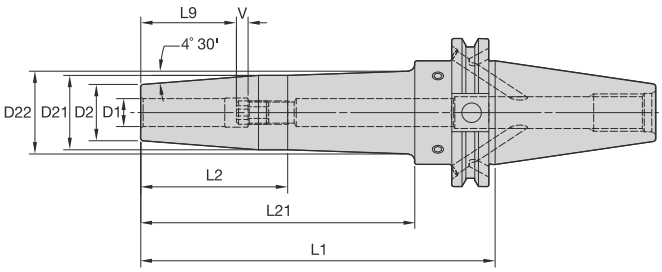
(Gage line on taper to front of tool)

inch
xxx = x.xx

BB = Bar blank
DA = Double-angle collet chuck
DC = Drill chuck
EM = End mill adapter
ER = DIN 6499 single-angle collet chuck
HC = Hydraulic chuck — Standard Line
HCB = Hydraulic chuck — Basic Line
HCSL = Hydraulic chuck — Slim Line
HCSLT = Hydraulic chuck — Slim Line — Trend
HCT = Hydraulic chuck — Trend Line
HPMC = Bearing milling chuck — high performance
HSK = HSK adapter
JT = Jacobs taper adapter
KM = KM™ adapter
MT = Morse taper adapter
RC = Rapid Change — T&C tapping adapter chuck
RFX = ROTAFLEX™ boring adapters
SA = Slotting cutter adapter
SER = DIN 6499 single-angle collet chuck — short with internal locknut
SM2C = Shell mill adapter with coolant and small diameter
SMC = Shell mill adapter with coolant
SS = Adapter for straight shanks (drills)
SSF = Adapter for straight shanks with flat (drills)
ST = Screw-on adapters
STRC = Rapid Change — solid tapping adapter chuck
SWN = Whistle Notch™ 2° — short — (not to DIN standard)
TA = Tap chuck adapter
TCRC = Rapid Change — T&C tapping adapter chuck
TG = Tremendous Grip single-angle collet chuck
TGF = Tremendous Grip single-angle collet chuck — flush face
TT = Shrink Fit thermo toolholder
TTHT = Shrink Fit thermo toolholder — high torque
WD = Whistle Notch with drive
WNA = Whistle Notch — NAS 5° inch
WN = Whistle Notch (2° metric; 5° inch)

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

TT GP HPV MM-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3683482	CV40BHPVTT06M350	6	21	27	—	89	54	—	26	10	TTSS05014M	2,5mm	1,16
3683493	CV40BHPVTT06M600	6	21	27	32	152	50	117	26	10	TTSS05014M	2,5mm	1,48
3683494	CV40BHPVTT08M350	8	21	27	—	89	54	—	26	10	TTSS06014M	3mm	1,15
3683495	CV40BHPVTT08M600	8	21	27	32	152	50	117	26	10	TTSS06014M	3mm	1,48
3683496	CV40BHPVTT10M375	10	24	32	—	95	60	—	31	10	TTSS08014M	4mm	1,24
3683497	CV40BHPVTT10M600	10	24	32	36	152	63	117	31	10	TTSS08014M	4mm	1,63
3615213	CV40BHPVTT12M375	12	24	32	—	95	60	—	36	10	TTSS10014M	5mm	1,22
3615214	CV40BHPVTT12M600	12	24	32	36	152	63	117	36	10	TTSS10014M	5mm	1,57
3615215	CV40BHPVTT14M375	14	27	34	—	95	60	—	36	10	TTSS10014M	5mm	1,27
3615216	CV40BHPVTT14M600	14	27	34	38	152	63	117	36	10	TTSS10014M	5mm	1,66
3615217	CV40BHPVTT16M375	16	27	34	—	95	60	—	39	10	TTSS12014M	6mm	1,24
3615218	CV40BHPVTT16M600	16	27	34	38	152	63	117	39	10	TTSS12014M	6mm	1,64
3615219	CV40BHPVTT18M400	18	34	44	—	102	83	—	39	10	TTSS12014M	6mm	1,48
3615220	CV40BHPVTT18M600	18	33	42	—	152	117	—	39	10	TTSS12014M	6mm	1,95
3615221	CV40BHPVTT20M400	20	34	44	—	102	83	—	41	10	TTSS16014M	8mm	1,44
3615222	CV40BHPVTT20M600	20	33	42	—	152	117	—	41	10	TTSS16014M	8mm	1,89
3615223	CV40BHPVTT25M400	25	44	53	—	102	83	—	47	10	TTSS16014M	8mm	1,71
3615224	CV40BHPVTT25M600	25	44	53	—	152	133	—	47	10	TTSS16014M	8mm	2,52
3615225	CV40BHPVTT32M400	32	44	53	—	102	83	—	51	10	TTSS16014M	8mm	1,55
3615226	CV40BHPVTT32M600	32	44	53	—	152	133	—	51	10	TTSS16014M	8mm	2,36

(continued)

(TT GP HPV continued)

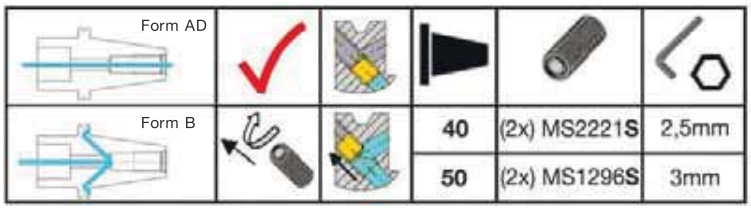
Cutting Tool Shank Requirements inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16 & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

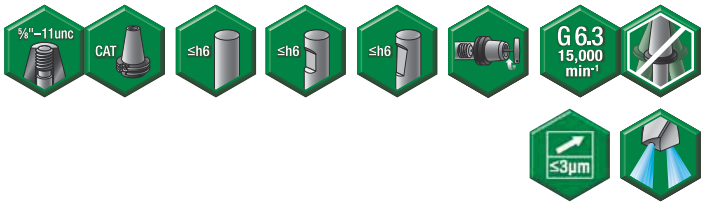
TT GP HPV IN-CV Form B/AD

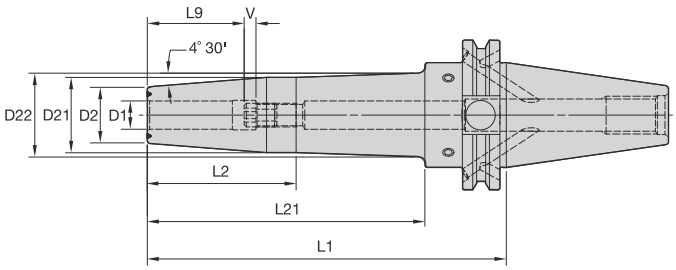
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3683474	**CV40BHPVTT025350**	1/4	.83	1.06	—	3.50	2.13	—	1.02	.39	**TTSS05014M**	2,5mm	2.55
3683476	**CV40BHPVTT025600**	1/4	.83	1.06	1.24	6.00	1.97	4.63	1.02	.39	**TTSS05014M**	2,5mm	3.27
3683477	**CV40BHPVTT031350**	5/16	.83	1.06	—	3.50	2.13	—	1.02	.39	**TTSS06014M**	3mm	2.54
3683478	**CV40BHPVTT031600**	5/16	.83	1.06	1.24	6.00	1.97	4.63	1.02	.39	**TTSS06014M**	3mm	3.25
3683479	**CV40BHPVTT038375**	3/8	.95	1.26	—	3.75	2.38	—	1.22	.39	**TTSS08014M**	4mm	2.73
3683480	**CV40BHPVTT038600**	3/8	.95	1.26	1.41	6.00	2.48	4.63	1.22	.39	**TTSS08014M**	4mm	3.59
3683481	**CV40BHPVTT044375**	7/16	.95	1.26	—	3.75	2.38	—	1.42	.39	**TTSS10014M**	5mm	2.70
3615175	**CV40BHPVTT050375**	1/2	.95	1.26	—	3.75	2.38	—	1.42	.39	**TTSS10014M**	5mm	2.68
3615176	**CV40BHPVTT050600**	1/2	.95	1.26	1.41	6.00	2.48	4.63	1.42	.39	**TTSS10014M**	5mm	3.44
3615177	**CV40BHPVTT056375**	9/16	1.06	1.34	—	3.75	2.38	—	1.42	.39	**TTSS10014M**	5mm	2.79
3615178	**CV40BHPVTT062375**	5/8	1.06	1.34	—	3.75	2.38	—	1.54	.39	**TTSS12014M**	6mm	2.74
3615179	**CV40BHPVTT062600**	5/8	1.06	1.34	1.48	6.00	2.48	4.63	1.54	.39	**TTSS12014M**	6mm	3.61
3615180	**CV40BHPVTT068400**	11/16	1.34	1.75	—	4.00	3.25	—	1.54	.39	**TTSS12014M**	6mm	3.28
3615182	**CV40BHPVTT075600**	3/4	1.30	1.65	—	6.00	4.63	—	1.61	.39	**TTSS16014M**	8mm	4.24
3615181	**CV40BHPVTT075400**	3/4	1.34	1.75	—	4.00	3.25	—	1.61	.39	**TTSS16014M**	8mm	3.22
3615184	**CV40BHPVTT088600**	7/8	1.30	1.65	—	6.00	4.63	—	1.61	.39	**TTSS16014M**	8mm	4.15
3615183	**CV40BHPVTT088400**	7/8	1.34	1.75	—	4.00	3.25	—	1.61	.39	**TTSS16014M**	8mm	3.14
3615185	**CV40BHPVTT100400**	1	1.73	2.08	—	4.00	3.25	—	1.85	.39	**TTSS16014M**	8mm	3.76
3615186	**CV40BHPVTT100600**	1	1.73	2.08	—	6.00	5.25	—	1.85	.39	**TTSS16014M**	8mm	5.06
3615187	**CV40BHPVTT125400**	1 1/4	1.73	2.08	—	4.00	3.25	—	2.01	.39	**TTSS16014M**	8mm	3.43
3615188	**CV40BHPVTT125600**	1 1/4	1.73	2.08	—	6.00	5.25	—	2.01	.39	**TTSS16014M**	8mm	4.74

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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■ TT HT HPV MM-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3618030	CV40BHPVTTHT12M375	12	24	32	—	95	60	—	36	10	TTSS10014M	5mm	1,22
3618031	CV40BHPVTTHT12M600	12	24	32	36	152	63	117	36	10	TTSS10014M	5mm	1,57
3618032	CV40BHPVTTHT14M375	14	27	34	—	95	60	—	36	10	TTSS10014M	5mm	1,27
3618033	CV40BHPVTTHT14M600	14	27	34	38	152	63	117	36	10	TTSS10014M	5mm	1,66
3618034	CV40BHPVTTHT16M375	16	27	34	—	95	60	—	39	10	TTSS12014M	6mm	1,24
3618035	CV40BHPVTTHT16M600	16	27	34	38	152	63	117	39	10	TTSS12014M	6mm	1,64
3618036	CV40BHPVTTHT18M400	18	34	44	—	102	83	—	39	10	TTSS12014M	6mm	1,48
3618037	CV40BHPVTTHT18M600	18	33	42	—	152	117	—	39	10	TTSS12014M	6mm	1,95
3618038	CV40BHPVTTHT20M400	20	34	44	—	102	83	—	41	10	TTSS16014M	8mm	1,44
3618039	CV40BHPVTTHT20M600	20	33	42	—	152	117	—	41	10	TTSS16014M	8mm	1,89
3618040	CV40BHPVTTHT25M400	25	44	53	—	102	83	—	47	10	TTSS16014M	8mm	1,71
3618041	CV40BHPVTTHT25M600	25	44	53	—	152	133	—	47	10	TTSS16014M	8mm	2,52
3618042	CV40BHPVTTHT32M400	32	44	53	—	102	83	—	51	10	TTSS16014M	8mm	1,55
3618043	CV40BHPVTTHT32M600	32	44	53	—	152	133	—	51	10	TTSS16014M	8mm	2,36

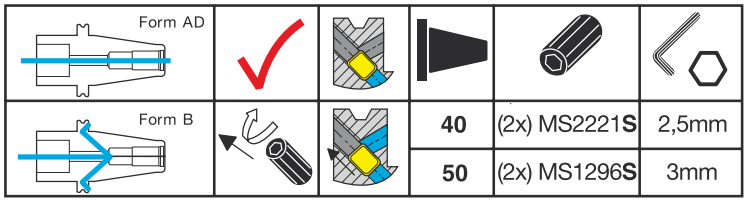
(continued)

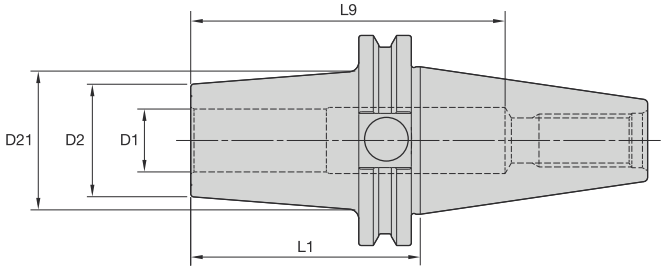
(TT HT HPV continued)

Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	tolerance
1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, & 1-1/4	.0000/-.0005

TT HT HPV IN-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	lbs
3617952	CV40BHPVTTHT050375	1/2	.95	1.26	—	3.75	2.38	—	1.42	.39	TTSS10014M	5 mm	2.68
3618003	CV40BHPVTTHT050600	1/2	.95	1.26	1.41	6.00	2.48	4.63	1.42	.39	TTSS10014M	5 mm	3.44
3618004	CV40BHPVTTHT056375	9/16	1.06	1.34	—	3.75	2.38	—	1.42	.39	TTSS10014M	5 mm	2.79
3618005	CV40BHPVTTHT062375	5/8	1.06	1.34	—	3.75	2.38	—	1.54	.39	TTSS12014M	6 mm	2.74
3618006	CV40BHPVTTHT062600	5/8	1.06	1.34	1.48	6.00	2.48	4.63	1.54	.39	TTSS12014M	6 mm	3.61
3618007	CV40BHPVTTHT068400	11/16	1.34	1.75	—	4.00	3.25	—	1.54	.39	TTSS12014M	6 mm	3.28
3618009	CV40BHPVTTHT075600	3/4	1.30	1.65	—	6.00	4.63	—	1.61	.39	TTSS16014M	8 mm	4.24
3618008	CV40BHPVTTHT075400	3/4	1.34	1.75	—	4.00	3.25	—	1.61	.39	TTSS16014M	8 mm	3.22
3618011	CV40BHPVTTHT088600	7/8	1.30	1.65	—	6.00	4.63	—	1.61	.39	TTSS16014M	8 mm	4.15
3618010	CV40BHPVTTHT088400	7/8	1.34	1.75	—	4.00	3.25	—	1.61	.39	TTSS16014M	8 mm	3.13
3618012	CV40BHPVTTHT100400	1	1.73	2.08	—	4.00	3.25	—	1.85	.39	TTSS16014M	8 mm	3.76
3618013	CV40BHPVTTHT100600	1	1.73	2.08	—	6.00	5.25	—	1.85	.39	TTSS16014M	8 mm	5.06
3618014	CV40BHPVTTHT125400	1 1/4	1.73	2.08	—	4.00	3.25	—	2.01	.39	TTSS16014M	8 mm	3.43
3618015	CV40BHPVTTHT125600	1 1/4	1.73	2.08	—	6.00	5.25	—	2.01	.39	TTSS16014M	8 mm	4.74

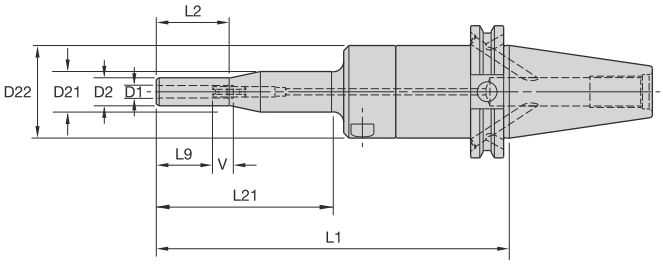




TT HT HPV IN-CV Z Form AD

order number	catalog number	D1	D2	D21	L1	L9	lbs
3683514	CV40ZTTHT050275	1/2	.95	1.26	2.75	4.26	2.16
3683516	CV40ZTTHT075275	3/4	1.34	1.65	2.75	3.74	2.34

NOTE: CV40 Z toolholders deviate from ANSI B5.50 standard. The 1.750" diameter in front of the V-flange has been eliminated to achieve short gage lengths.
Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



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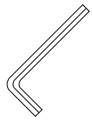
HC Slim T MM-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	kg
3019245	CV40BHCSLT06M669	6	13,5	19,5	44,5	170	35	85	27	10	1,64
3019246	CV40BHCSLT08M669	8	15,5	19,5	44,5	170	35	85	27	10	1,65
3019247	CV40BHCSLT10M669	10	17,5	44,5	–	170	85	151	31	10	1,65

Spare Parts

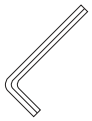


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV40BHCSLT06M669	170.135	5mm	170.002	2,5mm
CV40BHCSLT08M669	170.135	5mm	170.002	2,5mm
CV40BHCSLT10M669	170.135	5mm	170.003	3mm

HC Slim T IN-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	lbs
3019257	CV40BHCSLT025669	.25	.54	.77	44,45	6.69	1.38	85,00	1.06	.39	3.64
3019258	CV40BHCSLT038669	.38	.69	1.75	–	6.69	3.35	150,95	1.22	.39	3.64

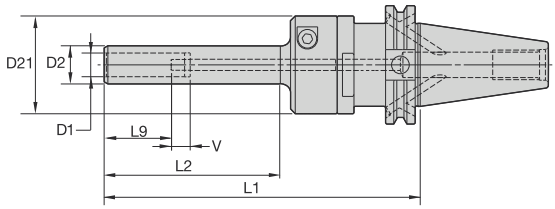
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV40BHCSLT025669	170.135	5mm	170.002	2,5mm
CV40BHCSLT038669	170.135	5mm	170.003	3mm

(continued)

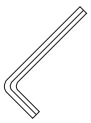
(HC Slim Form B/AD continued)



HC Slim MM-CV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2495136	CV40BHCSL12M669	12	19,5	44,5	170	95	36	10	1,56
3019248	CV40BHCSL14M669	14	21,5	52,5	170	95	36	10	1,75
3019249	CV40BHCSL16M669	16	23,5	52,5	170	95	39	10	1,78
3019250	CV40BHCSL18M669	18	25,5	52,5	170	95	39	10	1,82
2495141	CV40BHCSL20M669	20	27,5	52,5	170	95	41	10	1,83

Spare Parts

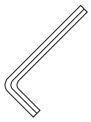


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV40BHCSL12M669	170.135	5mm	170.002	2,5mm
CV40BHCSL14M669	170.135	5mm	170.002	2,5mm
CV40BHCSL16M669	170.135	5mm	170.002	2,5mm
CV40BHCSL18M669	170.135	5mm	170.002	2,5mm
CV40BHCSL20M669	170.135	5mm	170.002	2,5mm

HC Slim IN-CV Form B/AD

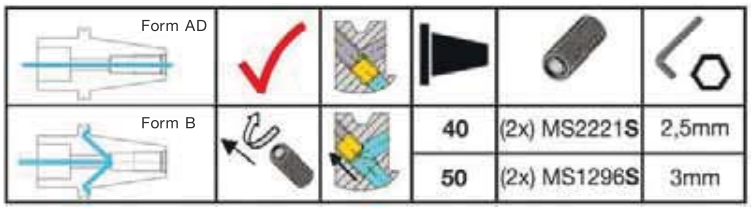
order number	catalog number	D1	D2	D21	L1	L2	L9	V	lbs
2508153	CV40BHCSL050669	.50	.81	2.07	6.69	3.74	1.42	.39	3.84
3019259	CV40BHCSL062669	.63	.93	2.07	6.69	3.74	1.54	.39	3.92
2508154	CV40BHCSL075669	.75	1.06	2.07	6.69	3.74	1.61	.39	4.08

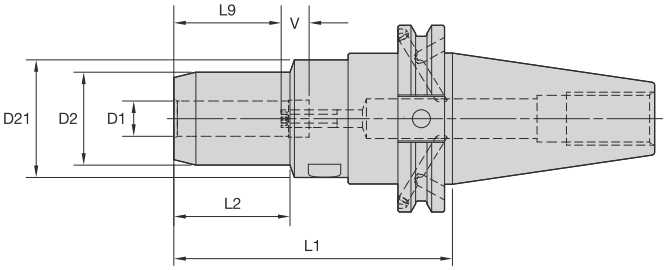
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV40BHCSL050669	170.135	5mm	170.002	2,5mm
CV40BHCSL062669	170.135	5mm	170.002	2,5mm
CV40BHCSL075669	170.135	5mm	170.002	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw and actuation wrench.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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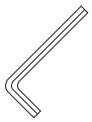
HC MM -CV Form B/AD

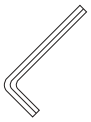


order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1605145	**CV40BHC06M350**	6	25,7	40	88,9	33	27	10	**170.135**	5mm	**170.002**	2,5mm	1,24
1605149	**CV40BHC08M350**	8	27,7	40	88,9	33	27	10	**170.135**	5mm	**170.002**	2,5mm	1,25
1605150	**CV40BHC10M375**	10	29,7	40	95,3	39	31	10	**170.135**	5mm	**170.002**	2,5mm	1,30
2079279	**CV40BHC12M375**	12	31,6	40	95,3	40	36	10	**170.135**	5mm	**170.002**	2,5mm	1,32
2079280	**CV40BHC14M400**	14	33,6	50	101,6	46	41	10	**170.135**	5mm	**170.003**	3mm	1,45
2079281	**CV40BHC16M400**	16	37,6	50	101,6	47	41	10	**170.135**	5mm	**170.003**	3mm	1,52
2079282	**CV40BHC18M400**	18	39,6	50	101,6	47	41	10	**170.135**	5mm	**170.003**	3mm	1,54
2079523	**CV40BHC20M400**	20	41,6	50	101,6	48	41	10	**170.135**	5mm	**170.003**	3mm	1,56
1605216	**CV40BHC25M462**	25	49,9	63	117,5	51	51	10	**170.136**	6mm	**170.004**	4mm	2,13
1605217	**CV40BHC32M462**	32	59,9	63	117,5	59	51	10	**170.136**	6mm	**170.004**	4mm	2,31

(continued)

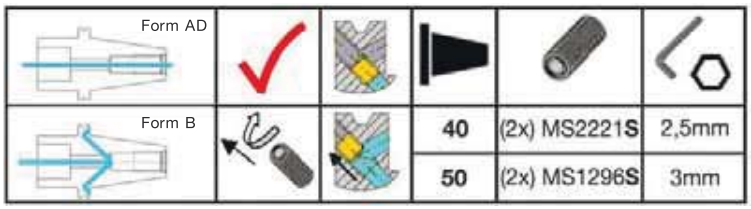
(HC CV Form B/AD continued)

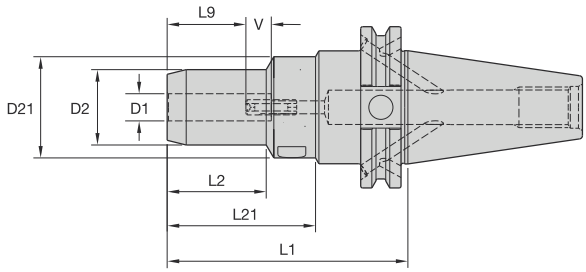
HC IN -CV Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	lbs
1605101	**CV40BHC025350**	1/4	1.01	1.57	3.50	1.30	1.06	.39	**170.135**	5mm	**170.002**	2,5mm	2.7
1605102	**CV40BHC038375**	3/8	1.17	1.57	3.75	1.54	1.22	.39	**170.135**	5mm	**170.002**	2,5mm	2.9
1605103	**CV40BHC050375**	1/2	1.24	1.57	3.75	1.57	1.42	.39	**170.135**	5mm	**170.002**	2,5mm	2.9
1605104	**CV40BHC062400**	5/8	1.48	1.97	4.00	1.83	1.54	.39	**170.135**	5mm	**170.003**	3mm	3.2
1605105	**CV40BHC075400**	3/4	1.64	1.97	4.00	1.89	1.61	.39	**170.135**	5mm	**170.003**	3mm	3.4
1605106	**CV40BHC100462**	1	1.96	2.48	4.63	2.01	1.81	.39	**170.136**	6mm	**170.004**	4mm	4.7
1605107	**CV40BHC125462**	1 1/4	2.36	2.48	4.63	2.32	1.97	.39	**170.136**	6mm	**170.004**	4mm	5.1

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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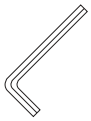
HC Trend MM-CV Form B/AD

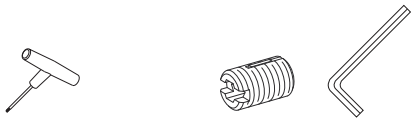


order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw	kg
2979257	**CV40BHCT06M350**	6	26	40	89	33	53	27	10	**170.135**	5 mm	**571.061**	**170.003**	3 mm	1,25
2982160	**CV40BHCT06M600**	6	26	40	152	100	117	27	10	**170.135**	5 mm	**571.061**	**170.003**	3 mm	1,49
2979258	**CV40BHCT08M350**	8	28	40	89	33	53	27	10	**170.135**	5 mm	**571.061**	**170.003**	3 mm	1,27
2982161	**CV40BHCT08M600**	8	28	40	152	100	117	27	10	**170.135**	5 mm	**571.061**	**170.003**	3 mm	1,55
2979259	**CV40BHCT10M375**	10	30	40	95	39	58	31	10	**170.135**	5 mm	**571.061**	**170.003**	3 mm	1,32
2982162	**CV40BHCT10M600**	10	30	40	152	100	117	31	10	**170.135**	5 mm	**571.061**	**170.003**	3 mm	1,62
2979260	**CV40BHCT12M375**	12	32	40	95	40	60	36	10	**170.135**	5 mm	**571.061**	**170.003**	3 mm	1,32
2982163	**CV40BHCT12M600**	12	32	40	152	100	117	36	10	**170.135**	5 mm	**571.061**	**170.003**	3 mm	1,67
2979261	**CV40BHCT14M400**	14	34	50	102	46	65	41	10	**170.135**	5 mm	**571.063**	**170.005**	5 mm	1,47
2982164	**CV40BHCT14M600**	14	34	50	152	100	116	36	10	**170.135**	5 mm	**–**	**170.005**	5 mm	1,79
2979262	**CV40BHCT16M400**	16	38	50	102	47	65	41	10	**170.135**	5 mm	**571.063**	**170.005**	5 mm	1,54
2982165	**CV40BHCT16M600**	16	38	50	152	100	116	39	10	**170.135**	5 mm	**571.063**	**170.005**	5 mm	1,95
2979263	**CV40BHCT18M400**	18	40	50	102	47	65	41	10	**170.135**	5 mm	**571.063**	**170.005**	5 mm	1,56
2982166	**CV40BHCT18M600**	18	40	50	152	100	116	39	10	**170.135**	5 mm	**571.063**	**170.005**	5 mm	2,02
2979264	**CV40BHCT20M400**	20	42	50	102	48	65	41	10	**170.135**	5 mm	**571.063**	**170.005**	5 mm	1,58
2982167	**CV40BHCT20M600**	20	42	50	152	100	116	41	10	**170.135**	5 mm	**571.063**	**170.005**	5 mm	2,10
2979265	**CV40BHCT25M462**	25	50	63	117	51	81	51	10	**170.136**	6 mm	**571.063**	**170.005**	5 mm	2,15
2979266	**CV40BHCT32M462**	32	60	63	117	59	81	51	10	**170.136**	6 mm	**–**	**170.005**	5 mm	2,33

(continued)

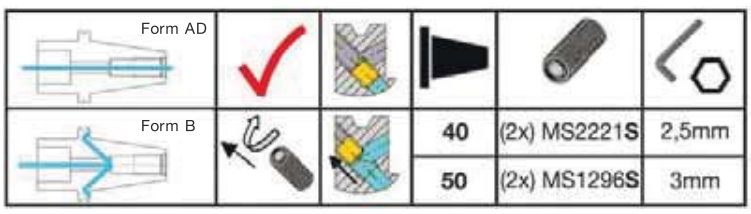
(HC Trend CV Form B/AD continued)

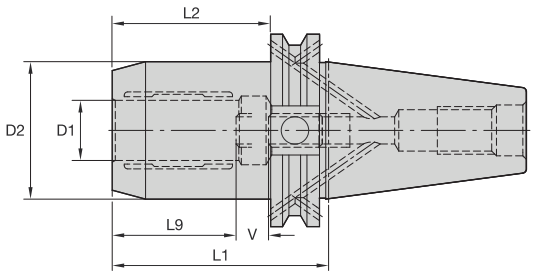
HC Trend IN-CV Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw	stop screw wrench	wrench size stop screw	lbs
2979230	**CV40BHCT025350**	1/4	1.012	1.569	3.500	1.299	1.063	.39	**170.135**	5mm	**571.061**	**170.003**	3mm	2.76
2982155	**CV40BHCT025600**	1/4	1.012	1.569	6.000	3.937	1.063	.39	**170.135**	5mm	**571.061**	**170.003**	3mm	3.28
2979231	**CV40BHCT038375**	3/8	1.169	1.569	3.750	1.535	1.221	.39	**170.135**	5mm	**571.061**	**170.003**	3mm	2.91
2982156	**CV40BHCT038600**	3/8	1.169	1.569	6.000	3.937	1.221	.39	**170.135**	5mm	**571.061**	**170.003**	3mm	3.57
2979232	**CV40BHCT050375**	1/2	1.244	1.569	3.750	1.575	1.417	.39	**170.135**	5mm	**571.061**	**170.003**	3mm	2.91
2982157	**CV40BHCT050600**	1/2	1.244	1.569	6.000	3.937	1.417	.39	**170.135**	5mm	**571.061**	**170.003**	3mm	3.68
2979253	**CV40BHCT062400**	5/8	1.480	1.963	4.000	1.831	1.535	.39	**170.135**	5mm	**571.063**	**170.005**	5mm	3.40
2982158	**CV40BHCT062600**	5/8	1.479	1.963	6.000	3.937	1.535	.39	**170.135**	5mm	**571.063**	**170.005**	5mm	4.30
2979254	**CV40BHCT075400**	3/4	1.638	1.963	4.000	1.890	1.614	.39	**170.135**	5mm	**571.063**	**170.005**	5mm	3.53
2982159	**CV40BHCT075600**	3/4	1.873	1.963	6.000	3.937	1.614	.39	**170.135**	5mm	**571.063**	**170.005**	5mm	4.65
2979255	**CV40BHCT100462**	1	1.961	2.474	4.625	2.008	1.811	.39	**170.136**	6mm	**571.063**	**170.005**	5mm	4.76
2979256	**CV40BHCT125462**	1 1/4	2.354	2.474	4.625	2.323	1.969	.39	**170.136**	6mm	**571.063**	**170.005**	5mm	5.18

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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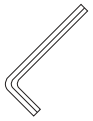
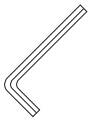
HC Basic MM-CV Form B/AD



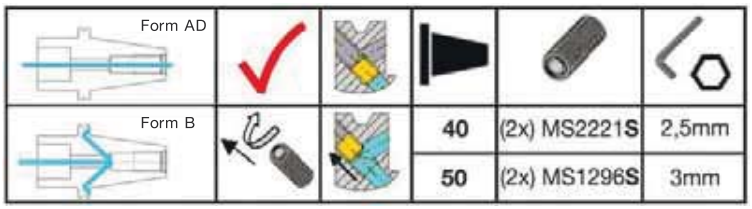
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
2001975	**CV40BHCB20M400**	20	49,9	102	83	41	10	**170.135**	5mm	**170.005**	5mm	1,81

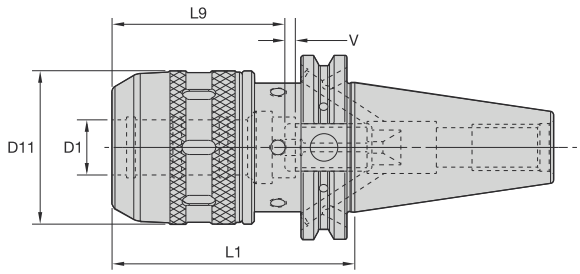
HC Basic IN-CV Form B/AD



order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	lbs
2001976	**CV40BHCB075400**	3/4	1.96	4.00	3.25	1.61	.39	**170.135**	5mm	**170.005**	5mm	4.01

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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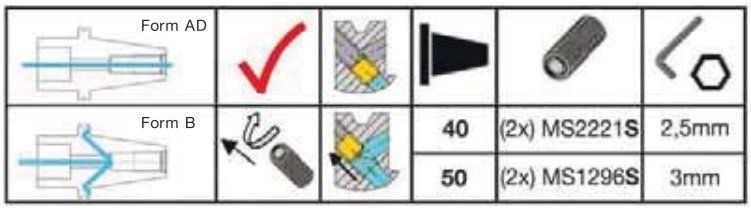
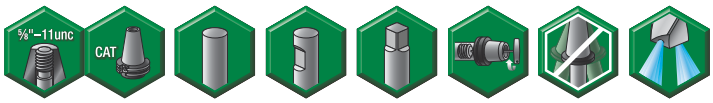
HPMC IN-CV Form B/AD

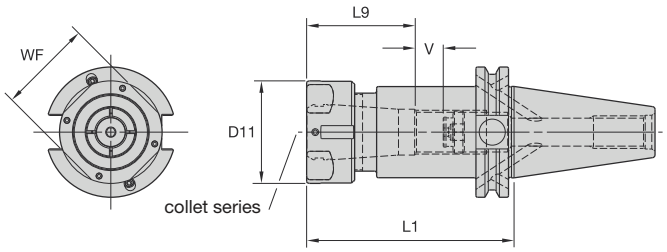
order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100356	**CV40BHPMC075335**	3/4	2.09	3.35	4.73	.79	**PSW52M**	**MCSS16040M**	2,5mm & 5mm	3.40
3100358	**CV40BHPMC075591**	3/4	2.09	5.91	1.93	.79	**PSW52M**	**MCSS16040M**	2,5mm & 5mm	5.70
3100359	**CV40BHPMC100374**	1	2.40	3.74	2.17	.79	**PSW58M**	**MCSS16040M**	2,5mm & 5mm	4.20
3100360	**CV40BHPMC100591**	1	2.40	5.91	2.17	.79	**PSW58M**	**MCSS16040M**	2,5mm & 5mm	6.45
3100362	**CV40BHPMC125472**	1 1/4	2.76	4.72	2.28	.79	**PSW68M**	**MCSS16040M**	2,5mm & 5mm	5.65
3100361	**CV40BHPMC125591**	1 1/4	2.76	5.91	2.28	.79	**PSW68M**	**MCSS16040M**	2,5mm & 5mm	7.20

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench not included.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
For retention knobs, see page J33.



- Tremendous Grip (3:1 advantage).
- Totally flush face, locknut to collet.





	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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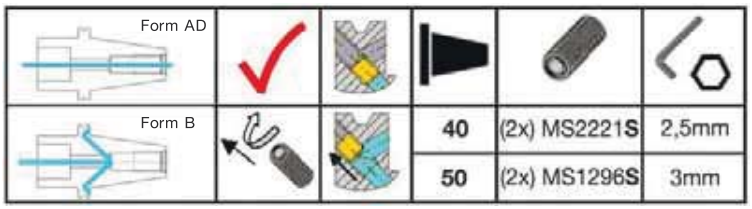
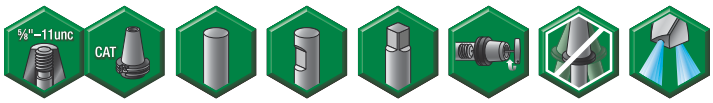
TG Flush Face-CV Form B/AD

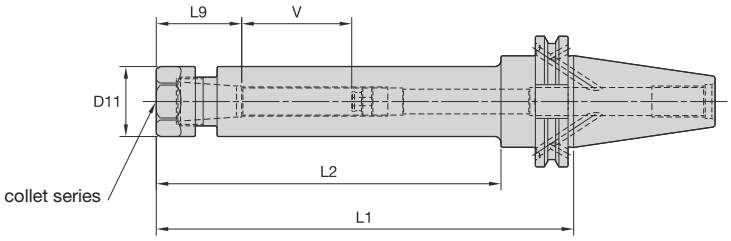
order number	catalog number	collet series	D11	L1	L9	V	locknut	WF	locknut wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2987290	**CV40BTGF050250**	TG50	1.50	2.50	1.46	.70	**LNATGF050M**	34	**HSW34M**	50	**SS056041G**	4mm & 5/32	2.37
2987291	**CV40BTGF050400**	TG50	1.50	4.00	1.46	2.20	**LNATGF050M**	34	**HSW34M**	50	**SS056041G**	4mm & 5/32	2.76
2987292	**CV40BTGF050600**	TG50	1.50	6.00	1.46	2.48	**LNATGF050M**	34	**HSW34M**	50	**SS056041G**	4mm & 5/32	3.36
2987303	**CV40BTGF075250**	TG75	1.97	2.50	1.89	.95	**LNATGF075M**	46	**HSW45M**	100	**SS081041G**	4mm & 5/32	2.43
2987304	**CV40BTGF075400**	TG75	1.97	4.00	1.89	1.30	**LNATGF075M**	46	**HSW45M**	100	**SS081041G**	4mm & 5/32	3.31
2987305	**CV40BTGF075600**	TG75	1.97	6.00	1.89	3.31	**LNATGF075M**	46	**HSW45M**	100	**SS081041G**	4mm & 5/32	4.41
2987306	**CV40BTGF100275**	TG100	2.36	2.75	2.44	.55	**LNATGF100M**	55	**HSW58M**	150	**SS112041G**	4mm & 5/32	2.55
2987307	**CV40BTGF100400**	TG100	2.36	4.00	2.44	.71	**LNATGF100M**	55	**HSW58M**	150	**SS112041G**	4mm & 5/32	3.42
2987308	**CV40BTGF100600**	TG100	2.36	6.00	2.44	2.68	**LNATGF100M**	55	**HSW58M**	150	**SS112041G**	4mm & 5/32	4.50

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Locknut disk sealing cap is available and must be ordered separately; see page J22.
Coolant disks for sealing cap are available and must be ordered separately; see page J7.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



• Tremendous Grip (3:1 advantage).





TG collet series	Collet Capacity mm min	mm max	inch min	inch max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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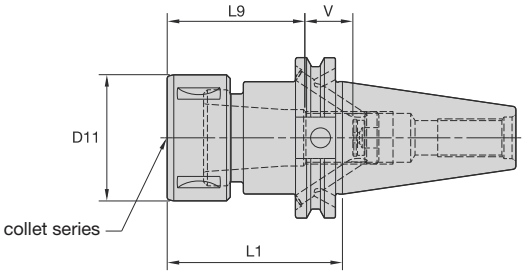
TG Hex-CV Form B/AD

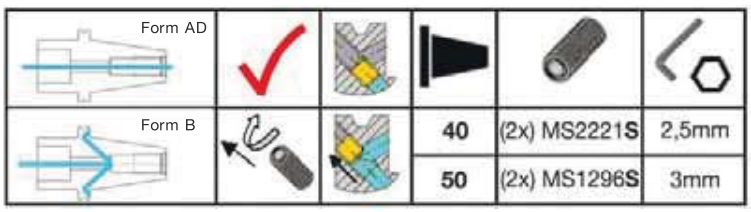
order number	catalog number	collet series	D11	L1	L2	L9	V	hex locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
4135683	**CV40BTG050300**	TG50	1.34	3.00	1.59	1.50	1	**LN050M**	**OEW30M**	50	**SS056041G**	4 mm & 5/32	2.49
4135684	**CV40BTG050500**	TG50	1.34	5.00	3.59	1.50	2	**LN050M**	**OEW30M**	50	**SS056041G**	4 mm & 5/32	3.16
4135685	**CV40BTG050800**	TG50	1.34	8.00	6.59	1.50	2	**LN050M**	**OEW30M**	50	**SS056041G**	4 mm & 5/32	4.20
4135686	**CV40BTG0501000**	TG50	1.34	10.00	8.59	1.50	2	**LN050M**	**OEW30M**	50	**SS056041G**	4 mm & 5/32	4.90



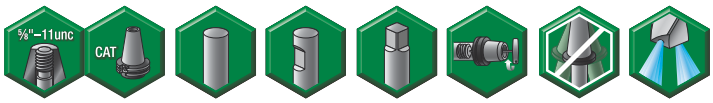
TG Round-CV Form B/AD

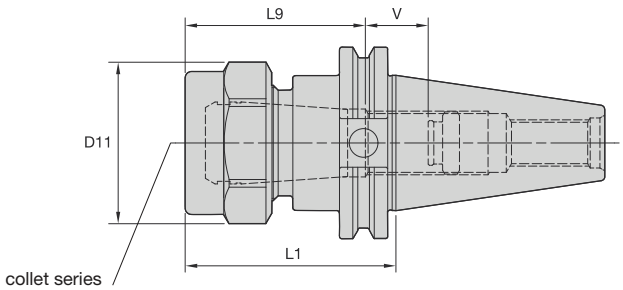
order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1261621	**CV40BTG075275G**	TG75	1.97	2.75	1.93	.75	**LNA075M**	**HSW45M**	100	**SS081041G**	4mm & 5/32	2.63
1261622	**CV40BTG075600G**	TG75	1.97	6.00	1.93	4.01	**LNA075M**	**HSW45M**	100	**SS081041G**	4mm & 5/32	4.50
1261623	**CV40BTG100300G**	TG100	2.36	3.00	2.64	.67	**LNA100M**	**HSW58M**	150	**SS094041G**	4mm & 5/32	2.91
1261624	**CV40BTG100600G**	TG100	2.36	6.00	2.64	2.95	**LNA100M**	**HSW58M**	150	**SS094041G**	4mm & 5/32	4.82

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



• Tremendous Grip (3:1 advantage).





Collet Capacity

TG collet series	mm min	mm max	inch min	inch max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

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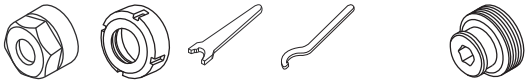
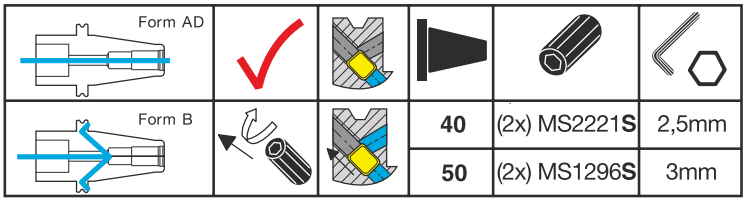
■ TG Hex-CV Form AD

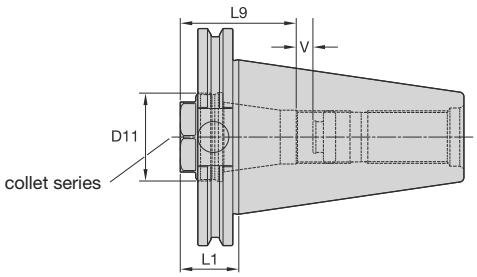


order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut	locknut wrench	locknut wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1025600	**CV40TG075600**	TG75	2.09	6.00	2.16	3.84	**NPA075**	**–**	**OEW188**	**–**	100	**SS081041G**	4mm & 5/32	4.40
1025799	**CV40TG075275**	TG75	2.09	2.75	2.28	1.18	**NPA075**	**–**	**OEW188**	**–**	100	**SS081041G**	4mm & 5/32	2.41
1025771	**CV40TG100300**	TG100	2.44	3.00	2.95	.51	**NPA100**	**–**	**OEW225**	**–**	150	**SS112041G**	4mm & 5/32	2.77
1025772	**CV40TG100600**	TG100	2.44	6.00	2.94	3.38	**NPA100**	**–**	**OEW225**	**–**	150	**SS112041G**	4mm & 5/32	5.40
1025773	**CV40TG100400**	TG100	2.44	4.00	2.95	1.54	**NPA100**	**–**	**OEW225**	**–**	150	**SS112041G**	4mm & 5/32	3.28
1013532	**CV40TG150488**	TG150	3.50	4.88	3.27	1.23	**–**	**NPA150**	**–**	**PSW350**	200	**SS125050G**	4mm & 5/32	5.72

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J4.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



• Grip (2:1 advantage).



Collet Capacity

ER collet series	mm min	mm max	inch min	inch max
ER32	2,0	20,0	.08	.81

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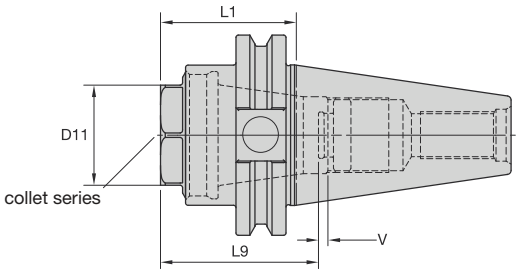
ER Short-CV Z Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2978739	**CV40ZSER32106**	ER32	1.41	1.06	1.97	.20	**LNECSER32M**	**OEW32M**	100	**SS094041G**	4mm & 5/32	1.35

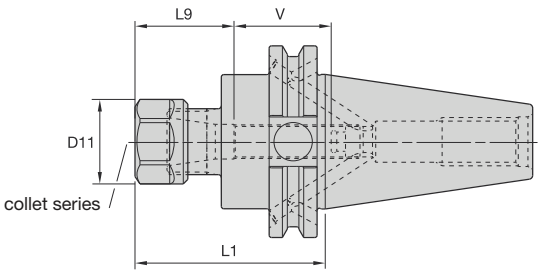


ER Short-CV Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2978740	**CV40SER32169**	ER32	1.41	1.69	1.97	.43	**LNECSER32M**	**OEW32M**	100	**SS094041G**	4mm & 5/32	1.70

NOTE: CV40 Z toolholders deviate from ANSI B5.50 standard. The 1.750" diameter in front of the V-flange has been eliminated to achieve short gage lengths.
Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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ER Hex-CV Form B/AD

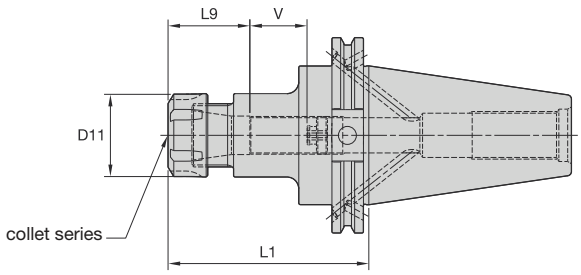
order number	catalog number	collet series	D11	L1	L9	V	lbs
1901019	**CV40BER16250**	ER16	1.10	2.50	1.26	1.30	2.30
1901046	**CV40BER16500**	ER16	1.10	5.00	1.26	1.58	2.85
1261618	**CV40BER20250**	ER20	1.34	2.50	1.42	1.73	2.32
2249531	**CV40BER20600**	ER20	1.34	6.00	1.42	1.73	3.47

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
CV40BER16250	**LNHSER16M**	**OEW25M**	30	**SS044038G**	4mm & 5/32
CV40BER16500	**LNHSER16M**	**OEW25M**	30	**SS044038G**	4mm & 5/32
CV40BER20250	**LNHSER20M**	**OEW30M**	24	**SS056041G**	4mm & 5/32
CV40BER20600	**LNHSER20M**	**OEW30M**	24	**SS056041G**	4mm & 5/32

(continued)

(ER continued)



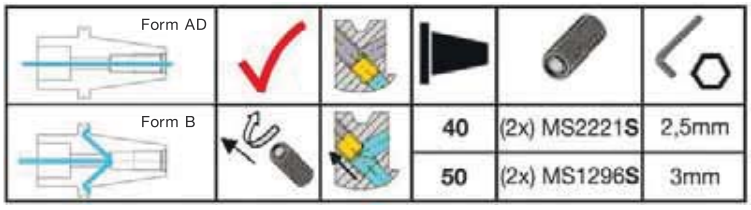
ER Round-CV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
2249532	**CV40BER25250**	ER25	1.65	2.50	1.57	.75	2.35
2249703	**CV40BER25600**	ER25	1.65	6.00	1.57	2.37	4.13
1261619	**CV40BER32275**	ER32	1.97	2.75	1.81	1.65	2.34
1901045	**CV40BER32600**	ER32	1.97	6.00	1.81	2.13	4.26
2249704	**CV40BER40300**	ER40	2.48	3.00	2.05	.47	2.78
2249705	**CV40BER40600**	ER40	2.48	6.00	2.05	1.89	4.44

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
CV40BER25250	**LNSER25M**	**ER25WM**	77	**SS075041G**	4mm & 5/32
CV40BER25600	**LNSER25M**	**ER25WM**	77	**SS075041G**	4mm & 5/32
CV40BER32275	**LNSER32M**	**ER32WM**	100	**SS094041G**	4mm & 5/32
CV40BER32600	**LNSER32M**	**ER32WM**	100	**SS094041G**	4mm & 5/32
CV40BER40300	**LNSER40M**	**ER40WM**	130	**SS112041G**	4mm & 5/32
CV40BER40600	**LNSER40M**	**ER40WM**	130	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.



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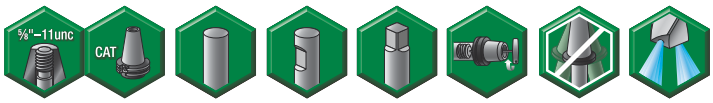

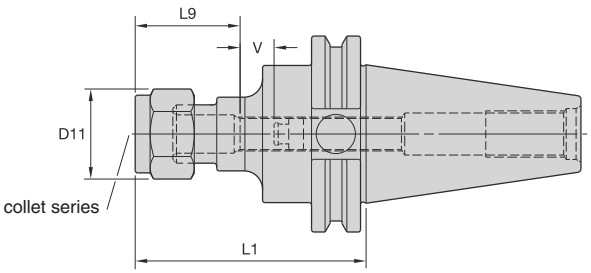

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DA collet series	Collet Capacity mm min	mm max	inch min	inch max
DA200	0,2	10	1/64	25/64
DA180	2,2	20	1/64	3/4

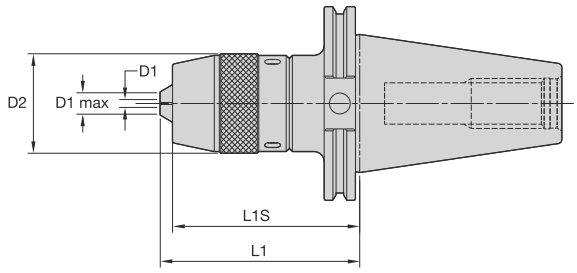
DA Hex-CV Form AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
1015515	**CV40DA208300**	DA200	1.15	3.00	1.62	1.38	2.41
1015305	**CV40DA208500**	DA200	1.15	5.00	1.62	3.38	3.05
1015304	**CV40DA188600**	DA180	1.73	6.00	1.94	3.94	3.60
1015596	**CV40DA188300**	DA180	1.73	3.00	1.94	.81	2.42

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
CV40DA208500	**NPA208**	**OEW100**	40	**SS044038G**	4mm & 5/32
CV40DA208300	**NPA208**	**OEW100**	40	**SS044038G**	4mm & 5/32
CV40DA188600	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32
CV40DA188300	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32

NOTE: For retention tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I62.
DA non-pullout collets, see page I65.



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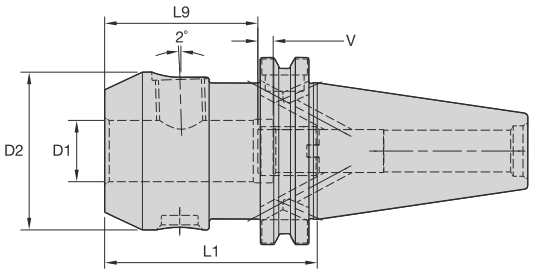
■ DC-CV Form A

		D1		D1 max						
order number	catalog number	mm	in	mm	in	D2	L1	L1S	wrench	lbs
2262967	**CV40DC13M421**	1,0	.039	13,0	.512	1.969	4.210	3.726	**HSW45M**	3.84

NOTE: Tighten to the recommended tightening torque.
Locking wrench not supplied.
For retention knobs, see page J33.



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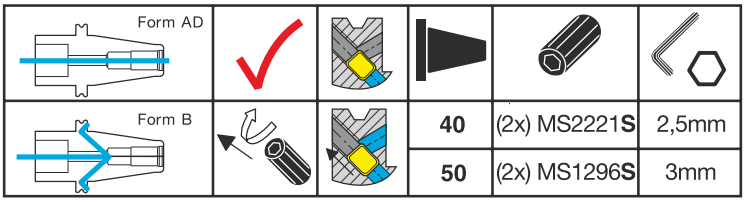
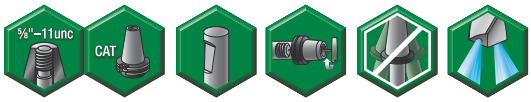
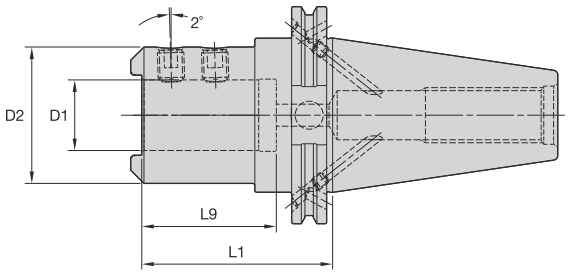
■ WN MM-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1549300	**CV40BWN06M244**	6	25	62	30	10	**SS03M012**	3mm	7	**571.060**	2,5mm	1,09
1549315	**CV40BWN08M244**	8	28	62	26	10	**SS03M014**	4mm	15	**571.067**	3mm	1,10
1549317	**CV40BWN10M244**	10	35	62	35	10	**SS03M018**	5mm	25	**571.068**	4mm	1,15
1549320	**CV40BWN12M260**	12	42	66	40	10	**SS03M023**	6mm	35	**571.074**	5mm	1,25
1549326	**CV40BWN14M260**	14	44	66	40	10	**SS03M023**	6mm	35	**571.074**	5mm	1,26
1549328	**CV40BWN16M275**	16	48	70	43	10	**SS03M025**	6mm	50	**571.075**	6mm	1,35
1549329	**CV40BWN18M275**	18	50	70	43	10	**SS03M025**	6mm	50	**571.075**	6mm	1,36
1549342	**CV40BWN20M275**	20	52	70	45	10	**SS03M026**	8mm	95	**571.076**	6mm	1,38
1549330	**CV40BWN25M375**	25	65	95	50	10	**SS03M027**	10mm	135	**571.077**	6mm	2,17
1549341	**CV40BWN32M388**	32	72	99	54	10	**SS03M029**	10mm	160	**571.076**	6mm	2,45

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw and stop screw wrenches not included.
For retention knobs, see page J33.







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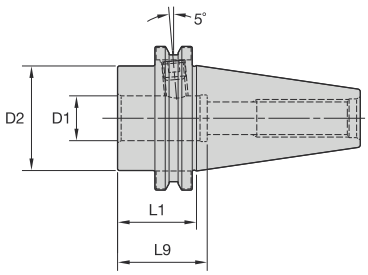
■ WD MM-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size clamp screw	Nm	kg
1749276	**CV40BWD32M343**	32	60	87	63	**SS03M023**	6mm	–	1,74

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrenches not included.
For retention knobs, see page J33.



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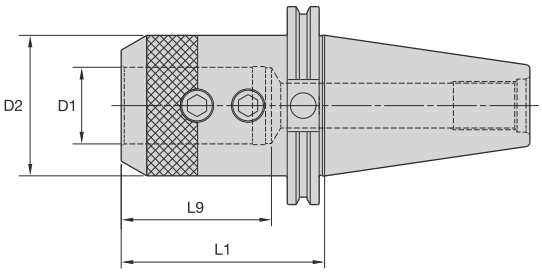
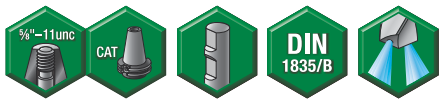
■ SWN IN-CV Form AD (Tap Chuck Adapter)

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1018054	**CV40TA7137**	.75	1.75	1.38	1.50	**ELS038031PKG**	3/16	15	2.20
1017938	**CV40TA1137**	1.00	1.75	1.38	2.81	**ELS038031PKG**	3/16	15	1.79

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





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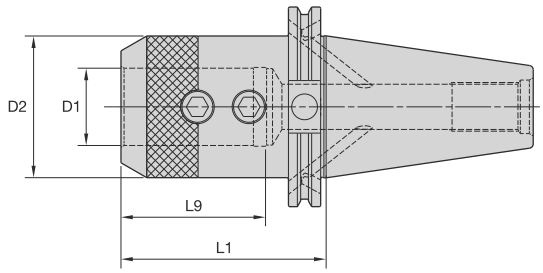
■ EM IN-CV Form AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1026404	CV40ZEM012138	1/8	.69	1.38	2.89	S1045PKG	3/32	3	1.79
1026405	CV40EM012450	1/8	.69	4.50	6.01	S1045PKG	3/32	3	2.41
1026406	CV40ZEM018138	3/16	.69	1.38	2.89	S1045PKG	3/32	3	1.79
1025921	CV40EM018250	3/16	.69	2.50	4.01	S1045PKG	3/32	3	2.22
1026407	CV40EM018450	3/16	.69	4.50	6.01	S1045PKG	3/32	3	2.41
1026408	CV40ZEM025138	1/4	.78	1.38	2.89	ELS025025PKG	1/8	5	1.82
1018427	CV40EM025250	1/4	1.00	2.50	4.01	ELS025025PKG	1/8	5	2.35
1026409	CV40EM025450	1/4	.78	4.50	6.01	ELS025025PKG	1/8	5	2.51
1026410	CV40ZEM031138	5/16	1.00	1.38	2.89	ELS031031PKG	5/32	11	1.85
1026411	CV40EM031450	5/16	1.00	4.50	6.01	ELS031031PKG	5/32	11	2.76
1026412	CV40ZEM038138	3/8	1.00	1.38	2.89	ELS038031PKG	3/16	15	1.85
1026338	CV40EM038250	3/8	1.00	2.50	4.01	ELS038031PKG	3/16	15	2.32
1013350	CV40EM038450	3/8	1.00	4.50	6.01	ELS038031PKG	3/16	15	2.69
1013351	CV40EM038650	3/8	1.00	6.50	8.01	ELS038031PKG	3/16	15	3.17
1013352	CV40ZEM044175	7/16	1.25	1.76	3.26	ELS044038PKG	7/32	20	2.00
1013353	CV40EM044450	7/16	1.25	4.50	6.01	ELS044038PKG	7/32	20	3.04
1026380	CV40ZEM050175	1/2	1.75	1.75	3.26	ELS044038PKG	7/32	20	2.27
1025922	CV40EM050262	1/2	1.38	2.62	4.13	ELS044038PKG	7/32	20	2.52
1013374	CV40EM050462	1/2	1.25	4.62	3.07	ELS044038PKG	7/32	20	3.06
1013375	CV40EM050662	1/2	1.25	6.62	8.13	ELS044038PKG	7/32	20	3.83
1026381	CV40ZEM062175	5/8	1.75	1.75	3.56	ELS056050PKG	1/4	40	2.19
1025923	CV40EM062375	5/8	1.50	3.75	3.56	DWG ELS056038	1/4	40	2.96
1013376	CV40EM062575	5/8	1.63	5.75	3.56	ELS056050PKG	1/4	40	4.21
1026382	CV40ZEM075175	3/4	1.75	1.75	2.40	ELS062050PKG	5/16	70	2.09
1025944	CV40EM075375	3/4	1.75	3.75	3.94	ELS062050PKG	5/16	70	3.21
1013377	CV40EM075575	3/4	1.75	5.75	3.94	ELS062050PKG	5/16	70	4.44
1013378	CV40ZEM088175	7/8	1.88	1.75	2.27	ELS062050PKG	5/16	70	2.13
1025945	CV40EM088400	7/8	2.00	4.00	4.19	ELS062050PKG	5/16	70	3.65
1013424	CV40EM088600	7/8	1.88	6.00	4.19	ELS062050PKG	5/16	70	4.86
1026383	CV40ZEM100175	1	1.75	1.75	2.64	DWG ELS075044	3/8	110	1.78
1025946	CV40EM100400	1	2.00	4.00	4.49	ELS075056PKG	3/8	110	3.39
1013425	CV40EM100600	1	2.00	6.00	4.49	ELS075056PKG	3/8	110	5.04
1013426	CV40ZEM125200	1 1/4	2.25	2.00	2.35	DWG ELS075050	3/8	110	2.25
1025947	CV40EM125425	1 1/4	2.50	4.25	2.39	ELS075062PKG	3/8	110	4.96
1013427	CV40EM125625	1 1/4	2.50	6.25	2.39	ELS075062PKG	3/8	110	7.47
1025986	CV40EM150462	1 1/2	2.75	4.63	2.82	ELS075069PKG	3/8	110	5.80
1013428	CV40EM150662	1 1/2	2.75	6.62	2.82	ELS075069PKG	3/8	110	8.76

NOTE: CV40 Z toolholders deviate from ANSI B5.50 standard. The 1.750" diameter in front of the V-flange has been eliminated to achieve short gage lengths.
Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



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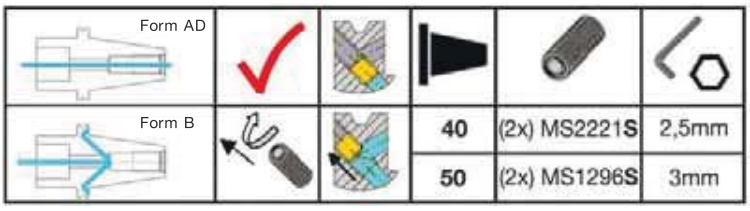
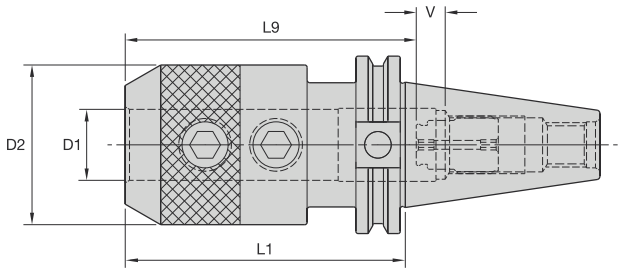
■ EM IN-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1261613	**CV40BEM050262**	1/2	1.38	2.62	4.13	**ELS044038PKG**	7/32	20	2.48
1261614	**CV40BEM062375**	5/8	1.50	3.75	3.56	**ELS056050PKG**	1/4	40	2.95
1261615	**CV40BEM075375**	3/4	1.75	3.75	3.94	**ELS062050PKG**	5/16	70	3.18
1261616	**CV40BEM100400**	1	2.00	4.00	4.49	**ELS075056PKG**	3/8	110	3.37
1261617	**CV40BEM125425**	1 1/4	2.50	4.25	2.39	**ELS075062PKG**	3/8	110	4.97

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





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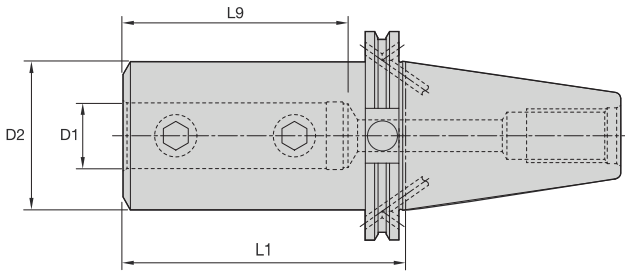
■ SS IN-CV Form AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	ft. lbs.	stop screw	wrench size stop screw	lbs
1018426	CV40SS100400	1	2.25	4.00	3.75	.63	ELS075062PKG	3/8	110	CSS081125	1/8	4.06

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screws and stop screw.
Lock screw and stop screw wrench not included.
For retention knobs, see page J33.



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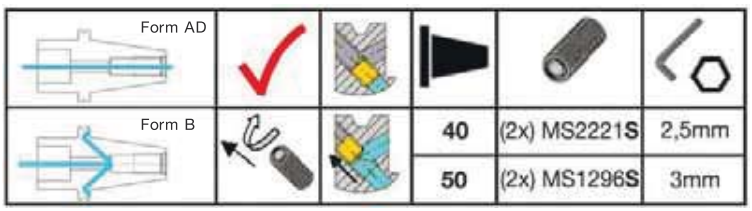
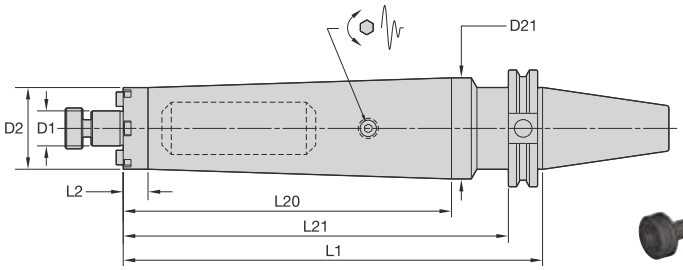
■ SSF IN-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1749368	CV40BSSF075275	3/4	1.75	2.75	2.25	ELS062050PKG	5/16	70	2.78
1749369	CV40BSSF100450	1	2.00	4.50	3.25	DWG ELS075050	3/8	110	4.12
1749370	CV40BSSF125475	1 1/4	2.50	4.75	3.50	ELS075056PKG	3/8	110	5.44
1749471	CV40BSSF150575	1 1/2	2.75	5.75	4.00	ELS075056PKG	3/8	110	7.01

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





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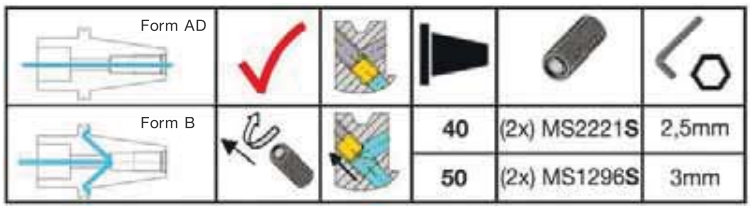
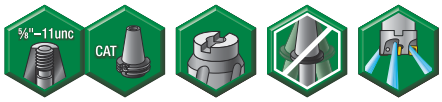
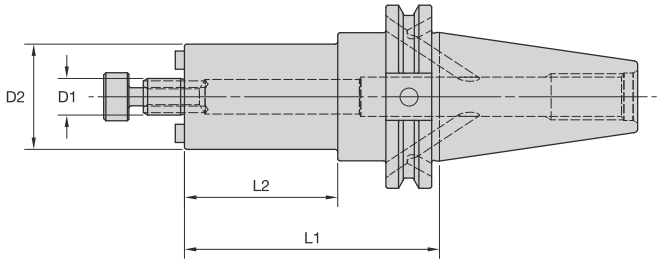
■ SMC TD Lock IN-CV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136187	**CV40BTDSMC0750900**	3/4	1.75	2.17	9.00	.53	7.03	8.25	**KLS07**	**KDK05**	1/4	8.34
4136188	**CV40BTDSMC1000900**	1	2.19	—	9.00	8.25	—	—	**KLS10**	**KDK06**	5/16	9.99

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.





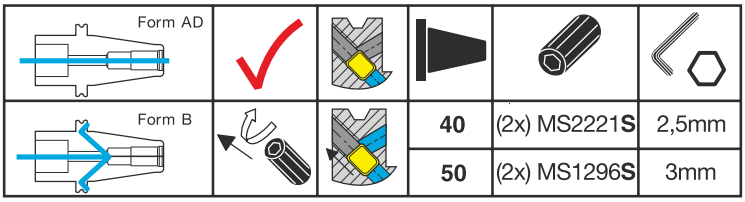


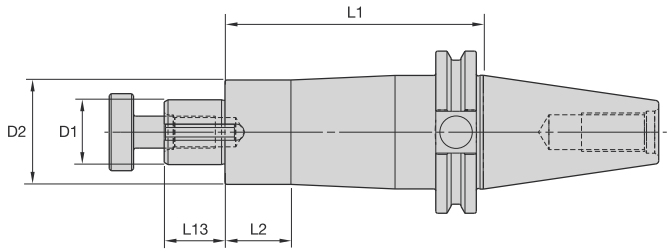
ERICKSON

■ SMC Lock IN-CV Form B/AD

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	lbs
3641491	**CV40BSM2C050350**	1/2	1.20	3.50	2.09	**KLS05**	**KDK04**	3/16	2.80
3641490	**CV40BSMC050350**	1/2	1.44	3.50	2.09	**KLS05**	**KDK04**	3/16	3.05
3641514	**CV40BSM2C075350**	3/4	1.46	3.50	2.09	**KLS07**	**–**	1/4	3.12
3641516	**CV40BSM2C075600**	3/4	1.46	6.00	5.25	**KLS07**	**–**	1/4	4.14
3641489	**CV40BSMC050138**	1/2	1.75	1.38	.63	**KLS05**	**KDK04**	3/16	2.18
3641492	**CV40BSMC075138**	3/4	1.75	1.38	.63	**KLS07**	**KDK05**	1/4	2.25
3641513	**CV40BSMC075350**	3/4	1.75	3.50	2.09	**KLS07**	**KDK05**	1/4	3.56
3641515	**CV40BSMC075600**	3/4	1.75	6.00	5.25	**KLS07**	**KDK05**	1/4	5.10
3641518	**CV40ZBSM2C100100**	1	2.19	1.00	.25	**KLS10**	**KDK06**	5/16	2.21
3641520	**CV40BSM2C100206**	1	2.19	2.06	1.31	**KLS10**	**KDK06**	5/16	2.98
3641522	**CV40BSM2C100400**	1	2.19	4.00	3.25	**KLS10**	**KDK06**	5/16	4.30
3641524	**CV40BSM2C100600**	1	2.19	6.00	5.25	**KLS10**	**KDK06**	5/16	5.59
3641517	**CV40ZBSMC100100**	1	2.75	1.00	.25	**KLS10**	**KDK06**	5/16	2.33
3641519	**CV40BSMC100206**	1	2.75	2.06	1.31	**KLS10**	**KDK06**	5/16	3.28
3641521	**CV40BSMC100400**	1	2.75	4.00	3.25	**KLS10**	**KDK06**	5/16	4.70
3641523	**CV40BSMC100600**	1	2.75	6.00	5.25	**KLS10**	**KDK06**	5/16	5.99
3641525	**CV40BSMC125212**	1 1/4	2.88	2.12	1.37	**KLS12**	**KDK08**	5/16	3.79
3641526	**CV40BSMC125400**	1 1/4	2.88	4.00	3.25	**KLS12**	**KDK08**	5/16	5.08
3641527	**CV40BSMC150241**	1 1/2	3.81	2.41	1.66	**KLS15**	**KDK10**	3/8	5.36
3641528	**CV40BSMC150400**	1 1/2	3.81	4.00	3.25	**KLS15**	**KDK10**	3/8	6.85

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.



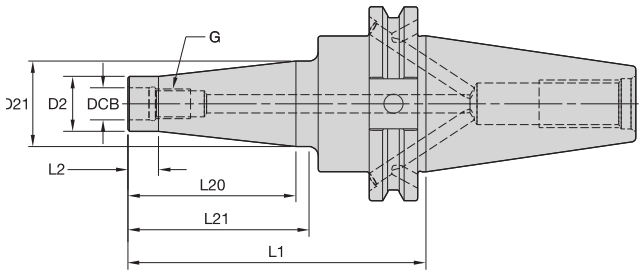


ERICKSON

■ SA IN-CV Form AD

order number	catalog number	D1	D2	L1	L13	L2	lock screw	wrench size lock screw	drive key	lbs
1261699	**CV40SA062400**	5/8	1.25	4.00	.78	2.63	**KLS07**	1/4	**DWG SDK062088**	3.10
1026215	**CV40SA100400**	1	1.61	4.00	.94	1.00	**KLS10**	5/16	**DWG SDK100106**	3.97
1026216	**CV40SA125400**	1 1/4	1.86	4.00	1.09	3.25	**KLS12**	5/16	**DWG SDK125119**	4.97

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For retention knobs, see page J33.

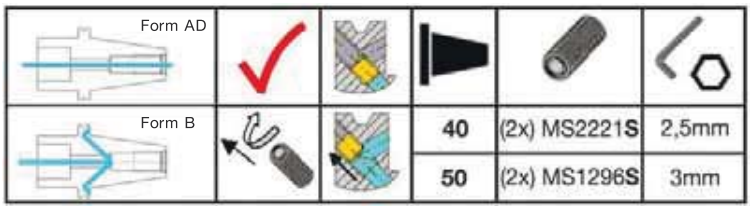


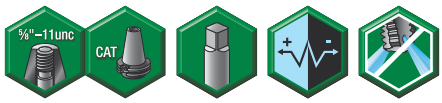
ERICKSON

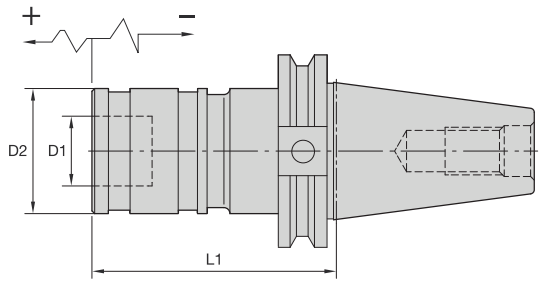
■ ST-CV Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L20	L21	kg
4073528	CV40BST06M228	6,5	M6	10	13	58	10	18	19	1,00
4073529	CV40BST06M386	6,5	M6	10	23	98	10	55	59	1,07
4073530	CV40BST08M228	8,5	M8	13	15	58	10	18	19	1,00
4073531	CV40BST08M386	8,5	M8	13	23	98	10	55	59	1,07
4073532	CV40BST10M228	10,5	M10	18	20	58	10	18	19	1,04
4073643	CV40BST10M386	10,5	M10	18	28	98	10	55	59	1,19
4073644	CV40BST12M228	12,5	M12	21	24	58	10	18	19	1,05
4073645	CV40BST12M386	12,5	M12	21	31	98	10	55	59	1,22
4073646	CV40BST16M228	17,0	M16	29	–	58	19	–	–	1,07
4073647	CV40BST16M386	17,0	M16	29	34	98	10	55	59	1,32

NOTE: For retention knobs, see page J33.





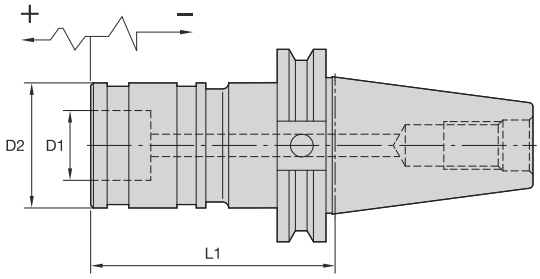


ERICKSON

RC-CV Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	tension	compression	kg
1615978	**CV40TCRC1297**	1	M1 - M14	#0 - 9/16	19	36	75	15,0	15,0	1,21
1615979	**CV40TCRC2393**	2	M5 - M24	5/16 - 7/8	31	53	98	25,0	25,0	1,62

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

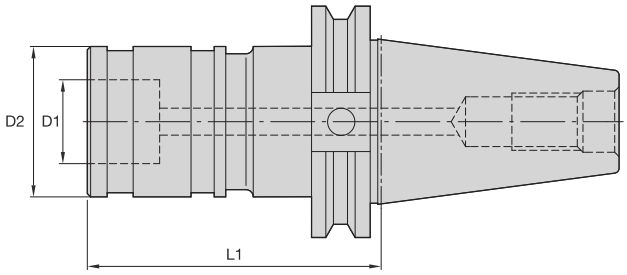


ERICKSON

RC Cool-CV Form AD

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	tension	compression	kg
1615986	**CV40CHTCRC1382**	1	M1 - M14	#0 - 9/16	19	36	97	15,0	15,0	1,41
1615987	**CV40CHTCRC2524**	2	M5 - M24	5/16 - 7/8	31	53	133	20,0	20,0	2,40

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

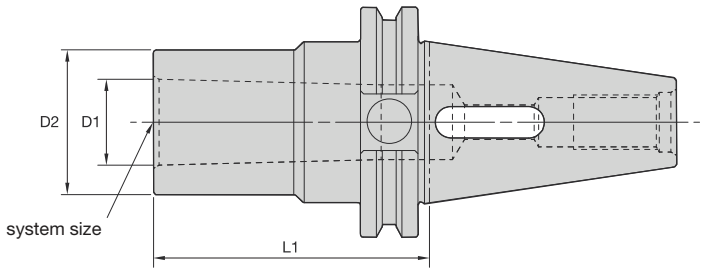


ERICKSON

STRC-CV Form AD

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	lbs
1615969	**CV40CSTRC1290**	1	M1 - M14	#0 - 9/16	.75	1.26	2.88	2.60
1615971	**CV40CSTRC2350**	2	M5 - M24	5/16 - 7/8	1.22	1.97	3.50	3.50

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.



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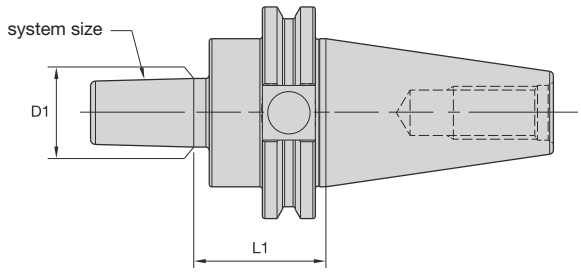
MT-CV Form A

order number	catalog number	system size	D1	D2	L1	lbs
1025948	**CV40MT1175**	1	.48	.98	1.75	2.21
1025949	**CV40MT2244**	2	.70	1.26	2.44	2.30
1025950	**CV40MT3300**	3	.94	1.57	3.00	2.49
1025987	**CV40MT4388**	4	1.23	1.89	3.88	2.86

NOTE: For retention knobs, see page J33.

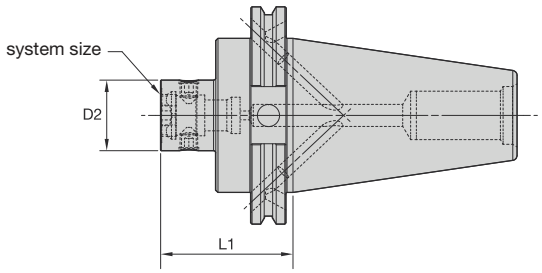


ERICKSON

■ JT-CV Form A

order number	catalog number	system size	D1	L1	lbs
1025951	**CV40JT2244**	2	.56	1.57	2.33
1025953	**CV40JT3278**	3	.81	1.56	2.45
1025952	**CV40JT33256**	33	.62	1.56	2.32

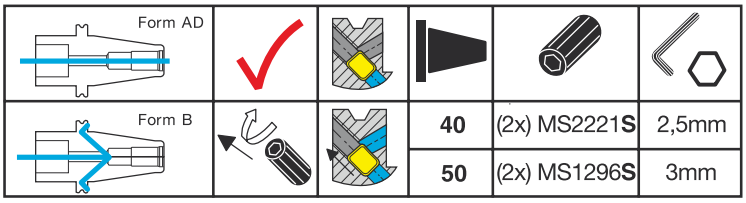
NOTE: For retention knobs, see page J33.

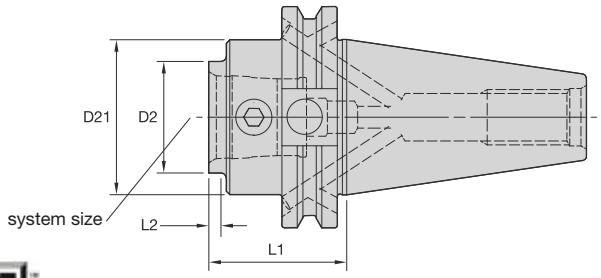


■ RFX-CV Form B/AD

order number	catalog number	system size	D2	L1	wrench size clamp screw	Nm	kg
3860896	**CV40BRFX185236**	RFX185	18,5	60	3mm	6	1,10
3860897	**CV40BRFX245236**	RFX245	24,5	60	3mm	8	1,10
3860898	**CV40BRFX320236**	RFX320	32,0	60	4mm	14	1,10
3860899	**CV40BRFX420236**	RFX420	42,0	60	5mm	16	1,10
3860900	**CV40BRFX550256**	RFX550	55,0	65	6mm	20	1,20

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.





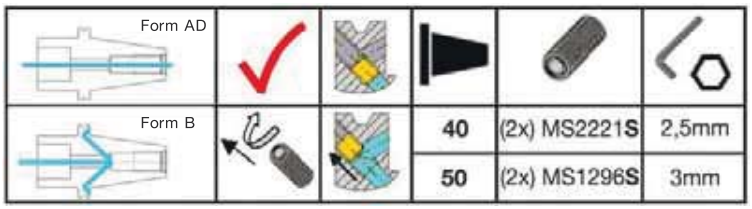
KM QUICK CHANGE

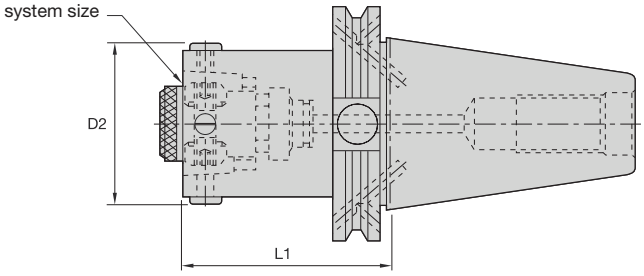
ERICKSON

KM-CV Form B/AD

order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	ft. lbs.	lbs
2992433	**CV40BKM32157**	KM32	1.26	1.75	1.58	.37	**KM32PKG3L**	5mm	6	2.15
2992434	**CV40BKM32354**	KM32	1.26	1.75	3.54	2.14	**KM32PKG3S**	5mm	6	2.77
2992435	**CV40BKM40157**	KM40	1.58	1.75	1.58	.18	**KM40PKG3L**	6mm	9	2.12
2992436	**CV40BKM40394**	KM40	1.58	1.75	3.94	2.56	**KM40PKG3S**	6mm	9	3.29
2992437	**CV40BKM50354**	KM50	1.97	—	3.54	2.79	**KM50PKG3S**	10mm	20	3.51
2992438	**CV40BKM50472**	KM50	1.97	—	4.72	3.97	**KM50PKG3S**	10mm	20	4.23

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.



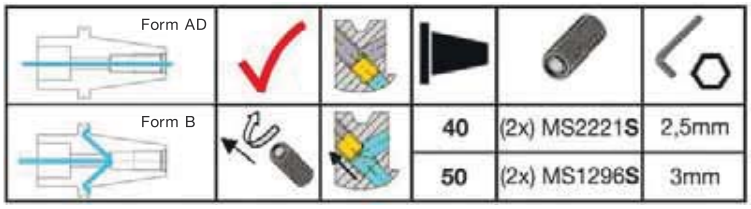


ERICKSON

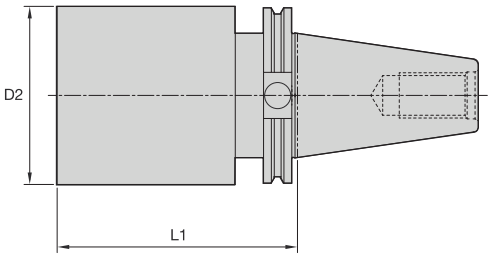
HSK-CV Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	ft. lbs.	lbs
1533057	**CV40BHSK63295**	HSK63	2.76	2.95	5mm	15	2.65

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.



• Machinable front 20–30 HRC.



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BB-CV Form A

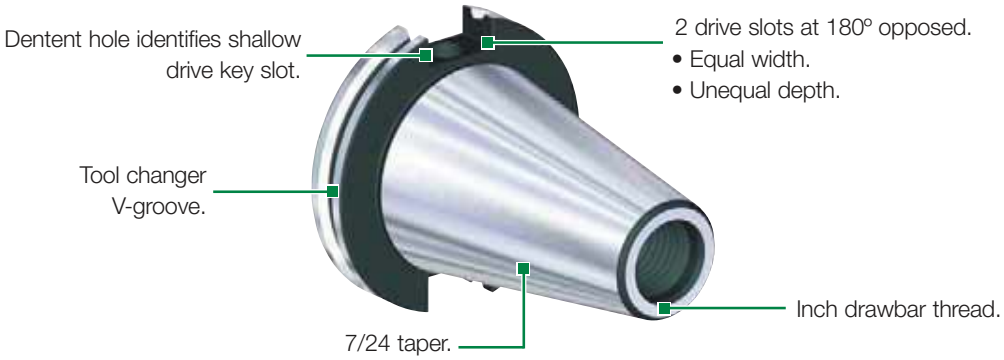
order number	catalog number	D2	L1	lbs
1020634	**CV40BB400120**	4.00	12.00	39.89
1020563	**CV40BB400600**	4.00	6.00	18.55

NOTE: For retention knob, see page J33.

Erickson™ CAT V-Flange Shank Tooling System • **CV50 Series**

Erickson V-Flange CAT Taper Tooling is manufactured from premium materials and meets or exceeds the latest ANSI B5.50 and ISO-1947 taper accuracy of AT3 specification standards. CV50 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 12,000 RPM.

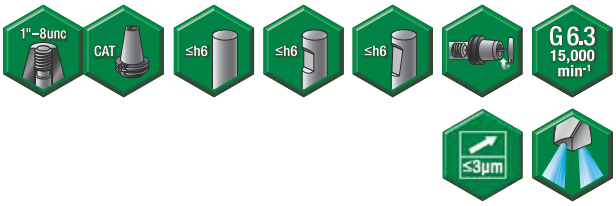
CAT50(CV)

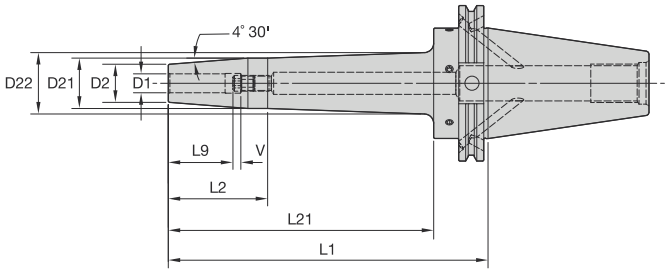


For any applications higher than 12,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

- ANSI B5.50 7/24 taper.
- Standard 1-8 drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 12,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3683508	CV50BHPVTT06M350	6	21	27	—	89	54	—	26	10	TTSS05014M	2,5mm	3,13
3683509	CV50BHPVTT06M800	6	21	27	35	203	50	168	26	10	TTSS05014M	2,5mm	3,74
3683510	CV50BHPVTT08M350	8	21	27	—	89	54	—	26	10	TTSS06014M	3mm	3,12
3683511	CV50BHPVTT08M800	8	21	27	35	203	50	168	26	10	TTSS06014M	3mm	3,73
3683512	CV50BHPVTT10M375	10	24	32	—	95	60	—	31	10	TTSS08014M	4mm	3,21
3683513	CV50BHPVTT10M800	10	24	32	39	203	63	168	31	10	TTSS08014M	4mm	3,98
3615227	CV50BHPVTT12M375	12	24	32	—	95	60	—	36	10	TTSS10014M	5mm	3,17
3615228	CV50BHPVTT12M800	12	24	32	39	203	63	168	36	10	TTSS10014M	5mm	3,88
3615229	CV50BHPVTT14M375	14	27	34	—	95	60	—	36	10	TTSS10014M	5mm	3,22
3615230	CV50BHPVTT14M800	14	27	34	41	203	63	168	36	10	TTSS10014M	5mm	3,98
3615231	CV50BHPVTT16M375	16	27	34	—	95	60	—	39	10	TTSS12014M	6mm	3,19
3615232	CV50BHPVTT16M800	16	27	34	41	203	63	168	39	10	TTSS12014M	6mm	3,96
3615233	CV50BHPVTT18M400	18	33	42	—	102	67	—	39	10	TTSS12014M	6mm	3,40
3615234	CV50BHPVTT18M800	18	33	42	49	203	70	168	39	10	TTSS12014M	6mm	4,52
3615235	CV50BHPVTT20M400	20	33	42	—	102	67	—	41	10	TTSS16014M	8mm	3,36
3615236	CV50BHPVTT20M800	20	33	42	49	203	70	168	41	10	TTSS16014M	8mm	4,44
3615237	CV50BHPVTT25M400	25	44	53	—	102	67	—	47	10	TTSS16014M	8mm	3,67
3615238	CV50BHPVTT25M800	25	44	53	60	203	70	168	47	10	TTSS16014M	8mm	5,44
3615239	CV50BHPVTT32M400	32	44	53	—	102	67	—	51	10	TTSS16014M	8mm	3,51
3615240	CV50BHPVTT32M800	32	44	53	60	203	70	168	51	10	TTSS16014M	8mm	5,28

(continued)

(TT GP HPV continued)

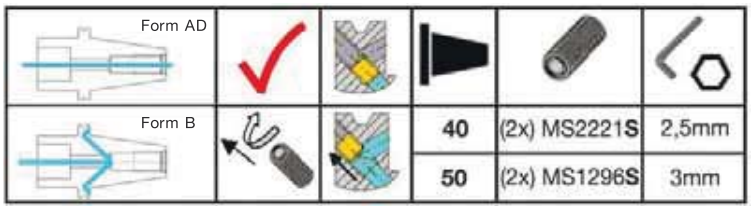
Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-.0005

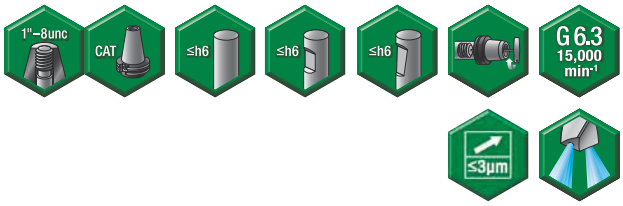
TT GP HPV IN-CV Form B/AD

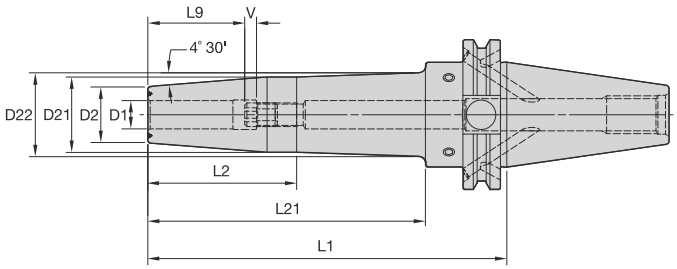
order number	catalog number	D1	D2	D21	L1	D22	L2	L9	L21	V	stop screw	wrench size stop screw	lbs
3683498	CV50BHPVTT025350	1/4	.83	1.06	3.50	—	2.13	1.02	—	.39	TTSS05014M	2,5mm	6.89
3683499	CV50BHPVTT025800	1/4	.83	1.06	8.00	1.38	1.97	1.02	6.63	.39	TTSS05014M	2,5mm	8.25
3683500	CV50BHPVTT031350	5/16	.83	1.06	3.50	—	2.13	1.02	—	.39	TTSS06014M	3mm	6.88
3683501	CV50BHPVTT031800	5/16	.83	1.06	8.00	1.38	1.97	1.02	6.63	.39	TTSS06014M	3mm	8.23
3683502	CV50BHPVTT038375	3/8	.95	1.26	3.75	—	2.38	1.22	—	.39	TTSS08014M	4mm	7.07
3683503	CV50BHPVTT038800	3/8	.95	1.26	8.00	1.55	2.48	1.22	6.63	.39	TTSS08014M	4mm	8.77
3683504	CV50BHPVTT044375	7/16	.95	1.26	3.75	—	2.38	1.42	—	.39	TTSS10014M	5mm	7.04
3683505	CV50BHPVTT044800	7/16	.95	1.26	8.00	1.55	2.48	1.42	6.63	.39	TTSS10014M	5mm	8.75
3615189	CV50BHPVTT050375	1/2	.95	1.26	3.75	—	2.38	1.42	—	.39	TTSS10014M	5mm	6.95
3615190	CV50BHPVTT050800	1/2	.95	1.26	8.00	1.55	2.48	1.42	6.63	.39	TTSS10014M	5mm	8.52
3615191	CV50BHPVTT056375	9/16	1.06	1.34	3.75	—	2.38	1.42	—	.39	TTSS10014M	5mm	7.06
3615192	CV50BHPVTT062375	5/8	1.06	1.34	3.75	—	2.38	1.54	—	.39	TTSS12014M	6mm	7.01
3615193	CV50BHPVTT062800	5/8	1.06	1.34	8.00	1.62	2.48	1.54	6.63	.39	TTSS12014M	6mm	8.72
3615194	CV50BHPVTT068400	11/16	1.30	1.65	4.00	—	2.63	1.54	—	.39	TTSS12014M	6mm	7.48
3615195	CV50BHPVTT075400	3/4	1.30	1.65	4.00	—	2.63	1.61	—	.39	TTSS16014M	8mm	7.41
3615196	CV50BHPVTT075800	3/4	1.30	1.65	8.00	1.92	2.76	1.61	6.63	.39	TTSS16014M	8mm	9.80
3615197	CV50BHPVTT088400	7/8	1.30	1.65	4.00	—	2.63	1.61	—	.39	TTSS16014M	8mm	7.32
3615198	CV50BHPVTT088800	7/8	1.30	1.65	8.00	1.92	2.76	1.61	6.63	.39	TTSS16014M	8mm	9.71
3615199	CV50BHPVTT100400	1	1.73	2.08	4.00	—	2.63	1.85	—	.39	TTSS16014M	8mm	8.05
3615200	CV50BHPVTT100800	1	1.73	2.08	8.00	2.35	2.76	1.85	6.63	.39	TTSS16014M	8mm	11.97
3615201	CV50BHPVTT125400	1 1/4	1.73	2.08	4.00	—	2.63	2.01	—	.39	TTSS16014M	8mm	7.74
3615202	CV50BHPVTT125800	1 1/4	1.73	2.08	8.00	2.35	2.76	2.01	6.63	.39	TTSS16014M	8mm	11.65
3683506	CV50BHPVTT150450	1 1/2	2.36	2.75	4.50	—	3.75	2.01	—	.39	TTSS20014M	10mm	9.81
3683507	CV50BHPVTT200450	2	2.72	3.11	4.50	—	3.75	2.20	—	.39	TTSS20014M	10mm	10.07

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16 & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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■ TT HT HPV MM-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3618044	CV50BHPVTTHT12M375	12	24	32	–	95	60	–	36	10	TTSS10014M	5mm	3,17
3618045	CV50BHPVTTHT12M800	12	24	32	39	203	63	168	36	10	TTSS10014M	5mm	3,88
3618046	CV50BHPVTTHT14M375	14	27	34	–	95	60	–	36	10	TTSS10014M	5mm	3,21
3618047	CV50BHPVTTHT14M800	14	27	34	41	203	63	168	36	10	TTSS10014M	5mm	3,98
3618048	CV50BHPVTTHT16M375	16	27	34	–	95	60	–	39	10	TTSS12014M	6mm	3,19
3618049	CV50BHPVTTHT16M800	16	27	34	41	203	63	168	39	10	TTSS12014M	6mm	3,96
3618050	CV50BHPVTTHT18M400	18	33	42	–	102	67	–	39	10	TTSS12014M	6mm	3,40
3618051	CV50BHPVTTHT18M800	18	33	42	49	203	70	168	39	10	TTSS12014M	6mm	4,52
3618052	CV50BHPVTTHT20M400	20	33	42	–	102	67	–	41	10	TTSS16014M	8mm	3,36
3618053	CV50BHPVTTHT20M800	20	33	42	49	203	70	168	41	10	TTSS16014M	8mm	4,44
3618054	CV50BHPVTTHT25M400	25	44	53	–	102	67	–	47	10	TTSS16014M	8mm	3,67
3618055	CV50BHPVTTHT25M800	25	44	53	60	203	70	168	47	10	TTSS16014M	8mm	5,44
3618056	CV50BHPVTTHT32M400	32	44	53	–	102	67	–	51	10	TTSS16014M	8mm	3,51
3618057	CV50BHPVTTHT32M800	32	44	53	60	203	70	168	51	10	TTSS16014M	8mm	5,28

(continued)

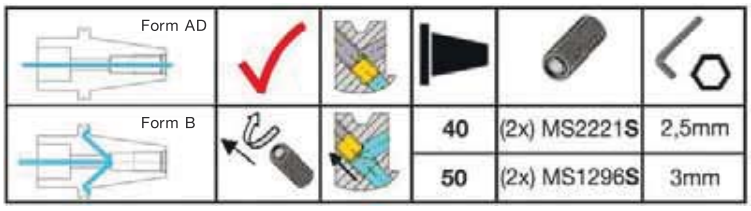
(TT HT HPV continued)

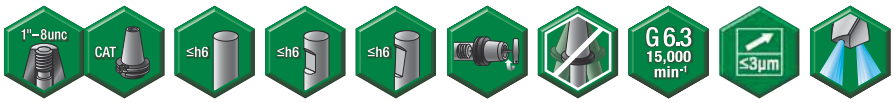
Cutting Tool Shank Requirements inch (industry standard)	
cutting tool shank diameters	**tolerance**
1/2, 9/16, 5/8 & 11/16	.0000/-.0004
3/4, 7/8, 1 & 1-1/4	.0000/-.0005

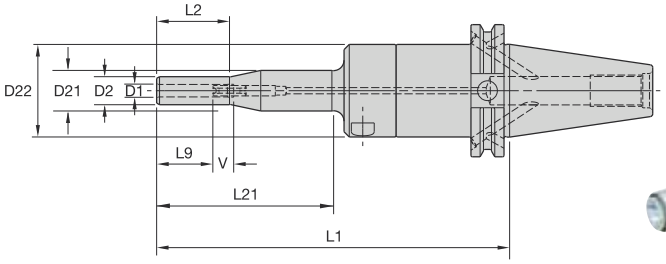
TT HT HPV IN-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw	lbs
3618016	**CV50BHPVTTHT050375**	1/2	.95	1.26	—	3.75	2.38	1.42	—	.39	**TTSS10014M**	5mm	6.95
3618017	**CV50BHPVTTHT050800**	1/2	.95	1.26	1.55	8.00	2.48	1.42	6.63	.39	**TTSS10014M**	5mm	8.52
3618018	**CV50BHPVTTHT056375**	9/16	1.06	1.34	—	3.75	2.38	1.42	—	.39	**TTSS10014M**	5mm	7.06
3618019	**CV50BHPVTTHT062375**	5/8	1.06	1.34	—	3.75	2.38	1.54	—	.39	**TTSS12014M**	6mm	7.01
3618020	**CV50BHPVTTHT062800**	5/8	1.06	1.34	1.62	8.00	2.48	1.54	6.63	.39	**TTSS12014M**	6mm	8.72
3618021	**CV50BHPVTTHT068400**	11/16	1.30	1.65	—	4.00	2.63	1.54	—	.39	**TTSS12014M**	6mm	7.48
3618022	**CV50BHPVTTHT075400**	3/4	1.30	1.65	—	4.00	2.63	1.61	—	.39	**TTSS16014M**	8mm	7.41
3618023	**CV50BHPVTTHT075800**	3/4	1.30	1.65	1.92	8.00	2.76	1.61	6.63	.39	**TTSS16014M**	8mm	9.80
3618024	**CV50BHPVTTHT088400**	7/8	1.30	1.65	—	4.00	2.63	1.61	—	.39	**TTSS16014M**	8mm	7.32
3618025	**CV50BHPVTTHT088800**	7/8	1.30	1.65	1.92	8.00	2.76	1.61	6.63	.39	**TTSS16014M**	8mm	9.72
3618026	**CV50BHPVTTHT100400**	1	1.73	2.08	—	4.00	2.63	1.85	—	.39	**TTSS16014M**	8mm	8.05
3618027	**CV50BHPVTTHT100800**	1	1.73	2.08	2.35	8.00	2.76	1.85	6.63	.39	**TTSS16014M**	8mm	11.97
3618028	**CV50BHPVTTHT125400**	1 1/4	1.73	2.08	—	4.00	2.63	2.01	—	.39	**TTSS16014M**	8mm	7.74
3618029	**CV50BHPVTTHT125800**	1 1/4	1.73	2.08	2.35	8.00	2.76	2.01	6.63	.39	**TTSS16014M**	8mm	11.65

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.







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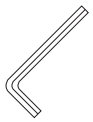
HC Slim T MM-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3019251	CV50BHCSLT06M787	6	13,5	19,5	44	200	35	27	85	10	4,17
3019252	CV50BHCSLT08M787	8	15,5	19,5	44	200	35	27	85	10	4,18
3019253	CV50BHCSLT10M787	10	17,5	44,5	70	200	85	31	141	10	4,17

Spare Parts

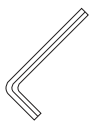


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV50BHCSLT06M787	170.135	5mm	170.002	2,5mm
CV50BHCSLT08M787	170.135	5mm	170.002	2,5mm
CV50BHCSLT10M787	170.135	5mm	170.003	3mm

HC Slim T IN-CV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	V	lbs
3019260	CV50BHCSLT025787	.25	.54	.77	1.75	7.87	1.38	1.06	.39	9.22
3019261	CV50BHCSLT038787	.38	.69	1.75	2.75	7.87	3.35	1.22	.39	9.19

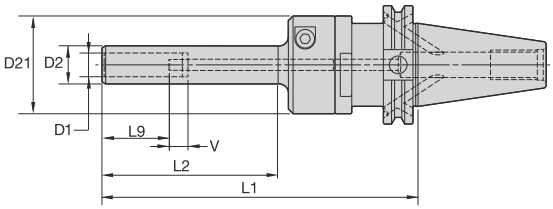
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV50BHCSLT025787	170.135	5mm	170.002	2,5mm
CV50BHCSLT038787	170.135	5mm	170.003	3mm

(continued)

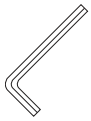
(HC Slim continued)



HC Slim MM-CV Form B/AD

order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2508155	CV50BHCSL12M787	12	19,5	44,5	200	95	36	10	3,91
3019254	CV50BHCSL14M787	14	21,5	52,5	200	95	36	10	4,25
3019255	CV50BHCSL16M787	16	23,5	52,5	200	95	39	10	4,27
3019256	CV50BHCSL18M787	18	25,5	52,5	200	95	39	10	4,31
2508156	CV50BHCSL20M787	20	27,5	52,5	200	95	41	10	4,32

Spare Parts

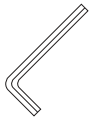


catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV50BHCSL12M787	170.135	5mm	170.002	2,5mm
CV50BHCSL14M787	170.135	5mm	170.002	2,5mm
CV50BHCSL16M787	170.135	5mm	170.002	2,5mm
CV50BHCSL18M787	170.135	5mm	170.002	2,5mm
CV50BHCSL20M787	170.135	5mm	170.002	2,5mm

HC Slim IN-CV Form B/AD

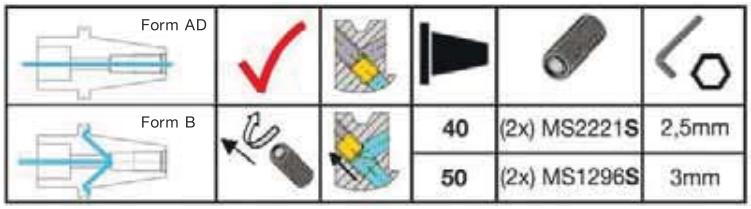
order number	catalog number	D1	D2	D21	L1	L2	L9	V	lbs
2508157	CV50BHCSL050787	.50	.81	2.07	7.87	3.74	1.42	.39	9.28
3019262	CV50BHCSL062787	.63	.93	2.07	7.87	3.74	1.54	.39	9.41
2508158	CV50BHCSL075787	.75	1.06	2.07	7.87	3.74	1.61	.39	9.52

Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
CV50BHCSL050787	170.135	5mm	170.002	2,5mm
CV50BHCSL062787	170.135	5mm	170.002	2,5mm
CV50BHCSL075787	170.135	5mm	170.002	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw and actuation wrench.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.



WIDIA™ Victory™ TOP DRILL M1™

The TOP DRILL M1 modular drills offer quality and performance in one versatile, economical package.

Choose the Victory TOP DRILL M1 for:

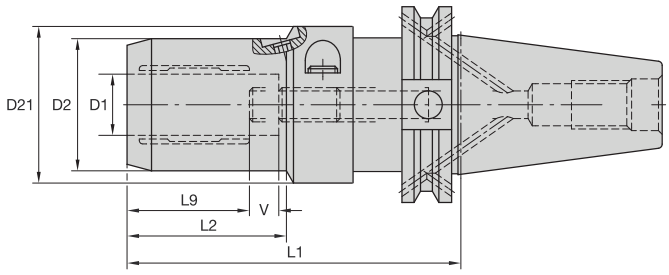
Performance — Hole quality and metal removal rates comparable to solid carbide drills and superior to traditional indexable style drills.

Convenience — Insert is easy to change from the front without any small screws, clamps, or need to remove from the machine.

Reliability — Replaceable tip design ensures consistent performance without the issues and logistics associated with reconditioning.

NEW!

New Inch SCF shank line. Covers .315–1.023" with only four shank sizes (1/2", 5/8", 3/4", and 1").



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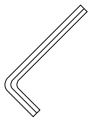
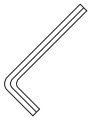
HC MM-CV Form B/AD



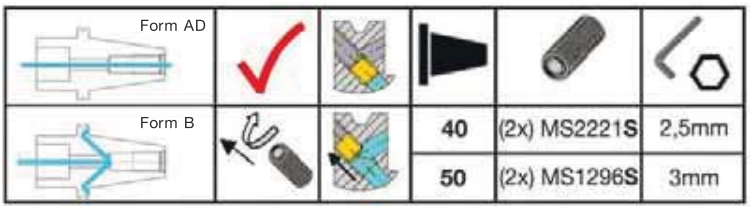
order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
2079529	CV50BHC06M350	6	25,7	63	89	33	27	10	170.135	5mm	170.002	2,5mm	3,44
2079530	CV50BHC08M350	8	27,7	63	89	33	27	10	170.135	5mm	170.002	2,5mm	3,46
2079531	CV50BHC10M375	10	29,7	63	95	37	31	10	170.135	5mm	170.002	2,5mm	3,54
2079532	CV50BHC12M375	12	31,6	63	95	40	36	10	170.135	5mm	170.002	2,5mm	3,52
2079563	CV50BHC14M400	14	33,6	63	102	46	41	10	170.135	5mm	170.003	3mm	3,56
2079564	CV50BHC16M400	16	37,6	63	102	47	41	10	170.135	5mm	170.003	3mm	3,62
2079565	CV50BHC18M400	18	39,6	63	102	47	41	10	170.135	5mm	170.003	3mm	3,64
2079566	CV50BHC20M400	20	41,6	63	102	48	41	10	170.135	5mm	170.003	3mm	3,67
1605226	CV50BHC25M462	25	49,9	63	117	51	51	10	170.136	6mm	170.004	4mm	4,10
1605227	CV50BHC32M462	32	59,9	63	117	59	51	10	170.136	6mm	170.004	4mm	4,29

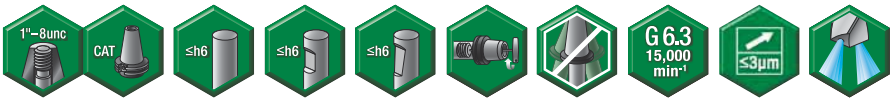
HC IN-CV Form B/AD

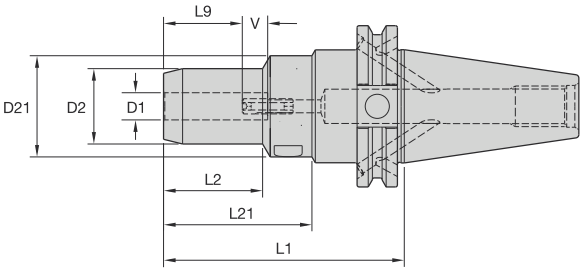


order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
2079524	CV50BHC025350	1/4	1.01	2.48	3.50	1.30	1.06	.39	170.135	5mm	170.002	2,5mm	7.59
2079525	CV50BHC038375	3/8	1.17	2.48	3.75	1.46	1.22	.39	170.135	5mm	170.002	2,5mm	7.83
2079526	CV50BHC050375	1/2	1.24	2.48	3.75	1.57	1.42	.39	170.135	5mm	170.002	2,5mm	7.74
2079527	CV50BHC062400	5/8	1.48	2.48	4.00	1.83	1.54	.39	170.135	5mm	170.003	3mm	8.00
2079528	CV50BHC075400	3/4	1.64	2.48	4.00	1.89	1.61	.39	170.135	5mm	170.003	3mm	8.11
1605143	CV50BHC100462	1	1.96	2.48	4.63	2.01	1.81	.39	170.136	6mm	170.004	4mm	9.06
1605144	CV50BHC125462	1 1/4	2.36	2.48	4.63	2.32	1.97	.39	170.136	6mm	170.004	4mm	9.50

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.







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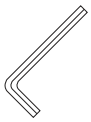
HC Trend MM-CV Form B/AD

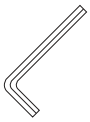


order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
2977690	**CV50BHCT06M350**	6	25,7	63	89	33	53	27	10	**170.135**	6mm	**170.003**	3mm	3,48
2452778	**CV50BHCT06M600**	6	25,7	63	152	100	117	27	10	**170.135**	5mm	**170.003**	3mm	3,68
2977691	**CV50BHCT08M350**	8	27,7	63	89	33	53	27	10	**170.135**	5mm	**170.003**	3mm	3,55
2452779	**CV50BHCT08M600**	8	27,7	63	152	100	117	27	10	**170.135**	5mm	**170.003**	3mm	3,73
2977692	**CV50BHCT10M375**	10	29,7	63	95	37	59	31	10	**170.135**	5mm	**170.003**	3mm	3,58
2452780	**CV50BHCT10M600**	10	29,7	63	152	100	117	31	10	**170.135**	5mm	**170.003**	3mm	3,80
2977693	**CV50BHCT12M375**	12	31,6	63	95	40	59	36	10	**170.135**	5mm	**170.003**	3mm	3,56
2452781	**CV50BHCT12M600**	12	31,6	63	152	100	117	36	10	**170.135**	5mm	**170.005**	5mm	3,85
2977694	**CV50BHCT14M400**	14	33,6	63	102	46	66	41	10	**170.135**	5mm	**170.005**	5mm	3,60
2452782	**CV50BHCT14M600**	14	33,6	63	152	100	117	36	10	**170.135**	5mm	**170.005**	5mm	3,92
2977695	**CV50BHCT16M400**	16	37,6	63	102	47	66	41	10	**170.135**	5mm	**170.005**	5mm	3,67
2453233	**CV50BHCT16M600**	16	37,6	63	152	100	117	39	10	**170.135**	5mm	**170.005**	5mm	4,08
2977696	**CV50BHCT18M400**	18	39,6	63	102	47	66	41	10	**170.135**	5mm	**170.005**	5mm	3,70
2453234	**CV50BHCT18M600**	18	39,6	63	152	100	117	39	10	**170.135**	5mm	**170.005**	5mm	4,15
2977697	**CV50BHCT20M400**	20	41,6	63	102	48	66	41	10	**170.135**	5mm	**170.005**	5mm	3,71
2453235	**CV50BHCT20M600**	20	41,6	63	152	100	117	41	10	**170.135**	5mm	**170.005**	5mm	4,23
2977698	**CV50BHCT25M462**	25	49,9	63	117	51	81	51	10	**170.136**	6mm	**170.005**	5mm	4,15
2977699	**CV50BHCT32M462**	32	59,9	63	117	59	81	51	10	**170.136**	6mm	**170.005**	5mm	4,33

(continued)

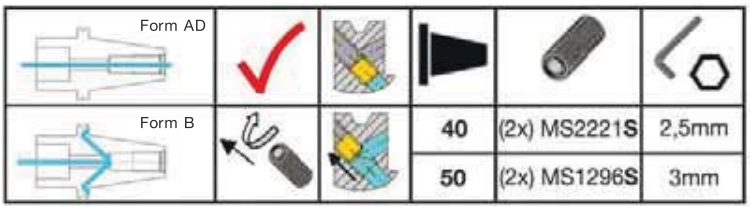
(HC Trend continued)

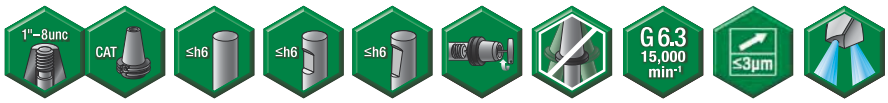
HC Trend IN-CV Form B/AD

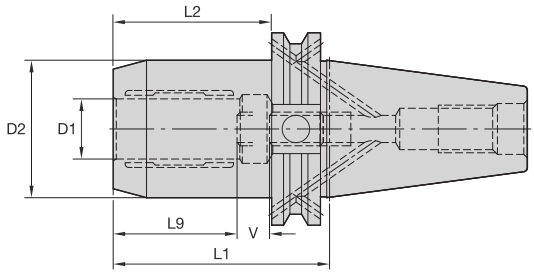


order number	catalog number	D1	D2	D21	L1	L2	L21	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
2977683	**CV50BHCT025350**	1/4	1.01	2.47	3.50	1.30	2.08	1.06	.39	**170.135**	5mm	**170.003**	3mm	7.67
2452210	**CV50BHCT025600**	1/4	1.01	2.47	6.00	3.94	4.59	1.06	.39	**170.135**	5mm	**170.003**	3mm	8.10
2977684	**CV50BHCT038375**	3/8	1.17	2.47	3.75	1.46	2.33	1.22	.39	**170.135**	5mm	**170.003**	3mm	7.89
2452774	**CV50BHCT038600**	3/8	1.17	2.47	6.00	3.94	4.59	1.22	.39	**170.135**	5mm	**170.003**	3mm	8.36
2977685	**CV50BHCT050375**	1/2	1.24	2.47	3.75	1.57	2.33	1.42	.39	**170.135**	5mm	**170.003**	3mm	7.83
2452775	**CV50BHCT050600**	1/2	1.24	2.47	6.00	3.94	4.59	1.42	.39	**170.135**	5mm	**170.005**	5mm	8.47
2977686	**CV50BHCT062400**	5/8	1.48	2.47	4.00	1.83	2.58	1.54	.39	**170.135**	5mm	**170.005**	5mm	8.09
2452776	**CV50BHCT062600**	5/8	1.48	2.47	6.00	3.94	4.59	1.54	.39	**170.135**	5mm	**170.005**	5mm	8.98
2977687	**CV50BHCT075400**	3/4	1.64	2.47	4.00	1.89	2.58	1.61	.39	**170.135**	5mm	**170.005**	5mm	8.20
2452777	**CV50BHCT075600**	3/4	1.64	2.47	6.00	3.94	4.59	1.61	.39	**170.135**	5mm	**170.005**	5mm	9.33
2977688	**CV50BHCT100462**	1	1.96	2.47	4.63	2.01	3.21	1.81	.39	**170.136**	6mm	**170.005**	5mm	9.17
2977689	**CV50BHCT125462**	1 1/4	2.35	2.47	4.63	2.32	3.21	1.97	.39	**170.136**	6mm	**170.005**	5mm	9.57

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.







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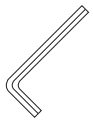
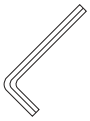
HC Basic MM-CV Form B/AD



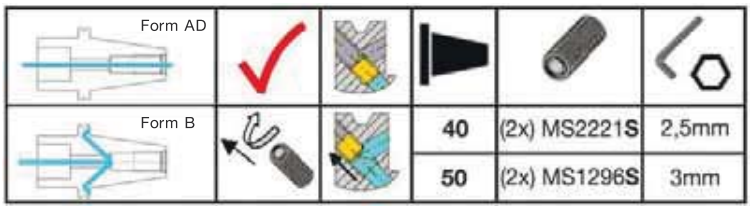
order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	kg
2001977	**CV50BHCB20M400**	20	62,9	102	65	41	10	**170.135**	5 mm	**170.005**	5 mm	4,38

HC Basic IN-CV Form B/AD

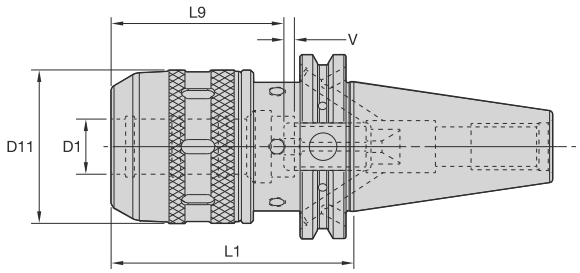


order number	catalog number	D1	D2	L1	L2	L9	V	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw	lbs
2001978	**CV50BHCB075400**	3/4	2.47	4.00	2.56	1.61	.39	**170.135**	5 mm	**170.005**	5 mm	9.68

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.



- Heavy- and fine-milling capabilities.
- Balancable — fine tune with optional M6 set screws.



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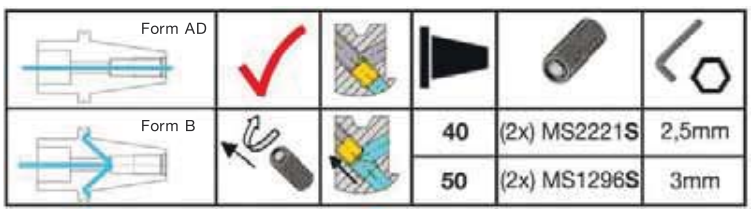
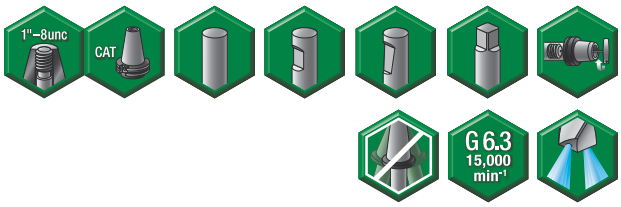
HPMC IN-CV Form B/AD

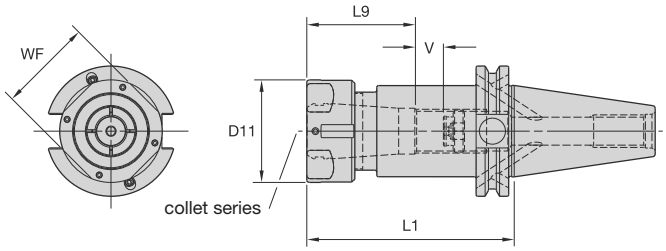
order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	lbs
3100403	CV50BHPMC075354	3/4	2.09	3.54	1.93	.79	PSW52M	MCSS16040M	2,5mm & 5mm	8.10
3100404	CV50BHPMC075650	3/4	2.09	6.50	1.93	.79	PSW52M	MCSS16040M	2,5mm & 5mm	10.50
3100405	CV50BHPMC100354	1	2.40	3.54	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	8.50
3100406	CV50BHPMC100531	1	2.40	5.32	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	10.50
3100407	CV50BHPMC100650	1	2.40	6.50	2.17	.79	PSW58M	MCSS16040M	2,5mm & 5mm	11.85
3100408	CV50BHPMC125354	1 1/4	2.76	3.54	2.28	.79	PSW68M	MCSS16040M	2,5mm & 5mm	9.00
3100409	CV50BHPMC125531	1 1/4	2.91	5.32	2.95	.79	PSW68M	MCSS16040M	2,5mm & 5mm	11.70
3100410	CV50BHPMC125650	1 1/4	2.91	6.50	2.95	.79	PSW68M	MCSS16040M	2,5mm & 5mm	13.50

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench not included.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
For retention knobs, see page J33.



- Tremendous Grip (3:1 advantage).
- Totally flush face, locknut to collet.
- Locknut uses either open end wrench or spanner wrench.
- Locknut disk sealing cap available for through coolant to prevent collet contamination.





Collet Capacity

TG collet series	mm min	mm max	inch min	inch max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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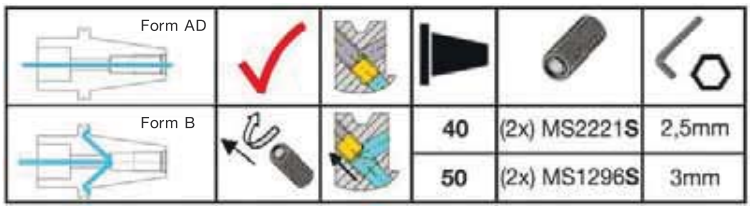
TG Flush-CV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	WF	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2993251	**CV50BTGF075275**	TG75	1.97	2.75	1.89	1	2	**LNATGF075M**	**HSW45M**	100	**SS081041G**	4mm & 5/32	7.21
2993247	**CV50BTGF050275**	TG50	1.50	2.75	1.46	2	1	**LNATGF050M**	**HSW34M**	50	**SS056041G**	4mm & 5/32	7.06
2993255	**CV50BTGF100275**	TG100	2.36	2.75	2.44	1	2	**LNATGF100M**	**HSW58M**	150	**SS112041G**	4mm & 5/32	7.13
2993248	**CV50BTGF050400**	TG50	1.50	4.00	1.46	2	1	**LNATGF050M**	**HSW34M**	50	**SS056041G**	4mm & 5/32	7.38
2993256	**CV50BTGF100400**	TG100	2.36	4.00	2.44	1	2	**LNATGF100M**	**HSW58M**	150	**SS112041G**	4mm & 5/32	8.28
2993252	**CV50BTGF075400**	TG75	1.97	4.00	1.89	2	2	**LNATGF075M**	**HSW45M**	100	**SS081041G**	4mm & 5/32	8.15
2993253	**CV50BTGF075600**	TG75	1.97	6.00	1.89	2	2	**LNATGF075M**	**HSW45M**	100	**SS081041G**	4mm & 5/32	9.52
2993249	**CV50BTGF050600**	TG50	1.50	6.00	1.46	2	1	**LNATGF050M**	**HSW34M**	50	**SS056041G**	4mm & 5/32	7.75
2993257	**CV50BTGF100600**	TG100	2.36	6.00	2.44	3	2	**LNATGF100M**	**HSW58M**	150	**SS112041G**	4mm & 5/32	10.39
2993250	**CV50BTGF050800**	TG50	1.50	8.00	1.46	2	1	**LNATGF050M**	**HSW34M**	50	**SS056041G**	4mm & 5/32	8.48
2993258	**CV50BTGF100800**	TG100	2.36	8.00	2.44	3	2	**LNATGF100M**	**HSW58M**	150	**SS112041G**	4mm & 5/32	12.53
2993254	**CV50BTGF075800**	TG75	1.97	8.00	1.89	2	2	**LNATGF075M**	**HSW45M**	100	**SS081041G**	4mm & 5/32	11.02

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Disk sealing cap and coolant disks are available and must be ordered separately; see page J7.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



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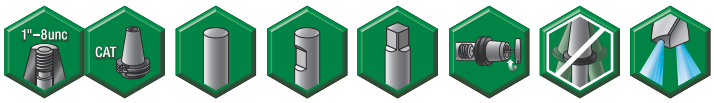

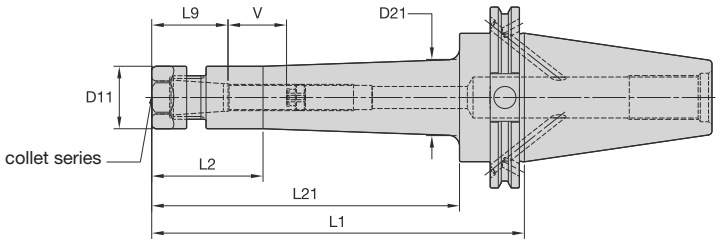

	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG50	1,3	13,5	1/32	17/32

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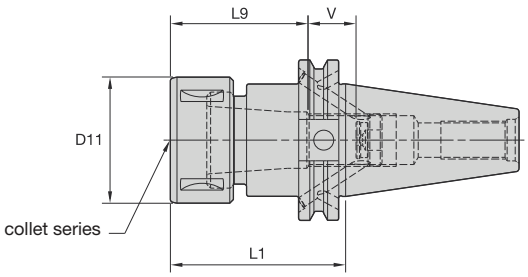
■ TG Hex-CV Form B/AD

order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
4135687	**CV50BTG050300**	TG50	1.34	—	3.00	1.59	—	1.50	1.81	**LN050M**	**OEW30M**	50	**SS056041G**	4mm & 5/32	7.06
4135688	**CV50BTG050500**	TG50	1.34	—	5.00	3.59	—	1.50	2.44	**LN050M**	**OEW30M**	50	**SS056041G**	4mm & 5/32	7.58
4135689	**CV50BTG050800**	TG50	1.34	1.63	8.00	2.00	6.59	1.50	2.44	**LN050M**	**OEW30M**	50	**SS056041G**	4mm & 5/32	8.93
4135690	**CV50BTG0501000**	TG50	1.34	1.70	10.00	3.00	8.59	1.50	2.44	**LN050M**	**OEW30M**	50	**SS056041G**	4mm & 5/32	9.85
4135691	**CV50BTG0501200**	TG50	1.34	1.81	12.00	3.50	10.59	1.50	2.44	**LN050M**	**OEW30M**	50	**SS056041G**	4mm & 5/32	10.97

(continued)

(TG Form B/AD continued)

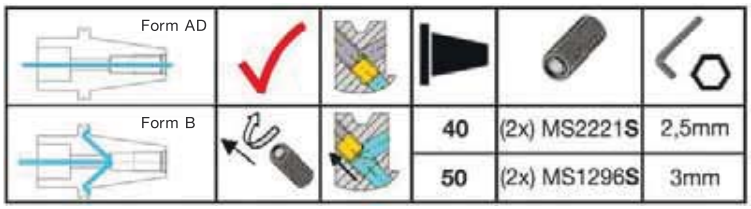


	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

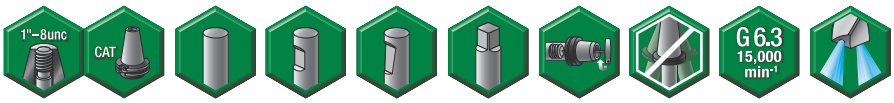
TG Round-CV Form B/AD

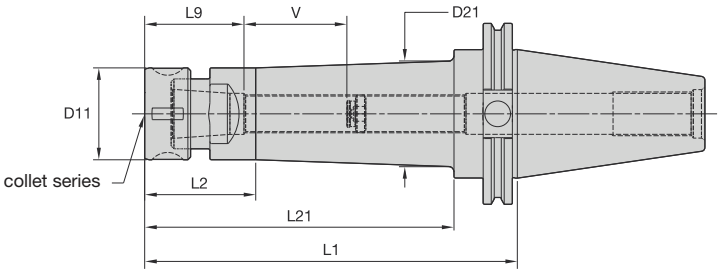
order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1261786	**CV50BTG075300G**	TG75	1.97	3.00	1.93	1.46	**LNA075M**	**HSW45M**	100	**SS081041G**	4mm & 5/32	7.34
1261787	**CV50BTG075600G**	TG75	1.97	6.00	1.93	4.45	**LNA075M**	**HSW45M**	100	**SS081041G**	4mm & 5/32	9.56
1261788	**CV50BTG100300G**	TG100	2.36	3.00	2.56	.98	**LNA100M**	**HSW58M**	150	**SS112041G**	4mm & 5/32	7.32
1261789	**CV50BTG100750G**	TG100	2.36	7.50	2.56	5.12	**LNA100M**	**HSW58M**	150	**SS112041G**	4mm & 5/32	11.80

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



- Tremendous Grip (3:1 advantage).





	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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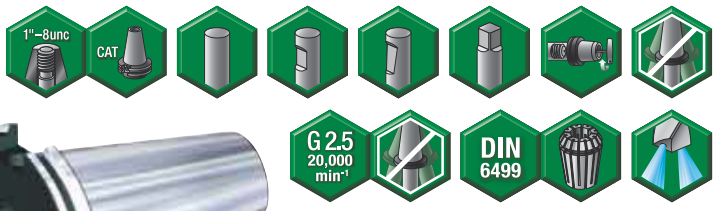
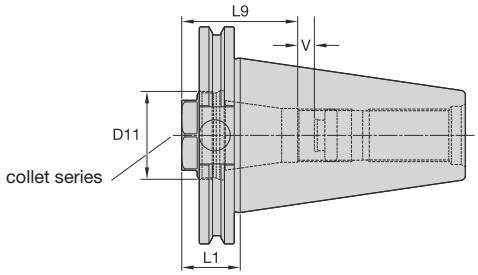
TG Round-CV Form AD

order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1025603	**CV50TG075279G**	TG75	1.97	—	2.79	1.42	—	1.93	1.38	**LNA075M**	**HSW45M**	100.0000	**SS081041G**	4mm & 5/32	7.30
1025635	**CV50TG075579G**	TG75	1.97	2.15	5.79	1.82	4.38	1.93	4.37	**LNA075M**	**HSW45M**	100.0000	**SS081041G**	4mm & 5/32	9.70
1025914	**CV50TG075800G**	TG75	1.97	2.27	8.00	2.38	6.63	2.09	4.45	**LNA075M**	**HSW45M**	100.0000	**SS081041G**	4mm & 5/32	11.45
1025915	**CV50TG0751000G**	TG75	1.97	2.40	10.00	2.38	8.63	2.09	4.45	**LNA075M**	**HSW45M**	100.0000	**SS081041G**	4mm & 5/32	13.61
1025916	**CV50TG0751200G**	TG75	1.97	2.54	12.00	2.40	10.63	1.93	4.57	**LNA075M**	**HSW45M**	100.0000	**SS081041G**	4mm & 5/32	16.50
2636767	**CV50TG100276G**	TG100	2.36	—	2.76	1.47	—	2.76	1.85	**LNA100M**	**HSW58M**	150.0000	**SS112041G**	4mm & 5/32	7.07
2636768	**CV50TG100326G**	TG100	2.36	—	3.26	1.69	—	2.76	2.36	**LNA100M**	**HSW58M**	150.0000	**SS112041G**	4mm & 5/32	7.61
2636769	**CV50TG100526G**	TG100	2.36	—	5.26	3.89	—	2.76	4.33	**LNA100M**	**HSW58M**	150.0000	**SS112041G**	4mm & 5/32	9.50
2636770	**CV50TG100726G**	TG100	2.36	—	7.26	5.89	—	2.76	5.15	**LNA100M**	**HSW58M**	150.0000	**SS112041G**	4mm & 5/32	11.56

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

• Grip (2:1 advantage).





	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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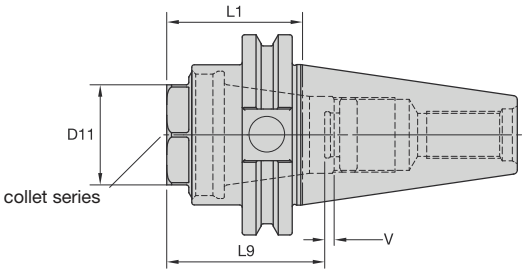
ER Short-CV Z Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2978741	**CV50ZSER32106**	ER32	1.41	1.06	1.97	.67	**LNECSER32M**	**OEW32M**	100	**SS094041G**	4mm & 5/32	5.32
2978763	**CV50ZSER40106**	ER40	1.81	1.06	2.24	.43	**LNECSER40M**	**OEW168**	130	**SS112041G**	4mm & 5/32	4.94

NOTE: CV50 toolholders deviate from ANSI B5.50 standard. The 2.750" diameter in front of the V-flange has been eliminated to achieve short gage lengths.



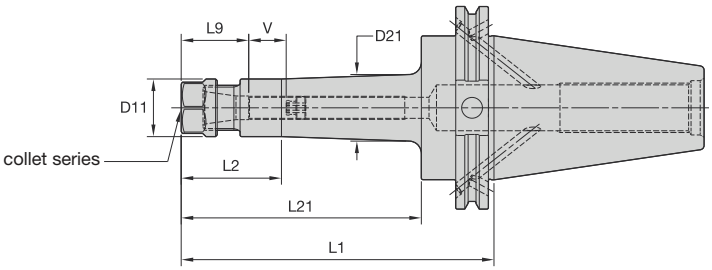
	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ER Short-CV Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
2978742	**CV50SER32169**	ER32	1.41	1.69	1.97	1.06	**LNECSER32M**	**OEW32M**	100	**SS094041G**	4mm & 5/32	6.27
2978764	**CV50SER40169**	ER40	1.81	1.69	2.24	.83	**LNECSER40M**	**OEW168**	130	**SS112041G**	4mm & 5/32	5.86

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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ER Hex-CV Form B/AD

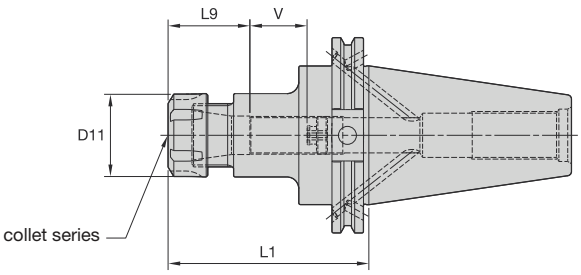
order number	catalog number	collet series	D11	D21	L1	L2	L21	L9	V	lbs
2249706	**CV50BER16250**	ER16	1.10	—	2.50	1.13	—	1.26	1.69	6.83
2249707	**CV50BER16400**	ER16	1.10	—	4.00	2.63	—	1.26	1.50	6.97
2249708	**CV50BER16600**	ER16	1.10	1.29	6.00	1.92	4.59	1.26	1.50	7.55
2249709	**CV50BER20250**	ER20	1.34	—	2.50	1.13	—	1.42	1.73	6.84
1261782	**CV50BER20400**	ER20	1.34	—	4.00	2.63	—	1.42	1.73	7.19
2249710	**CV50BER20600**	ER20	1.34	—	6.00	4.63	—	1.42	1.73	7.77

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)	stop screw	wrench size stop screw
CV50BER16250	**LNHSER16M**	**OEW25M**	30	42	**SS044038G**	4mm & 5/32
CV50BER16400	**LNHSER16M**	**OEW25M**	30	42	**SS044038G**	4mm & 5/32
CV50BER16600	**LNHSER16M**	**OEW25M**	30	42	**SS044038G**	4mm & 5/32
CV50BER20250	**LNHSER20M**	**OEW30M**	24	59	**SS056041G**	4mm & 5/32
CV50BER20400	**LNHSER20M**	**OEW30M**	24	59	**SS056041G**	4mm & 5/32
CV50BER20600	**LNHSER20M**	**OEW30M**	24	59	**SS056041G**	4mm & 5/32

(continued)

(ER Form B/AD continued)



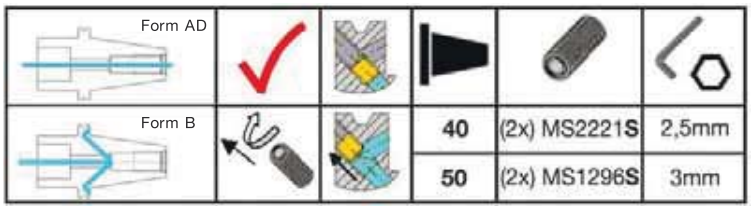
ER Round-CV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
2249711	**CV50BER25250**	ER25	1.65	2.50	1.57	1	6.85
2249712	**CV50BER25400**	ER25	1.65	4.00	1.57	2	7.61
2249713	**CV50BER25600**	ER25	1.65	6.00	1.57	2	8.44
2249714	**CV50BER32275**	ER32	1.97	2.75	1.81	1	6.91
1261783	**CV50BER32400**	ER32	1.97	4.00	1.81	1	7.78
2249715	**CV50BER32600**	ER32	1.97	6.00	1.81	1	9.19
2249716	**CV50BER40300**	ER40	2.48	3.00	2.05	1	7.21
2249717	**CV50BER40600**	ER40	2.48	6.00	2.05	4	10.58

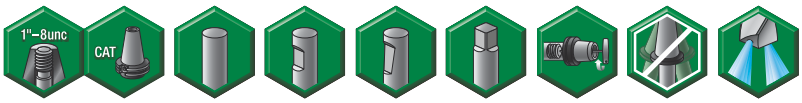
Spare Parts

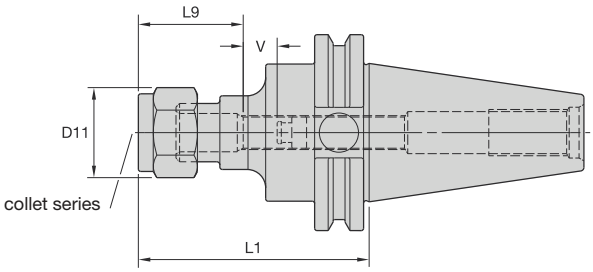
catalog number	locknut	wrench	counterbore collet torque (ft. lbs.)	stop screw	wrench size stop screw
CV50BER25250	**LNSER25M**	**ER25WM**	77	**SS075041G**	4mm & 5/32
CV50BER25400	**LNSER25M**	**ER25WM**	77	**SS075041G**	4mm & 5/32
CV50BER25600	**LNSER25M**	**ER25WM**	77	**SS075041G**	4mm & 5/32
CV50BER32275	**LNSER32M**	**ER32WM**	100	**SS094041G**	4mm & 5/32
CV50BER32400	**LNSER32M**	**ER32WM**	100	**SS094041G**	4mm & 5/32
CV50BER32600	**LNSER32M**	**ER32WM**	100	**SS094041G**	4mm & 5/32
CV50BER40300	**LNSER40M**	**ER40WM**	130	**SS112041G**	4mm & 5/32
CV50BER40600	**LNSER40M**	**ER40WM**	130	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.



• Grip 1:1.





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DA collet series	Collet Capacity mm min	mm max	inch min	inch max
DA180	2,2	20	1/64	3/4

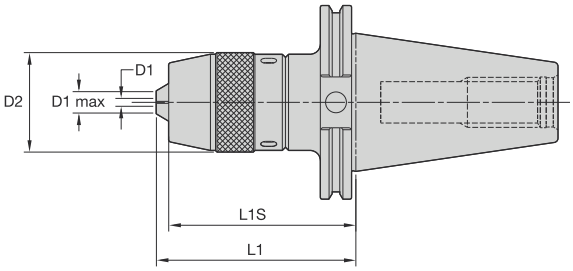
DA Hex-CV Form AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
1015307	**CV50DA188600**	DA180	1.73	6	1.93	4.65	8.21
1015306	**CV50DA188300**	DA180	1.73	3	1.93	2.36	7.03

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
CV50DA188300	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32
CV50DA188600	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I62.
DA non-pullout collets, see page I65.
For retention knobs, see page J33.



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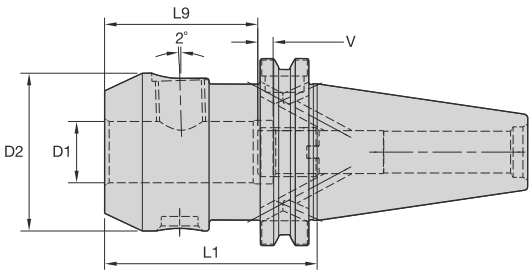
■ DC-CV Form A

order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2	L1	L1S	locknut wrench	lbs
2262968	**CV50DC13M421**	1,0	.039	13,0	.512	1.97	4.21	3.72	**HSW45M**	7.85

NOTE: Locknut wrench is supplied.
For retention knobs, see page J33.



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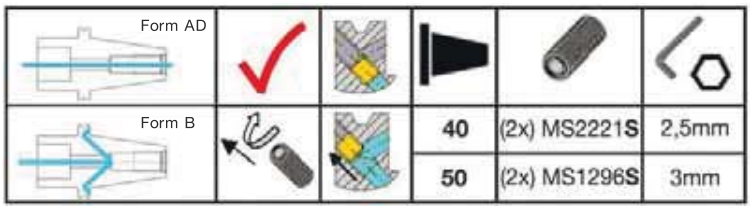
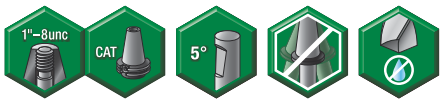
■ WN MM-CV Form B/AD

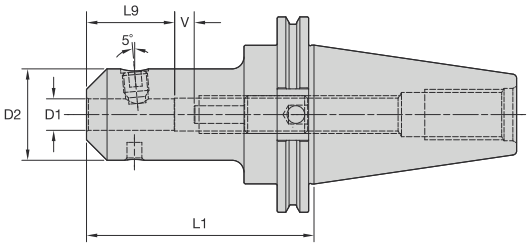
order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1549343	**CV50BWN06M244**	6	25	62	30	10	**SS03M012**	3mm	7	**571.060**	2,5mm	3,14
1549344	**CV50BWN08M244**	8	28	62	30	10	**SS03M014**	4mm	15	**571.067**	3mm	3,10
1549378	**CV50BWN10M244**	10	35	62	35	10	**SS03M018**	5mm	25	**571.068**	4mm	3,21
1549345	**CV50BWN12M264**	12	42	67	40	10	**SS03M023**	6mm	35	**571.074**	5mm	3,32
1549346	**CV50BWN14M264**	14	44	67	40	10	**SS03M023**	6mm	35	**571.074**	5mm	3,30
1549352	**CV50BWN16M275**	16	48	70	43	10	**SS03M025**	6mm	50	**571.075**	6mm	3,41
1549353	**CV50BWN18M275**	18	50	70	43	10	**SS03M025**	6mm	50	**571.075**	6mm	3,43
1549362	**CV50BWN20M275**	20	52	70	45	10	**SS03M026**	8mm	95	**571.076**	6mm	3,43
1804514	**CV50BWN20M600**	20	52	152	45	10	**SS03M026**	8mm	95	**571.076**	6mm	4,67
1549354	**CV50BWN25M375**	25	65	95	50	10	**SS03M027**	10mm	135	**571.077**	6mm	4,23
1804515	**CV50BWN25M600**	25	65	152	50	10	**SS03M027**	10mm	135	**571.077**	6mm	5,52
1549355	**CV50BWN32M388**	32	72	99	54	10	**SS03M029**	10mm	160	**571.076**	6mm	4,51
1804516	**CV50BWN32M600**	32	72	152	54	10	**SS03M029**	10mm	160	**571.076**	6mm	6,06

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw and stop screw.
Clamp screw or stop screw wrenches not included.
For retention knobs, see page J33.



- 5° NAS 987 Whistle Notch cutting toolholders.
- No through-the-toolholder coolant capability (Form A only), unless stop screw is removed.
- Axial adjustment with consistant 3/8" drive throughout complete range of adapters.





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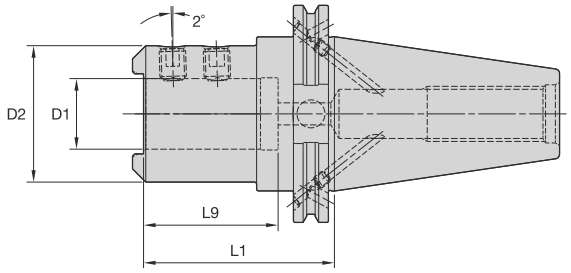
■ WN NAS-CV Form AD • Inch

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size clamp screw	ft. lbs.	wrench size stop screw	lbs
3594645	CV50WNA038282	3/8	1.38	2.82	1.19	.38	–	3/16	15	3/8	7.33
3594646	CV50WNA038469	3/8	1.38	4.69	1.19	.38	–	3/16	15	3/8	7.94
3594647	CV50WNA038669	3/8	1.38	6.69	1.19	.38	–	3/16	15	3/8	8.59
3594648	CV50WNA050273	1/2	1.63	2.73	1.40	.38	–	3/16	15	3/8	7.45
3594649	CV50WNA050460	1/2	1.63	4.60	1.40	.38	–	3/16	15	3/8	8.37
3594650	CV50WNA050660	1/2	1.63	6.60	1.40	.38	–	3/16	15	3/8	9.36
3594651	CV50WNA062266	5/8	1.81	2.66	1.52	.38	–	1/4	60	3/8	7.55
3594652	CV50WNA062453	5/8	1.81	4.53	1.52	.38	–	1/4	60	3/8	8.75
3594653	CV50WNA062653	5/8	1.81	6.53	1.52	.38	–	1/4	60	3/8	10.02
3594654	CV50WNA075263	3/4	2.00	2.63	1.54	.38	–	1/4	60	3/8	7.60
3594655	CV50WNA075450	3/4	2.00	4.50	1.65	.38	–	1/4	60	3/8	9.14
3594656	CV50WNA075650	3/4	2.00	6.50	1.65	.38	–	1/4	60	3/8	10.73
3594657	CV50WNA088263	7/8	2.25	2.63	1.53	.38	–	1/4	60	3/8	7.78
3594658	CV50WNA088450	7/8	2.25	4.50	1.64	.38	–	1/4	60	3/8	9.74
3594659	CV50WNA088650	7/8	2.25	6.50	1.64	.38	–	1/4	60	3/8	11.88
3594660	CV50WNA100300	1	2.63	3.00	1.90	.38	S-1820	3/8	110	3/8	8.57
3594661	CV50WNA100450	1	2.63	4.50	1.90	.38	S-1820	3/8	110	3/8	10.75
3594662	CV50WNA100650	1	2.63	6.50	1.90	.38	S-1820	3/8	110	3/8	13.68
3594663	CV50WNA125300	1 1/4	2.88	3.00	1.90	.38	S-1820	3/8	110	3/8	8.80
3594664	CV50WNA125450	1 1/4	2.88	4.50	1.90	.38	S-1820	3/8	110	3/8	11.44
3594665	CV50WNA125650	1 1/4	2.88	6.50	1.90	.38	S-1820	3/8	110	3/8	14.98
3594666	CV50WNA150400	1 1/2	3.13	4.00	1.90	.38	S-1820	3/8	110	3/8	10.95
3594667	CV50WNA200535	2	4.00	5.35	3.01	.38	S-1820	3/8	110	3/8	16.44
3594668	CV50WNA200735	2	4.00	7.35	3.01	.38	S-1820	3/8	110	3/8	23.42
3594669	CV50WNA250535	2 1/2	5.00	5.35	3.01	.38	–	3/8	110	3/8	22.44
3594670	CV50WNA250735	2 1/2	5.00	7.35	3.01	.38	–	3/8	110	3/8	26.77
3594671	CV50ZWNA200375	2	3.75	3.75	3.01	.38	S-1820	3/8	110	3/8	11.48

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw and stop screw (3/4"-10 RH x 2.25lg).
Clamp screw or stop screw wrenches not included.
For retention knobs, see page J33.

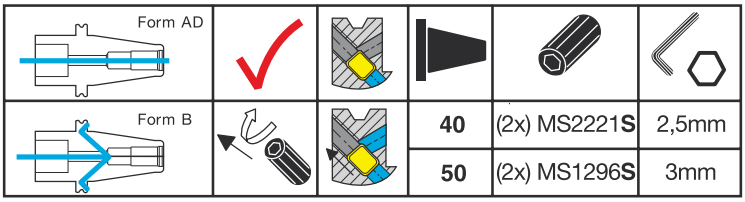


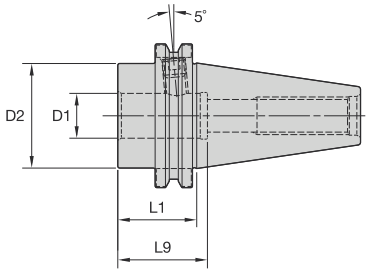
ERICKSON

■ WD MM-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1749279	**CV50BWD32M343**	32	63	87	61	**SS03M023**	6mm	35	3,84
1749283	**CV50BWD40M343**	40	70	87	71	**SS03M023**	6mm	35	3,88
1749284	**CV50BWD50M343**	50	80	87	69	**SS03M023**	6mm	35	4,04

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Lock screw wrenches not included.
For retention knobs, see page J33.





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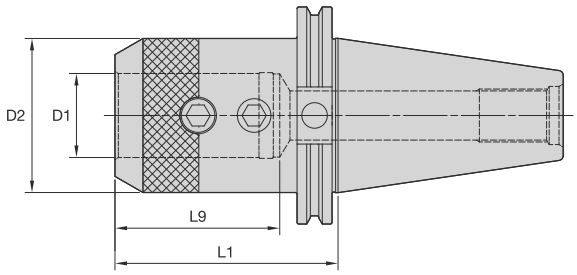
■ SWN IN-CV Form AD (Tap Chuck Adapter)

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1064539	**CV50TA1137**	1.00	2.75	1.38	3.63	**ELS062050PKG**	5/16	70	6.53
1017996	**CV50TA15200**	1.50	2.75	2.00	3.80	**ELS050050PKG**	1/4	60	6.38

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



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■ EM IN-CV Form AD

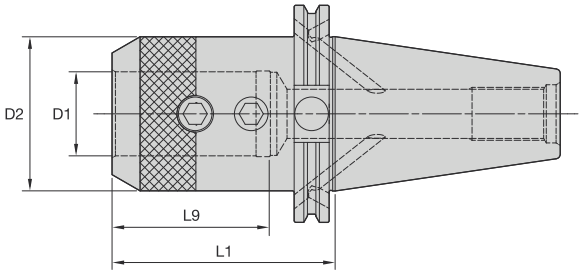
order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	lbs	ft. lbs.
1013379	CV50EM018250	3/16	.69	2.50	4.69	S1045PKG	3/32	6.55	3
1013408	CV50EM018450	3/16	.69	4.50	6.69	S1045PKG	3/32	6.84	3
1013409	CV50EM018650	3/16	.69	6.50	8.69	S1045PKG	3/32	7.05	3
1013380	CV50EM025250	1/4	.78	2.50	4.69	ELS025025PKG	1/8	6.55	5
1013410	CV50EM025450	1/4	.78	4.50	6.69	ELS025025PKG	1/8	7.17	5
1013411	CV50EM025650	1/4	.78	6.50	7.68	ELS025025PKG	1/8	7.19	5
1013381	CV50EM031250	5/16	1.00	2.50	4.69	ELS031031PKG	5/32	6.61	11
1013412	CV50EM031450	5/16	1.00	4.50	6.69	ELS031031PKG	5/32	7.15	11
1013413	CV50EM031650	5/16	1.00	6.50	8.69	ELS031031PKG	5/32	7.60	11
1026020	CV50EM038250	3/8	1.00	2.50	4.69	ELS038031PKG	3/16	6.63	15
1026286	CV50EM038450	3/8	1.00	4.50	6.69	ELS038031PKG	3/16	7.07	15
1026093	CV50EM038650	3/8	1.00	6.50	8.69	ELS038031PKG	3/16	7.45	15
1013382	CV50EM038850	3/8	1.00	8.50	10.70	ELS038031PKG	3/16	8.27	15
1013383	CV50EM044250	7/16	1.25	2.50	4.69	ELS044038PKG	7/32	6.78	20
1026021	CV50EM050262	1/2	1.38	2.62	4.81	ELS044038PKG	7/32	6.82	20
1026114	CV50EM050462	1/2	1.38	4.62	6.81	ELS044038PKG	7/32	7.52	20
1026115	CV50EM050662	1/2	1.38	6.62	8.81	ELS044038PKG	7/32	8.21	20
1013404	CV50EM050850	1/2	1.25	8.50	10.69	ELS044038PKG	7/32	9.03	20
1026022	CV50EM062375	5/8	1.63	3.75	5.94	ELS056050PKG	1/4	7.53	40
1026116	CV50EM062575	5/8	1.63	5.75	7.94	ELS056050PKG	1/4	8.63	40
1026117	CV50EM062775	5/8	1.63	7.75	9.94	ELS056050PKG	1/4	9.48	40
1026250	CV50EM075375	3/4	1.75	3.75	5.94	ELS062050PKG	5/16	7.65	70
1026118	CV50EM075575	3/4	1.75	5.75	7.94	ELS062050PKG	5/16	8.67	70
1026119	CV50EM075775	3/4	1.75	7.75	7.91	ELS062050PKG	5/16	9.81	70
1013405	CV50EM0751000	3/4	1.75	10.00	12.19	ELS062050PKG	5/16	12.25	70
1026023	CV50EM088375	7/8	2.00	3.75	4.19	ELS062050PKG	5/16	7.65	70
1026120	CV50EM088575	7/8	2.00	5.75	4.19	ELS062050PKG	5/16	9.44	70
1026121	CV50EM088775	7/8	2.00	7.75	4.19	ELS062050PKG	5/16	10.85	70
1026044	CV50EM100400	1	2.00	4.00	4.49	ELS075056PKG	3/8	7.94	110
1026287	CV50EM100600	1	2.00	6.00	4.49	ELS075056PKG	3/8	9.39	110

(continued)

(EM IN-CV Form AD continued)

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	lbs	ft. lbs.
1026122	**CV50EM100800**	1	2.00	8.00	4.49	**ELS075056PKG**	3/8	10.82	110
1013406	**CV50EM1001000**	1	2.00	10.00	4.49	**ELS075056PKG**	3/8	13.37	110
1026045	**CV50EM125400**	1 1/4	2.50	4.00	2.39	**ELS075062PKG**	3/8	8.98	110
1026123	**CV50EM125600**	1 1/4	2.50	6.00	2.39	**ELS075062PKG**	3/8	11.42	110
1026288	**CV50EM125800**	1 1/4	2.50	8.00	2.39	**ELS075062PKG**	3/8	13.85	110
1013407	**CV50EM1251000**	1 1/4	2.50	10.00	2.39	**ELS075062PKG**	3/8	16.28	110
1026284	**CV50EM150400**	1 1/2	2.75	4.00	2.82	**ELS075069PKG**	3/8	9.19	110
1026289	**CV50EM150600**	1 1/2	2.75	6.00	2.82	**ELS075069PKG**	3/8	12.21	110
1026144	**CV50EM150800**	1 1/2	2.75	8.00	2.82	**ELS075069PKG**	3/8	15.25	110
1026046	**CV50EM200562**	2	3.75	5.62	3.38	**ELS100088PKG**	1/2	15.96	150
1026145	**CV50EM200762**	2	3.75	7.62	3.38	**ELS100088PKG**	1/2	19.01	150
1026290	**CV50EM200962**	2	3.75	9.62	3.38	**ELS100088PKG**	1/2	22.08	150

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



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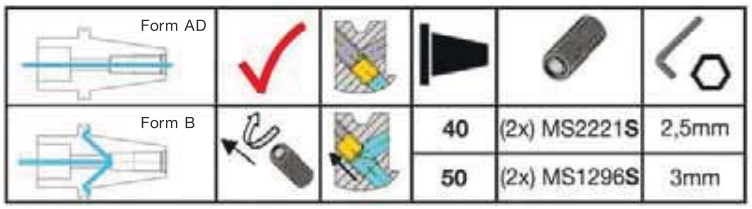
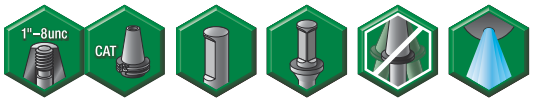
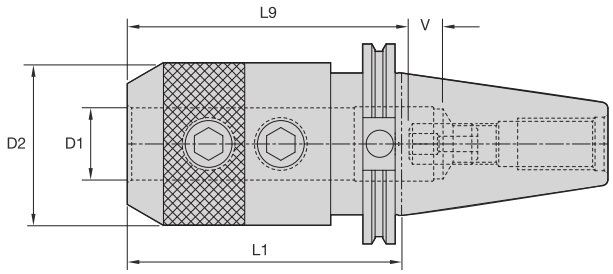
EM IN-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	lbs	ft. lbs.
1261776	**CV50BEM050462**	1/2	1.38	4.62	6.81	**ELS044038PKG**	7/32	7.53	20
1261777	**CV50BEM062375**	5/8	1.62	3.75	5.94	**ELS056050PKG**	1/4	7.48	40
1261778	**CV50BEM075375**	3/4	1.75	3.75	5.94	**ELS062050PKG**	5/16	7.62	70
1261779	**CV50BEM100400**	1	2.00	4.00	4.49	**ELS075056PKG**	3/8	7.90	110
1261780	**CV50BEM125400**	1 1/4	2.50	4.00	2.39	**ELS075062PKG**	3/8	8.94	110
1261781	**CV50BEM150400**	1 1/2	2.75	4.00	2.82	**ELS075069PKG**	3/8	9.17	110

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.







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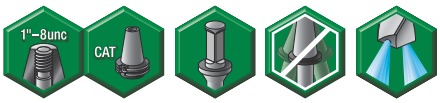
SS-CV Form AD • Inch

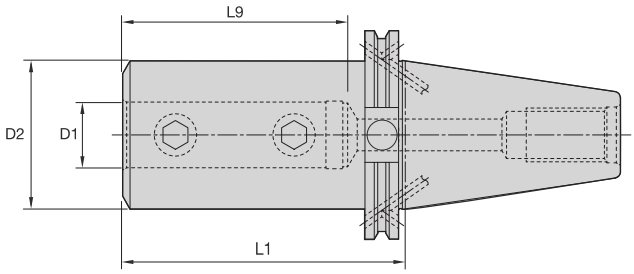
order number	catalog number	D1	D2	L1	L9	V	lbs
1018311	CV50SS100400	1	2.25	4.00	3.75	.63	8.74
1018312	CV50SS100600	1	2.25	6.00	3.75	.63	10.66
1018313	CV50SS100800	1	2.25	8.00	3.75	.63	12.57
1018357	CV50SS150400	1 1/2	2.75	4.00	3.25	1.25	8.83
1018358	CV50SS150600	1 1/2	2.75	6.00	3.25	1.25	11.85
1018359	CV50SS150800	1 1/2	2.75	8.00	3.25	1.25	14.87
1018354	CV50SS125400	1 1/4	2.50	4.00	3.25	1.25	8.80
1018355	CV50SS125600	1 1/4	2.50	6.00	3.25	1.25	11.24
1018356	CV50SS125800	1 1/4	2.50	8.00	3.25	1.25	13.67
1018360	CV50SS175400	1 3/4	3.13	4.00	2.75	1.25	9.51
1018361	CV50SS200562	2	3.69	5.62	3.25	1.25	14.99
1018362	CV50SS200762	2	3.69	7.62	3.25	1.25	20.70
1018425	CV50SS250800	2 1/2	4.00	8.00	4.25	1.25	21.50
1018424	CV50SS225650	2 1/4	4.00	6.50	3.75	1.25	18.64

Spare Parts

catalog number	lock screw	wrench size clamp screw	ft. lbs.	stop screw	wrench size stop screw
CV50SS100400	ELS075062PKG	3/8	110	CSS081125	1/8
CV50SS100600	ELS075062PKG	3/8	110	CSS081125	1/8
CV50SS125400	ELS075062PKG	3/8	110	CSS112175PKG	3/16
CV50SS125600	ELS075062PKG	3/8	110	CSS112175PKG	3/16
CV50SS150400	ELS075062PKG	3/8	110	CSS112175PKG	3/16
CV50SS150600	ELS075062PKG	3/8	110	CSS112175PKG	3/16
CV50SS175400	ELS075069PKG	3/8	110	CSS112175PKG	3/16
CV50SS200562	ELS100088PKG	1/2	150	CSS112175PKG	3/16
CV50SS250800	ELS100062	1/2	150	CSS112175PKG	3/16

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screws and stop screw.
Clamp screw or stop screw wrench not included.
For retention knobs, see page J33.





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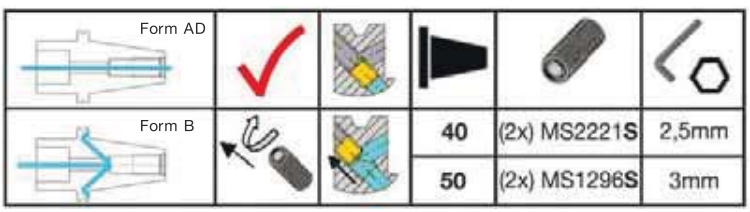
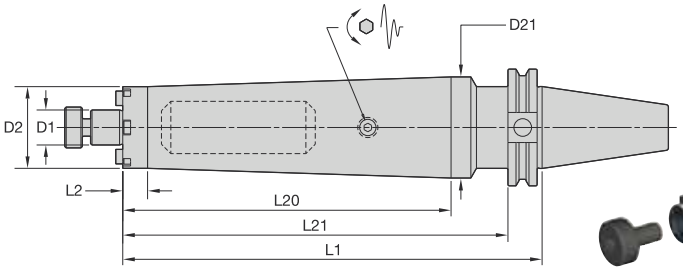
SSF IN-CV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1749472	**CV50BSSF075275**	3/4	1.75	2.75	2.25	**ELS062050PKG**	5/16	70	7.21
1749473	**CV50BSSF100400**	1	2.00	4.00	3.25	**DWG ELS075050**	3/8	110	8.05
1749474	**CV50BSSF125400**	1 1/4	2.50	4.00	3.50	**ELS075056PKG**	3/8	110	8.86
1749475	**CV50BSSF150450**	1 1/2	2.75	4.50	4.00	**ELS075056PKG**	3/8	110	9.67
1749209	**CV50BSSF200550**	2	3.75	5.50	4.25	**ELS100088PKG**	1/2	150	15.23

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





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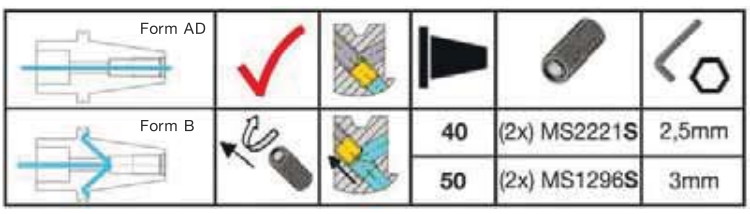
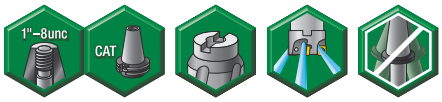
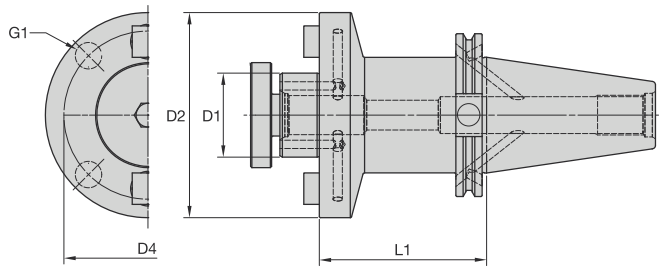
SMC TD Lock IN-CV Form A

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	lbs
4136189	**CV50BTDSMC0751050**	3/4	1.75	2.75	10.50	.53	9.09	9.75	**KLS07**	**KDK05**	1/4	16.53
4136190	**CV50BTDSMC1001250**	1	2.75	—	12.50	11.75	—	—	**KLS10**	**KDK06**	5/16	24.62
4136191	**CV50BTDSMC1251300**	1 1/4	2.88	—	13.00	12.25	—	—	**KLS12**	**KDK08**	5/16	31.97

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.







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SMC Lock IN-CV Form B/AD

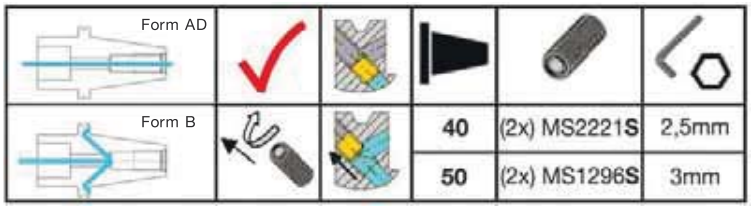
order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	lbs
3640130	CV50BSM2C050150	1/2	1.20	–	–	1.50	KLS05	KDK04	3/16	6.80
3640132	CV50BSM2C050350	1/2	1.20	–	–	3.50	KLS05	KDK04	3/16	7.10
3640194	CV50BSM2C050550	1/2	1.20	–	–	5.50	KLS05	KDK04	3/16	7.64
3640129	CV50BSMC050150	1/2	1.44	–	–	1.50	KLS05	KDK04	3/16	6.81
3640131	CV50BSMC050350	1/2	1.44	–	–	3.50	KLS05	KDK04	3/16	7.39
3640193	CV50BSMC050550	1/2	1.44	–	–	5.50	KLS05	KDK04	3/16	8.21
3640196	CV50BSM2C075150	3/4	1.46	–	–	1.50	KLS07	–	1/4	6.80
3640198	CV50BSM2C075350	3/4	1.46	–	–	3.50	KLS07	–	1/4	7.41
3640200	CV50BSM2C075550	3/4	1.46	–	–	5.50	KLS07	–	1/4	8.17
3640195	CV50BSMC075150	3/4	1.75	–	–	1.50	KLS07	KDK05	1/4	6.94
3640197	CV50BSMC075350	3/4	1.75	–	–	3.50	KLS07	KDK05	1/4	7.85
3640199	CV50BSMC075550	3/4	1.75	–	–	5.50	KLS07	KDK05	1/4	9.04
3640201	CV50BSMC075700	3/4	1.75	–	–	7.00	KLS07	KDK05	1/4	10.51
3640202	CV50BSMC075900	3/4	1.75	–	–	9.00	KLS07	KDK05	1/4	12.39
3640204	CV50BSM2C100200	1	2.19	–	–	2.00	KLS10	KDK06	5/16	7.26
3640206	CV50BSM2C100400	1	2.19	–	–	4.00	KLS10	KDK06	5/16	9.12
3640208	CV50BSM2C100600	1	2.19	–	–	6.00	KLS10	KDK06	5/16	10.98
3640203	CV50BSMC100200	1	2.75	–	–	2.00	KLS10	KDK06	5/16	7.63
3640205	CV50BSMC100400	1	2.75	–	–	4.00	KLS10	KDK06	5/16	10.72
3640207	CV50BSMC100600	1	2.75	–	–	6.00	KLS10	KDK06	5/16	13.81
3640209	CV50BSMC100800	1	2.75	–	–	8.00	KLS10	KDK06	5/16	16.89
3640210	CV50BSMC1001000	1	2.75	–	–	10.00	KLS10	KDK06	5/16	19.98
3640211	CV50BSMC125150	1 1/4	2.75	–	–	1.50	KLS12	KDK08	5/16	7.10
3640212	CV50BSMC125350	1 1/4	2.88	–	–	3.50	KLS12	KDK08	5/16	10.24
3640213	CV50BSMC125550	1 1/4	2.88	–	–	5.50	KLS12	KDK08	5/16	13.27
3640214	CV50BSMC125700	1 1/4	2.88	–	–	7.00	KLS12	KDK08	5/16	15.22
3640215	CV50BSMC125900	1 1/4	2.88	–	–	9.00	KLS12	KDK08	5/16	18.57
3640216	CV50BSMC150240	1 1/2	3.81	–	–	2.40	KLS15	KDK10	3/8	9.88
3640217	CV50BSMC150400	1 1/2	3.81	–	–	4.00	KLS15	KDK10	3/8	12.53
3640218	CV50BSMC150600	1 1/2	3.81	–	–	6.00	KLS15	KDK10	3/8	15.72
3640219	CV50BSMC150800	1 1/2	3.81	–	–	8.00	KLS15	KDK10	3/8	18.90
3640220	CV50BSMC200240	2	4.88	4.00	5/8-11 UNC	2.40	KLS20	KDK12	9/16	11.95

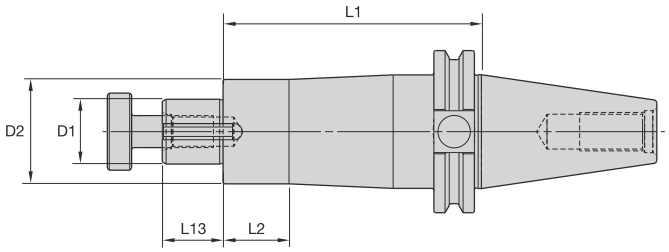
(continued)

(SMC Lock IN-CV Form B/AD continued)

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	lbs
3640221	**CV50BSMC200400**	2	4.88	4.00	5/8-11 UNC	4.00	**KLS20**	**KDK12**	9/16	14.94
3640222	**CV50BSMC200600**	2	4.88	4.00	5/8-11 UNC	6.00	**KLS20**	**KDK12**	9/16	18.18
3640223	**CV50BSMC200800**	2	4.88	4.00	5/8-11 UNC	8.00	**KLS20**	**KDK12**	9/16	21.43
3640224	**CV50BSMC250240**	2 1/2	4.88	4.00	5/8-11 UNC	2.40	**—**	**KDK16**	—	12.87
3640225	**CV50BSMC250400**	2 1/2	4.88	4.00	5/8-11 UNC	4.00	**—**	**KDK16**	—	15.80

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.



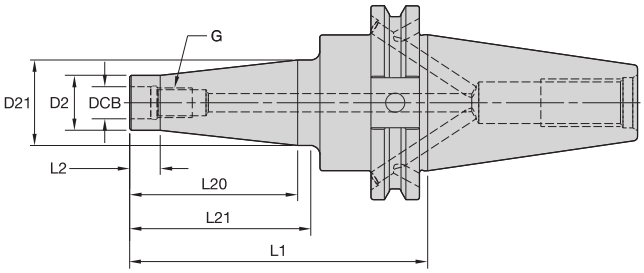


ERICKSON

■ SA IN-CV Form A

order number	catalog number	D1	D2	L1	L2	L13	lock screw	wrench size lock screw	drive key	lbs
1261878	**CV50SA062400**	5/8	1.25	4.00	2.63	.78	**KLS07**	1/4	**DWG SDK062088**	7.96
1026217	**CV50SA100400**	1	1.56	4.00	2.63	.94	**KLS10**	5/16	**DWG SDK100106**	8.59
2461123	**CV50SA100600**	1	1.56	6.00	.87	.94	**KLS10**	5/16	**DWG SDK100106**	11.60
2461124	**CV50SA125400**	1 1/4	1.88	4.00	2.63	1.09	**KLS12**	5/16	**DWG SDK125119**	9.56
1026218	**CV50SA125600**	1 1/4	1.88	6.00	1.06	1.09	**KLS12**	5/16	**DWG SDK125119**	12.60
2461125	**CV50SA150400**	1 1/2	2.00	4.00	2.63	1.70	**KLS15**	3/8	**DWG SDK150175**	10.35
1026223	**CV50SA150600**	1 1/2	2.00	6.00	1.06	1.70	**KLS15**	3/8	**DWG SDK150175**	13.44
1026244	**CV50SA200600**	2	2.75	6.00	5.25	1.70	**KLS20**	9/16	**SDK200169**	16.67

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For retention knobs, see page J33.

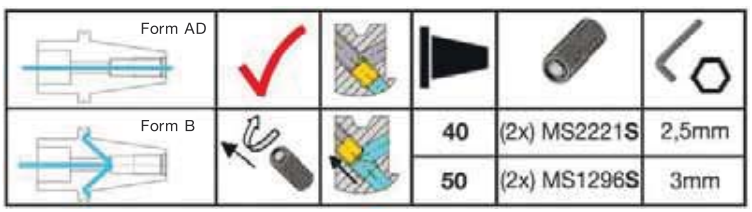


ERICKSON

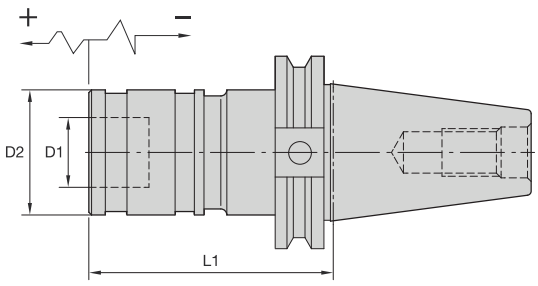
■ ST-CV Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L20	L21	lbs
4073648	**CV50BST12M343**	.5	M12	.83	.94	3.43	.39	1.77	1.83	7.06
4073649	**CV50BST12M539**	.5	M12	.83	1.22	5.39	.39	3.54	3.75	7.62
4073650	**CV50BST12M736**	.5	M12	.83	1.54	7.36	.39	5.71	5.72	8.51
4073651	**CV50BST16M343**	.7	M16	1.14	1.34	3.43	.39	1.77	1.79	7.35
4073652	**CV50BST16M539**	.7	M16	1.14	1.54	5.39	.39	3.54	3.75	8.23
4073653	**CV50BST16M739**	.7	M16	1.14	1.54	7.36	.39	5.51	5.72	8.98
4073654	**CV50BST16M933**	.7	M16	1.14	1.93	9.33	.39	7.48	7.69	10.81

NOTE: For retention knobs, see page J33.



• Rapid Change style.



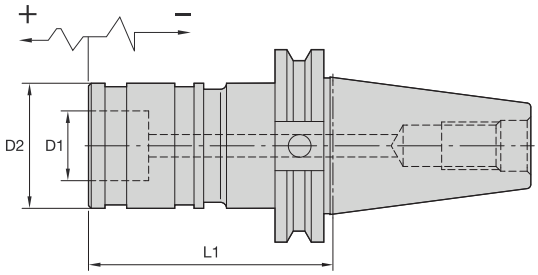
ERICKSON

RC-CV Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	lbs
1615981	CV50TCRC1297	1	M1 - M14	#0 - 9/16	.75	1.42	2.96	7.22
1615982	CV50TCRC2393	2	M5 - M24	5/16 - 7/8	1.22	2.09	3.86	8.00
1615983	CV50TCRC3516	3	M14 - M27	13/16 - 1 3/8	1.89	3.07	5.16	9.60

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

• Rapid Change style.
• High-pressure coolant capability through the chuck.

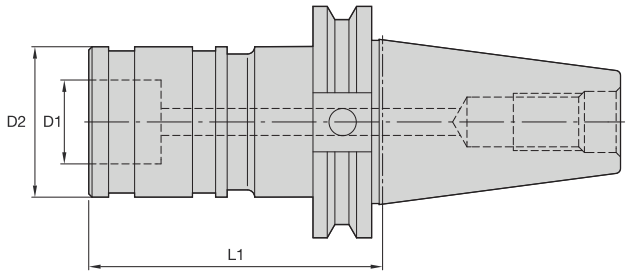


ERICKSON

RC Coolant-CV Form AD

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	lbs
1615989	CV50CHTCRC1382	1	M1 - M14	#0 - 9/16	.75	1.42	3.82	7.70
1615990	CV50CHTCRC2524	2	M5 - M24	5/16 - 7/8	1.22	2.09	5.23	10.30
1616001	CV50CHTCRC3717	3	M14 - M27	13/16 - 1 3/8	1.89	3.07	7.17	16.30

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

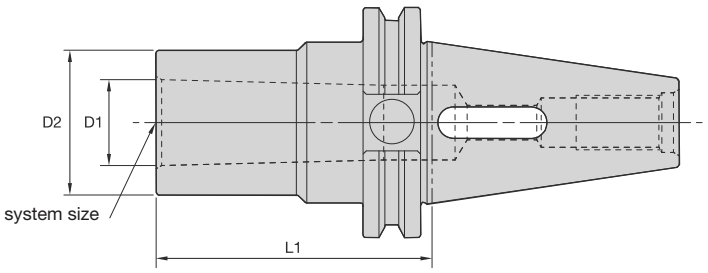


ERICKSON

STRC-CV Form AD

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	lbs
1615973	**CV50CSTRC1290**	1	M1 - M14	#0 - 9/16	.75	1.26	3	7.20
1615974	**CV50CSTRC2350**	2	M5 - M24	5/16 - 7/8	1.22	1.97	4	8.00
1615976	**CV50CSTRC3481**	3	M14 - M27	13/16 - 1 3/8	1.89	2.81	5	10.60

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

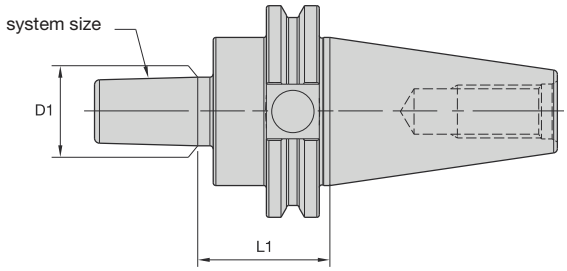


ERICKSON

MT-CV Form A

order number	catalog number	system size	D1	D2	L1	lbs
1026049	**CV50MT1150**	1	.47	2.75	1.50	6.77
1026050	**CV50MT2200**	2	.70	2.75	2.00	7.43
1026051	**CV50MT3250**	3	.94	1.57	2.50	6.73
1026052	**CV50MT4338**	4	1.23	1.89	3.38	6.90
1026091	**CV50MT5375**	5	1.75	2.75	3.75	7.55

NOTE: For retention knobs, see page J33.



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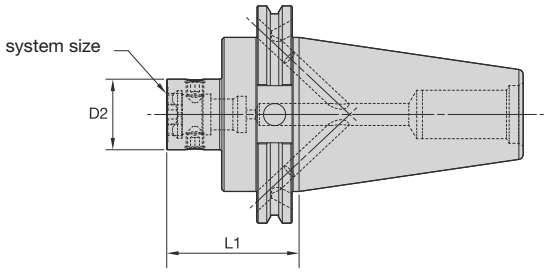
JT-CV Form A

order number	catalog number	system size	D1	L1	lbs
1026379	**CV50JT3268**	3	.81	1.46	6.97

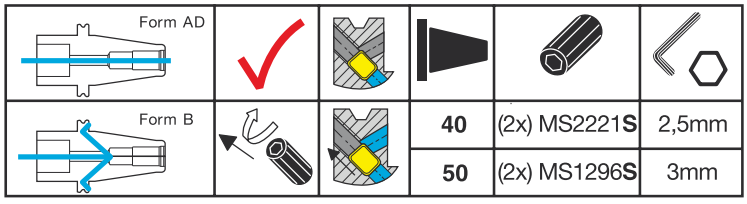
NOTE: For retention knobs, see page J33.

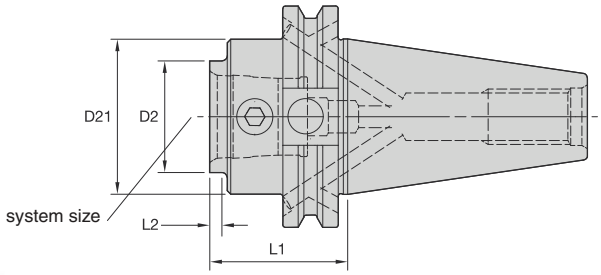


RFX-CV Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
3860901	**CV50BRFX320236**	RFX320	32	60	4mm	12	3,10
3860902	**CV50BRFX420236**	RFX420	42	60	5mm	20	3,20
3860903	**CV50BRFX550236**	RFX550	55	60	6mm	25	3,40
3860904	**CV50BRFX720276**	RFX720	72	70	6mm	25	3,60

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.





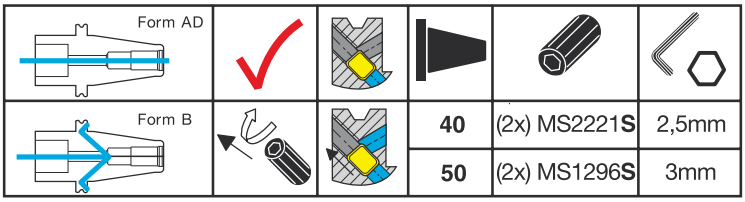
KM QUICK CHANGE

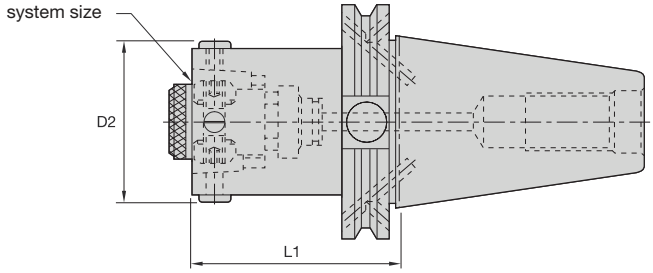
ERICKSON

KM-CV Form B/AD

order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	ft. lbs.	lbs
2992484	**CV50BKM32157**	KM32	1.26	2.75	1.58	.12	**KM32PKG3L**	5mm	6	6.60
2992485	**CV50BKM32354**	KM32	1.26	2.75	3.54	1.89	**KM32PKG3S**	5mm	6	7.10
2992486	**CV50BKM40157**	KM40	1.57	2.75	1.58	.12	**KM40PKG3L**	6mm	9	6.61
2992487	**CV50BKM40394**	KM40	1.57	2.75	3.94	2.28	**KM40PKG3S**	6mm	9	7.63
2992488	**CV50BKM50236**	KM50	1.97	2.75	2.36	.16	**KM50PKG3L**	10mm	20	7.59
2992489	**CV50BKM50472**	KM50	1.97	2.75	4.72	3.07	**KM50PKG3S**	10mm	20	8.83
2992490	**CV50BKM50630**	KM50	1.97	2.75	6.30	4.65	**KM50PKG3S**	10mm	20	9.95
2992491	**CV50BKM63236**	KM63	2.48	2.75	2.36	.20	**KM63PKG3L**	12mm	35	7.39
2992492	**CV50BKM63551**	KM63	2.48	2.75	5.51	4.06	**KM63PKG3S**	12mm	35	11.04
2992493	**CV50BKM63709**	KM63	2.48	2.75	7.09	5.63	**KM63PKG3S**	12mm	35	13.12
2992494	**CV50BKM80319**	KM80	3.15	—	3.19	—	**KM80PKG3S**	14mm	58	9.04

NOTE: These products only available in the U.S., Canada, and Japan.
Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.



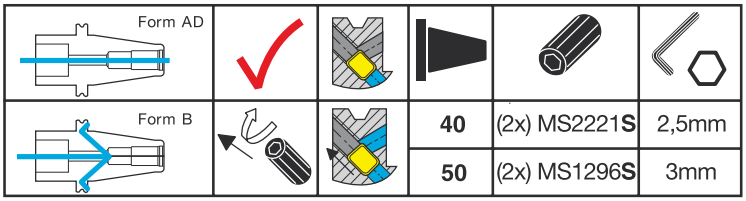


ERICKSON

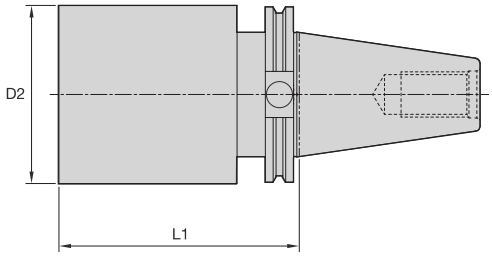
HSK-CV Form BA/D

order number	catalog number	system size	D2	L1	wrench size actuation screw	ft. lbs.	lbs
1533058	CV50BHSK50197	HSK50	2.17	1.97	4mm	11	6.39
1533059	CV50BHSK63236	HSK63	2.76	2.36	5mm	15	6.83

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.



• Machinable front 20–30 HRC.



ERICKSON

BB-CV Form B/AD

order number	catalog number	D2	L1	lbs
1065951	CV50BB400120	4.00	12.00	44.56
1020558	CV50BB400600	4.00	6.00	23.23
1020560	CV50BB600120	6.00	12.00	91.40
1020559	CV50BB600600	6.00	6.00	43.50

NOTE: For retention knobs, see page J33.

WIDIA

WIDIA

DV Shank Tools

DV40 . . . . . **F2–F37**
DV50 . . . . . **F38–F71**

Erickson™ DV V-Flange Shank Tooling System • **DV40 Series**

Erickson V-Flange DV Taper Tooling is manufactured from premium materials and meets or exceeds the latest DIN 69871 specification and ISO-1947 taper accuracy of AT3 specification standards. DV40 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 15,000 RPM. For any applications higher than 15,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

DV40

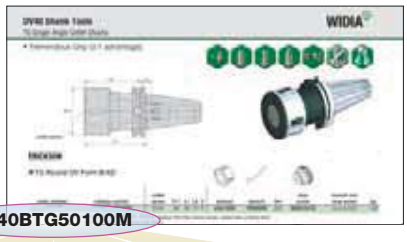
- DIN 69871 7/24 taper.
- Standard M16 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 15,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

DV DIN 69871 Form B/AD Shank

NOTE: Inherent out-of-balance conditions due to notch and unequal depth of drive slots.

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



DV40BTG50100M

DV — Shank Style

DIN 69871

40 — Shank Taper Size

40 = 40

50 = 50

B — Special Feature *(optional)*

B =
DIN form B coolant feature, tool shipped to AD specifications (design allows conversion to form B style)

(blank) =
(no "B" or "Z") — tool built to DIN form A/AD coolant style

CH =
Coolant form AD — high pressure

HPV =
High performance and balanceable

TD =
Tunable

TG — Toolholder Style

BB	=	Bar blank
DA	=	Double-angle collet chuck
DC	=	Drill chuck
EM	=	End mill adapter
ER	=	DIN 6499 single-angle collet chuck
HC	=	Hydraulic chuck — Standard Line
HCB	=	Hydraulic chuck — Basic Line
HCSL	=	Hydraulic chuck — Slim Line
HCSLT	=	Hydraulic chuck — Slim Line — Trend
HCT	=	Hydraulic chuck — Trend Line
HPMC	=	Bearing milling chuck — high performance
HSK	=	HSK adapter
JT	=	Jacobs taper adapter
KM	=	KM™ adapter
MT	=	Morse taper adapter
RC	=	Rapid Change — T&C tapping adapter chuck
SA	=	Slotting cutter adapter
RFX	=	ROTAFLEX™ boring adapters
SER	=	DIN 6499 single-angle collet chuck — short with internal locknut
SM2C	=	Shell mill adapter with coolant and small diameter
SMC	=	Shell mill adapter with coolant
SS	=	Adapter for straight shanks (drills)
SSF	=	Adapter for straight shanks with flat (drills)
ST	=	Screw-on adapters
STRC	=	Rapid Change — solid tapping adapter chuck
SWN	=	Whistle Notch™ 2° — short — (not to DIN standard)
TA	=	Tap chuck adapter
TCRC	=	Rapid Change — T&C tapping adapter chuck
TG	=	Tremendous Grip single-angle collet chuck
TGF	=	Tremendous Grip single-angle collet chuck — flush face
TT	=	Shrink Fit thermo toolholder
TTHT	=	Shrink Fit thermo toolholder — high torque
WD	=	Whistle Notch with drive
WN	=	Whistle Notch (2° metric; 5° inch)

50 — Toolholder Size

TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

100 — Tool Length

(Taper gage line to front of tool)

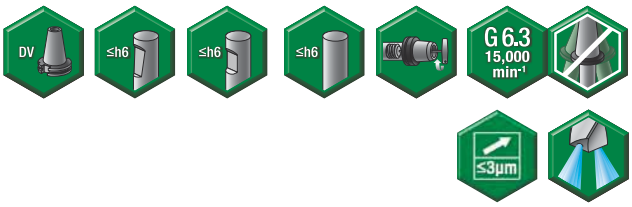
metric
xxx = xxx

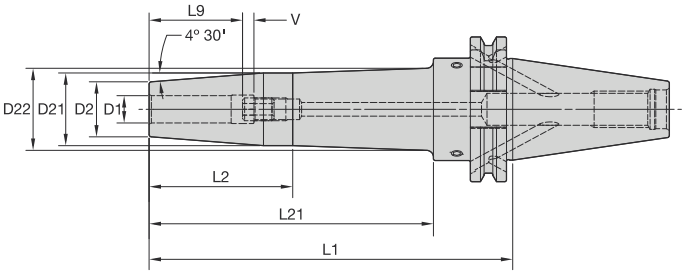
inch
xxx = x.xx

M — Identification Values

M =
Tool built to metric values and has metric retention thread

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

■ TT GP HPV MM-DV Form B/AD

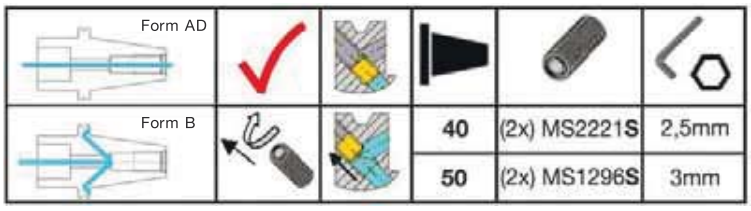
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3790097	DV40BHPVTT06080M	6	21	27	—	80	61	—	26	10	TTSS05014M	2,5mm	0,99
3790098	DV40BHPVTT06120M	6	21	27	—	120	85	—	26	10	TTSS05014M	2,5mm	1,28
3790099	DV40BHPVTT06160M	6	21	27	32	160	50	125	26	10	TTSS05014M	2,5mm	1,52
3790100	DV40BHPVTT08080M	8	21	27	—	80	61	—	26	10	TTSS06014M	3mm	0,99
3790101	DV40BHPVTT08120M	8	21	27	—	120	85	—	26	10	TTSS06014M	3mm	1,28
3790102	DV40BHPVTT08160M	8	21	27	32	160	50	125	26	10	TTSS06014M	3mm	1,52
3790203	DV40BHPVTT10080M	10	24	32	—	80	61	—	31	10	TTSS08014M	4mm	1,05
3790204	DV40BHPVTT10120M	10	24	32	—	120	85	—	31	10	TTSS08014M	4mm	1,38
3790205	DV40BHPVTT10160M	10	24	32	36	160	63	125	31	10	TTSS08014M	4mm	1,68
3617617	DV40BHPVTT12080M	12	24	32	—	80	61	—	36	10	TTSS10014M	5mm	1,03
3617642	DV40BHPVTT12120M	12	24	32	—	120	85	—	36	10	TTSS10014M	5mm	1,37
3617643	DV40BHPVTT12160M	12	24	32	36	160	63	125	36	10	TTSS10014M	5mm	1,66
3617644	DV40BHPVTT14080M	14	27	34	—	80	61	—	36	10	TTSS10014M	5mm	1,08
3617645	DV40BHPVTT14120M	14	27	34	—	120	85	—	36	10	TTSS10014M	5mm	1,43
3617646	DV40BHPVTT14160M	14	27	34	38	160	63	125	36	10	TTSS10014M	5mm	1,76
3617647	DV40BHPVTT16080M	16	27	34	—	80	61	—	39	10	TTSS12014M	6mm	1,05
3617648	DV40BHPVTT16120M	16	27	34	—	120	85	—	39	10	TTSS12014M	6mm	1,40
3617649	DV40BHPVTT16160M	16	27	34	38	160	63	125	39	10	TTSS12014M	6mm	1,73
3617650	DV40BHPVTT18080M	18	33	41	—	80	61	—	39	10	TTSS12014M	6mm	1,19
3617651	DV40BHPVTT18120M	18	33	42	—	120	85	—	39	10	TTSS12014M	6mm	1,63
3617652	DV40BHPVTT18160M	18	33	42	—	160	125	—	39	10	TTSS12014M	6mm	2,05
3617653	DV40BHPVTT20080M	20	33	41	—	80	61	—	41	10	TTSS16014M	8mm	1,16

(continued)

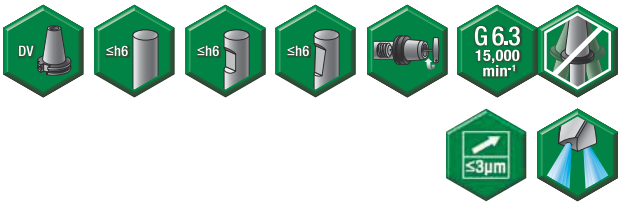
(TT GP HPV continued)

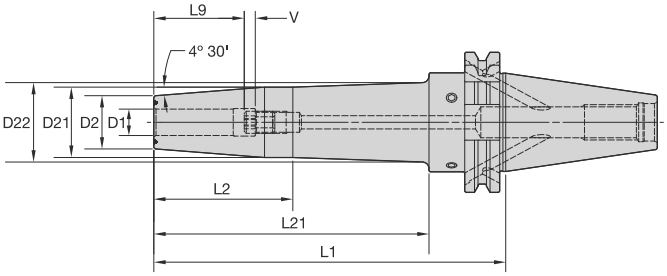
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617654	**DV40BHPVTT20120M**	20	33	42	—	120	85	—	41	10	**TTSS16014M**	8mm	1,59
3617655	**DV40BHPVTT20160M**	20	33	42	—	160	125	—	41	10	**TTSS16014M**	8mm	2,00
3617656	**DV40BHPVTT25100M**	25	44	53	—	100	81	—	47	10	**TTSS16014M**	8mm	1,65
3617657	**DV40BHPVTT25160M**	25	44	53	—	160	141	—	47	10	**TTSS16014M**	8mm	2,65
3617658	**DV40BHPVTT32100M**	32	44	53	—	100	81	—	51	10	**TTSS16014M**	8mm	1,49
3617659	**DV40BHPVTT32160M**	32	44	53	—	160	141	—	51	10	**TTSS16014M**	8mm	2,48

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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TT HT HPV MM-DV Form B/AD

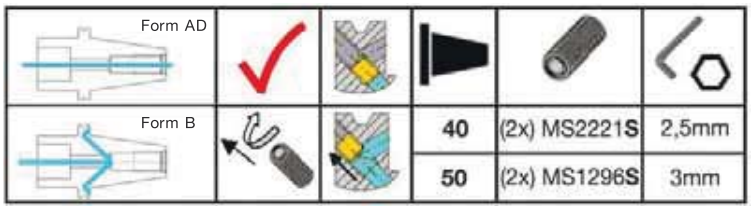
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617591	DV40BHPVTTHT12080M	12	24	32	—	80	61	—	36	10	TTSS10014M	5mm	1,03
3617592	DV40BHPVTTHT12120M	12	24	32	—	120	85	—	36	10	TTSS10014M	5mm	1,37
3617605	DV40BHPVTTHT12160M	12	24	32	36	160	63	125	36	10	TTSS10014M	5mm	1,66
3617606	DV40BHPVTTHT14080M	14	27	34	—	80	61	—	36	10	TTSS10014M	5mm	1,08
3617607	DV40BHPVTTHT14120M	14	27	34	—	120	85	—	36	10	TTSS10014M	5mm	1,43
3617608	DV40BHPVTTHT14160M	14	27	34	38	160	63	125	36	10	TTSS10014M	5mm	1,76
3617609	DV40BHPVTTHT16080M	16	27	34	—	80	61	—	39	10	TTSS12014M	6mm	1,05
3617610	DV40BHPVTTHT16120M	16	27	34	—	120	85	—	39	10	TTSS12014M	6mm	1,40
3617611	DV40BHPVTTHT16160M	16	27	34	38	160	63	125	39	10	TTSS12014M	6mm	1,73
3617612	DV40BHPVTTHT18080M	18	33	41	—	80	61	—	39	10	TTSS12014M	6mm	1,19
3617613	DV40BHPVTTHT18120M	18	33	42	—	120	85	—	39	10	TTSS12014M	6mm	1,63
3617614	DV40BHPVTTHT18160M	18	33	42	—	160	125	—	39	10	TTSS12014M	6mm	2,05
3617615	DV40BHPVTTHT20080M	20	33	41	—	80	61	—	41	10	TTSS16014M	8mm	1,16
3617616	DV40BHPVTTHT20120M	20	33	42	—	120	85	—	41	10	TTSS16014M	8mm	1,59

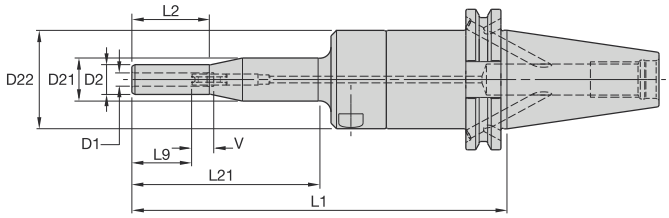
(continued)

(TT HT HPV continued)

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617618	**DV40BHPVTTHT20160M**	20	33	42	—	160	125	—	41	10	**TTSS16014M**	8mm	2,00
3617619	**DV40BHPVTTHT25100M**	25	44	53	—	100	81	—	47	10	**TTSS16014M**	8mm	1,65
3617620	**DV40BHPVTTHT25160M**	25	44	53	—	160	141	—	47	10	**TTSS16014M**	8mm	2,65
3617621	**DV40BHPVTTHT32100M**	32	44	53	—	100	81	—	51	10	**TTSS16014M**	8mm	1,49
3617622	**DV40BHPVTTHT32160M**	32	44	53	—	160	141	—	51	10	**TTSS16014M**	8mm	2,48

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5mm lg fine-balancing screw set (10 pieces) is available. Order number is MS1276PKG and must be ordered separately.
For retention knobs, see page J33.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

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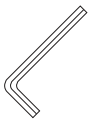
HC Slim-T MM-DV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3019233	**DV40BHCSLT06170M**	6	13,5	19,5	44,5	170	35	27	85	10	1,64
3019234	**DV40BHCSLT08170M**	8	15,5	19,5	44,5	170	35	27	85	10	1,65
3019235	**DV40BHCSLT10170M**	10	17,5	44,5	–	170	85	31	151	10	1,64

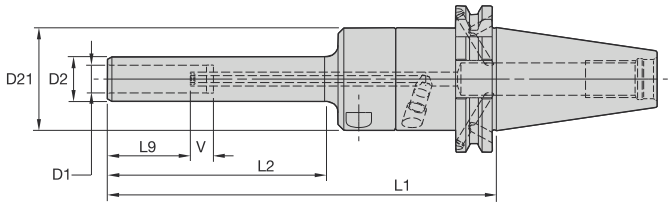
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
DV40BHCSLT06170M	**170.135**	5mm	**170.002**	2,5mm
DV40BHCSLT08170M	**170.135**	5mm	**170.002**	2,5mm
DV40BHCSLT10170M	**170.135**	5mm	**170.003**	3mm

(continued)

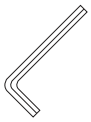
(Slim Line continued)



HC Slim MM-DV Form B/AD

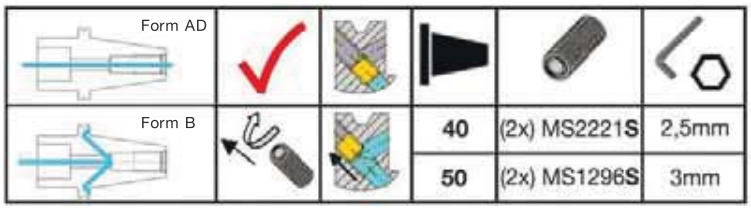
order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2634535	**DV40BHCSL12170M**	12	19,5	44,5	170	95	36	10	1,55
2634536	**DV40BHCSL14170M**	14	21,5	52,5	170	95	36	10	1,78
2634537	**DV40BHCSL16170M**	16	23,5	52,5	170	95	39	10	1,80
2634538	**DV40BHCSL18170M**	18	25,5	52,5	170	95	39	10	1,85
2634539	**DV40BHCSL20170M**	20	27,5	52,5	170	95	41	10	1,89

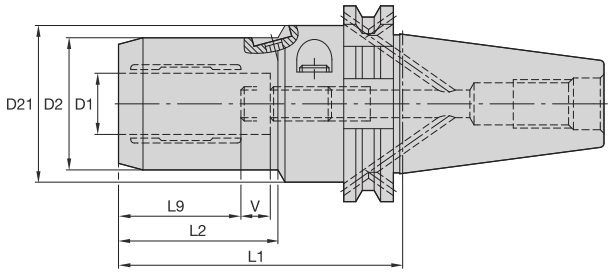
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw
DV40BHCSL12170M	**170.135**	5mm	**170.002**	2,5mm
DV40BHCSL14170M	**170.135**	5mm	**170.002**	2,5mm
DV40BHCSL16170M	**170.135**	5mm	**170.002**	2,5mm
DV40BHCSL18170M	**170.135**	5mm	**170.002**	2,5mm
DV40BHCSL20170M	**170.135**	5mm	**170.002**	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw and actuation wrench.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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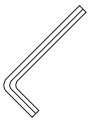
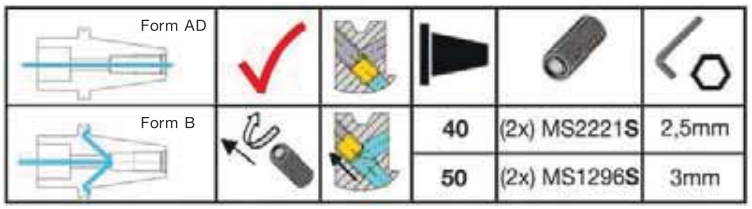
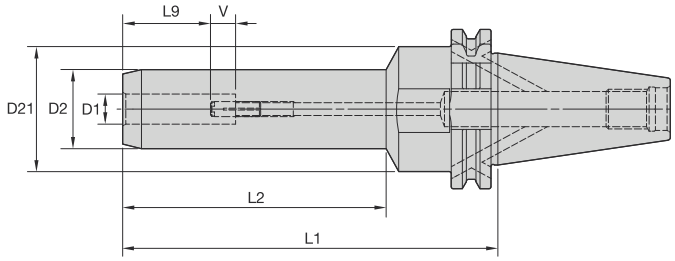
HC MM-DV Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1245443	**DV40BHC06072M**	6	25,7	50	72	33	30	10	**170.135**	5mm	**170.002**	2,5mm	1,12
1245444	**DV40BHC08072M**	8	27,7	50	72	34	30	10	**170.135**	5mm	**170.002**	2,5mm	1,13
1245445	**DV40BHC10077M**	10	29,7	50	77	39	35	10	**170.135**	5mm	**170.002**	2,5mm	1,17
1237451	**DV40BHC12077M**	12	31,6	50	77	40	35	10	**170.135**	5mm	**170.002**	2,5mm	1,18
1245446	**DV40BHC14082M**	14	33,6	50	82	46	40	10	**170.135**	5mm	**170.003**	3mm	1,22
1237452	**DV40BHC16082M**	16	37,6	50	82	47	40	10	**170.135**	5mm	**170.003**	3mm	1,28
1245447	**DV40BHC18082M**	18	39,6	50	82	47	40	10	**170.135**	5mm	**170.003**	3mm	1,31
1191013	**DV40BHC20082M**	20	41,6	50	82	48	40	10	**170.135**	5mm	**170.003**	3mm	1,33
1245448	**DV40BHC25117M**	25	49,8	63	117	51	51	10	**170.136**	6mm	**170.004**	4mm	2,16
1245449	**DV40BHC32117M**	32	59,8	63	117	59	51	10	**170.136**	6mm	**170.004**	4mm	2,34

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20	h6	0,000/-0,013

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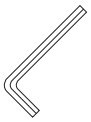
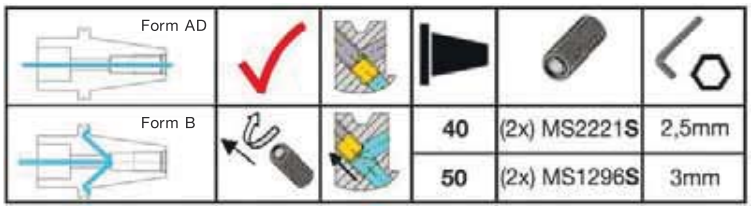
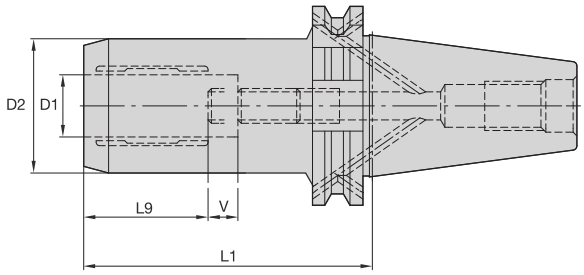
HC Trend In-DV Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1809973	**DV40BHCT06150M**	6	26	50	150	105	30	10	**170.135**	5 mm	**170.003**	3 mm	1,50
1809974	**DV40BHCT08150M**	8	28	50	150	105	30	10	**170.135**	5 mm	**170.003**	3 mm	1,56
1809975	**DV40BHCT10150M**	10	30	50	150	105	35	10	**170.135**	5 mm	**170.003**	3 mm	1,63
1809976	**DV40BHCT12150M**	12	32	50	150	105	35	10	**170.135**	5 mm	**170.003**	3 mm	1,69
1809977	**DV40BHCT14150M**	14	34	50	150	105	40	10	**170.135**	5 mm	**170.005**	5 mm	1,73
1809978	**DV40BHCT16150M**	16	38	50	150	105	40	10	**170.135**	5 mm	**170.005**	5 mm	1,90
1809979	**DV40BHCT18150M**	18	40	50	150	105	40	10	**170.135**	5 mm	**170.005**	5 mm	1,98
1809980	**DV40BHCT20150M**	20	42	50	150	105	40	10	**170.135**	5 mm	**170.005**	5 mm	2,07

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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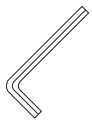
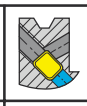
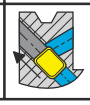
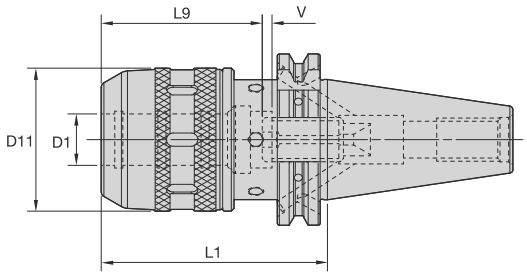
■ HC Basic MM-DV Form B/AD



order number	catalog number	D1	D2	L1	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1599399	**DV40BHCB20082M**	20	49,9	82	41	10	**170.135**	5mm	–	5mm	1,57

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.

Form AD					
Form B			**40**	(2x) MS2221**S**	2,5mm
			50	(2x) MS1296**S**	3mm



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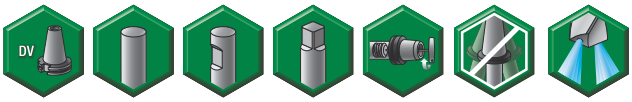
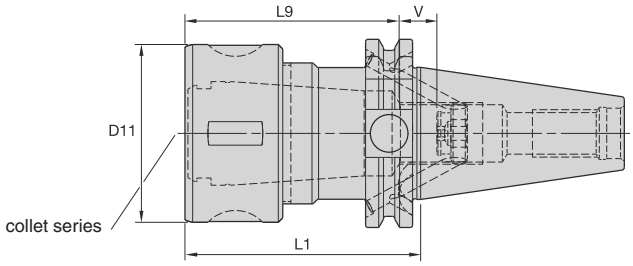
■ HPMC MM-DV Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3523084	**DV40BHPMC20085M**	20	53	85	44	20	**PSW52M**	**MCSS16040M**	2,5mm & 5mm	1,54
3523085	**DV40BHPMC20150M**	20	53	150	49	20	**PSW52M**	**MCSS16040M**	2,5mm & 5mm	2,59
3523086	**DV40BHPMC25095M**	25	61	95	55	20	**PSW58M**	**MCSS16040M**	2,5mm & 5mm	1,91
3523087	**DV40BHPMC25150M**	25	61	150	55	20	**PSW58M**	**MCSS16040M**	2,5mm & 5mm	2,93
3523088	**DV40BHPMC32120M**	32	70	120	58	20	**PSW68M**	**MCSS16040M**	2,5mm & 5mm	2,56
3523089	**DV40BHPMC32150M**	32	70	150	58	20	**PSW68M**	**MCSS16040M**	2,5mm & 5mm	3,27

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench not included.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
For retention knobs, see page J33.

- Tremendous Grip (3:1 advantage).





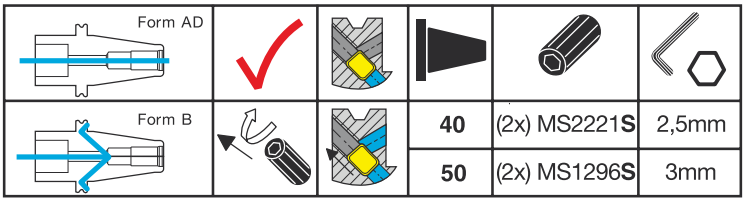
	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG100	2,6	25,5	5/64	1

ERICKSON

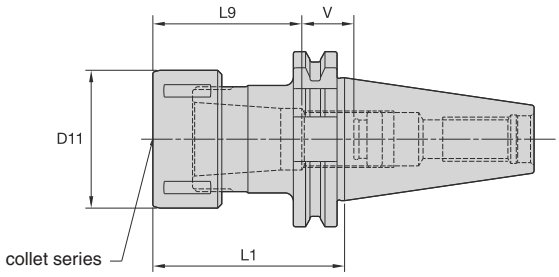
TG Round-DV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1237204	**DV40BTG100080M**	DV40	60	80	70	8	**LNA100M**	**HSW58M**	203	**SS081041G**	4mm & 5/32	1,38

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



• Tremendous Grip (3:1 advantage).



	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

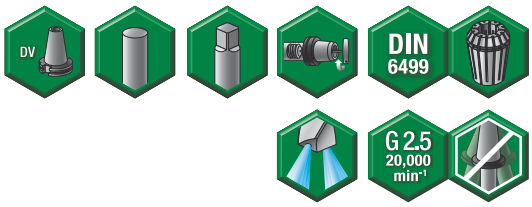
ERICKSON

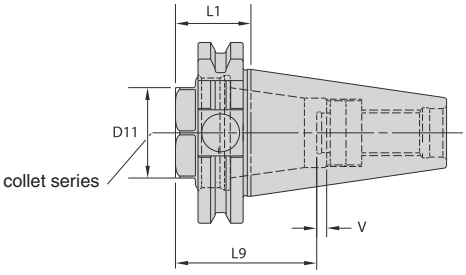
TG Round-DV Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1191962	**DV40TG075070M**	TG75	50	70	54	14	**LNA075M**	**HSW45M**	136	**SS081041G**	4mm & 5/32	1,14
1156385	**DV40TG100080M**	TG100	60	80	70	23	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,30
1263986	**DV40TG100100M**	TG100	60	100	70	43	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,49
1191963	**DV40TG100150M**	TG100	60	150	70	70	**LNA100M**	**HSW58M**	203	**SS112041G**	4mm & 5/32	1,99
1191964	**DV40TG150125M**	TG150	85	125	86	52	**LNA150M**	**HSW80M**	271	**SS112041G**	4mm & 5/32	2,57

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

• Grip (2:1 advantage).





	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER32	2,0	20,0	.08	.81

ERICKSON

■ ER Short-DV Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
3479819	**DV40SER32027M**	ER32	36	27	50	5	**LNECSER32M**	**OEW32M**	136	**SS094041G**	4mm & 5/32	0,60

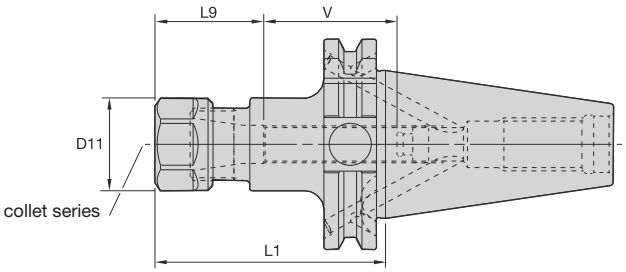
NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

KM™ ROTAFLEX™

The ROTAFLEX high-performance hole finishing system from WIDIA™, with its long history of proven successes, now features a host of new developments that will further its reputation as the premier hole-finishing solution for metalworking manufacturers.

With both roughing and precision finishing heads available, ROTAFLEX represents a single WIDIA system for both roughing and fine-finishing operations over a broad diameter range. The very stable KM-TS coupling and the newly developed RFX coupling are applicable to almost every machine spindle and offer easy assembly and disassembly due to less vibration, resulting in increased machine tool productivity and longer intervals between scheduled maintenance.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

ERICKSON

ER Hex-DV Form B/AD

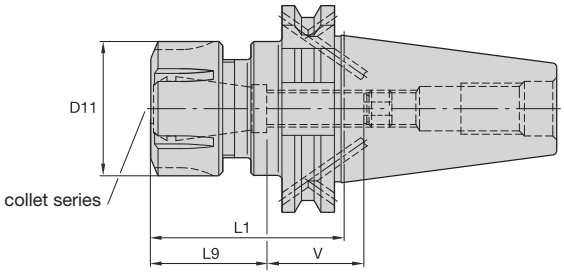
order number	catalog number	collet series	D11	L1	L9	V	kg
1770957	**DV40BER16070M**	ER16	28	70	32	48	0,96
1770958	**DV40BER16120M**	ER16	28	120	32	48	1,14

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
DV40BER16070M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
DV40BER16120M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32

(continued)

(ER continued)



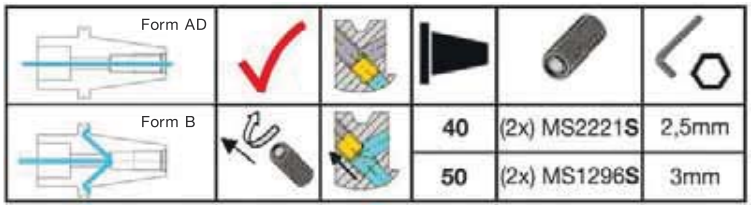
ER Round-DV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	kg
1263807	**DV40BER25065M**	ER25	42	65	40	35	1,04
1263808	**DV40BER25120M**	ER25	42	120	40	60	1,51
1263809	**DV40BER32070M**	ER32	50	70	46	33	1,08
1263810	**DV40BER32120M**	ER32	50	120	46	54	1,55
1263811	**DV40BER40080M**	ER40	63	80	52	34	1,22
1263812	**DV40BER40120M**	ER40	63	120	52	48	1,57

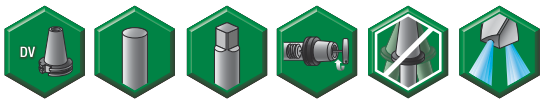
Spare Parts

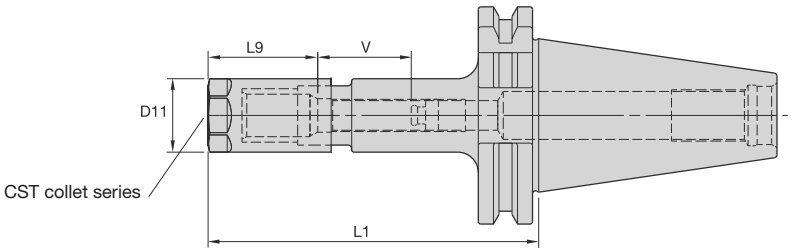
catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
DV40BER25065M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
DV40BER25120M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
DV40BER32070M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
DV40BER32120M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
DV40BER40080M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32
DV40BER40120M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.



- Grip 1:1.
- Balanced-by-design.
- Through-the-toolholder coolant capability — form AD.





ERICKSON

DA 08 collet series	Collet Capacity mm min	mm max	inch min	inch max
DA200	0,2	10	1/64	25/64

■ DA Style 04-DV Form AD • Hex Locknut • Metric

order number	catalog number	CST collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	Nm	kg
1156381	**DV40DA204100M**	DA200	21	100	38	30	**LNA204M**	**OEW19M**	54	**SS038031G**	2mm & 5/64	54	1,10
1191927	**DV40DA204150M**	DA200	21	150	38	30	**LNA204M**	**OEW19M**	54	**SS038031G**	2mm & 5/64	54	1,06

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I62.
DA non-pullout collets, see page I65.
For retention knobs, see page J33.

WIDIA™ TOP DRILL S+™ 12 x D • Superior Deep Hole Drilling

The versatile TOP DRILL S+ provides reliable performance across a broad scope of applications, including alloyed and unalloyed steel, cast iron, and some stainless steels and high-temperature alloys. TDS+ is now available in 12 x D, adding to its already wide range of options from 3–8 x D.

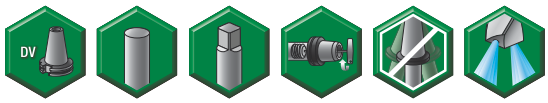
TDS+ 12 x D is capable of drilling an array of materials. The 4-margin land configuration offers stability, minimizes chipping and jamming, and promotes chip evacuation. Because TDS+ 12 x D does not require a pilot drill, it increases efficiency by reducing the number of steps required for basic applications.

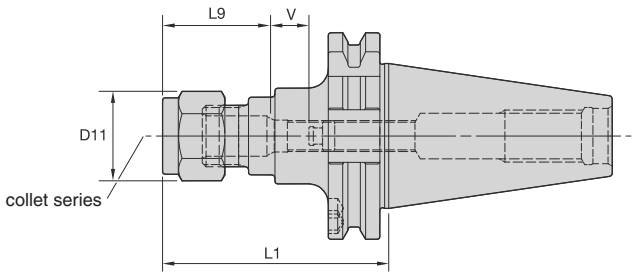
- 12 x D fits the gap between 8 x D and 15 x D.
- One drill that covers all materials.
- Can be used without a pilot.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA™

• Grip 1:1.





	Collet Capacity			
	mm		inch	
DA collet series	min	max	min	max
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

ERICKSON

DA Hex-DV Form AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
1156382	**DV40DA208070M**	DA200	1.08	2.76	1.50	1.26	2.11
1191924	**DV40DA108070M**	DA100	1.44	2.76	1.77	1.58	2.19

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
DV40DA208070M	**LNA208M**	**OEW24M**	44	**SS038031G**	2mm & 5/64
DV40DA108070M	**LNA108M**	**OEW32M**	55	**SS056041G**	4mm & 5/32

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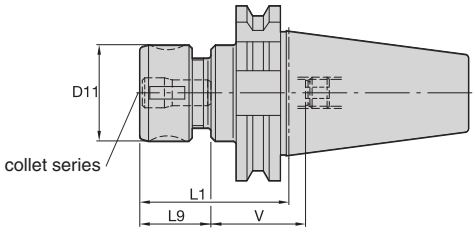


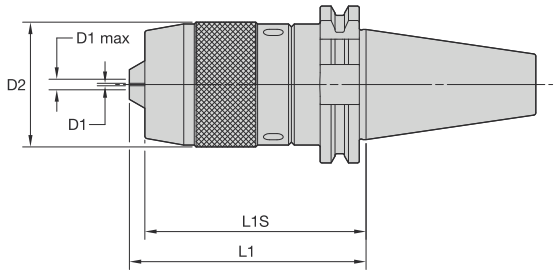
DA Round-DV form AD

order number	catalog number	collet series	D11	L1	L9	V	lbs
1156380	**DV40DA188070M**	DA180	1.69	2.76	1.96	.67	2.65
1191925	**DV40DA188100M**	DA180	1.69	3.94	1.96	1.86	3.09
1191926	**DV40DA188150M**	DA180	1.69	5.91	1.96	1.86	3.97

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
DV40DA188070M	**LNA188M**	**HSW45M**	100	**SS081041G**	4mm & 5/32
DV40DA188100M	**LNA188M**	**HSW45M**	100	**SS081041G**	4mm & 5/32
DV40DA188150M	**LNA188M**	**HSW45M**	100	**SS081041G**	4mm & 5/32

NOTE: For retention, tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.

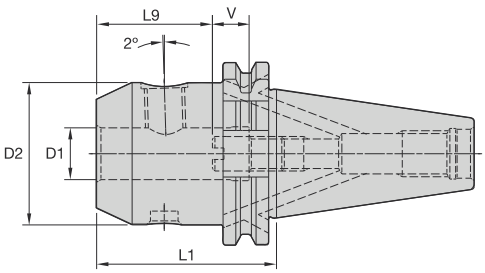


ERICKSON

DC-DV Form A

order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2	L1	L1S	locknut wrench	ft. lbs.	lbs
3583505	**DV40DC13090M**	1,0	.039	13,0	.512	50,5	102,3	90	**PSW45M**	40	3.48

NOTE: Tighten to the recommended tightening torque.
Locking wrench not supplied.
For retention knobs, see page J33.

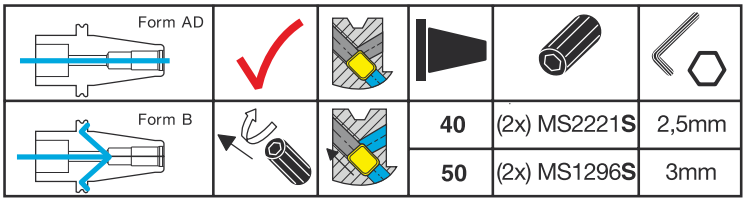


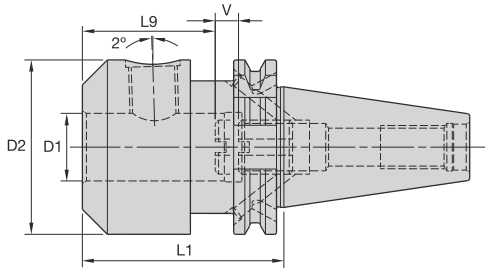
ERICKSON

WN MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1135194	**DV40BWN06050M**	6	25	50	30	10	**SS03M012**	3mm	7	**571.060**	2,5mm	0,89
1135203	**DV40BWN08050M**	8	28	50	30	10	**SS03M014**	4mm	15	**571.067**	3mm	0,92
1135210	**DV40BWN10050M**	10	35	50	35	10	**SS03M018**	5mm	25	**571.068**	4mm	0,98
1135219	**DV40BWN12050M**	12	42	50	40	10	**SS03M023**	6mm	35	**571.074**	5mm	1,05
1135227	**DV40BWN14050M**	14	44	50	40	10	**SS03M023**	6mm	35	**571.074**	5mm	1,07
1135245	**DV40BWN16063M**	16	48	63	43	10	**SS03M025**	6mm	50	**571.075**	6mm	1,27
1135255	**DV40BWN18063M**	18	50	63	43	10	**SS03M025**	6mm	50	**571.075**	6mm	1,31
1135265	**DV40BWN20063M**	20	52	63	45	10	**SS03M026**	8mm	95	**571.076**	6mm	1,29
1135273	**DV40BWN25100M**	25	65	100	50	10	**SS03M027**	10mm	135	**571.076**	6mm	2,26
1135282	**DV40BWN32100M**	32	72	100	54	10	**SS03M029**	10mm	160	**571.076**	6mm	2,48

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
For retention knobs, see page J33.





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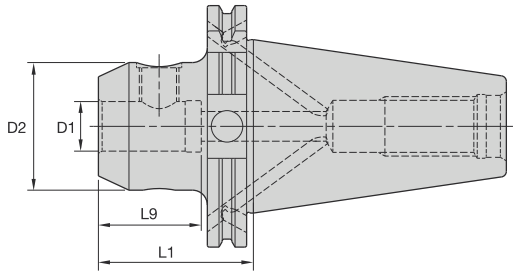
■ SWN MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1134537	**DV40BSWN25075M**	25	65	75	44	15	**SS03M027**	10mm	135	**571.066**	10mm	1,71
1134538	**DV40BSWN32075M**	32	72	75	46	17	**SS03M029**	10mm	160	**571.066**	10mm	1,80

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
For retention knobs, see page J33.

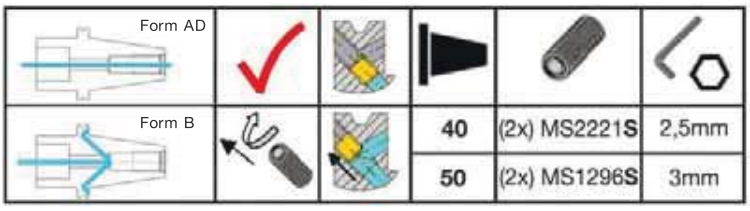


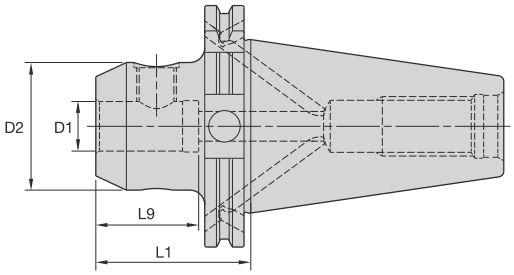
ERICKSON

EM MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1263781	**DV40BEM06050M**	6	25	50	40	**SS03M012**	3mm	7	0,88
1263784	**DV40BEM08050M**	8	28	50	40	**SS03M014**	4mm	15	0,93
1263787	**DV40BEM10050M**	10	35	50	45	**SS03M018**	5mm	25	0,96
1263790	**DV40BEM12050M**	12	42	50	50	**SS03M023**	6mm	35	1,03
1886608	**DV40BEM14050M**	14	44	50	50	**SS03M023**	6mm	35	1,06
1263796	**DV40BEM16063M**	16	48	63	53	**SS03M025**	6mm	50	1,25
1263799	**DV40BEM20063M**	20	50	63	55	**SS03M026**	8mm	95	1,25
1156378	**DV40BEM25100M**	25	65	100	60	**SS03M027**	10mm	135	2,27
1237816	**DV40BEM32100M**	32	72	100	65	**SS03M029**	10mm	160	2,48

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





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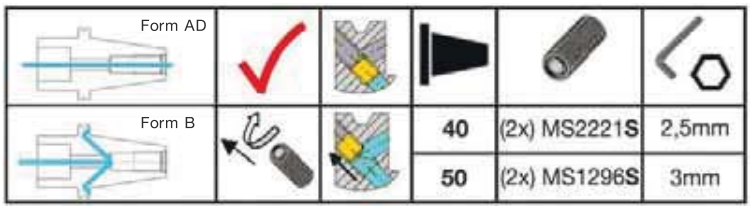
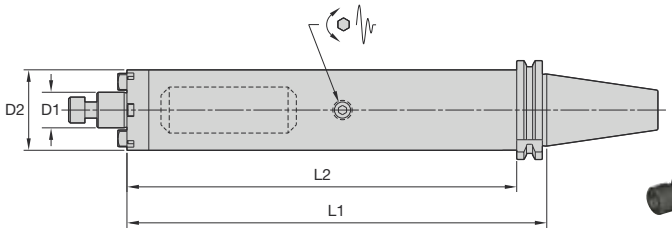
SEM MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9
1263821	**DV40BSEM25045M**	25	44,45	45	60
1263822	**DV40BSEM32070M**	32	65,50	70	–

NOTE: Do not overtighten clamp screw.
Supplied with clamp screw.
Clamp screw wrench not included.
For retention knobs, see page J33.





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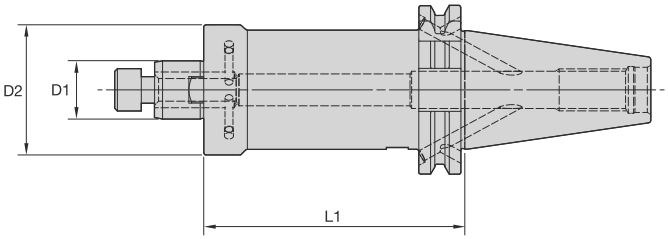
SMC TD Cap MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
4135132	**DV40BTDSMC22260M**	22	49	260	13,5	**MS1234**	**KDK22M**	8mm	4,30

SMC TD Lock MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L2	lock screw	drive key	wrench size lock screw	kg
4135483	**DV40BTDSMC27260M**	27	61	260	241,0	**KLSS27M**	**—**	10mm	5,88

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.



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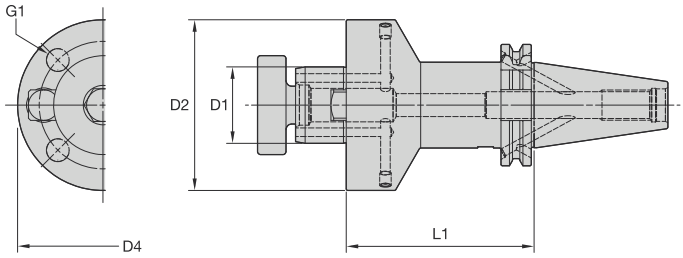
■ SMC Cap MM-DV Form B/AD

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3767816	**DV40BSM2C16035M**	16	38	35	**MS1294**	**KDK16M**	6mm	0,94
3767818	**DV40BSM2C16100M**	16	38	100	**MS1294**	**KDK16M**	6mm	1,46
3767815	**DV40BSMC16035M**	16	44	35	**MS1294**	**KDK16M**	6mm	0,98
3767817	**DV40BSMC16100M**	16	44	100	**MS1294**	**KDK16M**	6mm	1,70
3767820	**DV40BSM2C22035M**	22	42	35	**MS1234**	**–**	8mm	1,00
3767822	**DV40BSM2C22100M**	22	42	100	**MS1234**	**–**	8mm	1,65
3767819	**DV40BSMC22035M**	22	49	35	**MS1234**	**KDK22M**	8mm	1,06
3767821	**DV40BSMC22100M**	22	49	100	**MS1234**	**KDK22M**	8mm	1,81

(continued)

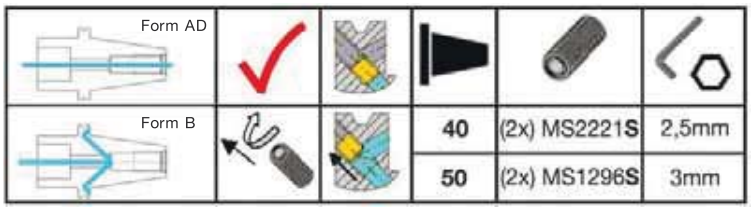
(SMC continued)

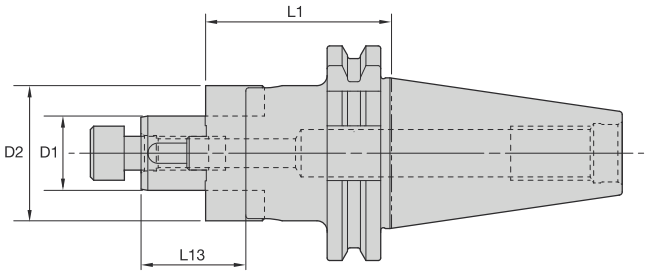


SMC Lock MM-DV Form B/AD

order number	catalog number	D1	D2	L1	G1	D4	lock screw	drive key	wrench size lock screw	kg
3767833	**DV40BSMC27035M**	27	50,0	35	–	–	**KLSS27M**	**KDK27M**	10mm	1,14
3767834	**DV40BSMC27100M**	27	60,0	100	–	–	**KLSS27M**	**KDK27M**	10mm	2,05
3767835	**DV40BSMC32050M**	32	78,0	50	–	–	**KLSS32M**	**KDK32M**	14mm	1,77
3767836	**DV40BSMC32100M**	32	78,0	100	–	–	**KLSS32M**	**KDK32M**	14mm	2,54
3767837	**DV40BSMC40050M**	40	89,3	50	M12 X 1.75	67	**KLSS40M**	**KDK40M**	17mm	2,01
3767838	**DV40BSMC40100M**	40	89,3	100	M12 X 1.75	67	**KLSS40M**	**KDK40M**	17mm	3,23

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.





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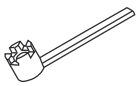
CS MM-DV Form AD • Cap Screw Design

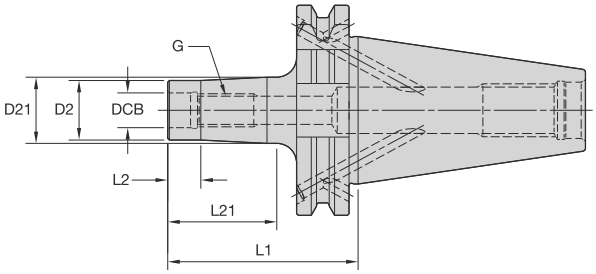
order number	catalog number	D1	D2	L1	L13	lock screw	wrench size lock screw	combi driver ring	combi drive key	kg
1263828	**DV40CS16055M**	16	32	55	27	**MS1294**	6mm	**CDR16M**	**CDK16M**	1,02
1191920	**DV40CS16100M**	16	32	100	27	**MS1294**	6mm	**CDR16M**	**CDK16M**	1,25
1236436	**DV40CS22055M**	22	40	55	31	**MS1234**	8mm	**CDR22M**	**CDK22M**	1,18
1191921	**DV40CS22100M**	22	40	100	31	**MS1234**	8mm	**CDR22M**	**CDK22M**	1,56

CS MM-DV Form AD • Lock Screw Design



order number	catalog number	D1	D2	L1	L13	lock screw	wrench	combi driver ring	combi drive key	kg
1156379	**DV40CS27055M**	27	48	55	33	**KLS27MPKG**	**SMW27M**	**CDR27M**	**CDK27M**	1,36
1263832	**DV40CS27100M**	27	48	100	33	**KLS27MPKG**	**SMW27M**	**CDR27M**	**CDK27M**	1,94
1263833	**DV40CS27150M**	27	48	150	33	**KLS27MPKG**	**SMW27M**	**CDR27M**	**CDK27M**	2,59
1191922	**DV40CS32060M**	32	58	60	38	**KLS32M**	**SMW32M**	**CDR32M**	**CDK32M**	1,65
1263835	**DV40CS32100M**	32	58	100	38	**KLS32M**	**SMW32M**	**CDR32M**	**CDK32M**	2,43
1191923	**DV40CS40060M**	40	70	60	41	**KLS40M**	**SMW40M**	**CDR40M**	**CDK40M**	2,06

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.



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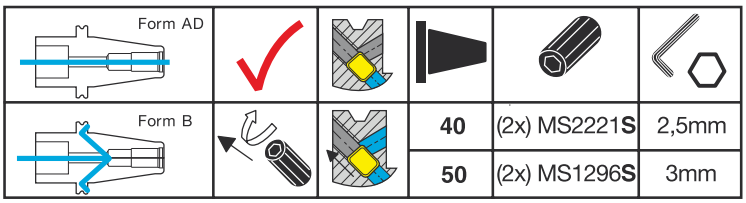
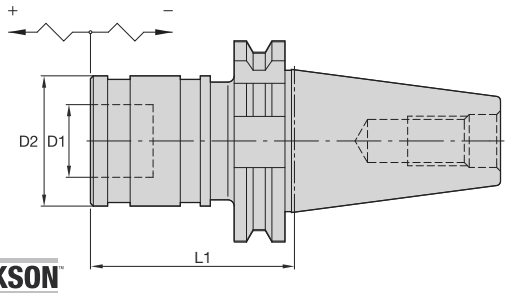
■ ST-DV Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4066108	DV40BST06038M	6,5	M6	10	–	38	13	–	0,82
4066109	DV40BST06058M	6,5	M6	10	13	58	10	33	0,80
4066110	DV40BST06078M	6,5	M6	10	20	78	10	53	0,85
4066111	DV40BST06098M	6,5	M6	10	23	98	10	73	0,90
4066112	DV40BST08038M	8,5	M8	13	–	38	13	–	0,82
4066123	DV40BST08058M	8,5	M8	13	15	58	10	33	0,81
4066124	DV40BST08078M	8,5	M8	13	23	78	10	53	0,88
4066125	DV40BST08098M	8,5	M8	13	23	98	10	73	0,91
4066126	DV40BST10038M	10,5	M10	18	–	38	13	–	0,83
4066127	DV40BST10058M	10,5	M10	18	20	58	10	33	0,87
4066128	DV40BST10078M	10,5	M10	18	25	78	10	53	0,91
4066129	DV40BST10098M	10,5	M10	18	28	98	10	73	0,99
4066130	DV40BST12038M	12,5	M12	21	–	38	13	–	0,83
4066131	DV40BST12058M	12,5	M12	21	24	58	10	33	0,88
4066132	DV40BST12078M	12,5	M12	21	24	78	10	53	0,91
4066133	DV40BST12098M	12,5	M12	21	31	98	10	73	1,05
4066134	DV40BST12118M	12,5	M12	21	31	118	10	93	1,12
4066135	DV40BST16038M	17,0	M16	29	–	38	13	–	0,86
4066136	DV40BST16058M	17,0	M16	29	–	58	33	–	0,95
4066137	DV40BST16078M	17,0	M16	29	34	78	10	53	1,09
4066138	DV40BST16098M	17,0	M16	29	34	98	10	73	1,20
4066139	DV40BST16118M	17,0	M16	29	39	118	10	93	1,42

NOTE: For retention knobs, see page J33.



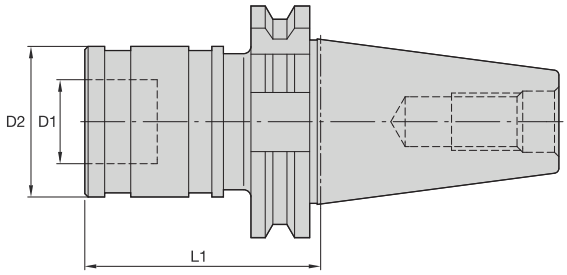


ERICKSON

■ RC-DV Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	tension	compression	kg
1777397	**DV40RC1060M**	1	M1 - M14	#0 - 9/16	19	36	60	7,5	7,5	1,80
1777380	**DV40RC2098M**	2	M5 - M24	5/16 - 7/8	31	53	98	12,5	12,5	2,00
1777381	**DV40RC3150M**	3	M14 - M27	13/16 - 1 3/8	48	78	150	20,0	20,0	2,70

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

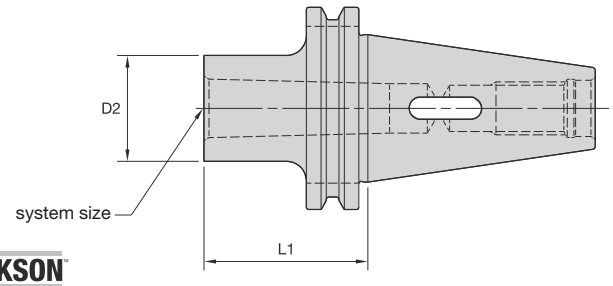


ERICKSON

■ STRC-DV Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	kg
1777541	**DV40STRC1074M**	1	M1 - M14	#0 - 9/16	19	36	74	1,20
1778012	**DV40STRC2089M**	2	M5 - M24	5/16 - 7/8	31	53	89	1,50

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

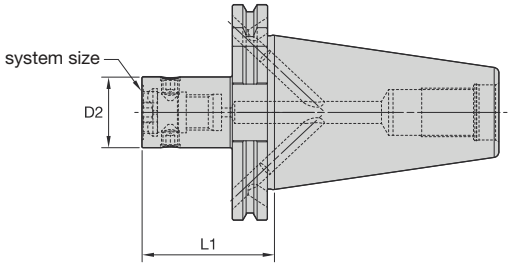


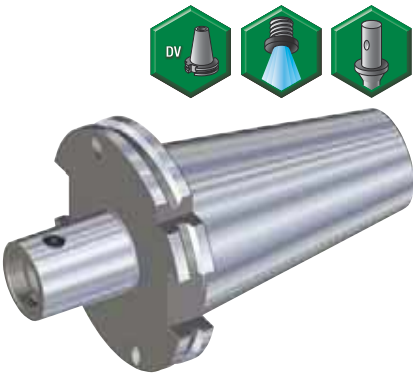
ERICKSON

MT-DV Form A

order number	catalog number	system size	D2	L1	kg
1191946	**DV40MT1050M**	1	25	50	1,03
1156384	**DV40MT2050M**	2	32	50	1,01
1191947	**DV40MT3070M**	3	40	70	1,03
1191948	**DV40MT4095M**	4	48	95	1,25

NOTE: For retention knobs; see page J33.

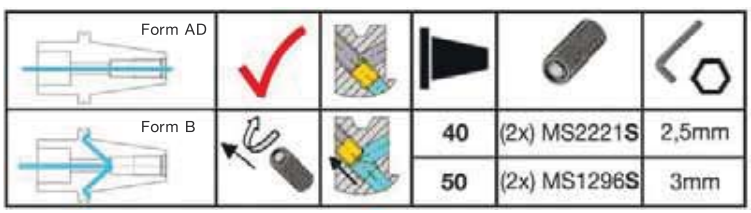


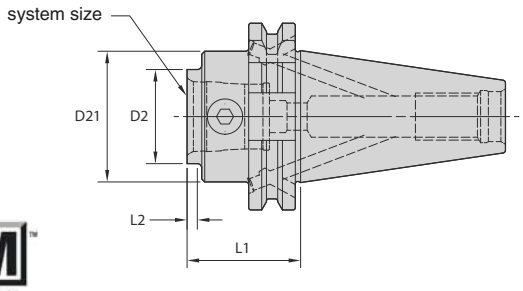


RFX-DV Form B/AD

order number	catalog number	system size	D2	L1	wrench size clamp screw	Nm	kg
3860696	**DV40BRFX185060M**	RFX185	18,5	60	3mm	6	1,10
3860697	**DV40BRFX245060M**	RFX245	24,5	60	3mm	8	1,10
3860698	**DV40BRFX320060M**	RFX320	32,0	60	4mm	14	1,10
3860699	**DV40BRFX420060M**	RFX420	42,0	60	5mm	16	1,10
3860700	**DV40BRFX550065M**	RFX550	55,0	65	6mm	20	1,20

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.





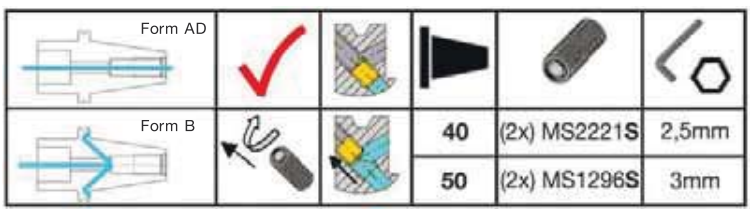
KM QUICK CHANGE

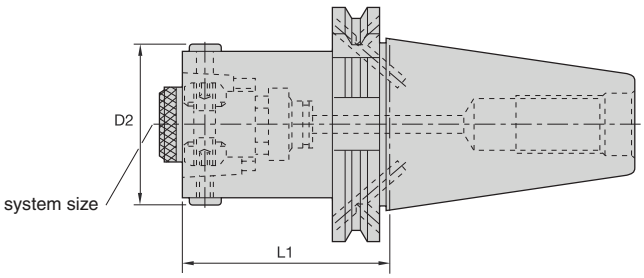
ERICKSON

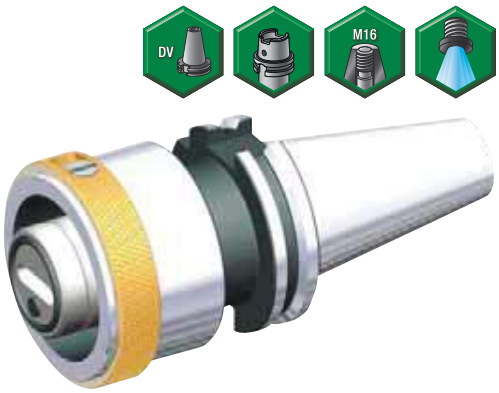
KM-DV Form B/AD

order number	catalog number	system size	D2	D21	L1	L2	KM spare parts package	wrench size actuation screw	Nm	kg
1974735	**DV40BKM32040M**	KM32	32	44,5	40	5	**KM32PKG3L**	5mm	8-11	0,97
1974736	**DV40BKM32090M**	KM32	32	44,5	90	55	**KM32PKG3S**	5mm	8-11	1,23
1974737	**DV40BKM40040M**	KM40	40	44,5	40	5	**KM40PKG3L**	6mm	12-16	0,95
1974738	**DV40BKM40100M**	KM40	40	44,5	100	65	**KM40PKG3S**	6mm	12-16	1,47
1974739	**DV40BKM50060M**	KM50	50	—	60	41	**KM50PKG3S**	10mm	27-34	1,22
1974740	**DV40BKM50120M**	KM50	50	—	120	101	**KM50PKG3S**	10mm	27-34	2,07

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.





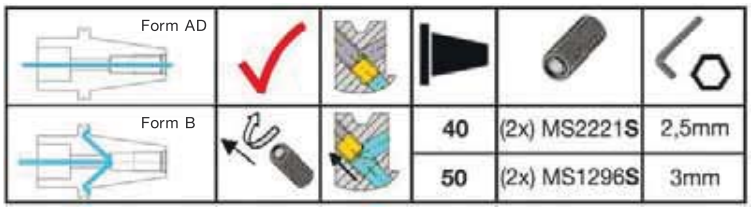


ERICKSON

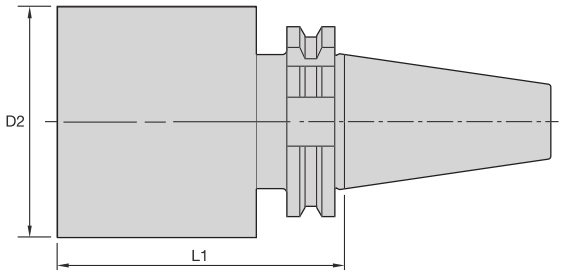
HSK-DV Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1519665	**DV40BHSK40060M**	HSK40	45	60	3mm	8	1,00
1519668	**DV40BHSK50065M**	HSK50	55	65	4mm	15	1,00
1320683	**DV40BHSK63075M**	HSK63	70	75	5mm	20	1,20

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.



• Machinable front 20–30 HRC.



ERICKSON

BB-DV Form A

order number	catalog number	D2	L1	kg
1263773	**DV40BB063280M**	63	280	7,00
1263774	**DV40BB082280M**	82	280	11,15
1263775	**DV40BB104200M**	104	200	11,99

NOTE: For retention knobs, see page J33.

Erickson™ DV V-Flange Shank Tooling System • **DV50 Series**

Erickson V-Flange DV Taper Tooling is manufactured from premium materials and meets or exceeds the latest DIN 69871 specification and ISO-1947 taper accuracy of AT3 specification standards. The DV50 tools are either prebalanced to a high specification or balanced-by-design and will perform effectively up to 12,000 RPM.

DV50

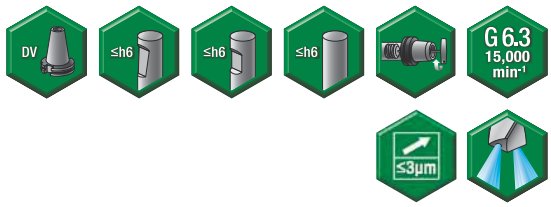
DV DIN 69871 Form B/AD Shank

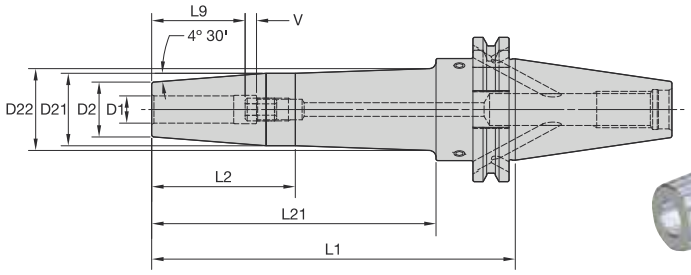
NOTE: Inherent out-of-balance conditions due to notch and unequal depth of drive slots.

For any applications higher than 12,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, retention knobs, collets, hardware, and cutting tools) be balanced as one identity.

- DIN 69871 7/24 taper.
- Standard M24 metric drawbar thread.
- Taper accuracy of AT3 specification or better.
- All tools set to form AD coolant specification. Many can be converted to form B style.
- Maximum 12,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.

- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools (requirements below).





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

ERICKSON

TT GP HPV MM-DV Form B/AD

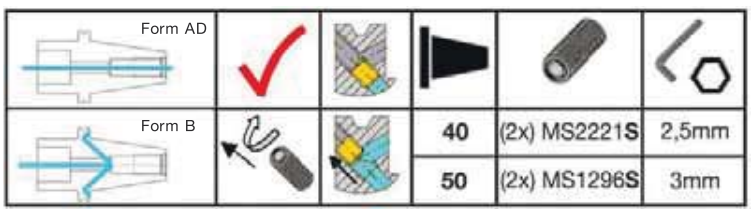
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3790206	DV50BHPVTT06080M	6	21	27	—	80	61	—	26	10	TTSS05014M	2,5mm	2,72
3790207	DV50BHPVTT06120M	6	21	27	—	120	85	—	26	10	TTSS05014M	2,5mm	3,30
3790208	DV50BHPVTT06160M	6	21	27	32	160	50	125	26	10	TTSS05014M	2,5mm	3,54
3790209	DV50BHPVTT08080M	8	21	27	—	80	61	—	26	10	TTSS06014M	3mm	2,71
3790210	DV50BHPVTT08120M	8	21	27	—	120	85	—	26	10	TTSS06014M	3mm	3,29
3790211	DV50BHPVTT08160M	8	21	27	32	160	50	125	26	10	TTSS06014M	3mm	3,53
3790212	DV50BHPVTT10080M	10	24	32	—	80	61	—	31	10	TTSS08014M	4mm	2,78
3790213	DV50BHPVTT10120M	10	24	32	—	120	85	—	31	10	TTSS08014M	4mm	3,40
3790214	DV50BHPVTT10160M	10	24	32	36	160	63	125	31	10	TTSS08014M	4mm	3,70
3617660	DV50BHPVTT12080M	12	24	32	—	80	61	—	36	10	TTSS10014M	5mm	2,76
3617661	DV50BHPVTT12120M	12	24	32	—	120	85	—	36	10	TTSS10014M	5mm	3,38
3617662	DV50BHPVTT12160M	12	24	32	36	160	63	125	36	10	TTSS10014M	5mm	3,68
3617663	DV50BHPVTT14080M	14	27	34	—	80	61	—	36	10	TTSS10014M	5mm	2,81
3617664	DV50BHPVTT14120M	14	27	34	—	120	85	—	36	10	TTSS10014M	5mm	3,45
3617665	DV50BHPVTT14160M	14	27	34	39	160	57	125	36	10	TTSS10014M	5mm	3,79
3617666	DV50BHPVTT16080M	16	27	34	—	80	61	—	39	10	TTSS12014M	6mm	2,80
3617667	DV50BHPVTT16120M	16	27	34	—	120	85	—	39	10	TTSS12014M	6mm	3,42
3617668	DV50BHPVTT16160M	16	27	34	39	160	57	125	39	10	TTSS12014M	6mm	3,76
3617669	DV50BHPVTT18080M	18	33	41	—	80	61	—	39	10	TTSS12014M	6mm	2,93
3617670	DV50BHPVTT18120M	18	33	42	—	120	85	—	39	10	TTSS12014M	6mm	3,65

(continued)

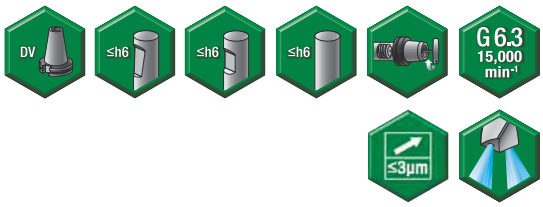
(TT GP HPV MM-DV Form B/AD continued)

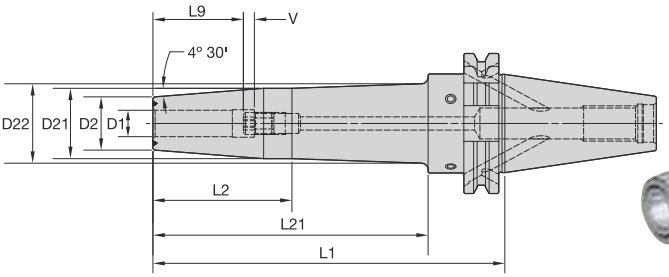
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617671	**DV50BHPVTT18160M**	18	33	42	46	160	69	125	39	10	**TTSS12014M**	6mm	4,13
3617672	**DV50BHPVTT20080M**	20	33	41	—	80	61	—	41	10	**TTSS16014M**	8mm	2,90
3617673	**DV50BHPVTT20120M**	20	33	42	—	120	85	—	41	10	**TTSS16014M**	8mm	3,61
3617674	**DV50BHPVTT20160M**	20	33	42	46	160	69	125	41	10	**TTSS16014M**	8mm	4,08
3617675	**DV50BHPVTT25100M**	25	44	53	—	100	81	—	47	10	**TTSS16014M**	8mm	3,48
3617676	**DV50BHPVTT25160M**	25	44	53	—	160	120	—	47	10	**TTSS16014M**	8mm	4,74
3617677	**DV50BHPVTT32100M**	32	44	53	—	100	81	—	51	10	**TTSS16014M**	8mm	3,32
3617678	**DV50BHPVTT32160M**	32	44	53	—	160	120	—	51	10	**TTSS16014M**	8mm	4,58

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is MS127PKG and must be ordered separately.
For retention knobs, see page J33.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face (requirements below).
- 10 kW power or greater Shrink Fit device must be used.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32	h6	0,000/-0,016

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TT HT HPV MM-DV Form B/AD

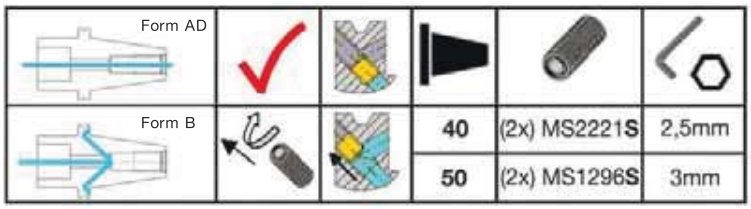
order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617623	DV50BHPVTTHT12080M	12	24	32	—	80	61	—	36	10	TTSS10014M	5mm	2,76
3617624	DV50BHPVTTHT12120M	12	24	32	—	120	85	—	36	10	TTSS10014M	5mm	3,38
3617625	DV50BHPVTTHT12160M	12	24	32	36	160	63	125	36	10	TTSS10014M	5mm	3,68
3617626	DV50BHPVTTHT14080M	14	27	34	—	80	61	—	36	10	TTSS10014M	5mm	2,81
3617627	DV50BHPVTTHT14120M	14	27	34	—	120	85	—	36	10	TTSS10014M	5mm	3,45
3617628	DV50BHPVTTHT14160M	14	27	34	39	160	57	125	36	10	TTSS10014M	5mm	3,79
3617629	DV50BHPVTTHT16080M	16	27	34	—	80	61	—	39	10	TTSS12014M	6mm	2,80
3617630	DV50BHPVTTHT16120M	16	27	34	—	120	85	—	39	10	TTSS12014M	6mm	3,42
3617631	DV50BHPVTTHT16160M	16	27	34	39	160	57	125	39	10	TTSS12014M	6mm	3,76
3617632	DV50BHPVTTHT18080M	18	33	41	—	80	61	—	39	10	TTSS12014M	6mm	2,93
3617633	DV50BHPVTTHT18120M	18	33	42	—	120	85	—	39	10	TTSS12014M	6mm	3,65
3617634	DV50BHPVTTHT18160M	18	33	42	46	160	69	125	39	10	TTSS12014M	6mm	4,13

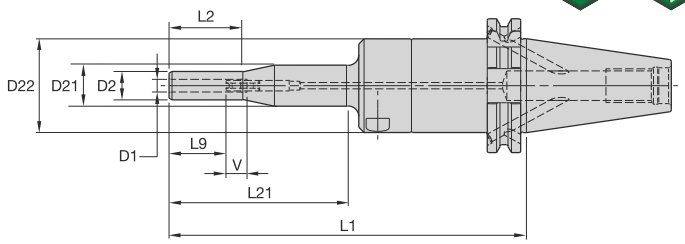
(continued)

(TT HT HPV MM-DV Form B/AD continued)

order number	catalog number	D1	D2	D21	D22	L1	L2	L21	L9	V	stop screw	wrench size stop screw	kg
3617635	**DV50BHPVTTHT20080M**	20	33	41	—	80	61	—	41	10	**TTSS16014M**	8mm	2,90
3617636	**DV50BHPVTTHT20120M**	20	33	42	—	120	85	—	41	10	**TTSS16014M**	8mm	3,61
3617637	**DV50BHPVTTHT20160M**	20	33	42	46	160	69	125	41	10	**TTSS16014M**	8mm	4,08
3617638	**DV50BHPVTTHT25100M**	25	44	53	—	100	81	—	47	10	**TTSS16014M**	8mm	3,48
3617639	**DV50BHPVTTHT25160M**	25	44	53	—	160	125	—	47	10	**TTSS16014M**	8mm	4,74
3617640	**DV50BHPVTTHT32100M**	32	44	53	—	100	81	—	51	10	**TTSS16014M**	8mm	3,32
3617641	**DV50BHPVTTHT32160M**	32	44	53	—	160	125	—	51	10	**TTSS16014M**	8mm	4,58

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) is available. Order number is M51276PKG and must be ordered separately.
For retention knobs, see page J33.





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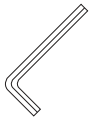
HC Slim T MM-DV Form B/AD

order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	kg
3019239	DV50BHCSLT06200M	6	13,5	19,5	44	200	35	27	85	10	3,81
3019240	DV50BHCSLT08200M	8	15,5	19,5	44	200	35	27	85	10	3,82
3019241	DV50BHCSLT10200M	10	17,5	44,5	–	200	85	31	181	10	3,81

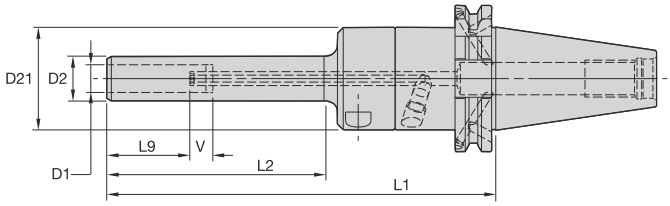
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
DV50BHCSLT06200M	170.135	5mm	170.002	2,5mm
DV50BHCSLT08200M	170.135	5mm	170.002	2,5mm
DV50BHCSLT10200M	170.135	5mm	170.003	3mm

(continued)

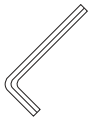
(HC Slim continued)



HC Slim MM-DV Form B/AD

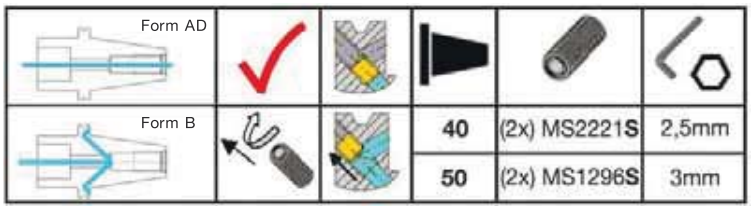
order number	catalog number	D1	D2	D21	L1	L2	L9	V	kg
2634420	**DV50BHCSL12200M**	12	19,5	44,5	200	95	36	10	3,57
2634421	**DV50BHCSL14200M**	14	21,5	52,5	200	95	36	10	3,99
2634422	**DV50BHCSL16200M**	16	23,5	52,5	200	95	39	10	4,01
2634533	**DV50BHCSL18200M**	18	25,5	52,5	200	95	39	10	4,05
2634534	**DV50BHCSL20200M**	20	27,5	52,5	200	95	41	10	4,09

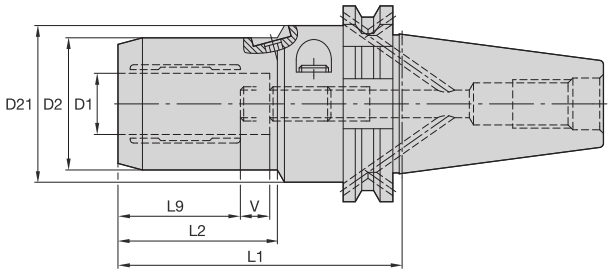
Spare Parts



catalog number	actuation wrench	wrench size actuation screw	length-adjustment wrench	wrench size stop screw
DV50BHCSL12200M	**170.135**	5mm	**170.002**	2,5mm
DV50BHCSL14200M	**170.135**	5mm	**170.002**	2,5mm
DV50BHCSL16200M	**170.135**	5mm	**170.002**	2,5mm
DV50BHCSL18200M	**170.135**	5mm	**170.002**	2,5mm
DV50BHCSL20200M	**170.135**	5mm	**170.002**	2,5mm

NOTE: Do not overtorque actuation screw. Use supplied wrench and tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw and actuation wrench.
Unable to use SEFAS™ chamfering rings on this design.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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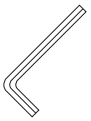
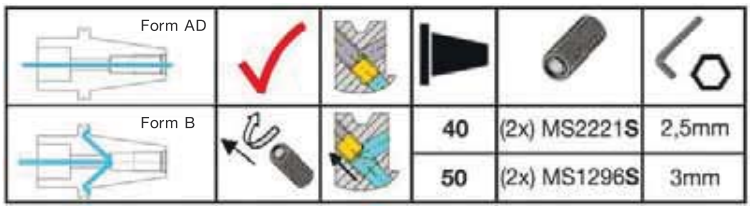
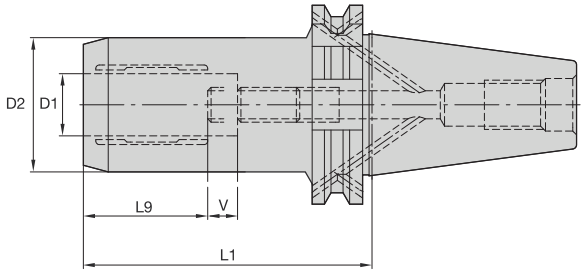
HC MM-DV Form B/AD



order number	catalog number	D1	D2	D21	L1	L2	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1245450	**DV50BHC06072M**	6	25,7	50	72	33	30	10	**170.135**	5mm	**170.002**	2,5mm	2,87
1245451	**DV50BHC08072M**	8	27,7	50	72	34	30	10	**170.135**	5mm	**170.002**	2,5mm	2,90
1191014	**DV50BHC10077M**	10	29,7	50	77	39	35	10	**170.135**	5mm	**170.002**	2,5mm	2,92
1191015	**DV50BHC12077M**	12	31,6	50	77	40	35	10	**170.135**	5mm	**170.002**	2,5mm	2,93
1245452	**DV50BHC14082M**	14	33,6	50	82	46	40	10	**170.135**	5mm	**170.003**	3mm	2,96
1245453	**DV50BHC16082M**	16	37,6	50	82	47	40	10	**170.135**	5mm	**170.003**	3mm	3,02
1245454	**DV50BHC18082M**	18	39,6	50	82	47	40	10	**170.135**	5mm	**170.003**	3mm	3,04
1191016	**DV50BHC20082M**	20	41,6	50	82	48	40	10	**170.135**	5mm	**170.003**	3mm	3,06
1245455	**DV50BHC25117M**	25	49,8	63	117	51	51	10	**170.136**	6mm	**170.004**	4mm	4,03
1197514	**DV50BHC32117M**	32	59,8	63	117	59	51	10	**170.136**	6mm	**170.004**	4mm	4,21

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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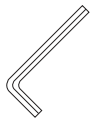
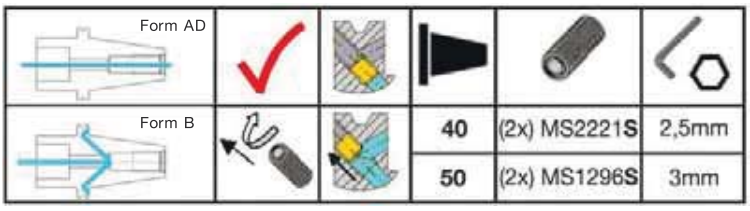
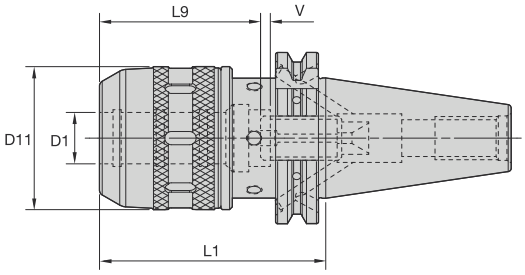
HC Basic MM-DV Form B/AD



order number	catalog number	D1	D2	L1	L9	V	actuation wrench	wrench size actuation screw	stop screw wrench	wrench size stop screw	kg
1599686	**DV50BHCB20082M**	20	49,9	82	41	10	**170.135**	5mm	**170.005**	5mm	3,30

NOTE: Do not overtorque actuation screw. Tighten by hand until stop is felt.
Hydraulic chuck technical section, see page K60.
Supplied with stop screw.
Actuation wrench must be ordered separately.
Reduction sleeves are available and must be ordered separately; see page I2.
For retention knobs, see page J33.





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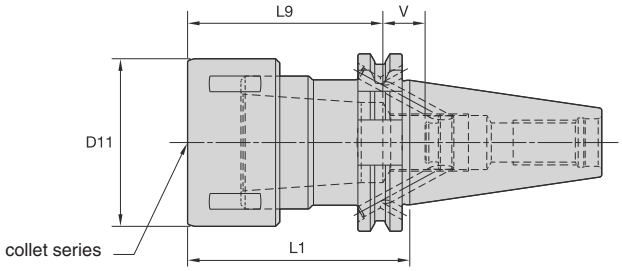
■ HPMC MM-DV Form B/AD

order number	catalog number	D1	D11	L1	L9	V	locknut wrench	stop screw	wrench size stop screw	kg
3523090	**DV50BHPMC20090M**	20	53	90	49	20	**PSW52M**	**MCSS16040M**	2,5mm & 5mm	3,67
3523091	**DV50BHPMC20165M**	20	53	165	49	20	**PSW52M**	**MCSS16040M**	2,5mm & 5mm	4,76
3523092	**DV50BHPMC25090M**	25	61	90	55	20	**PSW58M**	**MCSS16040M**	2,5mm & 5mm	3,86
3523093	**DV50BHPMC25165M**	25	61	165	55	20	**PSW58M**	**MCSS16040M**	2,5mm & 5mm	5,37
3523094	**DV50BHPMC32090M**	32	70	90	58	20	**PSW68M**	**MCSS16040M**	2,5mm & 5mm	4,08
3523095	**DV50BHPMC32165M**	32	74	165	75	20	**PSW68M**	**MCSS16040M**	2,5mm & 5mm	6,12

NOTE: Milling chuck technical section, see page K64.
Supplied with locknut and stop screw.
Locknut wrench not included.
Optional M6~1,0P fine-balancing screw set is available (order number HPMCBALSCREWSET) and must be ordered separately; see page J4.
Reduction sleeves are available and must be ordered separately; see page I6.
For retention knobs, see page J33.

• Tremendous Grip (3:1 advantage).



	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG100	2,6	25,5	5/64	1

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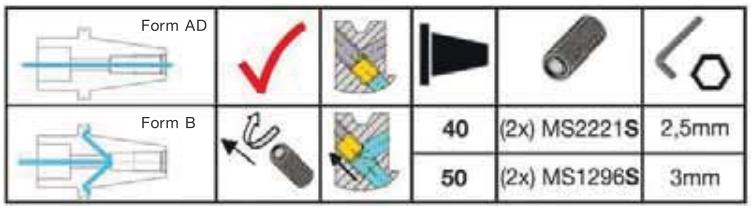
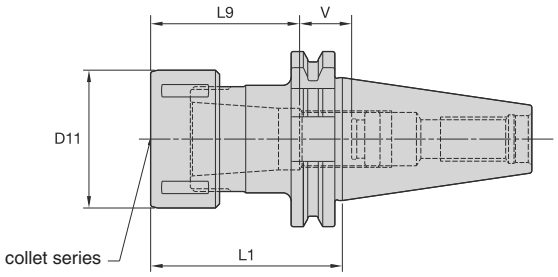
TG Round-DV Form B/AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	kg
1125523	**DV50BTG100085M**	TG100	60	85	70	18	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	3,00
1264147	**DV50BTG100150M**	TG100	60	150	70	80	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	4,50

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



- Tremendous Grip (3:1 advantage).



	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1 1/2

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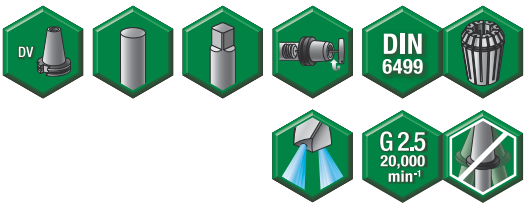
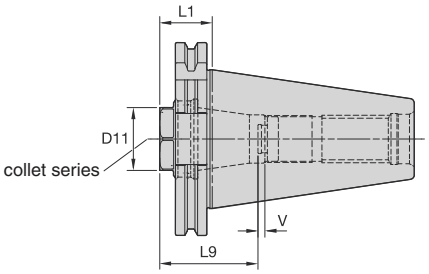
TG Round-DV Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	kg
1156402	**DV50TG100085M**	TG100	60	85	70	38	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	3,36
1156403	**DV50TG100150M**	TG100	60	150	70	80	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	4,54
1264353	**DV50TG100200M**	TG100	60	200	70	80	**LNA100M**	**HSW58M**	**SS112041G**	4mm & 5/32	5,51
1252592	**DV50TG150090M**	TG150	85	90	83	27	**LNA150M**	**HSW80M**	**SS162062G**	4mm & 5/32	3,73
1228270	**DV50TG150150M**	TG150	85	150	83	67	**LNA150M**	**HSW80M**	**SS162062G**	4mm & 5/32	4,94

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

• Grip (2:1 advantage).





	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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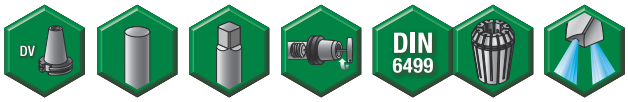
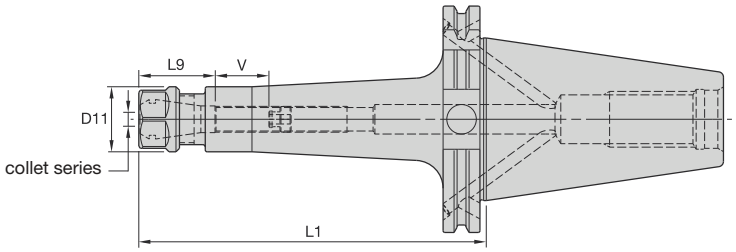
■ ER Short-DV Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
3479820	**DV50SER32027M**	ER32	36	27	50	17	**LNECSER32M**	**OEW32M**	136	**SS094041G**	4mm & 5/32	2,41
3479821	**DV50SER40027M**	ER40	46	27	57	11	**LNECSER40M**	**OEW168**	176	**SS112041G**	4mm & 5/32	2,24

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.

• Grip (2:1 advantage).





ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER16	0,5	10,0	.02	.41
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

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ER Hex-DV Form B/AD

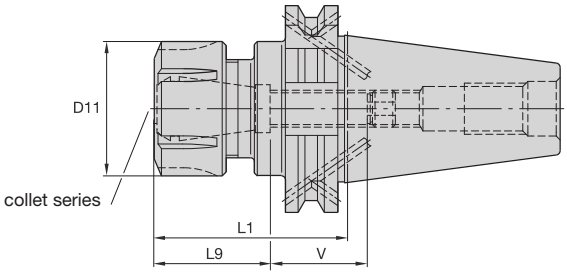
order number	catalog number	collet series	D11	L1	L9	V	kg
1748235	**DV50BER16100M**	ER16	28	100	32	48	2,81
1972537	**DV50BER16150M**	ER16	28	150	32	48	3,13

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
DV50BER16100M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32
DV50BER16150M	**LNHSER16M**	**OEW25M**	40	56	**SS044038G**	4mm & 5/32

(continued)

(ER DV Form B/AD continued)



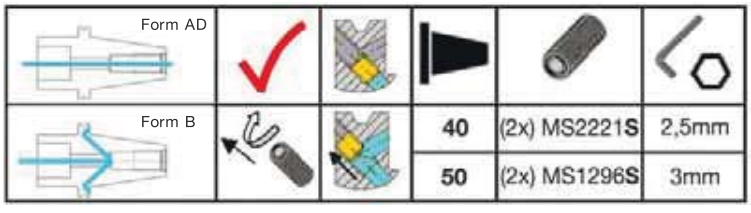
ER Round-DV Form B/AD

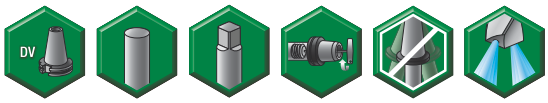
order number	catalog number	collet series	D11	L1	L9	V	kg
1264126	**DV50BER25070M**	ER25	42	70	40	50	2,87
1264127	**DV50BER25150M**	ER25	42	150	40	60	3,53
1264128	**DV50BER32070M**	ER32	50	70	46	54	2,91
1264129	**DV50BER32150M**	ER32	50	150	46	54	3,89
1264130	**DV50BER40080M**	ER40	63	80	52	48	3,25
1264132	**DV50BER40150M**	ER40	63	150	52	48	4,66

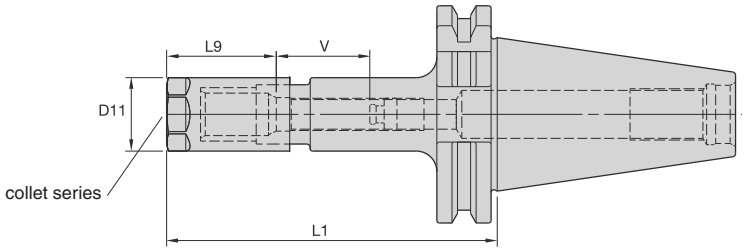
Spare Parts

catalog number	locknut	wrench	counterbore collet torque (Nm)	stop screw	wrench size stop screw
DV50BER25070M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
DV50BER25150M	**LNSER25M**	**ER25WM**	104	**SS075041G**	4mm & 5/32
DV50BER32070M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
DV50BER32150M	**LNSER32M**	**ER32WM**	136	**SS094041G**	4mm & 5/32
DV50BER40080M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32
DV50BER40150M	**LNSER40M**	**ER40WM**	176	**SS112041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.
For retention knobs, see page J33.







	Collet Capacity			
	mm		inch	
DA 08 collet series	min	max	min	max
DA200	0,2	10	1/64	25/64

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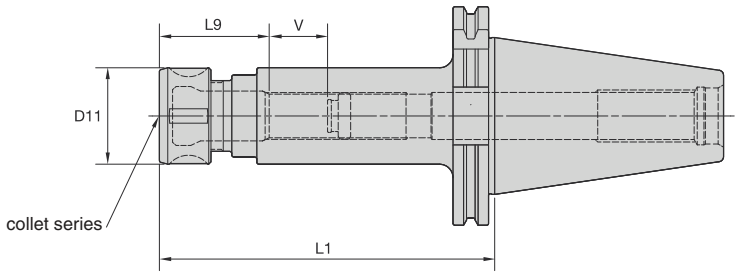
DA 04 Hex-DV Form AD

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	Nm	stop screw	wrench size stop screw	kg
1264197	**DV50DA204100M**	DA200	21,46	100	38	32	**LNA204M**	**OEW19M**	54	**SS038031G**	2mm & 5/64	3,00
1264198	**DV50DA204150M**	DA200	21,46	150	38	32	**LNA204M**	**OEW19M**	54	**SS038031G**	2mm & 5/64	3,20

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I62.
DA non-pullout collets, see page I65.
For retention knobs, see page J33.

• Grip 1:1.



	Collet Capacity			
	mm		inch	
DA collet series	min	max	min	max
DA180	2,2	20	1/64	3/4

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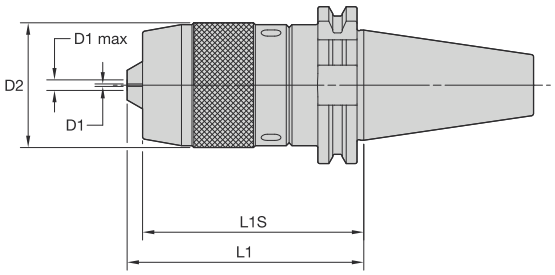
DA 08 Round-DV Form AD

order number	catalog number	collet series	D11	L1	L9	V
1179333	**DV50DA188070M**	DA180	43	70	50	49
1156389	**DV50DA188150M**	DA180	43	150	50	50
1136821	**DV50DA188200M**	DA180	43	200	50	50

Spare Parts

catalog number	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
DV50DA188070M	**LNA188M**	**HSW45M**	136	**SS081041G**	4mm & 5/32
DV50DA188150M	**LNA188M**	**HSW45M**	136	**SS081041G**	4mm & 5/32
DV50DA188200M	**LNA188M**	**HSW45M**	136	**SS081041G**	4mm & 5/32

NOTE: For retention, tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I62.
DA non-pullout collets, see page I65.
For retention knobs, see page J33.



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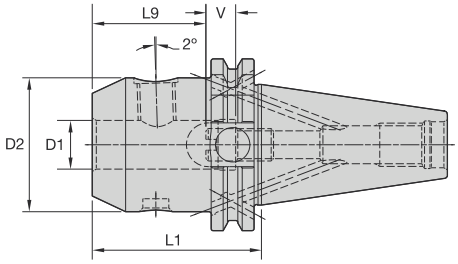
■ DC-DV Form A

order number	catalog number	D1 mm	D1 in	D1 max mm	D1 max in	D2	L1	L1S	locknut wrench	Nm	kg
3583506	**DV50DC13090M**	1,0	.039	13,0	.512	50,5	102,3	90	**PSW45M**	55	3,50

NOTE: Tighten to the recommended tightening torque.
Locking wrench not supplied.
For retention knobs, see page J33.



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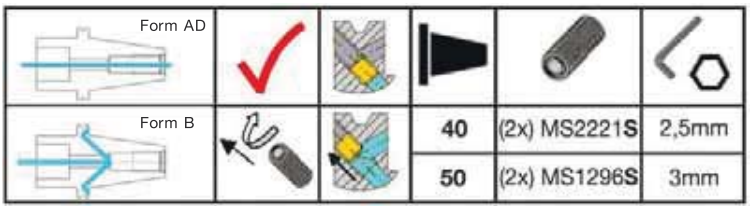
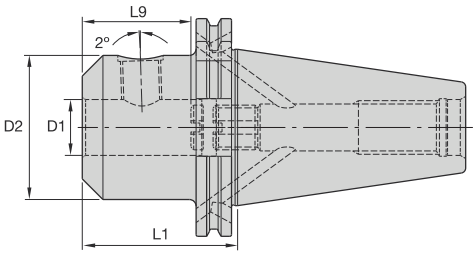
WN MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9	V	lock screw	wrench size lock screw	Nm	stop screw	wrench size stop screw	kg
1175468	**BT50BWN06063M**	6	25	63	30	10	**SS03M012**	3mm	7	**571.060**	2,5mm	3,63
1300426	**BT50BWN08063M**	8	28	63	30	10	**SS03M014**	4mm	15	**571.067**	3mm	3,64
1137510	**BT50BWN10063M**	10	35	63	35	10	**SS03M018**	5mm	25	**571.068**	4mm	3,69
1137518	**BT50BWN12080M**	12	42	80	40	10	**SS03M023**	6mm	35	**571.074**	5mm	3,92
1137526	**BT50BWN14080M**	14	44	80	40	10	**SS03M023**	6mm	35	**571.074**	5mm	3,95
1137535	**BT50BWN16080M**	16	48	80	43	10	**SS03M025**	6mm	50	**571.075**	6mm	4,02
1137543	**BT50BWN18080M**	18	50	80	43	10	**SS03M025**	6mm	50	**571.075**	6mm	4,05
1137550	**BT50BWN20080M**	20	52	80	45	10	**SS03M026**	8mm	95	**571.076**	6mm	4,06
1137558	**BT50BWN25100M**	25	65	100	50	10	**SS03M027**	10mm	135	**571.076**	6mm	4,80
1137576	**BT50BWN32105M**	32	72	105	54	10	**SS03M029**	10mm	160	**571.076**	6mm	5,15

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and stop screw.
Lock screw or stop screw wrenches not included.
For retention knobs, see page J33.





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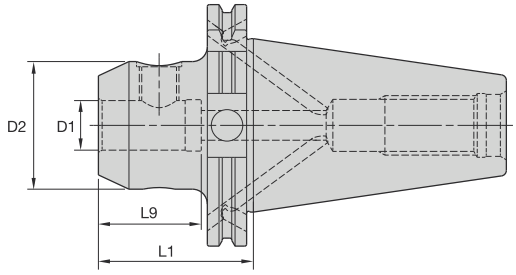
■ SWN IN-DV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	Nm	wrench size lock screw	kg
1134539	**DV50BSWN25070M**	25	65	70	44	**SS03M027**	135	10mm	3,59
1134540	**DV50BSWN32070M**	32	70	70	46	**SS03M029**	160	10mm	3,69

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrenches not included.
For retention knobs, see page J33.



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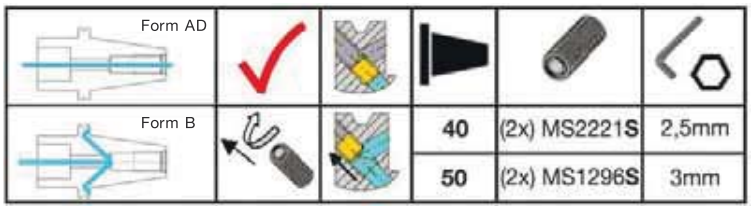
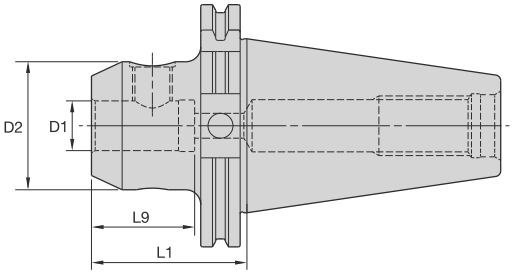
EM MM-DV Form B/AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1264102	**DV50BEM16063M**	16	48	63	53	**SS03M025**	6mm	50	3,00
1264107	**DV50BEM20063M**	20	52	63	55	**SS03M026**	8mm	95	3,06
1156387	**DV50BEM25080M**	25	65	80	60	**SS03M027**	10mm	135	3,72
1156388	**DV50BEM32100M**	32	72	100	65	**SS03M029**	10mm	160	4,48
1264122	**DV50BEM40110M**	40	90	110	75	**SS03M032**	10mm	160	5,76
1264125	**DV50BEM50120M**	50	100	120	85	**SS03M030**	12mm	250	6,63

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





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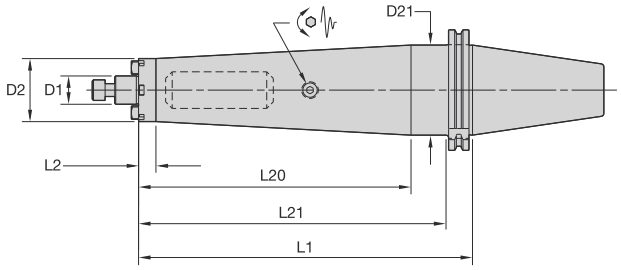
■ EM MM-DV Form AD

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	Nm	kg
1264207	**DV50EM06063M**	6	25	63	40	**SS03M012**	3mm	7	2,67
1264208	**DV50EM06150M**	6	25	150	40	**SS03M012**	3mm	7	2,96
1264210	**DV50EM08063M**	8	28	63	40	**SS03M014**	4mm	15	2,71
1264212	**DV50EM08150M**	8	28	150	40	**SS03M014**	4mm	15	3,05
1264214	**DV50EM10063M**	10	35	63	45	**SS03M018**	5mm	25	2,84
1264216	**DV50EM10150M**	10	35	150	45	**SS03M018**	5mm	25	3,39
1191975	**DV50EM12063M**	12	42	63	50	**SS03M023**	6mm	35	3,02
1264219	**DV50EM12150M**	12	42	150	50	**SS03M023**	6mm	35	3,77
1189666	**DV50EM16150M**	16	48	150	53	**SS03M025**	6mm	50	4,13
1152193	**DV50EM20150M**	20	52	150	55	**SS03M026**	8mm	95	4,44

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



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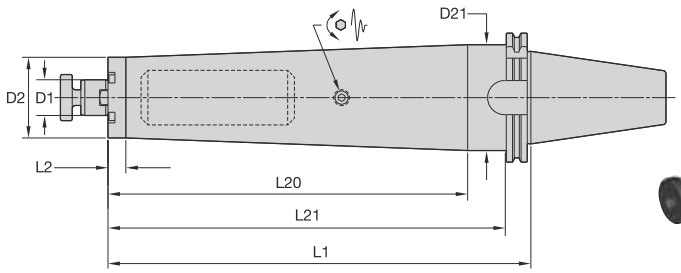
■ SMC TD Cap MM-DV Form B/AD

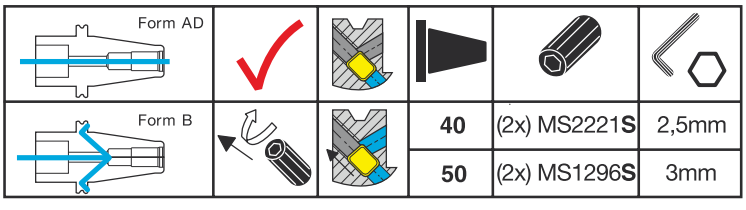
order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135484	**DV50BTDSMC22260M**	22	49	70	260	13,5	211,8	241	**MS1234**	**KDK22M**	8mm	7,83



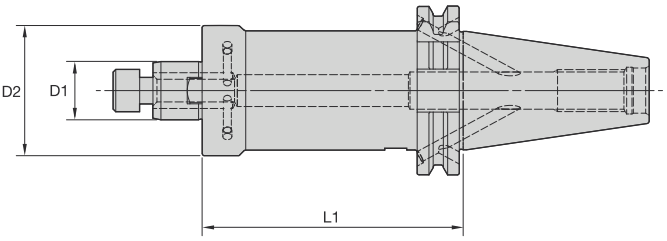
■ SMC TD Lock MM-DV Form B/AD

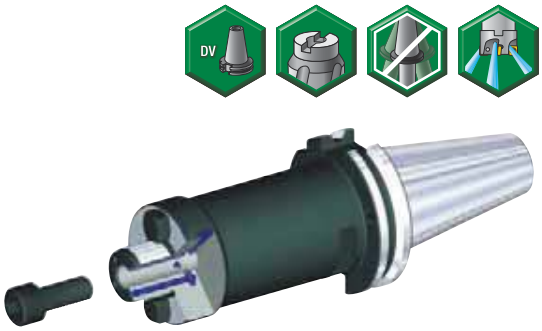
order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	drive key	wrench size lock screw	kg
4135485	**DV50BTDSMC27320M**	27	61	80	320	13,5	271,8	301	**KLSS27M**	**–**	10mm	11,63
4135486	**DV50BTDSMC32330M**	32	78	–	330	311,0	–	–	**KLSS32M**	**KDK32M**	14mm	15,91

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.



40	(2x) MS2221**S**	2,5mm
50	(2x) MS1296**S**	3mm





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■ SMC Cap MM-DV Form B/AD

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	kg
3767840	**DV50BSM2C16035M**	16	38	35	**MS1294**	**KDK16M**	6mm	2,73
3767842	**DV50BSM2C16100M**	16	38	100	**MS1294**	**KDK16M**	6mm	3,17
3767839	**DV50BSMC16035M**	16	44	35	**MS1294**	**KDK16M**	6mm	2,76
3767841	**DV50BSMC16100M**	16	44	100	**MS1294**	**KDK16M**	6mm	3,39
3767844	**DV50BSM2C22035M**	22	42	35	**MS1234**	**–**	8mm	2,76
3767846	**DV50BSM2C22100M**	22	42	100	**MS1234**	**–**	8mm	3,31
3767848	**DV50BSM2C22150M**	22	42	150	**MS1234**	**–**	8mm	3,75
3767843	**DV50BSMC22035M**	22	49	35	**MS1234**	**KDK22M**	8mm	2,82
3767845	**DV50BSMC22100M**	22	49	100	**MS1234**	**KDK22M**	8mm	3,63
3767847	**DV50BSMC22150M**	22	49	150	**MS1234**	**KDK22M**	8mm	4,26

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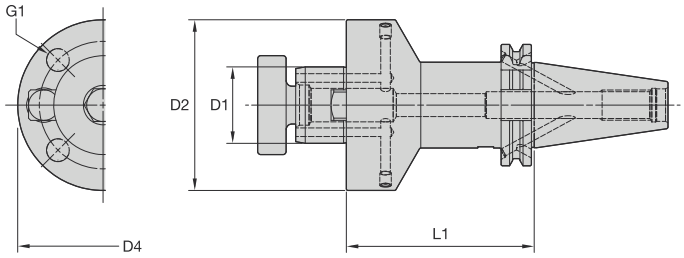
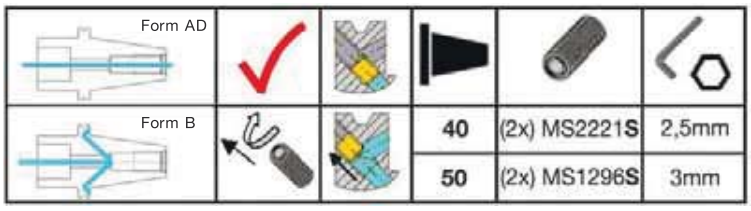
(SMC continued)

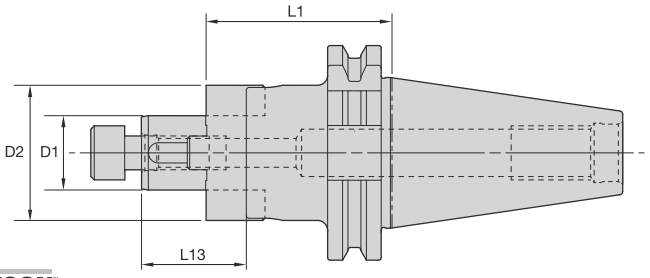


SMC Lock MM-DV Form B/AD

order number	catalog number	D1	D2	L1	G1	D4	lock screw	drive key	wrench size lock screw	kg
3767849	**DV50BSMC27035M**	27	60,0	35	–	–	**KLSS27M**	**KDK27M**	10mm	2,98
3767850	**DV50BSMC27100M**	27	60,0	100	–	–	**KLSS27M**	**KDK27M**	10mm	4,26
3767851	**DV50BSMC27150M**	27	60,0	150	–	–	**KLSS27M**	**KDK27M**	10mm	5,24
3767852	**DV50BSMC32035M**	32	78,0	35	–	–	**KLSS32M**	**KDK32M**	14mm	3,31
3767853	**DV50BSMC32100M**	32	78,0	100	–	–	**KLSS32M**	**KDK32M**	14mm	5,17
3767854	**DV50BSMC32150M**	32	78,0	150	–	–	**KLSS32M**	**KDK32M**	14mm	6,58
3767855	**DV50BSMC40050M**	40	89,3	50	M12 X 1.75	66,7	**KLSS40M**	**KDK40M**	17mm	4,18
3767856	**DV50BSMC40100M**	40	89,3	100	M12 X 1.75	66,7	**KLSS40M**	**KDK40M**	17mm	5,76
3767857	**DV50BSMC40150M**	40	89,3	150	M12 X 1.75	66,7	**KLSS40M**	**KDK40M**	17mm	7,12
3767858	**DV50BSMC60070M**	60	129,0	70	M16 X 2.0	101,6	**–**	**KDK60M**	–	6,24

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.

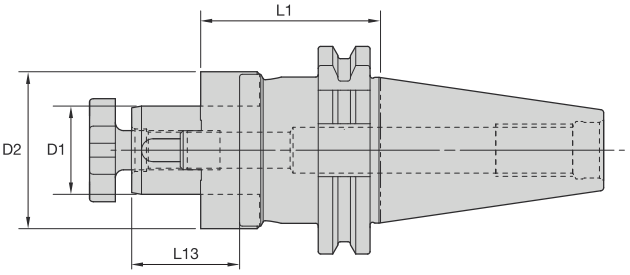




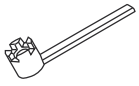
ERICKSON

■ CS-DV Form AD • Cap Screw Design

order number	catalog number	D1	D2	L1	L13	lock screw	wrench size retention screw	combi driver ring	combi drive key	kg
1264174	DV50CS16055M	16	32	55	27	MS1294	6mm	CDR16M	CDK16M	2,78
1191972	DV50CS22055M	22	40	55	31	MS1234	8mm	CDR22M	CDK22M	2,93
1264181	DV50CS22100M	22	40	100	31	MS1234	8mm	CDR22M	CDK22M	3,36
1236218	DV50CS22150M	22	40	150	31	MS1234	8mm	CDR22M	CDK22M	3,83

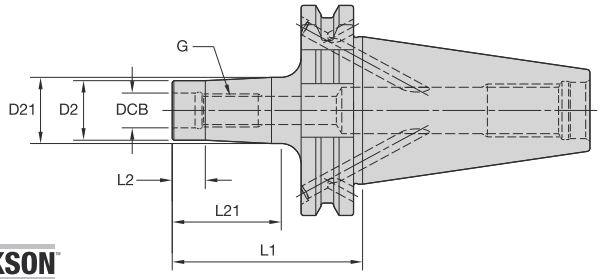


■ CS-DV Form AD • Lock Screw Design



order number	catalog number	D1	D2	L1	L13	lock screw	lock screw wrench	Nm	combi driver ring	combi drive key	kg
1191973	DV50CS27055M	27	48	55	33	KLS27MPKG	SMW27M	80	CDR27M	CDK27M	3,11
1264185	DV50CS27100M	27	48	100	33	KLS27MPKG	SMW27M	80	CDR27M	CDK27M	3,75
1264186	DV50CS27150M	27	48	150	33	KLS27MPKG	SMW27M	80	CDR27M	CDK27M	4,27
1191974	DV50CS32055M	32	58	55	38	KLS32M	SMW32M	95	CDR32M	CDK32M	3,41
1264188	DV50CS32100M	32	58	100	38	KLS32M	SMW32M	95	CDR32M	CDK32M	4,29
1264189	DV50CS32150M	32	58	150	38	KLS32M	SMW32M	95	CDR32M	CDK32M	5,18
1188351	DV50CS40055M	40	70	55	41	KLS40M	SMW40M	100	CDR40M	CDK40M	3,91
1232559	DV50CS40100M	40	70	100	41	KLS40M	SMW40M	100	CDR40M	CDK40M	5,17
1264192	DV50CS40150M	40	70	150	41	KLS40M	SMW40M	100	CDR40M	CDK40M	6,57
1264194	DV50CS50075M	50	90	75	46	KLS50M	SMW50M	135	CDR50M	CDK50M	7,20
1264195	DV50CS50150M	50	90	150	46	KLS50M	SMW50M	135	CDR50M	CDK50M	8,50

NOTE: Do not overtighten lock screw.
Supplied with lock screw, drive ring, and drive keys.
Lock screw wrench not included.
For retention knobs, see page J33.

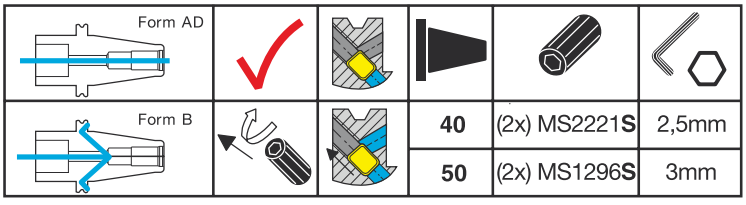


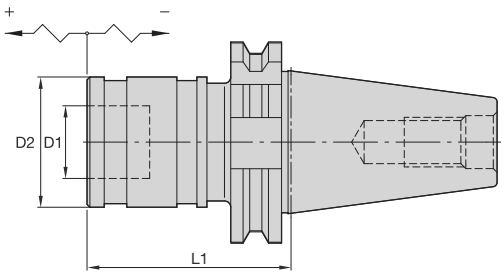
ERICKSON

■ ST-DV Form B/AD

order number	catalog number	DCB	G	D2	D21	L1	L2	L21	kg
4067827	**DV50BST12087M**	12,5	M12	21	24	87	10	62	2,77
4067828	**DV50BST12137M**	12,5	M12	21	31	137	10	112	3,05
4067829	**DV50BST12187M**	12,5	M12	21	39	187	10	162	3,50
4067830	**DV50BST16087M**	17,0	M16	29	34	87	10	62	2,96
4067831	**DV50BST16137M**	17,0	M16	29	39	137	10	112	3,38
4067832	**DV50BST16187M**	17,0	M16	29	39	187	10	162	3,71
4067863	**DV50BST16237M**	17,0	M16	29	49	237	10	212	4,62

NOTE: For retention knobs, see page J33.





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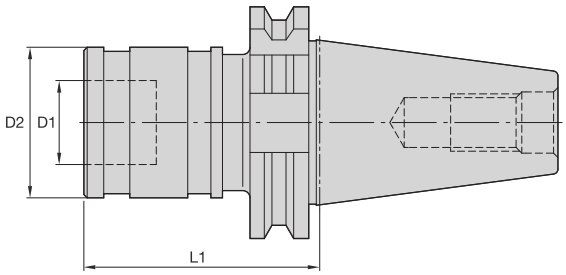
RC-DV Form A

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	tension	compression	kg
1777453	**DV50RC1075M**	1	M1 - M14	#0 - 9/16	19	36	75	7,5	7,5	2,90
1777455	**DV50RC2084M**	2	M5 - M24	5/16 - 7/8	31	53	85	12,5	12,5	3,70
1777540	**DV50RC3139M**	3	M14 - M27	13/16 - 1 3/8	48	78	139	20,0	20,0	4,50

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.

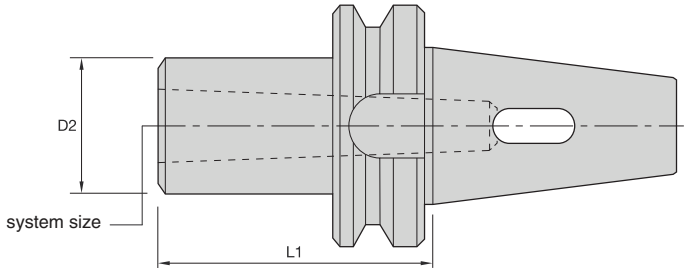


ERICKSON

STRC-DV Form AD

order number	catalog number	adapter size	tap size mm	tap size in	D1	D2	L1	kg
1778243	**DV50STRC1074M**	1	M1 - M14	#0 - 9/16	19	36	74	3,60
1778244	**DV50STRC2089M**	2	M5 - M24	5/16 - 7/8	31	53	89	3,80

NOTE: Quick-change tap adapters are available and must be ordered separately; see page I76.
For retention knobs, see page J33.



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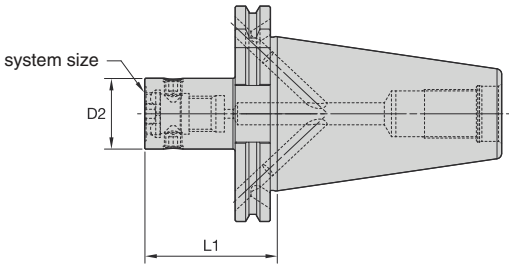
MT-DV Form A

order number	catalog number	system size	D2	L1	kg
1191989	**DV50MT5105M**	5	69,9	105	3,75

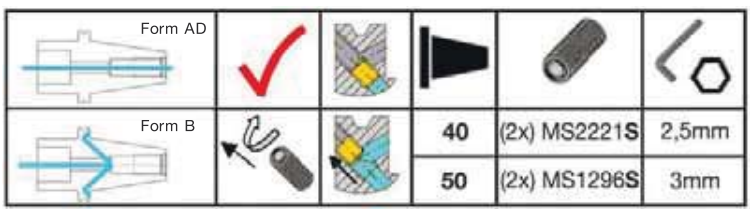
NOTE: For retention knobs; see page J33.

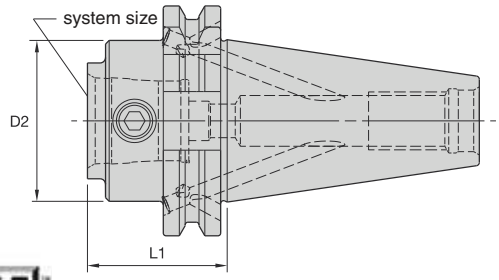


RFX-DV Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
3860701	**DV50BRFX320060M**	RFX320	32	60	4mm	12	3,10
3860702	**DV50BRFX420060M**	RFX420	42	60	5mm	20	3,20
3860853	**DV50BRFX550060M**	RFX550	55	60	6mm	25	3,40
3860854	**DV50BRFX720065M**	RFX720	72	65	6mm	25	3,60

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.





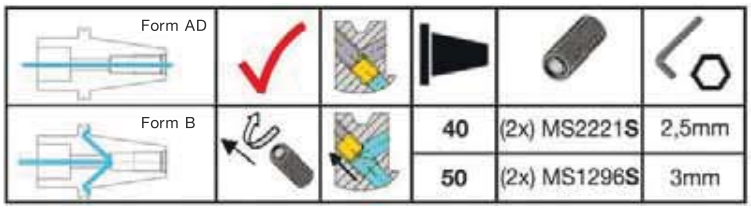
KM QUICK CHANGE

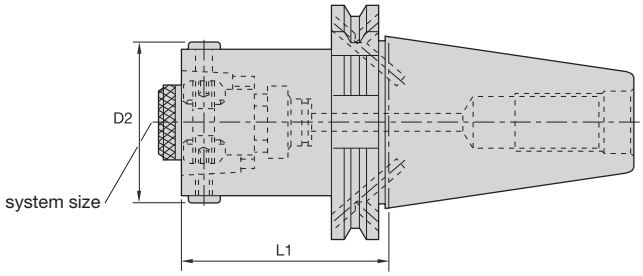
ERICKSON

KM-DV Form B/AD

order number	catalog number	system size	D2	L1	KM spare parts package	wrench size actuation screw	Nm	kg
1974741	**DV50BKM32040M**	KM32	32	40,0	**KM32PKG3S**	5mm	8-11	2,64
1974742	**DV50BKM32090M**	KM32	32	90,0	**KM32PKG3S**	5mm	8-11	2,91
1974813	**DV50BKM40040M**	KM40	40	40,0	**KM40PKG3L**	6mm	12-16	3,00
1974814	**DV50BKM40100M**	KM40	40	100,0	**KM40PKG3S**	6mm	12-16	3,18
1974815	**DV50BKM50060M**	KM50	50	60,0	**KM50PKG3S**	10mm	27-34	2,99
1974816	**DV50BKM50120M**	KM50	50	120,0	**KM50PKG3S**	10mm	27-34	3,79
1974817	**DV50BKM63060M**	KM63	63	60,0	**KM63PKG3S**	12mm	47-54	3,18
1974818	**DV50BKM63140M**	KM63	63	140,0	**KM63PKG3S**	12mm	47-54	4,95
1974819	**DV50BKM80080M**	KM80	80	80,0	**KM80PKG3S**	14mm	79-85	4,23

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.
For retention knobs, see page J33.





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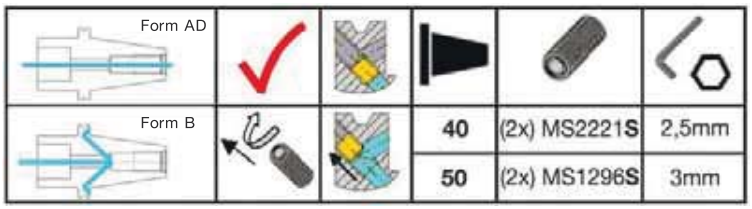
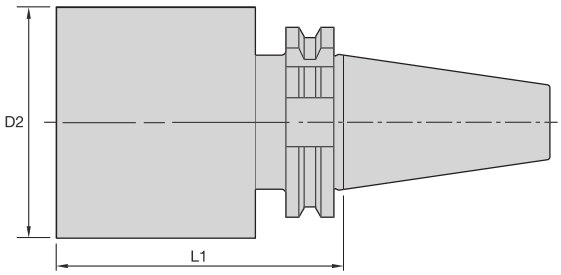
HSK-DV Form B/AD

order number	catalog number	system size	D2	L1	wrench size actuation screw	Nm	kg
1519669	**DV50BHSK32055M**	HSK32	37	55	3mm	6	2,70
1519670	**DV50BHSK40060M**	HSK40	45	60	3mm	8	2,80
1124343	**DV50BHSK50065M**	HSK50	55	65	4mm	15	2,90
1126202	**DV50BHSK63075M**	HSK63	70	75	5mm	20	3,10

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with actuation mechanism and sealing ring.
For retention knobs, see page J33.



• Machinable front 20–30 RW C.



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BB-DV Form A

order number	catalog number	D2	L1	kg
1264076	**DV50BB104350M**	104	350	24,08
1123987	**DV50BB134250M**	134	250	26,86

NOTE: For retention knobs, see page J33.

WIDIA

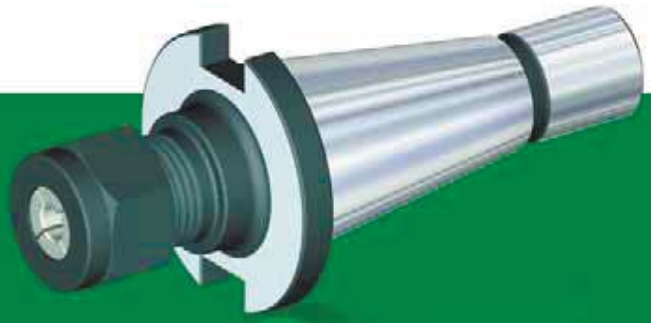
WIDIA

QC and R8 Shank Tools

QC30 Shank Tools G2–G9
QC40 Shank Tools G10–G17
QC50 Shank Tools G18–G22
R8 Shank Tools G24–G27

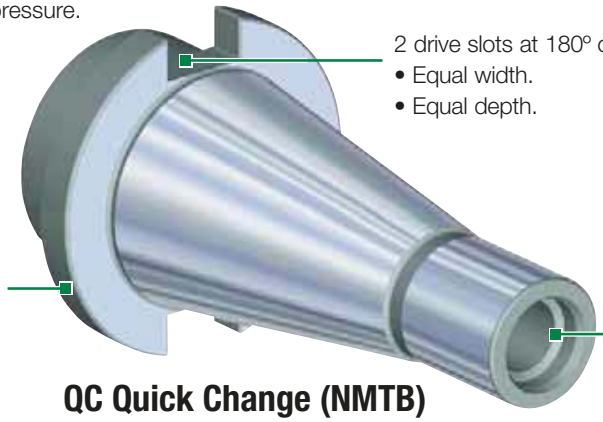
Erickson™ Quick Change Flange Shank Tooling System •
QC30 Series

With an Erickson QC locknut retrofitted to manual-loading milling machine spindles, the Erickson Quick Change Flange QC Taper Tooling can be used as a quick-change system. These tools are manufactured from premium materials and meet or exceed the latest ISO-1947 taper accuracy. The QC30 tools are balanced-by-design and will perform effectively up to 8,000 RPM. For any applications higher than 8,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, collets, hardware, and cutting tools) be balanced as one identity.



QC30

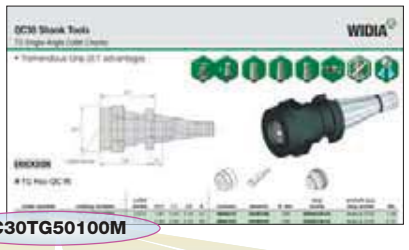
- 7/24 taper, interchangeable with NMTB and DIN2080 shank tooling.
- Hub at the tail end of taper cone houses the machine's drawbar bolt, standard 1/2" – 13 UNC – 2B thread.
- Flange faces are precision ground to accommodate Erickson QC locknuts.
- Taper accuracy of AT4 specification or better.
- Maximum 8,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



QC Quick Change (NMTB)

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



QC30TG50100M

QC	30	TG	50	100	M
Shank Style	Shank Taper Size	Toolholder Style	Toolholder Size	Tool Length	Tool Length

30 = 30

40 = 40

50 = 50

DA = Double-angle collet chuck

EM = End mill adapter

MS = Morse taper adapter

SA = Slotting cutter adapter

SM = Shell mill adapter

TA = Tap chuck adapter

TG = Tremendous Grip single-angle collet chuck

(Taper gage line to from of tool)

inch
xxx = x.xx

TG =
Collet series xx (50), xxx (100)

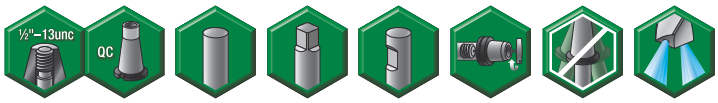
EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

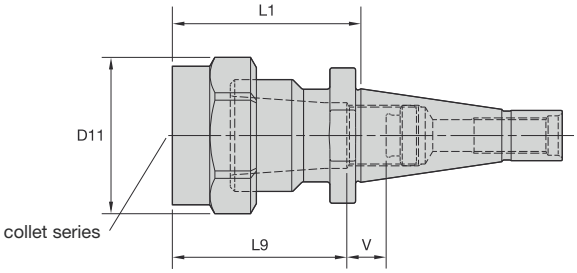
SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

M = Tool built to metric values and has metric retention thread

(blank) = Tool built to inch values and has inch retention thread

• Tremendous Grip (3:1 advantage).





	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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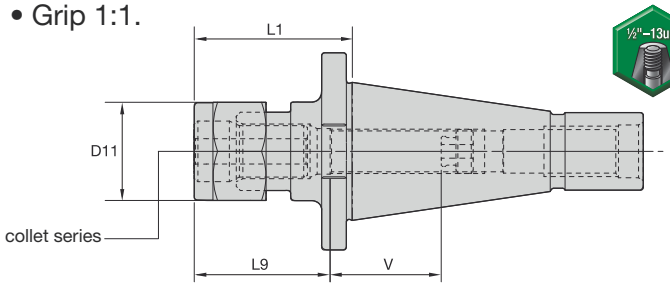
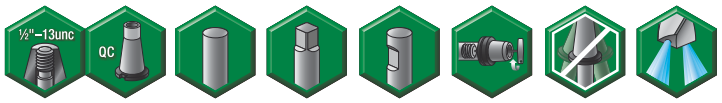
TG Hex-QC IN

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1025640	**QC30TG075253**	TG75	1.81	2.53	2.31	.37	**NPA075**	**OEW188**	100	**SS081041G**	4mm & 5/32	1.26
1025641	**QC30TG100394**	TG100	2.44	3.94	2.91	.83	**NPA100**	**OEW225**	150	**SS081041G**	4mm & 5/32	2.57

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

• Grip 1:1.





	Collet Capacity			
	mm		inch	
DA collet series	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

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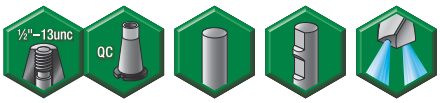
DA Hex-QC IN

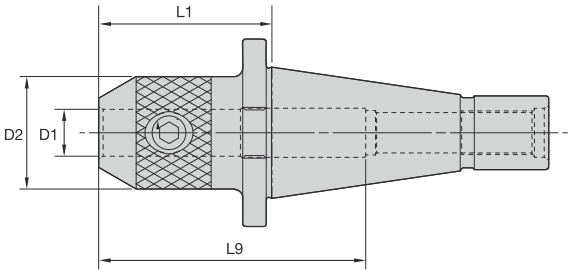
order number	catalog number	collet series	D11	L1	L9	V	lbs
1015552	**QC30DA308162**	DA300	.77	1.62	1.34	1.38	.73
1015546	**QC30DA208181**	DA200	1.15	1.81	1.42	1.49	.82
1015595	**QC30DA188206**	DA180	1.73	2.06	1.93	.47	.90
1015544	**QC30DA108200**	DA100	1.44	2.00	1.65	1.10	.90

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
QC30DA308162	**LNA308M**	**—**	20	**SS031031G**	2mm & 5/64
QC30DA208181	**NPA208**	**OEW100**	40	**SS044038G**	2mm & 5/64
QC30DA188206	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32
QC30DA108200	**LNA108M**	**OEW32M**	55	**SS056041G**	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I62.
DA non-pullout collets, see page I65.
For retention knobs, see page J33.





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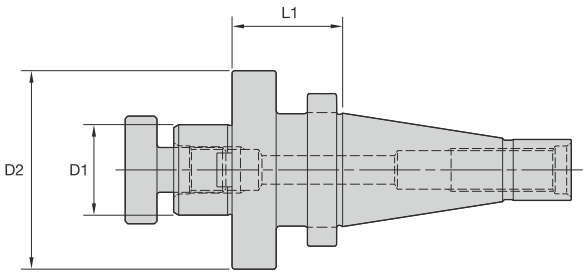
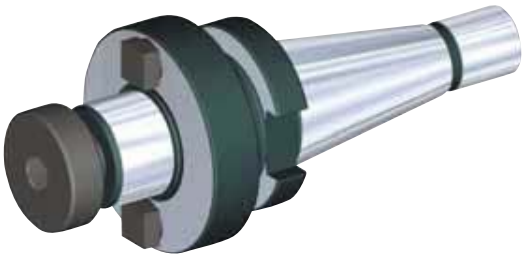
■ EM IN-QC IN

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1018668	**QC30EM018175**	3/16	.69	1.75	3.40	**S1045PKG**	3/32	3	.73
1018669	**QC30EM038175**	3/8	1.00	1.75	3.40	**ELS038031PKG**	3/16	15	.84
1018671	**QC30EM062175**	5/8	1.44	1.75	2.14	**DWG ELS056038**	1/4	40	.96
1018242	**QC30EM025175**	1/4	1.00	1.75	3.40	**ELS025025PKG**	1/8	5	.86
1018670	**QC30EM050175**	1/2	1.25	1.75	3.07	**ELS044038PKG**	7/32	20	.90
1018672	**QC30EM075213**	3/4	1.75	2.13	2.27	**ELS062050PKG**	5/16	70	1.28
1018714	**QC30EM100269**	1	2.00	2.69	2.51	**ELS075056PKG**	3/8	110	1.73
1018715	**QC30EM125363**	1 1/4	2.50	3.63	2.51	**ELS075062PKG**	3/8	110	3.65

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



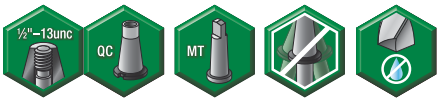


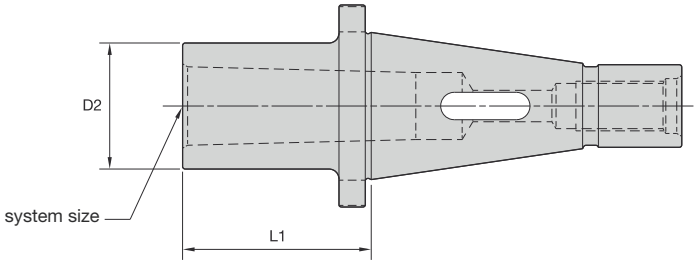
ERICKSON

■ SM IN-QC IN

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size retention screw	lbs
1018716	**QC30SM050125**	1/2	1.44	1.25	**KLS05**	**KDK04**	3/16	1
1018717	**QC30SM075131**	3/4	1.75	1.31	**KLS07**	**KDK05**	1/4	1
1018718	**QC30SM100131**	1	2.19	1.31	**KLS10**	**KDK06**	5/16	2
1018719	**QC30SM125144**	1 1/4	2.88	1.44	**KLS12**	**KDK08**	5/16	2
1018720	**QC30SM150156**	1 1/2	3.81	1.56	**KLS15**	**KDK10**	3/8	4

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knobs, see page J33.



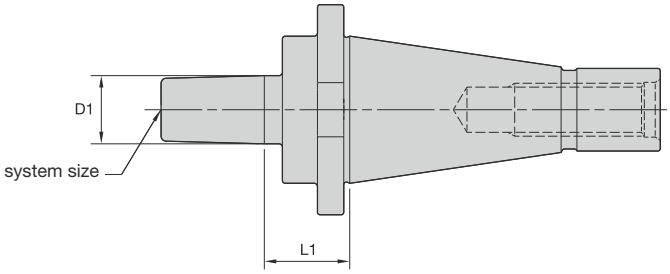


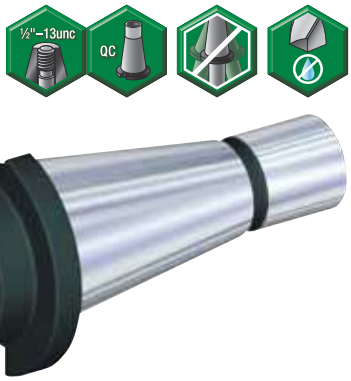
ERICKSON

■ MT-QC IN

order number	catalog number	system size	D2	L1	kg
1018721	**QC30MT1100**	1	25	25,40	0,31
1018722	**QC30MT2212**	2	32	53,85	0,44
1018723	**QC30MT3281**	3	40	71,37	0,54

NOTE: For retention knobs, see page J33.





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■ JT-QC IN

order number	catalog number	system size	D1	L1	lbs
1018774	**QC30JT1159**	1	.38	.93	.80
1018775	**QC30JT2181**	2	.56	.94	.84
1018776	**QC30JT3219**	3	.81	.97	.95
1018779	**QC30JT33197**	33	.62	.97	.86
1018777	**QC30JT4262**	4	1.12	.96	1.25
1018778	**QC30JT6197**	6	.68	.97	.89

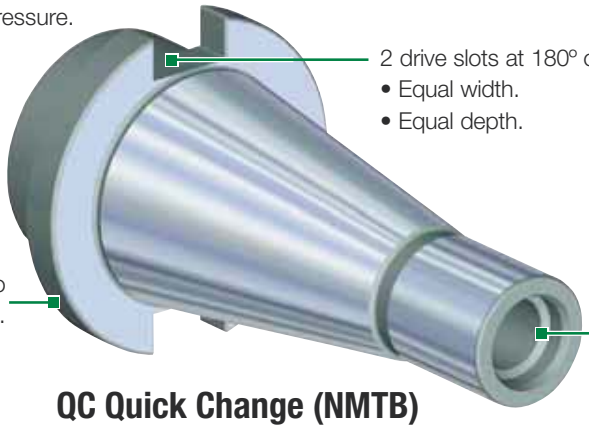
NOTE: For retention knobs, see page J33.

Erickson™ Quick Change Flange Shank Tooling System • **QC40 Series**

With an Erickson QC locknut retrofitted to manual-loading milling machine spindles, the Erickson Quick Change Flange QC Taper Tooling can be used as a quick-change system. These tools are manufactured from premium materials and meet or exceed the latest ISO-1947 taper accuracy. The QC40 tools are balanced-by-design and will perform effectively up to 8,000 RPM. For any applications higher than 8,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, collets, hardware, and cutting tools) be balanced as one identity.

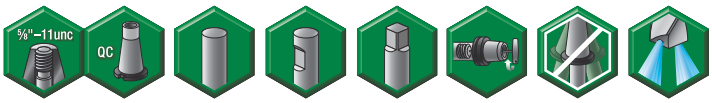
QC40

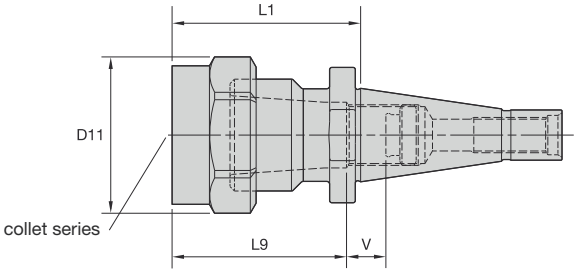
- 7/24 taper, interchangeable with NMTB and DIN2080 shank tooling.
- Hub at the tail end of taper cone houses the machine's drawbar bolt, standard 5/8" – 11 UNC – 2B thread.
- Flange faces are precision ground to accommodate Erickson QC locknuts.
- Taper accuracy of AT4 specification or better.
- Maximum 8,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



QC Quick Change (NMTB)

• Tremendous Grip (3:1 advantage).





TG collet series	mm min	mm max	inch min	inch max
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

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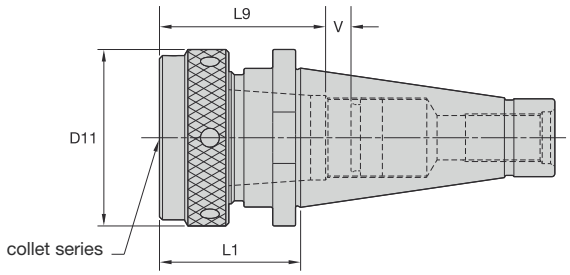
TG Hex-QC IN

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	lbs
1025642	**QC40TG075211**	TG75	2.09	2.11	2.31	1.04	**NPA075**	**OEW188**	**SS081041G**	4mm & 5/32	2.07
1025643	**QC40TG100255**	TG100	2.50	2.55	2.72	.41	**NPA100**	**OEW225**	**SS112041G**	4mm & 5/32	2.56



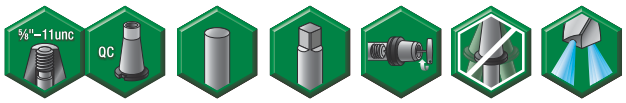
TG collet series	Collet Capacity mm min	mm max	inch min	inch max
TG150	11,6	40,0	23/64	1-1/2

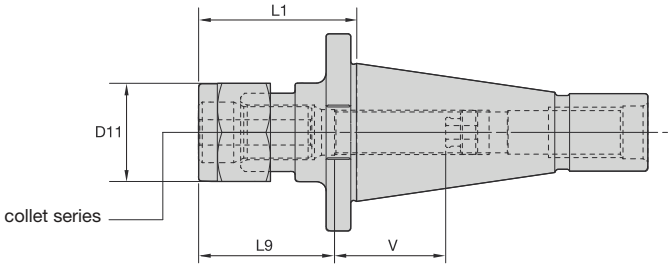
TG Round-QC IN

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	lbs
1013525	**QC40TG150450**	TG150	3.48	4.50	3.22	1.24	**NPA150**	**PSW350**	**SS125050G**	4 mm & 5/32	5.75

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.

• Grip 1:1.





	Collet Capacity			
	mm		inch	
DA collet series	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

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DA Hex-QC IN

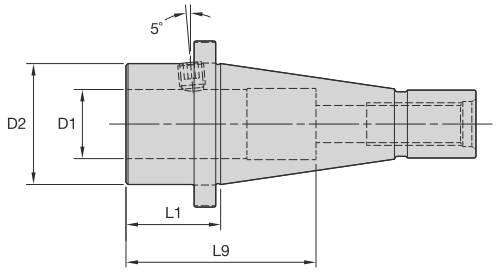
order number	catalog number	collet series	D11	L1	L9	V	lbs
1015413	**QC40DA308163**	DA300	.77	1.63	1.30	1.30	1.69
1015412	**QC40DA208181**	DA200	1.15	1.81	1.46	2.04	1.79
1015410	**QC40DA108200**	DA100	1.44	2.00	1.65	2.05	1.87
1015411	**QC40DA188206**	DA180	1.73	2.06	1.93	1.73	1.82

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
QC40DA308163	**LNA308M**	**—**	20.00	**SS031031G**	2mm & 5/64
QC40DA208181	**NPA208**	**OEW100**	40.00	**SS044038G**	4mm & 5/32
QC40DA108200	**LNA108M**	**OEW32M**	55.00	**SS056041G**	4mm & 5/32
QC40DA188206	**NPA188**	**OEW150**	75.00	**SS081041G**	4mm & 5/32

NOTE: For retention, tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I62.
DA non-pullout collets, see page I65.
For retention knobs, see page J33.

- Through-the-toolholder coolant capability — form AD.
- 1" — 8 UNC drawbar thread.
- Suitable for Whistle Notch straight-shank-style tap chucks.



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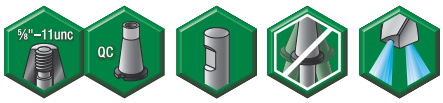
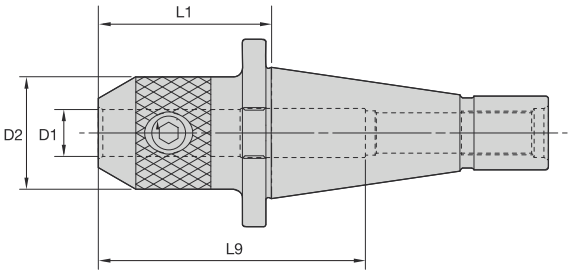
■ SWN IN-QC IN

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1017943	**QC40TA1137**	1.00	1.75	1.38	2.75	—	3/16	15	1.68

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.
For retention knobs, see page J33.





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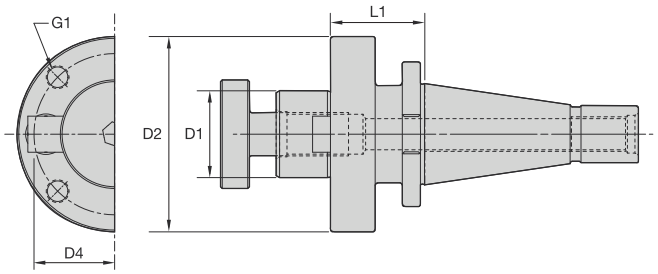
■ EM IN-QC IN

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1018781	**QC40EM018231**	.19	.69	2.31	4.84	**S1045PKG**	3/32	3	1.74
1018667	**QC40EM025138**	.25	1.00	1.38	3.91	**ELS025025PKG**	1/8	5	1.73
1018782	**QC40EM038231**	.38	1.00	2.31	4.84	**ELS038031PKG**	3/16	15	1.86
1018783	**QC40EM050231**	.50	1.25	2.31	4.84	**ELS044038PKG**	7/32	20	2.02
1018844	**QC40EM062231**	.63	1.50	2.31	3.56	**ELS056050PKG**	1/4	40	2.18
1018845	**QC40EM075231**	.75	1.75	2.31	3.94	**ELS062050PKG**	5/16	70	2.46
1018846	**QC40EM088294**	.88	2.00	2.94	4.19	**ELS062050PKG**	5/16	70	2.80
1018847	**QC40EM100338**	1.00	2.00	3.38	4.49	**ELS075056PKG**	3/8	110	3.00
1018848	**QC40EM125369**	1.25	2.50	3.69	2.39	**ELS075062PKG**	3/8	110	4.63
1019099	**QC40EM150395**	1.50	2.75	3.95	2.82	**ELS075062PKG**	3/8	110	5.29

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.



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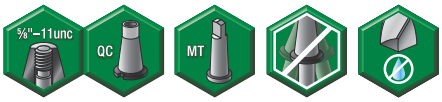
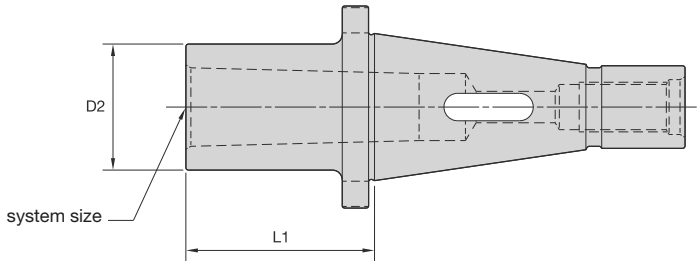
SM IN-QC IN

order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size lock screw	lbs
1018849	**QC40SM050088**	1/2	1.44	—	—	.88	**KLS05**	**KDK04**	3/16	1.90
1018850	**QC40SM075088**	3/4	1.75	—	—	.88	**KLS07**	**KDK05**	1/4	2.02
1018851	**QC40SM100131**	1	2.19	—	—	1.31	**KLS10**	**KDK06**	5/16	2.57
1018852	**QC40SM125150**	1 1/4	2.88	—	—	1.50	**KLS12**	**KDK08**	5/16	3.47
1018853	**QC40SM150163**	1 1/2	3.38	—	—	1.63	**KLS15**	**KDK10**	3/8	4.58
1018904	**QC40SM200163**	2	4.88	4.00	5/8-11 UNC	1.63	**KLS20**	**KDK12**	9/16	6.85

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.





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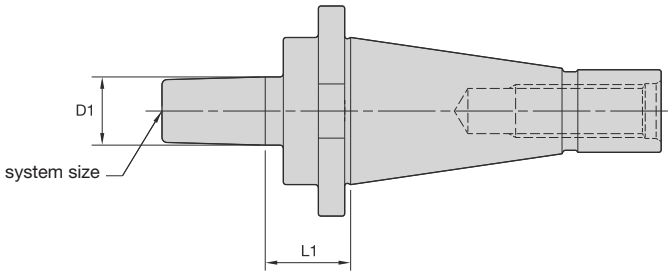
■ MT-QC IN

order number	catalog number	system size	D2	L1	lbs
1018905	**QC40MT1094**	1	1.00	.94	1.64
1018906	**QC40MT2206**	2	1.25	2.06	1.93
1018907	**QC40MT3225**	3	1.50	2.25	1.95
1018908	**QC40MT4306**	4	1.88	3.06	2.33
1019097	**QC40MT5700**	5	2.38	7.00	5.57

NOTE: For retention knobs, see page J33.



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■ JT-QC IN

order number	catalog number	system size	D1	L1	lbs
1018909	**QC40JT2188**	2	.56	1.01	2.02
1018910	**QC40JT3225**	3	.81	1.03	2.11
1018913	**QC40JT33194**	33	.62	.94	2.00
1018911	**QC40JT4269**	4	1.12	1.03	2.44
1018912	**QC40JT6194**	6	.68	.94	2.02

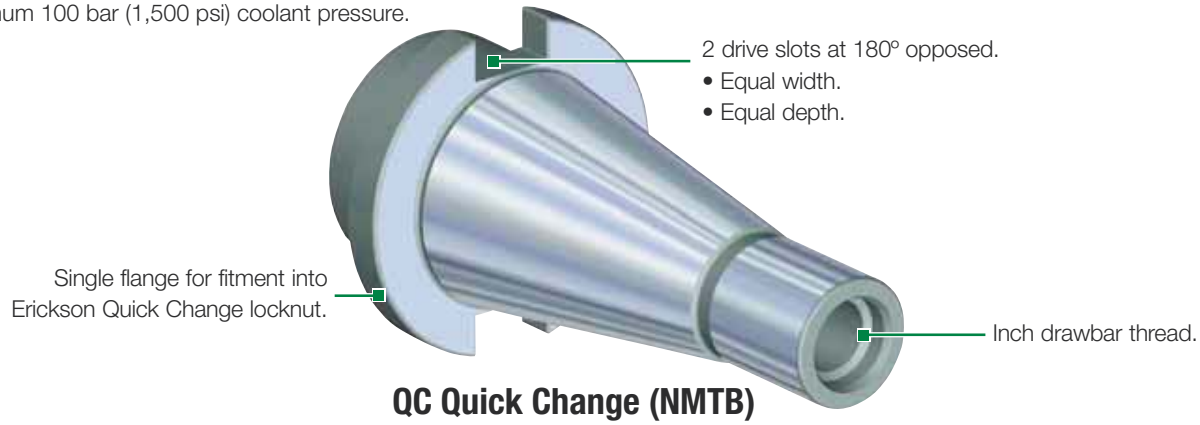
NOTE: For retention knobs, see page J33.

Erickson™ Quick Change Flange Shank Tooling System • QC50 Series

With an Erickson QC locknut retrofitted to manual-loading milling machine spindles, the Erickson Quick Change Flange QC Taper Tooling can be used as a quick-change system. These tools are manufactured from premium materials and meet or exceed the latest ISO-1947 taper accuracy. The QC50 tools are balanced-by-design that will perform effectively up to 8,000 RPM. For any applications higher than 8,000 RPM, WIDIA™ recommends that the complete toolholder assembly (toolholder, collets, hardware, and cutting tools) be balanced as one identity.

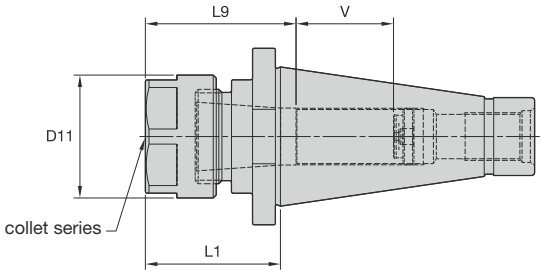
QC50

- 7/24 taper, interchangeable with NMTB and DIN2080 shank tooling.
- Hub at the tail end of taper cone houses the machine's drawbar bolt, standard 1" – 8 UNC – 2B thread.
- Flange faces are precision ground to accommodate Erickson QC locknuts.
- Taper accuracy of AT4 specification or better.
- Maximum 8,000 RPM.
- Maximum 100 bar (1,500 psi) coolant pressure.



QC Quick Change (NMTB)

• Tremendous Grip (3:1 advantage).



	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

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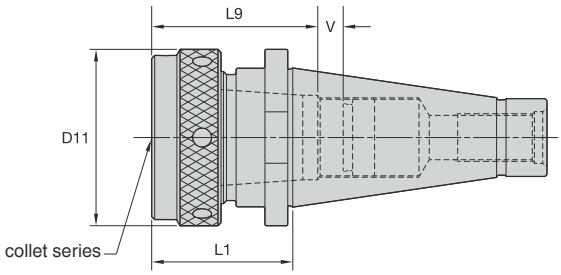
TG Hex-QC IN

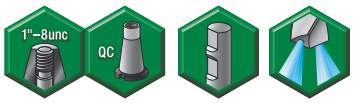
order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	ft. lbs.	lbs
1025798	**QC50TG100272**	TG100	2.44	2.72	2.76	2.28	**NPA100**	**OEW225**	**SS112041G**	4mm & 5/32	150	6.45

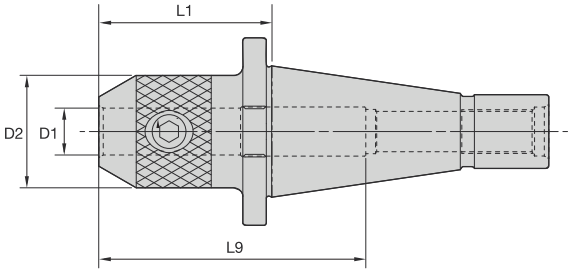


TG Round-QC IN

order number	catalog number	collet series	D11	L1	L9	V	locknut	wrench	stop screw	wrench size stop screw	ft. lbs.	lbs
1013526	**QC50TG150284**	TG150	3.50	2.84	3.15	1.26	**NPA150**	**PSW350**	**SS162062G**	4 mm & 5/32	200	7.14

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
Balanceable/interchangeable locknuts are available and must be ordered separately; see page J3.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.
For retention knobs, see page J33.



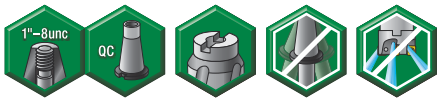


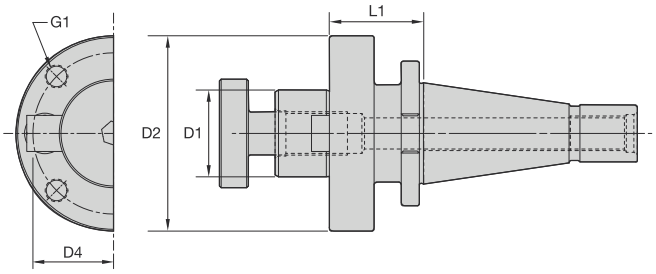
ERICKSON

EM IN-QC IN

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1019096	**QC50EM038275**	3/8	1.00	2.75	5.96	**ELS038031PKG**	3/16	15	5.81
1018979	**QC50EM050275**	1/2	1.38	2.75	5.96	**ELS044038PKG**	7/32	20	6.07
1019101	**QC50EM062275**	5/8	1.63	2.75	5.96	**ELS056050PKG**	1/4	40	6.18
1019100	**QC50EM075275**	3/4	1.75	2.75	5.96	**ELS062050PKG**	5/16	70	6.30
1018980	**QC50EM088200**	7/8	2.00	2.00	4.19	**ELS062050PKG**	5/16	70	6.05
1018981	**QC50EM100306**	1	2.00	3.06	4.49	**ELS075056PKG**	3/8	110	6.58
1019102	**QC50EM125306**	1-1/4	2.50	3.06	2.39	**ELS075062PKG**	3/8	110	7.57
1019145	**QC50EM150350**	1-1/2	2.75	3.50	2.82	**ELS075069PKG**	3/8	110	8.42
1018982	**QC50EM200475**	2	3.75	4.75	3.38	**ELS100088PKG**	1/2	150	13.67

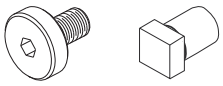
NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.
For retention knobs, see page J33.





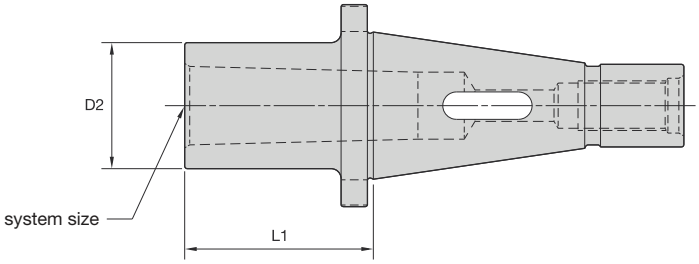
ERICKSON

■ SM IN-QC IN



order number	catalog number	D1	D2	D4	G1	L1	lock screw	drive key	wrench size retention screw	lbs
1925520	**QC50SM050125**	1/2	1.44	—	—	1.25	**KLS05**	**KDK04**	3/16	5.71
1018983	**QC50SM075125**	3/4	1.75	—	—	1.25	**KLS07**	**KDK05**	1/4	5.78
1019273	**QC50SM075600**	3/4	1.75	—	—	6.00	**KLS07**	**KDK05**	1/4	9.40
1019024	**QC50SM100188**	1	2.19	—	—	1.88	**KLS10**	**KDK06**	5/16	7.28
1019334	**QC50SM100600**	1	2.19	—	—	6.00	**KLS10**	**KDK06**	5/16	11.57
1019335	**QC50SM100800**	1	2.19	—	—	8.00	**KLS10**	**KDK06**	5/16	14.36
1019336	**QC50SM125600**	1-1/4	2.75	—	—	6.00	**KLS12**	**KDK08**	5/16	14.45
1019337	**QC50SM1251000**	1-1/4	2.75	—	—	10.00	**KLS12**	**KDK08**	5/16	20.66
1019025	**QC50SM125188**	1-1/4	2.88	—	—	1.88	**KLS12**	**KDK08**	5/16	14.78
1019146	**QC50SM150188**	1-1/2	3.38	—	—	1.88	**KLS15**	**KDK10**	3/8	8.99
1019095	**QC50SM200188**	2	4.88	4.00	5/8-11 UNC	1.88	**KLS20**	**KDK12**	9/16	11.04
1019026	**QC50SM250200**	2-1/2	4.88	4.00	5/8-11 UNC	2.00	**—**	**KDK16**	1/2	11.94

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw and drive keys.
Interchangeable coolant-style lock screws are available and must be ordered separately; see page J26.
Lock screw wrench not included.
For retention knob, see page J33.



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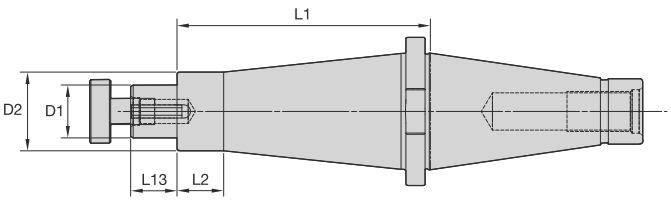
■ MT-QC IN

order number	catalog number	system size	D2	L1	lbs
1019027	**QC50MT2188**	2	1.25	1.88	5.61
1019028	**QC50MT3238**	3	1.62	2.38	5.67
1019029	**QC50MT4325**	4	2.00	3.25	6.44
1019030	**QC50MT5462**	5	2.75	4.62	8.74

NOTE: For retention knobs, see page J33.



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■ SA IN-QC IN

order number	catalog number	D1	D2	L1	L2	L13	lock screw	wrench size lock screw	drive key	lbs
1026342	**QC50SA125600**	1-1/4	1.86	6.00	1.10	1.09	**KLS12**	5/16	**DWG SDK125119**	12.27
1026343	**QC50SA150600**	1-1/2	2.11	6.00	1.25	1.70	**KLS15**	3/8	**DWG SDK150175**	13.49
1026222	**QC50SA200600**	2	2.75	6.00	5.41	1.70	**KLS20**	9/16	**SDK200169**	16.72

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive key.
Lock screw wrench not included.
For retention knobs, see page J33.

WIN WITH WIDIA™

WIDIA™ VariDrill™

WIDIA is pleased to announce the new VariDrill for a wide range of materials

The most extensive solid carbide drill line on the market today.

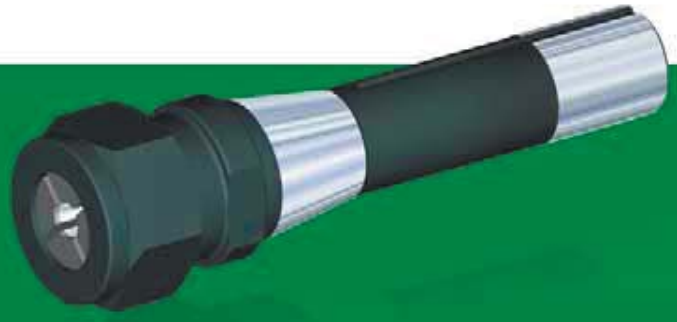
The VariDrill line is available as non-coolant drills in 3 x D and 5 x D, coolant drills in 3 x D, 5 x D, and 8 x D. “A” and “F” shanks available.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA™

Shank Tooling System • **R8 Shank Tooling**

R8 Shank Toolholders are designed with a locking groove that aligns into a locking mechanism when inserted into the spindle. A milling machine drawbar bolt pulls the tool into the spindle for a secure connection. If the toolholder assembly is properly balanced and application conditions are appropriate, R8 shanks can operate effectively up to 8,000 RPM.



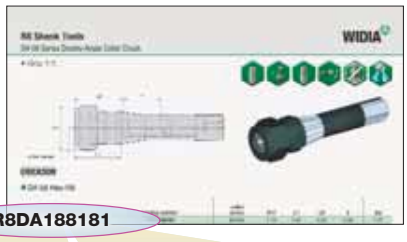
R8

- All non-critical surfaces are black oxide.
- Design enables coolant as a standard feature.
- Clean components prior to assembly.
- To avoid destroying the toolholder, never overtighten toolholders or neglect surface damage.

ERICKSON

How Do Catalog Numbers Work?

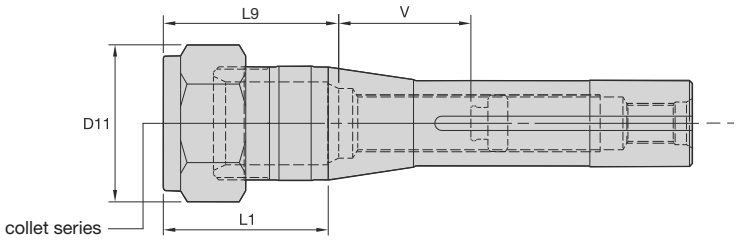
Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



R8DA188181

R8	DA	188	181
Shank Style	Toolholder Style	Toolholder Size	Tool Length
	DA = Double-angle collet chuck **EM** = End mill adapter **SM** = Shell mill adapter	**DA** = Collet series xxx (188) **EM** = I.D. size: metric — xx = xx, (20); inch — xxx = x.xx, (075) **SM** = O.D. size: metric — xx = xx, (20); inch — xxx = x.xx, (075)	(Tool gage line to front of tool) **inch** xxx = x.xx

• Grip 1:1.



	Collet Capacity			
	mm		inch	
DA collet series	min	max	min	max
DA180	2,2	20	1/64	3/4

ERICKSON

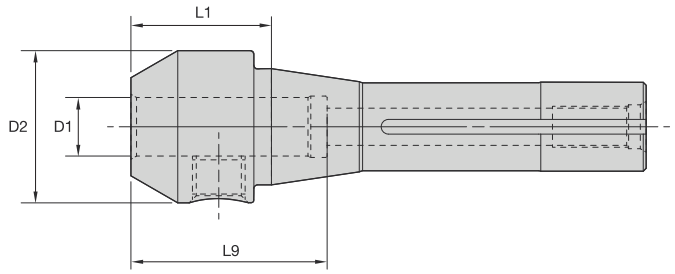
DA 08 Hex-R8

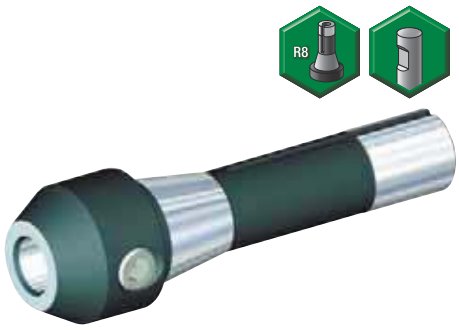
order number	catalog number	collet series	D11	L1	L9	V	lbs
1015548	R8DA188181	DA180	1.73	1.81	2.29	2.36	1.01

Spare Parts

catalog number	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
R8DA188181	NPA188	OEW150	75	SS062041G	4mm & 5/32

NOTE: For retention, tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I62.
DA non-pullout collets, see page I65.



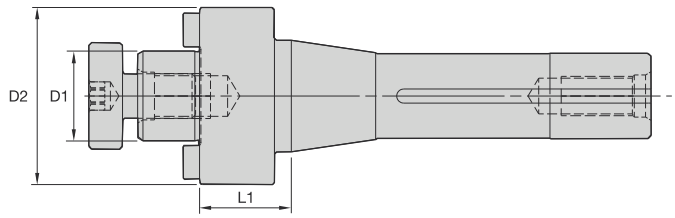


ERICKSON

EM IN-R8

order number	catalog number	D1	D2	L1	L9	lock screw	wrench size lock screw	ft. lbs.	lbs
1286048	**R8EM018112**	3/16	.69	1.13	1.01	**S1045PKG**	3/32	5	.86
1286049	**R8EM038100**	3/8	1.00	1.00	1.73	**ELS038031PKG**	3/16	15	.90
1286050	**R8EM050112**	1/2	1.24	1.13	1.73	**ELS044038PKG**	7/32	20	.95
1286051	**R8EM062150**	5/8	1.63	1.50	2.09	**ELS056050PKG**	1/4	40	1.29
1229174	**R8EM075262**	3/4	1.75	2.63	2.22	**ELS062050PKG**	5/16	70	2.04
1286052	**R8EM088306**	7/8	2.00	3.06	2.22	**ELS062050PKG**	5/16	70	2.80
1286053	**R8EM100306**	1	2.00	3.06	2.46	**ELS075056PKG**	3/8	110	2.64
1286054	**R8EM125306**	1-1/4	2.50	3.06	2.51	**ELS075056PKG**	3/8	110	3.72

NOTE: Do not overtighten lock screw; use torque recommendations above.
Supplied with lock screw.
Lock screw wrench not included.



ERICKSON

SM Lock IN-R8

order number	catalog number	D1	D2	L1	lock screw	drive key	wrench size lock screw	lbs
1286058	**R8SM050102**	1/2	1.28	1.02	**KLS05**	**KDK04**	3/16	1.23
1286059	**R8SM075102**	3/4	1.63	1.02	**KLS07**	**KDK05**	1/4	1.50
1286060	**R8SM100102**	1	1.97	1.02	**KLS10**	**KDK06**	5/16	1.85
1286061	**R8SM125102**	1-1/4	2.50	1.02	**KLS12**	**KDK08**	5/16	2.51

NOTE: Do not overtighten lock screw.
Supplied with lock screw and drive keys.
Lock screw wrench not included.

WIDIA

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Straight Shanks

Shrink Fit Toolholders **H4–H5**
Single-Angle Collet Chucks **H6–H11**
Double-Angle Collet Chucks **H12–H22**
Screw-On Adapters for Modular Milling Cutters **H23–H25**
Weldon Shank Tools **H26**
Slotting Cutter Adapters **H27**

Shank Tooling System • **Straight Shank Tools**

Straight Shank Toolholders are ideal for extending tool length to reach difficult-to-machine areas. These toolholders are intended for use in combination with other toolholder and adapter systems. When the toolholder assembly is properly balanced and application conditions are appropriate, Straight Shank Toolholders can effectively operate at speeds up to 8,000 RPM.

Straight Shank

- All non-critical surfaces are black oxide.
- Design enables coolant as a standard feature on most designs.
- Clean components prior to assembly.
- To avoid destroying the toolholder, never overtighten toolholders or neglect surface damage.

How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

ERICKSON

SS120TG50100M

SS	120	TG	50	100	M
Shank Style	Shank Taper Size	Toolholder Style	Toolholder Size	Tool Length	Identification Value

120 = 12mm
125 = 12,5mm
160 = 16mm
190 = 19mm
200 = 20mm
250 = 25mm
038 = 3/8"
050 = 1/2"
062 = 5/8"
075 = 3/4"
100 = 1"
125 = 1-1/4"
150 = 1-1/2"
175 = 1-3/4"
200 = 2"

DA = Double-angle collet chuck
DP = Double pin, floating holder
ER = DIN 6499 single-angle collet chuck
FC = Fully floating holder
SA = Slotting cutter adapter
STL = DAL — tapping adapter, solid
TCJ = DAJ — tapping adapter, tension and compression
TCK = DAK — tapping adapter, tension and compression
TCL = DAL — tapping adapter, tension and compression
TCTG = TG — tapping adapter, tension and compression
TG = Tremendous Grip single-angle collet chuck
TOJ = DAJ — tapping adapter, tension only
TOK = DAK — tapping adapter, tension only
TOL = DAL — tapping adapter, tension only
TT = Shrink Fit thermo toolholder

(Flange face to front of tool)

metric
xxx = xxx

inch
xxx = x.xx

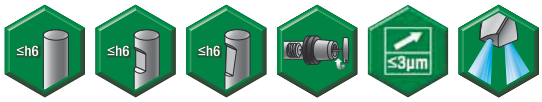
M = Tool built to metric values
(blank) = Tool built to inch values

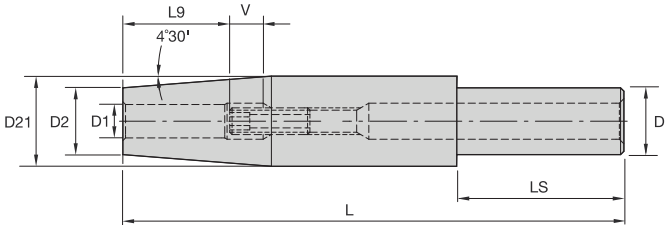
TG =
Collet series xx (50), xxx (100)

EM =
I.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

SM =
O.D. size: metric — xx = xx, (20);
inch — xxx = x.xx, (075)

- Suitable for carbide and HSS cutting tools (requirements below).
- Slim design for extending adapters, collet chucks, and toolholders.
- 10mm (3/8") axial adjustment.





Cutting Tool Shank Requirements
metric (ISO standard)

cutting tool shank diameter	tolerance	
3	h4	0,000/-0,003
4	h4	0,000/-0,004
5	h5	0,000/-0,005
6	h6	0,000/ -0,008
8 & 10	h6	0,000/ -0,009
12	h6	0,000/ -0,011

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■ TT GP MM-SS MM

order number	catalog number	D	D1	D2	D21	L	LS	L9	V	stop screw	wrench size stop screw	kg
2264458	**SS160TT03110M**	16	3	9	15	110	50	15	10	**TTSS05014M**	2,5mm	0,11
2456194	**SS160TT04110M**	16	4	9	15	110	50	15	10	**TTSS05014M**	2,5mm	0,12
1801299	**SS200TT04150M**	20	4	9	15	150	60	15	10	**TTSS05014M**	2,5mm	0,22
1801300	**SS200TT05150M**	20	5	9	15	150	60	15	10	**TTSS06014M**	3mm	0,22
1801301	**SS200TT06150M**	20	6	15	—	150	118	26	10	**TTSS05014M**	2,5mm	0,30
1801302	**SS200TT08150M**	20	8	15	—	150	118	26	10	**TTSS06014M**	3mm	0,30
1801413	**SS200TT10150M**	20	10	20	27	150	50	31	10	**TTSS08014M**	4mm	0,46
1801414	**SS200TT12150M**	20	12	20	27	150	50	36	10	**TTSS10014M**	5mm	0,44

(continued)

(TT GP continued)

Cutting Tool Shank Requirements
inch (industry standard)

cutting tool shank diameters	tolerance
1/8 & 3/16	-.0001/-.0003
1/4, 5/16, & 3/8	-.0001/-.0004
7/16, 1/2, 9/16, & 5/8	.0000/-.0004

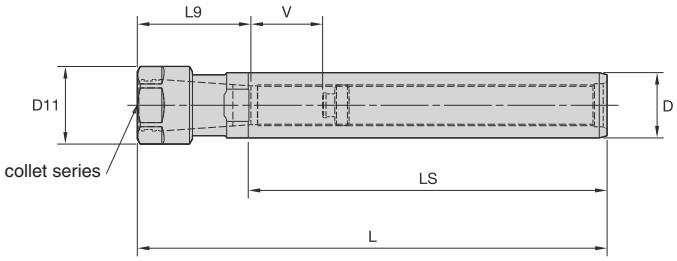
TT GP IN-SS IN

order number	catalog number	D	D1	D2	D21	L	LS	L9	V	stop screw	wrench size stop screw	lbs
1794109	**SS050TT012600**	1/2	1/8	.35	.50	6.00	5.07	.61	.39	**TTSS05014M**	2,5mm	.26
1794110	**SS050TT018600**	1/2	3/16	.35	.50	6.00	5.07	.61	.39	**TTSS06014M**	3mm	.25
1794111	**SS075TT025600**	3/4	1/4	.59	.75	6.00	4.98	1.02	.39	**TTSS05014M**	2,5mm	.62
1794112	**SS075TT031600**	3/4	5/16	.59	.75	6.00	4.98	1.02	.39	**TTSS06014M**	3mm	.61
1794233	**SS075TT038600**	3/4	3/8	.79	1.06	6.00	1.50	1.22	.39	**TTSS08014M**	4mm	1.07
1794234	**SS075TT044600**	3/4	—	.79	1.06	6.00	1.50	1.42	.39	**TTSS10014M**	4mm	1.05
1794235	**SS075TT050600**	3/4	1/2	.79	1.06	6.00	1.50	1.42	.39	**TTSS10014M**	5mm	1.02
1794236	**SS100TT056700**	1	9/16	.95	1.26	7.00	1.75	1.42	.39	**TTSS10014M**	4mm	1.72
1794237	**SS100TT062700**	1	5/8	.95	1.26	7.00	1.75	1.54	.39	**TTSS12014M**	6mm	1.68

Straight shank toolholders are a great complement to the Shrink Fit program. Use caution to not overheat the Slim Line design. Overheating can cause warping or permanent damage. The life cycle of the toolholders will be drastically reduced if the activating heat is not controlled. The Slim Line design permits only a limited number of heat shrinks. Testing has shown more than 300 heat shrinks can be performed with the straight shank extensions when the activation heat is controlled to less than 426 °C (800 °F).

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Shrink Fit technical section, see page K56.
Supplied with stop screw.
Adjusting stop screw gage, see page K59.
Shrink Fit accessories, see page J2.

- Tremendous Grip (3:1 advantage).



Collet Capacity

TG collet series	mm min	mm max	inch min	inch max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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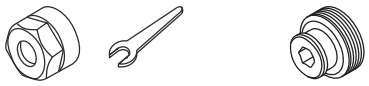
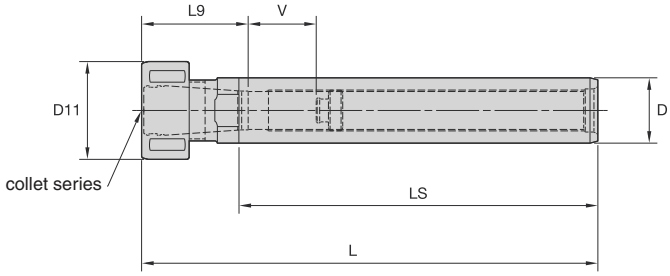
TG Hex-SS IN



order number	catalog number	collet series	D	D11	L	L9	LS	V	locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1082537	**SS100TG050719**	TG50	1	1.19	7.19	1.77	5.49	4.73	**NPA050**	**OEW106**	75	**SS062041G**	4mm & 5/32	1.03
1025794	**SS125TG075850**	TG75	1 1/4	2.09	8.50	2.06	6.00	3.56	**NPA075**	**OEW188**	100	**SS081041G**	4mm & 5/32	2.28
2636807	**SS125TG100925**	TG100	1 1/4	2.44	9.25	2.88	6.00	3.63	**NPA100**	**OEW225**	150	**SS081041G**	4mm & 5/32	3.27
1025797	**SS150TG075775**	TG75	1 1/2	2.09	7.75	2.06	6.00	5.00	**NPA075**	**OEW188**	100	**SS081041G**	4mm & 5/32	2.97
1025638	**SS150TG100925**	TG100	1 1/2	2.44	9.25	2.63	6.00	5.93	**NPA100**	**OEW225**	150	**SS112041G**	4mm & 5/32	3.52
1025796	**SS175TG100819**	TG100	1 3/4	2.44	8.19	2.63	6.02	4.87	**NPA100**	**OEW225**	150	**SS112041G**	4mm & 5/32	4.15
1025795	**SS200TG100819**	TG100	2	2.44	8.19	2.76	6.00	4.74	**NPA100**	**OEW225**	150	**SS112041G**	4mm & 5/32	5.38

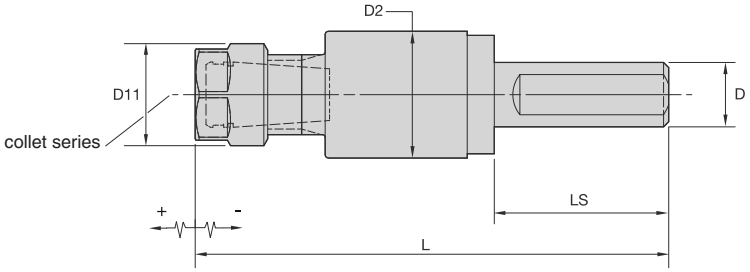


TG Round-SS IN

order number	catalog number	collet series	D	D11	L	L2	L9	V	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw	lbs
1025637	**SS100TG050698G**	TG50	1	1.50	6.98	1.49	1.77	4.53	**LNA050M**	**HSW34M**	50	**SS062041G**	4mm & 5/32	1.15

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
Stop screw coolant caps are available and must be ordered separately; see page J22.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.

- Tremendous Grip (3:1 advantage).
- Anti-friction drive.
- Compact design.
- Adjustment hard start.



	Collet Capacity			
	mm		inch	
TG collet series	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1

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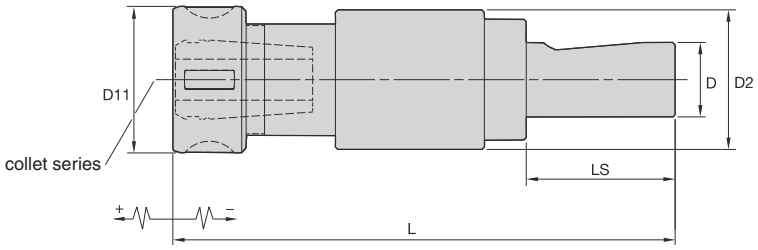
TG Hex Tap T&C-SS IN

order number	catalog number	collet series	D	D11	D2	L	LS	tension	compression	hex assembly	OEW	ft. lbs.	lbs
1288221	**SS075TCTG050**	TG50	3/4	1.22	1.48	5.48	2.00	.25	.30	**NPA050**	**OEW106**	75	.68

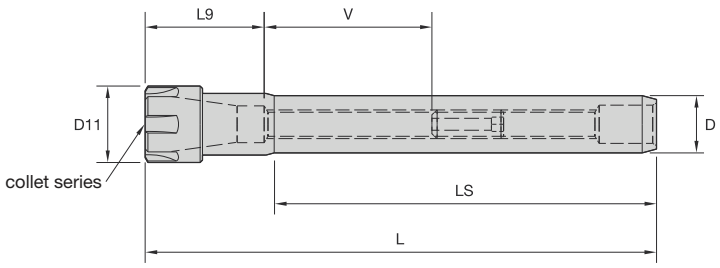


TG Round Tap T&C-SS IN

order number	catalog number	collet series	D	D11	D2	L	LS	tension	compression	locknut	wrench	ft. lbs.	lbs
1288256	**SS100TCTG075**	TG75	1	1.97	1.88	6.79	2.20	.40	.43	**LNA075M**	**HSW45M**	100	1.50
1017625	**SS150TCTG100756**	TG100	1 1/2	2.36	2.50	7.56	2.68	.50	.13	**LNA100M**	**HSW58M**	150	2.12

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut.
Locknut wrench must be ordered separately.
Interchangeable locknuts, coolant-style locknuts, and coolant disks are available and must be ordered separately; see page J6.
TG standard straight-bore collets, see page I10.
TG tap collets, see page I10.

• Grip (2:1 advantage).



ER collet series	Collet Capacity mm min	mm max	inch min	inch max
ER11	0,5	7,0	.02	.28
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	1,0	20,0	.04	.79

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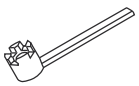
ER Slim-SS MM

order number	catalog number	collet series	D	D11	L	LS	L9	V	kg
1288261	**SS120ER11107M**	ER11	12	16	107	80	24	56	0,08
1288285	**SS160ER11132M**	ER11	16	16	132	100	24	56	0,16
1125015	**SS200ER16182M**	ER16	20	22	182	140	32	68	0,32
1288321	**SS250ER20190M**	ER20	25	28	190	150	36	64	0,55

Spare Parts



catalog number	locknut	locknut wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	stop screw	wrench size stop screw
SS120ER11107M	**LER11M**	**ER11WEM**	12	16	**CSS0615M**	3mm
SS200ER16182M	**LER16M**	**ER16WEM**	24	24	**CSS1020M**	5mm
SS250ER20190M	**LER20M**	**ER20WEM**	28	28	**CSS1225M**	6mm

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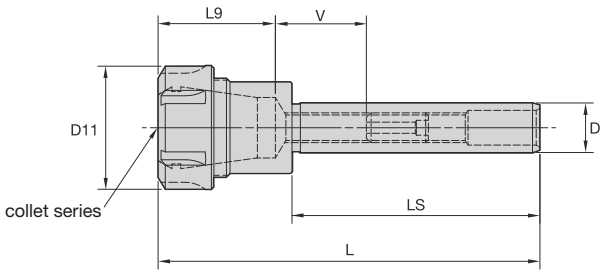


ER Round-SS MM

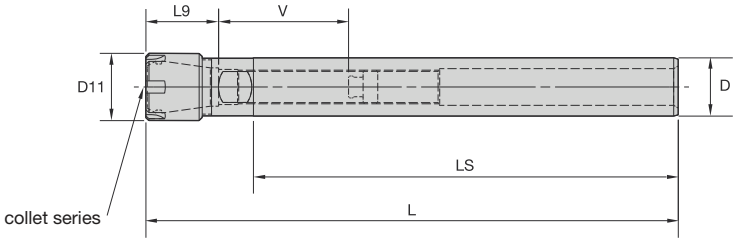
order number	catalog number	collet series	D	D11	L	LS	L9	V	kg
1288303	**SS200ER25146M**	ER25	20	42	146	100	42	58	0,38
1288304	**SS200ER32154M**	ER32	20	50	154	100	49	51	0,51

Spare Parts

catalog number	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
SS200ER25146M	**LNSER25M**	**ER25WM**	104	**CSS1225M**	6mm
SS200ER32154M	**LNSER32M**	**ER32WM**	136	**CSS1225M**	6mm

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

• Grip (2:1 advantage).



	Collet Capacity			
	mm		inch	
ER collet series	min	max	min	max
ER8	0,5	0,5	.02	.20
ER11	0,5	7,0	.02	.28
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63

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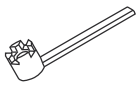
ER Slim-SS IN

order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1021460	**SS038ER08500**	ER8	3/8	.47	5.00	4.15	.71	1.42	.10
1021462	**SS050ER11700**	ER11	1/2	.63	7.00	5.96	.95	3.23	.26
1021494	**SS075ER16700**	ER16	3/4	.87	7.00	5.47	1.30	2.24	.56

Spare Parts



catalog number	locknut	wrench	Nm	stop screw	wrench size stop screw
SS038ER08500	**LER08M**	**ER08WEM**	4.8	**SS025031PKG**	–
SS050ER11700	**LER11M**	**ER11WEM**	12.0	**SS031031G**	2mm & 5/64
SS075ER16700	**LER16M**	**ER16WEM**	24.0	**SS044038G**	4mm & 5/32

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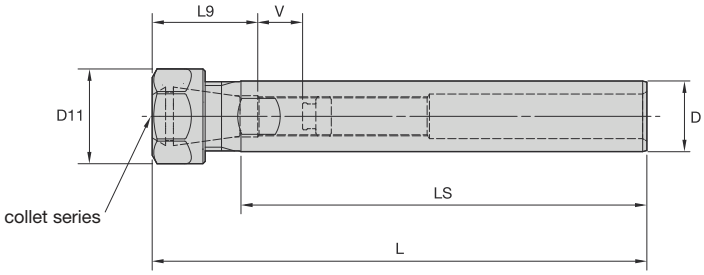
(ER continued)

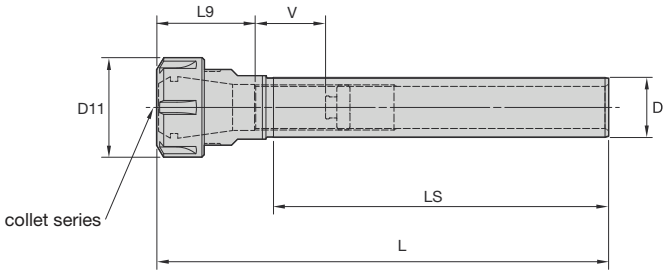


ER Hex-SS IN

order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1021496	**SS100ER20700**	ER20	1.00	1.34	7.00	5.70	1.30	2.20	1.07

Spare Parts

catalog number	locknut	wrench	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)	stop screw	wrench size stop screw
SS100ER20700	**LNHSER20M**	**OEW30M**	24	59	**SS056041G**	4mm & 5/32



ER Round-SS IN

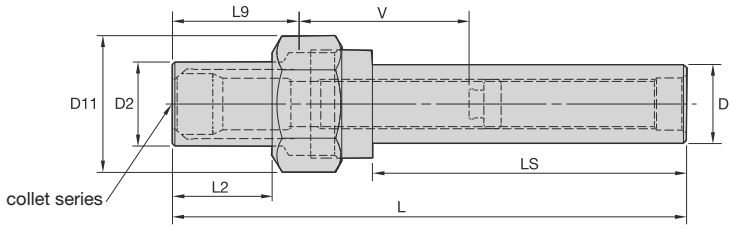
order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1021498	**SS100ER25750**	ER25	1.00	1.65	7.50	5.69	1.58	1.97	1.13

Spare Parts

catalog number	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw
SS100ER25750	**LNSER25M**	**ER25WM**	77	**SS075041G**	4mm & 5/32

NOTE: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
ER standard straight-bore collets, see page I50.
ER tap collets, see page I58.
ER TCT tension-only tap collets, see page I60.

• Grip 1:1.



	Collet Capacity			
	mm		inch	
DA collet series	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

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■ DA 01-SS IN

order number	catalog number	collet series	D	D2	D11	L	L2	LS	L9	V	lbs
1015309	**SS050DA301544**	DA300	1/2	.50	.87	5.44	.62	3.98	1.25	2.9370	.23
1015312	**SS062DA301319**	DA300	5/8	.50	.87	3.19	.62	1.73	1.21	1.4800	.21
1015313	**SS062DA301544**	DA300	5/8	.50	.87	5.44	.62	3.98	1.25	2.9410	.36
1015736	**SS062DA201325**	DA200	5/8	.81	1.44	3.25	.91	1.26	1.30	1.4600	.45
1015522	**SS062DA201600**	DA200	5/8	.81	1.44	6.00	.91	4.01	1.42	2.7559	.60
1015483	**SS075DA301344**	DA300	3/4	.50	.86	3.44	.61	—	1.22	1.7300	.30
1015695	**SS075DA301544**	DA300	3/4	.50	.86	5.44	—	3.96	1.26	3.5400	.51
1015669	**SS075DA201600**	DA200	3/4	.81	1.44	6.00	.91	4.01	1.11	3.0120	.71
1015601	**SS075DA101650**	DA100	3/4	1.06	1.73	6.50	—	3.96	1.57	4.1800	.98
1015666	**SS100DA301544**	DA300	1	.50	.86	5.44	.62	3.96	1.22	3.0300	.89
1015340	**SS100DA201600**	DA200	1	.81	1.44	6.00	.88	4.01	1.50	2.5980	1.10
1015520	**SS100DA101650**	DA100	1	1.06	1.73	6.50	1.26	3.96	1.69	4.0200	1.24
1015625	**SS100DA181638**	DA180	1	1.32	2.02	6.38	—	3.96	1.69	4.0160	1.33
1015375	**SS125DA181838**	DA180	1 1/4	1.32	2.02	8.38	2.42	5.96	1.73	3.9800	2.12
1015378	**SS150DA201600**	DA200	1 1/2	.81	1.44	6.00	—	4.01	1.50	2.6300	2.21
1015597	**SS150DA181838**	DA180	1 1/2	1.32	2.02	8.38	—	5.96	1.50	4.2100	3.03
1015764	**SS200DA201800**	DA200	2	.81	1.44	8.00	.91	6.01	1.50	2.6378	5.45
1015765	**SS200DA101850**	DA100	2	1.06	1.73	8.50	1.26	5.97	1.70	4.0160	5.46
1015631	**SS200DA181838**	DA180	2	1.32	2.02	8.38	.99	5.98	1.88	5.9060	5.41

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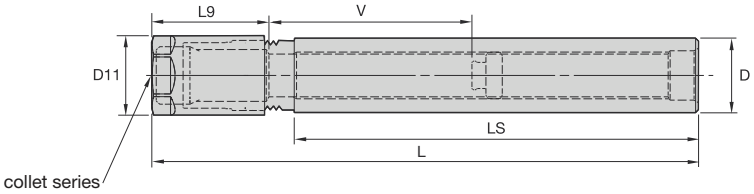
(DA 01-SS IN continued)

Spare Parts

catalog number	nose piece	hex locknut	locknut wrench	ft. lbs.	stop screw	wrench size stop screw
SS050DA301544	**NP301**	**LN301**	**OEW075**	20	**SS031031G**	2mm & 5/64
SS062DA301319	**NP301**	**LN301**	**OEW075**	20	**SS031031G**	2mm & 5/64
SS062DA301544	**NP301**	**LN301**	**OEW075**	20	**SS031031G**	2mm & 5/64
SS062DA201325	**NP201**	**LN201**	**OEW125**	40	**SS038031G**	2mm & 5/64
SS062DA201600	**NP201**	**LN201**	**OEW125**	40	**SS038031G**	2mm & 5/64
SS075DA301344	**NP301**	**LN301**	**OEW075**	20	**SS031031G**	2mm & 5/64
SS075DA301544	**NP301**	**LN301**	**OEW075**	20	**SS031031G**	2mm & 5/64
SS075DA201600	**NP201**	**LN201**	**OEW125**	40	**SS044038G**	4mm & 5/32
SS075DA101650	**NP101**	**LN101**	**OEW150**	45	**SS050038G**	4mm & 5/32
SS100DA301544	**NP301**	**LN301**	**OEW075**	20	**SS031031G**	2mm & 5/64
SS100DA201600	**NP201**	**LN201**	**OEW125**	40	**SS044038G**	4mm & 5/32
SS100DA101650	**NP101**	**LN101**	**OEW150**	45	**SS062041G**	4mm & 5/32
SS100DA181638	**NP181**	**LN181**	**OEW175**	75	**SS075041G**	4mm & 5/32
SS125DA181838	**NP181**	**LN181**	**OEW150**	75	**SS081041G**	4mm & 5/32
SS150DA201600	**NP201**	**LN201**	**OEW125**	40	**SS044038G**	4mm & 5/32
SS150DA181838	**NP181**	**LN181**	**OEW175**	75	**SS081041G**	4mm & 5/32
SS200DA201800	**NP201**	**LN201**	**OEW125**	40	**SS044038G**	4mm & 5/32
SS200DA101850	**NP101**	**LN101**	**OEW150**	45	**SS062041G**	4mm & 5/32
SS200DA181838	**NP181**	**LN181**	**OEW175**	75	**SS081041G**	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.

- Grip 1:1.
- Small outside diameter clearance is ideal for machining centers, close center-distance, and fixture problems.



	Collet Capacity			
	mm		inch	
DA collet series	min	max	min	max
DA000	0,65	4	—	—
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

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DA 04-SS MM

order number	catalog number	collet series	D	D11	L	LS	L9	V	kg
1015043	SS080DA000132M	DA000	8,0	10,1	132	100	—	—	0,05
1015037	SS125DA304109M	DA300	12,5	14,2	109	72	33	63	0,07
1015038	SS125DA304173M	DA300	12,5	14,2	173	136	34	126	0,11
1015034	SS190DA204117M	DA200	19,1	21,5	117	74	37	65	0,19
1015013	SS190DA204181M	DA200	19,1	21,5	181	138	42	124	0,29
1015035	SS200DA204117M	DA200	20,0	21,5	117	74	38	65	0,21
1015036	SS200DA204181M	DA200	20,0	21,5	181	138	37	128	0,32
1015011	SS250DA104122M	DA100	25,0	27,0	122	73	46	61	0,29
1015012	SS250DA104186M	DA100	25,0	27,0	186	137	46	124	0,45

Spare Parts

catalog number	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
SS080DA000132M	LN000M	OEW9M	41	—	—
SS125DA304109M	LNA304M	OEW13M	27	SS031031G	2mm & 5/64
SS125DA304173M	LNA304M	OEW13M	27	SS031031G	2mm & 5/64
SS190DA204117M	LNA204M	OEW19M	54	SS044038G	4mm & 5/32
SS190DA204181M	LNA204M	OEW19M	54	SS044038G	4mm & 5/32
SS200DA204117M	LNA204M	OEW19M	54	SS044038G	4mm & 5/32
SS200DA204181M	LNA204M	OEW19M	54	SS044038G	4mm & 5/32
SS250DA104122M	LNA104M	OEW24M	61	SS062041G	4mm & 5/32
SS250DA104186M	LNA104M	OEW24M	61	SS062041G	4mm & 5/32

(continued)

(DA 04-SS continued)

DA 04-SS IN

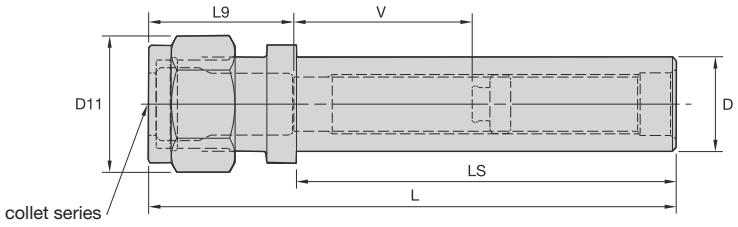
order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1015308	**SS050DA304438**	DA300	1/2	.56	4.38	2.93	1.34	2.60	.17
1015311	**SS050DA304681**	DA300	1/2	.56	6.81	5.36	1.27	2.98	.24
1015334	**SS075DA204469**	DA200	3/4	.84	4.69	3.00	1.50	2.63	.42
1015337	**SS075DA204712**	DA200	3/4	.84	7.13	5.44	1.50	3.27	.62
1015338	**SS100DA104488**	DA100	1	1.06	4.88	2.95	1.69	2.56	.66
1015342	**SS100DA104731**	DA100	1	1.06	7.31	5.38	1.73	4.96	1.02
1015517	**SS125DA184738**	DA180	1 1/4	1.44	7.38	5.38	1.89	4.76	1.61
1015594	**SS125DA184988**	DA180	1 1/4	1.44	9.88	7.86	1.89	7.20	2.15
1015737	**SS150DA404104**	DA400	1 1/2	1.87	10.40	7.96	2.20	7.25	2.80
1015545	**SS150DA404791**	DA400	1 1/2	1.88	7.91	5.18	2.19	4.81	2.22

Spare Parts

catalog number	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw
SS050DA304438	**LNA304M**	**OEW050**	20	**SS031031G**	2mm & 5/64
SS050DA304681	**LNA304M**	**OEW050**	20	**SS031031G**	2mm & 5/64
SS075DA204469	**LNA204M**	**OEW075**	40	**SS044038G**	4mm & 5/32
SS075DA204712	**LNA204M**	**OEW075**	40	**SS044038G**	4mm & 5/32
SS100DA104488	**LNA104M**	**OEW094**	45	**SS062041G**	4mm & 5/32
SS100DA104731	**LNA104M**	**OEW094**	45	**SS062041G**	4mm & 5/32
SS125DA184738	**LNA184M**	**OEW119**	60	**SS081041G**	4mm & 5/32
SS125DA184988	**LNA184M**	**OEW119**	60	**SS081041G**	4mm & 5/32
SS150DA404104	**LNA404M**	**OEW168**	64	**SS112041G**	4mm & 5/32
SS150DA404791	**LNA404M**	**OEW168**	64	**SS112041G**	4mm & 5/32

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.

- Grip 1:1.
- Heavy-duty design.



	Collet Capacity			
	mm		inch	
DA collet series	min	max	min	max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

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■ DA 08-SS-IN

order number	catalog number	collet series	D	D11	L	LS	L9	V	lbs
1015310	**SS050DA308516**	DA300	1/2	.79	5.16	3.98	1.34	2.91	.22
1015519	**SS062DA308516**	DA300	5/8	.77	5.16	3.98	1.38	2.80	.35
1015694	**SS062DA208569**	DA200	5/8	1.15	5.69	4.00	1.38	2.87	.44
1015336	**SS075DA308516**	DA300	3/4	.79	5.16	4.24	1.97	2.62	.50
1015335	**SS075DA208531**	DA200	3/4	1.15	5.31	3.96	1.45	2.68	.52
1015518	**SS075DA108588**	DA100	3/4	1.44	5.88	4.00	1.73	3.62	.67
1015696	**SS100DA308516**	DA300	1	.77	5.16	3.98	1.38	2.76	.88
1015734	**SS100DA208431**	DA200	1	1.15	4.31	2.96	1.50	2.24	.73
1015341	**SS100DA208531**	DA200	1	1.15	5.31	3.95	1.46	2.68	.91
1015698	**SS100DA108556**	DA100	1	1.44	5.56	3.99	1.75	3.21	.90
1015339	**SS100DA188638**	DA180	1	1.73	6.38	4.00	1.97	3.82	1.04
1015703	**SS125DA208531**	DA200	1-1/4	1.15	5.31	3.96	1.50	2.59	1.40
1015343	**SS125DA108556**	DA100	1-1/4	1.44	5.56	3.99	1.77	3.19	1.40
1015374	**SS125DA108756**	DA100	1-1/4	1.44	7.56	5.99	1.77	3.94	1.92
1015376	**SS125DA188762**	DA180	1-1/4	1.73	7.63	5.91	1.93	5.04	1.76
1015379	**SS150DA208531**	DA200	1-1/2	1.15	5.31	3.96	1.50	3.22	2.02
1015629	**SS150DA208731**	DA200	1-1/2	1.15	7.31	5.96	1.46	2.67	2.91
1015380	**SS150DA108756**	DA100	1-1/2	1.44	7.56	5.99	1.77	3.94	2.83
1015381	**SS150DA188762**	DA180	1-1/2	1.73	7.63	5.91	1.93	5.08	2.64
1015404	**SS175DA188762**	DA180	1-3/4	1.73	7.63	5.91	1.93	5.08	3.70
1015405	**SS200DA188762**	DA180	2	1.73	7.63	5.91	1.89	5.22	4.92

(continued)

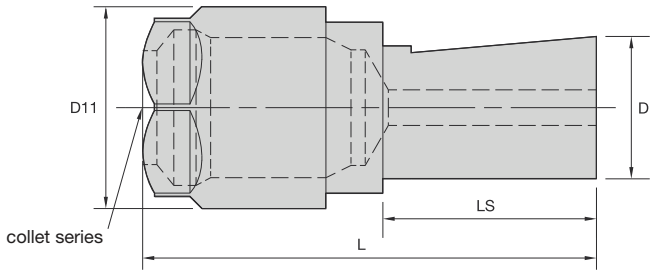
(DA 08-SS IN continued)

Spare Parts

catalog number	locknut	wrench	ft. lbs.	stop screw	wrench size stop screw
SS050DA308516	**LNA308M**	**OEW068**	20	**SS031031G**	2mm & 5/64
SS062DA308516	**LNA308M**	**OEW068**	20	**SS031031G**	2mm & 5/64
SS062DA208569	**NPA208**	**OEW100**	40	**SS038031G**	2mm & 5/64
SS075DA308516	**LNA308M**	**OEW068**	20	**SS031031G**	2mm & 5/64
SS075DA208531	**NPA208**	**OEW100**	40	**SS044038G**	4mm & 5/32
SS075DA108588	**LNA108M**	**OEW125**	55	**SS050038G**	4mm & 5/32
SS100DA308516	**LNA308M**	**OEW068**	20	**SS031031G**	2mm & 5/64
SS100DA208431	**NPA208**	**OEW100**	40	**SS044038G**	4mm & 5/32
SS100DA208531	**NPA208**	**OEW100**	40	**SS044038G**	4mm & 5/32
SS100DA108556	**LNA108M**	**OEW125**	55	**SS062041G**	4mm & 5/32
SS100DA188638	**NPA188**	**OEW150**	75	**SS075041G**	4mm & 5/32
SS125DA208531	**NPA208**	**OEW100**	40	**SS044038G**	4mm & 5/32
SS125DA108556	**LNA108M**	**OEW125**	55	**SS062041G**	4mm & 5/32
SS125DA108756	**LNA108M**	**OEW125**	55	**SS062041G**	4mm & 5/32
SS125DA188762	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32
SS150DA208531	**NPA208**	**OEW100**	40	**SS044038G**	4mm & 5/32
SS150DA208731	**NPA208**	**OEW100**	40	**SS044038G**	4mm & 5/32
SS150DA108756	**LNA108M**	**OEW125**	55	**SS062041G**	4mm & 5/32
SS150DA188762	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32
SS175DA188762	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32
SS200DA188762	**NPA188**	**OEW150**	75	**SS081041G**	4mm & 5/32

NOTE: For retention tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.
Stop screw coolant caps are available and must be ordered separately; see page J22.
DA standard straight-bore collets, see page I63.
DA non-pullout collets, see page I65.

- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Small outside diameter clearance is ideal for machining centers, close center-distance, and fixture issues.
- Solid drive/positive drive collets prevent tap slippage.
- Right- or left-hand tapping capability.
- Economical to use.



	Collet Capacity					
	mm		inch			
DA L collet series	min	max	min	max	min	max
L	M5	M24	#0	7/8	1/16P	1/2P

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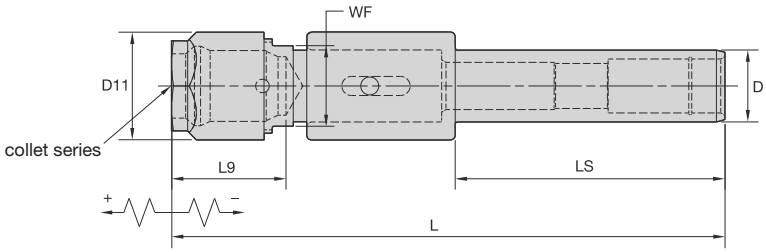
■ DA L Tap Solid-SS IN

order number	catalog number	collet series	D	D11	L	LS	locknut	ft. lbs.	wrench	lbs
1017941	**SS100STL169**	L	1	1.50	3.19	1.50	**LNAL04M**	60	**OEW125**	1.59

NOTE: Tighten locknut to the recommended tightening torque.
Collet chuck technical section, see page K74.
Supplied with locknut.
Locknut wrench must be ordered separately.
DA standard straight-bore collets, see page I63.

- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Small outside diameter clearance is ideal for use on machining centers, close center-distance, and fixture issues.
- Use for through hole tapping.
- Key drive.
- Right- or left-hand tapping capability.
- Alternate springs available to adjust tension pressure to control thread quality in a variety of workpiece conditions.
- Positive-drive collets prevent tap slippage.
- Economical to use.



Collet Capacity

DA J, K, and L collet series	mm		inch			
	min	max	min	max	min	max
J	M1	M12	#0	1/2	1/16P	—
K	M1	M16	#0	5/8	1/16P	1/8P
L	M5	M24	#0	7/8	1/16P	1/2P

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DA J, K, and L Tap T&C-SS • Inch

order number	catalog number	collet series	D	D11	L	LS	L9	tension	compression	WF	locknut	ft. lbs.	wrench	lbs
1017581	**SS075TCJ731**	J	3/4	.85	7.31	5.44	1.50	.56	.19	.562	**LNA204M**	40	**OEW075**	.72
1017748	**SS100TCK719**	K	1	1.06	7.19	5.44	—	.56	.19	.750	**LNAK04M**	45	**OEW094**	1.23
1017580	**SS100TCL769**	L	1	1.50	7.69	3.75	—	.56	.19	1.125	**LNAL04M**	60	**OEW125**	2.06

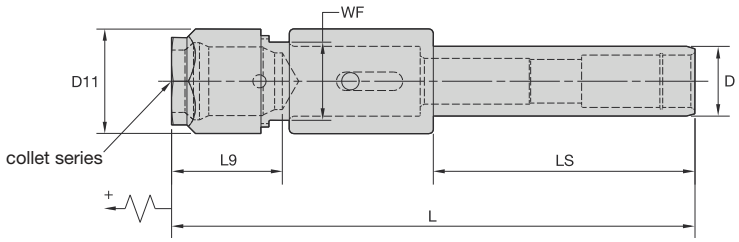
NOTE: Do not overtighten locknut; use torque recommendations above.
Collet chuck technical section, see page K74.
Supplied with locknut.
Locknut wrench must be ordered separately.
DA standard straight-bore collets, see page I63.

Alternate Tension Adjustment Springs for Tension and Compression Chucks

tap chuck	standard spring	alternate spring	preload (lb/in²)
SS075TCJ731	**CS0563041156PKG**	—	2.37
—	—	heavier **CS054001150PKG**	3.50
SS100TCK719	**CS0720067125PKG**	—	6.75
—	—	lightest **CS0563041156PKG**	2.37
—	—	lightest **CS0600049125PKG**	3.25
—	—	heavier **CS0600055150PKG**	7.50
—	—	heaviest **CS0600072150PKG**	18.00
SS100TCL769	**CS0600072150PKG**	—	18.00
—	—	light **CS0600055150 PKG**	7.50

NOTE: There are two springs in a package.

- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Small outside diameter clearance is ideal for use with machining centers, close center-distance, and fixture issues.
- Use for through hole tapping.
- Solid hard start ensures tap will start at same point every time, regardless if it is sharp or dull.
- Key drive.
- Right- or left-hand tapping capability.
- Alternate springs available to adjust tension pressure to control thread quality in a variety of workpiece conditions.
- Positive-drive collets prevent tap slippage.
- Economical to use.



Collet Capacity

DA J, K, and L collet series	mm		inch			
	min	max	min	max	min	max
J	M1	M12	#0	1/2	1/16P	—
K	M1	M16	#0	5/8	1/16P	1/8P
L	M5	M24	#0	7/8	1/16P	1/2P

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DA J, K, and L Tap Tension Only-SS • Inch

order number	catalog number	collet series	D	D11	L	LS	L9	tension	WF	locknut	ft. lbs.	wrench	lbs
1017627	**SS075TOJ712**	J	3/4	.85	7.13	5.44	1.50	.50	.562	**LNA204M**	40	**OEW075**	.72
1017629	**SS100TOK700**	K	1	1.06	7.00	5.44	1.47	.75	.750	**LNAK04M**	45	**OEW094**	1.14
1017631	**SS100TOL750**	L	1	1.50	7.50	3.75	1.59	.75	1.125	**LNAL04M**	60	**OEW125**	2.08

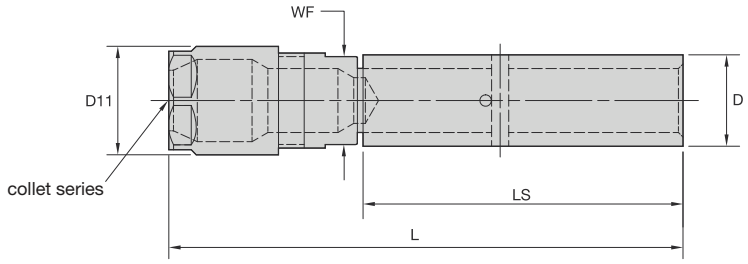
NOTE: Do not overtighten locknut; use torque recommendations above.
Collet chuck technical section, see page K74.
Supplied with locknut.
Locknut wrench must be ordered separately.
DA standard straight-bore collets, see page I63.

Alternate Tension Adjustment Springs for Tension-Only Chucks

tap chuck	standard spring	alternate spring	preload (lb/in²)
SS075TOJ712	**CS0563041156PKG**	—	2.37
—	—	heavier **CS0540041150 PKG**	3.50
SS100TOK700	**CS0600055150PKG**	—	7.50
—	—	lighter **CS0563041156 PKG**	2.37
SS100TOL750	**CS0600049125PKG**	—	3.25
—	—	heavier **CS0600055150 PKG**	7.50

NOTE: There are two springs in a package.

- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Ideal for machining centers.
- It provides 0,10mm (.004") movement in all directions to compensate for angular and parallel misalignments.
- Minimum outside diameter and overhang provide maximum tool clearance.



DA collet series	Collet Capacity mm min	mm max	inch min	inch max
DA300	0,2	6	1/64	1/4
DA200	0,2	10	1/64	25/64
DA100	1,8	14	1/64	9/16
DA180	2,2	20	1/64	3/4

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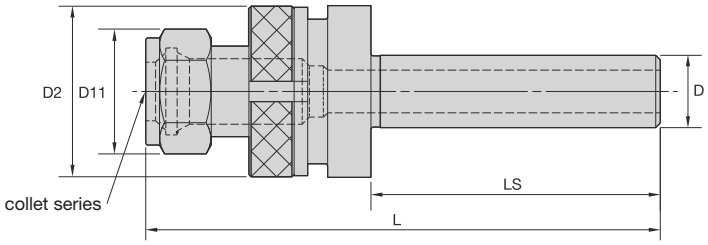
■ DA 08 DP F-SS IN

order number	catalog number	collet series	D	D11	L	LS	WF	locknut	wrench	ft. lbs.	lbs
1015905	**SS050DP308403**	DA300	1/2	.69	4.03	2.50	.500	**NPA338**	**OEW062**	20	.22
1015906	**SS075DP308403**	DA300	3/4	.69	4.03	2.50	.500	**NPA338**	**OEW062**	20	.50
1015980	**SS075DP208448**	DA200	3/4	.94	4.50	3.00	.625	**NPA238**	**OEW088**	40	.56
1015949	**SS100DP308403**	DA300	1	.69	4.03	2.50	.500	**NPA338**	**OEW062**	20	.89
1015981	**SS100DP208448**	DA200	1	.94	4.50	3.00	.625	**NPA238**	**OEW088**	40	.99
1015979	**SS100DP108562**	DA100	1	1.19	5.63	3.50	.875	**NPA139**	**OEW088**	55	1.24
1015944	**SS125DP188696**	DA180	1-1/4	1.50	6.97	4.50	1.125	**LNA138**	**OEW138**	75	2.41

NOTE: Do not overtighten locknut; use torque recommendations above.
Using two wrenches is recommended to prevent premature wear on the floating mechanism. Wrenches must be ordered separately.
Collet chuck technical section, see page K74.
Supplied with locknut.
DA standard straight-bore collets, see page I63.

- Grip 1:1.
- Industry standard Erickson™ double-angle collet system.
- Recommended only for stationary applications (lathe).
- Toolholder provides 0,25mm (.010") movement in all directions to compensate for angular and parallel misalignments.
- Hollow design enables coolant through the tool and short projection lengths.
- Adjusting nut varies spring tension to compensate for cutter weight.



	Collet Capacity			
	mm		inch	
DA 08 collet series	min	max	min	max
DA180	2,2	20	1/64	3/4

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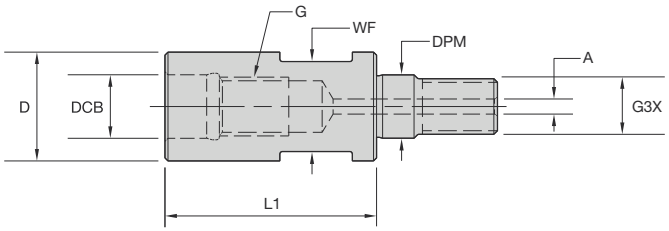
DA 08 FF-SS IN

order number	catalog number	collet series	D	D11	D2	L	LS	locknut	wrench	wrench	ft. lbs.	lbs
1015975	**SS075FC188688**	DA180	3/4	1.73	2.38	6.88	4.00	**NPA188**	**OEW150**	**HSW58M**	75	.86
1015982	**SS100FC188688**	DA180	1	1.73	2.38	6.88	4.00	**NPA188**	**OEW150**	**HSW58M**	75	1.52
1015910	**SS125FC188888**	DA180	1 1/4	1.73	2.38	8.88	6.00	**NPA188**	**OEW150**	**HSW58M**	75	4.08
1015952	**SS150FC188688**	DA180	1 1/2	1.73	2.38	6.88	4.00	**NPA188**	**OEW150**	**HSW58M**	75	3.44
1015947	**SS150FC188888**	DA180	1 1/2	1.73	2.38	8.88	6.00	**NPA188**	**OEW150**	**HSW58M**	75	4.44
1015976	**SS175FC188888**	DA180	1 3/4	1.73	2.38	8.88	6.00	**NPA188**	**OEW150**	**HSW58M**	75	6.04
1013502	**SS200FC188888**	DA180	2	1.73	2.38	8.88	6.00	**NPA188**	**OEW150**	**HSW58M**	75	–

NOTE: Do not overtighten locknut; use torque recommendations above.
Locknut and adjusting nut wrenches must be ordered separately.
Collet chuck technical section, see page K74.
Supplied with locknut.
DA standard straight-bore collets, see page I63.



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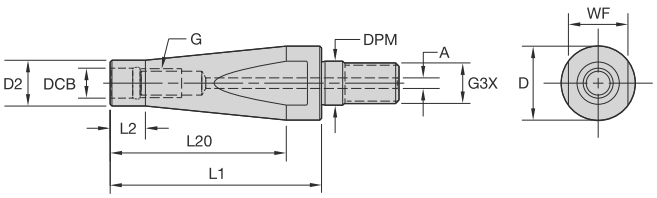
■ ST Ext-ST

order number	catalog number	DCB	G	DPM	G3X	D	A	L1	WF	kg
4074158	**M06MST06025M**	6,5	M6	6,5	M6	9,8	2	25	7	0,01
4074159	**M08MST08030M**	8,5	M8	8,5	M8	13,0	2	30	10	0,03
4074160	**M10MST10035M**	10,5	M10	10,5	M10	18,0	3	35	15	0,06
4074161	**M12MST12040M**	12,5	M12	12,5	M12	21,0	3	40	17	0,10
4074162	**M16MST16040M**	17,0	M16	17,0	M16	29,0	4	40	22	0,18



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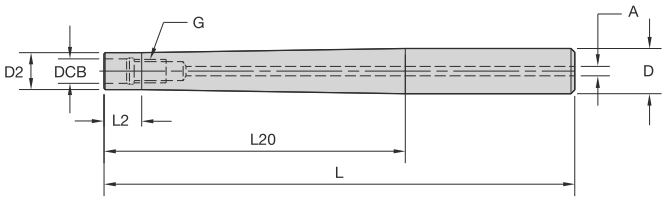
■ ST Red-ST

order number	catalog number	DCB	G	DPM	G3X	D	D2	A	L1	L2	L20	WF
4077826	**M08MST06025M**	6,5	M6	8,5	M8	13	10	2,0	25	10	15	10
4077815	**M10MST08030M**	8,5	M8	10,5	M10	18	13	2,5	30	10	20	15
4077822	**M12MST06080M**	6,5	M6	12,5	M12	21	10	3,0	80	10	70	17
4077818	**M12MST06040M**	6,5	M6	12,5	M12	21	10	3,0	40	10	30	17
4077820	**M12MST10035M**	10,5	M10	12,5	M12	21	18	3,0	35	10	25	17
4077816	**M12MST06060M**	6,5	M6	12,5	M12	21	10	3,0	60	10	50	17
4077817	**M12MST08080M**	8,5	M8	12,5	M12	21	13	3,0	80	10	70	17
4077819	**M12MST08060M**	8,5	M8	12,5	M12	21	13	3,0	60	10	50	17
4077821	**M12MST08040M**	8,5	M8	12,5	M12	21	13	3,0	40	10	30	17
4077825	**M16MST10060M**	10,5	M10	17,0	M16	29	18	4,0	60	10	50	22
4074194	**M16MST12040M**	12,5	M12	17,0	M16	29	21	4,0	35	10	25	22
4074193	**M16MST08060M**	8,5	M8	17,0	M16	29	13	4,0	60	10	50	22
4077824	**M16MST10080M**	10,5	M10	17,0	M16	29	18	4,0	80	10	70	22
4077823	**M16MST08080M**	8,5	M8	17,0	M16	29	13	4,0	80	10	70	22

• Heavy metal for strength.



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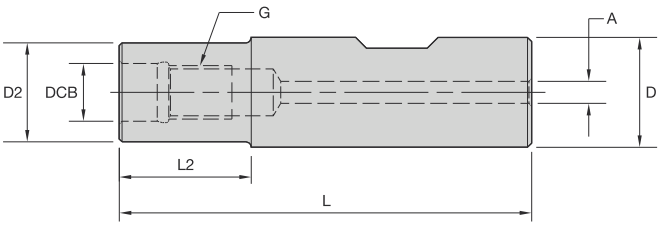
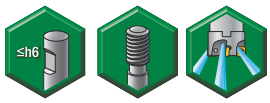
■ ST Est-SS MM

order number	catalog number	DCB	G	D	D2	A	L	L2	L20
4160427	SS120STCHM06085M	6,5	M6	12	10	2,5	85	10	40
4160428	SS120STCHM06105M	6,5	M6	12	10	2,5	105	10	60
4160430	SS120STCHM06125M	6,5	M6	12	10	2,5	125	10	80
4160431	SS160STCHM08088M	8,5	M8	16	13	3,0	88	10	40
4160473	SS160STCHM08128M	8,5	M8	16	13	3,0	128	10	80
4160432	SS160STCHM08108M	8,5	M8	16	13	3,0	108	10	60
4160474	SS160STCHM08148M	8,5	M8	16	13	3,0	148	10	100
4160475	SS160STCHM08168M	8,5	M8	16	13	3,0	168	10	120
4160480	SS200STCHM10170M	10,5	M10	20	18	3,5	170	10	130
4160479	SS200STCHM10150M	10,5	M10	20	18	3,5	150	10	100
4160478	SS200STCHM10130M	10,5	M10	20	18	3,5	130	10	80
4160477	SS200STCHM10110M	10,5	M10	20	18	3,5	110	10	60
4160476	SS200STCHM10090M	10,5	M10	20	18	3,5	90	10	40

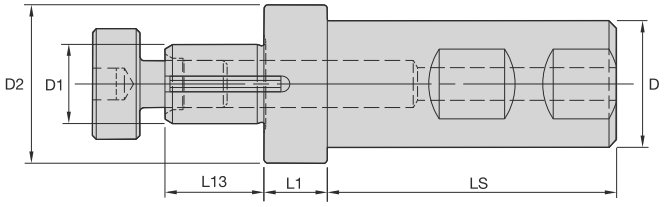




ERICKSON

■ ST Est-WN MM

order number	catalog number	DCB	G	D	D2	A	L	L2
4074129	**M06WST10060M**	6,5	M6	10	10	2	60	19
4074131	**M08WST16073M**	8,5	M8	16	13	4	73	24
4074132	**M10WST20080M**	10,5	M10	20	18	4	75	24
4074153	**M12WST25086M**	12,5	M12	25	21	5	86	29
4074154	**M16WST32095M**	17,0	M16	32	29	6	95	34



ERICKSON

SA-SS IN

order number	catalog number	D	D1	D2	L1	LS	L13	lock screw	wrench size lock screw	drive key	spacing collar	lbs
1288235	**SS100SA062050**	1	5/8	1.25	.50	2.28	.78	**KLS07**	1/4	**DWG SDK062088**	**–**	.74
1288264	**SS125SA100075**	1 1/4	1	1.61	.75	2.28	.94	**KLS10**	5/16	**DWG SDK100106**	**–**	1.46
1015362	**SS125SA125075**	1 1/4	1 1/4	1.86	.75	2.28	1.09	**KLS12**	5/16	**DWG SDK125119**	**QNB-80617B**	2.05
1015363	**SS150SA150100**	1 1/2	1 1/2	2.11	1.00	2.69	1.70	**KLS15**	3/8	**DWG SDK150175**	**–**	3.28
1015384	**SS200SA200100**	2	2	2.75	1.00	3.25	1.70	**KLS20**	9/16	**SDK200169**	**–**	6.64

NOTE: Do not overtighten lock screw.
Item 1288264 is supplied with .156" spacer.
Item 1015362 is supplied with .250" spacer.
Supplied with lock screw and drive key.
Lock screw wrench not included.

WIDIA

WIDIA

Collets and Sleeves

HC Hydraulic Chuck Sleeves **I2–I5**
SMC Bearing Milling Chuck Sleeves **I6–I9**
TG Single-Angle Collets **I10–I48**
TG50 Series I14–I21
TG75 Series I22–I29
TG100 Series I30–I41
TG150 Series I42–I48
ER Single-Angle Collets **I50–I60**
Standard Collets I54–I57
Solid Tap Collets I58–I59
Tension Tap Collets **I60**
DA Double-Angle Collets **I62–I75**
Standard Collets I65–I69
DA-J Solid Tap Collets I71
DA-K Solid Tap Collets I72–I73
DA-L Solid Tap Collets I74–I75
RC Rapid Quick Change Tap Adapters **I76–I81**

Erickson™ HC Hydraulic Chuck Sleeves • **Drilling**

Erickson Hydraulic Reduction Sleeves are specially designed for high-precision clamping of straight cylindrical cutting tool shanks. The self-sealing design enables efficient use of through-coolant cutting tools when the cutting tool shank completely engages the full gripping length of the sleeve.

HC

- One-piece design with slot configuration to seal coolant.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Capable of up to 100 bar (1,500 psi) coolant pressure.
- Cutting tool shank requirement tolerance is h6 and Ra ≥0,3 µm (12 µ in) surface finish.
- Maximum collapse is h6.

How Do Catalog Numbers Work?

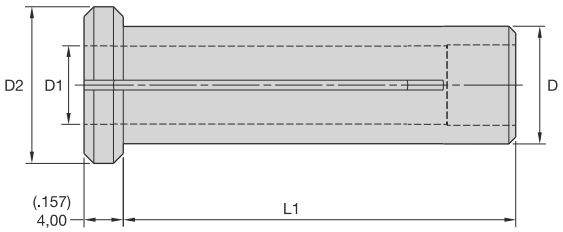
Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

ERICKSON

20MHC160M

20	M	HC	160	M
System Size	System Value	Sleeve Style	Sleeve Bore Size	Identification Value
12 = 12mm **20** = 20mm **32** = 32mm **50** = 1/2" **75** = 3/4" **12** = 1-1/4"	**M** = Previous two numbers built in metric values	**HC** = Hydraulic Chuck	**metric (xx.x)** **010** = 1mm **160** = 16mm **250** = 25mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2" **1000** = 1"	**M** = Sleeve bore size built to metric values **(blank)** = Sleeve bore size built to metric values

- One-piece design with slot configuration to seal coolant.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Sleeve must be inserted completely into the hydraulic chuck until shoulder mates against the hydraulic chuck front face.
- Cutting tools must be in full contact with the sleeve bore length (L9).



ERICKSON

Metric with Metric Bores

D1	12HC D = 12mm D2 = 16mm L1 = 40mm1	20HC D = 20mm D2 = 25mm L1 = 50mm	25HC D = 25mm D2 = 30mm L1 = 56mm	32HC D = 32mm D2 = 36mm L1 = 60mm
3,0	12MHC030M	20MHC030M	25MHC030M	–
4,0	12MHC040M	20MHC040M	25MHC040M	–
5,0	12MHC050M	20MHC050M	25MHC050M	–
6,0	12MHC060M	20MHC060M	25MHC060M	32MHC060M
7,0	12MHC070M	20MHC070M	25MHC070M	32MHC070M
8,0	12MHC080M	20MHC080M	25MHC080M	32MHC080M
9,0	12MHC090M	20MHC090M	25MHC090M	32MHC090M
10,0	12MHC100M	20MHC100M	25MHC100M	32MHC100M
11,0	–	20MHC110M	–	32MHC110M
12,0	–	20MHC120M	25MHC120M	32MHC120M
13,0	–	20MHC130M	–	32MHC130M
14,0	–	20MHC140M	25MHC140M	32MHC140M
15,0	–	20MHC150M	–	32MHC150M
16,0	–	20MHC160M	25MHC160M	32MHC160M
17,0	–	–	–	32MHC170M
18,0	–	–	25MHC180M	32MHC180M
19,0	–	–	–	32MHC190M
20,0	–	–	25MHC200M	32MHC200M
22,0	–	–	–	32MHC220M
25,0	–	–	–	32MHC250M

(continued)

(HC Hydraulic Chuck Sleeves continued)

Metric with Inch Bores

D1	20HC D = 20mm D2 = 25mm L1 = 50mm	32HC D = 32mm D2 = 36mm L1 = 60mm
3/16	20HCM0188	–
1/4	20HCM0250	–
5/16	20HCM0312	–
3/8	20HCM0375	–
7/16	20HCM0438	–
1/2	20HCM0500	32HCM0500
9/16	20HCM0562	32HCM0562
5/8	20HCM0625	32HCM0625
11/16	–	32HCM0688
3/4	–	32HCM0750
7/8	–	32HCM0875
1	–	32HCM1000

Inch with Metric Bores

D1	50HC D = .500 D2 = .630 L1 = 1.575	75HC D = .750 D2 = .984 L1 = 1.969	12HC D = 1.250 D2 = 1.417 L1 = 2.362
3,0	50HC030M	75HC030M	–
4,0	50HC040M	75HC040M	–
5,0	50HC050M	75HC050M	–
6,0	50HC060M	75HC060M	–
8,0	50HC080M	75HC080M	–
10,0	50HC100M	75HC100M	–
12,0	–	75HC120M	–
14,0	–	75HC140M	–
16,0	–	75HC160M	12HC160M
18,0	–	–	12HC180M
20,0	–	–	12HC200M
25,0	–	–	12HC250M

Inch with Inch Bores

D1	50HC D = .500 D2 = .630 L1 = 1.575	75HC D = .750 D2 = .945 L1 = 1.969	12HC D = 1.250 D2 = 1.417 L1 = 2.362
1/8	50HC0125	75HC0125	–
3/16	50HC0188	75HC0188	–
1/4	50HC0250	75HC0250	–
5/16	50HC0312	75HC0312	–
3/8	50HC0375	75HC0375	–
7/16	–	75HC0438	–
1/2	–	75HC0500	12HC0500
9/16	–	75HC0562	12HC0562
5/8	–	75HC0625	12HC0625
11/16	–	–	12HC0688
3/4	–	–	12HC0750
13/16	–	–	12HC0812
7/8	–	–	12HC0875
1	–	–	12HC1000

NOTE: Inserting the cutting tool less than the full gripping length (L9) of the sleeve can permanently damage the sleeve and hydraulic chuck. Full length of the gripping bore needs to be maintained to achieve maximum accuracy, safety, and coolant sealing feature.

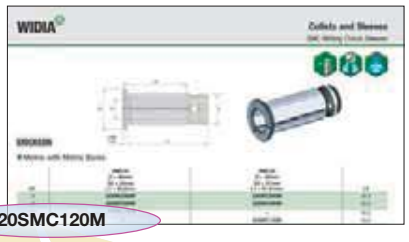
Erickson™ SMC Bearing Milling Chuck Sleeves • **Milling**

Erickson Bearing Milling Chuck Reduction Sleeves are specially designed for high-precision clamping of straight cylindrical cutting tool shanks. These are not self-sealing designed and rely on the back-up screws in the milling chuck for sealing coolant through the cutting tool.

SMC

- One-piece design.
- Cutting tool shank requirement tolerance is h6.
- Maximum collapse is h6.

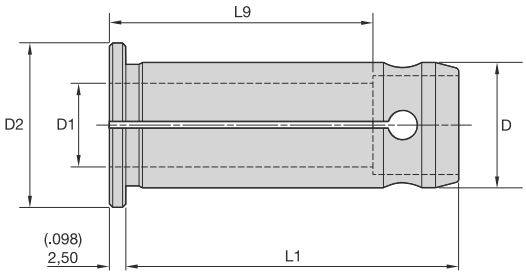
- One-piece design.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Cutting tool shank requirement tolerance is h6 and Ra ≥ 0,3 µm (12 µ in) surface finish.
- Maximum collapse is h6.



ERICKSON

20	SMC	120	M
System Size	Sleeve Style	Sleeve Bore Size	Identification Value
20 = 20mm **25** = 25mm **32** = 32mm **75** = 3/4" **10** = 1" **12** = 1-1/4"	**SMC** = Milling Chuck	**metric (xx.x)** **010** = 1mm **160** = 16mm **245** = 24,5mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2" **1000** = 1"	**M** = Sleeve bore size built to metric values **(blank)** = Sleeve bore size built to metric values

- One-piece design.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Sleeve must be inserted completely into the milling chuck until shoulder mates against the chuck front face.
- Cutting tools must be in full contact with the sleeve bore length (L9).
- Maximum collapse is h6.
- Metric and inch bores are available.



ERICKSON

Metric with Metric Bores

D1	20SMC D = 20mm D2 = 25mm L1 = 50,5mm	32SMC D = 32mm D2 = 37mm L1 = 61,51mm	L9
6	20SMC060M	32SMC060M	32,0
8	20SMC080M	32SMC080M	35,0
10	20SMC100M	–	36,0
10	–	32SMC100M	38,0
12	20SMC120M	–	40,0
12	–	32SMC120M	42,5
16	20SMC160M	–	41,0
16	–	32SMC160M	47,5
20	–	32SMC200M	48,5
25	–	32SMC250M	51,5

Inch with Metric Bores

D1	75SMC D = 19,05mm D2 = 25mm L1 = 50,5mm	10SMC D = 25,4mm D2 = 29mm L1 = 58,5mm	12SMC D = 31,75mm D2 = 37mm L1 = 61,51mm	L9
.2362	75SMC060M	10SMC060M	12SMC060M	1.260
.3150	75SMC080M	10SMC080M	12SMC080M	1.378
.3937	75SMC100M	–	–	1.417
.3937	–	–	12SMC100M	1.496
.3937	–	10SMC100M	–	1.516
.4724	75SMC120M	–	–	1.575
.4724	–	10SMC120M	12SMC120M	1.673
.5512	75SMC140M	–	–	1.614
.5512	–	10SMC140M	–	1.673
.5512	–	–	12SMC140M	1.752
.6299	75SMC160M	–	–	1.614
.6299	–	10SMC160M	12SMC160M	1.870

(continued)

(SMC Milling Chuck Sleeves continued)

D1	75SMC D = 19,05mm D2 = 25mm L1 = 50,5mm	10SMC D = 25,4mm D2 = 29mm L1 = 58,5mm	12SMC D = 31,75mm D2 = 37mm L1 = 61,51mm	L9
.7087	–	–	12SMC180M	1.870
.7087	–	10SMC180M	–	1.909
.7874	–	10SMC200M	12SMC200M	1.909
.8661	–	–	12SMC220M	1.949
.9843	–	–	12SMC250M	2.028

Inch with Inch Bores

D1	75SMC D = .750 D2 = .984 L1 = 1.988	10SMC D = 1.000 D2 = 1.142 L1 = 2.303	12SMC D = 1.250 D2 = 1.457 L1 = 2.422	L9
1/8	75SMC0125	10SMC0125	12SMC0125	.709
3/16	75SMC0188	10SMC0188	12SMC0188	.984
1/4	75SMC0250	10SMC0250	12SMC0250	1.260
5/16	75SMC0312	10SMC0312	12SMC0312	1.378
3/8	75SMC0375	–	–	1.417
3/8	–	–	12SMC0375	1.496
3/8	–	10SMC0375	–	1.516
7/16	75SMC0438	10SMC0438	12SMC0438	1.575
1/2	75SMC0500	–	–	1.575
1/2	–	10SMC0500	12SMC0500	1.673
9/16	75SMC0563	–	–	1.614
9/16	–	10SMC0563	–	1.673
9/16	–	–	12SMC0563	1.752
5/8	75SMC0625	–	–	1.614
5/8	–	10SMC0625	12SMC0625	1.870
3/4	–	10SMC0750	12SMC0750	1.909
7/8	–	10SMC0875	–	1.909
7/8	–	–	12SMC0875	1.949
1	–	–	12SMC1000	2.028

Erickson™ • **TG Single-Angle Collets**

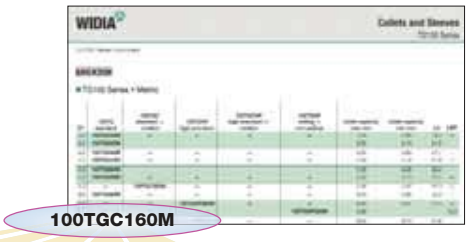
TG — Tremendous Grip Collets are manufactured according to the original Erickson standard and developed to utilize the full power available from the modern machine tool. A slow taper (8° inclusive angle) is used to produce maximum wedge action as the collet is forced back into the chuck body from the actuating locknut. From all the Collets WIDIA™ offers, the TG system is superior on grip, versatile in applications, and the most accurate. They are ideal for end milling, drilling, tapping, reaming, and boring solutions and available in a variety of styles, TG50, TG75, TG100, and TG150, with clamping ranges from 0,5–40mm (.0197–1.5000").

ERICKSON™

TG Collets

- Original Erickson standard.
- Slow 8° inclusive angle taper for best grip (approximately 3:1).
- Standard design accuracy to DIN 6499 Class 2 accuracy.
- HP design accuracy to DIN 6499 Class 1 accuracy.
- Bonded style available for through-coolant applications.
- Non-pullout style to captivate Weldon®-style end mills.
- Dedicated versions for tapping — driving off the square of the tap.

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



100TGC160M

ERICKSON

100	TG	C	160	M
System Size	Collet Style	Special Features *(optional)*	Collet Bore Size	Identification Value
50 = 50 **75** = 75 **100** = 100 **150** = 150	**TG** = Tremendous Grip, single angle	**C** = Coolant style — bonded **HP** = High precision **CHP** = Coolant/high precision **NP** = Non-pullout (slot for drive) **ST** = Solid tapping (slot for drive) **STC** = Solid tapping/coolant (slot for drive)	**metric (xx.x)** **010** = 1mm **160** = 16mm **245** = 24,5mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2" **1000** = 1"	**M** = Sleeve bore size built to metric values **(blank)** = Sleeve bore size built to metric values

TG • Tremendous Grip

ERICKSON

- Provides Tremendous Grip and accuracy for all drilling applications.
- 0,4mm [.016" (1/64)] range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy.

TGC • Tremendous Grip Coolant

ERICKSON

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 100 bar (1500 psi).
- Unique design features permit easy entry into nosepiece.
- Available from stock in all popular sizes.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range collapse.
- Design enables flutes of drills to enter collet, unlike competitive designs.

TGHP • Tremendous Grip High Precision

ERICKSON

- Twice as accurate as standard TG- and ER-style collets.
- Available from stock in all popular sizes.
- Can be used in all standard TG-style collet chucks.
- 0,25mm (.010") range of collapse.
- Manufactured to DIN 6499 Class 1 accuracy.

TGCHP • Tremendous Grip Coolant High Precision

ERICKSON

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 100 bar (1500 psi).
- Unique design features permit easy entry into nosepiece.
- Available from stock in all popular sizes.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.
- Manufactured to DIN 6499 Class 1 accuracy.

TGNP • Tremendous Grip Non-Pullout, Weldon® Style

ERICKSON

- Positive retention and drive provided by drive wedge in collet.
- Eliminates inaccuracy created by solid end mill holders.
- 0,13mm (.005") range of collapse.
- Fits all standard TG-style collet chucks.

TGST • Tremendous Grip Single-Angle Tap Collet

ERICKSON

- Designed to grip the tap on the shank and square.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.

TGSTC • Tremendous Grip Single-Angle Tap Collet, Coolant Style

ERICKSON

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 70 bar (1000 psi).
- Designed to grip the tap on the shank and square.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.

WIN WITH WIDIA™

VariMill II™ Solid Carbide End Mills

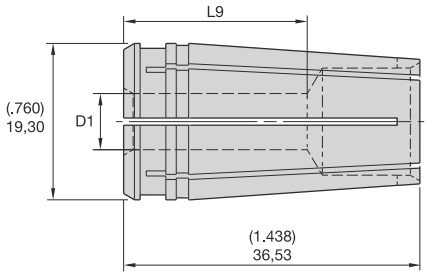
The next generation high-performance end mill, VariMill II dramatically improves metal removal rates without reducing tool life.

- Best suited for applications in the aerospace, medical, die and mold, automotive, and general engineering markets.
- Outstanding performance in stainless steel, titanium, INCONEL®, and other high-temperature alloys and steels.
- Increased metal removal rates in roughing and finishing operations.
- Excellent performance in both slotting and profiling operations.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA™

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 50TG 0,4mm [.016" (1/64)] range of collapse.
- 50TGC and 50TGCHP 0,13mm (.005") range of collapse.
- 50TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON

TG50 Series • Metric

D1	50TG standard	50TGC standard — coolant	50TGHP high precision	50TGCHP high precision — coolant	collet capacity max mm	collet capacity min mm	L9
1,5	**50TG015M**	–	–	–	1,50	1,10	11,9
2,0	**50TG020M**	–	–	–	2,00	1,60	12,0
2,5	**50TG025M**	–	–	–	2,50	2,10	18,0
3,0	**50TG030M**	–	–	–	3,00	2,60	18,2
3,5	**50TG035M**	–	–	–	3,50	3,10	18,4
4,0	**50TG040M**	–	–	–	4,00	3,60	21,7
4,0	–	–	**50TGHP040M**	–	4,00	3,75	21,7
4,5	**50TG045M**	–	–	–	4,50	4,10	21,9
5,0	**50TG050M**	–	–	–	5,00	4,60	22,0
5,5	**50TG055M**	–	–	–	5,50	5,10	22,2
6,0	–	–	**50TGHP060M**	–	6,00	5,75	22,3
6,0	**50TG060M**	–	–	–	6,00	5,60	22,3
6,0	–	**50TGC060M**	–	–	6,00	5,87	22,3
6,0	–	–	–	**50TGCHP060M**	5,90	5,87	22,4
6,5	**50TG065M**	–	–	–	6,50	6,10	22,3
7,0	**50TG070M**	–	–	–	7,00	6,60	29,0

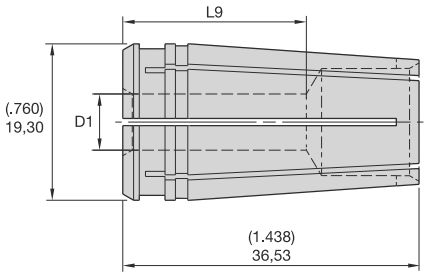
(continued)

(TG50 Series continued)

D1	50TG standard	50TGC standard — coolant	50TGHP high precision	50TGCHP high precision — coolant	collet capacity max mm	collet capacity min mm	L9
7,5	**50TG075M**	—	—	—	7,50	7,10	29,1
8,0	—	**50TGC080M**	—	—	8,00	7,87	22,9
8,0	—	—	—	**50TGCHP080M**	7,90	7,87	23,0
8,0	**50TG080M**	—	—	—	8,00	7,60	29,3
8,0	—	—	**50TGHP080M**	—	8,00	7,75	29,4
8,5	**50TG085M**	—	—	—	8,50	8,10	29,4
9,0	**50TG090M**	—	—	—	9,00	8,60	29,6
9,5	**50TG095M**	—	—	—	9,50	9,10	29,9
10,0	—	**50TGC100M**	—	—	10,00	9,87	30,0
10,0	—	—	—	**50TGCHP100M**	9,90	9,87	30,0
10,0	—	—	**50TGHP100M**	—	10,00	9,75	30,0
10,0	**50TG100M**	—	—	—	10,00	9,60	30,0
10,5	**50TG105M**	—	—	—	10,50	10,10	30,2
11,0	**50TG110M**	—	—	—	11,00	10,60	30,3
11,5	**50TG115M**	—	—	—	11,50	11,10	30,5
12,0	—	**50TGC120M**	—	—	12,00	11,87	30,3
12,0	**50TG120M**	—	—	—	12,00	11,60	30,6
12,0	—	—	—	**50TGCHP120M**	11,90	11,87	30,6
12,0	—	—	**50TGHP120M**	—	12,00	11,75	30,6
12,5	**50TG125M**	—	—	—	12,50	12,10	30,8
13,0	**50TG130M**	—	—	—	13,00	12,60	30,9
13,5	**50TG135M**	—	—	—	13,50	13,10	36,5

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 0,13mm (.005") range of collapse.
- 50TG 0,4mm [.016" (1/64)] range of collapse.
- 50TGTGC and 50TGCHP 0,13mm (.005") range of collapse.
- 50TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON

TG50 Series • Inch

D1	50TG standard	50TGC standard — coolant	50TGHP high precision	50TGCHP high precision — coolant	collet capacity max inch	collet capacity min inch	L9
3/64	**50TG0047**	—	—	—	.0470	.0313	.465
1/16	**50TG0062**	—	—	—	.0625	.0469	.470
5/64	**50TG0078**	—	—	—	.0780	.0625	.475
3/32	**50TG0094**	—	—	—	.0940	.0781	.710
7/64	**50TG0109**	—	—	—	.1090	.0938	.715
1/8	—	—	**50TGHP0125**	—	.1250	.1150	.719
1/8	**50TG0125**	—	—	—	.1250	.1094	.720
1/8	—	—	—	**50TGCHP0125**	.1250	.1200	.847
9/64	—	**50TGC0141**	—	—	.1406	.1356	.852
9/64	**50TG0141**	—	—	—	.1410	.1250	.725
5/32	**50TG0156**	—	—	—	.1560	.1406	.855
5/32	—	**50TGC0156**	—	—	.1563	.1513	.857

(continued)

(TG50 Series continued)

D1	50TG standard	50TGC standard — coolant	50TGHP high precision	50TGCHP high precision — coolant	collet capacity max inch	collet capacity min inch	L9
11/64	—	50TGC0172	—	—	.1719	.1669	.861
11/64	50TG0172	—	—	—	.1720	.1563	.860
3/16	—	—	50TGHP0188	—	.1875	.1775	.865
3/16	—	50TGC0188	—	50TGCHP0188	.1875	.1825	.866
3/16	50TG0188	—	—	—	.1880	.1719	.865
13/64	50TG0203	—	—	—	.2030	.1875	.870
13/64	—	50TGC0203	—	—	.2031	.1981	.871
7/32	—	50TGC0219	—	—	.2188	.2138	.876
7/32	50TG0219	—	—	—	.2190	.2031	.875
15/64	50TG0234	—	—	—	.2340	.2188	.880
1/4	—	50TGC0250	—	50TGCHP0250	.2500	.2450	.885
1/4	—	—	50TGHP0250	—	.2500	.2400	1.139
1/4	50TG0250	—	—	—	.2500	.2344	1.139
17/64	—	50TGC0266	—	—	.2656	.2606	.890
17/64	50TG0266	—	—	—	.2660	.2500	1.144
9/32	50TG0281	—	—	—	.2810	.2656	1.148
9/32	—	50TGC0281	—	—	.2813	.2763	.894
19/64	50TG0297	—	—	—	.2970	.2813	1.153
5/16	50TG0312	—	—	—	.3120	.2969	1.158
5/16	—	50TGC0312	—	50TGCHP0312	.3125	.3075	.904
5/16	—	—	50TGHP0312	—	.3125	.3025	1.158
21/64	50TG0328	—	—	—	.3280	.3125	1.163
21/64	—	50TGC0328	—	—	.3281	.3231	.908
11/32	—	50TGC0344	—	—	.3438	.3388	.913
11/32	50TG0344	—	—	—	.3440	.3281	1.167
23/64	50TG0359	—	—	—	.3590	.3438	1.172
23/64	—	50TGC0359	—	—	.3594	.3544	.918
3/8	—	50TGC0375	—	50TGCHP0375	.3750	.3700	.922
3/8	50TG0375	—	—	—	.3750	.3594	1.177
3/8	—	—	50TGHP0375	—	.3750	.3650	1.177
25/64	—	50TGC0391	—	—	.3906	.3856	1.182
25/64	50TG0391	—	—	—	.3910	.3750	1.181
13/32	50TG0406	—	—	—	.4060	.3906	1.186
13/32	—	50TGC0406	—	—	.4063	.4013	1.187
27/64	—	50TGC0422	—	—	.4219	.4169	1.192
27/64	50TG0422	—	—	—	.4220	.4063	1.191
7/16	—	—	50TGHP0438	—	.4375	.4275	1.195
7/16	—	50TGC0438	—	50TGCHP0438	.4375	.4325	1.196
7/16	50TG0438	—	—	—	.4380	.4219	1.196
29/64	50TG0453	—	—	—	.4530	.4375	1.200

(continued)

(TG50 Series continued)

D1	50TG standard	50TGC standard — coolant	50TGHP high precision	50TGCHP high precision — coolant	collet capacity max inch	collet capacity min inch	L9
29/64	—	**50TGC0453**	—	—	.4531	.4481	1.201
15/32	**50TG0469**	—	—	—	.4680	.4531	1.205
15/32	—	**50TGC0469**	—	—	.4688	.4638	1.206
31/64	**50TG0484**	—	—	—	.4840	.4688	1.209
31/64	—	**50TGC0484**	—	—	.4844	.4794	1.210
1/2	—	—	**50TGHP0500**	—	.5000	.4900	1.214
1/2	**50TG0500**	—	—	—	.5000	.4844	1.214
1/2	—	**50TGC0500**	—	**50TGCHP0500**	.5000	.4950	1.215
33/64	—	**50TGC0516**	—	—	.5156	.5106	1.220
33/64	**50TG0516**	—	—	—	.5160	.5000	1.209
17/32	**50TG0531**	—	—	—	.5310	.5156	1.438
17/32	—	**50TGC0531**	—	—	.5313	.5263	1.438

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

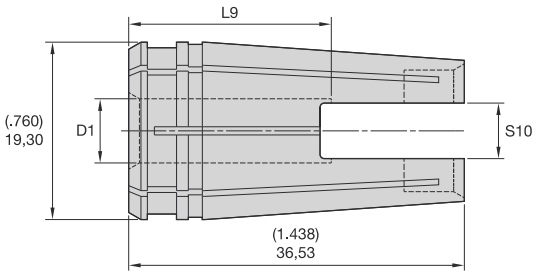
• An economical way to purchase a group of collets.

ERICKSON

■ TG50 Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S50TG1SET	TG50	32	3/16 - 17/64	1/64
S50TG2SET	TG50	15	3/32 - 17/64	1/32

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Can be used in all standard TG collet chucks.
- Provides Tremendous Grip (3:1 advantage) and accuracy for tapping applications.
- Slot in back of collets acts as a drive for the tap square.
- Industry-standard Erickson™ single-angle collet system.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON

TG50 Solid Tap Collet • Metric DIN and ISO

tap size	50TGST solid tap — non-coolant	collet series	D1	S10	L9
M1 & M1,8 & M3 & M3,5	**50TGST025021M**	TG50	2,5	2,1	17,0
M2,5 & M4	**50TGST028021M**	TG50	2,8	2,1	17,0
M3 & M4	**50TGST032025M**	TG50	3,2	2,5	17,0
M3 & M5	**50TGST035027M**	TG50	3,5	2,7	17,0
M4 & M5	**50TGST040032M**	TG50	4,0	3,2	17,0
M4 & M6	**50TGST045034M**	TG50	4,5	3,4	17,0
M5	**50TGST050040M**	TG50	5,0	4,0	17,0
M5 & M6 & M7 & M8	**50TGST060049M**	TG50	6,0	4,9	17,0
M6	**50TGST063050M**	TG50	6,3	4,9	17,0
M10	**50TGST070055M**	TG50	7,0	5,5	17,0
M7	**50TGST071056M**	TG50	7,1	5,6	17,0
M8	**50TGST080062M**	TG50	8,0	6,2	17,0
M12	**50TGST090070M**	TG50	9,0	7,0	17,0
M10	**50TGST100080M**	TG50	10,0	8,0	17,0
M14	**50TGST110090M**	TG50	11,0	9,0	17,0
M16	**50TGST120090M**	TG50	12,0	9,0	17,0

(continued)

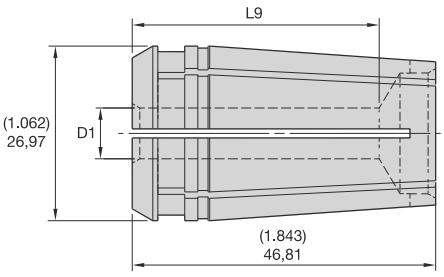
(TG50 Single-Angle Solid Tap Collets continued)

TG50 Solid Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	50TGST solid tap — non-coolant	50TGSTC solid tap — coolant	collet series	D1	S10	L9
M3 & M3,15 & M3,5	#0-#6 & 1/8	**50TGST6**	—	TG50	.141	.110	.775
M4	#8 & 5/32	**50TGST8**	—	TG50	.168	.131	.775
M4,5 & M5	#10 & 3/16	**50TGST10**	—	TG50	.194	.152	.900
—	#12 & 7/32	**50TGST12**	—	TG50	.220	.165	.807
M6 & M6,3	#14 & 1/4	**50TGST025**	**50TGSTC025**	TG50	.255	.191	.838
—	1/16P & 1/8P(SS)	**50TGST006P**	—	TG50	.313	.234	.775
M7 & M8	5/16	**50TGST031**	**50TGSTC031**	TG50	.318	.238	.868
—	7/16	**50TGST043**	**50TGSTC043**	TG50	.323	.242	.963
M12 & M12,5	1/2	**50TGST050**	**50TGSTC050**	TG50	.367	.275	.932
M10	3/8	**50TGST037**	**50TGSTC037**	TG50	.381	.286	.900
M14	9/16	**50TGST056**	**50TGSTC056**	TG50	.429	.322	.937
—	1/8P(LS)	**50TGST012P**	—	TG50	.438	.328	.775
M16	5/8	**50TGST062**	—	TG50	.480	.360	.876

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 75TG 0,4mm [.016" (1/64)] range of collapse.
- 75TGC and 75TGCHP 0,13mm (.005") range of collapse.
- 75TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON

TG75 Series • Metric

D1	75TG standard	75TGC standard — coolant	75TGHP high precision	75TGCHP high precision — coolant	collet capacity max mm	collet capacity min mm	L9
3,0	**75TG030M**	—	—	—	3,00	2,60	18,6
3,5	**75TG035M**	—	—	—	3,50	3,10	18,8
4,0	**75TG040M**	—	—	—	4,00	3,60	22,1
4,0	—	—	**75TGHP040M**	—	4,00	3,75	22,1
4,5	**75TG045M**	—	—	—	4,50	4,10	22,3
5,0	**75TG050M**	—	—	—	5,00	4,60	22,5
5,5	**75TG055M**	—	—	—	5,50	5,10	22,6
6,0	—	**75TGC060M**	—	—	6,00	5,87	22,8
6,0	**75TG060M**	—	—	—	6,00	5,60	22,8
6,0	—	—	**75TGHP060M**	—	6,00	5,75	22,8
6,0	—	—	—	**75TGCHP060M**	6,00	5,87	22,8
6,5	**75TG065M**	—	—	—	6,50	6,10	37,7
7,0	**75TG070M**	—	—	—	7,00	6,60	37,8
7,5	**75TG075M**	—	—	—	7,50	7,10	38,0
8,0	—	**75TGC080M**	—	**75TGCHP080M**	8,00	7,87	25,9
8,0	—	—	**75TGHP080M**	—	8,00	7,75	38,1

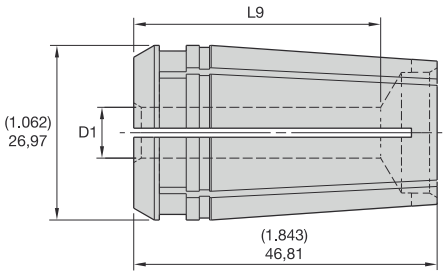
(continued)

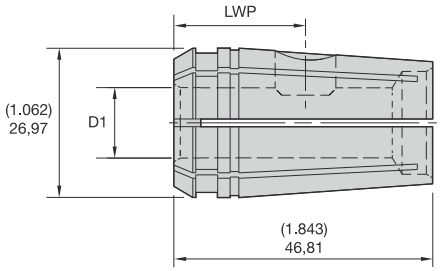
(TG75 Series continued)

D1	75TG standard	75TGC standard — coolant	75TGHP high precision	75TGCHP high precision — coolant	collet capacity max mm	collet capacity min mm	L9
8,0	**75TG080M**	—	—	—	8,00	7,60	38,1
8,5	**75TG085M**	—	—	—	8,50	8,10	38,3
9,0	**75TG090M**	—	—	—	9,00	8,60	38,4
9,5	**75TG095M**	—	—	—	9,50	9,10	38,6
10,0	—	—	—	**75TGCHP100M**	10,00	9,87	38,7
10,0	—	—	**75TGHP100M**	—	10,00	9,75	38,7
10,0	**75TG100M**	—	—	—	10,00	9,60	38,7
10,0	—	**75TGC100M**	—	—	10,00	9,87	38,7
10,5	**75TG105M**	—	—	—	10,50	10,10	38,8
11,0	**75TG110M**	—	—	—	11,00	10,60	39,0
11,5	**75TG115M**	—	—	—	11,50	11,10	39,1
12,0	—	**75TGC120M**	—	—	12,00	11,87	39,3
12,0	**75TG120M**	—	—	—	12,00	11,60	39,3
12,0	—	—	**75TGHP120M**	—	12,00	11,75	39,3
12,0	—	—	—	**75TGCHP120M**	12,00	11,87	39,3
12,5	**75TG125M**	—	—	—	12,50	12,10	39,4
13,0	**75TG130M**	—	—	—	13,00	12,60	39,6
13,5	**75TG135M**	—	—	—	13,50	13,10	39,7
14,0	—	**75TGC140M**	—	**75TGCHP140M**	14,00	13,87	39,9
14,0	—	—	**75TGHP140M**	—	14,00	13,75	46,8
14,0	**75TG140M**	—	—	—	14,00	13,60	46,8
14,5	**75TG145M**	—	—	—	14,50	14,10	46,8
15,0	**75TG150M**	—	—	—	15,00	14,60	46,8
15,5	**75TG155M**	—	—	—	15,50	15,10	46,8
16,0	—	**75TGC160M**	—	**75TGCHP160M**	16,00	15,87	40,5
16,0	**75TG160M**	—	—	—	16,00	15,60	46,8
16,0	—	—	**75TGHP160M**	—	16,00	15,75	46,8
16,5	**75TG165M**	—	—	—	16,50	16,10	46,8
17,0	**75TG170M**	—	—	—	17,00	16,60	46,8
17,5	**75TG175M**	—	—	—	17,50	17,10	46,8
18,0	—	**75TGC180M**	—	**75TGCHP180M**	18,00	17,87	41,1
18,0	**75TG180M**	—	—	—	18,00	17,60	46,8
18,0	—	—	**75TGHP180M**	—	18,00	17,75	46,8
19,0	**75TG190M**	—	—	—	19,00	18,60	46,8
19,5	**75TG195M**	—	—	—	19,50	19,10	46,8
20,0	**75TG200M**	—	—	—	20,00	19,60	46,8
20,0	—	**75TGC200M**	—	**75TGCHP200M**	20,00	19,87	46,8
20,0	—	—	**75TGHP200M**	—	20,00	19,75	46,8

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 75TG and 75TGC 0,4mm [.016" (1/64)] range of collapse.
- 75TGCHP and 75TGNP 0,13mm (.005") range of collapse.
- 75TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page [40273].





TG Collet — NP

TG Collet — NP

ERICKSON™

TG75 Series • Inch

D1	75TG standard	75TGC standard — coolant	75TGHP high precision	75TGCHP high precision — coolant	75TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
1/16	**75TG0062**	—	—	—	—	.0620	.0469	.485	—
5/64	**75TG0078**	—	—	—	—	.0780	.0625	.490	—
3/32	**75TG0094**	—	—	—	—	.0940	.0781	.725	—
7/64	**75TG0109**	—	—	—	—	.1090	.0938	.730	—

(continued)

(TG75 Series continued)

D1	75TG standard	75TGC standard — coolant	75TGHP high precision	75TGCHP high precision — coolant	75TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
1/8	75TG0125	—	—	—	—	.1250	.1094	.735	—
1/8	—	—	75TGHP0125	—	—	.1250	.1150	.735	—
9/64	75TG0141	—	—	—	—	.1410	.1250	.740	—
5/32	75TG0156	—	—	—	—	.1560	.1406	.872	—
11/64	75TG0172	—	—	—	—	.1720	.1563	.877	—
3/16	—	—	75TGHP0188	—	—	.1875	.1775	.881	—
3/16	75TG0188	—	—	—	—	.1880	.1719	.881	—
13/64	75TG0203	—	—	—	—	.2030	.1875	.886	—
7/32	75TG0219	—	—	—	—	.2190	.2031	.891	—
15/64	75TG0234	—	—	—	—	.2340	.2188	.895	—
1/4	—	—	—	75TGCHP0250	—	.2500	.2450	1.000	—
1/4	—	75TGC0250	—	—	—	.2500	.2450	1.001	—
1/4	—	—	75TGHP0250	—	—	.2500	.2400	1.480	—
1/4	75TG0250	—	—	—	—	.2500	.2344	1.481	—
17/64	—	75TGC0266	—	—	—	.2656	.2606	1.006	—
17/64	75TG0266	—	—	—	—	.2660	.2500	1.486	—
9/32	75TG0281	—	—	—	—	.2810	.2656	1.490	—
9/32	—	75TGC0281	—	—	—	.2813	.2763	1.010	—
19/64	—	75TGC0297	—	—	—	.2969	.2919	1.015	—
19/64	75TG0297	—	—	—	—	.2970	.2813	1.495	—
5/16	75TG0312	—	—	—	—	.3120	.2969	1.500	—
5/16	—	75TGC0312	—	—	—	.3125	.3075	1.020	—
5/16	—	—	75TGHP0312	—	—	.3125	.3025	1.499	—
21/64	75TG0328	—	—	—	—	.3280	.3125	1.505	—
21/64	—	75TGC0328	—	—	—	.3281	.3231	1.024	—
11/32	—	75TGC0344	—	—	—	.3438	.3281	1.029	—
11/32	75TG0344	—	—	—	—	.3440	.3281	1.509	—
23/64	75TG0359	—	—	—	—	.3590	.3438	1.514	—
23/64	—	75TGC0359	—	—	—	.3594	.3544	1.034	—
3/8	—	—	—	75TGCHP0375	—	.3750	.3700	1.038	—
3/8	—	—	75TGHP0375	—	—	.3750	.3650	1.518	—
3/8	—	75TGC0375	—	—	—	.3750	.3700	1.518	—
3/8	75TG0375	—	—	—	—	.3750	.3594	1.519	—
3/8	—	—	—	—	75TGNP0375	.3750	—	—	.703
25/64	—	75TGC0391	—	—	—	.3906	.3856	1.523	—
25/64	75TG0391	—	—	—	—	.3910	.3750	1.521	—
13/32	75TG0406	—	—	—	—	.4060	.3906	1.526	—
13/32	—	75TGC0406	—	—	—	.4063	.4013	1.528	—
27/64	—	75TGC0422	—	—	—	.4219	.4169	1.533	—
27/64	75TG0422	—	—	—	—	.4220	.4063	1.531	—
7/16	—	—	75TGHP0438	—	—	.4375	.4275	1.535	—
7/16	—	75TGC0438	—	75TGCHP0438	—	.4375	.4325	1.537	—
7/16	75TG0438	—	—	—	—	.4380	.4219	1.536	—
29/64	75TG0453	—	—	—	—	.4530	.4375	1.540	—
29/64	—	75TGC0453	—	—	—	.4531	.4481	1.542	—
15/32	—	75TGC0469	—	—	—	.4688	.4638	1.547	—
15/32	75TG0469	—	—	—	—	.4690	.4531	1.545	—
31/64	75TG0484	—	—	—	—	.4840	.4688	1.549	—

(continued)

(TG75 Series continued)

D1	75TG standard	75TGC standard — coolant	75TGHP high precision	75TGCHP high precision — coolant	75TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
31/64	—	**75TGC0484**	—	—	—	.4844	.4794	1.551	—
1/2	**75TG0500**	—	—	—	—	.5000	.4844	1.554	—
1/2	—	—	**75TGHP0500**	—	—	.5000	.4900	1.554	—
1/2	—	**75TGC0500**	—	**75TGCHP0500**	—	.5000	.4950	1.556	—
1/2	—	—	—	—	**75TGNP0500**	.5000	—	—	.828
33/64	**75TG0516**	—	—	—	—	.5156	.5000	1.559	—
33/64	—	**75TGC0516**	—	—	—	.5156	.5106	1.561	—
17/32	**75TG0531**	—	—	—	—	.5310	.5156	1.563	—
17/32	—	**75TGC0531**	—	—	—	.5313	.5263	1.565	—
35/64	—	**75TGC0547**	—	—	—	.5469	.5419	1.570	—
35/64	**75TG0547**	—	—	—	—	.5470	.5313	1.843	—
9/16	**75TG0562**	—	—	—	—	.5620	.5469	1.843	—
9/16	—	**75TGC0562**	—	**75TGCHP0562**	—	.5625	.5575	1.575	—
9/16	—	—	**75TGHP0562**	—	—	.5625	.5525	1.843	—
37/64	**75TG0578**	—	—	—	—	.5780	.5625	1.843	—
37/64	—	**75TGC0578**	—	—	—	.5781	.5731	1.579	—
19/32	—	**75TGC0594**	—	—	—	.5938	.5888	1.584	—
19/32	**75TG0594**	—	—	—	—	.5940	.5781	1.843	—
39/64	**75TG0609**	—	—	—	—	.6090	.5938	1.843	—
39/64	—	**75TGC0609**	—	—	—	.6094	.6044	1.589	—
5/8	—	**75TGC0625**	—	**75TGCHP0625**	—	.6250	.6200	1.594	—
5/8	**75TG0625**	—	—	—	—	.6250	.6094	1.843	—
5/8	—	—	**75TGHP0625**	—	—	.6250	.6150	1.843	—
5/8	—	—	—	—	**75TGNP0625**	.6250	—	—	.859
41/64	—	**75TGC0641**	—	—	—	.6406	.6356	1.598	—
41/64	**75TG0641**	—	—	—	—	.6410	.6250	1.843	—
21/32	**75TG0656**	—	—	—	—	.6560	.6406	1.843	—
21/32	—	**75TGC0656**	—	—	—	.6563	.6513	1.603	—
43/64	—	**75TGC0672**	—	—	—	.6719	.6669	1.608	—
43/64	**75TG0672**	—	—	—	—	.6720	.6563	1.843	—
11/16	—	**75TGC0688**	—	**75TGCHP0688**	—	.6875	.6825	1.612	—
11/16	**75TG0688**	—	—	—	—	.6880	.6719	1.843	—
45/64	**75TG0703**	—	—	—	—	.7030	.6875	1.843	—
45/64	—	**75TGC0703**	—	—	—	.7031	.6981	1.617	—
23/32	—	**75TGC0719**	—	—	—	.7188	.7138	1.622	—
23/32	**75TG0719**	—	—	—	—	.7190	.7031	1.843	—
47/64	**75TG0734**	—	—	—	—	.7340	.7188	1.843	—
47/64	—	**75TGC0734**	—	—	—	.7344	.7294	1.843	—
3/4	—	—	**75TGHP0750**		—	.7500	.7400	1.843	—
3/4	—	**75TGC0750**	—	**75TGCHP0750**	—	.7500	.7450	1.843	—
3/4	**75TG0750**	—	—	—	—	.7500	.7344	1.843	—
3/4	—	—	—	—	**75TGNP0750**	.7500	—	—	.922

• An economical way to purchase a group of collets.

TG Collet

ERICKSON

TG75 Collet Set • Inch

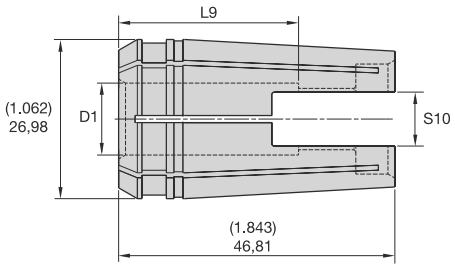
catalog number	series	quantity	dimensional range	incremental division
S75TG1SET	TG75	45	1/16 - 3/4	1/64
S75TG2SET	TG75	23	1/16 - 3/4	1/32
S75TG3SET	TG75	33	1/4 - 3/4	1/64
S75TG4SET	TG75	17	1/4 - 3/4	1/32

TG Collet — NP

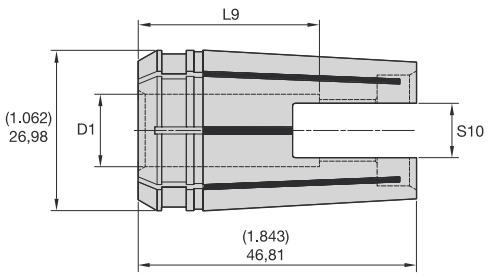
TG75 NP-Out Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S75TGNPSET	TG75	4	3/8 - 3/4	1/8

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Twice as accurate as the standard TG and Class 2 ER-style collets.
- Can be used in all standard TG collet chucks.
- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 0,13mm (.005") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Slot in back of collets acts as a drive for the tap square.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



Bonded Type



Coolant Type

ERICKSON

■ TG75 Solid Tap Collet • Solid Tap Coolant • Inch/Metric ANSI

tap size mm	tap size in	75TGST solid tap	75TGSTC solid tap — coolant	collet series	D1	S10	L9
M3 & M3,15 & M3,5	0-#6 & 1/8	**75TGST6**	**—**	TG75	.141	.110	.775
M4	8 & 5/32	**75TGST8**	**—**	TG75	.168	.131	.775
M4,5 & M5	10 & 3/16	**75TGST10**	**—**	TG75	.194	.152	.900
—	12 & 7/32	**75TGST12**	**—**	TG75	.220	.165	.807
M6 & M6,3	14 & 1/4	**75TGST025**	**75TGSTC025**	TG75	.255	.191	.838
—	1/16P & 1/8P(SS)	**75TGST006P**	**—**	TG75	.313	.234	.775
M7 & M8	5/16	**75TGST031**	**75TGSTC031**	TG75	.318	.238	.868
—	7/16	**75TGST043**	**75TGSTC043**	TG75	.323	.242	.963

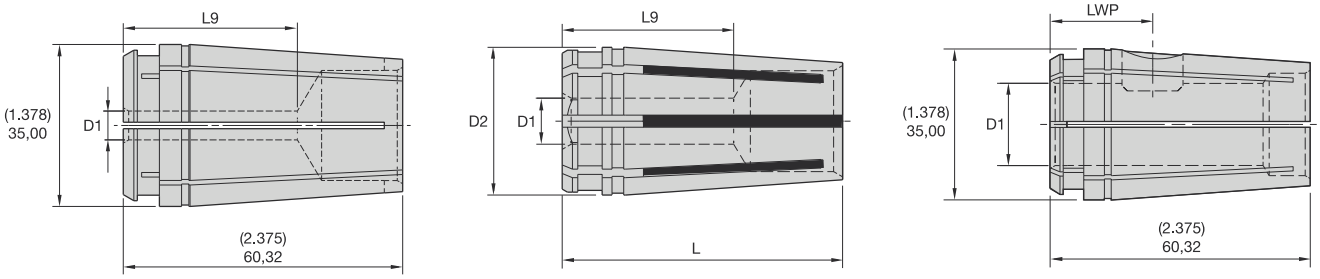
(continued)

(TG75 Single-Angle Solid Tap Collets continued)

tap size mm	tap size in	75TGST solid tap	75TGSTC solid tap — coolant	collet series	D1	S10	L9
M12 & M12,5	1/2	**75TGST050**	**75TGSTC050**	TG75	.367	.275	.932
M10	3/8	**75TGST037**	**75TGSTC037**	TG75	.381	.286	.900
M14	9/16	**75TGST056**	—	TG75	.429	.322	1.087
—	1/8P(LS)	**75TGST012P**	—	TG75	.438	.328	.775
M16	5/8	**75TGST062**	**75TGSTC062**	TG75	.480	.360	1.031
M18	11/16	**75TGST068**	**75TGSTC068**	TG75	.542	.406	.968
—	1/4P	**75TGST025P**	—	TG75	.563	.421	.775
—	3/4	**75TGST075**	**75TGSTC075**	TG75	.590	.442	.906
M20	13/16	**75TGST081**	—	TG75	.652	.489	.906
—	1/2P	**75TGST050P**	—	TG75	.688	.515	.775
M22	7/8	**75TGST087**	**75TGSTC087**	TG75	.697	.523	.843
—	3/8P	**75TGST037P**	—	TG75	.700	.531	.775

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 100TG 0,4mm [.016" (1/64)] range of collapse.
- 100TGC and 100TGCHP 0,13mm (.005") range of collapse.
- 100TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



TG Collet — NP

TG Collet — NP

ERICKSON™

TG100 Series • Metric

D1	100TG standard	100TGC standard — coolant	100TGHP high precision	100TGCHP high precision — coolant	100TGNP milling — non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
3,0	**100TG030M**	—	—	—	—	3,00	2,60	18,2	—
3,5	**100TG035M**	—	—	—	—	3,50	3,10	21,5	—
4,0	**100TG040M**	—	—	—	—	4,00	3,60	21,7	—
4,5	**100TG045M**	—	—	—	—	4,50	4,10	21,8	—
5,0	**100TG050M**	—	—	—	—	5,00	4,60	22,0	—
5,5	**100TG055M**	—	—	—	—	5,50	5,10	22,1	—
6,0	—	**100TGC060M**	—	—	—	6,00	5,87	22,3	—
6,0	**100TG060M**	—	—	—	—	6,00	5,60	22,3	—
6,0	—	—	**100TGHP060M**	—	—	6,00	5,87	22,3	—
6,0	—	—	—	—	**100TGNP060M**	6,00	—	—	16,0

(continued)

(TG100 Series continued)

D1	100TG standard	100TGC standard — coolant	100TGHP high precision	100TGCHP high precision — coolant	100TGNP milling — non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
6,5	100TG065M	–	–	–	–	6,50	6,10	37,6	–
7,0	100TG070M	–	–	–	–	7,00	6,60	37,8	–
7,5	100TG075M	–	–	–	–	7,50	7,10	37,9	–
8,0	–	100TGC080M	–	–	–	8,00	7,87	34,9	–
8,0	100TG080M	–	–	–	–	8,00	7,60	38,1	–
8,0	–	–	100TGHP080M	–	–	8,00	7,87	38,1	–
8,5	100TG085M	–	–	–	–	8,50	8,10	38,2	–
9,0	100TG090M	–	–	–	–	9,00	8,60	38,4	–
9,5	100TG095M	–	–	–	–	9,50	9,10	38,5	–
10,0	–	100TGC100M	–	100TGCHP100M	–	10,00	9,87	38,5	–
10,0	–	–	100TGHP100M	–	–	10,00	9,87	38,7	–
10,0	100TG100M	–	–	–	–	10,00	9,60	38,7	–
10,5	100TG105M	–	–	–	–	10,50	10,10	38,8	–
11,5	100TG115M	–	–	–	–	11,50	11,10	39,1	–
12,0	–	100TGC120M	–	100TGCHP120M	–	12,00	11,87	39,1	–
12,0	100TG120M	–	–	–	–	12,00	11,60	39,3	–
12,0	–	–	–	–	100TGNP120M	12,00	–	–	18,0
12,5	100TG125M	–	–	–	–	12,50	12,10	39,4	–
13,0	100TG130M	–	–	–	–	13,00	12,60	39,6	–
13,5	100TG135M	–	–	–	–	13,50	13,10	39,7	–
14,0	–	–	100TGHP140M	–	–	14,00	13,87	39,9	–
14,0	100TG140M	–	–	–	–	14,00	13,60	39,9	–
14,0	–	100TGC140M	–	100TGCHP140M	–	14,00	13,87	43,7	–
14,5	100TG145M	–	–	–	–	14,50	14,10	40,0	–
15,0	100TG150M	–	–	–	–	15,00	14,60	40,2	–
15,5	100TG155M	–	–	–	–	15,50	15,10	40,3	–
16,0	100TG160M	–	–	–	–	16,00	15,60	40,5	–
16,0	–	100TGC160M	–	100TGCHP160M	–	16,00	15,87	44,3	–
16,0	–	–	–	–	100TGNP160M	16,00	–	–	20,5
16,5	100TG165M	–	–	–	–	16,50	16,10	40,6	–
17,0	100TG170M	–	–	–	–	17,00	16,60	40,8	–
17,5	100TG175M	–	–	–	–	17,50	17,10	40,9	–
23,0	100TG230M	–	–	–	–	23,00	22,60	60,3	–
23,5	100TG235M	–	–	–	–	23,50	23,10	60,3	–
24,0	100TG240M	–	–	–	–	24,00	23,60	60,3	–
24,5	100TG245M	–	–	–	–	24,50	24,10	60,3	–
25,0	–	100TGC250M	–	100TGCHP250M	–	25,00	24,87	50,0	–
25,0	100TG250M	–	–	–	–	25,00	24,60	60,3	–
25,0	–	–	100TGHP250M	–		25,00	24,87	60,3	–
25,0	–	–	–	–	100TGNP250M	25,00	–	–	22,0
25,5	100TG255M	–	–	–	–	25,50	25,10	60,3	–

(continued)

(TG100 Series continued)

D1	100TG standard	100TGC standard — coolant	100TGHP high precision	100TGCHP high precision — coolant	100TGNP milling — non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
18,0	**100TG180M**	**—**	**—**	**—**	**—**	18,00	17,60	41,1	—
18,0	**—**	**—**	**100TGHP180M**	**—**	**—**	18,00	17,87	41,1	—
18,0	**—**	**100TGC180M**	**—**	**100TGCHP180M**	**—**	18,00	17,87	44,9	—
18,5	**100TG185M**	**—**	**—**	**—**	**—**	18,50	18,10	41,2	—
19,0	**100TG190M**	**—**	**—**	**—**	**—**	19,00	18,60	41,4	—
19,5	**100TG195M**	**—**	**—**	**—**	**—**	19,50	19,10	60,3	—
20,0	**—**	**100TGC200M**	**—**	**100TGCHP200M**	**—**	20,00	19,87	48,5	—
20,0	**100TG200M**	**—**	**—**	**—**	**—**	20,00	19,60	60,3	—
20,0	**—**	**—**	**100TGHP200M**	**—**	**—**	20,00	19,87	60,3	—
20,0	**—**	**—**	**—**	**—**	**100TGNP200M**	20,00	—	—	23,0
20,5	**100TG205M**	**—**	**—**	**—**	**—**	20,50	20,10	60,3	—
21,0	**100TG210M**	**—**	**—**	**—**	**—**	21,00	20,60	60,3	—
22,0	**100TG220M**	**—**	**—**	**—**	**—**	22,00	21,60	60,3	—
22,5	**100TG225M**	**—**	**—**	**—**	**—**	22,50	22,10	60,3	—

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

TOOLING SYSTEMS

Erickson™ Toolholders

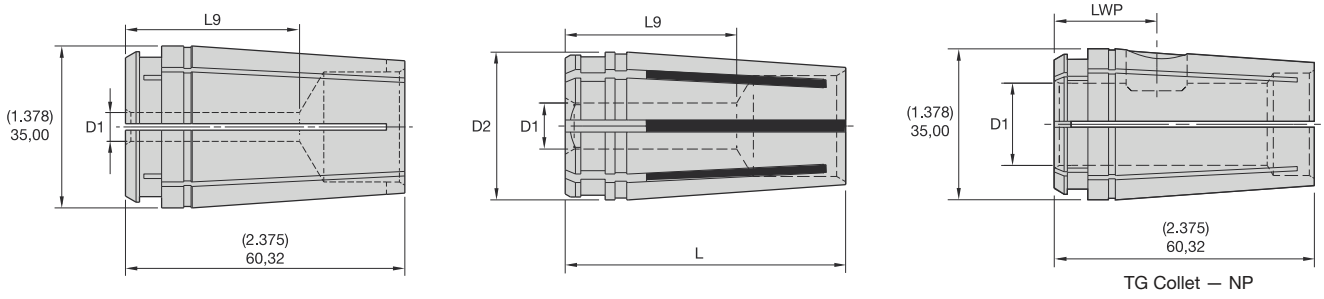
WIDIA™ proudly offers premium quality Erickson toolholder products, so you can be sure that you're buying the best the industry has to offer. The entire portfolio — including steep taper, HSK, straight shank extensions, collets, sleeves, and accompanying products — offers high productivity, increased accuracy, and application flexibility.

Designed for both manual and automatic tool changing, Erickson interfaces are ideally suited for most machine tools and feature a compact and rigid construction guaranteed to handle high torque and deliver optimal metal removal rates.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

ERICKSON™

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 100TG 0,4mm [.016" (1/64)] range of collapse.
- 100TGC and 100TGCHP 0,13mm (.005") range of collapse.
- 100TGHP 0,25mm (.010") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



TG Collet — NP

TG Collet — NP

ERICKSON

TG100 Series • Inch

D1	100TG standard	100TGC standard — coolant	100TGHP high precision	100TGCHP high precision — coolant	100TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
3/32	**100TG0094**	—	—	—	—	.0940	.0781	.707	—
7/64	**100TG0109**	—	—	—	—	.1090	.0938	.712	—
1/8	**100TG0125**	—	—	—	—	.1250	.1094	.844	—
1/8	—	—	**100TGHP0125**	—	—	.1250	.1150	.844	—
9/64	**100TG0141**	—	—	—	—	.1410	.1250	.848	—
5/32	**100TG0156**	—	—	—	—	.1563	.1410	.853	—
11/64	**100TG0172**	—	—	—	—	.1720	.1563	.858	—
3/16	—	—	**100TGHP0188**	—	—	.1875	.1775	.862	—
3/16	**100TG0188**	—	—	—	—	.1880	.1719	.862	—
13/64	**100TG0203**	—	—	—	—	.2030	.1875	.867	—

(continued)

(TG100 Series continued)

D1	100TG standard	100TGC standard — coolant	100TGHP high precision	100TGCHP high precision — coolant	100TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
7/32	100TG0219	—	—	—	—	.2190	.2031	.872	—
15/64	100TG0234	—	—	—	—	.2340	.2188	.876	—
1/4	—	100TGC0250	—	—	—	.2500	.2450	1.356	—
1/4	—	—	100TGHP0250	—	—	.2500	.2400	1.461	—
1/4	100TG0250	—	—	—	—	.2500	.2344	1.480	—
17/64	—	100TGC0266	—	—	—	.2656	.2606	1.360	—
17/64	100TG0266	—	—	—	—	.2660	.2500	1.485	—
9/32	100TG0281	—	—	—	—	.2810	.2656	1.489	—
9/32	—	100TGC0281	—	—	—	.2813	.2763	1.365	—
19/64	—	100TGC0297	—	—	—	.2969	.2919	1.370	—
19/64	100TG0297	—	—	—	—	.2970	.2813	1.494	—
5/16	100TG0312	—	—	—	—	.3120	.2969	1.499	—
5/16	—	100TGC0312	—	—	—	.3125	.3075	1.374	—
5/16	—	—	100TGHP0312	—	—	.3125	.3025	1.499	—
21/64	100TG0328	—	—	—	—	.3280	.3125	1.503	—
21/64	—	100TGC0328	—	—	—	.3281	.3231	1.379	—
11/32	—	100TGC0344	—	—	—	.3438	.3388	1.384	—
11/32	100TG0344	—	—	—	—	.3440	.3281	1.508	—
23/64	100TG0359	—	—	—	—	.3590	.3438	1.513	—
23/64	—	100TGC0359	—	—	—	.3594	.3544	1.388	—
3/8	—	100TGC0375	—	—	—	.3750	.3700	1.393	—
3/8	—	—	—	100TGCHP0375	—	.3750	.3700	1.511	—
3/8	—	—	100TGHP0375	—	—	.3750	.3650	1.518	—
3/8	100TG0375	—	—	—	—	.3750	.3594	1.518	—
3/8	—	—	—	—	100TGNP0375	.3750	—	—	.703
25/64	—	100TGC0391	—	—	—	.3906	.3856	1.516	—
25/64	100TG0391	—	—	—	—	.3910	.3750	1.522	—
13/32	100TG0406	—	—	—	—	.4060	.3906	1.527	—
13/32	—	100TGC0406	—	—	—	.4063	.4013	1.520	—
27/64	—	100TGC0422	—	—	—	.4219	.4169	1.525	—
27/64	100TG0422	—	—	—	—	.4220	.4063	1.532	—
7/16	—	100TGC0438	—	100TGCHP0438	—	.4375	.4325	1.530	—
7/16	—	—	100TGHP0438	—	—	.4375	.4275	1.536	—
7/16	100TG0438	—	—	—	—	.4380	.4219	1.536	—
29/64	100TG0453	—	—	—	—	.4530	.4375	1.541	—
29/64	—	100TGC0453	—	—	—	.4531	.4481	1.534	—
15/32	—	100TGC0469	—	—	—	.4688	.4638	1.539	—
15/32	100TG0469	—	—	—	—	.4690	.4531	1.546	—
31/64	100TG0484	—	—	—	—	.4840	.4688	1.550	—
31/64	—	100TGC0484	—	—	—	.4844	.4794	1.544	—
1/2	—	100TGC0500	—	100TGCHP0500	—	.5000	.4950	1.549	—
1/2	—	—	100TGHP0500	—	—	.5000	.4900	1.555	—
1/2	100TG0500	—	—	—	—	.5000	.4844	1.555	—
1/2	—	—	—	—	100TGNP0500	.5000	—	—	.828

(continued)

(TG100 Series continued)

D1	100TG standard	100TGC standard — coolant	100TGHP high precision	100TGCHP high precision — coolant	100TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
33/64	—	100TGC0516	—	—	—	.5156	.5106	1.553	—
33/64	100TG0516	—	—	—	—	.5160	.5000	1.560	—
17/32	100TG0531	—	—	—	—	.5310	.5156	1.564	—
17/32	—	100TGC0531	—	—	—	.5313	.5263	1.558	—
35/64	—	100TGC0547	—	—	—	.5469	.5419	1.720	—
35/64	100TG0547	—	—	—	—	.5470	.5313	1.569	—
9/16	100TG0562	—	—	—	—	.5620	.5469	1.574	—
9/16	—	—	100TGHP0562	—	—	.5625	.5525	1.574	—
9/16	—	100TGC0562	—	100TGCHP0562	—	.5625	.5575	1.724	—
37/64	100TG0578	—	—	—	—	.5780	.5625	1.579	—
37/64	—	100TGC0578	—	—	—	.5781	.5731	1.729	—
19/32	—	100TGC0594	—	—	—	.5938	.5888	1.734	—
19/32	100TG0594	—	—	—	—	.5940	.5781	1.583	—
39/64	100TG0609	—	—	—	—	.6090	.5938	1.588	—
39/64	—	100TGC0609	—	—	—	.6094	.6044	1.738	—
5/8	100TG0625	—	—	—	—	.6250	.6094	1.593	—
5/8	—	—	100TGHP0625	—	—	.6250	.6150	1.593	—
5/8	—	100TGC0625	—	100TGCHP0625	—	.6250	.6200	1.743	—
5/8	—	—	—	—	100TGNP0625	.6250	—	—	.875
41/64	—	100TGC0641	—	—	—	.6406	.6356	1.748	—
41/64	100TG0641	—	—	—	—	.6410	.6250	1.597	—
21/32	100TG0656	—	—	—	—	.6560	.6406	1.602	—
21/32	—	100TGC0656	—	—	—	.6563	.6513	1.752	—
43/64	—	100TGC0672	—	—	—	.6719	.6669	1.757	—
43/64	100TG0672	—	—	—	—	.6720	.6563	1.607	—
11/16	—	—	100TGHP0688	—	—	.6875	.6775	1.612	—
11/16	—	100TGC0688	—	100TGCHP0688	—	.6875	.6825	1.762	—
11/16	100TG0688	—	—	—	—	.6880	.6719	1.612	—
45/64	100TG0703	—	—	—	—	.7030	.6875	1.612	—
45/64	—	100TGC0703	—	—	—	.7031	.6981	1.767	—
23/32	—	100TGC0719	—	—	—	.7188	.7138	1.771	—
23/32	100TG0719	—	—	—	—	.7190	.7031	1.621	—
47/64	100TG0734	—	—	—	—	.7340	.7188	1.625	—
47/64	—	100TGC0734	—	—	—	.7344	.7294	1.776	—
3/4	100TG0750	—	—	—	—	.7500	.7348	1.630	—
3/4	—	—	100TGHP0750	—	—	.7500	.7400	1.630	—
3/4	—	100TGC0750	—	100TGCHP0750	—	.7500	.7450	1.781	—
3/4	—	—	—	—	100TGNP0750	.7500	—	—	.938
49/64	—	100TGC0766	—	—	—	.7656	.7606	1.904	—
49/64	100TG0766	—	—	—	—	.7660	.7500	2.375	—
25/32	100TG0781	—	—	—	—	.7810	.7656	2.375	—
25/32	—	100TGC0781	—	—	—	.7813	.7763	1.908	—
51/64	—	100TGC0797	—	—	—	.7969	.7919	1.913	—
51/64	100TG0797	—	—	—	—	.7970	.7813	2.375	—
13/16	100TG0812	—	—	—	—	.8120	.7969	2.375	—
13/16	—	100TGC0812	—	—	—	.8125	.8075	1.917	—

(continued)

(TG100 Series continued)

D1	100TG standard	100TGC standard — coolant	100TGHP high precision	100TGCHP high precision — coolant	100TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
53/64	**100TG0828**	—	—	—	—	.8280	.8125	2.375	—
53/64	—	**100TGC0828**	—	—	—	.8281	.8231	1.922	—
27/32	—	**100TGC0844**	—	—	—	.8438	.8388	1.927	—
27/32	**100TG0844**	—	—	—	—	.8440	.8281	2.375	—
55/64	**100TG0859**	—	—	—	—	.8590	.8438	2.375	—
7/8	—	**100TGC0875**	—	**100TGCHP0875**	—	.8750	.8700	1.936	—
7/8	—	—	**100TGHP0875**	—	—	.8750	.8650	2.375	—
7/8	**100TG0875**	—	—	—	—	.8750	.8594	2.375	—
7/8	—	—	—	—	**100TGNP0875**	.8750	—	2.375	.938
57/64	—	**100TGC0891**	—	—	—	.8906	.8856	1.941	—
57/64	**100TG0891**	—	—	—	—	.8910	.8750	2.375	—
29/32	**100TG0906**	—	—	—	—	.9060	.8906	2.375	—
29/32	—	**100TGC0906**	—	—	—	.9063	.9013	1.946	—
59/64	—	**100TGC0922**	—	—	—	.9219	.9169	1.950	—
59/64	**100TG0922**	—	—	—	—	.9220	.9063	2.375	—
15/16	—	**100TGC0938**	—	—	—	.9375	.9325	1.955	—
15/16	**100TG0938**	—	—	—	—	.9380	.9219	2.375	—
61/64	**100TG0953**	—	—	—	—	.9530	.9375	2.375	—
61/64	—	**100TGC0953**	—	—	—	.9531	.9481	1.960	—
31/32	—	**100TGC0969**	—	—	—	.9688	.9638	1.964	—
31/32	**100TG0969**	—	—	—	—	.9690	.9531	2.375	—
63/64	**100TG0984**	—	—	—	—	.9840	.9688	2.375	—
63/64	—	**100TGC0984**	—	—	—	.9844	.9794	1.969	—
1	**100TG1000**	—	—	—	—	1.0000	.9844	2.375	—
1	—	**100TGC1000**	—	**100TGCHP1000**	—	1.0000	.9950	2.375	—
1	—	—	**100TGHP1000**	—	—	1.0000	.9900	2.375	—
1	—	—	—	—	**100TGNP1000**	1.0000	—	—	.938

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

• An economical way to purchase a group of collets.

TG Collet

ERICKSON

TG100 Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S100TG1SET	TG100	59	3/32-1	1/64
S100TG2SET	TG100	30	3/32 - 1	1/32
S100TG3SET	TG100	41	3/8 - 1	1/64
S100TG4SET	TG100	21	3/8 - 1	1/32

TG Collet — NP

TG100 NP-Out Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S100TGNPSET	TG100	6	3/8-1	1/8

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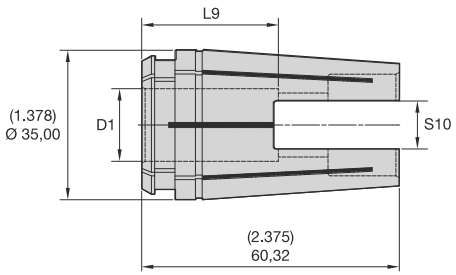
WIDIA Products

Whether your operation is turning, milling, or holemaking, WIDIA brands are the high-performance tooling you need.
We offer standard and custom solutions for the general engineering market.

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Can be used in all standard TG collet chucks.
- Provides Tremendous Grip (3:1 advantage) and accuracy for tapping applications.
- Slot in back of collets acts as a drive for the tap square.
- Industry-standard Erickson™ single-angle collet system.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON

TG100 Solid Tap Collet • Metric DIN and ISO

tap size	catalog number	collet series	D1	S10	L9
M9 & M12	**100TGST090071M**	TG100	9,0	7,1	30,0
M10	**100TGST100080M**	TG100	10,0	8,0	30,0
M14	**100TGST110090M**	TG100	11,0	9,0	30,0
M16	**100TGST120090M**	TG100	12,0	9,0	30,0
M18	**100TGST140110M**	TG100	14,0	11,0	30,0
M20	**100TGST160120M**	TG100	16,0	12,0	30,0
M22 & M24	**100TGST180145M**	TG100	18,0	14,5	30,0

TG100 Solid Tap Collet • Solid Tap Coolant • Inch/Metric ANSI

tap size mm	tap size in	100TGST solid tap	100TGSTC solid tap — coolant	collet series	D1	S10	L9
M3 & M3,15 & M3,5	#0-#6 & 1/8	**100TGST6**	—	TG100	.141	.110	.141
M4	#8 & 5/32	**100TGST8**	—	TG100	.168	.131	.168
M4,5 & M5	#10 & 3/16	**100TGST10**	—	TG100	.194	.152	.194
—	#12 & 7/32	**100TGST12**	—	TG100	.220	.165	.220
M6 & M6,3	#14 & 1/4	**100TGST025**	—	TG100	.255	.191	.812
—	1/16P & 1/8P(SS)	**100TGST006P**	—	TG100	.313	.234	.812
M7 & M8	5/16	**100TGST031**	**100TGSTC031**	TG100	.318	.238	.868
—	7/16	**100TGST043**	**100TGSTC043**	TG100	.323	.242	.963
M12 & M12,5	1/2	**100TGST050**	**100TGSTC050**	TG100	.367	.275	.932
M10	3/8	**100TGST037**	**100TGSTC037**	TG100	.381	.286	.900
M14	9/16	**100TGST056**	—	TG100	.429	.322	1.087
—	1/8P(LS)	**100TGST012P**	—	TG100	.438	.328	.812
M16	5/8	**100TGST062**	**100TGSTC062**	TG100	.480	.360	1.087
M18	11/16	**100TGST068**	—	TG100	.542	.406	1.244

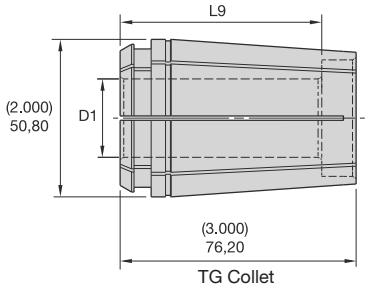
(continued)

(TG100 Single-Angle Solid Tap Collets continued)

tap size mm	tap size in	100TGST solid tap	100TGSTC solid tap — coolant	collet series	D1	S10	L9
—	1/4P	**100TGST025P**	**—**	TG100	.563	.421	.812
—	3/4	**100TGST075**	**100TGSTC075**	TG100	.590	.442	1.213
M20	13/16	**100TGST081**	**—**	TG100	.652	.489	.652
—	1/2P	**100TGST050P**	**—**	TG100	.688	.515	.812
M22	7/8	**100TGST087**	**—**	TG100	.697	.523	.697
M22	7/8	**—**	**100TGSTC087**	TG100	.697	.523	1.369
—	3/8P	**100TGST037P**	**—**	TG100	.700	.531	.812
M24	15/16	**100TGST094**	**—**	TG100	.760	.570	.760
M25	1	**—**	**100TGSTC100**	TG100	.800	.600	1.313
M25	1	**100TGST100**	**—**	TG100	.800	.600	.800
M27	1 1/16 & 1 1/8	**100TGST112**	**—**	TG100	.896	.672	.896
—	3/4P	**100TGST075P**	**—**	TG100	.906	.679	.812

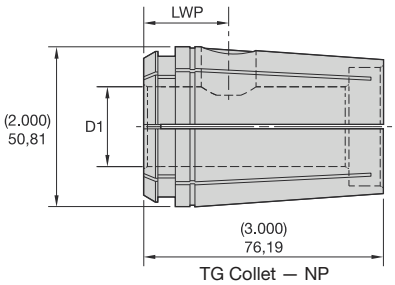
NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 0,4mm [.016" (1/64")] range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



TG Collet

TG Collet



TG Collet — NP

TG Collet — NP

ERICKSON™

TG150 Series • Metric

D1	150TG standard	150TGNP standard — non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
12,0	**150TG120M**	—	12,0	11,6	44,0	—
13,0	**150TG130M**	—	13,0	12,6	44,0	—
14,0	**150TG140M**	—	14,0	13,6	44,0	—
14,5	**150TG145M**	—	14,5	14,1	44,0	—
15,0	**150TG150M**	—	15,0	14,6	54,0	—
16,0	**150TG160M**	—	16,0	15,6	54,0	—
18,0	**150TG180M**	—	18,0	17,6	54,0	—
19,0	**150TG190M**	—	19,0	18,6	76,2	—
20,0	**150TG200M**	—	20,0	19,6	76,2	—
21,0	**150TG210M**	—	21,0	20,6	76,2	—

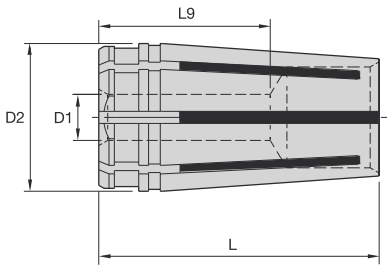
(continued)

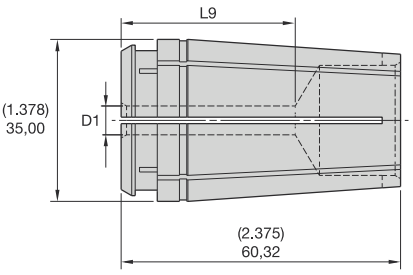
(TG150 Series continued)

D1	150TG standard	150TGNP standard — non-pullout	collet capacity max mm	collet capacity min mm	L9	LWP
22,0	**150TG220M**	—	22,0	21,6	76,2	—
25,0	**150TG250M**	—	25,0	24,6	76,2	—
25,0	—	**150TGNP250M**	25,0	—	—	22
25,5	**150TG255M**	—	25,5	25,1	76,2	—
26,0	**150TG260M**	—	26,0	25,6	76,2	—
27,0	**150TG270M**	—	27,0	26,6	76,2	—
28,0	**150TG280M**	—	28,0	27,6	76,2	—
30,0	**150TG300M**	—	30,0	29,6	76,2	—
32,0	**150TG320M**	—	32,0	31,6	76,2	—
32,0	—	**150TGNP320M**	32,0	—	—	22
34,0	**150TG340M**	—	34,0	33,6	76,2	—
35,0	**150TG350M**	—	35,0	34,6	76,2	—
36,0	**150TG360M**	—	36,0	35,6	76,2	—
38,0	**150TG380M**	—	38,0	37,6	76,2	—
40,0	**150TG400M**	—	40,0	39,6	76,2	—

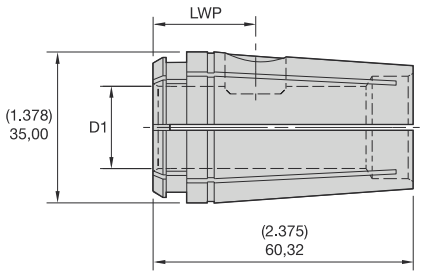
NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Provides Tremendous Grip (3:1 advantage) and accuracy for all drilling applications.
- Industry-standard Erickson™ single-angle collet system.
- 150TG 0,4mm [.016" (1/64)] range of collapse.
- 150TGCHP and 150TGNP 0,13mm (.005") range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.





TG Collet



TG Collet — NP

TG Collet

TG Collet — NP

ERICKSON

TG150 Series • Inch

D1	150TG standard	150TGCHP high precision — coolant	150TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
3/8	**150TG0375**	—	—	.3750	.3594	2.000	—
25/64	**150TG0391**	—	—	.3906	.3750	2.000	—
13/32	**150TG0406**	—	—	.4063	.3906	2.000	—
27/64	**150TG0422**	—	—	.4219	.4063	2.000	—
7/16	**150TG0438**	—	—	.4375	.4219	2.000	—
29/64	**150TG0453**	—	—	.4531	.4375	2.000	—
15/32	**150TG0468**	—	—	.4688	.4531	2.000	—
31/64	**150TG0484**	—	—	.4844	.4688	2.000	—
1/2	**150TG0500**	—	—	.5000	.4844	2.560	—
1/2	—	—	**150TGNP0500**	.5000	—	—	.828
33/64	**150TG0516**	—	—	.5156	.5000	2.560	—
17/32	**150TG0531**	—	—	.5313	.5156	2.560	—

(continued)

(TG150 Series continued)

D1	150TG standard	150TGCHP high precision — coolant	150TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
35/64	**150TG0547**	—	—	.5469	.5313	2.560	—
9/16	**150TG0562**	—	—	.5625	.5469	2.560	—
37/64	**150TG0578**	—	—	.5781	.5625	2.560	—
19/32	**150TG0594**	—	—	.5938	.5781	2.560	—
39/64	**150TG0609**	—	—	.6094	.5938	2.560	—
5/8	**150TG0625**	—	—	.6250	.6094	2.560	—
5/8	—	—	**150TGNP0625**	.6250	—	—	.875
41/64	**150TG0641**	—	—	.6406	.6250	2.560	—
21/32	**150TG0656**	—	—	.6563	.6406	2.560	—
43/64	**150TG0672**	—	—	.6719	.6563	2.560	—
11/16	**150TG0688**	—	—	.6875	.6719	2.560	—
45/64	**150TG0703**	—	—	.7031	.6875	2.560	—
23/32	**150TG0719**	—	—	.7188	.7031	2.560	—
47/64	**150TG0734**	—	—	.7344	.7188	2.560	—
3/4	**150TG0750**	—	—	.7500	.7344	2.560	—
3/4	—	—	**150TGNP0750**	.7500	—	—	.938
49/64	**150TG0766**	—	—	.7656	.7500	2.560	—
25/32	**150TG0781**	—	—	.7813	.7656	2.560	—
51/64	**150TG0797**	—	—	.7969	.7813	2.560	—
13/16	**150TG0812**	—	—	.8125	.7969	2.560	—
53/64	**150TG0828**	—	—	.8281	.8125	2.560	—
27/32	**150TG0844**	—	—	.8438	.8281	2.560	—
55/64	**150TG0859**	—	—	.8594	.8438	2.560	—
7/8	**150TG0875**	—	—	.8750	.8594	2.560	—
7/8	—	—	**150TGNP0875**	.8750	—	—	.938
57/64	**150TG0891**	—	—	.8906	.8750	2.560	—
29/32	**150TG0906**	—	—	.9063	.8906	2.560	—
59/64	**150TG0922**	—	—	.9219	.9063	2.560	—
15/16	**150TG0938**	—	—	.9375	.9219	2.560	—
61/64	**150TG0953**	—	—	.9531	.9375	2.560	—
31/32	**150TG0969**	—	—	.9688	.9531	2.560	—
63/64	**150TG0984**	—	—	.9844	.9688	2.560	—
1	**150TG1000**	—	—	1.0000	.9844	2.560	—
1	—	**150TGCHP1000**	—	—	—	—	—
1	—	—	**150TGNP1000**	1.0000	—	—	1.063
1 1/64	**150TG1016**	—	—	1.0156	1.0000	2.560	—
1 1/32	**150TG1031**	—	—	1.0313	1.0156	2.560	—
1 3/64	**150TG1047**	—	—	1.0469	1.0313	2.560	—
1 1/16	**150TG1062**	—	—	1.0625	1.0469	2.560	—
1 5/64	**150TG1078**	—	—	1.0781	1.0625	2.560	—
1 3/32	**150TG1094**	—	—	1.0938	1.0781	2.560	—
1 7/64	**150TG1109**	—	—	1.1094	1.0938	2.560	—
1 9/64	**150TG1141**	—	—	1.1200	1.1094	2.560	—
1 1/8	**150TG1125**	—	—	1.1250	1.1200	2.560	—
1 5/32	**150TG1156**	—	—	1.1563	1.1250	2.560	—
1 11/64	**150TG1172**	—	—	1.1719	1.1563	2.560	—
1 3/16	**150TG1187**	—	—	1.1875	1.1719	2.560	—
1 13/64	**150TG1203**	—	—	1.2031	1.1875	2.560	—

(continued)

(TG150 Series continued)

D1	150TG standard	150TGCHP high precision — coolant	150TGNP milling — non-pullout	collet capacity max inch	collet capacity min inch	L9	LWP
1 7/32	**150TG1219**	—	—	1.2188	1.2031	2.560	—
1 15/64	**150TG1234**	—	—	1.2344	1.2188	2.560	—
1 1/4	**150TG1250**	—	—	1.2500	1.2344	2.560	—
1 1/4	—	—	**150TGNP1250**	1.2500	—	—	1.063
1 1/4	—	**150TGCHP1250**	—	—	—	—	—
1 17/64	**150TG1266**	—	—	1.2656	1.2500	2.560	—
1 9/32	**150TG1281**	—	—	1.2813	1.2656	2.560	—
1 19/64	**150TG1297**	—	—	1.2969	1.2813	2.560	—
1 5/16	**150TG1312**	—	—	1.3125	1.2969	2.560	—
1 21/64	**150TG1328**	—	—	1.3281	1.3125	2.560	—
1 11/32	**150TG1344**	—	—	1.3438	1.3281	2.560	—
1 23/64	**150TG1359**	—	—	1.3594	1.3438	2.560	—
1 3/8	**150TG1375**	—	—	1.3750	1.3594	2.560	—
1 25/64	**150TG1391**	—	—	1.3906	1.3750	2.560	—
1 13/32	**150TG1406**	—	—	1.4063	1.3906	2.560	—
1 27/64	**150TG1422**	—	—	1.4219	1.4063	2.560	—
1 7/16	**150TG1438**	—	—	1.4375	1.4219	2.560	—
1 29/64	**150TG1453**	—	—	1.4531	1.4375	2.560	—
1 15/32	**150TG1469**	—	—	1.4688	1.4531	2.560	—
1 1/2	**150TG1500**	—	—	1.5000	1.4688	2.560	—
1 1/2	—	—	**150TGNP1500**	1.5000	—	—	1.063
1 1/2	—	**150TGCHP1500**	—	—	—	—	—
1 31/32	**150TG1484**	—	—	1.9688	1.5000	2.560	—

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

• An economical way to purchase a group of collets.

TG Collet

ERICKSON

TG150 Collet Set • Metric

catalog number	series	quantity	dimensional range	incremental division
150TGS000M	TG150	3	25mm - 40mm	25 & 32 & 40

TG150 Collet Set • Inch

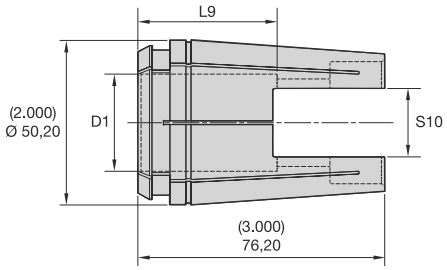
catalog number	series	quantity	dimensional range	incremental division
S150TG1SET	TG150	65	1/2-1 1/2	1/64
S150TG2SET	TG150	33	1/2- 1 1/2	1/32
S150TG4SET	TG150	25	3/4-1 1/2	1/32

TG Collet — NP

TG150 NP-Out Collet Set • Inch

catalog number	series	quantity	dimensional range	incremental division
S150TGNPSET	TG150	7	1/2 - 1 1/2	1/8(1/2-1) & 1/4(1 1/4-1 1/2)

- Can be used in all standard TG collet chucks.
- Provides Tremendous Grip (3:1 advantage) and accuracy for tapping applications.
- Slot in back of collets acts as a drive for the tap square.
- Industry-standard Erickson™ single-angle collet system.



ERICKSON

TG150 Solid Tap Collet • Metric DIN and ISO

**** Metric DIN and ISO only avalable in TG50 and TG100 series ****

TG150 Solid Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	150TGST solid tap	collet series	D1	S10	L9
–	3/4	**150TGST075**	TG150	.590	.442	1.213
–	1/2P	**150TGST050P**	TG150	.688	.515	.812
–	3/8P	**150TGST037P**	TG150	.700	.531	.812
M25	1	**150TGST100**	TG150	.800	.600	1.463
M27	1 1/16 & 1 1/8	**150TGST112**	TG150	.896	.672	1.650
–	3/4P	**150TGST075P**	TG150	.906	.679	.906
M30	1 3/16 & 1 1/4	**150TGST125**	TG150	1.021	.766	1.750
M33	1 5/16 & 1 3/8	**150TGST137**	TG150	1.108	.831	1.687
–	1P	**150TGST100P**	TG150	1.125	2.142	.906
M36	1 7/16 & 1 1/2	**150TGST150**	TG150	1.233	.925	1.625
M39	1 5/8	**150TGST162**	TG150	1.305	.979	1.625
–	1 1/4P	**150TGST125P**	TG150	1.313	2.085	.963
M42	1 3/4	**150TGST175**	TG150	1.430	1.072	1.500
–	1 1/2P	**150TGST150P**	TG150	1.500	1.898	1.150

NOTE: Inserting the cutting tool less than 2/3 of the gripping length into the collet can influence the coolant sealing performance and permanently damage the collet.
Full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

WIN WITH WIDIA™

ProGroove™

With easy-to-change inserts available in multiple high-performance carbide grades, the ProGroove system ensures accurate, reliable, and reproducible cutting edge performance.

ProGroove Grooving and Cut-Off

- Single-end inserts for grooving and cut-off.
- Offered with integral shanks and blades.
- Shallow, deep grooving, and cut-off capabilities.
- Available in four different geometries.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

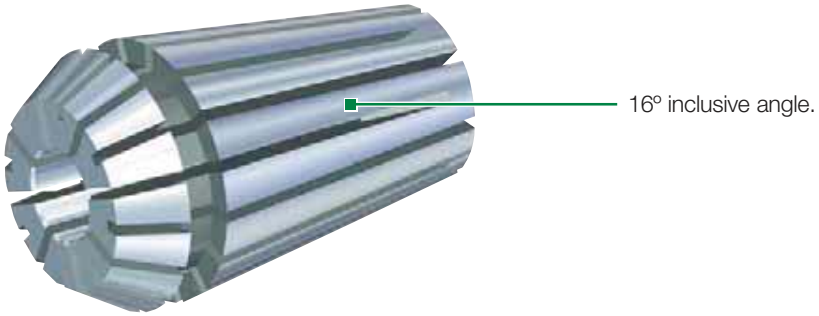
WIDIA™
Win with WIDIA™

Erickson™ • **ER Single-Angle Collets**

The standard ER Collets are manufactured according to DIN 6499-B (16° inclusive angle) standard and are available in a variety of styles, ER8, ER11, ER16, ER20, ER25, ER32, and ER40, with sizes ranging from 0,5–26mm (.0197–1.0000"). Applications of light end milling, drilling, tapping, reaming, and boring solution are applicable.

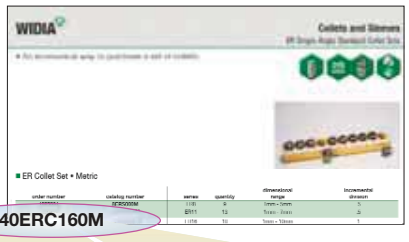
ER Collets

- DIN 6499 Class 2 accuracy.
- 16° inclusive taper angle taper for approximately 2:1 grip.
- Dedicated versions for tapping — driving off the square of the tap.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



ERICKSON

40ERC160M

40	ER	C	160	M
System Size	Collet Style	Special Feature *(optional)*	Collet Bore Size	Identification Value
11 = ER11 **16** = ER16 **20** = ER20 **25** = ER25 **32** = ER32 **40** = ER40	**ER-DIN 6499** = Single-angle	**TC** = Solid tapping (square for drive) **TCT** = Solid tapping with tension only	**metric (xx.x)** **010** = 1mm **160** = 16mm **245** = 24,5mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2" **1000** = 1"	**M** = Collet bore size built to metric values **(blank)** = Collet bore size built to metric values

ER • Single-Angle

ERICKSON

- Provides good grip and accuracy for all drilling applications.
- Wide clamping range.
- Available in both inch and metric bores.
- 1mm (.040") range of collapse.
- Manufactured to DIN 6499.
- Accuracy to DIN 6499 Class 2.

ERTC • Single-Angle Tap Collet

ERICKSON

- Designed to grip taps on shank and square to eliminate slippage.
- Fits all standard ER-style collet chucks.
- 0,13mm (.005") range of collapse.

ERTCT • Single-Angle Tap Collet with Axial Compensation

ERICKSON

- Designed to grip taps on shank and square to eliminate slippage.
- Tension only, cost effective solution for machines that require axial compensation for tapping.
- Fits all standard ER-style collet chucks.

Our complete portfolio.
Your complete satisfaction.

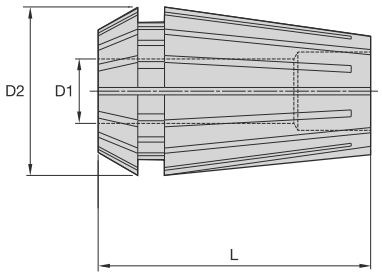
From turning, holemaking, and indexable milling to solid carbide end milling, solid carbide drilling, and tapping, the most powerful tools in the business now proudly wear WIDIA™ brands. When you buy WIDIA products, you're not just purchasing speed, power, and precision, you're investing in quality and complete satisfaction.

Match the most expansive portfolio of precision-engineered products and engineered solution services available today with a global, specialized network of Authorized Distributor partners, and you have the tools you need — and the power that only comes from WIDIA brands. For product information, or to schedule an onsite demonstration, visit www.widia.com.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA™

- Provides approximately 2:1 grip advantage.
- Wide clamping range for all drilling applications.
- ER8 and ER11 0,5mm (.020") range of collapse.
- ER16, ER20, ER25, ER32, and ER40 1mm (.040") range of collapse.
- Available in both metric and inch sizes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON

ER Collets • Metric

D1	ER8 D2 = 8,5mm L = 13,5mm	ER11 D2 = 11,5mm L = 18mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	collet capacity max mm	collet capacity min mm
1,0	8ER010M	11ER010M	16ER010M	20ER010M	–	–	–	1,00	0,50
1,5	8ER015M	11ER015M	16ER015M	–	–	–	–	1,50	1,00
2,0	–	–	16ER020M	20ER020M	25ER020M	–	–	2,00	1,00
2,0	8ER020M	11ER020M	–	–	–	–	–	2,00	1,50
2,5	–	–	16ER025M	–	–	–	–	2,50	1,50
2,5	8ER025M	11ER025M	–	–	–	–	–	2,50	2,00
3,0	–	–	16ER030M	20ER030M	25ER030M	32ER030M	–	3,00	2,00
3,0	8ER030M	11ER030M	–	–	–	–	–	3,00	2,50
3,5	–	–	16ER035M	–	–	–	–	3,50	2,50
3,5	8ER035M	11ER035M	–	–	–	–	–	3,50	3,00
4,0	–	–	16ER040M	20ER040M	25ER040M	32ER040M	40ER040M	4,00	3,00
4,0	8ER040M	11ER040M	–	–	–	–	–	4,00	3,50
4,5	–	–	16ER045M	–	–	–	–	4,50	3,50
4,5	8ER045M	11ER045M	–	–	–	–	–	4,50	4,00
5,0	–	–	16ER050M	20ER050M	25ER050M	32ER050M	40ER050M	5,00	4,00
5,0	8ER050M	11ER050M	–	–	–	–	–	5,00	4,50
5,5	–	–	16ER055M	–	–	–	–	5,50	4,50
5,5	–	11ER055M	–	–	–	–	–	5,50	5,00
6,0	–	–	16ER060M	20ER060M	25ER060M	32ER060M	40ER060M	6,00	5,00
6,0	–	11ER060M	–	–	–	–	–	6,00	5,50
6,5	–	–	16ER065M	–	–	–	–	6,50	5,50
6,5	–	11ER065M	–	–	–	–	–	6,50	6,00
7,0	–	–	16ER070M	20ER070M	25ER070M	32ER070M	40ER070M	7,00	6,00
7,0	–	11ER070M	–	–	–	–	–	7,00	6,50
7,5	–	–	16ER075M	–	–	–	–	7,50	6,50
8,0	–	–	16ER080M	20ER080M	25ER080M	32ER080M	40ER080M	8,00	7,00

(continued)

(ER Single-Angle Standard Collets continued)

D1	ER8 D2 = 8,5mm L = 13,5mm	ER11 D2 = 11,5mm L = 18mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	collet capacity max mm	collet capacity min mm
8,5	–	–	16ER085M	–	–	–	–	8,50	7,50
9,0	–	–	16ER090M	20ER090M	25ER090M	32ER090M	40ER090M	9,00	8,00
9,5	–	–	16ER095M	–	–	–	–	9,50	8,50
10,0	–	–	16ER100M	20ER100M	25ER100M	32ER100M	40ER100M	10,00	9,00
11,0	–	–	–	20ER110M	25ER110M	32ER110M	40ER110M	11,00	10,00
12,0	–	–	–	20ER120M	25ER120M	32ER120M	40ER120M	12,00	11,00
13,0	–	–	–	20ER130M	25ER130M	32ER130M	40ER130M	13,00	12,00
14,0	–	–	–	–	25ER140M	32ER140M	40ER140M	14,00	13,00
15,0	–	–	–	–	25ER150M	32ER150M	40ER150M	15,00	14,00
16,0	–	–	–	–	25ER160M	32ER160M	40ER160M	16,00	15,00
17,0	–	–	–	–	–	32ER170M	40ER170M	17,00	16,00
18,0	–	–	–	–	–	32ER180M	40ER180M	18,00	17,00
19,0	–	–	–	–	–	32ER190M	40ER190M	19,00	18,00
20,0	–	–	–	–	–	32ER200M	40ER200M	20,00	19,00
21,0	–	–	–	–	–	–	40ER210M	21,00	20,00
22,0	–	–	–	–	–	–	40ER220M	22,00	21,00
23,0	–	–	–	–	–	–	40ER230M	23,00	22,00
24,0	–	–	–	–	–	–	40ER240M	24,00	23,00
25,0	–	–	–	–	–	–	40ER250M	25,00	24,00
26,0	–	–	–	–	–	–	40ER260M	26,00	25,00

(continued)

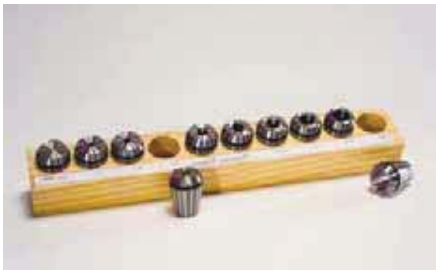
(ER Single-Angle Standard Collets continued)

ER Collets • Inch

D1	ER16 D2 = .669 L = 1.083	ER20 D2 = .827 L = 1.240	ER25 D2 = 1.024 L = 1.339	ER32 D2 = 1.299 L = 1.575	ER40 D2 = 1.614 L = 1.811	collet capacity max inch	collet capacity min inch
1/16	16ER0062	20ER0062	25ER0062	–	–	.0625	.0425
3/32	–	20ER0094	–	–	–	.0938	.0538
3/32	16ER0094	–	25ER0094	–	–	.0938	.0738
1/8	16ER0125	20ER0125	25ER0125	32ER0125	40ER0125	.1250	.0850
5/32	16ER0156	20ER0156	25ER0156	32ER0156	40ER0156	.1563	.1163
3/16	16ER0188	20ER0188	25ER0188	32ER0188	40ER0188	.1875	.1475
7/32	16ER0219	20ER0219	25ER0219	32ER0219	40ER0219	.2188	.1788
1/4	16ER0250	20ER0250	25ER0250	32ER0250	40ER0250	.2500	.2100
9/32	16ER0281	20ER0281	25ER0281	32ER0281	40ER0281	.2813	.2413
5/16	16ER0312	20ER0312	25ER0312	32ER0312	40ER0312	.3125	.2725
11/32	16ER0344	20ER0344	25ER0344	32ER0344	40ER0344	.3438	.3038
3/8	16ER0375	20ER0375	25ER0375	32ER0375	40ER0375	.3750	.3350
13/32	16ER0406	20ER0406	25ER0406	32ER0406	40ER0406	.4063	.3663
7/16	–	20ER0438	25ER0438	32ER0438	40ER0438	.4375	.3975
15/32	–	20ER0469	25ER0469	32ER0469	40ER0469	.4688	.4288
1/2	–	20ER0500	25ER0500	32ER0500	40ER0500	.5000	.4600
17/32	–	–	25ER0531	32ER0531	40ER0531	.5313	.4913
9/16	–	–	–	32ER0562	40ER0562	.5625	.5225
9/16	–	–	25ER0562	–	–	.5626	.5225
19/32	–	–	25ER0594	32ER0594	40ER0594	.5938	.5538
5/8	–	–	25ER0625	32ER0625	40ER0625	.6250	.5850
21/32	–	–	–	32ER0656	40ER0656	.6563	.6163
11/16	–	–	–	32ER0688	40ER0688	.6875	.6475
23/32	–	–	–	32ER0719	40ER0719	.7188	.6788
3/4	–	–	–	32ER0750	40ER0750	.7500	.7100
25/32	–	–	–	32ER0781	40ER0781	.7813	.7413
13/16	–	–	–	32ER0812	40ER0812	.8125	.7725
27/32	–	–	–	–	40ER0844	.8438	.8038
7/8	–	–	–	–	40ER0875	.8750	.8350
29/32	–	–	–	–	40ER0906	.9063	.8663
15/16	–	–	–	–	40ER0938	.9375	.8975
31/32	–	–	–	–	40ER0969	.9688	.9288
1	–	–	–	–	40ER1000	1.0000	.9600

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions.
Never try to stretch the collets by clamping oversized cutting tools.

• An economical way to purchase a set of collets.



ERICKSON

ER Collet Set • Metric

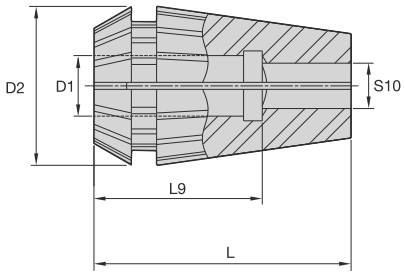
order number	catalog number	series	quantity	dimensional range	incremental division
1025864	**8ERS000M**	ER8	9	1mm - 5mm	.5
1020872	**11ERS000M**	ER11	13	1mm - 7mm	.5
1135892	**16ERS000M**	ER16	10	1mm - 10mm	1
1025865	**20ERS000M**	ER20	12	2mm - 13mm	1
1123858	**25ERS000M**	ER25	15	2mm - 16mm	1
1135911	**32ERS000M**	ER32	18	3mm - 20mm	1
1126252	**40ERS000M**	ER40	23	4mm - 26mm	1

ER Collet Set • Inch

order number	catalog number	series	quantity	dimensional range	incremental division
2269968	**16ERS000SET2**	ER16	12	1/16 - 13/32	1/32
2269969	**20ERS000SET1**	ER20	8	1/16 - 1/2	1/16
2269970	**20ERS000SET2**	ER20	15	1/16 - 1/2	1/32
2269971	**25ERS000SET1**	ER25	10	1/16 - 5/8	1/16
2269972	**25ERS000SET2**	ER25	19	1/16 - 5/8	1/32
2269973	**32ERS000SET1**	ER32	12	1/8 - 13/16	1/16
2269974	**32ERS000SET2**	ER32	23	1/8 - 13/16	1/32
2269975	**40ERS000SET1**	ER40	15	1/8 - 1	1/16
2269976	**40ERS000SET2**	ER40	29	1/8 - 1	1/32

NOTE: ER collet sets come complete with protective tray.

- Square in back of collet acts as a drive for the tap square.
- Can be used in all standard ER collet chucks.
- Available in metric and inch sizes.



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■ ER Solid Tap Collet • Metric DIN and ISO

tap size	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	D1	S10	L9
M4 & M6	**16ERTC045034M**	**20ERTC045034M**	**25ERTC045034M**	**32ERTC045034M**	–	4,5	3,4	18
–	**16ERTC055043M**	**20ERTC055043M**	**25ERTC055043M**	**32ERTC055043M**	–	5,5	4,3	18
M5 & M6 & M7 & M8	**16ERTC060049M**	**20ERTC060049M**	**25ERTC060049M**	**32ERTC060049M**	–	6,0	4,9	18
M10	**16ERTC070055M**	**20ERTC070055M**	**25ERTC070055M**	**32ERTC070055M**	**40ERTC070055M**	7,0	5,5	18
M8	**16ERTC080062M**	**20ERTC080062M**	**25ERTC080062M**	**32ERTC080062M**	**40ERTC080062M**	8,0	6,2	22
M12	**16ERTC090070M**	**20ERTC090070M**	**25ERTC090070M**	**32ERTC090070M**	**40ERTC090070M**	9,0	7,0	22
M10	–	**20ERTC100080M**	**25ERTC100080M**	**32ERTC100080M**	**40ERTC100080M**	10,0	8,0	25
M14	–	**20ERTC110090M**	**25ERTC110090M**	**32ERTC110090M**	**40ERTC110090M**	11,0	9,0	25
M16	–	–	**25ERTC120090M**	**32ERTC120090M**	**40ERTC120090M**	12,0	9,0	25
M18	–	–	–	**32ERTC140110M**	**40ERTC140110M**	14,0	11,0	25
–	–	–	**25ERTC140110M**	–	–	14,0	11,0	25
M20	–	–	–	**32ERTC160120M**	–	16,0	12,0	25
–	–	–	**25ERTC160120M**	–	–	16,0	12,0	25
M20	–	–	–	–	**40ERTC160120M**	16,0	12,0	25
M22 & M24	–	–	–	**32ERTC180145M**	**40ERTC180145M**	18,0	14,5	25
M27 & M30	–	–	–	**32ERTC200160M**	**40ERTC200160M**	20,0	16,0	28
M30	–	–	–	–	**40ERTC220180M**	22,0	18,0	28

(continued)

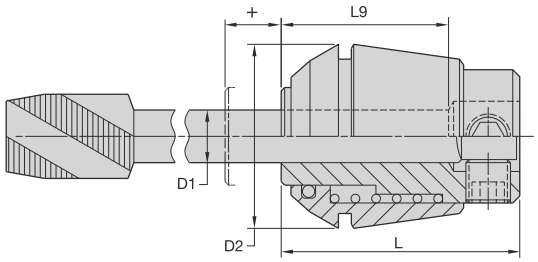
(ER Single-Angle Solid Tap Collets continued)

ER Solid Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	ER16 D2 = .669 L = 1.083	ER20 D2 = .827 L = 1.240	ER25 D2 = 1.024 L = 1.339	ER32 D2 = 1.299 L = 1.575	ER40 D2 = 1.614 L = 1.811	D1	S10	L9
M4	8 & 5/32	**16ERTC8**	**20ERTC8**	**25ERTC8**	**32ERTC8**	**–**	.168	.131	.710
M4,5 & M5	10 & 3/16	**16ERTC10**	**20ERTC10**	**25ERTC10**	**32ERTC10**	**–**	.194	.152	.710
–	12 & 7/32	**16ERTC12**	**20ERTC12**	**25ERTC12**	**32ERTC12**	**–**	.220	.165	.710
M6 & M6,3	14 & 1/4	**16ERTC025**	**20ERTC025**	**25ERTC025**	**32ERTC025**	**40ERTC025**	.255	.191	.710
M7 & M8	5/16	**–**	**20ERTC031**	**25ERTC031**	**32ERTC031**	**40ERTC031**	.318	.238	.866
–	7/16	**–**	**20ERTC043**	**25ERTC043**	**32ERTC043**	**40ERTC043**	.323	.242	.866
M12 & M12,5	1/2	**–**	**20ERTC050**	**25ERTC050**	**32ERTC050**	**40ERTC050**	.367	.275	.866
M10	3/8	**–**	**20ERTC037**	**25ERTC037**	**32ERTC037**	**40ERTC037**	.381	.286	.866
M14	9/16	**–**	**–**	**25ERTC056**	**32ERTC056**	**40ERTC056**	.429	.322	.984
M16	5/8	**–**	**–**	**25ERTC062**	**32ERTC062**	**40ERTC062**	.480	.360	.984
M18	11/16	**–**	**–**	**–**	**32ERTC069**	**40ERTC069**	.542	.406	.984
–	3/4	**–**	**–**	**–**	**32ERTC075**	**–**	.590	.422	.984
–	3/4	**–**	**–**	**–**	**–**	**40ERTC075**	.590	.442	.984
M20	13/16	**–**	**–**	**–**	**32ERTC081**	**40ERTC081**	.652	.489	.984
M22	7/8	**–**	**–**	**–**	**–**	**40ERTC087**	.697	.523	.984
M24	15/16	**–**	**–**	**–**	**–**	**40ERTC093**	.760	.570	1.100
M25	1	**–**	**–**	**–**	**–**	**40ERTC100**	.800	.600	1.100

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Tension feature for applications that need synchronized tapping.
- Adjustable screws in back of collet act as a drive for the tap square.
- Can be used in all standard ER collet chucks.
- Available in inch sizes.



ERICKSON

ER T-Only Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	ER12 D2 = 11,4mm L = 21,5mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	D1 mm	D1 in
M3 & M3,15 & M3,5	#0-#6 & 1/8	12ERTCT6	16ERTCT6	20ERTCT6	25ERTCT6	–	–	3,58	.141
M4	#8 & 5/32	–	16ERTCT8	20ERTCT8	25ERTCT8	32ERTCT8	–	4,27	.168
M4,5 & M5	#10 & 3/16	–	16ERTCT10	20ERTCT10	25ERTCT10	32ERTCT10	–	4,93	.194
–	#12 & 7/32	–	–	20ERTCT12	25ERTCT12	32ERTCT12	–	5,59	.220
M6 & M6,3	#14 & 1/4	–	–	20ERTCT025	25ERTCT025	32ERTCT025	40ERTCT025	6,48	.255
–	1/8P(LS)	–	–	–	–	32ERTCT012P	–	7,94	.313
M7 & M8	5/16	–	–	–	25ERTCT031	32ERTCT031	40ERTCT031	8,08	.318
–	7/16	–	–	–	25ERTCT043	32ERTCT043	40ERTCT043	8,20	.323
M12 & M12,5	1/2	–	–	–	25ERTCT050	32ERTCT050	40ERTCT050	9,32	.367
M10	3/8	–	–	–	25ERTCT037	32ERTCT037	40ERTCT037	9,68	.381
M14	9/16	–	–	–	–	32ERTCT056	40ERTCT056	10,90	.429
M16	5/8	–	–	–	–	32ERTCT062	40ERTCT062	12,19	.480
M18	11/16	–	–	–	–	–	40ERTCT069	13,77	.542
–	3/4	–	–	–	–	–	40ERTCT075	14,99	.590
M20	13/16	–	–	–	–	–	40ERTCT081	16,56	.652
M22	7/8	–	–	–	–	–	40ERTCT087	17,70	.697

NOTE: 12ERTCT6 fits ER11 chucks.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.

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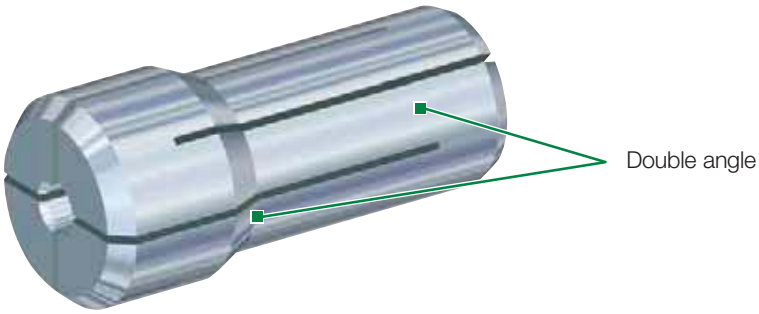
Erickson™ • **DA Double-Angle Collets**

DA – Double-Angle Collets are well-known in the industry as an economical collet system allowing reaching in to areas where other systems have clearance issues. These collets are manufactured according to the original Erickson standard styles, DA000, DA100, DA180, DA200, and DA300, with clamping sizes ranging from 0,5–20mm (.0197–.7500"). They are ideal for end milling, drilling, tapping, reaming, and boring solutions.

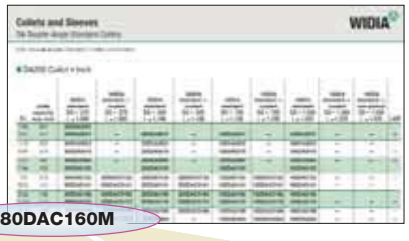
ERICKSON

DA Collets

- Original Erickson standard.
- Versatile double-angle design providing approximately 1:1 grip.
- Bonded style available for through-coolant applications.
- Non-pullout style to captivate Weldon®-style end mills.
- Dedicated versions for tapping — driving off the square of the tap.



- Industry-standard Erickson™ double-angle collet system.



ERICKSON

180DAC160M

180	DA	C	160	M
System Size	Collet Style	Special Feature *(optional)*	Collet Bore Size	Identification Value
100 = DA100 **180** = DA180 **200** = DA200 **300** = DA300	**DA** = Erickson Double-Angle	**C** = Coolant style bonded **NP** = Non-pullout Weldon® (end mill design)	**metric (xx.x)** **010** = 1mm **160** = 16mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2"	**M** = Collet bore size built to metric values **(blank)** = Collet bore size built to metric values

DA • Double-Angle

ERICKSON

- 0,8mm [.031" (1/32")] range of collapse.

DAC • Double-Angle Coolant

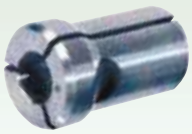
ERICKSON

- Rubber-filled slots seal coolant-fed tool applications.
- Suitable for coolant pressure up to 70 bar (1000 psi).
- Fits all standard DA-style collet chucks.
- 0,13mm (.005") range of collapse.

DANP • Double-Angle Non-Pullout, Weldon® Style

ERICKSON

- Designed to grip end mills with Weldon-style shanks.
- Positive retention and drive provided by drive wedge in collet.
- Eliminates inaccuracy created by solid end mill adapters.
- Fits all standard DA-style collet chucks.
- 0,13mm (.005") range of collapse.

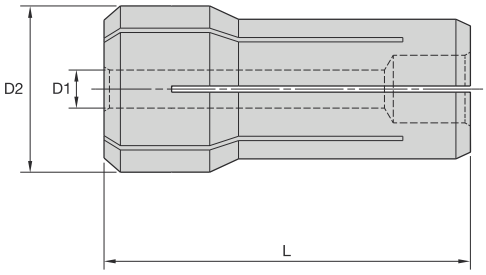


DA-J, K, & L • Double-Angle Solid Tap

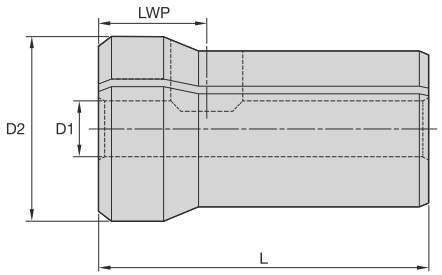
ERICKSON

- Provides positive drive for taps.

- For bonded collet DAC only — rubber-filled slots seal collet for coolant-fed tool applications.
- Provides 1:1 grip for most drilling, reaming, and tapping applications.
- Industry-standard Erickson™ double-angle collet system.
- 000DA 0,25mm (.010") range of collapse.
- 300DA, 200DA, 100DA, and 180DA 0,8mm [.0310" (1/32)] range of collapse.
- 200DA, 100DAC, 180DAC, and 180DANP 0,13mm (.005") range of collapse.
- 0,025mm (.001") TIR collet accuracy.



DA collet



DA collet — non-pullout

DA collet

DA collet — non-pullout

DA Collet • Metric

D1	collet capacity max mm	000DA standard D2 = 8,50mm L = 16,76mm	300DA standard D2 = 9,53mm L = 25,406mm	200DA standard D2 = 13,69mm L = 30,16mm	200DA standard — coolant D2 = 13,69mm L = 30,16mm	100DA standard D2 = 19,53mm L = 36,53mm	100DA standard — coolant D2 = 19,53mm L = 36,53mm	180DA standard D2 = 26,29mm L = 41,28mm	180DA standard — coolant D2 = 26,29mm L = 41,28mm	180DA standard — non-pullout D2 = 26,29mm L = 41,28mm	LWP
1,0	1,0	000DA010M	300DA010M	200DA010M	–	–	–	–	–	–	–
1,3	1,3	000DA012M	–	–	–	–	–	–	–	–	–
1,5	1,5	000DA015M	300DA015M	200DA015M	–	–	–	–	–	–	–
1,8	1,8	000DA017M	–	–	–	–	–	–	–	–	–
2,0	2,0	000DA020M	300DA020M	200DA020M	–	–	–	–	–	–	–
2,3	2,3	000DA022M	–	–	–	–	–	–	–	–	–
2,5	2,5	000DA025M	300DA025M	200DA025M	–	100DA025M	–	–	–	–	–
2,8	2,8	000DA027M	–	–	–	–	–	–	–	–	–
3,0	3,0	000DA030M	300DA030M	200DA030M	–	100DA030M	–	180DA030M	–	–	–
3,3	3,3	000DA032M	–	–	–	–	–	–	–	–	–

(continued)

(DA Double-Angle Standard Collets continued)

D1	collet capacity max mm	000DA standard D2 = 8,50mm L = 16,76mm	300DA standard D2 = 9,53mm L = 25,406mm	200DA standard D2 = 13,69mm L = 30,16mm	200DA standard – coolant D2 = 13,69mm L = 30,16mm	100DA standard D2 = 19,53mm L = 36,53mm	100DA standard – coolant D2 = 19,53mm L = 36,53mm	180DA standard D2 = 26,29mm L = 41,28mm	180DA standard – coolant D2 = 26,29mm L = 41,28mm	180DA standard – non-pullout D2 = 26,29mm L = 41,28mm	LWP
3,5	3,5	000DA035M	300DA035M	200DA035M	–	100DA035M	–	180DA035M	–	–	–
3,8	3,8	000DA037M	–	–	–	–	–	–	–	–	–
4,0	4,0	000DA040M	300DA040M	200DA040M	–	100DA040M	–	180DA040M	–	–	–
4,5	4,5	–	300DA045M	200DA045M	–	100DA045M	–	180DA045M	–	–	–
5,0	5,0	–	300DA050M	200DA050M	–	100DA050M	–	180DA050M	–	–	–
5,5	5,5	–	300DA055M	200DA055M	–	100DA055M	–	180DA055M	–	–	–
6,0	6,0	–	300DA060M	200DA060M	200DAC060M	100DA060M	100DAC060M	180DA060M	180DAC060M	–	–
6,5	6,5	–	–	200DA065M	–	100DA065M	–	180DA065M	–	–	–
7,0	7,0	–	–	200DA070M	–	100DA070M	–	180DA070M	–	–	–
7,5	7,5	–	–	200DA075M	–	100DA075M	–	180DA075M	–	–	–
8,0	8,0	–	–	200DA080M	200DAC080M	100DA080M	100DAC080M	180DA080M	180DAC080M	–	–
8,5	8,5	–	–	200DA085M	–	100DA085M	–	180DA085M	–	–	–
9,0	9,0	–	–	200DA090M	–	100DA090M	–	180DA090M	–	–	–
9,5	9,5	–	–	200DA095M	–	100DA095M	–	180DA095M	–	–	–
10,0	10,0	–	–	200DA100M	200DAC100M	100DA100M	100DAC100M	180DA100M	180DAC100M	–	–
10,0	10,0	–	–	–	–	–	–	–	–	180DANP100M	12,5
10,5	10,5	–	–	–	–	100DA105M	–	180DA105M	–	–	–
11,0	11,0	–	–	–	–	100DA110M	–	180DA110M	–	–	–
11,5	11,5	–	–	–	–	100DA115M	–	180DA115M	–	–	–
12,0	12,0	–	–	–	–	100DA120M	–	180DA120M	–	–	–
12,0	12,0	–	–	–	–	–	–	–	–	180DANP120M	12,5
12,0	12,0	–	–	–	–	–	100DAC120M	–	180DAC120M	–	–
12,5	12,5	–	–	–	–	100DA125M	–	180DA125M	–	–	–
13,0	13,0	–	–	–	–	100DA130M	–	180DA130M	–	–	–
13,5	13,5	–	–	–	–	100DA135M	–	180DA135M	–	–	–
14,0	14,0	–	–	–	–	100DA140M	100DAC140M	180DA140M	180DAC140M	–	–
14,5	14,5	–	–	–	–	–	–	180DA145M	–	–	–
15,0	15,0	–	–	–	–	–	–	180DA150M	–	–	–
15,5	15,5	–	–	–	–	–	–	180DA155M	–	–	–
16,0	16,0	–	–	–	–	–	–	–	180DAC160M	–	–
16,0	16,0	–	–	–	–	–	–	–	–	180DANP160M	16,1
16,0	16,0	–	–	–	–	–	–	180DA160M	–	–	–
16,5	16,5	–	–	–	–	–	–	180DA165M	–	–	–
17,0	17,0	–	–	–	–	–	–	180DA170M	–	–	–
17,5	17,5	–	–	–	–	–	–	180DA175M	–	–	–
18,0	18,0	–	–	–	–	–	–	180DA180M	180DAC180M	–	–
18,5	18,5	–	–	–	–	–	–	180DA185M	–	–	–
19,0	19,0	–	–	–	–	–	–	180DA190M	–	–	–
19,5	19,5	–	–	–	–	–	–	180DA195M	–	–	–
20,0	20,0	–	–	–	–	–	–	180DA200M	180DAC200M	–	–

(continued)

(DA Double-Angle Standard Collets continued)

DA200 Collet • Inch

D1	collet capacity max inch	300DA standard D2 = .375 L = 1.000	300DA standard — coolant D2 = .375 L = 1.000	200DA standard D2 = .539 L = 1.188	200DA standard — coolant D2 = .539 L = 1.188	100DA standard D2 = .769 L = 1.438	100DA standard — coolant D2 = .769 L = 1.438	180DA standard D2 = 1.035 L = 1.625	180DA standard — coolant D2 = 1.035 L = 1.625	180DA standard — non-pullout D2 = 1.035 L = 1.625	LWP
1/32	.031	300DA0031	–	–	–	–	–	–	–	–	–
3/64	.047	300DA0047	–	200DA0047	–	100DA0047	–	180DA0047	–	–	–
1/16	.063	300DA0062	–	200DA0062	–	100DA0062	–	180DA0062	–	–	–
5/64	.078	300DA0078	–	200DA0078	–	100DA0078	–	180DA0078	–	–	–
3/32	.094	300DA0094	–	200DA0094	–	100DA0094	–	180DA0094	–	–	–
7/64	.109	300DA0109	–	200DA0109	–	100DA0109	–	180DA0109	–	–	–
1/8	.125	300DA0125	300DAC0125	200DA0125	200DAC0125	100DA0125	100DAC0125	180DA0125	–	–	–
9/64	.141	300DA0141	300DAC0141	200DA0141	200DAC0141	–	–	180DA0141	–	–	–
9/64	.141	–	–	–	–	100DA0141	100DAC0141	–	–	–	–
5/32	.156	300DA0156	300DAC0156	200DA0156	200DAC0156	100DA0156	100DAC0156	180DA0156	–	–	–
11/64	.172	300DA0172	300DAC0172	200DA0172	200DAC0172	100DA0172	100DAC0172	180DA0172	–	–	–
3/16	.188	300DA0188	300DAC0188	200DA0188	200DAC0188	100DA0188	100DAC0188	180DA0188	–	–	–
13/64	.203	300DA0203	300DAC0203	200DA0203	–	100DA0203	100DAC0203	180DA0203	–	–	–
7/32	.219	300DA0219	300DAC0219	200DA0219	–	100DA0219	100DAC0219	180DA0219	–	–	–
15/64	.234	300DA0234	300DAC0234	200DA0234	200DAC0234	100DA0234	100DAC0234	180DA0234	–	–	–
1/4	.250	300DA0250	300DAC0250	200DA0250	200DAC0250	100DA0250	100DAC0250	180DA0250	180DAC0250	–	–
17/64	.266	–	–	200DA0266	200DAC0266	100DA0266	100DAC0266	180DA0266	180DAC0266	–	–
9/32	.281	–	–	200DA0281	200DAC0281	100DA0281	100DAC0281	180DA0281	180DAC0281	–	–
19/64	.297	–	–	200DA0297	–	100DA0297	100DAC0297	180DA0297	180DAC0297	–	–
5/16	.312	–	–	–	–	100DA0312	100DAC0312	–	–	–	–
5/16	.313	–	–	200DA0312	200DAC0312	–	–	180DA0312	180DAC0312	–	–
21/64	.328	–	–	200DA0328	200DAC0328	100DA0328	100DAC0328	180DA0328	180DAC0328	–	–
11/32	.344	–	–	200DA0344	200DAC0344	100DA0344	100DAC0344	180DA0344	180DAC0344	–	–
23/64	.359	–	–	200DA0359	–	100DA0359	100DAC0359	180DA0359	180DAC0359	–	–
3/8	.375	–	–	200DA0375	200DAC0375	100DA0375	100DAC0375	–	180DAC0375	–	–
3/8	.375	–	–	–	–	–	–	–	–	180DANP0375	.484
25/64	.391	–	–	200DA0391	200DAC0391	100DA0391	100DAC0391	180DA0391	180DAC0391	–	–
13/32	.406	–	–	–	–	100DA0406	100DAC0406	180DA0406	180DAC0406	–	–
27/64	.422	–	–	–	–	100DA0422	100DAC0422	180DA0422	180DAC0422	–	–
7/16	.438	–	–	–	–	100DA0438	100DAC0438	180DA0438	180DAC0438	–	–
29/64	.453	–	–	–	–	100DA0453	100DAC0453	180DA0453	180DAC0453	–	–
15/32	.469	–	–	–	–	100DA0469	100DAC0469	180DA0469	180DAC0469	–	–
31/64	.484	–	–	–	–	100DA0484	100DAC0484	180DA0484	180DAC0484	–	–
1/2	.500	–	–	–	–	100DA0500	100DAC0500	180DA0500	180DAC0500	–	–
1/2	.500	–	–	–	–	–	–	–	–	180DANP0500	.484
33/64	.516	–	–	–	–	100DA0516	100DAC0516	180DA0516	180DAC0516	–	–
17/32	.531	–	–	–	–	100DA0531	100DAC0531	180DA0531	180DAC0531	–	–
35/64	.547	–	–	–	–	100DA0547	100DAC0547	180DA0547	180DAC0547	–	–
9/16	.562	–	–	–	–	100DA0562	100DAC0562	–	–	–	–
9/16	.563	–	–	–	–	–	–	180DA0562	180DAC0562	–	–
37/64	.578	–	–	–	–	–	–	180DA0578	180DAC0578	–	–
19/32	.594	–	–	–	–	–	–	180DA0594	180DAC0594	–	–
39/64	.609	–	–	–	–	–	–	180DA0609	180DAC0609	–	–
5/8	.625	–	–	–	–	–	–	180DA0625	180DAC0625	–	–
5/8	.625	–	–	–	–	–	–	–	–	180DANP0625	.633
41/64	.641	–	–	–	–	–	–	180DA0641	180DAC0641	–	–
21/32	.656	–	–	–	–	–	–	180DA0656	180DAC0656	–	–
43/64	.672	–	–	–	–	–	–	180DA0672	180DAC0672	–	–

(continued)

(DA Double-Angle Standard Collets continued)

D1	collet capacity max inch	300DA standard D2 = .375 L = 1.000	300DA standard — coolant D2 = .375 L = 1.000	200DA standard D2 = .539 L = 1.188	200DA standard — coolant D2 = .539 L = 1.188	100DA standard D2 = .769 L = 1.438	100DA standard — coolant D2 = .769 L = 1.438	180DA standard D2 = 1.035 L = 1.625	180DA standard — coolant D2 = 1.035 L = 1.625	180DA standard — non-pullout D2 = 1.035 L = 1.625	LWP
11/16	.688	—	—	—	—	—	—	180DA0688	180DAC0688	—	—
45/64	.703	—	—	—	—	—	—	180DA0703	180DAC0703	—	—
23/32	.719	—	—	—	—	—	—	180DA0719	180DAC0719	—	—
47/64	.734	—	—	—	—	—	—	180DA0734	180DAC0734	—	—
3/4	.750	—	—	—	—	—	—	—	—	180DANP0750	.664
3/4	.750	—	—	—	—	—	—	180DA0750	180DAC0750	—	—

• An economical way to purchase a set of collets.

ERICKSON

DA Collet Set • Metric

order number	catalog number	series	quantity	dimensional range	incremental division
1293409	000DAS000M	DA000	13	1mm - 4mm	.25
1297410	300DAS000M	DA300	11	1mm - 6mm	.5
1296078	200DAS000M	DA200	19	1mm - 10mm	.5
1294736	100DAS000M	DA100	24	2,5mm - 14mm	.5
1191011	180DAS000M	DA180	35	3mm - 20mm	.5

DA Collet Set • Inch

order number	catalog number	series	quantity	dimensional range	incremental division
1289026	S303SET	DA300	8	3/64 - 1/4	1/32 (3/32–1/4) + 3/64 & 5/64
1289027	S304SET	DA300	9	1/8 - 1/4	1/64
1289028	S305SET	DA300	5	1/8 - 1/4	1/32
1288983	S203SET	DA200	9	1/8 - 3/8	1/32
1288984	S204SET	DA200	17	1/8 - 3/8	1/64
1288923	S103SET	DA100	11	1/4 - 9/16	1/32
1288925	S104SET	DA100	21	1/4 - 9/16	1/64
1288963	S183SET	DA180	17	1/4 - 3/4	1/32
1288964	S184SET	DA180	33	1/4 - 3/4	1/64

WIN WITH WIDIA™

WIDIA™ M1200 Mini •
One Series Meets Every Face Milling Need

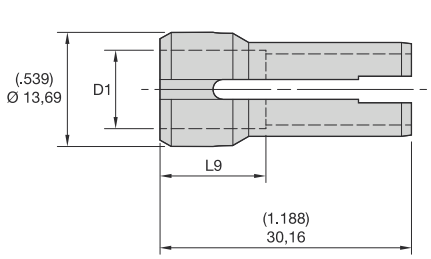
For consistent performance, look no further than the WIDIA M1200 Mini. This easy-to-use product ensures great tool life, reduced machining time, and maximum productivity.

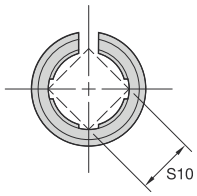
- Low cost per edge and high productivity.
- 25% lower cutting forces due to soft cutting action.
- Up to 30% increased Metal Removal Rates (MRR).
- M1200 Mini 15°, 45°, and 60° lead.
- WIDIA premium milling grades.
- Up to 35% better tool life from light to heavy machining.
- Up to 40% shorter machining cycle time.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA VICTORY
Win with WIDIA™

- Provides positive retention for tapping applications.
- Design of slots in back of collet acts as a drive for the tap square.
- Can be used in all standard J-series double-angle collet chucks.
- Industry-standard Erickson™ double-angle collet system.





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DA-J Tap Collet • Metric DIN

tap size	order number	catalog number	collet series	D1	S10	L9
M1 & M1,8 & M3 & M3,5	**1274924**	**JTC025021M**	J	2,5	2,1	13,0
M3 & M5	**1274926**	**JTC035027M**	J	3,5	2,7	13,0
M4 & M6	**1274928**	**JTC045034M**	J	4,5	3,4	13,0
M5 & M6 & M7 & M8	**1274931**	**JTC060049M**	J	6,0	4,9	13,0
M10	**1274932**	**JTC070055M**	J	7,0	5,5	13,0
M8 & M10 & M11	**1228732**	**JTC080063M**	J	8,1	6,3	13,0

DA-J Tap Collet • Metric ISO

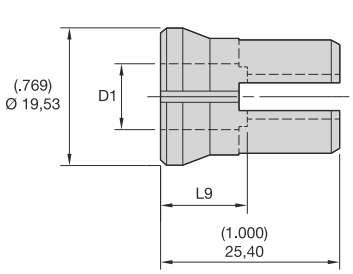
tap size	order number	catalog number	collet series	D1	S10	L9
M2,5 & M4	**1274925**	**JTC028021M**	J	2,8	2,1	13,0
M2,2 & M2,5	**1228728**	**JTC028022M**	J	2,8	2,2	13,0
M3 & M4	**1228729**	**JTC032025M**	J	3,2	2,5	13,0
M3,5 & M4,5	**1274927**	**JTC036028M**	J	3,6	2,8	13,0
M4 & M5	**1228730**	**JTC040032M**	J	4,0	3,2	13,0
M4,5 & M6	**1274929**	**JTC045036M**	J	4,5	3,6	13,0
12UNC/UNF	**1274930**	**JTC056045M**	J	5,6	4,5	–
M7	**1274933**	**JTC071056M**	J	7,1	5,6	13,0
M8 & M10 & M11	**1228732**	**JTC080063M**	J	8,1	6,3	13,0
M9 & M12	**1228733**	**JTC090071M**	J	9,0	7,1	13,0

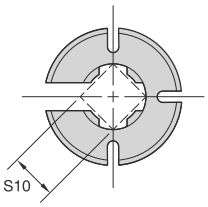
DA-J Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	order number	catalog number	collet series	D1	S10	L9
M3 & M3,15 & M3,5	0-#6 & 1/8	**1016411**	**JTC6**	J	.141	.110	.500
M4	8 & 5/32	**1016464**	**JTC8**	J	.168	.131	.500
M4,5 & M5	10 & 3/16	**1016467**	**JTC10**	J	.194	.152	.500
–	12 & 7/32	**1016470**	**JTC12**	J	.220	.165	.500
M6 & M6,3	14 & 1/4	**1016473**	**JTC025**	J	.255	.191	.500
M7 & M8	5/16	**1016529**	**JTC031**	J	.318	.238	.500
–	7/16	**1016532**	**JTC043**	J	.323	.242	.500
M12 & M12,5	1/2	**1016585**	**JTC050**	J	.367	.275	.500
M10	3/8	**1016589**	**JTC037**	J	.381	.286	.500

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Provides positive drive for tapping applications.
- Design of slots in back of collet acts as a drive for the tap square.
- Can be used in all standard J-series double-angle collet chucks.
- Industry-standard Erickson™ double-angle collet system.





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DA-K Tap Collet • Metric DIN

tap size	order number	catalog number	collet series	D1	S10	L9
M1 & M1,8 & M3 & M3,5	**1280271**	**KTC025021M**	K	2,5	2,1	13,0
M3 & M5	**1280273**	**KTC035027M**	K	3,5	2,7	13,0
M4 & M6	**1280274**	**KTC045034M**	K	4,5	3,4	13,0
M5 & M6 & M7 & M8	**1280275**	**KTC060049M**	K	6,0	4,9	13,0
M10	**1280277**	**KTC070055M**	K	7,0	5,5	13,0
M10	**1192315**	**KTC100080M**	K	10,0	8,0	13,0
M14	**1280279**	**KTC110090M**	K	11,0	9,0	13,0
M16	**1280280**	**KTC120090M**	K	12,0	9,0	13,0

DA-K Tap Collet • Metric ISO

tap size	order number	catalog number	collet series	D1	S10	L9
M2.5 & M4	**1280272**	**KTC028021M**	K	2,8	2,1	13,0
M3.5 & 4.5	**1192306**	**KTC036028M**	K	3,6	2,8	13,0
M4 & M5	**1192307**	**KTC040032M**	K	4,0	3,2	13,0
M4.5 & M6	**1192308**	**KTC045036M**	K	4,5	3,6	13,0
M5	**1192309**	**KTC050040M**	K	5,0	4,0	13,0
M7	**1192312**	**KTC071056M**	K	7,1	5,6	13,0
M8 & M10 & M11	**1192313**	**KTC080063M**	K	8,0	6,3	13,0
M9 & M12	**1192314**	**KTC090071M**	K	9,0	7,1	13,0
M14	**1192316**	**KTC112090M**	K	11,2	9,0	13,0

(continued)

(DA-K Series Double-Angle Solid Tap Collets continued)

DA-K Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	order number	catalog number	collet series	D1	S10	L9
M3 & M3,15 & M3,5	0-#6 & 1/8	**1016412**	**KTC6**	K	.141	.110	.480
M4	8 & 5/32	**1016465**	**KTC8**	K	.168	.131	.480
M4,5 & M5	10 & 3/16	**1016468**	**KTC10**	K	.194	.152	.480
—	12 & 7/32	**1016471**	**KTC12**	K	.220	.165	.480
M6 & M6,3	14 & 1/4	**1016524**	**KTC025**	K	.255	.191	.480
M7 & M8	5/16	**1016530**	**KTC031**	K	.318	.238	.480
—	7/16	**1016533**	**KTC043**	K	.323	.242	.480
M12 & M12,5	1/2	**1016586**	**KTC050**	K	.367	.275	.480
M10	3/8	**1016590**	**KTC037**	K	.381	.286	.480
M14	9/16	**1016592**	**KTC056**	K	.429	.322	.480

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
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- Provides positive drive for tapping applications.
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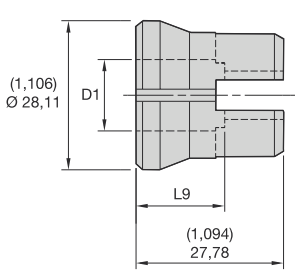
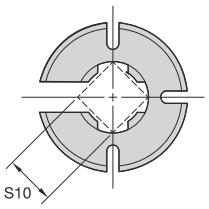
- Can be used in all standard J-series double-angle collet chucks.
- Industry-standard Erickson™ double-angle collet system.





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DA-L Tap Collet • Metric DIN

tap size	order number	catalog number	collet series	D1	S10	L9
M5 & M6 & M7 & M8	**1192328**	**LTC060049M**	L	6,0	4,9	15,0
M10	**1109575**	**LTC070055M**	L	7,0	5,5	15,0
M10	**1117803**	**LTC100080M**	L	10,0	8,0	15,0
M14	**1281835**	**LTC110090M**	L	11,0	9,0	15,0
M16	**1281837**	**LTC120090M**	L	12,0	9,0	15,0
M18	**1281838**	**LTC140110M**	L	14,0	11,0	15,0
M20	**1281839**	**LTC160120M**	L	16,0	12,0	15,0
M22 & M24	**1109574**	**LTC180145M**	L	18,0	14,5	15,0

DA-L Tap Collet • Metric ISO

tap size	order number	catalog number	collet series	D1	S10	L9
–	**1192329**	**LTC063050M**	L	6,3	4,9	15,0
M7	**1192330**	**LTC071056M**	L	7,1	5,6	15,0
M8 & M10 & M11	**1117802**	**LTC080063M**	L	8,0	6,3	15,0
M9 & M12	**1093758**	**LTC090071M**	L	9,0	7,1	15,0
(1/4BSPF)	**1192331**	**LTC109082M**	L	10,9	8,2	–
(1/8NPT) (ANSI)	**1192332**	**LTC111085M**	L	11,1	8,5	–
M14	**1281836**	**LTC112090M**	L	11,2	9,0	15,0
M16 (3/8BSP)	**1192333**	**LTC125100M**	L	12,5	10,0	15,0
M18 & M20	**1192335**	**LTC140112M**	L	14,0	11,2	15,0
(1/4NPT) (ANSI)	**1192336**	**LTC143107M**	L	14,3	10,7	–
M22	**1192337**	**LTC160125M**	L	16,0	12,5	15,0
M24	**1192338**	**LTC180140M**	L	18,0	14,0	15,0

(continued)

(DA-L Series Double-Angle Solid Tap Collets continued)

DA-L Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	order number	catalog number	collet series	D1	S10	L9
M3 & M3,15 & M3,5	0-#6 & 1/8	**1016413**	**LTC6**	L	.141	.110	.560
M4	8 & 5/32	**1016466**	**LTC8**	L	.168	.131	.560
M4,5 & M5	10 & 3/16	**1016469**	**LTC10**	L	.194	.152	.560
—	12 & 7/32	**1016472**	**LTC12**	L	.220	.165	.560
M6 & M6,3	14 & 1/4	**1016525**	**LTC025**	L	.255	.191	.560
M7 & M8	5/16	**1016531**	**LTC031**	L	.318	.238	.560
—	7/16	**1016584**	**LTC043**	L	.323	.242	.560
M12 & M12,5	1/2	**1016587**	**LTC050**	L	.367	.275	.560
M10	3/8	**1016591**	**LTC037**	L	.381	.286	.560
M14	9/16	**1016593**	**LTC056**	L	.429	.322	.560
M16	5/8	**1016658**	**LTC062**	L	.480	.360	.560
M18	11/16	**1016660**	**LTC069**	L	.542	.406	.560
—	3/4	**1016663**	**LTC075**	L	.590	.442	.560
M20	13/16	**1016705**	**LTC081**	L	.652	.489	.560
M22	7/8	**1016708**	**LTC087**	L	.697	.523	.560

NOTE: Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

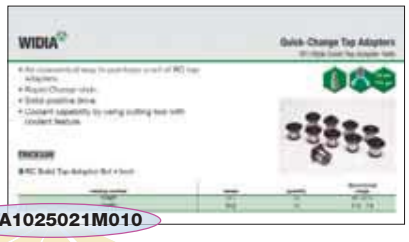
Erickson™ RC Rapid Quick-Change Tap Adapters • **Tapping**

Erickson RC Rapid Quick-Change Tap Adapters are convenient for hand changes with taps within seconds. No wrenches or locknuts are required. For this positive drive tap adapter, simply hold the tap in place with internal locking balls and drive on the tap square.

RC

- Compact Rapid Change by hand design.
- Solid positive drive.
- Coolant through the tap design.

- Rapid-change style.
- Solid-positive drive.
- Coolant capability by using cutting tool with coolant feature.
- For taps with DIN, ISO, and ANSI specifications.



RCTA1025021M010

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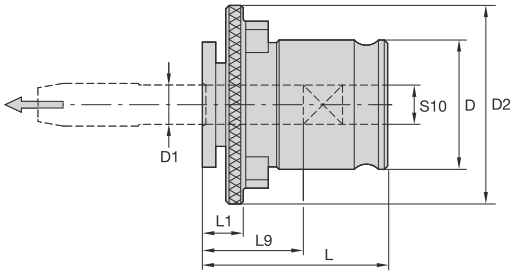
RC1	TA	025	021	M	010
System Size	Collet Style	Collet Bore Size	Collet Drive Size	Identification Value	Tap Size
RC1 = RC1 **RC2** = RC2 **RC3** = RC3	**TA** = Tap Adapter	**metric (xx.x)** **025** = 2,5mm **110** = 11mm **245** = 24,5mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2"	**metric (xx.x)** **010** = 1mm **160** = 16mm **245** = 24,5mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2" **1000** = 1"	**M** = Sleeve bore size built to metric values **IN** = Sleeve bore size built to inch values	**metric (xx.x)** **010** = 1mm **160** = 16mm **245** = 24,5mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2" **1000** = 1"

- Rapid Change style.
- Solid-positive drive.
- Coolant capability by using cutting tool with coolant feature.
- For taps with DIN, ISO, and ANSI specifications.



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RC Solid Tap Adapter • Metric DIN

tap size DIN	RC1 D = 19mm D2 = 30mm L = 28mm L1 = 7mm L9 = 17mm	RC2 D = 31mm D2 = 48mm L = 46mm L1 = 11mm L9 = 30mm	RC3 D = 48mm D2 = 70mm L = 70mm L1 = 14mm L9 = 44mm	D1	S10
M1 & M1.8 & M3 & M3.5	**RC1TA025021M010**	–	–	2,5	2,1
M2.5 & M4	**RC1TA028021M020**	–	–	2,8	2,1
M3 & M5	**RC1TA035027M030**	–	–	3,5	2,7
M3.5	**RC1TA040030M035**	–	–	4,0	3,0
M4 & M6	**RC1TA045034M040**	–	–	4,5	3,4
M4	–	**RC2TA045034M040**	–	4,5	3,4
M5 & M6 & M7 & M8	**RC1TA060049M050**	**RC2TA060049M050**	–	6,0	4,9
M10	**RC1TA070055M100**	**RC2TA070055M100**	–	7,0	5,5
M8	**RC1TA080062M080**	**RC2TA080062M080**	–	8,0	6,2
M12	**RC1TA090070M120**	**RC2TA090070M120**	–	9,0	7,0
M10	**RC1TA100080M100**	**RC2TA100080M100**	–	10,0	8,0
M14	**RC1TA110090M140**	**RC2TA110090M140**	**RC3TA110090M140**	11,0	9,0
M16	–	–	**RC3TA120090M160**	12,0	9,0
M16	–	**RC2TA120090M160**	–	12,9	9,0
M18	–	**RC2TA140110M180**	**RC3TA140110M180**	14,0	11,0
M20	–	**RC2TA160120M200**	**RC3TA160120M200**	16,0	12,0
M22 & M24	–	**RC2TA180145M220**	–	18,0	4,5
–	–	–	**RC3TA180140M240**	18,0	14,0
M22 & M24	–	–	**RC3TA180145M240**	18,0	14,5
M27	–	–	**RC3TA200160M300**	20,0	16,0
M30	–	–	**RC3TA220180M300**	22,0	18,0
M33	–	–	**RC3TA250200M360**	25,0	20,0
M36	–	–	**RC3TA280220M360**	28,0	22,0

(continued)

(RC-Style Solid Tap Adapters continued)

RC Solid Tap Adapter • Metric ISO

tap size	RC1 D = 19mm D2 = 30mm L = 28mm L1 = 7mm L9 = 17mm	RC2 D = 31mm D2 = 48mm L = 46mm L1 = 11mm L9 = 30mm	RC3 D = 48mm D2 = 70mm L = 70mm L1 = 14mm L9 = 44mm	D1	S10
M3	**RC1TA023018M030**	–	–	2,24	1,80
M2.2 & M2.5	**RC1TA028023M025**	–	–	2,80	2,24
M3 & M4	**RC1TA032025M030**	–	–	3,15	2,50
M3.5 & M4.5	**RC1TA036028M035**	–	–	3,55	2,80
M4 & M5	**RC1TA040032M040**	–	–	4,00	3,15
M4.5 & M6	**RC1TA045036M060**	**RC2TA045036M060**	–	4,50	3,55
M5	**RC1TA050040M050**	**RC2TA050040M050**	–	5,00	4,00
–	**RC1TA056045M000**	–	–	5,60	4,50
M6 & M8	**RC1TA063050M060**	**RC2TA063050M060**	–	6,30	5,00
M7	**RC1TA071056M070**	**RC2TA071056M070**	–	7,10	5,60
M8 & M10 & M11	**RC1TA080063M080**	**RC2TA080063M080**	–	8,00	6,30
M9 & M12	**RC1TA090071M090**	–	–	9,00	7,10
M9 & M12	–	**RC2TA090071M090**	–	9,00	7,10
M14	**RC1TA112090M140**	**RC2TA112090M140**	**RC3TA112090M140**	11,20	9,00
M16	–	**RC2TA125100M160**	–	12,50	10,00
M18 & M20	–	**RC2TA140112M180**	–	14,00	11,20
M22	–	**RC2TA160125M220**	**RC3TA160125M220**	16,00	12,50
M24	–	**RC2TA180140M240**	–	18,00	14,00
M33	–	–	**RC3TA224180M330**	22,40	18,00

(continued)

(RC-Style Solid Tap Adapters continued)

RC Solid Tap Adapter • Inch/Metric ANSI

tap size mm	tap size in	RC1 D = .750 D2 = 1.180 L = 1.100 L1 = .280	RC2 D = 1.220 D2 = 1.890 L = 1.810 L1 = .430	RC3 D = 1.890 D2 = 2.760 L = 2.760 L1 = .550	D1	S10
M3 & M3.18 & M3.5	#0 - #6 UNC/UNF	**T11006**	**–**	**–**	.141	.110
M4	#8 UNC/UNF	**T11007**	**–**	**–**	.168	.131
M4.5 & M5	#10 UNC/UNF	**T11008**	**–**	**–**	.194	.152
–	#12 UNC/UNF	**T11009**	**–**	**–**	.220	.165
M6 & M6.3	1/4 UNC/UNF	**T11010**	**–**	**–**	.255	.191
–	–	**T110166**	**–**	**–**	.313	.234
M7 & M8	5/16 UNC/UNF	**T11012**	**T21018**	**–**	.318	.238
–	7/16 UNC/UNF	**T11014**	**T21020**	**–**	.323	.242
M12 & M12.5	1/2 UNC/UNF	**T11015**	**T21021**	**–**	.367	.275
M10	3/8 UNC/UNF	**T11013**	**T21019**	**–**	.381	.286
M14	9/16 UNC/UNF	**T110155**	**T21022**	**–**	.429	.322
–	–	**T110177**		**–**	.438	.328
M16	5/8 UNC/UNF	**–**	**T21023**	**–**	.480	.360
M18	11/16 UNC/UNF	**–**	**T21024**	**–**	.542	.406
–	–	**–**	**T210288**	**–**	.563	.421
–	3/4 UNC/UNF	**–**	**T21025**	**–**	.590	.442
M20	13/16 UNC/UNF	**–**	**T21026**	**T31031**	.652	.489
–	–	**–**	**T210300**	**T310387**	.688	.515
M22	7/8 UNC/UNF	**–**	**T21027**	**T31032**	.697	.523
–	–	**–**	**T210299**		.700	.531
M24	15/16 UNC/UNF	**–**	**–**	**T31033**	.760	.570
M25	1 UNC/UNF	**–**	**–**	**T31034**	.800	.600
M27	1 1/8 UNC/UNF	**–**	**–**	**T31035**	.896	.672
–	–	**–**	**–**	**T310388**	.906	.679
–	1 1/4 UNC/UNF	**–**	**–**	**T31036**	1.021	.766
M30	1 3/8 UNC/UNF	**–**	**–**	**T31037**	1.108	.831
–	–	**–**	**–**	**T310389**	1.125	.843

- An economical way to purchase a set of RC tap adapters.
- Rapid Change style.
- Solid-positive drive.
- Coolant capability by using cutting tool with coolant feature.

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■ RC Solid Tap Adapter Set • Inch

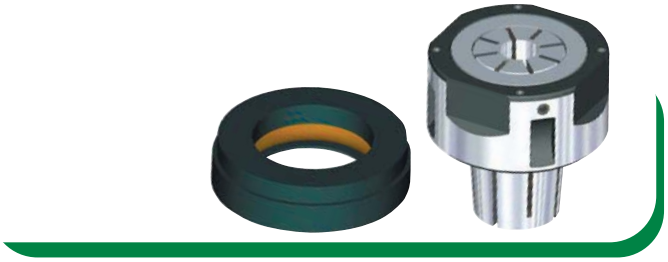
catalog number	series	quantity	dimensional range
T1SET	RC1	10	#0 - 9/16
T2SET	RC2	10	5/16 - 7/8

WIDIA

WIDIA

Accessories

Shrink Fit Axial Adjustment Gages **J2–J3**
TG Balanceable Round Locknuts **J3**
Balance Screw Sets **J4**
HC Hydraulic Chuck Test Pins **J4**
HC Hydraulic Chuck Cleaning Brushes **J5**
Collet Extractors TG **J5**
TG Round Flush-Face Locknuts **J6**
Coolant Disk Assemblies **J7**
TG Standard Round and Hex Locknuts **J8**
ER Standard Short and Slim Locknuts **J9**
ER Slim Coolant and Hex Locknuts **J10**
ER Coolant Hex and Standard Round Locknuts **J11**
ER Coolant Round Locknuts **J12**
Coolant Locknut Sealing Disks and Disk Sets **J13–J19**
ER16 . . . . . J13
ER20 . . . . . J14
ER25 . . . . . J15
ER32 . . . . . J16–J17
ER40 . . . . . J18–J19
Stop Screws **J20**
Coolant and Blank Caps **J22**
Extended Caps **J23**
Shell Mill Adapter Lock Screws **J24–J25**
Shell Mill Coolant Lock Screws **J26**
Tightening Fixtures **J26–J29**
KM Vise Mounts J26
KM4X and HSK Vise Mounts J27
HSK Universal Mounts and Sleeves J28
7/24 Steep Taper Vises and Universal Mounts J29
P-KM Spindle and HSK Plugs **J30**
KM, HSK, and 7/24 Steep Taper Spindle Wipers **J31**
HSK Coolant Supply Unit and Wrenches **J32**
Retention Knobs **J33–J38**
Socket Wrenches **J39**
KM Manual Torque Wrenches **J40**
KM-LOC II and KM-LOC Wrenches **J40**
T-Handle Hex Wrench Sets **J41**
Universal Bit Drivers **J42**
Driver Bits **J42**
Open-Ended Wrenches **J44**
Pin Spanner and Hook Spanner Wrenches **J45**



Shrink Fit Axial Adjustment Gages

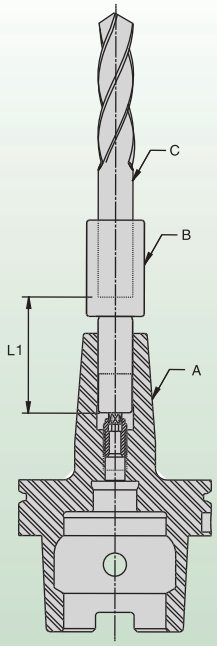
Cutting tool length adjustment is performed using a special axial adjusting gage (B) before shrinking the cutting tool into the toolholder.

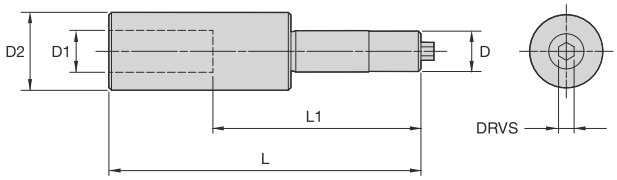
An axial adjustment gage is placed in the toolholder (A) along with the cutting tool (C). Length difference of the setting gage (L1) is calculated into the required tool assembly length.

The whole assembly then can be placed into a length presetter for adjustment.

Rotating the gage moves the axial stop screw and presets the assembled tool to the required length. Remove the gage; the cutting tool can then be shrunk into the toolholder.

In some cases, there are two different gage options for the D bore size. The only difference is the DRVS hex drive size to accommodate a recent DIN standard change.





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■ TTAAG • Metric

order number	catalog number	D	D1	D2	L	L1	DRVS
2441761	TTAAG03M	3	3	20	50	40	3mm
2456185	TTAAG04M	4	4	20	52	40	4mm
2456186	TTAAG05M	5	5	20	55	40	3mm
1801298	TTAAG06M	6	6	25	110	80	2,5mm
1775603	TTAAG08M	8	8	25	112	80	3mm
1775604	TTAAG10M	10	10	30	117	80	4mm
1775605	TTAAG12M	12	12	30	117	80	4mm
3110267	TTAAG12MX1	12	12	30	117	80	5mm
1775606	TTAAG14M	14	14	30	117	80	4mm
3110268	TTAAG14MX1	14	14	30	117	80	5mm
1775608	TTAAG16M	16	16	30	120	80	6mm
1775609	TTAAG18M	18	16	30	120	80	6mm
1775610	TTAAG20M	20	20	40	120	80	8mm
1784105	TTAAG25M	25	25	40	124	80	8mm
1775611	TTAAG32M	32	32	40	124	80	8mm

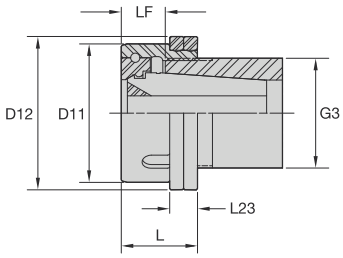
(continued)

(TTAAG continued)

■ TTAAG • Inch

order number	catalog number	D	D1	D2	L	L1	DRVS
1765666	**TTAAG025**	1/4	.250	.984	4.33	3.15	2,5mm
1765669	**TTAAG031**	5/16	.313	.984	4.41	3.15	3mm
1765670	**TTAAG038**	3/8	.375	1.181	4.61	3.15	4mm
1765671	**TTAAG044**	7/16	.438	1.181	4.41	3.15	4mm
3110269	**TTAAG044X1**	7/16	.438	1.181	4.41	3.15	5mm
1765702	**TTAAG050**	1/2	.500	1.181	4.61	3.15	4mm
3110270	**TTAAG050X1**	1/2	.500	1.181	4.61	3.15	5mm
1765703	**TTAAG056**	9/16	.563	1.181	4.61	3.15	4mm
3110271	**TTAAG056X1**	9/16	.563	1.181	4.61	3.15	5mm
1765704	**TTAAG062**	5/8	.625	1.181	4.72	3.15	6mm
1765705	**TTAAG068**	11/16	.688	1.181	4.72	3.15	6mm
1765707	**TTAAG075**	3/4	.750	1.575	4.72	3.15	8mm
1765708	**TTAAG088**	7/8	.875	1.575	4.72	3.15	8mm
1765709	**TTAAG100**	1	1.000	1.575	4.88	3.15	8mm
1765710	**TTAAG125**	1 1/4	1.250	1.850	4.88	3.15	8mm

• Balanceable and interchangeable locknuts can be ordered separately as an option to the original standard locknut supplied on collet chucks.



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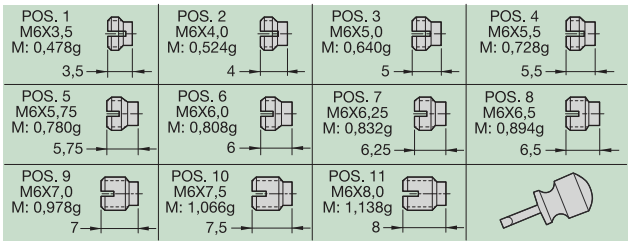
■ TG Locknut Round — Balanceable

		D11		D12		L		L23		LF						
order number	catalog number	mm	in	mm	in	mm	in	mm	in	mm	in	G3	wrench size	Nm	ft. lbs.	balance ring set
1020465	**HPVLNA050G**	38,0	1.50	42,5	1.67	20,0	.79	10,05	.40	9,7	.38	15/16-20 UNEF	HSW34M	81	60	**SHVBR0325M**
1091592	**HPVLNA075G**	50,0	1.97	56,5	2.22	25,0	.98	12,05	.47	14,4	.57	1 1/2-12 ACME	HSW45M	150	110	**SHVBR0445M**
1020466	**HPVLNA100G**	60,0	2.36	66,5	2.62	33,0	1.30	12,05	.47	19,1	.75	1 7/8-12 ACME	HSW58M	203	150	**SHVBR0545M**

Note: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten according to torque reccommendations.
Collet chuck technical section, see page K74.
Locknut wrench must be ordered separately.
Balance rings are supplied with locknut and adjustment directions.

- Standard balance screw set is used on HPMC bearing milling chuck.
- Total number of screws in each set is 110.
- All are M6 screws.
- Eleven different lengths from 3,5–8mm.
- Eleven different weights, 10 of each, varying between 0,047–1,138 grams.
- Set comes complete in a divider box and screwdriver.
- For high-performance milling choices.



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Balance Screw Set

order number	catalog number
3367391	HPMCBALSCREWSET

- It is important to periodically check the clamping function on a hydraulic chuck with a test pin for clamping clarity.
- The clamping grip can be checked quickly and easily by placing the correct test pin in the chuck bore and the turning the clamp screw to the limit stop. The chuck is functioning correctly if the testing pin cannot be moved by hand.

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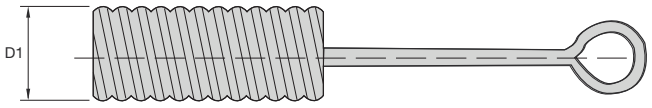
HC Test Pin • Metric

order number	catalog number	D
1191037	280.200	6
1191039	280.202	10
1191040	280.203	12
1245409	280.204	14
1191041	280.205	16
1245410	280.206	18
1191042	280.207	20
1245411	280.208	25
1191043	280.209	32

HC Test Pin • Inch

order number	catalog number	D
1247566	280.262	3/8
1247570	280.264	1/2
1247572	280.266	5/8
1247575	280.268	3/4
1247577	280.269	1

• Hydraulic chucks are maintenance-free and deliver a long service life.
A non-abrasive cleaning brush is recommended to help maintain the performance and accuracy of the clamping bore of the hydraulic chuck and reducing sleeves.



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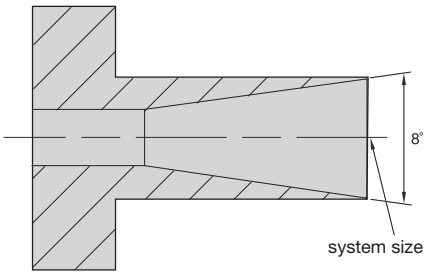
■ Cleaning Brush

order number	catalog number	D1 mm	D1 in
1138729	192.950	6	1/4
1138736	192.951	8	5/16
1138744	192.952	10	3/8
1138752	192.953	12	1/2
1138759	192.954	14	9/16
1138766	192.955	16	5/8
1138914	192.956	18	11/16
1138853	192.957	20	3/4
1138922	192.958	25	1
1138930	192.959	32	1 1 /4

• Assists with collet extraction from locknut.



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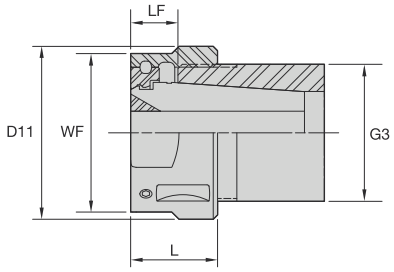
■ TG • CE

order number	catalog number	system size
1106809	50TGCE	TG50
1106812	75TGCE	TG75
1106813	100TGCE	TG100
1106814	150TGCE	TG150

- TG flush mount, coolant-capable locknuts, and coolant disks/caps can be used on all standard WIDIA™ collet chucks to seal standard TG collets.
- Face is completely flush.
- Includes the WIDIA original ball bearing race design.
- External diameter is the same as existing global round TG locknut.
- Operated by a standard open-ended wrench or the original hook-style wrench.
- TG flush mount coolant capable locknuts and coolant disks/caps are interchangeable with existing designs.
- Utilizes standard TG collets.



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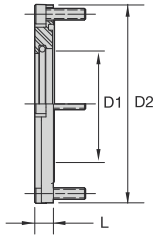
■ TG Locknut • Round Flush Face

order number	catalog number	D11 mm	D11 in	L mm	L in	LF mm	LF in	WF	G3	wrench size	Nm	ft. lbs.
2980879	**LNATGF050M**	38	1.50	18,3	.72	10,6	.42	34	15/16-20 UNEF	**HSW34M**	81	60
2980880	**LNATGF075M**	50	1.97	23,4	.92	13,0	.51	46	1 1/2-12 ACME	**HSW45M**	150	110
2980881	**LNATGF100M**	60	2.36	30,2	1.19	16,4	.65	55	1 7/8-12 ACME	**HSW58M**	203	150

NOTE: Locknut wrench must be ordered separately.
WF = Open-ended wrench size.

- TG coolant disk cap assemblies are used in conjunction with the TG flush-style locknuts and collet chucks to seal standard TG collets.
- Utilizes the ER coolant disks.
- High-pressure coolant up to 150 bar (1,500 psi).
- Withstands most of today's coolants.
- Seals against chip packing and machined contaminants.



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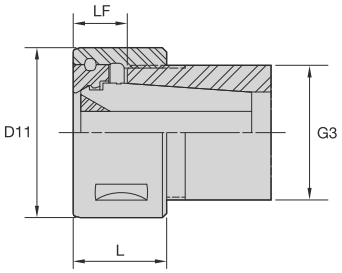
TG Nut • Coolant Disk Assembly

order number	catalog number	D1 mm	D1 in	D2 mm	D2 in	L mm	L in	lock screw	locknut reference	ER coolant disk reference	Nm	ft. lbs.
2980882	**TG050CDA**	21,0	.827	40	1.6	5,7	.22	**MS311**	**LNATGF050M**	**ER25**	25	18
2980893	**TG075CDA**	27,0	1.063	50	2.0	5,7	.22	**MS1488**	**LNATGF075M**	**ER32**	25	18
2980894	**TG100CDA**	33,5	1.319	60	2.4	5,7	.22	**MS1488**	**LNATGF100M**	**ER40**	25	18

NOTE: Tighten the four assembly screws to the recommended tightening torque.
Assembly screws to locknuts are supplied with the appropriate wrench.
ER coolant disks must be ordered separately; see page J13.
Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to torque recommendations.
Collet chuck technical section, see page K74.
Locknut wrench must be ordered separately.

- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.



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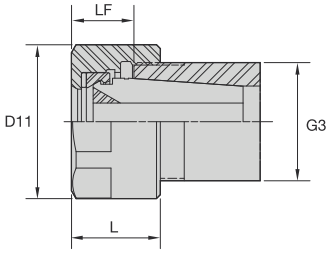
■ TG Locknut • Round

		D11		L		LF					
order number	catalog number	mm	in	mm	in	mm	in	G3	locknut wrench	Nm	ft. lbs.
1013486	**LNA075M**	50,0	1.97	25,0	.98	14,4	.57	1 1/2-12 ACME	**HSW45M**	136	100
1013485	**LNA100M**	60,0	2.36	33,0	1.30	19,1	.75	1 7/8-12 ACME	**HSW58M**	203	150
1013484	**LNA150M**	85,0	3.35	37,0	1.46	18,0	.71	2 5/8-12 ACME	**HSW80M**	271	200
1020326	**NPA150**	88,3	3.48	34,9	1.38	18,6	.73	2 5/8-12 ACME	**PSW350**	271	200

NOTE: Locknut wrench must be ordered separately.



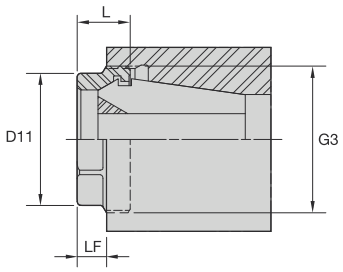
ERICKSON

■ TG Locknut • Hex

		D11		L		LF						
order number	catalog number	mm	in	mm	in	mm	in	G3	locknut wrench	WF	Nm	ft. lbs.
1020290	**NPA050**	30,2	1.19	21,4	.84	14,6	.58	15/16-20 2B	**OEW106**	1 1/16	102	75
4134686	**LN050M**	34,0	1.34	19,0	.75	9,8	.38	15/16-20 UNEF	**OEW30M**	30mm	136	100
1020289	**NPA075**	53,2	2.09	28,4	1.12	19,7	.78	1 1/2-12 ACME	**OEW188**	1 7/8	136	100
1020331	**NPA100**	61,9	2.44	35,7	1.41	25,1	.99	1 7/8-12 ACME	**OEW225**	2 1/4	203	150

NOTE: Locknut wrench must be ordered separately.
WF = Open-ended wrench size.

- Standard and replaceable locknuts are supplied as the standard option with the original short-style collet chuck.

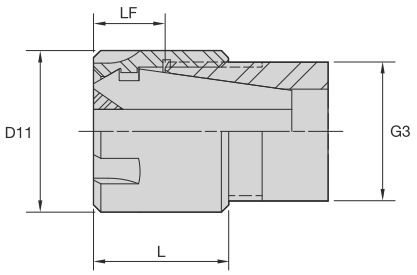


ERICKSON

ER Locknut • Short

order number	catalog number	collet series	D11 mm	D11 in	L mm	L in	LF mm	LF in	G3	locknut wrench	wrench size	Nm	ft. lbs.
2978768	**LNECSER32M**	ER32	35,9	1.41	14,4	.57	8	.32	M40 x 1.5	**OEW32M**	32	136	100
2978769	**LNECSER40M**	ER40	46,0	1.81	16,0	.63	8	.32	M50 x 1.5	**OEW168**	1 11/16	176	130

NOTE: Locknut wrench must be ordered separately.



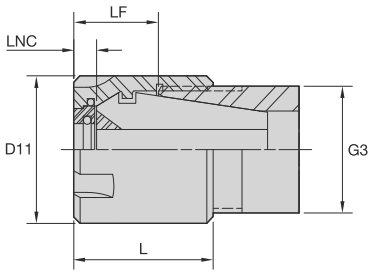
ERICKSON

ER Locknut • Slim

order number	catalog number	collet series	D11 mm	D11 in	L mm	L in	LF mm	LF in	G3	locknut wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (in. lbs.)	straight collet torque (in. lbs.)
1024642	**LER08M**	ER08	12	.47	10,8	.43	6,1	.24	M10 X .75	**ER08WEM**	5	5	42	42
1024643	**LER11M**	ER11	16	.63	12,0	.47	7,5	.30	M13 X .75	**ER11WEM**	12	16	106	142
1016342	**LER16M**	ER16	22	.87	18,4	.72	11,5	.45	M19 X 1	**ER16WEM**	24	24	212	212
1799219	**LER20M**	ER20	28	1.10	19,0	.75	11,5	.45	M24 X 1	**ER20WEM**	28	28	248	248

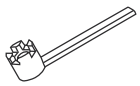
NOTE: Locknut wrench must be ordered separately.

- Interchangeable with slim locknuts.
- Must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page J13.



ERICKSON

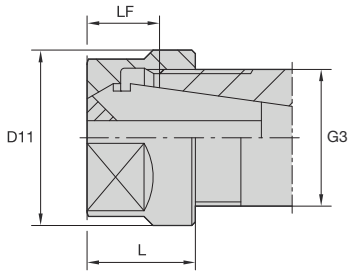
ER Locknut • Slim Coolant



order number	catalog number	collet series	D11 mm	D11 in	L mm	L in	LNC mm	LNC in	LF mm	LF in	G3	locknut wrench	Nm	in. lbs.
2255307	**LABER16M**	ER16	22	.87	22	.87	4,5	.18	11,5	.45	M19 X 1	**ER16WEM**	24	212
2398953	**LABER20M**	ER20	28	1.10	24	.94	5,0	.20	13,0	.51	M24 X 1	**ER20WEM**	28	248

NOTE: Locknut wrench must be ordered separately.

- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.



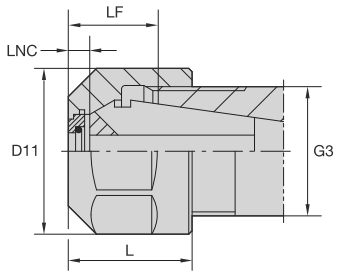
ERICKSON

ER Locknut • Hex

order number	catalog number	collet series	D11 mm	D11 in	L mm	L in	LF mm	LF in	G3	locknut wrench	wrench size	Nm	ft. lbs.	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)
3062811	**LNHSER16M**	ER16	28,0	1.10	17,5	.69	10,5	.41	M22 X 1.5	**OEW25M**	25mm	56	42	40	56	30	42
3062812	**LNHSER20M**	ER20	34,0	1.34	19,0	.75	11,5	.45	M25 X 1.5	**OEW30M**	30mm	80	59	32	80	24	59

NOTE: Locknut wrench must be ordered separately.

- Interchangeable with standard locknuts.
- Must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page J13.



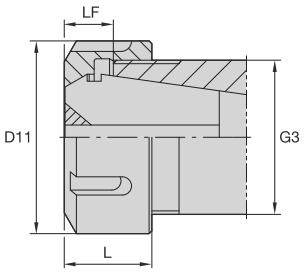
ERICKSON

ER Locknut Hex • Coolant

order number	catalog number	collet series	D11 mm	D11 in	L mm	L in	LNC mm	LNC in	LF mm	LF in	G3	locknut wrench	wrench size	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)
1854738	**LNHABER16M**	ER16	28,0	1.10	22,5	.89	5,0	.20	15,5	.61	M22 X 1.5	**OEW25M**	25mm	40	56	30	42
1859410	**LNHABER20M**	ER20	34,0	1.34	24,0	.94	5,0	.20	16,5	.65	M25 X 1.5	**OEW30M**	30mm	32	80	24	59

NOTE: Locknut wrench must be ordered separately.

- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.



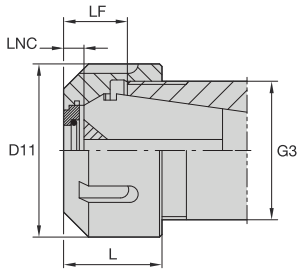
ERICKSON

ER Locknut • Round

order number	catalog number	collet series	D11 mm	D11 in	L mm	L in	LF mm	LF in	G3	locknut wrench	Nm	ft. lbs.
3063113	**LNSER25M**	ER25	42	1.65	20	.79	12	.47	M32 X 1.5	**ER25WM**	104	77
3063114	**LNSER32M**	ER32	50	1.97	23	.89	13	.51	M40 X 1.5	**ER32WM**	136	100
3063115	**LNSER40M**	ER40	63	2.48	26	1.00	15	.59	M50 X 1.5	**ER40WM**	176	130

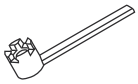
NOTE: Locknut wrench must be ordered separately.

- Interchangeable with standard locknuts; must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page J13.



ERICKSON

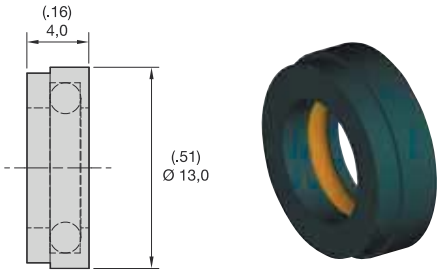
ER Locknut Round • Coolant



order number	catalog number	collet series	D11 mm	D11 in	L mm	L in	LNC mm	LNC in	LF mm	LF in	G3	locknut wrench	Nm	ft. lbs.
1127154	**LNABER25M**	ER25	42	1.65	25,0	.98	5	.20	17	.67	M32 X 1.5	**ER25WM**	104	77
1128857	**LNABER32M**	ER32	50	1.97	27,5	1.08	5	.20	18	.71	M40 X 1.5	**ER32WM**	136	100
1125692	**LNABER40M**	ER40	63	2.48	30,5	1.20	5	.20	20	.79	M50 X 1.5	**ER40WM**	176	130

NOTE: Locknut wrench must be ordered separately.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized replaceable O-rings.

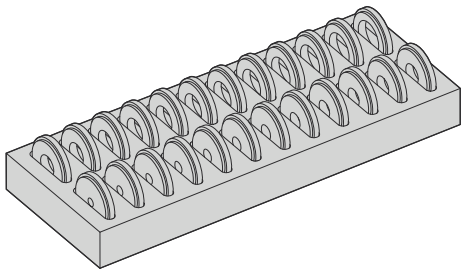


ERICKSON

ER16 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1128244	**CDER16035M**	ER16	3,0–3,5	.1181–.1387	1/8
1122128	**CDER16040M**	ER16	3,5–4,0	.1378–.1575	5/32
1125973	**CDER16045M**	ER16	4,0–4,5	.1575–.1772	—
1125741	**CDER16050M**	ER16	4,5–5,0	.1772–.1969	3/16
1260100	**CDER16055M**	ER16	5,0–5,5	.1969–.2165	7/32
1130781	**CDER16060M**	ER16	5,5–6,0	.2165–.2362	—
1260101	**CDER16065M**	ER16	6,0–6,5	.2362 -.2559	1/4
1260102	**CDER16070M**	ER16	6,5–7,0	.2559–.2756	—
1260103	**CDER16075M**	ER16	7,0–7,5	.2756–.2953	9/32
1124948	**CDER16080M**	ER16	7,5–8,0	.3150–.3347	5/16
1254499	**CDER16085M**	ER16	8,0–8,5	.3150–.3347	—
1120977	**CDER16090M**	ER16	8,5–9,0	.3347–.3543	11/32
1260104	**CDER16095M**	ER16	9,0–9,5	.3543–.3740	3/8
1128201	**CDER16100M**	ER16	9,5–10,0	.3740–.3937	—

- An economical way to purchase a group of coolant disks.



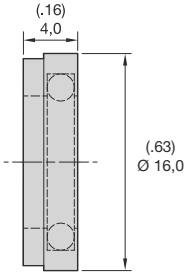
ERICKSON

ER16 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1148501	**CDER16000M**	ER16	14	3,5mm–10mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.

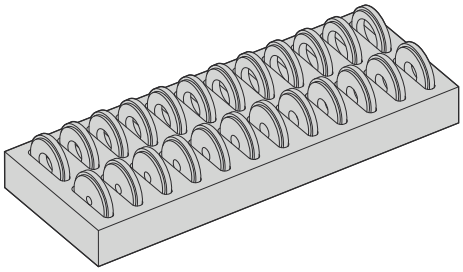


ERICKSON

■ ER20 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1882862	CDER20030M	ER20	2,5–3,0	.0984–.1181	—
2046541	CDER20035M	ER20	3,0–3,5	.1181–.1387	1/8
2046542	CDER20040M	ER20	3,5–4,0	.1378–.1575	5/32
1785844	CDER20045M	ER20	4,0–4,5	.1575–.1772	—
2046613	CDER20050M	ER20	4,5–5,0	.1772–.1969	3/16
2046614	CDER20055M	ER20	5,0–5,5	.1969–.2165	7/32
1600448	CDER20060M	ER20	5,5–6,0	.2165–.2362	—
2046615	CDER20065M	ER20	6,0–6,5	.2362 -.2559	1/4
1821042	CDER20070M	ER20	6,5–7,0	.2559–.2756	—
2046616	CDER20075M	ER20	7,0–7,5	.2756–.2953	9/32
1568338	CDER20080M	ER20	7,5–8,0	.3150–.3347	5/16
2046617	CDER20085M	ER20	8,0–8,5	.3150–.3347	—
1567466	CDER20090M	ER20	8,5–9,0	.3347–.3543	11/32
2046618	CDER20095M	ER20	9,0–9,5	.3543–.3740	3/8
1747032	CDER20100M	ER20	9,5–10,0	.3740–.3937	—
2046619	CDER20105M	ER20	10,0–10,5	.3937–.4134	13/32
1923780	CDER20110M	ER20	10,5–11,0	.4314–.4330	—
2046620	CDER20115M	ER20	11,0–11,5	.4330–.4528	7/16
1883015	CDER20120M	ER20	11,5–12,0	.4528–.4724	15/32
2046621	CDER20125M	ER20	12,0–12,5	.4724–.4921	—
2046622	CDER20130M	ER20	12,5–13,0	.4921–.5118	1/2

- An economical way to purchase a group of coolant disks.



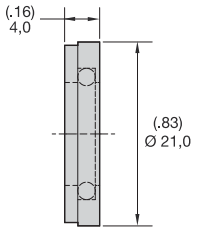
ERICKSON

■ ER20 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1720848	CDER20000M	ER20	20	3,5mm–13mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.

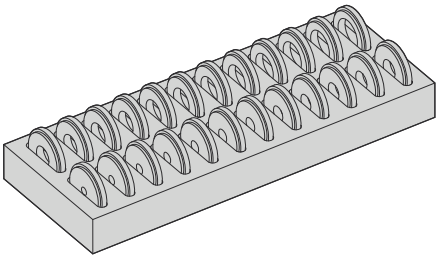


ERICKSON

ER25 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1820323	CDER25035M	ER25	3,0–3,5	.1181–.1387	1/8
1136043	CDER25040M	ER25	3,5–4,0	.1378–.1575	5/32
1260105	CDER25045M	ER25	4,0–4,5	.1575–.1772	—
1130194	CDER25050M	ER25	4,5–5,0	.1772–.1969	3/16
1260114	CDER25150M	ER25	4,5–5,0	.1772–.1969	3/16
1260115	CDER25155M	ER25	5,0–5,5	.1969–.2165	7/32
1260106	CDER25055M	ER25	5,0–5,5	.1969–.2165	7/32
1127146	CDER25060M	ER25	5,5–6,0	.2165–.2362	—
1260107	CDER25065M	ER25	6,0–6,5	.2263 -.2559	1/4
1126670	CDER25070M	ER25	6,5–7,0	.2559–.2756	—
1260108	CDER25075M	ER25	7,0–7,5	.2756–.2953	9/32
1126599	CDER25080M	ER25	7,5–8,0	.3150–.3347	—
1126607	CDER25085M	ER25	8,0–8,5	.3150–.3347	—
1129478	CDER25090M	ER25	8,5–9,0	.3347–.3543	11/32
1260109	CDER25095M	ER25	9,0–9,5	.3543–.3740	3/8
1126613	CDER25100M	ER25	9,5–10,0	.3740–.3937	—
1124966	CDER25105M	ER25	10,0–10,5	.3937–.4134	13/32
1126677	CDER25110M	ER25	10,5–11,0	.4134–.4330	—
1260110	CDER25115M	ER25	11,0–11,5	.4330–.4528	7/16
1125474	CDER25120M	ER25	11,5–12,0	.4528–.4724	15/32
1260111	CDER25125M	ER25	12,0–12,5	.4724–.4921	—
1129141	CDER25130M	ER25	12,5–13,0	.4921–.5118	1/2
1260112	CDER25135M	ER25	13,0–13,5	.5118–.5315	17/32
1125481	CDER25140M	ER25	13,5–14,0	.5315–.5512	—
1260113	CDER25145M	ER25	14,0–14,5	.5512–.5709	9/16
1128486	CDER25160M	ER25	15,5–16,0	.6102–.6300	5/8

- An economical way to purchase a group of coolant disks.



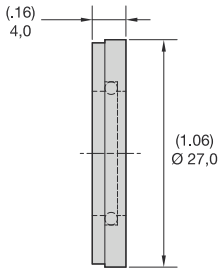
ERICKSON

ER25 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1254501	CDER25000M	ER25	26	3,5mm–16mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.

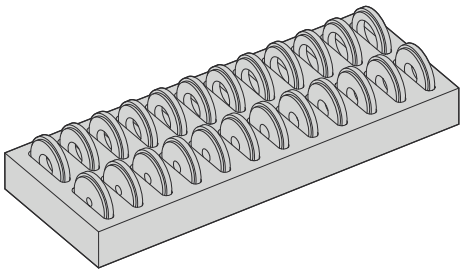


ERICKSON

ER32 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1120969	**CDER32035M**	ER32	3,0–3,5	.1181–.1387	1/8
1125347	**CDER32040M**	ER32	3,5–4,0	.1378–.1575	5/32
1260116	**CDER32045M**	ER32	4,0–4,5	.1575–.1772	–
1148555	**CDER32050M**	ER32	4,5–5,0	.1772–.1969	3/16
1260117	**CDER32055M**	ER32	5,0–5,5	.1969–.2165	7/32
1121104	**CDER32060M**	ER32	5,5–6,0	.2165–.2362	–
1120661	**CDER32065M**	ER32	6,0–6,5	.2362 -.2559	1/4
1131561	**CDER32070M**	ER32	6,5–7,0	.2559–.2756	–
1260118	**CDER32075M**	ER32	7,0–7,5	.2756–.2953	9/32
1132831	**CDER32080M**	ER32	7,5–8,0	.3150–.3347	5/16
1260119	**CDER32085M**	ER32	8,0–8,5	.3150–.3347	–
1122258	**CDER32090M**	ER32	8,5–9,0	.3347–.3543	11/32
1260120	**CDER32095M**	ER32	9,0–9,5	.3543–.3740	3/8
1136052	**CDER32100M**	ER32	9,5–10,0	.3740–.3937	–
1260121	**CDER32105M**	ER32	10,0–10,5	.3937–.4134	13/32
1135241	**CDER32110M**	ER32	10,5–11,0	.4134–.4330	–
1260122	**CDER32115M**	ER32	11,0–11,5	.4330–.4528	7/16
1128840	**CDER32120M**	ER32	11,5–12,0	.4528–.4724	15/32
1125490	**CDER32125M**	ER32	12,0–12,5	.4724–4921	–
1126728	**CDER32130M**	ER32	12,5–13,0	.4921–.5118	1/2
1260123	**CDER32135M**	ER32	13,0–13,5	.5118–.5315	17/32
1132848	**CDER32140M**	ER32	13,5–14,0	.5315–.5512	–
1127692	**CDER32145M**	ER32	14,0–14,5	.5512–.5709	9/16
1232472	**CDER32150M**	ER32	14,5–15,0	.5709–.5905	–
1260124	**CDER32155M**	ER32	15,0–15,5	.5905–.6102	19/32
1125023	**CDER32160M**	ER32	15,5–16,0	.6102–.6300	5/8
1260125	**CDER32165M**	ER32	16,0–16,5	.6300–.6496	–
1260126	**CDER32170M**	ER32	16,5–17,0	.6496–.6693	21/32
1260127	**CDER32175M**	ER32	17,0–17,5	.6693–.6890	11/16
1126732	**CDER32180M**	ER32	17,5–18,0	.6890–.7087	–
1260128	**CDER32185M**	ER32	18,0–18,5	.7087–.7284	23/32
1155337	**CDER32190M**	ER32	18,5–19,0	.7284–.7480	3/4
1260129	**CDER32195M**	ER32	19,0–19,5	.7480–.7677	–
1124951	**CDER32200M**	ER32	19,5–20,0	.7677–.7874	25/32

• An economical way to purchase a group of coolant disks.



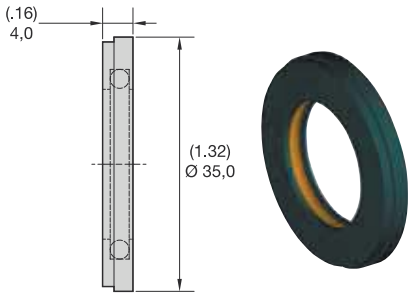
ERICKSON

ER32 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1123496	**CDER32000M**	ER32	34	3,5mm–20mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.



ERICKSON

ER40 Locknut Coolant Seal Disk

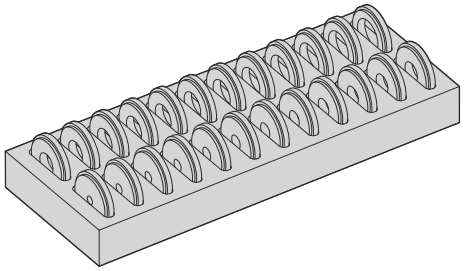
order number	catalog number	collet series	range metric	range inch	range fraction
1260131	**CDER40035M**	ER40	3,0–3,5	.1181–.1387	1/8
1260132	**CDER40040M**	ER40	3,5–4,0	.1378–.1575	5/32
1260133	**CDER40045M**	ER40	4,0–4,5	.1575–.1772	—
1260134	**CDER40050M**	ER40	4,5–5,0	.1772–.1969	3/16
1260135	**CDER40055M**	ER40	5,0–5,5	.1969–.2165	7/32
1128810	**CDER40060M**	ER40	5,5–6,0	.2165–.2362	—
1260136	**CDER40065M**	ER40	6,0–6,5	.2362 -.2559	1/4
1128828	**CDER40070M**	ER40	6,5–7,0	.2559–.2756	—
1260137	**CDER40075M**	ER40	7,0–7,5	.2756–.2953	9/32
1126684	**CDER40080M**	ER40	7,5–8,0	.3150–.3347	5/16
1260138	**CDER40085M**	ER40	8,0–8,5	.3150–.3347	—
1129486	**CDER40090M**	ER40	8,5–9,0	.3347–.3543	11/32
1260139	**CDER40095M**	ER40	9,0–9,5	.3543–.3740	3/8
1128834	**CDER40100M**	ER40	9,5–10,0	.3740–.3937	—
1260140	**CDER40105M**	ER40	10,0–10,5	.3937–.4134	13/32
1125622	**CDER40110M**	ER40	10,5–11,0	.4134–.4330	—
1260141	**CDER40115M**	ER40	11,0–11,5	.4330–.4528	7/16
1125678	**CDER40120M**	ER40	11,5–12,0	.4528–.2724	15/32
1260142	**CDER40125M**	ER40	12,0–12,5	.4724–.4921	—
1260143	**CDER40130M**	ER40	12,5–13,0	.4921–.5118	1/2
1260144	**CDER40135M**	ER40	13,0–13,5	.5118–.5315	17/32
1128841	**CDER40140M**	ER40	13,5–14,0	.5315–.5512	—
1260145	**CDER40145M**	ER40	14,0–14,5	.5512–.5709	9/16
1128848	**CDER40150M**	ER40	14,5–15,0	.5709–.5905	—
1260146	**CDER40155M**	ER40	15,0–15,5	.5905–.6102	19/32
1125686	**CDER40160M**	ER40	15,5–16,0	.6102–.6300	5/8
1260147	**CDER40165M**	ER40	16,0–16,5	.6300–.6496	—
1125623	**CDER40170M**	ER40	16,5–17,0	.6496–.6693	21/32

(continued)

(ER40 Locknut Coolant Seal Disk continued)

order number	catalog number	collet series	range metric	range inch	range fraction
1260148	**CDER40175M**	ER40	17,0–17,5	.6693–.6890	11/16
1128856	**CDER40180M**	ER40	17,5–18,0	.6890–.7087	—
1260149	**CDER40185M**	ER40	18,0–18,5	.7087–.7248	23/32
1260150	**CDER40190M**	ER40	18,5–19,0	.7284–.7480	3/4
1260151	**CDER40195M**	ER40	19,0–19,5	.7480–.7677	—
1128845	**CDER40200M**	ER40	19,5–20,0	.7677–.7874	25/32
1260152	**CDER40205M**	ER40	20,0–20,5	.7874–.8071	—
1260153	**CDER40215M**	ER40	21,0–21,5	.7874–.8465	27/32
1129413	**CDER40210M**	ER40	20,5–21,0	.8071–.8268	13/16
1121616	**CDER40220M**	ER40	21,5–22,0	.8465–.8661	—
1254500	**CDER40230M**	ER40	22,5–23,0	.8858–.9055	29/32
1260154	**CDER40225M**	ER40	23,0–23,5	.9055–.9252	—
1260155	**CDER40235M**	ER40	23,0–23,5	.9055–.9252	—
1260156	**CDER40240M**	ER40	23,5–24,0	.9252–.9449	15/16
1260157	**CDER40245M**	ER40	24,0–24,5	.9449–.9646	—
1128850	**CDER40250M**	ER40	24,5–25,0	.9646–.9843	31/32
1971143	**CDER40255M**	ER40	25,0–25,5	.9843–1.0039	1
1124539	**CDER40260M**	ER40	25,5–26,0	1.0039–1.0236	—

• An economical way to purchase a group of coolant disks.



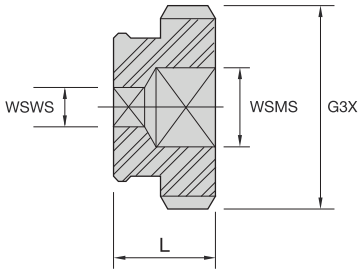
ERICKSON

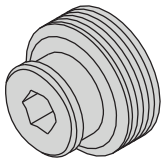
■ ER40 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1260130	**CDER40000M**	ER40	46	3,5mm–26mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- Replacement stop screws.
- Coolant, blank, and extended caps are available for added capabilities.





ERICKSON

■ Stop Screw

order number	catalog number	L mm	L in	WSWS wrench size	WSMS wrench size	G3X
1019943	**SS031031G**	7,9	.31	4mm & 5/32	—	5/16-24UNF LH
1019975	**SS038031G**	7,9	.31	4mm & 5/32	—	3/8-24UNF LH
1019977	**SS044038G**	9,5	.38	4mm & 5/32	—	7/16-20UNF LH
1019979	**SS050038G**	9,5	.38	4mm & 5/32	—	1/2-20UNF LH
1019981	**SS056041G**	9,5	.38	4mm & 5/32	—	9/16-18UNF LH
1019983	**SS062041G**	9,5	.38	4mm & 5/32	—	5/8-18UNF LH
1019985	**SS075041G**	10,3	.41	4mm & 5/32	—	3/4-16UNF LH
1019987	**SS081041G**	10,3	.41	4mm & 5/32	8mm & 5/16	13/16-16UN LH
1019989	**SS094041G**	10,3	.41	4mm & 5/32	8mm & 5/16	15/16-16UN LH
1019991	**SS112041G**	10,3	.41	4mm & 5/32	8mm & 5/16	1 1/8-16UN LH
1020023	**SS125050G**	12,7	.50	4mm & 5/32	8mm & 5/16	1 1/4-12UNF LH
1020017	**SS162062G**	15,8	.62	4mm & 5/32	8mm & 5/16	1 5/8-12UN LH
1020049	**SS175062G**	15,8	.62	4mm & 5/32	8mm & 5/16	1 3/4-12UN LH

WIN WITH WIDIA™

WIDIA™ M690 90° Shoulder Mill Series

M690 SD1204.. | **M690 SD1506..**

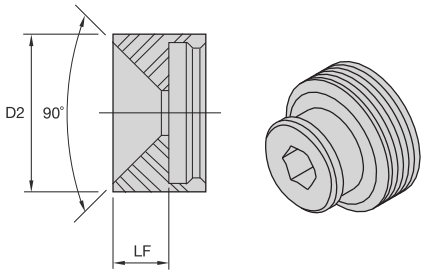
Strong and specially designed to streamline most milling operations, M690 Series 90º shoulder mills enable excellent shoulder finishes, enhanced chip evacuation, and optimal insert support.

- Sturdy tool design for maximum safety and productivity.
- Four cutting edges for economical and reliable machining.
- Superior shoulder finishes and smooth cutting action.

To learn more, contact your local Authorized Distributor or visit **www.widia.com.**

WIDIA™

- Stop screw caps can easily be snapped onto their respective stop screws, referenced in the first column in respective tables below, for added capabilities.

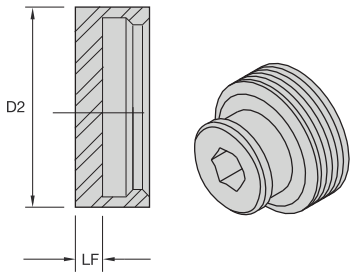


ERICKSON

Coolant Cap

order number	catalog number	D2 mm	D2 in	LF mm	LF in	stop screw reference
1021134	**SSCC031**	6,5	.25	2,4	.09	SS031031G
1021138	**SSCC044**	9,5	.37	3,0	.12	SS044038G
1021140	**SSCC050**	11,0	.43	3,0	.12	SS050038G
1021142	**SSCC056**	12,0	.47	4,0	.16	SS056041G
1092046	**SSCC062**	14,0	.55	4,5	.18	SS062041G
1021154	**SSCC075**	17,0	.67	6,0	.24	SS075041G
1021156	**SSCC081**	17,0	.67	6,0	.24	SS081041G
1021158	**SSCC094**	21,8	.86	8,5	.33	SS094041G
1021160	**SSCC112**	24,5	.97	9,8	.38	SS112041G
1021162	**SSCC125**	29,0	1.14	12,0	.47	SS125050G
1021176	**SSCC162**	37,0	1.46	15,5	.61	SS162062G
1021178	**SSCC175**	42,0	1.65	18,5	.73	SS175062G

NOTE: For use with through-coolant applications for improved sealing.

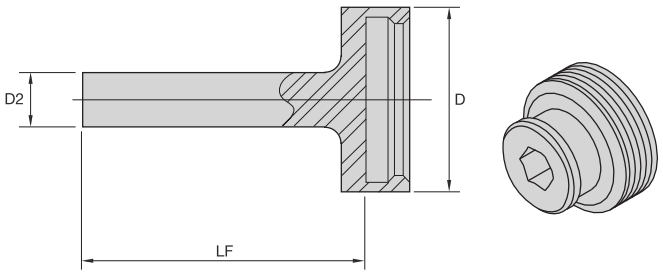


Blank Cap

order number	catalog number	D2 mm	D2 in	LF mm	LF in	stop screw reference
1021180	**SSC031**	6,5	.26	2,2	.09	SS031031G
1021204	**SSC044**	9,5	.37	2,2	.09	SS044038G,SS0500384
1021206	**SSC056**	12,0	.47	2,2	.09	SS075041G,SS056041G,SS062041G
1021208	**SSC081**	17,0	.67	2,2	.09	SS081041G,SS094041G

NOTE: A solid cap for small-diameter cutting tools with no through-coolant capability.

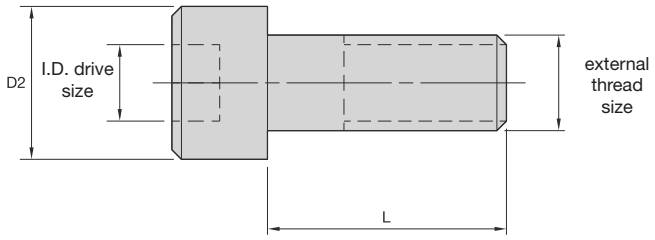
- Stop screw caps can easily be snapped onto their respective stop screws, referenced in the first column in respective tables below, for added capabilities.

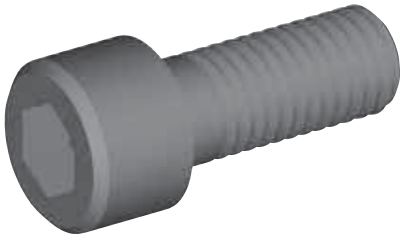


Extended Cap

order number	catalog number	D mm	D in	D2 mm	D2 in	LF mm	LF in	stop screw reference
1021216	**SSC038081**	8,1	.32	8,1	.32	20,5	.81	SS038031G
1021220	**SSC056066**	12,0	.47	5,0	.20	16,7	.66	SS094041G,SS075041G,SS056041G
1021222	**SSC081103**	17,0	.67	5,0	.20	26,2	1.03	SS094041G,SS081041G
1021254	**SSC112150**	24,5	.96	12,0	.47	38,1	1.50	SS150062G,SS125050G,SS112041G

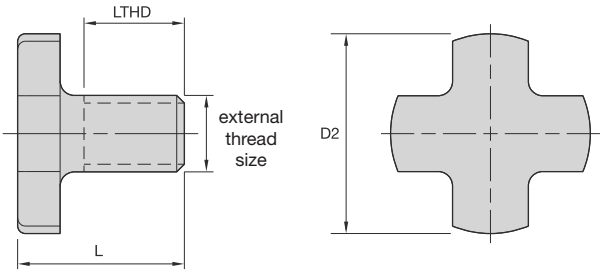
NOTE: For greater access and reaching inside collet cavities.





SM Cap Lock Screw • Metric

order number	catalog number	external thread size	D2	L	I.D. drive size
1905810	**MS1294**	M8X1.25	13,0	25,0	6mm
1129648	**MS1234**	M10X1.5	16,0	25,0	8mm

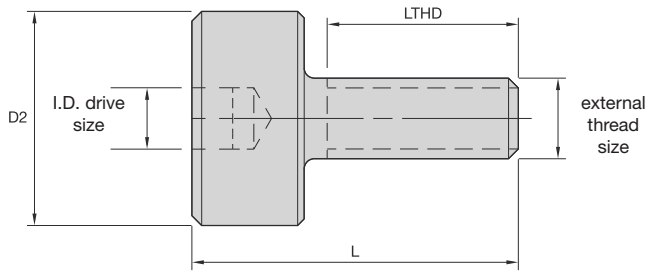


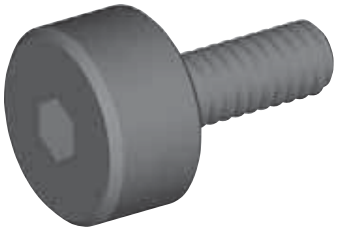
SM Lock Screw • Metric

order number	catalog number	external thread size	D2	L	LTHD
1147969	**KLS27MPKG**	M12X1.75	34,8	29,9	17,5
1736199	**KLS32M**	M16X2.0	41,8	34,9	20,5
1016374	**KLS40M**	M20X2.5	51,8	39,9	24,0
1178775	**KLS50M**	M24X3	62,8	47,9	28,5

(continued)

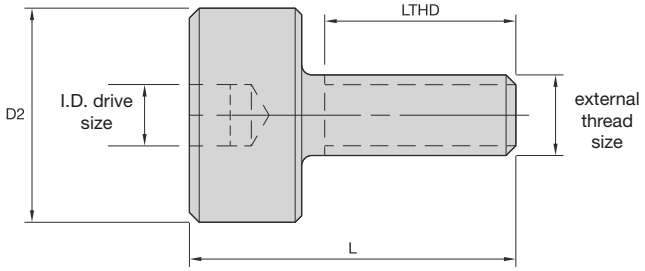
(SM Lock Screws continued)

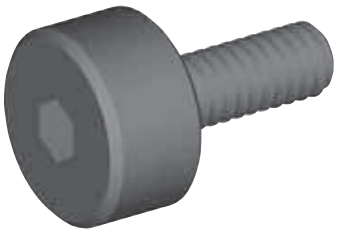




SM Round Lock Screw • Metric

order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
4078806	**KLSS27M**	M12X1.75	35,0	30,9	22,0	10mm
4078807	**KLSS32M**	M16X2.0	42,0	37,9	26,0	14mm
4078808	**KLSS40M**	M20X2.5	52,0	44,9	30,0	17mm

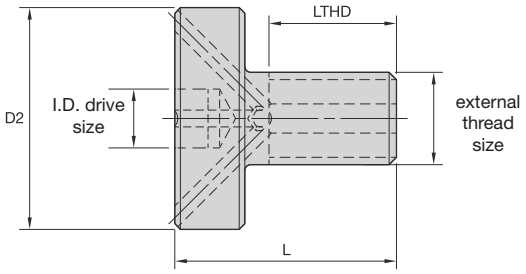




SM Lock Screw • Inch

order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
1020548	**KLS05**	.250-28 UNF	.656	1.000	.656	3/16
1020550	**KLS07**	.375 - 24 UNF	.875	1.062	.687	1/4
1020552	**KLS10**	.500 - 20 UNF	1.188	1.187	.812	5/16
1020574	**KLS12**	.625 - 18 UNF	1.500	1.535	1.040	5/16
1020576	**KLS15**	3/4 - 16 UNF	1.875	1.516	1.016	3/8
1020578	**KLS20**	1.000 - 14 UNS	—	—	—	9/16

- Coolant lock screw to convert a standard shell mill adapter into a through-coolant version.

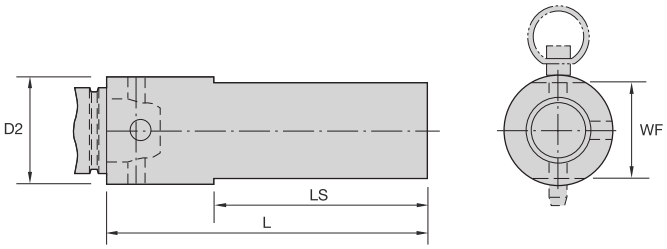


ERICKSON

SM Lock Screw Coolant • Inch

order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
1151259	**KLSSH10**	.500-20 UNF	1.2	1.2	.8	5/16
1151260	**KLSSH12**	.625-18 UNF	1.5	1.5	1.0	5/16
1151261	**KLSSH15**	.750-16 UNF	1.9	1.5	1.0	3/8
1151262	**KLSSH20**	1.000-14 UNS	2.5	1.5	1.0	9/16
1151315	**KLSSH25**	1.000-14 UNS	3.1	2.0	1.5	9/16

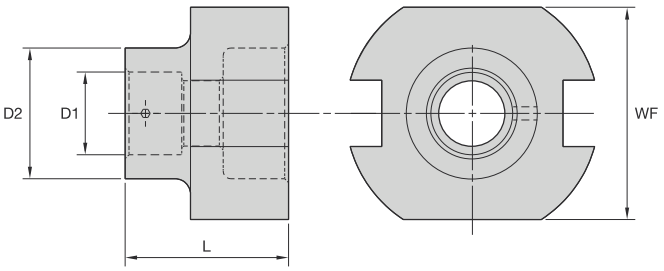
- Vise mount pot to hold KM™ toolholders for tightening/locking operations.



TF • KM Vise Mount

order number	catalog number	system size	D2 mm	D2 in	L mm	L in	LS mm	LS in	WF mm	WF in
1021816	**KM40TF**	KM40	50,80	2.00	152,4	6.00	101,6	4.00	44,45	1.750
1021817	**KM50TF**	KM50	63,50	2.50	152,4	6.00	101,6	4.00	57,15	2.250
1021818	**KM63TF**	KM63	76,20	3.00	152,4	6.00	101,6	4.00	69,15	2.750
2606542	**KM80TF**	KM80	88,90	3.50	152,4	6.00	101,6	4.00	85,73	3.375

- Vise mount pot to hold HSK toolholders for tightening/locking operations.

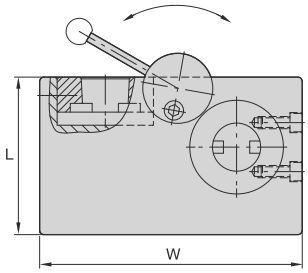


ERICKSON

■ TF • KM4X and HSK Vise Mount

order number	catalog number	D1 mm	D1 in	D2 mm	D2 in	L mm	L in	WF mm	WF in	wrench size clamp screw
1013573	**TFHSK32A**	32,0	1.26	50,8	2.00	63,5	2.50	82,5	3.25	3mm & 1/8
1013584	**TFHSK40A**	40,0	1.57	60,0	2.36	63,5	2.50	82,5	3.25	4mm & 5/32
1013586	**TFHSK63A**	63,0	2.48	98,4	98.41	69,9	2.75	82,5	3.25	8mm & 5/16
1013587	**TFHSK80A**	80,0	3.15	108,0	4.25	120,7	4.75	82,5	3.25	8mm & 5/16
1013588	**TFHSK100A**	100,0	3.94	135,0	5.31	139,7	5.50	82,5	3.25	8mm & 5/16

- Universal vise to hold HSK forms A, C, and E toolholders for tightening/locking operations.
- Permits simultaneous access to the rear and front end of the toolholders.
- Replaces up to 15 separate tightening fixtures.
- Holds tools in the horizontal or vertical position.
- Can be used either right or left handed.
- Rigid aluminum construction with bolt holes to secure to bench.

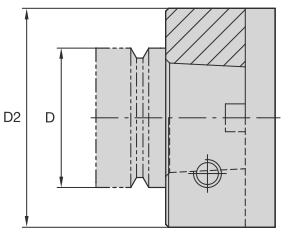


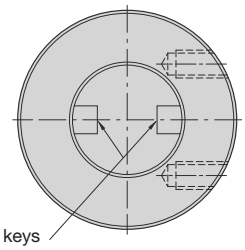
ERICKSON

TF • HSK Universal Mount

			L		W	
order number	catalog number	CSWS	mm	in	mm	in
1254135	UTAV	ALL	160	6.30	260	10.24

- For HSK forms A and C, insert sleeve into fixture.
- For HSK form E, remove the drive keys before inserting the sleeve adapter.
- Sleeve adapters are made from hardened steel with removable keys.
- For sizes HSK32 and HSK40, a larger cam disk must be ordered when used in a horizontal position.



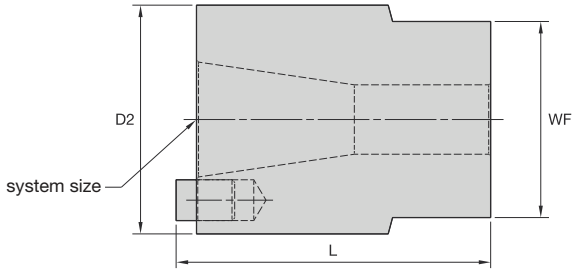


TF • HSK Universal Sleeve

			D		D2	
order number	catalog number	system size	mm	in	mm	in
1254136	HSK32AS	32	32,0	1.26	98,0	3.86
1254137	HSK40AS	40	40,0	1.57	98,0	3.86
1254158	HSK50AS	50	50,0	1.97	98,0	3.86
1254159	HSK63AS	63	63,0	2.48	98,0	3.86
1254160	HSK80AS	80	80,0	3.15	98,0	3.86
1254161	HSK100AS	100	100,0	3.94	98,0	3.86

	cam disks needed to support HSK32 and HSK40		
catalog number • sleeve	size reference • HSK	order number • cam disk	catalog number • cam disk
HSK32AS	HSK32	2241080	536.150
HSK40AS	HSK40	2241080	536.150

- Vise mount pot to hold steep taper toolholders for tightening/locking operations.

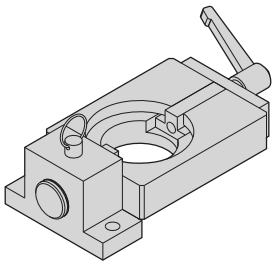


ERICKSON

TF • ST Vise Mount

order number	catalog number	system size	D2 mm	D2 in	L mm	L in	WF mm	WF in
1013620	**TF30**	30	88,9	3.50	109,5	4.31	76,2	3.00
1013636	**TF40**	40	88,9	3.50	122,2	4.81	76,2	3.00
1013638	**TF50**	50	133,4	5.25	165,1	6.50	114,3	4.50

- Universal vise to hold 30, 35, 40, 45, and 50 7/24 steep taper toolholders for tightening/locking operations.
- Permits simultaneous access to the retention knob and locknut.
- Replaces up to five separate tightening fixtures.
- Holds tools in the horizontal or vertical position.
- Can be used either right or left handed.
- Holds most 7/24 tapers including ANSI, ISO, DIN, V-flange, BT, and NMTB.
- Handle position is easily changed with a simple button push.
- No setups, bushings, or spare parts required.
- 400 Nm (300 ft. lbs.) maximum torque capacity.

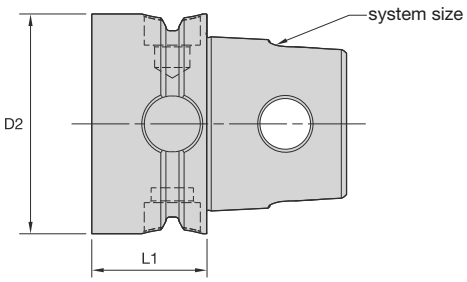


ERICKSON

TF • ST Universal Mount

order number	catalog number	system size
1013591	**UTV5030**	30, 35, 40, 45, & 50

- Prevents machine tool spindle from becoming contaminated when not in use.

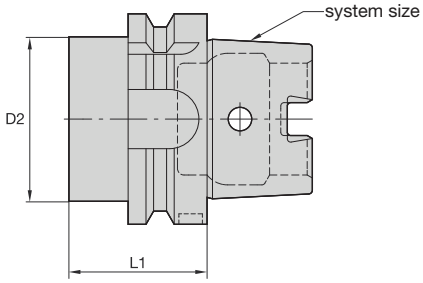


KM QUICK CHANGE

■ Spindle Plug • KM™

order number	catalog number	system size	D2 mm	D2 in	L1 mm	L1 in
1019237	**KM32P**	KM32	32	1.26	25	.98
1144452	**KM40P**	KM40	40	1.57	27	1.06
1144501	**KM50P**	KM50	50	1.97	31	1.22
1019945	**KM63TSP**	KM63TS	63	2.48	33	1.30
1144328	**KM80P**	KM80	80	3.15	37	1.46

- Prevents machine tool spindle from becoming contaminated when not in use.

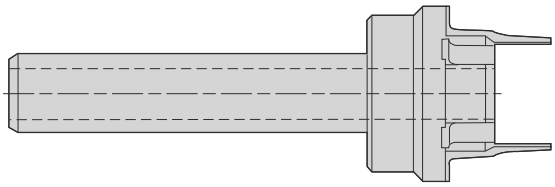


ERICKSON

■ P-HSK • Form A

order number	catalog number	system size	D2 mm	D2 in	L1 mm	L1 in	kg
1256061	**HSK63AP**	63	50	1.97	42,3	1.66	0,7
1307767	**HSK100AP**	100	80	3.15	45,3	1.78	0,7

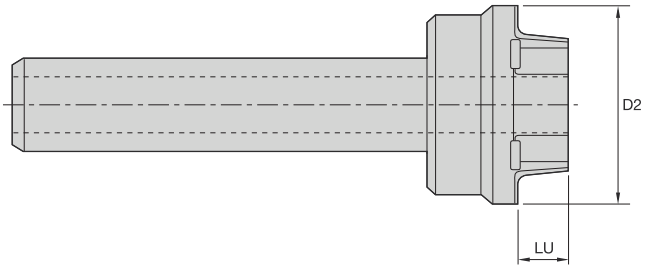
• Cleans taper and face of machine spindle and tool adapter.



SW-KM

order number	catalog number	system size
1727267	KMSW32	32
1606113	KMSW40	40
1612900	KMSW50	50
1612922	KMSW63	63
1612923	KMSW80	80

• Cleans taper and face of machine spindle and tool adapter.



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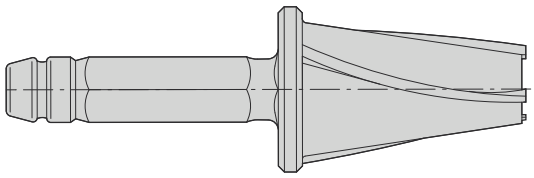
SW-HSK

			D2		LU	
order number	catalog number	system size	mm	in	mm	in
1518662	HSK32SW	32	45	1.77	11	.43
1518630	HSK40SW	40	45	1.77	14	.55
1514497	HSK50SW	50	53	2.09	17	.67
1518677	HSK63SW	63	66	2.60	22	.87
1518681	HSK100SW	100	103	4.06	35	1.38

• Cleans taper of machine spindle and tool adapter.

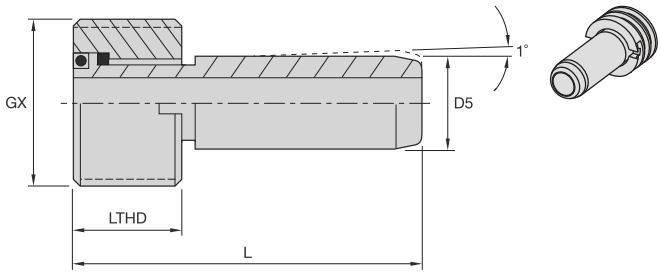


ERICKSON

SW-ST

order number	catalog number	system size
1288838	SW30	30
1288842	SW40	40
1192562	SW50	50

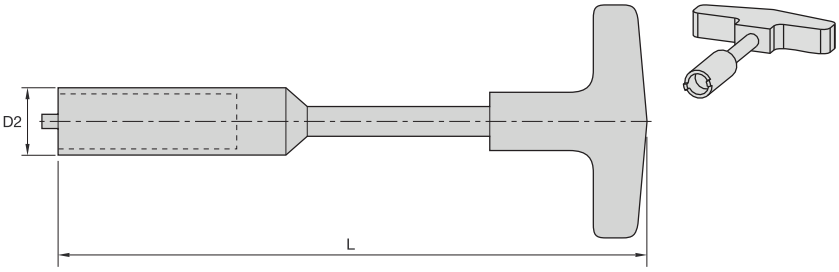
- Designed in accordance with DIN 69893.
- Withstand coolant pressure up to 80 bar (1,160 psi).
- Directs flow of coolant through the tool and avoids spindle mechanism contamination from flow-back.
- Standard-sized replaceable O-rings.



HSK Coolant Supply Unit • Assembly

order number	catalog number	system size	D5 mm	D5 in	L mm	L in	LTHD mm	LTHD in	GX	Nm	in. lbs.
1132083	**193.158**	40A & 40E	8,0	.3	29,5	1.2	7,5	.30	M12 X 1	3	30
1132144	**193.159**	50A & 50E & 63F	10,0	.4	32,7	1.3	9,5	.37	M16 X 1	4	35
1132145	**193.160**	63A & 80F	12,0	.5	36,2	1.4	11,5	.45	M18 X 1	6	53
1132146	**193.161**	80A	14,0	.6	40,2	1.6	13,5	.53	M20 X 1.5	8	70
1132147	**193.162**	100A	16,0	.6	43,6	1.7	15,5	.61	M24 X 1.5	12	106

- Designed to lock and unlock the HSK coolant supply units.



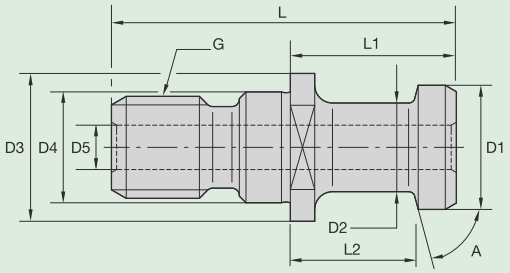
HSK Wrench

order number	catalog number	CSWS	D2 mm	D2 in	L mm	L in	Nm	in. lbs.
1176487	**170.195**	40A & 40E	13,0	.51	120	4.72	3	30
1132992	**170.196**	50A & 50E & 63F	14,5	.57	114	4.49	4	35
1134161	**170.197**	63A & 80F	16,5	.65	122	4.80	6	53
1127524	**170.198**	80A	19,0	.75	130	5.12	8	70
1132993	**170.199**	100A	22,0	.87	141	5.55	12	106

WARNING

Retention knobs are available in various styles and are not always interchangeable because all are machine and spindle specific. The proper retention knob must be used at all times with the appropriate adapter, according to machine specifications as provided by the machine's original manufacturer. Failure to use the correct retention knob, or to adequately install and tighten the correct retention knob, may result in an adapter loosening. Using a combination of metric and non-metric components can result in an inadequate coupling of the adapter to the spindle during machining, causing the component to fail.

While WIDIA™ has endeavored to obtain accurate and up-to-date information regarding retention knob selection based on individual machine tool builder specifications, we cannot guarantee that the information and specifications contained in this catalog are complete and that they have not been modified or superseded by the manufacturer. **You, the machine tool operator, are ultimately responsible for proper selection and use of retention knobs.** The purchase of retention knobs from WIDIA is subject to WIDIA's Standard Terms and Conditions of Sale.



Machining center manufacturers use numerous types and styles of retention knobs. WIDIA has listed some of the most popular retention knobs in the industry on the next few pages.

If a retention knob is not shown, please contact your WIDIA Representative or call WIDIA's Customer Service and have the following information available:

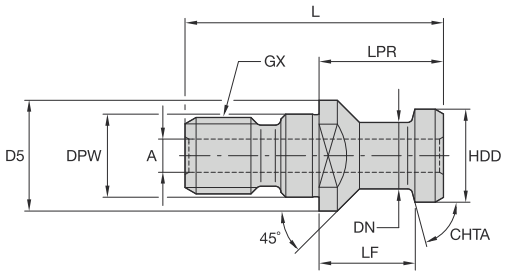
machine builder	machine builder's drawing and/or numbers		machine model number	
taper size	**G thread**		**A angle**	
D1	**D2**	**D3**	**D4**	**D5**
L	**L1**	**L2**	**through coolant needed?**	**O-ring needed?**

The machine builder should recommend the required tightening torque for the retention knobs. This information is not always available.

WIDIA has referenced a suggested maximum torque setting and offers a specialized socket just for retention knobs. Please see these socket wrench sizes listed against each knob.

taper size	suggested torque max (ft. lbs.)	suggested torque max (Nm)
30	40	54
40	85	115
50	110	149

- Metric thread.
- Piloted.
- Through coolant.

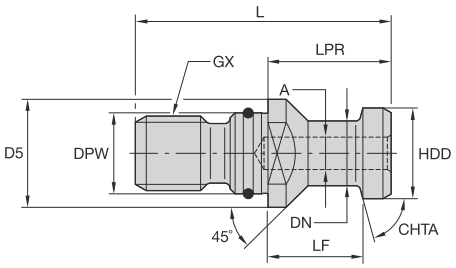


RK DIN 69872 Form A • Metric

order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192424	**RK40DVM**	40	M16 X 2	7,05	75°	23	13,95	16,97	18,97	20,0	26,00	54	**RKW40**	115
1192430	**RK50DVM**	50	M24 X 3	11,55	75°	36	20,95	24,97	27,97	25,0	34,00	74	**RKW50M**	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted with O-ring.
- No through coolant.

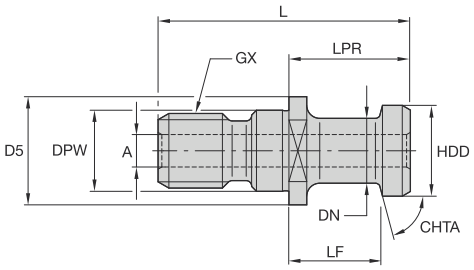


RK DIN 69872 Form B • Metric

order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192423	**RK40DVBM**	40	M16 X 2	7,05	75°	22,9	13,95	16,97	18,97	20	26	54	**RKW40**	115
1192429	**RK50DVBM**	50	M24 X 3	11,55	75°	35,9	20,95	24,97	27,97	25	34	74	**RKW50M**	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted.
- Through coolant.

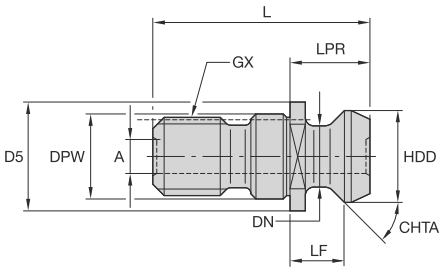


RK ISO 7388/2 Type A • Metric

order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1285460	**RK40ISAM**	40	M16 X 2	7,05	75°	22,9	13,95	16,99	18,95	20	26	54	**RKW40**	115
1285502	**RK50ISAM**	50	M24 X 3	11,55	75°	35,9	20,95	24,99	27,95	25	34	74	**RKW50M**	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted.
- Through coolant.

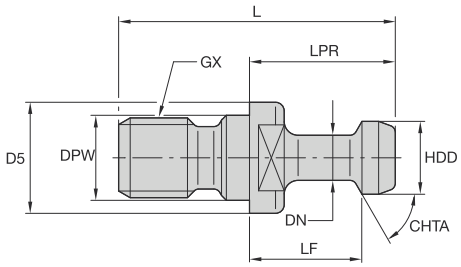


RK • ISO 7388/2 Type B • Metric

order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192425	**RK40ISBM**	40	M16 X 2	7,5	45°	22	12,80	16,99	18,80	11,0	16,25	44,50	**RKW40**	115
1192431	**RK50ISBM**	50	M24 X 3	11,7	45°	36	19,45	24,99	28,95	17,8	25,40	65,50	**RKW50M**	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted.
- No through coolant.

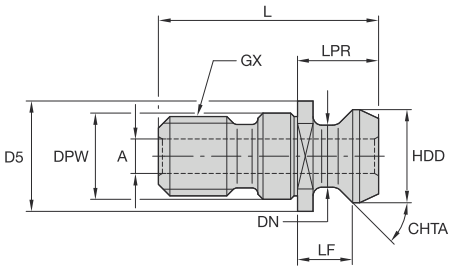


RK BT-MAS-Style with Pilot • Metric

order number	catalog number	system size	GX	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192417	**RK30BT1M**	30	M12 X 1.75	45°	16,4	6,95	12,49	10,95	17,95	22,95	43,0	**RKW30**	54
1285416	**RK30BT2M**	30	M12 X 1.75	60°	16,4	6,95	12,49	10,95	17,95	22,95	43,0	**RKW30**	54
1192419	**RK40BT1M**	40	M16 X 2	45°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	**RKW40**	115
1192420	**RK40BT2M**	40	M16 X 2	60°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	**RKW40**	115
1285441	**RK40BT3M**	40	M16 X 2	90°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	**RKW40**	115
1192426	**RK50BT1M**	50	M24 X 3	45°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	**RKW50M**	143
1192427	**RK50BT2M**	50	M24 X 3	60°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	**RKW50M**	143
1285482	**RK50BT3M**	50	M24 X 3	90°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	**RKW50M**	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- Piloted.
- Through coolant.

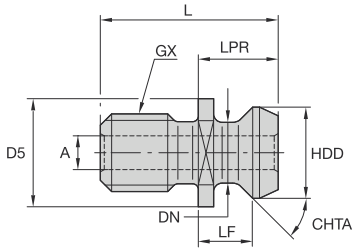


RK Short CV with Pilot • Metric

order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192422	**RK40CV3M**	40	M16 X 2	7,14	45°	23,63	12,45	16,98	18,80	11,18	16,26	41,26	**RKW40**	115
1026734	**RK50HPCV**	50	M24 X 3	11,89	45°	36,32	20,83	24,99	28,96	17,78	25,40	65,41	**RKW50**	143

NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Metric thread.
- No pilot.
- Through coolant.

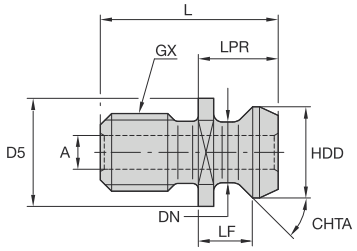


RK Short CV without Pilot • Metric

order number	catalog number	system size	GX	A	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	Nm
1192421	**RK40CV1M**	40	M16 X 2	6,95	45°	22,5	12,4	18,8	11,20	16,30	38,1	**RKW40**	115
1285478	**RK50AV1M**	50	M24 X 3	11,55	45°	37,0	19,6	29,1	17,95	25,55	60,0	**RKW50M**	143

NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Inch thread.
- No pilot.
- Through coolant.

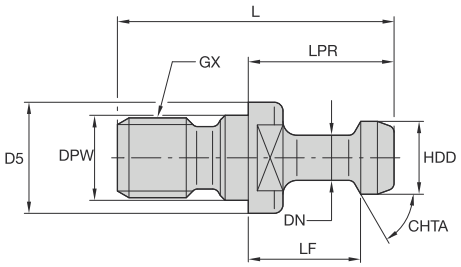


RK Short CV without Pilot • Inch

order number	catalog number	system size	GX	A	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026590	**RK40CV**	40	5/8 - 11	.281	45°	.900	.490	.740	.440	.640	1.500	**RKW40**	85
1026690	**RK50CV**	50	1 - 8	.500	45°	1.400	.820	1.140	.700	1.000	2.300	**RKW50**	110

NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Inch thread.
- Piloted.
- No through coolant.

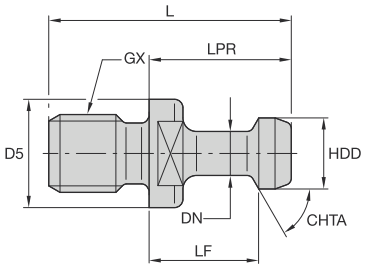


RK BT-MAS Style with Pilot • Inch

order number	catalog number	system size	GX	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026729	**RK31114**	40	5/8 - 11	45°	.938	.392	.636	.589	.988	1.264	2.250	**RKW40**	85
1025459	**RK31114B**	40	5/8 - 11	90°	.938	.392	.636	.589	.988	1.264	2.250	**RKW40**	85
1021844	**RK31118**	50	1 - 8	45°	1.438	.668	1.026	.903	1.384	1.778	3.355	**RKW50**	110
1021800	**RK31118B**	50	1 - 8	90°	1.438	.668	1.026	.903	1.384	1.778	3.355	**RKW50**	110

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

- Inch thread.
- Piloted.
- No through coolant.

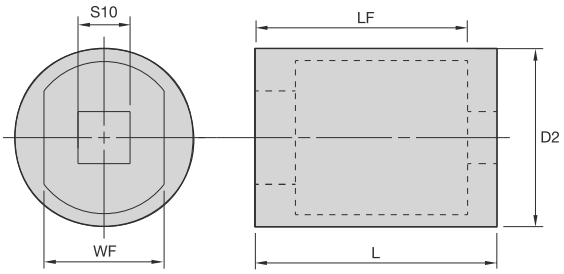


RK BT-MAS-Style without Pilot • Inch

order number	catalog number	system size	GX	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026730	**RK32114**	40	5/8 - 11	45°	.903	.392	.588	.990	1.266	2.125	**RKW40**	85

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page J39.

• Socket wrench with standard 1/2" drive to tighten retention knobs.

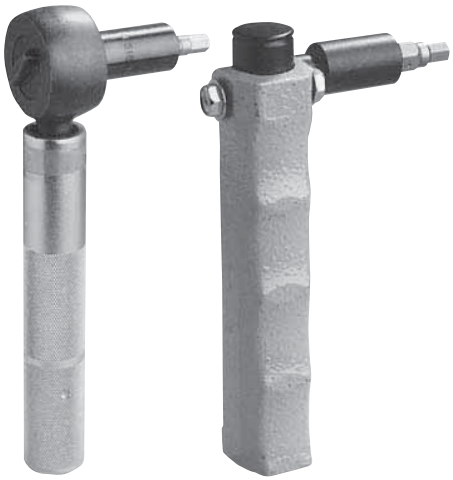


RK Socket • Metric

order number	catalog number	system size	D2	L	LF	S10 mm	S10 in	WF	Nm
2407089	**RKW40M**	40	31,8	31,8	19,0	12,7	.50	18,1	115
2407091	**RKW50M**	50	44,5	60,3	47,6	12,7	.50	30,2	150

RK Socket • Inch

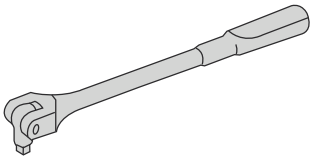
order number	catalog number	system size	D2	L	LF	S10	WF	ft. lbs.
2407087	**RKW30**	30	1.00	1.50	1.00	.50	.54	40
2407088	**RKW40**	40	1.25	1.94	1.44	.50	.76	85
2407090	**RKW50**	50	1.75	1.63	1.12	.50	1.26	110



KM Manual Torque Wrench

order number	catalog number	KM size	wrench type	adapter	adapter drive size	driver bit	driver hex size	clamping unit hex size	torque ft. lbs.	torque Nm
2432682	**TW628R**	25 & 3225	ratchet	—	3/8"	301.362	5/16"	6mm	25	34
1291313	**TW58**	32	solid	—	—	301.361	5/16"	5mm	8	11
1099387	**TW610**	40	solid	—	—	301.362	5/16"	6mm	10	14
1291314	**TW58R**	32	ratchet	30137	3/8"	301.361	5/16"	5mm	8	11
1291316	**TW610R**	40	ratchet	30137	3/8"	301.362	5/16"	6mm	10	13
1291318	**TW623R**	50	ratchet	AHB375M10	3/8"	—	—	10mm	23	30
1291312	**TW1237R**	63	ratchet	AHB500M12	1/2"	—	—	12mm	37	50
1121108	**TW1460R**	80	ratchet	EBM14	1/2"	—	—	14mm	60	80

NOTE: All KM torque wrenches come complete with adapter and driver bit.



KM LOC II and LOC Wrench

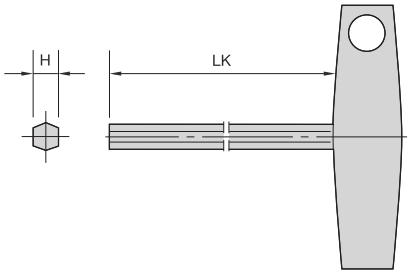
wrench catalog number	drive hex bit			
	KM32	**KM40**	**KM50**	**KM63**
914-15	986-6 = hex size 6mm	986-8 = hex size 8mm	986-10 = hex size 10mm	986-10 = hex size 10mm

order number	drive hex bit catalog number
1863666	986-6
1131354	986-8
1131361	986-10

NOTE: Wrench and drive hex bit must be ordered separately.

T-Handle Hex Wrench Set • Metric

order number	catalog number	wrench set description
1192354	MW-9	set contains (mm) 1,27; 1,5; 2,0; 2,5; 3,0; 4,0; 5,0; 6,0; and 8,0



T-Handle Hex Wrench • Metric

order number	catalog number	hex size
1138748	170.135	5mm
1138755	170.136	6mm

T-Handle Wrench Set • Inch

order number	catalog number	wrench description
1192321	KW-7A	set contains sizes: 5/64, 3/32, 7/64, 1/8, 5/32, 3/16, and 7/32

Universal Bit Driver

order number	catalog number
1963869	driver

Driver Bit

order number	catalog number	hex size	Torx size	Torx Plus size
1138851	170.179	2,5mm	–	–
1150198	170.180	3mm	–	–
1138857	170.181	4mm	–	–
1962981	BT6	–	6	–
1963853	BT7	–	7	–
1963855	BT8	–	8	–
1963854	BT9	–	9	–
1963856	BT10	–	10	–
1138814	170.175	–	15	–
1138822	170.176	–	20	–
1994654	170.258	–	25	–
1984243	170.256	–	27	–
2244316	BT25IP	–	–	25IP
2244317	BT27IP	–	–	27IP

Achieve Victory with the WIDIA™ Modular Drill Family

WIDIA-Metcut™ Spade Blades

are the perfect compliment to TOP DRILL M1™ for an extensive portfolio of modular drilling.

WIDIA™ provides the complete modular holemaking solution portfolio from 8mm (.315") to 114mm (4.5") to cover a wide range of machining environments and materials.

- Fast penetration rates, less downtime, lower variability.
- Interchangeable with other conventional spade blade holders.
- Improved surface finish — elimination of secondary operations.
- Standard and special drill body/holder offering, including porting tool configurations.

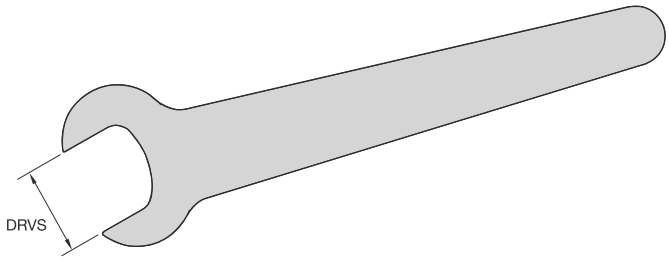
WIDIA-Metcut spade blades are great choices for:

- Cast iron and aluminum workpieces.
- Machining environments where rigidity, coolant supply, or speed and feed rates are limiting factors.
- Short run manufacturing and prototyping environments.

To learn more, contact your local Authorized Distributor or visit **www.widia.com.**

WIDIA™

• Standard open-ended wrenches.



ERICKSON

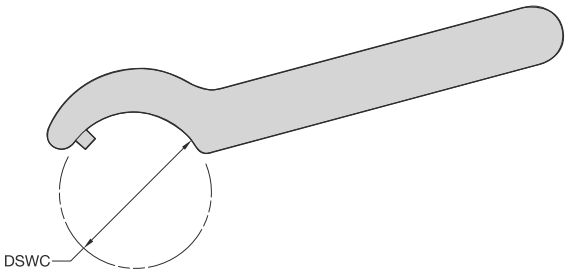
Wrench OEW • Metric

order number	catalog number	DRVS
1284020	OEW9M	9mm
1284011	OEW13M	13mm
1174217	OEW16M	16mm
1197387	OEW19M	19mm
1192371	OEW24M	24mm
1186649	OEW25M	25mm
1284014	OEW30M	30mm
1284015	OEW32M	32mm

Wrench OEW • Inch

order number	catalog number	DRVS
1025533	OEW044	7/16
1025544	OEW050	1/8
1025546	OEW062	5/8
1025547	OEW068	11/16
1025548	OEW075	3/4
1025550	OEW088	7/8
1025551	OEW094	15/16
1025552	OEW100	1
1025553	OEW106	1 1/16
1025574	OEW112	1 1/8
1025575	OEW119	1 3/16
1025576	OEW125	1 1/4
1025674	OEW138	1 3/8
1025581	OEW150	1 1/2
1025582	OEW162	1 5/8
1025583	OEW168	1 11/16
1025604	OEW175	1 3/4
1025605	OEW188	1 7/8
1025607	OEW225	2 1/4
1025608	OEW250	2 1/2

• Standard pin spanner wrenches.



ERICKSON

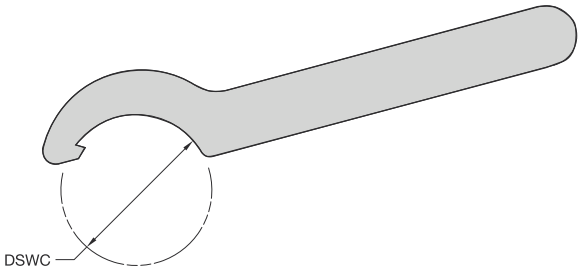
■ Wrench PSW • Metric

order number	catalog number	DSWC
3367387	PSW52M	58,0mm - 62,0mm
1284310	PSW58M	52,0mm - 55,0mm
1192392	PSW68M	68,0mm - 75,0mm
1284311	PSW80M	80,0mm - 90,0mm

■ Wrench PSW • Inch

order number	catalog number	DSWC
1013497	PSW350	3 1/2

• Standard hook spanner wrenches.



ERICKSON

■ Wrench HSW • Metric

order number	catalog number	DSWC
1273813	HSW25M	25,0mm - 28,0mm
1273814	HSW34M	34,0mm - 36,0mm
1192229	HSW45M	45,0mm - 50,0mm
1192230	HSW58M	58,0mm - 62,0mm
1273815	HSW68M	68,0mm - 75,0mm
1192231	HSW80M	80,0mm - 90,0mm

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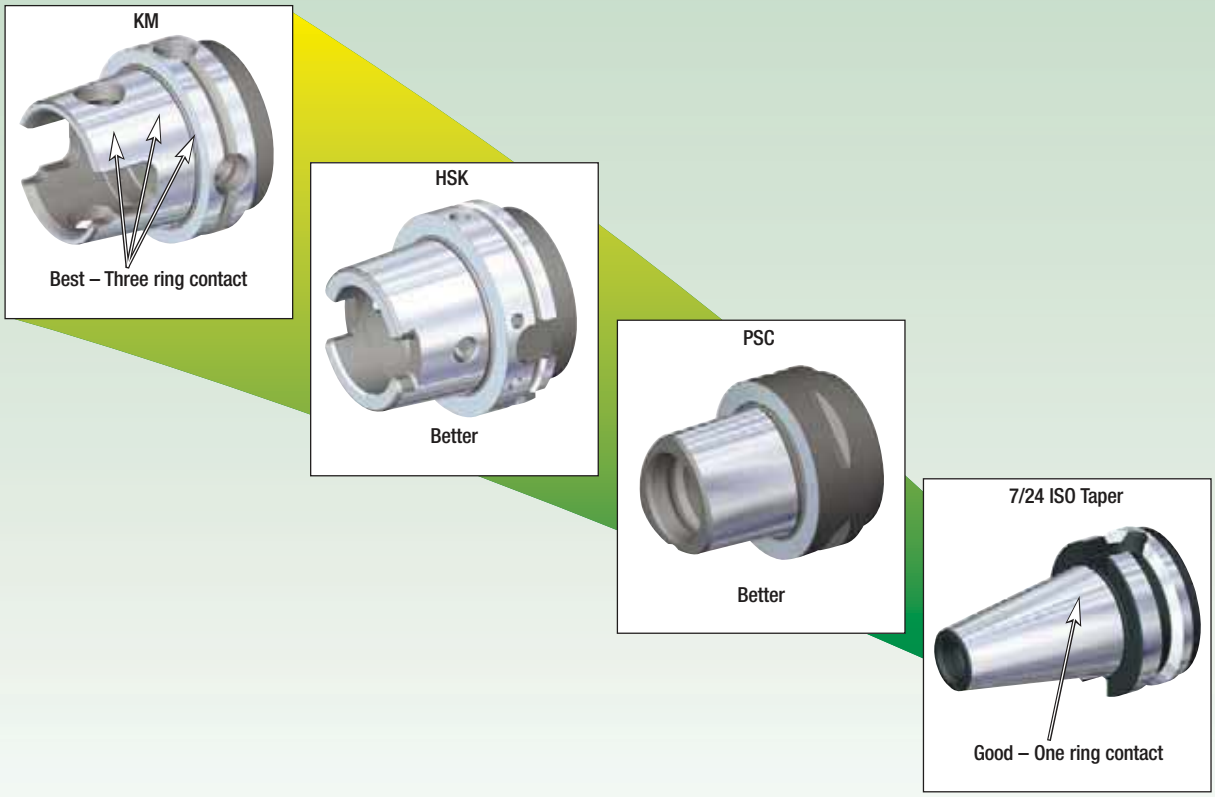
The Correct Spindle Connection and Application Guide

The Spindle Connection

Several different types of spindle connection have been developed or optimized over the last few decades. The 7/24 ISO taper became one of the most popular systems in the market. It has been successfully used in many applications, but its accuracy and high-speed limitations prevent it from growing further due to only having one ring of contact around the gage diameter/uppermost cone. The recent combination of face contact with 7/24 solid taper provides higher accuracy in the Z-axis direction, but this also presents some disadvantages, namely the loss in stiffness at higher speeds or high side loads. Most of these tools on the market are solid and the spindles have relatively low clamping force.

In 1985, WIDIA™ (Krupp WIDIA) and Kennametal initiated a joint program to further develop the concept of taper and face contact interface and a universal quick-change system — now known as KM™ and recently standardized as ISO 26622. The KM system has a very strong design, utilizing three rings of contact, the flange face, and lower as well as upper ring of contact of the cone. The polygonal taper-face connection, known as PSC, is now also standardized as ISO 26623, and in the early 1990s, the HSK system started being employed on machines in Europe and later became DIN 69893 and later ISO 12164 with two rings of contact.



(continued)

Adapter Application Guide *(continued)*

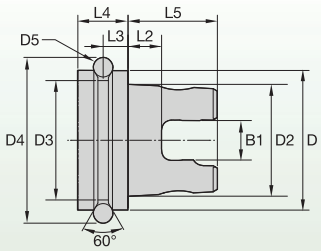
WIDIA™ has a large offering of high-performance holding products to gain the best execution from the cutting edge. The matrix below is designed to help you choose the right adapter for the required application:

toolholder type	accuracy TIR	grip	end milling		face milling	drilling	tapping	boring	modular
			rough	finishing					
Whistle Notch™	●	●●●●●	●●●●●	●●●●	—	●●●●	●	●●●●	—
end mill adapters	●	●●●●●	●●●●●	●●●●	—	●●	●	●●●●	—
straight shank adapters	●	●●●●●	—	—	—	●●●●●	—	●●●●	—
straight shank with flat adapters	●	●●●●●	—	—	—	●●●●●	—	●●●●	—
screw-on milling adapters	●●●●	●●●●●	●●●●	●●●●●	●●●●●	—	—	—	●●●●●
tunable shell mill adapters	●●●●	●●●●●	●●●●●	●●●●●	●●●●●	—	—	—	●●●●●
shell mill adapters	●●●●	●●●●●	●●●●●	●●●●●	●●●●●	—	—	—	●●●
slotting cutter adapters	●●●●	●●●●●	●●●●●	●●●●●	●●●●●	—	—	—	●●●●●
RC rapid change tap adapters	●●●●	●●●●●	—	—	—	—	●●●●●	—	—
Morse taper adapters	●●●●	●●●●●	●●	—	—	●●●●●	●●●●●	●●●●●	●●●
Jacobs taper adapters	●●●●	●●●	●	—	—	●●●●●	●●●	●●●	●●●
KM™ modular adapters	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●
HSK modular adapters	●●●●	●●●●●	●●●●	●●●●	●●●●	●●●●●	●●●●●	●●●●●	●●●●●

●●●● = Excellent (first choice) ● = Good (last choice) — = Not recommended

Taper Specifications

KM™ — ISO 26622-1

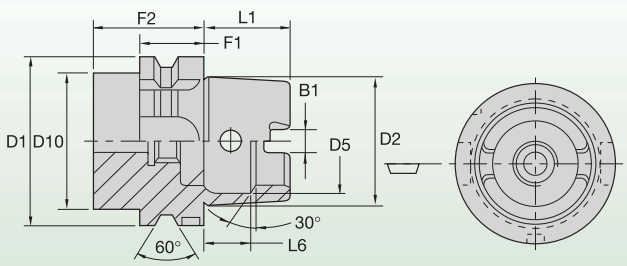


	D	D2	D3	D4	D5	L5	L2	L3	L4	B1
KM32TS	32,0	24,0	29,0	36,45	3,5	20,0	8,0	4,9	10,0	9,0
	1.260	.945	1.142	1.435	0.138	0.787	1.102	0.193	0.394	0.354
KM40TS	40,0	30,0	37,0	44,45	3,5	25,0	11,0	5,89	12,0	10,1
	1.575	1.181	1.457	1.750	0.138	0.984	0.433	0.232	0.472	0.398
KM50TS	50,0	40,0	42,7	59,4	7,0	32,0	12,0	8,9	16,0	14,1
	1.969	1.575	1.681	2.339	0.276	1.260	0.472	0.350	0.630	0.555
KM63TS	63,0	50,0	55,7	72,4	7,0	40,0	18,0	9,9	18,0	16,1
	2.480	1.969	2.193	2.850	0.276	1.575	0.709	0.390	0.709	0.634
KM80TS	80,0	64,0	72,7	89,4	7,0	45,0	18,5	11,0	22,0	20,1
	3.150	2.520	2,862	3.520	0.276	1.772	0.728	0.433	0.866	0.791

NOTE: Valid for all KM styles including XMZ and ATC.

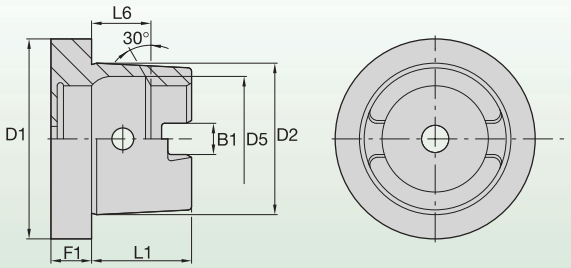
Taper Specifications

HSK — DIN 69893 Part 1, Form A



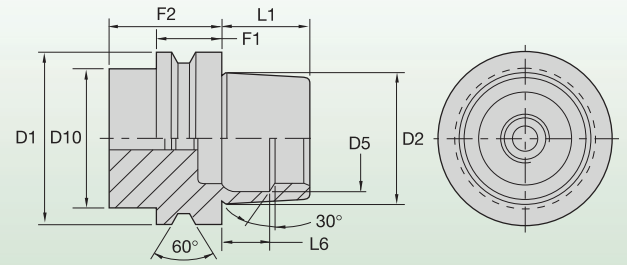
	D1 mm (h10)	D2 mm (ref)	D5 mm (h11)	D10 mm (max)	L1 mm (-0,2)	L6 mm (js10)	B1 mm (±0,04)	F1 mm (-0,1)	F2 mm (min)
40A	40	30	25,50	34	20	11,42	8,05	20	35
50A	50	38	32	42	25	14,13	10,53	26	42
63A	63	48	40	53	32	18,13	12,54	26	42
80A	80	60	50	67	40	22,85	16,04	26	42
100A	100	75	63	85	50	28,56	20,02	29	45

HSK — DIN 69893 Part 1, Form C



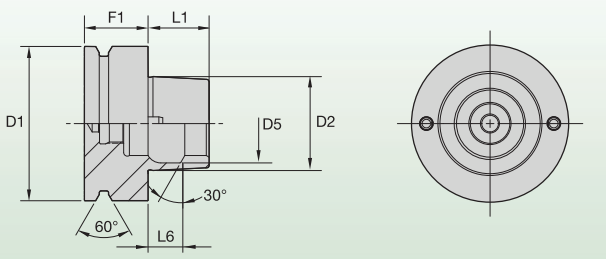
	D1 mm (h10)	D2 mm (ref)	D5 mm (h11)	L1 mm (-0,2)	L6 mm (js10)	B1 mm (±0,04)	F1 mm (-0,1)
32C	32	24	21	16	8,92	7,05	10
40C	40	30	25,50	20	11,42	8,05	10
50C	50	38	32	25	14,13	10,53	12,5
63C	63	48	40	32	18,13	12,54	12,5

HSK — DIN 69893 Part 5, Form E



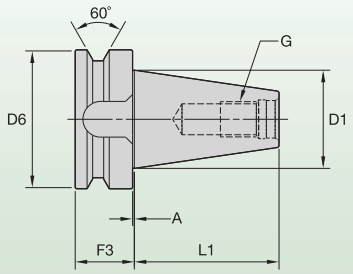
	D1 mm (h10)	D2 mm (ref)	D5 mm (h11)	D10 mm (max)	L1 mm (-0,2)	L6 mm (js10)	F1 mm (-0,1)	F2 mm (min)
40E	40	30	25,5	34	20	11,42	20	35
50E	50	38	32	42	25	14,13	26	42

HSK — DIN 69893 Part 1, Form F (with Pin)



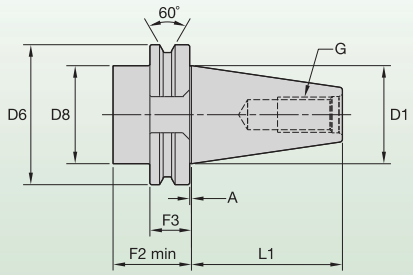
	D1 mm (h10)	D2 mm (ref)	D5 mm (h11)	L1 mm (-0,2)	L6 mm (js10)	F1 mm (-0,1)
63F (pin)	63	38	32	25	14,13	26
80F (pin)	80	48	40	32	18,13	26

BTKV — Taper Face



	D1	D6	L1	F3	A	G
40	44,45 (1.750)	63,00 (2.480)	65,40 (2.575)	27,00 (1.063)	1,00 (.039)	M16 thread
50	69,85 (2.750)	100,00 (3.937)	101,80 (4.008)	38,00 (1.496)	1,50 (.059)	M24 thread

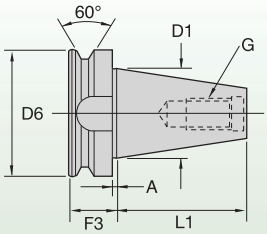
CVKV — Taper Face



	D1	D6	D8	L1	F2	F3	A	G
40	44,45 (1.750)	63,05 (2.500)	44,45 (1.750)	68,25 (2.687)	35,00 (1.375)	19,05 (.750)	1,00 (.039)	5/8-11 thread
50	69,85 (2.750)	98,41 (3.875)	69,85 (2.750)	101,60 (4.000)	35,00 (1.375)	35,00 (1.375)	1,50 (.059)	1-8 thread

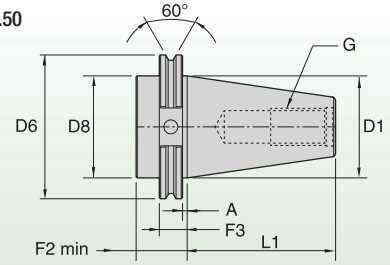
Taper Specifications

BT — JIS B6339



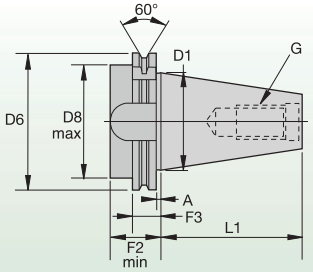
	D1	D6	L1	F3	A	G
30	31,75 (1.250)	46,00 (1.811)	48,40 (1.906)	22,00 (.866)	2,00 (.079)	M12 thread
35	38,10 (1.500)	53,00 (2.087)	56,50 (2.224)	24,00 (.945)	2,00 (.079)	M12 thread
40	44,45 (1.750)	63,00 (2.480)	65,40 (2.575)	27,00 (1.063)	2,00 (.079)	M16 thread
45	57,15 (2.250)	85,00 (3.346)	82,80 (3.260)	33,00 (1.299)	3,00 (.118)	M20 thread
50	69,85 (2.750)	100,00 (3.937)	101,80 (4.008)	38,00 (1.496)	3,00 (.118)	M24 thread

CAT (CV) — ANSI B5.50



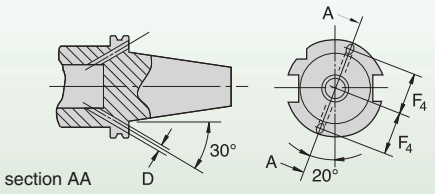
	D1	D6	D8	L1	F2	F3	A	G
30	31,75 (1.250)	46,02 (1.812)	31,75 (1.250)	47,63 (1.875)	35,00 (1.375)	19,05 (.750)	3,18 (.125)	1/2-13 thread
40	44,45 (1.750)	63,05 (2.500)	44,45 (1.750)	68,25 (2.687)	35,00 (1.375)	19,05 (.750)	3,18 (.125)	5/8-11 thread
45	57,15 (2.250)	82,50 (3.250)	57,15 (2.250)	82,55 (3.250)	35,00 (1.375)	19,05 (.750)	3,18 (.125)	3/4-10 thread
50	69,85 (2.750)	98,41 (3.875)	69,85 (2.750)	101,60 (4.000)	35,00 (1.375)	19,05 (.750)	3,18 (.125)	1-8 thread
60	107,95 (4.250)	139,70 (5.500)	107,95 (4.250)	161,93 (6.375)	38,10 (1.500)	19,05 (.750)	3,18 (.125)	1 1/-7 thread

DV — DIN 69871



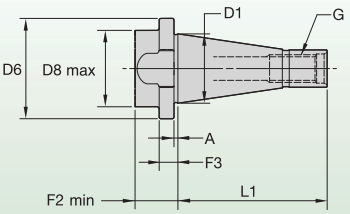
	D1	D6	D8 max	L1	F2 min	F3	A	G
30	31,75 (1.250)	49,95 (1.967)	45,00 (1.772)	47,65 (1.876)	35,00 (1.378)	19,05 (.750)	3,20 (.126)	M12 thread
40	44,45 (1.750)	63,00 (2.480)	50,00 (1.969)	68,25 (2.687)	35,00 (1.378)	19,05 (.750)	3,20 (.126)	M16 thread
45	57,15 (2.250)	82,00 (3.228)	63,00 (2.480)	82,55 (3.250)	35,00 (1.378)	19,05 (.750)	3,20 (.126)	M20 thread
50	69,85 (2.750)	97,45 (3.827)	80,00 (3.150)	101,60 (4.000)	35,00 (1.378)	19,05 (.750)	3,20 (.126)	M24 thread

Form B — Flange Coolant Entry Ports



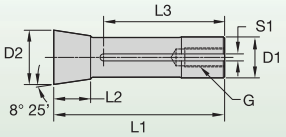
	D	F4 ±0.004
30	4,00 (.157)	21,00 (.827)
40	4,00 (.157)	27,00 (1.063)
45	5,00 (.197)	35,00 (1.378)
50	6,00 (.236)	42,00 (1.654)

QC — Erickson™ Quick Change



	D1	D6	D8 max	L1	F2 min	F3	A	G
30	31,75 (1.250)	46,03 (1.812)	35,05 (1.380)	68,33 (2.690)	19,81 (.780)	10,69 (.421)	1,96 (.077)	1/2" - 13 UNC - 2B
40	44,45 (1.750)	63,50 (2.500)	50,80 (2.000)	93,73 (3.690)	20,83 (.820)	9,88 (.389)	1,93 (.076)	5/8" - 11 UNC - 2B
50	69,85 (2.750)	88,90 (3.500)	73,66 (2.900)	127,00 (5.000)	30,73 (1.210)	15,09 (.594)	3,58 (.141)	1" - 8 UNC - 2B

R8 — Bridgeport



	D1	D2	L1	L2	L3	S1	G
R8	.469	1.241	4.000	.938	2.750	.157	7/16-20 UNF - 2B

The Importance of a Strong Connection

Many component materials are switching to lighter, high-strength materials, like titanium, to increase fuel efficiency. To save time and money, machinists are challenged to maximize metal removal rates at low cutting speeds and considerably higher cutting forces. Machine tool builders must also provide greater stiffness and damping in their spindles to minimize undesirable vibrations that deteriorate tool life and part quality.

Though these advances contribute to greater productivity, the weakest point is often the spindle connection itself, which needs high torque and must overcome high-bending applications.

Our response to this traditionally weak point has been the proven KM™ system, and now we are introducing the next generation KM4X™. The combination of the KM4X's high clamping force and interference level lead to a robust connection and extremely high stiffness and bending load capacity for unmatched performance in titanium machining.

Current Spindle Connections

To fulfill the increasing demand for high productivity, an important element to consider is the tool/spindle connection. This interface must be able to withstand high loads and maintain rigidity throughout the machining process. In most cases, the connection determines how much material can be removed on a given operation until high tool deflection or chatter result.

High-performance machining is accomplished using high feeds and depths of cut. Because of advances in cutting tools, there is a need for spindle connections that utilize available power.

Several different types of spindle connections were developed and/or optimized over the last few decades. Due to its strong cost/benefit position, the 7/24 ISO taper became one of the most popular systems on the market. It has been successfully used in many applications, but its accuracy and high-speed limitations prevent it from becoming a more advanced and productive system.

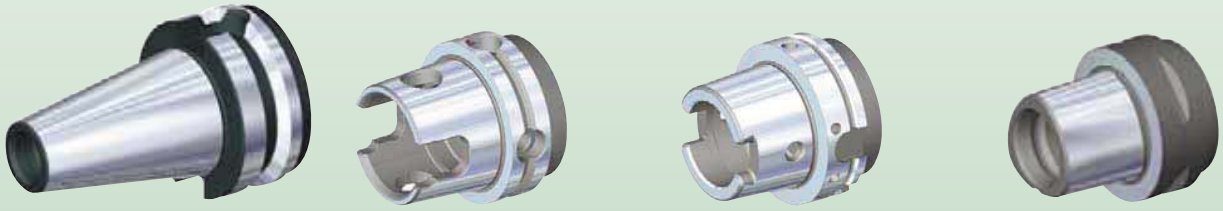
The advent of face contact represented a major step over the standard 7/24 taper. Combining face contact with a 7/24 solid taper provides higher accuracy. However, this also presents some disadvantages. Loss of stiffness at higher speeds or high side loads are some of the major flaws apparent in this system. Most of these tools are solid, and the spindles have relatively low clamping force.

This results in limited connection stiffness, as radial interference needs to be minimal. The required tolerances to achieve consistent face contact are thus very tight, leading to high manufacturing costs.

Choosing What's Right

With more materials that are tougher to machine and require considerably higher cutting forces from the machine tool, choosing the spindle interface wisely to maximize cutting edge performance is key to success.

The KM spindle connections greatly outperform the conventional 7/24 steep taper and its face taper contact derivatives HSK and PSC systems. KM4X is the best large, heavy-duty spindle connection for rigidity because it has superb balance between bending and torsion capabilities from the machine tool.



Various spindle connections commercially available today: 7/24 ISO taper, KM (ISO TS), HSK, and PSC.

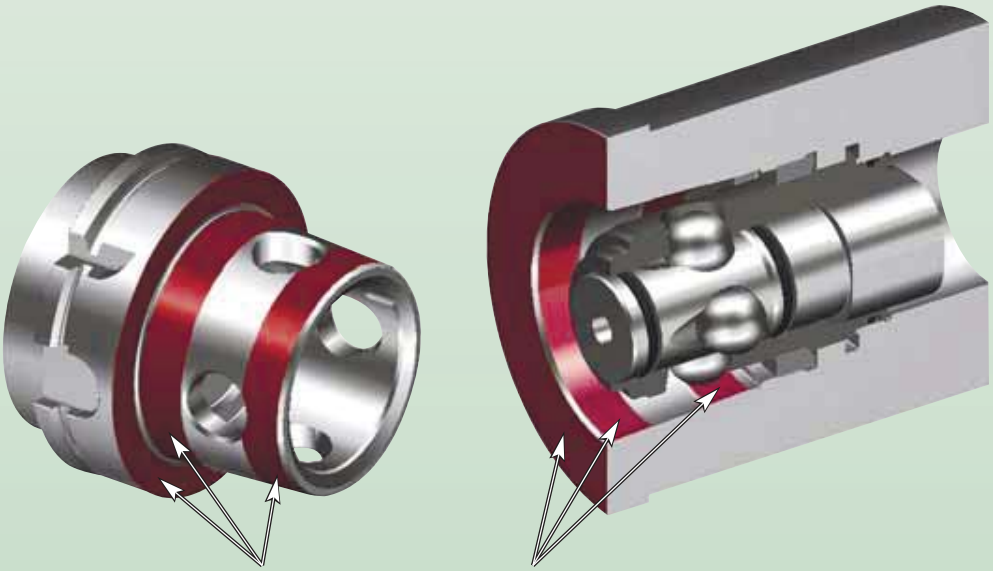
KM4X — The Next Generation Spindle Connection System

As a global tooling supplier and a true customer support partner, we recognize the need to offer tooling products for all spindle interfaces and make available solutions to provide the best cutting edges to gain maximum productivity at the spindle system connection.

KM4X is the latest version of the KM™ spindle interface targeted at heavy-duty machining operations and is a top choice for machining large, structural tough-to-machine materials like titanium for the aerospace industry.

The Latest Innovation in Spindle Interface Technology

- KM4X offers the most rigid connection able to withstand extremely high bending due to a combination of high interference and high clamping forces.
- KM4X provides 3x more bending capacity than comparable face contact systems.
- KM is the only connection that maintains stiffness at elevated rotational speeds and is suitable for a range of applications from low speeds with high torque to very high spindle speeds with low torque.
- KM4X maintains a better balance between bending and torsion capabilities.
- The ability to retrofit KM4X to an existing machine tool offers the added advantage of increasing throughput.
- Heavy-duty, rigid configuration with evenly distributed clamping force.
- Simple design enables front-loaded spindle configuration.
- Balanced-by-design for high spindle speed capacity.



KM4X three-surface contact for improved stability and accuracy.
Optimized clamping force distribution and interference fit provides higher stiffness.

Why Bending Load Capacity Is Important

When machining tough materials like titanium, cutting speeds are relatively low due to thermal effects on cutting tools. Over the years, machine tool builders responded to this issue by improving stiffness and damping on spindles and machine structures. Spindles have been designed with abundant torque at low rotational speeds. Nevertheless, the spindle connection has remained the weak link in the system.

The spindle connection must provide torque and bending capacity compatible with the machine tool specifications and the requirements for higher productivity. It becomes obvious that in end-milling applications where the projection lengths are typically greater, the limiting factor is the bending capacity of the spindle interface.

The lines on the chart to the right represent the load capacity of HSK, PSC, and KM4X. The shaded areas represent the typical requirements for heavy-duty applications in various machining processes. KM4X is the only system that can deliver the torque and bending required for achieving high-performance machining. Some systems may be able to transmit a considerable amounts of torque, but the cutting forces also generate bending moments that exceed the interface's limits before torque limits are exceeded.

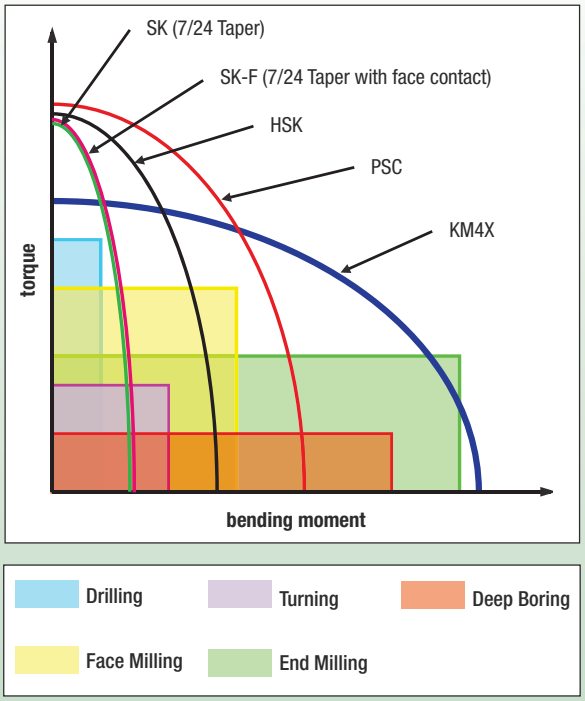
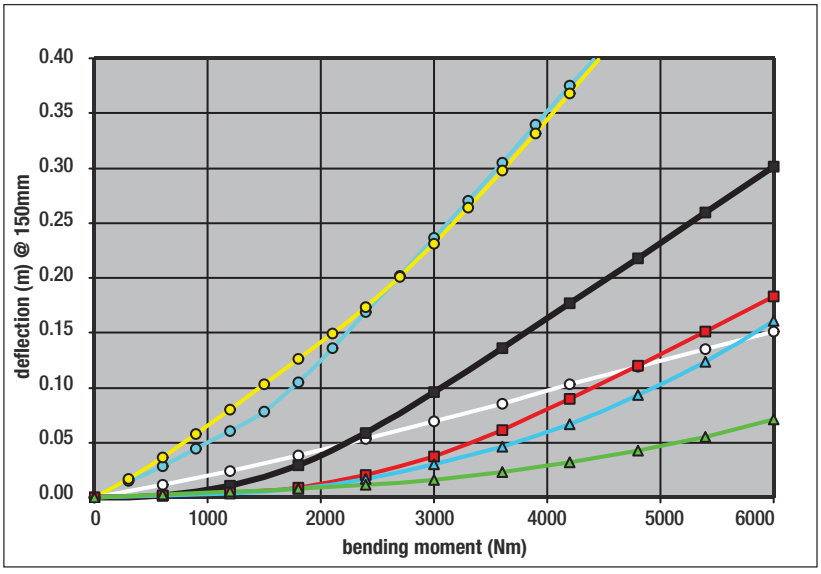
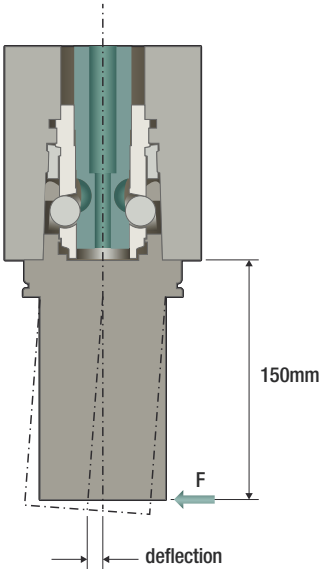
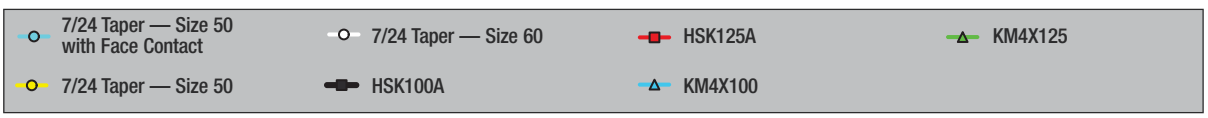
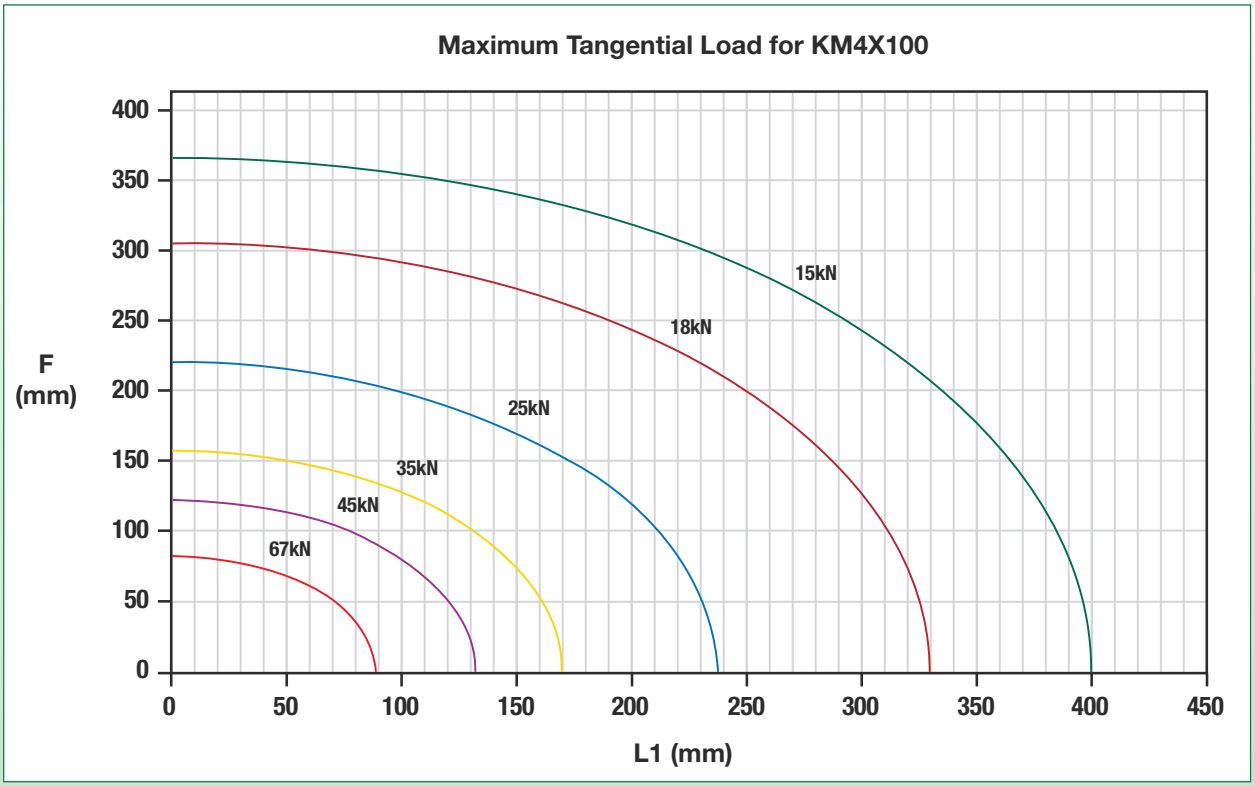


Chart shows load-deflection comparison of steep taper with and without face contact — HSK and KM4X.









The KM4X system is the best large, heavy-duty connection. A weak connection can fail to deliver the desired cutting edge performance. KM4X superior rigidity equals maximum productivity.

The KM Coupling

The KM Quick Change Clamping System is the first step in achieving maximum machine output. Please refer to the WIDIA Machine Utilization Strategy for more information on how we can help you increase your machine throughput.
The KM joint achieves rigidity and stiffness by combining unique design elements in both the shank of the tool and the clamping mechanism. The KM joint was developed as a system and takes full advantage of both the tool shank and the mechanism to obtain maximum benefits from the space utilized.

Rigidity

All KM tooling is designed around a short 10:1 tapered shank. Extensive testing of many different lengths, angles, and interference levels provided the optimum combination of dimensions with regard to maximum stiffness. The taper is self-centering, promoting easy tool loading in both manual and automatic applications.

The three-zone contact and the ball track clamping mechanism produces a coupling that closely approaches the ultimate rigidity of a solid piece.

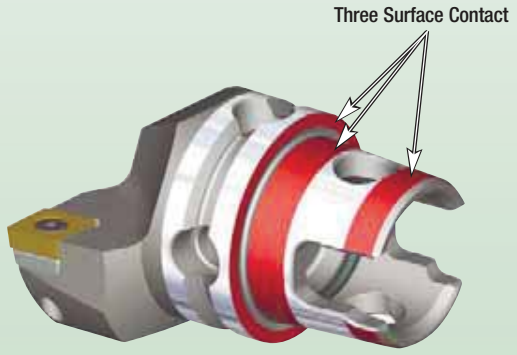
Face and Taper Contact

KM tooling is designed to have simultaneous taper and face contact. Previous efforts to achieve this were concentrated on steep taper applications. However, due to the relatively large angle of the taper, extremely tight tolerances are required on the gage diameters of both the tool and receptacle. The KM taper was designed to avoid these tight tolerances by selecting shallower taper angles that enable elastic deformation of both the taper shank and receptacle during clamping. It also permits larger interference levels* to be used while still achieving taper and face contact during clamping. These interference levels, when combined with the proper clamping force, provide superior static and dynamic stiffness. The system's interference capability enables the use of lower tolerance levels for gage diameters, decreasing manufacturing costs. The taper and face contact feature provides a radial and axial repeatability of ±2,5 µm (±.0001") for a specific cutting unit in a specific clamping unit. When more than one unit is utilized, the manufacturing and component tolerances of each must be considered. Pre-gaging cutting units before they are used enables the deviations of each tool tip location to be recorded. These deviations can be compensated for by the machine tool control offsets. Checking for deviations prior to use means the first part manufactured will be a good part.

**The difference between the gage diameters of the receptacle and the taper shank.*

Clamping Mechanism

The KM clamping mechanism is housed inside of the taper shank, which contains two angled holes that function as ball tracks. A cylindrical ball canister fits inside of the taper shank, where wedge shaped forms on a central lock rod force two hardened steel balls outward. The steel balls interact with the angled holes in the tapered shank to produce clamping force. The combination of the angle in the taper shank, the angle of the canister holes, and the lock rod angle produce a measured mechanical advantage that varies between 3.5:1–7:1. The standard manual side activation mechanism has a mechanical advantage of 3.5:1 and fits into the system size diameter.



Locking Sequence

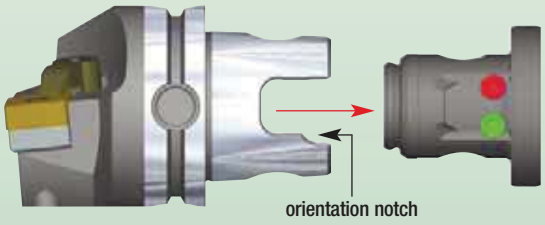
The clamping sequence starts by inserting the cutting unit into the female taper of the clamping unit. The cutting unit first makes contact at a standoff from the face of approximately 0,25mm (.010"). The cutting unit advances until the gage face makes contact with the clamping unit face, where a small amount of elastic deformation takes place at the front of the female taper as locking force is applied. The final amount of torque applied enables the tail of the cutting unit to clamp securely between the steel balls and the clamping unit inside diameter.

Sealed Coolant

Sealed through-the-tool coolant is offered on all standard KM tooling and clamping units. The coolant is sealed using O-rings in both the cutting units and clamping units. This feature ensures that coolant is directed as close as possible to the cutting edge while preventing contaminants from entering the clamping mechanism. Standard Viton® O-rings are utilized on KM.

Fail-Safe Tool Orientation

A unique feature of KM clamping is the ability to ensure that the KM cutting unit can only be installed in one orientation. The direction of this orientation feature can be changed within the clamping unit. To allow greater flexibility, standard KM clamping units are shipped without this feature installed. For more details on this feature, refer to the KM operating instructions section.



Summary

KM coupling offers a very rigid joint with a high degree of repeatability while maintaining a compact envelope. This permits a high degree of versatility without sacrificing cutting performance.

Accuracy and Repeatability

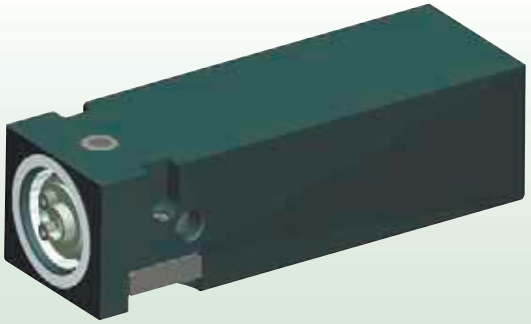
Accuracy and repeatability of the coupling are shown in the table below. Accuracy is measured over a gage insert in different cutting units changed in and out of a clamping unit. Accuracy will decrease with inserts of varying tolerances and nose radii. Station-to-station accuracy on a turret requires that all clamping units be set in the same position on the machine tool mechanically or that variations are recorded as offsets in the machine control. Repeatability is measured over the nose radius of a cutting unit through many cycles of changing the cutting unit in and out of a clamping unit.

	accuracy	repeatability
axial	0,13mm (+/- .005")	0,0025mm (+/- .0001")
radial	0,13mm (+/- .005")	0,0025mm (+/- .0001")
cutting edge height	0,4mm (+/- .016")	0,0025mm (+/- .0001")

Manual Clamping System

Characteristics

- KM Manual Quick Change tooling is the most economical way to reduce downtime for setup and tool change and is an important first step toward further automation. The machine tool builder or the customer can easily install KM Manual Quick Change tooling.
- All KM manual clamping units require approximately three turns of the activation screw and a specified amount of torque to lock the cutting tool.
- The KM Manual Quick Change clamping mechanism is rigid and compact, with an easily accessible activation screw. The high mechanical advantage of the ball track makes it simple to apply the required locking force.
- All KM Manual Quick Change clamping units accept external and internal cutting tools. Right- or left-hand tooling can be used interchangeably, and cutting tools can be inverted if required. KM Manual Quick Change clamping units support through-the-tool coolant.



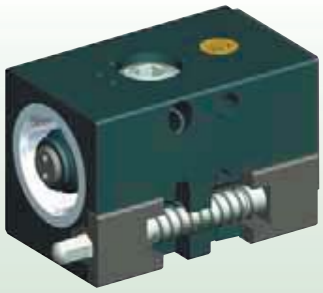
- The KM Manual Quick Change clamping mechanism can adapt to a wide variety of machine tool mounting configurations including flange mounts, square, round, and VDI shanks.

KM-LOC II™ Clamping System

The KM-LOC II clamping device is the latest addition to the WIDIA™ KM modular quick-change tooling family. An evolutionary step from the conventional KM manual clamping system, the KM-LOC II employs a cam and a preloaded disc spring pack to provide positive, stop-to-stop locking and unlocking in only 145° of movement.

The spring pack supplies the correct clamping force without using a torque wrench, while the cam permits quick and easy clamping/unclamping in less than one half of a turn. The KM-LOC II clamping device is compact to adapt to a wide variety of machine tool mounting configurations including flange mounts, square, round, and VDI shanks.

The KM-LOC II is capable of handling through-the-tool coolant pressure of 100 bar (1500 psi), and the design permits lubrication of internal components without disassembly. The design also enables the external installation of an orientation screw that restricts the cutting tool to a single orientation.



The latest KM-LOC II clamping device offers all of the features and benefits of our industry-proven KM Modular Quick Change Tooling System and reduces the time required for manual tool changes.

Automatic Clamping System • Spring-Pack Activated

Characteristics

Automatic KM clamping systems enable tools to be locked or unlocked with the push of a button by the machine operator or changed automatically by the machine tool. These units also allow tools to be changed quickly and provide a high level of automation at a moderate cost.

Operation

The pull on the lock rod for the automatic KM clamping unit is provided by disc springs that are an integral part of the clamping unit. Release is accomplished by pushing on the back of the clamping unit with a hydraulic cylinder mounted on the turret assembly. Many machine tool builders design and build the turrets for their machines to be equipped with the KM Automatic Clamping Units.

KM Manual Clamping Operating Instructions

Locking

Before inserting the KM unit into the clamping mechanism (Figure 1), clean the contact face and taper.

Turning the torque screw clockwise locks the cutting unit in position. For maximum safety, tighten the unit to the specified torque using a torque wrench. This ensures that the proper clamping forces are exerted.

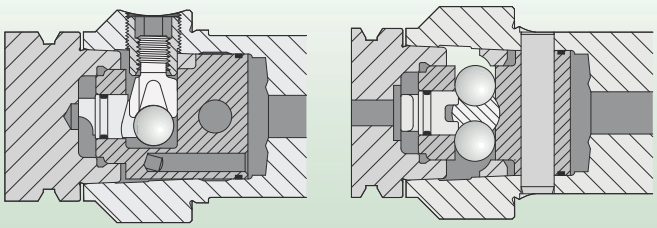


Figure 1

Operating Position

With the balls locked in position (Figure 2), and the face and self-locking taper fully engaged, the cutting unit and clamping unit are rigidly secured together.

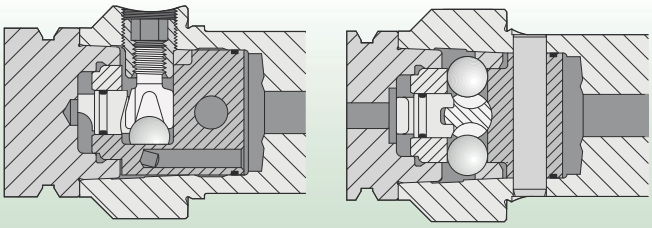


Figure 2

Unlocking

Rotate the torque screw counterclockwise (Figure 3) until initial resistance is felt. In this position, the locking balls are free of the cutting unit, but the taper interference is still holding the KM unit in the clamping unit. At this point, the bump-off pin is in position to free the cutting unit from the interference fit.

Continue to rotate the torque screw slowly until the cutting unit is no longer making face contact (Figure 4) and is released from the taper. The torque screw will stop rotating and more resistance will be felt. Do not turn the torque screw any further.

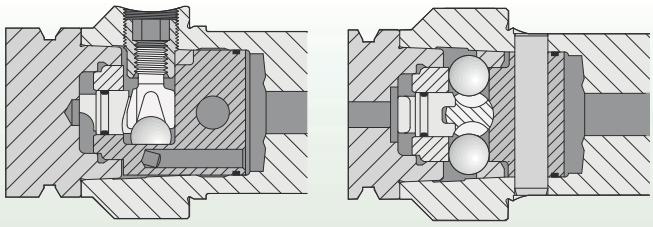


Figure 3

CAUTION
Continuing to rotate the torque screw may damage the clamping components.

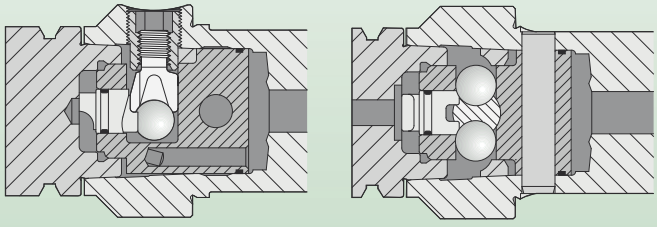
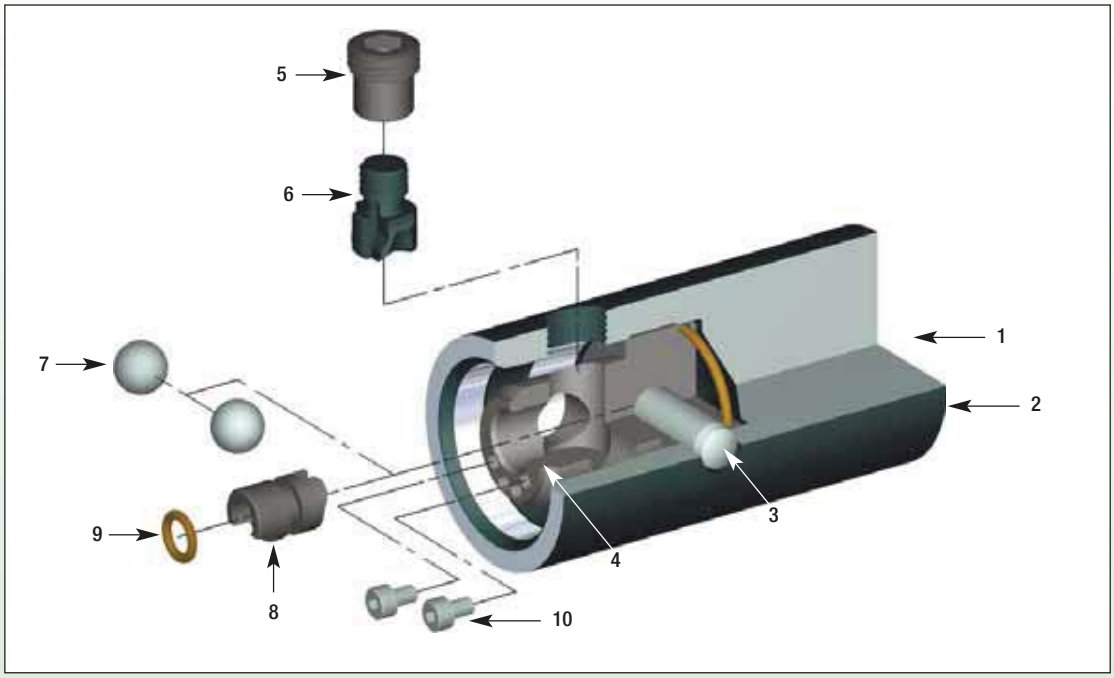


Figure 4

Clamping Components



KM Clamping Components • Functional Definitions

1. Clamping Unit Assembly
- Assembly is designed to adapt KM tooling to a wide variety of machine tools.

2. Clamping Unit Body
- Primary detail of the clamping unit assembly, less additional hardware.

3. Canister Pin or Canister Screw
- Secures ball canister to clamping unit body.

4. Pin Canister or Screw Canister
- Main component of KM clamping mechanism holds and locates the locking balls and bump-off pin.

5. Torque Screw
- Rotation moves the lockrod:
  a. Clockwise rotation advances lockrod, securing cutting unit (not shown).
  b. Counterclockwise rotation retracts lockrod, releasing cutting unit (not shown).

6. Lockrod
- Dual function:
  a. Acts as a wedge when advanced between locking balls, causing them to move outward in the ball canister and pushing the locking balls into the ball tracks of the cutting unit (not shown).
  b. Acts as a wedge when retracted using a raised, tapered key to force the bump-off pin against the cutting unit (not shown).

7. Locking Balls (2)
- Precision, chrome alloy-steel hardened balls used to transmit pull-back force to the cutting unit.

8. Bump-Off Pin
- Dual function:
  a. Releases cutting unit from the clamping mechanism.
  b. Prevents lockrod from rotating.

9. Bump-Off Pin O-Ring
- Prevents coolant and contaminants from contacting KM clamping components.

10. Bump-Off Pin Screws (2)
- Secures bump-off pin in ball canister.

Assembly/Disassembly Instructions • Repair Adjustment/Retiming Procedures for KM Manual Tooling Clamping Unit

• Proper KM repair package catalog and order numbers:

catalog number	3S order number	3L order number
KM32-PKG 3S or 3L	1023697	1023698
KM40-PKG 3S or 3L	1023699	1023700
KM50-PKG 3S or 3L	1023726	1023725
KM63-PKG 3S or 3L	1013701	1013702
KM80-PKG 3S or 3L.	1144980	1023701

- Pair of pliers.
- WIDIA™ recommends and uses GLEITMO™ 805.
- Order number 1567575 for one grease cartridge.
- Order number 1567577 for a 1,000 gram tin.
- Clean towels or shop rags.
- Solvent or degreaser that does not leave residue (used to clean inside the taper and canister upon disassembly). Should the unit become contaminated, you can use a degreasing agent or something similar to clean the surfaces.

CAUTION
DO NOT USE silicone cleaner or WD-40™-type lubricants.

• T-wrench or metric-hex Allen wrench fits torque screw hex head for:
KM32™ units.....5mm
KM40™ units.....6mm
KM50™ units.....10mm
KM63™ units.....12mm
KM80™ units.....14mm

• Hex Allen wrench fits small socket head screws to hold bump-off pin in place for:
KM32 units.....2mm
KM40 units.....2,5mm
KM50 units.....3mm
KM63 units.....5mm
KM80 units.....5mm

NOTE: All KM repair packages include the bump-off pin, lock rod, torque screw, two chrome balls, two socket head cap screws, and O-ring.

KM Manual

Standard KM Manual units require a torque wrench to activate. Using the proper torque wrench value is critical. Tighter is not better because over tightening can cause damage.

The specific operating torque of the KM manual clamping units is listed on each unit (torque value information is listed to the right).

The KM connection must be kept clean and free from nicks and burrs. KM plugs are available to ensure cleanliness when a cutting unit is not engaged in the clamping unit.

When a KM head is unlocked, the head will bump-off. KM's 10:1 taper is self-locking, and therefore, requires a mechanical release. This is accomplished within the design of the KM System and does not require operator intervention.

After the head has been released, you will need to turn the torque screw another 3/4–1-1/2 turns. This rotation will feel free of resistance. When the free turning motion stops, the head can be pulled from the clamping unit. Do not turn the lock screw further, as damage can occur to the lockrod and/or bump-off pin.

KM size	torque (ft. lbs.)	torque (Nm)	activation drive size
KM32™	7–9	10–12	5mm
KM40™	9–12	12–16	6mm
KM50™	20–25	27–34	10mm
KM63™	35–40	47–54	12mm
KM80™	58–63	79–85	14mm

Operator Maintenance

All tooling showing damage must be replaced. Burrs and nicks should be removed by stoning and/or polishing.

- Use plugs to protect clamping units when they are not in use.
- Use spindle wipers to clean the clamping units.
- For spindle wipers, refer to page J31.

(continued)

Assembly/Disassembly Instructions • Disassembly Procedure *(continued)*

1. Remove the two socket-head cap screws that retain the bump-off pin (see Frame 1).

2. Grip the exposed end of the bump-off pin with pliers and pull straight out. Some resistance may be felt due to the O-ring seal around the bump-off pin (see Frame 2).

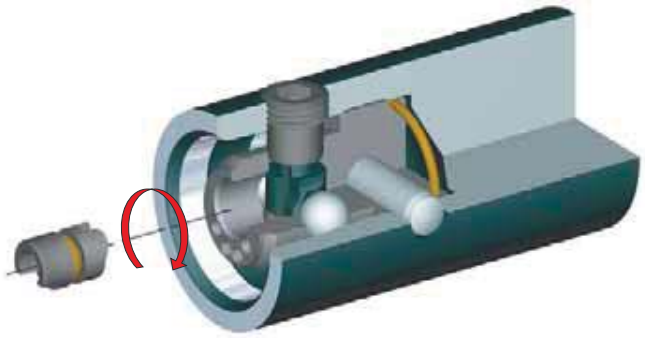
3. Using the appropriate metric wrench, remove the torque screw. The lockrod should come out with the torque screw. Separate the torque screw from the lockrod, remembering the lockrod has left-hand threads (see Frame 3).

4. Remove the locking balls from within the canister. Grease can cause them to stick inside. Pushing the balls one at a time towards the center of the canister then turning the clamping unit upside down and tapping it against your palm will usually dislodge them. If you must hit the clamping unit harder, be certain you do not damage the gage or locking face of the unit. A small magnetic screwdriver also works well (see Frame 4).

5. Normally, no further disassembly should be attempted. If the clamping unit body or canister has been damaged, it should be replaced with a new unit. You can also contact your WIDIA™ Sales office for instructions on how to send the unit to a WIDIA Repair facility.

Frame 1

Frame 2



(continued)

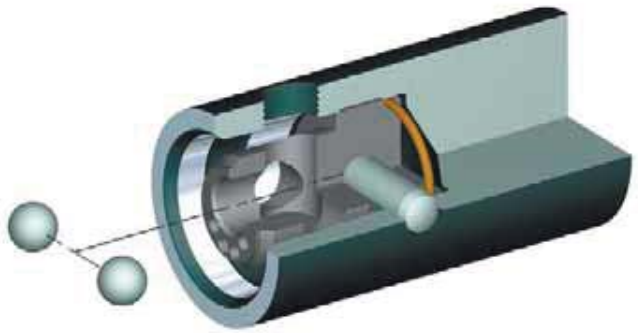
Assembly/Disassembly Instructions • Disassembly Procedure *(continued)*

6. Clean locking balls, torque screw, lockrod, and bump-off pin of all grease and inspect for wear, burrs, or obvious damage. If rebuilding the unit with a repair parts package, we recommend using all new components contained in the kit. If you are not using the repair package, but are retiming or adjusting the unit, inspect the external threads on the torque screw and lockrod, the locking ball contact surfaces on the lockrod, and the mating surfaces between the lockrod and bump-off pin. Discard any components of questionable condition and replace with new ones. Note the condition of the raised taper key on the lockrod as you will need this later.

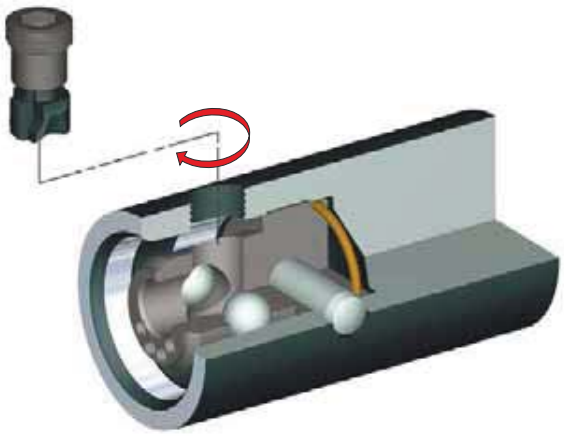
7. Inspect inside the KM taper for damage and/or contamination. Clean the taper and canister with solvent. Allow the unit to dry before reassembling. Inspect the torque screw threads in the body for damage.

8. If the unit is equipped for through-coolant capability, you may want to verify that the coolant passages are clear. Clean if required.

Frame 3



Frame 4



(continued)

Assembly/Disassembly Instructions • Assembly/Retiming Procedure *(continued)*

1. Place a small amount of GLEITMO™ 805 grease into the canister where the locking balls make contact, paying particular attention to the inner top surface of the locking ball bores.

2. Lightly coat both locking balls with grease. Insert the balls, one at a time, into the canister's central bore until it bottoms, then move the ball outward into the locking ball bores, not the torque screw hole (see Frame 5).

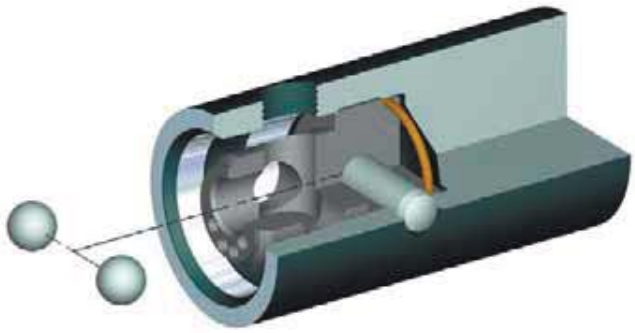
3. Lightly coat the threads of the lockrod and torque screw with grease and thread them together finger tight (left-hand threads). The torque screw and lockrod must remain tightly together during the reassembly procedure and rotated as one piece throughout (see Frame 6).

4. Make sure the balls are pushed radially into the bores. Using the metric Allen or T-handle wrench, thread the torque screw lockrod assembly into the body until it makes soft contact with the balls. Be certain the torque screw and lockrod rotate together by looking down into the canister as you thread them. If the lockrod and torque screw become unthreaded, you should remove them, re-tighten, and start Step 4 again.

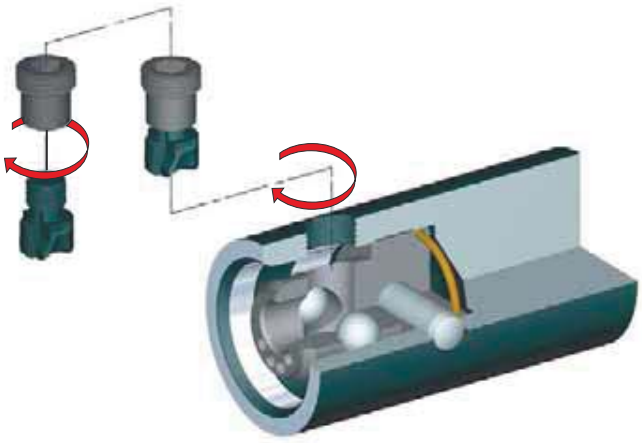
5. Look into the canister through the bump-off pin bore and note the raised key on the lockrod. Position the key facing outward through the bump-off pin bore, centering it in the bore by backing out the torque screw only enough to properly align the key.

6. Place a KM cutting unit into the clamping unit. If cutting unit does not drop into place, go to Step 7. If the cutting unit drops into place, remove it, push the balls radially back out into the ball bores, and turn the torque screw/lockrod assembly inward a full turn (360°). Repeat Step 6 as many times as necessary until the unit does not drop into the taper.

Frame 5



Frame 6



(continued)

Assembly/Disassembly Instructions • Assembly/Retiming Procedure *(continued)*

7. Thread the torque screw/lockrod assembly outward one full turn (360°), making sure the raised key faces outward. Place a KM cutting unit into the clamping unit. It should drop into the taper easily. If it does not, repeat Step 7.

8. Insert the bump-off pin without its O-ring into the bore, being certain the angled surface of the bump-off pin will ride on the angled surface of the lockrod (see Frame 7).

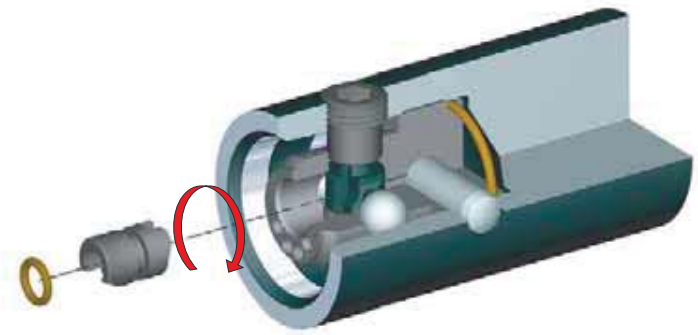
9. When the bump-off pin is properly seated, its largest diameter should be below the end of the canister — it should not rotate. The pin is rotationally restrained by the lockrod key, in the bump-off pin keyway.

10. If all is correct, remove the bump-off pin, install its O-ring, lightly coat with grease paying particular attention to the slot, and reinstall into the bore.

11. Reinstall the socket-head cap screws that retain the bump-off pin (see Frame 8). Check for proper operation of the unit by pushing down on the end of the bump-off pin with your finger while tightening and loosening the torque screw through its full travel. You should feel the bump-off pin move in and out as the direction of the torque screw changes.

12. As a final check, rotate the torque screw outward until it stops. Install a KM cutting unit and tighten the torque screw to the proper torque required for locking. Ensure that there is no air gap between the locking faces of the cutting unit and the clamping unit. Loosen the torque screw. Initially, resistance will be felt while loosening the screw, and again when bumping off the tool from the taper. Only use light force to loosen the screw after the tool has been bumped off. Do not force the torque screw loose after tool bump-off or damage may result. Remove the cutting unit and install protective plastic or steel plug.

Frame 7

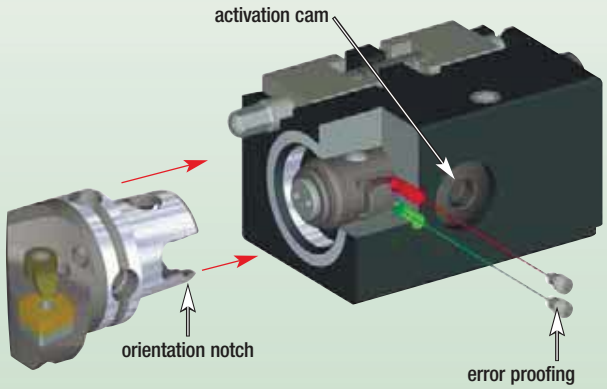


Frame 8

KM-LOC II™ Clamping Units

Operating Instructions

All KM-LOC II Clamping Units utilize disc springs to develop the correct tightening torque. This unique system does not require a torque wrench to achieve proper clamping torque. The KM LOC II System provides consistent clamping forces designed to last 50,000 cycles.



KM-LOC II Locking Sequence

Always ensure that the KM cutting unit and clamping unit are free of dirt and contaminants. When installing the cutting head into the clamping unit, note the key relations of the male and female tapers. The flange face will have about 1mm (.040") standoff from the gage face before lock up. If the amount of standoff is greater than this, the unit is either error proofed or the tapers are contaminated. Rotate the head 180° for correct, free-state standoff.

Next, insert a wrench with the properly sized metric bit into the cam socket. Rotating the cam socket clockwise 145° (where it will stop) locks the head into the clamping unit. The dimples on both the cam and clamping unit body are aligned when a positive stop is reached.

KM-LOC II Unlocking Sequence

Remove chips or foreign material from around the cutting unit flange and clamping body. Insert the metric bit into the cam and rotate counterclockwise to unlock the unit. During this procedure, the lockrod will make contact with the inside of the cutting unit (this could feel like a positive stop), continue the counterclockwise turn until the head moves apart from the gage face.

When unlocked, a KM head will bump off. The KM System utilizes a 10:1 self-locking taper that requires a mechanical release.

KM-LOC II Clamping Units

The KM-LOC II

Under normal use, the KM-LOC II unit is designed to last 50,000 cycles. The KM-LOC II units are greased at the factory during assembly. To keep the unit functioning properly, it should be periodically greased and, if operating under normal conditions, done regularly every six months.

Approximate grease amounts are as follows:

- KM32™ .....0.2–0.3 fl. oz
- KM40™ .....0.3–0.4 fl. oz.
- KM50™ .....0.5–0.6 fl .oz.
- KM63™ .....0.5–0.6 fl. oz.

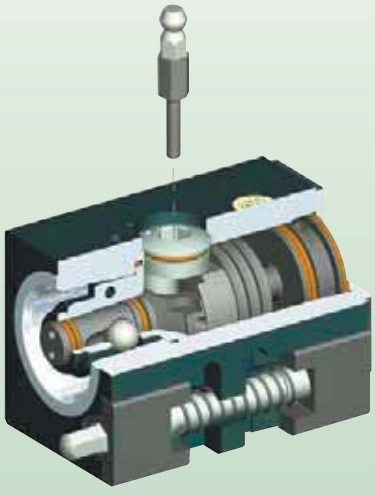
WIDIA™ uses and recommends GLEITMO™ 805, a white, high-performance grease paste.

Order number 1567575 for one grease cartridge.

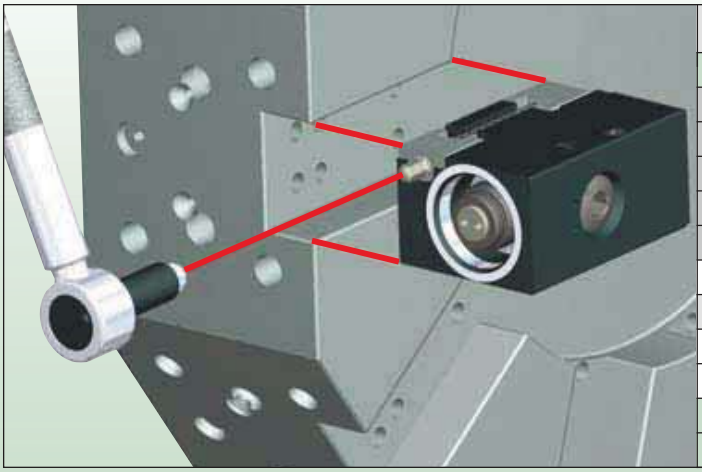
Order number 1567577 for a 1,000 gram tin.

How to Grease the KM-LOC II

Remove the standard M4 socket-set screw from the bottom of the cam hex, and thread the grease assembly into the tapped hole. An assembled grease fitting and adapter are in the spare parts package included with every clamping unit.



KM-LOC II™ Mounting Wedges • Tightening Torque



catalog number	wedge screw hex size	LBF	Nm
KM40 CL2SR/L 1260B	6	30–34	41–46
KM40 CL2SR/L 1660C	7	43–47	58–64
KM40 CL2SR/L 1660D	7	43–47	58–64
KM40 CL2SR/L 2060D	7	43–47	58–64
KM40 CL2SR/L 2560M	7	43–47	58–64
KM40 CL2SR/L 3260P	7	43–47	58–64
KM50 CL2SR/L 1675D	7	43–47	58–64
KM50 CL2SR/L 2075D	8	58–62	79–84
KM50 CL2SR/L 2575M	7	43–47	58–64
KM50 CL2SR/L 2575P	7	43–47	58–64
KM63 CL2SR/L 2090E	8	58–62	79–84
KM63 CL2SR/L 3290P	8	58–62	79–84

NOTE: Use a six-point socket.

Automatic Clamping System

Operating Instructions

The KM automatic clamping system uses a disc spring package to supply force to the lock rod — driving the locking balls and providing clamping force to the cutting unit. The mechanical advantage of the clamping mechanism is designed specifically for a given spring force to supply proper clamping force. Once the cutting unit is clamped in the KM automatic clamping unit, it is securely held in place until released by applying force to the end of the spring end cap. In most cases, this is accomplished using a hydraulic cylinder. KM automatic clamping units contain sealed coolant ports as well as a system for distributing air through the unit.

Air serves two functions: (1) air is used to clean the taper and face area during tool change; (2) it is also used to detect improper tool change. Air is routed to the intersection of the taper and the face. If the faces of the cutting unit and the clamping unit do not totally seal after a tool change, air will continue to escape and can be used to detect a tool change fault. KM automatic clamping units are available in several configurations for application on a wide variety of machines.

KM-TS™ • WIDIA™ Modular Tool Changing

KM-TS is engineered to provide machine tool builders the capability to design a machine around a very rigid and proven system while maintaining full automation. It is the ultimate in flexible tooling systems and is equipped with four holes in the V-groove.

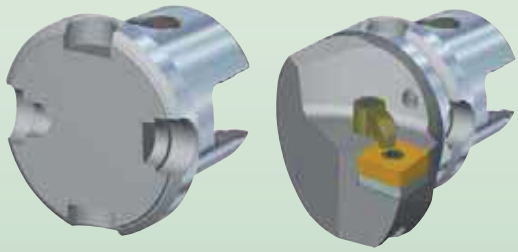
The next generation of multifunction mill-turn machines demand flexible and high-tech tooling systems. Previously, the V-groove in the KM system permitted automatic tool changing but without the capability for tool identification chips.

Tool Changing Location Features

- Two horizontally opposed holes in the V-groove for the tool changer and storage in the tool magazine. Within these two holes are counterbored holes that can be used for tool orientation.
- Two vertically oriented holes in the V-groove for tool identification chip and balancing.

Additional New Features

- A standard hardness of 50–54 HRC makes the tool durable enough to withstand the forces generated during high-speed tool changes and enables long-term use.
- Optimal toughness from the taper to the insert pocket seat ensures maximum protection against wear at all contact points and the highest stability under high cutting loads.
- The KM-TS tools have a silver, satin-finished surface that provides durability and long-lasting appearance.



Automatic tool changer configuration

Summary of Benefits

- A proven spindle interface for Daewoo®, Nakamura-Tome™, Takisawa™, and many other builders.
- Full compatibility with KM63™ and WIDIA UT63™ tools and adapters.
- Use with manual and fully automatic tool changing on lathes and modern mill/turn machines.
- Precision-ground tool taper and locating face.
- Optimal coolant supplied directly onto the cutting point, guaranteeing the highest-level of performance.
- For dry machining, the coolant hole can be easily closed with a screw.

KM63XMZ™

Automatic tool changer configuration

KM63XMZ has been engineered to work specifically on Mazak® INTEGREX® Mark IV Series of INTEGREX machines. The Mazak INTEGREX combines a high-powered turning center and a full-function machining center to produce parts in a single setup. KM63XMZ is an integral part of the success and ingenuity of these machines.

A standard hardness of 50–54 HRC enables long-term use and durability to withstand the forces generated during high-speed tool changes. KM63XMZ standard material provides optimal toughness from the taper to the insert pocket seat. This ensures maximum protection against wear at all contact points and the highest stability under high cutting loads. The tools have a silver, satin-finished surface that provides a durable and long-lasting appearance.

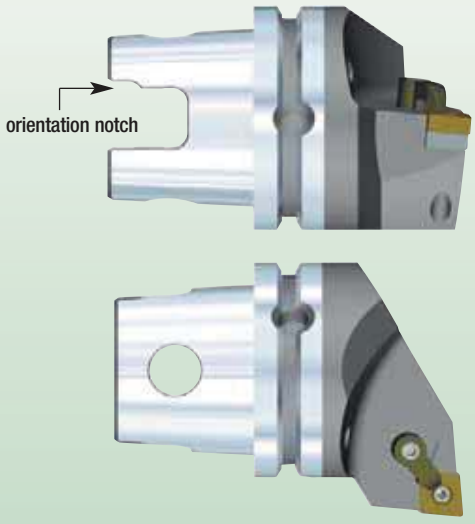
Conventional machine tools require multiple setups, extra manpower for part handling, in-process inventory, larger floor space, and increased tooling and workholding expenses.

- KM63XMZ will help reduce your overall manufacturing cost with multitask piece part processing.
- KM63XMZ will optimize your machining operations — however challenging your particular application!
- The world's most economical, rigid, and accurate modular quick-change tooling!
- Dramatically reduce your machine downtime and increase productivity!
- Large product selection for your machining needs!
- Special design tools available for unique applications!
- A proven tooling system for multitasking machines like the Mazak INTEGREX Machine Tool System!

KM63XMZ Tool Orientation Specification

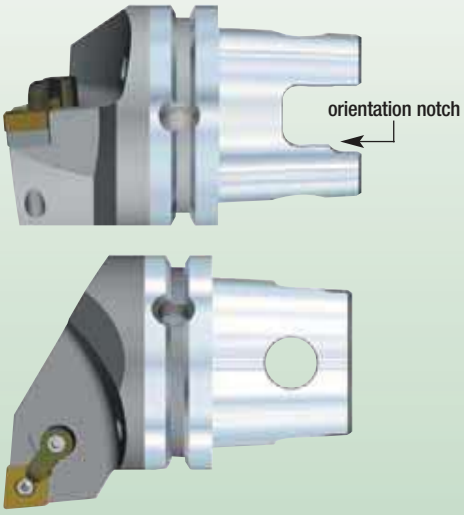
Left-Hand Orientation

For turning clockwise toward the main spindle.
Catalog Number: KM63XMZMCLNLF12Y



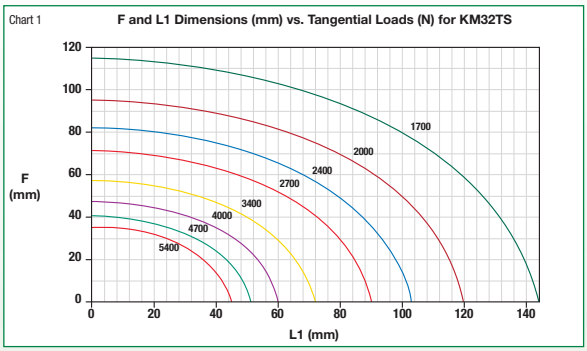
Right-Hand Orientation

For turning counterclockwise toward the main spindle.
Catalog Number: KM63XMZMCLNR12Y



Operating Conditions

The KM tooling joint is an extremely rigid and stable system that is specifically designed to supply consistent results. As with any mechanical coupling, KM has limits that, if exceeded, could result in mechanical damage to the joint and/or its components. To help you stay within these limits, WIDIA™ has established maximum safe tangential loads for each system size. These loads are described as a certain amount of force at the standard "F" and "L1" dimensions for each given system size.



Example

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling. Do not use for any other tooling system because the results will not apply.

Example of Calculation:

Where: **P** = rated tangential load

K = empirical coefficient depending on KM system size and the units of measure

KM32™ K=190200
KM40™ K=383600
KM50™ K=887400
KM63™ K=1718000
KM80™ K=3085800

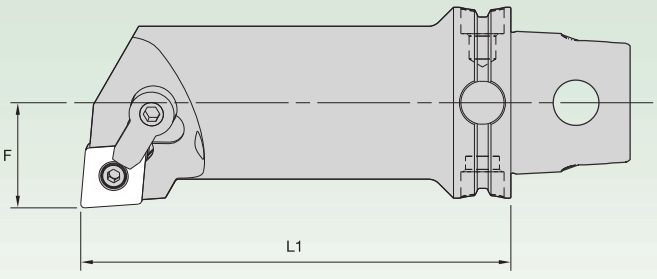
$$P = \frac{K}{\sqrt{(0.8\ L1)^2 + F^2}}$$

Given: The KM integral shank boring bar, ordering code KM40TS S32G-MCLNR12

Dimensions: **L1** = 90mm (3.543")
F = 22mm (0.866")

Required: What is maximum permissible tangential load?

$$P = \frac{383600}{\sqrt{(0.8 \times 90)^2 + 22^2}} = 5095\ N$$



Operating Conditions

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

The following example illustrates how to use Charts 1, 3, 5, and 7

Given: KM40™ integral shank boring bar, ordering code KM40TS-S32G-MCLNR12

Dimensions: KM40 integral shank boring bar, ordering code KM40TS-S32G-MCLNR12 — **L1** = 90mm, **F** = 22mm

Required: What is maximum permissible tangential load?

Solution: To determine the tangential load:

a) Determine the correct chart to use. (This is a KM40 tool, so use Chart 3).
b) Find the intersection point of the two lines that correspond to the dimensions
L1= 90mm, F = 22mm. These two lines intersect just above the 6670 N (1500 lbs) curve.
c) The permissible tangential load is the approximate load at the point of intersection.
The point of intersection is at approximately 6890 N (1550 lbs).

As you can see from the calculation, the actual value is 6790 N (1528 lbs). Small variations are to be expected from reading the approximate location on the chart but should be inconsequential.

Safe cutting conditions are achieved when the actual tangential load that is being put on the KM tooling does not exceed the maximum permissible tangential force. To help you determine the approximate value of your actual tangential force, Charts 2, 4, 6, and 8 have been developed (pages K26–K35). They show the relationship between depth of cut and feed rate at various tangential forces.

They are recommended when using standard CNMG and TNMG insert geometries to machine plain carbon steels (AISI 1000 series), most alloy steels (AISI 4000 series), and some tool and stainless steels (H11, 316).

The following example illustrates how to use Charts 2, 4, 6, and 8

Given: KM40 integral shank boring bar, ordering code KM40TS-S32G-MCLNR12
feed rate: 0.016 IPR
depth of cut: .200" (doc)

Required: What is approximate tangential force?

Solution: To determine the tangential force:

a) Determine the correct chart to use. (This is a KM40 tool, so use Chart 4).
b) Find the intersection point of the two lines that correspond to the 0.016 IPR
feed rate and the .200" doc.
c) The approximate tangential force is the force at the point of intersection.
The point of intersection is at approximately 4450 N (1000 lbs).

Please remember that these are approximate values and should be used only as a reference. If there is any doubt whether these charts are accurate enough, the actual cutting force should be calculated.

These charts were designed to determine conditions within the limits of the various KM tooling system sizes. However, in actual cutting conditions, there are many other limitations, such as insert strength or excessive overhangs, that may limit the cutting forces to values far lower than those represented in the charts.

Operating Conditions • KM32TS™ • Metric

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

Chart 1

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM32TS

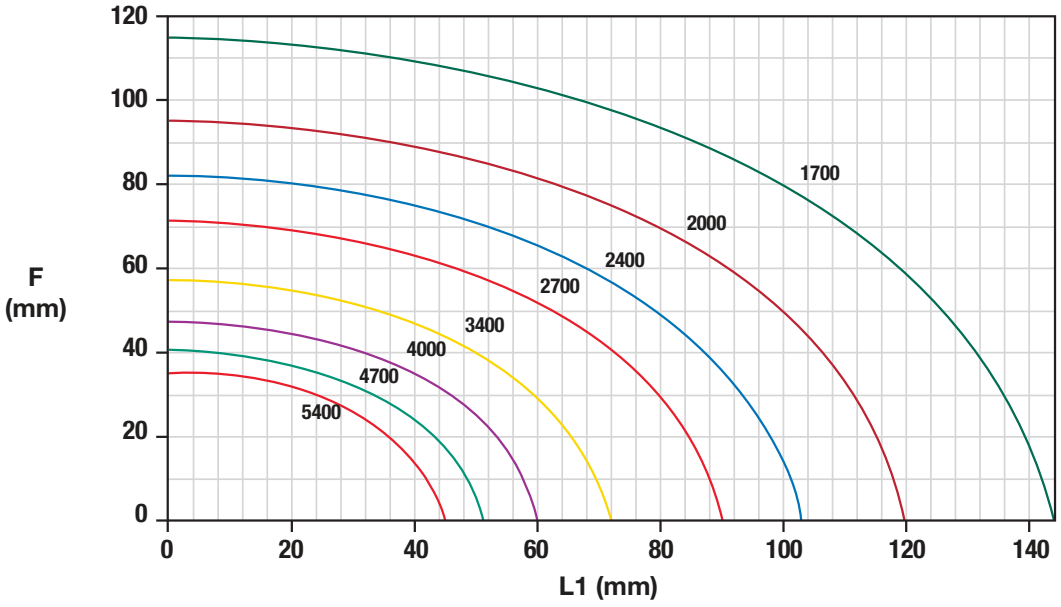
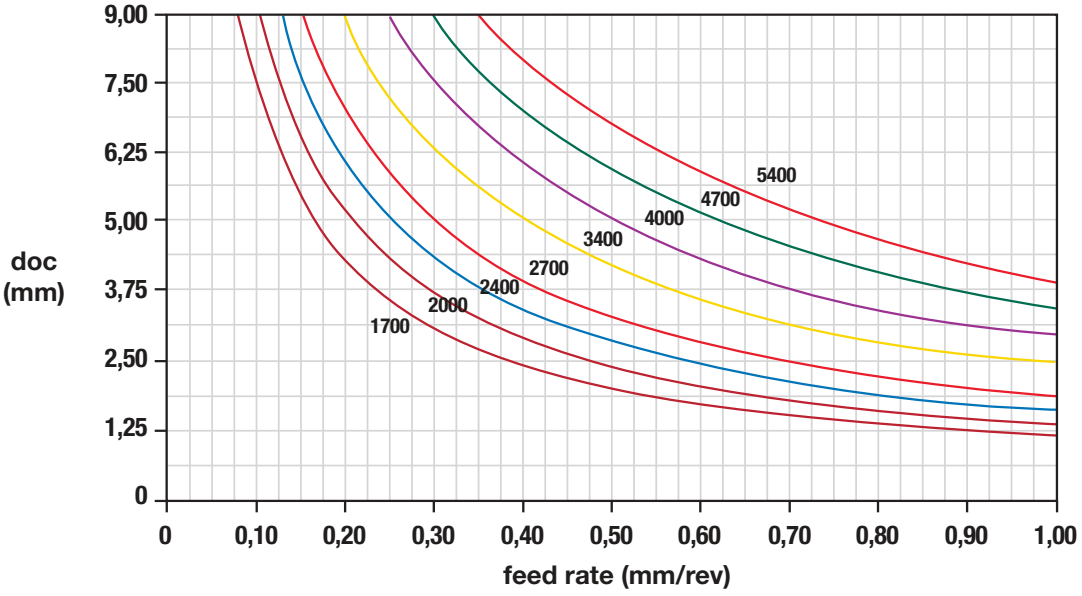


Chart 2

Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM32TS



Operating Conditions • KM32TS™ • Inch

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

Chart 1

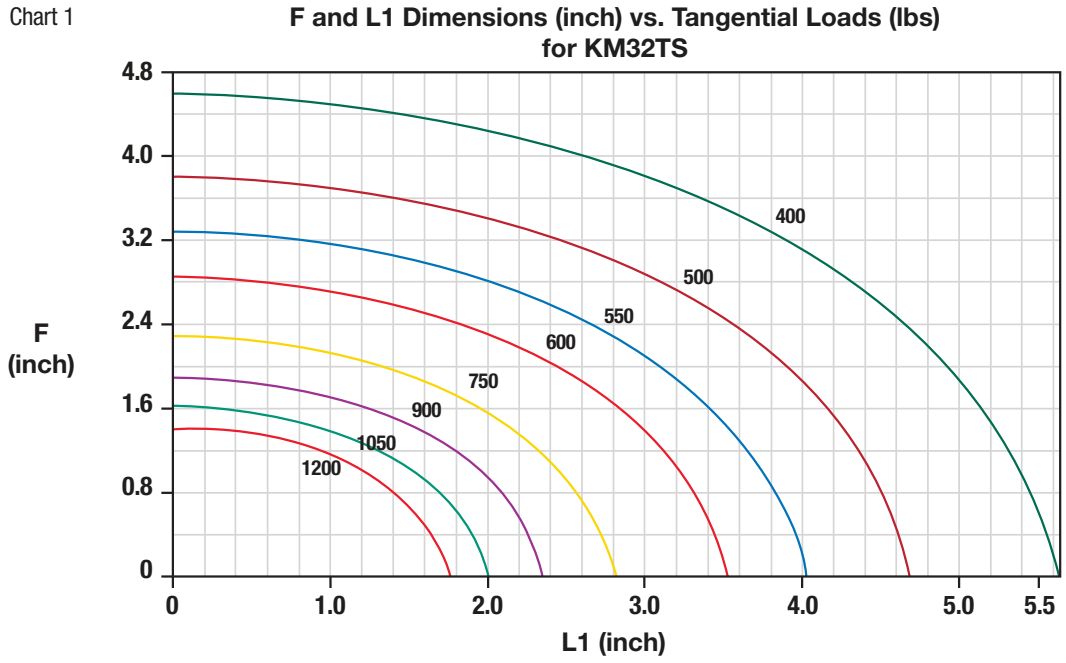
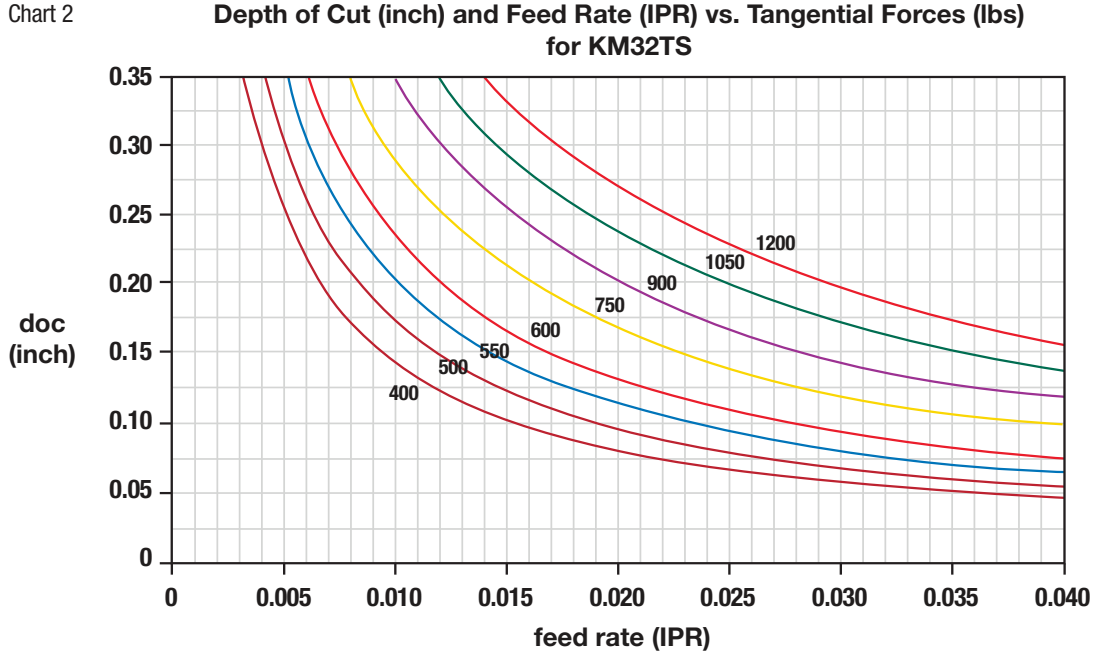


Chart 2



Operating Conditions • KM40TS™ • Metric

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

Chart 3

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM40TS

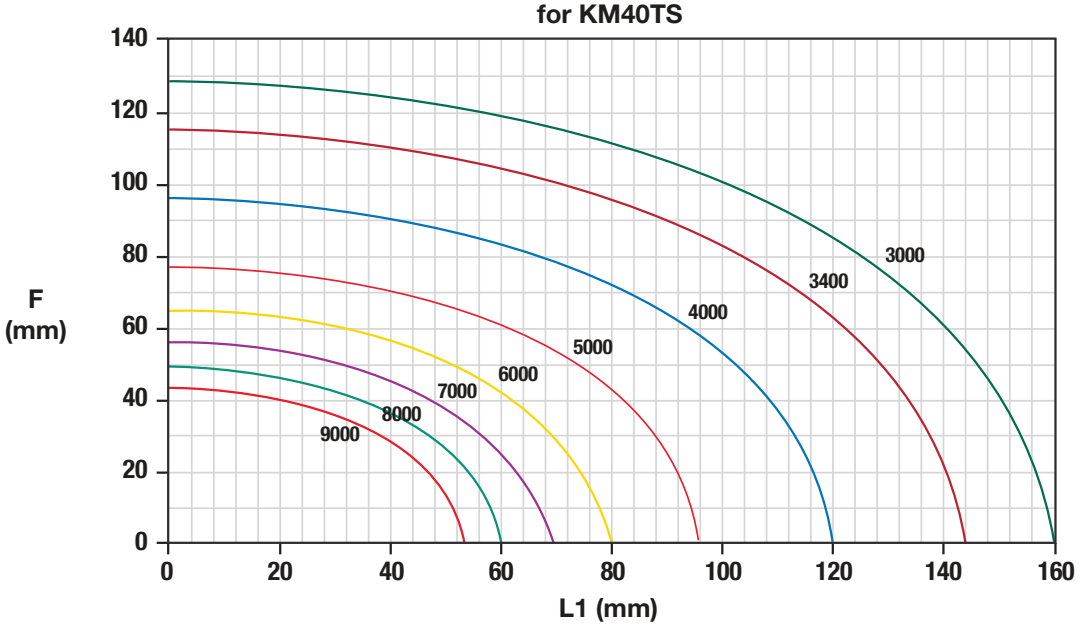
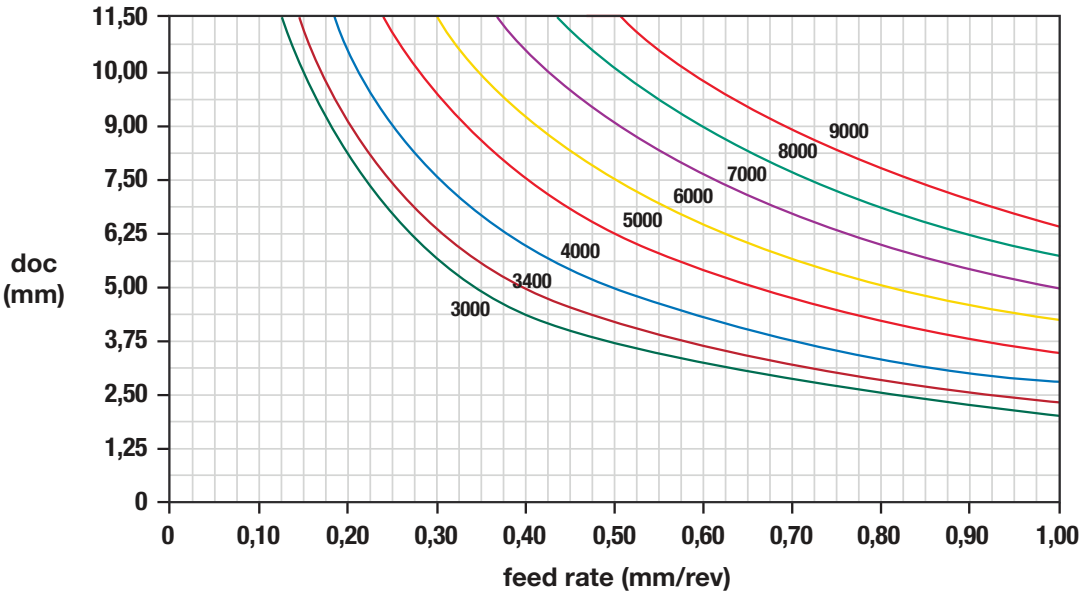


Chart 4

Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM40TS



Operating Conditions • KM40TS™ • Inch

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

Chart 3

F and L1 Dimensions (inch) vs. Tangential Loads (lbs) for KM40TS

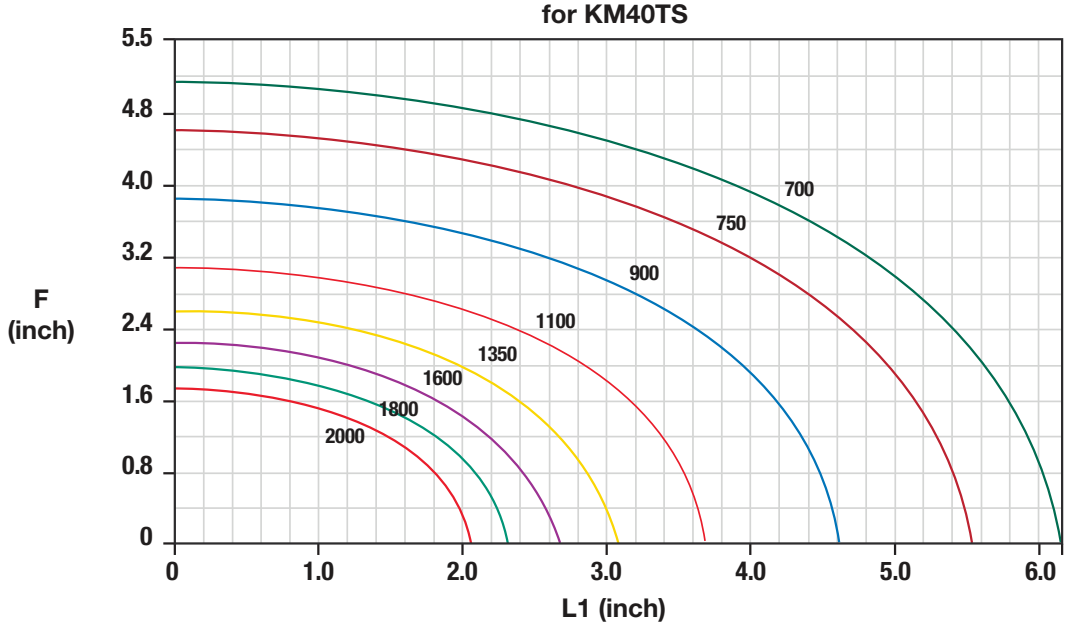
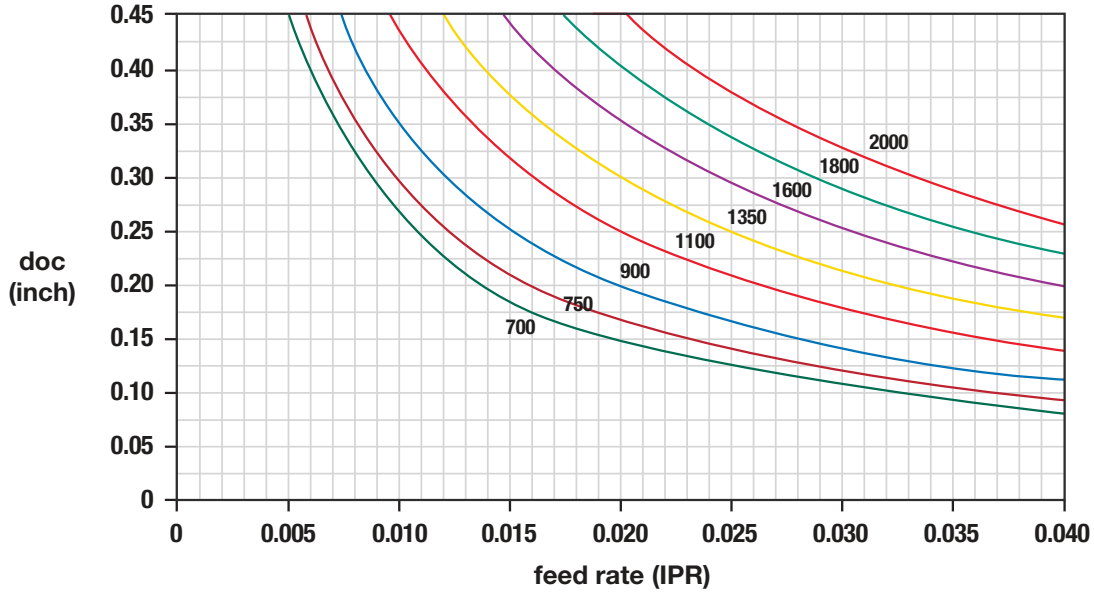


Chart 4

Depth of Cut (inch) and Feed Rate (IPR) vs. Tangential Forces (lbs) for KM40TS



Operating Conditions • KM50TS™ • Metric

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

Chart 5

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM50TS

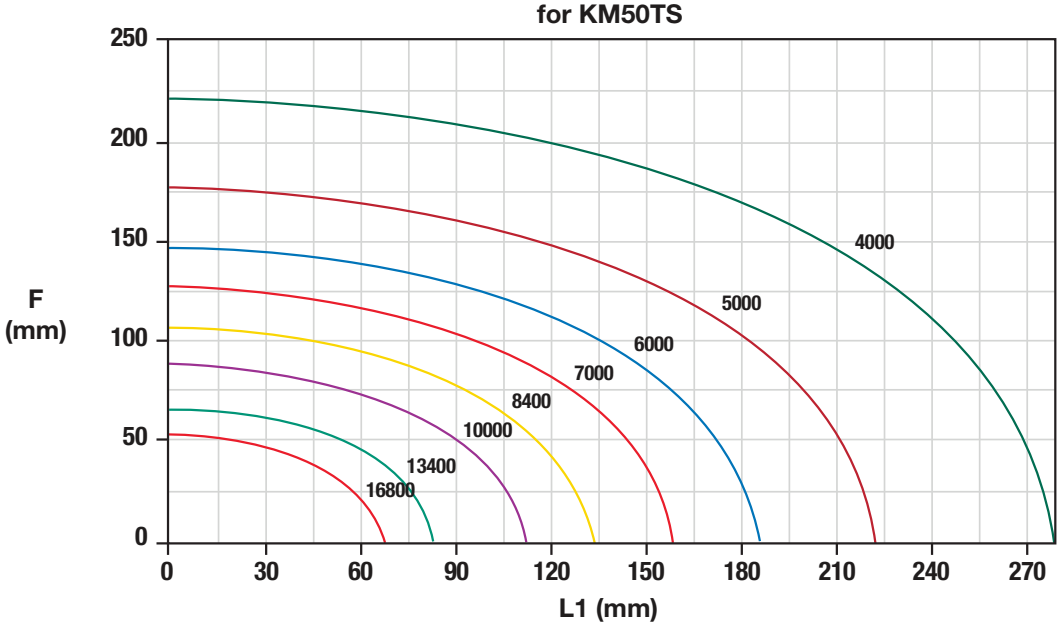
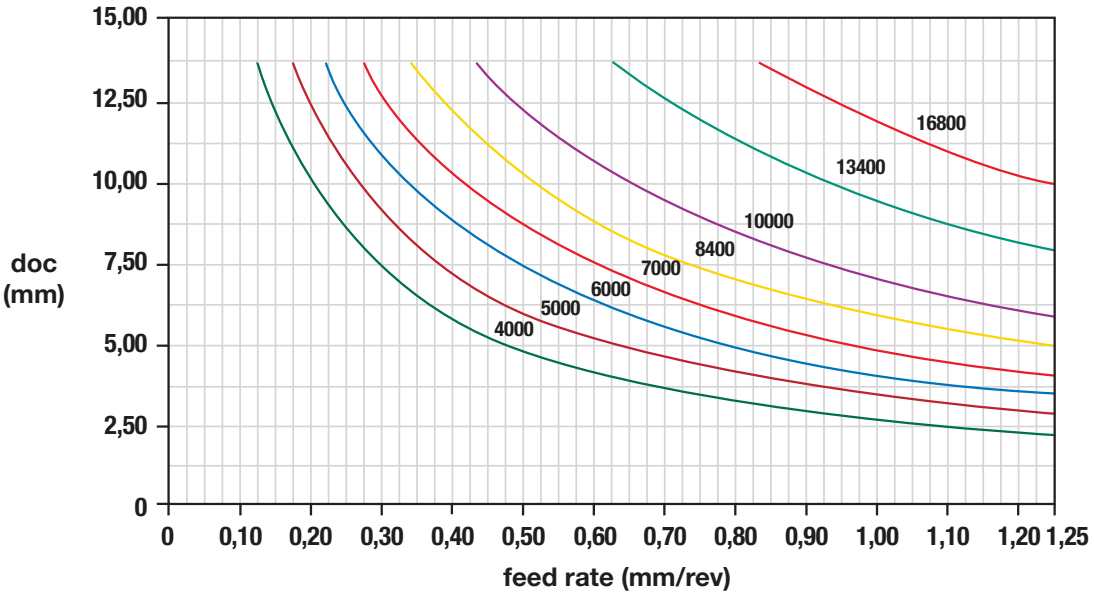


Chart 6

Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM50TS



Operating Conditions • KM50TS™ • Inch

IMPORTANT
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Do not use for any other tooling system because the results will not apply.

Chart 5

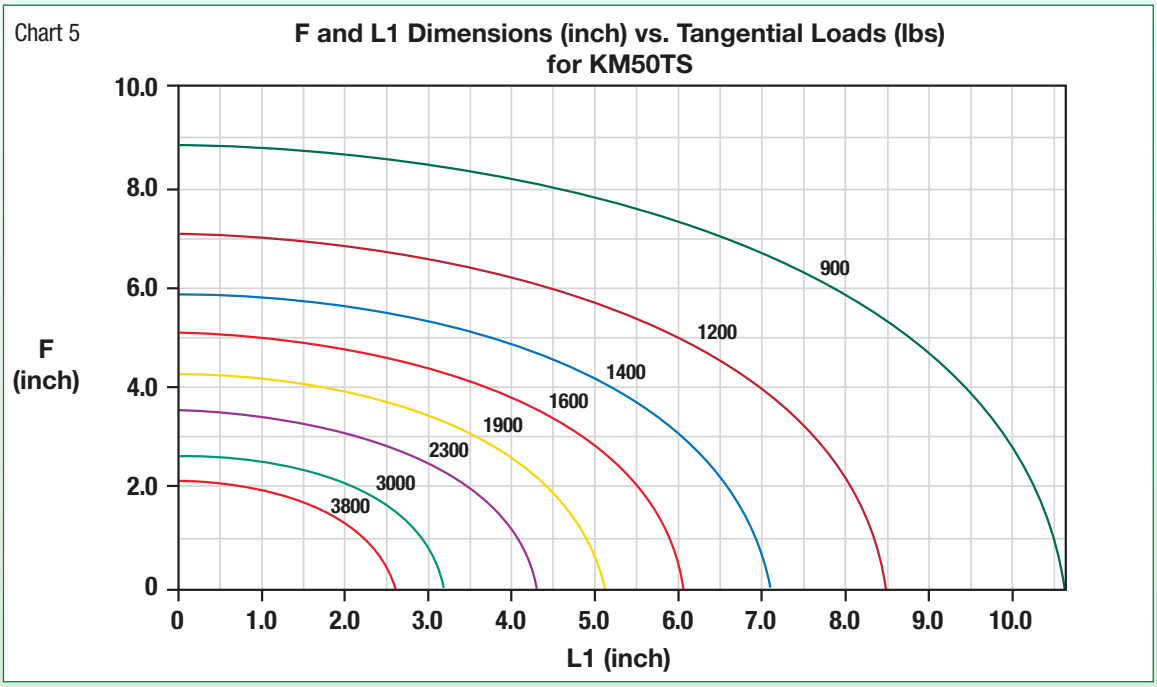
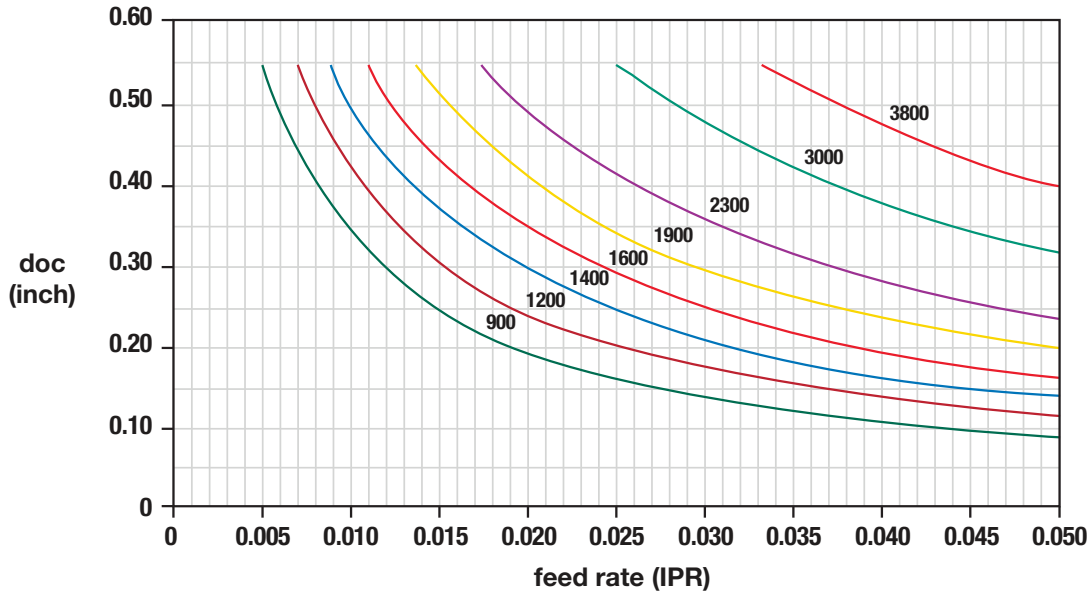


Chart 6



Operating Conditions • KM63TS™ and KM63XMZ™ • Metric

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

Chart 7

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM63TS and KM63XMZ

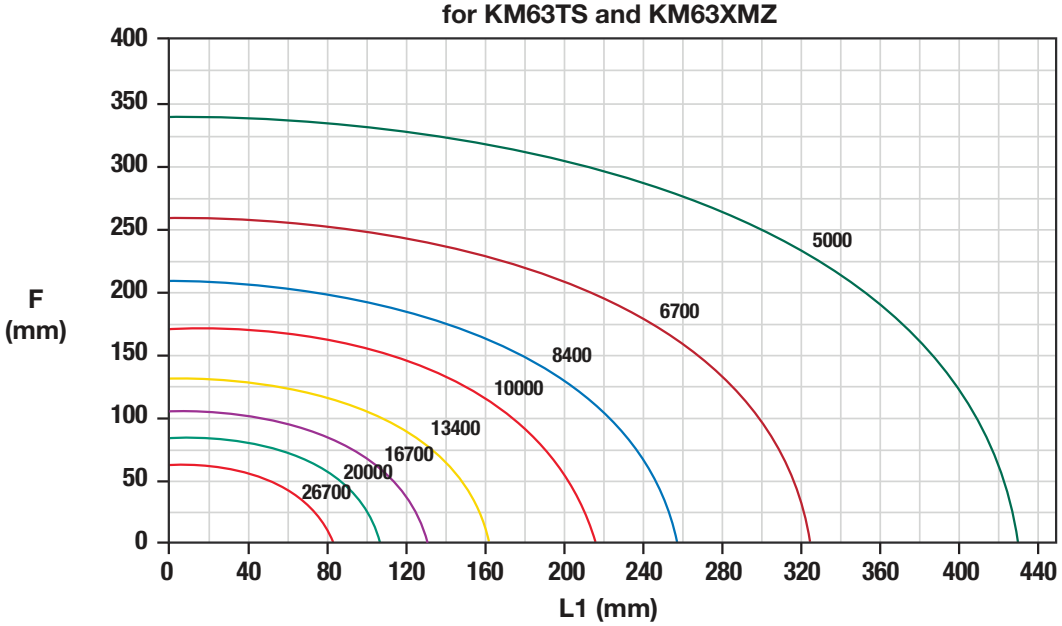
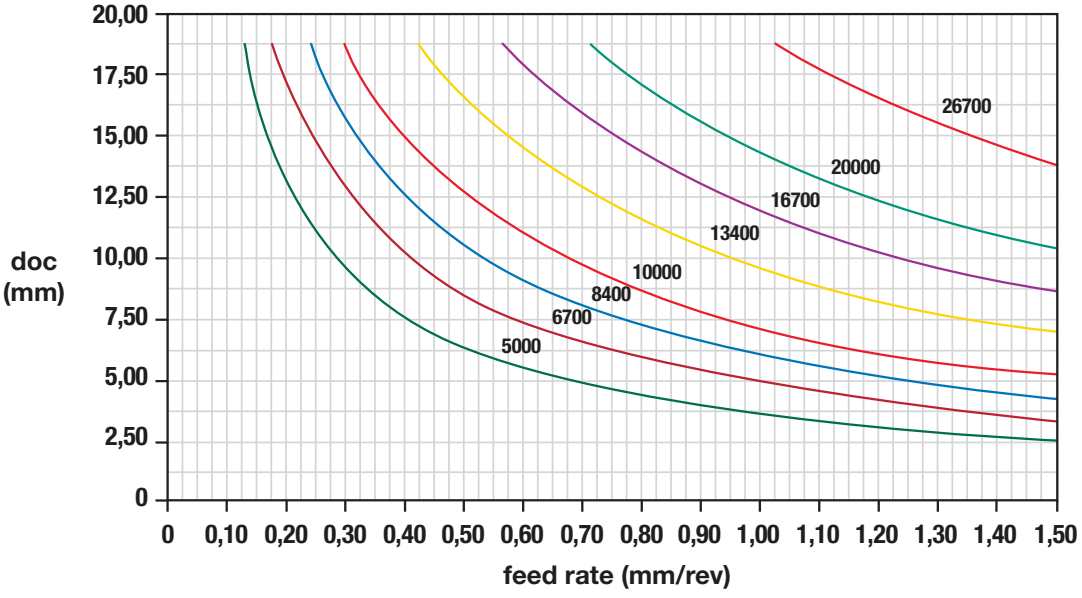


Chart 8

Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM63TS and KM63XMZ



Operating Conditions • KM63TS™ and KM63XMZ™ • Inch

IMPORTANT
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Do not use for any other tooling system because the results will not apply.

Chart 7

F and L1 Dimensions (inch) vs. Tangential Loads (lbs) for KM63TS and KM63XMZ

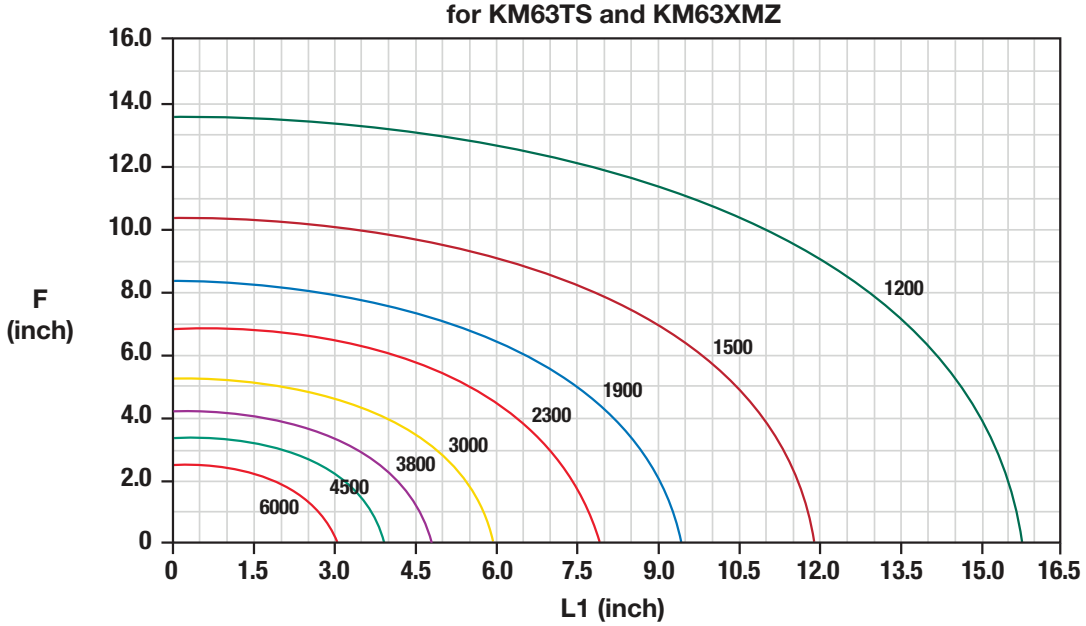
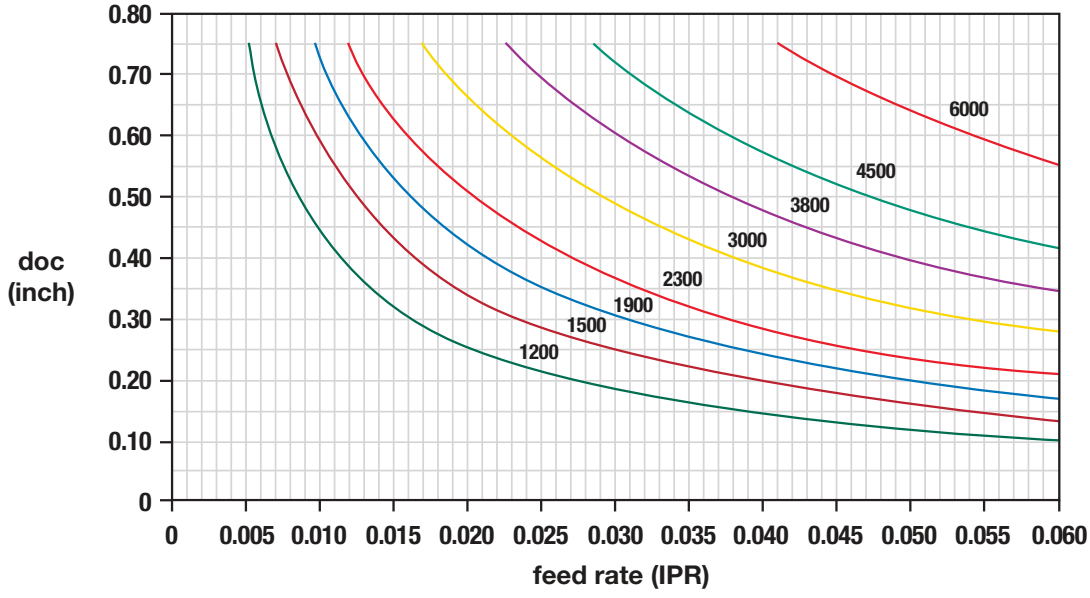


Chart 8

Depth of Cut (inch) and Feed Rate (IPR) vs. Tangential Forces (lbs) for KM63TS and KM63XMZ



Operating Conditions • KM80TS™ and KM80ATC™ • Metric

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

Chart 9

F and L1 Dimensions (mm) vs. Tangential Loads (N) for KM80TS and KM80ATC

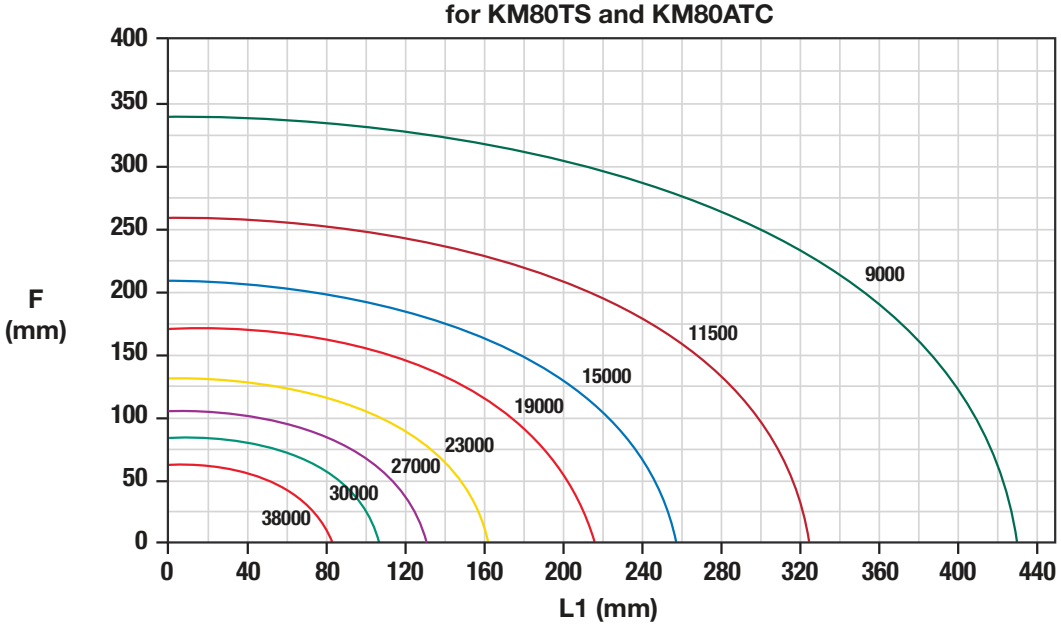
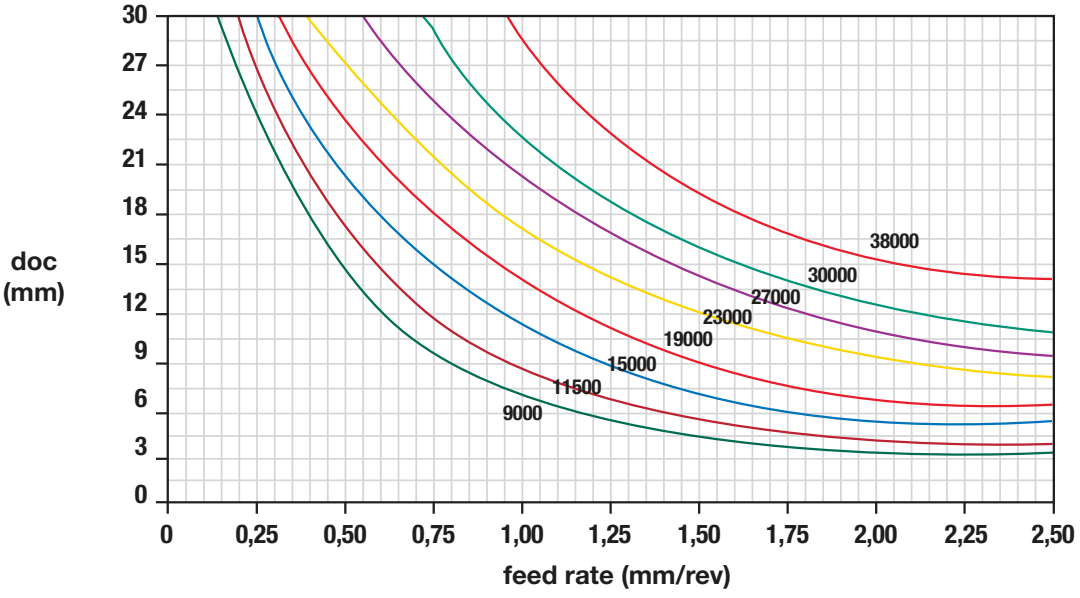


Chart 10

Depth of Cut (mm) and Feed Rate (mm/rev) vs. Tangential Forces (N) for KM80TS and KM80ATC



Operating Conditions • KM80TS™ and KM80ATC™ • Inch

IMPORTANT
Information shown on the following charts was developed exclusively for use with KM tooling.
Do not use for any other tooling system because the results will not apply.

Chart 9

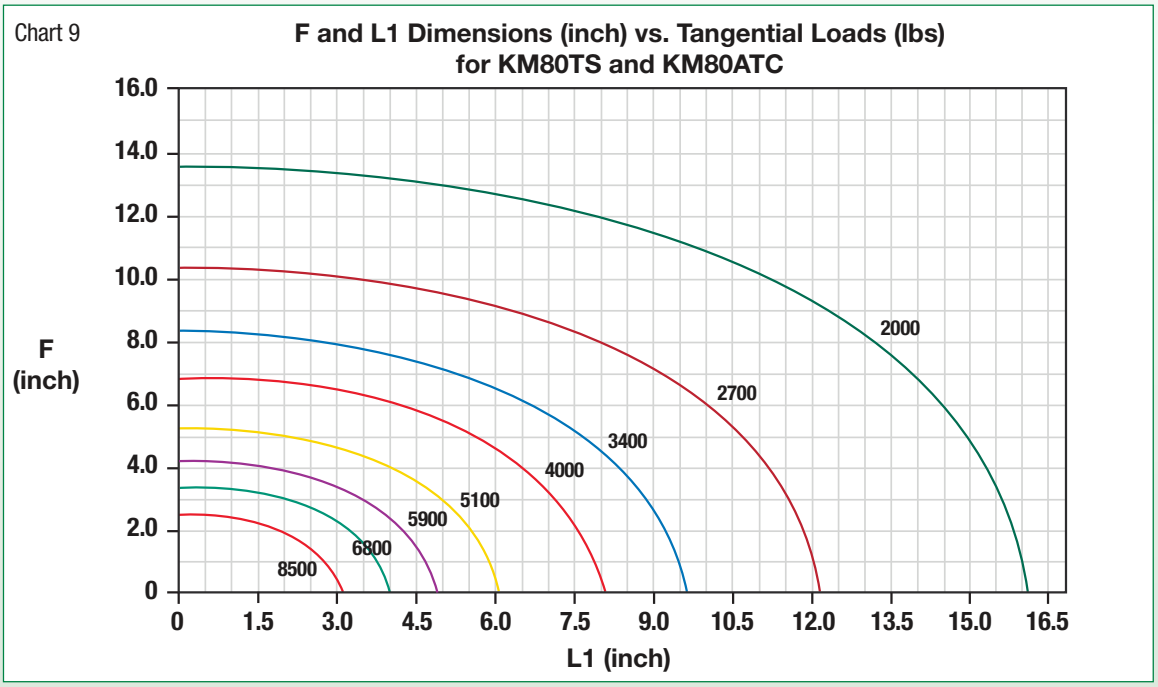
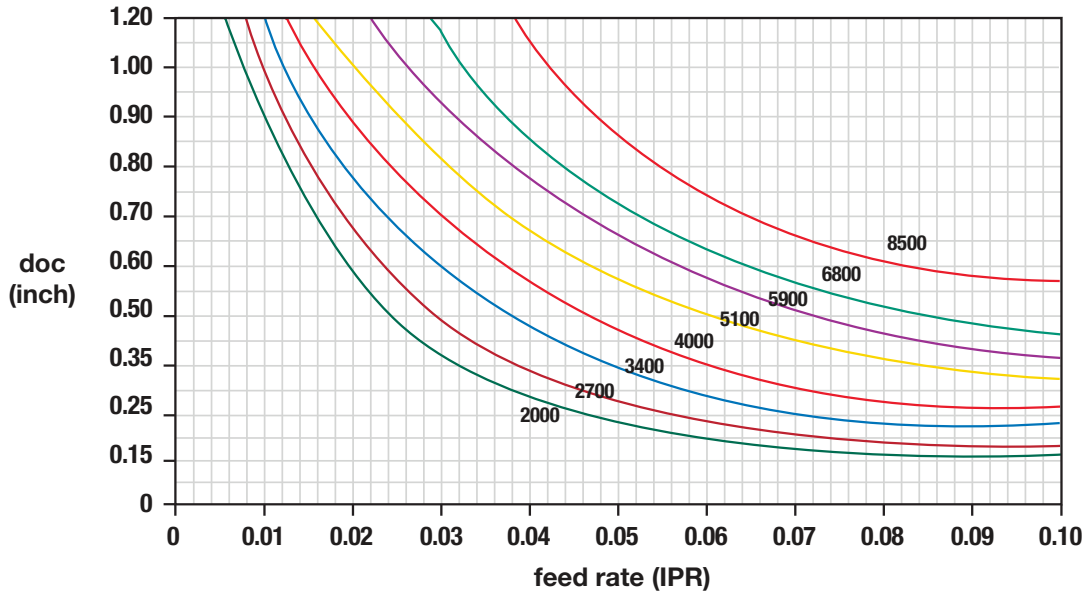


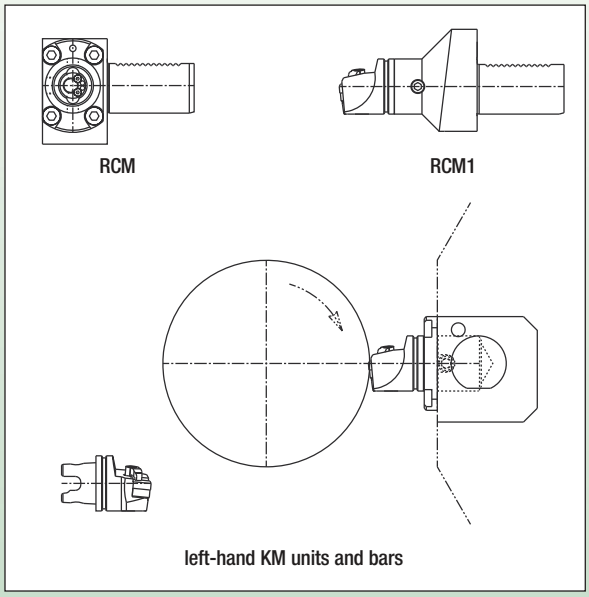
Chart 10



VDI Application Guide

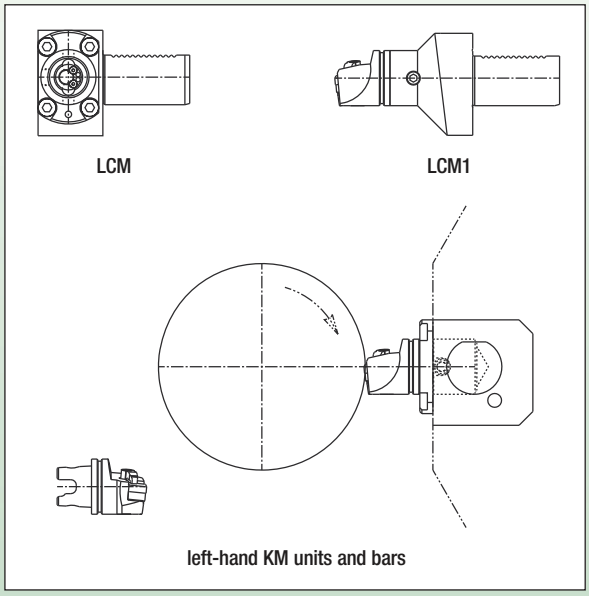
Clockwise Spindle Rotation

VDI Clamp Wedge • Top



left-hand KM units and bars

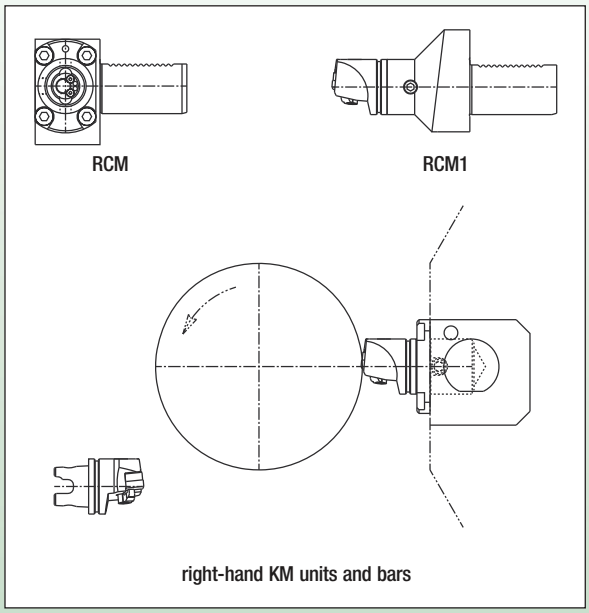
VDI Clamp Wedge • Bottom



left-hand KM units and bars

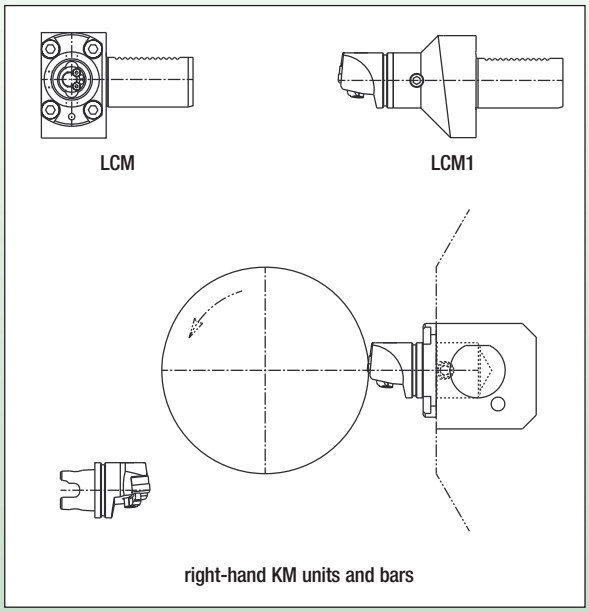
Counterclockwise Spindle Rotation

VDI Clamp Wedge • Top



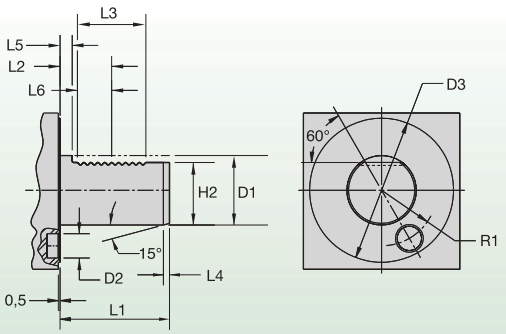
right-hand KM units and bars

VDI Clamp Wedge • Bottom



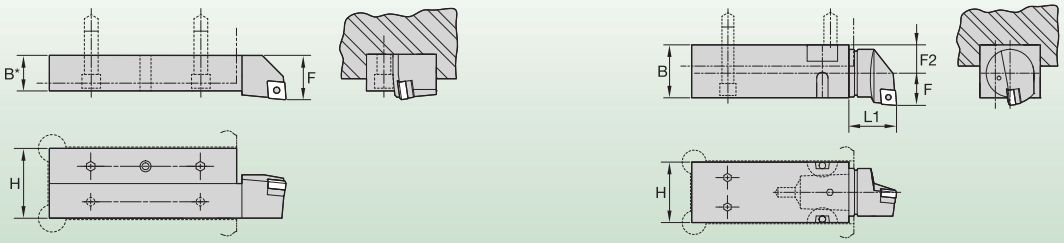
right-hand KM units and bars

VDI Standard Dimensions
DIN 69880



D1	D2	D3	L1	L2	L3	L4	L5	L6	H2	R1
30,00	14,00	68,00	55,00	29,70	40,00	2,00	7,00	20,00	27,00	25,00
1.181	0.551	2.677	2.165	1.169	1.575	0.079	0.276	0.787	1.063	0.984
40,00	14,00	83,00	63,00	29,70	40,00	3,00	7,00	20,00	36,00	32,00
1.575	0.551	3.268	2.480	1.169	1.575	0.118	0.276	0.787	1.417	1.260
50,00	16,00	98,00	78,00	35,70	48,00	3,00	8,00	24,00	45,00	37,00
1.969	0.630	3.858	3.071	1.406	1.890	0.118	0.315	0.945	1.772	1.457
60,00	16,00	123,00	94,00	43,70	56,00	4,00	10,00	28,00	55,00	48,00
2.362	0.630	4.843	3.701	1.720	2.205	0.157	0.394	1.102	2.165	1.890

Mounting Details • NCM Square Shank Conversion



KM Toolholder Replacement — Square Shank Toolholder — Style MCLNL shown

Toolholder Replacements • Metric

KM replacement unit	square shank equivalent	B*	B	H	L1	F	F2
KM32-NCM4040	20 x 20	20	40	40	45	22	23
KM32-NCM5040	25 x 25	25	40	50	45	22	23
KM40-NCM5044	25 x 25	25	44	50	40	27	23
KM40-NCM6444	32 x 32	32	44	64	40	27	23
KM50-NCM6454	32 x 32	32	54	64	50	35	28

**For MCLNR/L holders.*

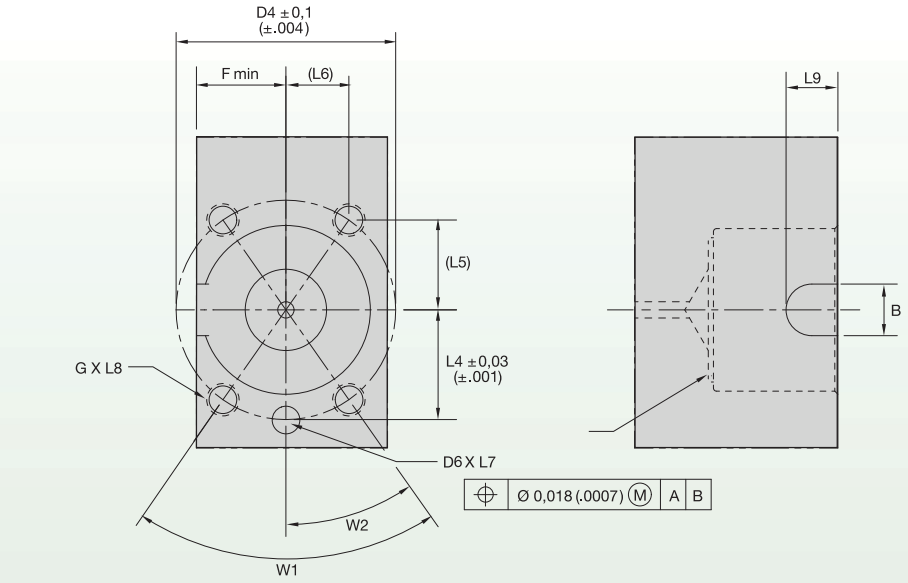
Toolholder Replacements • Inch

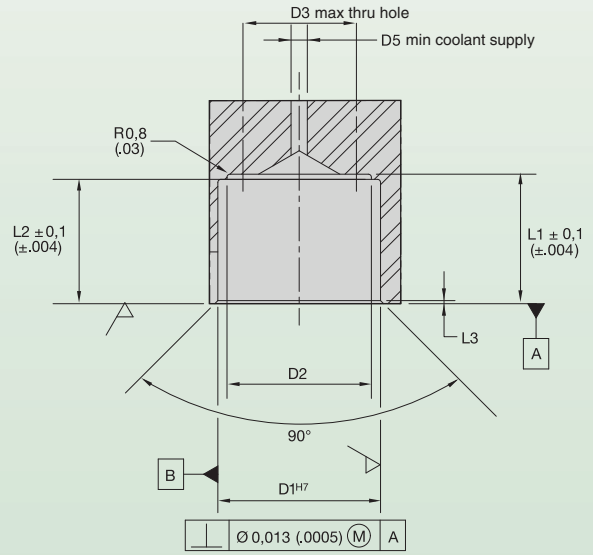
KM replacement unit	square shank equivalent	B*	B	H	L1	F	F2
KM32-NCM2425	3/4 x 3/4	3/4	1.562	1.500	1.378	0.866	0.884
KM32-NCM3225	1 x 1	1	1.562	2.000	1.378	0.866	0.884
KM40-NCM3228	1 x 1	1	1.750	2.000	1.575	1.063	0.937
KM40-NCM4028	1-1/4 x 1-1/4	1-1/4	1.750	2.500	1.575	1.063	0.937
KM50-NCM4034	1-1/4 x 1-1/4	1-1/4	2.125	2.500	1.969	1.378	1.122

**For MCLNR/L holders.*

NOTE: F equals the dimension from the centerline of the KM cutting unit over the nose radius of the gage insert.
F2 equals the dimension from the back of the clamping unit to the centerline of the KM cutting unit (see column F2 above).
The offset is identical with most KM cutting units, except for positive lead angle units and neutral units.

NCM-F

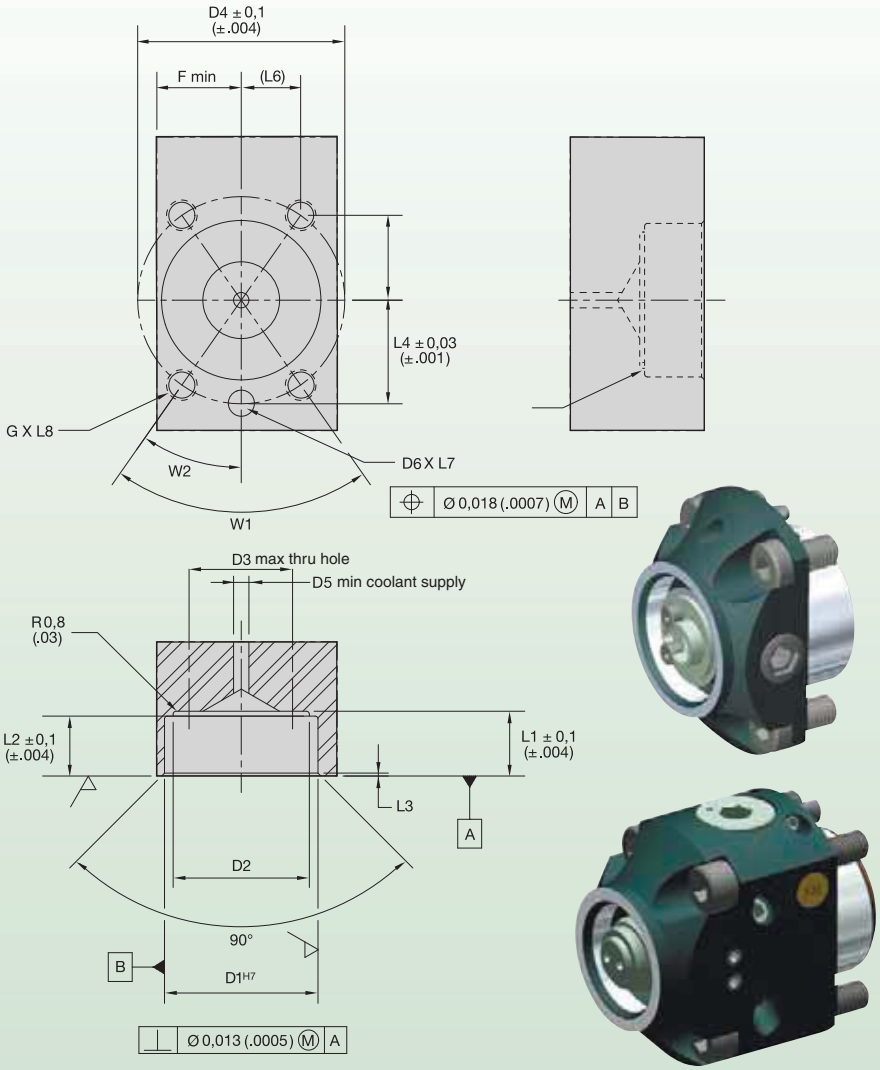




KM size	D1	D2	D3	D4	D5	D6	F	L1	L2	L3	L4	L5	L6	L7	L8	L9	B	G	W1	W2	O-ring
KM32	32,02 1.261	30,30 1.193	24,00 0.945	43,00 1.693	4,00 0.157	6,370/ 6,348 .2508/ .2499	18,01 0.709	26,37 1.038	25,20 0.992	0,50 0.020	21,50 0.847	17,61 0.693	12,33 0.486	11,18 0.440	11,00 0.433	11,51 0.453	11,00 0.433	M6	70°	35°	OR00987103V75
KM40	40,02 1.575	35,51 1.398	29,01 1.142	54,00 2.126	5,00 0.197	6,370/ 6,348 .2508/ .2499	22,00 0.866	31,88 1.255	30,61 1.205	0,80 0.031	27,00 1.063	22,12 0.871	15,49 0.610	11,18 0.440	18,01 0.709	12,75 0.502	12,70 0.500	M8	70°	35°	OR01174103V75
KM50	50,03 1.970	42,80 1.685	37,01 1.457	67,01 2.638	6,50 0.256	7,958/ 7,935 .3133/ .3124	27,51 1.083	39,88 1.570	38,61 1.070	1,00 0.039	33,50 1.319	27,44 1.080	19,22 0.757	12,70 0.500	18,01 0.709	18,24 0.718	17,50 0.689	M10	70°	35°	OR1487103V75
KM63	63,03 2.481	53,90 2.122	48,01 1.890	81,99 3.228	8,00 0.315	14,079/ 14,054 .5543/ .5533	35,99 1.417	46,89 1.846	45,62 1.796	1,50 0.059	41,00 1.614	31,70 1.248	25,99 1.023	19,99 0.787	35,00 1.378	23,50 0.925	21,49 0.846	M12	78°42'	39°21'	OR01925103V75
KM80	80,03 3.151	66,60 2.622	60,00 2.362	105,00 4.134	9,00 0.354	16,079/ 16,054 .6330/ .6320	45,00 1.772	58,39 2.300	57,12 2.249	1,50 0.059	52,50 2.067	41,61 1.638	32,01 1.260	25,00 0.984	50,00 1.969	23,50 0.925	23,00 0.906	M16	75°8'	37°34'	OR02425103V75

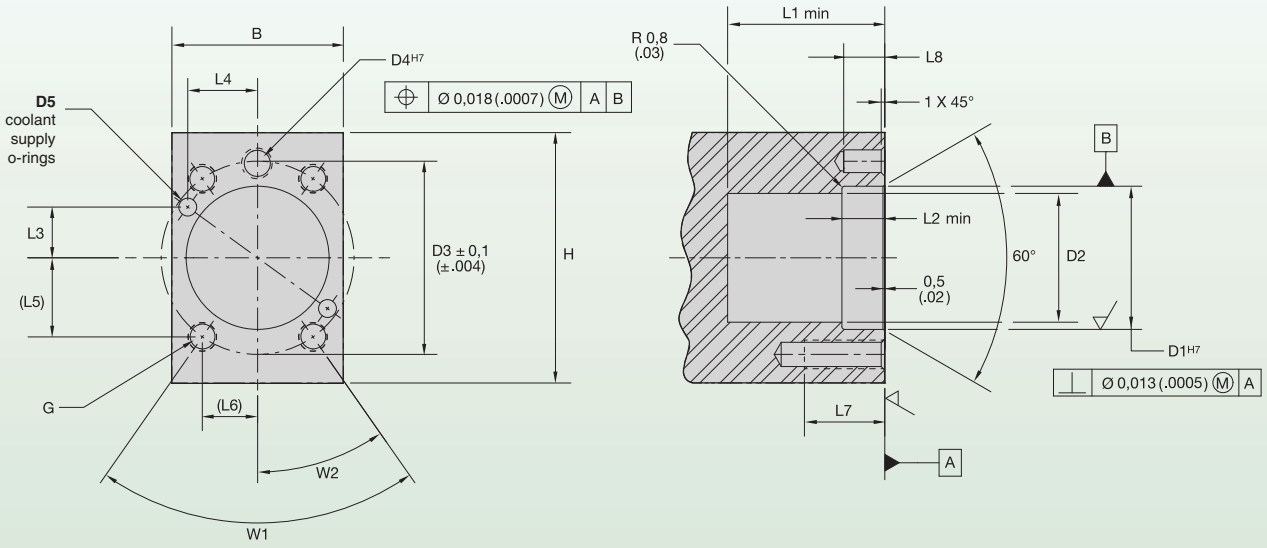
NOTE: Contact WIDIA™ for the latest dimensional data.

KM LOC-II™ CL2NS/T-EF Flanges • KM Manual NCM-EF Flanges



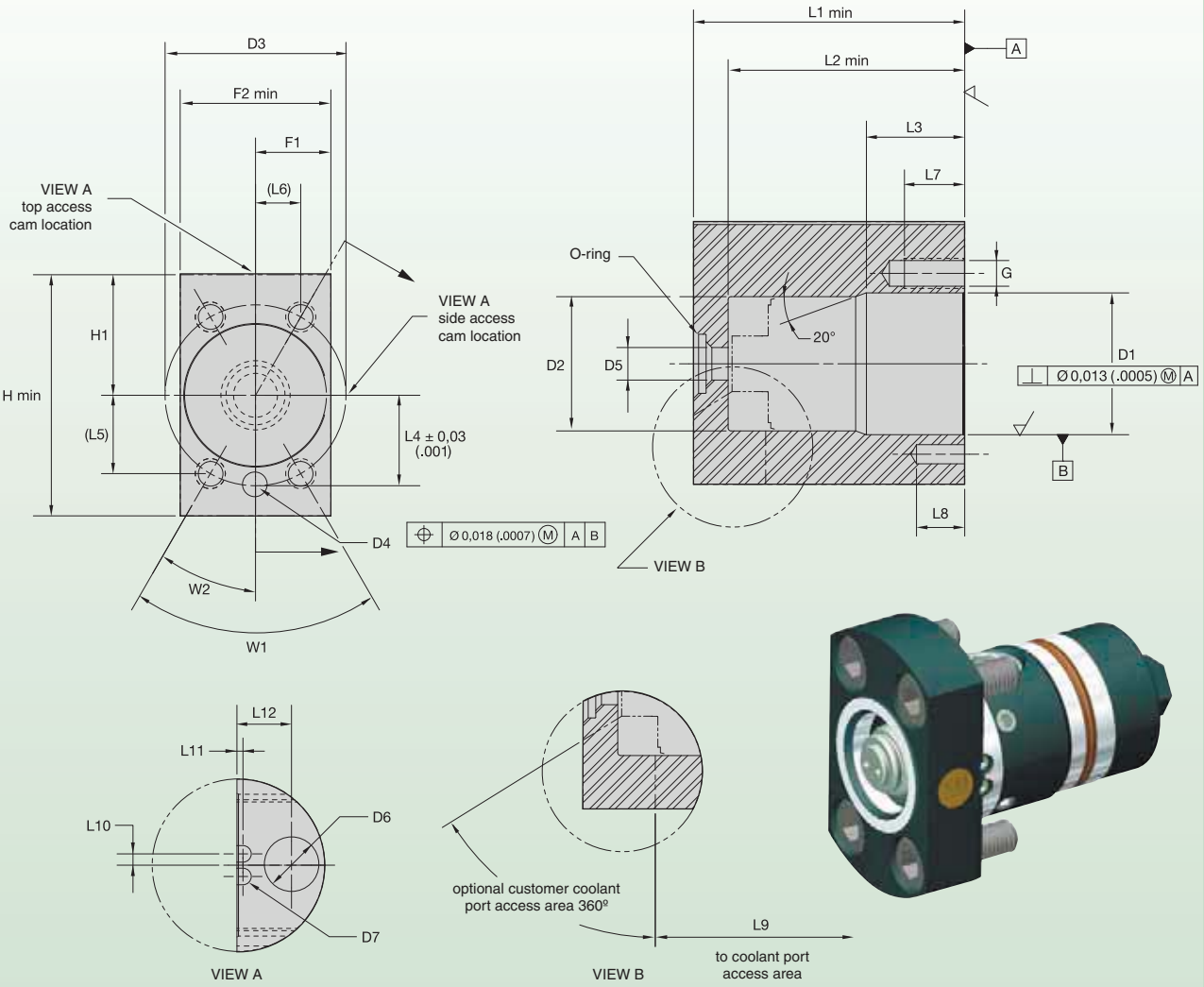
KM size	D1	D2	D3	D4	D5	D6	F	L1	L2	L3	L4	L5	L6	L7	L8	G	W1	W2	O-ring
KM32	32,02 1.261	30,30 1.193	24,00 0.945	43,00 1.693	4,00 0.157	6,370/6,348 .2508/.2499	18,01 0.709	13,87 0.546	12,70 0.500	0,50 0.020	21,50 0.847	17,61 0.693	12,33 0.486	11,18 0.440	11,00 0.433	M6	70°	35°	OR00987103V75
KM40	40,02 1.575	35,51 1.398	29,01 1.142	54,00 2.126	5,00 0.197	6,370/6,348 .2508/.2499	22,00 0.866	16,89 0.665	15,62 0.615	0,80 0.031	27,00 1.063	22,12 0.871	15,49 0.610	11,18 0.440	18,01 0.709	M8	70°	35°	OR01174103V75
KM50	50,03 1.97	42,80 1.685	37,01 1.457	67,01 2.638	6,50 0.256	7,958/7,935 .3133/.3124	27,51 1.083	21,87 0.861	20,60 0.811	1,00 0.039	33,50 1.319	27,44 1.080	19,22 0.757	12,70 0.500	18,01 0.709	M10	70°	35°	OR1487103V75
KM63	63,03 2.481	53,90 2.122	48,01 1.890	81,99 3.228	8,00 0.315	14,079/14,054 .5543/.5533	35,99 1.417	21,87 0.861	20,60 0.811	1,50 0.059	41,00 1.614	31,70 1.248	25,99 1.023	19,99 0.787	30,00 1.181	M12	78°42'	39°21'	OR01925103V75
KM80	80,03 3.151	66,60 2.622	60,00 2.362	105,00 4.134	9,00 0.354	16,079/16,054 .6330/.6320	45,00 1.772	26,89 1.059	25,62 1.009	1,50 0.059	52,50 2.067	41,61 1.638	32,01 1.260	25,00 0.984	50,00 1.969	M16	75°8'	37°34'	OR02425103V75

KM-LOC CLNS/T-EF



KM size	D1	D2	D3	D4	L1	L2	L3	L4	L5	L6	L7	L8	B	G	H	W1	W2	O-ring
KM32	32,00 1.260	30,00 1.181	43,00 1.693	6,35 0.250	30,00 1.181	10,00 0.394	11,30 0.445	16,15 0.646	17,6 0.693	12,30 0.484	19,50 0.768	11,50 0.453	40,00 1.575	M6	60,00	70°	35°	OR00145070V75
KM40	40,00 1.575	36,00 1.417	54,00 2.126	6,35 0.250	44,00 1.732	12,00 0.472	14,18 0,558	19,56 0,770	22,10 0.870	15,50 0.610	22,50 0.886	11,50 0.453	48,00 1.890	M8	70,00	70°	35°	OR00176070V75
KM50	50,00 1.969	47,00 1.850	67,00 2.638	7,95 0.313	49,00 1.929	14,00 0.551	18,25 0.719	23,90 0.941	27,40 1.079	19,20 0.756	25,50 1.004	13,00 0.512	58,00 2.283	M10	85,00	70°	35°	OR00208070V75

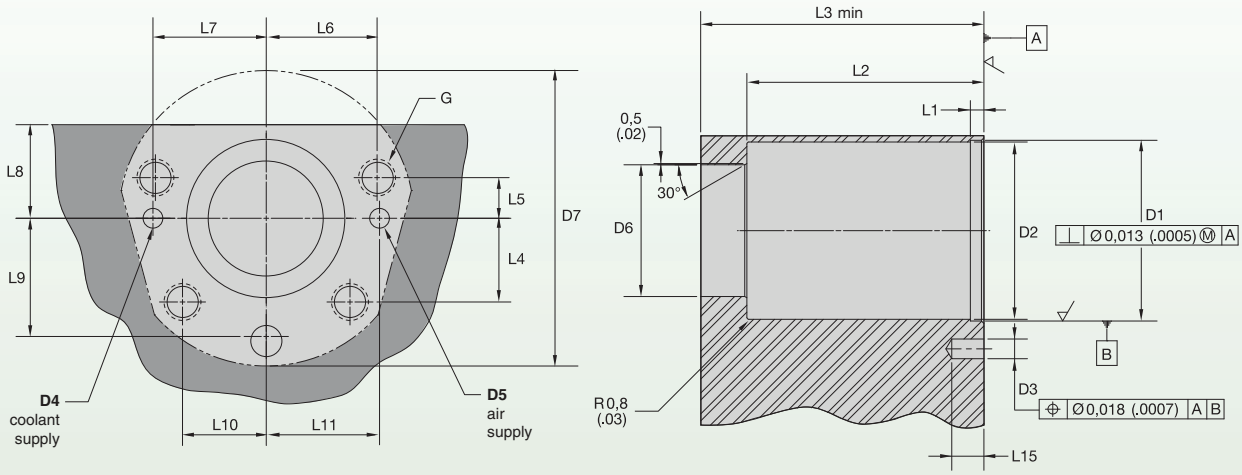
KM LOC-II™ CL2NS/T-EF Flanges • KM Manual NCM-EF Flanges



KM size	D1	D2	D3	D4	D5	D6	D7	F	F1	H	H1	L1	L2
KM40	47,04 1.852	44,54 1.754	60,00 2.362	6,36 0.250	10,80 0.425	15,00 0.591	5,50 0.217	50,00 1.969	25,00 0.984	80,00 3.150	40,00 1.575	90,00 3.543	78,50 3.091
KM50	58,29 2.295	54,10 2.130	74,00 2.913	7,94 0.313	10,80 0.425	18,00 0.709	6,50 0.256	64,00 2.520	32,00 1.260	96,00 3.780	48,00 1.890	100,00 3.937	88,00 3.465
KM63	74,04 2.915	69,92 2.753	94,00 3.701	14,04 0.553	12,80 0.504	20,00 0.787	6,50 0.256	78,00 3.071	39,00 1.535	122,00 4.803	61,00 2.402	115,00 4.528	100,80 1.535

KM size	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	G	W1	W2	O-ring
KM40	32,75 1.289	30,00 1.181	25,98 1.023	15,00 0.591	20,00 0.787	16,00 0.630	65,50 2.579	3,75 0.148	2,00 0.079	18,10 0.713	M10	60	30	OR00614070V90
KM50	38,00 1.496	37,00 1.457	32,04 1.261	18,50 0.728	21,00 0.827	16,00 0.630	75,75 2.982	5,30 0.209	6,75 0.266	24,25 0.955	M12	60	30	OR00614070V90
KM63	47,20 1.858	47,00 1.850	40,70 1.602	23,50 0.925	20,00 0.787	16,00 0.630	87,50 3.445	6,45 0.254	5,00 0.197	26,00 1.024	M16	60	30	OR00739070V90

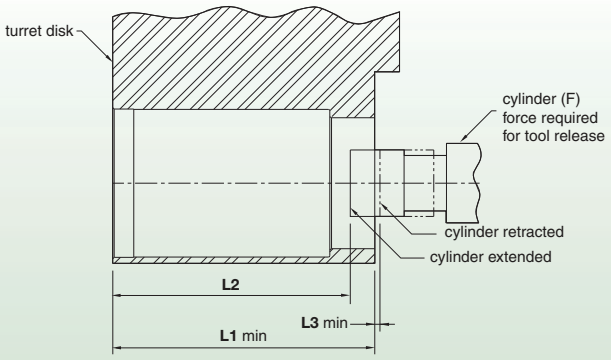
KM RACA and NAC



KM size	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4
KM32	52,00 2.047	51,60 2.032	10,08 0.397	5,00 0.196	5,00 0.196	47,08 1.853	85,00 3.346	9,00 0.354	72,00 2.835	85,00 3.346	24,00 0.945
KM40	62,00 2.441	61,70 2.421	10,08 0.397	7,70 0.303	7,70 0.303	55,08 2.168	100,00 3.937	10,00 0.394	78,50 3.091	95,00 3.74	30,00 1.181
KM50	72,00 2.835	71,70 2.815	12,08 0.475	8,00 0.315	8,00 0.315	65,08 2.562	120,00 4.724	10,00 0.394	97,00 3.819	115,00 4.528	34,00 1.339
KM63	85,00 3.346	84,60 3.327	16,08 0.633	9,50 0.374	9,50 0.374	75,08 2.956	140,00 5.512	12,00 0.472	124,50 4.902	145,00 5.709	35,35 1.392

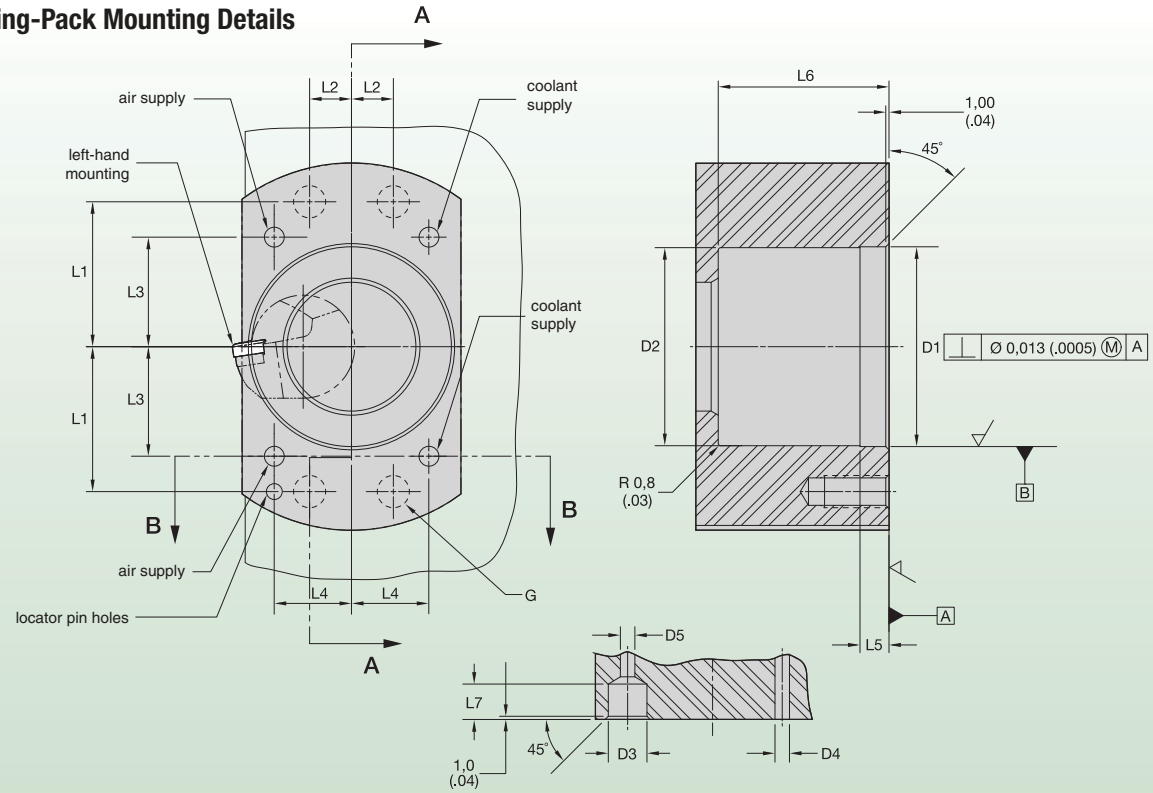
KM size	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	G
KM32	11,50 0.453	32,00 1.260	32,00 1.260	27,50 1.083	34,00 1.339	24,00 0.945	32,00 0.945	27,50 1.083	70,00 2.756	38,00 1.496	14.50 0.571	M8-1,25x20 (.79) deep
KM40	15,00 0.591	37,00 1.457	39,50 1.555	33,00 1.299	40,00 1.575	26,50 1.043	39,50 1.043	34,00 1.339	84,00 3.307	46,00 1.811	22.00 0.866	M10-1,5x25 (.98) deep
KM50	16,50 0.650	45,00 1.772	46,00 1.811	42,00 1.654	48,00 1.890	34,00 1.339	46,00 1.339	42,00 1.654	102,00 4.016	54,00 2.126	22.00 0.866	M12-1,75x25 (.98) deep
KM63	18,80 0.740	51,70 2.035	55,00 2.165	46,00 1.811	55,00 2.165	42,15 1.659	55,00 1.659	47,00 1.850	117,00 4.606	65,00 2.559	24.00 0.945	M16-2,0x30 (1.18) deep

KM RACA and NACA Spring-Pack Cylinder



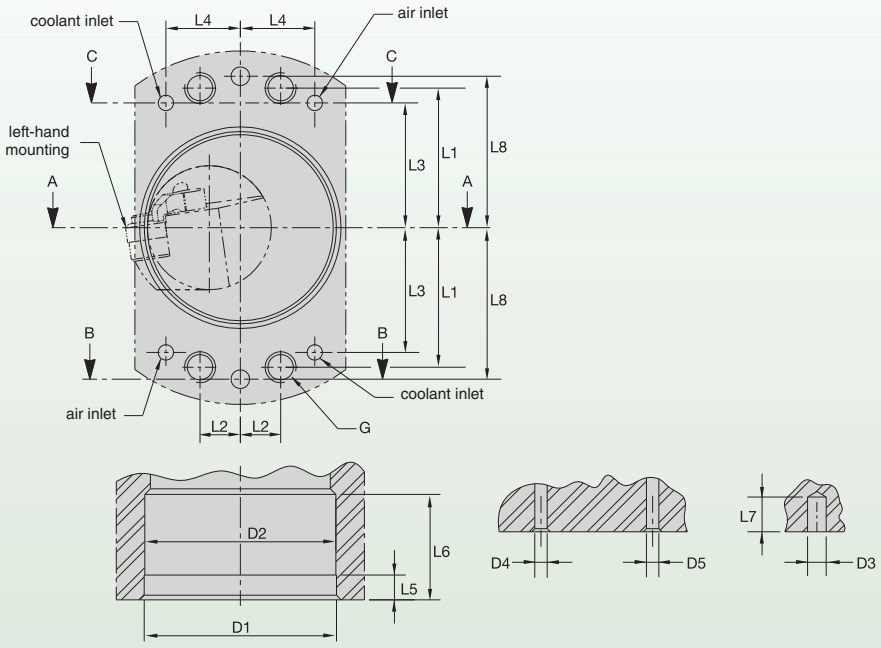
KM size	L1	L2	L3
KM32	85,00 3.346	76,50 3.012	3,00 0.118
KM40	95,00 3.740	83,20 3.276	3,00 0.118
KM50	115,00 4.528	103,00 4.055	3,00 0.118
KM63	145,00 5.709	131,00 5.157	3,00 0.118

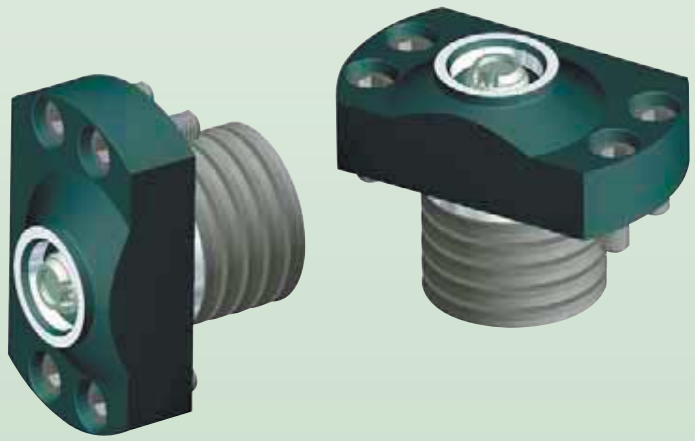
NCA Spring-Pack Mounting Details



KM size	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	G
KM32-NCA-DS31	51,00 2.008	50,50 1.988	8,00 0.315	3,20 0.126	3,20 0.126	36,00 1.417	10,50 0.413	27,50 1.083	19,50 0.768	6,00 0.236	44,00 1.732	9,00 0.354	M8-1,25x20 (.79) deep
KM40-NCA-DS40	62,00 2.441	61,50 2.421	12,00 0.472	4,50 0.177	4,50 0.177	45,00 1.772	13,00 0.512	34,01 1.339	24,00 0.945	9,00 0.354	53,01 2.087	11,00 0.433	M10-1,5x20 (.79) deep
KM50-NCA-DS50	78,00 3.071	71,50 2.815	15,00 0.591	5,50 0.217	5,50 0.217	56,00 2.205	16,00 0.630	42,00 1.654	28,00 1.102	6,00 0.236	74,00 2.913	12,00 0.472	M12-1,75x30 (1.18) deep

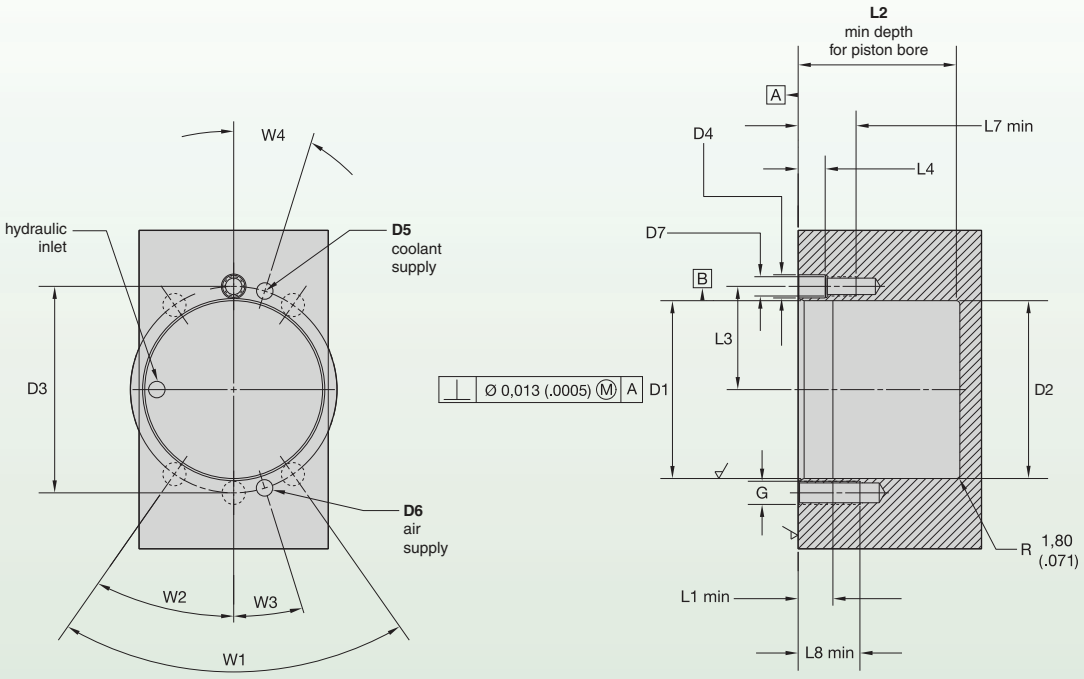
KM32 NCA

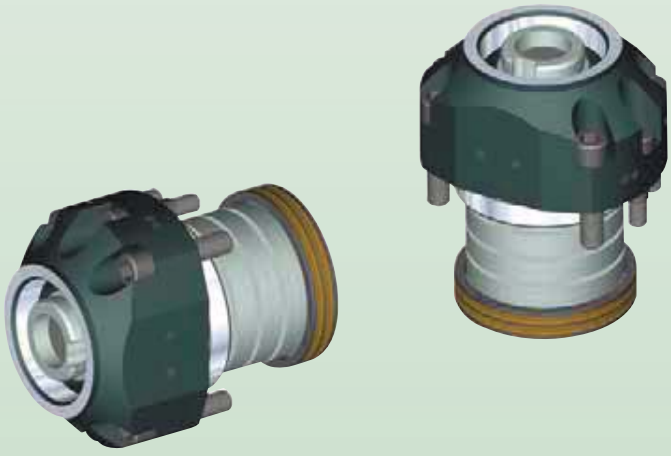




KM size	D1	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6	L7	L8	G
KM32-NCA-DS16	51,00 2.008	50,80 2.000	6,04 0.238	5,00 0.197	5,00 0.197	29,37 1.156	10,69 0.421	23,93 0.942	20,09 0.791	20,00 0.787	65,00 2.559	11,20 0.441	32,25 1.270	M8-1,25x15 (.59) deep

XGL – Static



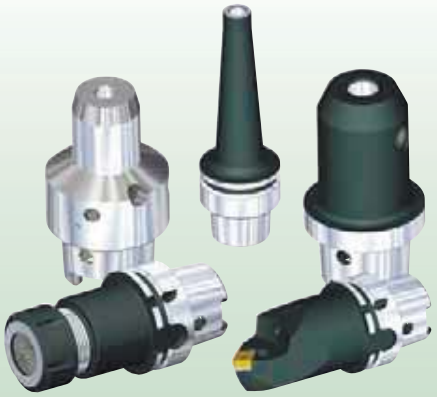


KM size	D1	D2	D3	D4	D5	D6	D7	G	L1	L2	L3	L4	L7	L8	W1	W2	W3	W4
KM80	92,177 3.629	92,177 3.629	107,00 4.213	12,045 .4742	6,35 0.25	6,35 0.25	M10	M12	18,00 0.709	81,95 3.226	53,525 2.107	14,00 0.551	30,00 1.181	32,00 1.26	70°	35°	17"30'	17"30'

Taper and Face Quick-Reference Identification

HSK hollow-stub taper shanks are a widely used DIN standard for machine tools. HSK tools have a simultaneous 1:10 taper, which generates two surface contact areas: face and taper. Compared with traditional steep-taper shanks, HSK shanks are shorter, hollow, and clamp from the inside. They also incorporate drive keys that engage milled key-slots in machine spindles and offer higher static and dynamic stiffness than standard steep taper tooling.

HSK tooling includes seven toolholder shank forms: A, B, C, D, E, F, and T. Various machine-spindle receivers are available for each. However, the choice of form depends on application requirements such as torque and spindle speed.



HSK-A
for general-machining service

HSK-B
greater flange support than form A for heavier work

Form A

Form A for automatic tool change is the most common shank, typically used on new machining centers and for general service. Form A has a drive slot in the small end of the tapered shank and features coolant through the center, using a coolant tube thread mount inside the shank cavity. In many applications, wrench access holes are provided through the taper as an option for manual clamping and automatic tool change shanks. Form A shanks have mounting holes for an electronic chip.

There are eight different sizes of form A ranging from 32–160mm (1.260–6.299") flange diameter.

Form B

Form B is also for automatic tool change. It is similar in appearance to form A but dimensionally different. Form B provides greater flange support for heavy machining, even though its taper shank size is smaller than form A. This style of shanks have drive slots in the flange and drive keys in the taper. Coolant for form B is fed through ports in the flange. Mounting holes for an electronic chip are also a feature of form B.

For form B there are seven different shank sizes from 40–160mm (1.575–6.299") flange diameter.

HSK-C
similar to form A but for manual tool change applications

HSK-D
similar to form B but for manual tool change applications

Forms C and D

Forms C and D for manual tool changes are variations of forms A and B, but the gripper groove and chip holes are eliminated. These two forms always have their access holes through the taper for manual clamping. These manual forms are typically used on transfer lines and non-rotating applications for NC lathes.

There are six different shank sizes for form C ranging from 32–100mm (1.260–3.937") flange diameter. Form D has five different shank sizes from 40–100mm (1.575–3.937") flange diameter.

(continued)

Taper and Face Quick-Reference Identification *(continued)*

HSK-E
balanced-by-design for higher speeds

HSK-F
balanced-by-design with greater flange support for higher speeds

HSK-T

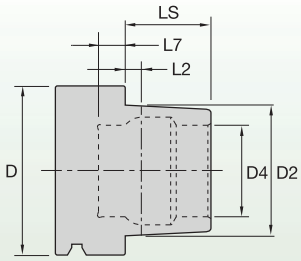
Forms E and F

Forms E and F with automatic tool change are also variations of forms A and B. These forms are intended for high-speed machining. Design features, such as drive slots, the orientation notch, and chip holes, have been removed to help eliminate imbalance. As a result, these forms are driven by the locking taper and are suitable only for light machining applications such as high-speed metalcutting and woodworking machines.

Form E offers five different shank sizes ranging from 25–63mm (.984–2.480") flange diameter. There are three shank sizes for form F from 50–80mm (1.969–3.150") diameter on the flange.

Form T

Form T shanks are similar to form A, but these tools offer a tighter keyway that reduces cutting height variation. This gives form T improved repeatability over form A. These shanks have new centerline technology for variance and high productivity. They are also available in a wide range of standard toolholders.



flange diameter D										
forms A and T	form B	form C	form D	form E	form F	D2 mm	D4 mm	LS mm	L2 mm	L7 mm
-	-	-	-	25	-	19	14	13	2,5	6
32	40	32	40	32	-	24	17	16	3,2	8
40	50	40	50	40	50	30	21	20	4	8
50	63	50	63	50	63	38	26	25	5	10
63	80	63	80	63	80	48	34	32	6,3	10
80	100	80	100	-	-	60	42	40	8	12,5
100	125	100	-	-	-	75	53	50	10	12,5
125	160	-	-	-	-	95	67	63	12,5	16
160	-	-	-	-	-	120	85	80	16	16

WIDIA™ primary offering

Secondary styles available upon request

Taper Face Contact V-Flange

The 7/24 Taper Face Contact Spindle Interface, is being found on machining centers and multitasking machines. The basic principle of this system takes the standard 7/24 steep-taper tool and adds material to the back face of the toolholder flange as well as to the front face of the spindle. This is controlled so that the two parts have both face and taper contact when locked into position. The distinctive features of the system are the lead-in chamfers on the drive slots and ground back V-flange. The surface contact creates a system with higher static and dynamic stiffness than a regular 7/24 taper and increased axial and radial accuracy.

Capable of being utilized in a variety of machining applications ranging from low-speed, heavy milling applications to high speeds greater than 20,000 RPM. The systems accuracy, repeatability, and stability should be equal or greater to the performance of current equivalent Taper Face tooling on the market in all applications.

Technology

With the Taper Face System, toolholders are axially supported on the taper and flange face, which brings about higher rigidity and precision than a conventional 7/24 toolholder. The system utilizes elastic deformation of the machine spindle to achieve simultaneous fitting of both the taper and flange face. Although the tapers are fit prior to clamping the mechanism, the faces are not yet secured because of a small amount of clearance between them. When the toolholder is pulled in by the drawbar mechanism, the machine spindle expands by elastic deformation and the faces are fit, completing the simultaneous fit between both taper and face. This synchronized fit prevents additional axial displacement of the taper providing high accuracy and superior surface finish in operations such as face milling.

Taper face tool's axial position is maintained even at high rotational speed.

- One surface contact.
- Relatively low stiffness.
- Possible runout due to taper fitment.
- Low axial accuracy.

- Two surface contact.
- Higher static and dynamic stiffness.
- Higher axial and radial accuracy.
- Rigid system.

- Two surface contact.
- Higher axial and radial accuracy.
- Less mass — faster quick change and higher speeds.
- Higher stiffness than 7/24 tapers.

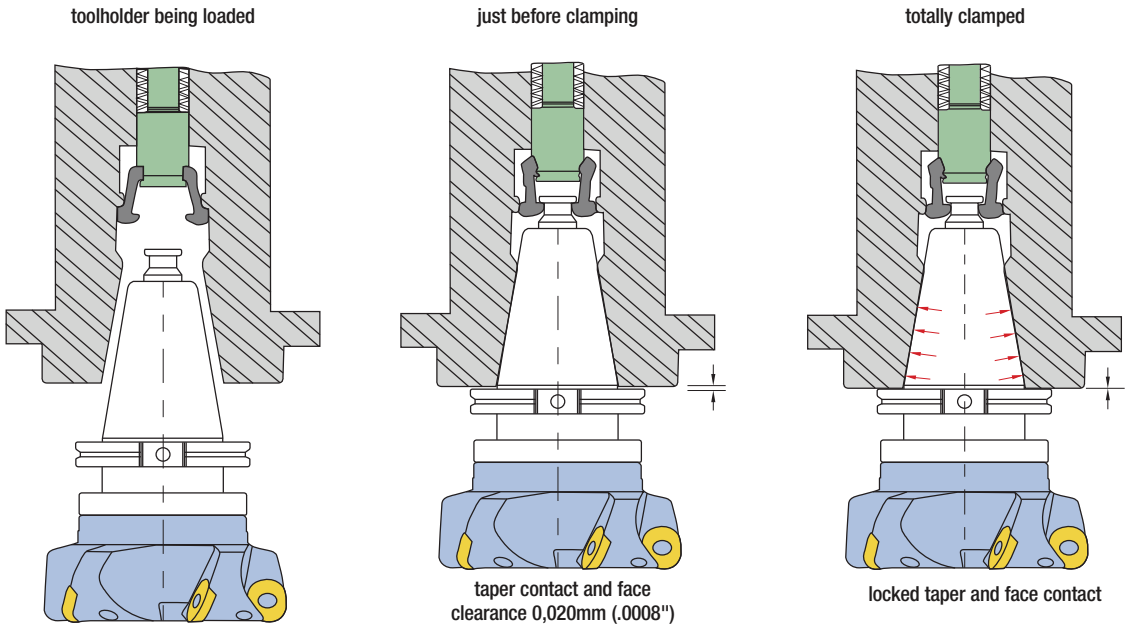
- Three surface contact.
- Superior static and dynamic stiffness.
- Static and rotating applications.
- Higher maximum speed.
- Higher stiffness than HSK and 7/24 tapers.

Safety

In some cases, standard 7/24 steep-taper tooling can be used in a face contact 7/24 taper spindle. However, the combination does not offer the same stability or advantages of face contact. As a caution, some spindles have a safety switch that shuts the spindle down if face contact is not achieved. In these cases, tools will need taper face contact for the spindle to operate.

Similar to all interfaces with face contact, special care should be taken regarding the cleanliness of the mating faces as high contact pressures are present. Adequate filtration systems for coolant must be used.

Locking Principle



Steep Taper V-Flange

Steep taper form B coolant

Taper Size

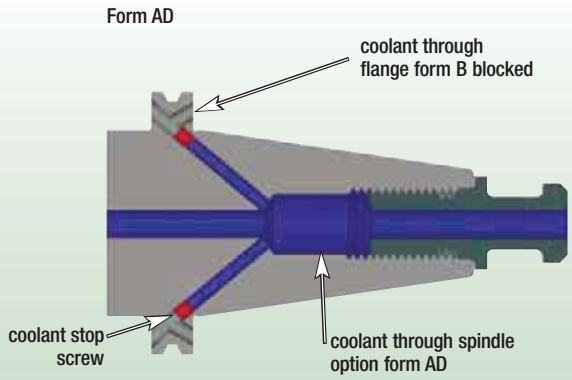
Taper size should be chosen with realistic considerations. When selecting cutting parameters, keep in mind that a machine with a 30 taper spindle will not achieve the same heavy cuts or use cutters as large those on a 50 taper machine.

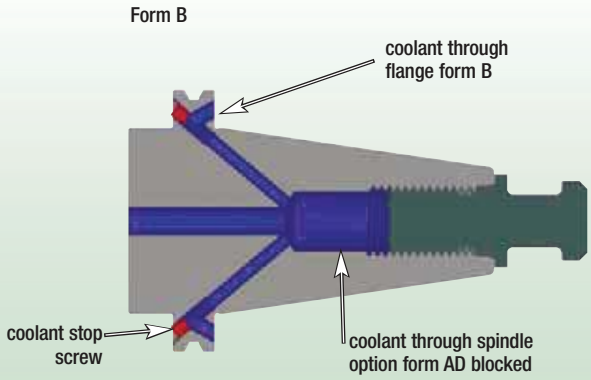
Pull-Back System

When troubleshooting a problem, assume that the toolholder is at fault is not the correct course of action. The spring pack, drawbar, gripper, and retention knob are major components for the successful operation of a machine tool because wear or breakage of these parts is a major concern.

- **Spring pack —** Can become weak or out of adjustment. This can cause chatter during a milling operation, which causes damage to the adapter taper, spindle taper, cutter, or workpiece.
- **Gripper fingers —** If worn, they may not grip the retention knob correctly, enabling the adapter to move, resulting in chatter and damage to the adapter.
- **Retention knob —** A worn or incorrect retention knob will not enable proper gripping for pull back on the taper. This is a very serious safety hazard due to the movement of the adapter. Using an improper knob may result in a lack of any detectable gripping force.

Spindles are now running at higher rates — quickly burning seals, making it difficult to seal coolant as it passes through the drawbar. One option is to direct the coolant around the spindle bearings and enter through the spindle face and toolholder flange.



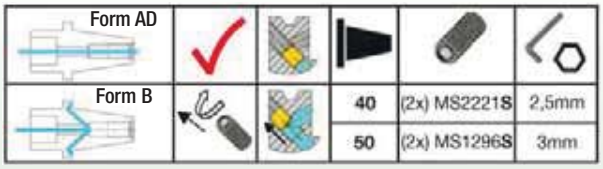


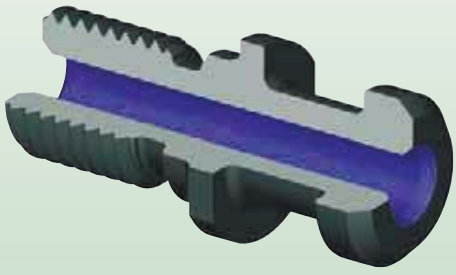
WIDIA™ toolholders are positioned in the AD coolant form with self-sealing, nylon-coated screws. The coolant screws are designed to completely seal the tool and prevent coolant leakage under pressures up to 1500 psi. However, if form B coolant is desired, the coolant stop screws must be backed out into the form B position.

IMPORTANT
When choosing a desired coolant form, the correct retention knob should be used in conjunction with the coolant form applied.

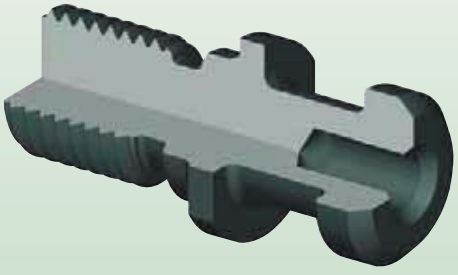
Form B toolholders can be converted back through the drawbar form AD by simply threading the coolant stop screw and stopping below the flange coolant entry hole. Changing coolant form can be achieved many times before it is necessary to replace the coolant stop screw.

All form B capable tooling is supplied with a label designating the required screw components for each steep taper size and information necessary for selecting a wrench to adjust the coolant stop screws.





Form AD
(through-coolant hole)



Form B
(no hole through or half hole)

Balancing

WIDIA™ offers a range of balanced and balanced-by-design toolholders capable of extending spindle and tool life and improving part quality at higher machining speeds.

Definitions for Balance

Standard Toolholder

A toolholder that may contain uncorrected features (unbalanced drive slots, notches, locking screws, etc.). Standard toolholders have no compensating features added to correct balance, such as basic, low-speed applications.

Balanceable

A toolholder with a built-in mechanism that can adjust to correct any unbalance inaccuracies incurred during normal manufacturing. The fully assembled tool (toolholder and cutting tool) can be balanced as a system using a balancing device.

Balanced-by-Design

A toolholder designed with compensating features to correct any unbalance caused by uneven drive slots, notches, locking screws, etc. The balanced toolholder is capable of being used in high-speed applications. Small, residual unbalance may result due to normal manufacturing tolerances within the shank standards.

Balanced

A toolholder has been balanced to predetermined specification after manufacture by checking the balance condition with a balancing device. This may be followed by physically removing material from the toolholder, such as holes and/or slots.

When machining at higher speeds, responsible machining practices must be observed. Unbalance is caused by uneven mass distribution in the tool or toolholder. Potential sources of unbalance are movable parts (adjustable cartridges, set screws, spindle spring pack, and clamping mechanisms), manufacturing tolerances, and design.

Forces caused by unbalance increase with the rotational speed squared. Excessive unbalance can cause premature wear to the tool and spindle bearing, which can adversely affect surface finish and accuracy.

Balancing

The balance quality is usually specified by the balance grade G, according to ISO 1940-1 and ANSI S2.19 standards.

The balance quality grade (G) was derived from practical experience, which is expressed in millimeters per second (mm/s) and ranges from 0,16–4000. For rotating tooling and general machinery parts, it is usually specified to be G 2.5 or G 6.3. A lower number designates better balance quality.

The permissible residual unbalance can be calculated by the following equation:

$$U_{per} = \frac{9549 \times G \times M}{n}$$

Where:

- U_{per} = permissible unbalance, expressed in gram millimeters (gmm)
- G = desired balance grade
- M = rotor mass in kilograms (kg)
- n = operating speed in rotations per minute (RPM)

Example:

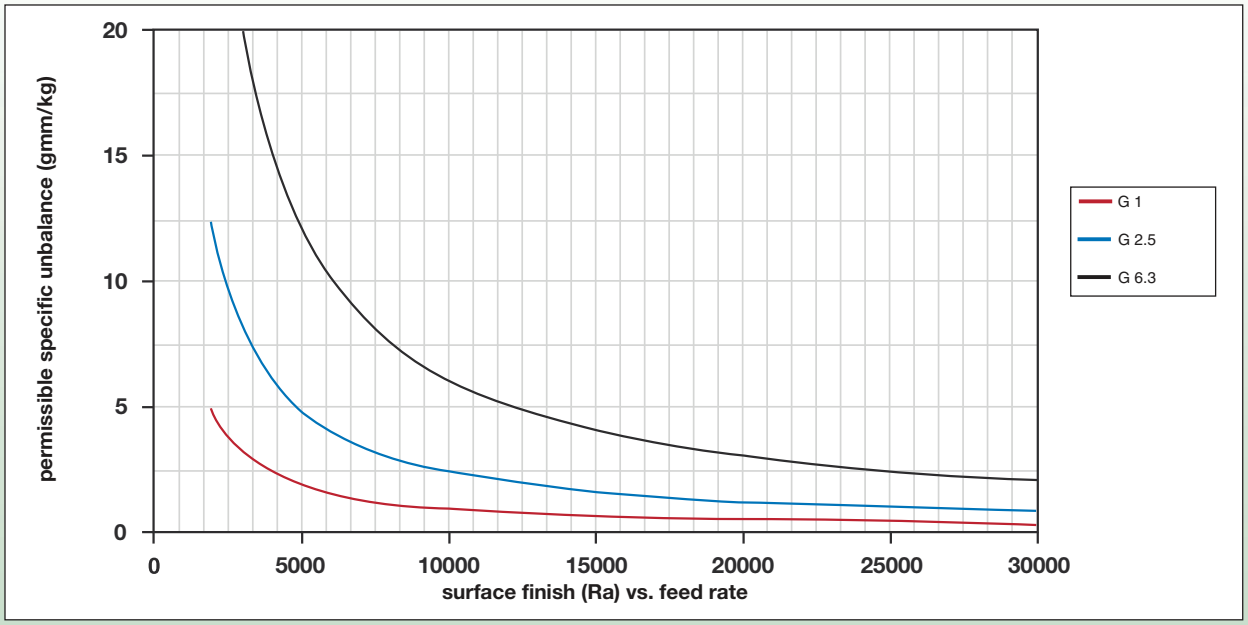
- **Rotor mass** = 2 kg
- n = 10,000 RPM
- **Desired balancing grade** = G 6.3

$$U_{per} = \frac{9549 \times 6.3 \times 2}{10{,}000} = 12 \text{ gmm}$$

The same value can be obtained from the chart on the following page. It gives the permissible specific unbalance in gram millimeters (gmm) as a function of the rotational speed and the balance quality (G). For the example above, at 10,000 RPM and for grade G 6.3, the maximum residual unbalance would be 6 gmm/kg. The toolholder assembly (including the tool) has a mass equal to 2 kg, the permissible unbalance is [(6 gmm/kg) x 2 kg], which equals 12 gmm.

(continued)

Balancing *(continued)*



From the approach described in ISO 1940-1, the requirements for maximum residual unbalance become very strict as speed increases. For example, a G 2.5 balancing grade can become unpractical at 25,000 RPM for a tool with a mass of 1 kg. The chart shows that the maximum residual unbalance would be 1 gmm, which could be very time consuming to be achieved or even beyond the accuracy of the balancing machine.

Comparing the cutting forces can provide a reference for the balancing requirements. Generally, finishing operations generate lower cutting forces and require a better balance quality. Though rotating components should always be balanced, in most cases it is sufficient to keep the unbalance forces to 5–10% of the cutting forces.

Balancing

The permissible residual unbalance can be calculated by the following equation:

$$F = U \times (n/9{,}549)^2 \quad \text{(Newtons)}$$

Where:

U = unbalance in gram millimeters (gmm)

N = rotational speed (RPM)

In this particular case, the unbalanced induced force would be $F = 1 \times (25{,}000/9{,}549)^2 = 6{,}9$ N. The cutting forces generated are likely to be orders of magnitude greater than that.

Good balancing quality does not necessarily guarantee safe operation at higher speeds. Other variables (spindle connection, type of operation, cutting parameters, machine stiffness, bearing condition, etc.) should always be considered.

Unbalance can be corrected by material removal (drilling, milling, grinding), material addition (set screws), and material redistribution (balancing rings or set screws).

For a given unbalance, the following formula can be used to determine the hole depth (L) necessary to correct for the unbalance*:

** Formula for steel components only.*

$$L = \frac{D - \sqrt{D^2 - U \times 1300/d^2}}{2}$$

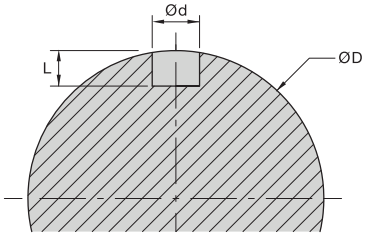
Where:

U = unbalance (gmm)

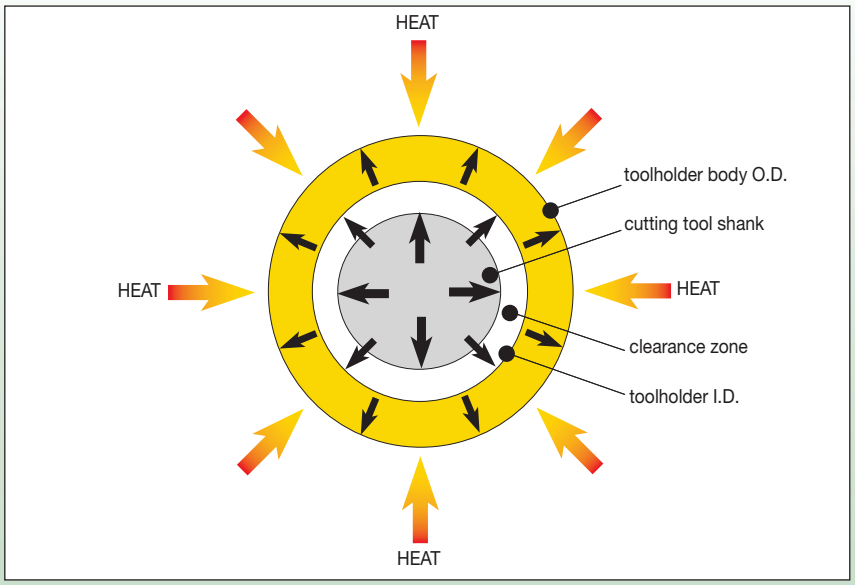
D = diameter of placement (mm)

d = hole diameter (flat bottom) (mm)

L = hole depth (mm)



Shrink Fit



The Concept

Heat shrinking is not a new process in the machine tool industry. However, the concept was only recently implemented as a quick-change toolholding mechanism for clamping cylindrical cutting tools for high-speed machining applications.

The Shrink Fit process begins by applying a quick and precise heat to the holding end of a toolholder. This causes the internal bore, which is slightly smaller than the shank of a cutting tool, to expand, allowing a tool to be inserted. As the toolholder cools, the bore shrinks to create 360° of uniform pressure along the entire length of the bore, resulting in an evenly distributed clamping force that mechanical toolholding cannot beat.

Due to the design, flatted-style, Weldon®, and Whistle Notch™ cutting tool shanks can employ Shrink Fit technology. To gain full benefits of the technology, fully cylindrical tool shanks are recommended. As long as the heating processes are kept within the elastic range of the toolholder material, this clamping operation can be repeated for several thousand cycles.

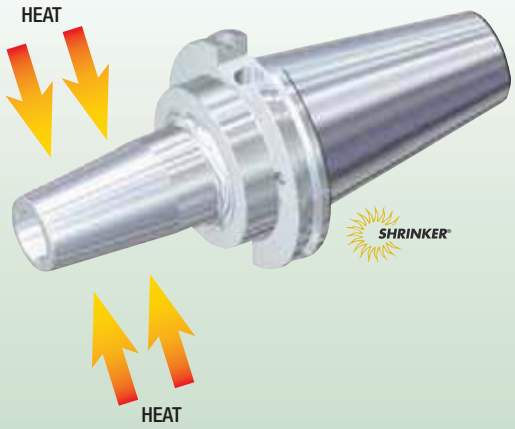
Shrink Fit Tooling Advantages:

- Low runout — cutting tools are gripped 360° along the entire length of the cutting tool shank for an evenly distributed clamping force.
- Clamping forces are greater than collets or hydraulic chucks.
- During testing, tool material properties break down and shear before slippage occurs.
- Slim and short toolholder profile designs are achievable because no moving parts are used.
- Well suited for high-speed operations because their symmetry provides the best possible balance.
- Sealing stop screws are not required — designed interference between the cutting tool and toolholder forms a seal that enables coolant to flow only through designated passages.

These advantages enable Shrink Fit technology to work at greater speeds and feeds, produce better finishes, deliver increased tool and spindle life, and generate more productivity.

Heat-Activating Systems

Shorter cycle time, less cooling downtime, localized heating, and integrated cooling systems are essential for a safe and simple heating system. Shrink Fit heating systems include induction, hot-air, and open-flame methods, with induction being the easiest and fastest of these systems.



Toolholders

- Slim design.
- Balanced.
- Flatted-style, Weldon®, and Whistle Notch™ shanks can be gripped. Optimal results are obtained with smooth, cylindrical shank cutting tools — without flats and/or notches.
- Avoid using carbide tools with polished shanks. This will reduce torque values by 60%.

HT (High Torque) Shrink Fit Toolholders

HT Shrink Fit holders have a high interference level that offers 30–50% greater torque than competitive systems. This line is only to be used with carbide tools because of their low thermal expansion coefficient. These toolholders require a machine with at least 10 kW of power to apply heat quick enough to avoid heating the tool.

GP (General Purpose) Shrink Fit Toolholders

GP toolholders enable the use of all materials and extensions because they have lower interference levels. Operators should use this style if not generating high cutting forces.

Ideal Surface Quality

- Metric (ISO standard) Ra ≥0,8 µm surface finish.
- Inch (industry standard) Ra ≥32 µin surface finish.

(continued)

Shrink Fit *(continued)*

Straight shank toolholder extensions are a great complement to the Shrink Fit system. Use caution and do not overheat Slim Line products. Overheating can cause warping or other permanent damage. Toolholder life drastically reduces if activating heat is not properly controlled.

Cutting Tool Requirements

metric (ISO standard)

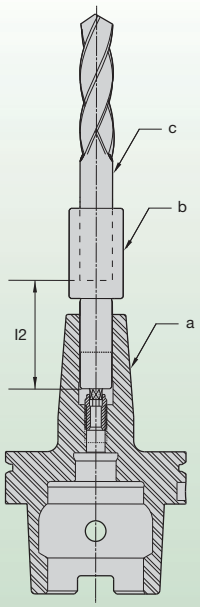
cutting tool shank diameters			tolerance	
3mm	2,997	3,000	h4	0.000/-0.003
4mm	3,996	4,000	h4	0.000/-0.004
5mm	4,995	5,000	h5	0.000/-0.005
6mm	5,992	6,000	h6	0.000/-0.008
8mm	7,991	8,000		0.000/-0.009
10mm	9,991	10,000		0.000/-0.009
12mm	11,989	12,000		0.000/-0.011
14mm	13,989	14,000		0.000/-0.011
16mm	15,989	16,000		0.000/-0.011
18mm	17,989	18,000		0.000/-0.011
20mm	19,987	20,000		0.000/-0.013
25mm	24,987	25,000		0.000/-0.013
32mm	31,984	32,000		0.000/-0.016
40mm	39,984	40,000		0.000/-0.016
50mm	49,984	50,000		0.000/-0.003

inch (industry standard)

cutting tool shank diameters			tolerance
1/8	.1249	.1247	-0.0001/-0.0003
3/16	.1874	.1872	-0.0001/-0.0003
1/4	.2499	.2496	-0.0001/-0.0004
5/16	.3124	.3121	-0.0001/-0.0004
3/8	.3749	.3746	-0.0001/-0.0004
7/16	.4375	.4371	0.0000/-0.0004
1/2	.5000	.4996	0.0000/-0.0004
9/16	.5625	.5621	0.0000/-0.0004
5/8	.6250	.6246	0.0000/-0.0004
11/16	.6875	.6871	0.0000/-0.0004
3/4	.7500	.7495	0.0000/-0.0005
7/8	.8750	.8745	0.0000/-0.0005
1	1.0000	.9995	0.0000/-0.0005
1-1/4	1.2500	1.2495	0.0000/-0.0005
1-1/2	1.5000	1.4995	0.0000/-0.0005
2	2.0000	1.9995	0.0000/-0.0005

Axial Adjustment Gages

Cutting tool length adjustment is performed using a special axial adjusting gage **(b)** before shrinking the cutting tool into the toolholder. This gage **(b)** is placed on the toolholder **(a)** along with the cutting tool **(c)**. The length difference of the setting gage **(l2)** is calculated into the required tool assembly length. The whole assembly can then be placed into a length presetter for adjustment. Rotating the gage moves the axial stop screw and presets the assembled tool to the required length. After removing the gage, the cutting tool can then be shrunk into the toolholder.



Standard Styles

WIDIA™ hydraulic chucks provide optimum performance for clamping full-cylindrical straight shanks, such as solid carbide drills and end mills. Activation of the chuck is achieved by turning the piston screw, which pressurizes the hydraulic fluid and exerts force on a thin-walled membrane along the length of the clamping bore. This highly concentric clamping force not only holds the tool shank more securely, but also produces a dampening effect that reduces vibration and helps eliminate microcracking on cutting edges.

A safety stop prevents chuck damage caused by over-tightening either with or without the cutting tool in place. Another unique feature is the special spiral wiper groove in the chuck's clamping bore that securely grips oily tool shanks. All WIDIA hydraulic chucks utilize a range of sealed, cutting-tool-reducing sleeves to maximize chuck versatility. Reducing sleeves can also be used for converting bores from inch to metric and vice versa.

Slim Line

Slim Line hydraulic chucks have a sophisticated shape for universal application and maximum precision. After the chucking process, safety is guaranteed if a minimum clamping force or a transmittable torque (determined according to the clamping diameter) is reached. This is achieved through the clamping screw operation and the stroke of the clamping piston that force the hydraulic oil into the thin-walled expansion chamber with high pressure.

Standard/HP Line

Our proven Standard Line hydraulic chucks have an external adjustment screw for radial alteration up to 3/8" of the cutting-tool length. This feature eliminates the need to remove the cutting tool or retention knob to make fine adjustments. Standard Line chucks are prebalanced and can also be used with SEFAS™ chamfering rings. Please see the toolholder sections of this catalog for information regarding balancing quality.

Trend Line

New Trend Line hydraulic chucks offer maximum precision at an attractive price. This system provides the same accuracy specifications as the Standard Line except with an axial back-up screw through the chuck bore to achieve the 3/8" radial adjustment of the cutting tool length. SEFAS chamfering rings also can be used with our Trend Line chucks.

Basic Line

Basic Line hydraulic chucks have a high-quality runout specification of .0001. These chucks are balanced-by-design for speeds up to 10,000 RPM. Like the Trend Line, Basic Line chucks utilize an axial back-up screw through the chuck bore to achieve a 3/8" radial adjustment. Larger body diameters give this chuck a higher torque transmission (grip) of 220 ft. lbs. Please note that the standard SEFAS chamfering ring cannot be used in this chuck design.

General Design

Function

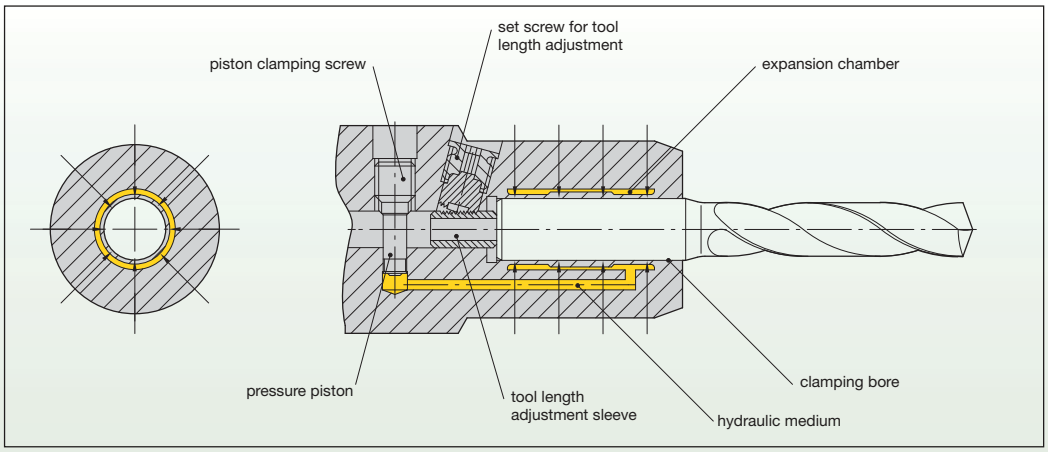
Tightening the piston clamping screw exerts force on the pressure piston, which presses the hydraulic fluid, exerting force on the thin-walled expansion sleeve. This pressure causes the sleeve to compress around the tool shank, creating a highly concentric clamping force.

Effect

The hydraulic clamping system has a dampening effect. Vibration in a mechanical clamping system can cause microcracking on insert cutting edges. This is prevented by the hydraulic expansion chuck and results in higher production quality and up to 4x better tool life.

Accuracy

The accuracy shown is based on a round shank (no flats) with h6 tolerance and no reducing sleeve.



Features

- Turning the external set screw adjusts axial tool length. There is no need to remove the cutting tool or coolant supply unit for standard designs.
- Maintained contact with the tool-length adjusting sleeve ensures that the tool is safely held. 10mm of adjustment is provided.
- A sealed bore and a large hole through the tool-length adjusting screw enable maximum coolant to flow through coolant-fed cutting tools.
- A uniquely designed piston clamping screw prevents damage from overtightening and accidentally actuating the hydraulic mechanism without a tool in the chuck.
- High-performance balanced chucks can be converted to balanceable chucks by adding a set of WIDIA™ balance rings that compensate for cutter imbalance and optimize performance.
- Wiper grooves inside the bore safely grip oily shanks, sealing the bore to eliminate contamination from chips, dirt, or coolant.
- SEFAS™ chamfering rings can be added to chucks, reducing the need for step drills and secondary chamfering operations.
- A wide assortment of reducer sleeves are available to increase the application range of hydraulic chucks. When using a bushing, the runout could be up to twice as high as the example shown.

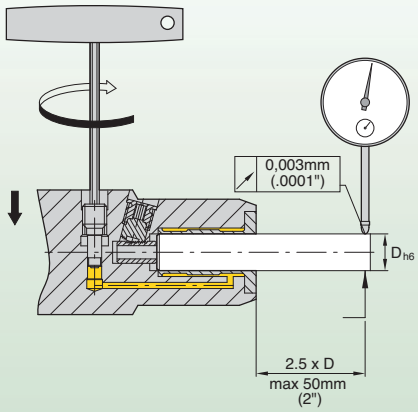
(continued)

General Design *(continued)*

Application

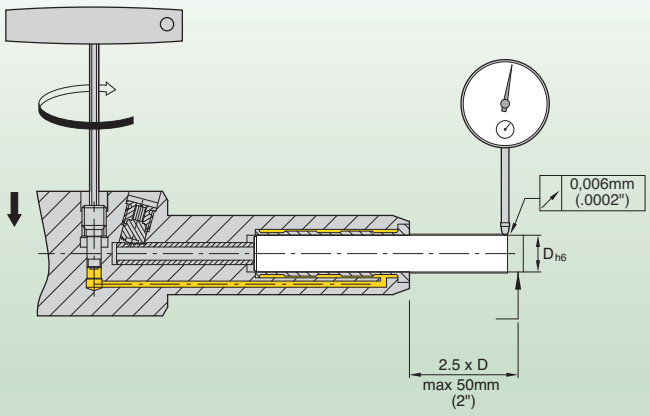
Hydraulic expansion chucks work best when clamping these style shanks:

- Shanks to DIN-6535 — forms HA, HB, and HE.
- Shanks to DIN-1835 — forms A and B (with shank tolerance h6 and Ra minimum of 0,3 µm).
- Forms HA and A — plain cylindrical shank, 6–32mm diameter.
- Forms HB and B — Whistle Notch™ shank, 6–20mm maximum diameter.
- Form HE — Whistle Notch shank, 6–20mm maximum diameter. (WIDIA™ suggests the use of a reducer collet).
- Inch straight shanks:
  - 1/4–5/8" (.0004 under nominal diameter maximum).
  - 3/4–1-1/4" (.0005 under nominal diameter maximum).



Slim Line Design

Weldon® shanks with a maximum diameter of 20mm (3/4") can be gripped without reducer collets. However, WIDIA recommends using reducer collets for all flatted shanks. Highest accuracy is obtained with plain, cylindrical shanks.



Using a sleeve gives higher grip torque:

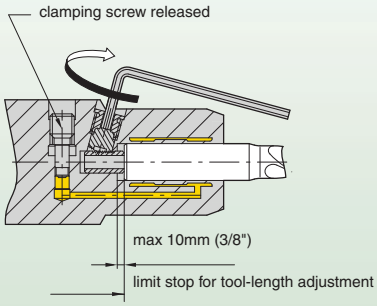
Formula: $\frac{\text{sleeve bore}}{\text{chuck bore}}$ x chuck torque = assembled torque

Example: $\frac{\text{12mm (sleeve bore)}}{\text{20mm (chuck bore)}}$ x 220 Nm = 132 Nm

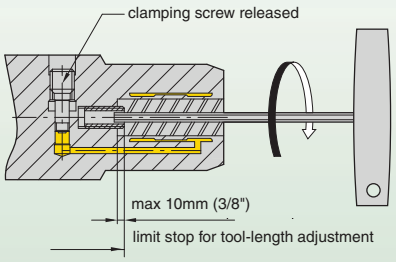
While chart shows for a 12mm Hydraulic Chuck = 70 Nm approx.
2x grip advantage

Setting Up New Hydraulic Chucks

Length adjustment for:
Standard/HP Line and Slim/Standard Line



Length adjustment for:
Trend Line, Basic Line, and Slim/Trend Line

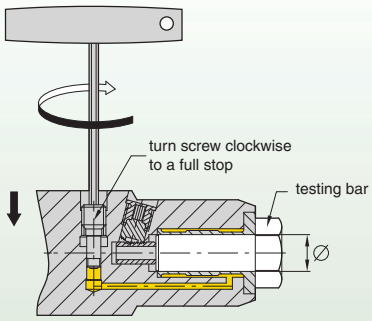


1. Remove all grease from the hydraulic chuck before using.
2. Insert the cutting tool into the clamping bore as far as the stop pin/stop screw will allow.
3. Adjust the cutting tool length with a hex wrench.
4. Always tighten the clamping screw with a hex wrench as far as the limit stop by hand tightening. Never try to adjust the stop pin when the hydraulic chuck is in the clamped position.
5. The tool is now clamped and ready for use.

Maintenance

WIDIA™ hydraulic chucks are maintenance-free and deliver long service life. It is important that the clamping function be checked with a test pin on a regular basis. Any dirt in the bore can be removed with a nylon cleaning brush.

- The clamping function can be tested quickly and easily using the test pin.
- Insert the test pin into the clamping bore as far as the stop pin/stop screw allow.
- Tighten the clamping screw with a hex wrench as far as the limit stop by hand tightening.
- The chuck is functioning correctly if the test pin cannot be moved by normal hand pressure.



Reducing sleeves are available; see page I3.

Cleaning brushes are available; see page J5.

Test pins are available; see page J4.

IMPORTANT
Never tamper with the oil-loading orifice (sealed with a cap) as this could destroy the clamping ability of the hydraulic chuck and require it to be sent to WIDIA for service.

In the event of small tool crashes or misuse of the chuck, please contact your local WIDIA Service and Repair Department to have your WIDIA hydraulic chuck serviced or repaired by qualified WIDIA service technicians.

The HPMC (High-Performance Milling Chuck) System

Application

The HPMC System is ideal for holding round shank cutting tools and extensions on various applications because it offers greater versatility. This makes it an excellent choice for end mills, reamers, indexable cutters, drills, straight shank extensions, and boring systems. The HPMC System, with its powerful gripping torque, provides the maximum performance for tough roughing and high metal removal applications, as well as delivering first-rate accuracy for finishing applications — all with the same chuck.

These toolholders are through-coolant capable with the use of supplied backup screws. Threaded holes in the chucks accept set screws for fine balancing, and reducing sleeves allow the same holder to be converted for smaller gripping sizes.

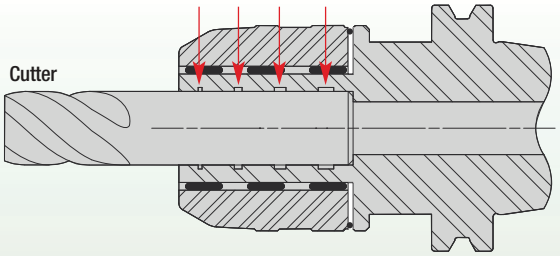
Design

The HPMC System is comprised of an inner chuck body, a needle roller bearing assembly, and a thick-walled outer locknut. The inner chuck body, with radial and axial grooves at the inside bore, acts as a master collet by compressing around the cutting tool, exerting a very strong grip. The chuck bore is compressed by roller bearings as they track up a taper of approximately 4°. The roller bearings are held in a retainer (four per window to maximize contact) at an angle slightly skewed from that of the chuck taper angle. The locknut bearing retainer's wall thickness is greater than that of the chuck body nose. Therefore, as the locknut is rotated clockwise, the roller bearings track in a helical movement, gradually climbing the shallow taper.

There are no threads in the HPMC System. As the two tapers are forced together, a tremendously high, uniform force is created. This squeezes the chuck body inward, conforming it to the cutting tool shank. Radial grooves assist the internal diameter by evenly collapsing inward, which improves gripping torque, accuracy, and prevents fretting. Force continues to be applied until the locknut's back face bottoms out on the chuck's body face. This is the maximum gripping torque position. Oil residue left on cutting tool shanks can cause slippage, but axial grooves minimize this by draining contaminants.

Shallow contact angles produce a self-locking effect, so the chuck will not release during operation. Because of this strong grip, no torque wrench is required. Also, the high gripping force of the HPMC enhances its ability to transmit energy to the machine tool, so vibration, deflection, and runout are minimized. The cutting tool shank offers an advantage over collet chucks because there is no axial drawback as the locknut is tightened.

A single toolholder provides 5–10% more gripping torque for heavy milling, and the same chuck is versatile enough to do finishing work, too.



To get the maximum accuracy out of the HPMC System, tighten the locknut to the face stop and then back off half a turn. As this is done, be sure the O-ring on the back face of the locknut stays in contact with the chuck face.

Stop screws are included with all HPMC Systems for length adjustment or coolant feed. These screws are designed with a cone face and reversible flat face and an O-ring for coolant sealing options.

HPMC Systems are subjected to sub-zero treatment to stabilize the material and prevent pitting on the bearing contact surface. This helps to ensure long, worry-free tool life.

(continued)

The HPMC (High-Performance Milling Chuck) System *(continued)*

Cutting Tool Requirements

The outside diameter of the cutting tool shank and the inside diameter of the HPMC System must be wiped with a clean dry cloth before assembly. Any contamination will increase runout and reduce gripping force.

Carefully monitor the cutting tools used in these chucks so they do not exceed h6 (nominal to -.0005") on the shank diameter. Use tools as close to nominal as possible. Cutting tool shank roundness should be within 0,003mm (.0001"). Undersized tools cause excessive stress and may cause chuck failure.

Optimal chuck performance is attained when the cutting tool shank is round, without flats. Cutting tools with small flats may be held, but they will increase runout. Whistle and flatted cutting tool shanks are recommended in conjunction with reducing sleeves. For best performance, keep shank flats to a minimum.

The minimum length of engagement is 2x the diameter of the cutting tool shank. Short holding length may cause the tool and/or chuck to break. This could dislodge the cutting tool and result in serious injury to the operator.

The milling chuck should never be tightened without a cutting tool inside the bore. High gripping forces will cause permanent deformation to the inside diameter.

Maintenance Operations

Greasing the needle bearing is the only required maintenance. Follow the procedure below to ensure maintenance is properly performed:

1. Tighten the locknut clockwise to obtain clearance from the retaining ring.
2. Remove the retaining ring from the chuck.
3. Unlock the locknut counterclockwise, and lift the nut assembly from the chuck.
4. Wipe off old grease from the milling chuck and all other components.
5. Recoat the needle bearings in the locknut liberally with a quality, water-resistant grease.
6. Regrease the outside diameter of the milling chuck where the locknut is housed.
7. Reinstall the locknut on the milling chuck body and tighten to gain clearance for reinserting the retaining ring.
8. Tighten and loosen the locknut several times. Recheck the retaining ring for correct fitting.
9. Wipe away any excess grease.

Please contact the WIDIA™ Service and Repair Department to have your WIDIA products serviced or repaired by qualified WIDIA service technicians.

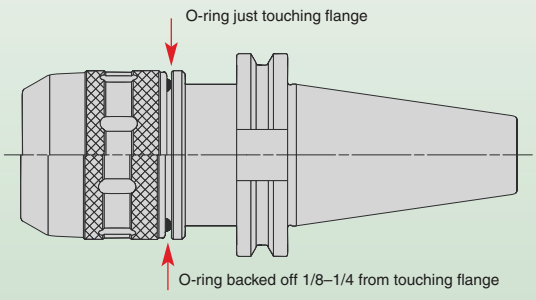
Setting the Accuracy of the Milling Chuck

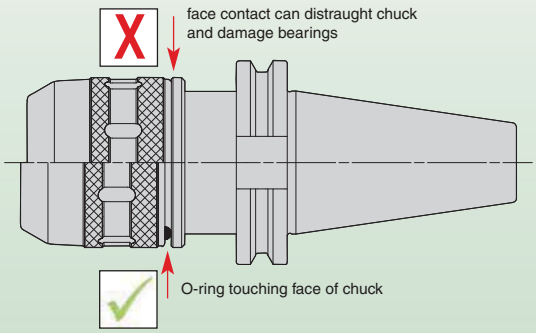
Heavy Milling

- Tighten the locknut all the way down with a milling chuck wrench until the O-ring on the locknut just touches the flange of the milling chuck body (O-ring should not be compressed).
- Accuracy 10–20 µm (.0004–.0008") at 3x diameter up to 50mm (2").

Finish Cut

- Back the locknut off 1/8–1/4 of a turn from above position.
- Best accuracy — 5 µm (.0002") at 3x diameter up to 50mm (2").





CAUTION
DO NOT over tighten the milling chuck without a tool shank inserted. This may cause serious damage to the milling chuck or loss of performance.

Tunable Tooling System (TTS)

Overview

When machining with extended length setups, undesirable regenerative vibrations (chatter) can arise, causing poor surface finish, dimensional control issues, and tool breakage. To avoid chatter, machine operators are generally forced to reduce cutting parameters, which decreases metal removal rates and diminishes productivity.

Cutting force fluctuates when chip thickness varies. This is caused by waves left on the workpiece from the previous pass. These waves may create chatter when the cutting tool and workpiece interact. Continued chatter can further produce variation in cutting force, leading to more vibration. If not addressed, the amplitude of vibration may eventually reach levels that cause the tool to bounce out of the workpiece or even result in catastrophic failure.

This problem can be approached in many different ways. Chatter can be avoided by drastically reducing cutting speeds to increase process damping (friction between flank face and workpiece), which dissipates energy to reduce vibrations. Another approach utilizes milling cutters that have inserts with differential spacing. This minimizes the regenerative effect by creating a disturbance on the wave pattern left on the workpiece. However, this approach provides limited success as chip loads are no longer evenly distributed over the cutting edges and may require the feed rate to be restricted. Also, because the spacing is not even, the surface quality could be negatively affected.

The problem with these solutions is that they do not allow high metal removal rates to be maintained. To uphold high rates, the dynamic stiffness of the system must be increased. Dynamic stiffness is proportional to the product of static stiffness and damping ratio. Static stiffness can be increased through using shorter setups or larger toolholder diameters. Materials with a higher modulus of elasticity can also increase static stiffness.

The WIDIA™ Tunable Tooling System (TTS) provides a means for maximizing the dynamic stiffness of boring bars and milling adapters by suppressing vibrations with a passive dynamic absorber. TTS is designed with an internal mass that vibrates close to the natural frequency of the most dominant vibration mode in the system. The motion of the internal mass will dissipate energy and prevent chatter. The overall result depends on a machine's dynamic characteristics* and the rigidity of the connection between tool and machine tool. Manufacturing tolerances, preload, and wear may change the dynamic response of a machine and adversely affect overall results.

**Machines from same builder and model are not dynamically identical.*

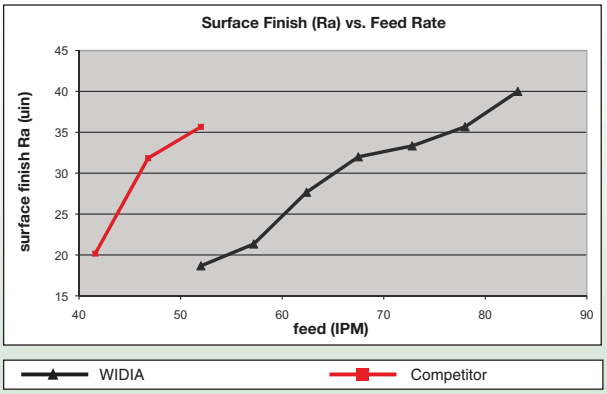
While passive dampening improves the dynamic stiffness of an extended reach tool, the damping mechanism will not perform the same with every machine. Not only does the natural frequency of the tool affect its dynamic stiffness, frequencies inherent to the machine do as well. Because machine tools have their own dynamic signature, a tool that is tuned on one machine may not be tuned on another. Unlike other products on the market that are pretuned, WIDIA tunable boring bars and milling adapters are tunable. They allow users to adjust the passive damper, optimally tuning the tool for a specific machine or setup. This enables extended reach tooling to be retuned to match a machine's dynamic signature, even as it changes over time. A key benefit of WIDIA's tunable boring bars and milling adapters is that they can be optimally tuned for any given setup. While WIDIA standard tunable products come pretuned from the factory, it may be beneficial to further optimize them once installed.

(continued)

Tunable Tooling System (TTS) *(continued)*

With the WIDIA™ TTS System, longer L:D ratio toolholders can be used for larger DOC, better surface finishes, and longer tool life. When TTS is applied to milling adapters, using greater insert density on milling cutters or increasing ADOC or WOC enables higher MRR. Better surface finishes and tool life can also be expected from these adjustments.

The benefits of using WIDIA's Tunable Systems go beyond increased metal removal rates. In metalcutting tests, a good correlation between dynamic stiffness and vibration levels were measured at the spindle. Vibrations can not only cause premature tool life, but also limit spindle bearing life. Preventing vibration from propagating through the machine promotes longer life for spindle-related components and maintains machine accuracy over time.



Surface finish measurements comparing a pretuned milling adapter from a competitor and a WIDIA's optimally tuned adapter on the spindle. An increase of up to 50% in feed rate for similar surface finish values can be noticed.

Dynamic Stiffness

Figure 1 shows the relative dynamic stiffness of a tunable boring bar as a function of adjusting screw tightness — loose to tightened (left to right).

The chart shows that for the given bar, optimal tuning occurs at about 70% or when the relative performance equals 1.

It is also important to note that performance decreases more severely when the tool is over-tuned, compared to when it is under-tuned. For this reason, it is best to slightly under-tune the system.

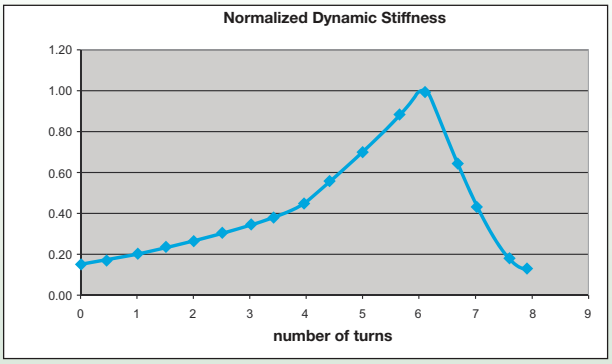
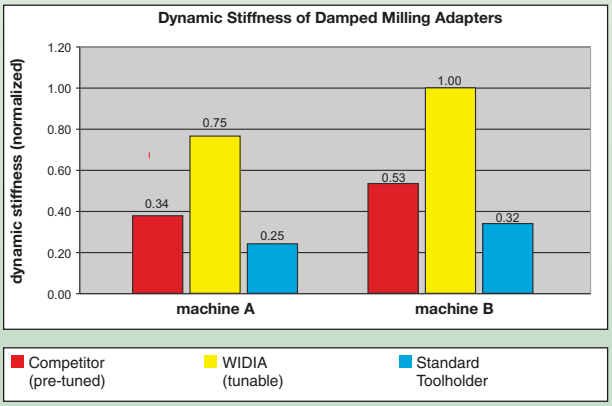


Fig. 1

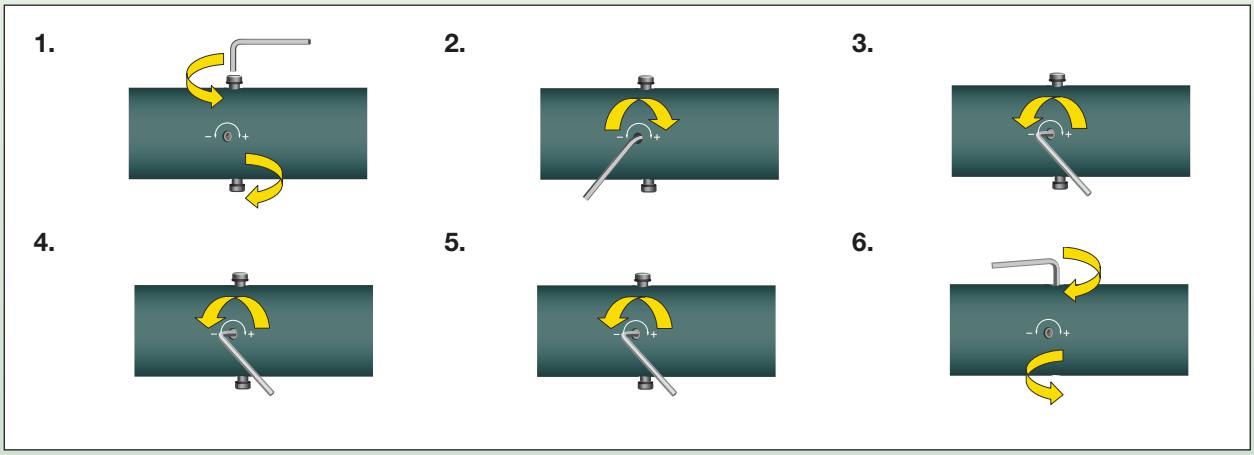


Tunable Milling Adapters

The WIDIA™ Tuned Tooling System offers a full line of tunable milling adapters capable of performing at maximum output without the hindrance of vibration. Tunable milling adapters are through-coolant capable, and, because the internal damper can be adjusted to alleviate chatter, they provide optimum surface finish and longer tool life.

General Guidelines for Milling with Extended Reach Adapters

1. Loosen both clamping screws.
2. Turn the adjusting screw in the positive direction until it becomes snug. The adjusting screw becomes snug when it locks the tuner mass.
3. Turn the screw one complete turn in the negative direction and take a test cut.
4. Repeat Step 3 until good surface finish is achieved. You may need to use small increments to find an optimal position.
5. Back the adjusting screw off a 1/4–1/2 turn in the negative direction.
6. Tighten both clamping screws and take a test cut to confirm desired results.



**The TTS Milling Adapters will need to be re-tuned if the milling cutter is replaced with another with different mass.*

Tunable Boring Bars

The WIDIA™ complete portfolio of Tunable Boring Bars helps prevent chatter and other problems associated with an internal dampening package designed for deep-hole boring applications.

Advantages

Optimal Rigidity

Eliminates vibration to improve surface quality and tolerance.

Increased Productivity

Larger depth of cut and better chip removal by up to 10:1 (steel) and 15:1 (carbide) length-to-diameter ratio.

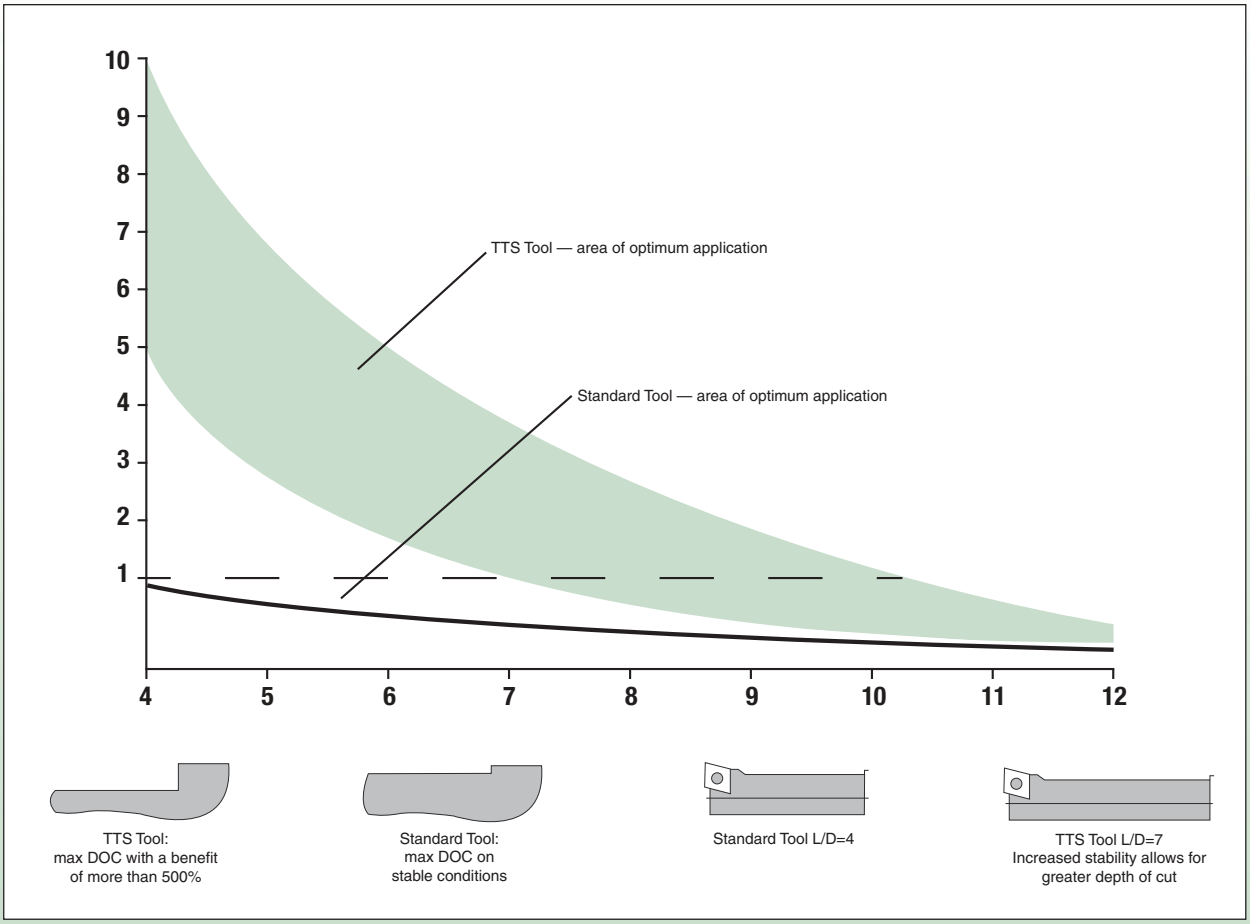
Machining without Chatter or Vibration

Less noise exposure and improved results.

Tunable Damping Mechanism

To account for different vibration behavior, bars can be tuned on the machine, and tools can be adjusted.

Relative Stability



NOTE: This chart illustrates how KM™ Tunable Boring Bars proivde greater stability than standard toolholders, even in larger tool length-to-diameter ratios. Increased stablilty enables greater depth of cut.

General Guidelines for Boring with Extended Reach Bars

1. Select the largest boring bar diameter possible. Larger diameter bars are stiffer and more stable. Remember to leave enough space for chip evacuation.
2. While larger diameters are more stable, the diameter may also be too large, preventing proper chip evacuation, affecting surface finish, or damaging the bar. Ensure the bar diameter is not so large that it will interfere with chip evacuation.
3. Keep the overhang length of the tunable boring bar as short as possible. For Tunable Boring Bars, select the shortest bar possible.
4. Balance machining parameters to prevent the occurrence of uncontrolled vibrations and resonance.
5. The tool setting angle should be as close as possible to 90°.
6. Make sure the insert is in the correct center position.
7. By choosing a small corner radius you can reduce forces on the workpiece.
8. Use cutting heads with a negative back-rake angle that is as small as possible.
9. Using inserts with a positive chip former is preferred.
10. Change inserts when any flank wear is detected because radial back forces will increase in proportion to wear.

Selecting the Correct Bar

WIDIA™ offers TTS Boring Bars with KM™ back-ends or straight shanks, KM front-ends, or bolt-on head connections, and they are available in either steel or carbide.

To find the appropriate boring bar, first consider that the length-to-diameter ratio (L:D) should always be kept as small as possible. The smaller the L:D ratio, the greater the stiffness and stability of the bar.

The L:D ratios of Tunable Boring Bars are fixed, where straight shank tunable bar L:D ratios are not. When using straight shank bars, the overhang length should be kept as small as possible.

Please note that only standard pretuned straight shank tunable bars are pretuned at the factory for 10:1 L:D. If the straight shank bar is mounted with less than 10:1 L:D, it may be necessary to retune the bar. This is discussed in more detail in the “Tuning the Bar” section.

Holding Method

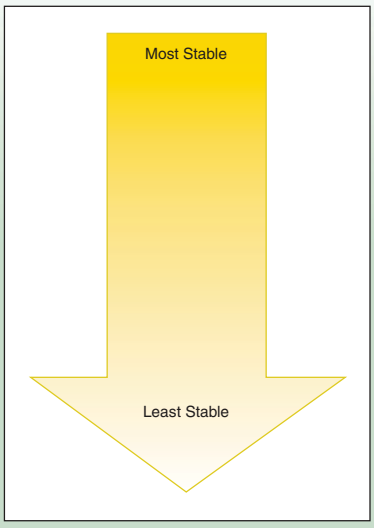
The holding method is as critical to performance as selecting and tuning the boring bar. The connection between the boring bar and the machine should be as rigid as possible. Rigid connections enable the tuner mass to function more effectively. The minimum holding length of the bar should be 2.5x the diameter of the bar.

Various connection methods are shown below and listed from most stable to least stable:

Face and Taper Contact with Interference Fit
Example: KM Tunable Boring Bar clamped with short overhang
KM clamping unit on turret

Split Sleeve/Full Cylindrical Contact
Example: Straight Shank Tunable Boring Bar with split sleeve

Screw Clamping
Example: Straight Shank Tunable Boring Bar with screw clamping on bar flat



Tuning the Bar

Standard tunable boring bars are pretuned at our factory. Though they may work right out of the box on some machines, for others, they may chatter because of differences in dynamic response. Chatter can be eliminated by optimally tuning the boring bar for a given setup, and the key benefit of our tunable boring bars is that they can be adjusted for any application. Therefore, corrections can be made to put the tool in tune with your machine, optimizing dynamic stiffness and negating chatter.

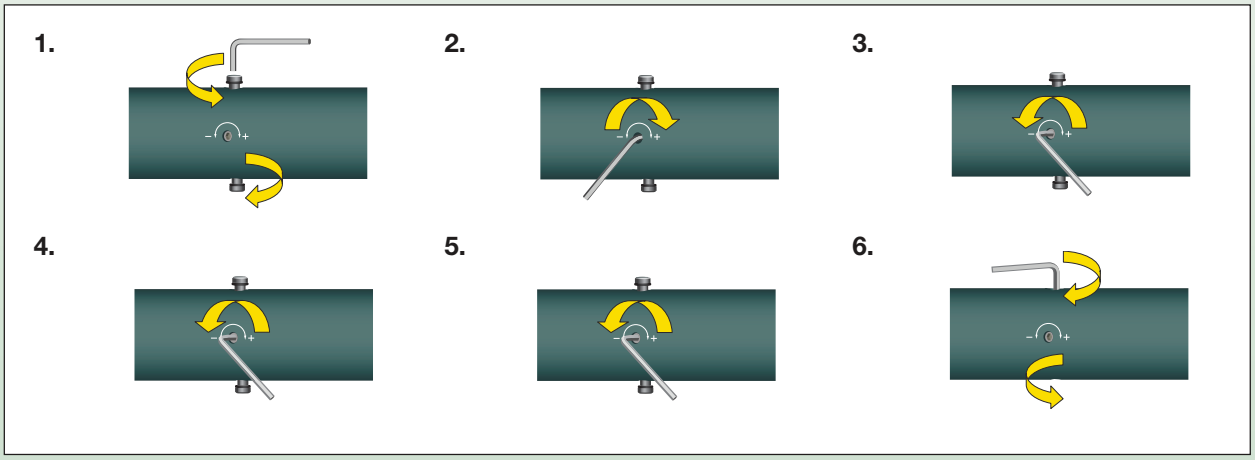
Several factors influence the required adjusting screw setting on tunable boring bars, including:

- Overhang and L:D ratio.
- Depth of cut.
- Overall dynamics and rigidity of the machine.

When retuning, it is best to slightly under-tune the bar. For this reason, the tuning process focuses on identifying the adjusting screw setting where chatter starts, and then backing off the screw by a 1/2 turn in the negative direction.

Retuning a Tunable Boring Bar

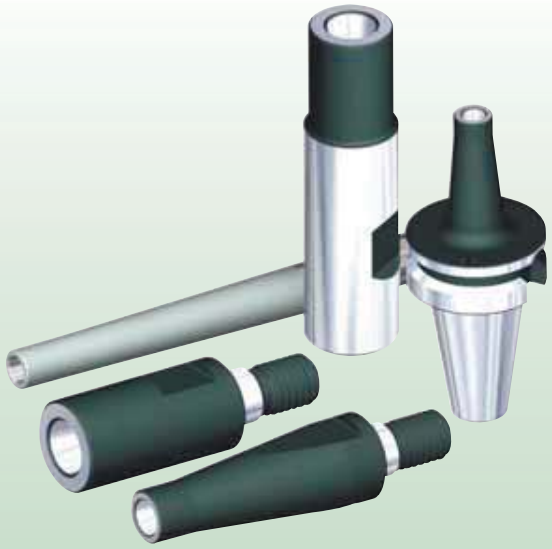
1. Loosen both clamping screws.
2. Turn the adjusting screw in the positive direction until it becomes snug. The adjusting screw becomes snug when it locks the tuner mass.
3. Turn the screw one complete turn in the negative direction and take a test cut.
4. Repeat Step 3 until chatter is eliminated.
5. (A) Once chatter is eliminated, note that it starts between the current screw setting and one turn in the positive direction. Make 1/4 turn adjustments within this range, taking test cuts for each setting, until you can identify the adjusting screw setting that causes chatter to start. (B) Once the adjusting screw setting that causes chatter is determined, back the adjusting screw off a 1/2 turn in the negative direction.
6. Tighten both clamping screws and take a test cut to confirm desired results.



Screw-On Adapters

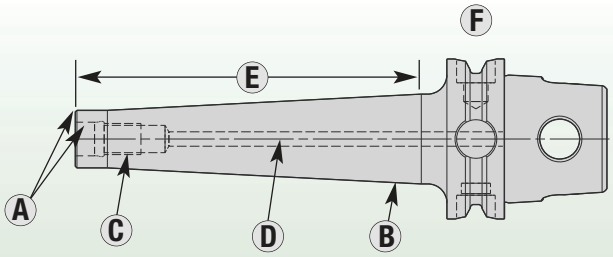
The universal design of WIDIA™ Screw-On Milling Cutter Adapters enables old and new tool styles to be used interchangeably yet maintain a rigid connection. All adapters offer superior runout accuracy, high metal removal rates, and through-coolant capability. Screw-On Milling Cutter Adapters can be used with WIDIA's wide range of best-in-class inserts to guarantee excellent cutting results, performance, and productivity.

Screw-On products can also be used with a variety of machining applications ranging from low-speed milling applications to rates greater than 20,000 RPM, with the added feature of coolant directed to the cutting edge. The system's accuracy, repeatability, and stability should be equal or greater to the performance of any similar systems on the market today in all applications.



Features, Functions, and Benefits

- All adapters have through-coolant capability.
- All products are stock standard products.
- High accuracy — low runout.
- Stable system for helix, pocket milling, contour cutting, and ramping.
- KM™, HSK, and steep taper prebalanced to G6.3 at 16,000 RPM.
- Extensions and reducers are designed with through-coolant prevision.
- The fine-tuned Screw-On indexable end mill cutters and the KM/Erickson™ toolholders together with a wide range of best-in-class inserts ensure excellence in cutting results, performance, and productivity.



A. Ground pilot and face for high rigidity and accuracy.

B. Extended shanks have slow taper for added rigidity.

C. Thread locking system.

D. Through coolant on all adapters.

E. Designed for long reach.

F. Balanced.

Applying Screw-On Adapters

Heavy-Metal Adapters
- Devibration extensions with heavy metal (Densimet™ D176).
- Internal threads with accurate mating surface for best possible concentric and axial runout with the extended tools.
- Through-coolant capability.

Extensions with Weldon® Shank
- Screw-On type extension with Weldon shank, as per DIN 1835-B.
- Shank manufactured as per DIN 1835-B, internal-coolant capability.

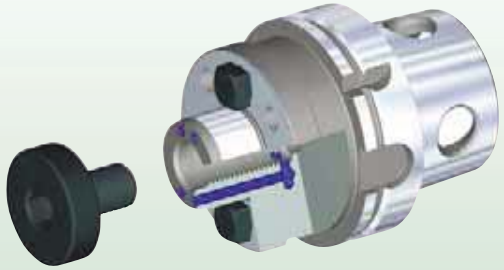
Reducers
- Adapter uses Screw-On tools with smaller size.
- Through-coolant capability.
- Mating surface helps generate accurate concentric and axial runout.

Extensions
- Adapter uses Screw-On tools with larger thread size.
- Through-coolant capability.
- Mating surface helps generate accurate concentric and axial runout

Through-Coolant Shell Mill Adapters

Shell mill adapters with high-pressure and high-volume through-coolant capability are now available as standard offerings. Their unique design enables maximum coolant flow to be channeled directly to a tool's cutting edge.

These latest shell mill adapters with through coolant are ideal for holding indexable milling cutters. Together, the toolholder and cutter ensure excellence in tool life, surface quality, and productivity. With this combination, high-pressure or high-volume coolant can dramatically improve surface finishes, reduce tool wear, decrease cutting force, and control chip shape and evacuation. This makes through-coolant shell mill adapters perfect for machining hardened steels and other difficult-to-cut materials like titanium.



Options

- Extended lengths available in standard stocked offering.
- Drive keys upgraded to high-strength material, allowing for high-torque capability.
- Adapters are set for form AD coolant and can be converted to form B flange coolant using adjusting screws.
- No extra components necessary to buy for standard tools.

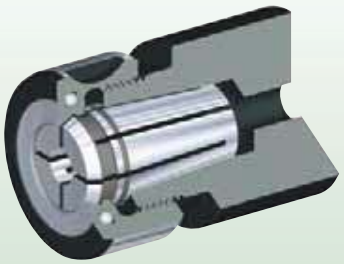
Coolant Flow Options

- Through holes in the face of the pilot.
- Through the center.

Collet Chuck Styles

TG Collet Chucks

Primarily for gripping straight shanks, TG collet chucks are the Erickson™ industry standard. These chucks offer flexibility for drilling, milling, and tapping applications and are also capable of gripping Whistle Notch™ cutters. TG collet chucks should be used for medium to light operations.

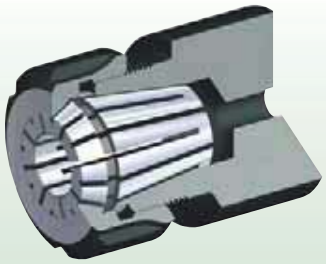


TG collet chucks have a range of dedicated milling and tap collets available. Balanceable locknuts are offered for operating at relatively high speeds. Sealing/coolant locknuts and bonded collets are also available for chucks utilizing through coolant.

- Clamping range of 0,3mm (.016").
- Good rigidity and gripping power of 3:1.
- Good concentricity.

ER Collet Chucks

As the DIN 6499 industry standard, ER collet chucks are designed to grip straight shanks. They are flexible for drilling, light milling, and tapping applications. ER collet chucks are used for medium to light applications at medium speeds.



Dedicated tap collets are available for this style collet chuck. For ER collet chucks using through coolant, sealing and coolant locknuts are available.

- Wide clamping range of 1mm (.040").
- Fair rigidity and gripping power of 2:1.
- Good concentricity.

(continued)

Collet Chuck Styles *(continued)*

DA Collet Chucks

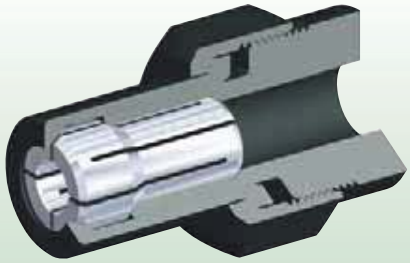
DA collet chucks are an Erickson™ industry standard. They are intended for gripping straight shanks, but the DA style also has the ability to grip drill margins. This eliminates center drilling by shortening the drill. DA collet chucks also offer flexibility for drilling, milling, and tapping.

Milling and tap collet styles dedicated to the DA style are available. These chucks can also make use of bonded collets when employing through coolant. DA collet chucks can utilize three styles of locknuts.

- Clamping range of 0,8mm (.031").
- Fair rigidity and gripping power of 1:1.
- Concentricity >0,025mm (.001").

DA — 01 Series
Extended Nose Style

Long nosepiece bearing and compensating locknut delivery offer proper axial position and prevent twisting. This style is ideal when extreme accuracy is required.

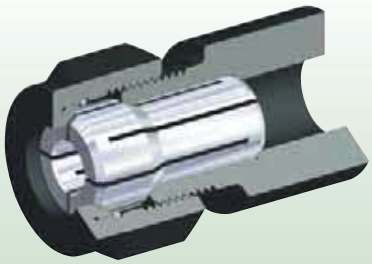


DA — 04 Series
Close Center Style

Designed at the minimum safe outside diameter to solve close center problems. This style should be used where reach and close proximity of workpiece problems are encountered.

DA — 08 Series
Stub Nose Style

This DA style has a compensating nose ring with the locknut that allows collets to find their own axial position and prevent twisting. They should be used when better rigidity is required.



TG • Tremendous Grip

ERICKSON

- Provides Tremendous Grip and accuracy for all drilling applications.
- 0,4mm [1/64" (.016")] range of collapse.
- Grips on back taper and margin of drill for maximum feed rates and more accurate holes.
- Manufactured to DIN 6499 Class 2 accuracy.

TGC • Tremendous Grip Coolant

ERICKSON

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 100 bar (1500 psi).
- Unique design features permit easy entry into nosepiece.
- Available from stock in all popular sizes.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range collapse.
- Design enables flutes of drills to enter collet, unlike competitive designs.

TGHP • Tremendous Grip High Precision

ERICKSON

- Twice as accurate as standard TG- and ER-style collets.
- Available from stock in all popular sizes.
- Can be used in all standard TG-style collet chucks.
- 0,25mm (.010") range of collapse.
- Manufactured to DIN 6499 Class 1 accuracy.

TGCHP • Tremendous Grip Coolant High Precision

ERICKSON

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 100 bar (1500 psi).
- Unique design features permit easy entry into nosepiece.
- Available from stock in all popular sizes.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.
- Manufactured to DIN 6499 Class 1 accuracy.

TGNP • Tremendous Grip Non-Pullout, Weldon® Style

ERICKSON

- Positive retention and drive provided by drive wedge in collet.
- Eliminates inaccuracy created by solid end mill holders.
- 0,13mm (.005") range of collapse.
- Fits all standard TG-style collet chucks.

TGST • Tremendous Grip Single-Angle Tap Collet

ERICKSON

- Designed to grip the tap on the shank and square.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.

TGSTC • Tremendous Grip Single-Angle Tap Collet, Coolant Style

ERICKSON

- Rubber-filled slots seal collet for coolant-fed tool applications.
- Suitable for coolant pressure up to 70 bar (1000 psi).
- Designed to grip the tap on the shank and square.
- Fits all standard TG-style collet chucks.
- 0,13mm (.005") range of collapse.

ER • Single Angle

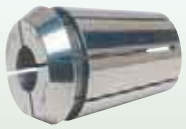
ERICKSON

- Provides good grip and accuracy for all drilling applications.
- Wide clamping range.
- Available in both inch and metric bores.
- 1mm (.040") range of collapse.
- Manufactured to DIN 6499 Class 2 accuracy.

ERTC • Single-Angle Tap Collet

ERICKSON

- Designed to grip taps on shank and square to eliminate slippage.
- Fits all standard ER-style collet chucks.
- 0,13mm (.005") range of collapse.



ERTCT • Single-Angle Tap Collet with Axial Compensation

ERICKSON

- Designed to grip taps on shank and square to eliminate slippage.
- Tension only, cost-effective solution for machines that require axial compensation for tapping.
- Fits all standard ER-style collet chucks.

DA • Double-Angle

ERICKSON

- 0,8mm [1/32" (.031")] range of collapse.

DAC • Double-Angle Coolant

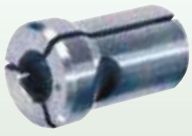
ERICKSON

- Rubber-filled slots seal coolant-fed tool applications.
- Suitable for coolant pressure up to 70 bar (1000 psi).
- Fits all standard DA-style collet chucks.
- 0,13mm (.005") range of collapse.

DANP • Double-Angle Non-Pullout — Weldon® Style

ERICKSON

- Designed to grip end mills with Weldon-style shanks.
- Positive retention and drive provided by drive wedge in collet.
- Eliminates inaccuracy created by solid end mill adapters.
- Fits all standard DA-style collet chucks.
- 0,13mm (.005") range of collapse.



TG Collet Series

The TG collet series is the first choice when high precision, gripping torque, and versatility are required. These single-angle collet chucks grip at approximately 3:1 for grip torque versus tightening torque without a stop screw.

The taper's slow angle produces a sticking action, so collets must be snapped into the locknut before assembling the locknut onto the chuck. Follow the procedure on page K79 for assembly/disassembly instructions.

Standard Collet

- 0,40mm (.016") maximum collapse.

Bonded Seal Collet

- 0,13mm (.005") maximum collapse.
- 100 bar (1,500 psi) coolant pressure.

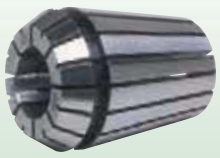
DA Collet Series

DA-style collet chucks have a grip of approximately 1:1 tightening torque versus grip torque.

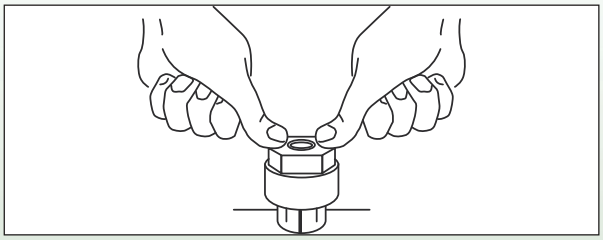
ER Collet Series

The ER collet series is an international standard style used for many applications. Collets from this series are ideal for boring, milling, reaming, tapping, and grinding.

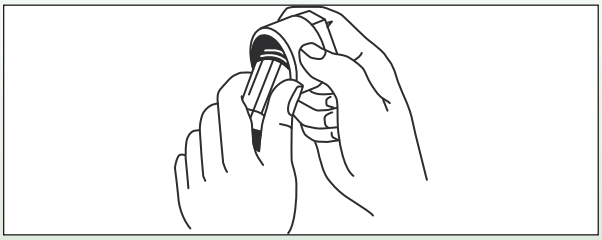
ER collets are manufactured from alloy steel and hardened for long life. They offer a grip of approximately 2:1 tightening torque versus grip torque. See page K79 for assembly/disassembly instructions.



TG and ER Collet Assembly/Disassembly Instructions

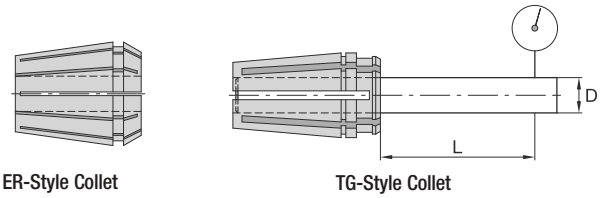


- First, place the locknut with nose ring over collet nose. Apply force on the locknut until it snaps into place. The nose ring is now seated into the collet undercut and should turn freely.



- To remove the collet from the locknut, hold the nut firmly in one hand and apply a bending action on the collet with the other hand until the collet snaps free from the nose ring.

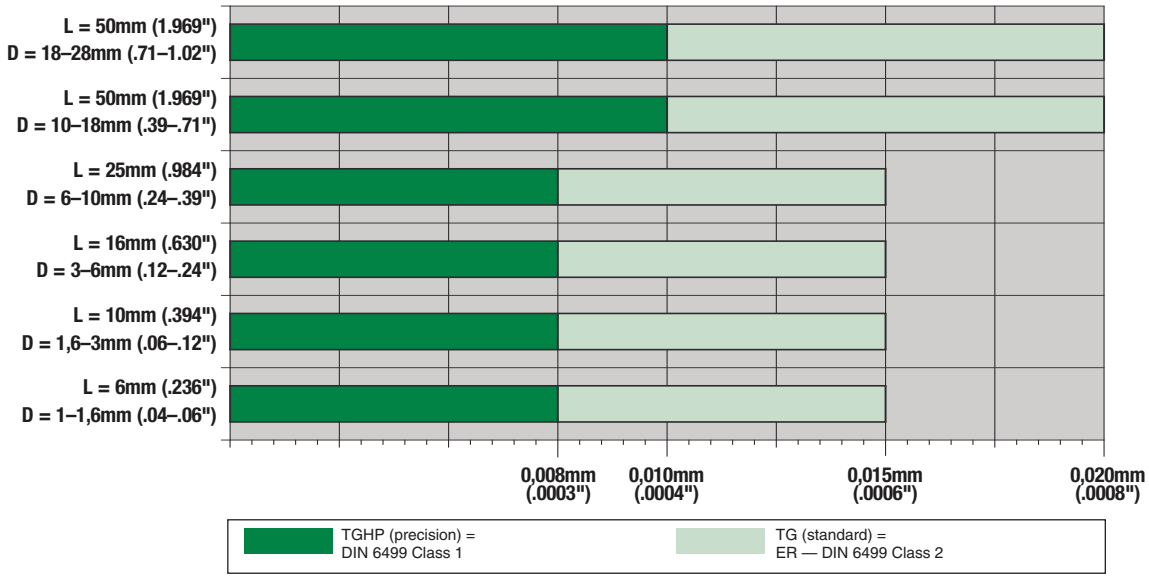
NOTE
Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet. The full length of the gripping bore needs to be maintained to achieve maximum accuracy and safety. Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers. Never try to stretch collets by clamping oversized cutting tools.



ER-Style Collet

TG-Style Collet

Maximum Runout Error



Gripping Strength Comparison Chart • Metric

ER collet chuck based on ER40		TG collet chuck based on TG100		standard hydraulic		Slim Line hydraulic	
mm	Nm	mm	Nm	mm	Nm	mm	Nm
3	—	3	—	3	—	3	—
4	—	4	—	4	—	4	—
5	—	5	—	5	—	5	—
6	38	6	—	6	12	6	26
8	52	8	115	8	30	8	50
10	70	10	144	10	40	10	80
12	103	12	300	12	70	12	115
14	108	14	312	14	100	14	160
16	118	16	325	16	135	16	200
18	156	18	339	18	180	18	250
20	206	20	384	20	220	20	230
25	255	25	536	25	500	25	—
32	—	32	569	32	700	32	—
40	—	40	—	40	—	40	—
50	—	50	—	50	—	50	—

Gripping Strength Comparison Chart • Inch

ER collet chuck based on ER40		TG collet chuck based on TG100		standard hydraulic		Slim Line hydraulic	
in	ft. lbs.	in	ft. lbs.	in	ft. lbs.	in	ft. lbs.
1/8	—	1/8	—	1/8	—	1/8	—
3/16	—	3/16	—	3/16	—	3/16	—
1/4	28	1/4	—	1/4	9	1/4	19.2
5/16	38	5/16	85	5/16	22	5/16	—
3/8	52	3/8	106	3/8	30	3/8	59
7/16	—	7/16	—	7/16	—	7/16	—
1/2	76	1/2	221	1/2	55	1/2	89
9/16	80	9/16	230	9/16	74	9/16	—
5/8	87	5/8	240	5/8	100	5/8	148
11/16	115	11/16	250	11/16	129	11/16	—
3/4	152	3/4	283	3/4	148	3/4	155
7/8	—	7/8	—	7/8	—	7/8	—
1	188	1	395	1	369	1	—
1 1/4	—	1 1/4	420	1 1/4	516	1 1/4	—
1 1/2	—	1 1/2	—	1 1/2	—	1 1/2	—
2	—	2	—	2	—	2	—

NOTE: Torque values in in. lbs.
Minimum values calculated for maximum bore size and minimum shank size.
Maximum values calculated for minimum bore size and maximum shank size.

Gripping Strength Comparison Chart • Metric

	milling chuck		Shrink Fit			
			standard (Nm)		high torque (Nm)	
	mm	Nm	min	max	min	max
	3	—	3.3	11	—	—
	4	—	5.2	16	—	—
	5	—	6.8	20	—	—
	6	—	19	116	—	—
	8	—	26	176	—	—
	10	—	91	312	—	—
	12	—	132	445	269	582
	14	—	169	546	346	723
	16	—	253	587	444	779
	18	—	304	865	540	1101
	20	1127	412	1049	654	1292
	25	1666	901	1896	1233	2227
	32	2347	1033	2079	1338	2384
	40	—	1907	3482	2432	4007
	50	—	2651	4465	3029	4843

Gripping Strength Comparison Chart • Inch

	milling chuck		Shrink Fit			
			standard (ft. lbs.)		high torque (ft. lbs.)	
	in	ft. lbs.	min	max	min	max
	1/8	—	3.2	13	—	—
	3/16	—	4.6	19	—	—
	1/4	—	13	86	—	—
	5/16	—	18	117	—	—
	3/8	—	53	196	—	—
	7/16	—	65	269	—	—
	1/2	—	111	340	225	455
	9/16	—	160	410	285	535
	5/8	—	172	442	307	576
	11/16	—	262	648	427	814
	3/4	831	336	797	509	970
	7/8	—	363	791	524	951
	1	1229	674	1382	939	1647
	1 1/4	1731	784	1445	1115	1775
	1 1/2	—	1132	1818	1389	2075
	2	—	1942	3049	2357	3465

NOTE: Torque values in in. lbs.
Minimum values calculated for maximum bore size and minimum shank size.
Maximum values calculated for minimum bore size and maximum shank size.

TOOL
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Services and Support

ToolBOSS **L2**
Advanced Tool Management Software (ATMS) **L3**
WIDIA Services **L4–L7**
Customer Application Support **L8–L9**
WIDIA Shop **L10–L13**

ToolBOSS™ Secure point of use solutions — tooling at the right place at the right time.

Combined with our powerful WIDIA ToolBOSS Management Software, the 28 LEVEL cabinet provides a versatile, high-capacity solution to meet the unpredictable challenges of logistics and supply chain management.

- Cut tooling inventory.
- 24/7 stock availability.
- Unique reconfiguring.
- Decrease tooling spend.
- Reduce administrative costs.
- Accountability.
- Reduced cost per location.

Drawer Options
19 different drawer sizes available.

Compatibility
Fully compatible with existing ToolBOSS units.

Diagnostics
Built-in tray diagnostic port, facilitating improved remote system support, diagnosis, and repair.

Efficiency
Multiple drawers can be selected in one transaction, minimizing the time required to manage large stock volumes.

Future-Port
USB interface, as well as a DCS expansion port, for use with RFID and other ancillary equipment.

High-Speed Access
Rapid search and selection of an item is enhanced with LED identification system, guiding users to the correct drawer.

Traceability
Software provides a complete audit trail, tracking component usage details.

Expandability
Expandable up to 10 units per system, providing up to 1.121 secure locations.

To learn more about ToolBOSS, contact your local Authorized Distributor or visit ***www.widia.com****.*

Reduce tool spend and productivity costs — quickly and easily

ATMS is a powerful, cost effective software solution for tool management. It's an all-inclusive package, providing full tool management with inventory control, purchasing, and full audit trail.

Increase Productivity

- Eliminate downtime from stock-outs.
- Achieve up to 66% setup time reduction.

Improve Your Bottom Line

- Reduce on-hand inventory up to 55% in six months.
- Slash tool consumption up to 30%.
- Reduce acquisition costs up to 90%.

atms

ADVANCED TOOL MANAGEMENT SOFTWARE

Standard and Custom Reporting
An extensive suite of user-friendly standard and customizable reports.

Requesting and Purchasing
The purchasing facility enables internal requisitions to be raised and passed electronically to a business system.

Rework Control
Controls the full rework cycle, including internal and external rework departments.

Inspection Management
Tracks and trends data to identify tool and calibration maintenance needs.

Unlimited Points of Issue
Access to full reporting, ordering, and data management by location and point of issue.

Vending Machine Consolidation and Order Control
Streamlines data entry process consolidation for an unlimited amount of linked vending machines.

To learn more about ATMS, contact your local Authorized Distributor or visit ***www.widia.com****.*

Anyone Can Regrind Your Tools — Only We Truly Recondition Them

Why recondition?

Our Reconditioning Services help optimize the total value of your metalcutting tools throughout their entire life cycle by giving them “like-new” performance characteristics — with rapid turnaround time — so the tools you need are always on-hand and perform just like new.

By sending your worn drills and end mills for reconditioning, you get:

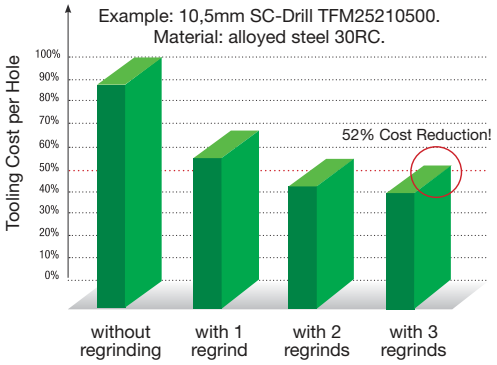
- Proprietary geometry.
- Certified coatings.
- Superior quality.
- Like-new performance.
- Fast turnaround time.
- Application support throughout the entire tool life cycle.

Most tooling can be reconditioned up to five times.

Reconditioning Services make perfect sense

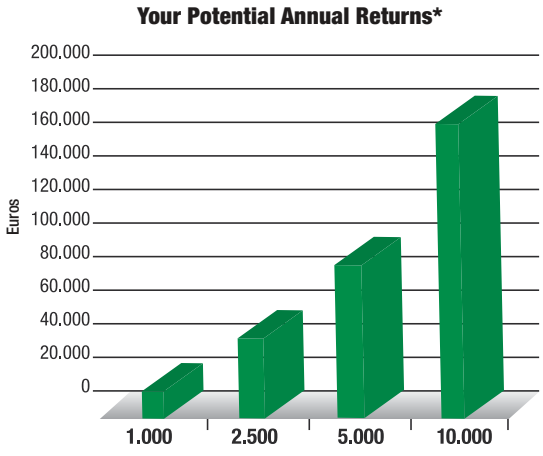
Our Reconditioning Services deliver considerable savings throughout the life of your cutting tools and can reduce your overall tooling costs by more than 50%.

Reduce Tooling Costs by More than 50%



*To learn more about Reconditioning, contact your local Authorized Distributor or visit **www.widia.com**.*

Get Cash for Your Used Carbide



**Actual returns may vary based on current market value for carbide recycled materials.*

Why recycle?

It's the right thing to do!

It's easy for your company to be environmentally conscious with our Carbide Recycling Program.

By sending us your used carbide tools, you help preserve and protect the environment and ensure that these products are recycled responsibly.

It's profitable!

Not only does WIDIA make it easy for your company to be environmentally conscious, we offer an added incentive — it is profitable.

Through our Carbide Recycling Program, get the full value of your investment in metalcutting tools, improve profitability, and reduce your overall tooling spend. When you send us your used carbide, we will reward you with cash.

It's EASY!

Our Carbide Recycling Program is available on the web and is easy to use. You can request a quote, arrange to send us your used carbide, and check the status of your shipment.

Green Boxes for green companies

The Green Box™ program is a safe and efficient way for you to package and ship your spent carbide tools to an authorized recycling location.

Qualified used carbide includes mixed coated and uncoated metalcutting tools free of chips, oil, and steel contamination. Material must be free of braze.

To learn more about Recycling, contact your local Authorized Distributor or visit ***www.widia.com****.*

Sustainable Engineering

Environmental Responsibility

We are deeply committed to designing and manufacturing environmentally responsible products that deliver high performance and proven value. With decades of experience in tooling and manufacturing, and the synergies of superior engineering, leading technology, and customized solutions, we offer some of the most effective opportunities for sustainable manufacturing in the industry. Our comprehensive range of products and excellent customer service make us your complete supplier of sustainable tooling solutions.

Sustainable Engineering

Leading the way with innovation, engineering, and service in standard and custom tooling — a proven methodology and partnership.

Successful project engineering requires planning, teamwork, and disciplined execution. Through our extensive experience in developing and implementing new project engineering strategies, we have pioneered a proven methodology to help you manufacture new products and bring them to market quickly. Service deliverables are carefully outlined and jointly agreed to before the project begins. We formally evaluate progress and results with you throughout the project through our stage-gate management systems.

We can provide your engineering teams and machine tool builders with process engineering support, advanced metalcutting technologies, and project management expertise to help you achieve your sustainability goals. With our best-in-class process, you will experience accelerated time-to-market, lower overall costs, and reduced risks to implement new technologies.

On the Web

Fast, Free, and Easy Registration

You can easily register with www.widia.com to obtain full access to the features of the site.

Find a Local Authorized WIDIA™ Distributor in Your Area

The WIDIA Products Group offers world-class products and services globally. Our distributors know us, and more importantly, they know you. They know better than anyone in the industry how to put the global power of WIDIA to work for you — in your industry, in your region, and for your business.

Contact Us

Our customers are important to us. We want to provide you the best customer service in the industry.
If you have a comment or question, please send it to us. We strive to respond to all inquiries within 24 hours.

WIDIA Products

Whether your operation is turning, milling, or holemaking, WIDIA brands are the high-performance tooling you need.
We offer standard and custom solutions for the general engineering market.

Customer Application Support

Get fast and reliable answers to your toughest metalcutting problems.

Our Customer Application Support (CAS) Team is the metalworking industry's leading help desk resource for tooling application solutions and problem resolution!

- Easy access to proven metalworking expertise.
- Service level excellence.
- Best-in-class application support tools and technology.

Service Level Excellence:

- Fast telephone response.
- Quick technical solutions.
- Efficient case management.

Services Provided:

- Tooling selection.
- Operating parameters.
- Troubleshooting.
- Process optimization.
- Hardware support.

Best-in-Class Support Tools and Technology:

- Tooling performance experts.
- Materials database.
- Application calculators.

Customer Application Support

Easy access to proven metalworking expertise!

WIDIA™ Customer Application Engineers assist customers and engineering groups throughout the world with expert tool selection and application recommendations for the entire range of WIDIA tooling.

Convenient Access Options:

Originating Country	Language	Phone	Fax	E-mail
Australia	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Austria	German	0800 291630*	0800 291631*	eu.techsupport@widia.com
Belgium	English/French	0800 80410*	0800 80411*	eu.techsupport@widia.com
China	Chinese	440-889-2237	+86-21-58999985	w-cn.techsupport@widia.com
Denmark	English	808 89295*	808 89297*	na.techsupport@widia.com
Finland	English	0800 919413*	0800 919415*	na.techsupport@widia.com
France	French	080 5540 379*	080 5540 029*	eu.techsupport@widia.com
Germany	German	0800 1015774*	0800 0007531*	eu.techsupport@widia.com
India	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Israel	English	1809 449907	1809 439845	na.techsupport@widia.com
Italy	Italian	800 916568*	800 917749*	eu.techsupport@widia.com
Japan	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Korea (South)	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Malaysia	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Netherlands	English	0800 0201131*	0800 0201135*	na.techsupport@widia.com
New Zealand	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Norway	English	800 10081*	800 10001*	na.techsupport@widia.com
Poland	Polish	00800 4411943*	00800 4411940*	eu.techsupport@widia.com
Singapore	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
South Africa	English	0800 981644*	0800 981645*	na.techsupport@widia.com
Sweden	English	020798794	020790477	na.techsupport@widia.com
Taiwan	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
Thailand	English	001-724-539-6921	001-724-539-6830	ap.techsupport@widia.com
United Kingdom	English	0800 028 2996*	0800 028 5721*	na.techsupport@widia.com
USA	English	888-539-5145*	724-539-6830	na.techsupport@widia.com

** Toll-free number.*

WIDIA Merchandise

Introducing a new line of WIDIA merchandise made available to you, our customer. Place your order for any of the following quality products with your Authorized WIDIA Distributor or visit www.widia.com.

Ordering Information

Use the order numbers shown in the tables below to order your WIDIA merchandise. For apparel, you can mix and match sizes. For the greatest value, order in quantities based on the minimum order quantities. These products are made to order, so no returns will be accepted.

Men's Performance Polo

100% polyester. Moisture wicking, antimicrobial, and raglan sleeves.

- Color: black/black silk

size	minimum order quantity	order number
S	12	5047847
M	12	5047848
L	12	5047849
XL	12	5047850
XXL	12	5047851
XXXL*	12	5047852

**XXXL sizes include a surcharge.*

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.

Solid Performance Polo

100% polyester. No curl/rib-knit jacquard collar. Antimicrobial.

- Color: olive green

size	minimum order quantity	order number
S	1	5047853
M	1	5047854
L	1	5047855
XL	1	5047856
XXL	1	5047857
XXXL*	1	5047858

**XXXL sizes include a surcharge.*

Discounts available for minimum orders of 6 or more.

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.

Clique Softshell Jacket

Clique by Cutter & Buck®. Softshell 98% polyester, 2% spandex. Bonded polyester microfleece lining, reflective piping, velcro cuffs, and inside zip pocket.

- Color: black

size	minimum order quantity	order number
S	12	5047871
M	12	5047872
L	12	5047873
XL	12	5047874
XXL	12	5047875
XXXL*	12	5047876

**XXXL sizes include a surcharge.*

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.

1/4-Zip Pullover

98% polyester, 2% spandex. Moisture wicking. 6.5 oz.

- Color: stone/graphite

size	minimum order quantity	order number
S	1	5047877
M	1	5047878
L	1	5047879
XL	1	5047880
XXL	1	5047881
XXXL*	1	5047882

**XXXL sizes include a surcharge.*

Discounts available for minimum orders of 6 or more.

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.

Pinnacle Cap

Unstructured cap made of laundered cotton for a soft, comfortable fit. The contrast stitching and contrast underbill give this cap added styling. Pre-curved visor, six sewn eyelets, and hook-and-loop closure.

- Color: black/khaki

size	minimum order quantity	order number
one size	24	5047895

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.

Atlas Sport Bag

Durable, rugged sport bag features top bungee cord for extra storage. Adjustable, removable shoulder strap and top grab handles with handle wrap, and mesh zippered side pocket for water bottle (water bottle not included). Large main compartment for spacious storage and removable floor board for extra durability. Front zippered gusset pocket.

- Color: black

size	minimum order quantity	order number
one size	13	5047896

Available in Australia, Canada, Germany, Malaysia, Singapore, Thailand, UK, and USA.

14 oz. Lucent Co-Molded Tumbler

Dual-wall construction with a SAN liner and rubberized SAN outer shell. FDA-compliant materials feature a stainless steel rim with twist action. Spill-resistant lid and a non-skid bottom for stability. BPA free.

- Color: green/black

size	minimum order quantity	order number
one size	48	5047900

Available in Canada, China, Germany, India, Malaysia, Singapore, UK, and USA.

Titleist® DT SoLo® Golf Balls

The New DT SoLo golf ball will appeal to a broad range of golfers seeking the combination of long distance, exceptional feel, responsive short game control, and cut-proof cover durability.

- Color: white

size	minimum order quantity	order number
one size	6 boxes	5047897

**1 box = 12 balls.*

Available in Australia, Canada, China, Germany, India, Malaysia, Singapore, Thailand, UK, and USA.

Metro Pen

Clip color matches grip. Comfort grip for easy writing. Medium point. Black ink.

- Color: green

size	minimum order quantity	order number
one size	250	5047898

Available in Australia, Canada, China, Germany, India, Malaysia, Singapore, Thailand, UK, and USA.

Franklin Covey® by A.T. Cross® — Norwich Ballpoint Pen

Contemporary detailing and a rubberized grip make the sporty Franklin Covey Norwich a unique blend of style and function. The Norwich is engineered to sit comfortably in your hand providing hours of effortless writing. Backed by a lifetime mechanical guarantee, the Norwich will be there to get you through even the most arduous projects.

- Color: satin chrome

size	minimum order quantity	order number
one size	50	5047899

Available in Australia, Canada, China, Germany, India, Malaysia, Singapore, Thailand, UK, and USA.

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Metalcutting Safety

IMPORTANT SAFETY INSTRUCTIONS

Read before using the tools in this catalog!

Projectile and Fragmentation Hazards

Modern metalcutting operations involve high spindle and cutter speeds and high temperatures and cutting forces. Hot metal chips may fly off the workpiece during metalcutting. Although cutting tools are designed and manufactured to withstand high cutting forces and temperatures, they can sometimes fragment, particularly if they are subjected to over-stress, severe impact, or other abuse.

To avoid injury:

- Always wear appropriate personal protective equipment, including safety goggles, when operating metalcutting machines or working nearby.
- Always make sure all machine guards are in place.

Breathing and Skin Contact Hazards:

Grinding carbide or other advanced cutting tool materials produce dust or mist containing metallic particles. Breathing this dust or mist — especially over an extended period — can cause temporary or permanent lung disease or make existing medical conditions worse. Contact with this dust or mist can irritate eyes, skin, and mucous membranes and may make existing skin conditions worse.

To avoid injury:

- Always wear breathing protection and safety goggles when grinding.
- Provide ventilation control and collect and properly dispose of dust, mist, or sludge from grinding.
- Avoid skin contact with dust or mist.

For more information, read the applicable Material Safety Data Sheet provided by Kennametal and consult General Industry Safety and Health Regulations, Part 1910, Title 29 of the Code of Federal Regulations.

These safety instructions are general guidelines. Many variables affect machining operations. It is impossible to cover every specific situation. The technical information included in this catalog and recommendations on machining practices may not apply to your particular operation. For more information, consult Kennametal's Metalcutting Safety booklet, available at www.widia.com. For specific product safety and environmental questions, contact our Corporate Environmental Health and Safety Office at 724.539.5066 or fax 724.539.5372.

Erickson, Green Box, KM-LOC II, KM-LOC, KM32, KM32TS, KM40, KM40TS, KM4X, KM50, KM50TS, KM63, KM63TS, KM63XMZ, KM80ATC, KM80TS, KM, M370, ProGroove, Quadralock, ROTAFLEX, Screw-On, SEFAS, Shrink Fit, Shrinker, Slim Line, ToolBOSS, Top Cut Plus, Top Cut, TOP DRILL M1, TOP DRILL S+, TopGroove, TopThread, UT63, VariDrill, VariMill II, Victory, Wedgelock, Whistle Notch, WIDIA, WIDIA-CIRCLE, WIDIA-GTD, WIDIA-Hanita, WIDIA-Manchester, WIDIA-Metal Removal, WIDIA-Metcut, WIDIA-Rubig, and WMT are trademarks of Kennametal and are used as such herein.
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Application, Geometry, and Feature Icons

Accuracy — 3µm or Less	Accuracy — 5µm or Less	Accuracy — 6µm or Less	Axial Adjustment
Axial Adjustment — End	Axial Adjustment — Side	Balance — G 2.5@ 15,000 min^{-1}	Balance — G 2.5@ 15,000 min^{-1}
Balance — G 2.5@ 20,000 min^{-1}	Balance — G 2.5@ 25,000 min^{-1}	Balance — G 2.5@ 33,000 min^{-1}	Balance — G 6.3@ 15,000 min^{-1}
Balance — G 6.3@ 15,000 min^{-1}	Balance — G 6.3@ 20,000 min^{-1}	Balance — G 6.3@ 20,000 min^{-1}	Balance — G 6.3@ 30,000 min^{-1}
Balanced-by-Design	Collet — ER DIN 6499	Compensation — None	Compensation — Tension and Compression
Compensation — Tension Only	Coolant — No Coolant	Coolant — Through Coolant	Coolant — Through Coolant 100 bar (1500 psi) Maximum
Coolant — Through Coolant 70 bar (1000 psi) Maximum	Coolant — Through Coolant 100 bar (1500 psi) Maximum	Coolant — Through Coolant Nozzle	Drilling — No Coolant
Drilling — Through Coolant	Milling — No Coolant	Milling — Side and Face	Milling — Slotting
Milling — Through Coolant	Reaming — Through Coolant	Shank — 1"–8 UNC Drawbar	Shank — 1/2"–13 UNC Drawbar
Shank — 5/8"–11 UNC Drawbar	Shank — Cylindrical Kenbore™	Shank — Cylindrical Plain	Shank — Cylindrical Plain ≤h6
Shank — Cylindrical ROTAFLEX™	Shank — Cylindrical VDI DIN 69880	Shank — Cylindrical Weldon® ≤h6	Shank — Cylindrical Weldon 2 Flat
Shank — Cylindrical Weldon DIN 1835/B	Shank — Cylindrical Weldon	Shank — Cylindrical Weldon DIN 6535/1835	Shank — Cylindrical Whistle Notch™
Shank — Cylindrical Whistle Notch ≤h6	Shank — Cylindrical Whistle Notch 2°	Shank — Cylindrical Whistle Notch 5°	Shank — Cylindrical Whistle Notch with Drive and Flange

Application, Geometry, and Feature Icons

Shank — Cylindrical Whistle Notch™ DIN 1835/E	Shank — Cylindrical with Flat	Shank — Cylindrical with Flat and Flange	Shank — Cylindrical with Flat and Flange
Shank — Cylindrical with Square	Shank — HSK DIN 69893	Shank — HSK DIN 69893	Shank — HSK DIN 69893 Form A
Shank — HSK DIN 69893 Form A	Shank — HSK DIN 69893 Form C	Shank — HSK DIN 69893 Form C	Shank — HSK DIN 69893 Form E
Shank — HSK DIN 69893 Form E	Shank — HSK DIN 69893 Form F	Shank — HSK DIN 69893 Form F with Pin	Shank — HSK Turning ISO 12164-3
Shank — HSK Turning ISO 12164-3	Shank — KM Micro	Shank — KM4X	Shank — KM-ATC
Shank — KM-TS ISO 26622	Shank — KM-TS ISO 26622	Shank — KM-XMZ	Shank — M16 Drawbar
Shank — M24 Drawbar	Shank — R8 Bridgeport	Shank — Screw-On	Shank — SK BT JIS B 6339
Shank — SK BT Taper Face Contact	Shank — SK CAT(CV) ANSI B5.50	Shank — SK CAT(CV) ANSI B5.50 1"–8 UNC Drawbar	Shank — SK CAT(CV) ANSI B5.50 5/8"–11 UNC Drawbar
Shank — SK CAT(CV) Taper Face Contact	Shank — SK DV DIN 69871	Shank — SK QC Erickson Quick Change 1"–8 UNC Drawbar	Shank — SK QC Erickson Quick Change 5/8"–11 UNC Drawbar
Shank — SK QC Erickson™ Quick Change	Speed — 20,000 min^{-1} Maximum	Speed — 3,000 min^{-1} Maximum	Speed — 30,000 min^{-1} Maximum
Speed — 6,000 min^{-1} Maximum	Speed — No Rotation	Tapping — Through Coolant	Tapping — Through Coolant 50 bar (725 psi) Maximum
Tunable			

DIN — German Institute for Standardization
ISO — International Standardization Organization