

LYNDEX NIKKEN



ADVANCED PRODUCT CATALOG





Lyndex-Nikken. Together, Lyndex and Nikken represent the best of both worlds: Extreme Quality and Advanced Technology.

Though only recently established, Lyndex-Nikken already has a long history of success. Founded nearly three decades ago, Lyndex Corporation set the standard for quality toolholding in the U.S. Nikken, on the other hand, was established in Japan over a half century ago and has a rock solid reputation as the number one manufacturer of toolholders and machine tool accessories.

From the joining of these two great companies emerges an even greater company. Lyndex-Nikken boasts a broader product line, more service personnel and a higher degree of engineering support and technology.

Best of all, the quality that you've come to expect from Lyndex is further reinforced through the addition of Nikken products.

Complementing this extensive inventory is expanded support. From Lyndex-Nikken, you are assured of the highest levels of knowledge-based engineering and service.

Superior quality and technology, as well as selection and service, make Lyndex-Nikken your single source for toolholders and machine tool accessories.



Lyndex Corporation began in 1979 as a supplier of 5C and R8 collets. The company was founded with a vision of becoming the industry's premier supplier of quality toolholders.

Over the years, Lyndex's product line has evolved to include a vast selection of toolholding and accessories. Commitment of quality products and excellent service has earned Lyndex industry-wide attention.

Partnering with Nikken has further enhanced opportunities for Lyndex and Lyndex customers.



Nikken Kosakusho Works, Ltd. has dominated Japan's toolholding market almost since its inception in 1953. Established by Mr. Matsumoto, a top name in Japan's machine tool market, Nikken is committed to technological advancement and customer satisfaction.

Today, Nikken annually produces over 300,000 toolholders, 2,500 CNC rotary tables and 250,000 reamers. A global company, Nikken's sales and technical service network consists of over 600 employees worldwide.

Through joining forces with Lyndex, Nikken will further establish its presence in the U.S. toolholding marketplace.

MILLING CHUCKS



SK / LSK HOLDERS

MMC / INSIDER

Standard Products

Our complete range of quality-driven toolholding solutions are designed to meet your strictest requirements. Our extensive line features the industry's most trusted ER Collet Chucks, End Mill Holders and Tap Holders.

VC HOLDERS



BULLSEYE HOLDERS

3LOCK HOLDERS

Hole Making

Featuring the ZMAC, our world-class boring heads are extremely rigid and precise. A shoulder support and locking screw (located closer to the cutting edge) ensures stable operation. The dial ring and cartridge are precision-matched for improved accuracy.

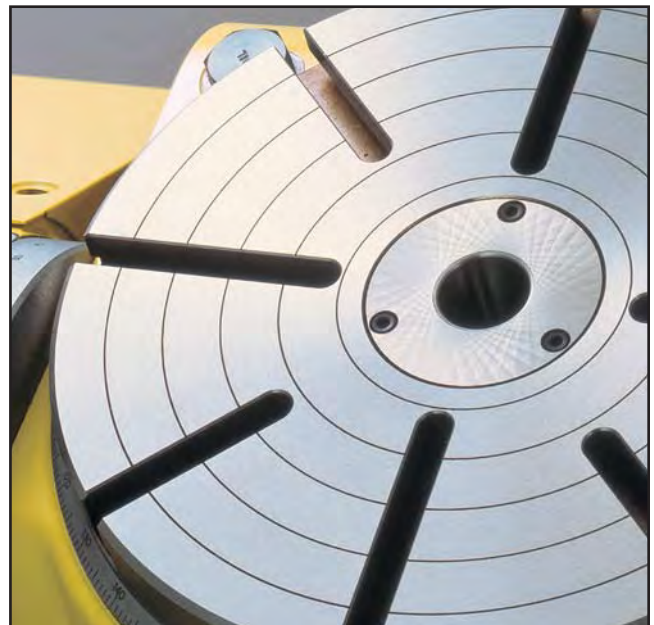
Advanced Products

Maximize the potential of your machine tools with our technologically superior tooling. Our advanced line includes High-Speed SK, Insider Collet Chucks, Ultra-lock Milling Chucks, our HSBalance™ tooling line as well as productivity-driven AngleHeads and HiSpinners.



CNC Rotary Tables

Our complete line of CNC Rotary Tables are known worldwide for their wear-resistance, rigidity and high-speed rotation. Ion-nitrided worm wheels and carbide worm screws reduce friction and wear by up to 8 times (compared to common phosphorous bronze and aluminum bronze worm construction).





Presetters

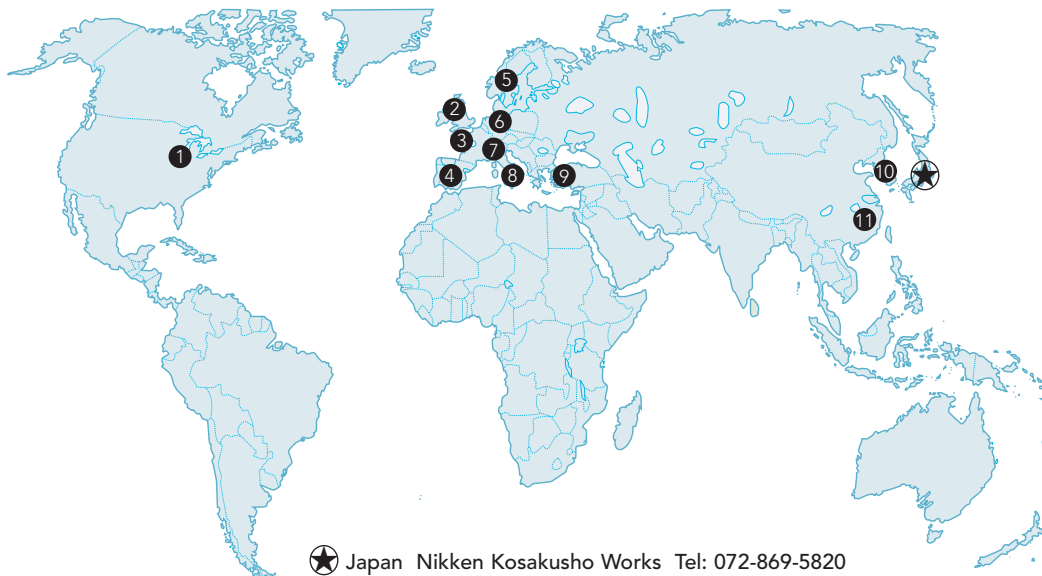
Presetters from Elbo Controlli reduce valuable tooling set-up time. Our E238, E348, E450 and E458 presetters maximize accuracy and ease of operation, are solidly constructed, include an intuitive icon-driven control system and feature a specially designed C-MOS camera system.

Live Tools

Our Alps and Benz line of live tooling meets the industry's demand for superior technology, precision and selection. Choose from standard or custom designs in axial or radial configurations. Various shank tooling and collets are available.



Nikken Worldwide



★ Japan Nikken Kosakusho Works Tel: 072-869-5820

- | | | | | | |
|------------|-----------------------|----------------------------|----------------|-----------------------|----------------------|
| 1. USA | Lyndex Nikken | Tel: (847) 367-4800 | 7. Switzerland | Nikken Switzerland AG | Tel: (041) 748-5000 |
| 2. UK | Nikken Kosakusho UK | Tel: (01709) 366306 | 8. Italy | Vega International | Tel: (011) 9456330 |
| 3. France | Procomo France S.A. | Tel: 01.69.19.17.35 | 9. Turkey | Nikken Turkey | Tel: (0216) 464-0620 |
| 4. Spain | Cutting Tool S.L. | Tel: (943) 494144 | 10. Korea | Korea Nikken LTD. | Tel: (032) 763-4461 |
| 5. Sweden | Nikken Scandinavia AB | Tel: (031) 519855 | 11. China | Nikken China | Tel: (021) 6210-2506 |
| 6. Germany | Nikken Deutschland | Tel: 0049 (0) 6142/55060-0 | | | |

Nikken's Osaka-Daito Factory

Open in 2003, Nikken's state of the art production facility sits on 12 acres and includes 237,000 square feet of manufacturing space and 26,000 square feet of office space.



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS



Machine Center Line with 3Lock Spindles



NC Lathe Line



Tool Grinding Line



Carbonizing and Sub-Zero Treatment



Ion Nitriding

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

Lyndex-Nikken Part Numbers

We continue to utilize our original system for the standard products (shown below) and have incorporated Nikken's part numbers for their product.

The Taper Descriptions are self-explanatory with the addition of:

C = Milling Chucks

SK = SK / LSK

MMC = MMC / Insider

SZF = Bullseye

VC = VC Holder

FMD = Face Mill Adapter

MCAT or MBT = 3Lock Taper

NPU = Drill Chuck

MOL = Fluid Head - Side Lock Style

MOK = Fluid Head - SK Collet Style

MOC = Fluid Head - Milling Chuck Style

G in conjunction with C or SK = High Speed

F = Din 69871 FormB (Flange Coolant)

C in conjunction with SK = High Pressure Coolant

Nikken Example: CAT40-GSK25C-90

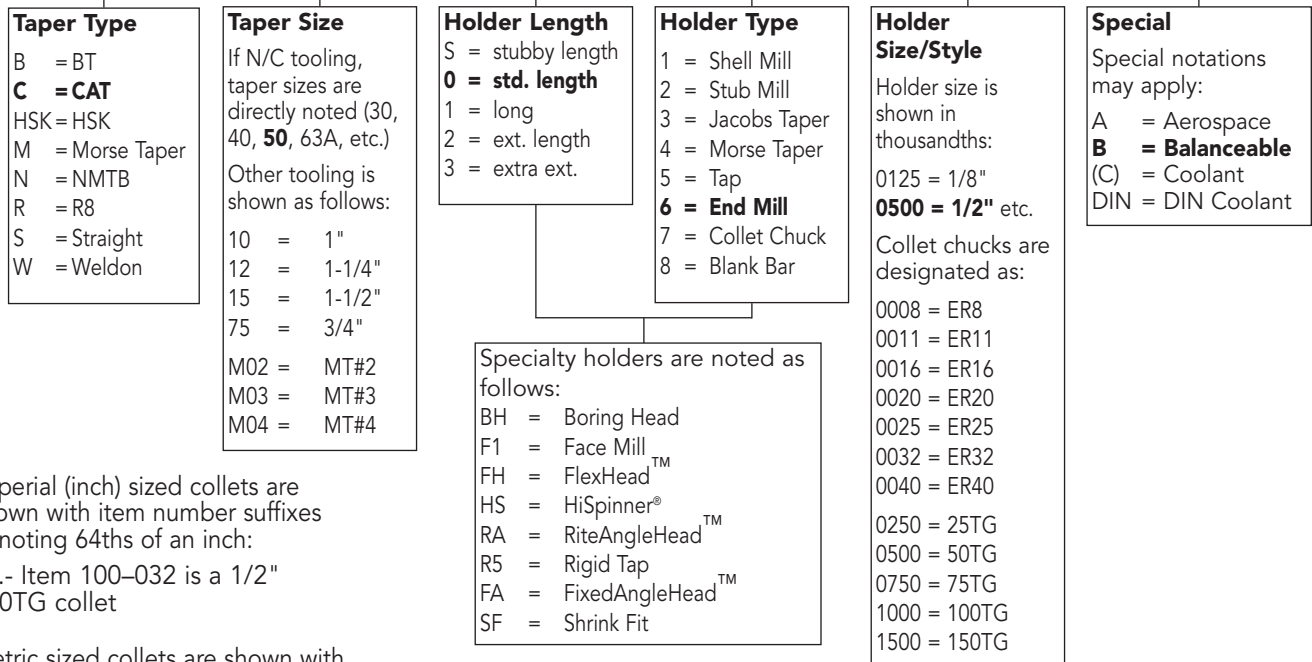


Here's how we derive our Lyndex toolholder part numbers.

Reviewing this numbering system will help you to quickly identify Lyndex toolholders in this catalog.

The example, item C5006-0500B, is a **CT50 taper 1/2" balanceable end mill holder.**

C 50 0 6 - 0500 B



Imperial (inch) sized collets are shown with item number suffixes denoting 64ths of an inch:

i.e.- Item 100-032 is a 1/2" 100TG collet

Metric sized collets are shown with item number suffixes denoting its maximum capacity in thousandths of an inch:

i.e.- Item E25-196 is a 4 - 5mm ER25 collet

All specifications listed in this catalog are subject to change without notice.

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MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

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Technical Data

MILLING CHUCKS

SK / LSK HOLDERS

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VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

NIKKEN MILLING CHUCKS



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

Nikken Ultra Lock Milling Chuck

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

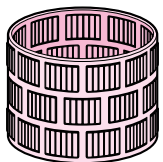


Sub Zero Treatment
Nikken Toolholders are all subjected to ultra low temperature treatment of -90°C after carburizing. This treatment removes residual austenite to prevent deformation for many years

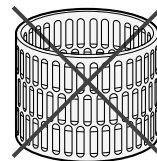
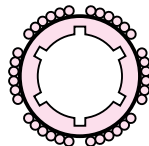
Chucking Torque and Durability

All of the Ultra Lock Milling Chucks incorporate the multi-roller system including 140% more needle rollers than the other imitations. In addition, The retainer is not made of phosphorus bronze, but of a special steel which will never break.

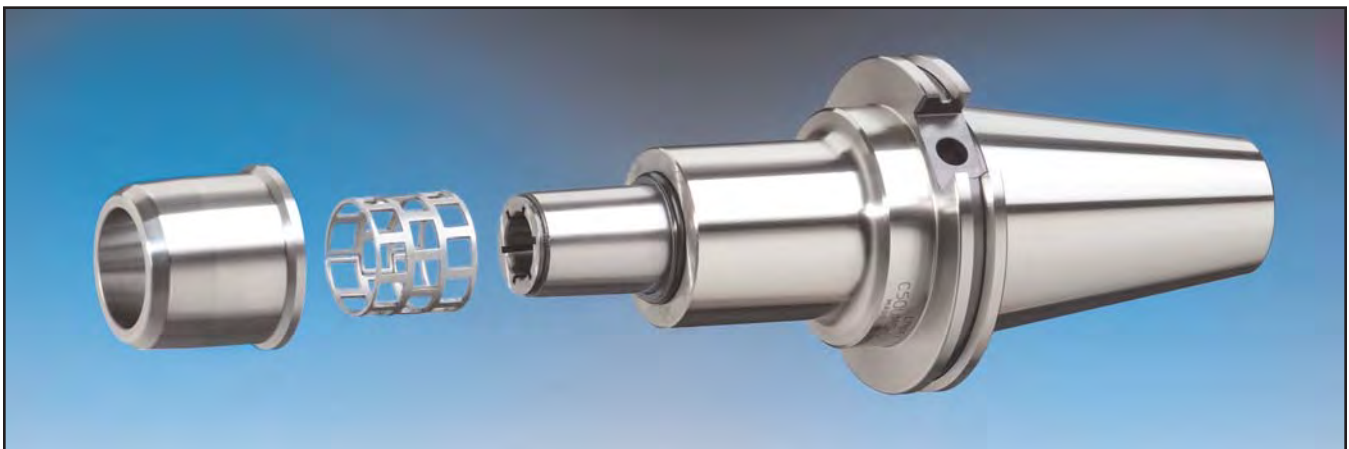
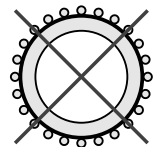
Nikken's Needle roller bearings are arranged in perfect order and density to allow for even gripping torque and smooth operation



Nikken Multi-Roller System



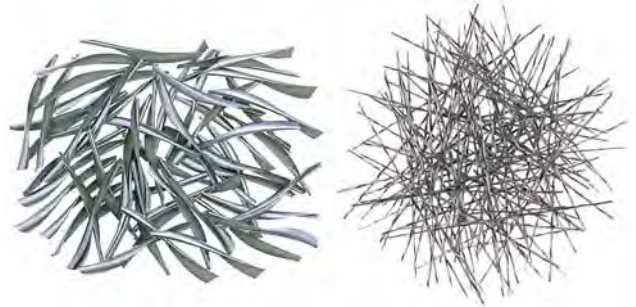
Imitation Multi-Roller System





Uniform Chip Size

Consistent chips show optimum performance of cutting tool, generating maximum tool life.



Rigidity and Chucking Torque

Internal slots together with a thickened wall of the chuck body ensures no distortion even at heavy milling. Thus, smooth milling work is achieved without the vibration or slipping of the end mill.

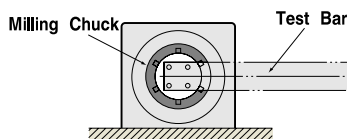
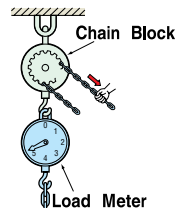
Effects of Internal Slots

Internal slots allow for no decrease in gripping torque even if oil remains on the end mill shank. Without slots, chucking torque is greatly reduced allowing for slippage.

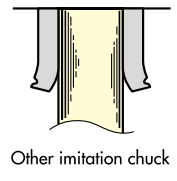
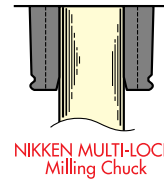
Thick wall and slots provides strong chucking torque and rigidity. Further, slots function as an escape for oil.

Chucking Torque Test Data (C42)

	Oil is removed completely	Trace amounts of oil	%
Nikken With Slots	3,600 ft. lbs.	3,500 ft. lbs.	5% down
Others Without Slots	2,500 ft lbs	900 ft. lbs.	67% down



Only the Ultra-Lock Milling Chuck perfectly clamps even at 3mm from the chuck nose.



NIKKEN MULTI-LOCK Milling Chuck

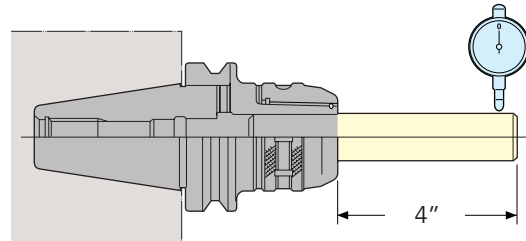
Other imitation chuck

Stable Milling with Stopper

The tightening stopper is located where the maximum efficiency of chucking torque is exerted. Tightening the chuck close to the flange face ensures smooth, stable and reliable milling work.

Fine Run-Out Accuracy

The finest run-out accuracy of any Milling Chuck (0.0002 at 4.0" from the nose).



High Speed Tools

Lyndex-Nikken has a wide range of high speed products available. Please refer to our High Speed section for more information about Nikken's high speed Milling Chucks.



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

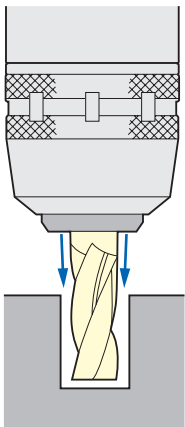
3LOCK HOLDERS

Ultra-Lock™ Milling Chuck Collets

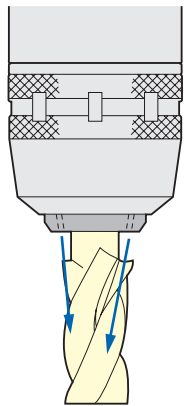
The Ultra-Lock™ Milling Chuck Collets are designed to insure uniform collapsing around the cutting tool shank. This provides maximum gripping power as well as concentric positioning of the cutting tool. Collets are available for all Ultra-Lock Milling Chucks in inch and metric sizes including coolant thru styles. Cutting tool shank tolerance is H7.



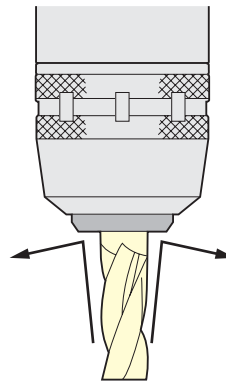
Examples of Coolant Thru Options



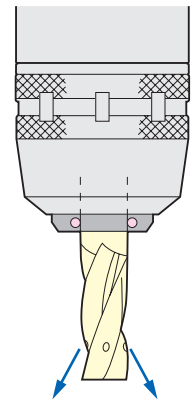
For Grooving.



For cutters with cutting diameter which is larger than the shank diameter



Prevention of the swarf contamination.



A front nut with an O-ring seal, for use with coolant thru cutter, is also available as an option



Coolant-Thru Nut

When paired with the Ultra-Lock™ Milling Chuck Coolant Collet (not shown), the Coolant-Thru Nut forms a complete seal around the cutting tool. This combination is well suited for coolant-thru cutting tools. Both the Coolant Collet and the Coolant-Thru Nut must be ordered on size for each cutting tool (see pages 21-22 for sizes and part numbers).



Slotted Nut

When paired with the Ultra-Lock™ Milling Chuck Coolant Collet (not shown), the Slotted Nut allows coolant to travel down the shank of the cutting tool to the cutting edge. This combination is well suited for non-coolant-thru cutting tools. Both the Coolant Collet and the Slotted Nut must be ordered on size for each cutting tool (see pages 21-22 for sizes and part numbers).

CAT TAPER ULTRA-LOCK™ MILLING CHUCKS



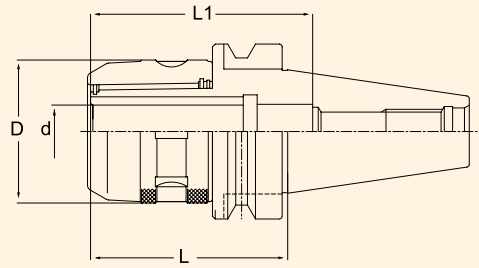
Part Number	Taper	Collet Series	Clamping Range	d	L	L1	D
CAT40-C3/4-85	CT40	KM3/4	0.125-0.750"	0.750"	3.346"	3.150"	2.047"
CAT40-C3/4-105	CT40	KM3/4	0.125-0.750"	0.750"	4.134"	3.150"	2.047"
CAT40-C3/4-120	CT40	KM3/4	0.125-0.750"	0.750"	4.724"	3.150"	2.047"
CAT40-C1-85	CT40	KM1	0.125-1.000"	1.000"	3.346"	3.150"	2.362"
CAT40-C1-105	CT40	KM1	0.125-1.000"	1.000"	4.134"	3.150"	2.362"
CAT40-C1.1/4-85	CT40	KM1-1/4	0.187-1.250"	1.250"	3.346"	3.031"	2.717"
CAT40-C1.1/4-105	CT40	KM1-1/4	0.187-1.250"	1.250"	4.134"	3.543"	2.717"
CAT40-C1.1/4-120	CT40	KM1-1/4	0.187-1.250"	1.250"	4.724"	4.134"	2.717"
CAT40-C32-105	CT40	KM32	3mm - 32mm	32mm	4.134"	3.543"	2.717"
CAT45-C3/4-90	CT45	KM3/4	0.125-0.750"	0.750"	3.543"	3.150"	2.047"
CAT45-C1-105	CT45	KM1	0.125-1.000"	1.000"	4.134"	3.150"	2.362"
CAT45-C1.1/4-105	CT45	KM1-1/4	0.187-1.250"	1.250"	4.134"	4.134"	2.717"
CAT50-C3/4-105	CT50	KM3/4	0.125-0.750"	0.750"	4.134"	3.150"	2.047"
CAT50-C3/4-135	CT50	KM3/4	0.125-0.750"	0.750"	5.315"	3.150"	2.047"
CAT50-C3/4-165	CT50	KM3/4	0.125-0.750"	0.750"	6.496"	3.150"	2.047"
CAT50-C1-105	CT50	KM1	0.125-1.000"	1.000"	4.134"	3.150"	2.362"
CAT50-C1-135	CT50	KM1	0.125-1.000"	1.000"	5.315"	3.150"	2.362"
CAT50-C1.1/4-90	CT50	KM1-1/4	0.187-1.250"	1.250"	3.543"	4.134"	2.717"
CAT50-C1.1/4-105	CT50	KM1-1/4	0.187-1.250"	1.250"	4.134"	4.134"	2.717"
CAT50-C1.1/4-135	CT50	KM1-1/4	0.187-1.250"	1.250"	5.315"	4.134"	2.717"
CAT50-C1.1/4-165	CT50	KM1-1/4	0.187-1.250"	1.250"	6.496"	4.134"	2.717"
CAT50-C32-105	CT50	KM32	3mm - 32mm	32mm	4.134"	4.134"	2.717"
CAT50-C32-165	CT50	KM32	3mm - 32mm	32mm	6.496"	4.134"	2.717"
CAT50-C2-125	CT50	KM2	1.000-2.000"	2.000"	4.921"	3.228"	4.134"

CAT TAPER ULTRA-LOCK™ MILLING CHUCKS (DIN)

Part Number	Taper	Collet Series	Clamping Range	d	L	L1	D
CAT40-C3/4F-85	CT40	KM3/4	0.125-0.750"	0.750"	3.346"	3.150"	2.047"
CAT40-C3/4F-105	CT40	KM3/4	0.125-0.750"	0.750"	4.134"	3.150"	2.047"
CAT40-C1F-105	CT40	KM1	0.125-1.000"	1.000"	4.134"	3.150"	2.362"
CAT40-C1F-85	CT40	KM1	0.125-1.000"	1.000"	3.346"	3.150"	2.362"
CAT40-C1.1/4F-105	CT40	KM1-1/4	0.187-1.250"	1.250"	4.134"	3.543"	2.717"
CAT40-C1.1/4F-120	CT40	KM1-1/4	0.187-1.250"	1.250"	4.724"	4.134"	2.717"
CAT50-C3/4F-105	CT50	KM3/4	0.125-0.750"	0.750"	4.134"	3.150"	2.047"
CAT50-C3/4F-135	CT50	KM3/4	0.125-0.750"	0.750"	5.315"	3.150"	2.047"
CAT50-C1F-105	CT50	KM1	0.125-1.000"	1.000"	4.134"	3.150"	2.362"
CAT50-C1F-135	CT50	KM1	0.125-1.000"	1.000"	5.315"	3.150"	2.362"
CAT50-C1.1/4F-105	CT50	KM1-1/4	0.187-1.250"	1.250"	4.134"	4.134"	2.717"
CAT50-C1.1/4F-135	CT50	KM1-1/4	0.187-1.250"	1.250"	5.315"	4.134"	2.717"

Note: Spanner wrench not included.

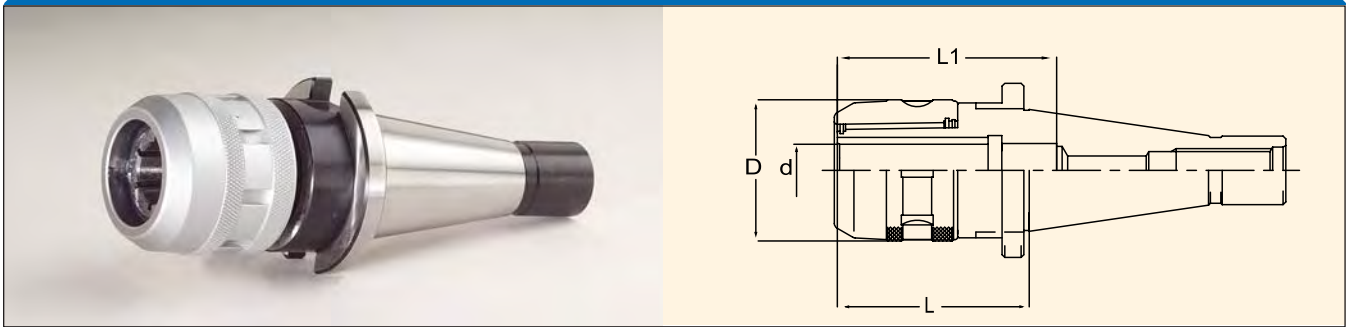
BT TAPER ULTRA-LOCK™ MILLING CHUCKS



Part Number	Taper	Collet Series	Clamping Range	d	L	L1	D
BT30-C3/4-75	BT30	KM3/4	0.125-0.750"	0.750"	2.953"	3.150"	2.047"
BT35-C3/4-70	BT35	KM3/4	0.125-0.750"	0.750"	2.756"	3.150"	2.047"
BT40-C3/4-70	BT40	KM3/4	0.125-0.750"	0.750"	2.756"	3.150"	2.047"
BT40-C3/4-105	BT40	KM3/4	0.125-0.750"	0.750"	4.134"	3.150"	2.047"
BT40-C1-70	BT40	KM1	0.125-1.000"	1.000"	2.756"	3.150"	2.362"
BT40-C1-90	BT40	KM1	0.125-1.000"	1.000"	3.543"	3.150"	2.362"
BT40-C1.1/4-85	BT40	KM1-1/4	0.187-1.250"	1.250"	3.346"	3.031"	2.717"
BT40-C1.1/4-120	BT40	KM1-1/4	0.187-1.250"	1.250"	4.724"	4.134"	2.717"
BT40-C32-105	BT40	KM32	3mm - 32mm	32mm	4.134"	3.543"	2.717"
BT45-C1.1/4-85	BT45	KM1-1/4	0.187-1.250"	1.250"	3.346"	4.134"	2.717"
BT50-C3/4-105	BT50	KM3/4	0.125-0.750"	0.750"	4.134"	3.150"	2.047"
BT50-C3/4-135	BT50	KM3/4	0.125-0.750"	0.750"	5.315"	3.150"	2.047"
BT50-C1-105	BT50	KM1	0.125-1.000"	1.000"	4.134"	3.150"	2.362"
BT50-C1-135	BT50	KM1	0.125-1.000"	1.000"	5.315"	3.150"	2.362"
BT50-C1.1/4-90	BT50	KM1-1/4	0.187-1.250"	1.250"	3.543"	4.134"	2.717"
BT50-C1.1/4-135	BT50	KM1-1/4	0.187-1.250"	1.250"	5.315"	4.134"	2.717"
BT50-C2-105	BT50	KM2	1.000-2.000"	2.000"	4.134"	3.543"	4.134"
BT50-C32-105	BT50	KM32	3mm - 32mm	32mm	4.134"	4.134"	2.717"
BT50-C32-165	BT50	KM32	3mm - 32mm	32mm	6.496"	4.134"	2.717"

Note: Spanner wrench not included.

NMTB TAPER ULTRA-LOCK™ MILLING CHUCKS



Part Number	Taper	Collet Series	Clamping Range	d	L	L1	D
NMTB40-C3/4-70	NMTB40	KM3/4	0.125-0.750"	0.750"	2.756"	3.150"	2.047"
NMTB40-C1.1/4-105	NMTB40	KM1-1/4	0.187-1.250"	1.250"	4.134"	3.150"	2.717"
NMTB50-C3/4-65	NMTB50	KM3/4	0.125-0.750"	0.750"	2.559"	3.150"	2.047"
NMTB50-C1.1/4-90	NMTB50	KM1-1/4	0.187-1.250"	1.250"	3.543"	4.134"	2.717"
NMTB50-C2-105	NMTB50	KM2	1.000-2.000"	2.000"	4.134"	3.543"	4.134"

Note: Spanner wrench not included.

MILLING CHUCKS

SK / LSK HOLDERS

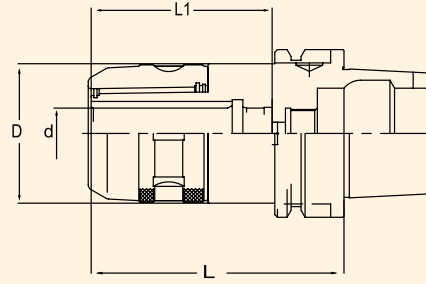
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

HSK TAPER ULTRA-LOCK™ MILLING CHUCKS



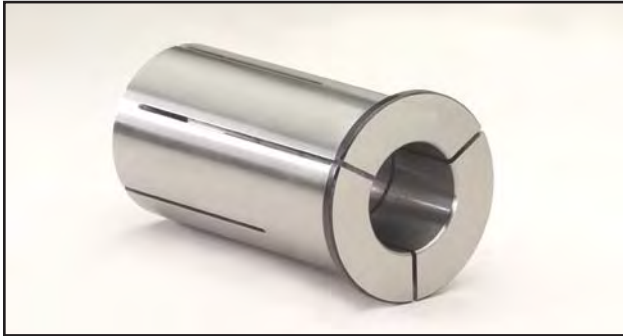
Part Number	Taper	Collet Series	Clamping Range	d	L	L1	D
HSK63A-C3/4-95	HSK63A	KM3/4	0.125-0.750"	0.750"	3.740"	2.480"	2.047"
HSK63A-C3/4-110	HSK63A	KM3/4	0.125-0.750"	0.750"	4.331"	3.150"	2.047"
HSK63A-C1-100	HSK63A	KM1	0.125-1.000"	1.000"	3.937"	2.972"	2.362"
HSK63A-C1-130	HSK63A	KM1	0.125-1.000"	1.000"	5.118"	3.150"	2.362"
HSK63A-C1.1/4-110	HSK63A	KM1-1/4	0.187-1.250"	1.250"	4.331"	3.268"	2.717"
HSK63A-C1.1/4-130	HSK63A	KM1-1/4	0.187-1.250"	1.250"	5.118"	3.189"	2.717"
HSK63A-C32-130	HSK63A	KM32	3mm - 32mm	32mm	5.118"	4.055"	2.717"
HSK100A-C3/4-115	HSK100A	KM3/4	0.125-0.750"	0.750"	4.528"	3.150"	2.047"
HSK100A-C3/4-135	HSK100A	KM3/4	0.125-0.750"	0.750"	5.315"	3.150"	2.047"
HSK100A-C1-115	HSK100A	KM1	0.125-1.000"	1.000"	4.528"	3.150"	2.362"
HSK100A-C1-135	HSK100A	KM1	0.125-1.000"	1.000"	5.315"	3.150"	2.362"
HSK100A-C1.1/4-115	HSK100A	KM1-1/4	0.187-1.250"	1.250"	4.528"	3.268"	2.717"
HSK100A-C1.1/4-165	HSK100A	KM1-1/4	0.187-1.250"	1.250"	6.496"	3.189"	2.717"
HSK100A-C32-135	HSK100A	KM32	3mm - 32mm	32mm	5.315"	4.055"	2.717"
HSK100A-C2-125	HSK100A	KM2	1.000-2.000"	2.000"	4.921"	3.543"	4.134"

Note: Coolant tubes are not included.
Spanner wrench not included.

MILLING CHUCK SPANNER WRENCHES

Part Number	Description
9HC22	3/4" Milling Chuck Spanner Wrench
9HC25	1" Milling Chuck Spanner Wrench
9HC32	1.1/4" Milling Chuck Spanner Wrench
9HC50	2" Milling Chuck Spanner Wrench
9HC32	32mm Milling Chuck Spanner Wrench

KM Collets (inch)



KM0750 INCH COLLETS

Part Number	Size
KM3/4-1/8	1/8"
KM3/4-3/16	3/16"
KM3/4-1/4	1/4"
KM3/4-5/16	5/16"
KM3/4-3/8	3/8"
KM3/4-7/16	7/16"
KM3/4-1/2	1/2"
KM3/4-9/16	9/16"
KM3/4-5/8	5/8"

KM1000 INCH COLLETS

Part Number	Size
KM1-1/8	1/8"
KM1-3/16	3/16"
KM1-1/4	1/4"
KM1-5/16	5/16"
KM1-3/8	3/8"
KM1-7/16	7/16"
KM1-1/2	1/2"
KM1-5/8	5/8"
KM1-3/4	3/4"
KM1-7/8	7/8"

KM1250 INCH COLLETS

Part Number	Size
KM1.1/4-3/16	3/16"
KM1.1/4-1/4	1/4"
KM1.1/4-5/16	5/16"
KM1.1/4-3/8	3/8"
KM1.1/4-7/16	7/16"
KM1.1/4-1/2	1/2"
KM1.1/4-9/16	9/16"
KM1.1/4-5/8	5/8"
KM1.1/4-3/4	3/4"
KM1.1/4-7/8	7/8"
KM1.1/4-1	1"

KM32 INCH COLLETS

Part Number	Size
KM32-3/16	3/16"
KM32-1/4	1/4"
KM32-5/16	5/16"
KM32-3/8	3/8"
KM32-7/16	7/16"
KM32-1/2	1/2"
KM32-9/16	9/16"
KM32-5/8	5/8"
KM32-3/4	3/4"
KM32-7/8	7/8"
KM32-1	1"

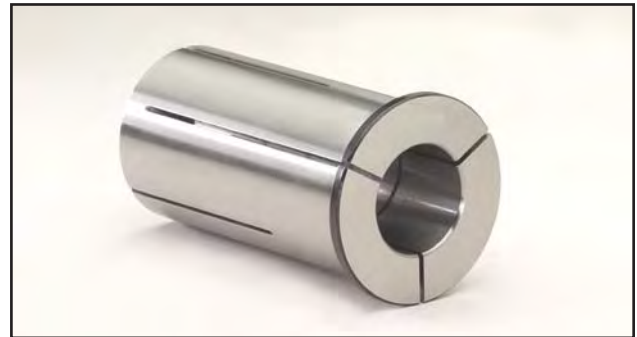
KM2000 INCH COLLETS

Part Number	Size
KM2-1	1"
KM2-1-1/4	1-1/4"
KM2-1-1/2	1-1/2"

KM Collets (metric)

KM0750 METRIC COLLETS

Part Number	Size
KM3/4-6	6mm
KM3/4-7	7mm
KM3/4-8	8mm
KM3/4-10	10mm
KM3/4-12	12mm
KM3/4-14	14mm
KM3/4-16	16mm



KM1000 METRIC COLLETS

Part Number	Size
KM1-6	6mm
KM1-8	8mm
KM1-10	10mm
KM1-12	12mm
KM1-14	14mm
KM1-16	16mm
KM1-18	18mm
KM1-20	20mm

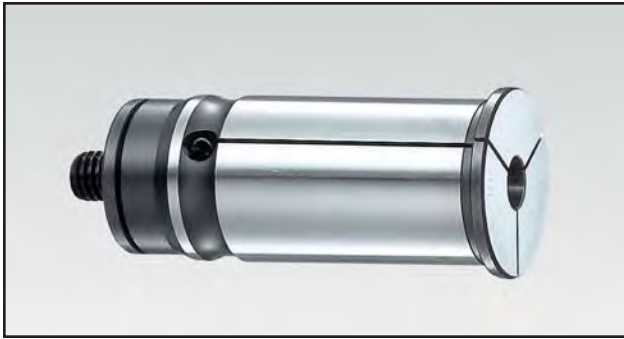
KM32 METRIC COLLETS

Part Number	Size
KM32-6	6mm
KM32-8	8mm
KM32-10	10mm
KM32-12	12mm
KM32-14	14mm
KM32-16	16mm
KM32-20	20mm
KM32-25	25mm
KM32-26	26mm

KM1250 METRIC COLLETS

Part Number	Size
KM1.1/4-6	6mm
KM1.1/4-8	8mm
KM1.1/4-10	10mm
KM1.1/4-12	12mm
KM1.1/4-14	14mm
KM1.1/4-16	16mm
KM1.1/4-20	20mm
KM1.1/4-25	25mm

NK Collets Depth Adjustable (inch)



NK0750 INCH COLLETS

Part Number	Size
NK3/4-1/8	1/8"
NK3/4-3/16	3/16"
NK3/4-1/4	1/4"
NK3/4-5/16	5/16"
NK3/4-3/8	3/8"
NK3/4-7/16	7/16"
NK3/4-1/2	1/2"
NK3/4-9/16	9/16"
NK3/4-5/8	5/8"

NK1000 INCH COLLETS

Part Number	Size
NK1-1/8	1/8"
NK1-3/16	3/16"
NK1-1/4	1/4"
NK1-5/16	5/16"
NK1-3/8	3/8"
NK1-7/16	7/16"
NK1-1/2	1/2"
NK1-5/8	5/8"
NK1-3/4	3/4"
NK1-7/8	7/8"

NK1250 INCH COLLETS

Part Number	Size
NK1.1/4-3/16	3/16"
NK1.1/4-1/4	1/4"
NK1.1/4-5/16	5/16"
NK1.1/4-3/8	3/8"
NK1.1/4-7/16	7/16"
NK1.1/4-1/2	1/2"
NK1.1/4-9/16	9/16"
NK1.1/4-5/8	5/8"
NK1.1/4-3/4	3/4"
NK1.1/4-7/8	7/8"
NK1.1/4-1	1"

NK32 INCH COLLETS

Part Number	Size
NK32-3/16	3/16"
NK32-1/4	1/4"
NK32-5/16	5/16"
NK32-3/8	3/8"
NK32-7/16	7/16"
NK32-1/2	1/2"
NK32-9/16	9/16"
NK32-5/8	5/8"
NK32-3/4	3/4"
NK32-7/8	7/8"
NK32-1	1"

NK2000 INCH COLLETS

Part Number	Size
NK2-1	1"
NK2-1-1/4	1-1/4"
NK2-1-1/2	1-1/2"

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

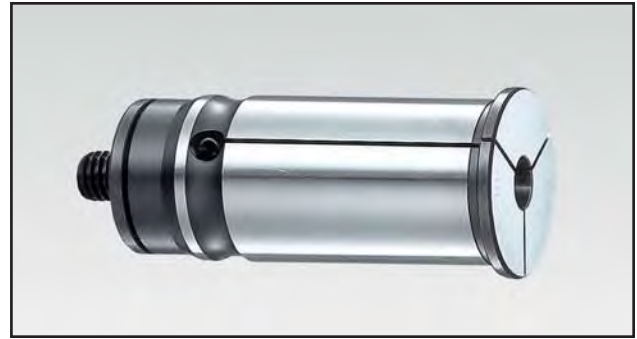
BULLSEYE HOLDERS

3LOCK HOLDERS

NK Collets Depth Adjustable (metric)

NK0750 METRIC COLLETS

Part Number	Size
NK3/4-6	6mm
NK3/4-7	7mm
NK3/4-8	8mm
NK3/4-10	10mm
NK3/4-12	12mm
NK3/4-14	14mm
NK3/4-16	16mm



NK1000 METRIC COLLETS

Part Number	Size
NK1-6	6mm
NK1-8	8mm
NK1-10	10mm
NK1-12	12mm
NK1-14	14mm
NK1-16	16mm
NK1-18	18mm
NK1-20	20mm

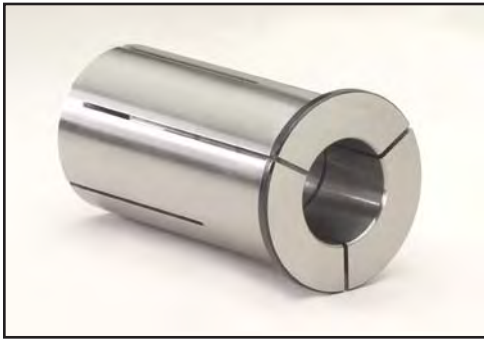
NK32 METRIC COLLETS

Part Number	Size
NK32-6	6mm
NK32-8	8mm
NK32-10	10mm
NK32-12	12mm
NK32-14	14mm
NK32-16	16mm
NK32-20	20mm
NK32-25	25mm
NK32-26	26mm

NK1250 METRIC COLLETS

Part Number	Size
NK1.1/4-6	6mm
NK1.1/4-8	8mm
NK1.1/4-10	10mm
NK1.1/4-12	12mm
NK1.1/4-14	14mm
NK1.1/4-16	16mm
NK1.1/4-20	20mm
NK1.1/4-25	25mm

3/4 INCH COOLANT THRU ACCESSORIES



Size	Coolant Collet	Coolant-Thru Nut	Slotted Nut
1/8"	CCK3/4-1/8	CKFN3/4-1/8C	CKFN3/4-1/8
3/16"	CCK3/4-3/16	CKFN3/4-3/16C	CKFN3/4-3/16
1/4"	CCK3/4-1/4	CKFN3/4-1/4C	CKFN3/4-1/4
5/16"	CCK3/4-5/16	CKFN3/4-5/16C	CKFN3/4-5/16
3/8"	CCK3/4-3/8	CKFN3/4-3/8C	CKFN3/4-3/8
7/16"	CCK3/4-7/16	CKFN3/4-7/16C	CKFN3/4-7/16
1/2"	CCK3/4-1/2	CKFN3/4-1/2C	CKFN3/4-1/2
9/16"	CCK3/4-9/16	CKFN3/4-9/16C	CKFN3/4-9/16
5/8"	CCK3/4-5/8	CKFN3/4-5/8C	CKFN3/4-5/8
6mm	CCK3/4-6	CKFN3/4-6C	CKFN3/4-6
7mm	CCK3/4-7	CKFN3/4-7C	CKFN3/4-7
8mm	CCK3/4-8	CKFN3/4-8C	CKFN3/4-8
10mm	CCK3/4-10	CKFN3/4-10C	CKFN3/4-10
12mm	CCK3/4-12	CKFN3/4-12C	CKFN3/4-12
14mm	CCK3/4-14	CKFN3/4-14C	CKFN3/4-14
16mm	CCK3/4-16	CKFN3/4-16C	CKFN3/4-16

1 INCH COOLANT THRU ACCESSORIES

Size	Coolant Collet	Coolant-Thru Nut	Slotted Nut
1/8"	CCK1-1/8	CKFN1-1/8C	CKFN1-1/8
3/16"	CCK1-3/16	CKFN1-3/16C	CKFN1-3/16
1/4"	CCK1-1/4	CKFN1-1/4C	CKFN1-1/4
5/16"	CCK1-5/16	CKFN1-5/16C	CKFN1-5/16
3/8"	CCK1-3/8	CKFN1-3/8C	CKFN1-3/8
7/16"	CCK1-7/16	CKFN1-7/16C	CKFN1-7/16
1/2"	CCK1-1/2	CKFN1-1/2C	CKFN1-1/2
5/8"	CCK1-5/8	CKFN1-5/8C	CKFN1-5/8
3/4"	CCK1-3/4	CKFN1-3/4C	CKFN1-3/4
7/8"	CCK1-7/8	CKFN1-7/8C	CKFN1-7/8
6mm	CCK1-6	CKFN1-6C	CKFN1-6
8mm	CCK1-8	CKFN1-8C	CKFN1-8
10mm	CCK1-10	CKFN1-10C	CKFN1-10
12mm	CCK1-12	CKFN1-12C	CKFN1-12
14mm	CCK1-14	CKFN1-14C	CKFN1-14
16mm	CCK1-16	CKFN1-16C	CKFN1-16
18mm	CCK1-18	CKFN1-18C	CKFN1-18
20mm	CCK1-20	CKFN1-20C	CKFN1-20

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

1.1/4 INCH COOLANT THRU ACCESSORIES

Size	Coolant Collet	Coolant-Thru Nut	Slotted Nut
3/16"	CCK1.1/4-3/16	CKFN1.1/4-3/16C	CKFN1.1/4-3/16
1/4"	CCK1.1/4-1/4	CKFN1.1/4-1/4C	CKFN1.1/4-1/4
5/16"	CCK1.1/4-5/16	CKFN1.1/4-5/16C	CKFN1.1/4-5/16
3/8"	CCK1.1/4-3/8	CKFN1.1/4-3/8C	CKFN1.1/4-3/8
7/16"	CCK1.1/4-7/16	CKFN1.1/4-7/16C	CKFN1.1/4-7/16
1/2"	CCK1.1/4-1/2	CKFN1.1/4-1/2C	CKFN1.1/4-1/2
9/16"	CCK1.1/4-9/16	CKFN1.1/4-9/16C	CKFN1.1/4-9/16
5/8"	CCK1.1/4-5/8	CKFN1.1/4-5/8C	CKFN1.1/4-5/8
3/4"	CCK1.1/4-3/4	CKFN1.1/4-3/4C	CKFN1.1/4-3/4
7/8"	CCK1.1/4-7/8	CKFN1.1/4-7/8C	CKFN1.1/4-7/8
1"	CCK1.1/4-1	CKFN1.1/4-1C	CKFN1.1/4-1
6mm	CCK1.1/4-6	CKFN1.1/4-6C	CKFN1.1/4-6
8mm	CCK1.1/4-8	CKFN1.1/4-8C	CKFN1.1/4-8
10mm	CCK1.1/4-10	CKFN1.1/4-10C	CKFN1.1/4-10
12mm	CCK1.1/4-12	CKFN1.1/4-12C	CKFN1.1/4-12
14mm	CCK1.1/4-14	CKFN1.1/4-14C	CKFN1.1/4-14
16mm	CCK1.1/4-16	CKFN1.1/4-16C	CKFN1.1/4-16
20mm	CCK1.1/4-20	CKFN1.1/4-20C	CKFN1.1/4-20
25mm	CCK1.1/4-25	CKFN1.1/4-25C	CKFN1.1/4-25

2 INCH COOLANT THRU ACCESSORIES

Size	Coolant Collet	Coolant-Thru Nut	Slotted Nut
1"	CCK2-1	CKFN2-1C	CKFN2-1
1.1/4"	CCK2-1.1/4	CKFN2-1.1/4C	CKFN2-1.1/4
1.1/2"	CCK2-1.1/2	CKFN2-1.1/2C	CKFN2-1.1/2

32 MM COOLANT THRU ACCESSORIES

Size	Coolant Collet	Coolant-Thru Nut	Slotted Nut
3/16"	CCK32-3/16	CKFN32-3/16C	CKFN32-3/16
1/4"	CCK32-1/4	CKFN32-1/4C	CKFN32-1/4
5/16"	CCK32-5/16	CKFN32-5/16C	CKFN32-5/16
3/8"	CCK32-3/8	CKFN32-3/8C	CKFN32-3/8
7/16"	CCK32-7/16	CKFN32-7/16C	CKFN32-7/16
1/2"	CCK32-1/2	CKFN32-1/2C	CKFN32-1/2
9/16"	CCK32-9/16	CKFN32-9/16C	CKFN32-9/16
5/8"	CCK32-5/8	CKFN32-5/8C	CKFN32-5/8
3/4"	CCK32-3/4	CKFN32-3/4C	CKFN32-3/4
7/8"	CCK32-7/8	CKFN32-7/8C	CKFN32-7/8
1"	CCK32-1	CKFN32-1C	CKFN32-1
6mm	CCK32-6	CKFN32-6C	CKFN32-6
8mm	CCK32-8	CKFN32-8C	CKFN32-8
10mm	CCK32-10	CKFN32-10C	CKFN32-10
12mm	CCK32-12	CKFN32-12C	CKFN32-12
14mm	CCK32-14	CKFN32-14C	CKFN32-14
16mm	CCK32-16	CKFN32-16C	CKFN32-16
20mm	CCK32-20	CKFN32-20C	CKFN32-20
25mm	CCK32-25	CKFN32-25C	CKFN32-25

NIKKEN SK/LSK HOLDERS



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

Titanium Nitrate (TiN)



TiN Bearing

- Good sliding effect due to the surface hardness of HV2,200. No Damage, no friction.
- No Corrosion occurs internally.
- Less micro vibration with collet flange contact. Improvement of cutting performance and tool life durability.

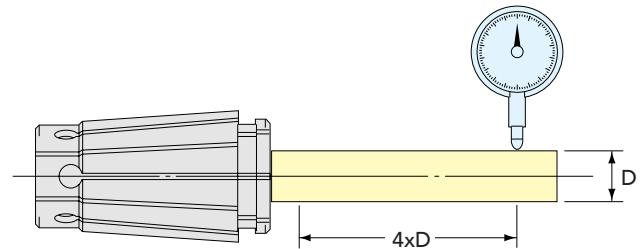
Big on Precision, Narrow-Bodied



The narrow-bodied SK Toolholding System accesses tight spaces and hard to reach areas with ease and drills, taps, reams, and mills with precision. Tools up to 1" in diameter can be accommodated with this superior and affordably priced collet system.

High Accuracy

Accuracy: run-out accuracy is less than 5µm at four times the diameter of the cutting tool shank.

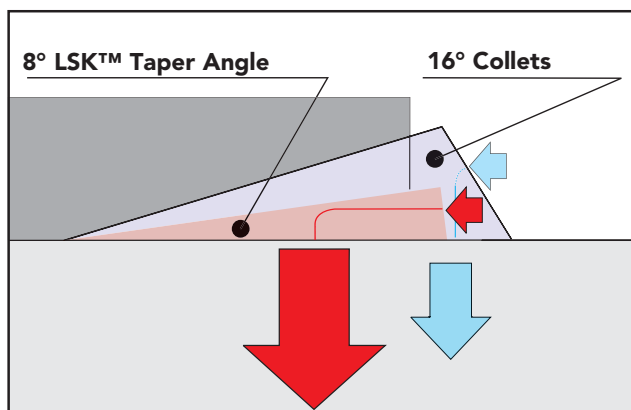


SK Collet Chuck Sizes:

- SK06: 0.7-6mm (0.027-0.236") capacity
- SK10: 1.75-10mm (0.069-0.393") capacity
- SK16: 2.75-16mm (0.108-0.629") capacity
- SK25: 16.0-25.4mm (0.629-1.000") capacity

Increased Gripping Power

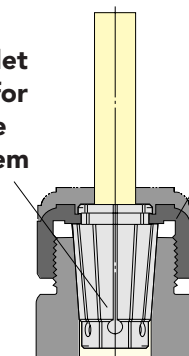
8° Collet seats deeper in the body of the holder providing increased rigidity. This also results in better concentricity and stronger gripping power.



Flat Shoulder Pushing

Standard Collet can be used for High Pressure Coolant System

Simple and Rigid Nut

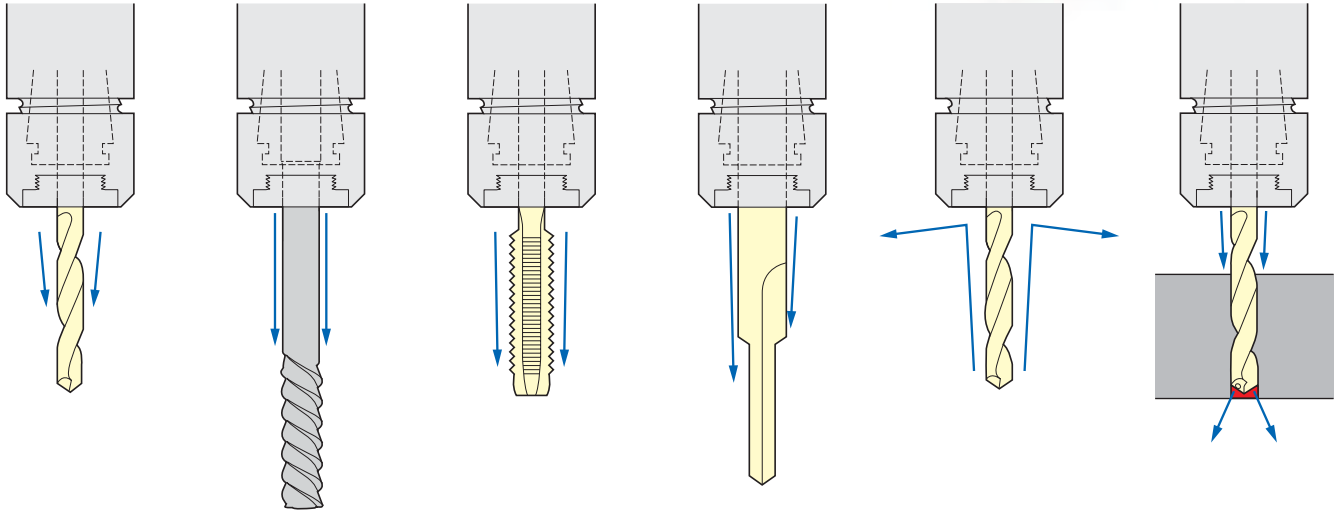


Big on Precision, Narrow-Bodied

SK collets can be used for all applications, from milling to reaming. Standard collets can be used in coolant thru applications as shown below.



SK/LSK Coolant Thru Options



Coolant Nut

The SK Coolant Nut can be paired either with a Coolant-Thru Disk or a Slotted Disk (Disks sold separately) for coolant applications. Coolant Nuts are available for all four SK Collet Series. When using the Coolant Nut, add 6mm (0.236") to the tool-holder gauge length.



Coolant-Thru Disk

When the Coolant Nut is paired with the Coolant-Thru Disk, a perfect seal is formed around the cutting tool shank, making this combination ideal for coolant-thru tools. Coolant-Thru Disks must be ordered on size for the cutting tool. Assembly of the Coolant Nut and Disk is easily accomplished with the Disk Wrench (sold separately).



Slotted Disk

When the Coolant Nut is paired with the Slotted Disk, coolant is directed to the cutting edge of the cutting tool, making this combination ideal for non-coolant-thru tools. Slotted Disks must be ordered on size for the cutting tool. Assembly of the Coolant Nut and Disk is easily accomplished with the Disk Wrench (sold separately).

MILLING CHUCKS

SK / LSK HOLDERS

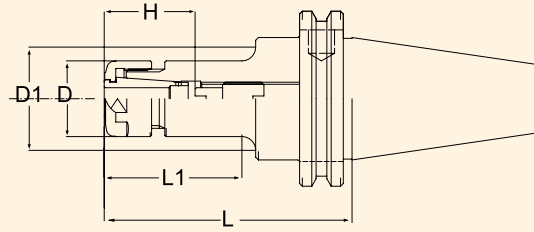
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

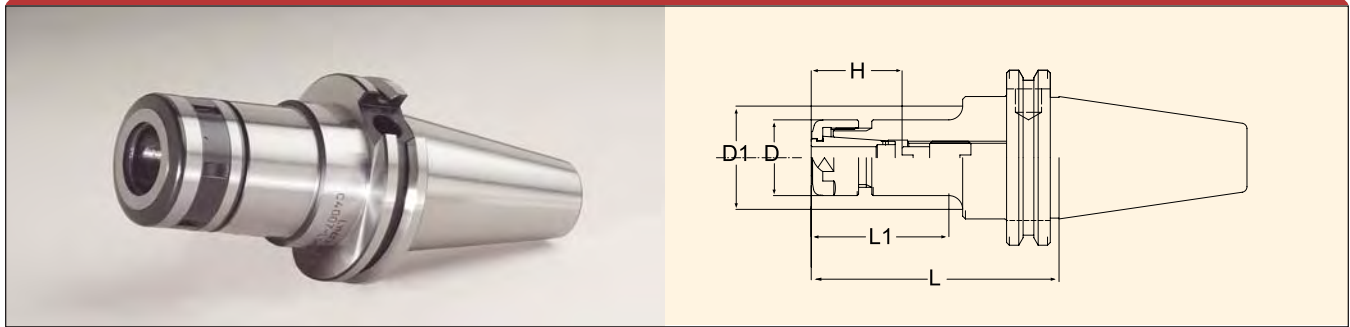
CAT TAPER SK/LSK



Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
CAT40-SK6-90U	CT40	SK06	3.543"	1.969"	0.827-1.378"	0.768"	0.768"	SKG-8
CAT40-SK6-120U	CT40	SK06	4.724"	2.441"	0.827-1.378"	0.768"	1.260"	SKG-8
CAT40-SK6-150U	CT40	SK06	5.906"	2.362"	0.827-1.378"	0.768"	0.984"	SKG-8
CAT40-SK10-90U	CT40	SK10	3.543"	1.969"	1.181-1.969"	1.083"	1.083"	SKG-12L
CAT40-SK10-120U	CT40	SK10	4.724"	2.756"	1.181-1.969"	1.083"	1.260"	SKG-12L
CAT40-SK10-150U	CT40	SK10	5.906"	2.874"	1.181-1.969"	1.083"	1.343"	SKG-12L
CAT40-SK10-180U	CT40	SK10	7.086"	-	1.378-1.614"	1.083"	-	SKG-12L
CAT40-SK16-90U	CT40	SK16	3.543"	1.969"	1.772-2.756"	1.575"	1.575"	SKG-18L
CAT40-SK16-120U	CT40	SK16	4.724"	3.150"	1.772-2.756"	1.575"	1.575"	SKG-18L
CAT40-SK16-150U	CT40	SK16	5.906"	4.331"	1.772-2.756"	1.575"	1.575"	SKG-18L
CAT40-SK16-180U	CT40	SK16	7.086"	-	1.654-2.244"	1.575"	-	SKG-18L
CAT40-SK25 -90U	CT40	SK25	3.543"	2.165"	2.165-2.756"	2.165"	1.750"	SKG-28
CAT40-SK25-120U	CT40	SK25	4.724"	3.346"	2.165-3.346"	2.165"	1.750"	SKG-28
CAT50-SK6-105U	CT50	SK06	4.134"	2.362"	0.827-1.378"	0.768"	0.768"	SKG-8
CAT50-SK6-165U	CT50	SK06	6.496"	2.441"	0.827-1.378"	0.768"	1.260"	SKG-8
CAT50-SK6-195U	CT50	SK06	7.677"	-	0.827-1.378"	0.768"	-	SKG-8
CAT50-SK10-105U	CT50	SK10	4.134"	2.362"	1.181-1.969"	1.083"	1.083"	SKG-12L
CAT50-SK10-165U	CT50	SK10	6.496"	2.953"	1.181-1.969"	1.083"	1.260"	SKG-12L
CAT50-SK10-195U	CT50	SK10	7.677"	2.953"	1.181-1.969"	1.083"	1.417"	SKG-12L
CAT50-SK10-225U	CT50	SK10	8.858"	-	1.378-1.614"	1.083"	-	SKG-12L
CAT50-SK16-105U	CT50	SK16	4.134"	2.559"	1.772-2.756"	1.575"	1.575"	SKG-18L
CAT50-SK16-165U	CT50	SK16	6.496"	3.543"	1.772-2.756"	1.575"	1.969"	SKG-18L
CAT50-SK16-195U	CT50	SK16	7.677"	3.543"	1.772-2.756"	1.575"	1.969"	SKG-18L
CAT50-SK25-105U	CT50	SK25	4.134"	2.559"	2.165-3.346"	2.165"	2.165"	SKG-28
CAT50-SK25-165U	CT50	SK25	6.496"	4.921"	2.165-3.346"	2.165"	2.165"	SKG-28
CAT50-SK25-195U	CT50	SK25	7.677"	6.102"	2.165-3.346"	2.165"	2.165"	SKG-28

Note: SK /LSK collets are located on page 31-33
Spanner Wrench not included. Please refer to page 35

CAT TAPER SK/LSK (DIN)

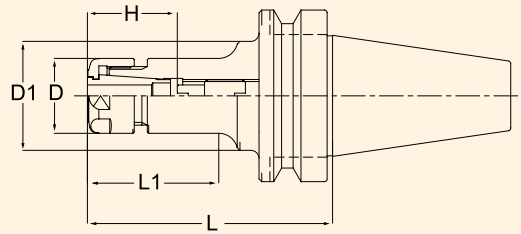


Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
CAT40-SK6F-90U	CT40	SK06	3.543"	1.969"	0.827-1.378"	0.768"	0.768"	SKG6-6HG
CAT40-SK6F-120U	CT40	SK06	4.724"	2.441"	0.827-1.378"	0.768"	1.260"	SKG6-6HG
CAT40-SK6F-150U	CT40	SK06	5.906"	2.362"	0.827-1.378"	0.768"	0.984"	SKG6-6HG
CAT40-SK10F-90U	CT40	SK10	3.543"	1.969"	1.181-1.969"	1.083"	1.083"	SKG10-10HG
CAT40-SK10F-120U	CT40	SK10	4.724"	2.756"	1.181-1.969"	1.083"	1.260"	SKG10-10HG
CAT40-SK10F-150U	CT40	SK10	5.906"	2.874"	1.181-1.969"	1.083"	1.343"	SKG10-10HG
CAT40-SK16F-90U	CT40	SK16	3.543"	1.969"	1.772-2.756"	1.575"	1.575"	SKG16-12HG
CAT40-SK16F-120U	CT40	SK16	4.724"	3.150"	1.772-2.756"	1.575"	1.575"	SKG16-12HG
CAT40-SK16F-150U	CT40	SK16	5.906"	4.331"	1.772-2.756"	1.575"	1.575"	SKG16-12HG
CAT40-SK25F-90U	CT40	SK25	3.543"	2.165"	2.165-2.756"	2.165"	1.750"	SKG25-18HGE
CAT40-SK25F-120U	CT40	SK25	4.724"	3.346"	2.165-3.346"	2.165"	1.750"	SKG25-18HGE

Note: SK /LSK collets are located on page 31-33
Spanner Wrench not included. Please refer to page 35

NIKKEN SK/LSK HOLDERS

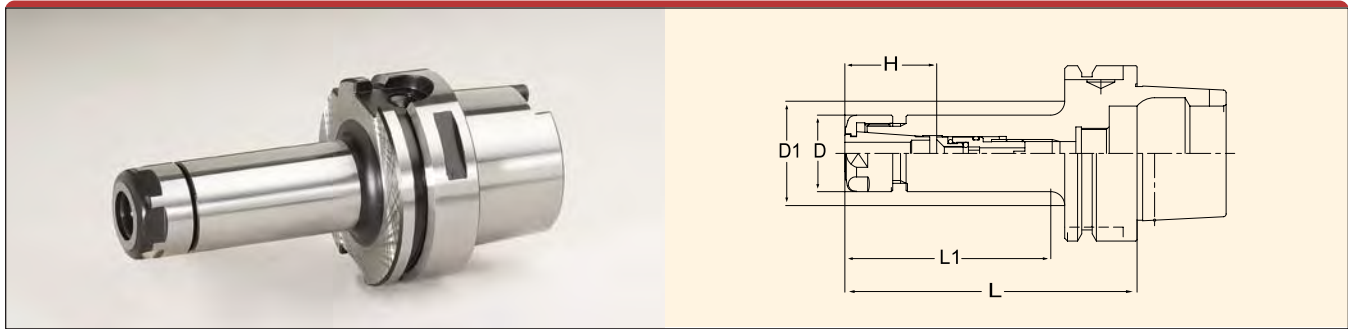
BT TAPER SK/LSK



Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
BT30-SK6-60	BT30	SK06	2.362"	1.299"	0.827-1.378"	0.768"	0.768"	SKG-8
BT30-SK6-90	BT30	SK06	3.543"	2.205"	0.827-1.378"	0.768"	1.260"	SKG-8
BT30-SK10-45	BT30	SK10	1.772"	0.866"	1.181-1.969"	1.083"	1.083"	SKG-12S
BT30-SK10-60	BT30	SK10	2.362"	1.378"	1.181-1.969"	1.083"	1.083"	SKG-12L
BT30-SK10-90	BT30	SK10	3.543"	2.559"	1.181-1.969"	1.083"	1.083"	SKG-12L
BT30-SK16-60	BT30	SK16	2.362"	1.457"	1.772-2.362"	1.575"	1.575"	SKG-12L
BT30-SK16-90	BT30	SK16	3.543"	2.638"	1.772-2.559"	1.575"	1.575"	SKG-12
BT30-SK25-90	BT30	SK25	3.543"	2.559"	2.165-2.953"	2.165"	2.165"	SKG-12
BT40-SK6-90	BT40	SK06	3.543"	2.008"	0.827-1.378"	0.768"	1.260"	SKG-8
BT40-SK6-120	BT40	SK06	4.724"	2.362"	0.827-1.378"	0.768"	1.260"	SKG-8
BT40-SK6-150	BT40	SK06	5.906"	2.362"	0.827-1.378"	0.768"	0.984"	SKG-8
BT40-SK10-90	BT40	SK10	3.543"	1.890"	1.181-1.969"	1.083"	1.575"	SKG-12L
BT40-SK10-120	BT40	SK10	4.724"	2.874"	1.181-1.969"	1.083"	1.575"	SKG-12L
BT40-SK10-150	BT40	SK10	5.906"	2.874"	1.181-1.969"	1.083"	1.358"	SKG-12L
BT40-SK10-180	BT40	SK10	7.086"	-	1.378-1.614"	1.083"	-	SKG-12L
BT40-SK16-90	BT40	SK16	3.543"	2.283"	1.772-2.756"	1.575"	1.575"	SKG-18L
BT40-SK16-120	BT40	SK16	4.724"	3.465"	1.772-2.756"	1.575"	1.575"	SKG-18L
BT40-SK16-150	BT40	SK16	5.906"	4.646"	1.772-2.756"	1.575"	1.575"	SKG-18L
BT40-SK16-180	BT40	SK16	7.086"	-	1.654-2.244"	1.575"	-	SKG-18L
BT40-SK25-75	BT40	SK25	2.953"	1.850"	2.165-2.953"	2.165"	2.165"	SKG-12
BT40-SK25-90	BT40	SK25	3.543"	2.402"	2.165-2.953"	2.165"	2.165"	SKG-28
BT40-SK25-120	BT40	SK25	4.724"	3.583"	2.165-3.346"	2.165"	2.165"	SKG-28
BT50-SK6-105	BT50	SK06	4.134"	2.165"	0.827-1.378"	0.768"	1.260"	SKG-8
BT50-SK6-165	BT50	SK06	6.496"	2.362"	0.827-1.378"	0.768"	1.260"	SKG-8
BT50-SK6-195	BT50	SK06	7.677"	2.362"	0.827-1.378"	0.768"	1.181"	SKG-8
BT50-SK10-105	BT50	SK10	4.134"	2.244"	1.181-1.969"	1.083"	1.083"	SKG-12L
BT50-SK10-165	BT50	SK10	6.496"	2.953"	1.181-1.969"	1.083"	1.260"	SKG-12L
BT50-SK10-195	BT50	SK10	7.677"	2.953"	1.181-1.969"	1.083"	1.417"	SKG-12L
BT50-SK16-105	BT50	SK16	4.134"	2.441"	1.772-2.756"	1.575"	1.575"	SKG-18L
BT50-SK16-165	BT50	SK16	6.496"	3.543"	1.772-2.756"	1.575"	1.969"	SKG-18L
BT50-SK16-195	BT50	SK16	7.677"	3.543"	1.772-2.756"	1.575"	2.047"	SKG-18L
BT50-SK25-105	BT50	SK25	4.134"	2.441"	2.165-3.346"	2.165"	2.165"	SKG-28
BT50-SK25-165	BT50	SK25	6.496"	4.803"	2.165-3.346"	2.165"	2.165"	SKG-28
BT50-SK25-195	BT50	SK25	7.677"	5.984"	2.165-3.346"	2.165"	2.165"	SKG-28

Note: SK /LSK collets are located on page 31-33
Spanner Wrench not included. Please refer to page 35

HSK TAPER SK/LSK



Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
HSK63A-SK6C-100	HSK63A	SK06	3.937"	2.441"	1.024-1.220"	0.768"	1.260"	SKG6-6HG
HSK63A-SK6C-120	HSK63A	SK06	4.724"	2.441"	1.024-1.220"	0.768"	1.260"	SKG6-6HG
HSK63A-SK6C-150	HSK63A	SK06	5.906"	2.362"	1.024-1.220"	0.768"	0.984"	SKG6-6HG
HSK63A-SK10C-105	HSK63A	SK10	4.134"	2.913"	1.378-1.614"	1.083"	1.083"	SKG10-10HG
HSK63A-SK10C-120	HSK63A	SK10	4.724"	2.362"	1.378-1.614"	1.083"	1.260"	SKG10-10HG
HSK63A-SK10C-150	HSK63A	SK10	5.906"	2.874"	1.378-1.614"	1.083"	1.358"	SKG10-10HG
HSK63A-SK16C-120	HSK63A	SK16	4.724"	3.583"	1.772-2.047"	1.575"	1.575"	SKG16-10HG
HSK63A-SK16C-150	HSK63A	SK16	5.906"	4.764"	1.772-2.244"	1.575"	1.575"	SKG16-12HG
HSK63A-SK25C-135	HSK63A	SK25	5.315"	4.252"	2.362-2.559"	2.165"	2.165"	SKG25-18HGE
HSK100A-SK6C-105	HSK100A	SK06	4.134"	2.441"	1.024-1.220"	0.768"	1.575"	SKG6-6HG
HSK100A-SK10C-105	HSK100A	SK10	4.134"	2.244"	1.378-1.614"	1.083"	1.575"	SKG10-10HG
HSK100A-SK10C-120	HSK100A	SK10	4.724"	2.913"	1.378-1.614"	1.083"	1.575"	SKG10-10HG
HSK100A-SK10C-150	HSK100A	SK10	5.906"	3.150"	1.378-1.614"	1.083"	1.575"	SKG10-10HG
HSK100A-SK10C-200	HSK100A	SK10	7.874"	2.953"	1.378-1.614"	1.083"	1.535"	SKG10-10HG
HSK100A-SK16C-120	HSK100A	SK16	4.724"	3.386"	1.654-2.047"	1.575"	1.575"	SKG16-10HG
HSK100A-SK16C-150	HSK100A	SK16	5.906"	3.543"	1.654-2.244"	1.575"	1.969"	SKG16-12HG
HSK100A-SK16C-200	HSK100A	SK16	7.874"	3.543"	1.654-2.244"	1.575"	2.165"	SKG16-12HG
HSK100A-SK25C-145	HSK100A	SK25	5.709"	4.370"	2.362-2.559"	2.165"	2.165"	SKG25-18HGE

Note: SK /LSK collets are located on page 31-33
Spanner Wrench not included. Please refer to page 35

MILLING CHUCKS

SK / LSK HOLDERS

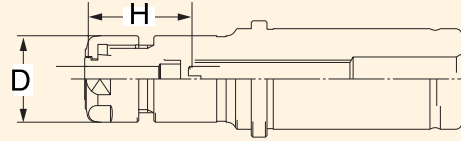
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

STRAIGHT SHANK SK/LSK



Part Number	Taper	Collet Series	H	D
K3/4-SK10-100	SS	SK10	1.378-1.614"	1.083"
K3/4-SK10-120	SS	SK10	1.378-1.614"	1.083"
K1.1/4-SK06-120	SS	SK06	0.827-1.378"	0.768"
K1.1/4-SK06-170	SS	SK06	0.827-1.378"	0.768"
K1.1/4-SK10-120	SS	SK10	1.378-1.614"	1.083"
K1.1/4-SK10-150	SS	SK10	1.378-1.614"	1.083"
K1.1/4-SK10-210	SS	SK10	1.378-1.614"	1.083"
K1.1/4-SK16-120	SS	SK16	1.654-2.244"	1.575"
K1.1/4-SK16-150	SS	SK16	1.654-2.244"	1.575"
K1.1/4-SK16-210	SS	SK16	1.654-2.244"	1.575"
K1.1/4-SK25-150	SS	SK25	2.362-2.559"	2.165"

Note: SK /LSK collets are located on page 31-33
Spanner Wrench not included. Please refer to page 35

SK06 COLLETS (metric)

Part Number	Size Range mm	Size Range Inch
SK6-0.8	0.7-0.8mm	0.027-0.031"
SK6-1	0.9-1.0mm	0.035-0.039"
SK6-1.25	1.15-1.25mm	0.045-0.049"
SK6-1.5	1.3-1.5mm	0.051-0.059"
SK6-1.75	1.5-1.75mm	0.059-0.068"
SK6-2	1.8-2.0mm	0.070-0.078"
SK6-2.25	2.05-2.25mm	0.080-0.088"
SK6-2.5	2.3-2.5mm	0.090-0.098"
SK6-2.75	2.55-2.75mm	0.100-0.108"
SK6-3	2.8-3.0mm	0.110-0.118"
SK6-3.5	3.0-3.5mm	0.118-0.137"
SK6-4	3.5-4.0mm	0.137-0.157"
SK6-4.5	4.0-4.5mm	0.157-0.177"
SK6-5	4.5-5.0mm	0.177-0.196"
SK6-5.5	5.0-5.5mm	0.196-0.216"
SK6-6	5.5-6.0mm	0.216-0.236"
SK6-SET	16 Piece SK6 Collet Set	0.7mm - 6.0mm



MILLING CHUCKS

SK / LSK HOLDERS

SK10 COLLETS (metric)

Part Number	Size Range mm	Size Range Inch
SK10-2	1.75-2.0mm	0.068-0.078"
SK10-2.25	2.0-2.25mm	0.078-0.088"
SK10-2.5	2.25-2.5mm	0.088-0.098"
SK10-2.75	2.5-2.75mm	0.098-0.108"
SK10-3	2.75-3.0mm	0.108-0.118"
SK10-3.5	3.0-3.5mm	0.118-0.137"
SK10-4	3.5-4.0mm	0.137-0.157"
SK10-4.5	4.0-4.5mm	0.157-0.177"
SK10-5	4.5-5.0mm	0.177-0.196"
SK10-5.5	5.0-5.5mm	0.196-0.216"
SK10-6	5.5-6.0mm	0.216-0.236"
SK10-6.5	6.0-6.5mm	0.236-0.255"
SK10-7	6.5-7.0mm	0.255-0.275"
SK10-7.5	7.0-7.5mm	0.275-0.295"
SK10-8	7.5-8.0mm	0.295-0.314"
SK10-8.5	8.0-8.5mm	0.314-0.334"
SK10-9	8.5-9.0mm	0.334-0.354"
SK10-9.5	9.0-9.5mm	0.354-0.374"
SK10-10	9.5-10.0mm	0.374-0.393"
SK10-SET	19 Piece SK10 Collet Set	1.75mm - 10.0mm

SK10 COLLETS (inch)

Part Number	Size
SK10-1/8A	0.125
SK10-3/16A	0.187
SK10-1/4A	0.250
SK10-5/16A	0.312
SK10-3/8A	0.375

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS



SK16 COLLETS (inch)

Part Number	Size
SK16-1/8A	0.125
SK16-3/16A	0.187
SK16-1/4A	0.250
SK16-5/16A	0.312
SK16-3/8A	0.375
SK16-7/16A	0.437
SK16-1/2A	0.500
SK16-9/16A	0.562
SK16-5/8A	0.625

SK16 COLLETS (metric)

Part Number	Size Range mm	Size Range inch
SK16-3	2.75-3.0mm	0.108-0.118"
SK16-3.5	3.0-3.5mm	0.118-0.137"
SK16-4	3.5-4.0mm	0.137-0.157"
SK16-4.5	4.0-4.5mm	0.157-0.177"
SK16-5	4.5-5.0mm	0.177-0.196"
SK16-5.5	5.0-5.5mm	0.196-0.216"
SK16-6	5.5-6.0mm	0.216-0.236"
SK16-6.5	6.0-6.5mm	0.236-0.255"
SK16-7	6.5-7.0mm	0.255-0.275"
SK16-7.5	7.0-7.5mm	0.275-0.295"
SK16-8	7.5-8.0mm	0.295-0.314"
SK16-8.5	8.0-8.5mm	0.314-0.334"
SK16-9	8.5-9.0mm	0.334-0.354"
SK16-9.5	9.0-9.5mm	0.354-0.374"
SK16-10	9.5-10.0mm	0.374-0.393"
SK16-10.5	10.0-10.5mm	0.393-0.413"
SK16-11	10.5-11.0mm	0.413-0.433"
SK16-11.5	11.0-11.5mm	0.433-0.452"
SK16-12	11.5-12.0mm	0.452-0.472"
SK16-12.5	12.0-12.5mm	0.472-0.492"
SK16-13	12.5-13.0mm	0.492-0.511"
SK16-13.5	13.0-13.5mm	0.511-0.531"
SK16-14	13.5-14.0mm	0.531-0.551"
SK16-14.5	14.0-14.5mm	0.551-0.570"
SK16-15	14.5-15.0mm	0.570-0.590"
SK16-15.5	15.0-15.5mm	0.590-0.610"
SK16-16	15.5-16.0mm	0.610-0.629"
SK16-SET	27 Piece SK16 Collet Set	2.75mm - 16.0mm

SK25 COLLETS (metric)

Part Number	Size Range mm	Size Range inch
SK25-16.5	16.0-16.5mm	0.629-0.649"
SK25-17	16.5-17.0mm	0.649-0.669"
SK25-17.5	17.0-17.5mm	0.669-0.688"
SK25-18	17.5-18.0mm	0.688-0.708"
SK25-18.5	18.0-18.5mm	0.708-0.728"
SK25-19	18.5-19.0mm	0.728-0.748"
SK25-19.5	19.0-19.5mm	0.748-0.767"
SK25-20	19.5-20.0mm	0.767-0.787"
SK25-20.5	20.0-20.5mm	0.787-0.807"
SK25-21	20.5-21.0mm	0.807-0.826"
SK25-21.5	21.0-21.5mm	0.826-0.846"
SK25-22	21.5-22.0mm	0.846-0.866"
SK25-22.5	22.0-22.5mm	0.866-0.885"
SK25-23	22.5-23.0mm	0.885-0.905"
SK25-23.5	23.0-23.5mm	0.905-0.925"
SK25-24	23.5-24.0mm	0.925-0.944"
SK25-24.5	24.0-24.5mm	0.944-0.964"
SK25-25	24.5-25.0mm	0.964-0.984"
SK25-25.4	25.0-25.4mm	0.984-0.1000"
SK25-SET	19 Piece SK25 Collet Set 16.0mm - 25.4mm	



SK25 COLLETS (inch)

Part Number	Size
SK25-3/16A	0.187
SK25-1/4A	0.250
SK25-5/16A	0.312
SK25-3/8A	0.375
SK25-7/16A	0.437
SK25-1/2A	0.500
SK25-5/8A	0.625
SK25-3/4A	0.750

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

NIKKEN SK/LSK HOLDERS

SK/LSK™ COOLANT COLLET SYSTEM

Collet Chuck	Coolant Nut	Cutting Tool Size	Coolant-Thru Disk	Slotted Disk	Disk Wrench
SK06	SKN-6WJ	3mm	SKJ6-3C	SKJ6-3	SKJL-6
		4mm	SKJ6-4C	SKJ6-4	
		5mm	SKJ6-5C	SKJ6-5	
		6mm	SKJ6-6C	SKJ6-6	
		1/8"	SKJ6-1/8C	SKJ6-1/8	
		3/16"	SKJ6-3/16C	SKJ6-3/16	
SK10	SKN-10J	3mm	SKJ10-3C	SKJ10-3	SKJL-10
		4mm	SKJ10-4C	SKJ10-4	
		5mm	SKJ10-5C	SKJ10-5	
		6mm	SKJ10-6C	SKJ10-6	
		8mm	SKJ10-8C	SKJ10-8	
		10mm	SKJ10-10C	SKJ10-10	
		1/8"	SKJ10-1/8C	SKJ10-1/8	
		3/16"	SKJ10-3/16C	SKJ10-3/16	
		1/4"	SKJ10-1/4C	SKJ10-1/4	
		5/16"	SKJ10-5/16C	SKJ10-5/16	
		3/8"	SKJ10-3/8C	SKJ10-3/8	
		SK16	SKN-16J	6mm	
8mm	SKJ16-8C			SKJ16-8	
10mm	SKJ16-10C			SKJ16-10	
12mm	SKJ16-12C			SKJ16-12	
16mm	SKJ16-16C			SKJ16-16	
1/4"	SKJ16-1/4C			SKJ16-1/4	
5/16"	SKJ16-5/16C			SKJ16-5/16	
3/8"	SKJ16-3/8C			SKJ16-3/8	
7/16"	SKJ16-7/16C			SKJ16-7/16	
1/2"	SKJ16-1/2C			SKJ16-1/2	
9/16"	SKJ16-9/16C			SKJ16-9/16	
5/8"	SKJ16-5/8C			SKJ16-5/8	
SK25	SKN-25J	16mm	SKJ25-16C	SKJ25-16	SKJL-25
		20mm	SKJ25-20C	SKJ25-20	
		25mm	SKJ25-25C	SKJ25-25	
		5/8"	SKJ25-5/8C	SKJ25-5/8	
		11/16"	SKJ25-11/16C	SKJ25-11/16	
		3/4"	SKJ25-3/4C	SKJ25-3/4	
		13/16"	SKJ25-13/16C	SKJ25-13/16	
		7/8"	SKJ25-7/8C	SKJ25-7/8	
		15/16"	SKJ25-15/16C	SKJ25-15/16	
1"	SKJ25-1C	SKJ25-1			

BLANK DISKS (machinable)

Collet Chuck	Blank Disks
SK06	SKJ6-BLANK
SK10	SKJ10-BLANK
SK16	SKJ16-BLANK
SK25	SKJ25-BLANK

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

COLLET EXTRACTOR

Part Number	Description
SKR-6	SK06 Collet Extractor
SKR-10	SK10 Collet Extractor
SKR-16	SK16 Collet Extractor
SKR-25	SK25 Collet Extractor



REPLACEMENT STANDARD SK CHUCK NUTS

Part Number	Description
SKN-6W	SK06 Chuck Nut
SKN-10	SK10 Chuck Nut
SKN-16	SK16 Chuck Nut
SKN-25	SK25 Chuck Nut



SK CHUCK NUT WRENCHES

Part Number	Description
SKL-6W	SK06 Chuck Nut Wrench
SKL-10	SK10 Chuck Nut Wrench
9HC16	SK16 Chuck Nut Wrench
9HC22	SK25 Chuck Nut Wrench



BACK UP SCREWS

Part Number	Description
SKG-8	SK Back Up Screw
SKG-12	SK Back Up Screw
SKG-12S	SK Back Up Screw
SKG-12L	SK Back Up Screw
SKG-18L	SK Back Up Screw
SKG-28	SK Back Up Screw
SKG6-6HG	SK Coolant Screw
SKG10-10HG	SK Coolant Screw
SKG16-10HG	SK Coolant Screw
SKG16-12HG	SK Coolant Screw
SKG25-18HGE	SK Coolant Screw



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

GEAR UP FOR RELIABILITY

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS



Nikken's Patented Carbide Worm System

The Nikken patented carbide worm system has what it takes to make CNC rotary tables exceptionally reliable and repeatable. Our ion-nitrated worm wheel and carbide worm screw reduce friction and wear by up to 8 times (compared to common phosphorous bronze and aluminum bronze worm wheel construction). Less wear translates to reduced maintenance and increased productivity.

Please ask your sales representative about Nikken's Rotary Table Line.



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

MMC/Insider™ Collet Chucks (Mini-Mini Chuck)

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS



Accuracy in Small-Diameter Cutting

The Insider™ Collet Chucks features a slim and compact body for precision machining with small diameter tools (up to 1/2"). The Insider™ has an easy-to-use draw-in collet clamping system, and is an ideal toolholder for your high speed machining needs.

High Speed - High Precision

All external surfaces are finish ground, and the holders are pre-balanced for high-speed applications. This insures reliability at high speeds and feed rates.

Draw-In Clamping



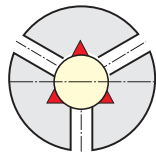
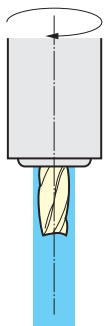
The Insider's use of a draw-in collet clamping system results in strong, high-precision gripping. A tightening wrench is supplied with each Insider™ Collet Chuck.

Available in Three Sizes

MPK04 (0.039" to 0.157" capacity), IMK08 (0.078" to 0.314" capacity), and IMK12 (0.157" to 0.500" capacity).

Jet Coolant Splash with J-type Collet

Coolant can be delivered either through the cutting tool or along the cutting tool using Insider Coolant or Slotted Collets.

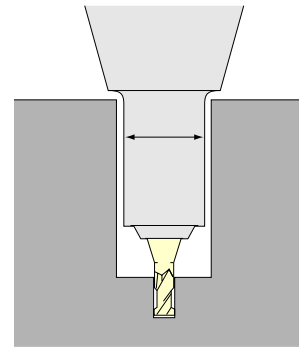
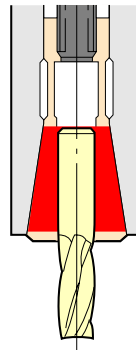


Jet Coolant System. No Coolant spreading out even at high rpm

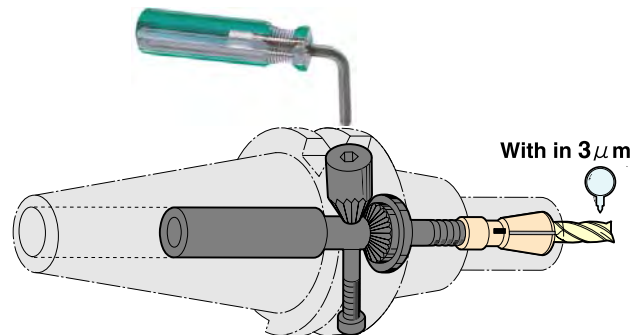


Accuracy and Slim Nose:

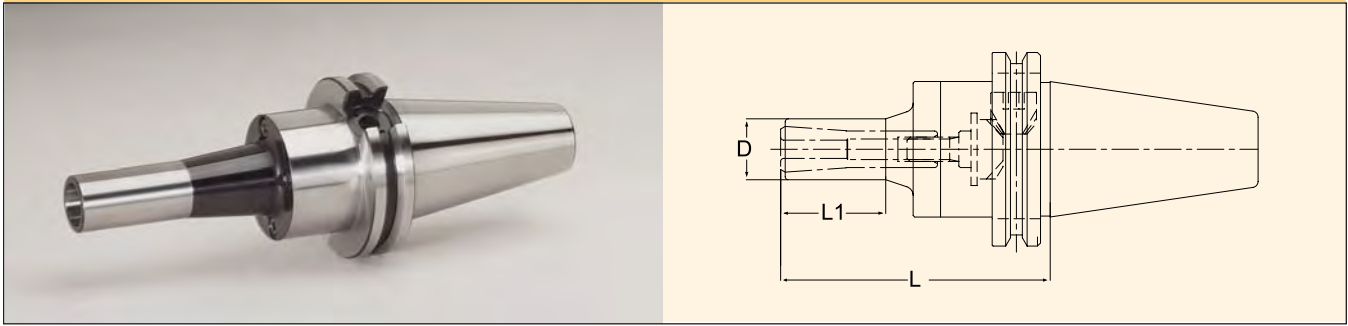
No collet nut is required! An internal mechanism draws in the collets using the tightening wrench (included), allowing for a slim-nose that can access hard-to-reach spots. Run-out is held to within 3µm at 4 times the diameter of the cutting tool.



Slim and Compact Nose with strong gripping



CAT TAPER MMC/INSIDER™ COLLET CHUCKS



Part Number	Taper	Collet Series	L	L1	D
CAT40-MMC4-90	CT40	MPK04	3.543"	1.181"	0.591"
CAT40-MMC8C-90	CT40	VMK08	3.543"	1.299"	0.787"
CAT40-MMC8C-120	CT40	VMK08	4.724"	1.574"	0.787"
CAT40-MMC12C-90	CT40	VMK12	3.543"	1.378"	1.181"
CAT40-MMC12C-120	CT40	VMK12	4.724"	2.362"	1.181"
CAT50-MMC4-105	CT50	MPK04	4.134"	1.181"	0.591"
CAT50-MMC8C-105	CT50	VMK08	4.134"	1.299"	0.787"
CAT50-MMC8C-135	CT50	VMK08	5.315"	1.574"	0.787"
CAT50-MMC8C-165	CT50	VMK08	6.496"	1.574"	0.787"
CAT50-MMC12C-105	CT50	VMK12	4.134"	1.378"	1.181"
CAT50-MMC12C-135	CT50	VMK12	5.315"	2.362"	1.181"
CAT50-MMC12C-165	CT50	VMK12	6.496"	2.756"	1.181"

Note: For MPK and VMK Collets see page 42.

MILLING CHUCKS

SK / LSK HOLDERS

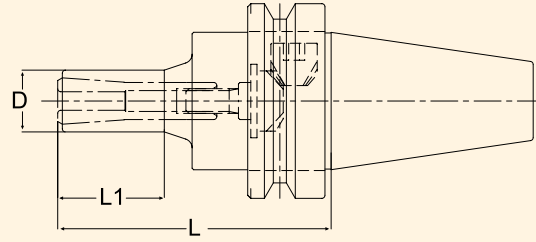
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

BT TAPER MMC/INSIDER™ COLLET CHUCKS



Part Number	Taper	Collet Series	L	L1	D
BT30-MMC4-105	BT30	MPK04	4.134"	1.181"	0.591"
BT30-MMC8C-105	BT30	VMK08	4.134"	1.417"	0.787"
BT30-MMC12C-105	BT30	VMK12	4.134"	1.378"	1.181"
BT40-MMC4-90	BT40	MPK04	3.543"	1.181"	0.591"
BT40-MMC8C-90	BT40	VMK08	3.543"	1.417"	0.787"
BT40-MMC8C-120	BT40	VMK08	4.724"	1.693"	0.787"
BT40-MMC12C-90	BT40	VMK12	3.543"	1.378"	1.181"
BT40-MMC12C-120	BT40	VMK12	4.724"	2.362"	1.181"
BT50-MMC4-105	BT50	MPK04	4.134"	1.181"	0.591"
BT50-MMC8C-105	BT50	VMK08	4.134"	1.417"	0.787"
BT50-MMC8C-135	BT50	VMK08	5.315"	1.693"	0.787"
BT50-MMC8C-165	BT50	VMK08	6.496"	1.693"	0.787"
BT50-MMC12C-105	BT50	VMK12	4.134"	1.378"	1.181"
BT50-MMC12C-135	BT50	VMK12	5.315"	2.362"	1.181"
BT50-MMC12C-165	BT50	VMK12	6.496"	2.756"	1.181"

Note: For MPK and VMK Collets see page 42.

MILLING CHUCKS

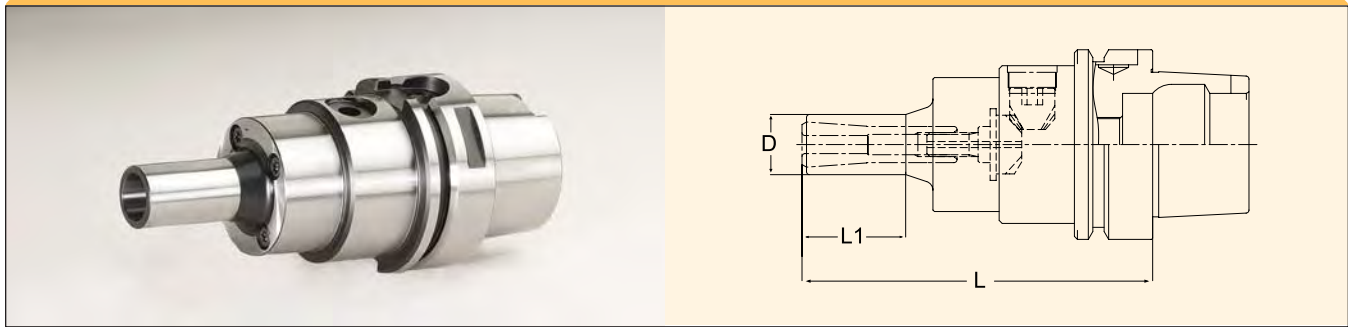
SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

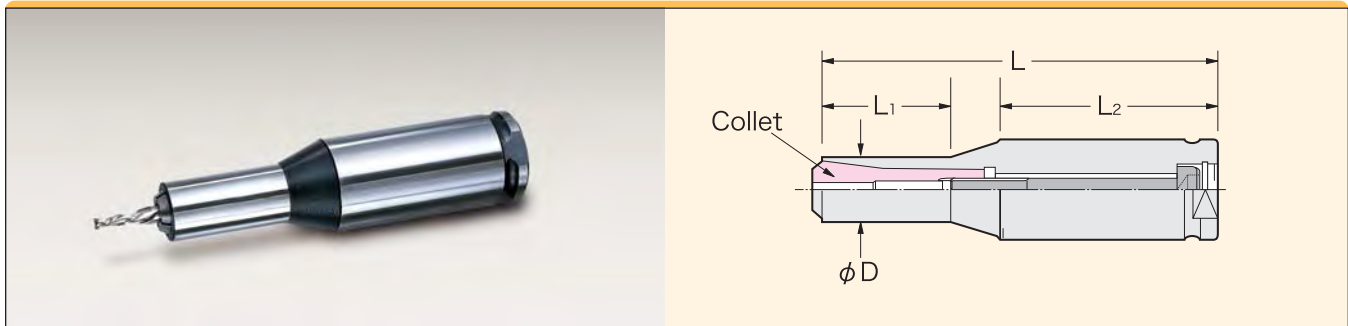
HSK63A/HSK100A TAPER MMC/INSIDER™ COLLET CHUCKS

Part Number	Taper	Collet Series	L	L1	D
HSK63A-MMC8C-115	HSK63A	VMK08	4.528"	1.299"	0.787"
HSK63A-MMC12C-117	HSK63A	VMK12	4.606"	1.417"	1.181"
HSK100A-MMC8C-130	HSK100A	VMK08	5.118"	1.299"	0.787"
HSK100A-MMC12C-130	HSK100A	VMK12	5.118"	1.417"	1.181"

HSK63F TAPER MMC/INSIDER™ COLLET CHUCKS

Part Number	Taper	Collet Series	L	L1	D
HSK63F-MMC8C-127	HSK63F	VMK08	5.000"	1.299"	0.787"
HSK63F-MMC12C-129	HSK63F	VMK12	5.078"	1.417"	1.181"

Note: For MPK and VMK Collets see page 42.

STRAIGHT SHANK MMC/INSIDER™ COLLET CHUCKS

Part Number	Collet Series	L	L1	L2	D
K3/4-MMC8C-100	VMK08	3.937"	0.787"	3.149"	0.787"
K1.1/4-MMC8C-122	VMK08	4.803"	1.574"	2.637"	0.787"
K1.1/4-MMC8C-160	VMK08	6.299"	1.574"	2.637"	0.787"

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

MPK04 COLLETS

Part Number	Size
MPK4-1/16	1/16"
MPK4-3/32	3/32"
MPK4-1	1.0mm
MPK4-1.5	1.5mm
MPK4-2	2.0mm
MPK4-2.5	2.5mm
MPK4-3	3.0mm
MPK4-3.5	3.5mm
MPK4-4	4.0mm



VMK08 COOLANT COLLETS

Part Number	Size
VMK8-1/8	1/8"
VMK8-3/16	3/16"
VMK8-1/4	1/4"
VMK8-5/16	5/16"
VMK8-3/8	3/8"
VMK8-2	2.0mm
VMK8-3	3.0mm
VMK8-4	4.0mm
VMK8-5	5.0mm
VMK8-6	6.0mm
VMK8-8	8.0mm

VMK12 COOLANT COLLETS

Part Number	Size
VMK12-3/16	3/16"
VMK12-1/4	1/4"
VMK12-5/16	5/16"
VMK12-3/8	3/8"
VMK12-7/16	7/16"
VMK12-1/2	1/2"
VMK12-4	4.0mm
VMK12-5	5.0mm
VMK12-6	6.0mm
VMK12-8	8.0mm
VMK12-10	10.0mm
VMK12-12	12.0mm

VMK08 SLOTTED COLLETS

Part Number	Size
VMK8-1/8J	1/8"
VMK8-3/16J	3/16"
VMK8-1/4J	1/4"
VMK8-5/16J	5/16"
VMK8-3/8J	3/8"
VMK8-2J	2.0mm
VMK8-3J	3.0mm
VMK8-4J	4.0mm
VMK8-5J	5.0mm
VMK8-6J	6.0mm
VMK8-8J	8.0mm

VMK12 SLOTTED COLLETS

Part Number	Size
VMK12-3/16J	3/16"
VMK12-1/4J	1/4"
VMK12-5/16J	5/16"
VMK12-3/8J	3/8"
VMK12-7/16J	7/16"
VMK12-1/2J	1/2"
VMK12-4J	4.0mm
VMK12-5J	5.0mm
VMK12-6J	6.0mm
VMK12-8J	8.0mm
VMK12-10J	10.0mm
VMK12-12J	12.0mm



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

Anniversary Type VC Holder

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

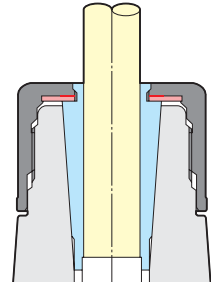
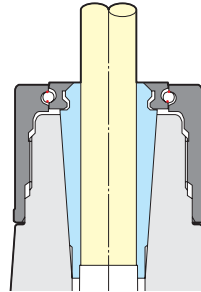
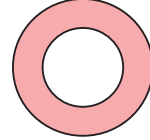
3LOCK HOLDERS



Nikken's High Performance VC Holder

The VC Holder produces exceptional gripping torque, run-out accuracy and cutting rigidity. This high performance tool excels in holding end mills during high speed rotations, especially suitable for finishing on die mold machining. It is capable of speeds up to 40,000 rpm and has coolant thru capabilities.

TiN (Titanium Nitrate) Bearing Advantage



Competitors

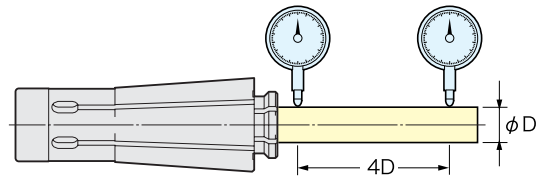
Radial bearing for rotational support. Not suitable for heavy thrust load.

Nikkens

TiN coated bearing plate produces less friction. Very effective for heavy thrust load.

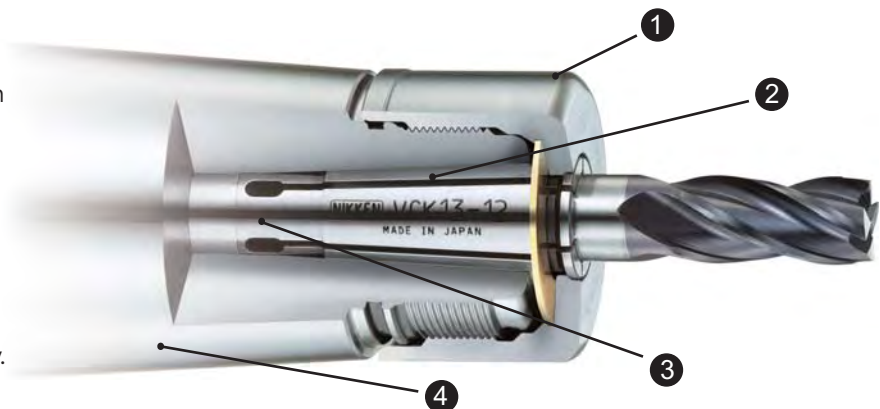
Run-Out Accuracy

Less than 3 microns at 4xD produces better stability and improved surface finish.

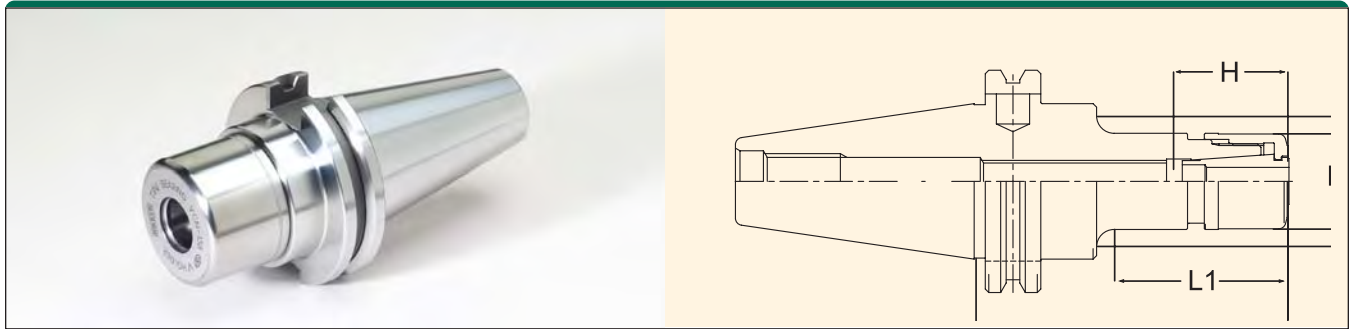


VC Features

1. Simple external design without notches for Ultra high speed rotation
2. 8° internal taper proven with the Slim Chuck for accuracy and gripping torque.
3. Pilot shank on the collet for further stability and accuracy.
4. The thick wall design of the VC Holder body improves cutting rigidity.



CAT TAPER VC HOLDERS

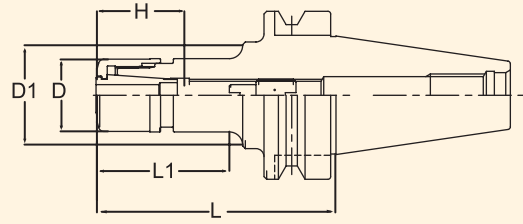


Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
CAT40-VC6-60U	CT40	VCK6	2.362"	0.906"	1.378"-1.772"	1.083"	1.083"	VCG6-8A
CAT40-VC6-90U	CT40	VCK6	3.543"	2.047"	1.378"-1.772"	1.083"	1.244"	VCG6-8A
CAT40-VC6-120U	CT40	VCK6	4.724"	3.228"	1.378"-1.772"	1.083"	1.409"	VCG6-8A
CAT40-VC13-60U	CT40	VCK13	2.362"	1.142"	1.969"-2.362"	1.575"	1.575"	VCG13-15A
CAT40-VC13-90U	CT40	VCK13	3.543"	2.756"	1.969"-2.362"	1.575"	1.083"	VCG13-15A
CAT40-VC13-120U	CT40	VCK13	4.724"	3.937"	1.969"-2.362"	1.575"	1.083"	VCG13-15A
CAT50-VC6-105U	CT50	VCK6	4.134"	2.559"	1.378"-1.772"	1.083"	1.315"	VCG6-8A
CAT50-VC6-135U	CT50	VCK6	5.315"	3.740"	1.378"-1.772"	1.083"	1.480"	VCG6-8A
CAT50-VC6-165U	CT50	VCK6	6.496"	4.921"	1.378"-1.772"	1.083"	1.646"	VCG6-8A
CAT50-VC13-105U	CT50	VCK13	4.134"	2.559"	1.969"-2.362"	1.575"	1.772"	VCG13-15A
CAT50-VC13-135U	CT50	VCK13	5.315"	3.740"	1.969"-2.362"	1.575"	1.937"	VCG13-15A
CAT50-VC13-165U	CT50	VCK13	6.496"	4.921"	1.969"-2.362"	1.575"	2.102"	VCG13-15A

Note: For VCK Collets see page 50.

Wrench not included. Please order GH10 for VC6 and GH16 wrench for VC13, refer to page 70.

BT TAPER VC HOLDERS

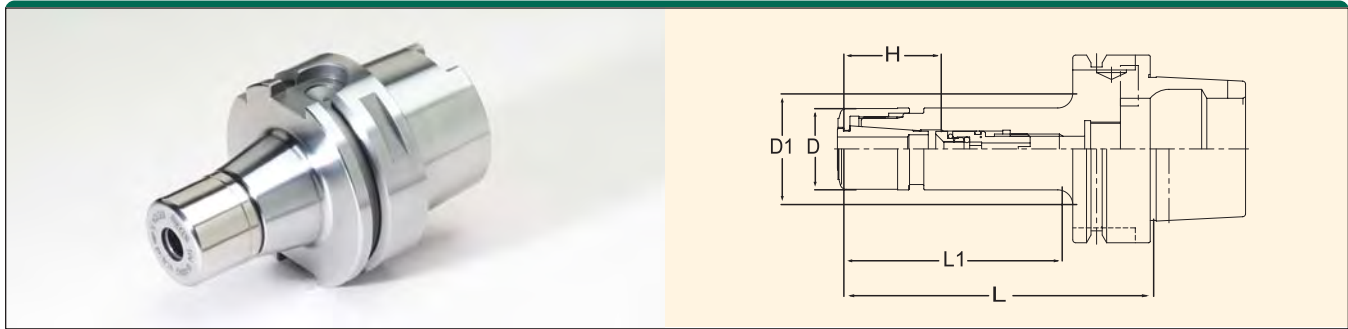


Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
BT30-VC6-45	BT30	VCK6	1.772"	0.906"	1.38"-1.77"	1.083"	1.083"	VCG6-8A
BT30-VC6-60	BT30	VCK6	2.362"	1.378"	1.38"-1.77"	1.083"	1.248"	VCG6-8A
BT30-VC6-90	BT30	VCK6	3.543"	2.559"	1.38"-1.77"	1.083"	1.315"	VCG6-8A
BT30-VC13-60	BT30	VCK13	2.362"	1.457"	1.97"-2.36"	1.575"	1.618"	VCG13-15A
BT30-VC13-90	BT30	VCK13	3.543"	2.638"	1.97"-2.36"	1.575"	1.626"	VCG13-15A
BT30-VC13-120	BT30	VCK13	4.724"	3.819"	1.97"-2.36"	1.575"	1.669"	VCG13-15A
BT40-VC6-60	BT40	VCK6	2.362"	1.181"	1.38"-1.77"	1.083"	1.181"	VCG6-8A
BT40-VC6-90	BT40	VCK6	3.543"	2.362"	1.38"-1.77"	1.083"	1.287"	VCG6-8A
BT40-VC6-120	BT40	VCK6	4.724"	3.543"	1.38"-1.77"	1.083"	1.452"	VCG6-8A
BT40-VC13-60	BT40	VCK13	2.362"	1.220"	1.97"-2.36"	1.575"	1.586"	VCG13-15A
BT40-VC13-90	BT40	VCK13	3.543"	2.362"	1.97"-2.36"	1.575"	1.744"	VCG13-15A
BT40-VC13-120	BT40	VCK13	4.724"	3.543"	1.97"-2.36"	1.575"	1.909"	VCG13-15A
BT50-VC6-105	BT50	VCK6	4.134"	2.441"	1.38"-1.77"	1.083"	1.299"	VCG6-8A
BT50-VC6-135	BT50	VCK6	5.315"	3.622"	1.38"-1.77"	1.083"	1.461"	VCG6-8A
BT50-VC6-165	BT50	VCK6	6.496"	4.803"	1.38"-1.77"	1.083"	1.626"	VCG6-8A
BT50-VC13-105	BT50	VCK13	4.134"	2.441"	1.97"-2.36"	1.575"	1.756"	VCG13-15A
BT50-VC13-135	BT50	VCK13	5.315"	3.622"	1.97"-2.36"	1.575"	1.921"	VCG13-15A
BT50-VC13-165	BT50	VCK13	6.496"	4.803"	1.97"-2.36"	1.575"	1.890"	VCG13-15A

Note: For VCK Collets see page 50.

Wrench not included. Please order GH10 for VC6 and GH16 wrench for VC13, refer to page 70.

HSK40A/HSK63A/HSK100A TAPER VC HOLDERS



Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
HSK40A-VC6-65	HSK40A	VCK6	2.559"	1.693"	-	1.083"	1.362"	-
HSK40A-VC6-90	HSK40A	VCK6	3.543"	2.677"	1.38"-1.77"	1.083"	1.330"	VCG6-8A
HSK40A-VC13-90	HSK40A	VCK13	3.543"	2.756"	-	1.575"	1.575"	-
HSK40A-VC13-120	HSK40A	VCK13	4.724"	3.937"	1.97"-2.36"	1.575"	1.575"	VCG13-15A
HSK63A-VC6-70	HSK63A	VCK6	2.760	1.614"	1.38"-1.77"	1.083"	1.330"	-
HSK63A-VC6-90	HSK63A	VCK6	2.540	2.402"	-	1.083"	1.291"	VCG6-8A
HSK63A-VC6-120	HSK63A	VCK6	4.724	3.583"	1.38"-1.77"	1.083"	1.457"	VCG6-8A
HSK63A-VC13-90	HSK63A	VCK13	3.543"	2.520"	-	1.575"	1.752"	VCG13-15A
HSK63A-VC13-120	HSK63A	VCK13	4.724"	3.622"	1.97"-2.36"	1.575"	1.921"	VCG13-15A
HSK100A-VC6-105	HSK100A	VCK6	4.134"	2.795"	1.38"-1.77"	1.083"	1.346"	VCG6-8A
HSK100A-VC6-135	HSK100A	VCK6	5.315"	3.976"	1.38"-1.77"	1.083"	1.512"	VCG6-8A
HSK100A-VC6-165	HSK100A	VCK6	6.496"	5.157"	1.38"-1.77"	1.083"	1.677"	VCG6-8A
HSK100A-VC13-105	HSK100A	VCK13	4.134"	2.795"	-	1.575"	1.807"	-
HSK100A-VC13-135	HSK100A	VCK13	5.315"	3.976"	1.97"-2.36"	1.575"	1.972"	VCG13-15A
HSK100A-VC13-165	HSK100A	VCK13	6.496"	5.157"	1.97"-2.36"	1.575"	2.138"	VCG13-15A

HSK40E TAPER VC HOLDERS

Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
HSK40E-VC6-65	HSK40E	VCK6	2.559"	1.693"	-	1.083"	1.362"	VCG6-8A
HSK40E-VC6-90	HSK40E	VCK6	3.543"	2.677"	1.38"-1.77"	1.083"	1.330"	VCG6-8A
HSK40E-VC13-90	HSK40E	VCK13	3.543"	2.756"	1.97"-2.36"	1.575"	1.575"	VCG13-15A
HSK40E-VC13-120	HSK40E	VCK13	4.724"	3.937"	1.97"-2.36"	1.575"	1.575"	VCG13-15A

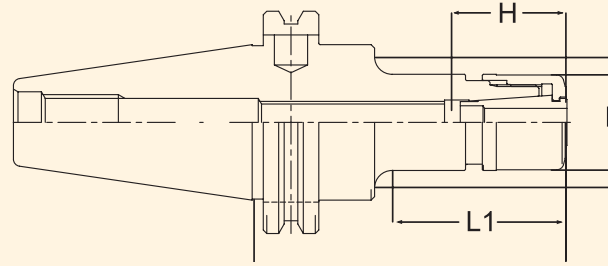
HSK63F TAPER VC HOLDERS

Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
HSK63F-VC6-65	HSK63F	VCK6	2.559"	1.457"	1.38"-1.77"	1.083"	1.083"	VCG6-8A
HSK63F-VC6-90	HSK63F	VCK6	3.543"	2.402"	1.38"-1.77"	1.083"	1.205"	VCG6-8A
HSK63F-VC6-120	HSK63F	VCK6	4.724"	3.583"	1.38"-1.77"	1.083"	1.370"	VCG6-8A
HSK63F-VC13-90	HSK63F	VCK13	3.543"	2.520"	1.97"-2.36"	1.575"	1.670"	VCG13-15A
HSK63F-VC13-120	HSK63F	VCK13	4.724"	3.622"	1.97"-2.36"	1.575"	1.835"	VCG13-15A

Note: For VCK Collets see page 50.

Wrench not included. Please order GH10 for VC6 and GH16 wrench for VC13, refer to page 70.

3LOCK CAT TAPER VC HOLDERS

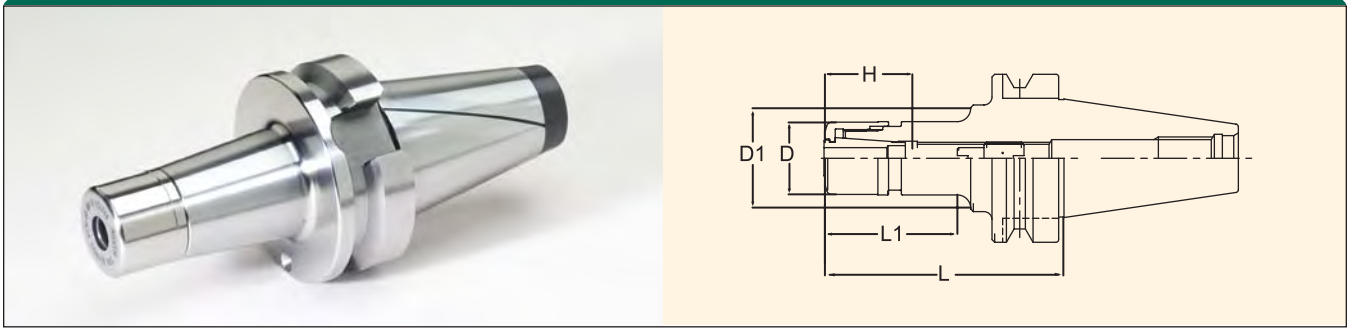


Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
MCAT40-VC6-60U	MCAT40	VCK6	2.362"	0.906"	1.378"-1.772"	1.083"	1.083"	VCG6-8A
MCAT40-VC6-90U	MCAT40	VCK6	3.543"	2.047"	1.378"-1.772"	1.083"	1.244"	VCG6-8A
MCAT40-VC6-120U	MCAT40	VCK6	4.724"	3.228"	1.378"-1.772"	1.083"	1.409"	VCG6-8A
MCAT40-VC13-60U	MCAT40	VCK13	2.362"	1.142"	1.969"-2.362"	1.575"	1.575"	VCG13-15A
MCAT40-VC13-90U	MCAT40	VCK13	3.543"	2.756"	1.969"-2.362"	1.575"	1.083"	VCG13-15A
MCAT40-VC13-120U	MCAT40	VCK13	4.724"	3.937"	1.969"-2.362"	1.575"	1.083"	VCG13-15A
MCAT50-VC6-105U	MCAT50	VCK6	4.134"	2.559"	1.378"-1.772"	1.083"	1.315"	VCG6-8A
MCAT50-VC6-135U	MCAT50	VCK6	5.315"	3.740"	1.378"-1.772"	1.083"	1.480"	VCG6-8A
MCAT50-VC6-165U	MCAT50	VCK6	6.496"	4.921"	1.378"-1.772"	1.083"	1.646"	VCG6-8A
MCAT50-VC13-105U	MCAT50	VCK13	4.134"	2.559"	1.969"-2.362"	1.575"	1.772"	VCG13-15A
MCAT50-VC13-135U	MCAT50	VCK13	5.315"	3.740"	1.969"-2.362"	1.575"	1.937"	VCG13-15A
MCAT50-VC13-165U	MCAT50	VCK13	6.496"	4.921"	1.969"-2.362"	1.575"	2.102"	VCG13-15A

Note: For VCK Collets see page 50.

Wrench not included. Please order GH10 for VC6 and GH16 wrench for VC13, refer to page 70.

3LOCK BT TAPER VC HOLDERS



Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
MBT40-VC6-60	MBT40	VCK6	2.362"	1.220"	1.38"-1.77"	1.083"	1.181"	VCG6-8A
MBT40-VC6-90	MBT40	VCK6	3.543"	2.362"	1.38"-1.77"	1.083"	1.287"	VCG6-8A
MBT40-VC6-120	MBT40	VCK6	4.724"	3.543"	1.38"-1.77"	1.083"	1.452"	VCG6-8A
MBT40-VC13-60	MBT40	VCK13	2.362"	1.220"	1.97"-1.77"	1.575"	1.586"	VCG13-15A
MBT40-VC13-90	MBT40	VCK13	3.543"	2.362"	1.97"-1.77"	1.575"	1.744"	VCG13-15A
MBT40-VC13-120	MBT40	VCK13	4.724"	3.543"	1.97"-1.77"	1.575"	1.909"	VCG13-15A

Note: For VCK Collets see page 50.

Wrench not included. Please order GH10 for VC6 and GH16 wrench for VC13, refer to page 70.

VCK06 COLLETS (inch)

Part Number	Size
VCK6-1/8	1/8"
VCK6-3/16	3/16"
VCK6-1/4	1/4"

VCK06 COLLETS (metric)

Part Number	Size
VCK6-2	2.0mm
VCK6-3	3.0mm
VCK6-4	4.0mm
VCK6-5	5.0mm
VCK6-6	6.0mm

VCK13 COLLETS (inch)

Part Number	Size
VCK13-1/8	1/8"
VCK13-3/16	3/16"
VCK13-1/4	1/4"
VCK13-5/16	5/16"
VCK13-3/8	3/8"
VCK13-7/16	7/16"
VCK13-1/2	1/2"



VCK13 COLLETS (metric)

Part Number	Size
VCK13-3	3.0mm
VCK13-4	4.0mm
VCK13-5	5.0mm
VCK13-6	6.0mm
VCK13-7	7.0mm
VCK13-8	8.0mm
VCK13-9	9.0mm
VCK13-10	10.0mm
VCK13-11	11.0mm
VCK13-12	12.0mm

NIKKEN BULLS-EYE™ HOLDERS



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3BLOCK HOLDERS

On Target for Zero Runout.

The Bull's-Eye™ Chuck can be easily adjusted to reduce the run-out of the cutting tool to zero at the tip in less than a minute. The adjustability of Lyndex-Nikken's Bull's Eye™ Chuck produces longer tool life, improved part accuracy, and better surface finish.



When the machine has been used for 2-3 years, the run-out accuracy of the spindle will decline with accuracy of 0.01mm - 0.04mm at 100mm from the gauge line, the Bullseye allows correction of this error back to the run-out of 0.001-0.002mm.

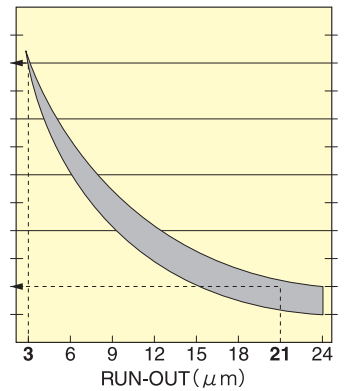
Bull's-Eye™ Chuck Sizes

The Bull's-Eye™ Chuck utilizes Lyndex-Nikken's high accuracy SK™ collets (see pages 31-33).

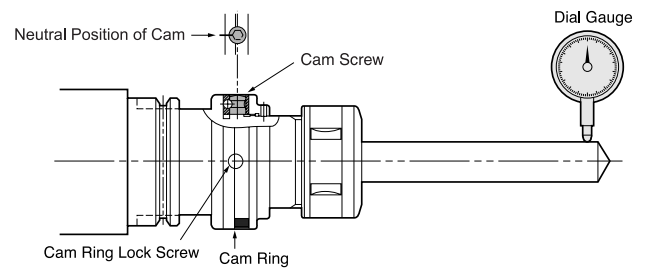
- SK06: 0.7-6mm (0.027-0.236") capacity
- SK10: 1.75-10mm (0.069-0.393") capacity
- SK16: 2.75-16mm (0.108-0.629") capacity
- SK25: 16.0-25.4mm (0.629-1.000") capacity

Extended Tool Life

This shows the relation between run-out accuracy and tool life. When the run-out accuracy of 21 microns is reduced to 3 microns, the tool life can be improved by approximately 5 times.



Adjustment Instructions



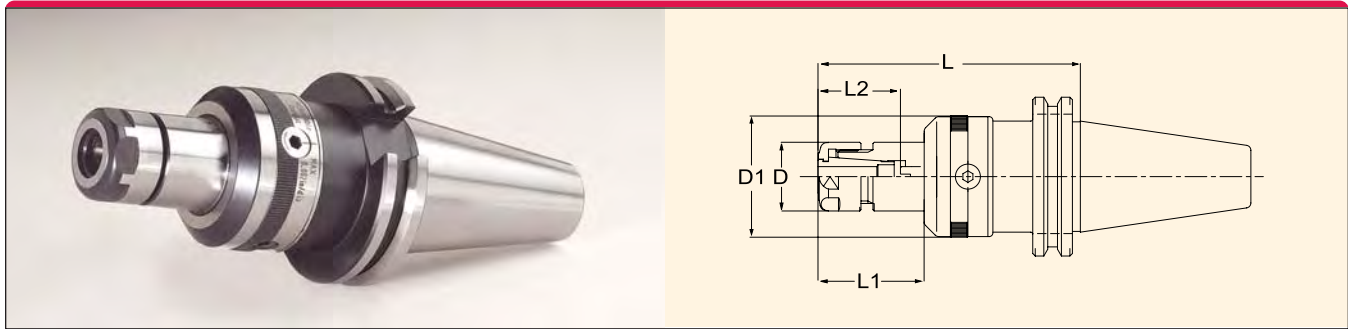
1. Loosen the two Cam Ring Lock Screws and rotate the Cam Screw to the free position. Set the Dial Gauge to the front end of the cutting tool.
2. Rotate the tool to establish the position of maximum run-out. Turn the Cam Ring and locate the Cam Screw at the maximum run-out position.
3. Using the supplied hex wrench, turn the Cam Screw until the run-out decreases to the medium value between maximum and minimum.
4. To confirm: rotate the toolholder to check the run-out. If the run-out is not satisfactory, return the Cam Screw to the free position and repeat from step 2. Finally, tighten the two Ring Lock Screws.

Max. adjustable run-out at 100mm from Cam center

SK06	0.050mm
SK10	0.050mm
SK16	0.040mm
SK25	0.025mm

Note: Make sure the adjustment is done within the above range. If this range is exceeded, loosening of the Cam may become difficult.

CAT TAPER BULLS-EYE™ HOLDERS



Part Number	Taper	Collet Series	L	L1	L2	D	D1
CAT40-SZF06-90	CT40	SK06	3.543"	1.772"	0.827 - 1.378"	0.768"	1.594"
CAT40-SZF06-150	CT40	SK06	5.906"	3.504"	0.827 - 1.378"	0.768"	1.594"
CAT40-SZF10-90	CT40	SK10	3.543"	1.063"	1.181 - 1.969"	1.083"	1.909"
CAT40-SZF10-120	CT40	SK10	4.724"	2.244"	1.181 - 1.969"	1.083"	1.909"
CAT40-SZF10-150	CT40	SK10	5.906"	3.425"	1.181 - 1.969"	1.083"	1.909"
CAT40-SZF16-90	CT40	SK16	3.543"	0.827"	1.772 - 2.559"	1.575"	2.343"
CAT40-SZF16-120	CT40	SK16	4.724"	2.008"	1.772 - 2.559"	1.575"	2.343"
CAT40-SZF16-150	CT40	SK16	5.906"	3.189"	1.772 - 2.559"	1.575"	2.343"
CAT40-SZF25-120	CT40	SK25	4.724"	1.929"	2.165 - 3.346"	2.165"	2.618"
CAT40-SZF25-150	CT40	SK25	5.906"	3.110"	2.165 - 3.346"	2.165"	2.618"
CAT50-SZF06-105	CT50	SK06	4.134"	2.362"	0.827 - 1.378"	0.768"	1.594"
CAT50-SZF06-165	CT50	SK06	6.496"	2.638"	0.827 - 1.378"	0.768"	1.594"
CAT50-SZF10-105	CT50	SK10	4.134"	2.362"	1.181 - 1.969"	1.083"	1.909"
CAT50-SZF10-165	CT50	SK10	6.496"	2.559"	1.181 - 1.969"	1.083"	1.909"
CAT50-SZF16-105	CT50	SK16	4.134"	2.362"	1.772 - 2.756"	1.575"	2.343"
CAT50-SZF16-165	CT50	SK16	6.496"	4.724"	1.772 - 2.756"	1.575"	2.343"
CAT50-SZF25-120	CT50	SK25	4.724"	2.953"	2.165 - 3.346"	2.165"	2.618"
CAT50-SZF25-165	CT50	SK25	6.496"	4.724"	2.165 - 3.346"	2.165"	2.618"

Note: SK /LSK collets are located on page 31-33.
Spanner Wrench not included. Please refer to page 35.

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

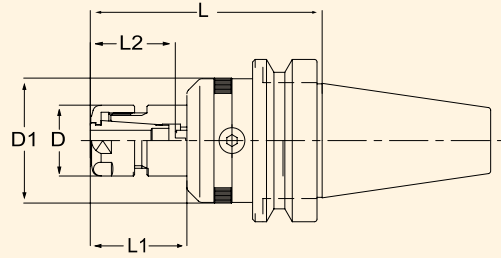
VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

NIKKEN BULLS-EYE™ HOLDERS

BT TAPER BULLS-EYE™ HOLDERS



Part Number	Taper	Collet Series	L	L1	L2	D	D1
BT30-SZF06-90	BT30	SK06	3.543"	1.654"	0.827 - 1.378"	0.768"	1.594"
BT30-SZF10-90	BT30	SK10	3.543"	1.378"	1.181 - 1.969"	1.083"	1.909"
BT30-SZF16-105	BT30	SK16	4.134"	1.575"	1.772 - 2.559"	1.575"	2.343"
BT40-SZF06-90	BT40	SK06	3.543"	1.457"	0.827 - 1.378"	0.768"	1.594"
BT40-SZF06-150	BT40	SK06	5.906"	2.362"	0.827 - 1.378"	0.768"	1.909"
BT40-SZF10-90	BT40	SK10	3.543"	1.457"	1.181 - 1.969"	1.083"	1.909"
BT40-SZF10-120	BT40	SK10	4.724"	3.818"	1.181 - 1.969"	1.083"	1.909"
BT40-SZF10-150	BT40	SK10	5.906"	3.818"	1.181 - 1.969"	1.083"	1.909"
BT40-SZF16-90	BT40	SK16	3.543"	1.457"	1.575 - 2.756"	1.575"	2.343"
BT40-SZF16-120	BT40	SK16	4.724"	3.818"	1.575 - 2.756"	1.575"	2.343"
BT40-SZF16-150	BT40	SK16	5.906"	3.818"	1.575 - 2.756"	1.575"	2.343"
BT40-SZF25-120	BT40	SK25	4.724"	2.165"	2.165 - 3.346"	2.165"	2.618"
BT40-SZF25-150	BT40	SK25	5.906"	3.386"	2.165 - 3.346"	2.165"	2.618"
BT50-SZF06-105	BT50	SK06	4.134"	1.614"	0.827 - 1.378"	0.768"	1.594"
BT50-SZF06-165	BT50	SK06	6.496"	2.480"	0.827 - 1.378"	0.768"	1.594"
BT50-SZF10-105	BT50	SK10	4.134"	1.614"	1.181 - 1.969"	1.083"	1.909"
BT50-SZF10-165	BT50	SK10	6.496"	3.976"	1.181 - 1.969"	1.083"	1.909"
BT50-SZF16-105	BT50	SK16	4.134"	1.614"	1.772 - 2.756"	1.575"	2.343"
BT50-SZF16-165	BT50	SK16	6.496"	3.976"	1.772 - 2.756"	1.575"	2.343"
BT50-SZF25-135	BT50	SK25	5.315"	2.795"	2.165 - 3.346"	2.165"	2.618"
BT50-SZF25-165	BT50	SK25	6.496"	3.976"	2.165 - 3.346"	2.165"	2.618"

Note: SK /LSK collets are located on page 31-33.
Spanner Wrench not included. Please refer to page 35.

MILLING CHUCKS

SK / LSK HOLDERS

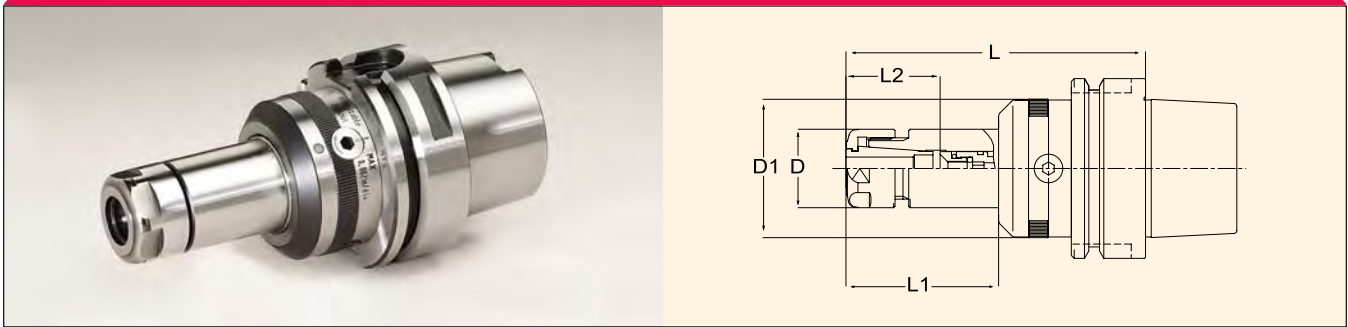
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

HSK TAPER BULLS-EYE™ HOLDERS



Part Number	Taper	Collet Series	L	L1	L2	D	D1
HSK63A-SZF06-120	HSK63A	SK06	4.724"	2.677"	1.024 - 1.220"	0.768"	1.594"
HSK63A-SZF10-105	HSK63A	SK10	4.134"	2.087"	1.378 - 1.614"	1.083"	1.909"
HSK63A-SZF10-150	HSK63A	SK10	5.906"	3.858"	1.378 - 1.614"	1.083"	1.909"
HSK63A-SZF16-150	HSK63A	SK16	5.906"	2.992"	1.772 - 2.244"	1.575"	2.343"
HSK63A-SZF25-135	HSK63A	SK25	5.315"	2.244"	2.362 - 2.559"	2.165"	2.618"
HSK100A-SZF06-120	HSK100A	SK06	4.724"	2.519"	1.024 - 1.220"	0.768"	1.594"
HSK100A-SZF10-150	HSK100A	SK10	5.906"	3.740"	1.378 - 1.614"	1.083"	1.909"
HSK100A-SZF16-150	HSK100A	SK16	5.906"	3.740"	1.772 - 2.244"	1.575"	2.343"
HSK100A-SZF25-150	HSK100A	SK25	5.906"	3.740"	2.362 - 2.559"	2.165"	2.618"

Note: SK /LSK collets are located on page 31-33.
Spanner Wrench not included. Please refer to page 35.

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

REMEDY FOR INEFFICIENCY

Relieve Machining Headaches with Lyndex-Nikken EfficiencyTools™

Our complete line of EfficiencyTools™ is designed to easily and effectively upgrade your machine tool's capability. Our productivity-increasing solutions include HiSpinners, AngleHeads, FlexHeads and FluidHeads.

Please ask your sales representative about Lyndex-Nikken's line of Efficiency Tools™.

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS



NIKKEN 3LOCK HOLDERS



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

3Lock Tooling System - Original Double Contact Technology

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

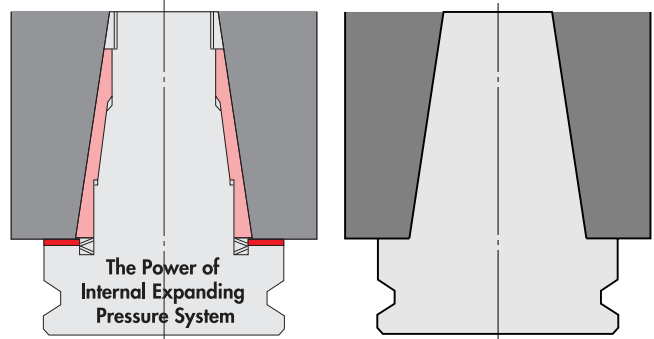


Nikken's Revolutionary 3Lock System

The 3Lock System uses internal expanding pressure to maintain the correct taper to flange ratio achieving full face contact of the flange to the spindle, for unsurpassed cutting performance and cutting tool life. The 3Lock holder counteracts the centrifugal forces produced on the machine spindle during high speed processes. Thus eliminating vibration, while promoting smooth cutting and a longer cutting tool life.

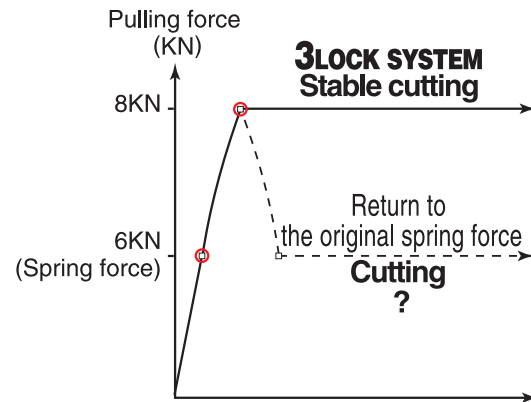
Internal Expanding Locking System

3Lock System captures the maximum pulling force generated at the split second of tool clamping.



3Lock Double Contact
 Ideal Contact Balance
 Taper contact 90%
 Flange contact 10%

Solid Double Contact
 Unstable Contact Balance
 Taper contact 10-50%
 Flange contact 90-50%



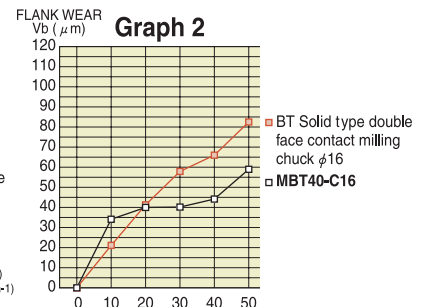
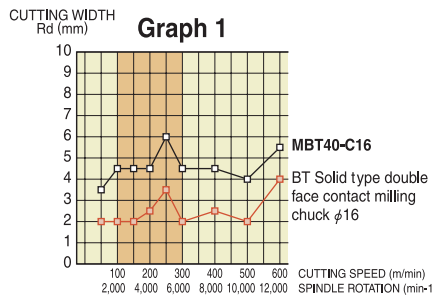
Dampening Effect

Extend the tool live by 3-5 times. Excellent machining results can be achieved on aluminum, steel, and alloy steel without vibration

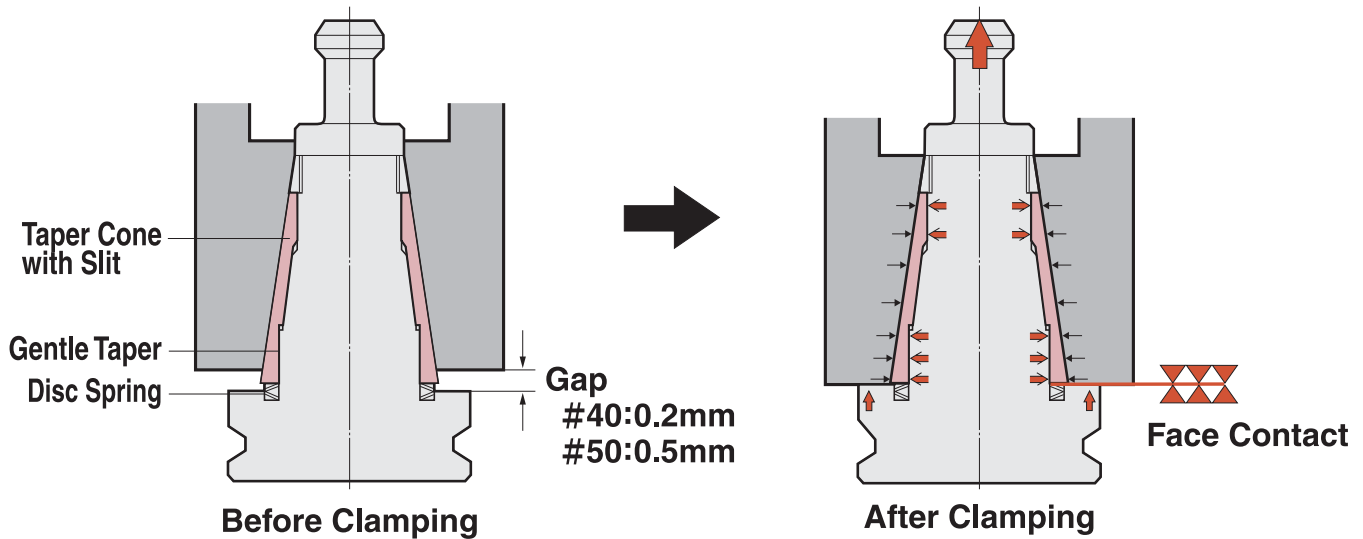
Cutting Comparison

Comparison of cutting capability between the Nikken 3Lock System and BT solid type double face contact tooling.

M/C: BT40 Face contact spindle
 Materials: Carbon Steel
 End mill: Carbide coated 16mm dia. 4 flutes, dry cutting



3Lock Technical Information



1. When 3Lock tool is inserted into a 3Lock spindle (before clamping), the gap between the spindle flange and the tool flange is ; #40 : 0.2mm, #50 : 0.5mm

2. When the tool is clamped, the taper cone pre-loaded by the disc springs deforms radially and slides axial to allow the face contact between the spindle face and the tool flange.

3Lock Construction

3Lock system consists of a main body with an internal taper configuration housed inside a taper cone. The taper cone is shaped to deform to a 7/24 external taper. This taper cone is pre-loaded on the body with the disc springs. The combination of the taper cone and the disc springs create a dampening effect reducing cutting vibration, thus extending cutting tool life.

When the tool is clamped, the taper cone slightly slides in an axial direction to absorb any minute gauge line errors.

During a tool change, the internal taper of the 3Lock body expands. The internal taper of the holder continues to expand until the flange of the tool holder makes contact with the spindle face. The combination of the taper expansion and the contact between the flange of the holder and the spindle face, results in the full pull force of the machine tool being maximized.

High-Speed and Extended Length

The 3Lock is especially ideal for high-speed and extended length applications. It is available in a range of types and may be compatible with your existing machines



MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

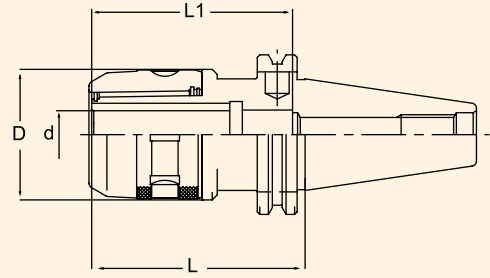
VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

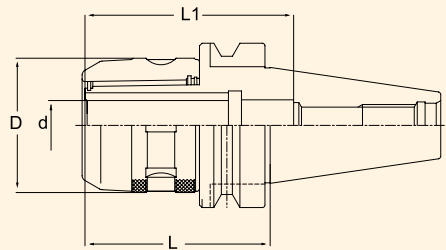
NIKKEN 3LOCK HOLDERS

3LOCK CAT TAPER ULTRA-LOCK™ MILLING CHUCKS



Part Number	Collet Series	Clamping Range	d	L	L1	D
MCAT40-C3/4-85U	KM3/4, CCK3/4	0.125 - 0.750"	0.750"	3.346"	3.149"	2.047"
MCAT40-C3/4-120U	KM3/4, CCK3/4	0.125 - 0.750"	0.750"	4.724"	3.149"	2.047"
MCAT40-C1-85U	KM1, CCK1	0.125 - 1.000"	1.00"	3.346"	2.952"	2.362"
MCAT40-C1-120U	KM1, CCK1	0.125 - 1.000"	1.00"	4.724"	3.149"	2.362"
MCAT40-C1.1/4-105U	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	4.134"	3.740"	2.519"
MCAT40-C1.1/4-120U	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	4.724"	4.212"	2.519"
MCAT50-C3/4-105U	KM3/4, CCK3/4	0.125 - 0.750"	0.750"	4.134"	3.149"	2.047"
MCAT50-C3/4-135U	KM3/4, CCK3/4	0.125 - 0.750"	0.750"	5.315"	3.149"	2.047"
MCAT50-C3/4-165U	KM3/4, CCK3/4	0.125 - 0.750"	0.750"	6.496"	3.149"	2.047"
MCAT50-C1-105U	KM1, CCK1	0.125 - 1.000"	1.00"	4.134"	3.149"	2.362"
MCAT50-C1-135U	KM1, CCK1	0.125 - 1.000"	1.00"	5.315"	3.149"	2.362"
MCAT50-C1-165U	KM1, CCK1	0.125 - 1.000"	1.00"	6.496"	3.149"	2.362"
MCAT50-C1.1/4-90U	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	3.543"	4.212"	2.717"
MCAT50-C1.1/4-105U	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	4.134"	4.212"	2.717"
MCAT50-C1.1/4-135U	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	5.315"	4.212"	2.717"
MCAT50-C1.1/4-165U	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	6.496"	4.212"	2.717"

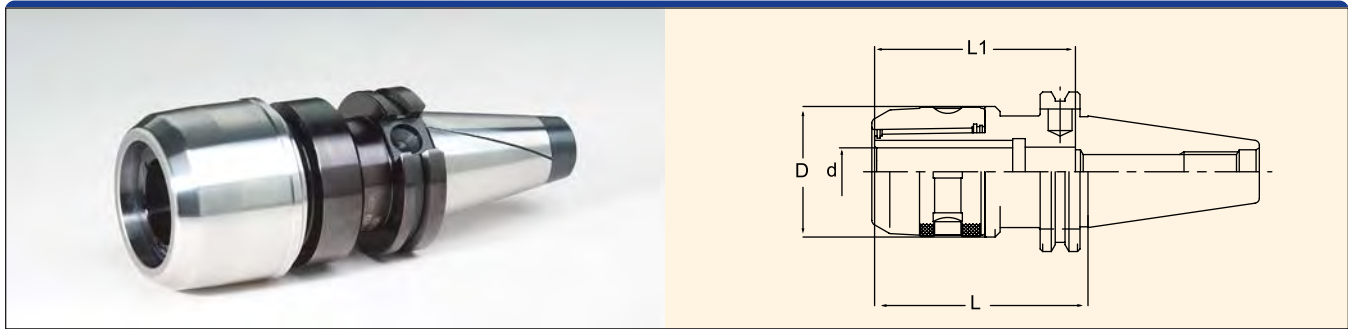
3LOCK BT TAPER ULTRA-LOCK™ MILLING CHUCKS



Part Number	Collet Series	Clamping Range	d	L	L1	D
MBT40-C3/4-70	KM3/4, CCK3/4	0.125 - 0.750"	0.750"	2.756"	3.149"	2.047"
MBT40-C3/4-120	KM3/4, CCK3/4	0.125 - 0.750"	0.750"	4.724"	3.149"	2.047"
MBT40-C1-70	KM1, CCK1	0.125 - 1.000"	1.00"	2.756"	3.149"	2.362"
MBT40-C1-120	KM1, CCK1	0.125 - 1.000"	1.00"	4.724"	3.149"	2.362"
MBT40-C1.1/4-85	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	3.346"	-	2.717"
MBT40-C1.1/4-120	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	4.724"	3.740"	2.717"

Note: Milling Chuck collets are located on page 17-20.
Spanner wrench not included, refer to page 16.

3LOCK HIGH SPEED CAT TAPER ULTRA-LOCK™ MILLING CHUCKS



Part Number	Collet Series	Clamping Range	d	L	L1	D
MCAT40-C3/4-85UG	CCK3/4, KM3/4	0.125 - 0.750"	0.750"	3.346"	3.149"	1.890"
MCAT40-C3/4-120UG	CCK3/4, KM3/4	0.125 - 0.750"	0.750"	4.724"	3.149"	1.890"
MCAT40-C1.1/4-85UG	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	3.346"	3.228"	2.677"
MCAT40-C1.1/4-105UG	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	4.134"	3.228"	2.677"
MCAT40-C1.1/4-120UG	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	4.724"	3.740"	2.677"
MCAT50-C3/4-105UG	CCK3/4, KM3/4	0.125 - 0.750"	0.750"	4.134"	3.149"	1.890"
MCAT50-C3/4-135UG	CCK3/4, KM3/4	0.125 - 0.750"	0.750"	5.315"	3.149"	1.890"
MCAT50-C3/4-165UG	CCK3/4, KM3/4	0.125 - 0.750"	0.750"	6.496"	3.149"	1.890"
MCAT50-C1.1/4-90UG	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	3.543"	4.212"	2.677"
MCAT50-C1.1/4-135UG	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	5.315"	4.212"	2.677"
MCAT50-C1.1/4-165UG	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	6.496"	4.212"	2.677"

3LOCK HIGH SPEED BT TAPER ULTRA-LOCK™ MILLING CHUCKS



Part Number	Collet Series	Clamping Range	d	L	L1	D
MBT40-C3/4-70G	CCK3/4, KM3/4	0.125 - 0.750"	0.750"	2.756"	3.149"	1.890"
MBT40-C3/4-120G	CCK3/4, KM3/4	0.125 - 0.750"	0.750"	4.724"	3.149"	1.890"
MBT40-C1.1/4-85G	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	3.346"	-	2.677"
MBT40-C1.1/4-120G	KM1.1/4, CCK1.1/4	0.187 - 1.250"	1.250"	4.724"	-	2.677"

Note: Milling Chuck collets are located on page 17-20.
Spanner wrench not included, refer to page 70.

MILLING CHUCKS

SK / LSK HOLDERS

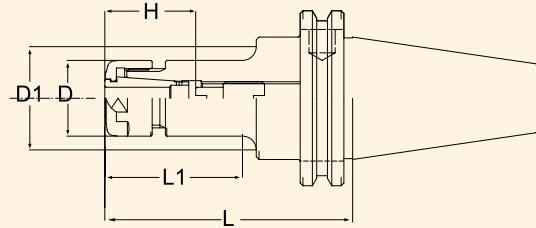
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

3 LOCK CAT TAPER SK/LSK COLLET CHUCKS



Part Number	Collet Series	L	L1	H	D	D1	Back Up Screw
MCAT40-SK6C-90U	SK6	3.543"	1.889"	1.023" - 1.220"	0.708"	1.259"	SKG6-6HG
MCAT40-SK6C-120U	SK6	4.724"	2.362"	1.023" - 1.220"	0.708"	1.319"	SKG6-6HG
MCAT40-SK6C-150U	SK6	5.905"	2.362"	1.023" - 1.220"	0.708"	0.984"	SKG6-6HG
MCAT40-SK10C-90U	SK10	3.543"	1.968"	1.377" - 1.614"	1.083"	-	SKG10-10HG
MCAT40-SK10C-120U	SK10	4.724"	2.362"	1.377" - 1.614"	1.083"	1.259"	SKG10-10HG
MCAT40-SK10C-150U	SK10	5.905"	2.874"	1.377" - 1.614"	1.083"	1.319"	SKG10-10HG
MCAT40-SK10C-180U	SK10	7.086"	2.874"	1.377" - 1.614"	1.083"	1.535"	SKG10-10HG
MCAT40-SK16C-90U	SK16	3.543"	2.125"	1.770" - 2.244"	1.574"	-	SK16-12HG
MCAT40-SK16C-120U	SK16	4.724"	3.307"	1.770" - 2.244"	1.574"	-	SK16-12HG
MCAT40-SK16C-150U	SK16	5.905"	4.527"	1.770" - 2.244"	1.574"	-	SK16-12HG
MCAT40-SK16C-180U	SK16	7.086"	5.669"	1.770" - 2.244"	1.574"	-	SK16-12HG
MCAT40-SK25C-90U	SK25	3.543"	2.755"	2.362" - 2.559"	2.165"	-	SK25-18HGD
MCAT40-SK25C-120U	SK25	4.724"	3.937"	2.362" - 2.559"	2.165"	-	SK25-18HG
MCAT50-SK6C-105U	SK6	4.134"	2.362"	1.023" - 1.220"	0.708"	-	SKG6-6HG
MCAT50-SK6C-165U	SK6	6.496"	2.362"	1.023" - 1.220"	0.708"	1.260"	SKG6-6HG
MCAT50-SK6C-195U	SK6	7.677"	2.362"	1.023" - 1.220"	0.708"	1.118"	SKG6-6HG
MCAT50-SK10C-105U	SK10	4.134"	2.559"	1.377" - 1.614"	1.083"	-	SKG10-10HG
MCAT50-SK10C-165U	SK10	6.496"	2.952"	1.377" - 1.614"	1.083"	1.259"	SKG10-10HG
MCAT50-SK10C-195U	SK10	7.677"	2.952"	1.377" - 1.614"	1.083"	1.417"	SKG10-10HG
MCAT50-SK16C-105U	SK16	4.134"	2.559"	1.770" - 2.244"	1.574"	-	SK16-12HG
MCAT50-SK16C-165U	SK16	6.496"	3.543"	1.770" - 2.244"	1.574"	1.969"	SK16-12HG
MCAT50-SK16C-195U	SK16	7.677"	3.543"	1.770" - 2.244"	1.574"	1.969"	SK16-12HG
MCAT50-SK25C-105U	SK25	4.134"	2.559"	2.362" - 2.755"	2.165"	-	SKG25-24HG
MCAT50-SK25C-165U	SK25	6.496"	4.921"	2.362" - 2.755"	2.165"	-	SKG25-24HG
MCAT50-SK25C-195U	SK25	7.677"	6.102"	2.362" - 2.755"	2.165"	-	SKG25-24HG

Note: SK /LSK collets are located on page 31-33.
Spanner wrench not included, refer to page 35.

MILLING CHUCKS

SK / LSK HOLDERS

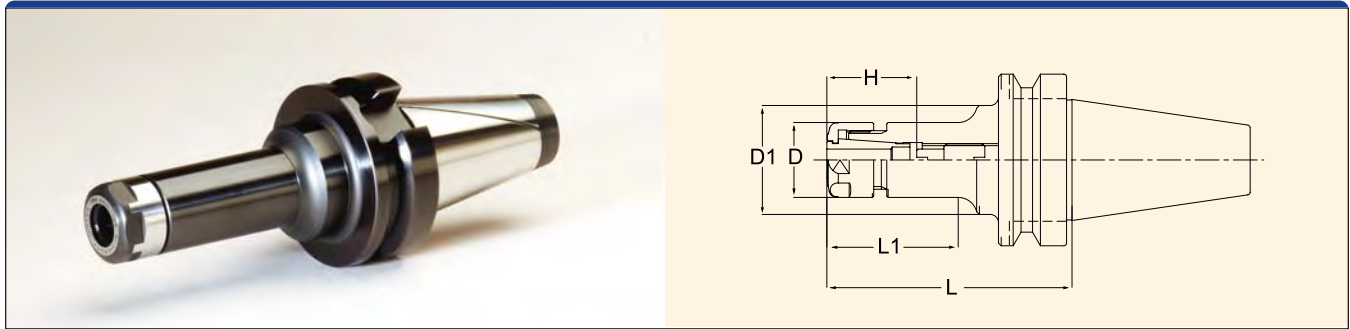
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3 LOCK HOLDERS

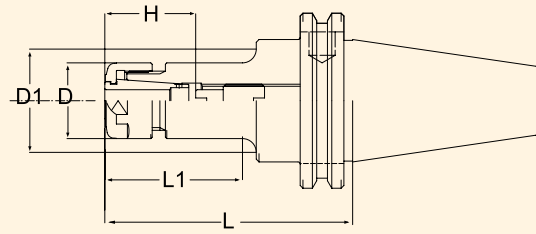
3LOCK BT TAPER SK/LSK COLLET CHUCKS



Part Number	Collet Series	L	L1	H	D	D1	Back Up Screw
MBT40-SK6C-90	SK6	3.543"	2.000"	1.023" - 1.22"	0.708"	1.259"	SKG6-6HG
MBT40-SK6C-120	SK6	4.724"	2.362"	1.023" - 1.22"	0.708"	1.259"	SKG6-6HG
MBT40-SK10C-90	SK10	3.543"	1.889"	1.377" - 1.614"	1.083"	1.575"	SKG10-10HG
MBT40-SK10C-120	SK10	4.724"	2.874"	1.377" - 1.614"	1.083"	1.575"	SKG10-10HG
MBT40-SK10C-150	SK10	5.905"	2.874"	1.377" - 1.614"	1.083"	1.358"	SKG10-10HG
MBT40-SK16C-90	SK16	3.543"	2.283"	1.770" - 2.244"	1.574"	-	SKG16-10HG
MBT40-SK16C-120	SK16	4.724"	3.465"	1.770" - 2.244"	1.574"	-	SKG16-12HG
MBT40-SK25C-90	SK25	3.543"	2.401"	2.362" - 2.559"	2.165"	-	SK25-18HGD
MBT40-SK25C-120	SK25	4.724"	3.582"	2.362" - 2.559"	2.165"	-	SK25-18HG

Note: SK /LSK collets are located on page 31-33.
Spanner wrench not included, refer to page 35.

3LOCK HIGH SPEED CAT TAPER SK/LSK COLLET CHUCKS



Part Number	Collet Series	L	L1	H	D	D1	Back Up Screw
MCAT40-GSK6C-90UP	SK6	3.543"	2.165"	1.024" - 1.220"	0.768"	0.768"	SKG6-HG
MCAT40-GSK6C-120UP	SK6	4.724"	2.441"	1.024" - 1.220"	0.768"	1.260"	SKG6-HG
MCAT40-GSK6C-150UP	SK6	5.905"	2.362"	1.024" - 1.220"	0.768"	0.984"	SKG6-HG
MCAT40-GSK10C-90UP	SK10	3.543"	2.165"	1.299" - 1.614"	1.083"	1.083"	SKG10-10HG
MCAT40-GSK10C-120UP	SK10	4.724"	2.756"	1.299" - 1.614"	1.083"	1.260"	SKG10-10HG
MCAT40-GSK10C-150UP	SK10	5.905"	2.874"	1.299" - 1.614"	1.083"	1.343"	SKG10-10HG
MCAT40-GSK10C-180UP	SK10	7.086"	2.874"	1.299" - 1.614"	1.083"	1.535"	SKG10-10HG
MCAT40-GSK16C-90UP	SK16	3.543"	2.165"	1.771" - 2.244"	1.575"	1.575"	SKG16-12HG
MCAT40-GSK16C-120UP	SK16	4.724"	3.246"	1.771" - 2.244"	1.575"	1.575"	SKG16-12HG
MCAT40-GSK16C-150UP	SK16	5.905"	4.528"	1.771" - 2.244"	1.575"	1.575"	SKG16-12HG
MCAT40-GSK16C-180UP	SK16	7.086"	5.709"	1.771" - 2.244"	1.575"	1.575"	SKG16-12HG
MCAT40-GSK25C-90UP	SK25	3.543"	2.165"	2.362" - 2.559"	2.165"	2.165"	SKG25-18HGD
MCAT40-GSK25C-120UP	SK25	4.724"	3.346"	2.362" - 2.559"	2.165"	2.165"	SKG25-18HGD
MCAT40-GSK25C-150UP	SK25	5.905"	4.528"	2.362" - 2.559"	2.165"	2.165"	SKG25-18HGD
MCAT50-GSK6C-105UP	SK6	4.134"	2.363"	1.024" - 1.220"	0.768"	0.768"	SKG6-HG
MCAT50-GSK6C-165UP	SK6	6.496"	2.362"	1.024" - 1.220"	0.768"	1.260"	SKG6-HG
MCAT50-GSK6C-195UP	SK6	7.677"	6.102"	1.024" - 1.220"	0.768"	1.260"	SKG6-HG
MCAT50-GSK10C-105UP	SK10	4.134"	2.756"	1.299" - 1.614"	1.083"	1.083"	SKG10-10HG
MCAT50-GSK10C-165UP	SK10	6.496"	2.953"	1.299" - 1.614"	1.083"	1.260"	SKG10-10HG
MCAT50-GSK10C-195UP	SK10	7.677"	2.953"	1.299" - 1.614"	1.083"	1.417"	SKG10-10HG
MCAT50-GSK16C-105UP	SK16	4.134"	2.756"	1.771" - 2.244"	1.575"	1.575"	SKG16-12HG
MCAT50-GSK16C-165UP	SK16	6.496"	3.740"	1.771" - 2.244"	1.575"	1.969"	SKG16-12HG
MCAT50-GSK16C-195UP	SK16	7.677"	3.543"	1.771" - 2.244"	1.575"	1.575"	SKG16-12HG
MCAT50-GSK25C-105UP	SK25	4.134"	2.755"	2.362" - 2.755"	2.165"	2.165"	SKG25-24HGD
MCAT50-GSK25C-165UP	SK25	6.496"	5.118"	2.362" - 2.755"	2.165"	2.165"	SKG25-24HGD
MCAT50-GSK25C-195UP	SK25	7.677"	6.299"	2.362" - 2.755"	2.165"	2.165"	SKG25-24HGD

Note: SK /LSK collets are located on page 31-33.
Spanner wrench not included, refer to page 70.

MILLING CHUCKS

SK / LSK HOLDERS

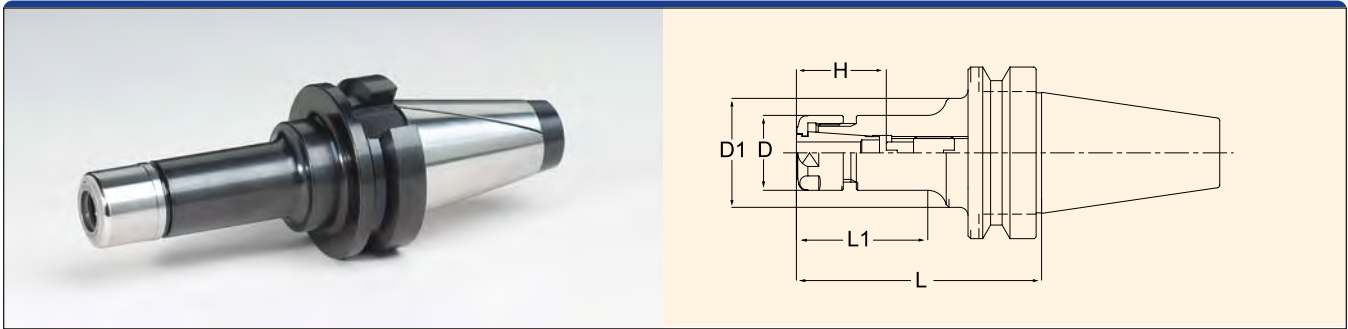
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3LOCK HOLDERS

3LOCK HIGH SPEED BT TAPER SK/LSK COLLET CHUCKS

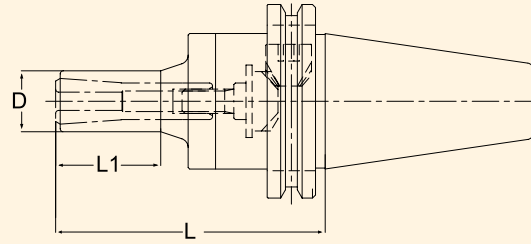


Part Number	Collet Series	L	L1	H	D	D1	Back Up Screw
MBT40-GSK6C-90P	SK6	3.543"	2.087"	1.024" - 1.220"	0.768"	1.260"	SKG6-HG
MBT40-GSK6C-120P	SK6	4.724"	2.638"	1.024" - 1.220"	0.768"	1.260"	SKG6-HG
MBT40-GSK10C-90P	SK10	3.543"	2.165"	1.299" - 1.614"	1.083"	1.575"	SKG10-10HG
MBT40-GSK10C-120P	SK10	4.724"	3.149"	1.299" - 1.614"	1.083"	1.575"	SKG10-10HG
MBT40-GSK10C-150P	SK10	5.905"	2.874"	1.299" - 1.614"	1.083"	1.358"	SKG10-10HG
MBT40-GSK16C-90P	SK16	3.543"	2.480"	1.771" - 2.244"	1.575"	1.575"	SKG16-12HG
MBT40-GSK16C-120P	SK16	4.724"	3.661"	1.771" - 2.244"	1.575"	1.575"	SKG16-12HG
MBT40-GSK25C-90P	SK25	3.543"	2.480"	2.362" - 2.559"	2.165"	2.165"	SKG25-18HGD
MBT40-GSK25C-120P	SK25	4.724"	3.661"	2.362" - 2.559"	2.165"	2.165"	SKG25-18HGD

Note: SK /LSK collets are located on page 31-33.
Spanner wrench not included, refer to page 70.

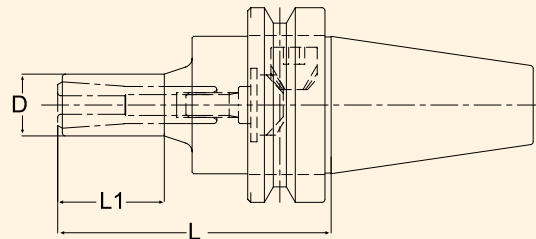
NIKKEN 3LOCK HOLDERS

3LOCK CAT TAPER INSIDER™ COLLET CHUCKS



Part Number	Collet Series	L	L1	D
MCAT40-MMC8C-90U	VMK8	3.543"	1.299"	0.787"
MCAT40-MMC8C-120U	VMK8	4.724"	1.574"	0.787"
MCAT40-MMC12C-90U	VMK12	3.543"	1.378"	1.181"
MCAT40-MMC12C-120U	VMK12	4.724"	2.362"	1.181"
MCAT50-MMC8C-105U	VMK8	4.134"	1.299"	0.787"
MCAT50-MMC8C-135U	VMK8	5.314"	1.574"	0.787"
MCAT50-MMC8C-165U	VMK8	6.299"	1.574"	0.787"
MCAT50-MMC12C-105U	VMK12	4.134"	1.378"	1.181"
MCAT50-MMC12C-135U	VMK12	5.314"	2.362"	1.181"
MCAT50-MMC12C-165U	VMK12	6.299"	2.756"	1.181"

3LOCK BT TAPER INSIDER™ COLLET CHUCKS



Part Number	Collet Series	L	L1	D
MBT40-MMC8C-90	VMK8	3.543"	1.299"	0.787"
MBT40-MMC8C-120	VMK8	4.724"	1.574"	0.787"
MBT40-MMC12C-90	VMK12	3.543"	1.378"	1.181"
MBT40-MMC12C-120	VMK12	4.724"	2.362"	1.181"

Note: For VMK Collets see page 42.

MILLING CHUCKS

SK / LSK HOLDERS

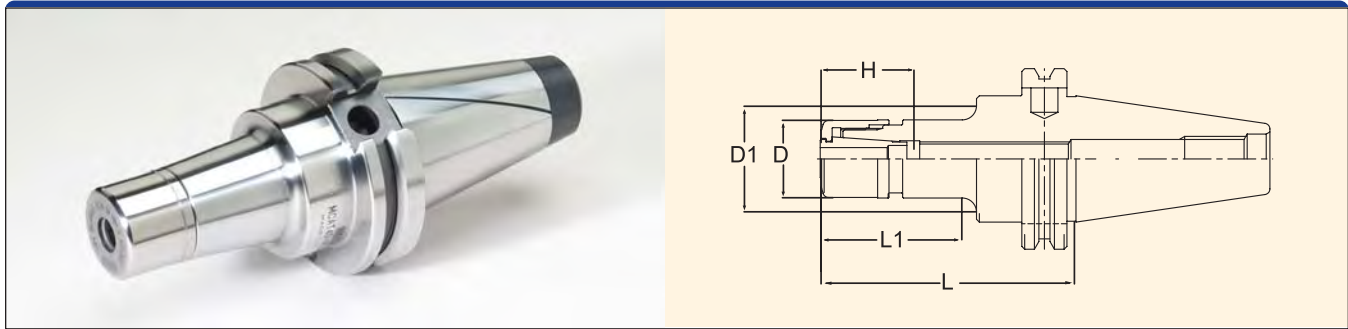
MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

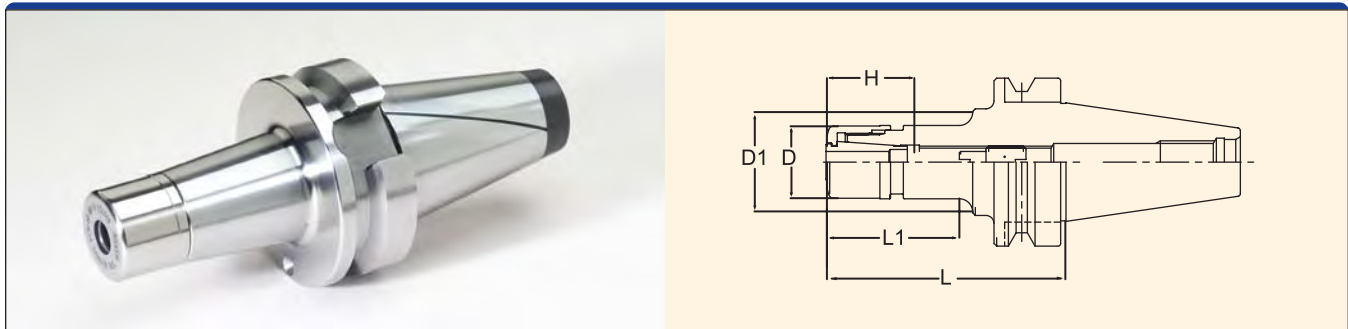
3LOCK HOLDERS

3LOCK CAT TAPER VC HOLDERS



Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
MCAT40-VC6-60U	MCAT40	VCK6	2.362"	0.906"	1.378"-1.772"	1.083"	1.083"	VCG6-8A
MCAT40-VC6-90U	MCAT40	VCK6	3.543"	2.047"	1.378"-1.772"	1.083"	1.244"	VCG6-8A
MCAT40-VC6-120U	MCAT40	VCK6	4.724"	3.228"	1.378"-1.772"	1.083"	1.409"	VCG6-8A
MCAT40-VC13-60U	MCAT40	VCK13	2.362"	1.142"	1.969"-2.362"	1.575"	1.575"	VCG13-15A
MCAT40-VC13-90U	MCAT40	VCK13	3.543"	2.756"	1.969"-2.362"	1.575"	1.083"	VCG13-15A
MCAT40-VC13-120U	MCAT40	VCK13	4.724"	3.937"	1.969"-2.362"	1.575"	1.083"	VCG13-15A
MCAT50-VC6-105U	MCAT50	VCK6	4.134"	2.559"	1.378"-1.772"	1.083"	1.315"	VCG6-8A
MCAT50-VC6-135U	MCAT50	VCK6	5.315"	3.740"	1.378"-1.772"	1.083"	1.480"	VCG6-8A
MCAT50-VC6-165U	MCAT50	VCK6	6.496"	4.921"	1.378"-1.772"	1.083"	1.646"	VCG6-8A
MCAT50-VC13-105U	MCAT50	VCK13	4.134"	2.559"	1.969"-2.362"	1.575"	1.772"	VCG13-15A
MCAT50-VC13-135U	MCAT50	VCK13	5.315"	3.740"	1.969"-2.362"	1.575"	1.937"	VCG13-15A
MCAT50-VC13-165U	MCAT50	VCK13	6.496"	4.921"	1.969"-2.362"	1.575"	2.102"	VCG13-15A

3LOCK BT TAPER VC HOLDERS

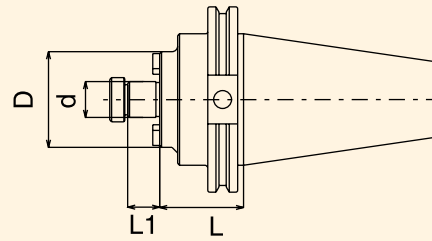


Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
MBT40-VC6-60	MBT40	VCK6	2.362"	1.220"	1.38"-1.77"	1.083"	1.181"	VCG6-8A
MBT40-VC6-90	MBT40	VCK6	3.543"	2.362"	1.38"-1.77"	1.083"	1.287"	VCG6-8A
MBT40-VC6-120	MBT40	VCK6	4.724"	3.543"	1.38"-1.77"	1.083"	1.452"	VCG6-8A
MBT40-VC13-60	MBT40	VCK13	2.362"	1.220"	1.97"-1.77"	1.575"	1.586"	VCG13-15A
MBT40-VC13-90	MBT40	VCK13	3.543"	2.362"	1.97"-1.77"	1.575"	1.744"	VCG13-15A
MBT40-VC13-120	MBT40	VCK13	4.724"	3.543"	1.97"-1.77"	1.575"	1.909"	VCG13-15A

Note: For VCK Collets see page 50.
Spanner wrench not included, refer to page 70.

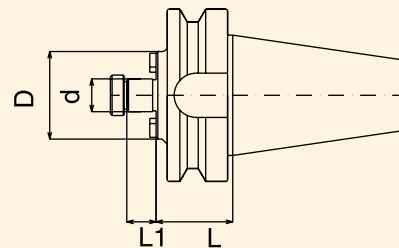
NIKKEN 3 LOCK HOLDERS

3 LOCK CAT TAPER SHELL MILL HOLDERS



Part Number	d	L	D	L1	Key Size	Drive Key	Arbor Thread
MCAT40-FMD19.05-45U	3/4"	1.771"	1.653"	0.670"	0.312"	FW1	FU3/8-24
MCAT40-FMD19.05-90U	3/4"	3.543"	1.653"	0.670"	0.312"	FW1	FU3/8-24
MCAT40-FMD25.4-45U	1"	1.771"	1.969"	0.680"	0.375"	FW5	FM12
MCAT40-FMD25.4-90U	1"	3.543"	1.969"	0.680"	0.375"	FW5	FM12
MCAT40-FMD31.75-45U	1-1/4"	1.771"	2.362"	0.680"	0.500"	FW13	FM16
MCAT40-FMD31.75-75U	1-1/4"	2.952"	2.362"	0.680"	0.500"	FW13	FM16
MCAT40-FMD38.1-45U	1-1/2"	1.771"	3.150"	0.940"	0.620"	FW18	FM20
MCAT50-FMD19.05-45U	3/4"	1.771"	1.653"	0.670"	0.312"	FW1	FU3/8-24
MCAT50-FMD19.05-90U	3/4"	3.543"	1.653"	0.670"	0.312"	FW1	FU3/8-24
MCAT50-FMD25.4-45U	1"	1.771"	1.969"	0.680"	0.375"	FW5	FM12
MCAT50-FMD25.4-90U	1"	3.543"	1.969"	0.680"	0.375"	FW5	FM12
MCAT50-FMD25.4-150U	1"	5.905"	1.969"	0.680"	0.375"	FW5	FM12
MCAT50-FMD31.75-45U	1-1/4"	1.771"	2.362"	0.680"	0.500"	FW13	FM16
MCAT50-FMD31.75-75U	1-1/4"	2.952"	2.362"	0.680"	0.500"	FW13	FM16
MCAT50-FMD31.75-105U	1-1/4"	4.133"	2.362"	0.680"	0.500"	FW13	FM16
MCAT50-FMD38.1-45U	1-1/2"	1.771"	3.150"	0.940"	0.620"	FW18	FM20
MCAT50-FMD38.1-75U	1-1/2"	2.952"	3.150"	0.940"	0.620"	FW18	FM20
MCAT50-FMD50.8-50U	2"	1.968"	3.937"	0.940"	0.750"	FW23	FM24
MCAT50-FMD50.8-75U	2"	2.952"	3.397"	0.940"	0.750"	FW24	FM24

3 LOCK BT TAPER SHELL MILL HOLDERS



Part Number	d	L	D	L1	Key Size	Drive Key	Arbor Thread
MBT40-FMD19.05-45	3/4"	1.771"	1.653"	0.670"	0.312"	FW1	FU3/8-24
MBT40-FMD19.05-90	3/4"	3.543"	1.653"	0.670"	0.312"	FW1	FU3/8-24
MBT40-FMD25.4-45	1"	1.771"	1.969"	0.680"	0.375"	FW5	FM12
MBT40-FMD31.75-45	1-1/4"	1.771"	2.362"	0.680"	0.500"	FW13	FM16
MBT40-FMD38.1-45	1-1/2"	1.771"	3.150"	0.940"	0.620"	FW18	FM20

MILLING CHUCKS

SK / LSK HOLDERS

MMC / INSIDER

VC HOLDERS

BULLSEYE HOLDERS

3 LOCK HOLDERS

NIKKEN HIGH SPEED HOLDERS



HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

High Speed Tooling



High Performance High Speed Tooling

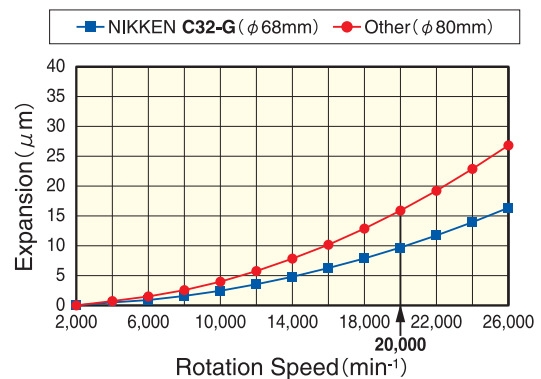
Our newest high-speed tooling lines are ready for today's most tenacious high-speed machining. All of these pre-balanced toolholders will give you the tools performance you need to get up to speed. These tools have completely ground external surfaces including the nut. This eliminates any vibration due to wind noise.

Dynamic Balancing

All Nikken high speed toolholders are balanced on a high performance balancing machine to suit the appropriate speed and G rating

Gripping Torque Data

The graph shows the comparison for the expansion for the nose piece between Nikken's C 1 1/4 - G milling chuck nose ring (68mmOD) and the competitors copied chuck nose (80mmOD) ring at high speed rotation. According to the graph, the difference of the expansion at 20,000 rpm will be 6 microns, this means the axial tightening length is reduced by approx. 0.2mm which is equivalent of 400Nm gripping torque reduction.



Available High Speed Products

Nikken's High Speed products are available in all tapers for milling chucks, slim chucks (SK), MMC (Insider), and VC Holders.

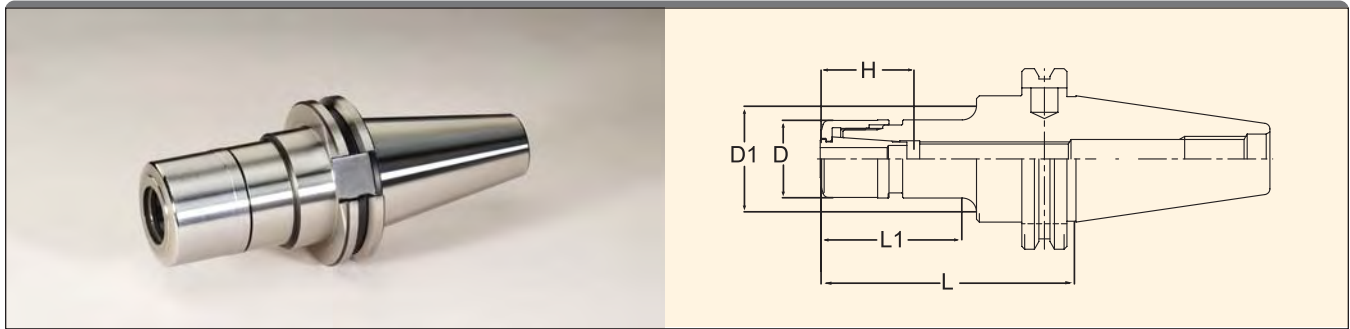
GH Clutch Wrench

Part Number	Milling Chuck	Slim Chuck
GH-6	-	GSK6-P
GH10	-	GSK10-P
GH12	C12-G	-
GH16	C16-G	GSK16-P
GH20	C3/4-G	-
GH25	C1-G	GSK25-P
GH32S	C32-G (Ring OD:φ62mm)	-
GH32	C1 1/4-G	-



GH Clutch Wrench with switchable lever

CAT TAPER HIGH SPEED SK/LSK CHUCKS



Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
CAT40-GSK6-90UP	CT40	SK06	3.543"	2.165"	0.827" - 1.378"	0.768"	0.768"	SKG-8
CAT40-GSK6-120UP	CT40	SK06	4.724"	2.637"	0.827" - 1.378"	0.768"	1.26"	SKG-8
CAT40-GSK6-150UP	CT40	SK06	5.906"	4.528"	0.827" - 1.378"	0.768"	0.984"	SKG-8
CAT40-GSK10-90UP	CT40	SK10	3.543"	2.165"	1.181" - 1.969"	1.083"	1.083"	SKG-12L
CAT40-GSK10-120UP	CT40	SK10	4.724"	3.346"	1.181" - 1.969"	1.083"	1.26"	SKG-12L
CAT40-GSK10-150UP	CT40	SK10	5.906"	4.528"	1.181" - 1.969"	1.083"	1.260"	SKG-12L
CAT40-GSK16-90UP	CT40	SK16	3.543"	2.165"	1.574" - 2.756"	1.575"	1.575"	SKG-18L
CAT40-GSK16-120UP	CT40	SK16	4.724"	3.346"	1.574" - 2.756"	1.575"	1.575"	SKG-18L
CAT40-GSK16-150UP	CT40	SK16	5.906"	4.528"	1.574" - 2.756"	1.575"	1.575"	SKG-18L
CAT40-GSK25-90UP	CT40	SK25	3.543"	2.165"	2.165" - 2.952"	2.165"	2.165"	SKG-28
CAT40-GSK25-120UP	CT40	SK25	4.724"	3.346"	2.165" - 2.952"	2.165"	2.165"	SKG-28
CAT50-GSK6-105UP	CT50	SK06	4.134"	2.756"	0.827" - 1.378"	0.768"	0.768"	SKG-8
CAT50-GSK6-165UP	CT50	SK06	6.496"	5.118"	0.827" - 1.378"	0.768"	1.26"	SKG-8
CAT50-GSK10-105UP	CT50	SK10	4.134"	2.756"	1.181" - 1.969"	1.083"	1.083"	SKG-12L
CAT50-GSK10-165UP	CT50	SK10	6.496"	5.118"	1.181" - 1.969"	1.083"	1.26"	SKG-12L
CAT50-GSK10-195UP	CT50	SK10	7.677"	6.299"	1.181" - 1.969"	1.083"	1.417"	SKG-12L
CAT50-GSK16-105UP	CT50	SK16	4.134"	2.756"	1.574" - 2.756"	1.575"	1.575"	SKG-18L
CAT50-GSK16-165UP	CT50	SK16	6.496"	5.118"	1.574" - 2.756"	1.575"	1.969"	SKG-18L
CAT50-GSK16-195UP	CT50	SK16	7.677"	6.299"	1.574" - 2.756"	1.575"	1.969"	SKG-18L
CAT50-GSK25-105UP	CT50	SK25	4.134"	2.756"	2.165" - 2.952"	2.165"	2.165"	SKG-28
CAT50-GSK25-165UP	CT50	SK25	6.496"	5.118"	2.165" - 2.952"	2.165"	2.165"	SKG-28
CAT50-GSK25-195UP	CT50	SK25	7.677"	6.299"	2.165" - 2.952"	2.165"	2.165"	SKG-28

Note: SK /LSK collets are located on pages 31-33.
Spanner wrench not included, refer to page 70.

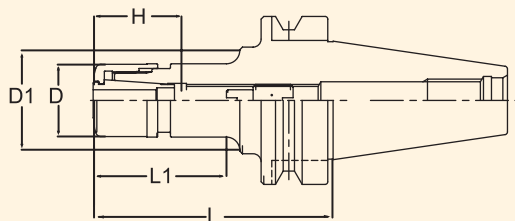
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

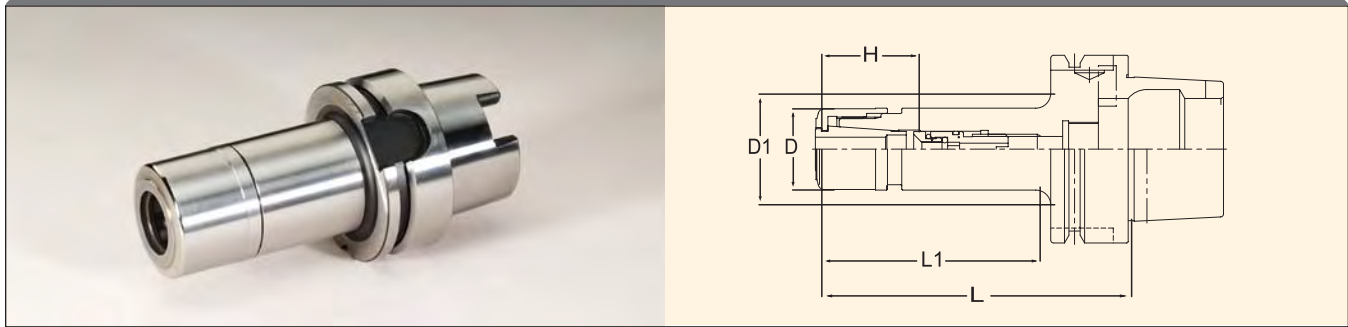
BT TAPER HIGH SPEED SK/LSK CHUCKS



Part Number	Taper	Collet Series	L	LI	H	D	D1	Back Up Screw
BT30-GSK6-60P	BT30	SK06	2.362"	1.496"	0.827" - 1.378"	0.768"	0.768"	SKG-8
BT30-GSK6-90P	BT30	SK06	3.543"	2.480"	0.827" - 1.378"	0.768"	0.768"	SKG-8
BT30-GSK10-45P	BT30	SK10	1.772"	0.906"	1.181" - 1.969"	1.083"	1.083"	SKG-12S
BT30-GSK10-60P	BT30	SK10	2.362"	2.677"	1.181" - 1.969"	1.083"	1.083"	SKG-12L
BT30-GSK10-90P	BT30	SK10	3.543"	1.496"	1.181" - 1.969"	1.083"	1.083"	SKG-12L
BT30-GSK16-60P	BT30	SK16	2.362"	1.496"	1.772" - 2.362"	1.575"	1.575"	SKG-12L
BT30-GSK16-90P	BT30	SK16	3.543"	2.677"	1.772" - 2.559"	1.575"	1.575"	SKG-12
BT30-GSK25-90P	BT30	SK25	3.543"	1.693"	2.165" - 2.953"	2.165"	2.165"	SKG-28
BT40-GSK6-90P	BT40	SK06	3.543"	2.086"	0.827" - 1.378"	0.768"	1.260"	SKG-8
BT40-GSK6-120P	BT40	SK06	4.724"	3.661"	0.827" - 1.378"	0.768"	1.260"	SKG-8
BT40-GSK6-150P	BT40	SK06	5.906"	4.843"	0.827" - 1.378"	0.768"	0.984"	SKG-8
BT40-GSK10-90P	BT40	SK10	3.543"	2.480"	1.181" - 1.969"	1.083"	1.083"	SKG-12L
BT40-GSK10-120P	BT40	SK10	4.724"	3.661"	1.181" - 1.969"	1.083"	1.575"	SKG-12L
BT40-GSK10-150P	BT40	SK10	5.906"	2.874"	1.181" - 1.969"	1.083"	1.358"	SKG-12L
BT40-GSK16-90P	BT40	SK16	3.543"	2.480"	1.575" - 2.756"	1.575"	1.575"	SKG-18L
BT40-GSK16-120P	BT40	SK16	4.724"	3.661"	1.575" - 2.756"	1.575"	1.575"	SKG-18L
BT40-GSK16-150P	BT40	SK16	5.906"	4.646"	1.575" - 2.756"	1.575"	1.575"	SKG-18L
BT40-GSK25-75P	BT40	SK25	2.953"	1.890"	2.165" - 2.953"	2.165"	2.165"	SKG-12
BT40-GSK25-90P	BT40	SK25	3.543"	2.480"	2.165" - 2.953"	2.165"	2.165"	SKG-28
BT40-GSK25-120P	BT40	SK25	4.724"	3.661"	2.165" - 2.953"	2.165"	2.165"	SKG-28
BT50-GSK6-105P	BT50	SK06	4.134"	2.638"	0.827" - 1.378"	0.768"	0.768"	SKG-8
BT50-GSK6-165P	BT50	SK06	6.496"	5.00"	0.827" - 1.378"	0.768"	1.260"	SKG-8
BT50-GSK6-195P	BT50	SK06	7.677"	2.362"	0.827" - 1.378"	0.768"	1.181"	SKG-8
BT50-GSK10-105P	BT50	SK10	4.134"	2.638"	1.181" - 1.969"	1.083"	1.083"	SKG-12L
BT50-GSK10-165P	BT50	SK10	6.496"	5.00"	1.181" - 1.969"	1.083"	1.260"	SKG-12L
BT50-GSK10-195P	BT50	SK10	7.677"	6.181"	1.181" - 1.969"	1.083"	1.417"	SKG-12L
BT50-GSK16-105P	BT50	SK16	4.134"	2.638"	1.575" - 2.756"	1.575"	1.575"	SKG-18L
BT50-GSK16-165P	BT50	SK16	6.496"	5.00"	1.575" - 2.756"	1.575"	1.969"	SKG-18L
BT50-GSK16-195P	BT50	SK16	7.677"	3.543"	1.575" - 2.756"	1.575"	2.047"	SKG-18L
BT50-GSK25-105P	BT50	SK25	4.134"	2.638"	2.165" - 2.953"	2.165"	2.165"	SKG-28
BT50-GSK25-165P	BT50	SK25	6.496"	5.00"	2.165" - 2.953"	2.165"	2.165"	SKG-28
BT50-GSK25-195P	BT50	SK25	7.677"	5.984"	2.165" - 2.953"	2.165"	2.165"	SKG-28

Note: SK /LSK collets are located on pages 31-33.
Spanner wrench not included, refer to page 70.

HSK63A/100A TAPER HIGH SPEED SK/LSK CHUCKS



Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
HSK63A-GSK6C-100P	HSK63A	SK06	3.937"	2.913"	1.024" - 1.220"	0.768"	1.260"	SKG6-6HG
HSK63A-GSK6C-120P	HSK63A	SK06	4.724"	3.700"	1.024" - 1.220"	0.768"	1.260"	SKG6-6HG
HSK63A-GSK6C-150P	HSK63A	SK06	5.906"	4.882"	1.024" - 1.220"	0.768"	0.984"	SKG6-6HG
HSK63A-GSK10C-105P	HSK63A	SK10	4.134"	3.110"	1.299" - 1.614"	1.083"	1.083"	SKG10-10HG
HSK63A-GSK10C-120P	HSK63A	SK10	4.724"	3.700"	1.299" - 1.614"	1.083"	1.260"	SKG10-10HG
HSK63A-GSK10C-150P	HSK63A	SK10	5.906"	4.882"	1.299" - 1.614"	1.083"	1.358"	SKG10-10HG
HSK63A-GSK16C-120P	HSK63A	SK16	4.724"	3.700"	1.772" - 2.047"	1.575"	1.575"	SKG16-10HG
HSK63A-GSK16C-150P	HSK63A	SK16	5.906"	4.882"	1.772" - 2.244"	1.575"	1.575"	SKG16-12HG
HSK63A-GSK25C-135P	HSK63A	SK25	5.315"	4.252"	2.362" - 2.559"	2.165"	2.165"	SKG25-18HGE
HSK100A-GSK6C-105P	HSK100A	SK06	4.134"	2.637"	1.024" - 1.220"	0.768"	1.575"	SKG6-6HG
HSK100A-GSK10C-105P	HSK100A	SK10	4.134"	2.441"	1.299" - 1.614"	1.083"	1.575"	SKG10-10HG
HSK100A-GSK10C-120P	HSK100A	SK10	4.724"	3.031"	1.299" - 1.614"	1.083"	1.575"	SKG10-10HG
HSK100A-GSK10C-150P	HSK100A	SK10	5.906"	4.213"	1.299" - 1.614"	1.083"	1.575"	SKG10-10HG
HSK100A-GSK10C-200P	HSK100A	SK10	7.874"	6.732"	1.299" - 1.614"	1.083"	1.535"	SKG10-10HG
HSK100A-GSK16C-120P	HSK100A	SK16	4.724"	3.583"	1.771" - 2.047"	1.575"	1.575"	SKG16-10HG
HSK100A-GSK16C-150P	HSK100A	SK16	5.906"	3.740"	1.771" - 2.047"	1.575"	1.969"	SKG16-12HG
HSK100A-GSK16C-200P	HSK100A	SK16	7.874"	6.732"	1.771" - 2.047"	1.575"	2.165"	SKG16-12HG
HSK100A-GSK25C-145P	HSK100A	SK25	5.709"	4.567"	2.362" - 2.559"	2.165"	2.165"	SKG25-18HGE

HSK40E TAPER HIGH SPEED SK/LSK CHUCKS

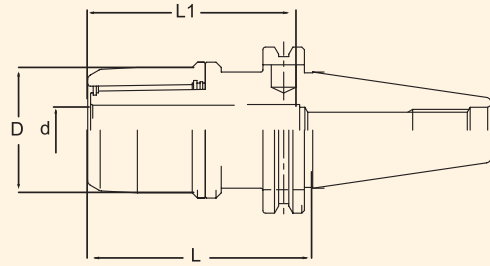
Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
HSK40E-GSK6C-60P	HSK40E	SK06	2.362"	1.456"	1.024" - 1.142"	0.768"	-	SKG-5L
HSK40E-GSK10C-60P	HSK40E	SK10	2.362"	2.047"	1.142" - 1.417"	1.083"	-	SKG-6L
HSK40E-GSK16C-80P	HSK40E	SK16	3.149"	-	2.322"	1.575"	-	-

HSK63F TAPER HIGH SPEED SK/LSK CHUCKS

Part Number	Taper	Collet Series	L	L1	H	D	D1	Back Up Screw
HSK63F-GSK10C-105P	HSK63F	SK10	4.134"	2.913"	1.299" - 1.614"	1.083"	-	SKG10-10HG
HSK63F-GSK16C-120P	HSK63F	SK16	4.724"	3.583"	2.637"	1.575"	-	SKG16-10HG

Note: SK /LSK collets are located on pages 31-33.
Spanner wrench not included, refer to page 70.

CAT TAPER HIGH SPEED ULTRA-LOCK™ MILLING CHUCKS



Part Number	Taper	Collet Series	Clamping Range	d	L	D	L1
CAT40-C3/4-85UG	CT40	KM3/4	0.125 - 0.750"	0.750"	3.346"	1.890"	3.150"
CAT40-C3/4-105UG	CT40	KM3/4	0.125 - 0.750"	0.750"	4.134"	1.890"	3.150"
CAT40-C1-85UG	CT40	KM1	0.125 - 1.000"	1.000"	3.346"	2.165"	3.150"
CAT40-C1-105UG	CT40	KM1	0.125 - 1.000"	1.000"	4.134"	2.165"	3.150"
CAT40-C1.1/4-105UG	CT40	KM1.1/4	0.187 - 1.250"	1.250"	4.134"	2.677"	2.500"
CAT40-C1.1/4-120UG	CT40	KM1.1/4	0.187 - 1.250"	1.250"	4.724"	2.677"	3.150"
CAT50-C3/4-105UG	CT50	KM3/4	0.125 - 0.750"	0.750"	4.134"	1.890"	3.150"
CAT50-C3/4-135UG	CT50	KM3/4	0.125 - 0.750"	0.750"	5.315"	1.890"	3.150"
CAT50-C1-105UG	CT50	KM1	0.125 - 1.000"	1.000"	4.134"	2.165"	3.150"
CAT50-C1-135UG	CT50	KM1	0.125 - 1.000"	1.000"	5.315"	2.165"	3.150"
CAT50-C1.1/4-105UG	CT50	KM1.1/4	0.187 - 1.250"	1.250"	4.134"	2.677"	4.134"
CAT50-C1.1/4-135UG	CT50	KM1.1/4	0.187 - 1.250"	1.250"	5.315"	2.677"	4.134"

Note: Milling Chuck collets are located on pages 17-20.
Spanner wrench not included, refer to page 70.

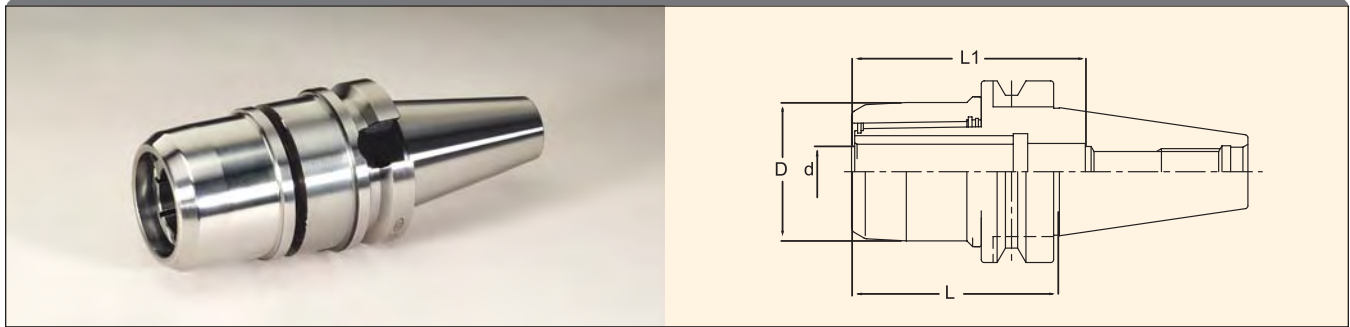
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

BT TAPER HIGH SPEED ULTRA-LOCK™ MILLING CHUCKS



Part Number	Taper	Collet Series	Clamping Range	d	L	D	L1
BT30-C3/4-75G	BT30	KM3/4	0.125 - 0.750"	0.750"	2.953"	1.890"	3.150"
BT40-C3/4-70G	BT40	KM3/4	0.125 - 0.750"	0.750"	2.795"	1.890"	3.150"
BT40-C3/4-105G	BT40	KM3/4	0.125 - 0.750"	0.750"	4.134"	1.890"	3.150"
BT40-C1-70G	BT40	KM1	0.125 - 1.000"	1.000"	2.756"	2.165"	3.150"
BT40-C1-90G	BT40	KM1	0.125 - 1.000"	1.000"	3.543"	2.165"	3.150"
BT40-C1.1/4-85G	BT40	KM1.1/4	0.187 - 1.250"	1.250"	3.346"	2.677"	3.031"
BT40-C1.1/4-120G	BT40	KM1.1/4	0.187 - 1.250"	1.250"	4.724"	2.677"	4.134"
BT50-C3/4-105G	BT50	KM3/4	0.125 - 0.750"	0.750"	4.134"	1.890"	3.150"
BT50-C3/4-135G	BT50	KM3/4	0.125 - 0.750"	0.750"	5.315"	1.890"	3.150"
BT50-C1-105G	BT50	KM1	0.125 - 1.000"	1.000"	4.134"	2.165"	3.150"
BT50-C1-135G	BT50	KM1	0.125 - 1.000"	1.000"	5.315"	2.165"	3.150"
BT50-C1.1/4-90G	BT50	KM1.1/4	0.187 - 1.250"	1.250"	3.543"	2.677"	4.134"
BT50-C1.1/4-135G	BT50	KM1.1/4	0.187 - 1.250"	1.250"	5.315"	2.677"	4.134"

Note: Milling Chuck collets are located on pages 17-20.
Spanner wrench not included, refer to page 70.

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

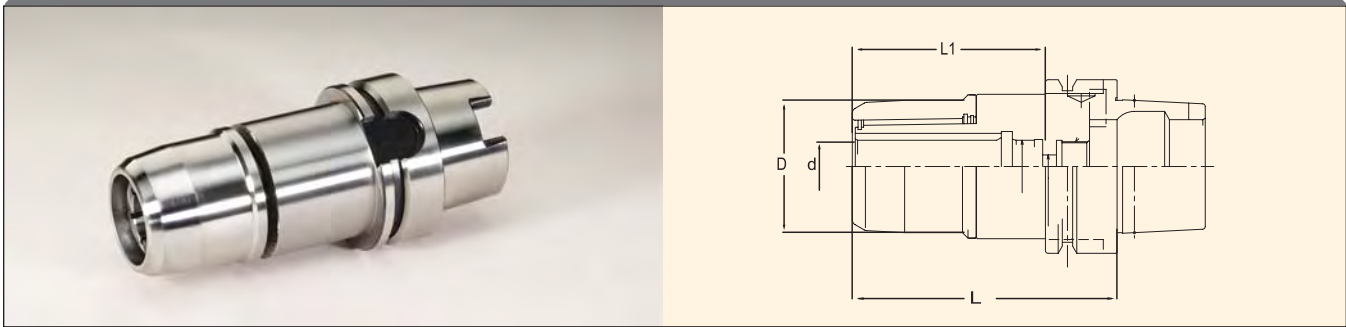
HSK63A/HSK100A TAPER HIGH SPEED ULTRA-LOCK™ MILLING CHUCKS

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



Part Number	Taper	Collet Series	Clamping Range	d	L	D	L1
HSK63A-C3/4-95G	HSK63A	KM3/4	0.125 - 0.750"	0.750"	3.740"	1.890"	2.244"
HSK63A-C3/4-110G	HSK63A	KM3/4	0.125 - 0.750"	0.750"	4.331"	1.890"	2.244"
HSK63A-C1-100G	HSK63A	KM1	0.125 - 1.000"	1.000"	3.937"	2.165"	2.362"
HSK63A-C1-130G	HSK63A	KM1	0.125 - 1.000"	1.000"	5.118"	2.165"	2.362"
HSK63A-C1.1/4-110G	HSK63A	KM1.1/4	0.187 - 1.250"	1.250"	4.331"	2.677"	2.559"
HSK63A-C1.1/4-130G	HSK63A	KM1.1/4	0.187 - 1.250"	1.250"	5.118"	2.677"	2.756"
HSK100A-C3/4-115G	HSK100A	KM3/4	0.125 - 0.750"	0.750"	4.528"	1.890"	2.244"
HSK100A-C3/4-135G	HSK100A	KM3/4	0.125 - 0.750"	0.750"	5.315"	1.890"	2.244"
HSK100A-C1-115G	HSK100A	KM1	0.125 - 1.000"	1.000"	4.528"	2.165"	2.362"
HSK100A-C1-135G	HSK100A	KM1	0.125 - 1.000"	1.000"	5.315"	2.165"	2.362"
HSK100A-C1.1/4-115G	HSK100A	KM1.1/4	0.187 - 1.250"	1.250"	4.528"	2.677"	2.559"
HSK100A-C1.1/4-165G	HSK100A	KM1.1/4	0.187 - 1.250"	1.250"	6.496"	2.677"	2.756"

HSK63F TAPER HIGH SPEED ULTRA-LOCK™ MILLING CHUCKS

Part Number	Taper	Collet Series	Clamping Range	d	L	D	L1
HSK63F-C3/4-95G	HSK63F	KM3/4	0.125-0.750"	0.750"	3.740"	1.890"	2.677"
HSK63F-C1-100G	HSK63F	KM1	0.125-1.000"	1.000"	3.937"	2.165"	2.952"
HSK63F-C1.1/4-110G	HSK63F	KM1.1/4	0.187-1.250"	1.250"	4.331"	2.677"	3.267"

Note: Milling Chuck collets are located on pages 17-20.
Spanner wrench not included, refer to page 70.

SHRINK FIT HOLDERS



HIGH SPEED

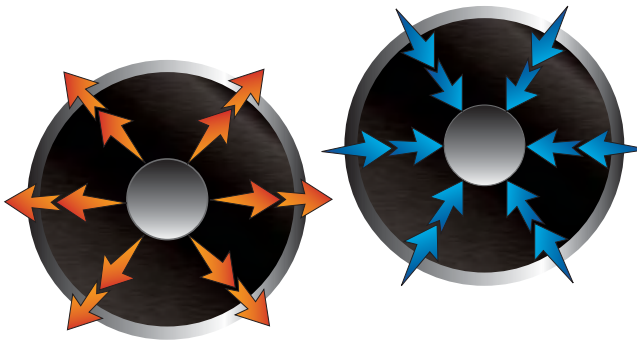
SHRINK FIT

BALANCEABLE

TECHNICAL

Long Term Repeatability

Lyndex-Nikken's shrink fit system gives consistent and highly repeatable results. This repeatability correlates to extreme accuracy, rigidity and balance. Our uniform and superior gripping on the tool shank provides the best torque and force capability compared to other manufacturers.



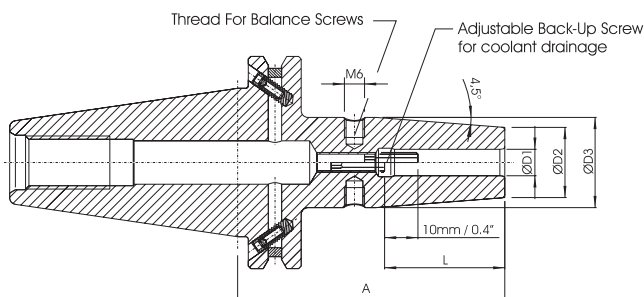
Pre-Balanced

- Solid construction offers minimal variations of unbalance when changing cutting tools.
- All Shrink Fit holders are designed to be symmetrical.
- All Shrink Fit holders are pre-balanced:
 - to G2.5 at 25,000 rpm on all HSK32E/40E holders.
 - to G2.5 at 18,000 rpm on all #40 taper/HSK63 holders.
 - to G2.5 at 18,000 rpm on all #50 taper/HSK100 holders.

Balanceable

The majority of the holders have the ability to be balanceable with the addition of a balancing kit.

Balancing Kit part number: BALKIT-SF

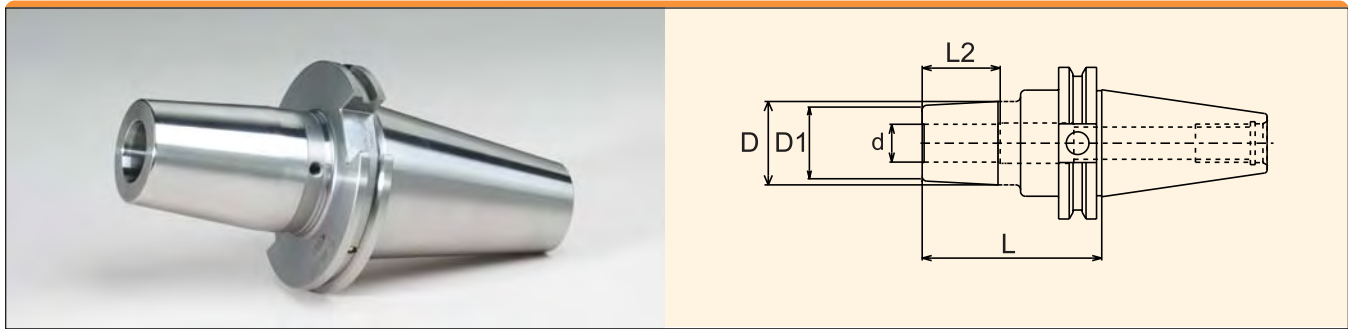


Shrink Fit Machine

Clamping times of maximum 5 seconds and cooling times of maximum 30 seconds with one handed operation. No heating of the taper or cutting tool occurs. Use only one coil from 1/8" to 1 1/4" for both hss and carbide tools.



CAT40 TAPER SHRINK FIT HOLDERS



Part Number	Taper	d	L	L2	D1	D
C40SF-0250-3.15	CT40	1/4"	3.15"	1.42"	0.83"	1.06"
C40SF-0250-6.30	CT40	1/4"	6.30"	1.42"	0.83"	1.06"
C40SF-0375-3.15	CT40	3/8"	3.15"	1.65"	0.94"	1.26"
C40SF-0375-6.30	CT40	3/8"	6.30"	1.65"	0.94"	1.26"
C40SF-0500-3.15	CT40	1/2"	3.15"	1.85"	0.94"	1.26"
C40SF-0500-6.30	CT40	1/2"	6.30"	1.85"	0.94"	1.26"
C40SF-0625-3.15	CT40	5/8"	3.15"	1.97"	1.06"	1.34"
C40SF-0625-6.30	CT40	5/8"	6.30"	1.97"	1.06"	1.34"
C40SF-0750-3.15	CT40	3/4"	3.15"	2.05"	1.30"	1.65"
C40SF-0750-6.30	CT40	3/4"	6.30"	2.05"	1.30"	1.65"
C40SF-1000-3.94	CT40	1"	3.94"	2.28"	1.73"	2.09"
C40SF-1000-6.30	CT40	1"	6.30"	2.28"	1.73"	2.09"
C40SF-1250-3.94	CT40	1.1/4"	3.94"	2.28"	1.73"	2.09"
C40SF-1250-6.30	CT40	1.1/4"	6.30"	2.28"	1.73"	2.09"
C40SF-6-80	CT40	6mm	80mm	36mm	21mm	27mm
C40SF-6-160	CT40	6mm	160mm	36mm	21mm	27mm
C40SF-8-80	CT40	8mm	80mm	36mm	21mm	27mm
C40SF-8-160	CT40	8mm	160mm	36mm	21mm	27mm
C40SF-10-80	CT40	10mm	80mm	42mm	24mm	32mm
C40SF-10-160	CT40	10mm	160mm	42mm	24mm	32mm
C40SF-12-80	CT40	12mm	80mm	47mm	24mm	32mm
C40SF-12-160	CT40	12mm	160mm	47mm	24mm	32mm
C40SF-16-80	CT40	16mm	80mm	50mm	27mm	34mm
C40SF-16-160	CT40	16mm	160mm	50mm	27mm	34mm
C40SF-20-80	CT40	20mm	80mm	52mm	33mm	42mm
C40SF-20-160	CT40	20mm	160mm	52mm	33mm	42mm
C40SF-25-100	CT40	25mm	100mm	58mm	44mm	53mm
C40SF-25-160	CT40	25mm	160mm	58mm	44mm	53mm
C40SF-32-100	CT40	32mm	100mm	58mm	44mm	53mm
C40SF-32-160	CT40	32mm	160mm	58mm	44mm	53mm

Note: Shrink Fit tools can be balanceable by addition of a balancing kit.

HIGH SPEED

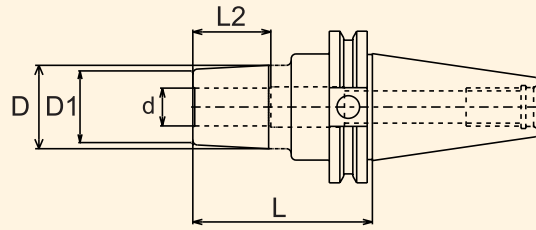
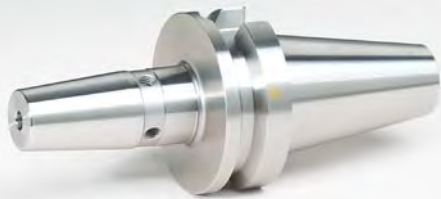
SHRINK FIT

BALANCEABLE

TECHNICAL

SHRINK FIT HOLDERS

CAT50 TAPER SHRINK FIT HOLDERS



Part Number	Taper	d	L	L2	D1	D
C50SF-0250-3.15	CT50	1/4"	3.15"	1.42"	0.83"	1.06"
C50SF-0250-6.30	CT50	1/4"	6.30"	1.42"	0.83"	1.06"
C50SF-0375-3.15	CT50	3/8"	3.15"	1.65"	0.94"	1.26"
C50SF-0375-6.30	CT50	3/8"	6.30"	1.65"	0.94"	1.26"
C50SF-0500-3.15	CT50	1/2"	3.15"	1.85"	0.94"	1.26"
C50SF-0500-6.30	CT50	1/2"	6.30"	1.85"	0.94"	1.26"
C50SF-0625-3.15	CT50	5/8"	3.15"	1.97"	1.06"	1.34"
C50SF-0625-6.30	CT50	5/8"	6.30"	1.97"	1.06"	1.34"
C50SF-0750-3.15	CT50	3/4"	3.15"	2.05"	1.30"	1.65"
C50SF-0750-6.30	CT50	3/4"	6.30"	2.05"	1.30"	1.65"
C50SF-1000-3.94	CT50	1"	3.94"	2.28"	1.73"	2.09"
C50SF-1000-6.30	CT50	1"	6.30"	2.28"	1.73"	2.09"
C50SF-1250-3.94	CT50	1.1/4"	3.94"	2.28"	1.73"	2.09"
C50SF-1250-6.30	CT50	1.1/4"	6.30"	2.28"	1.73"	2.09"
C50SF-6-80	CT50	6mm	80mm	36mm	21mm	27mm
C50SF-8-80	CT50	8mm	80mm	36mm	21mm	27mm
C50SF-10-80	CT50	10mm	80mm	42mm	24mm	32mm
C50SF-10-160	CT50	10mm	160mm	42mm	24mm	32mm
C50SF-12-80	CT50	12mm	80mm	47mm	24mm	32mm
C50SF-12-160	CT50	12mm	160mm	47mm	24mm	32mm
C50SF-16-80	CT50	16mm	80mm	50mm	27mm	34mm
C50SF-16-160	CT50	16mm	160mm	50mm	27mm	34mm
C50SF-20-80	CT50	20mm	80mm	52mm	33mm	42mm
C50SF-20-160	CT50	20mm	160mm	52mm	33mm	42mm
C50SF-25-100	CT50	25mm	100mm	58mm	44mm	53mm
C50SF-25-160	CT50	25mm	160mm	58mm	44mm	53mm
C50SF-32-100	CT50	32mm	100mm	58mm	44mm	53mm
C50SF-32-160	CT50	32mm	160mm	58mm	44mm	53mm

Note: Shrink Fit tools can be balanceable by addition of a balancing kit.

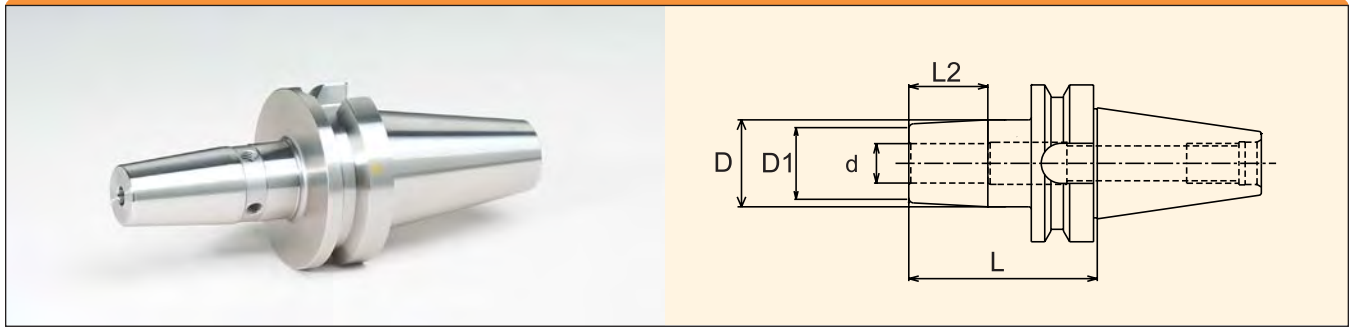
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

BT40 TAPER SHRINK FIT HOLDERS



Part Number	Taper	d	L	L2	D1	D
B40SF-0250-6.30	BT40	1/4"	6.30"	1.42"	0.83"	1.06"
B40SF-0250-3.54	BT40	1/4"	3.54"	1.42"	0.83"	1.06"
B40SF-0375-6.30	BT40	3/8"	6.30"	1.42"	0.83"	1.06"
B40SF-0375-3.54	BT40	3/8"	3.54"	1.42"	0.83"	1.06"
B40SF-0500-6.30	BT40	1/2"	6.30"	1.85"	0.94"	1.26"
B40SF-0500-3.54	BT40	1/2"	3.54"	1.85"	0.94"	1.26"
B40SF-0625-6.30	BT40	5/8"	6.30"	1.97"	1.06"	1.36"
B40SF-0625-3.54	BT40	5/8"	3.54"	1.97"	1.06"	1.36"
B40SF-0750-6.30	BT40	3/4"	6.30"	2.05"	1.30"	1.65"
B40SF-0750-3.54	BT40	3/4"	3.54"	2.05"	1.30"	1.65"
B40SF-1000-3.94	BT40	1"	3.94"	2.28"	1.73"	2.09"
B40SF-1000-6.30	BT40	1"	6.30"	2.28"	1.73"	2.09"
B40SF-1250-3.94	BT40	1.1/4"	3.94"	2.28"	1.73"	2.09"
B40SF-1250-6.30	BT40	1.1/4"	6.30"	2.28"	1.73"	2.09"
B40SF-6-90	BT40	6mm	90mm	36mm	21mm	27mm
B40SF-6-160	BT40	6mm	160mm	36mm	21mm	27mm
B40SF-8-90	BT40	8mm	90mm	36mm	21mm	27mm
B40SF-8-160	BT40	8mm	160mm	36mm	21mm	27mm
B40SF-10-90	BT40	10mm	90mm	42mm	24mm	32mm
B40SF-10-160	BT40	10mm	160mm	42mm	24mm	32mm
B40SF-12-90	BT40	12mm	90mm	47mm	24mm	32mm
B40SF-12-160	BT40	12mm	160mm	47mm	24mm	32mm
B40SF-16-90	BT40	16mm	90mm	50mm	27mm	34mm
B40SF-16-160	BT40	16mm	160mm	50mm	27mm	34mm
B40SF-20-90	BT40	20mm	90mm	52mm	33mm	42mm
B40SF-20-160	BT40	20mm	160mm	52mm	33mm	42mm
B40SF-25-100	BT40	25mm	100mm	58mm	44mm	53mm
B40SF-25-160	BT40	25mm	160mm	58mm	44mm	53mm
B40SF-32-100	BT40	32mm	100mm	58mm	44mm	53mm
B40SF-32-160	BT40	32mm	160mm	58mm	44mm	53mm

Note: Shrink Fit tools can be balanceable by addition of a balancing kit.

HIGH SPEED

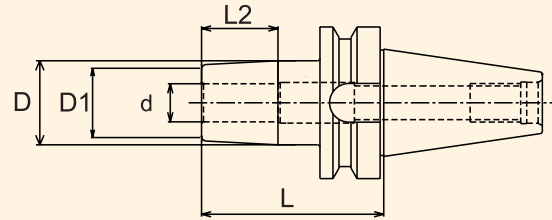
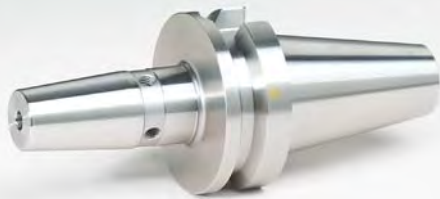
SHRINK FIT

BALANCEABLE

TECHNICAL

SHRINK FIT HOLDERS

BT50 TAPER SHRINK FIT HOLDERS



Part Number	Taper	d	L	L2	D1	D
B50SF-0250-3.15	BT50	1/4"	3.15"	1.42"	0.83"	1.06"
B50SF-0250-6.30	BT50	1/4"	6.30"	1.42"	0.83"	1.06"
B50SF-0375-3.15	BT50	3/8"	3.15"	1.42"	0.83"	1.06"
B50SF-0375-6.30	BT50	3/8"	6.30"	1.42"	0.83"	1.06"
B50SF-0500-3.15	BT50	1/2"	3.15"	1.85"	0.94"	1.26"
B50SF-0500-6.30	BT50	1/2"	6.30"	1.85"	0.94"	1.26"
B50SF-0625-3.15	BT50	5/8"	3.15"	1.97"	1.06"	1.36"
B50SF-0625-6.30	BT50	5/8"	6.30"	1.97"	1.06"	1.36"
B50SF-0750-3.15	BT50	3/4"	3.15"	2.05"	1.30"	1.65"
B50SF-0750-6.30	BT50	3/4"	6.30"	2.05"	1.30"	1.65"
B50SF-1000-3.94	BT50	1"	3.94"	2.28"	1.73"	2.09"
B50SF-1000-6.30	BT50	1"	6.30"	2.28"	1.73"	2.09"
B50SF-1250-3.94	BT50	1.1/4"	3.94"	2.28"	1.73"	2.09"
B50SF-1250-6.30	BT50	1.1/4"	6.30"	2.28"	1.73"	2.09"
B50SF-6-100	BT50	6mm	100mm	36mm	21mm	27mm
B50SF-6-160	BT50	6mm	160mm	36mm	21mm	27mm
B50SF-8-100	BT50	8mm	100mm	36mm	21mm	27mm
B50SF-8-160	BT50	8mm	160mm	36mm	21mm	27mm
B50SF-10-100	BT50	10mm	100mm	42mm	24mm	32mm
B50SF-10-160	BT50	10mm	160mm	42mm	24mm	32mm
B50SF-12-100	BT50	12mm	100mm	47mm	24mm	32mm
B50SF-12-160	BT50	12mm	160mm	47mm	24mm	32mm
B50SF-16-100	BT50	16mm	100mm	50mm	27mm	34mm
B50SF-16-160	BT50	16mm	160mm	50mm	27mm	34mm
B50SF-20-100	BT50	20mm	100mm	52mm	33mm	42mm
B50SF-20-160	BT50	20mm	160mm	52mm	33mm	42mm
B50SF-25-100	BT50	25mm	100mm	58mm	44mm	53mm
B50SF-25-160	BT50	25mm	160mm	58mm	44mm	53mm
B50SF-32-100	BT50	32mm	100mm	58mm	44mm	53mm
B50SF-32-160	BT50	32mm	160mm	58mm	44mm	53mm

Note: Shrink Fit tools can be balanceable by addition of a balancing kit.

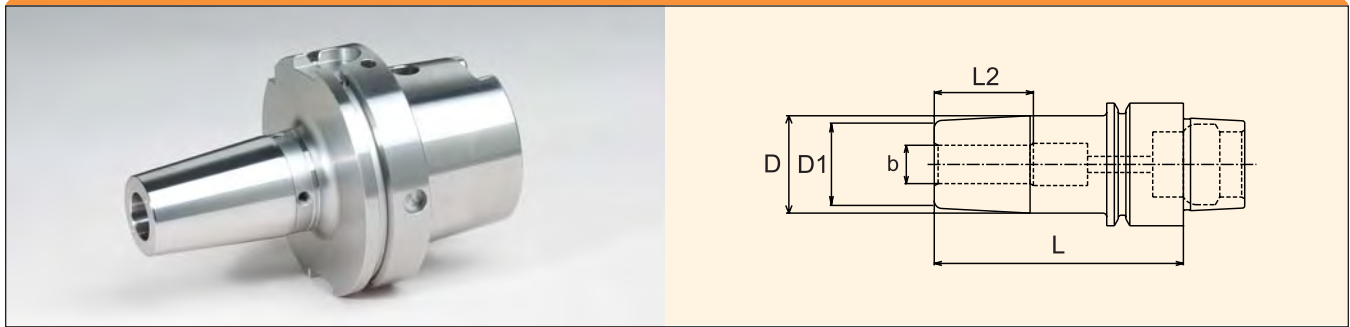
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

HSK32E TAPER SHRINK FIT HOLDERS



Part Number	Taper	d	L	L2	D1	D
HSK32E-SF3-100	HSK32E	3mm	100mm	9mm	10mm	none
HSK32E-SF4-100	HSK32E	4mm	100mm	12mm	10mm	none
HSK32E-SF5-100	HSK32E	5mm	100mm	15mm	10mm	none
HSK32E-SF6-100	HSK32E	6mm	100mm	36mm	21mm	27mm
HSK32E-SF8-100	HSK32E	8mm	100mm	36mm	21mm	27mm
HSK32E-SF10-100	HSK32E	10mm	100mm	42mm	24mm	32mm

HSK40E TAPER SHRINK FIT HOLDERS

Part Number	Taper	d	L	L2	D1	D
HSK40E-SF0187-2.36	HSK40E	3/16"	2.36"		0.39"	
HSK40E-SF0250-3.15	HSK40E	1/4"	3.15"	1.42	0.83"	1.06"
HSK40E-SF0250-5.12	HSK40E	1/4"	5.12"	1.42	0.83"	1.06"
HSK40E-SF0375-3.15	HSK40E	3/8"	3.15"	1.65	0.94"	1.26"
HSK40E-SF0375-5.12	HSK40E	3/8"	5.12"	1.65	0.94"	1.26"
HSK40E-SF0500-3.54	HSK40E	1/2"	3.54"	1.85	0.94"	1.26"
HSK40E-SF0500-5.12	HSK40E	1/2"	5.12"	1.85	0.94"	1.26"
HSK40E-SF0625-3.54	HSK40E	5/8"	3.54"	1.97	1.06"	1.34"
HSK40E-SF0625-5.12	HSK40E	5/8"	5.12"	1.97	1.06"	1.34"
HSK40E-SF6-80	HSK40E	6mm	80mm	36mm	21mm	27mm
HSK40E-SF6-130	HSK40E	6mm	130mm	36mm	21mm	27mm
HSK40E-SF8-80	HSK40E	8mm	80mm	36mm	21mm	27mm
HSK40E-SF8-130	HSK40E	8mm	130mm	36mm	21mm	27mm
HSK40E-SF10-80	HSK40E	10mm	80mm	42mm	24mm	32mm
HSK40E-SF10-130	HSK40E	10mm	130mm	42mm	24mm	32mm
HSK40E-SF12-90	HSK40E	12mm	90mm	47mm	24mm	32mm
HSK40E-SF12-130	HSK40E	12mm	130mm	47mm	24mm	32mm
HSK40E-SF16-90	HSK40E	16mm	90mm	50mm	27mm	34mm
HSK40E-SF16-130	HSK40E	16mm	130mm	50mm	27mm	34mm

Note: Shrink Fit tools can be balanceable by addition of a balancing kit.

HIGH SPEED

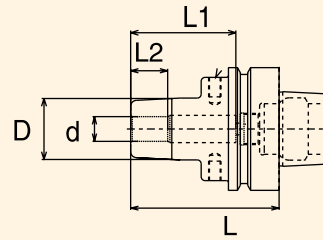
SHRINK FIT

BALANCEABLE

TECHNICAL

SHRINK FIT HOLDERS

HSK63F TAPER SHRINK FIT HOLDERS



Part Number	Taper	d	L	L1	L2	D
HSK63F-SF0250-3.00	HSK63F	1/4"	3.00"	1.00"	1.00"	1.00"
HSK63F-SF0250-6.00	HSK63F	1/4"	6.00"	1.00"	1.00"	1.00"
HSK63F-SF0375-3.00	HSK63F	3/8"	3.00"	2.12"	1.00"	1.13"
HSK63F-SF0375-6.00	HSK63F	3/8"	6.00"	2.12"	1.00"	1.13"
HSK63F-SF0500-3.00	HSK63F	1/2"	3.00"	2.12"	1.00"	1.25"
HSK63F-SF0500-6.00	HSK63F	1/2"	6.00"	2.12"	1.00"	1.25"
HSK63F-SF0625-3.00	HSK63F	5/8"	3.00"	2.12"	1.25"	1.38"
HSK63F-SF0625-6.00	HSK63F	5/8"	6.00"	2.12"	1.25"	1.38"
HSK63F-SF0750-3.50	HSK63F	3/4"	3.50"	2.64"	1.25"	1.50"
HSK63F-SF0750-6.00	HSK63F	3/4"	6.00"	2.64"	1.25"	1.50"
HSK63F-SF1000-4.00	HSK63F	1"	4.00"	2.50"	1.25"	1.75"
HSK63F-SF1000-6.00	HSK63F	1"	6.00"	2.50"	1.25"	1.75"

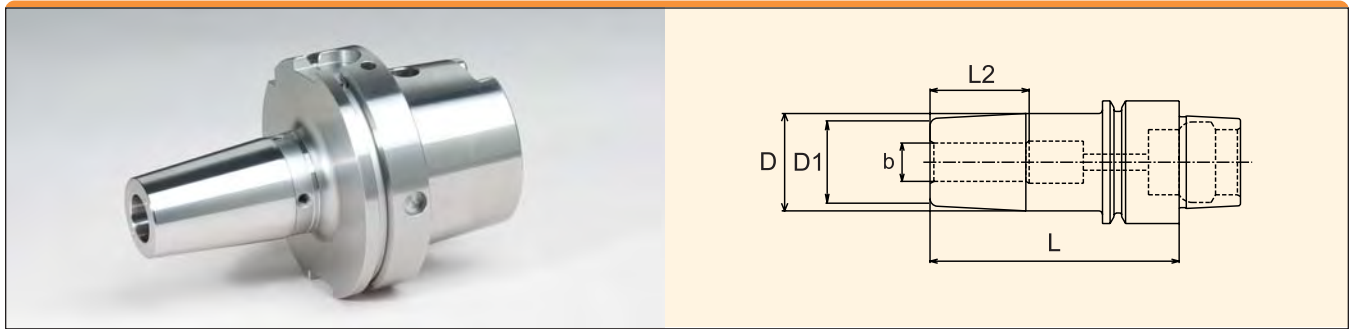
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

HSK63A TAPER SHRINK FIT HOLDERS



Part Number	Taper	d	L	L2	D1	D
HSK63A-SF0250-3.15	HSK63A	1/4"	3.15"	1.42"	0.83"	1.06"
HSK63A-SF0250-6.30	HSK63A	1/4"	6.30"	1.42"	0.83"	1.06"
HSK63A-SF0375-3.35	HSK63A	3/8"	3.35"	1.65"	0.94"	1.26"
HSK63A-SF0375-6.30	HSK63A	3/8"	6.30"	1.65"	0.94"	1.26"
HSK63A-SF0500-3.54	HSK63A	1/2"	3.54"	1.85"	0.94"	1.26"
HSK63A-SF0500-6.30	HSK63A	1/2"	6.30"	1.85"	0.94"	1.26"
HSK63A-SF0625-3.74	HSK63A	5/8"	3.74"	1.97"	1.06"	1.34"
HSK63A-SF0625-6.30	HSK63A	5/8"	6.30"	1.97"	1.06"	1.34"
HSK63A-SF0750-3.94	HSK63A	3/4"	3.94"	2.05"	1.30"	1.65"
HSK63A-SF0750-6.30	HSK63A	3/4"	6.30"	2.05"	1.30"	1.65"
HSK63A-SF1000-4.53	HSK63A	1"	4.53"	2.28"	1.73"	2.09"
HSK63A-SF1000-6.30	HSK63A	1"	6.30"	2.28"	1.73"	2.09"
HSK63A-SF6-80	HSK63A	6mm	80mm	36mm	21mm	27mm
HSK63A-SF6-160	HSK63A	6mm	160mm	36mm	21mm	27mm
HSK63A-SF8-80	HSK63A	8mm	80mm	36mm	21mm	27mm
HSK63A-SF8-160	HSK63A	8mm	160mm	36mm	21mm	27mm
HSK63A-SF10-85	HSK63A	10mm	85mm	42mm	24mm	32mm
HSK63A-SF10-160	HSK63A	10mm	160mm	42mm	24mm	32mm
HSK63A-SF12-90	HSK63A	12mm	90mm	47mm	24mm	32mm
HSK63A-SF12-160	HSK63A	12mm	160mm	47mm	24mm	32mm
HSK63A-SF16-95	HSK63A	16mm	95mm	50mm	27mm	34mm
HSK63A-SF16-160	HSK63A	16mm	160mm	50mm	27mm	34mm
HSK63A-SF20-100	HSK63A	20mm	100mm	52mm	33mm	42mm
HSK63A-SF20-160	HSK63A	20mm	160mm	52mm	33mm	42mm
HSK63A-SF25-115	HSK63A	25mm	115mm	58mm	44mm	53mm
HSK63A-SF25-160	HSK63A	25mm	160mm	58mm	44mm	53mm
HSK63A-SF32-120	HSK63A	32mm	120mm	58mm	44mm	53mm

Note: Shrink Fit tools can be balanceable by addition of a balancing kit.

HIGH SPEED

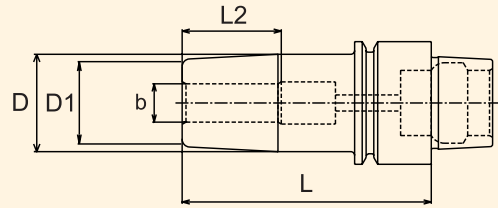
SHRINK FIT

BALANCEABLE

TECHNICAL

SHRINK FIT HOLDERS

HSK100A TAPER SHRINK FIT HOLDERS



Part Number	Taper	d	L	L2	D1	D
HSK100A-SF0375-3.54	HSK100A	3/8"	3.54"	1.65"	0.94"	1.26"
HSK100A-SF0375-6.30	HSK100A	3/8"	6.30"	1.65"	0.94"	1.26"
HSK100A-SF0500-3.74	HSK100A	1/2"	3.74"	1.85"	0.94"	1.26"
HSK100A-SF0500-6.30	HSK100A	1/2"	6.30"	1.85"	0.94"	1.26"
HSK100A-SF0625-3.94	HSK100A	5/8"	3.94"	1.97"	1.06"	1.34"
HSK100A-SF0625-6.30	HSK100A	5/8"	6.30"	1.97"	1.06"	1.34"
HSK100A-SF0750-4.13	HSK100A	3/4"	4.13"	2.05"	1.30"	1.65"
HSK100A-SF0750-6.30	HSK100A	3/4"	6.30"	2.05"	1.30"	1.65"
HSK100A-SF1000-4.53	HSK100A	1"	4.53"	2.28"	1.73"	2.09"
HSK100A-SF1000-6.30	HSK100A	1"	6.30"	2.28"	1.73"	2.09"
HSK100A-SF1250-4.72	HSK100A	1.1/4"	4.72"	2.28"	1.73"	2.09"
HSK100A-SF1250-6.30	HSK100A	1.1/4"	6.30"	2.28"	1.73"	2.09"
HSK100A-SF6-85	HSK100A	6mm	85mm	36mm	21mm	27mm
HSK100A-SF6-160	HSK100A	6mm	160mm	36mm	21mm	27mm
HSK100A-SF8-85	HSK100A	8mm	85mm	36mm	21mm	27mm
HSK100A-SF8-160	HSK100A	8mm	160mm	36mm	21mm	27mm
HSK100A-SF10-90	HSK100A	10mm	90mm	42mm	24mm	32mm
HSK100A-SF10-160	HSK100A	10mm	160mm	42mm	24mm	32mm
HSK100A-SF12-95	HSK100A	12mm	95mm	47mm	24mm	32mm
HSK100A-SF12-160	HSK100A	12mm	160mm	47mm	24mm	32mm
HSK100A-SF16-100	HSK100A	16mm	100mm	50mm	27mm	34mm
HSK100A-SF16-160	HSK100A	16mm	160mm	50mm	27mm	34mm
HSK100A-SF20-105	HSK100A	20mm	105mm	52mm	33mm	42mm
HSK100A-SF20-160	HSK100A	20mm	160mm	52mm	33mm	42mm
HSK100A-SF25-115	HSK100A	25mm	115mm	58mm	44mm	53mm
HSK100A-SF25-160	HSK100A	25mm	160mm	58mm	44mm	53mm
HSK100A-SF32-120	HSK100A	32mm	120mm	58mm	44mm	53mm
HSK100A-SF32-160	HSK100A	32mm	160mm	58mm	44mm	53mm

Note: Shrink Fit tools can be balanceable by addition of a balancing kit.

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

BALANCEABLE HOLDERS



HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

HSBalance™ Toolholders



HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

HSBalance™ Features

Accuracy of balance comes from balancing the full assembly, not just the tool-holder itself. Even though its mass is comparatively less than that of the toolholder, unbalanced cutting tools and retention studs may have a relatively high degree of inherent unbalance. Therefore, a certain amount of unbalance will still be created when the cutting tool, the retention knob and a pre-balanced toolholder are assembled. This could easily exceed the maximum acceptable level of unbalance. As the cutting speed increases this becomes more pronounced. Rebalancing the toolholding assembly is definitely necessary for any high-speed spindles.

The toolholder is, in most cases, the dominant unbalance source, and the most accessible component for balancing in any assemblies. Therefore, toolholders for high-speed machining need to be pre-balanced to a certain specification, and need to be balanceable to compensate for other unbalanced components for any re-assembling.

Patented Balancing Method

Lyndex's HSBalance toolholder employs a series of tapped holes surrounding the holder's centerline. Small set screws and weights are used to achieve balance. The holes are drilled parallel (not perpendicular) to the holder's centerline so the inserted set screws are not depth sensitive. A deeper setting will not affect the weight distribution. Parallel holes offer an additional advantage: set screws cannot become unscrewed and back out during high-speed operations, so they need not be affixed semi-permanently.

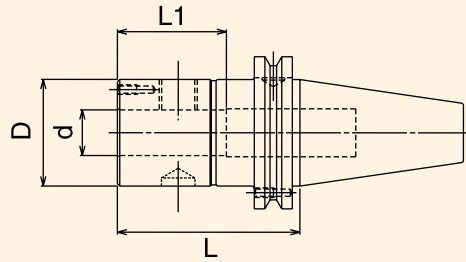
HSBalance toolholders are easily re-balanced by adding, removing, or relocating the balancing weights, to bring any assembly into the finest level of acceptable unbalance.



30, 35 & 40 taper tool-holders are pre-balanced to G2.5 or better at 20,000RPM

50 taper toolholders are pre-balanced to G2.5 or better at 15,000RPM

CAT40 *HSBALANCE™* END MILL HOLDERS



Part Number	Taper	d	L	L1	D	Set Screw
C4006-0125B	CT40	1/8"	2.50"	0.62"	0.75"	6-32X1/4
C4016-0125B	CT40	1/8"	4.00"	0.62"	0.75"	6-32X1/4
C4006-0187B	CT40	3/16"	2.50"	0.86"	0.75"	8-32X1/4
C4016-0187B	CT40	3/16"	4.00"	0.86"	0.75"	8-32X1/4
C4006-0250B	CT40	1/4"	2.50"	1.10"	0.94"	1/4-28X1/4
C4016-0250B	CT40	1/4"	4.00"	1.10"	0.94"	1/4-28X1/4
C4006-0312B	CT40	5/16"	2.50"	1.25"	0.94"	5/16-24X1/4
C4016-0312B	CT40	5/16"	4.00"	1.25"	0.94"	5/16-24X1/4
C4006-0375B	CT40	3/8"	2.50"	1.25"	0.94"	3/8-24X5/16
C4016-0375B	CT40	3/8"	4.00"	1.25"	0.94"	3/8-24X5/16
C4006-0500B	CT40	1/2"	3.00"	1.49"	1.38"	7/16-20X3/8
C4016-0500B	CT40	1/2"	4.00"	1.49"	1.38"	7/16-20X3/8
C4006-0625B	CT40	5/8"	3.00"	1.61"	1.65"	9/16-18X1/2
C4016-0625B	CT40	5/8"	4.00"	1.61"	1.65"	9/16-18X1/2
C4006-0750B	CT40	3/4"	3.00"	1.77"	1.75"	5/8-18X1/2
C4016-0750B	CT40	3/4"	4.00"	1.77"	1.75"	5/8-18X1/2
C4006-0875B	CT40	7/8"	3.50"	2.08"	2.00"	5/8-18X1/2 (2)
C4016-0875B	CT40	7/8"	6.00"	2.08"	2.00"	5/8-18X1/2 (2)
C4006-1000B	CT40	1"	4.00"	2.36"	2.36"	3/4-16X11/16 (2)
C4016-1000B	CT40	1"	6.00"	2.36"	2.36"	3/4-16X11/16 (2)
C4006-1250B	CT40	1-1/4"	4.00"	2.56"	2.48"	3/4-16X5/8 (2)
C4016-1250B	CT40	1-1/4"	6.00"	2.56"	2.48"	3/4-16X5/8 (2)

Note: Use balance-qualified retention studs with these holders.

HSBALANCE™ End Mill Holders come equipped with set screws.

HSBALANCE™ toolholders come with a printout of actual balance condition. For balance specifications, please see page 88.

HIGH SPEED

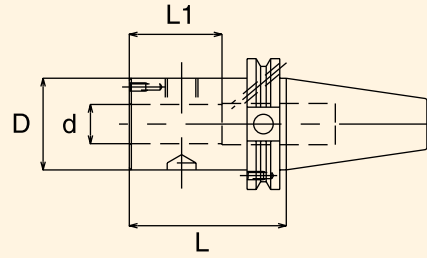
SHRINK FIT

BALANCEABLE

TECHNICAL

BALANCEABLE HOLDERS

CAT40 HSBALANCE™ END MILL HOLDERS - DIN



Part Number	Taper	d	L	L1	D	Set Screw
C4006-0125B-DIN	CT40	1/8"	2.50"	0.63"	0.75"	6-32X1/4
C4006-0187B-DIN	CT40	3/16"	2.50"	0.87"	0.75"	8-32X1/4
C4006-0250B-DIN	CT40	1/4"	2.50"	1.10"	0.94"	1/4-28X1/4
C4006-0312B-DIN	CT40	5/16"	2.50"	1.25"	0.94"	5/16-24X1/4
C4006-0375B-DIN	CT40	3/8"	2.50"	1.25"	0.94"	3/8-24X5/16
C4006-0500B-DIN	CT40	1/2"	3.00"	1.49"	1.38"	7/16-20X3/8
C4006-0625B-DIN	CT40	5/8"	3.00"	1.61"	1.65"	9/16-18X1/2
C4006-0750B-DIN	CT40	3/4"	3.00"	1.77"	1.75"	5/8-18X1/2
C4006-0875B-DIN	CT40	7/8"	3.50"	2.08"	2.00"	5/8-18X1/2 (2)
C4006-1000B-DIN	CT40	1"	4.00"	2.36"	2.36"	3/4-16X11/16 (2)
C4006-1250B-DIN	CT40	1-1/4"	4.00"	2.55"	2.48"	3/4-16X5/8 (2)

Note: "DIN" designates suitability for coolant through the flange per DIN 69871 Form B specs.

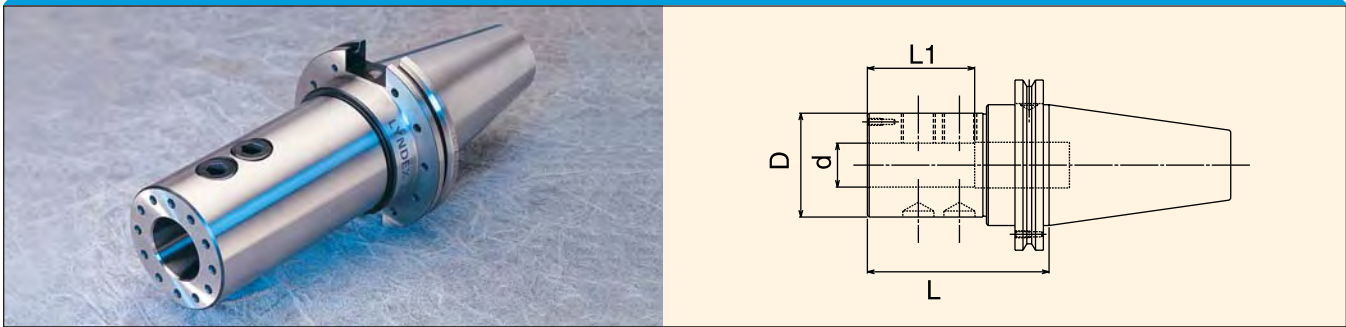
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

CAT50 *HSBALANCE™* END MILL HOLDERS



Part Number	Taper	d	L	L1	D	Set Screw
C5006-0250B	CT50	1/4"	3.00"	1.10"	0.94"	1/4-28X1/4
C5016-0250B	CT50	1/4"	4.00"	1.10"	0.94"	1/4-28X1/4
C5006-0375B	CT50	3/8"	3.00"	1.26"	0.94"	3/8-24X5/16
C5016-0375B	CT50	3/8"	4.00"	1.26"	0.94"	3/8-24X5/16
C5026-0375B	CT50	3/8"	6.00"	1.26"	0.94"	3/8-24X5/16
C5006-0500B	CT50	1/2"	3.00"	1.49"	1.38"	7/16-20X3/8
C5016-0500B	CT50	1/2"	4.00"	1.49"	1.38"	7/16-20X3/8
C5026-0500B	CT50	1/2"	6.00"	1.49"	1.38"	7/16-20X3/8
C5006-0625B	CT50	5/8"	3.00"	1.61"	1.65"	9/16-18X1/2
C5016-0625B	CT50	5/8"	4.00"	1.61"	1.65"	9/16-18X1/2
C5026-0625B	CT50	5/8"	6.00"	1.61"	1.65"	9/16-18X1/2
C5006-0750B	CT50	3/4"	3.00"	1.77"	1.75"	5/8-18X1/2
C5016-0750B	CT50	3/4"	4.00"	1.77"	1.75"	5/8-18X1/2
C5026-0750B	CT50	3/4"	6.00"	1.77"	1.75"	5/8-18X1/2
C5006-0875B	CT50	7/8"	4.00"	2.08"	2.00"	5/8-18X1/2 (2)
C5016-0875B	CT50	7/8"	6.00"	2.08"	2.00"	5/8-18X1/2 (2)
C5006-1000B	CT50	1"	4.00"	2.36"	2.36"	3/4-16X11/16 (2)
C5016-1000B	CT50	1"	6.00"	2.36"	2.36"	3/4-16X11/16 (2)
C5006-1250B	CT50	1-1/4"	4.00"	2.55"	2.48"	3/4-16X5/8 (2)
C5016-1250B	CT50	1-1/4"	6.00"	2.55"	2.48"	3/4-16X5/8 (2)
C5006-1500B	CT50	1-1/2"	4.50"	2.83"	2.91"	3/4-16X5/8 (2)
C5016-1500B	CT50	1-1/2"	7.00"	2.83"	2.91"	3/4-16X5/8 (2)

Note: Use balance-qualified retention studs with these holders.

HSBALANCE™ End Mill Holders come equipped with set screws.

HSBALANCE™ toolholders come with a printout of actual balance condition. For balance specifications, please see page 88.

HIGH SPEED

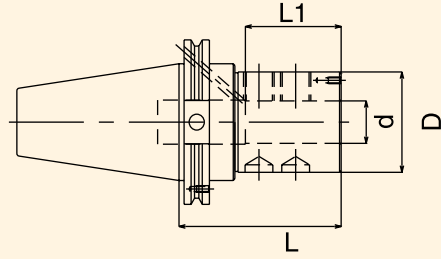
SHRINK FIT

BALANCEABLE

TECHNICAL

BALANCEABLE HOLDERS

CAT50 *hsBALANCE*™ END MILL HOLDERS - DIN



Part Number	Taper	d	L	L1	D	Set Screw
C5006-0250B-DIN	CT50	1/4"	3.00"	1.10"	0.94"	1/4-28X1/4
C5006-0375B-DIN	CT50	3/8"	3.00"	1.25"	0.94"	3/8-24X5/16
C5006-0500B-DIN	CT50	1/2"	3.00"	1.49"	1.38"	7/16-20X3/8
C5006-0625B-DIN	CT50	5/8"	3.00"	1.61"	1.65"	9/16-18X1/2
C5006-0750B-DIN	CT50	3/4"	3.00"	1.77"	1.75"	5/8-18X1/2
C5006-0875B-DIN	CT50	7/8"	4.00"	2.08"	2.00"	5/8-18X1/2 (2)
C5006-1000B-DIN	CT50	1"	4.00"	2.36"	2.36"	3/4-16X11/16 (2)
C5006-1250B-DIN	CT50	1-1/4"	4.00"	2.55"	2.48"	3/4-16X5/8 (2)

Note: "DIN" designates suitability for coolant through the flange per DIN 69871 Form B specs.

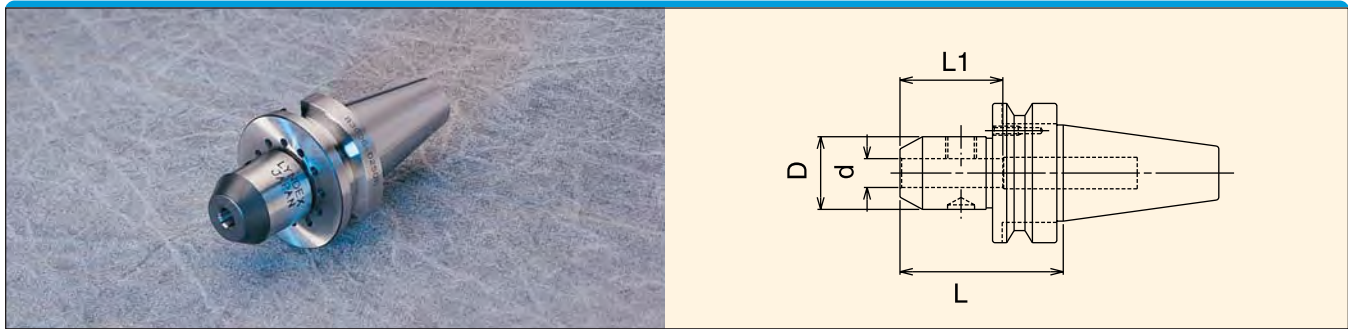
HIGH SPEED

SHRINK FIT

BALANCEABLE

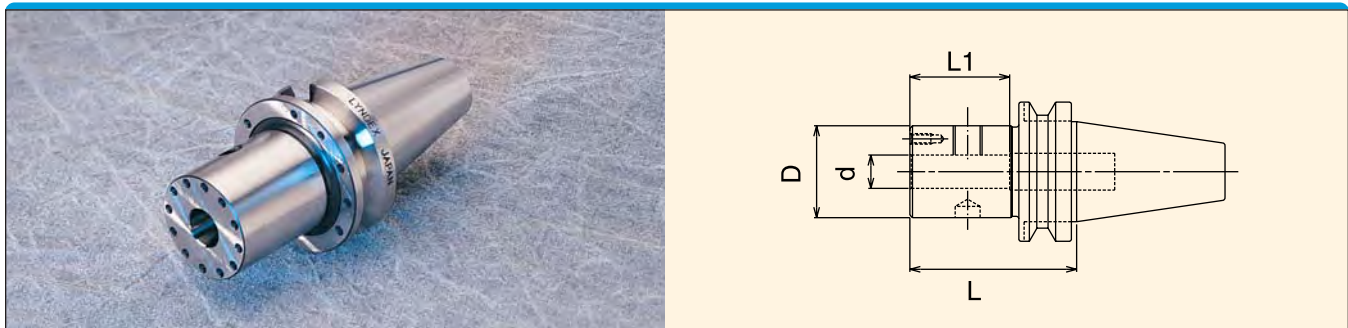
TECHNICAL

BT30 *hsBALANCE™* END MILL HOLDERS



Part Number	Taper	d	L	L1	D	Set Screw
B3006-0125B	BT30	1/8"	2.00"	0.62"	0.74"	6-32X1/4
B3006-0187B	BT30	3/16"	2.00"	0.86"	0.74"	8-32X1/4
B3006-0250B	BT30	1/4"	2.00"	1.10"	0.94"	1/4-28X1/4
B3006-0312B	BT30	5/16"	2.00"	1.25"	0.94"	5/16-24X1/4
B3006-0375B	BT30	3/8"	2.00"	1.25"	0.94"	3/8-24X5/16
B3006-0500B	BT30	1/2"	2.50"	1.49"	1.37"	7/16-20X3/8
B3006-0625B	BT30	5/8"	2.50"	1.61"	1.65"	9/16-18X1/2
B3006-0750B	BT30	3/4"	2.50"	1.77"	1.75"	5/8-18X1/2

BT35 *hsBALANCE™* END MILL HOLDERS

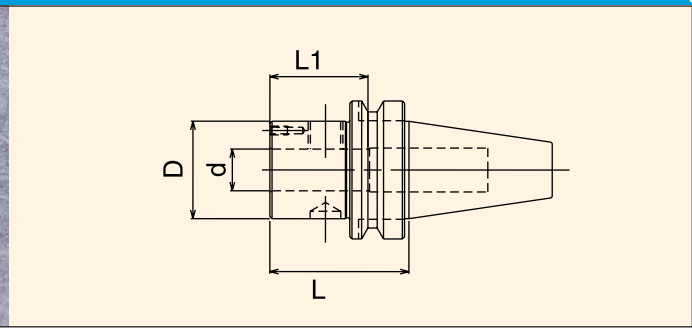


Part Number	Taper	d	L	L1	D	Set Screw
B3506-0125B	BT35	1/8"	2.00"	0.62"	0.74"	6-32X1/4
B3506-0187B	BT35	3/16"	2.00"	0.86"	0.74"	8-32X1/4
B3506-0250B	BT35	1/4"	2.00"	1.10"	0.94"	1/4-28X1/4
B3506-0312B	BT35	5/16"	2.00"	1.25"	0.94"	5/16-24X1/4
B3506-0375B	BT35	3/8"	2.00"	1.25"	0.94"	3/8-24X5/16
B3506-0500B	BT35	1/2"	2.50"	1.49"	1.37"	7/16-20X3/8
B3506-0625B	BT35	5/8"	2.50"	1.61"	1.65"	9/16-18X1/2
B3506-0750B	BT35	3/4"	2.50"	1.77"	1.75"	5/8-18X1/2
B3506-0875B	BT35	7/8"	3.50"	2.08"	2.00"	5/8-18X1/2 (2)
B3506-1000B	BT35	1"	3.50"	2.36"	2.36"	3/4-16X5/8 (2)
B3506-1250B	BT35	1-1/4"	3.50"	2.24"	2.48"	3/4-16X5/8 (2)

hsBALANCE™ End Mill Holders come equipped with set screws.

hsBALANCE™ toolholders come with a printout of actual balance condition. For balance specifications, please see page 88.

BT40 HS*BALANCE*™ END MILL HOLDERS



Part Number	Taper	d	L	L1	D	Set Screw
B4006-0125B	BT40	1/8"	2.00"	0.62"	0.74"	6-32 XI/4
B4016-0125B	BT40	1/8"	4.00"	0.62"	0.74"	6-32X1/4
B4006-0187B	BT40	3/16"	2.00"	0.86"	0.74"	8-32X1/4
B4016-0187B	BT40	3/16"	4.00"	0.86"	0.74"	8-32X1/4
B4006-0250B	BT40	1/4"	2.00"	1.10"	0.94"	1/4-28X1/4
B4016-0250B	BT40	1/4"	4.00"	1.10"	0.94"	1/4-28X1/4
B4006-0312B	BT40	5/16"	2.00"	1.25"	0.94"	5/16-24X1/2
B4016-0312B	BT40	5/16"	4.00"	1.25"	0.94"	5/16-24X1/2
B4006-0375B	BT40	3/8"	2.50"	1.25"	0.94"	3/8-24X5/16
B4016-0375B	BT40	3/8"	4.00"	1.25"	0.94"	3/8-24X5/16
B4006-0500B	BT40	1/2"	2.50"	1.49"	1.37"	7/16-20X3/8
B4016-0500B	BT40	1/2"	4.00"	1.49"	1.37"	7/16-20X3/8
B4006-0625B	BT40	5/8"	2.50"	1.61"	1.65"	9/16-18X1/2
B4016-0625B	BT40	5/8"	4.00"	1.61"	1.65"	9/16-18X1/2
B4006-0750B	BT40	3/4"	2.50"	1.77"	1.75"	5/8-18X1/2
B4016-0750B	BT40	3/4"	4.00"	1.77"	1.75"	5/8-18X1/2
B4006-0875B	BT40	7/8"	3.50"	2.08"	2.00"	5/8-18X1/2 (2)
B4016-0875B	BT40	7/8"	6.00"	2.08"	2.00"	5/8-18X1/2 (2)
B4006-1000B	BT40	1"	4.00"	2.36"	2.36"	3/4-16X11/16 (2)
B4016-1000B	BT40	1"	6.00"	2.36"	2.36"	3/4-16X11/16 (2)
B4006-1250B	BT40	1-1/4"	4.00"	2.55"	2.48"	3/4-16X5/8 (2)
B4016-1250B	BT40	1-1/4"	6.00"	2.55"	2.48"	3/4-16X5/8 (2)

HS*BALANCE*™ End Mill Holders come equipped with set screws.

HS*BALANCE*™ toolholders come with a printout of actual balance condition. For balance specifications, please see page 88

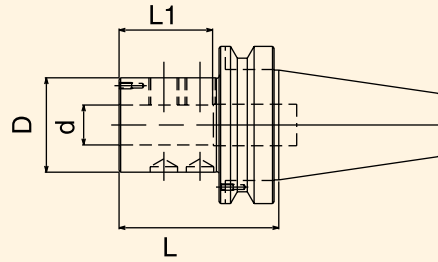
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

BT50 *hsBALANCE™* END MILL HOLDERS



Part Number	Taper	d	L	L1	D	Set Screw
B5006-0250B	BT50	1/4"	3.00"	1.10"	0.94"	1/4-28X1/4
B5016-0250B	BT50	1/4"	6.00"	1.10"	0.94"	1/4-28X1/4
B5006-0375B	BT50	3/8"	3.00"	1.25"	0.94"	3/8-24X5/16
B5016-0375B	BT50	3/8"	6.00"	1.25"	0.94"	3/8-24X5/16
B5006-0500B	BT50	1/2"	3.00"	1.49"	1.38"	7/16-20X3/8
B5016-0500B	BT50	1/2"	6.00"	1.49"	1.38"	7/16-20X3/8
B5006-0625B	BT50	5/8"	3.00"	1.61"	1.65"	9/16-18X1/2
B5016-0625B	BT50	5/8"	6.00"	1.61"	1.65"	9/16-18X1/2
B5006-0750B	BT50	3/4"	3.00"	1.77"	1.75"	5/8-18X1/2
B5016-0750B	BT50	3/4"	6.00"	1.77"	1.75"	5/8-18X1/2
B5006-0875B	BT50	7/8"	4.00"	2.08"	2.00"	5/8-18X1/2 (2)
B5016-0875B	BT50	7/8"	6.00"	2.08"	2.00"	5/8-18X1/2 (2)
B5006-1000B	BT50	1"	4.00"	2.36"	2.36"	3/4-16X11/16 (2)
B5016-1000B	BT50	1"	6.00"	2.36"	2.36"	3/4-16X11/16 (2)
B5006-1250B	BT50	1-1/4"	4.00"	2.55"	2.48"	3/4-16X5/8 (2)
B5016-1250B	BT50	1-1/4"	6.00"	2.55"	2.48"	3/4-16X5/8 (2)

hsBALANCE™ End Mill Holders come equipped with set screws.

hsBALANCE™ toolholders come with a printout of actual balance condition. For balance specifications, please see page 88.

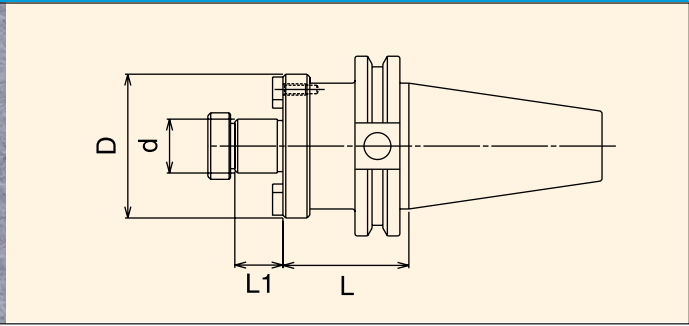
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

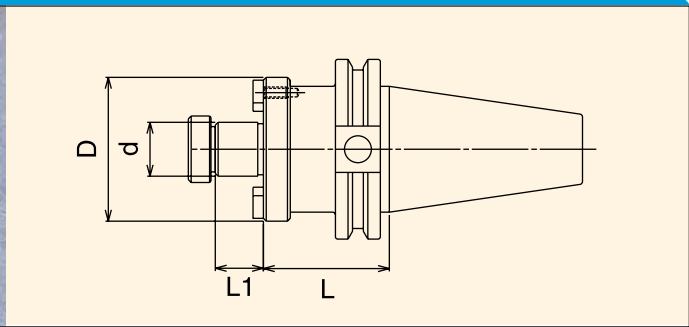
CT40 *hsBALANCE™* SHELL MILL HOLDERS



Part Number	Taper	d	L	D	L1	Key Size	Arbor Thread
C4001-0750B	CT40	3/4"	2.00"	1.75"	0.67"	5/16"	3/8"-24
C4001-1000B	CT40	1"	2.38"	1.75"	0.67"	3/8"	1/2"-20
C4001-1250B	CT40	1-1/4"	2.88"	2.00"	0.67"	1/2"	5/8"-18
C4001-1500B	CT40	1-1/2"	3.80"	2.00"	0.93"	5/8"	3/4"-16

Note: Use balance-qualified retention studs with these holders.

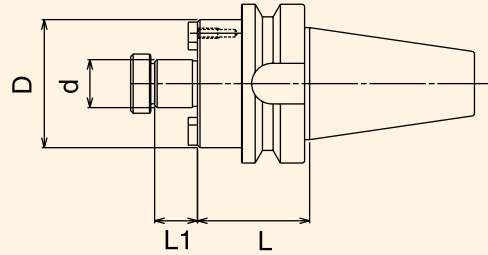
CT50 *hsBALANCE™* SHELL MILL HOLDERS



Part Number	Taper	d	L	D	L1	Key Size	Arbor Thread
C5001-0750B	CT50	3/4"	2.00"	1.75"	0.67"	5/16"	3/8"-24
C5011-0750B	CT50	3/4"	2.00"	4.00"	0.67"	5/16"	3/8"-24
C5001-1000B	CT50	1"	2.75"	1.75"	0.67"	3/8"	1/2"-20
C5011-1000B	CT50	1"	2.75"	4.00"	0.67"	3/8"	1/2"-20
C5001-1250B	CT50	1-1/4"	2.88"	2.00"	0.67"	1/2"	5/8"-18
C5011-1250B	CT50	1-1/4"	2.88"	4.00"	0.67"	1/2"	5/8"-18
C5001-1500B	CT50	1-1/2"	3.80"	2.00"	0.93"	5/8"	3/4"-16
C5011-1500B	CT50	1-1/2"	3.81"	4.00"	0.93"	5/8"	3/4"-16
C5001-2000B	CT50	2"	4.38"	2.00"	0.93"	3/4"	1"-14
C5011-2000B	CT50	2"	4.38"	4.00"	0.93"	3/4"	1"-14

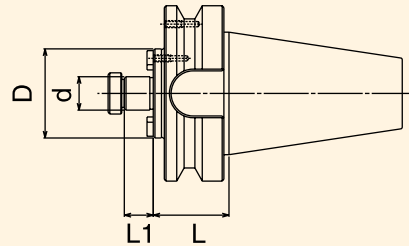
hsBALANCE™ Shell Mill Holders come equipped with drive keys and an arbor screw. **hsBALANCE™** toolholders come with a printout of actual balance condition. For balance specifications, please see page 88

BT40 *hsBALANCE™* SHELL MILL HOLDERS



Part Number	Taper	d	L	D	L1	Key Size	Arbor Thread
B4001-0750B	BT40	3/4"	2.00"	1.75"	0.67"	5/16"	3/8"-24
B4001-1000B	BT40	1"	2.38"	1.75"	0.67"	3/8"	1/2"-20
B4001-1250B	BT40	1-1/4"	2.88"	2.00"	0.67"	1/2"	5/8"-18
B4001-1500B	BT40	1-1/2"	3.80"	2.00"	0.93"	5/8"	3/4"-16

BT50 *hsBALANCE™* SHELL MILL HOLDERS



Part Number	Taper	d	L	D	L1	Key Size	Arbor Thread
B5001-0750B	BT50	3/4"	2.00"	1.75"	0.67"	5/16"	3/8"-24
B5001-1000B	BT50	1"	2.38"	1.75"	0.67"	3/8"	1/2"-20
B5001-1250B	BT50	1-1/4"	2.88"	2.00"	0.67"	1/2"	5/8"-18
B5001-1500B	BT50	1-1/2"	3.80"	2.00"	0.93"	5/8"	3/4"-16

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

BALANCEABLE HOLDERS

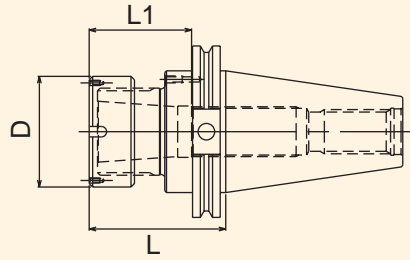
HIGH SPEED

SHRINK FIT

BALANCEABLE

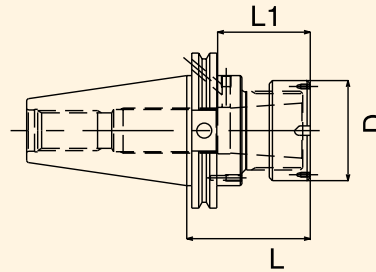
TECHNICAL

CT TAPER *hsBALANCE™* 100TG COLLET CHUCKS



Part Number	Taper	Collet Series	Collet Range	L	L1	D
C4007-0750B	CT40	75TG	3/64-3/4"	3.00"	1.60"	1.97"
C4007-1000B	CT40	100TG	3/64-1"	3.75"	2.12"	2.50"
C4017-1000B	CT40	100TG	3/64-1"	5.50"	2.12"	2.50"
C5007-0750B	CT50	75TG	3/64-3/4"	3.50"	1.60"	1.97"
C5007-1000B	CT50	100TG	3/64-1"	3.50"	2.12"	2.50"
C5017-1000B	CT50	100TG	3/64-1"	5.50"	2.12"	2.50"

CT TAPER *hsBALANCE™* 100TG COLLET CHUCKS

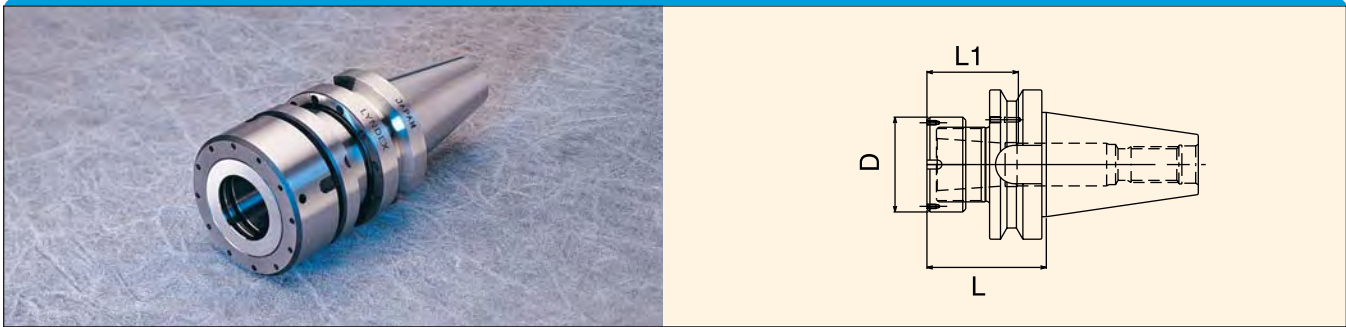


Part Number	Taper	Collet Series	Collet Range	L	L1	D
C4007-1000B-DIN	CT40	100TG	3/64-1"	3.75"	2.52"	2.50"
C5007-1000B-DIN	CT50	100TG	3/64-1"	3.50"	2.12"	2.50"

Note: Use balance-qualified retention studs with these holders. For TG Collets see pages 106-110.

"DIN" designates suitability for coolant through the flange per DIN 69871 Form B specs.

BT TAPER *hsBALANCE™* TG COLLET CHUCKS



Part Number	Taper	Collet Series	Collet Range	L	L1	D
B3007-0750B	BT30	75TG	3/64-3/4"	3.00"	1.60"	1.97"
B4007-0750B	BT40	75TG	3/64-3/4"	3.00"	1.60"	1.97"
B4007-1000B	BT40	100TG	3/64-1"	3.50"	2.12"	2.50"
B4017-1000B	BT40	100TG	1/16-1"	5.50"	2.12"	2.50"
B5007-0750B	BT50	75TG	3/64-3/4"	3.50"	1.60"	1.97"
B5007-1000B	BT50	100TG	3/64-1"	3.50"	2.12"	2.50"
B5017-1000B	BT50	100TG	1/16-1"	5.50"	2.12"	2.50"

hsBALANCE™ Collet Chucks are supplied with a left-hand-threaded stop screw and a chuck nut. *hsBALANCE™* toolholders come with a printout of actual balance condition. For balance specifications, please see page 88.

HIGH SPEED

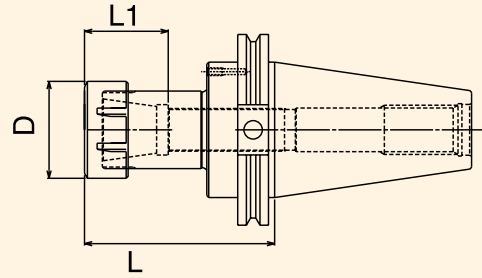
SHRINK FIT

BALANCEABLE

TECHNICAL

BALANCEABLE HOLDERS

CAT TAPER *hsBALANCE™* ER COLLET CHUCKS



Part Number	Taper	Collet Series	Collet Range	L	L1	D
C4007-0008B	CT40	ER8	.019-.196"	2.50"	0.51"	0.47"
C4017-0008B	CT40	ER8	.019-.196"	4.00"	0.51"	0.47"
C4007-0011B	CT40	ER11	.019-.275"	2.50"	0.65"	0.63"
C4017-0011B	CT40	ER11	.019-.275"	4.00"	0.65"	0.63"
C4007-0016B	CT40	ER16	.019-.406"	2.50"	0.87"	0.87"
C4017-0016B	CT40	ER16	.019-.406"	4.00"	0.87"	0.87"
C4007-0020B	CT40	ER20	.039-.511"	2.50"	1.06"	1.10"
C4017-0020B	CT40	ER20	.039-.511"	4.00"	1.06"	1.10"
C4007-0025B	CT40	ER25	.039-.629"	2.50"	1.18"	1.65"
C4017-0025B	CT40	ER25	.039-.629"	4.00"	1.18"	1.65"
C4007-0032B	CT40	ER32	.078-.787"	3.00"	1.33"	1.97"
C4017-0032B	CT40	ER32	.078-.787"	5.00"	1.33"	1.97"
C5007-0016B	CT50	ER16	.019-.406"	2.50"	0.87"	0.87"
C5017-0016B	CT50	ER16	.019-.406"	4.00"	0.87"	0.87"
C5007-0020B	CT50	ER20	.039-.511"	2.50"	1.06"	1.10"
C5017-0020B	CT50	ER20	.039-.511"	4.00"	1.06"	1.10"
C5007-0025B	CT50	ER25	.039-.629"	2.50"	1.18"	1.65"
C5017-0025B	CT50	ER25	.039-.629"	4.00"	1.18"	1.65"
C5007-0032B	CT50	ER32	.078-.787"	4.00"	1.33"	1.97"
C5017-0032B	CT50	ER32	.078-.787"	6.00"	1.33"	1.97"
C5007-0040B	CT50	ER40	.118-1.023"	4.00"	1.50"	2.48"
C5017-0040B	CT50	ER40	.118-1.023"	6.00"	1.50"	2.48"

Note: Use balance-qualified retention studs with these holders.
For ER Collets, see pages 111-126.

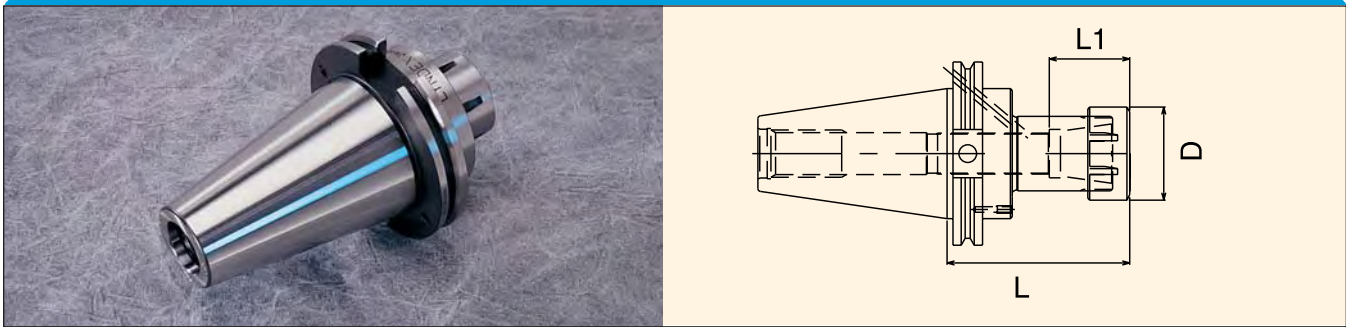
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

CAT TAPER *hsBALANCE*™ ER COLLET CHUCKS - DIN



Part Number	Taper	Collet Series	Collet Range	L	L1	D
C4007-0016B-DIN	CT40	ER16	.019-.406"	2.50"	1.06"	0.87"
C4007-0020B-DIN	CT40	ER20	.039-.511"	2.50"	1.06"	1.10"
C4007-0025B-DIN	CT40	ER25	.039-.629"	2.50"	1.18"	1.65"
C4007-0032B-DIN	CT40	ER32	.078-.787"	3.00"	1.77"	1.97"
C5007-0016B-DIN	CT50	ER16	.019-.406"	2.50"	1.06"	0.87"
C5007-0020B-DIN	CT50	ER20	.039-.511"	2.50"	1.06"	1.10"
C5007-0025B-DIN	CT50	ER25	.039-.629"	2.50"	1.18"	1.65"
C5007-0032B-DIN	CT50	ER32	.078-.787"	4.00"	2.08"	1.97"
C5007-0040B-DIN	CT50	ER40	.118-1.023"	4.00"	2.12"	2.48"

Note: "DIN" designates suitability for coolant through the flange per DIN 69871 Form B specs.

hsBALANCE™ Collet Chucks are supplied with a left-hand-threaded stop screw and a chuck nut. *hsBALANCE*™ toolholders come with a printout of actual balance condition. For balance specifications, please see page 88

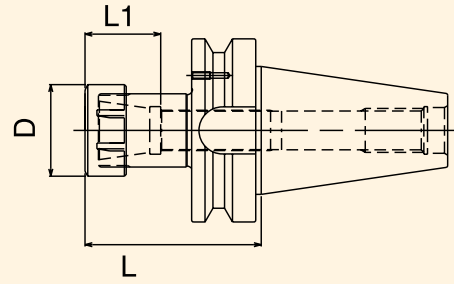
HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

BT TAPER *hsBALANCE*™ ER COLLET CHUCKS



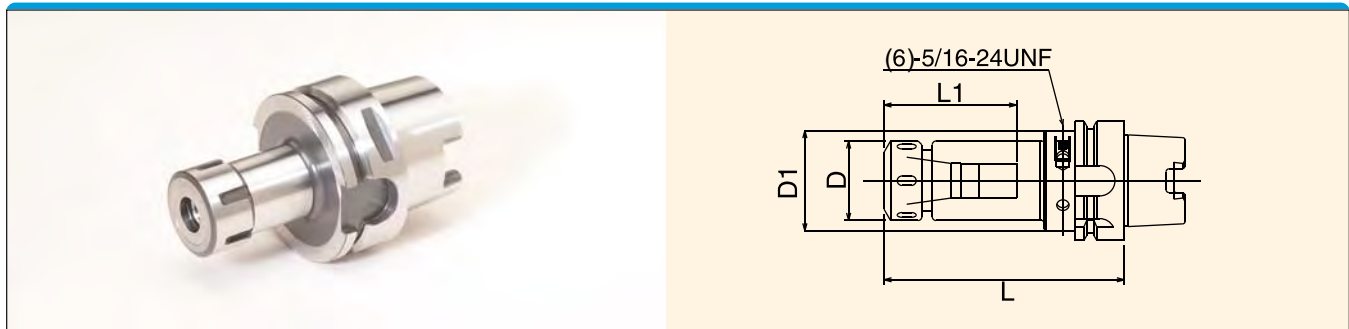
Part Number	Taper	Collet Series	Collet Range	L	L1	D
B3007-0008B	BT30	ER8	.019-.196"	2.00"	0.51"	0.47"
B3017-0008B	BT30	ER8	.019-.196"	4.00"	0.51"	0.47"
B3007-0011B	BT30	ER11	.019-.275"	2.00"	0.65"	0.63"
B3017-0011B	BT30	ER11	.019-.275"	4.00"	0.65"	0.63"
B3007-0016B	BT30	ER16	.019-.406"	2.00"	0.87"	0.87"
B3017-0016B	BT30	ER16	.019-.406"	4.00"	0.87"	0.87"
B3007-0020B	BT30	ER20	.039-.511"	2.50"	1.06"	1.10"
B3017-0020B	BT30	ER20	.039-.511"	4.00"	1.06"	1.10"
B3007-0025B	BT30	ER25	.039-.629"	2.50"	1.18"	1.65"
B3017-0025B	BT30	ER25	.039-.629"	4.00"	1.18"	1.65"
B3007-0032B	BT30	ER32	.078-.787"	3.00"	1.33"	1.97"
B3017-0032B	BT30	ER32	.078-.787"	5.00"	1.33"	1.97"
B3507-0011B	BT35	ER11	.019-.275"	2.00"	0.65"	0.63"
B3517-0011B	BT35	ER11	.019-.275"	4.00"	0.65"	0.63"
B3507-0016B	BT35	ER16	.019-.406"	2.50"	0.87"	0.87"
B3517-0016B	BT35	ER16	.019-.406"	4.00"	0.87"	0.87"
B3507-0025B	BT35	ER25	.039-.629"	2.50"	1.18"	1.65"
B3517-0025B	BT35	ER25	.039-.629"	4.00"	1.18"	1.65"
B4007-0008B	BT40	ER8	.019-.196"	2.50"	0.51"	0.47"
B4017-0008B	BT40	ER8	.019-.196"	4.00"	0.51"	0.47"
B4007-0011B	BT40	ER11	.019-.275"	2.50"	0.65"	0.63"
B4017-0011B	BT40	ER11	.019-.275"	4.00"	0.65"	0.63"
B4007-0016B	BT40	ER16	.031-.406"	2.50"	0.87"	0.87"
B4017-0016B	BT40	ER16	.031-.406"	4.00"	0.87"	0.87"
B4007-0020B	BT40	ER20	.039-.511"	2.50"	1.06"	1.10"
B4017-0020B	BT40	ER20	.039-.511"	4.00"	1.06"	1.10"
B4007-0025B	BT40	ER25	.039-.629"	2.50"	1.18"	1.65"
B4017-0025B	BT40	ER25	.039-.629"	4.00"	1.18"	1.65"
B4007-0032B	BT40	ER32	.078-.787"	3.00"	1.33"	1.97"
B4017-0032B	BT40	ER32	.078-.787"	5.00"	1.33"	1.97"
B5007-0016B	BT50	ER16	.031-.406"	2.50"	0.87"	0.87"
B5017-0016B	BT50	ER16	.031-.406"	4.00"	0.87"	0.87"
B5007-0020B	BT50	ER20	.039-.511"	2.75"	1.06"	1.10"
B5017-0020B	BT50	ER20	.039-.511"	4.00"	1.06"	1.10"
B5007-0025B	BT50	ER25	.039-.629"	2.50"	1.18"	1.65"
B5017-0025B	BT50	ER25	.039-.629"	4.00"	1.18"	1.65"
B5007-0032B	BT50	ER32	.078-.787"	4.00"	1.33"	1.97"
B5017-0032B	BT50	ER32	.078-.787"	6.00"	1.33"	1.97"

Note: For ER Collets, see For ER Collets, see pages 111-126.

hsBALANCE™ Collet Chucks are supplied with a left-hand-threaded stop screw and a chuck nut.

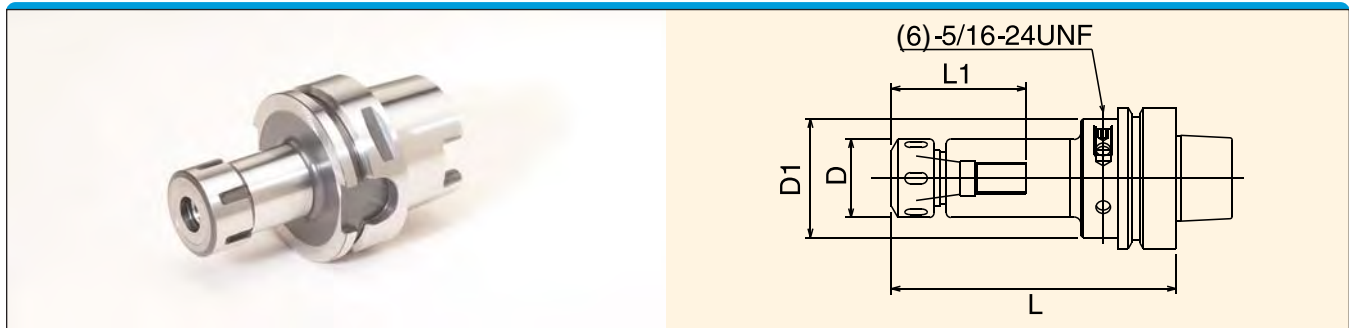
hsBALANCE™ toolholders come with a printout of actual balance condition. For balance specifications, please see page 88

HSK63A ER COLLET CHUCKS



Part Number	Taper	Collet Series	Collet Range	L	L1	D	D1
B/HSK63A-ER16-3.00	HSK63A	ER16	.019-.393"	3.00"	0.866"	0.866"	0.748"
B/HSK63A-ER16-5.00	HSK63A	ER16	.019-.393"	5.00"	0.866"	0.866"	0.748"
B/HSK63A-ER20-3.50	HSK63A	ER20	.039-.511"	3.50"	1.062"	1.102"	0.984"
B/HSK63A-ER20-5.00	HSK63A	ER20	.039-.511"	5.00"	1.062"	1.102"	0.984"
B/HSK63A-ER25-3.50	HSK63A	ER25	.039-.629"	3.50"	1.181"	1.654"	1.260"
B/HSK63A-ER25-5.00	HSK63A	ER25	.039-.629"	5.00"	1.181"	1.654"	1.260"
B/HSK63A-ER32-4.00	HSK63A	ER32	.078-.787"	4.00"	1.260"	1.969"	1.575"
B/HSK63A-ER32-6.00	HSK63A	ER32	.078-.787"	6.00"	1.260"	1.969"	1.575"
B/HSK63A-ER40-5.00	HSK63A	ER40	.118-1.023"	5.00"	1.496"	2.480"	1.969"
B/HSK63A-ER40-6.00	HSK63A	ER40	.118-1.023"	6.00"	1.496"	2.480"	1.969"

HSK63F ER COLLET CHUCKS



Part Number	Taper	Collet Series	Collet Range	L	L1	D	D1
B/HSK63F-ER16-3.50	HSK63F	ER16	.019-.393"	3.50"	0.866"	0.866"	0.748"
B/HSK63F-ER16-5.00	HSK63F	ER16	.019-.393"	5.00"	0.866"	0.866"	0.748"
B/HSK63F-ER20-3.50	HSK63F	ER20	.039-.511"	3.50"	1.062"	1.102"	0.984"
B/HSK63F-ER20-5.00	HSK63F	ER20	.039-.511"	5.00"	1.062"	1.102"	0.984"
B/HSK63F-ER25-3.50	HSK63F	ER25	.039-.629"	3.50"	1.181"	1.654"	1.260"
B/HSK63F-ER25-5.00	HSK63F	ER25	.039-.629"	5.00"	1.181"	1.654"	1.260"
B/HSK63F-ER32-4.00	HSK63F	ER32	.078-.787"	4.00"	1.260"	1.969"	1.575"
B/HSK63F-ER32-6.00	HSK63F	ER32	.078-.787"	6.00"	1.260"	1.969"	1.575"
B/HSK63F-ER40-5.00	HSK63F	ER40	.118-1.023"	5.00"	1.496"	2.480"	1.969"
B/HSK63F-ER40-6.00	HSK63F	ER40	.118-1.023"	6.00"	1.496"	2.480"	1.969"

HIGH SPEED

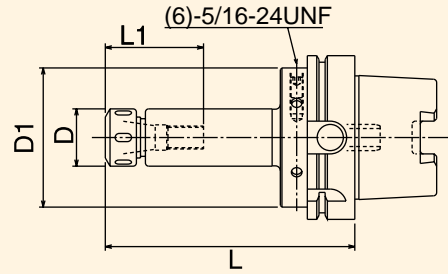
SHRINK FIT

BALANCEABLE

TECHNICAL

BALANCEABLE HOLDERS

HSK100A ER COLLET CHUCKS



Part Number	Taper	Collet Series	Collet Range	L	L1	D	D1
B/HSK100A-ER16-4.00	HSK100A	ER16	.019-.393"	4.00"	0.866"	0.866"	0.748"
B/HSK100A-ER16-6.00	HSK100A	ER16	.019-.393"	6.00"	0.866"	0.866"	0.748"
B/HSK100A-ER20-4.00	HSK100A	ER20	.039-.511"	4.00"	1.062"	1.102"	0.984"
B/HSK100A-ER20-6.00	HSK100A	ER20	.039-.511"	6.00"	1.062"	1.102"	0.984"
B/HSK100A-ER25-4.00	HSK100A	ER25	.039-.629"	4.00"	1.181"	1.654"	1.260"
B/HSK100A-ER25-6.00	HSK100A	ER25	.039-.629"	6.00"	1.181"	1.654"	1.260"
B/HSK100A-ER32-4.00	HSK100A	ER32	.078-.787"	4.00"	1.260"	1.969"	1.575"
B/HSK100A-ER32-6.00	HSK100A	ER32	.078-.787"	6.00"	1.260"	1.969"	1.575"
B/HSK100A-ER40-4.00	HSK100A	ER40	.118-1.023"	4.00"	1.496"	2.480"	1.969"
B/HSK100A-ER40-6.00	HSK100A	ER40	.118-1.023"	6.00"	1.496"	2.480"	1.969"

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



ER SPANNER WRENCHES

Part Number	Description
08-HSSPAN	ER8 Hi-Speed Nut Spanner Wrench
011-HSSPAN	ER11 Hi-Speed Nut Spanner Wrench
016-HSSPAN	ER16 Hi-Speed Nut Spanner Wrench
020-HSSPAN	ER20 Hi-Speed Nut Spanner Wrench
025-SPAN	ER25 Spanner Wrench
032-SPAN	ER32 Spanner Wrench
040-SPAN	ER40 Spanner Wrench



REPLACEMENT ER NUTS

Part Number	Description
08-HSNUT	ER8 Hi-Speed Nut
011-HSNUT	ER11 Hi-Speed Nut
016-HSNUT	ER16 Hi-Speed Nut
020-HSNUT	ER20 Hi-Speed Nut
E25-NUT	ER25 Complete Nut
E32-NUT	ER32 Complete Nut
E40-NUT	ER40 Complete Nut



TG SPANNER WRENCHES

Part Number	Description
75TG-SPAN	75TG Spanner Wrench
100TG-SPAN	100TG Spanner Wrench

REPLACEMENT TG NUTS

Part Number	Description
75TG-NUT(B)	75TG Balanceable Nut
100TG-NUT(B)	100TG Balanceable Nut



HSBALANCE™ BALANCING KITS

Part Number	Size
BAL-KIT (M3)	HSBalance Balancing Kit for small I.D. weight holes
BAL-KIT (M4)	HSBalance Balancing Kit for large I.D. weight holes

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



75TG COLLETS Size Range: 3/64 - 3/4"

Part Number	Size	Part Number	Size
075-003	3/64"	075-026	13/32"
075-004	1/16"	075-027	27/64"
075-005	5/64"	075-028	7/16"
075-006	3/32"	075-029	29/64"
075-007	7/64"	075-030	15/32"
075-008	1/8"	075-031	31/64"
075-009	9/64"	075-032	1/2"
075-010	5/32"	075-033	33/64"
075-011	11/64"	075-034	17/32"
075-012	3/16"	075-035	35/64"
075-013	13/64"	075-036	9/16"
075-014	7/32"	075-037	37/64"
075-015	15/64"	075-038	19/32"
075-016	1/4"	075-039	39/64"
075-017	17/64"	075-040	5/8"
075-018	9/32"	075-041	41/64"
075-019	19/64"	075-042	21/32"
075-020	5/16"	075-043	43/64"
075-021	21/64"	075-044	11/16"
075-022	11/32"	075-045	45/64"
075-023	23/64"	075-046	23/32"
075-024	3/8"	075-047	47/64"
075-025	25/64"	075-048	3/4"

75TG COLLETS SETS

Part Number	Description
075-112	12 Piece 75TG Collet Set: 1/16" - 3/4" by 16ths
075-117	17 Piece 75TG Collet Set: 1/8" - 3/8" by 64ths
075-123	23 Piece 75TG Collet Set: 1/16" - 3/4" by 32nds
075-127	27 Piece 75TG Collet Set: 3/32" - 1/2" by 64ths
075-145	45 Piece 75TG Collet Set: 1/16" - 3/4" by 64ths

75TG COOLANT COLLETS *Size Range: 1/8 - 3/4"*

Part Number	Size	Part Number	Size
075-008(S)	1/8"	075-029(S)	29/64"
075-009(S)	9/64"	075-030(S)	15/32"
075-010(S)	5/32"	075-031(S)	31/64"
075-011(S)	11/64"	075-032(S)	1/2"
075-012(S)	3/16"	075-033(S)	33/64"
075-013(S)	13/64"	075-034(S)	17/32"
075-014(S)	7/32"	075-035(S)	35/64"
075-015(S)	15/64"	075-036(S)	9/16"
075-016(S)	1/4"	075-037(S)	37/64"
075-017(S)	17/64"	075-038(S)	19/32"
075-018(S)	9/32"	075-039(S)	39/64"
075-019(S)	19/64"	075-040(S)	5/8"
075-020(S)	5/16"	075-041(S)	41/64"
075-021(S)	21/64"	075-042(S)	21/32"
075-022(S)	11/32"	075-043(S)	43/64"
075-023(S)	23/64"	075-044(S)	11/16"
075-024(S)	3/8"	075-045(S)	45/64"
075-025(S)	25/64"	075-046(S)	23/32"
075-026(S)	13/32"	075-047(S)	47/64"
075-027(S)	27/64"	075-048(S)	3/4"
075-028(S)	7/16"		



Note: Our TG coolant collets seals up to maximum coolant pressure of 750 PSI.

HIGH SPEED

SHRINK FIT

BALANCEABLE

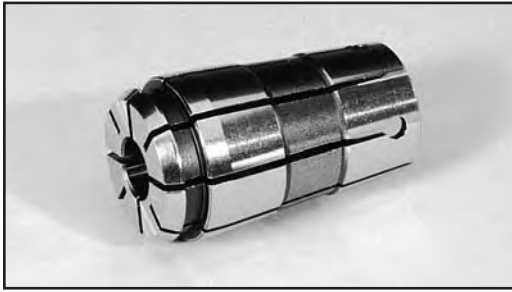
TECHNICAL

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



100TG COLLETS Size Range: 3/64 - 1"

Part Number	Size	Part Number	Size
100-003	3/64"	100-034	17/32"
100-004	1/16"	100-035	35/64"
100-005	5/64"	100-036	9/16"
100-006	3/32"	100-037	37/64"
100-007	7/64"	100-038	19/32"
100-008	1/8"	100-039	39/64"
100-009	9/64"	100-040	5/8"
100-010	5/32"	100-041	41/64"
100-011	11/64"	100-042	21/32"
100-012	3/16"	100-043	43/64"
100-013	13/64"	100-044	11/16"
100-014	7/32"	100-045	45/64"
100-015	15/64"	100-046	23/32"
100-016	1/4"	100-047	47/64"
100-017	17/64"	100-048	3/4"
100-018	9/32"	100-049	49/64"
100-019	19/64"	100-050	25/32"
100-020	5/16"	100-051	51/64"
100-021	21/64"	100-052	13/16"
100-022	11/32"	100-053	53/64"
100-023	23/64"	100-054	27/32"
100-024	3/8"	100-055	55/64"
100-025	25/64"	100-056	7/8"
100-026	13/32"	100-057	57/64"
100-027	27/64"	100-058	29/32"
100-028	7/16"	100-059	59/64"
100-029	29/64"	100-060	15/16"
100-030	15/32"	100-061	61/64"
100-031	31/64"	100-062	31/32"
100-032	1/2"	100-063	63/64"
100-033	33/64"	100-064	1"

100TG COLLET SETS

Part Number	Description
100-108	8 Piece 100TG Standard Collet Set: 1/8" - 1" by 8ths
100-111	11 Piece 100TG Standard Collet Set: 3/8" - 1" by 16ths
100-115	15 Piece 100TG Standard Collet Set: 1/8" - 1" by 16ths
100-121	21 Piece 100TG Standard Collet Set: 3/8" - 1" by 32nds
100-123	23 Piece 100TG Coolant Collet Set: 1/16" - 3/4" by 32nds
100-130	30 Piece 100TG Standard Collet Set: 3/32" - 1" by 32nds
100-141	41 Piece 100TG Standard Collet Set: 3/8" - 1" by 64ths
100-145	45 Piece 100TG Standard Collet Set: 1/16" - 3/4" by 64ths
100-159	59 Piece 100TG Standard Collet Set: 3/32" - 1" by 64ths

100TG COLLETS (METRIC) Size Range: 4 - 26mm

Part Number	Size	Part Number	Size
100-204	4mm	100-218	18mm
100-206	6mm	100-220	20mm
100-208	8mm	100-222	22mm
100-210	10mm	100-224	24mm
100-212	12mm	100-225	25mm
100-214	14mm	100-226	26mm
100-216	16mm		



NON-PULL 100TG COLLETS Size Range: 3/8 - 1"

Part Number	Size	Part Number	Size
100-324	3/8"	100-348	3/4"
100-332	1/2"	100-356	7/8"
100-340	5/8"	100-364	1"



HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



Note: Our TG coolant collets seals up to maximum coolant pressure of 750 PSI.

100TG COOLANT COLLETS Size Range: 1/4 - 1"

Part Number	Size	Part Number	Size
100-016(S)	1/4"	100-041(S)	41/64"
100-017(S)	17/64"	100-042(S)	21/32"
100-018(S)	9/32"	100-043(S)	43/64"
100-019(S)	19/64"	100-044(S)	11/16"
100-020(S)	5/16"	100-045(S)	45/64"
100-021(S)	21/64"	100-046(S)	23/32"
100-022(S)	11/32"	100-047(S)	47/64"
100-023(S)	23/64"	100-048(S)	3/4"
100-024(S)	3/8"	100-049(S)	49/64"
100-025(S)	25/64"	100-050(S)	25/32"
100-026(S)	13/32"	100-051(S)	51/64"
100-027(S)	27/64"	100-052(S)	13/16"
100-028(S)	7/16"	100-053(S)	53/64"
100-029(S)	29/64"	100-054(S)	27/32"
100-030(S)	15/32"	100-055(S)	55/64"
100-031(S)	31/64"	100-056(S)	7/8"
100-032(S)	1/2"	100-057(S)	57/64"
100-033(S)	33/64"	100-058(S)	29/32"
100-034(S)	17/32"	100-059(S)	59/64"
100-035(S)	35/64"	100-060(S)	15/16"
100-036(S)	9/16"	100-061(S)	61/64"
100-037(S)	37/64"	100-062(S)	31/32"
100-038(S)	19/32"	100-063(S)	63/64"
100-039(S)	39/64"	100-064(S)	1"
100-040(S)	5/8"		

100TG COOLANT COLLETS (METRIC) Size Range: 6 - 26MM

Part Number	Size	Part Number	Size
100-206(S)	6mm	100-218(S)	18mm
100-208(S)	8mm	100-220(S)	20mm
100-210(S)	10mm	100-222(S)	22mm
100-212(S)	12mm	100-224(S)	24mm
100-214(S)	14mm	100-225(S)	25mm
100-216(S)	16mm	100-226(S)	26mm

Precision ER Collets



HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

The Most Complete Range of ER Collets Available Anywhere

Every inch and metric size available in both standard and patented coolant-thru designs in our most popular series.



Coolant-thru collets are sealed by design. They contain no wearable rubber or silicone and do not require special nuts or discs.

ER Collets are ideal for high speed/high precision drilling operations.

- Tolerance: Guaranteed to be within 0.0003" at the collet's nose.
- Accuracy: Less than 0.0004" at 4 x D

ER Coolant Collets feature a patented staggered slot design that prevents coolant from reaching the collet's face.

- Unique patented design is solid steel.
- No discs, plugs or other hardware are needed.
- No rubber or silicone to wear out.
- Maximum pressure of 1000psi.

HIGH SPEED

SHRINK FIT

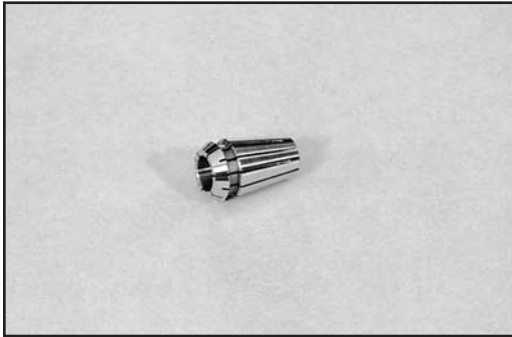
BALANCEABLE

TECHNICAL



ER SERIES 8 COLLETS (metric) Size Range: 0.5 - 5.0mm (.019 - .196")

Part Number	Size	Collapse range
ER8-039	1.0mm	1.0-0.5mm
ER8-059	1.5mm	1.5-1.0mm
ER8-078	2.0mm	2.0-1.5mm
ER8-098	2.5mm	2.5-2.0mm
ER8-118	3.0mm	3.0-2.5mm
ER8-137	3.5mm	3.5-3.0mm
ER8-157	4.0mm	4.0-3.5mm
ER8-177	4.5mm	4.5-4.0mm
ER8-196	5.0mm	5.0-4.5mm
ER8-09S	9 Piece Set 0.5mm - 5.0mm by 0.5mm	



ER SERIES 11 COLLETS SIZE RANGE: 1/32 - 17/64"

Part Number	Size	Collapse range
E11-002	1/32"	1/32" - .0233"
E11-003	3/64"	3/64" - 1/32"
E11-004	1/16"	1/16" - 3/64"
E11-005	5/64"	5/64" - 1/16"
E11-006	3/32"	3/32" - 5/64"
E11-007	7/64"	7/64" - 3/32"
E11-008	1/8"	1/8" - 7/64"
E11-009	9/64"	9/64" - 1/8"
E11-010	5/32"	5/32" - 9/64"
E11-011	11/64"	11/64" - 5/32"
E11-012	3/16"	3/16" - 11/64"
E11-013	13/64"	13/64" - 3/16"
E11-014	7/32"	7/32" - 13/64"
E11-015	15/64"	15/64" - 7/32"
E11-016	1/4"	1/4" - 15/64"
E11-017	17/64"	17/64" - 1/4"
E11-14S	14 Piece Set 1/16" - 1/4" by 64ths	

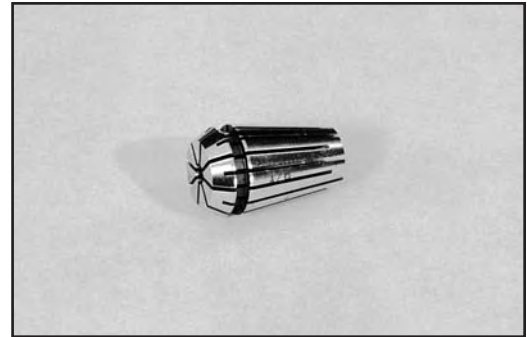


ER SERIES 11 COLLETS (metric) SIZE RANGE: .05 - 7.0MM (.019 - 0.275)

Part Number	Size	Collapse range
E11-039	1.0mm	1.0-0.5mm
E11-059	1.5mm	1.5-1.0mm
E11-078	2.0mm	2.0-1.5mm
E11-098	2.5mm	2.5-2.0mm
E11-118	3.0mm	3.0-2.5mm
E11-137	3.5mm	3.5-3.0mm
E11-157	4.0mm	4.0-3.5mm
E11-177	4.5mm	4.5-4.0mm
E11-196	5.0mm	5.0-4.5mm
E11-216	5.5mm	5.5-5.0mm
E11-236	6.0mm	6.0-5.5mm
E11-255	6.5mm	6.5-6.0mm
E11-275	7.0mm	7.0-6.5mm
E11-12S	12 Piece Set 1.0mm - 7.0mm by 0.5mm	

ER SERIES 11 COOLANT COLLETS SIZE RANGE: 3/16 - 17/64"

Part Number	Size	Collapse range
E11-012(C)	3/16"	.187" - .183"
E11-013(C)	13/64"	.203" - .199"
E11-014(C)	7/32"	.218" - .214"
E11-015(C)	15/64"	.234" - .230"
E11-016(C)	1/4"	.250" - .246"
E11-017(C)	17/64"	.265" - .261"
E11-6S(C)	6 Piece Set 3/16" - 17/64" by 64ths	



Note: Our patented ER Coolant Collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage may result. Seals up to maximum coolant pressure of 1000 PSI.

ER SERIES 11 COOLANT COLLETS (metric) SIZE RANGE: 4.0 - 7.0mm

Part Number	Size	Collapse range
E11-157(C)	4.0mm	4.0mm - 3.9mm
E11-177(C)	4.5mm	4.5mm - 4.4mm
E11-196(C)	5.0mm	5.0mm - 4.9mm
E11-216(C)	5.5mm	5.5mm - 5.4mm
E11-236(C)	6.0mm	6.0mm - 5.9mm
E11-255(C)	6.5mm	6.5mm - 6.4mm
E11-275(C)	7.0mm	7.0mm - 6.9mm
E11-7S(C)	7 Piece Set 3.9mm - 7.0mm by 0.5mm	

HIGH SPEED

SHRINK FIT

BALANCEABLE

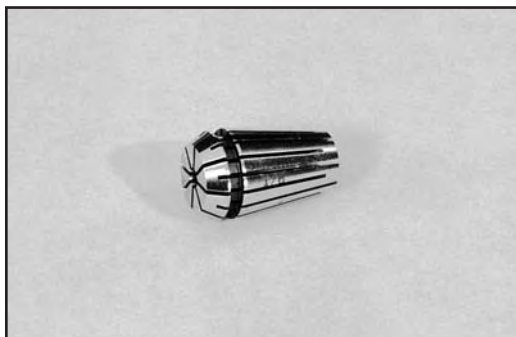
TECHNICAL

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



ER SERIES 16 COLLETS SIZE RANGE: 1/64 - 13/32"

Part Number	Size	Collapse range
E16-002	1/32"	1/32" - 0.0233"
E16-004	1/16"	1/16" - 1/32"
E16-006	3/32"	3/32" - 1/16"
E16-008	1/8"	1/8" - 3/32"
E16-010	5/32"	5/32" - 1/8"
E16-012	3/16"	3/16" - 5/32"
E16-014	7/32"	7/32" - 3/16"
E16-016	1/4"	1/4" - 7/32"
E16-018	9/32"	9/32" - 1/4"
E16-020	5/16"	5/16" - 9/32"
E16-022	11/32"	11/32" - 5/16"
E16-024	3/8"	3/8" - 11/32"
E16-026	13/32"	13/32" - 3/8"
E16-12S	12 Piece Set 1/32" - 13/32" by 32nds	

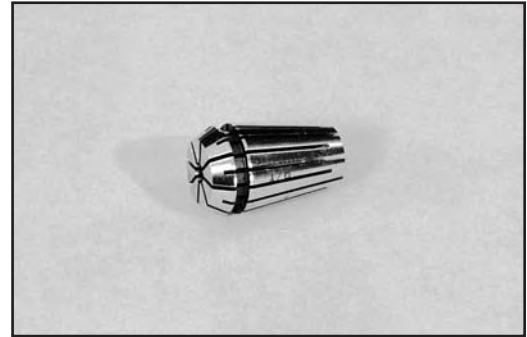
ER SERIES 16 COLLETS (metric)

SIZE RANGE: 1.0 - 13.0mm (0.039-0.511")

Part Number	Size	Collapse range
E16-039	1.0mm	1.0-0.5mm
E16-059	1.5mm	1.5-1.0mm
E16-078	2.0mm	2.0-1.5mm
E16-098	2.5mm	2.5-2.0mm
E16-118	3.0mm	3.0-2.5mm
E16-137	3.5mm	3.5-3.0mm
E16-157	4.0mm	4.0-3.5mm
E16-177	4.5mm	4.5-4.0mm
E16-196	5.0mm	5.0-4.5mm
E16-216	5.5mm	5.5-5.0mm
E16-236	6.0mm	6.0-5.5mm
E16-255	6.5mm	6.5-6.0mm
E16-275	7.0mm	7.0-6.5mm
E16-295	7.5mm	7.5-7.0mm
E16-314	8.0mm	8.0-7.5mm
E16-334	8.5mm	8.5-8.0mm
E16-354	9.0mm	9.0-8.5mm
E16-374	9.5mm	9.5-9.0mm
E16-393	10.0mm	10.0-9.5mm
E16-09S	9 Piece Set 1.0mm - 10.0mm by 1mm	

ER SERIES 16 COOLANT COLLETS SIZE RANGE: 3/32" - 13/32"

Part Number	Size	Collapse range
E16-006(C)	3/32"	.0937" - .0897"
E16-007(C)	7/64"	.109" - .105"
E16-008(C)	1/8"	.125" - .121"
E16-009(C)	9/64"	.140" - .136"
E16-010(C)	5/32"	.156" - .152"
E16-011(C)	11/64"	.171" - .167"
E16-012(C)	3/16"	.187" - .183"
E16-013(C)	13/64"	.203" - .199"
E16-014(C)	7/32"	7/32" - 13/64"
E16-015(C)	15/64"	15/64" - 7/32"
E16-016(C)	1/4"	1/4" - 15/64"
E16-017(C)	17/64"	17/64" - 1/4"
E16-018(C)	9/32"	9/32" - 17/64"
E16-019(C)	19/64"	19/64" - 9/32"
E16-020(C)	5/16"	5/16" - 19/64"
E16-021(C)	21/64"	21/64" - 5/16"
E16-022(C)	11/32"	11/32" - 21/64"
E16-023(C)	23/64"	23/64" - 11/32"
E16-024(C)	3/8"	3/8" - 23/64"
E16-025(C)	25/64"	25/64" - 3/8"
E16-026(C)	13/32"	13/32" - 25/64"
E16-115(C)	11 Piece Set 3/32" - 13/32" by 32nds	



Note: Our patented ER Coolant Collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage may result. Seals up to maximum coolant pressure of 1000 PSI.

ER SERIES 16 COOLANT COLLETS (metric)

SIZE RANGE: 4.0 - 10.0mm

Part Number	Size	Collapse range
E16-157(C)	4.0mm	4.0mm - 3.9mm
E16-177(C)	4.5mm	4.5mm - 4.4mm
E16-196(C)	5.0mm	5.0mm - 4.5mm
E16-216(C)	5.5mm	5.5mm - 5.0mm
E16-236(C)	6.0mm	6.0mm - 5.5mm
E16-255(C)	6.5mm	6.5mm - 6.0mm
E16-275(C)	7.0mm	7.0mm - 6.5mm
E16-295(C)	7.5mm	7.5mm - 7.0mm
E16-314(C)	8.0mm	8.0mm - 7.5mm
E16-334(C)	8.5mm	8.5mm - 8.0mm
E16-354(C)	9.0mm	9.0mm - 8.5mm
E16-374(C)	9.5mm	9.5mm - 9.0mm
E16-393(C)	10.0mm	
E16-135(C)	13 Piece Set 4.0mm - 10.0mm by 0.5mm	

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



ER SERIES 20 COLLETS SIZE RANGE: 1/16" - 1/2"

Part Number	Size	Collapse range
E20-004	1/16"	1/16" - 1/32"
E20-006	3/32"	3/32" - 1/16"
E20-008	1/8"	1/8" - 3/32"
E20-010	5/32"	5/32" - 1/8"
E20-012	3/16"	3/16" - 5/32"
E20-014	7/32"	7/32" - 3/16"
E20-016	1/4"	1/4" - 7/32"
E20-018	9/32"	9/32" - 1/4"
E20-020	5/16"	5/16" - 9/32"
E20-022	11/32"	11/32" - 5/16"
E20-024	3/8"	3/8" - 11/32"
E20-026	13/32"	13/32" - 3/8"
E20-028	7/16"	7/16" - 13/32"
E20-030	15/32"	15/32" - 7/16"
E20-032	1/2"	1/2" - 15/32"
E20-15S	15 Piece Set 1/16" - 1/2" by 32nds	

ER SERIES 20 COLLETS (metric)

SIZE RANGE: 1.0 - 13.0mm (0.039" - 0.511")

Part Number	Size	Collapse range
E20-078	2.0mm	2.0-1.0mm
E20-118	3.0mm	3.0-2.5mm
E20-137	3.5mm	3.5-2.5mm
E20-157	4.0mm	4.0-3.5mm
E20-196	5.0mm	5.0-4.0mm
E20-236	6.0mm	6.0-5.0mm
E20-275	7.0mm	7.0-6.0mm
E20-314	8.0mm	8.0-7.0mm
E20-354	9.0mm	9.0-8.0mm
E20-393	10.0mm	10.0-9.0mm
E20-433	11.0mm	11.0-10.0mm
E20-452	11.5mm	11.5-11.0mm
E20-472	12.0mm	12.0-11.0mm
E20-511	13.0mm	13.0-12.0mm
E20-11S	11 Piece Set 2.0mm - 13.0mm by 1mm	

ER SERIES 20 COOLANT COLLETS SIZE RANGE: 5/32" - 1/2"

Part Number	Size	Collapse range
E20-010(C)	5/32"	.156" - .152"
E20-011(C)	11/64"	.171" - .167"
E20-012(C)	3/16"	.187" - .183"
E20-013(C)	13/64"	.203" - .199"
E20-014(C)	7/32"	7/32" - 13/64"
E20-015(C)	15/64"	15/64" - 7/32"
E20-016(C)	1/4"	1/4" - 15/64"
E20-017(C)	17/64"	17/64" - 1/4"
E20-018(C)	9/32"	9/32" - 17/64"
E20-019(C)	19/64"	19/64" - 9/32"
E20-020(C)	5/16"	5/16" - 19/64"
E20-021(C)	21/64"	21/64" - 5/16"
E20-022(C)	11/32"	11/32" - 21/64"
E20-023(C)	23/64"	23/64" - 11/32"
E20-024(C)	3/8"	3/8" - 23/64"
E20-025(C)	25/64"	25/64" - 3/8"
E20-026(C)	13/32"	13/32" - 25/64"
E20-027(C)	27/64"	27/64" - 13/32"
E20-028(C)	7/16"	7/16" - 27/64"
E20-029(C)	29/64"	29/64" - 7/16"
E20-030(C)	15/32"	15/32" - 29/64"
E20-031(C)	31/64"	31/64" - 15/32"
E20-032(C)	1/2"	1/2" - 31/64"
E20-12S(C)	12 Piece Set 5/32" - 1/2" by 32nds	



Note: Our patented ER Coolant Collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage may result. Seals up to maximum coolant pressure of 1000 PSI.

ER SERIES 20 COOLANT COLLETS (metric)

SIZE RANGE: 5.0 - 130.mm

Part Number	Size	Collapse range
E20-196(C)	5.0mm	5.0mm - 4.9mm
E20-216(C)	5.5mm	5.5mm - 5.4mm
E20-236(C)	6.0mm	6.0mm - 5.5mm
E20-255(C)	6.5mm	6.5mm - 6.0mm
E20-275(C)	7.0mm	7.0mm - 6.5mm
E20-295(C)	7.5mm	7.5mm - 7.0mm
E20-314(C)	8.0mm	8.0mm - 7.5mm
E20-334(C)	8.5mm	8.5mm - 8.0mm
E20-354(C)	9.0mm	9.0mm - 8.5mm
E20-374(C)	9.5mm	9.5mm - 9.0mm
E20-393(C)	10.0mm	10.0mm - 9.5mm
E20-413(C)	10.5mm	10.5mm - 10.0mm
E20-433(C)	11.0mm	11.0mm - 10.5mm
E20-452(C)	11.5mm	11.5mm - 11.0mm
E20-472(C)	12.0mm	12.0mm - 11.5mm
E20-492(C)	12.5mm	12.5mm - 12.0mm
E20-511(C)	13.0mm	13.0mm - 12.5mm
E20-17S(C)	17 Piece Set 5.0mm - 13.0mm by 0.5mm	

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



ER SERIES 25 COLLETS SIZE RANGE: 1/16" - 5/8"

Part Number	Size	Collapse range
E25-004	1/16"	1/16" - 1/32"
E25-006	3/32"	3/32" - 1/16"
E25-008	1/8"	1/8" - 3/32"
E25-010	5/32"	5/32" - 1/8"
E25-012	3/16"	3/16" - 5/32"
E25-014	7/32"	7/32" - 3/16"
E25-016	1/4"	1/4" - 7/32"
E25-018	9/32"	9/32" - 1/4"
E25-020	5/16"	5/16" - 9/32"
E25-022	11/32"	11/32" - 5/16"
E25-024	3/8"	3/8" - 11/32"
E25-026	13/32"	13/32" - 3/8"
E25-028	7/16"	7/16" - 13/32"
E25-030	15/32"	15/32" - 7/16"
E25-032	1/2"	1/2" - 15/32"
E25-034	17/32"	17/32" - 1/2"
E25-036	9/16"	9/16" - 17/32"
E25-038	19/32"	19/32" - 9/16"
E25-040	5/8"	5/8" - 19/32"
E25-19S	19 Piece Set 1/16" - 5/8" by 32nds	

ER SERIES 25 COLLETS (metric)

SIZE RANGE: 1.0 - 16.0mm (0.039" - 0.629")

Part Number	Size	Collapse range
E25-078	2.0mm	2.0-1.0mm
E25-118	3.0mm	3.0-2.0mm
E25-137	3.5mm	3.5-2.5mm
E25-157	4.0mm	4.0-3.0mm
E25-196	5.0mm	5.0-4.0mm
E25-236	6.0mm	6.0-5.0mm
E25-275	7.0mm	7.0-6.0mm
E25-314	8.0mm	8.0-7.0mm
E25-354	9.0mm	9.0-8.0 mm
E25-393	10.0mm	10.0-9.0mm
E25-433	11.0mm	11.0-10.0mm
E25-452	11.5mm	11.5-11.0mm
E25-472	12.0mm	12.0-11.0mm
E25-511	13.0mm	13.0-12.0mm
E25-551	14.0mm	14.0-13.0mm
E25-590	15.0mm	15.0-14.0mm
E25-629	16.0mm	16.0-15.0mm
E25-14S	14 Piece Set 2.0mm - 16.0mm by 1mm	

ER SERIES 25 COOLANT COLLETS SIZE RANGE: 7/32" - 5/8"

Part Number	Size	Collapse range
E25-014(C)	7/32"	7/32" - 13/64"
E25-015(C)	15/64"	15/64" - 7/32"
E25-016(C)	1/4"	1/4" - 15/64"
E25-017(C)	17/64"	17/64" - 1/4"
E25-018(C)	9/32"	9/32" - 17/64"
E25-019(C)	19/64"	19/64" - 9/32"
E25-020(C)	5/16"	5/16" - 19/64"
E25-021(C)	21/64"	21/64" - 5/16"
E25-022(C)	11/32"	11/32" - 21/64"
E25-023(C)	23/64"	23/64" - 11/32"
E25-024(C)	3/8"	3/8" - 23/64"
E25-025(C)	25/64"	25/64" - 3/8"
E25-026(C)	13/32"	13/32" - 25/64"
E25-027(C)	27/64"	27/64" - 13/32"
E25-028(C)	7/16"	7/16" - 27/64"
E25-029(C)	29/64"	29/64" - 7/16"
E25-030(C)	15/32"	15/32" - 29/64"
E25-031(C)	31/64"	31/64" - 15/32"
E25-032(C)	1/2"	1/2" - 31/64"
E25-033(C)	33/64"	33/64" - 1/2"
E25-034(C)	17/32"	17/32" - 33/64"
E25-035(C)	35/64"	35/64" - 17/32"
E25-036(C)	9/16"	9/16" - 35/64"
E25-037(C)	37/64"	37/64" - 9/16"
E25-038(C)	19/32"	19/32" - 37/64"
E25-039(C)	39/64"	39/64" - 19/32"
E25-040(C)	5/8"	5/8" - 39/64"
E25-13S(C)	13 Piece Set 1/4" - 5/8" by 32nds	



Note: Our patented ER Coolant Collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage may result. Seals up to maximum coolant pressure of 1000 PSI.

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



Note: Our patented ER Coolant Collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage may result. Seals up to maximum coolant pressure of 1000 PSI.

ER SERIES 25 COOLANT COLLETS (metric)

SIZE RANGE: 6.0 - 16.0mm

Part Number	Size	Collapse range
E25-236(C)	6.0mm	6.0mm - 5.9mm
E25-255(C)	6.5mm	6.5mm - 6.4mm
E25-275(C)	7.0mm	7.0mm - 6.9mm
E25-295(C)	7.5mm	7.5mm - 7.4mm
E25-314(C)	8.0mm	8.0mm - 7.9mm
E25-334(C)	8.5mm	8.5mm - 8.0mm
E25-354(C)	9.0mm	9.0mm - 8.9mm
E25-374(C)	9.5mm	9.5mm - 9.4mm
E25-393(C)	10.0mm	10.0mm - 9.5mm
E25-413(C)	10.5mm	10.5mm - 10.0mm
E25-433(C)	11.0mm	11.0mm - 10.5mm
E25-452(C)	11.5mm	11.5mm - 11.0mm
E25-472(C)	12.0mm	12.0mm - 11.5mm
E25-492(C)	12.5mm	12.5 - 12.0mm
E25-511(C)	13.0mm	13.0mm - 12.5mm
E25-531(C)	13.5mm	13.5mm - 13.0mm
E25-551(C)	14.0mm	14.0mm - 13.5mm
E25-570(C)	14.5mm	14.5mm - 14.0mm
E25-590(C)	15.0mm	15.0mm - 14.5mm
E25-610(C)	15.5mm	15.5mm - 15.0mm
E25-629(C)	16.0mm	16.0mm - 15.5mm
E25-21S(C)	21 Piece Set 6.0mm - 16.0mm by 0.5mm	

ER SERIES 32 COLLETS SIZE RANGE: 1/8" - 25/32"

Part Number	Size	Collapse range
E32-008	1/8"	1/8" - 3/32"
E32-010	5/32"	5/32" - 1/8"
E32-012	3/16"	3/16" - 5/32"
E32-014	7/32"	7/32" - 3/16"
E32-016	1/4"	1/4" - 7/32"
E32-018	9/32"	9/32" - 1/4"
E32-020	5/16"	5/16" - 9/32"
E32-022	11/32"	11/32" - 5/16"
E32-024	3/8"	3/8" - 11/32"
E32-026	13/32"	13/32" - 3/8"
E32-028	7/16"	7/16" - 13/32"
E32-030	15/32"	15/32" - 7/16"
E32-032	1/2"	1/2" - 15/32"
E32-034	17/32"	17/32" - 1/2"
E32-036	9/16"	9/16" - 17/32"
E32-038	19/32"	19/32" - 9/16"
E32-040	5/8"	5/8" - 19/32"
E32-042	21/32"	21/32" - 5/8"
E32-044	11/16"	11/16" - 21/32"
E32-046	23/32"	23/32" - 11/16"
E32-048	3/4"	3/4" - 23/32"
E32-050	25/32"	25/32" - 3/4"
E32-21S	21 Piece Set 1/8" - 3/4" by 32nds	



ER SERIES 32 COLLETS (metric)

SIZE RANGE: 2 - 20mm (0.078" - 0.787")

Part Number	Size	Collapse range
E32-118	3.0mm	3.0-2.0mm
E32-137	3.5mm	3.5-2.5mm
E32-157	4.0mm	4.0-3.0mm
E32-196	5.0mm	5.0-4.0mm
E32-236	6.0mm	6.0-5.0mm
E32-275	7.0mm	7.0-6.0mm
E32-314	8.0mm	8.0-7.0mm
E32-354	9.0mm	9.0-8.0mm
E32-393	10.0mm	10.0-9.0mm
E32-433	11.0mm	11.0-10.0mm
E32-452	11.5mm	11.5-10.5mm
E32-472	12.0mm	12.0-11.0mm
E32-511	13.0mm	13.0-12.0mm
E32-551	14.0mm	14.0-13.0mm
E32-590	15.0mm	15.0-14.0mm
E32-629	16.0mm	16.0-15.0mm
E32-669	17.0mm	17.0-16.0mm
E32-708	18.0mm	18.0-17.0mm
E32-748	19.0mm	19.0-18.0mm
E32-767	19.5mm	19.5-18.5mm
E32-787	20.0mm	20.0-19.0mm
E32-18S	18 Piece Set 2.0mm - 20.0mm by 1.0mm	

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

BALANCEABLE HOLDERS

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



Note: Our patented ER Coolant Collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage may result. Seals up to maximum coolant pressure of 1000 PSI.

ER SERIES 32 COOLANT COLLETS SIZE RANGE: 1/4" - 25/32"

Part Number	Size	Collapse range
E32-016(C)	1/4"	1/4" - 15/64"
E32-017(C)	17/64"	17/64" - 1/4"
E32-018(C)	9/32"	9/32" - 17/64"
E32-019(C)	19/64"	19/64" - 9/32"
E32-020(C)	5/16"	5/16" - 19/64"
E32-021(C)	21/64"	21/64" - 5/16"
E32-022(C)	11/32"	11/32" - 21/64"
E32-023(C)	23/64"	23/64" - 11/32"
E32-024(C)	3/8"	3/8" - 23/64"
E32-025(C)	25/64"	25/64" - 3/8"
E32-026(C)	13/32"	13/32" - 25/64"
E32-027(C)	27/64"	27/64" - 13/32"
E32-028(C)	7/16"	7/16" - 27/64"
E32-029(C)	29/64"	29/64" - 7/16"
E32-030(C)	15/32"	15/32" - 29/64"
E32-031(C)	31/64"	31/64" - 15/32"
E32-032(C)	1/2"	1/2" - 31/64"
E32-033(C)	33/64"	33/64" - 1/2"
E32-034(C)	17/32"	17/32" - 33/64"
E32-035(C)	35/64"	35/64" - 17/32"
E32-036(C)	9/16"	9/16" - 35/64"
E32-037(C)	37/64"	37/64" - 9/16"
E32-038(C)	19/32"	19/32" - 37/64"
E32-039(C)	39/64"	39/64" - 19/32"
E32-040(C)	5/8"	5/8" - 39/64"
E32-041(C)	41/64"	41/64" - 5/8"
E32-042(C)	21/32"	21/32" - 41/64"
E32-043(C)	43/64"	43/64" - 21/32"
E32-044(C)	11/16"	11/16" - 43/64"
E32-045(C)	45/64"	45/64" - 11/16"
E32-046(C)	23/32"	23/32" - 45/64"
E32-047(C)	47/64"	47/64" - 23/32"
E32-048(C)	3/4"	3/4" - 47/64"
E32-049(C)	49/64"	49/64" - 3/4"
E32-050(C)	25/32"	25/32" - 49/64"
E32-17S(C)	17 Piece Set 1/4" - 3/4" by 32nds	

ER SERIES 32 COOLANT COLLETS (metric)

SIZE RANGE: 10.0 - 20.0mm

Part Number	Size	Collapse range
E32-393(C)	10.0mm	10.0mm - 9.9mm
E32-413(C)	10.5mm	10.5mm - 10.4mm
E32-433(C)	11.0mm	11.0mm - 10.9mm
E32-452(C)	11.5mm	11.5mm - 11.4mm
E32-472(C)	12.0mm	12.0mm - 11.9mm
E32-492(C)	12.5mm	12.5mm - 12.4mm
E32-511(C)	13.0mm	13.0mm - 12.9mm
E32-531(C)	13.5mm	13.5mm - 13.0mm
E32-551(C)	14.0mm	14.0mm - 13.5mm
E32-570(C)	14.5mm	14.5mm - 14.4mm
E32-590(C)	15.0mm	15.0mm - 14.9mm
E32-610(C)	15.5mm	15.5mm - 15.4mm
E32-629(C)	16.0mm	16.0mm - 15.5mm
E32-649(C)	16.5mm	16.5mm - 16.0mm
E32-669(C)	17.0mm	17.0mm - 16.5mm
E32-688(C)	17.5mm	17.5mm - 17.0mm
E32-708(C)	18.0mm	18.0mm - 17.5mm
E32-728(C)	18.5mm	18.5mm - 18.0mm
E32-748(C)	19.0mm	19.0mm - 18.5mm
E32-767(C)	19.5mm	19.5mm - 19.0mm
E32-787(C)	20.0mm	20.0mm - 19.5mm
E32-21S(C)	21 Piece Set	10.0mm - 20.0mm by 0.5mm



Note: Our patented ER Coolant Collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage may result. Seals up to maximum coolant pressure of 1000 PSI.

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

BALANCEABLE HOLDERS

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL



ER SERIES 40 COLLETS SIZE RANGE: 5/32" - 1"

Part Number	Size	Collapse range
E40-010	5/32"	5/32" - 1/8"
E40-012	3/16"	3/16" - 5/32"
E40-014	7/32"	7/32" - 3/16"
E40-016	1/4"	1/4" - 7/32"
E40-018	9/32"	9/32" - 1/4"
E40-020	5/16"	5/16" - 9/32"
E40-022	11/32"	11/32" - 5/16"
E40-024	3/8"	3/8" - 11/32"
E40-026	13/32"	13/32" - 3/8"
E40-028	7/16"	7/16" - 13/32"
E40-030	15/32"	15/32" - 7/16"
E40-032	1/2"	1/2" - 15/32"
E40-034	17/32"	17/32" - 1/2"
E40-036	9/16"	9/16" - 17/32"
E40-038	19/32"	19/32" - 9/16"
E40-040	5/8"	5/8" - 19/32"
E40-042	21/32"	21/32" - 5/8"
E40-044	11/16"	11/16" - 21/32"
E40-046	23/32"	23/32" - 11/16"
E40-048	3/4"	3/4" - 23/32"
E40-050	25/32"	25/32" - 3/4"
E40-052	13/16"	13/16" - 25/32"
E40-054	27/32"	27/32" - 13/16"
E40-056	7/8"	7/8" - 27/32"
E40-058	29/32"	29/32" - 7/8"
E40-060	15/16"	15/16" - 29/32"
E40-062	31/32"	31/32" - 15/16"
E40-064	1"	1" - 31/32"
E40-25S	25 Piece Set 1/4" - 1" by 32nds	

ER SERIES 40 COLLETS (metric) SIZE RANGE: 3 - 26mm (0.118" - 1.023")

Part Number	Size	Collapse range
E40-157	4.0mm	4.0-3.0mm
E40-196	5.0mm	5.0-4.0mm
E40-236	6.0mm	6.0-5.0mm
E40-275	7.0mm	7.0-6.0mm
E40-314	8.0mm	8.0-7.0mm
E40-354	9.0mm	9.0-8.0 mm
E40-393	10.0mm	10.0-9.0mm
E40-433	11.0mm	11.0-10.0mm
E40-452	11.5mm	11.5-10.5mm
E40-472	12.0mm	12.0-11.0mm
E40-511	13.0mm	13.0-12.0mm
E40-551	14.0mm	14.0-13.0mm
E40-590	15.0mm	15.0-14.0mm
E40-629	16.0mm	16.0-15.0mm
E40-669	17.0mm	17.0-16.0mm
E40-708	18.0mm	18.0-17.0mm
E40-748	19.0mm	19.0-18.0mm
E40-767	19.5mm	19.5-18.5mm
E40-787	20.0mm	20.0-19.0mm
E40-826	21.0mm	21.0-20.0mm
E40-866	22.0mm	22.0-21.0mm
E40-905	23.0mm	23.0-22.0mm
E40-944	24.0mm	24.0-23.0mm
E40-984	25.0mm	25.0-24.0mm
E40-1023	26.0mm	26.0-25.0mm
E40-23S	23 Piece Set 4.0mm - 26.0mm by 1.0mm	



HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

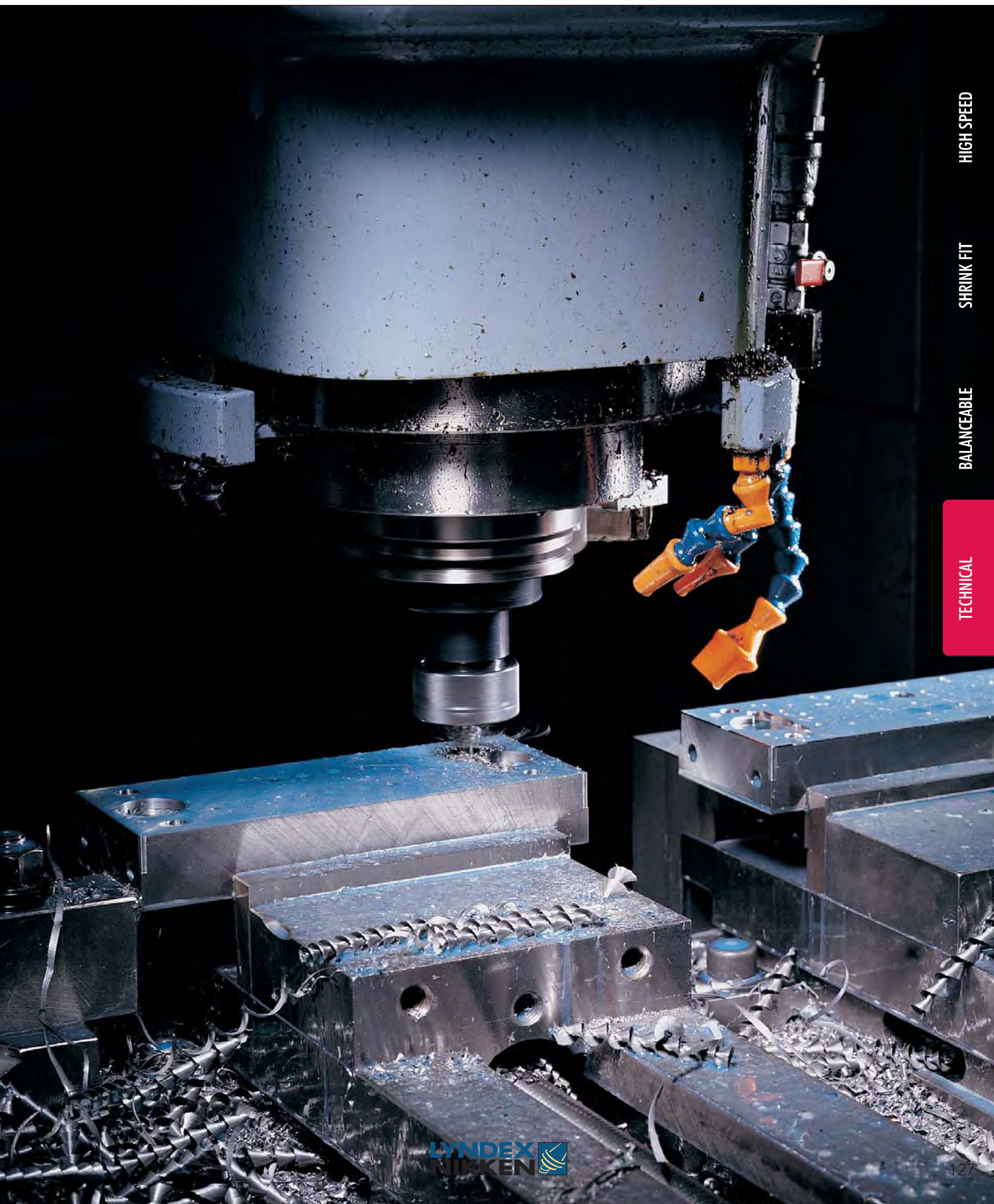


Note: Our patented ER Coolant Collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage may result. Seals up to maximum coolant pressure of 1000 PSI.

ER SERIES 40 COOLANT COLLETS (metric)

SIZE RANGE: 10.0 - 26.0mm

Part Number	Size	Collapse range
E40-393(C)	10.0mm	10.0mm - 9.9mm
E40-413(C)	10.5mm	10.5mm - 10.4mm
E40-433(C)	11.0mm	11.0mm - 10.9mm
E40-452(C)	11.5mm	11.5mm - 11.4mm
E40-472(C)	12.0mm	12.0mm - 11.9mm
E40-492(C)	12.5mm	12.5mm - 12.4mm
E40-511(C)	13.0mm	13.0mm - 12.9mm
E40-531(C)	13.5mm	13.5mm - 13.4mm
E40-551(C)	14.0mm	14.0mm - 13.9mm
E40-570(C)	14.5mm	14.5mm - 14.4mm
E40-590(C)	15.0mm	15.0mm - 14.9mm
E40-610(C)	15.5mm	15.5mm - 15.4mm
E40-629(C)	16.0mm	16.0mm - 15.9mm
E40-649(C)	16.5mm	16.5mm - 16.4mm
E40-669(C)	17.0mm	17.0mm - 16.9mm
E40-688(C)	17.5mm	17.5mm - 17.4mm
E40-708(C)	18.0mm	18.0mm - 17.5mm
E40-728(C)	18.5mm	18.5mm - 18.0mm
E40-748(C)	19.0mm	19.0mm - 18.5mm
E40-767(C)	19.5mm	19.5mm - 19.0mm
E40-787(C)	20.0mm	20.0mm - 19.5mm
E40-807(C)	20.5mm	20.5mm - 20.0mm
E40-826(C)	21.0mm	21.0mm - 20.5mm
E40-846(C)	21.5mm	21.5mm - 21.0mm
E40-866(C)	22.0mm	22.0mm - 21.5mm
E40-885(C)	22.5mm	22.5mm - 22.0mm
E40-905(C)	23.0mm	23.0mm - 22.5mm
E40-925(C)	23.5mm	23.5mm - 23.0mm
E40-944(C)	24.0mm	24.0mm - 23.5mm
E40-964(C)	24.5mm	24.5mm - 24.0mm
E40-984(C)	25.0mm	25.0mm - 24.5mm
E40-1003(C)	25.5mm	25.5mm - 25.0mm
E40-1023(C)	26.0mm	26.0mm - 25.0mm
E40-33S(C)	33 Piece Set 10.0mm - 26.0mm by 0.5mm	



HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

Lyndex-Nikken Product Warranty

Standard Product

Lyndex-Nikken Inc., the seller, warrants to the user, who purchases and uses (the "User") the Standard Product, as hereinafter defined against defects in materials and workmanship for one year from the date of delivery of the Standard Product to the User.

A "Standard Product" is defined as a product sold by Lyndex-Nikken which is not:

- A Lyndex-Nikken Tool Presetter and/or Custom Tool line Product, which is separately warranted. (Please see the separate warranty information included with each of these respective products).
- Special Tooling manufactured by Lyndex-Nikken at the User's request and to the User's specifications and/or plans, which shall have been approved by User, or,
- Modified Standard Product, which is modified by Lyndex-Nikken at the User's request and to User's specifications and/or plans, which shall have been approved by User.

From time to time in this Warranty, the Standard Product, Special Tooling or Modified Standard Product may be collectively referred to as the "Product."

Special Tooling or Modified Product

If the User first provides Lyndex-Nikken with all the required manufacturing specifications, then Lyndex-Nikken warrants that the Special Tooling and/or Modified Standard Product (1) will be manufactured to the User's specifications and (2) shall be free from defects in materials and workmanship for one year from the date of delivery of the product to the User, but Lyndex is not warranting that the Special Tooling and/or Modified Standard Product can perform the task anticipated by the User's specifications.

Additional Provisions

- Any attempts to repair, disassemble, modify, alter or otherwise change the Product voids this Warranty.
- It is the User's responsibility to see that the Product is suitable for the User's applications of the Product.
- Common wear parts such as bearings, seals & rotary unions (and the like), which are subject to wear and tear, are not included in this Warranty.
- To use the Products and avoid injury to persons or property, the User acknowledges that it is the User's sole responsibility to confirm that the supplied retention knobs are correct for the machine tool and taper type.
- The User agrees to indemnify and hold harmless Lyndex-Nikken, including reasonable attorneys' fees it might incur, for any claims arising out of an incorrect fit of the retention knobs.
- Our obligation under this warranty is to the initial User only.
- This Warranty may not be assigned without the express written approval of Lyndex.
- This Warranty is limited exclusively to the repair or replacement of parts found defective by Lyndex' Service Department.
- This Warranty provides for no credit or cash refund to the User.
- This Warranty is subject to change without notice, provided however, even though Lyndex shall not be required to give notice of a change in its Warranty, Lyndex will make a reasonable effort to notify customers and Distributors, who shall be obligated to notify its customers, of any substantive changes in the Warranty by either written notice to the customer, written notice to its Distributors, notice when an order is placed, or by including a copy of a changed Warranty in the product's package.

All other warranties, express or implied, are excluded.

APPLICATION GUIDE

Toolholder Type	Max Capacity	TIR	TIR Location	Milling					Drilling	Reaming
				Rough HSS	Finish HSS	Rough Indexable	Rough Carbide	Finish Carbide		
Bullseye	1.00"	0.0000"	4 x D						★★★★★	★★★★★
VC Chuck	.500"	0.0001"	4 x D	★★★	★★★★★	★★	★★★★★	★★★★★	★★	★★
MMC - Insider	.500"	0.0001"	4 x D	★★★	★★★★★	★★	★★★	★★★★★	★★★	★★★
Milling Chuck	1.25"	0.0002"	4" from Nose	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★	★★★
SK - LSK	1.00"	0.0002"	4 x D	★★★	★★★	★	★★★	★★★	★★★★★	★★★
Shrink-Fit	2.00"	0.0002"	4 x D	★	★★★		★★★	★★★	★	★★
ER Chuck	1.338"	0.0004"	4 x D	★★	★★	★	★★	★★	★★	★★
TG Chuck	1.50"	0.0005"	4 x D	★★	★	★	★	★	★★	★★
DA Chuck	.750"	0.0008"	4 x D	★	★			★	★	
End-Mill Holder	2.50"	0.0005"	Nose	★★★	★★	★★★	★	★	★	
Shell-Mill Holder	2.00"	0.0002"	Arbor							
Face-Mill Holder	2.50"	0.0002"	Arbor							
Stub-Mill Holder	1.50"	0.0002"	Holder Arbor							
Integral Drill Chuck	.500"								★★	★
Jacobs Drill Chuck	.750"								★★	★
Morse Taper Chuck	MT#5								★★	★

★ = Good ★★★★★ = Excellent

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

Taper Specifications

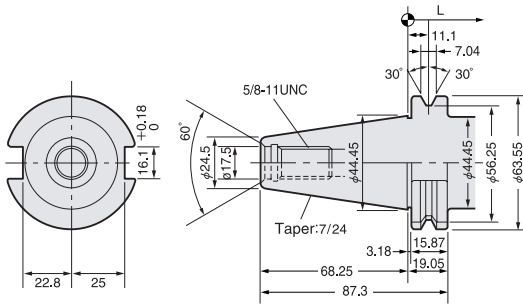
HIGH SPEED

SHRINK FIT

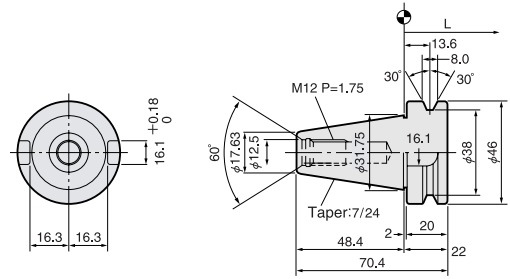
BALANCEABLE

TECHNICAL

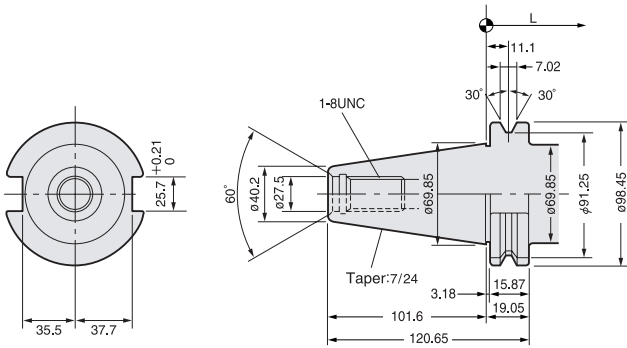
CAT 40



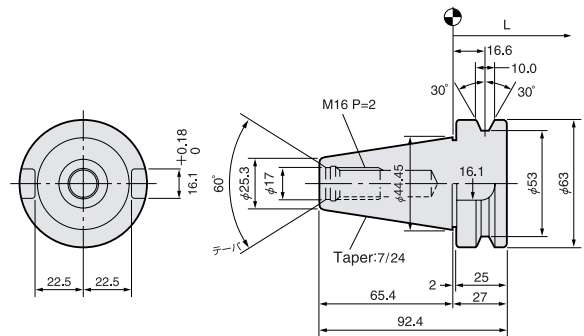
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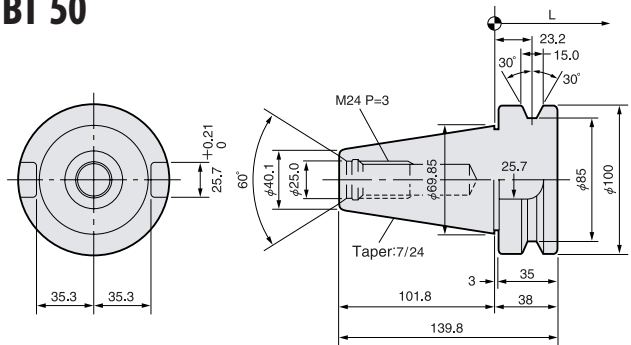
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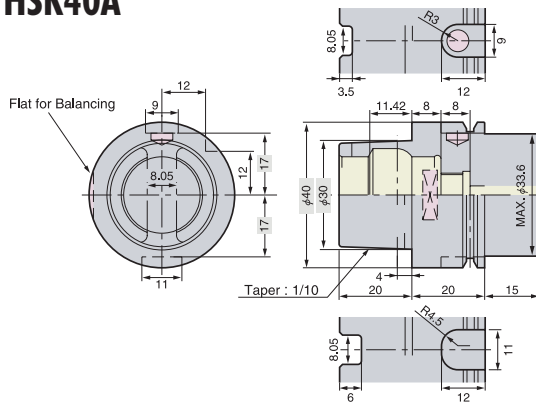


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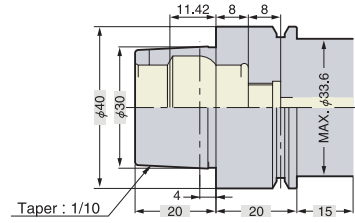


Taper Specifications

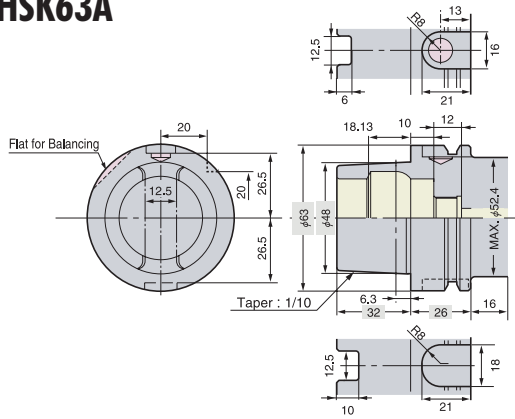
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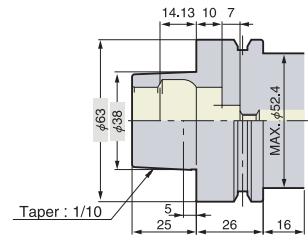
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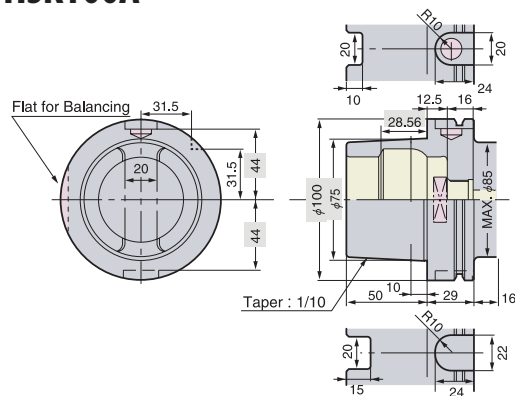
HSK63A



HSK63F



HSK100A



HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

TIGHTENING TORQUE FOR END MILL HOLDER SET SCREWS

I.D.	Set Screw Size	Tightening Torque	Hex Wrench Size
1/8"	6-32 x 1/4	0.6 ft/lbs	1/16
3/16"	8-32 x 1/4	0.8 ft/lbs	5/64
1/4"	1/4-28 x 1/4	6.5 ft/lbs	1/8
5/16"	5/16-24 x 1/4	14 ft/lbs	5/32
3/8"	3/8-24 x 5/16	16 ft/lbs	3/16
7/16"	3/8-24 x 5/16	16 ft/lbs	3/16
1/2"	7/16-20 x 3/8	24 ft/lbs	7/32
5/8"	9/16-18 x 1/2	36 ft/lbs	9/32
3/4"	5/8-18 x 1/2	36 ft/lbs	5/16
7/8"	5/8-18 x 1/2	76 ft/lbs	5/16
1"	3/4-16 x 11/16	150 fl/lbs	3/8
1-1/4"	3/4-16 x 11/16	150 fl/lbs	3/8
1-1/2"	3/4-16 x 11/16	150 fl/lbs	3/8
2"	1-14 x 7/8	270 ft/lbs	9/16
2-1/2"	1-14 x 7/8	270 ft/lbs	9/16
6.00mm	1/4-28 x 1/4	6.5 ft/lbs	1/8
8.00mm	5/16-24 x 1/4	14 ft/lbs	5/32
10.00mm	3/8-24 x 5/16	16 ft/lbs	3/16
12.00mm	7/16-20 x 3/8	24 ft/lbs	7/32
14.00mm	9/16-18 x 1/2	36 ft/lbs	9/32
16.00mm	9/16-18 x 1/2	36 ft/lbs	9/32
18.00mm	5/8-18 x 1/2	36 ft/lbs	5/16
20.00mm	5/8-18 x 1/2	36 ft/lbs	5/16
25.00mm	3/4-16 x 11/16	150 fl/lbs	3/8
32.00mm	3/4-16 x 11/16	150 fl/lbs	3/8
40.00mm	3/4-16 x 11/16	150 fl/lbs	3/8
42.00mm	3/4-16 x 11/16	150 fl/lbs	3/8

TIGHTENING TORQUE FOR COLLET CHUCKS

Collet Type	Collet Size	Nut Tightening Torque
SK	SK06	22-29 ft/lbs*
	SK10	33-34 ft/lbs
	SK16	55-62 ft/lbs
	SK25	66-73 ft/lbs
ER	ER8	4 ft/lbs
	ER11	18 ft/lbs
	ER16	40 ft/lbs
	ER20	60 ft/lbs
	ER25	75 ft/lbs
	ER32	100 ft/lbs
	ER40	125 ft/lbs
	ER50	175 ft/lbs
TG	TG25	20 ft/lbs
	TG50	35 ft/lbs
	TG75	55 ft/lbs
	TG100	75 ft/lbs
	TG150	100 ft/lbs
DA	300DA	18 ft/lbs
	200DA	25 ft/lbs
	100DA	35 ft/lbs
	180DA	40 ft/lbs

*Note: 14 ft/lbs for $\varnothing \leq 3\text{mm}$ on SK06 Collet Chucks.

Tap Dimensional Data

U.S. TAPS

U.S. Inch	JIS Metric	Shank Dia.		Square Dia.	
		inch	mm	inch	mm
#0 - #6	M1.6 - M3.5	0.141	3.6	0.110	2.8
#8	M4	0.168	4.3	0.131	3.3
#10	M5	0.194	4.9	0.152	3.9
#12		0.220	5.6	0.165	4.2
1/4"	M6	0.225	5.7	0.191	4.9
5/16"	M7, M8	0.318	8.1	0.238	6.0
3/8"	M10	0.381	9.7	0.286	7.3
7/16"		0.323	8.2	0.242	6.1
1/2"	M12	0.367	9.3	0.275	7.0
9/16"	M14	0.429	10.9	0.322	8.2
5/8"	M16	0.480	12.2	0.360	9.1
11/16"	M18	0.451	11.5	0.406	10.3
3/4"		0.590	15.0	0.442	11.2
13/16"	M20	0.652	16.6	0.489	12.4
7/8"	M22	0.697	17.7	0.523	13.3
15/16"	M24	0.760	19.3	0.570	14.5
1"	M25	0.800	20.3	0.600	15.2
1-1/16"	M27	0.896	22.8	0.672	17.1
1-1/8"		0.896	22.8	0.672	17.1
1-3/16"	M30	1.021	25.9	0.766	19.5
1-1/4"		1.021	25.9	0.766	19.5
1-5/16"	M33	1.108	28.1	0.831	21.1
1-3/8"		1.108	28.1	0.831	21.1

JIS TAPS

JIS Metric	Shank Dia.		Square Dia.	
	inch	mm	inch	mm
M4	0.197	5.0	0.157	4.0
M5	0.217	5.5	0.177	4.5
M6	0.236	6.0	0.177	4.5
M7, M8	0.244	6.2	0.197	5.0
M9, M10	0.276	7.0	0.217	5.5
M11	0.315	8.0	0.236	6.0
M12	0.335	8.5	0.256	6.5
M14, M15	0.413	10.5	0.315	8.0
M16	0.492	12.5	0.394	10.0
M17	0.512	13.0	0.394	10.0
M18	0.551	14.0	0.433	11.0
M20	0.591	15.0	0.472	12.0
M22	0.669	17.0	0.512	13.0
M25	0.748	19.0	0.591	15.0
M26, M27	0.787	20.0	0.591	15.0
M28	0.827	21.0	0.669	17.0
M30	0.906	23.0	0.669	17.0
M32	0.945	24.0	0.748	19.0
M33	0.984	25.0	0.748	19.0
M34, M35	1.024	26.0	0.827	21.0
M36, M38	1.102	28.0	0.827	21.0
M39, M40	1.181	30.0	0.906	23.0
M42	1.260	32.0	1.024	26.0

DIN 371 TAPS

US Metric	Shank Dia.		Square Dia.	
	inch	mm	inch	mm
M1 - M1.8	0.098	2.5	0.083	2.1
M2 - M2.5	0.110	2.8	0.083	2.1
M3	0.138	3.5	0.106	2.7
M3.5	0.157	4.0	0.118	3.0
M4	0.177	4.5	0.134	3.4
M5, M6	0.236	6.0	0.193	4.9
M8	0.315	8.0	0.244	6.2
M10	0.394	10.0	0.315	8.0

DIN 376 TAPS

US Metric	Shank Dia.		Square Dia.	
	inch	mm	inch	mm
M8	0.236	6.0	0.193	4.9
M10	0.276	7.0	0.217	5.5
M12	0.354	9.0	0.276	7.0
M14	0.433	11.0	0.354	9.0
M16	0.472	12.0	0.354	9.0
M18	0.551	14.0	0.433	11.0
M20	0.630	16.0	0.472	12.0
M22, M24	0.709	18.0	0.571	14.5
M27	0.787	20.0	0.630	16.0
M30	0.866	22.0	0.709	18.0
M33	0.984	25.0	0.787	20.0
M36	1.102	28.0	0.866	22.0
M39, M42	1.260	32.0	0.945	24.0
M45, M48	1.417	36.0	1.142	29.0
M52	1.575	40.0	1.260	32.0

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

Tap Collet Torque Specifications

PRESET TORQUE FOR TAP COLLETS - ANSI

Tap Shank x Square	Tap Size	Torque Setting ft./lbs.
141 x .110	#0-1	0.14
3.581 x 2.794	#2	0.22
	#3	0.29
	#4	0.36
	#5	0.58
	#6	0.72
.168 x .131	#8	1.16
4.267 x 3.327		
.194 x .152	#10	2.2
4.927 x 3.860		
.220 x .165	#12	2.9
5.588 x 4.191		
.255 x .191	1/4"	4.34
6.477 x 4.851		
.318 x .238	5/16"	7.23
8.077 x 6.045		
.381 x .286	3/8"	11.58
9.677 x 7.264		
.323 x .242	7/16"	15.91
8.204 x 6.146		
.367 x .275	1/2"	23.15
9.321 x 6.985		

PRESET TORQUE FOR TAP COLLETS - ANSI

Tap Shank x Square	Tap Size	Torque Setting ft./lbs.
.429 x .322	9/16"	28.93
10.896 x 8.178		
.480 x .360	5/8"	36.17
12.192 x 9.144		
.542 x .406	11/16"	44
13.766 x 10.31		
.590 x .442	3/4"	50.63
14.986 x 11.23		
.652 x .489	13/16"	57.5
16.56 x 12.42		
.697 x .523	7/8"	72.33
17.703 x 13.28		
.760 x .570	15/16"	77.4
19.304 x 14.48		
.800 x .600	1"	101.26
20.32 x 15.24		
.896 x .672	1-1/8"	144.66
22.758 x 17.07		

PRESET TORQUE FOR TAP COLLETS - JIS

Tap Shank x Square	Tap Size	Torque Setting Nm
3 x 2.5	M 2	0.6
4 x 3.2	M 3	1
5 x 4	M 4	2.3
5.5 x 4.5	M 5	3.6
6 x 4.5	M 6	5.9
6.2 x 5	M 8	11.8
7 x 5.5	M 10	21.6
8 x 6	M 11	25
8.5 x 6.5	M 12	31.4
9.5 x 7	M 13	39
10.5 x 8	M 14	46
12.5 x 10	M 16	51
13 x 10	M 17	67
14 x 11	M 18	80

PRESET TORQUE FOR TAP COLLETS - JIS

Tap Shank x Square	Tap Size	Torque Setting Nm
15 x 12	M 20	88
17 x 13	M 22	98
19 x 15	M 24	132
20 x 15	M 27	157
21 x 17	M 28	175
23 x 17	M 30	225
24 x 19	M 32	235
25 x 19	M 33	245
26 x 21	M 34	265
28 x 21	M 36	304

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

Tap Collet Torque Specifications

PRESET TORQUE FOR TAP COLLETS - ISO

Tap Shank x Square	Tap Size	Torque Setting Nm	
2.24 x 1.8 2.5 x 2	M 3	0.5	○
	M 2	0.3	■
	M 3.5	0.8	○
2.8 x 2.24	M 2.2	0.35	■
	M 2.5	0.4	○
3.15 x 2.5	M 3	0.5	■
	M 4	1.2	○
3.55 x 2.8	M 3.5	0.8	■
	M 4.5	1.6	○
4 x 3.15	M 4	1.2	■
	M 5	2	○
4.5 x 3.55	M 4.5	1.6	■
	M 6	4	○
5 x 4 5.6 x 4.5	M 5	2	○
	M 7	6	○
6.3 x 5	M 6	4	■
	M 8	8	○
7.1 x 5.6	M 7	6	○
	M 10	16	■
8 x 6.3	M 8	8	○
	M 10	16	■
	M 11	18	■

PRESET TORQUE FOR TAP COLLETS - DIN

Tap Shank x Square	Tap Size	Torque Setting Nm	
2.5 x 2.1	M 1.8	0.3	○
	M 3	0.5	■
2.8 x 2.1	M 2	0.3	■
	M 2.2	0.35	■
	M 2.5	0.4	○
	M 4	1.2	■
3.5 x 2.7	M 3	0.5	○
	M 5	2	■
4 x 3 4.5 x 3.4	M 3.5	0.8	○
	M 4	1.2	○
	M 6	4	■
6 x 4.9	M 5	2	■
	M 6	4	■
	M 8	8	○
7 x 5.5 8 x 6.2	M 10	16	○
	M 8	8	○
	M 11	18	■
9 x 7 10 x 8 11 x 9 12 x 9	M 12	22	○
	M 10	16	○
	M 14	36	○
	M 16	40	○

PRESET TORQUE FOR TAP COLLETS - ISO

Tap Shank x Square	Tap Size	Torque Setting Nm	
9 x 7.1	M 9	12	■
	M 12	22	○
10 x 8	M 10	16	○
	M 14	36	○
11.2 x 9 12.5 x 10	M 16	40	○
	M 20	70	■
	M 18	63	○
14 x 11.2 16 x 12.5 18 x 14 20 x 16	M 22	80	○
	M 24	125	○
	M 30	220	○
22.4 x 18 25 x 20	M 33	240	○
	M 33	240	○
	M 36	280	■
28 x 22.4	M 39	320	○
	M 42	420	■

○ - Standard setting.
■ - Setting on request.

PRESET TORQUE FOR TAP COLLETS - DIN

Tap Shank x Square	Tap Size	Torque Setting Nm	
14 x 11	M 16	40	■
	M 18	63	○
16 x 12 18 x 14.5	M 20	70	○
	M 22	80	■
	M 24	125	○
20 x 16 22 x 18 25 x 20	M 27	140	○
	M 30	220	○
	M 33	240	○
	M 36	280	■
28 x 22	M 36	280	○

○ - Standard setting.
■ - Setting on request.

HIGH SPEED

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3Lock Technical Information

HIGH SPEED

SHRINK FIT

BALANCEABLE

TECHNICAL

Please make sure that the suitable spacer is fitted on the machine spindle flange when the 3Lock tooling is used on the standard BT/IT/CAT spindle machine. Please do not use 3Lock tooling on the standard machine without the spacer.

Always ensure the swarf can't attach at the spindle flange surface of the double contact system. Generally the inside of the machining envelope is always covered with swarf. This means that there is a possibility that the flange of the tooling may collect swarf easily at the ATC. It is therefore important that the machine envelope is regularly cleaned (Clean the ATC arm, the route through which the tooling passes, the tool pot and the spindle surfaces ect.) at least every 3 months.

The fine swarf may contaminate the inside of a vacant pot within the ATC. If tool is randomly placed into ATC please either make sure the tool holder is returned to original station or insert dummy tool into all vacant pots to prevent swarf build up inside ATC station.

The taper connection of the tool shank with Rust Preventative Treatment (RPT) is more prone to sticking in the spindle than a tool shank without the RPT treatment. Also the unclamping force for the tool with the RPT treatment must be 20% stronger than the unclamping force of the tool without RPT treatment. Please be careful to check the unclamping force of your milling center when the tool with the RPT treatment is chosen.

As standard the taper cone of 3Lock Tool and NC5 tool is provided without the RPT treatment. When RPT treatment is required please add "TCRP" at end of part number.

Caution must be taken for center through tool coolant applications. There are two methods to seal coolant at the retention stud: Sealing the face contact and sealing of the taper contact. Please choose the proper retention stud for your milling center.

If your milling machine has center through coolant but does not have the sealing at the retention stud, the coolant may get inside the spindle and can be sealed by a standard tool holder connection. However the 3Lock tool can not seal the coolant at the taper connection because of the slit within the taper of the 3Lock holder.

If the pulling force of the machine spindle decreases substantially, the Nikken 3Lock tooling cannot perform 100% at its capability. We would recommend that regular inspection of the pulling force is carried out to prevent any reduction in the pulling force at an early stage.

