



CNC TOOLING SYSTEM CATALOG

High-performance solutions to optimize
your machine performance

MACHINE TOOL SOLUTIONS FOR EVERY APPLICATION



**SK COLLET
CHUCKS**

PAGE 9



**ER COLLET
CHUCKS**

PAGE 45



**VC COLLET
CHUCKS**

PAGE 77



**MMC COLLET
CHUCKS**

PAGE 89



**SHRINK
FIT**

PAGE 99



**MILLING
CHUCKS**

PAGE 133



**END MILL
HOLDERS**

PAGE 157



**SHELL MILL
HOLDERS**

PAGE 175



**DRILL CHUCKS &
MORSE TAPERS**

PAGE 189



**TAP
HOLDERS**

PAGE 199



**TG/DA COLLET
CHUCKS**

PAGE 227



**ANGLE
HEADS**

PAGE 243



**STUB MILL
HOLDERS**

PAGE 251



**R8/5C/3J/16C
COLLETS**

PAGE 257



**RETENTION
KNOBS**

PAGE 267



KOKORO = HUMAN HEART

Our company name, "NIKKEN," is derived from our desire to "always maintain the willingness to study patiently on a daily basis and contribute to future industries with technology and ideas."

INTRODUCTION



MISSION STATEMENT

Our mission is to provide the best value in machine tool accessories to help our customers become more profitable and promote manufacturing in North America. To Lyndex-Nikken, value means manufacturing quality products at a fair price.

We have built the widest product offering in the industry. As part of our mission, we also make it easy for manufacturers to fill their accessory needs while always focusing on return-on-investment. We achieve this by finding the best people and a fundamental principle of continuous improvement.

In this ever-changing market, our passion is to offer solutions to customer needs versus products. We pledge our unwavering stand on quality over price.



NIKKEN WORLDWIDE



Lyndex-Nikken is represented by sales personnel and product specialists in 15 countries all around the globe. Wherever you may be, you will always get full support from our representatives. Each overseas sales branch has stocks for tooling and CNC Rotary Tables, and service engineers to look after the maintenance and service operation of our products.

North and South Americas

- | | | |
|-----------|---|----------------------|
| 1. USA | Lyndex-Nikken | Tel: (847) 367-4800 |
| 2. Mexico | Herramientas Lyndex-Nikken S.A. de C.V. | Tel: 52-55-8421-8421 |

Europe and Middle East

- | | | |
|------------|---|--------------------------|
| 3. UK | Nikken Kosakusho Europe, Ltd. - Euro Centre | Tel: 44-(0)1709-366306 |
| 4. Germany | Nikken Deutschland GmbH | Tel: 49 731 9663397-0 |
| 5. Italy | Vega International Tools SRL | Tel: 39-011-9497911 |
| 6. France | Procomo-Nikken S.A.S | Tel: 33-(0)1-69 19 17 35 |
| 7. Sweden | Nikken Scandinavia AB | Tel: 46-(0)303-440-600 |
| 8. Spain | Cutting Tools, S.L. | Tel: 34-902-820090 |
| 9. Turkey | Nikken Kesici Takimlar San. Veuluslararası Tic A.S. | Tel: 90-(0)216-518-1010 |

Asia

- | | | |
|-----------------|--------------------------------------|-------------------------|
| 10. South Korea | Korea Nikken Ltd. | Tel: 82-(0)32-763-4461 |
| 11. China | Shanghai Zhong Yan Trading Co., Ltd. | Tel: 86-(0)21-6210-2506 |
| 12. Singapore | Nikken Kosakusho Asia PTE. Ltd. | Tel: 65-6362-7980 |
| 13. Thailand | Siam Nikken Co., Ltd. | Tel: 66-(0)2-178-0503 |
| 14. Indonesia | Pt. Nikken Kosakusho Indonesia | Tel: 62-811-9980-807 |
| ** Japan | Nikken Kosakusho Works Ltd. | Tel: (072)869-5810 |

NIKKEN ADVANTAGES



Carbonizing and Sub-Zero Treatment

Nikken Advantages

Nikken high quality brand products have been patented in Japan and in many other countries. Featuring unique features, they are used all over the world and have been proving their efficiency for years and years, providing users with benefits unmatched by the competition.

Sub Zero Treatment

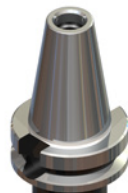
Nikken is the ONLY tool manufacturer that performs a sub-zero treatment to its tooling. All toolholders are subjects to ultra low temperature treatment of -90°C after carburizing. This treatment removes residual austenite to form 100% martensite compositions to prevent deformation and deterioration over time. This is a good example of how Nikken pays attention to those aspects often hidden from view, and how we put our hearts into each and every tool.

Taper Contact

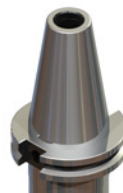
Nikken guarantees 80% of the taper contact ratio. It allows concentricity, run-out accuracy and stable machining, reduces damage to the M/C Spindle and extends tool life. Strong rigidity between machine spindle and toolholder eliminates potential fretting corrosion.

Nikken's Taper Characteristics:

- Nickel Chrome 4150 alloy
- AT3 taper or better, 56 to 58 HRC
- Traverse Ground Taper
- Inspected by Prussian Blue oil method



BT Taper-Made to JIS B6339 standard



CT Taper-Made to ANSI/ASE B5.50 standard



HSK Taper-Made to ISO 12164 standard



NMTB Taper-Erickson Qualified



Tool Grinding Line



Horizontal Machining Centers



NC Lathe Line

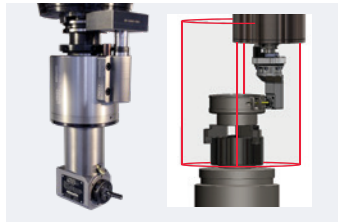


PRODUCT OVERVIEW



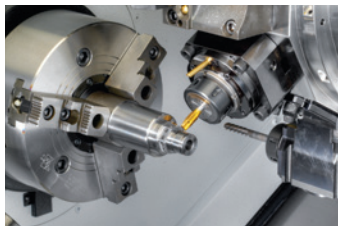
High Productivity Advanced Toolholders

Covering All Bases for Your Toolholder Needs. Most accurate and precise Collet Chucks in the industry (guaranteed runout within .0002"). Nikken Milling Chucks are the strongest clamping Toolholder in the world with over 3500 ft-lbs of gripping force. Greater rigidity and higher accuracy allows for more aggressive material removal and part precision.



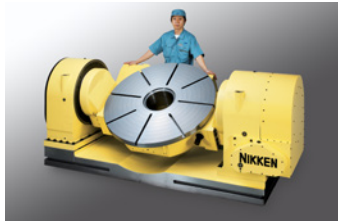
Modular & Fixed Angle Heads

Approaching Difficult Parts from All Angles. Offered in multiple styles: slim, rigid, offset, adjustable and coolant through. 452 possible combinations using Lyndex-Nikken's Modular Angle Head system. Clearance and ATC verification done by 3D printed Angle Heads. Full 3D model support upon request.



Live & Static Tools

Turning Your Lathe Into a Milling Machine. We offer both Live and Static Tools for a multitude of machine builders. Dual radial and thrust bearing design for added rigidity. Live and Static tools offered in coolant through, adjustable, and multi-output.



4th & 5th Axis Rotary Tables

Reduced Setups, Increased Productivity, More Profits. Ion-Nitride Worm Wheel and Carbide Worm Screw design extends longevity of rigidity and accuracy. 4 arc second repeatability for high precision and complex work pieces. Full installation and integration services available by Lyndex-Nikken technicians.



Presettters & Measuring Equipment

Rock Solid Precision. Presettters utilize natural granite for the column and base ensuring the best thermal stability. Coupled with Elbo Controlli Nikken vision systems, our Presettters provides the highest level of repeatability and reproducibility making presettters ideal for most tool measuring and inspecting applications.



Work Holding

Chucks and clamping to minimize set-up and changeover times. 2-jaw, 3-jaw, and specialty chucks offer durability and precision in a workholding solution with low maintenance, high performance, and are capable of clamping workpieces with uneven surfaces and a large range of diameters. Quick Change Flex Collet (QCFC) chucks can be used in a variety of turning center applications including high volume, low mix production shops for bar feeding or robot loading. Zero point clamping system provides process reliability and maximum flexibility.



Automation

EZ-Automation line of solutions - NO advanced robotics degree required. User-friendly CNC machine tending, loading, and work changing for high mix, low volume production seamlessly integrates automation while controlling costs and easing job complexities. Automation of machine tracking and bottleneck analysis increases shop efficiency. Machine shops at any size can thrive with streamlined operations and improved processes to achieve a bottom line that reflects success.

LYNDEX-NIKKEN SERVICE & SUPPORT

Management & Operations

Integrity is our highest company goal that is achieved in different ways in each department. In operations, this means “keeping promises”. When a Lyndex-Nikken salesperson commits to do something, we want to make sure it happens! Our management team is willing to put whatever resources are needed to stand behind ALL commitments made to our customers.



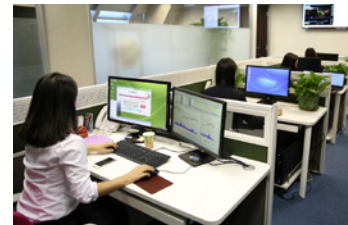
Outside Sales

The outside sales team is committed to providing you with the highest level of training, product knowledge, and customer service. Whether it's helping you close more deals, increasing your profit margins, or making your job easier, our product managers and sales representatives will do what is needed to make you more successful!



Inside Sales

Committed to upholding the highest standard in customer service, the inside sales team provides support to qualify, quote and process orders. Working in conjunction with our outside sales team, our goal is to provide the best expedited sales experience with the utmost clarity.



Engineering & Service

From product drawings to 3D models, clearance verifications to force calculations, the engineering team understands your manufacturing needs. We look forward to providing application support and hope to be a part of your success.



Warehouse & Shipping

With over 22,000 individual part numbers in our system and nearly \$50 million worth of in-stock inventory, our warehouse team means serious business. 95% of items we carry get shipped out same day on an impressive average of 160 shipments per day!



Lyndex-Nikken Mexico

Since our opening in 2013, we have been able to extend the same level of quality support to Mexico. One of our biggest tasks is providing services for transplant companies in Mexico from the U.S., Germany, Japan, and Korea. We offer full service of sales, engineering, and application support directly from our office.



INTRODUCTION

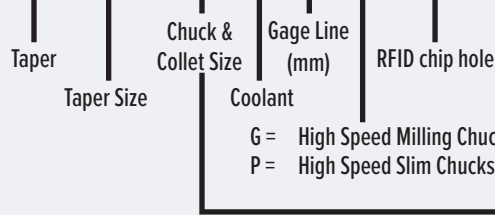


LYNDEX-NIKKEN PART NUMBERS

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

NIKKEN EXAMPLE:

NCAT40-SK25C-90UP-IDU



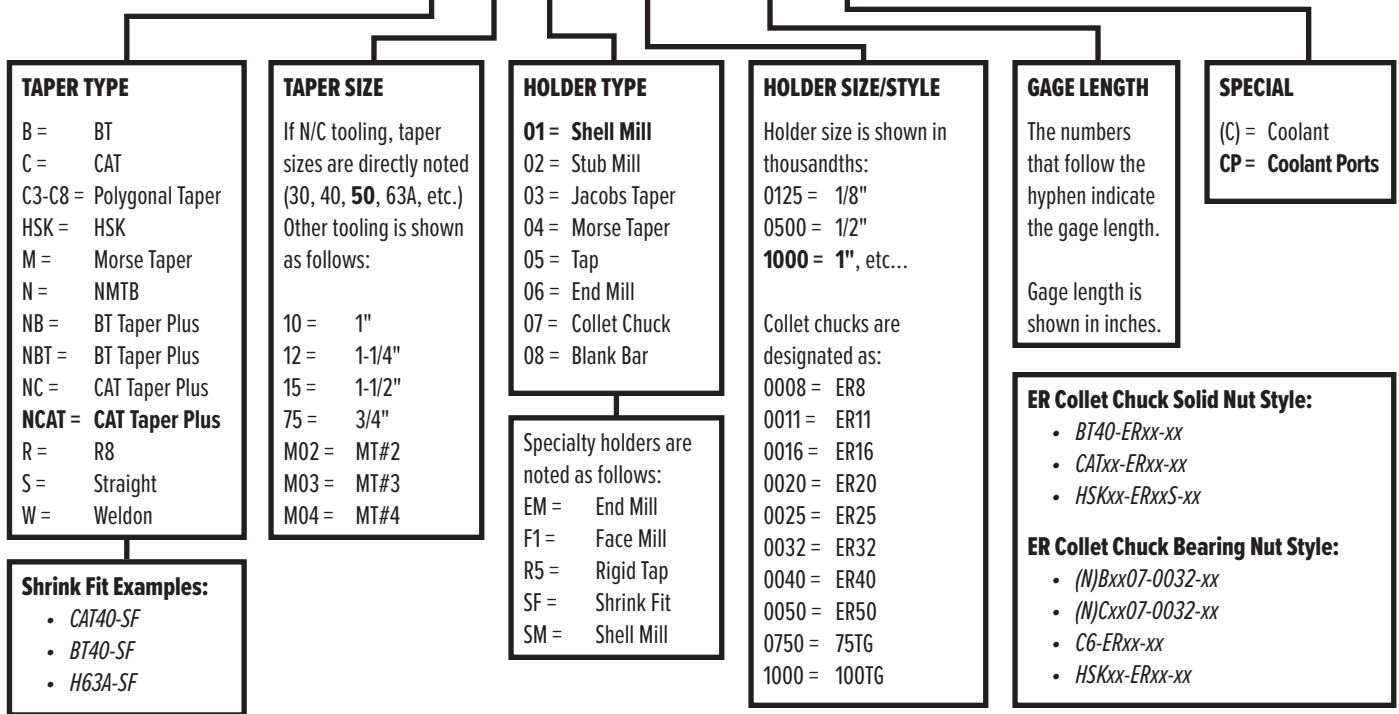
- C = Milling Chucks
- SK = SK Collet Chucks
- MMC = MMC Collet Chucks
- VC = VC Holder
- NPU = Drill Chucks

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 **NC5001-1000-4.00CP** is a **CAT50 Taper, 1" Shell Mill Holder x 4.00 Gage Length with Coolant Ports**.

NC 50 01 - 1000 - 4.00 CP



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.

TABLE OF CONTENTS

SK COLLET CHUCKS 9-44

SK Collet Chuck Features	10-11
SK Collet Features	12
Superior SK Coolant System	13
CAT SK Collet Chucks	14-15
Taper Plus - CAT SK Collet Chucks	16, 18
Taper Plus - CAT Slim Chuck Coolant High-Speed	17, 19
BT SK Collet Chucks	20-21
BT SK Collet Chucks - High-Speed	22
Taper Plus - BT SK Collet Chucks	23
Taper Plus - BT Slim Chuck Coolant High-Speed	24, 26
Taper Plus - BT Slim Chuck Coolant	25
HSK SK Collet Chucks	27
HSK SK Collet Chucks - High-Speed	28-29
Straight Shank SK Collet Chucks	30
Polygonal Taper SK Collet Chucks	31
SK Collets	32-37
SK Coolant Collet System	38-40
SK Accessories & Adjust Screws	41-43

ER COLLET CHUCKS 45-76

ER Collet Chuck Features	46
ER Collet Features	47
ER Nut Features	48
CAT ER Collet Chucks	49-52
BT ER Collet Chucks	53-55
Taper Plus - CAT ER Collet Chucks	56-57
Taper Plus - BT ER Collet Chucks	58-59
HSK ER Collet Chucks	60-61
NMTB & R8 ER Collet Chucks	62
ER Collet Chuck Extensions	63
Polygonal Taper ER Collet Chucks	64
ER Collets - Standard & Coolant	65-70
ER Tap Collets - Standard & Coolant	71-73
ER Accessories	74-75

VC COLLET CHUCKS 77-88

VC Collet Chuck Features	78-79
CAT VC Collet Chucks	80
BT VC Collet Chucks	81
HSK VC Collet Chucks	82-83
Taper Plus - CAT VC Collet Chucks	84

Taper Plus - BT VC Collet Chucks	85
VCK Collets	86
VC Coolant Collet System	87
VC Collet Chuck Accessories	88

MMC COLLET CHUCKS 89-98

MMC Collet Chuck Features	90
CAT MMC Collet Chucks	91
BT MMC Collet Chucks	92
Taper Plus - CAT & BT MMC Collet Chucks	93
HSK MMC Collet Chucks	94
Polygonal & Straight Shank MMC Collet Chucks	95
MMC Collets	96
VMK Collets	97

SHRINK FIT 99-132

Specifications & Equipment	100-101
Shrink Fit Equipment	102
Shrink Fit Unit Packages	103
Customize Your Equipment Package	104-105
CAT40 Shrink Fit Holders	106-107
CAT50 Shrink Fit Holders	108-109
BT30 Shrink Fit Holders	110
BT40 Shrink Fit Holders	111-112
BT50 Shrink Fit Holders	113
NCAT40 Shrink Fit Holders	114-116
NCAT50 Shrink Fit Holders	117-118
NBT30 Shrink Fit Holders	119
NBT40 Shrink Fit Holders	120-121
HSK63A Shrink Fit Holders	122-123
HSK100A Shrink Fit Holders	124-125
Polygonal Taper Shrink Fit Holders	126-129
Shrink Fit Holder Accessories	130
Straight Shank Extensions	131

MILLING CHUCKS 133-156

Milling Chuck Features	134-135
Milling Chuck Collet System	136
Milling Chuck Coolant Collet System	137
Why Upgrade?	138
Taper Plus - Dual Contact Toolholders	139
CAT Milling Chucks	140



TABLE OF CONTENTS

CAT High-Speed Milling Chucks	141
Taper Plus - CAT Milling Chucks	142
Taper Plus - CAT High-Speed Milling Chucks	143
BT Milling Chucks	144
BT High-Speed Milling Chucks	145
Taper Plus - BT Milling Chucks	146
HSK Milling Chucks	147-148
NMTB Milling Chucks	149
Polygonal Taper Milling Chucks	150
KM Collets	151
NK Collets - Depth Adjustable	152
CCK Coolant Collet System	153-154
Milling Chuck Accessories	155

END MILL HOLDERS 157-174

End Mill Holder Features	158
CAT End Mill Holders	159-162
Taper Plus - CAT End Mill Holders	163
BT End Mill Holders	164-166
Taper Plus - BT End Mill Holders	167
Polygonal Taper End Mill Holders	168
HSK End Mill Holders	169-170
NMTB End Mill Holders	171
R8 & Straight Shank End Mill Holders	172
End Mill Holder Accessories	173

SHELL MILL HOLDERS 175-188

Shell Mill & Face Mill Holder Features	176
CAT Shell Mill Holders	177-178
CAT Face Mill Holders	178
Taper Plus - CAT Shell Mill Holders	179-180
Taper Plus - CAT Face Mill Holders	180
BT Shell Mill Holders	181-182
BT Face Mill Holders	182
Taper Plus - BT Shell Mill Holders	183
HSK Shell Mill Holders	184
Polygonal Taper Shell Mill Holders	185
NMTB Shell Mill Holders	186
R8 Shell Mill Holders	187
Shell Mill Holder Accessories	188

DRILL CHUCKS & MORSE TAPER HOLDERS 189-198

Drill Chucks Features	190
CAT & BT Integral Keyless Drill Chucks	191
NMTB & HSK Drill Chucks	192
Drill Chuck Accessories	193
CAT & BT Jacobs® Taper Holders	194
NMTB & R8 Jacobs® Taper Holders	195
Jacobs® Drill Chuck Accessories	196
CAT Morse Taper Holders	197
R8 Morse Taper Holders	198

TAP HOLDERS 199-226

Tap Holder Features	200
CAT Tap Holders	201-202
BT Tap Holders	203-204
HSK Tap Holders	205-206
Weldon Tap Holders	207-208
Straight Shank Tap Holders	209
Tap Collets	210-221
Tap Holder Accessories	222
Tapping - Technical Details	223
Tap Dimensional Data	224-225
Torque Control Tap Collet Torque Specifications	226

TG/DA COLLET CHUCKS 227-242

TG Collet Chuck Features	228
DA Collet Chuck Features	229
CAT TG Collet Chucks	230
BT TG Collet Chucks	231
Straight Shank TG Collet Chucks	232
TG Collets	233-235
TG Accessories	236
CAT, BT & NMTB DA Collet Chucks	237
DA Collet Chuck Extension	238
DA Collets	239-240
DA Accessories	241

ANGLE HEADS 243-250

Technical Features	244
Types of Fixed Angle Heads	245
Modular Angle Head Assembly	246

TABLE OF CONTENTS

Modular Angle Head System	247
High Productivity Angle Heads	248
Engineering Support	249

STUB MILL HOLDERS & BLANK BARS 251-256

Stub Mill Holder Features	252
CAT & BT Stub Mill Holders	253
CAT & BT Stub Mill Holder Accessories	254
CAT, BT & Taper Plus Blank Bars	255
NMTB & HSK Blank Bars	256

R8/5C/3J/16C COLLETS 257-266

R8 Collets	258
5C Collets	259-260
5C Collet Accessories	261
3J Collets & Accessories	262-263
16C Collets & Accessories	264-265

RETENTION KNOBS 267-272

Retention Knob Features	268
CAT Retention Knobs	269
BT Retention Knobs	270
Retention Knob Inquiry Form	271

ACCESSORIES 273-284

Tool Clampers	274
Nikken Tool Clamper for HSK Tooling	275
ATC Alignment Kit	275
Pointfinder™	276
ZeroSetter™	277
Universal Micro Stand	278
Spindle Wipes	279
Test Bars	280
Momimen Carbide Indexable Tools	281-282
Chibimomi Carbide Indexable Tools	283-284

TECHNICAL/INDEX 285-312

Lyndex-Nikken Product Warranty	286-287
Taper Specifications	288-290
SK Drill Chart	291-295
Index	296-312

LYNDEX-NIKKEN

High Performance Live Tools	44
Advanced Toolholders	76
Automation	98
Shrink Fit In-Depth Training and Live Demos	132
NIKKEN X-Treme Milling Chuck	156
CNC Rotary Table Solutions	174
Torque Test Demos	242
Product Training Seminars	250
Quick Change Flex Collets	266
Lyndex-Nikken Products	272

SK COLLET CHUCKS



SK COLLET CHUCKS



SK COLLET CHUCKS



SK COLLET CHUCK FEATURES

LEAN, TOUGH AND EFFICIENT

Lean: Narrow body design allows access to tight spots.

Versatile: Applicable for all milling, drilling, reaming and rigid tapping applications.

Wide Range: Covers sizes from 0.028" to 1".

Extreme Precision: 0.0002" or less concentricity guarantee with on-size collets.

8 Degree vs. 16 Degree: SK longer and steeper angle collets provide 2-3 times the gripping force over ER collets.



SK Collet Range



SK6	SK10	SK13	SK16	SK20	SK25
0.7 - 6.0mm 0.028 - 0.236"	1.75 - 10.0mm 0.069 - 0.394"	2.5 - 13mm 0.098 - 0.512"	2.75 - 16.0mm 0.108 - 0.630"	3.5 - 20.0mm 0.138 - 0.787"	16.0 - 25.4mm 0.630 - 1.000"

Accuracy and Flexibility
Due to our special heat treatment, grinding and custom slotting process, we are able to guarantee a 5 micron run-out tolerance for our "on size" fractional and metric size precision collets.

Collet is flush with nut surface preventing stringy chips from nesting.

Ground threads reduce friction and maintain tightening torque to maximize collet compression for even more gripping power.

Fine adjustment back up screw (see details on page 13) with chamfered plastic tip creates additional seal for 1000 psi coolant through applications.

Extremely hard and smooth surface of the TiN Bearing allows for more thrust load on the collet while preventing additional runout associated with collet twisting.

Threads are protected to prevent chip packing or stringy birds nests below the collet chuck nut.

SK COLLET CHUCKS

SK COLLET CHUCK FEATURES



T.I.R.
≤0.0002" at 4xD



Speed
Up to 30,000 rpm



Coolant-Thru
Thru-tool coolant

MILLING



REAMING



DRILLING



TAPPING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

Increased Gripping Power

The smaller the taper angle is, the better concentricity is obtained.

Our steep 8° collet seats deeper in the body of the holder, providing double the clamping force and precision than traditional 16° ER collets.



GH Handle (High-Speed only)

Easy, safe and reliable handling with GH wrench (see page 36).



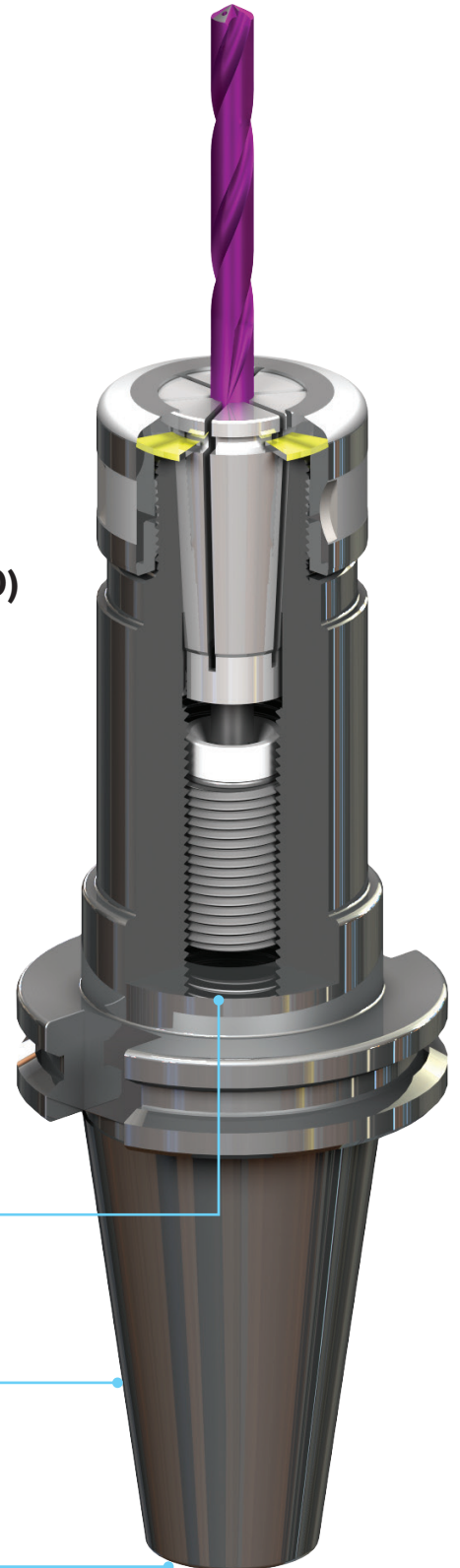
Titanium Nitrided Bearing Nut (HV2,200) (US Patent 6923451)

- More efficient than conventional ball bearing built-in nut!
- Good sliding effect due to surface hardness of HV2,200
- Durable, minimal friction
- No corrosion occurs internally
- Less micro vibration with collet flange contact
- Increase cutting performance and tool life durability
- More cutting rigidity

High pressure 1000 psi fine thread coolant back up screw.

AT3 or better taper - .0028 degree tolerance variation (80 millionths to 126 millionths taper size tolerance).

Ground surface provides precise square seating of retention knob vs. taper.

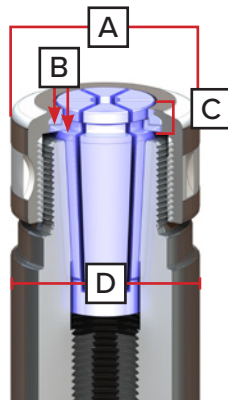


SK COLLET

SK Collets can be used for all applications, from milling to reaming. Mechanical sealed collets can be used in coolant thru applications.

SK Collet vs. ER Collet

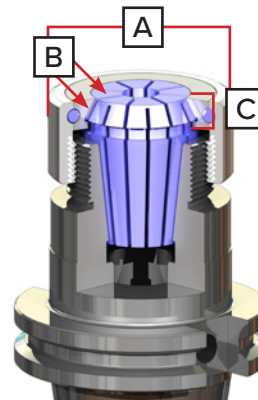
- A. Compact design allows for better clearance
- B. Straight compression prevents collet rocking, creating better accuracy
- C. Deeper seating creates greater accuracy and repeatability
- D. Body and nut are flush for more rigidity



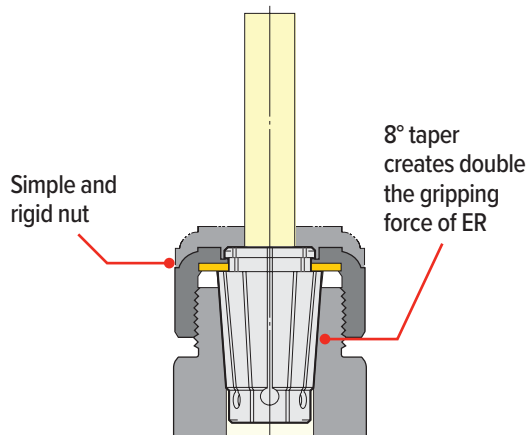
SCAN THE QR CODE TO SEE THESE COLLETS IN ACTION



- A. Wide collet = wide nut = less clearance
- B. Angular compression creates more runout
- C. Shallow seating allows for collet rocking with more runout, less repeatability

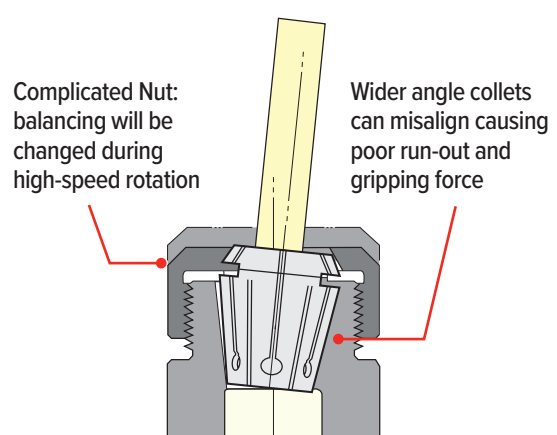


LYNDEX-NIKKEN Slim Chuck - Flat Shoulder Pushing



- High accuracy due to flat shoulder pushing

OTHERS Taper Shoulder Pushing



- Unstable run-out due to taper part pushing
 - Poor gripping torque of 12°, 16° taper

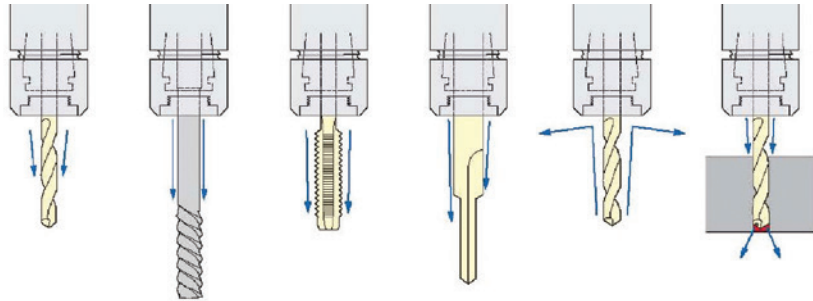
SK COLLET CHUCKS

SUPERIOR SK COOLANT SYSTEM

Our Slim Chuck features a unique High-Pressure Coolant Collet System which allows for higher accuracy and gripping torque. Coolant Collets are steel-sealed and mechanically sealed by design.



SK Coolant Thru Options:



Back-up Screw for SK Collet Chuck



SKG-12

- Solid steel black oxide coated back up screws
- Accessible and adjustable from both ends



SKG-12L

- Excellent for high feed drilling
- Allows cutter repeatability within .0002"



SKG16-12HGA

- Ultra High Pressure back up screw capable up to 1000 psi
- Solid steel black oxide coated back-up screws with plastic caps
- 80% thread engagement on fine thread to prevent coolant leakage
- External O-ring provides additional seal to prevent coolant build-up within the toolholder



SKG-18H

- Plastic cap is tapered to accommodate for different sizes
- Excellent for high pressure coolant or oil drilling applications
- Allows cutter repeatability within .0002"



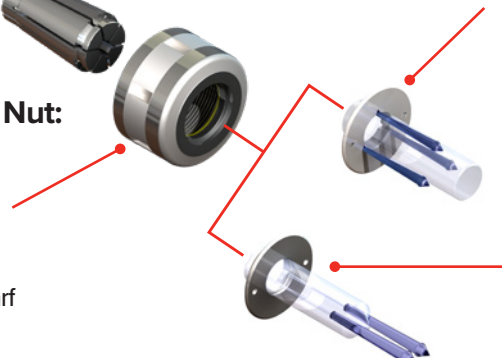
Coolant Collets are steel-sealed and mechanically sealed by design.

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. The jet coolant pressure creates a tornado effect, ensuring efficient swarf dispersal.

Applications for SK Coolant Nut:

- Tap or specially designed cutting tool
- Burnishing drill for formed hole
- Oil hole drill for through hole drilling
- Cutting tool with coolant grooves
- Mechanical seal prevents dust and swarf entering inside the collet slots



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.

CAT SK COLLET CHUCKS

FEATURES

- Feature TiN Bearing Nut which considerably improves cutting rigidity and finish
- Narrow body allows access to tight spaces and hard to reach areas
- Longer and steeper taper SK collet provides double the clamping force and precision than ER Collet Chucks



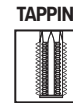
T.I.R.
≤0.0002" at 4xD



Speed
Up to 30,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
CAT40-SK6-90U-IDU	SK6	0.028 - 0.25"	SKL-6W	90	3.54"	2.15"	-	0.77"	1.75"	-	SKG-8	20K	1
CAT40-SK6-120U-IDU	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	2.61"	3.31"	0.77"	1.26"	1.75"	SKG-8	20K	2
CAT40-SK6-150U-IDU	SK6	0.028 - 0.25"	SKL-6W	150	5.91"	2.35"	-	0.77"	1.75"	-	SKG-8	20K	3
CAT40-SK10-60U-IDU	SK10	0.035 - 0.394"	SKL-10	60	2.36"	1.61"	-	1.08"	-	-	SKG-12L	20K	4
CAT40-SK10-90U-IDU	SK10	0.035 - 0.394"	SKL-10	90	3.54"	2.17"	-	1.08"	1.75"	-	SKG-12L	20K	1
CAT40-SK10-120U-IDU	SK10	0.035 - 0.394"	SKL-10	120	4.72"	3.00"	3.35"	1.08"	1.26"	1.75"	SKG-12L	20K	2
CAT40-SK10-150U-IDU	SK10	0.035 - 0.394"	SKL-10	150	5.91"	2.90"	-	1.08"	1.75"	-	SKG-12L	20K	3
CAT40-SK10-180U-IDU	SK10	0.035 - 0.394"	SKL-10	180	7.09"	2.90"	-	1.08"	1.75"	-	SKG-12L	20K	3
CAT40-SK13-90U-IDU	SK13	0.108 - 0.512"	O16-SPAN	90	3.54"	2.18"	-	1.30"	1.75"	-	SKG-15	20K	1
CAT40-SK13-120U-IDU	SK13	0.108 - 0.512"	O16-SPAN	120	4.72"	3.36"	-	1.30"	1.75"	-	SKG-15	20K	1
CAT40-SK13-150U-IDU	SK13	0.108 - 0.512"	O16-SPAN	150	5.91"	3.48"	-	1.30"	1.75"	-	SKG-15	20K	3
CAT40-SK13-180U-IDU	SK13	0.108 - 0.512"	O16-SPAN	180	7.09"	3.45"	-	1.30"	1.75"	-	SKG-15	20K	3
CAT40-SK16-60U-IDU	SK16	0.108 - 0.63"	9HC16	60	2.36"	1.58"	-	1.58"	-	-	SKG-18S	20K	4
CAT40-SK16-90U-IDU	SK16	0.108 - 0.63"	9HC16	90	3.54"	2.14"	-	1.58"	1.75"	-	SKG-18L	20K	1
CAT40-SK16-120U-IDU	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.31"	-	1.58"	1.75"	-	SKG-18L	20K	1
CAT40-SK16-150U-IDU	SK16	0.108 - 0.63"	9HC16	150	5.91"	4.49"	-	1.58"	1.75"	-	SKG-18L	20K	1
CAT40-SK16-180U-IDU	SK16	0.108 - 0.63"	9HC16	180	7.09"	5.68"	-	1.58"	1.75"	-	SKG-18L	20K	1
CAT40-SK20-65U-IDU	SK20	0.138 - 0.787"	9HC22	65	2.56"	1.80"	-	1.91"	-	-	SKG-22	20K	4
CAT40-SK20-90U-IDU	SK20	0.138 - 0.787"	9HC22	90	3.54"	2.79"	-	1.91"	-	-	SKG-22	20K	5
CAT40-SK20-120U-IDU	SK20	0.138 - 0.787"	9HC22	120	4.72"	3.98"	-	1.91"	-	-	SKG-22	20K	5
CAT40-SK20-150U-IDU	SK20	0.138 - 0.787"	9HC22	150	5.91"	5.15"	-	1.91"	-	-	SKG-22	20K	5
CAT40-SK20-180U-IDU	SK20	0.138 - 0.787"	9HC22	180	7.09"	1.94"	-	1.91"	-	-	SKG-22	20K	5
CAT40-SK25-90U-IDU	SK25	0.188 - 1.000"	9HC22	90	3.54"	2.79"	-	2.17"	-	-	SKG-28	20K	5
CAT40-SK25-120U-IDU	SK25	0.188 - 1.000"	9HC22	120	4.72"	3.98"	-	2.17"	-	-	SKG-28	20K	5

Note: "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

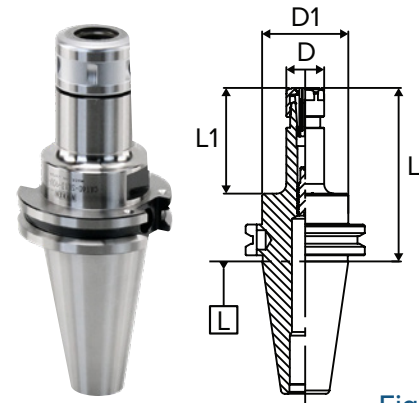


Fig. 1

CAT50

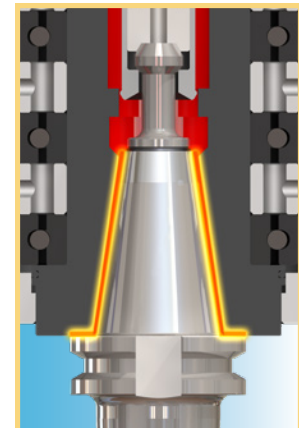
Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
CAT50-SK6-105U-IDU	SK6	0.028 - 0.25"	SKL-6W	105	4.13"	2.77"	-	0.77"	2.75"	-	SKG-8	20K	1
CAT50-SK6-165U-IDU	SK6	0.028 - 0.25"	SKL-6W	165	6.50"	2.63"	5.11"	0.77"	1.26"	2.75"	SKG-8	20K	2
CAT50-SK6-195U-IDU	SK6	0.028 - 0.25"	SKL-6W	195	7.68"	2.35"	6.29"	0.77"	1.97"	2.75"	SKG-8	20K	6
CAT50-SK10-105U-IDU	SK10	0.035 - 0.394"	SKL-10	105	4.13"	2.78"	-	1.08"	2.75"	-	SKG-12L	20K	1
CAT50-SK10-165U-IDU	SK10	0.035 - 0.394"	SKL-10	165	6.50"	3.20"	5.13"	1.08"	1.26"	2.75"	SKG-12L	20K	2
CAT50-SK10-195U-IDU	SK10	0.035 - 0.394"	SKL-10	195	7.68"	2.95"	-	1.08"	2.75"	-	SKG-12L	20K	3
CAT50-SK10-225U-IDU	SK10	0.035 - 0.394"	SKL-10	225	8.86"	2.97"	-	1.08"	2.75"	-	SKG-12L	20K	3
CAT50-SK13-105U-IDU	SK13	0.108 - 0.512"	O16-SPAN	105	4.13"	2.77"	-	1.30"	2.75"	-	SKG-15	20K	1
CAT50-SK13-165U-IDU	SK13	0.108 - 0.512"	O16-SPAN	165	6.50"	3.83"	5.13"	1.30"	1.73"	2.75"	SKG-15	20K	2
CAT50-SK13-195U-IDU	SK13	0.108 - 0.512"	O16-SPAN	195	7.68"	3.62"	-	1.30"	2.75"	-	SKG-15	20K	3
CAT50-SK16-105U-IDU	SK16	0.108 - 0.63"	9HC16	105	4.13"	2.75"	-	1.58"	2.75"	-	SKG-18L	20K	1
CAT50-SK16-165U-IDU	SK16	0.108 - 0.63"	9HC16	165	6.50"	3.72"	5.09"	1.58"	1.97"	2.75"	SKG-18L	20K	2
CAT50-SK16-195U-IDU	SK16	0.108 - 0.63"	9HC16	195	7.68"	3.51"	-	1.58"	2.75"	-	SKG-18L	20K	3
CAT50-SK20-105U-IDU	SK20	0.138 - 0.787"	9HC22	105	4.13"	2.75"	-	1.91"	2.75"	-	SKG-22	20K	1
CAT50-SK20-195U-IDU	SK20	0.138 - 0.787"	9HC22	195	7.68"	6.29"	-	1.91"	2.75"	-	SKG-22	20K	1
CAT50-SK25-165U-IDU	SK25	0.188 - 1.000"	9HC22	165	6.50"	5.12"	-	2.17"	2.75"	-	SKG-28	15K	1
CAT50-SK25-195U-IDU	SK25	0.188 - 1.000"	9HC22	195	7.68"	6.29"	-	2.17"	2.75"	-	SKG-28	15K	1

Note: Wrench and back-up screw not included.



Available in **TAPER PLUS**
Dual-taper and flange contact
See pages 22-23

TAPER PLUS+
COMBINING TAPER ACCURACY
WITH FLANGE RIGIDITY!



- Outstanding Runout Accuracy for longer tool life
- Vibration Dampening for increased productivity
- High Rigidity for smooth and stable cutting



SK Collets
Pages 32-39



Wrenches
Page 40



Back-up Screw
Page 41



Coolant-thru Nuts
Pages 37-39

SK COLLET CHUCKS

CAT SK COLLET CHUCKS - HIGH SPEED

CAT40 - HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
CAT40-SK6-90UP-IDU	SK6	0.028 - 0.25"	GH6	90	3.54"	2.17"	-	0.78"	1.75"	-	SKG-8	30K	1
CAT40-SK6-120UP-IDU	SK6	0.028 - 0.25"	GH6	120	4.72"	2.64"	3.35"	0.78"	1.26"	1.75"	SKG-8	30K	2
CAT40-SK6-150UP-IDU	SK6	0.028 - 0.25"	GH6	150	5.91"	2.36"	-	0.78"	1.75"	-	SKG-8	30K	3
CAT40-SK10-60UP-IDU	SK10	0.035 - 0.394"	GH10	60	2.36"	1.61"	-	1.08"	-	-	SKG-12L	30K	4
CAT40-SK10-90UP-IDU	SK10	0.035 - 0.394"	GH10	90	3.54"	2.18"	-	1.08"	1.75"	-	SKG-12L	30K	1
CAT40-SK10-120UP-IDU	SK10	0.035 - 0.394"	GH10	120	4.72"	3.00"	3.36"	1.08"	1.26"	1.75"	SKG-12L	30K	2
CAT40-SK10-150UP-IDU	SK10	0.035 - 0.394"	GH10	150	5.91"	2.89"	-	1.08"	1.75"	-	SKG-12L	30K	3
CAT40-SK13-90UP-IDU	SK13	0.108 - 0.512"	GH12	90	3.54"	2.17"	-	1.32"	1.75"	-	SK-15	30K	1
CAT40-SK13-120UP-IDU	SK13	0.108 - 0.512"	GH12	120	4.72"	3.35"	-	1.32"	1.75"	-	SK-15	30K	1
CAT40-SK13-150UP-IDU	SK13	0.108 - 0.512"	GH12	150	5.91"	3.47"	-	1.32"	1.75"	-	SK-15	30K	3
CAT40-SK16-60UP-IDU	SK16	0.108 - 0.63"	GH16	60	2.36"	1.77"	-	1.59"	-	-	SKG-18S	25K	4
CAT40-SK16-90UP-IDU	SK16	0.108 - 0.63"	GH16	90	3.54"	2.13"	-	1.59"	1.75"	-	SKG-18L	25K	1
CAT40-SK16-120UP-IDU	SK16	0.108 - 0.63"	GH16	120	4.72"	3.31"	-	1.59"	1.75"	-	SKG-18L	25K	1
CAT40-SK16-150UP-IDU	SK16	0.108 - 0.63"	GH16	150	5.91"	4.49"	-	1.59"	1.75"	-	SKG-18L	25K	1
CAT40-SK20-65UP-IDU	SK20	0.138 - 0.787"	GH20	65	2.56"	1.80"	-	1.91"	-	-	SKG-22	25K	4
CAT40-SK20-90UP-IDU	SK20	0.138 - 0.787"	GH20	90	3.54"	2.79"	-	1.91"	-	-	SKG-22	25K	5
CAT40-SK20-120UP-IDU	SK20	0.138 - 0.787"	GH20	120	4.72"	3.70"	-	1.91"	-	-	SKG-22	25K	5
CAT40-SK25-90UP-IDU	SK25	0.630 - 1.000"	GH25	90	3.54"	2.75"	-	3.61"	-	-	SKG-28	20K	5
CAT40-SK25-120UP-IDU	SK25	0.630 - 1.000"	GH25	120	4.72"	3.93"	-	3.61"	-	-	SKG-28	15K	5

Note:

- DIN type high-speed toolholders available. Please contact us for more information.
- "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

CAT50 - HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
CAT50-SK6-105UP-IDU	SK6	0.028 - 0.25"	GH6	105	4.13"	2.76"	-	0.78"	2.75"	-	SKG-8	20K	1
CAT50-SK6-165UP-IDU	SK6	0.028 - 0.25"	GH6	165	6.50"	2.64"	5.12"	0.78"	1.26"	2.75"	SKG-8	20K	2
CAT50-SK10-105UP-IDU	SK10	0.035 - 0.394"	GH10	105	4.13"	2.78"	-	1.08"	2.75"	-	SKG-12L	20K	1
CAT50-SK10-165UP-IDU	SK10	0.035 - 0.394"	GH10	165	6.50"	3.21"	5.14"	1.08"	1.26"	2.75"	SKG-12L	20K	2
CAT50-SK10-195UP-IDU	SK10	0.035 - 0.394"	GH10	195	7.68"	2.97"	-	1.08"	2.75"	-	SKG-12L	20K	3
CAT50-SK13-105UP-IDU	SK13	0.108 - 0.512"	GH12	105	4.13"	2.76"	-	1.32"	2.75"	-	SKG-15	20K	1
CAT50-SK13-165UP-IDU	SK13	0.108 - 0.512"	GH12	165	6.50"	3.82"	5.12"	1.32"	1.77"	2.75"	SKG-15	20K	2
CAT50-SK16-105UP-IDU	SK16	0.108 - 0.63"	GH16	105	4.13"	2.72"	-	1.59"	2.75"	-	SKG-18L	20K	1
CAT50-SK16-165UP-IDU	SK16	0.108 - 0.63"	GH16	165	6.50"	3.71"	5.09"	1.59"	1.97"	2.75"	SKG-18L	20K	2
CAT50-SK16-195UP-IDU	SK16	0.108 - 0.63"	GH16	195	7.68"	3.51"	-	1.59"	2.75"	-	SKG-18L	20K	3
CAT50-SK25-105UP-IDU	SK25	0.188 - 1.000"	GH25	105	4.13"	2.76"	-	2.17"	2.75"	-	SKG-28	15K	1
CAT50-SK25-165UP-IDU	SK25	0.188 - 1.000"	GH25	165	6.50"	5.12"	-	2.17"	2.75"	-	SKG-28	15K	1
CAT50-SK25-195UP-IDU	SK25	0.188 - 1.000"	GH25	195	7.68"	6.30"	-	2.17"	2.75"	-	SKG-28	15K	1

Note: CAT50 - High-Speed - Wrench and back-up screw not included.

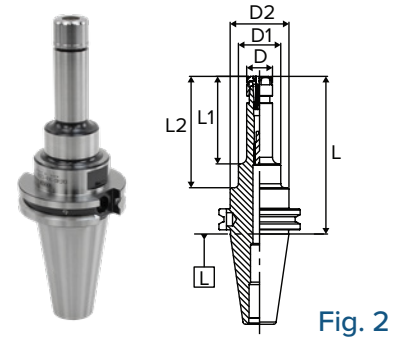


Fig. 2

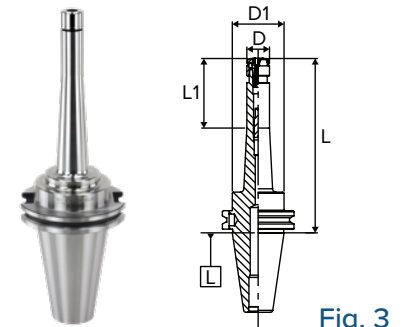


Fig. 3

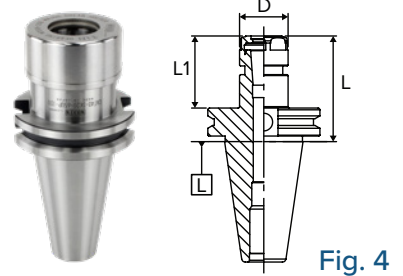


Fig. 4

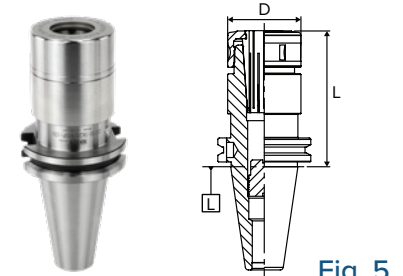


Fig. 5

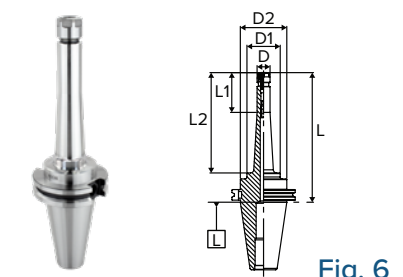


Fig. 6



SK Collets
Pages 32-39



Wrenches
Page 40

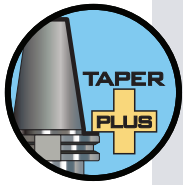


Back-up Screw
Page 41



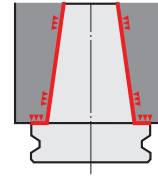
Coolant-thru Nuts
Pages 37-39

TAPER PLUS CAT SK COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT40 SK6/10/13/16/20/25

Part Number	Collet Series	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
NCAT40-SK6C-90U-IDU	SK6	0.028 - 0.25"	SKL-6W	90	3.54"	2.16"	-	0.77"	1.75"	-	SKG6-6HG	20K	1
NCAT40-SK6C-120U-IDU	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	2.63"	3.34"	0.77"	1.26"	1.75"	SKG6-6HG	20K	2
NCAT40-SK6C-150U-IDU	SK6	0.028 - 0.25"	SKL-6W	150	5.91"	2.34"	-	0.77"	1.75"	-	SKG6-6HG	20K	3
NCAT40-SK10C-90U-IDU	SK10	0.035 - 0.394"	SKL-10	90	3.54"	2.17"	-	1.08"	1.75"	-	SKG10-10HG	20K	1
NCAT40-SK10C-120U-IDU	SK10	0.035 - 0.394"	SKL-10	120	4.72"	3.00"	3.33"	1.08"	1.26"	1.75"	SKG10-10HG	20K	2
NCAT40-SK10C-150U-IDU	SK10	0.035 - 0.394"	SKL-10	150	5.91"	2.87"	-	1.08"	1.75"	-	SKG10-10HG	20K	3
NCAT40-SK10C-180U-IDU	SK10	0.035 - 0.394"	SKL-10	180	7.09"	2.87"	-	1.08"	1.75"	-	SKG10-10HG	20K	3
NCAT40-SK13C-90U-IDU	SK13	0.108 - 0.512"	016-SPAN	90	3.54"	2.18"	-	1.30"	1.75"	-	SKG13-10HG	20K	1
NCAT40-SK13C-120U-IDU	SK13	0.108 - 0.512"	016-SPAN	120	4.72"	3.34"	-	1.30"	1.75"	-	SKG13-10HG	20K	1
NCAT40-SK13C-150U-IDU	SK13	0.108 - 0.512"	016-SPAN	150	5.91"	3.47"	-	1.30"	1.75"	-	SKG13-10HG	20K	3
NCAT40-SK13C-180U-IDU	SK13	0.108 - 0.512"	016-SPAN	180	7.09"	3.46"	-	1.30"	1.75"	-	SKG13-10HG	20K	3
NCAT40-SK16C-60U-IDU	SK16	0.108 - 0.63"	9HC16	60	2.36"	1.56"	-	1.58"	-	-	SKG16-10HG	20K	4
NCAT40-SK16C-90U-IDU	SK16	0.108 - 0.63"	9HC16	90	3.54"	2.14"	-	1.58"	1.75"	-	SKG16-12HG	20K	1
NCAT40-SK16C-120U-IDU	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.31"	-	1.58"	1.75"	-	SKG16-12HG	20K	1
NCAT40-SK16C-150U-IDU	SK16	0.108 - 0.63"	9HC16	150	5.91"	4.49"	-	1.58"	1.75"	-	SKG16-12HG	20K	1
NCAT40-SK16C-180U-IDU	SK16	0.108 - 0.63"	9HC16	180	7.09"	5.67"	-	1.58"	1.75"	-	SKG16-12HG	20K	1
NCAT40-SK20-50U-IDU	SK20	0.138 - 0.787"	9HC22	50	1.97"	1.17"	-	1.91"	-	-	SKG-22	20K	4
NCAT40-SK20C-65U-IDU	SK20	0.138 - 0.787"	9HC22	65	2.56"	1.80"	-	1.91"	-	-	SKG20-12HG	20K	4
NCAT40-SK20C-90U-IDU	SK20	0.138 - 0.787"	9HC22	90	3.54"	2.79"	-	1.91"	-	-	SKG20-18HG	20K	5
NCAT40-SK20C-120U-IDU	SK20	0.138 - 0.787"	9HC22	120	4.72"	3.97"	-	1.91"	-	-	SKG20-18HG	20K	5
NCAT40-SK20C-150U-IDU	SK20	0.138 - 0.787"	9HC22	150	5.91"	5.15"	-	1.91"	-	-	SKG20-18HG	20K	5
NCAT40-SK20C-180U-IDU	SK20	0.138 - 0.787"	9HC22	180	7.09"	6.33"	-	1.91"	-	-	SKG20-18HG	20K	5
NCAT40-SK25C-90U-IDU	SK25	0.188 - 1.000"	9HC22	90	3.54"	2.77"	-	2.17"	-	-	SKG25-18HGD	20K	5
NCAT40-SK25C-120U-IDU	SK25	0.188 - 1.000"	9HC22	120	4.72"	3.95"	-	2.17"	-	-	SKG25-18HGD	20K	5

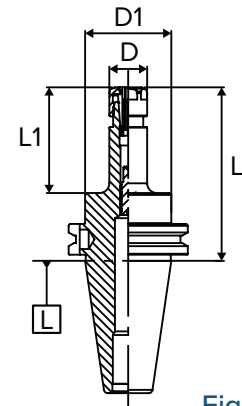


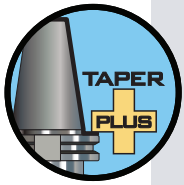
Fig. 1

Note: "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)



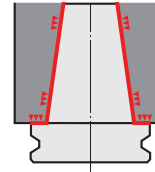
SK COLLET CHUCKS

TAPER PLUS CAT SLIM CHUCK COOLANT HIGH-SPEED



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



SK COLLET CHUCKS

TAPER PLUS - CAT40 SK6-P/10/13/16/20/25

Part Number	Collet Series	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
NCAT40-SK6C-90UP-IDU	SK6	0.028 - 0.25"	GH6	90	3.54"	2.16"	-	0.78"	1.75"	-	SKG6-6HG	30K	1
NCAT40-SK6C-120UP-IDU	SK6	0.028 - 0.25"	GH6	120	4.72"	2.63"	3.34"	0.78"	0.78"	1.75"	SKG6-6HG	30K	2
NCAT40-SK6C-150UP-IDU	SK6	0.028 - 0.25"	GH6	150	5.91"	2.33"	-	0.78"	1.75"	-	SKG6-6HG	30K	3
NCAT40-SK10C-90UP-IDU	SK10	0.035 - 0.394"	GH10	90	3.54"	2.19"	-	1.08"	1.75"	-	SKG10-10HG	30K	1
NCAT40-SK10C-120UP-IDU	SK10	0.035 - 0.394"	GH10	120	4.72"	3.00"	3.36"	1.08"	1.26"	1.75"	SKG10-10HG	30K	2
NCAT40-SK10C-180UP-IDU	SK10	0.035 - 0.394"	GH10	180	7.09"	2.89"	-	1.08"	1.75"	-	SKG10-10HG	30K	3
NCAT40-SK10C-150UP-IDU	SK10	0.035 - 0.394"	GH10	150	5.91"	2.87"	-	1.08"	1.75"	-	SKG10-10HG	30K	3
NCAT40-SK13C-90UP-IDU	SK13	0.108 - 0.512"	GH12	90	3.54"	2.17"	-	1.32"	1.75"	-	SKG13-10HG	30K	1
NCAT40-SK13C-120UP-IDU	SK13	0.108 - 0.512"	GH12	120	4.72"	3.36"	-	1.32"	1.75"	-	SKG13-10HG	30K	1
NCAT40-SK13C-150UP-IDU	SK13	0.108 - 0.512"	GH12	150	5.91"	3.48"	-	1.32"	1.75"	-	SKG13-10HG	30K	3
NCAT40-SK16C-60UP-IDU	SK16	0.108 - 0.63"	GH16	60	2.36"	1.59"	-	1.59"	-	-	SKG16-10HG	25K	4
NCAT40-SK16C-90UP-IDU	SK16	0.108 - 0.63"	GH16	90	3.54"	2.13"	-	1.59"	1.75"	-	SKG16-12HG	25K	1
NCAT40-SK16C-120UP-IDU	SK16	0.108 - 0.63"	GH16	120	4.72"	3.31"	-	1.59"	1.75"	-	SKG16-12HG	25K	1
NCAT40-SK16C-150UP-IDU	SK16	0.108 - 0.63"	GH16	150	5.91"	4.50"	-	1.59"	1.75"	-	SKG16-12HG	25K	1
NCAT40-SK20C-65UP-IDU	SK20	0.138 - 0.787"	GH20	65	2.56"	1.80"	-	1.91"	-	-	SKG20-12HG	25K	4
NCAT40-SK20C-90UP-IDU	SK20	0.138 - 0.787"	GH20	90	3.54"	2.79"	-	1.91"	-	-	SKG20-18HG	25K	5
NCAT40-SK20C-120UP-IDU	SK20	0.138 - 0.787"	GH20	120	4.72"	3.97"	-	1.91"	-	-	SKG20-18HG	25K	5
NCAT40-SK20C-150UP-IDU	SK20	0.138 - 0.787"	GH20	150	5.91"	5.15"	-	1.91"	-	-	SKG20-18HG	25K	5
NCAT40-SK25C-90UP-IDU	SK25	0.188 - 1.000"	GH25	90	3.54"	2.77"	-	2.17"	-	-	SKG25-18HGD	20K	5
NCAT40-SK25C-120UP-IDU	SK25	0.188 - 1.000"	GH25	120	4.72"	3.95"	-	2.17"	-	-	SKG25-18HGD	20K	5

Note: "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

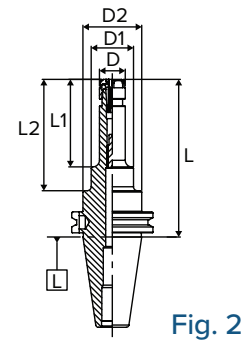


Fig. 2

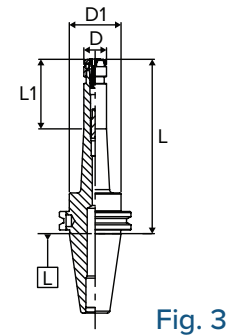


Fig. 3

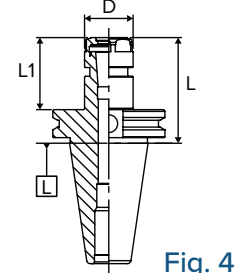


Fig. 4

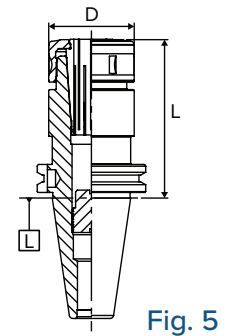


Fig. 5



SK Collets
Pages 32-39



Wrenches
Page 40

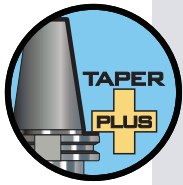


Back-up Screw
Page 41



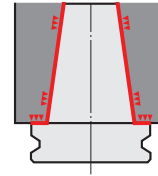
Coolant-thru Nuts
Pages 37-39

TAPER PLUS CAT SK COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT50 SK6/SK10/16/25

Part Number	Collet Series	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
NCAT50-SK6C-105U-IDU	SK6	0.028 - 0.25"	SKL-6W	105	4.13"	2.73"	-	0.77"	2.75"	-	SKG6-6HG	20K	1
NCAT50-SK6C-165U-IDU	SK6	0.028 - 0.25"	SKL-6W	165	6.50"	2.61"	5.09"	0.77"	1.26"	2.75"	SKG6-6HG	20K	2
NCAT50-SK10C-105U-IDU	SK10	0.035 - 0.394"	SKL-10	105	4.13"	2.77"	-	1.08"	2.75"	-	SKG10-10HG	20K	1
NCAT50-SK10C-165U-IDU	SK10	0.035 - 0.394"	SKL-10	165	6.50"	3.21"	5.14"	1.08"	1.26"	2.75"	SKG10-10HG	20K	2
NCAT50-SK10C-195U-IDU	SK10	0.035 - 0.394"	SKL-10	195	7.68"	2.95"	-	1.08"	2.75"	-	SKG10-10HG	20K	3
NCAT50-SK10C-225U-IDU	SK10	0.035 - 0.394"	SKL-10	225	8.86"	2.95"	-	1.08"	2.75"	-	SKG10-10HG	20K	3
NCAT50-SK16C-105U-IDU	SK16	0.108 - 0.63"	9HC16	105	4.13"	2.72"	-	1.58"	2.75"	-	SKG16-12HG	20K	1
NCAT50-SK16C-165U-IDU	SK16	0.108 - 0.63"	9HC16	165	6.50"	3.71"	5.08"	1.58"	1.97"	2.75"	SKG16-12HG	20K	2
NCAT50-SK16C-195U-IDU	SK16	0.108 - 0.63"	9HC16	195	7.68"	3.52"	-	1.58"	2.75"	-	SKG16-12HG	20K	3
NCAT50-SK25C-105U-IDU	SK25	0.188 - 1.000"	9HC22	105	4.13"	2.75"	-	1.91"	2.75"	-	SKG25-24HG	15K	1
NCAT50-SK25C-165U-IDU	SK25	0.188 - 1.000"	9HC22	165	6.50"	5.09"	-	2.17"	2.75"	-	SKG25-24HG	15K	1
NCAT50-SK25C-195U-IDU	SK25	0.188 - 1.000"	9HC22	195	7.68"	6.27"	-	2.17"	2.75"	-	SKG25-24HG	15K	1

Note: "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

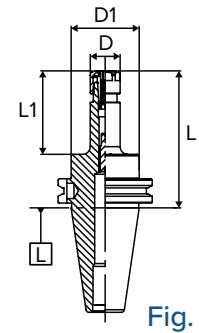


Fig. 1

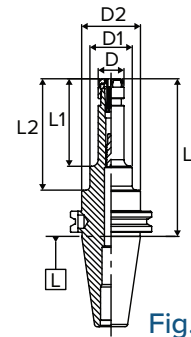


Fig. 2

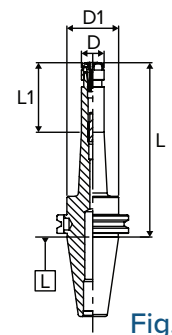
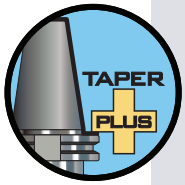


Fig. 3



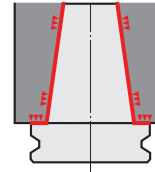
SK COLLET CHUCKS

TAPER PLUS CAT SLIM CHUCK COOLANT HIGH-SPEED



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT50 SK10-P/16/25

Part Number	Collet Series	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
NCAT50-SK10C-105UP-IDU	SK10	0.035 - 0.394"	GH10	105	4.13"	2.75"	-	1.08"	2.75"	-	SKG10-10HG	20K	1
NCAT50-SK10C-165UP-IDU	SK10	0.035 - 0.394"	GH10	165	6.50"	3.19"	5.11"	1.08"	1.26"	2.75"	SKG10-10HG	20K	2
NCAT50-SK10C-195UP-IDU	SK10	0.035 - 0.394"	GH10	195	7.68"	2.95"	-	1.08"	2.75"	-	SKG10-10HG	20K	3
NCAT50-SK16C-105UP-IDU	SK16	0.108 - 0.63"	GH16	105	4.13"	2.72"	-	1.59"	2.75"	-	SKG16-12HG	20K	1
NCAT50-SK16C-165UP-IDU	SK16	0.108 - 0.63"	GH16	165	6.50"	3.71"	5.08"	1.59"	1.97"	2.75"	SKG16-12HG	20K	2
NCAT50-SK25C-105UP-IDU	SK25	0.188 - 1.000"	GH25	105	4.13"	2.73"	-	2.17"	2.75"	-	SKG25-24HG	15K	1
NCAT50-SK25C-165UP-IDU	SK25	0.188 - 1.000"	GH25	165	6.50"	5.09"	-	2.17"	2.75"	-	SKG25-24HG	15K	1

Note: "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

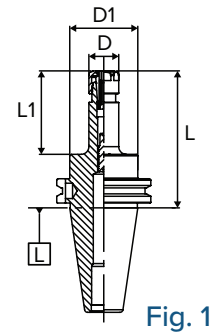


Fig. 1

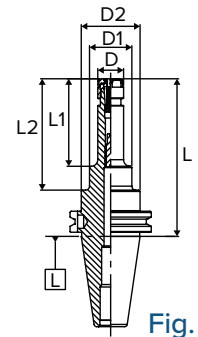


Fig. 2

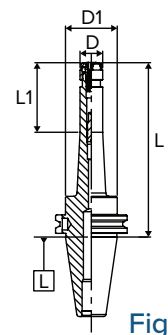


Fig. 3



BT SK COLLET CHUCKS

FEATURES

- Feature TiN Bearing Nut which considerably improves cutting rigidity and finish
- Narrow body allows access to tight spaces and hard to reach areas
- Unique high-pressure coolant collet system for higher accuracy and gripping torque
- Longer and steeper collet provides double the clamping force and precision than ER Collet Chucks



T.I.R.
≤0.0002" at 4xD



Speed
Up to 30,000 rpm



Coolant-Thru
Thru-tool coolant

MILLING



REAMING



DRILLING



TAPPING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT30

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
BT30-SK6-60	SK6	0.028 - 0.25"	SKL-6W	60	2.36"	1.49"	0.77"	-	SKG-8	15K	7
BT30-SK6-90	SK6	0.028 - 0.25"	SKL-6W	90	3.54"	2.47"	0.77"	1.26"	SKG-8	15K	8
BT30-SK6-120	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	2.63"	0.77"	1.26"	SKG-8	15K	8
BT30-SK10-45	SK10	0.035 - 0.394"	SKL-10	45	1.77"	0.90"	1.08"	-	SKG-12S	15K	7
BT30-SK10-60	SK10	0.035 - 0.394"	SKL-10	60	2.36"	1.52"	1.08"	-	SKG-12L	15K	7
BT30-SK10-90	SK10	0.035 - 0.394"	SKL-10	90	3.54"	2.68"	1.08"	-	SKG-12L	15K	7
BT30-SK13-75	SK13	0.108 - 0.512"	016-SPAN	75	2.95"	2.09"	1.30"	-	SKG-15	15K	7
BT30-SK13-90	SK13	0.108 - 0.512"	016-SPAN	90	3.54"	2.68"	1.30"	-	SKG-15	15K	7
BT30-SK13-120	SK13	0.108 - 0.512"	016-SPAN	120	4.72"	3.86"	1.30"	-	SKG-15	15K	7
BT30-SK16-60	SK16	0.108 - 0.63"	9HC16	60	2.36"	1.47"	1.58"	-	SKG-12L	15K	7
BT30-SK16-90	SK16	0.108 - 0.63"	9HC16	90	3.54"	2.67"	1.58"	-	SKG-12	15K	7
BT30-SK16-120	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.82"	1.58"	-	SKG-18L	15K	7
BT30-SK20-60	SK20	0.138 - 0.787"	9HC22	60	2.36"	1.49"	1.91"	-	SKG-12S	15K	7
BT30-SK20-90	SK20	0.138 - 0.787"	9HC22	90	3.54"	2.67"	1.91"	-	SKG-12	15K	7
BT30-SK25-90	SK25	0.188 - 1.000"	9HC22	90	3.54"	2.67"	2.17"	-	SKG-12	15K	7

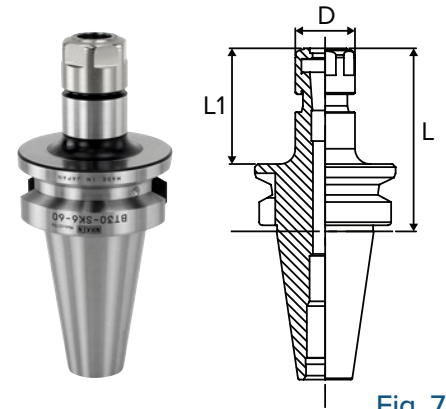


Fig. 7

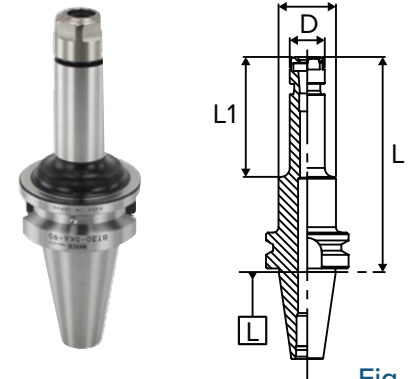


Fig. 8

Available in **TAPER PLUS+**
Dual-taper and flange contact



SK COLLET CHUCKS

BT SK COLLET CHUCKS

BT40

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
BT40-SK6-60	SK6	0.028 - 0.25"	SKL-6W	60	2.36"	1.30"	0.77"	-	SKG-8	15K	7
BT40-SK6-90	SK6	0.028 - 0.25"	SKL-6W	90	3.54"	2.28"	0.77"	1.26"	SKG-8	15K	8
BT40-SK6-120	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	2.63"	0.77"	1.26"	SKG-8	15K	8
BT40-SK6-150	SK6	0.028 - 0.25"	SKL-6W	150	5.91"	2.35"	0.77"	-	SKG-8	10K	9
BT40-SK10-60	SK10	0.035 - 0.394"	SKL-10	60	2.36"	1.32"	1.08"	-	SKG-12L	15K	7
BT40-SK10-90	SK10	0.035 - 0.394"	SKL-10	90	3.54"	2.18"	1.08"	1.58"	SKG-12L	15K	8
BT40-SK10-120	SK10	0.035 - 0.394"	SKL-10	120	4.72"	3.16"	1.08"	1.58"	SKG-12L	15K	8
BT40-SK10-150	SK10	0.035 - 0.394"	SKL-10	150	5.91"	2.87"	1.08"	-	SKG-12L	10K	9
BT40-SK10-180	SK10	0.035 - 0.394"	SKL-10	180	7.09"	2.87"	1.08"	-	SKG-12L	10K	9
BT40-SK13-75	SK13	0.108 - 0.512"	016-SPAN	75	2.95"	1.90"	1.30"	-	SKG-15	15K	7
BT40-SK13-90	SK13	0.108 - 0.512"	016-SPAN	90	3.54"	2.48"	1.30"	-	SKG-15	15K	7
BT40-SK16-60	SK16	0.108 - 0.63"	9HC16	60	2.36"	1.27"	1.58"	-	SKG-18S	15K	7
BT40-SK16-90	SK16	0.108 - 0.63"	9HC16	90	3.54"	2.45"	1.58"	-	SKG-18L	15K	7
BT40-SK16-120	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.65"	1.58"	-	SKG-18L	15K	7
BT40-SK16-150	SK16	0.108 - 0.63"	9HC16	150	5.91"	4.84"	1.58"	-	SKG-18L	10K	7
BT40-SK16-180	SK16	0.108 - 0.63"	9HC16	180	7.09"	6.02"	1.58"	-	SKG-18L	10K	7
BT40-SK20-60	SK20	0.138 - 0.787"	9HC22	60	2.36"	1.30"	1.91"	-	SKG-22	15K	7
BT40-SK20-90	SK20	0.138 - 0.787"	9HC22	90	3.54"	2.47"	1.91"	-	SKG-22	15K	7
BT40-SK20-120	SK20	0.138 - 0.787"	9HC22	120	4.72"	3.65"	1.91"	-	SKG-22	15K	7
BT40-SK25-75	SK25	0.188 - 1.000"	9HC22	75	2.95"	1.88"	2.17"	-	SKG-12	15K	7
BT40-SK25-90	SK25	0.188 - 1.000"	9HC22	90	3.54"	2.47"	2.17"	-	SKG-28	15K	7
BT40-SK25-120	SK25	0.188 - 1.000"	9HC22	120	4.72"	3.65"	2.17"	-	SKG-28	15K	7

Note: Wrench and back-up screw not included.

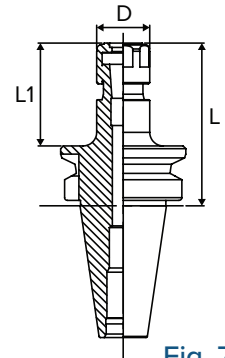


Fig. 7

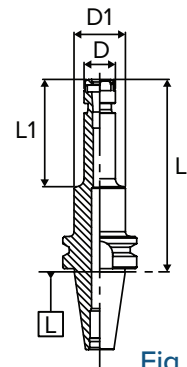


Fig. 8

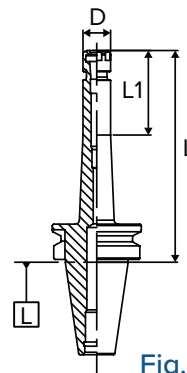


Fig. 9

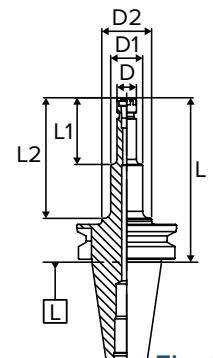


Fig. 10

BT50 STANDARD

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
BT50-SK6-105	SK6	0.028 - 0.25"	SKL-6W	105	4.13"	2.43"	-	0.77"	1.26"	-	SKG-8	15K	8
BT50-SK6-165	SK6	0.028 - 0.25"	SKL-6W	165	6.50"	2.63"	4.76"	0.77"	1.26"	1.97"	SKG-8	10K	10
BT50-SK10-105	SK10	0.035 - 0.394"	SKL-10	105	4.13"	2.63"	-	1.08"	-	-	SKG-12L	15K	7
BT50-SK10-165	SK10	0.035 - 0.394"	SKL-10	165	6.50"	3.18"	4.76"	1.08"	1.26"	1.97"	SKG-12L	10K	10
BT50-SK10-200	SK10	0.035 - 0.394"	SKL-10	200	7.87"	2.93"	-	1.08"	-	-	SKG-12L	2.4K	9
BT50-SK13-250	SK13	0.108 - 0.512"	016-SPAN	250	9.84"	3.62"	-	1.30"	-	-	SKG-15	2.4K	9
BT50-SK16-105	SK16	0.108 - 0.63"	9HC16	105	4.13"	2.63"	-	1.58"	-	-	SKG-18L	15K	7
BT50-SK16-135	SK16	0.108 - 0.63"	9HC16	135	5.31"	3.78"	-	1.58"	-	-	SKG-18L	10K	7
BT50-SK16-165	SK16	0.108 - 0.63"	9HC16	165	6.50"	3.73"	-	1.58"	1.97"	-	SKG-18L	10K	8
BT50-SK16-200	SK16	0.108 - 0.63"	9HC16	200	7.87"	3.59"	-	1.58"	-	-	SKG-18L	2.4K	9
BT50-SK25-105	SK25	0.188 - 1.000"	9HC22	105	4.13"	2.63"	-	2.17"	-	-	SKG-28	15K	7
BT50-SK25-165	SK25	0.188 - 1.000"	9HC22	165	6.50"	4.99"	-	2.17"	-	-	SKG-28	10K	7
BT50-SK25-200	SK25	0.188 - 1.000"	9HC22	200	7.87"	6.35"	-	2.17"	-	-	SKG-28	2.4K	7



SK Collets
Pages 32-39



Wrenches
Page 40



Back-up Screw
Page 41



Coolant-thru Nuts
Pages 37-39

BT SK COLLET CHUCKS - HIGH-SPEED

BT30 - HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
BT30-SK6-60P	SK6	0.028-0.25"	GH6	60	2.36"	1.49"	0.78"	-	SKG-8	30K	7
BT30-SK6-90P	SK6	0.028-0.25"	GH6	90	3.54"	2.47"	0.78"	1.26"	SKG-8	30K	8
BT30-SK6-120P	SK6	0.028-0.25"	GH6	120	4.72"	2.61"	0.78"	1.26"	SKG-8	30K	8
BT30-SK10-45P	SK10	0.035-0.394"	GH10	45	1.77"	0.90"	1.08"	-	SKG-12S	30K	7
BT30-SK10-60P	SK10	0.035-0.394"	GH10	60	2.36"	1.50"	1.08"	-	SKG-12L	30K	7
BT30-SK10-90P	SK10	0.035-0.394"	GH10	90	3.54"	2.67"	1.08"	-	SKG-12L	30K	7
BT30-SK13-90P	SK13	0.108-0.512"	GH12	90	3.54"	2.69"	1.32"	-	SKG-15	30K	7
BT30-SK16-60P	SK16	0.108-0.63"	GH16	60	2.36"	1.50"	1.59"	-	SKG-12L	30K	7
BT30-SK16-90P	SK16	0.108-0.63"	GH16	90	3.54"	2.67"	1.59"	-	SKG-12	30K	7
BT30-SK16-120P	SK16	0.108-0.63"	GH16	120	4.72"	3.83"	1.59"	-	SKG-18L	25K	7
BT30-SK20-60P	SK20	0.138-0.787"	GH20	60	2.36"	1.49"	1.91"	-	SKG-12S	30K	7
BT30-SK20-90P	SK20	0.138-0.787"	GH20	90	3.54"	2.67"	1.91"	-	SKG-12	25K	7
BT30-SK25-90P	SK25	0.188-1.000"	GH25	90	3.54"	2.67"	2.17"	-	SKG-12	15K	7

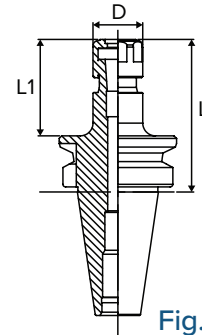


Fig. 7

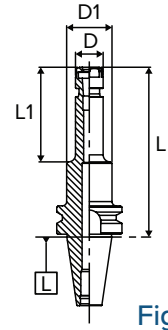


Fig. 8

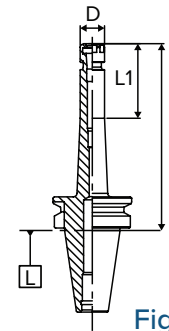


Fig. 9

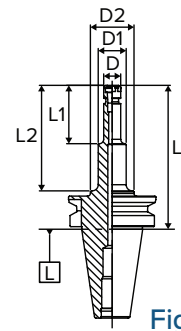


Fig. 10

BT40 - HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
BT40-SK6-90P	SK6	0.028-0.25"	GH6	90	3.54"	2.28"	0.78"	1.26"	SKG-8	30K	8
BT40-SK6-120P	SK6	0.028-0.25"	GH6	120	4.72"	2.63"	0.78"	1.26"	SKG-8	30K	8
BT40-SK6-150P	SK6	0.028-0.25"	GH6	150	5.91"	2.35"	0.78"	-	SKG-8	30K	9
BT40-SK10-60P	SK10	0.035-0.394"	GH10	60	2.36"	1.32"	1.08"	-	SKG-12L	30K	7
BT40-SK10-90P	SK10	0.035-0.394"	GH10	90	3.54"	2.16"	1.08"	1.58"	SKG-12L	30K	8
BT40-SK10-120P	SK10	0.035-0.394"	GH10	120	4.72"	3.14"	1.08"	1.58"	SKG-12L	30K	8
BT40-SK10-150P	SK10	0.035-0.394"	GH10	150	5.91"	2.87"	1.08"	-	SKG-12L	30K	9
BT40-SK16-60P	SK16	0.108-0.63"	GH16	60	2.36"	1.27"	1.59"	-	SKG-18S	25K	7
BT40-SK16-90P	SK16	0.108-0.63"	GH16	90	3.54"	2.47"	1.59"	-	SKG-18L	25K	7
BT40-SK16-120P	SK16	0.108-0.63"	GH16	120	4.72"	3.65"	1.59"	-	SKG-18L	25K	7
BT40-SK16-150P	SK16	0.108-0.63"	GH16	150	5.91"	4.84"	1.59"	-	SKG-18L	25K	7
BT40-SK25-75P	SK25	0.188-1.000"	GH25	75	2.95"	1.88"	2.17"	-	SKG-12	20K	7
BT40-SK25-90P	SK25	0.188-1.000"	GH25	90	3.54"	2.47"	2.17"	-	SKG-28	20K	7
BT40-SK25-120P	SK25	0.188-1.000"	GH25	120	4.72"	3.65"	2.17"	-	SKG-28	20K	7

BT50 - HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
BT50-SK6-165P	SK6	0.028-0.25"	GH6	165	6.50"	2.63"	4.76"	0.78"	1.26"	1.97"	SKG-8	20K	10
BT50-SK10-105P	SK10	0.035-0.394"	GH10	105	4.13"	2.63"	-	1.08"	-	-	SKG-12L	20K	7
BT50-SK10-165P	SK10	0.035-0.394"	GH10	165	6.50"	3.18"	4.76"	1.08"	1.26"	1.97"	SKG-12L	20K	10
BT50-SK16-105P	SK16	0.108-0.63"	GH16	105	4.13"	2.63"	-	1.59"	-	-	SKG-18L	20K	7
BT50-SK16-165P	SK16	0.108-0.63"	GH16	165	6.50"	3.73"	-	1.59"	1.97"	-	SKG-18L	20K	8
BT50-SK25-105P	SK25	0.188-1.000"	GH25	105	4.13"	2.63"	-	2.17"	-	-	SKG-28	15K	7
BT50-SK25-165P	SK25	0.188-1.000"	GH25	165	6.50"	4.99"	-	2.17"	-	-	SKG-28	15K	7

Note: Wrench and back-up screw not included.

Available in **TAPER PLUS**
Dual-taper and flange contact
See pages 22-23

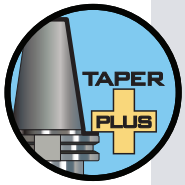
TAPER PLUS+
COMBINING TAPER ACCURACY
WITH FLANGE RIGIDITY!

- Outstanding Runout Accuracy for longer tool life
- Vibration Dampening for increased productivity
- High Rigidity for smooth and stable cutting



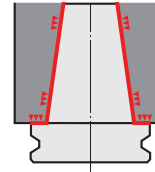
SK COLLET CHUCKS

TAPER PLUS BT SK COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - BT30 SK6/10/13/16/20/25

Part Number	Collet Series	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
NBT30-SK6C-60	SK6	0.028 - 0.25"	SKL-6W	60	2.36"	1.49"	0.77"	-	SKG6-6HG	15K	7
NBT30-SK6C-90	SK6	0.028 - 0.25"	SKL-6W	90	3.54"	2.46"	0.77"	1.26"	SKG6-6HG	15K	8
NBT30-SK6C-120	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	2.63"	0.77"	1.26"	SKG6-6HG	15K	8
NBT30-SK10C-45	SK10	0.035 - 0.394"	SKL-10	45	1.77"	0.90"	1.08"	-	SKG10-10HG	15K	7
NBT30-SK10C-60	SK10	0.035 - 0.394"	SKL-10	60	2.36"	1.49"	1.08"	-	SKG10-10HG	15K	7
NBT30-SK10C-75	SK10	0.035 - 0.394"	SKL-10	75	2.95"	2.08"	1.08"	-	SKG10-10HG	15K	7
NBT30-SK10C-90	SK10	0.035 - 0.394"	SKL-10	90	3.54"	2.67"	1.08"	-	SKG10-10HG	15K	7
NBT30-SK10C-120	SK10	0.035 - 0.394"	SKL-10	120	4.72"	3.85"	1.08"	-	SKG10-10HG	15K	7
NBT30-SK13C-60	SK13	0.108 - 0.512"	016-SPAN	60	2.36"	1.50"	1.30"	-	SKG13-10HG	15K	7
NBT30-SK13C-90	SK13	0.108 - 0.512"	016-SPAN	90	3.54"	2.69"	1.30"	-	SKG13-10HG	15K	7
NBT30-SK13C-120	SK13	0.108 - 0.512"	016-SPAN	120	4.72"	3.86"	1.30"	-	SKG13-10HG	15K	7
NBT30-SK16C-60	SK16	0.108 - 0.63"	9HC16	60	2.36"	1.49"	1.58"	-	SKG16-12HGE	15K	7
NBT30-SK16C-75	SK16	0.108 - 0.63"	9HC16	75	2.95"	2.08"	1.58"	-	SKG16-10HG	15K	7
NBT30-SK16C-90	SK16	0.108 - 0.63"	9HC16	90	3.54"	2.65"	1.58"	-	SKG16-12HG	15K	7
NBT30-SK16C-120	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.85"	1.58"	-	SKG16-12HG	15K	7
NBT30-SK20-60	SK20	0.138 - 0.787"	9HC22	60	2.36"	1.49"	1.91"	-	SKG-12S	15K	7
NBT30-SK20C-75	SK20	0.138 - 0.787"	9HC22	75	2.95"	2.08"	1.91"	-	SKG20-12HGE	15K	7
NBT30-SK20C-90	SK20	0.138 - 0.787"	9HC22	90	3.54"	2.67"	1.91"	-	SKG20-12HG	15K	7
NBT30-SK25-90	SK25	0.188 - 1.000"	9HC22	90	3.54"	2.67"	2.17"	-	SKG-12	15K	7

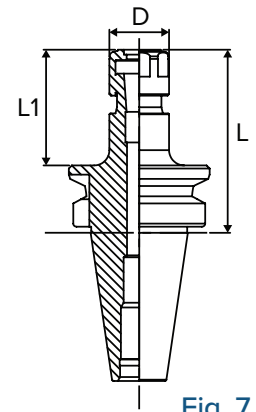


Fig. 7

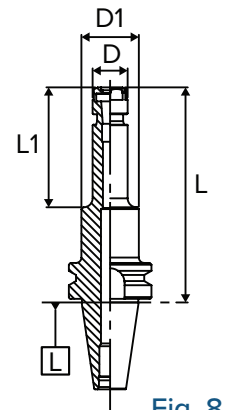
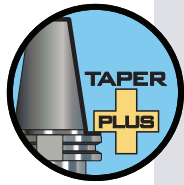


Fig. 8

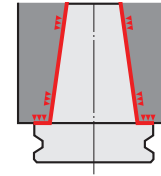


TAPER PLUS BT SLIM CHUCK COOLANT HIGH-SPEED



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - BT30 SK6/10/13/16/20/25-P

Part Number	Collet Series	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
NBT30-SK6C-60P	SK6	0.028 - 0.25"	GH6	60	2.36"	1.49"	0.78"	-	SKG6-6HG	30K	7
NBT30-SK6C-90P	SK6	0.028 - 0.25"	GH6	90	3.54"	2.47"	0.78"	1.26"	SKG6-6HG	30K	8
NBT30-SK6C-120P	SK6	0.028 - 0.25"	GH6	120	4.72"	2.64"	0.78"	1.26"	SKG6-6HG	30K	8
NBT30-SK10C-45P	SK10	0.035 - 0.394"	GH10	45	1.77"	0.90"	1.08"	-	SKG10-10HG	30K	7
NBT30-SK10C-60P	SK10	0.035 - 0.394"	GH10	60	2.36"	1.49"	1.08"	-	SKG10-10HG	30K	7
NBT30-SK10C-75P	SK10	0.035 - 0.394"	GH10	75	2.95"	2.08"	1.08"	-	SKG10-10HG	30K	7
NBT30-SK10C-90P	SK10	0.035 - 0.394"	GH10	90	3.54"	2.67"	1.08"	-	SKG10-10HG	30K	7
NBT30-SK10C-120P	SK10	0.035 - 0.394"	GH10	120	4.72"	3.88"	1.08"	-	SKG10-10HG	30K	7
NBT30-SK13C-60P	SK13	0.028 - 0.25"	GH12	60	2.36"	1.50"	1.32"	-	SKG13-10HG	30K	7
NBT30-SK13C-90P	SK13	0.028 - 0.25"	GH12	90	3.54"	2.69"	1.32"	-	SKG13-10HG	30K	7
NBT30-SK13C-120P	SK13	0.028 - 0.25"	GH12	120	4.72"	3.87"	1.32"	-	SKG13-10HG	30K	7
NBT30-SK16C-60P	SK16	0.108 - 0.63"	GH16	60	2.36"	1.49"	1.59"	-	SKG16-12HGE	25K	7
NBT30-SK16C-75P	SK16	0.108 - 0.63"	GH16	75	2.95"	2.08"	1.59"	-	SKG16-10HG	25K	7
NBT30-SK16C-90P	SK16	0.108 - 0.63"	GH16	90	3.54"	2.67"	1.59"	-	SKG16-12HG	25K	7
NBT30-SK16C-120P	SK16	0.108 - 0.63"	GH16	120	4.72"	3.83"	1.59"	-	SKG16-12HG	25K	7
NBT30-SK20-60P	SK20	0.138 - 0.787"	GH20	60	2.36"	1.49"	1.91"	-	SKG-12S	25K	7
NBT30-SK20C-75P	SK20	0.138 - 0.787"	GH20	75	2.95"	2.08"	1.91"	-	SKG20-12HGE	25K	7
NBT30-SK20C-90P	SK20	0.138 - 0.787"	GH20	90	3.54"	2.67"	1.91"	-	SKG20-12HG	25K	7
NBT30-SK25-90P	SK25	0.188 - 1.000"	GH25	90	3.54"	2.67"	2.17"	-	SKG-12	20K	7

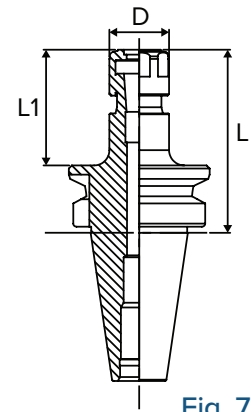


Fig. 7

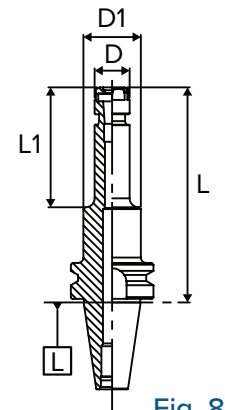
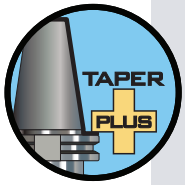


Fig. 8



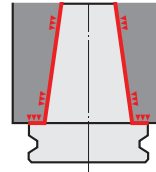
SK COLLET CHUCKS

TAPER PLUS BT SLIM CHUCK COOLANT



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



SK COLLET CHUCKS

TAPER PLUS - BT40 SK6/10/13/16/25

Part Number	Collet Series	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
NBT40-SK6C-60	SK6	0.028 - 0.25"	SKL-6W	60	2.36"	1.29"	0.77"	0.77"	SKG6-6HG	15K	7
NBT40-SK6C-90	SK6	0.028 - 0.25"	SKL-6W	90	3.54"	2.28"	0.77"	1.26"	SKG6-6HG	15K	8
NBT40-SK6C-120	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	2.63"	0.77"	1.26"	SKG6-6HG	15K	8
NBT40-SK6C-150	SK6	0.028 - 0.25"	SKL-6W	150	5.91"	2.35"	0.77"	-	SKG6-6HG	10K	9
NBT40-SK10C-60	SK10	0.035 - 0.394"	SKL-10	60	2.36"	1.29"	1.08"	-	SKG10-10HG	15K	7
NBT40-SK10C-75	SK10	0.035 - 0.394"	SKL-10	75	2.95"	1.88"	1.08"	-	SKG10-10HG	15K	7
NBT40-SK10C-90	SK10	0.035 - 0.394"	SKL-10	90	3.54"	1.89"	1.08"	1.58"	SKG10-10HG	15K	8
NBT40-SK10C-120	SK10	0.035 - 0.394"	SKL-10	120	4.72"	3.14"	1.08"	1.58"	SKG10-10HG	15K	8
NBT40-SK10C-150	SK10	0.035 - 0.394"	SKL-10	150	5.91"	2.87"	1.08"	-	SKG10-10HG	10K	9
NBT40-SK10C-180	SK10	0.035 - 0.394"	SKL-10	180	7.09"	2.87"	1.08"	-	SKG10-10HG	10K	9
NBT40-SK10C-200	SK10	0.035 - 0.394"	SKL-10	200	7.87"	2.87"	1.08"	-	SKG10-10HG	2.4K	9
NBT40-SK10C-250	SK10	0.035 - 0.394"	SKL-10	250	9.84"	2.87"	1.08"	-	SKG10-10HG	2.4K	9
NBT40-SK13C-60	SK13	0.108 - 0.512"	016-SPAN	60	2.36"	1.30"	1.30"	-	SKG13-10HG	15K	7
NBT40-SK13C-75	SK13	0.108 - 0.512"	016-SPAN	75	2.95"	1.89"	1.30"	-	SKG13-10HG	15K	7
NBT40-SK16C-60	SK16	0.108 - 0.63"	9HC16	60	2.36"	1.29"	1.58"	-	SKG16-10HG	15K	7
NBT40-SK16C-75	SK16	0.108 - 0.63"	9HC16	75	2.95"	1.88"	1.58"	-	SKG16-12HG	15K	7
NBT40-SK16C-90	SK16	0.108 - 0.63"	9HC16	90	3.54"	2.47"	1.58"	-	SKG16-12HG	15K	7
NBT40-SK16C-120	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.65"	1.58"	-	SKG16-12HG	15K	7
NBT40-SK16C-150	SK16	0.108 - 0.63"	9HC16	150	5.91"	4.84"	1.58"	-	SKG16-12HG	10K	7
NBT40-SK16C-180	SK16	0.108 - 0.63"	9HC16	180	7.09"	6.02"	1.58"	-	SKG16-12HG	10K	7
NBT40-SK16C-200	SK16	0.108 - 0.63"	9HC16	200	7.87"	6.80"	1.58"	-	SKG16-12HG	2.4K	7
NBT40-SK16C-250	SK16	0.108 - 0.63"	9HC16	250	9.84"	8.77"	1.58"	-	SKG16-12HG	2.4K	7
NBT40-SK25C-75	SK25	0.188 - 1.000"	9HC22	75	2.95"	1.88"	2.17"	-	SKG25-18HGE	15K	7
NBT40-SK25C-90	SK25	0.188 - 1.000"	9HC22	90	3.54"	2.47"	2.17"	-	SKG25-18HGD	15K	7
NBT40-SK25C-120	SK25	0.188 - 1.000"	9HC22	120	4.72"	3.65"	2.17"	-	SKG25-24HG	15K	7

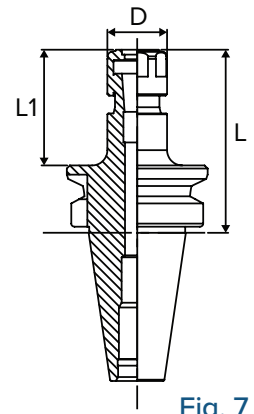


Fig. 7

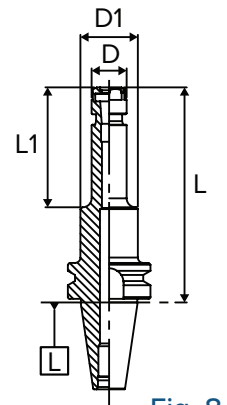


Fig. 8

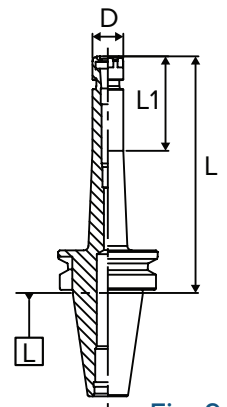


Fig. 9



SK Collets
Pages 32-39



Wrenches
Page 40

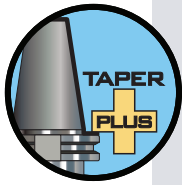


Back-up Screw
Page 41



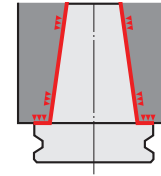
Coolant-thru Nuts
Pages 37-39

TAPER PLUS BT SLIM CHUCK COOLANT HIGH-SPEED



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - BT40 SK6/10/13/16/25-P

Part Number	Collet Series	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
NBT40-SK6C-60P	SK6	0.028 - 0.25"	GH6	60	2.36"	1.29"	0.78"	-	SKG6-6HG	30K	7
NBT40-SK6C-90P	SK6	0.028 - 0.25"	GH6	90	3.54"	2.28"	0.78"	1.26"	SKG6-6HG	30K	8
NBT40-SK6C-120P	SK6	0.028 - 0.25"	GH6	120	4.72"	2.63"	0.78"	1.26"	SKG6-6HG	30K	8
NBT40-SK6C-150P	SK6	0.028 - 0.25"	GH6	150	5.91"	2.35"	0.78"	-	SKG6-6HG	30K	9
NBT40-SK10C-60P	SK10	0.035 - 0.394"	GH10	60	2.36"	1.29"	1.08"	-	SKG10-10HG	30K	7
NBT40-SK10C-75P	SK10	0.035 - 0.394"	GH10	75	2.95"	1.88"	1.08"	-	SKG10-10HG	30K	7
NBT40-SK10C-90P	SK10	0.035 - 0.394"	GH10	90	3.54"	2.16"	1.08"	1.58"	SKG10-10HG	30K	8
NBT40-SK10C-120P	SK10	0.035 - 0.394"	GH10	120	4.72"	3.14"	1.08"	1.58"	SKG10-10HG	30K	8
NBT40-SK10C-150P	SK10	0.035 - 0.394"	GH10	150	5.91"	2.87"	1.08"	-	SKG10-10HG	30K	9
NBT40-SK13C-75P	SK13	0.108 - 0.512"	GH12	75	2.95"	1.90"	1.32"	-	SKG13-10HG	30K	7
NBT40-SK16C-60P	SK16	0.108 - 0.63"	GH16	60	2.36"	1.30"	1.59"	-	SKG16-10HG	25K	7
NBT40-SK16C-75P	SK16	0.108 - 0.63"	GH16	75	2.95"	1.88"	1.59"	-	SKG16-12HG	25K	7
NBT40-SK16C-90P	SK16	0.108 - 0.63"	GH16	90	3.54"	2.47"	1.59"	-	SKG16-12HG	25K	7
NBT40-SK16C-120P	SK16	0.108 - 0.63"	GH16	120	4.72"	3.65"	1.59"	-	SKG16-12HG	25K	7
NBT40-SK16C-150P	SK16	0.108 - 0.63"	GH16	150	5.91"	4.84"	1.59"	-	SKG16-12HG	25K	7
NBT40-SK25C-75P	SK25	0.188 - 1.000"	GH25	75	2.95"	1.88"	2.17"	-	SKG25-18HGE	20K	7
NBT40-SK25C-90P	SK25	0.188 - 1.000"	GH25	90	3.54"	2.47"	2.17"	-	SKG25-18HGD	20K	7
NBT40-SK25C-120P	SK25	0.188 - 1.000"	GH25	120	4.72"	3.65"	2.17"	-	SKG25-24HG	20K	7

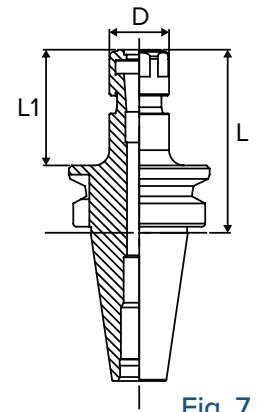


Fig. 7

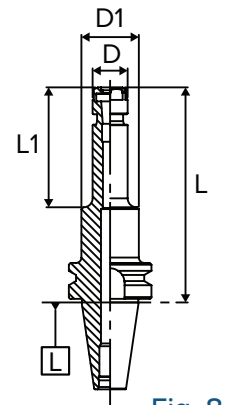


Fig. 8

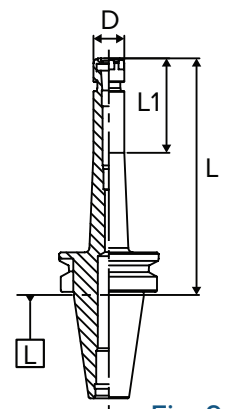


Fig. 9



SK COLLET CHUCKS

HSK SK COLLET CHUCKS

FEATURES

- Feature TiN Bearing Nut which considerably improves cutting rigidity and finish
- Narrow body allows access to tight spaces and hard to reach areas
- Unique high-pressure coolant collet system for higher accuracy and gripping torque
- 8° taper SK collet provides double the clamping force and precision than ER Collet Chucks
- Coolant Collets are steel-sealed and mechanically sealed by design.



T.I.R.
≤0.0002" at 4xD



Speed
Up to 50,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK63A

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
HSK63A-SK6C-100-IDU	SK6	0.028 - 0.25"	SKL-6W	100	3.94"	2.64"	0.77"	1.26"	SKG6-6HG	20K	11
HSK63A-SK6C-120-IDU	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	2.64"	0.77"	1.26"	SKG6-6HG	20K	11
HSK63A-SK6C-150-IDU	SK6	0.028 - 0.25"	SKL-6W	150	5.91"	2.39"	0.77"	-	SKG6-6HG	10K	12
HSK63A-SK10C-105-IDU	SK10	0.035 - 0.394"	SKL-10	105	4.13"	3.12"	1.08"	-	SKG10-10HGA	20K	13
HSK63A-SK10C-120-IDU	SK10	0.035 - 0.394"	SKL-10	120	4.72"	2.61"	1.08"	1.26"	SKG10-10HGA	20K	11
HSK63A-SK10C-150-IDU	SK10	0.035 - 0.394"	SKL-10	150	5.91"	2.87"	1.08"	-	SKG10-10HGA	15K	12
HSK63A-SK16C-120-IDU	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.67"	1.58"	-	SKG16-10HGA	20K	13
HSK63A-SK16C-150-IDU	SK16	0.108 - 0.630"	9HC16	150	5.91"	4.85"	1.58"	-	SKG16-10HGA	15K	13
HSK63A-SK25C-135-IDU	SK25	0.188 - 1.000"	9HC22	135	5.31"	4.29"	2.17"	-	SKG25-24HGE	10K	13

Note:

- Wrench and back-up screw not included. Coolant tube and coolant tube wrench are sold separately.
- "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

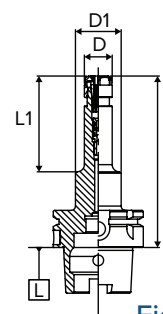


Fig. 11

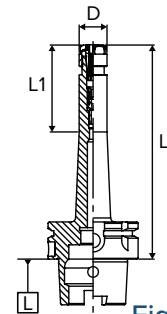


Fig. 12

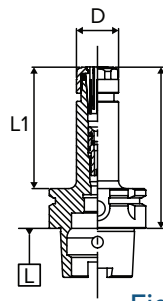


Fig. 13

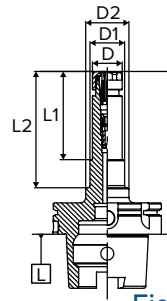


Fig. 14

HSK100A

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
HSK100A-SK6C-105-IDU	SK6	0.028 - 0.25"	SKL-6W	105	4.13"	2.61"	-	0.77"	1.58"	-	SKG6-6HG	15K	11
HSK100A-SK10C-105-IDU	SK10	0.035 - 0.394"	SKL-10	105	4.13"	2.46"	-	1.08"	1.58"	-	SKG10-10HGA	15K	11
HSK100A-SK10C-120-IDU	SK10	0.035 - 0.394"	SKL-10	120	4.72"	3.05"	-	1.08"	1.58"	-	SKG10-10HGA	15K	11
HSK100A-SK10C-150-IDU	SK10	0.035 - 0.394"	SKL-10	150	5.91"	3.21"	4.24"	1.08"	1.26"	1.58"	SKG10-10HGA	15K	14
HSK100A-SK10C-200-IDU	SK10	0.035 - 0.394"	SKL-10	200	7.87"	2.98"	-	1.08"	-	-	SKG10-10HGA	15K	12
HSK100A-SK16C-120-IDU	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.55"	-	1.58"	-	-	SKG16-10HGA	15K	13
HSK100A-SK16C-150-IDU	SK16	0.108 - 0.63"	9HC16	150	5.91"	3.71"	-	1.58"	1.97"	-	SKG16-12HGBA	10K	11
HSK100A-SK16C-200-IDU	SK16	0.108 - 0.63"	9HC16	200	7.87"	3.51"	-	1.58"	-	-	SKG16-12HGBA	2.4K	12
HSK100A-SK20C-120-IDU	SK20	0.035 - 0.394"	9HC22	120	4.72"	3.58"	-	1.91"	-	-	SKG20-18HG	15K	13
HSK100A-SK25C-145-IDU	SK25	0.630 - 1.000"	9HC22	145	5.71"	4.56"	-	2.17"	-	-	SKG25-24HGE	15K	13

Note: Wrench and back-up screw not included. Coolant tube and coolant tube wrench are sold separately.

COOLANT TUBE WRENCH FOR HSK HOLDERS

Part Number	Description
HSK40-WRENCH	Wrench for HSK40 Coolant Tube
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube



COOLANT TUBE FOR HSK HOLDERS

Part Number	Description
HSK40-TUBE	Coolant Tube for HSK40 holder
HSK63-TUBE	Coolant Tube for HSK63 holder
HSK100-TUBE	Coolant Tube for HSK100 holder



Note: Coolant Tube Wrenches are needed to remove or install coolant tubes in HSK toolholders.



SK Collets
Pages 32-39



Wrenches
Page 40



Back-up Screw
Page 41



Coolant-thru Nuts
Pages 37-39

HSK SK COLLET CHUCKS - HIGH-SPEED

HSK32E HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
HSK32E-SK6-50P	SK6	0.028 - 0.25"	GH6	50	1.97"	1.17"	0.78"	50K	15
HSK32E-SK10-60P	SK10	0.035 - 0.394"	GH10	60	2.36"	1.57"	1.08"	50K	15

Note: Wrench and back-up screw not included.
Coolant tube and coolant tube wrench are sold separately. See page 27 for details.

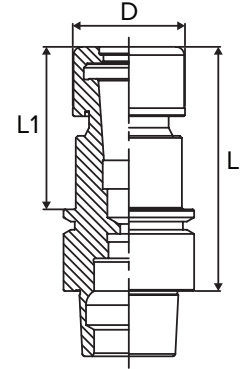


Fig. 15

HSK40E HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
HSK40E-SK6-60P	SK6	0.028 - 0.25"	GH6	60	2.36"	1.57"	0.78"	40K	15
HSK40E-SK10-60P	SK10	0.035 - 0.394"	GH10	60	2.36"	1.59"	1.08"	40K	15
HSK40E-SK16-80P	SK16	0.108 - 0.63"	GH16	80	3.15"	2.35"	1.59"	30K	15

Note: Wrench and back-up screw not included.
Coolant tube and coolant tube wrench are sold separately. See page 27 for details.



HSK63A HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	D1	Back-Up Screw	Max. RPM	Fig.
HSK63A-SK6C-100P-IDU	SK6	0.028 - 0.25"	GH6	100	3.94"	2.64"	0.78"	1.26"	SKG6-6HG	30K	11
HSK63A-SK6C-120P-IDU	SK6	0.028 - 0.25"	GH6	120	4.72"	2.64"	0.78"	1.26"	SKG6-6HG	30K	11
HSK63A-SK6C-150P-IDU	SK6	0.028 - 0.25"	GH6	150	5.91"	2.40"	0.78"	-	SKG6-6HG	30K	12
HSK63A-SK10C-105P-IDU	SK10	0.035 - 0.394"	GH10	105	4.13"	3.11"	1.08"	-	SKG10-10HG	30K	13
HSK63A-SK10C-120P-IDU	SK10	0.035 - 0.394"	GH10	120	4.72"	2.61"	1.08"	1.26"	SKG10-10HG	30K	11
HSK63A-SK10C-150P-IDU	SK10	0.035 - 0.394"	GH10	150	5.91"	2.89"	1.08"	-	SKG10-10HG	30K	12
HSK63A-SK16C-120P-IDU	SK16	0.108 - 0.63"	GH16	120	4.72"	3.70"	1.59"	-	SKG13-10HG	25K	13
HSK63A-SK16C-150P-IDU	SK16	0.108 - 0.63"	GH12	150	5.91"	4.85"	1.59"	-	SKG13-10HG	25K	13
HSK63A-SK25C-135P-IDU	SK25	0.188 - 1.000"	GH25	135	5.31"	4.28"	1.59"	-	SKG25-24HGE	20K	13

Note:

- Wrench and back-up screw not included. Coolant tube and coolant tube wrench are sold separately. See page 27 for details.
- "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

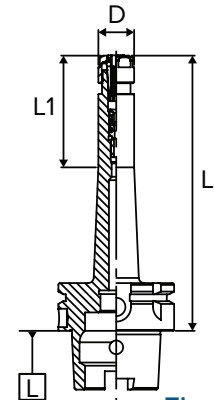


Fig. 12



SK COLLET CHUCKS

HSK SK COLLET CHUCKS - HIGH-SPEED

HSK63F HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	Back-Up Screw	Max. RPM	Fig.
HSK63F-SK10C-105P	SK10	0.035 - 0.394"	GH10	105	4.13"	3.10"	1.08"	SKG10-10HGAG	30K	15
HSK63F-SK16C-120P	SK16	0.108 - 0.63"	GH16	120	4.72"	3.69"	1.59"	SKG16-12HGBA	30K	15

Note: Wrench and back-up screw not included. Coolant tube and coolant tube wrench are sold separately. See page 27 for details.

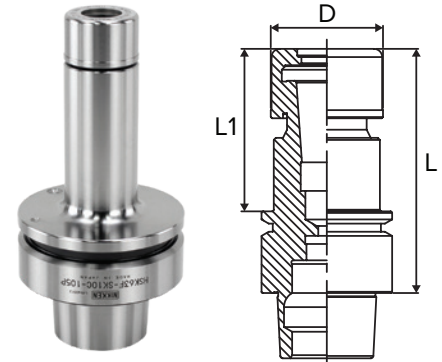


Fig. 15

HSK100A HIGH-SPEED

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	Back-Up Screw	Max. RPM	Fig.
HSK100A-SK10C-105P-IDU	SK10	0.035 - 0.394"	GH10	105	4.13"	2.46"	-	1.08"	1.58"	-	SKG10-10HGA	20K	11
HSK100A-SK10C-120P-IDU	SK10	0.035 - 0.394"	GH10	120	4.72"	3.05"	-	1.08"	1.58"	-	SKG10-10HGA	20K	11
HSK100A-SK10C-150P-IDU	SK10	0.035 - 0.394"	GH10	150	5.91"	3.18"	4.21"	1.08"	1.26"	1.58"	SKG10-10HGA	20K	14
HSK100A-SK16C-120P-IDU	SK16	0.108 - 0.63"	GH16	120	4.72"	3.56"	-	1.59"	-	-	SKG16-10HGA	20K	13
HSK100A-SK25C-145P-IDU	SK25	0.188 - 1.000"	GH25	145	5.71"	4.56"	-	2.17"	-	-	SKG25-24HGE	15K	13

Note:

- Wrench and back-up screw not included. Coolant tube and coolant tube wrench are sold separately. See page 27 for details.
- "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

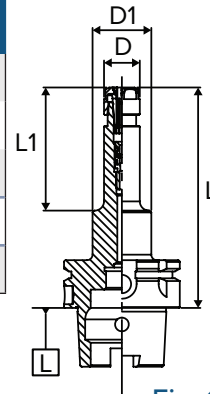


Fig. 11

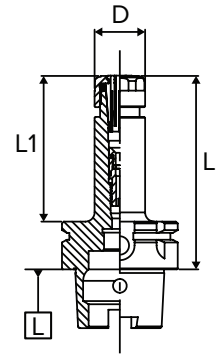


Fig. 13

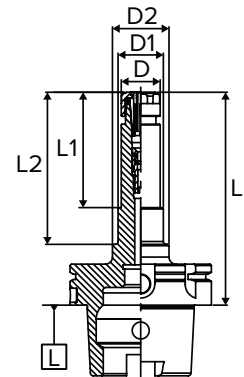


Fig. 14



SK Collets
Pages 32-39



Wrenches
Page 40



Back-up Screw
Page 41



Coolant-thru Nuts
Pages 37-39

STRAIGHT SHANK SK COLLET CHUCKS

FEATURES

- Feature TiN Bearing Nut which considerably improves cutting rigidity and finish
- Narrow body allows access to tight spaces and hard to reach areas
- Unique high-pressure coolant collet system for higher accuracy and gripping torque
- 8° taper SK collet provides double the clamping force and precision than ER Collet Chucks
- Coolant Collets are steel-sealed and mechanically sealed by design.



T.I.R.
≤0.0002" at 4xD



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STRAIGHT SHANK

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	L2	D	D1	D2	D3	Back-Up Screw	Fig.
K3/4-SK10-100	SK10	0.035 - 0.394"	SKL-10	100	3.94"	1.77"	-	0.75"	1.08"	-	-	SKG-12L	16
K3/4-SK10-120	SK10	0.035 - 0.394"	SKL-10	120	4.72"	2.56"	-	0.75"	1.08"	-	-	SKG-12L	16
K1.1/4-SK6-120	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	1.96"	2.28"	1.25"	0.77"	1.26"	1.46"	SKG-8	17
K1.1/4-SK6-170	SK6	0.028 - 0.25"	SKL-6W	170	6.69"	2.47"	4.24"	1.25"	0.77"	1.46"	-	SKG-8	18
K1.1/4-SK10-120	SK10	0.035 - 0.394"	SKL-10	120	4.72"	1.88"	2.28"	1.25"	1.08"	1.26"	1.46"	SKG-12L	17
K1.1/4-SK10-150	SK10	0.035 - 0.394"	SKL-10	150	5.91"	3.06"	3.46"	1.25"	1.08"	1.26"	1.46"	SKG-12L	17
K1.1/4-SK10-210	SK10	0.035 - 0.394"	SKL-10	210	8.27"	2.95"	5.82"	1.25"	1.08"	1.46"	-	SKG-12L	18
K1.1/4-SK16-120	SK16	0.108 - 0.63"	9HC16	120	4.72"	2.25"	-	1.25"	1.58"	-	-	SKG-18L	16
K1.1/4-SK16-150	SK16	0.108 - 0.63"	9HC16	150	5.91"	3.43"	-	1.25"	1.58"	-	-	SKG-18L	16
K1.1/4-SK16-210	SK16	0.108 - 0.63"	9HC16	210	8.27"	5.79"	-	1.25"	1.58"	-	-	SKG-18L	16
K1.1/4-SK25-150	SK25	0.630 - 1.000"	9HC22	150	5.91"	3.46"	-	1.25"	2.17"	-	-	SKG-18L	16
K25-SK6-130	SK6	0.028 - 0.25"	SKL-6W	130	5.12"	2.43"	2.75"	0.98"	0.77"	1.18"	-	SKG-8	18
K25-SK10-150	SK10	0.035 - 0.394"	SKL-10	150	5.91"	3.36"	3.56"	0.98"	1.08"	1.18"	-	SKG-12L	18
S25-SK10-250	SK10	0.035 - 0.394"	SKL-10	250	9.84"	1.06"	-	0.98"	1.08"	-	-	SKG-12L	16
S25-SK10-300	SK10	0.035 - 0.394"	SKL-10	300	11.81"	1.03"	-	0.98"	1.08"	-	-	SKG-12L	16
K32-SK6-120	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	1.96"	2.28"	1.26"	0.77"	1.26"	1.46"	SKG-8	17
K32-SK6-170	SK6	0.028 - 0.25"	SKL-6W	170	6.69"	2.48"	4.25"	1.26"	0.77"	1.46"	-	SKG-8	18
K32-SK10-120	SK10	0.035 - 0.394"	SKL-10	120	4.72"	1.89"	2.28"	1.26"	1.08"	1.26"	1.56"	SKG-12L	17
K32-SK10-210	SK10	0.035 - 0.394"	SKL-10	210	8.27"	2.98"	5.85"	1.26"	1.08"	1.46"	-	SKG-12L	18
K32-SK16-120	SK16	0.108 - 0.63"	9HC16	120	4.72"	2.28"	-	1.26"	1.58"	-	-	SKG-18L	16
K32-SK16-210	SK16	0.108 - 0.63"	9HC16	210	8.27"	5.80"	-	1.26"	1.58"	-	-	SKG-18L	16
S32-SK16-250	SK16	0.108 - 0.63"	9HC16	250	9.84"	2.25"	-	1.26"	1.58"	-	-	SKG-18L	16
S32-SK16-300	SK16	0.108 - 0.63"	9HC16	300	11.81"	2.25"	-	1.26"	1.58"	-	-	SKG-18L	16
K32-SK20-120	SK20	0.138 - 0.787"	9HC22	120	4.72"	2.28"	-	1.26"	1.91"	-	-	SKG-22	16
K32-SK20-180	SK20	0.138 - 0.787"	9HC22	180	7.09"	4.64"	-	1.26"	1.91"	-	-	SKG-22	16

Note: Wrench not included.

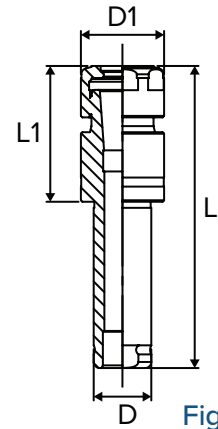


Fig. 16

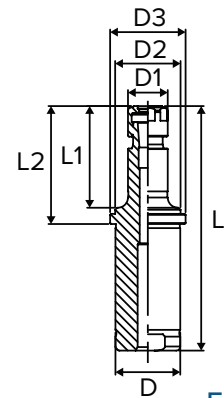


Fig. 17

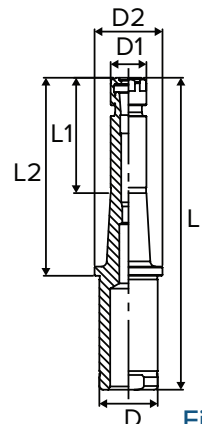


Fig. 18



SK COLLET CHUCKS

POLYGONAL TAPER SK COLLET CHUCKS

FEATURES

- Extremely stable and rigid connection between tool and the machine
- High torque and bending forces transmission due to simultaneous tapered polygon and face contact with machine spindle
- Self centering ability due to unique design
- Internal coolant supply, directly to the tool tip
- Best solution for all processes - both in turning and milling
- Modular design for flexible tooling
- Standardized interface as per ISO 26623



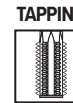
T.I.R.
≤0.0002" at 4xD



Speed
Up to 15,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

C4/C5/C6

Part Number	Collet Size	Collet Range	Wrench	L (mm)	L	L1	D	Back-Up Screw	Max. RPM	Fig.
C4-SK6-60-IDU	SK6	0.028 - 0.25"	SKL-6W	60	2.36"	1.60"	0.77"	SKG-8	15K	19
C4-SK10-60-IDU	SK10	0.035 - 0.394"	SKL-10	60	2.36"	1.60"	1.08"	SKG-12L	15K	19
C4-SK13-60-IDU	SK13	0.108 - 0.512"	016-SPAN	60	2.36"	1.59"	1.30"	-	15K	19
C4-SK16-60-IDU	SK16	0.108 - 0.63"	9HC16	60	2.36"	-	1.58"	-	15K	20
C4-SK20-75-IDU	SK20	0.138 - 0.787"	9HC22	75	2.95"	-	1.91"	-	15K	20
C5-SK6-60-IDU	SK6	0.028 - 0.25"	SKL-6W	60	2.36"	1.60"	0.77"	SKG-8	15K	19
C5-SK10-60-IDU	SK10	0.035 - 0.394"	SKL-10	60	2.36"	1.60"	1.08"	SKG-12L	15K	19
C5-SK13-60-IDU	SK13	0.108 - 0.512"	016-SPAN	60	2.36"	1.59"	1.30"	-	15K	19
C5-SK16-60-IDU	SK16	0.108 - 0.63"	9HC16	60	2.36"	1.55"	1.58"	-	15K	19
C5-SK20-75-IDU	SK20	0.138 - 0.787"	9HC22	75	2.95"	2.16"	1.91"	-	15K	19
C5-SK25-75-IDU	SK25	0.188 - 1"	9HC22	75	2.95"	-	2.17"	-	15K	20
C6-SK6-60-IDU	SK6	0.028 - 0.25"	SKL-6W	60	2.36"	1.51"	0.77"	SKG-8	15K	19
C6-SK6-90-IDU	SK6	0.028 - 0.25"	SKL-6W	90	3.54"	2.66"	0.77"	SKG-8	15K	19
C6-SK6-120-IDU	SK6	0.028 - 0.25"	SKL-6W	120	4.72"	3.84"	0.77"	SKG-8	15K	19
C6-SK10-60-IDU	SK10	0.035 - 0.394"	SKL-10	60	2.36"	1.50"	1.08"	SKG-12L	15K	19
C6-SK10-90-IDU	SK10	0.035 - 0.394"	SKL-10	90	3.54"	2.69"	1.08"	SKG-12L	15K	19
C6-SK10-120-IDU	SK10	0.035 - 0.394"	SKL-10	120	4.72"	3.88"	1.08"	SKG-12L	15K	19
C6-SK13-60-IDU	SK13	0.108 - 0.512"	016-SPAN	60	2.36"	1.50"	1.30"	-	15K	19
C6-SK13-90-IDU	SK13	0.108 - 0.512"	016-SPAN	90	3.54"	2.68"	1.30"	SKG-15	15K	19
C6-SK13-120-IDU	SK13	0.108 - 0.512"	016-SPAN	120	4.72"	3.87"	1.30"	SKG-15	15K	19
C6-SK16-60-IDU	SK16	0.108 - 0.63"	9HC16	60	2.36"	1.47"	1.58"	-	15K	19
C6-SK16-90-IDU	SK16	0.108 - 0.63"	9HC16	90	3.54"	2.65"	1.58"	SKG-18L	15K	19
C6-SK16-120-IDU	SK16	0.108 - 0.63"	9HC16	120	4.72"	3.82"	1.58"	SKG-18L	15K	19
C6-SK20-70-IDU	SK20	0.138 - 0.787"	9HC22	70	2.76"	1.89"	1.91"	-	15K	19
C6-SK20-90-IDU	SK20	0.138 - 0.787"	9HC22	90	3.54"	2.68"	1.91"	SKG-22	15K	19
C6-SK20-120-IDU	SK20	0.138 - 0.787"	9HC22	120	4.72"	3.84"	1.91"	SKG-22	15K	19
C6-SK25-75-IDU	SK25	0.188 - 1.000"	9HC22	75	2.95"	2.08"	2.17"	-	15K	19
C6-SK25-90-IDU	SK25	0.188 - 1.000"	9HC22	90	3.54"	2.68"	2.17"	SKG-28	15K	19
C6-SK25-120-IDU	SK25	0.188 - 1.000"	9HC22	120	4.72"	3.84"	2.17"	SKG-28	15K	19

Note:

- Wrench and back-up screw not included. Coolant tube and coolant tube wrench are sold separately. See page 27 for details.
- "-IDU" type holders have a pre-machined counter-bore on the drive key to accept Balluff BIS-C122-04/L RFID chips (10 X 4.5mm size)

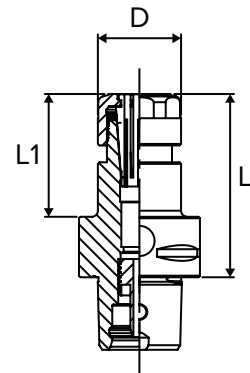


Fig. 19

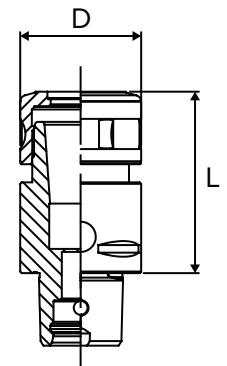


Fig. 20



SK Collets
Pages 32-39



Wrenches
Page 40



Back-up Screw
Page 41



Coolant-thru Nuts
Pages 37-39

SK6 COLLETS

SK6 COLLETS

Size range: 0.7mm - 6.0mm (0.028 - 0.236")

METRIC

Part Number	Collapse Range (mm)	Collapse Range (in)
SK6-0.8	0.8 - 0.7	0.031 - 0.028"
SK6-1	1 - 0.9	0.039 - 0.035"
SK6-1.25	1.25 - 1.15	0.049 - 0.045"
SK6-1.5	1.5 - 1.3	0.059 - 0.051"
SK6-1.75	1.75 - 1.55	0.069 - 0.061"
SK6-2	2 - 1.8	0.079 - 0.071"
SK6-2.25	2.25 - 2.05	0.089 - 0.081"
SK6-2.5	2.5 - 2.3	0.098 - 0.091"
SK6-2.75	2.75 - 2.55	0.108 - 0.1"
SK6-3	3 - 2.8	0.118 - 0.110"
SK6-3.5	3.5 - 3	0.138 - 0.118"
SK6-4	4 - 3.5	0.157 - 0.138"
SK6-4.5	4.5 - 4	0.177 - 0.157"
SK6-5	5 - 4.5	0.197 - 0.177"
SK6-5.5	5.5 - 5	0.217 - 0.197"
SK6-6	6 - 5.5	0.236 - 0.217"
SK6-SET-16-MM	0.7mm - 6mm SK6 Set	

INCH/METRIC ON-SIZE

Part Number	Size
SK6-1/8A	0.125"
SK6-3/16A	0.188"
SK6-1/4A	0.250"
SK6-2A	0.079"
SK6-3A	0.118"
SK6-4A	0.138"
SK6-5A	0.197"
SK6-6A	0.236"

These are on-size collets with minimal collapsible ranges. A-type collets have an H8 gripping range.



METRIC - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK6-3AC	3mm
SK6-4AC	4mm
SK6-5AC	5mm
SK6-6AC	6mm

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

INCH - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK6-1/8AC	0.125"
SK6-3/16AC	0.188"

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

SK6 COLLET RACK

Part Number	Description
RACK-ER11/SK6	SK6 collet rack, 35 collets capacity



Note: SK Collet Drill Chart available on page 291 in the Technical section.

SK COLLET CHUCKS

SK10 COLLETS

SK10 COLLETS

Size range: 1.75mm - 10.0mm (0.035 - 0.039")

METRIC

Part Number	Collapse Range (mm)	Collapse Range (in)
SK10-1	1 - 0.9	0.039 - 0.035"
SK10-1.25	1.25 - 1.15	0.049 - 0.045"
SK10-1.5	1.5 - 1.3	0.059 - 0.051"
SK10-1.75	1.75 - 1.55	0.069 - 0.061"
SK10-2	2 - 1.75	0.079 - 0.069"
SK10-2.25	2.25 - 2	0.089 - 0.079"
SK10-2.5	2.5 - 2.25	0.098 - 0.089"
SK10-2.75	2.75 - 2.5	0.098 - 0.108"
SK10-3	3 - 2.75	0.118 - 0.108"
SK10-3.5	3.5 - 3	0.138 - 0.118"
SK10-4	4 - 3.5	0.157 - 0.138"
SK10-4.5	4.5 - 4	0.177 - 0.157"
SK10-5	5 - 4.5	0.197 - 0.177"
SK10-5.5	5.5 - 5	0.217 - 0.197"
SK10-6	6.0 - 5.5	0.236 - 0.217"
SK10-6.2	6.2 - 5.7	0.2446 - 0.224"
SK10-6.5	6.5 - 6	0.256 - 0.236"
SK10-7	7 - 6.5	0.276 - 0.256"
SK10-7.5	7.5 - 7	0.295 - 0.276"
SK10-8	8 - 7.5	0.315 - 0.295"
SK10-8.5	8.5 - 8	0.335 - 0.315"
SK10-9	9 - 8.5	0.354 - 0.335"
SK10-9.5	9.5 - 9	0.374 - 0.354"
SK10-10	10 - 9.5	0.394 - 0.374"
SK10-SET-19-MM	1.75mm - 10mm SK10 Set	

INCH/METRIC ON-SIZE

Part Number	Size
SK10-1/8A	0.125"
SK10-3/16A	0.188"
SK10-1/4A	0.250"
SK10-5/16A	0.312"
SK10-3/8A	0.375"
SK10-3A	0.118"
SK10-4A	0.157"
SK10-5A	0.197"
SK10-6A	0.236"
SK10-8A	0.315"
SK10-10A	0.390"
SK10-SET-05-A	1/8 - 3/8" SK10 Set

These are on-size collets with minimal collapsible ranges. A-type collets have an H8 gripping range.



METRIC - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK10-3AC	3mm
SK10-4AC	4mm
SK10-5AC	5mm
SK10-6AC	6mm
SK10-7AC	7mm
SK10-8AC	8mm
SK10-9AC	9mm
SK10-10AC	10mm
SK10-SET-08-AC-MM	2.5mm - 10mm SK10 Set

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

INCH - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK10-1/8AC	0.125"
SK10-3/16AC	0.188"
SK10-1/4AC	0.250"
SK10-5/16AC	0.312"
SK10-3/8AC	0.375"
SK10-SET-05-AC	1/8 - 3/8" SK10 Set

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

SK10 COLLET RACK

Part Number	Description
RACK-ER16/SK10	SK10 collet rack, 24 collets capacity



Note: SK Collet Drill Chart available on page 291 in the Technical section.

SK13 COLLETS

SK13 COLLETS

Size range: 2.5mm - 13.0mm (0.098 - 0.512")

METRIC

Part Number	Collapse Range (mm)	Collapse Range (in)
SK13-3	3 - 2.8	0.118 - 0.110"
SK13-3.5	3.5 - 3	0.138 - 0.118"
SK13-4	4 - 3.5	0.157 - 0.138"
SK13-4.5	4.5 - 4	0.177 - 0.157"
SK13-5	5 - 4.5	0.197 - 0.177"
SK13-5.5	5.5 - 5	0.217 - 0.197"
SK13-6	6 - 5.5	0.236 - 0.217"
SK13-6.5	6.5 - 6	0.256 - 0.236"
SK13-7	7 - 6.5	0.276 - 0.256"
SK13-7.5	7.5 - 7	0.295 - 0.276"
SK13-8	8 - 7.5	0.315 - 0.295"
SK13-8.5	8.5 - 8	0.335 - 0.315"
SK13-9	9 - 8.5	0.354 - 0.335"
SK13-9.5	9.5 - 9	0.374 - 0.354"
SK13-10	10 - 9.5	0.394 - 0.374"
SK13-10.5	10.5 - 10	0.413 - 0.394"
SK13-11	11 - 10.5	0.433 - 0.413"
SK13-11.5	11.5 - 11	0.453 - 0.433"
SK13-12	12 - 11.5	0.472 - 0.453"
SK13-12.5	12.5 - 12	0.492 - 0.472"
SK13-13	13 - 12.5	0.512 - 0.492"
SK13-SET-21-MM	2.5mm - 13mm SK13 Set	

INCH/METRIC ON-SIZE

Part Number	Size
SK13-1/8A	0.125"
SK13-3/16A	0.188"
SK13-1/4A	0.250"
SK13-5/16A	0.312"
SK13-3/8A	0.375"
SK13-7/16A	0.438"
SK13-1/2A	0.500"
SK13-8A	0.315"
SK13-10A	0.390"
SK13-12A	0.472"
SK13-SET-07-A	1/8 - 1/2" SK13 Set

These are on-size collets with minimal collapsible ranges. A-type collets have an H8 gripping range.



METRIC - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK13-4AC	4mm
SK13-5AC	5mm
SK13-6AC	6mm
SK13-7AC	7mm
SK13-8AC	8mm
SK13-9AC	9mm
SK13-10AC	10mm
SK13-11AC	11mm
SK13-12AC	12mm
SK13-13AC	13mm
SK13-SET-09-AC-MM	5mm - 13mm SK13 Set

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

INCH - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK13-1/4AC	0.250"
SK13-5/16AC	0.312"
SK13-3/8AC	0.375"
SK13-7/16AC	0.438"

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

Note: SK Collet Drill Chart available on page 291 in the Technical section.

SK COLLET CHUCKS

SK16 COLLETS

SK16 COLLETS

Size range: 2.75mm - 16.0mm (0.108 - 0.630")

METRIC

Part Number	Collapse Range (mm)	Collapse Range (in)
SK16-3	3 - 2.75	0.118 - 0.108"
SK16-3.5	3.5 - 3	0.138 - 0.118"
SK16-4	4 - 3.5	0.157 - 0.138"
SK16-4.5	4.5 - 4	0.177 - 0.157"
SK16-5	5 - 4.5	0.197 - 0.177"
SK16-5.5	5.5 - 5	0.217 - 0.197"
SK16-6	6 - 5.5	0.236 - 0.217"
SK16-6.5	6.5 - 6	0.256 - 0.236"
SK16-7	7 - 6.5	0.276 - 0.256"
SK16-7.5	7.5 - 7	0.295 - 0.276"
SK16-8	8 - 7.5	0.315 - 0.295"
SK16-8.5	8.5 - 8	0.335 - 0.315"
SK16-9	9 - 8.5	0.354 - 0.335"
SK16-9.5	9.5 - 9	0.374 - 0.354"
SK16-10	10 - 9.5	0.394 - 0.374"
SK16-10.5	10.5 - 10	0.413 - 0.394"
SK16-11	11 - 10.5	0.433 - 0.413"
SK16-11.5	11.5 - 11	0.453 - 0.433"
SK16-12	12 - 11.5	0.472 - 0.453"
SK16-12.5	12.5 - 12	0.492 - 0.472"
SK16-13	13 - 12.5	0.512 - 0.492"
SK16-13.5	13.5 - 13	0.531 - 0.512"
SK16-14	14 - 13.5	0.551 - 0.531"
SK16-14.5	14.5 - 14	0.571 - 0.551"
SK16-15	15 - 14.5	0.591 - 0.571"
SK16-15.5	15.5 - 15	0.61 - 0.591"
SK16-16	16 - 15.5	0.63 - 0.61"
SK16-SET-27-MM	2.5mm - 16mm SK16 Set	

METRIC - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK16-6AC	6mm
SK16-7AC	7mm
SK16-8AC	8mm
SK16-9AC	9mm
SK16-10AC	10mm
SK16-11AC	11mm
SK16-12AC	12mm
SK16-13AC	13mm
SK16-14AC	14mm
SK16-15AC	15mm
SK16-16AC	16mm
SK16-SET-11-AC-MM	6mm - 16mm SK16 Set

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

Note: SK Collet Drill Chart available on page 291 in the Technical section.

INCH/METRIC ON-SIZE

Part Number	Size
SK16-1/8A	0.125"
SK16-3/16A	0.188"
SK16-1/4A	0.250"
SK16-5/16A	0.312"
SK16-3/8A	0.375"
SK16-7/16A	0.438"
SK16-1/2A	0.500"
SK16-9/16A	0.563"
SK16-5/8A	0.625"
SK16-3A	0.118"
SK16-4A	0.157"
SK16-5A	0.197"
SK16-6A	0.236"
SK16-8A	0.315"
SK16-10A	0.390"
SK16-12A	0.472"
SK16-14A	0.551"
SK16-16A	0.630"
SK16-SET-09-A	1/8 - 5/8" SK16 Set

These are on-size collets with minimal collapsible ranges. A-type collets have an H8 gripping range.

INCH - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK16-1/4AC	0.250"
SK16-5/16AC	0.312"
SK16-3/8AC	0.375"
SK16-7/16AC	0.438"
SK16-1/2AC	0.500"
SK16-9/16AC	0.563"
SK16-5/8AC	0.625"

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

SK16 COLLET RACK

Part Number	Description
RACK-180DA/ SK16/ER25	SK16 collet rack, 30 collets capacity



SK20 COLLETS

SK20 COLLETS

Size range: 3.5mm - 20.00mm (0.138 - 0.787")

METRIC

Part Number	Collapse Range (mm)	Collapse Range (in)
SK20-4	4 - 3.5	0.157 - 0.138"
SK20-4.5	4.5 - 4	0.177 - 0.157"
SK20-5	5 - 4.5	0.197 - 0.177"
SK20-5.5	5.5 - 5	0.217 - 0.197"
SK20-6	6 - 5.5	0.236 - 0.217"
SK20-6.5	6.5 - 6	0.256 - 0.236"
SK20-7	7 - 6.5	0.276 - 0.256"
SK20-7.5	7.5 - 7	0.295 - 0.276"
SK20-8	8 - 7.5	0.315 - 0.295"
SK20-8.5	8.5 - 8	0.335 - 0.315"
SK20-9	9 - 8.5	0.354 - 0.335"
SK20-9.5	9.5 - 9	0.374 - 0.354"
SK20-10	10 - 9.5	0.394 - 0.374"
SK20-10.5	10.5 - 10	0.413 - 0.394"
SK20-11	11 - 10.5	0.433 - 0.413"
SK20-11.5	11.5 - 11	0.453 - 0.433"
SK20-12	12 - 11.5	0.472 - 0.453"
SK20-12.5	12.5 - 12	0.492 - 0.472"
SK20-13	13 - 12.5	0.512 - 0.492"
SK20-13.5	13.5 - 13	0.531 - 0.512"
SK20-14	14 - 13.5	0.551 - 0.531"
SK20-14.5	14.5 - 14	0.571 - 0.551"
SK20-15	15 - 14.5	0.591 - 0.571"
SK20-15.5	15.5 - 15	0.61 - 0.591"
SK20-16	16 - 15.5	0.63 - 0.61"
SK20-16.5	16.5 - 16	0.65 - 0.63"
SK20-17	17 - 16.5	0.669 - 0.65"
SK20-17.5	17.5 - 17	0.689 - 0.669"
SK20-18	18 - 17.5	0.709 - 0.689"
SK20-18.5	18.5 - 18	0.728 - 0.709"
SK20-19	19 - 18.5	0.748 - 0.728"
SK20-19.5	19.5 - 19	0.768 - 0.748"
SK20-20	20 - 19.5	0.787 - 0.768"
SK20-SET-21-MM	9.5mm - 20mm SK20 Set	
SK20-SET-33-MM	3.5mm - 20mm SK20 Set	

INCH/METRIC ON-SIZE

Part Number	Size
SK20-1/8A	0.125"
SK20-3/16A	0.188"
SK20-1/4A	0.250"
SK20-5/16A	0.312"
SK20-3/8A	0.375"
SK20-7/16A	0.438"
SK20-1/2A	0.500"
SK20-9/16A	0.563"
SK20-5/8A	0.625"
SK20-3/4A	0.750"
SK20-4A	0.157"
SK20-6A	0.236"
SK20-8A	0.315"
SK20-10A	0.390"
SK20-12A	0.472"
SK20-16A	0.630"
SK20-20A	0.787"
SK20-SET-10-A	1/8 - 3/4" SK20 Set



These are on-size collets with minimal collapsible ranges. A-type collets have an H8 gripping range.

METRIC - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK20-12AC	12mm
SK20-16AC	16mm
SK20-18AC	18mm
SK20-20AC	20mm

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

INCH - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK20-7/16AC	0.438"
SK20-1/2AC	0.500"
SK20-9/16AC	0.563"
SK20-5/8AC	0.625"
SK20-3/4AC	0.750"

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

Note: SK Collet Drill Chart available on page 291 in the Technical section.

SK COLLET CHUCKS

SK25 COLLETS

SK25 COLLETS

Size range: 16mm - 25mm (0.630 - 0.984")

METRIC

Part Number	Collapse Range (mm)	Collapse Range (in)
SK25-8	8 - 7.5	0.315 - 0.295"
SK25-10	10 - 9.5	0.394 - 0.374"
SK25-12	12 - 11.5	0.472 - 0.453"
SK25-16	16 - 15.5	0.63 - 0.61"
SK25-16.5	16.5 - 16	0.65 - 0.63"
SK25-17	17 - 16.5	0.669 - 0.65"
SK25-17.5	17.5 - 17	0.689 - 0.669"
SK25-18	18 - 17.5	0.709 - 0.689"
SK25-18.5	18.5 - 18	0.728 - 0.709"
SK25-19	19 - 18.5	0.748 - 0.728"
SK25-19.5	19.5 - 19	0.768 - 0.748"
SK25-20	20 - 19.5	0.787 - 0.768"
SK25-20.5	20.5 - 20	0.807 - 0.787"
SK25-21	21 - 20.5	0.827 - 0.807"
SK25-21.5	21.5 - 21	0.846 - 0.827"
SK25-22	22 - 21.5	0.866 - 0.846"
SK25-22.5	22.5 - 22	0.886 - 0.866"
SK25-23	23 - 22.5	0.906 - 0.886"
SK25-23.5	23.5 - 23	0.925 - 0.906"
SK25-24	24 - 23.5	0.945 - 0.925"
SK25-24.5	24.5 - 24	0.965 - 0.945"
SK25-25	25 - 24.5	0.984 - 0.965"
SK25-25.4	25.4 - 25	1 - 0.984"
SK25-SET-19-MM	16.0mm - 25.4mm SK25 Set	

METRIC - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK25-16AC	16.0mm
SK25-20AC	20.0mm
SK25-25AC	25.0mm
SK25-25.4AC	25.4mm

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

INCH/METRIC ON-SIZE

Part Number	Size
SK25-3/16A	0.188"
SK25-1/4A	0.250"
SK25-5/16A	0.312"
SK25-3/8A	0.375"
SK25-7/16A	0.438"
SK25-1/2A	0.500"
SK25-9/16A	0.563"
SK25-5/8A	0.625"
SK25-3/4A	0.750"
SK25-7/8A	0.875"
SK25-8A	0.315"
SK25-10A	0.390"
SK25-12A	0.472"
SK25-16A	0.630"
SK25-20A	0.787"
SK25-25A	0.984"
SK25-SET-08-A	3/16 - 3/4" SK25 Set

These are on-size collets with minimal collapsible ranges. A-type collets have an H8 gripping range.

INCH - COOLANT-THRU

Up to 1000 psi capable.

Part Number	Size
SK25-3/4AC	0.750"
SK25-7/8AC	0.875"

AC-type collets are mechanically sealed, no coolant nuts or disks are required. AC-type collets have an H8 gripping range.

SK25 COLLET RACK

Part Number	Description
RACK-5C/100TG/SK25	SK25 collet rack, 30 pieces capacity



Note: SK Collet Drill Chart available on page 291 in the Technical section.

SK COOLANT COLLET SYSTEM



Collet Chuck	Collet Series	Coolant Nut Part Number	High-Speed Coolant Nut Part Number	Shank Diameter	Coolant-Thru Disk Part Number	Slotted Disk Part Number	Disk Wrench Part Number	Blank Disk (machinable) Part Number
SK6	SK6 Range: 0.7 - 6mm [0.027 - 0.236"]	SKN-6WKJ	SKN-6WKJ (GH)	2.0mm	SKJ6-2C	SKJ6-2	SKJL-6	SKJ6-BLANK
				2.25mm	-	SKJ6-2.25		
				2.5mm	-	SKJ6-2.5		
				3.0mm	SKJ6-3C	SKJ6-3		
				3.5mm	SKJ6-3.5C	SKJ6-3.5		
				4.0mm	SKJ6-4C	SKJ6-4		
				4.5mm	SKJ6-4.5C	SKJ6-4.5		
				5.0mm	SKJ6-5C	SKJ6-5		
				5.5mm	SKJ6-5.5C	SKJ6-5.5		
				6.0mm	SKJ6-6C	SKJ6-6		
				1/8"	SKJ6-1/8C	SKJ6-1/8		
				3/16"	SKJ6-3/16C	SKJ6-3/16		
				1/4"	SKJ6-1/4C	SKJ6-1/4		
				SK10	SK10 Range: 1.75 - 10mm [0.068 - 0.394"]	SKN-10BJ		
3.0mm	SKJ10-3C	SKJ10-3						
3.5mm	SKJ10-3.5C	SKJ10-3.5						
4.0mm	SKJ10-4C	SKJ10-4						
4.5mm	SKJ10-4.5C	SKJ10-4.5						
5.0mm	SKJ10-5C	SKJ10-5						
5.5mm	SKJ10-5.5C	SKJ10-5.5						
6.0mm	SKJ10-6C	SKJ10-6						
6.2mm	SKJ10-6.2C	SKJ10-6.2						
6.5mm	SKJ10-6.5C	SKJ10-6.5						
6.8mm	SKJ10-6.8C	-						
7.0mm	SKJ10-7C	SKJ10-7						
7.5mm	SKJ10-7.5C	SKJ10-7.5						
8.0mm	SKJ10-8C	SKJ10-8						
8.5mm	SKJ10-8.5C	SKJ10-8.5						
9.0mm	SKJ10-9C	SKJ10-9						
9.5mm	SKJ10-9.5C	SKJ10-9.5						
10.0mm	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						
11/32"	SKJ10-11/32C	-						
3/8"	SKJ10-3/8C	SKJ10-3/8						

SK COLLET CHUCKS

SK COOLANT COLLET SYSTEM



Collet Chuck	Collet Series	Coolant Nut Part Number	High-Speed Coolant Nut Part Number	Shank Diameter	Coolant-Thru Disk Part Number	Slotted Disk Part Number	Disk Wrench Part Number	Blank Disk (machinable) Part Number
SK13/SK16	SK13 Range: 2.5 - 13mm [0.098 - 0.512"] SK16 Range: 2.75 - 16mm [0.108 - 0.630"]	SKN-16BJ	SKN-16BJ (GH)	3.0mm	SKJ16-3C	SKJ16-3	SKJL-16	SKJ16-BLANK
				3.5mm	SKJ16-3.5C	SKJ16-3.5		
				4.0mm	SKJ16-4C	SKJ16-4		
				4.5mm	-	SKJ16-4.5		
				5.0mm	SKJ16-5C	SKJ16-5		
				5.5mm	-	SKJ16-5.5		
				6.0mm	SKJ16-6C	SKJ16-6		
				6.5mm	-	SKJ16-6.5		
				7.0mm	SKJ16-7C	SKJ16-7		
				8.0mm	SKJ16-8C	SKJ16-8		
				8.5mm	SKJ16-8.5C	SKJ16-8.5		
				9.0mm	SKJ16-9C	SKJ16-9		
				9.5mm	SKJ16-9.5C	SKJ16-9.5		
				10.0mm	SKJ16-10C	SKJ16-10		
				10.3mm	-	SKJ16-10.3		
				10.5mm	SKJ16-10.5C	SKJ16-10.5		
				11.0mm	SKJ16-11C	SKJ16-11		
				11.5mm	SKJ16-11.5C	SKJ16-11.5		
12.0mm	SKJ16-12C	SKJ16-12						
12.5mm	SKJ16-12.5C	SKJ16-12.5						
13.0mm	SKJ16-13C	SKJ16-13						
SK16	SK16 Range: 2.75 - 16mm [0.108 - 0.630"]	SKN-16BJ	SKN-16BJ (GH)	13.5mm	SKJ16-13.5C	-	SKJL-16	SKJ16-BLANK
				14.0mm	SKJ16-14C	SKJ16-14		
				14.5mm	SKJ16-14.5C	SKJ16-14.5		
				15.0mm	SKJ16-15C	SKJ16-15		
				15.5mm	-	SKJ16-15.5		
				16.0mm	SKJ16-16C	SKJ16-16		
SK13/SK16	SK13 Range: 2.5 - 13mm [0.098 - 0.512"] SK16 Range: 2.75 - 16mm [0.108 - 0.630"]	SKN-16BJ	SKN-16BJ (GH)	1/8"	SKJ16-1/8C	SKJ16-1/8	SKJL-16	SKJ16-BLANK
				3/16"	SKJ16-3/16C	SKJ16-3/16		
				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		
SK16	SK16 Range: 2.75 - 16mm [0.108 - 0.630"]	SKN-16BJ	SKN-16BJ (GH)	1/2"	SKJ16-1/2C	SKJ16-1/2	SKJL-16	SKJ16-BLANK
				9/16"	SKJ16-9/16C	SKJ16-9/16		
				5/8"	SKJ16-5/8C	SKJ16-5/8		

SK COOLANT COLLET SYSTEM



Collet Chuck	Collet Series	Coolant Nut Part Number	High-Speed Coolant Nut Part Number	Shank Diameter	Coolant-Thru Disk Part Number	Slotted Disk Part Number	Disk Wrench Part Number	Blank Disk (machinable) Part Number
SK20/SK25	SK20 Range: 3.5 - 20.0mm [0.138 - 0.787"] SK25 Range: 16.0 - 25.4mm [0.630 - 1.000"] SKJ Disk Range: 8mm - 25mm 3/16 - 1"	SKN-25BJ	SKN-25BJ (GH)	1.0mm	SKJ25-1C	SKJ25-1	SKJL-25	SKJ25-BLANK
				4.0mm	SKJ25-4C	-		
				6.0mm	SKJ25-6C	SKJ25-6		
				7.0mm	-	SKJ25-7		
				8.0mm	SKJ25-8C	SKJ25-8		
				8.5mm	SKJ25-8.5C	-		
				10.0mm	SKJ25-10C	SKJ25-10		
				11.0mm	SKJ25-11C	-		
				12.0mm	SKJ25-12C	SKJ25-12		
				12.5mm	-	SKJ25-12.5		
				14.0mm	SKJ25-14C	SKJ25-14		
				16.0mm	SKJ25-16C	SKJ25-16		
				16.5mm	-	SKJ25-16.5		
				17.0mm	SKJ25-17C	SKJ25-17		
				17.5mm	SKJ25-17.5C	SKJ25-17.5		
				18.0mm	SKJ25-18C	SKJ25-18		
				20.0mm	SKJ25-20C	SKJ25-20		
SK25	SK25 Range: 16.0 - 25.4mm [0.630 - 1.000"]	SKN-25BJ	SKN-25BJ (GH)	22.0mm	-	SKJ25-22	SKJL-25	SKJ25-BLANK
				23.0mm	-	SKJ25-23		
				24.0mm	SKJ25-24C	-		
				25.0mm	SKJ25-25C	SKJ25-25		
SK20/SK25	SK20 Range: 3.5 - 20.0mm [0.138 - 0.787"] SK25 Range: 16.0 - 25.4mm [0.630 - 1.000"]	SKN-25BJ	SKN-25BJ (GH)	3/16"	SKJ25-3/16C	SKJ25-3/16	SKJL-25	SKJ25-BLANK
				1/4"	SKJ25-1/4C	SKJ25-1/4		
				5/16"	SKJ25-5/16C	SKJ25-5/16		
				3/8"	SKJ25-3/8C	SKJ25-3/8		
				7/16"	SKJ25-7/16C	SKJ25-7/16		
				1/2"	SKJ25-1/2C	SKJ25-1/2		
				5/8"	SKJ25-5/8C	SKJ25-5/8		
				11/16"	SKJ25-11/16C	SKJ25-11/16		
3/4"	SKJ25-3/4C	SKJ25-3/4						
SK25	SK25 Range: 16.0 - 25.4mm [0.630 - 1.000"]	SKN-25BJ	SKN-25BJ (GH)	13/16"	SKJ25-13/16C	SKJ25-13/16	SKJL-25	SKJ25-BLANK
				7/8"	SKJ25-7/8C	SKJ25-7/8		
				15/16"	SKJ25-15/16C	SKJ25-15/16		

SK COLLET CHUCKS

SK COLLET CHUCK ACCESSORIES

SK COLLET EXTRACTOR

Part Number	Description
SKR-6	SK6 Collet Extractor
SKR-10	SK10 Collet Extractor
SKR-16	SK16 Collet Extractor
SKR-25	SK25 Collet Extractor



REPLACEMENT NUT FOR SK COLLET CHUCK STANDARD STYLE

Part Number	Description
SKN-6WK	Nut for SK6 Collet Chuck
SKN-10K	Nut for SK10 Collet Chuck
SKN-13B	Nut for SK13 Collet Chuck
SKN-16B	Nut for SK16 Collet Chuck
SKN-20B	Nut for SK20 Collet Chuck
SKN-25B	Nut for SK25 Collet Chuck



WRENCH FOR SK COLLET CHUCK

Standard Style Part Number	High-Speed Style Part Number	Description
SKL-6W	GH6	Wrench for SK6 Collet Chuck
SKL-10	GH10	Wrench for SK10 Collet Chuck
016-SPAN	GH12	Wrench for SK13 Collet Chuck
9HC16	GH16	Wrench for SK16 Collet Chuck
9HC22	GH20	Wrench for SK20 Collet Chuck
9HC22	GH25	Wrench for SK25 Collet Chuck



TORQUE WRENCH AND ATTACHMENT FOR SK COLLET CHUCK

Part Number	Description
TQW-025	Torque wrench for SK6 Collet Chuck Nut
TQW-200	Torque wrench for SK10/13/16/20/25 Collet Chuck Nut
TQW-SK06	SK6 attachment for TQW-025 torque wrench
TQW-SK10	SK10 attachment for TQW-200 torque wrench
TQW-ER16/SK13(30)	SK13 attachment for TQW-200 torque wrench
TQW-SK16(45)	SK16 attachment for TQW-200 torque wrench
TQW-ER32/SK20/T675(50)	SK20 attachment for TQW-200 torque wrench
TQW-SK25(55)	SK25 attachment for TQW-200 torque wrench



COOLANT TUBE WRENCH FOR HSK/POLYGONAL HOLDERS

Part Number	Description
HSK40-WRENCH	Wrench for HSK40 Coolant Tube
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube
C4-WRENCH	Wrench for C4 Coolant Tube
C5-WRENCH	Wrench for C5 Coolant Tube
C6-WRENCH	Wrench for C6 Coolant Tube



COOLANT TUBE FOR HSK/POLYGONAL HOLDERS

Part Number	Description
HSK40-TUBE	Coolant Tube for HSK40 holder
HSK63-TUBE	Coolant Tube for HSK63 holder
HSK100-TUBE	Coolant Tube for HSK100 holder
C4-TUBE	C4 Coolant Tube
C5-TUBE	C5 Coolant Tube
C6-TUBE	C6 Coolant Tube



Note: Coolant Tube Wrenches are needed to remove or install coolant tubes in HSK toolholders.

ADJUST SCREW FOR SLIM CHUCK

The adjust Screw for the High Speed Slim Chuck “GSK-P type” is identical to the Standard Slim Chuck as below. e.g. The adjust Screw for BT30-GSK10-45P is SKG-12S, is the same as the screw for BT30-SK10-45.

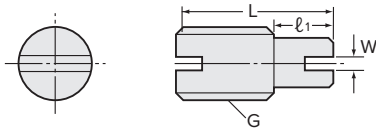


Fig. 1

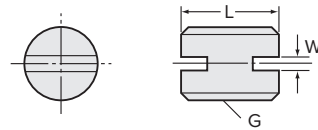


Fig. 2

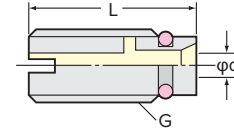


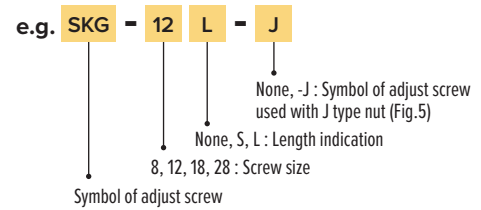
Fig. 3

SK

Style	Adjust Screw Code No.	Slim Chuck Code No.	Fig.
SK6	SKG- 8	All SK6 Slim Chucks	1
SK10	SKG-12L	All SK10 Slim Chucks except below	1
	SKG-12S	BT30-SK10-45, HSK50A-SK10-90, HSK63F-SK10-90	2
SK13	SKG-15	All SK13 Slim Chucks	1
SK16	SKG-18L	All SK16 Slim Chucks except below	1
	SKG-12	BT30-SK16-90	2
	SKG-12L	BT30-SK16-60	1
	SKG-18S	BT40-SK16-60	2
SK20	SKG-22	All SK20 Slim Chucks except below	1
	SKG-12	BT30-SK20-90	2
	SKG-12L	BT30-SK20-75	1
	SKG-12S	BT30-SK20-60	2
SK25	SKG-28	All SK25 Slim Chucks except below	1
	SKG-12	BT30-SK25-90, BT40-SK25-75	2
	SKG-12MF	NC5-46-SK25-90	2

Note: W=2mm is standard. W=2.4, 3, 4, 5, 6, 8, 12mm are also available. e.g. SKG-12L-W2.4 Please choose suitable one for the tang width of your drill.

Explanation of the Code No. of the Adjust screw for Standard Slim Chuck



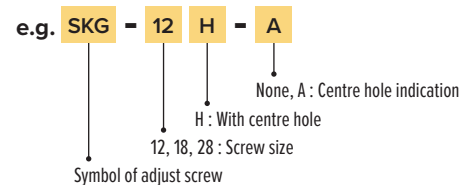
SK

Style	Screw Size	Adjust Screw Code No.	Hole Dia.	Cutter Shank Dia.	Wrench Width	Fig.
SK10	M12	SKG-12H	φ4	φ6~	3	3
		SKG-12HA	φ2.5	φ4~	2	
SK13	M15 P1.0	SKG-15H	φ4	φ6~	3	
		SKG-15HA	φ2.5	φ4~	2	
SK16	M12	SKG-12H	φ4	φ6~	3	
		SKG-12HA	φ2.5	φ4~	2	
	M18 P1.5	SKG-18H	φ7.2	φ10~	6	
		SKG-18HA	φ3.5	φ5~	3	
SK20	M12	SKG-12H	φ4	φ6~	3	
		SKG-12HA	φ2.5	φ4~	2	
SK25	M22 P1.5	SKG-22H	φ8	φ10~	5	
		SKG-12H	φ4	φ6~	3	
	M28 P2.0	SKG-12HA	φ2.5	φ4~	2	
SKG-28H		φ12	φ16~	8		

Note:

- The adjust screw for oil hole tap is also available. Please contact with us.
- These adjust screws are for the coolant pressure up to 1MPa.

Explanation of the Code No. of the Adjust screw with centre hole for Standard Slim Chuck



ADJUST SCREW FOR SLIM CHUCK

There is no leakage of coolant from screw, because OD of the straight portion of the adjust screw is sealed.

SK-C

Style	Adjust Screw Code No.	Hole Dia.	Cutter Shank Dia.	Slim Chuck Code No.	Wrench Width	Fig.
SK6	SKG6-6HG	φ2.5	φ4~	All SK6C/SK6F Slim Chucks	2	4
SK10	SKG10-10HG	φ4	φ6~	All SK10C/SK10F Slim Chucks	4	
	SKG10-10HGA	φ2.5	φ4~		2	
SK13	SKG13-10HG	φ4	φ6~	All SK13C/SK13F Slim Chucks	4	
	SKG13-10HGA	φ2.5	φ4~		2	
SK16	SKG16-12HG	φ7.2	φ10~	All SK16C/SK16F Slim Chucks except below	6	4
	SKG16-12HGB			BT40-SK16F-90		
	SKG16-10HG			HSK40A-SK16C-120, HSK50A-SK16C-120 HSK63A-SK16C-120, 150, HSK100A-SK16C-120 NC5-46-SK16C-90, -120, NBT40-SK16C-60, NBT30-SK16C-75		
	SKG16-12HGE	NBT30-SK16C-60	3			
	SKG16-12HGA	All SK16C/SK16F Slim Chucks except below				
	SKG16-12HGBA	BT40-SK16F-90				
SK20	SKG20-18HG	φ6.8	φ10~	All SK20C/SK20F Slim Chucks except below	5	4
	SKG20-12MFHG			NC5-46-SK20C-90, NC5-53-SK20C-90, HSK63A-SK20C-120, -135		
	SKG20-12HG			NC5-46-SK20C-120, NC5-53-SK20C-120, NBT30-SK20C-90 HSK100A-SK20C-150, -200		
	SKG20-12HGE			NBT30-SK20C-75		
	SKG20-16HG			NBT40-SK20C-60		
	SKG20-18HGB			BT40-SK20F-90		
SK25	SKG25-24HG	φ12	φ16~	All SK25C/SK25F Slim Chucks except below	8	4
	SKG25-24HGA			BT40-SK25F-120, BT50-SK25F-105		
	SKG25-18HGC			BT40-SK25F-90		
	SKG25-18HGD			BT40-SK25C-90, NC5-63-SK25C-135 NC5-85-SK25C-135, NBT40-SK25C-90		
	SKG25-18HGE			HSK63A-SK25C-135, HSK100A-SK25C-145, NBT40-SK25C-75		

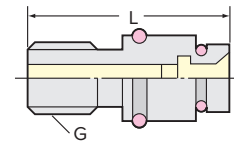


Fig. 4

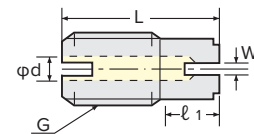
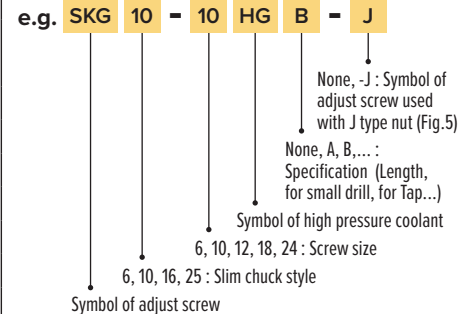


Fig. 5

Please remove standard Adjust Screw and use the Adjust Screw specially designed to J type Nut for the stopper.

Explanation of the Code No. of the Adjust screw for High Pressure Coolant Slim Chuck



Note:

- The adjust screw for oil hole tap is different from standard. The front end of the adjust screw is flat, not taper. Please add "S" at the end of Code No. e.g. SKG10-10HGAS, SKG16-12HGBAS, SKG16-12HGBAS
- The adjust screw for extra small cutter shank dia. (φ3) is available. Please contact with us.
- The steel made adjust screw for SK10 or SK16 is available. Please add "-FE" at the end of Code No. e.g. SKG10-10HG-FE



Adjustment tool for adjust screw Scale wrench with scale useful for presetting tool length

Code No. ex.) SKWR-DR-120L

(Minus driver type: Standard type)

It is compatible with each type of SK. Please let us know the model number of the slim chuck you will be using.

3LOCK tool (MBT, MIT and MCAT), 2LOCK tool (NBT, NIT and NCAT), NC5 tool and HSK tool can be used at high pressure centre through tool coolant application (MAX.7MPa).

Please change the shank No. from BT to MBT or NBT for 3LOCK tool or 2LOCK tool.

The adjust screw for BT40-SK16F-90 is same as the adjust screw for MBT40-SK16F-90 and NBT40-SK16F-90.



HIGH PERFORMANCE LIVE TOOLS

WHAT MAKES OUR LIVE TOOLS UNIQUE?

DESIGN AND ENGINEERING

- Nickel Chrome Molybdenum body
- Ground features to ensure optimal concentricity
- ABEC 7 angular contact bearings for highest run-out precision
- Run-out guarantee of under 5 micron repeatability at collet nose

GEARS FOR STABILITY

- Hand-matched gears for minimal backlash
- Spiral bevel gears maximizes drive torque
- Optimal bearing placement for balanced torque stress

PROTECTIVE SEALS

- Labyrinth Seals with unique multi-barrier construction prevent contaminants from entering the main chamber

**A COMPLETE LINE OF STATIC AND
LIVE TOOLING FOR DMG MORI,
MAZAK, OKUMA AND MORE
*IN STOCK NOW!***



ER COLLET CHUCKS



ER COLLET CHUCKS



ER COLLET CHUCKS



ER COLLET CHUCK FEATURES

LYNDEX-NIKKEN

AT3 or better taper tolerance

- All 40 taper tool angles are manufactured within +/- .0011 degrees angular tolerance
- Largest diameter of taper (where rigidity is established) is held within +/- 80 millionths (.00008")
- Precision ground taper ensures 80% or better taper contact

Drive key depth balanced for high speed rotation.

Body of Collet Chuck equal in diameter to the nut diameter. Thicker diameter and wall thickness results in stronger rigidity.

Reduced gap size to prevent bird nests and other stringy chips from packing in or wrapping about.

ER Nut

Smooth nut prevents coolant flare and provides better balance.

Bearing Nut

Bearing nut improves gripping force and accuracy by reducing the friction between nut and collet.



Nickel Chrome Molybdenum Alloy

Lyndex-Nikken toolholders are heat treated in house to a hardness between 55 to 58 Rc under the highest quality standard, ensuring a homogeneous martensite (needle-shaped) crystalline structure. The additional heat treatment process allows for a better ground surface finish and stress stability of the toolholder.

OTHER

AT4 taper tolerance

- All 40 taper tool angles are manufactured within +/- .0018 degrees angular tolerance
- Largest diameter of taper (where rigidity is established) varies within +/- 138 millionths (.00014")
- Varying aspects of taper angle and diameter can only ensure up to 60% taper contact

Recessed collet chuck body diameter weakens rigidity of holder.

Large Hex nut body design flares coolant away from toolholder.



High Carbon Steel

Other toolholders are commonly not heat treated thoroughly in order to reduce production costs, resulting in austenite deposits. Surface finish and material integrity are compromised commonly masked by chrome plating or polishing.

ER COLLET CHUCKS

ER COLLET FEATURES

We offer the largest ER Collet product range in the industry



Quality Standard

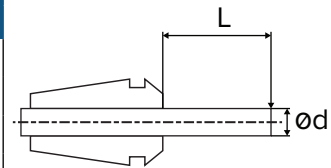
Made to DIN 6499 Specification

Material

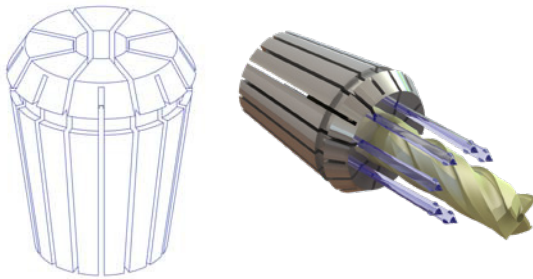
High Tensile Chromium Molybdenum Alloy provides greater hardness and less material deformation compared to traditional spring steel collets

T.I.R Accuracy

ID Bore Diameter Ød (mm)	L (mm)	T.I.R. Accuracy Standard Collet
1 - 1.5	4 x Ød	10µ
2 - 5.5	4 x Ød	
6 - 10	25	
11 - 26	40	



ER COLLET



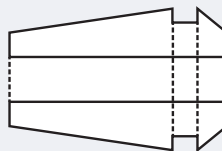
Inspection

100% collet inspection, checked 3 times for concentricity

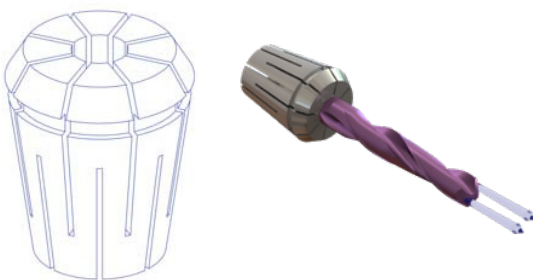
ER STANDARD TYPE COLLET

Flexibility and Durability:

Our ER Collets offer wide clamping range, ultra precision, and high pressure coolant capable up to 1015 psi (7MPa).



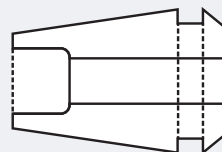
ER COOLANT COLLET



HIGH PRECISION ER TAP COLLET

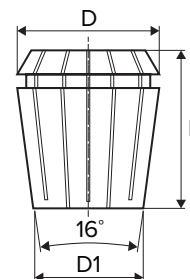
Extreme rigidity, high pressure performance:

Our Tap Collets are designed for all ANSI, DIN, ISO, and JIS Specification Taps. 1015 psi capable Coolant Tap Collets increase tool life by dissipating heat and preventing chip build-up.



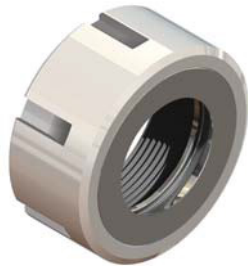
ER COLLET DIMENSIONAL DATA

Style	D	D1	L	Collet Range	Coolant Collet Size Range
ER8	0.330"	0.216"	0.535"	0.019 - 0.196"	N/A
ER11	0.460"	0.307"	0.709"	0.019 - 0.275"	0.157 - 0.275"
ER16	0.677"	0.445"	1.063"	0.019 - 0.393"	0.157 - 0.393"
ER20	0.835"	0.571"	1.220"	0.039 - 0.511"	0.196 - 0.511"
ER25	1.031"	0.728"	1.378"	0.039 - 0.629"	0.236 - 0.629"
ER32	1.307"	0.960"	1.575"	0.078 - 0.787"	0.393 - 0.787"
ER40	1.622"	1.228"	1.811"	0.118 - 1.023"	0.393 - 1.023"

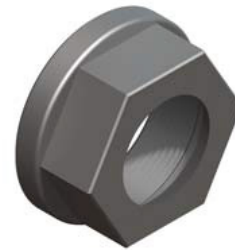


NUT FEATURES

LYNDEX-NIKKEN NUT



OTHER NUT



BEARING NUT



Bearing nuts come as a standard on all of our ER Collet Chucks:

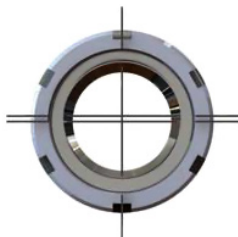
- Reduce twisting of the collet and increase T.I.R. accuracy.
- Improve chucking consistency compared to non bearing style nut!

STANDARD NUT - NO BEARING



Non bearing style nuts only provide the ability to retain the collet, and do not carry a functional advantage to improve the T.I.R. or chucking consistency.

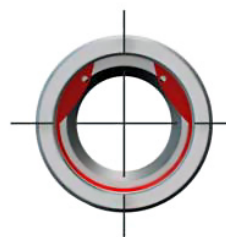
MAXIMUM ACCURACY



We control all of our manufacturing processes, thereby maintaining the assembly accuracy tolerances between the nut, collet, and holder.

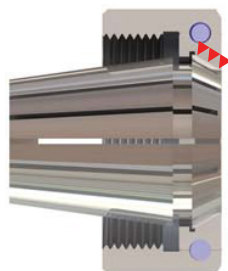
Our ground eccentric bearing race makes set up extremely easy, and ensures the accurate concentric placement of the collet.

OTHER MANUFACTURERS



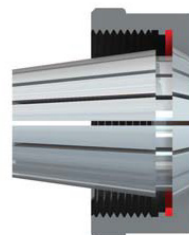
Other manufacturers use a commercial snap ring as a retainer for the collet. This can contribute to minor misalignment between the nut, collet, and holder.

GROUND ECCENTRIC NUT



Our ground eccentric bearing race increases clamping power compared to standard nuts! It also prevents galling and twisting between the collet angle contact surface and the nut to minimize runout and greatly assist in alignment of the collet to the holder.

NO GROUND SURFACE



ER Collet without ground contact locations cannot ensure ultra precision due to surface abnormality.

ER COLLET CHUCKS

CAT ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



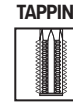
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40 - BEARING NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	L2	D	D1	Max. RPM	Fig.
C4007-0008-2.50	ER8	0.019 - 0.197"	WRENCH-ER08-MINI	2.50"	1.11"	-	0.47"	1.75"	25K	2
C4007-0008-4.00M	ER8	0.019 - 0.197"	WRENCH-ER08-MINI	4.00"	2.61"	-	0.47"	1.75"	25K	2
C4007-0011-2.50	ER11	0.019 - 0.275"	011-HEX	2.50"	1.12"	-	0.75"	1.75"	25K	2
C4007-0011-4.00	ER11	0.019 - 0.275"	011-HEX	4.00"	2.62"	-	0.75"	1.75"	25K	2
C4007-0011-6.00	ER11	0.019 - 0.275"	011-HEX	6.00"	4.62"	-	0.75"	1.75"	25K	2
C4007-0016-2.25	ER16	0.019 - 0.406"	016-SPAN	2.25"	1.50"	-	1.26"	-	25K	1
C4007-0016-3.50	ER16	0.019 - 0.406"	016-SPAN	3.50"	2.11"	-	1.26"	1.75"	25K	2
C4007-0016-6.00	ER16	0.019 - 0.406"	016-SPAN	6.00"	4.63"	-	1.26"	1.75"	25K	2
C4007-0016-9.00	ER16	0.019 - 0.406"	016-SPAN	9.00"	1.65"	7.64"	1.26"	1.75"	25K	3
C4007-0020-2.50	ER20	0.039 - 0.511"	020-SPAN	2.50"	1.12"	-	1.38"	1.75"	25K	2
C4007-0020-4.00	ER20	0.039 - 0.511"	020-SPAN	4.00"	2.60"	-	1.38"	1.75"	25K	2
C4007-0020-6.00	ER20	0.039 - 0.511"	020-SPAN	6.00"	4.62"	-	1.38"	1.75"	25K	2
C4007-0020-9.00	ER20	0.039 - 0.511"	020-SPAN	9.00"	1.71"	7.63"	1.38"	1.75"	25K	3
C4007-0025-2.50	ER25	0.039 - 0.629"	025-SPAN	2.50"	1.14"	-	1.65"	1.75"	25K	2
C4007-0025-4.00	ER25	0.039 - 0.629"	025-SPAN	4.00"	2.62"	-	1.65"	1.75"	25K	2
C4007-0025-6.00	ER25	0.039 - 0.629"	025-SPAN	6.00"	4.62"	-	1.65"	1.75"	25K	2
C4007-0032-0.76	ER32	0.078 - 0.787"	032-SPAN	0.76"	0.14"	-	1.58"	-	25K	1
C4007-0032-3.13	ER32	0.078 - 0.787"	032-SPAN	3.13"	2.38"	-	1.97"	-	25K	1
C4007-0032-5.00	ER32	0.078 - 0.787"	032-SPAN	5.00"	4.29"	-	1.97"	-	25K	1
C4007-0032-9.00	ER32	0.078 - 0.787"	032-SPAN	9.00"	1.74"	7.63"	1.97"	1.75"	25K	3
C4007-0040-3.13	ER40	0.118 - 1.023"	040-SPAN	3.13"	2.37"	-	2.44"	-	25K	1
C4007-0040-5.00	ER40	0.118 - 1.023"	040-SPAN	5.00"	4.26"	-	2.44"	-	25K	1

Notes:

- Back-up Screw included with ER Collet Chuck.
- *For Extended Length holders, "L" dimension has tapered length.
To confirm clearance, please download model/drawing from our website



Available in **TAPER PLUS⁺**
Dual-taper and flange contact

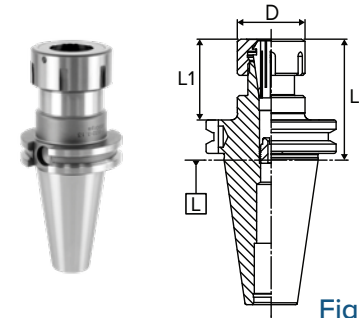


Fig. 1

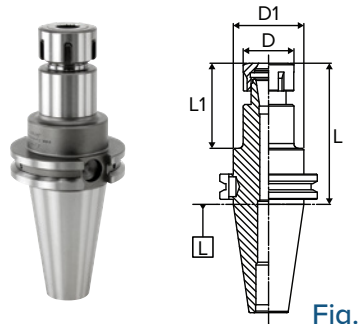


Fig. 2

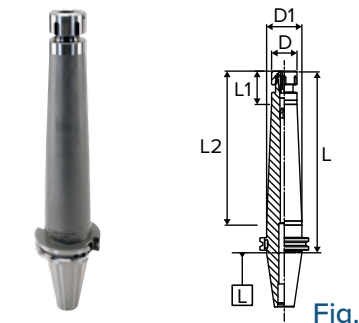


Fig. 3

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See ER Coolant Collets on pages 65-70



CAT ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



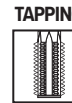
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40 - SOLID HEX NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	D1	Max. RPM	Fig.
CAT40-ER16-2.76	ER16	0.019 - 0.406"	016-SPAN	2.76"	1.38"	1.10"	1.75"	25K	1
CAT40-ER16-4.00	ER16	0.019 - 0.406"	016-SPAN	4.00"	2.62"	1.10"	1.75"	25K	1
CAT40-ER16-6.00	ER16	0.019 - 0.406"	016-SPAN	6.00"	4.62"	1.10"	1.75"	25K	1
CAT40-ER16-8.00	ER16	0.019 - 0.406"	016-SPAN	8.00"	6.62"	1.10"	1.75"	25K	1

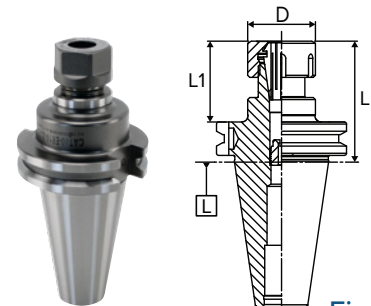


Fig. 1

CAT40 - SOLID NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	D1	Max. RPM	Fig.
CAT40-ER20-2.76	ER20	0.039 - 0.511"	020-SPAN	2.76"	1.38"	1.34"	1.75"	25K	1
CAT40-ER20-4.00	ER20	0.039 - 0.511"	020-SPAN	4.00"	2.66"	1.34"	1.75"	25K	1
CAT40-ER20-6.00	ER20	0.039 - 0.511"	020-SPAN	6.00"	4.66"	1.34"	1.75"	25K	1
CAT40-ER20-8.00	ER20	0.039 - 0.511"	020-SPAN	8.00"	6.66"	1.34"	1.75"	25K	1
CAT40-ER25-2.76	ER25	0.039 - 0.629"	025-SPAN	2.76"	1.38"	1.66"	1.75"	25K	1
CAT40-ER25-4.00	ER25	0.039 - 0.629"	025-SPAN	4.00"	2.62"	1.66"	1.75"	25K	1
CAT40-ER25-6.00	ER25	0.039 - 0.629"	025-SPAN	6.00"	4.62"	1.66"	1.75"	25K	1
CAT40-ER25-8.00	ER25	0.039 - 0.629"	025-SPAN	8.00"	6.62"	1.66"	1.75"	25K	1
CAT40-ER32-2.76	ER32	0.078 - 0.787"	032-SPAN	2.76"	2.01"	1.97"	-	25K	2
CAT40-ER32-4.00	ER32	0.078 - 0.787"	032-SPAN	4.00"	3.25"	1.97"	-	25K	2
CAT40-ER32-6.00	ER32	0.078 - 0.787"	032-SPAN	6.00"	5.25"	1.97"	-	25K	2
CAT40-ER32-8.00	ER32	0.078 - 0.787"	032-SPAN	8.00"	7.25"	1.97"	-	25K	2
CAT40-ER40-3.15	ER40	0.118 - 1.023"	040-SPAN	3.15"	2.41"	2.48"	-	25K	2
CAT40-ER40-4.00	ER40	0.118 - 1.023"	040-SPAN	4.00"	3.25"	2.48"	-	25K	2
CAT40-ER40-6.00	ER40	0.118 - 1.023"	040-SPAN	6.00"	5.25"	2.48"	-	25K	2

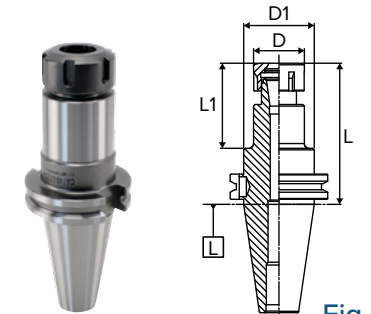


Fig. 2

Notes:

- Back-up Screw included with ER Collet Chuck.
- *For Extended Length holders, "L" dimension has tapered length.
To confirm clearance, please download model/drawing from our website

Available in **TAPER PLUS+**
Dual-taper and flange contact

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See ER Coolant Collets on pages 65-70



ER COLLET CHUCKS

CAT ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



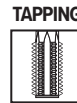
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT50 - BEARING NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	L2	D	D1	Max. RPM	Fig.
C5007-0016-4.12	ER16	0.019 - 0.406"	016-SPAN	4.12"	2.74"	-	1.26"	2.75"	25K	2
C5007-0016-6.00	ER16	0.019 - 0.406"	016-SPAN	6.00"	4.63"	-	1.26"	2.75"	25K	2
C5007-0016-8.00	ER16	0.019 - 0.406"	016-SPAN	8.00"	1.64"	6.63"	1.26"	2.75"	25K	3
C5007-0016-12.00	ER16	0.019 - 0.406"	016-SPAN	12.00"	1.64"	10.64"	1.26"	2.75"	25K	3
C5007-0020-2.50	ER20	0.039 - 0.511"	020-SPAN	2.50"	1.14"	-	1.38"	2.75"	25K	2
C5007-0020-4.00	ER20	0.039 - 0.511"	020-SPAN	4.00"	2.63"	-	1.38"	2.75"	25K	2
C5007-0020-6.00	ER20	0.039 - 0.511"	020-SPAN	6.00"	4.62"	-	1.38"	2.75"	25K	2
C5007-0020-8.00	ER20	0.039 - 0.511"	020-SPAN	8.00"	1.72"	6.63"	1.38"	2.75"	25K	3
C5007-0020-12.00	ER20	0.039 - 0.511"	020-SPAN	12.00"	1.57"	10.63"	1.38"	2.75"	25K	3
C5007-0025-2.50	ER25	0.039 - 0.629"	025-SPAN	2.50"	1.14"	-	1.65"	2.75"	25K	2
C5007-0025-4.00	ER25	0.039 - 0.629"	025-SPAN	4.00"	2.62"	-	1.65"	2.75"	25K	2
C5007-0025-6.00	ER25	0.039 - 0.629"	025-SPAN	6.00"	4.62"	-	1.65"	2.75"	25K	2
C5007-0025-8.00	ER25	0.039 - 0.629"	025-SPAN	8.00"	1.74"	6.62"	1.65"	2.75"	25K	3
C5007-0032-4.00	ER32	0.078 - 0.787"	032-SPAN	4.00"	2.63"	-	1.97"	2.75"	25K	2
C5007-0032-6.00	ER32	0.078 - 0.787"	032-SPAN	6.00"	4.63"	-	1.97"	2.75"	25K	2
C5007-0032-8.00	ER32	0.078 - 0.787"	032-SPAN	8.00"	1.85"	6.62"	1.97"	2.75"	25K	3
C5007-0032-12.00	ER32	0.078 - 0.787"	032-SPAN	12.00"	1.71"	10.63"	1.97"	2.75"	25K	3
C5007-0040-4.00	ER40	0.118 - 1.023"	040-SPAN	4.00"	2.63"	-	2.44"	2.75"	25K	2
C5007-0040-6.00	ER40	0.118 - 1.023"	040-SPAN	6.00"	4.63"	-	2.44"	2.75"	25K	2
C5007-0040-8.00	ER40	0.118 - 1.023"	040-SPAN	8.00"	1.98"	6.63"	2.44"	2.75"	25K	3
C5007-0040-12.00	ER40	0.118 - 1.023"	040-SPAN	4.00"	1.98"	10.63"	2.44"	2.75"	25K	3

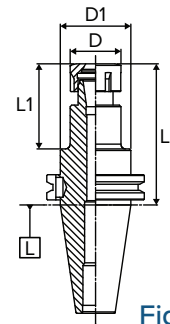


Fig. 2

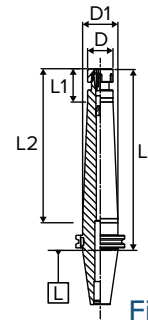


Fig. 3

Notes:

- Back-up Screw included with ER Collet Chuck.
- *For Extended Length holders, "L" dimension has tapered length.
To confirm clearance, please download model/drawing from our website



Available in **TAPER PLUS⁺**
Dual-taper and flange contact

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See ER Coolant Collets on pages 65-70



ER Collets
Pages 65-70



ER Torque
Wrenches
Page 75



ER Back Up
Screws
Page 75



ER Nuts
Page 74

CAT ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



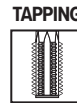
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT50 - SOLID HEX NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	D1	Max. RPM	Fig.
CAT50-ER16-4.00	ER16	0.019 - 0.406"	016-SPAN	4.00"	2.62"	1.10"	2.75"	25K	2
CAT50-ER16-6.00	ER16	0.019 - 0.406"	016-SPAN	6.00"	4.62"	1.10"	2.75"	25K	2
CAT50-ER16-8.00	ER16	0.019 - 0.406"	016-SPAN	8.00"	6.62"	1.10"	2.75"	25K	2

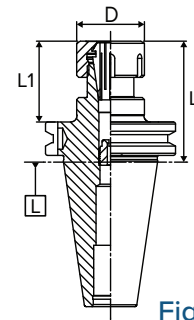


Fig. 1

CAT50 - SOLID NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	D1	Max. RPM	Fig.
CAT50-ER20-4.00	ER20	0.039 - 0.511"	020-SPAN	4.00"	2.62"	1.34"	2.75"	25K	2
CAT50-ER20-6.00	ER20	0.039 - 0.511"	020-SPAN	6.00"	4.62"	1.34"	2.75"	25K	2
CAT50-ER20-8.00	ER20	0.039 - 0.511"	020-SPAN	8.00"	6.62"	1.34"	2.75"	25K	2
CAT50-ER25-4.00	ER25	0.039 - 0.629"	025-SPAN	4.00"	2.62"	1.66"	2.75"	25K	2
CAT50-ER25-6.00	ER25	0.039 - 0.629"	025-SPAN	6.00"	4.62"	1.66"	2.75"	25K	2
CAT50-ER25-8.00	ER25	0.039 - 0.629"	025-SPAN	8.00"	6.62"	1.66"	2.75"	25K	2
CAT50-ER32-4.00	ER32	0.078 - 0.787"	032-SPAN	4.00"	2.62"	1.97"	2.75"	25K	2
CAT50-ER32-6.00	ER32	0.078 - 0.787"	032-SPAN	6.00"	4.62"	1.97"	2.75"	25K	2
CAT50-ER32-8.00	ER32	0.078 - 0.787"	032-SPAN	8.00"	6.62"	1.97"	2.75"	25K	2
CAT50-ER40-4.00	ER40	0.118 - 1.023"	040-SPAN	4.00"	2.62"	2.48"	2.75"	25K	2
CAT50-ER40-6.00	ER40	0.118 - 1.023"	040-SPAN	6.00"	4.62"	2.48"	2.75"	25K	2
CAT50-ER40-8.00	ER40	0.118 - 1.023"	040-SPAN	8.00"	6.62"	2.48"	2.75"	25K	2
CAT50-ER50-4.00	ER50	0.236 - 1.338"	9HC32	4.00"	3.25"	3.07"	-	25K	1
CAT50-ER50-6.00	ER50	0.236 - 1.338"	9HC32	6.00"	5.25"	3.07"	-	25K	1
CAT50-ER50-8.00	ER50	0.236 - 1.338"	9HC32	8.00"	7.25"	3.07"	-	25K	1

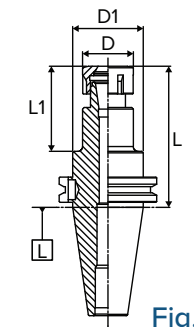


Fig. 2

Notes:

- Back-up Screw included with ER Collet Chuck.
- *For Extended Length holders, "L" dimension has tapered length. To confirm clearance, please download model/drawing from our website



Available in **TAPER PLUS+**
Dual-taper and flange contact

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER Coolant Collets on pages 65-70



ER Collets
Pages 65-70



ER Torque
Wrenches
Page 75



ER Back Up
Screws
Page 75



ER Nuts
Page 74

ER COLLET CHUCKS

BT ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



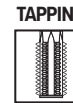
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 30,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT30 - BEARING NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	Max. RPM	Fig.
B3007-0008-2.00	ER8	0.019 - 0.197"	08-NASPAN	2.00"	1.13"	0.47"	18K	1
B3007-0008-4.00M	ER8	0.019 - 0.197"	WRENCH-ER08-MINI	4.00"	3.13"	0.47"	30K	1
B3007-0011-2.00	ER11	0.019 - 0.275"	011-HEX	2.00"	1.13"	0.75"	30K	1
B3007-0011-4.00	ER11	0.019 - 0.275"	011-HEX	4.00"	3.13"	0.75"	30K	1
B3007-0016-2.36	ER16	0.019 - 0.406"	016-SPAN	2.36"	1.49"	1.26"	30K	1
B3007-0016-4.00	ER16	0.019 - 0.406"	016-SPAN	4.00"	3.13"	1.26"	30K	1
B3007-0016-5.00	ER16	0.019 - 0.406"	016-SPAN	5.00"	4.13"	1.26"	30K	1
B3007-0020-2.50	ER20	0.039 - 0.511"	020-SPAN	2.50"	1.63"	1.38"	30K	1
B3007-0020-4.00	ER20	0.039 - 0.511"	020-SPAN	4.00"	3.13"	1.38"	30K	1
B3007-0025-2.00	ER25	0.039 - 0.629"	025-SPAN	2.00"	1.13"	1.65"	30K	1
B3007-0025-4.00	ER25	0.039 - 0.629"	025-SPAN	4.00"	3.14"	1.65"	30K	1
B3007-0032-3.00	ER32	0.078 - 0.787"	032-SPAN	3.00"	2.13"	1.97"	30K	1
B3007-0032-5.00	ER32	0.078 - 0.787"	032-SPAN	5.00"	4.13"	1.97"	30K	1

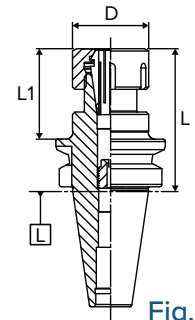


Fig. 6

BT30 - SOLID HEX NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
BT30-ER16-70	ER16	0.019 - 0.406"	016-SPAN	70	2.76"	1.89"	1.10"	30K	1
BT30-ER16-100	ER16	0.019 - 0.406"	016-SPAN	100	3.94"	3.07"	1.10"	30K	1

BT30 - SOLID NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
BT30-ER20-63.5	ER20	0.039 - 0.511"	020-SPAN	63.5	2.50"	1.63"	1.34"	30K	1
BT30-ER20-100	ER20	0.039 - 0.511"	020-SPAN	100	3.94"	3.07"	1.34"	30K	1
BT30-ER25-60	ER25	0.039 - 0.629"	025-SPAN	60	2.36"	1.46"	1.65"	30K	1
BT30-ER25-90	ER25	0.039 - 0.629"	025-SPAN	90	3.54"	2.64"	1.65"	30K	1
BT30-ER32-70	ER32	0.078 - 0.787"	032-SPAN	70	2.76"	1.89"	1.97"	30K	1
BT30-ER32-100	ER32	0.078 - 0.787"	032-SPAN	100	3.94"	3.07"	1.97"	30K	1

Notes:

- Back-up Screw included with ER Collet Chuck.
- *For Extended Length holders, "L" dimension has tapered length. To confirm clearance, please download model/drawing from our website



Available in **TAPER PLUS+**
Dual-taper and flange contact

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See ER Coolant Collets on pages 65-70



ER Collets
Pages 65-70



ER Torque
Wrenches
Page 75



ER Back Up
Screws
Page 75



ER Nuts
Page 74

BT ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



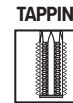
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT40 - BEARING NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	Max. RPM	Fig.
B4007-0008-4.00M	ER8	0.019 - 0.275"	WRENCH-ER08-MINI	4.00"	2.94"	0.47"	25K	1
B4007-0011-2.50	ER11	0.019 - 0.275"	011-HEX	2.50"	1.44"	0.75"	25K	1
B4007-0011-4.00	ER11	0.019 - 0.275"	011-HEX	4.00"	2.94"	0.75"	25K	1
B4007-0011-6.00	ER11	0.019 - 0.275"	011-HEX	6.00"	4.95"	0.75"	25K	1
B4007-0016-3.50	ER16	0.019 - 0.406"	016-SPAN	3.50"	2.43"	1.26"	25K	1
B4007-0016-5.00	ER16	0.019 - 0.406"	016-SPAN	5.00"	3.94"	1.26"	25K	1
B4007-0020-2.50	ER20	0.039 - 0.511"	020-SPAN	2.50"	1.43"	1.38"	25K	1
B4007-0020-4.00	ER20	0.039 - 0.511"	020-SPAN	4.00"	2.94"	1.38"	25K	1
B4007-0020-6.00	ER20	0.039 - 0.511"	020-SPAN	6.00"	4.94"	1.38"	25K	1
B4007-0025-2.25	ER25	0.039 - 0.629"	025-SPAN	2.25"	1.19"	1.65"	25K	1
B4007-0025-4.00	ER25	0.039 - 0.629"	025-SPAN	4.00"	2.93"	1.65"	25K	1
B4007-0025-6.00	ER25	0.039 - 0.629"	025-SPAN	6.00"	4.94"	1.65"	25K	1
B4007-0032-3.13	ER32	0.078 - 0.787"	032-SPAN	3.13"	2.06"	1.97"	25K	1
B4007-0032-5.00	ER32	0.078 - 0.787"	032-SPAN	5.00"	3.94"	1.97"	25K	1
B4007-0040-3.13	ER40	0.078 - 0.787"	032-SPAN	3.13"	2.06"	2.44"	25K	1

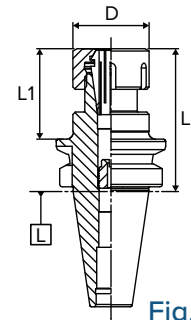


Fig. 6

BT40 - SOLID HEX NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
BT40-ER16-70	ER16	0.019 - 0.406"	016-SPAN	70.000	2.76"	1.69"	1.10"	25K	1
BT40-ER16-100	ER16	0.019 - 0.406"	016-SPAN	100.000	3.94"	2.87"	1.10"	25K	1

BT40 - SOLID NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
BT40-ER20-70	ER20	0.039 - 0.511"	020-SPAN	70.000	2.76"	1.69"	1.34"	25K	1
BT40-ER20-100	ER20	0.039 - 0.511"	020-SPAN	100.000	3.94"	2.87"	1.34"	25K	1
BT40-ER25-70	ER25	0.039 - 0.629"	025-SPAN	70.000	2.76"	1.69"	1.66"	25K	1
BT40-ER25-100	ER25	0.039 - 0.629"	025-SPAN	100.000	3.94"	2.87"	1.66"	25K	1
BT40-ER32-70	ER32	0.078 - 0.787"	032-SPAN	70.000	2.76"	1.69"	1.97"	25K	1
BT40-ER32-100	ER32	0.078 - 0.787"	032-SPAN	100.000	3.94"	2.87"	1.97"	25K	1

Notes:

- Back-up Screw included with ER Collet Chuck.
- *For Extended Length holders, "L" dimension has tapered length. To confirm clearance, please download model/drawing from our website



Available in **TAPER PLUS+**
Dual-taper and flange contact

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See ER Coolant Collets on pages 65-70



ER Collets
Pages 65-70



ER Torque
Wrenches
Page 75



ER Back Up
Screws
Page 75



ER Nuts
Page 74

ER COLLET CHUCKS

BT ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



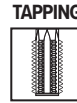
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant

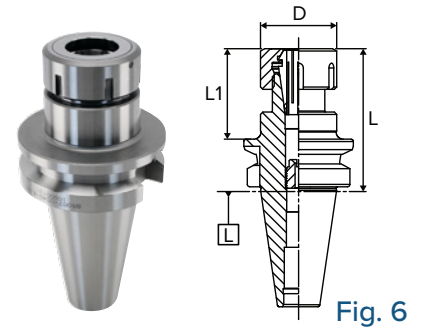


Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT50 - BEARING NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	Max. RPM	Fig.
B5007-0016-4.12	ER16	0.019 - 0.406"	016-SPAN	4.12"	2.63"	1.26"	25K	1
B5007-0016-6.00	ER16	0.019 - 0.406"	016-SPAN	6.00"	4.51"	1.26"	25K	1
B5007-0020-2.75	ER20	0.039 - 0.511"	020-SPAN	2.75"	1.26"	1.38"	25K	1
B5007-0020-4.00	ER20	0.039 - 0.511"	020-SPAN	4.00"	2.50"	1.38"	25K	1
B5007-0025-2.63	ER25	0.039 - 0.511"	020-SPAN	2.63"	1.13"	1.65"	25K	1
B5007-0025-4.00	ER25	0.039 - 0.511"	020-SPAN	4.00"	2.50"	1.65"	25K	1
B5007-0032-4.00	ER32	0.078 - 0.787"	032-SPAN	4.00"	2.50"	1.97"	25K	1
B5007-0032-6.00	ER32	0.078 - 0.787"	032-SPAN	6.00"	4.50"	1.97"	25K	1
B5007-0040-4.00	ER40	0.078 - 0.787"	032-SPAN	4.00"	2.50"	2.44"	25K	1
B5007-0040-6.00	ER40	0.078 - 0.787"	032-SPAN	6.00"	4.50"	2.44"	25K	1

Note: ER Collet Chucks come with back-up screw.



Notes:

- Back-up Screw included with ER Collet Chuck.
- *For Extended Length holders, "L" dimension has tapered length. To confirm clearance, please download model/drawing from our website



Available in **TAPER PLUS+**
Dual-taper and flange contact

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See ER Coolant Collets on pages 65-70



ER Collets
Pages 65-70



ER Torque
Wrenches
Page 75

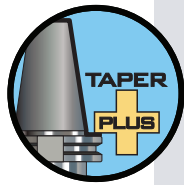


ER Back Up
Screws
Page 75



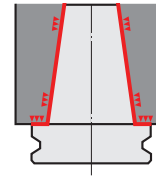
ER Nuts
Page 74

TAPER PLUS ER COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT40

Part Number	Collet Size	Collet Range	L	L1	L2	D	D1	Max. RPM	Fig.
NC4007-0016-3.50G	ER16	0.019 - 0.406"	3.50"	2.12"	-	1.26"	1.75"	25K	2
NC4007-0016-6.00G	ER16	0.019 - 0.406"	6.00"	4.62"	-	1.26"	1.75"	25K	2
NC4007-0016-9.00G	ER16	0.019 - 0.406"	9.00"	1.64"	7.63"	1.26"	1.75"	25K	3
NC4007-0020-2.50G	ER20	0.039 - 0.511"	2.50"	1.13"	-	1.38"	1.75"	25K	2
NC4007-0020-4.00G	ER20	0.039 - 0.511"	4.00"	2.62"	-	1.38"	1.75"	25K	2
NC4007-0020-6.00G	ER20	0.039 - 0.511"	6.00"	4.62"	-	1.38"	1.75"	25K	2
NC4007-0020-9.00G	ER20	0.039 - 0.511"	9.00"	1.72"	7.63"	1.38"	1.75"	25K	3
NC4007-0025-2.50G	ER25	0.039 - 0.629"	2.50"	1.14"	-	1.65"	1.75"	25K	2
NC4007-0025-4.00G	ER25	0.039 - 0.629"	4.00"	2.63"	-	1.65"	1.75"	25K	2
NC4007-0025-6.00G	ER25	0.039 - 0.629"	6.00"	4.62"	-	1.65"	1.75"	25K	2
NC4007-0032-3.13G	ER32	0.078 - 0.787"	3.13"	1.75"	-	1.97"	1.75"	25K	2
NC4007-0032-5.00G	ER32	0.078 - 0.787"	5.00"	3.62"	-	1.97"	1.75"	25K	2
NC4007-0032-9.00G	ER32	0.078 - 0.787"	9.00"	1.74"	7.63"	1.97"	1.75"	25K	3
NC4007-0040-3.13G	ER40	0.188 - 1.023"	3.13"	1.79"	-	2.44"	1.75"	25K	2

Note: See page 69 for Torque Wrench and attachment options.

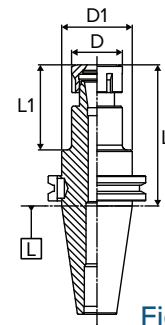


Fig. 2

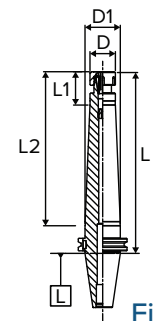


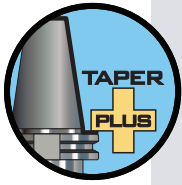
Fig. 3

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER Coolant Collets on pages 65-70



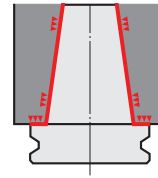
ER COLLET CHUCKS

TAPER PLUS ER COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT50

Part Number	Collet Size	Collet Range	L	L1	L2	D	D1	Max. RPM	Fig.
NC5007-0016-4.12G	ER16	0.019 - 0.406"	4.12"	2.75"	-	1.26"	2.75"	25K	2
NC5007-0016-6.00G	ER16	0.019 - 0.406"	6.00"	4.63"	-	1.26"	2.75"	25K	2
NC5007-0016-8.00G	ER16	0.019 - 0.406"	8.00"	1.64"	6.62"	1.26"	2.75"	25K	3
NC5007-0020-4.00G	ER20	0.039 - 0.511"	4.00"	2.62"	-	1.38"	2.75"	25K	2
NC5007-0020-6.00G	ER20	0.039 - 0.511"	6.00"	4.62"	-	1.38"	2.75"	25K	2
NC5007-0020-8.00G	ER20	0.039 - 0.511"	8.00"	1.72"	6.62"	1.38"	2.75"	25K	3
NC5007-0020-12.00G	ER20	0.039 - 0.511"	12.00"	1.57"	10.63"	1.38"	2.75"	25K	3
NC5007-0025-4.00G	ER25	0.039 - 0.629"	4.00"	2.62"	-	1.65"	2.75"	25K	2
NC5007-0025-8.00G	ER25	0.039 - 0.629"	8.00"	1.74"	6.62"	1.65"	2.75"	25K	3
NC5007-0032-4.00G	ER32	0.078 - 0.787"	4.00"	2.62"	-	1.97"	2.75"	25K	2
NC5007-0032-6.00G	ER32	0.078 - 0.787"	6.00"	4.63"	-	1.97"	2.75"	25K	2
NC5007-0032-8.00G	ER32	0.078 - 0.787"	8.00"	1.85"	6.63"	1.97"	2.75"	25K	3
NC5007-0032-12.00G	ER32	0.078 - 0.787"	12.00"	1.85"	10.63"	1.97"	2.75"	25K	3
NC5007-0040-4.00G	ER40	0.118 - 1.023"	4.00"	2.62"	-	2.44"	2.75"	25K	2
NC5007-0040-6.00G	ER40	0.118 - 1.023"	6.00"	4.62"	-	2.44"	2.75"	25K	2
NC5007-0040-8.00G	ER40	0.118 - 1.023"	8.00"	1.97"	6.63"	2.44"	2.75"	25K	3
NC5007-0040-12.00G	ER40	0.118 - 1.023"	12.00"	1.97"	10.63"	2.44"	2.75"	25K	3

Note: See page 69 for Torque Wrench and attachment options.

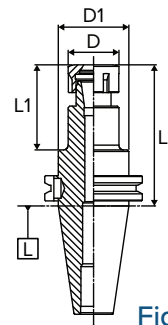


Fig. 2

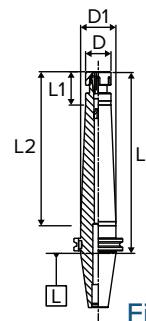


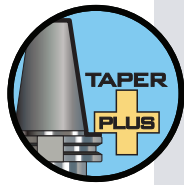
Fig. 3

ER COLLET CHUCKS

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER Coolant Collets on pages 65-70

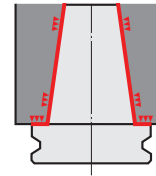


TAPER PLUS BT ER COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - BT30

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	Max. RPM	Fig.
NB3007-0008-2.00M	ER8	0.019 - 0.197"	WRENCH-ER08-MINI	2.00"	1.14"	0.47"	30K	1
NB3007-0011-2.00	ER11	0.019 - 0.275"	011-HEX	2.00"	1.14"	0.75"	30K	1
NB3007-0016-2.36G	ER16	0.019 - 0.406"	-	2.36"	1.50"	1.26"	30K	1
NB3007-0016-4.00G	ER16	0.019 - 0.406"	-	4.00"	3.13"	1.26"	30K	1
NB3007-0016-5.00G	ER16	0.019 - 0.406"	-	5.00"	4.14"	1.26"	30K	1
NB3007-0016-6.00G	ER16	0.019 - 0.406"	-	6.00"	5.13"	1.26"	30K	1
NB3007-0020-2.50G	ER20	0.039 - 0.511"	-	2.50"	1.63"	1.38"	30K	1
NB3007-0020-4.00G	ER20	0.039 - 0.511"	-	4.00"	3.13"	1.38"	30K	1
NB3007-0025-2.00G	ER25	0.039 - 0.629"	-	2.00"	1.13"	1.65"	30K	1
NB3007-0025-4.00G	ER25	0.039 - 0.629"	-	4.00"	3.14"	1.65"	30K	1
NB3007-0032-3.00G	ER32	0.078 - 0.787"	-	3.00"	2.13"	1.97"	30K	1
NB3007-0032-5.00G	ER32	0.078 - 0.787"	-	5.00"	4.14"	1.97"	30K	1

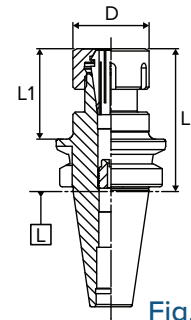


Fig. 6

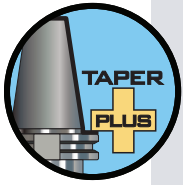
Note: See page 69 for Torque Wrench and attachment options. Only applies to part numbers ending in "G".

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER Coolant Collets on pages 65-70



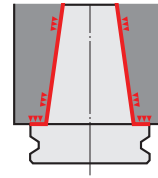
ER COLLET CHUCKS

TAPER PLUS BT ER COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - BT40

Part Number	Collet Size	Collet Range	L	L1	D	Max. RPM	Fig.
NB4007-0020-2.50G	ER20	0.039 - 0.511"	2.50"	1.44"	1.38"	25K	1
NB4007-0020-4.00G	ER20	0.039 - 0.511"	4.00"	2.94"	1.38"	25K	1
NB4007-0020-6.00G	ER20	0.039 - 0.511"	6.00"	4.94"	1.38"	25K	1
NB4007-0025-2.25G	ER25	0.039 - 0.629"	2.25"	1.19"	1.65"	25K	1
NB4007-0025-4.00G	ER25	0.039 - 0.629"	4.00"	2.94"	1.65"	25K	1
NB4007-0025-6.00G	ER25	0.039 - 0.629"	6.00"	4.94"	1.65"	25K	1
NB4007-0032-3.13G	ER32	0.078 - 0.787"	3.13"	2.06"	1.97"	25K	1
NB4007-0032-5.00G	ER32	0.078 - 0.787"	5.00"	3.94"	1.97"	25K	1
NB4007-0032-6.30G	ER32	0.078 - 0.787"	6.30"	5.28"	1.97"	25K	1

Note: See page 69 for Torque Wrench and attachment options.

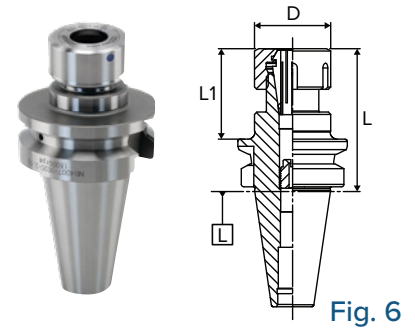


Fig. 6

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER Coolant Collets on pages 65-70



HSK ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



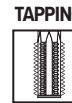
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK40A/63A

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	L2	D	D1	Max. RPM	Fig.
HSK40A-ER11-75	ER11	0.019 - 0.275"	011-HEX	75	2.95"	2.17"	-	0.75"	-	25K	1
HSK40A-ER16-75	ER16	0.019 - 0.406"	016-SPAN	75	2.95"	2.16"	-	1.26"	-	25K	1
HSK40A-ER20-75	ER20	0.039 - 0.511"	020-SPAN	75	2.95"	2.17"	-	1.38"	-	25K	1
HSK40A-ER25-80	ER25	0.039 - 0.629"	025-SPAN	80	3.15"	2.36"	-	1.65"	-	25K	1
HSK40A-ER32-80	ER32	0.078 - 0.787"	032-SPAN	80	3.15"	2.36"	-	1.97"	-	25K	1
HSK63A-ER11-4.33	ER11	0.019 - 0.275"	011-HEX	-	4.33"	2.96"	3.35"	0.63"	1.00"	25K	2
HSK63A-ER16-3.00	ER16	0.019 - 0.406"	016-SPAN	-	3.00"	1.98"	-	1.26"	-	25K	1
HSK63A-ER16-5.00	ER16	0.019 - 0.406"	016-SPAN	-	5.00"	3.98"	-	1.26"	-	25K	1
HSK63A-ER20-3.00	ER20	0.039 - 0.511"	020-SPAN	-	3.00"	1.99"	-	1.38"	-	25K	1
HSK63A-ER20-5.00	ER20	0.039 - 0.511"	020-SPAN	-	5.00"	3.98"	-	1.38"	-	25K	1
HSK63A-ER25-3.00	ER25	0.039 - 0.629"	025-SPAN	-	3.00"	1.98"	-	1.65"	-	25K	1
HSK63A-ER25-5.00	ER25	0.039 - 0.629"	025-SPAN	-	5.00"	3.98"	-	1.65"	-	25K	1
HSK63A-ER32-4.00	ER32	0.078 - 0.787"	032-SPAN	-	4.00"	2.99"	-	1.97"	-	25K	1
HSK63A-ER32-6.00	ER32	0.078 - 0.787"	032-SPAN	-	6.00"	4.98"	-	1.97"	-	25K	1
HSK63A-ER40-4.00	ER40	0.118 - 1.023"	040-SPAN	-	4.00"	2.97"	-	2.44"	-	25K	1
HSK63A-ER40-6.00	ER40	0.118 - 1.023"	040-SPAN	-	6.00"	4.98"	-	2.44"	-	25K	1

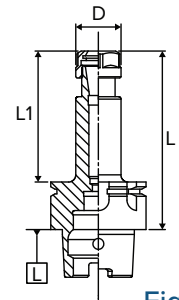


Fig. 7

HSK63A - SOLID HEX NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
HSK63A-ER16S-80	ER16	0.019 - 0.406"	016-SPAN	80	3.15"	2.13"	1.10"	25K	1
HSK63A-ER16S-100	ER16	0.019 - 0.406"	016-SPAN	100	3.94"	2.91"	1.10"	25K	1
HSK63A-ER16S-160	ER16	0.019 - 0.406"	016-SPAN	160	6.30"	5.28"	1.10"	25K	1

HSK63A - SOLID NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
HSK63A-ER20S-80	ER20	0.039 - 0.511"	020-SPAN	80	3.15"	2.13"	1.34"	25K	1
HSK63A-ER20S-100	ER20	0.039 - 0.511"	020-SPAN	100	3.94"	2.91"	1.34"	25K	1
HSK63A-ER20S-160	ER20	0.039 - 0.511"	020-SPAN	160	6.30"	5.28"	1.34"	25K	1
HSK63A-ER25S-80	ER25	0.078 - 0.787"	025-SPAN	80	3.15"	2.13"	1.66"	25K	1
HSK63A-ER25S-150	ER25	0.078 - 0.787"	025-SPAN	150	5.91"	4.88"	1.66"	25K	1
HSK63A-ER32S-80	ER32	0.078 - 0.787"	032-SPAN	80	3.15"	2.13"	1.97"	25K	1
HSK63A-ER32S-100	ER32	0.078 - 0.787"	032-SPAN	100	3.94"	2.91"	1.97"	25K	1
HSK63A-ER32S-160	ER32	0.078 - 0.787"	032-SPAN	160	6.30"	5.28"	1.97"	25K	1
HSK63A-ER40S-80	ER40	0.118 - 1.023"	040-SPAN	80	3.15"	2.13"	2.48"	25K	1
HSK63A-ER40S-120	ER40	0.118 - 1.023"	040-SPAN	120	4.72"	3.70"	2.48"	25K	1

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER Coolant Collets on pages 65-70



ER COLLET CHUCKS

HSK ER COLLET CHUCKS

FEATURES

- Ball bearing nut with ground collet race
- AT3 or better taper
- Equipped with a right-hand-threaded back-up screw



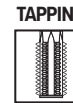
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK100A

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	Max. RPM	Fig.
HSK100A-ER16-4.00	ER16	0.019 - 0.406"	016-SPAN	4.00"	2.87"	1.26"	25K	1
HSK100A-ER16-6.00	ER16	0.019 - 0.406"	016-SPAN	6.00"	4.85"	1.26"	25K	1
HSK100A-ER20-4.00	ER20	0.039 - 0.511"	020-SPAN	4.00"	2.85"	1.38"	25K	1
HSK100A-ER20-6.00	ER20	0.039 - 0.511"	020-SPAN	6.00"	4.86"	1.38"	25K	1
HSK100A-ER25-4.00	ER25	0.039 - 0.629"	025-SPAN	4.00"	2.85"	1.65"	25K	1
HSK100A-ER25-6.00	ER25	0.039 - 0.629"	025-SPAN	6.00"	4.86"	1.65"	25K	1
HSK100A-ER32-4.00	ER32	0.078 - 0.787"	032-SPAN	4.00"	2.85"	1.97"	25K	1
HSK100A-ER32-6.00	ER32	0.078 - 0.787"	032-SPAN	6.00"	4.85"	1.97"	25K	1
HSK100A-ER40-4.00	ER40	0.118 - 1.023"	040-SPAN	4.00"	2.86"	2.44"	25K	1
HSK100A-ER40-6.00	ER40	0.118 - 1.023"	040-SPAN	6.00"	4.86"	2.44"	25K	1

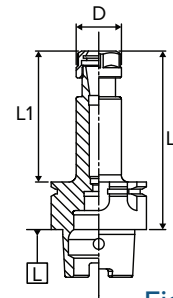


Fig. 7

Note: Coolant tube and coolant wrench not included. See page 75 for details.

HSK100A - SOLID HEX NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
HSK100A-ER16S-100	ER16	0.019 - 0.406"	016-SPAN	100	3.94"	2.79"	1.10"	25K	1
HSK100A-ER16S-160	ER16	0.019 - 0.406"	016-SPAN	160	6.30"	5.16"	1.10"	25K	1

HSK100A - SOLID NUT

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
HSK100A-ER32S-100	ER32	0.078 - 0.787"	032-SPAN	100	3.94"	2.78"	1.97"	25K	1
HSK100A-ER32S-160	ER32	0.078 - 0.787"	032-SPAN	160	6.30"	5.16"	1.97"	25K	1
HSK100A-ER40S-120	ER40	0.118 - 1.023"	040-SPAN	120	4.72"	3.59"	2.48"	25K	1

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See ER Coolant Collets on pages 65-70



ER Collets
Pages 65-70



ER Torque
Wrenches
Page 75



ER Back Up
Screws
Page 75



ER Nuts
Page 74

NMTB AND R8 ER COLLET CHUCKS

FEATURES

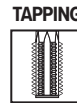
- Ball bearing nut with ground collet race
- AT3 or better taper



T.I.R.
≤ 0.0001" in ID bore



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

NMTB30/40/50

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	Fig.
N3007-0011-2.00	ER11	0.019 - 0.275"	011-HEX	2.00"	1.60"	0.75"	1
N3007-0016-1.77	ER16	0.019 - 0.406"	016-SPAN	1.77"	1.35"	1.26"	1
N4007-0016-1.77	ER16	0.019 - 0.406"	016-SPAN	1.77"	1.41"	1.26"	1
N4007-0025-2.00	ER25	0.039 - 0.629"	025-SPAN	2.00"	1.62"	1.65"	1
N5007-0016-2.00	ER16	0.019 - 0.406"	016-SPAN	2.00"	1.41"	1.26"	1
N5007-0025-2.00	ER25	0.039 - 0.629"	025-SPAN	2.00"	1.41"	1.65"	1

Note: NMTB shanks are suitable for use with Erickson Quick Change spindles.

R8

Part Number	Collet Size	Collet Range	Nut Wrench	L	L1	D	Fig.
R8007-0016-1.00S	ER16	0.019 - 0.406"	WRENCH-ER16-HEX	1.00"	0.87"	1.10"	1
R8007-0020-2.00S	ER20	0.039 - 0.511"	WRENCH-ER20-HEX	2.00"	2.07"	1.34"	1
R8007-0025-2.50S	ER25	0.039 - 0.629"	025-SPAN	2.50"	2.37"	1.65"	1

Note: ER Collet Chucks come with back-up screw.

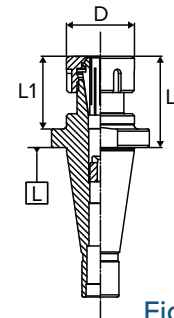


Fig. 8

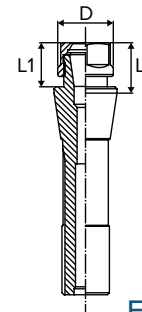


Fig. 9

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER Coolant Collets on pages 65-70



ER COLLET CHUCKS

ER COLLET CHUCK EXTENSIONS

Part Number	Collet Size	Collet Range	Nut Wrench	D	D1	L	L1	Fig.
ER8-EXT-500M	ER8	0.019 - 0.197"	WRENCH-ER08-MINI	0.49"	0.50"	5.95"	0.95"	1
ER8-EXT-625M	ER8	0.019 - 0.197"	WRENCH-ER08-MINI	0.49"	0.63"	5.95"	0.95"	1
E11-EXT-500	ER11	0.019 - 0.275"	011-HEX	0.75"	0.50"	6.07"	1.07"	1
E11-EXT-625	ER11	0.019 - 0.275"	011-HEX	0.75"	0.63"	6.07"	1.07"	1
E11-EXT-750	ER11	0.019 - 0.275"	011-HEX	0.75"	0.75"	5.61"	0.61"	1
E16-EXT-100	ER16	0.019 - 0.406"	016-SPAN	1.26"	1.00"	5.89"	0.97"	1
E16-EXT-625	ER16	0.019 - 0.406"	016-SPAN	1.26"	0.63"	6.48"	1.48"	1
E16-EXT-750	ER16	0.019 - 0.406"	016-SPAN	1.26"	0.75"	6.48"	1.48"	1
E20-EXT-100	ER20	0.039 - 0.511"	020-SPAN	1.38"	1.00"	6.40"	1.40"	1
E20-EXT-125	ER20	0.039 - 0.511"	020-SPAN	1.38"	1.25"	6.39"	1.39"	1
E20-EXT-750	ER20	0.039 - 0.511"	020-SPAN	1.38"	0.75"	6.67"	1.67"	1
E25-EXT-100	ER25	0.039 - 0.629"	025-SPAN	1.65"	1.00"	6.85"	1.85"	1
E25-EXT-125	ER25	0.039 - 0.629"	025-SPAN	1.65"	1.25"	6.00"	1.00"	1
E25-EXT-750	ER25	0.039 - 0.629"	025-SPAN	1.65"	0.75"	6.86"	1.86"	1
E32-EXT-100	ER32	0.078 - 0.787"	032-SPAN	1.97"	1.00"	7.09"	2.09"	1
E32-EXT-125	ER32	0.078 - 0.787"	032-SPAN	1.97"	1.25"	7.09"	2.09"	1

Note: ER Collet Chucks come with back-up screw.

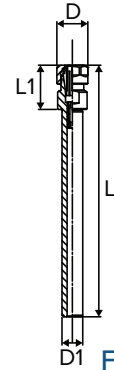


Fig. 10

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER coolant Collets on pages 52-59



Lyndex-Nikken Offers Single and Dual Plane Balancing for Large Diameter or Long Tooling Assemblies

Benefits of ER Collet Chuck Balancing:

- Balanced assemblies can reduce spindle vibration—prolonging the life of your cutting tools and spindle.
- Increase the quality and consistency of machined surface finishes.
- Achieves greater machined surface flatness.
- Balancing service is only required once during initial set up.



ER Collets
Pages 65-70



ER Torque
Wrenches
Page 75



ER Back Up
Screws
Page 75



ER Nuts
Page 74

POLYGONAL TAPER ER COLLET CHUCKS

FEATURES

- Extremely stable and rigid connection between tool and the machine
- High torque and bending forces transmission due to simultaneous tapered polygon and face contact with machine spindle
- Self centering ability due to unique design
- Internal coolant supply, directly to the tool tip
- Best solution for all processes - both in turning and milling
- Modular design for flexible tooling
- Standardized interface as per ISO 26623



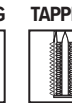
T.I.R.
≤ 0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

C3/C4/C5/C6/C8

Part Number	Collet Size	Collet Range	Nut Wrench	L (mm)	L	L1	D	Max. RPM	Fig.
C3-ER16-45	ER16	0.019 - 0.406"	016-SPAN	45	1.77"	1.18"	1.26"	25K	1
C3-ER20-45	ER20	0.039 - 0.511"	020-SPAN	45	1.77"	1.18"	1.38"	25K	1
C4-ER16-70	ER16	0.019 - 0.406"	016-SPAN	70	2.76"	1.97"	1.26"	25K	1
C4-ER20-52	ER20	0.039 - 0.511"	020-SPAN	52	2.05"	1.26"	1.38"	25K	1
C4-ER25-52	ER25	0.039 - 0.629"	025-SPAN	52	2.05"	1.14"	1.65"	25K	1
C4-ER32-54	ER32	0.078 - 0.787"	032-SPAN	54	2.13"	1.34"	1.97"	25K	1
C5-ER16-100	ER16	0.019 - 0.406"	016-SPAN	100	3.94"	3.15"	1.26"	25K	1
C5-ER20-55	ER20	0.039 - 0.511"	020-SPAN	55	2.17"	1.38"	1.38"	25K	1
C5-ER20-100	ER20	0.039 - 0.511"	020-SPAN	100	3.94"	3.15"	1.38"	25K	1
C5-ER20-130	ER20	0.039 - 0.511"	020-SPAN	130	5.12"	4.33"	1.38"	25K	1
C5-ER25-55	ER25	0.039 - 0.629"	025-SPAN	55	2.17"	1.38"	1.65"	25K	1
C5-ER25-100	ER25	0.039 - 0.629"	025-SPAN	100	3.94"	3.15"	1.65"	25K	1
C5-ER32-57	ER32	0.078 - 0.787"	032-SPAN	57	2.24"	1.46"	1.97"	25K	1
C5-ER32-100	ER32	0.078 - 0.787"	032-SPAN	100	3.94"	3.15"	1.97"	25K	1
C5-ER40-60	ER40	0.118 - 1.023"	040-SPAN	60	2.36"	1.58"	2.44"	25K	1
C6-ER16-100	ER16	0.019 - 0.406"	016-SPAN	100	3.94"	3.07"	1.26"	25K	1
C6-ER20-60	ER20	0.039 - 0.511"	020-SPAN	60	2.36"	1.50"	1.38"	25K	1
C6-ER20-100	ER20	0.039 - 0.511"	020-SPAN	100	3.94"	3.07"	1.38"	25K	1
C6-ER25-60	ER25	0.039 - 0.629"	025-SPAN	60	2.36"	1.50"	1.65"	25K	1
C6-ER25-100	ER25	0.039 - 0.629"	025-SPAN	100	3.94"	3.07"	1.67"	25K	1
C6-ER32-60	ER32	0.078 - 0.787"	032-SPAN	60	2.36"	1.50"	1.97"	25K	1
C6-ER32-100	ER32	0.078 - 0.787"	032-SPAN	100	3.94"	3.07"	1.97"	25K	1
C6-ER32-130	ER32	0.078 - 0.787"	032-SPAN	130	5.12"	4.25"	1.97"	25K	1
C6-ER40-65	ER40	0.118 - 1.023"	040-SPAN	65	2.56"	1.69"	2.44"	25K	1
C8-ER20-65	ER20	0.039 - 0.511"	020-SPAN	65	2.56"	1.38"	1.38"	25K	1
C8-ER25-70	ER25	0.039 - 0.629"	025-SPAN	70	2.76"	1.58"	1.65"	25K	1
C8-ER32-70	ER32	0.078 - 0.787"	032-SPAN	70	2.76"	1.58"	1.97"	25K	1
C8-ER32-160	ER32	0.078 - 0.787"	032-SPAN	160	6.30"	5.12"	1.97"	25K	1
C8-ER40-70	ER40	0.118 - 1.023"	040-SPAN	70	2.76"	1.58"	2.44"	25K	1

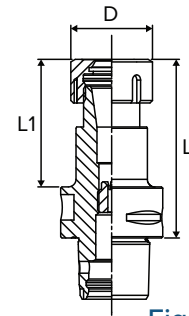


Fig. 11

ER Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!
See ER Coolant Collets on pages 65-70

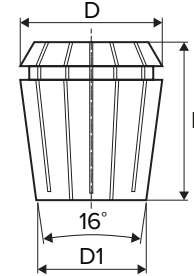


ER COLLET CHUCKS

ER8 AND ER11 COLLETS

ER COLLET DIMENSIONAL DATA

Style	D	D1	L	Collet Range	Coolant Collet Size Range
ER8	0.330"	0.216"	0.535"	0.019 - 0.196"	N/A
ER11	0.460"	0.307"	0.709"	0.019 - 0.275"	0.157 - 0.275"
ER16	0.677"	0.445"	1.063"	0.019 - 0.393"	0.157 - 0.393"
ER20	0.835"	0.571"	1.220"	0.039 - 0.511"	0.196 - 0.511"
ER25	1.031"	0.728"	1.378"	0.039 - 0.629"	0.236 - 0.629"
ER32	1.307"	0.960"	1.575"	0.078 - 0.787"	0.393 - 0.787"
ER40	1.622"	1.228"	1.811"	0.118 - 1.023"	0.393 - 1.023"



ER8 COLLETS

Size range: 1.00 - 5.00mm (0.039" - 0.197")

METRIC

Part Number	Size	Collapse Range
ER8-039	1.0mm	0.5~1mm
ER8-059	1.5mm	1~1.5mm
ER8-078	2.0mm	1.5~2mm
ER8-098	2.5mm	2~2.5mm
ER8-118	3.0mm	2.5 - 3mm
ER8-137	3.5mm	3~3.5mm
ER8-157	4.0mm	3.5~4mm
ER8-177	4.5mm	4 - 4.5mm
ER8-196	5.0mm	4.5 - 5mm
ER8-SET-09-MM	9 Piece Set 0.5 - 5.0mm by 0.5mm	



Precision Standard

Precision slots allow for even distribution of clamping pressure and minimal run out.



Coolant-Thru

Our patented 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 1015 psi. Steel-sealed and mechanically sealed by design.

ER11 COLLETS

Size Range: 1/32 - 17/64"
(0.031 - 0.266")

Size Range: 1.0 - 7.0mm
(0.039 - 0.276")

Size Range: 3/16 - 17/64"
(0.188 - 0.266")

Size Range: 4.0 - 7.0mm
(0.157 - 0.276")

INCH

Part Number	Size	Collapse Range
E11-002	1/32"	0.012 - 0.031"
E11-003	3/64"	0.027 - 0.047"
E11-004	1/16"	0.043 - 0.063"
E11-005	5/64"	0.058 - 0.078"
E11-006	3/32"	0.074 - 0.094"
E11-007	7/64"	0.09 - 0.109"
E11-008	1/8"	0.105 - 0.125"
E11-009	9/64"	0.121 - 0.141"
E11-010	5/32"	0.137 - 0.156"
E11-011	11/64"	0.156 - 0.172"
E11-012	3/16"	0.168 - 0.188"
E11-013	13/64"	0.183 - 0.203"
E11-014	7/32"	0.199 - 0.219"
E11-015	15/64"	0.215 - 0.234"
E11-016	1/4"	0.23 - 0.25"
E11-017	17/64"	0.246 - 0.266"

METRIC

Part Number	Size	Collapse Range
E11-039	1.0mm	0.5 - 1mm
E11-059	1.5mm	1 - 1.5mm
E11-078	2.0mm	1.5 - 2mm
E11-098	2.5mm	2 - 2.5mm
E11-118	3.0mm	2.5 - 3mm
E11-137	3.5mm	3 - 3.5mm
E11-157	4.0mm	3.5 - 4mm
E11-177	4.5mm	4 - 4.5mm
E11-196	5.0mm	4.5 - 5mm
E11-216	5.5mm	5 - 5.5mm
E11-236	6.0mm	5.5 - 6mm
E11-255	6.5mm	6 - 6.5mm
E11-275	7.0mm	6.5 - 7mm

INCH COOLANT-THRU

Part Number	Size	Collapse Range
E11-012(C)	3/16"	0.183 - 0.188"
E11-013(C)	13/64"	0.199 - 0.203"
E11-014(C)	7/32"	0.215 - 0.219"
E11-015(C)	15/64"	0.23 - 0.234"
E11-016(C)	1/4"	0.246 - 0.25"
E11-017(C)	17/64"	0.262 - 0.266"

METRIC COOLANT-THRU

Part Number	Size	Collapse Range
E11-157(C)	4.0mm	3.9 - 4mm
E11-177(C)	4.5mm	4.4 - 4.5mm
E11-196(C)	5.0mm	4.9 - 5mm
E11-216(C)	5.5mm	5.4 - 5.5mm
E11-236(C)	6.0mm	5.9 - 6mm
E11-255(C)	6.5mm	6.4 - 6.5mm
E11-275(C)	7.0mm	6.9 - 7mm

ER11 COLLET SETS

E11-SET-14	14 Piece Set: 1/16" - 17/64" by 1/64ths
E11-SET-12-MM	12 Piece Set: 1.0 mm- 7.0mm by 0.5mm

ER11 COOLANT COLLET SETS

E11-SET-06(C)	6 Piece Set: 3/16" - 1/4" by 1/64ths
E11-SET-07(C)-MM	7 Piece Set: 3.9mm - 7.0mm by 0.5mm

ER16 COLLETS



Precision Standard

Precision slots allow for even distribution of clamping pressure and minimal run out.

Size Range: 1/32 - 13/32"
(0.031 - 0.406")

Size Range: 1.0 - 10.0mm
(0.039 - 0.394")

INCH

Part Number	Size	Collapse Range
E16-002	1/32"	0.012 - 0.031"
E16-004	1/16"	0.043 - 0.063"
E16-006	3/32"	0.074 - 0.094"
E16-008	1/8"	0.105 - 0.125"
E16-010	5/32"	0.141 - 0.156"
E16-012	3/16"	0.148 - 0.188"
E16-014	7/32"	0.179 - 0.219"
E16-016	1/4"	0.211 - 0.25"
E16-018	9/32"	0.242 - 0.281"
E16-020	5/16"	0.273 - 0.313"
E16-022	11/32"	0.304 - 0.344"
E16-024	3/8"	0.336 - 0.375"
E16-026	13/32"	0.367 - 0.406"

METRIC

Part Number	Size	Collapse Range
E16-039	1.0mm	0.5 - 1mm
E16-059	1.5mm	1 - 1.5mm
E16-078	2.0mm	1.5 - 2mm
E16-098	2.5mm	2 - 2.5mm
E16-118	3.0mm	2.5 - 3mm
E16-137	3.5mm	3 - 3.5mm
E16-157	4.0mm	3.5 - 4mm
E16-177	4.5mm	4 - 4.5mm
E16-196	5.0mm	4 - 5mm
E16-216	5.5mm	4.5 - 5.5mm
E16-236	6.0mm	5 - 6mm
E16-255	6.5mm	5.5 - 6.5mm
E16-275	7.0mm	6 - 7mm
E16-295	7.5mm	6.5 - 7.5mm
E16-314	8.0mm	7 - 8mm
E16-334	8.5mm	7.5 - 8.5mm
E16-354	9.0mm	8 - 9mm
E16-374	9.5mm	8.5 - 9.5mm
E16-393	10.0mm	9 - 10mm

ER16 COLLET SETS

E16-SET-12	12 Piece Set: 1/16" - 13/32" by 1/32nds
E16-SET-09-MM	9 Piece Set: 1.5mm - 10.0mm by 1mm

Note: See dimensional data for ER16 Collets on page 59.



Coolant-Thru

Our patented 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 1015 psi. Steel-sealed and mechanically sealed by design.

Size range: 3/32 - 13/32"
(0.094 - 0.406")

Size Range: 3.0 - 10.0mm
(0.039 - 0.394")

INCH COOLANT-THRU

Part Number	Size	Collapse Range
E16-006(C)	3/32"	0.09 - 0.094"
E16-007(C)	7/64"	0.105 - 0.109"
E16-008(C)	1/8"	0.121 - 0.125"
E16-009(C)	9/64"	0.137 - 0.141"
E16-010(C)	5/32"	0.152 - 0.156"
E16-011(C)	11/64"	0.168 - 0.172"
E16-012(C)	3/16"	0.183 - 0.188"
E16-013(C)	13/64"	0.199 - 0.203"
E16-014(C)	7/32"	0.215 - 0.219"
E16-015(C)	15/64"	0.215 - 0.234"
E16-016(C)	1/4"	0.23 - 0.25"
E16-017(C)	17/64"	0.246 - 0.266"
E16-018(C)	9/32"	0.262 - 0.281"
E16-019(C)	19/64"	0.277 - 0.297"
E16-020(C)	5/16"	0.293 - 0.313"
E16-021(C)	21/64"	0.308 - 0.328"
E16-022(C)	11/32"	0.324 - 0.344"
E16-023(C)	23/64"	0.34 - 0.359"
E16-024(C)	3/8"	0.355 - 0.375"
E16-025(C)	25/64"	0.371 - 0.391"
E16-026(C)	13/32"	0.387 - 0.406"

METRIC COOLANT-THRU

Part Number	Size	Collapse Range
E16-118(C)	3.0mm	2.9 - 3mm
E16-157(C)	4.0mm	3.9 - 4mm
E16-177(C)	4.5mm	4.4 - 4.5mm
E16-196(C)	5.0mm	4.9 - 5mm
E16-216(C)	5.5mm	5.4 - 5.5mm
E16-236(C)	6.0mm	5.5 - 6mm
E16-255(C)	6.5mm	6 - 6.5mm
E16-275(C)	7.0mm	6.5 - 7mm
E16-295(C)	7.5mm	7 - 7.5mm
E16-314(C)	8.0mm	7.5 - 8mm
E16-334(C)	8.5mm	8 - 8.5mm
E16-354(C)	9.0mm	8.5 - 9mm
E16-374(C)	9.5mm	9 - 9.5mm
E16-393(C)	10.0mm	9.5 - 10mm

ER16 COOLANT COLLET SETS

E16-SET-11(C)	11 Piece Set: 3/32" - 13/32" by 1/32nds
E16-SET-13(C)-MM	13 Piece Set: 3.9mm - 10.0mm by 0.5mm
E16-SET-15(C)	15 Piece Set: 3/16" - 11/32" by 1/64ths

ER COLLET CHUCKS



ER20 COLLETS



Precision Standard

Precision slots allow for even distribution of clamping pressure and minimal run out.



Coolant-Thru

Our patented 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 1015 psi. Steel-sealed and mechanically sealed by design.

Size Range: 1/16 - 1/2"
(0.062 - 0.500")

Size Range: 2.0 - 13.0mm
(0.079 - 0.512")

Size Range: 5/32 - 1/2"
(0.156 - 0.500")

Size Range: 5.0 - 13.0mm
(0.197 - 0.512")

INCH

Part Number	Size	Collapse Range
E20-004	1/16"	0.043 - 0.063"
E20-006	3/32"	0.074 - 0.094"
E20-008	1/8"	0.105 - 0.125"
E20-010	5/32"	0.136 - 0.156"
E20-012	3/16"	0.148 - 0.188"
E20-014	7/32"	0.179 - 0.219"
E20-016	1/4"	0.211 - 0.25"
E20-018	9/32"	0.242 - 0.281"
E20-020	5/16"	0.273 - 0.313"
E20-022	11/32"	0.304 - 0.344"
E20-024	3/8"	0.336 - 0.375"
E20-026	13/32"	0.367 - 0.406"
E20-028	7/16"	0.398 - 0.438"
E20-030	15/32"	0.429 - 0.469"
E20-032	1/2"	0.461 - 0.5"

METRIC

Part Number	Size	Collapse Range
E20-078	2.0mm	1.5 - 2mm
E20-098	2.5mm	2 - 2.5mm
E20-118	3.0mm	2.5 - 3mm
E20-137	3.5mm	3 - 3.5mm
E20-157	4.0mm	3.5 - 4mm
E20-177	4.5mm	4 - 4.5mm
E20-196	5.0mm	4 - 5mm
E20-236	6.0mm	5 - 6mm
E20-275	7.0mm	6 - 7mm
E20-314	8.0mm	7 - 8mm
E20-354	9.0mm	8 - 9mm
E20-393	10.0mm	9 - 10mm
E20-433	11.0mm	10 - 11mm
E20-452	11.5mm	10.5 - 11.5mm
E20-472	12.0mm	11 - 12mm
E20-511	13.0mm	12 - 13mm

INCH COOLANT-THRU

Part Number	Size	Collapse Range
E20-010(C)	5/32"	0.152 - 0.156"
E20-011(C)	11/64"	0.168 - 0.172"
E20-012(C)	3/16"	0.183 - 0.188"
E20-013(C)	13/64"	0.199 - 0.203"
E20-014(C)	7/32"	0.199 - 0.219"
E20-015(C)	15/64"	0.215 - 0.234"
E20-016(C)	1/4"	0.23 - 0.25"
E20-017(C)	17/64"	0.246 - 0.266"
E20-018(C)	9/32"	0.262 - 0.281"
E20-019(C)	19/64"	0.277 - 0.297"
E20-020(C)	5/16"	0.293 - 0.313"
E20-021(C)	21/64"	0.308 - 0.328"
E20-022(C)	11/32"	0.324 - 0.344"
E20-023(C)	23/64"	0.34 - 0.359"
E20-024(C)	3/8"	0.355 - 0.375"
E20-025(C)	25/64"	0.371 - 0.391"
E20-026(C)	13/32"	0.387 - 0.406"
E20-027(C)	27/64"	0.402 - 0.422"
E20-028(C)	7/16"	0.418 - 0.438"
E20-029(C)	29/64"	0.433 - 0.453"
E20-030(C)	15/32"	0.449 - 0.469"
E20-031(C)	31/64"	0.465 - 0.484"
E20-032(C)	1/2"	0.48 - 0.5"

METRIC COOLANT-THRU

Part Number	Size	Collapse Range
E20-196(C)	5.0mm	4.9 - 5mm
E20-216(C)	5.5mm	5.4 - 5.5mm
E20-236(C)	6.0mm	5.5 - 6mm
E20-255(C)	6.5mm	6 - 6.5mm
E20-275(C)	7.0mm	6.5 - 7mm
E20-295(C)	7.5mm	7 - 7.5mm
E20-314(C)	8.0mm	7.5 - 8mm
E20-334(C)	8.5mm	8 - 8.5mm
E20-354(C)	9.0mm	8.5 - 9mm
E20-374(C)	9.5mm	9 - 9.5mm
E20-393(C)	10.0mm	9.5 - 10mm
E20-413(C)	10.5mm	10 - 10.5mm
E20-433(C)	11.0mm	10.5 - 11mm
E20-452(C)	11.5mm	11 - 11.5mm
E20-472(C)	12.0mm	11.5 - 12mm
E20-492(C)	12.5mm	12 - 12.5mm
E20-511(C)	13.0mm	12.5 - 13mm

ER20 COLLET SETS

E20-SET-15	15 Piece Set: 1/16" - 1/2" by 1/32nds
E20-SET-11-MM	11 Piece Set: 3.0mm - 13.0mm by 1mm

ER20 COOLANT COLLET SETS

E20-SET-12(C)	12 Piece Set: 5/32" - 1/2" by 1/32nds
E20-SET-17(C)-MM	17 Piece Set: 4.9mm - 13.0mm by 0.5mm

Note: See dimensional data for ER20 Collets on page 59.

ER25 COLLETS



Precision Standard

Precision slots allow for even distribution of clamping pressure and minimal run out.

Size Range: 1/16 - 5/8"
(0.062 - 0.625")

Size Range: 2.0 - 16.0mm
(0.079 - 0.630")

INCH

Part Number	Size	Collapse Range
E25-004	1/16"	0.043 - 0.063"
E25-006	3/32"	0.074 - 0.094"
E25-008	1/8"	0.105 - 0.125"
E25-010	5/32"	0.136 - 0.156"
E25-012	3/16"	0.148 - 0.188"
E25-014	7/32"	0.179 - 0.219"
E25-016	1/4"	0.211 - 0.25"
E25-018	9/32"	0.242 - 0.281"
E25-020	5/16"	0.273 - 0.313"
E25-022	11/32"	0.304 - 0.344"
E25-024	3/8"	0.336 - 0.375"
E25-026	13/32"	0.367 - 0.406"
E25-028	7/16"	0.398 - 0.438"
E25-030	15/32"	0.429 - 0.469"
E25-032	1/2"	0.461 - 0.5"
E25-034	17/32"	0.492 - 0.531"
E25-036	9/16"	0.523 - 0.563"
E25-038	19/32"	0.554 - 0.594"
E25-040	5/8"	0.586 - 0.625"

METRIC

Part Number	Size	Collapse Range
E25-078	2.0mm	1.5 - 2mm
E25-118	3.0mm	2.5 - 3mm
E25-137	3.5mm	3 - 3.5mm
E25-157	4.0mm	3.5 - 4mm
E25-196	5.0mm	4 - 5mm
E25-236	6.0mm	5 - 6mm
E25-275	7.0mm	6 - 7mm
E25-314	8.0mm	7 - 8mm
E25-354	9.0mm	8 - 9mm
E25-393	10.0mm	9 - 10mm
E25-433	11.0mm	10 - 11mm
E25-452	11.5mm	10.5 - 11.5mm
E25-472	12.0mm	11 - 12mm
E25-511	13.0mm	12 - 13mm
E25-551	14.0mm	13 - 14mm
E25-570	14.5mm	13.5 - 14.5mm
E25-590	15.0mm	14 - 15mm
E25-629	16.0mm	15 - 16mm

ER25 COLLET SETS

E25-SET-19	19 Piece Set: 1/16" - 5/8" by 1/32nds
E25-SET-14-MM	14 Piece Set: 1.5mm - 16.0mm by 1mm

Note: See dimensional data for ER25 Collets on page 59.



Coolant-Thru

Our patented 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 1015 psi. Steel-sealed and mechanically sealed by design.

Size Range: 7/32 - 5/8"
(0.219 - 0.625")

Size Range: 6.0 - 16.0mm
(0.236 - 0.630")

INCH COOLANT-THRU

Part Number	Size	Collapse Range
E25-014(C)	7/32"	0.215 - 0.219"
E25-015(C)	15/64"	0.23 - 0.234"
E25-016(C)	1/4"	0.23 - 0.25"
E25-017(C)	17/64"	0.246 - 0.266"
E25-018(C)	9/32"	0.262 - 0.281"
E25-019(C)	19/64"	0.277 - 0.297"
E25-020(C)	5/16"	0.293 - 0.313"
E25-021(C)	21/64"	0.308 - 0.328"
E25-022(C)	11/32"	0.324 - 0.344"
E25-023(C)	23/64"	0.34 - 0.359"
E25-024(C)	3/8"	0.355 - 0.375"
E25-025(C)	25/64"	0.371 - 0.391"
E25-026(C)	13/32"	0.387 - 0.406"
E25-027(C)	27/64"	0.402 - 0.422"
E25-028(C)	7/16"	0.418 - 0.438"
E25-029(C)	29/64"	0.433 - 0.453"
E25-030(C)	15/32"	0.449 - 0.469"
E25-031(C)	31/64"	0.465 - 0.484"
E25-032(C)	1/2"	0.48 - 0.5"
E25-033(C)	33/64"	0.496 - 0.516"
E25-034(C)	17/32"	0.512 - 0.531"
E25-035(C)	35/64"	0.527 - 0.547"
E25-036(C)	9/16"	0.543 - 0.563"
E25-037(C)	37/64"	0.558 - 0.578"
E25-038(C)	19/32"	0.574 - 0.594"
E25-039(C)	39/64"	0.59 - 0.609"
E25-040(C)	5/8"	0.605 - 0.625"

METRIC COOLANT-THRU

Part Number	Size	Collapse Range
E25-236(C)	6.0mm	5.5 - 6mm
E25-255(C)	6.5mm	6 - 6.5mm
E25-275(C)	7.0mm	6.5 - 7mm
E25-295(C)	7.5mm	7 - 7.5mm
E25-314(C)	8.0mm	7.5 - 8mm
E25-334(C)	8.5mm	8 - 8.5mm
E25-354(C)	9.0mm	8.5 - 9mm
E25-374(C)	9.5mm	9 - 9.5mm
E25-393(C)	10.0mm	9.5 - 10mm
E25-413(C)	10.5mm	10 - 10.5mm
E25-433(C)	11.0mm	10.5 - 11mm
E25-452(C)	11.5mm	11 - 11.5mm
E25-472(C)	12.0mm	11.5 - 12mm
E25-492(C)	12.5mm	12 - 12.5mm
E25-511(C)	13.0mm	12.5 - 13mm
E25-531(C)	13.5mm	13 - 13.5mm
E25-551(C)	14.0mm	13.5 - 14mm
E25-570(C)	14.5mm	14 - 14.5mm
E25-590(C)	15.0mm	14.5 - 15mm
E25-610(C)	15.5mm	15 - 15.5mm
E25-629(C)	16.0mm	15.5 - 16mm

ER25 COOLANT COLLET SETS

E25-SET-13(C)	13 Piece Set: 1/4" - 5/8" by 1/32nds
E25-SET-21(C)-MM	21 Piece Set: 5.5mm - 16.0mm by 0.5mm

ER COLLET CHUCKS



ER32 COLLETS



Precision Standard

Precision slots allow for even distribution of clamping pressure and minimal run out.

Size Range: 1/8" - 25/32"
(0.125 - 0.781")

Size Range: 3.0 - 20.0mm
(0.118 - 0.787")

INCH

Part Number	Size	Collapse Range
E32-008	1/8"	0.105 - 0.125"
E32-010	5/32"	0.136 - 0.156"
E32-012	3/16"	0.148 - 0.188"
E32-014	7/32"	0.179 - 0.219"
E32-016	1/4"	0.211 - 0.25"
E32-018	9/32"	0.242 - 0.281"
E32-020	5/16"	0.273 - 0.313"
E32-022	11/32"	0.304 - 0.344"
E32-024	3/8"	0.336 - 0.375"
E32-026	13/32"	0.367 - 0.406"
E32-028	7/16"	0.398 - 0.438"
E32-030	15/32"	0.429 - 0.469"
E32-032	1/2"	0.461 - 0.5"
E32-034	17/32"	0.492 - 0.531"
E32-036	9/16"	0.523 - 0.563"
E32-038	19/32"	0.554 - 0.594"
E32-040	5/8"	0.586 - 0.625"
E32-042	21/32"	0.617 - 0.656"
E32-044	11/16"	0.648 - 0.688"
E32-046	23/32"	0.679 - 0.719"
E32-048	3/4"	0.711 - 0.75"
E32-050	25/32"	0.742 - 0.781"

METRIC

Part Number	Size	Collapse Range
E32-118	3.0mm	2.5 - 3mm
E32-137	3.5mm	3 - 3.5mm
E32-157	4.0mm	3.5 - 4mm
E32-196	5.0mm	4 - 5mm
E32-236	6.0mm	5 - 6mm
E32-275	7.0mm	6 - 7mm
E32-314	8.0mm	7 - 8mm
E32-354	9.0mm	8 - 9mm
E32-393	10.0mm	9 - 10mm
E32-433	11.0mm	10 - 11mm
E32-452	11.5mm	10.5 - 11.5mm
E32-472	12.0mm	11 - 12mm
E32-511	13.0mm	12 - 13mm
E32-551	14.0mm	13 - 14mm
E32-590	15.0mm	14 - 15mm
E32-629	16.0mm	15 - 16mm
E32-669	17.0mm	16 - 17mm
E32-688	17.5mm	16.5 - 17.5mm
E32-708	18.0mm	17 - 18mm
E32-748	19.0mm	18 - 19mm
E32-767	19.5mm	18.5 - 19.5mm
E32-787	20.0mm	19 - 20mm

ER32 COLLET SETS

E32-SET-21	21 Piece Set: 1/8" - 3/4" by 1/32nds
E32-SET-18-MM	18 Piece Set: 1.5mm - 20.0mm by 1.0mm

Note: See dimensional data for ER32 Collets on page 59.



Coolant-Thru

Our patented 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 1015 psi. Steel-sealed and mechanically sealed by design.

Size Range: 1/4 - 25/32"
(0.250 - 0.781")

Size Range: 7.5 - 20.0mm
(0.394 - 0.295")

INCH COOLANT-THRU

Part Number	Size	Collapse Range
E32-016(C)	1/4"	0.246 - 0.25"
E32-017(C)	17/64"	0.262 - 0.266"
E32-018(C)	9/32"	0.277 - 0.281"
E32-019(C)	19/64"	0.293 - 0.297"
E32-020(C)	5/16"	0.308 - 0.313"
E32-021(C)	21/64"	0.308 - 0.328"
E32-022(C)	11/32"	0.324 - 0.344"
E32-023(C)	23/64"	0.34 - 0.359"
E32-024(C)	3/8"	0.355 - 0.375"
E32-025(C)	25/64"	0.371 - 0.391"
E32-026(C)	13/32"	0.387 - 0.406"
E32-027(C)	27/64"	0.402 - 0.422"
E32-028(C)	7/16"	0.418 - 0.438"
E32-029(C)	29/64"	0.433 - 0.453"
E32-030(C)	15/32"	0.449 - 0.469"
E32-031(C)	31/64"	0.465 - 0.484"
E32-032(C)	1/2"	0.48 - 0.5"
E32-033(C)	33/64"	0.496 - 0.516"
E32-034(C)	17/32"	0.512 - 0.531"
E32-035(C)	35/64"	0.527 - 0.547"
E32-036(C)	9/16"	0.543 - 0.563"
E32-037(C)	37/64"	0.558 - 0.578"
E32-038(C)	19/32"	0.574 - 0.594"
E32-039(C)	39/64"	0.59 - 0.609"
E32-040(C)	5/8"	0.605 - 0.625"
E32-041(C)	41/64"	0.621 - 0.641"
E32-042(C)	21/32"	0.637 - 0.656"
E32-043(C)	43/64"	0.652 - 0.672"
E32-044(C)	11/16"	0.668 - 0.688"
E32-045(C)	45/64"	0.683 - 0.703"
E32-046(C)	23/32"	0.699 - 0.719"
E32-047(C)	47/64"	0.715 - 0.734"
E32-048(C)	3/4"	0.73 - 0.75"
E32-049(C)	49/64"	0.746 - 0.766"
E32-050(C)	25/32"	0.762 - 0.781"

METRIC COOLANT-THRU

Part Number	Size	Collapse Range
E32-294(C)	7.5mm	7.4 - 7.5mm
E32-314(C)	8.0mm	7.9 - 8mm
E32-354(C)	9.0mm	8.5 - 9mm
E32-364(C)	9.25mm	8.75 - 9.25mm
E32-374(C)	9.5mm	9 - 9.5mm
E32-393(C)	10.0mm	9.5 - 10mm
E32-413(C)	10.5mm	10 - 10.5mm
E32-433(C)	11.0mm	10.5 - 11mm
E32-452(C)	11.5mm	11 - 11.5mm
E32-472(C)	12.0mm	11.5 - 12mm
E32-492(C)	12.5mm	12 - 12.5mm
E32-511(C)	13.0mm	12.5 - 13mm
E32-531(C)	13.5mm	13 - 13.5mm
E32-551(C)	14.0mm	13.5 - 14mm
E32-561(C)	14.25mm	13.75 - 14.25mm
E32-570(C)	14.5mm	14 - 14.5mm
E32-590(C)	15.0mm	14.5 - 15mm
E32-610(C)	15.5mm	15 - 15.5mm
E32-629(C)	16.0mm	15.5 - 16mm
E32-649(C)	16.5mm	16 - 16.5mm
E32-669(C)	17.0mm	16.5 - 17mm
E32-688(C)	17.5mm	17 - 17.5mm
E32-708(C)	18.0mm	17.5 - 18mm
E32-728(C)	18.5mm	18 - 18.5mm
E32-748(C)	19.0mm	18.5 - 19mm
E32-767(C)	19.5mm	19 - 19.5mm
E32-787(C)	20.0mm	19.5 - 20mm

ER32 COOLANT COLLET SETS

E32-SET-17(C)	17 Piece Set: 1/4" - 3/4" by 1/32nds
E32-SET-21(C)-MM	21 Piece Set: 9.5mm - 20.0mm by 0.5mm

ER40 COLLETS



Precision Standard

Precision slots allow for even distribution of clamping pressure and minimal run out.

Size Range: 5/32 - 1"
(0.156 - 1.000")

Size Range: 4.0 - 26.0mm
(0.157 - 1.024")

INCH

Part Number	Size	Collapse Range
E40-010	5/32"	0.136 - 0.156"
E40-012	3/16"	0.148 - 0.188"
E40-014	7/32"	0.179 - 0.219"
E40-016	1/4"	0.211 - 0.25"
E40-018	9/32"	0.242 - 0.281"
E40-020	5/16"	0.273 - 0.313"
E40-022	11/32"	0.304 - 0.344"
E40-024	3/8"	0.336 - 0.375"
E40-026	13/32"	0.367 - 0.406"
E40-028	7/16"	0.398 - 0.438"
E40-030	15/32"	0.429 - 0.469"
E40-032	1/2"	0.461 - 0.5"
E40-034	17/32"	0.492 - 0.531"
E40-036	9/16"	0.523 - 0.563"
E40-038	19/32"	0.554 - 0.594"
E40-040	5/8"	0.586 - 0.625"
E40-042	21/32"	0.617 - 0.656"
E40-044	11/16"	0.648 - 0.688"
E40-046	23/32"	0.679 - 0.719"
E40-048	3/4"	0.711 - 0.75"
E40-050	25/32"	0.742 - 0.781"
E40-052	13/16"	0.773 - 0.813"
E40-054	27/32"	0.804 - 0.844"
E40-056	7/8"	0.836 - 0.875"
E40-058	29/32"	0.867 - 0.906"
E40-060	15/16"	0.898 - 0.938"
E40-062	31/32"	0.929 - 0.969"
E40-064	1"	0.961 - 1"

METRIC

Part Number	Size	Collapse Range
E40-157	4.0mm	3.5 - 4mm
E40-196	5.0mm	4 - 5mm
E40-216	5.5mm	4.5 - 5.5mm
E40-236	6.0mm	5 - 6mm
E40-255	6.5mm	5.5 - 6.5mm
E40-275	7.0mm	6 - 7mm
E40-295	7.5mm	6.5 - 7.5mm
E40-314	8.0mm	7 - 8mm
E40-334	8.5mm	7.5 - 8.5mm
E40-354	9.0mm	8 - 9mm
E40-374	9.5mm	8.5 - 9.5mm
E40-393	10.0mm	9 - 10mm
E40-413	10.5mm	9.5 - 10.5mm
E40-433	11.0mm	10 - 11mm
E40-452	11.5mm	10.5 - 11.5mm
E40-472	12.0mm	11 - 12mm
E40-492	12.5mm	11.5 - 12.5mm
E40-511	13.0mm	12 - 13mm
E40-531	13.5mm	12.5 - 13.5mm
E40-551	14.0mm	13 - 14mm
E40-570	14.5mm	13.5 - 14.5mm
E40-590	15.0mm	14 - 15mm
E40-610	15.5mm	14.5 - 15.5mm
E40-629	16.0mm	15 - 16mm
E40-649	16.5mm	15.5 - 16.5mm
E40-669	17.0mm	16 - 17mm
E40-688	17.5mm	16.5 - 17.5mm
E40-708	18.0mm	17 - 18mm
E40-728	18.5mm	17.5 - 18.5mm
E40-748	19.0mm	18 - 19mm
E40-767	19.5mm	18.5 - 19.5mm
E40-787	20.0mm	19 - 20mm
E40-807	20.5mm	19.5 - 20.5mm
E40-826	21.0mm	20 - 21mm
E40-866	22.0mm	21 - 22mm
E40-905	23.0mm	22 - 23mm
E40-944	24.0mm	23 - 24mm
E40-984	25.0mm	24 - 25mm
E40-1003	25.5mm	24.5 - 25.5mm
E40-1023	26.0mm	25 - 26mm

ER40 COLLET SETS

E40-SET-25	25 Piece Set: 1/4" - 1" by 1/32nds
E40-SET-23-MM	23 Piece Set: 3.5mm - 26.0mm by 1.0mm

Note: See dimensional data for ER40 Collets on page 59.



Coolant-Thru

Our patented 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 1015 psi. Steel-sealed and mechanically sealed by design.

Size Range: 5/16 - 5/8"
(0.312 - 0.625")

Size Range: 10.0 - 26.0mm
(0.394 - 1.024")

INCH COOLANT-THRU

Part Number	Size	Collapse Range
E40-020(C)	5/16"	0.293 - 0.313"
E40-024(C)	3/8"	0.355 - 0.375"
E40-028(C)	7/16"	0.418 - 0.438"
E40-032(C)	1/2"	0.48 - 0.5"
E40-036(C)	9/16"	0.543 - 0.563"
E40-040(C)	5/8"	0.605 - 0.625"

METRIC COOLANT-THRU

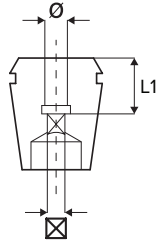
Part Number	Size	Collapse Range
E40-393(C)	10.0mm	9.5 - 10mm
E40-413(C)	10.5mm	10 - 10.5mm
E40-433(C)	11.0mm	10.5 - 11mm
E40-452(C)	11.5mm	11 - 11.5mm
E40-472(C)	12.0mm	11.5 - 12mm
E40-492(C)	12.5mm	12 - 12.5mm
E40-511(C)	13.0mm	12.5 - 13mm
E40-531(C)	13.5mm	13 - 13.5mm
E40-551(C)	14.0mm	13.5 - 14mm
E40-570(C)	14.5mm	14 - 14.5mm
E40-590(C)	15.0mm	14.5 - 15mm
E40-610(C)	15.5mm	15 - 15.5mm
E40-629(C)	16.0mm	15.5 - 16mm
E40-649(C)	16.5mm	16 - 16.5mm
E40-669(C)	17.0mm	16.5 - 17mm
E40-688(C)	17.5mm	17 - 17.5mm
E40-708(C)	18.0mm	17.5 - 18mm
E40-728(C)	18.5mm	18 - 18.5mm
E40-748(C)	19.0mm	18.5 - 19mm
E40-767(C)	19.5mm	19 - 19.5mm
E40-787(C)	20.0mm	19.5 - 20mm
E40-807(C)	20.5mm	20 - 20.5mm
E40-826(C)	21.0mm	20.5 - 21mm
E40-846(C)	21.5mm	21 - 21.5mm
E40-866(C)	22.0mm	21.5 - 22mm
E40-885(C)	22.5mm	22 - 22.5mm
E40-905(C)	23.0mm	22.5 - 23mm
E40-925(C)	23.5mm	23 - 23.5mm
E40-944(C)	24.0mm	23.5 - 24mm
E40-964(C)	24.5mm	24 - 24.5mm
E40-984(C)	25.0mm	24.5 - 25mm
E40-1003(C)	25.5mm	25 - 25.5mm
E40-1023(C)	26.0mm	25.5 - 26mm

ER40 COOLANT COLLET SETS

E40-SET-6(C)	6 Piece Set: 5/16" - 5/8" by 1/32nds
E40-SET-33(C)-MM	33 Piece Set: 10.0mm - 26.0mm by 0.5mm

ER COLLET CHUCKS

ER TAP COLLETS



ER Tap Collets feature a unique design that incorporates an internal square drive with our popular ER Series Collets. The square drive matches the tap square, providing a tight fit for all rigid tapping applications.

Note: Diameter and Square size are in accordance with U.S. Standard Taps.

Part Number	ER Series	Tap Inch Style	Tap Metric Size	L1 (mm)	ø	⊠
ET16-138	ER16	-	M3, M5	18	0.138"	0.106"
ET16-157	ER16	-	M3.5	19	0.157"	0.118"
ET16-168	ER16	#8, 5/32"	M4	15	0.168"	0.131"
ET16-177	ER16	-	M4, M6	18	0.177"	0.134"
ET16-194	ER16	#10, 3/16"	M4.5, M5	15	0.194"	0.152"
ET16-197	ER16	-	M5	18	0.197"	0.157"
ET16-220	ER16	#12, 7/32"	-	15	0.220"	0.165"
ET16-236	ER16	-	M5, M6, M8	18	0.236"	0.193"
ET16-255	ER16	#14, 1/4"	M6, M6.5	22	0.255"	0.191"
ET16-275	ER16	-	M10	18	0.276"	0.217"
ET16-315	ER16	-	M8, M10	22	0.315"	0.244"
ET20-138	ER20	-	M3, M5	20	0.138"	0.106"
ET20-157	ER20	-	M3.5	18	0.157"	0.118"
ET20-168	ER20	#8, 5/32"	M4	15	0.168"	0.131"
ET20-177	ER20	-	M4, M6	18	0.177"	0.134"
ET20-194	ER20	#10, 3/16"	M4.5, M5	15	0.194"	0.152"
ET20-197	ER20	-	M5	18	0.197"	0.157"
ET20-220	ER20	#12, 7/32"	-	15	0.220"	0.165"
ET20-236	ER20	-	M6	20	0.236"	0.193"
ET20-255	ER20	#14, 1/4"	M6, M6.5	20	0.255"	0.191"
ET20-275	ER20	-	M10	18	0.276"	0.217"
ET20-315	ER20	-	M8, M10	22	0.315"	0.244"
ET20-318	ER20	5/16"	M7, M6.5, M8	20	0.318"	0.238"
ET20-323	ER20	7/16"	-	20	0.323"	0.242"
ET20-354	ER20	-	M12	22	0.354"	0.276"
ET20-367	ER20	1/2"	M12, M12.5	25	0.367"	0.275"
ET20-381	ER20	3/8"	M10	20	0.381"	0.286"
ET20-394	ER20	-	M10	22	0.394"	0.315"
ET25-138	ER25	-	M3, M5	18	0.138"	0.106"
ET25-157	ER25	-	M3.5	18	0.157"	0.118"
ET25-168	ER25	#8, 5/32"	M4	15	0.168"	0.131"
ET25-177	ER25	-	M4, M6	18	0.177"	0.134"
ET25-194	ER25	#10, 3/16"	M4.5, M5	15	0.194"	0.152"
ET25-197	ER25	-	M5	18	0.197"	0.157"
ET25-220	ER25	#12, 7/32"	-	15	0.220"	0.165"
ET25-236	ER25	-	M5, M6, M8	22	0.236"	0.193"
ET25-255	ER25	#14, 1/4"	M6, M6.5	20	0.255"	0.191"
ET25-275	ER25	-	M10	22	0.276"	0.217"
ET25-315	ER25	-	M8, M10	22	0.315"	0.244"
ET25-318	ER25	5/16"	M7, M6.5, M8	20	0.318"	0.238"
ET25-323	ER25	7/16"	-	20	0.323"	0.242"
ET25-354	ER25	-	M12	22	0.354"	0.276"
ET25-367	ER25	1/2"	M12, M12.5	25	0.367"	0.275"
ET25-381	ER25	3/8"	M10	20	0.381"	0.286"
ET25-394	ER25	-	M10	25	0.394"	0.315"
ET25-429	ER25	9/16"	M14	25	0.429"	0.322"
ET25-433	ER25	-	M14	25	0.433"	0.354"
ET25-437	ER25	1/8" NPT(L)	-	18	0.437"	0.328"
ET25-472	ER25	-	M16	25	0.472"	0.354"
ET25-480	ER25	5/8"	M16	25	0.480"	0.360"

ER TAP COLLETS (CONTINUED)

ER COLLET CHUCKS

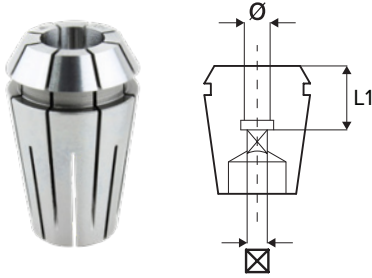
Part Number	ER Series	Tap Inch Style	Tap Metric Size	L1 (mm)	ø	⊠
ET32-157	ER32	-	M3.5	18	0.157"	0.118"
ET32-168	ER32	#8, 5/32"	M4	15	0.168"	0.131"
ET32-177	ER32	-	M4, M6	18	0.177"	0.134"
ET32-194	ER32	#10, 3/16"	M4.5, M5	15	0.194"	0.152"
ET32-197	ER32	-	M5	18	0.197"	0.157"
ET32-220	ER32	#12, 7/32"	-	15	0.220"	0.165"
ET32-236	ER32	-	M5, M6, M8	18	0.236"	0.193"
ET32-255	ER32	#14, 1/4"	M6, M6.5	20	0.255"	0.191"
ET32-275	ER32	-	M10	23	0.276"	0.217"
ET32-315	ER32	-	M8, M10	22	0.315"	0.244"
ET32-318	ER32	5/16"	M7, M6.5, M8	20	0.318"	0.238"
ET32-323	ER32	7/16"	-	20	0.323"	0.242"
ET32-354	ER32	-	M12	23	0.354"	0.276"
ET32-367	ER32	1/2"	M12, M12.5	25	0.367"	0.275"
ET32-381	ER32	3/8"	M10	20	0.381"	0.286"
ET32-394	ER32	-	M10	25	0.394"	0.315"
ET32-429	ER32	9/16"	M14	25	0.429"	0.322"
ET32-433	ER32	-	M14	25	0.433"	0.354"
ET32-437	ER32	1/8" NPT(L)	-	18	0.437"	0.328"
ET32-472	ER32	-	M16	25	0.472"	0.354"
ET32-480	ER32	5/8"	M16	25	0.480"	0.360"
ET32-542	ER32	11/16"	M18	30	0.542"	0.406"
ET32-551	ER32	-	M18	25	0.551"	0.433"
ET32-562	ER32	1/4" NPT	-	18	0.562"	0.421"
ET32-590	ER32	3/4"	-	30	0.590"	0.442"
ET32-630	ER32	-	M20	25	0.630"	0.472"
ET32-652	ER32	13/16"	M20	30	0.652"	0.489"
ET32-709	ER32	-	M22, M24	25	0.709"	0.571"
ET32-M12	ER32	-	M12	22	0.335"	0.256"
ET40-236	ER40	-	M5, M6, M8	18	0.236"	0.193"
ET40-255	ER40	#14, 1/4"	M6, M6.5	25	0.255"	0.191"
ET40-275	ER40	-	M10	18	0.276"	0.217"
ET40-315	ER40	-	M8, M10	22	0.315"	0.244"
ET40-318	ER40	5/16"	M7, M6.5, M8	25	0.318"	0.238"
ET40-323	ER40	7/16"	-	25	0.323"	0.242"
ET40-354	ER40	-	M12	22.5	0.354"	0.276"
ET40-367	ER40	1/2"	M12, M12.5	25	0.367"	0.275"
ET40-381	ER40	3/8"	M10	25	0.381"	0.286"
ET40-394	ER40	-	M10	25	0.394"	0.315"
ET40-429	ER40	9/16"	M14	25	0.429"	0.322"
ET40-433	ER40	-	M14	25	0.433"	0.354"
ET40-437	ER40	1/8" NPT(L)	-	18	0.437"	0.328"
ET40-472	ER40	-	M16	25	0.472"	0.354"
ET40-480	ER40	5/8"	M16	25	0.480"	0.360"
ET40-542	ER40	11/16"	M18	30	0.542"	0.406"
ET40-551	ER40	-	M18	25	0.551"	0.433"
ET40-562	ER40	1/4" NPT	-	18	0.562"	0.421"
ET40-590	ER40	3/4"	-	30	0.590"	0.442"
ET40-630	ER40	-	M20	25	0.630"	0.472"
ET40-652	ER40	13/16"	M20	30	0.652"	0.489"
ET40-687	ER40	1/2" NPT	-	18	0.687"	0.515"
ET40-697	ER40	7/8"	-	30	0.697"	0.523"
ET40-700	ER40	3/8" NPT	-	18	0.700"	0.531"
ET40-709	ER40	-	M22, M24	25	0.709"	0.571"
ET40-760	ER40	15/16"	M24	35	0.760"	0.570"
ET40-787	ER40	-	M27, M30	28	0.787"	0.630"
ET40-800	ER40	1"	M25	35	0.800"	0.600"

ER TAP COLLET SETS

ET16-SET-04	4 Piece Set
ET20-SET-08	8 Piece Set
ET25-SET-10	20 Piece Set
ET32-SET-15	15 Piece Set
ET40-SET-17	17 Piece Set

ER COLLET CHUCKS

ER TAP COOLANT COLLETS



Lyndex-Nikken has now combined the versatility of our ER Tapping Collets with the popularity of our Coolant Collets to create our patented ER Coolant Tap Collets. Steel-sealed and mechanically sealed by design.

Note: Diameter and Square size are in accordance with U.S. Standard Taps.

Part Number	ER Series	Tap Inch Style	Tap Metric Size	L1 (mm)	Ø	⊠
ET16-255(C)	ER16	#14, 1/4"	M6, M6.5	22	0.255"	0.191"
ET16-318(C)	ER16	5/16"	M7, M6.5, M8	22	0.318"	0.238"
ET20-255(C)	ER20	#14, 1/4"	M6, M6.5	25	0.255"	0.191"
ET20-318(C)	ER20	5/16"	M7, M6.5, M8	25	0.318"	0.238"
ET20-323(C)	ER20	7/16"	-	25	0.323"	0.242"
ET20-367(C)	ER20	1/2"	M12, M12.5	25	0.367"	0.275"
ET20-381(C)	ER20	3/8"	M10	25	0.381"	0.286"
ET25-255(C)	ER25	#14, 1/4"	M6, M6.5	25	0.255"	0.191"
ET25-318(C)	ER25	5/16"	M7, M6.5, M8	25	0.318"	0.238"
ET25-323(C)	ER25	7/16"	-	25	0.323"	0.242"
ET25-367(C)	ER25	1/2"	M12, M12.5	25	0.367"	0.275"
ET25-381(C)	ER25	3/8"	M10	27	0.381"	0.286"
ET25-429(C)	ER25	9/16"	M14	25	0.429"	0.322"
ET25-480(C)	ER25	5/8"	M16	30	0.480"	0.360"
ET25-M8(C)	ER25	-	M8, M10	22	0.315"	0.244"
ET32-255(C)	ER32	#14, 1/4"	M6, M6.5	30	0.255"	0.191"
ET32-318(C)	ER32	5/16"	M7, M6.5, M8	25	0.318"	0.238"
ET32-323(C)	ER32	7/16"	-	25	0.323"	0.242"
ET32-354(C)	ER32	-	M12	23	0.354"	0.276"
ET32-367(C)	ER32	1/2"	M12, M12.5	25	0.367"	0.275"
ET32-381(C)	ER32	3/8"	M10	27	0.381"	0.286"
ET32-429(C)	ER32	9/16"	M14	25	0.429"	0.322"
ET32-433(C)	ER32	-	M14	25	0.433"	0.354"
ET32-480(C)	ER32	5/8"	M16	30	0.480"	0.360"
ET32-542(C)	ER32	11/16"	M18	30	0.542"	0.406"
ET32-590(C)	ER32	3/4"	-	35	0.590"	0.442"
ET32-652(C)	ER32	13/16"	M20	35	0.652"	0.489"
ET40-323(C)	ER40	7/16"	-	35	0.323"	0.242"
ET40-354(C)	ER40	-	M12	22.5	0.354"	0.276"
ET40-367(C)	ER40	1/2"	M12, M12.5	25	0.367"	0.275"
ET40-381(C)	ER40	3/8"	M10	27	0.381"	0.286"
ET40-429(C)	ER40	9/16"	M14	25	0.429"	0.322"
ET40-433(C)	ER40	-	M14	25	0.433"	0.354"
ET40-480(C)	ER40	5/8"	M16	30	0.480"	0.360"
ET40-542(C)	ER40	11/16"	M18	30	0.542"	0.406"
ET40-590(C)	ER40	3/4"	-	35	0.590"	0.442"
ET40-652(C)	ER40	13/16"	M20	35	0.652"	0.489"
ET40-697(C)	ER40	7/8"	M22	35	0.697"	0.523"
ET40-760(C)	ER40	15/16"	M24	38	0.760"	0.570"
ET40-800(C)	ER40	1"	M25	38	0.800"	0.600"

Note: Seals up to a maximum coolant pressure of 1015 psi.

ER COLLET CHUCK ACCESSORIES

ER COLLET RACK

Part Number	Description
RACK-ER11/SK6	ER11 Collet Rack, 35 collet capacity
RACK-ER16/SK10	ER16 Collet Rack, 24 collet capacity
RACK-ER20/TAP	ER20 Collet Rack, 24 collet capacity
RACK-180DA/SK16/ER25	ER25 Collet Rack, 30 collet capacity
RACK-ER32/2TAP	ER32 Collet Rack, 24 collet capacity



REPLACEMENT NUT FOR ER COLLET CHUCK

Part Number	Description
08-NANUT	ER8 Nut
E08-NUT-MINI	ER8 Mini Nut
E11-NUT	ER11 Hex Nut
E11-NUT-MINI	ER11 Nut Mini
E16-NUT	ER16 Nut
E16-NUT-G	ER16 Nut Smooth
E16-NUT-S	ER16 Nut Hex
E20-NUT	ER20 Nut
E20-NUT-G	ER20 Nut Smooth
E20-NUT-S	ER20 Nut Solid
E25-NUT	ER25 Nut
E25-NUT-G	ER25 Nut Smooth
E25-NUT-S	ER25 Nut Solid
E32-NUT	ER32 Nut
E32-NUT-G	ER32 Nut Smooth
E32-NUT-S	ER32 Nut Solid
E40-NUT	ER40 Nut
E40-NUT-G	ER40 Nut Smooth
E40-NUT-S	ER40 Nut Solid
E50-NUT-S	ER50 Nut Solid
NUT-ER32I	ER32 Nut Hi-Q External Thread



SPANNER WRENCH FOR ER COLLET CHUCK NUT

Part Number	Description
08-NASPAN	Wrench for ER8 Chuck Nut
011-HEX	Wrench for ER11 Chuck Nut
016-SPAN	Wrench for ER16 Chuck Nut
020-SPAN	Wrench for ER20 Chuck Nut
025-SPAN	Wrench for ER25 Chuck Nut
032-SPAN	Wrench for ER32 Chuck Nut
040-SPAN	Wrench for ER40 Chuck Nut
FK-10	Wrench for ER50 Chuck Nut



ER COLLET CHUCKS

ER COLLET CHUCK ACCESSORIES

TORQUE WRENCHES

Part Number	Description
TQW-025	Torque Wrench 5-75 Ft. Lbs.
TQW-200	Torque Wrench 30-150 Ft. Lbs.



TORQUE WRENCH (1 PIECE CONSTRUCTION)

Part Number	Description
TQWS-E08M	Used on E08-NUT-MINI
TQWS-E11M	Used on E11-NUT-MINI
TQWS-E16M	Used on E16-NUT-MINI
TQWS-E20M	Used on E20-NUT-MINI
TQWS-E25M	Used on E25-NUT-MINI

TORQUE WRENCH ATTACHMENTS

Part Number	Description	Torque Wrench	Wrench Handle (Non-Torque)
TQW-ER8NA	ER8 Attachment for 08-NANUT	TQW-025	TQW-HANDLE14X18
TQW-ER11HEX	ER11 Attachment for E11-NUT	TQW-025	TQW-HANDLE14X18
TQW-ER16/SK13(30)	ER16 Attachment for E16-NUT	TQW-025 or TQW-200	TQW-HANDLE14X18
TQW-ER16HEX	ER16 Attachment for E16-NUT-S	TQW-025 or TQW-200	TQW-HANDLE14X18
TQW-E16-G	ER16 Attachment for E16-NUT-G	TQW-025 or TQW-200	TQW-HANDLE14X18
TQW-ER20/TG50(35)	ER20 Attachment for E20-NUT	TQW-025 or TQW-200	TQW-HANDLE14X18
TQW-E20-G	ER20 Attachment for E20-NUT-G	TQW-025 or TQW-200	TQW-HANDLE14X18
TQW-ER25(40)	ER25 Attachment for E25-NUT	TQW-200	TQW-HANDLE14X18
TQW-E25-G	ER25 Attachment for E25-NUT-G	TQW-200	TQW-HANDLE14X18
TQW-ER32/SK20/TG75(50)	ER32 Attachment for E32-NUT	TQW-200	TQW-HANDLE14X18
TQW-E32-G	ER32 Attachment for E32-NUT-G	TQW-200	TQW-HANDLE14X18
TQW-ER40/C1(60)	ER40 Attachment for E40-NUT	TQW-200	TQW-HANDLE14X18
TQW-E40-G	ER40 Attachment for E40-NUT-G	TQW-200	TQW-HANDLE14X18

Note: (XX) Denotes nut diameter.

REPLACEMENT BACK UP SCREWS FOR ER COLLET CHUCK

Part Number	Description
ER08-SCREW(C)	ER8 Coolant-thru Backup Screws
ER11-SCREW(C)	ER11 Coolant-thru Backup Screws
ER16-SCREW(C)	ER16 Coolant-thru Backup Screws
ER20-SCREW(C)	ER20 Coolant-thru Backup Screws
ER25-SCREW(C)	ER25 Coolant-thru Backup Screws
ER32-SCREW(C)	ER32 Coolant-thru Backup Screws
ER40-SCREW(C)	ER40 Coolant-thru Backup Screws

Note: *ER11-3 used for E16-EXT-625 Collet Chuck Extension.



COOLANT TUBE WRENCHES FOR HSK/POLYGON HOLDERS

Part Number	Description
HSK40-WRENCH	Wrench for HSK40 Coolant Tube
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube
C3-WRENCH	Wrench for C3 Coolant Tube
C4-WRENCH	Wrench for C4 Coolant Tube
C5-WRENCH	Wrench for C5 Coolant Tube
C6-WRENCH	Wrench for C6 Coolant Tube
C8-WRENCH	Wrench for C8 Coolant Tube



COOLANT TUBES FOR HSK/POLYGON HOLDERS

Part Number	Description
HSK40-TUBE	HSK40 Coolant Tube
HSK63-TUBE	HSK63 Coolant Tube
HSK100-TUBE	HSK100 Coolant Tube
C3-TUBE	C3 Coolant Tube
C4-TUBE	C4 Coolant Tube
C5-TUBE	C5 Coolant Tube
C6-TUBE-1	C6 Coolant Tube
C8-TUBE	C8 Coolant Tube



Note: Coolant Tube Wrenches are needed to remove or install coolant tubes in HSK toolholders.

ADVANCED TOOLHOLDERS



THE TOOLS TO MAXIMIZE YOUR MANUFACTURING POTENTIAL

SK COLLET CHUCKS

LEAN, TOUGH AND EFFICIENT

- Narrow body design accesses tight spots.
- Applicable for all milling, drilling, reaming and rigid tapping applications.
- Two times more accurate than ER Collet Chucks, within 10 times better repeatability.
- Over 1 million SK Collet Chucks and 15 million SK collets sold worldwide.



VC COLLET CHUCKS

ULTRA PERFORMANCE

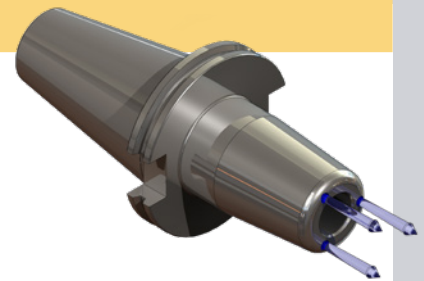
- Extremely precise with 0.00012" or less concentricity guarantee with any collet.
- Ideal for high-speed machining, thread milling, ultra precision reaming.
- Two times more accurate than ER Collet Chucks, within 10 times better repeatability.



SHRINK FIT HOLDERS

HIGH ACCURACY WITH OPTIMAL CLEARANCE

- Shrink fit holders provide minimal run out.
- Pre-balanced for up to 40,000 RPM.
- Excellent surface finish, extreme gripping and ideal for high-speed applications.
- Increase cutting tool life, material removal rate and workpiece accuracy.



VC COLLET CHUCKS



VC COLLET CHUCKS

VC COLLET CHUCKS



VC COLLET CHUCK FEATURES

ULTRA PERFORMANCE

Extremely Precise: 0.00012" or less concentricity guarantee with any collet

Extremely Efficient: Ideal for high-speed machining, thread milling, ultra precision reaming

Flexible: Covers sizes from 0.079" to 0.5"

Extremely Accurate: Double the accuracy over ER Collet Chucks, with ten times better repeatability

8° Versus 16° Collet Taper: Double the gripping power of ER Collet Chucks



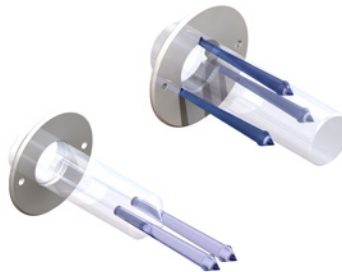
Coolant-Thru Disc

A perfect seal is formed between the nut and the coolant-thru disk. Ideal for coolant-thru tools.



Coolant-Thru Capabilities

Jet Coolant Splash with J-Type Nut



Slotted Disc

The jet coolant pressure creates a tornado effect, ensuring efficient swarf disposal.



VC COLLET CHUCKS



VC COLLET CHUCK FEATURES

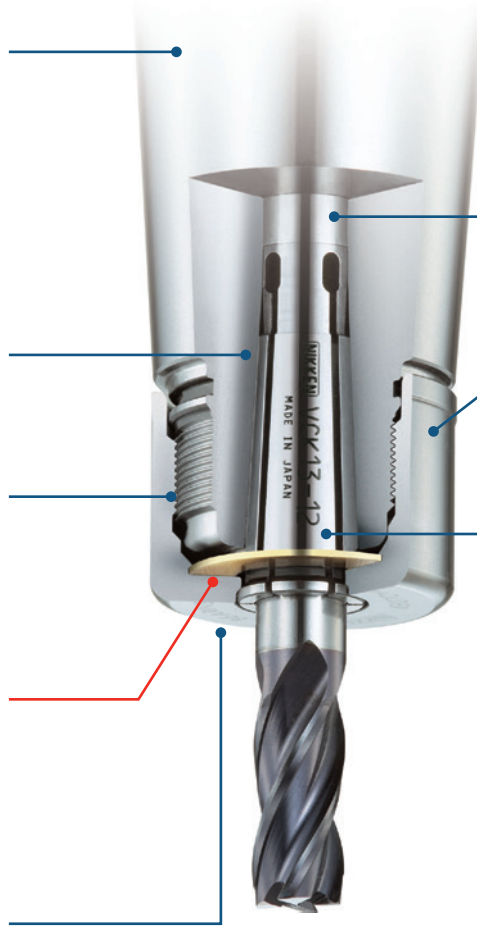
The thick wall design of the VC holder body improves cutting rigidity

8° internal taper collet for greater accuracy and clamping capability

The ground ion nitrided thread of collet chuck highly improves the torque and accuracy

TiN Bearing Nut
(Hardness: HV2,200)
US Patent 6923451
Reduces friction to minimize runout caused by collet twisting

Collet compression force is perpendicular to the centerline of collet bore maximizing runout accuracy and gripping strength



Ground pilot helps centralize the collet while giving additional length support on the cutting tool

Symmetrical and simple external nut design without notches for ultra high speed rotation

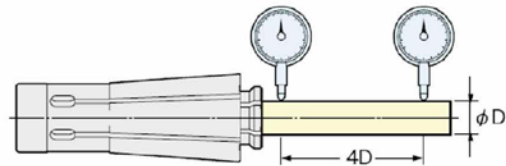
Extended Collet to minimize runout and to increase surface area contact of tooling

Easy, safe and reliable handling with GH wrench (see page 88)



High Runout Accuracy:

Within 0.00012" at 4 times the diameter of the cutting tool!
This produces better stability and improves surface finish and cutting tool life.



VC Collet Range:



VCK6: 2-6mm (1/8"-1/4")
VCK13: 3-12mm (1/8"-1/2")

VC Collet vs. Others:



VCK Collet
• Runout: 0.0001"
• 170N.m gripping power



ER Collet
• Runout: 0.0004"
• 80N.m gripping power



TG Collet
• Runout: 0.0003"
• 100N.m gripping power

CAT VC COLLET CHUCKS

FEATURES

- TiN Bearing Nut which considerably improves cutting rigidity and finish
- Extra thick body for aggressive milling
- High concentricity and repeatability
- Ideal for high-speed applications



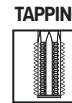
T.I.R.
<0.00012" at 4xD



Speed
Up to 30,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40

Part Number	Collet Size	Wrench	L (mm)	L	L1	L2	D	D1	Back-up Screw	Max. RPM	Fig.
CAT40-VC6-60U-IDU	VCK6	GH10	60	2.36"	0.99"	-	1.08"	1.75"	VCG6-8A	30K	2
CAT40-VC6-90U-IDU	VCK6	GH10	90	3.54"	0.87"	2.17"	1.08"	1.75"	VCG6-8A	30K	1
CAT40-VC6-120U-IDU	VCK6	GH10	120	4.72"	0.87"	3.35"	1.08"	1.75"	VCG6-8A	30K	1
CAT40-VC13-60U-IDU	VCK13	GH16	60	2.36"	1.14"	-	1.59"	1.75"	VCG13-15A	30K	2
CAT40-VC13-90U-IDU	VCK13	GH16	90	3.54"	1.10"	2.39"	1.59"	1.75"	VCG13-15A	30K	1
CAT40-VC13-120U-IDU	VCK13	GH16	120	4.72"	1.10"	3.65"	1.59"	1.75"	VCG13-15A	30K	1

Note: Wrenches are sold separately

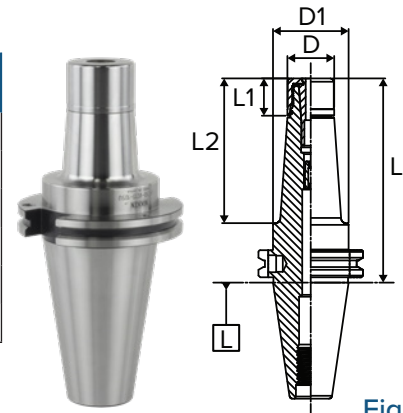


Fig. 1

CAT50

Part Number	Collet Size	Wrench	L (mm)	L	L1	L2	D	D1	Back-up Screw	Max. RPM	Fig.
CAT50-VC6-105U-IDU	VCK6	GH10	105	4.13"	0.87"	2.76"	1.08"	2.75"	VCG6-8A	20K	1
CAT50-VC13-105U-IDU	VCK13	GH16	105	4.13"	1.10"	2.76"	1.59"	2.75"	VCG13-15A	20K	1
CAT50-VC13-135U-IDU	VCK13	GH16	135	5.31"	1.10"	3.94"	1.59"	2.75"	VCG13-15A	20K	1
CAT50-VC13-165U-IDU	VCK13	GH16	165	6.50"	1.10"	5.12"	1.59"	2.75"	VCG13-15A	20K	1

Notes: Wrenches are sold separately.

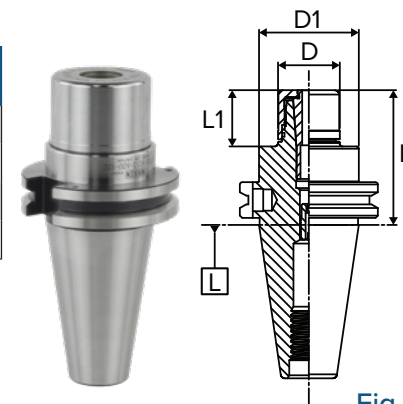
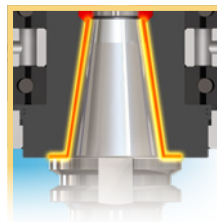


Fig. 2



Available in
TAPER PLUS
Dual-taper and flange contact

See Pages 84-85



TAPER PLUS COMBINING TAPER ACCURACY WITH FLANGE RIGIDITY!

- Outstanding Runout Accuracy for longer tool life
- Vibration Dampening for increased productivity
- High Rigidity for smooth and stable cutting



VCK Collets
Page 86



Nut Wrench
Page 88



Back-up Screw
Page 88



Coolant-thru Nut
Page 87

VC COLLET CHUCKS

BT VC COLLET CHUCKS

FEATURES

- TiN Bearing Nut which considerably improves cutting rigidity and finish
- Extra thick body for aggressive milling
- High concentricity and repeatability
- Ideal for high-speed applications



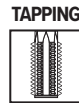
T.I.R.
<0.00012" at 4xD



Speed
Up to 40,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT30

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
BT30-VC6-45	VCK6	GH10	45	1.77"	0.91"	1.08"	1.08"	VCG6-8A	40K	1
BT30-VC6-60	VCK6	GH10	60	2.36"	0.87"	1.08"	1.25"	VCG6-8A	40K	2
BT30-VC6-90	VCK6	GH10	90	3.54"	0.87"	1.08"	1.31"	VCG6-8A	40K	2
BT30-VC13-60	VCK13	GH16	60	2.36"	1.10"	1.59"	1.62"	VCG13-15A	40K	2
BT30-VC13-90	VCK13	GH16	90	3.54"	1.10"	1.59"	1.63"	VCG13-15A	40K	2
BT30-VC13-120	VCK13	GH16	120	4.72"	1.10"	1.59"	1.67"	VCG13-15A	40K	2

Note: Wrenches are sold separately



Available in **TAPER PLUS+**
Dual-taper and flange contact

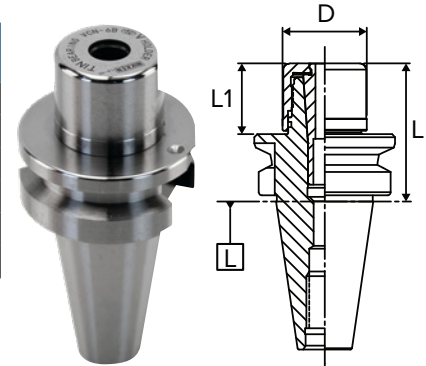


Fig. 3

BT40

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
BT40-VC6-60	VCK6	GH10	60	2.36"	0.87"	1.08"	1.18"	VCG6-8A	30K	2
BT40-VC6-90	VCK6	GH10	90	3.54"	0.87"	1.08"	1.29"	VCG6-8A	30K	2
BT40-VC6-120	VCK6	GH10	120	4.72"	0.87"	1.08"	1.45"	VCG6-8A	30K	2
BT40-VC13-60	VCK13	GH16	60	2.36"	1.30"	1.59"	1.59"	VCG13-15A	30K	1
BT40-VC13-90	VCK13	GH16	90	3.54"	1.10"	1.59"	1.75"	VCG13-15A	30K	2
BT40-VC13-120	VCK13	GH16	120	4.72"	1.10"	1.59"	1.91"	VCG13-15A	30K	2

Note: Wrenches are sold separately



Available in **TAPER PLUS+**
Dual-taper and flange contact

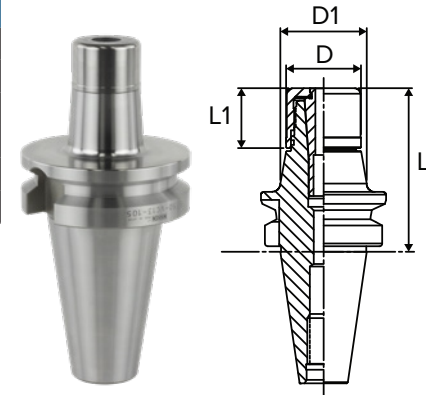


Fig. 4

BT50

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
BT50-VC6-105	VCK6	GH10	105	4.13"	0.87"	1.08"	1.30"	VCG6-8A	20K	2
BT50-VC6-135	VCK6	GH10	135	5.31"	0.87"	1.08"	1.46"	VCG6-8A	20K	2
BT50-VC6-165	VCK6	GH10	165	6.50"	0.87"	1.08"	1.63"	VCG6-8A	20K	2
BT50-VC13-105	VCK13	GH16	105	4.13"	1.10"	1.59"	1.76"	VCG13-15A	20K	2
BT50-VC13-135	VCK13	GH16	135	5.31"	1.10"	1.59"	1.92"	VCG13-15A	20K	2
BT50-VC13-165	VCK13	GH16	165	6.50"	1.10"	1.59"	2.09"	VCG13-15A	20K	2

Note: Wrenches are sold separately



VCK Collets
Page 86



Nut Wrench
Page 88



Back-up Screw
Page 88



Coolant-thru Nut
Page 87

HSK VC COLLET CHUCKS

FEATURES

- TiN Bearing Nut which considerably improves cutting rigidity and finish
- Extra thick body for aggressive milling
- High concentricity and repeatability
- Ideal for high-speed applications



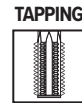
T.I.R.
<0.00012" at 4xD



Speed
Up to 40,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK40A

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
HSK40A-VC6-65	VCK6	GH10	65	2.56"	0.87"	1.08"	1.32"	VCG6-8A	40K	1
HSK40A-VC6-90	VCK6	GH10	90	3.54"	0.87"	1.08"	1.32"	VCG6-8A	40K	1
HSK40A-VC13-90	VCK13	GH16	90	3.54"	2.76"	1.59"	1.59"	VCG13-15A	40K	2
HSK40A-VC13-120	VCK13	GH16	120	4.72"	3.94"	1.59"	1.59"	VCG13-15A	40K	2

Note: Wrench, Coolant Tubes and Coolant Tube Wrenches are sold separately. See page 88 for more details.

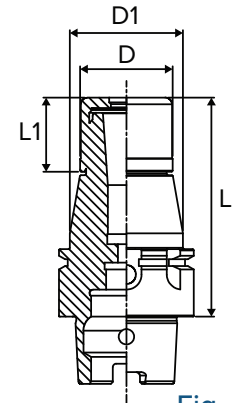


Fig. 5

HSK40E

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
HSK40E-VC6-65	VCK6	GH10	65	2.56"	0.87"	1.08"	1.34"	VCG6-8A	40K	1
HSK40E-VC6-90	VCK6	GH10	90	3.54"	0.87"	1.08"	1.34"	VCG6-8A	40K	1
HSK40E-VC13-90	VCK13	GH16	90	3.54"	2.76"	1.59"	1.59"	VCG13-15A	40K	2
HSK40E-VC13-120	VCK13	GH16	120	4.72"	3.94"	1.59"	1.59"	VCG13-15A	40K	2

Note: Wrench, Coolant Tubes and Coolant Tube Wrenches are sold separately. See page 88 for more details.

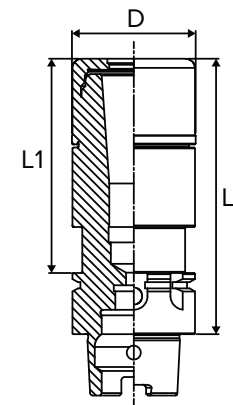


Fig. 6



VCK Collets
Page 86



Nut Wrench
Page 88



Back-up Screw
Page 88



Coolant-thru Nut
Page 87



Coolant Tube
Page 88

VC COLLET CHUCKS

HSK VC COLLET CHUCKS

FEATURES

- TiN Bearing Nut which considerably improves cutting rigidity and finish
- Extra thick body for aggressive milling
- High concentricity and repeatability
- Ideal for high-speed applications



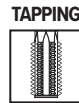
T.I.R.
<0.00012" at 4xD



Speed
Up to 30,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK63A

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
HSK63A-VC13-90-IDU	VCK13	GH16	90	3.54"	1.10"	1.59"	1.75"	VCG13-15A	30K	1

Note: Wrench, Coolant Tubes and Coolant Tube Wrenches are sold separately. See page 88 for more details.

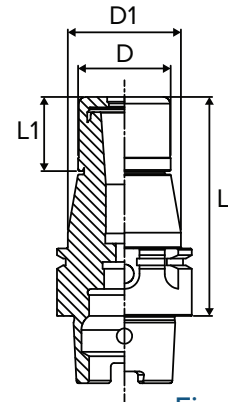


Fig. 5

HSK63F

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
HSK63F-VC6-65	VCK6	GH10	65	2.56"	1.54"	1.08"	1.08"	VCG6-8A	30K	2
HSK63F-VC6-90	VCK6	GH10	90	3.54"	0.87"	1.08"	1.29"	VCG6-8A	30K	1
HSK63F-VC6-120	VCK6	GH10	120	4.72"	0.87"	1.08"	1.46"	VCG6-8A	30K	1
HSK63F-VC13-90	VCK13	GH16	90	3.54"	1.10"	1.59"	1.75"	VCG13-15A	30K	1
HSK63F-VC13-120	VCK13	GH16	120	4.72"	1.10"	1.59"	1.92"	VCG13-15A	30K	1

Note: Wrench, Coolant Tubes and Coolant Tube Wrenches are sold separately. See page 88 for more details.

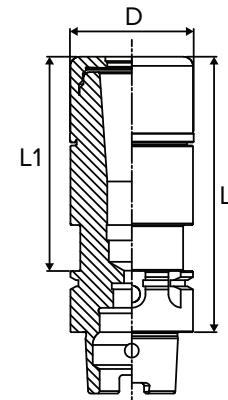


Fig. 6

HSK100A

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
HSK100A-VC13-105	VCK13	GH16	105	4.13"	1.10"	1.59"	1.81"	VCG6-8A	20K	1

Note: Wrench, Coolant Tubes and Coolant Tube Wrenches are sold separately. See page 88 for more details.



VCK Collets
Page 86



Nut Wrench
Page 88



Back-up Screw
Page 88

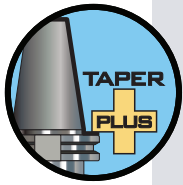


Coolant-thru Nut
Page 87



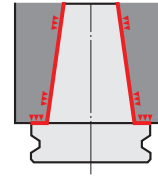
Coolant Tube
Page 88

TAPER PLUS CAT VC COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT40

Part Number	Collet Size	Wrench	L (mm)	L	L1	L2	D	D1	Back-up Screw	Max. RPM	Fig.
NCAT40-VC6-60U-IDU	VC6	GH10	60	2.36"	0.98"	-	1.08"	1.75"	VCG6-8A	30K	2
NCAT40-VC6-90U-IDU	VC6	GH10	90	3.54"	0.87"	2.17"	1.08"	1.75"	VCG6-8A	30K	1
NCAT40-VC13-60U-IDU	VC13	GH16	60	2.36"	1.14"	-	1.59"	1.75"	VCG13-15A	30K	2
NCAT40-VC13-90U-IDU	VC13	GH16	90	3.54"	1.10"	2.39"	1.59"	1.75"	VCG13-15A	30K	1
NCAT40-VC13-120U-IDU	VC13	GH16	120	4.72"	1.10"	3.65"	1.59"	1.75"	VCG13-15A	30K	1

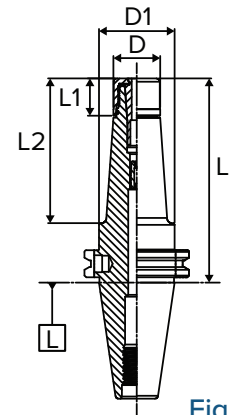


Fig. 1

TAPER PLUS - CAT50

Part Number	Collet Size	Wrench	L (mm)	L	L1	L2	D	D1	Back-up Screw	Max. RPM	Fig.
NCAT50-VC6-135U-IDU	VC6	GH10	135	5.31"	0.87"	3.94"	1.08"	2.75"	VCG6-8A	20K	1
NCAT50-VC6-165U-IDU	VC6	GH10	165	6.50"	0.87"	5.12"	1.08"	2.75"	VCG6-8A	20K	1
NCAT50-VC13-105U-IDU	VC13	GH16	105	4.13"	1.10"	2.76"	1.59"	2.75"	VCG13-15A	20K	1
NCAT50-VC13-135U-IDU	VC13	GH16	135	5.31"	1.10"	3.94"	1.59"	2.75"	VCG13-15A	20K	1
NCAT50-VC13-165U-IDU	VC13	GH16	165	6.50"	1.10"	5.12"	1.59"	2.75"	VCG13-15A	20K	1

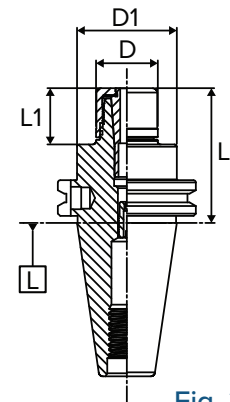


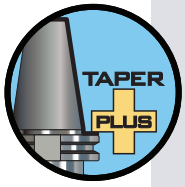
Fig. 2

Taper Plus Toolholders are interchangeable between Standard and Dual Face Contact spindles for greater flexibility!



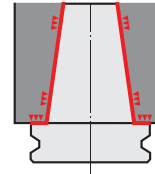
VC COLLET CHUCKS

TAPER PLUS BT VC COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - BT30

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
NBT30-VC6-45	VC6	GH10	45	1.77"	0.91"	1.08"	1.08"	VCG6-8A	40K	1
NBT30-VC6-60	VC6	GH10	60	2.36"	0.87"	1.08"	1.25"	VCG6-8A	40K	2
NBT30-VC6-90	VC6	GH10	90	3.54"	0.87"	1.08"	1.31"	VCG6-8A	40K	2
NBT30-VC13-60	VC13	GH16	60	2.36"	1.10"	1.59"	1.62"	VCG13-15A	40K	2
NBT30-VC13-90	VC13	GH16	90	3.54"	1.10"	1.59"	1.63"	VCG13-15A	40K	2
NBT30-VC13-120	VC13	GH16	120	4.72"	1.10"	1.59"	1.67"	VCG13-15A	40K	2

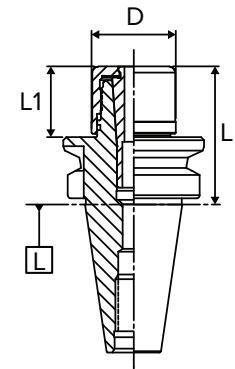


Fig. 3

TAPER PLUS - BT40

Part Number	Collet Size	Wrench	L (mm)	L	L1	D	D1	Back-up Screw	Max. RPM	Fig.
NBT40-VC6-60	VC6	GH10	60	2.36"	0.87"	1.08"	1.18"	VCG6-8A	30K	2
NBT40-VC6-90	VC6	GH10	90	3.54"	0.87"	1.08"	1.29"	VCG6-8A	30K	2
NBT40-VC6-120	VC6	GH10	120	4.72"	0.87"	1.08"	1.45"	VCG6-8A	30K	2
NBT40-VC6-150	VC6	GH10	150	5.91"	0.87"	1.08"	1.62"	VCG6-8A	30K	2
NBT40-VC13-60	VC13	GH16	60	2.36"	1.30"	1.59"	1.59"	VCG13-15A	30K	1
NBT40-VC13-90	VC13	GH16	90	3.54"	1.10"	1.59"	1.75"	VCG13-15A	30K	2
NBT40-VC13-120	VC13	GH16	120	4.72"	1.10"	1.59"	1.91"	VCG13-15A	30K	2
NBT40-VC13-150	VC13	GH16	150	5.91"	1.10"	1.59"	2.08"	VCG13-15A	30K	2

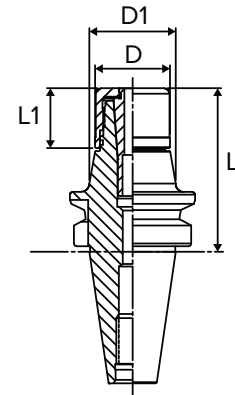


Fig. 4

Taper Plus Toolholders are interchangeable between Standard and Dual Face Contact spindles for greater flexibility!



VCK Collets
Page 86



Nut Wrench
Page 88



Back-up Screw
Page 88

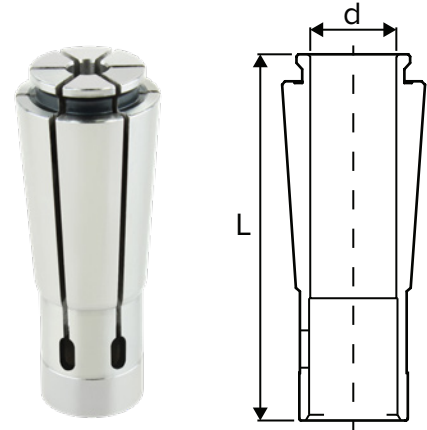


Coolant-thru Nut
Page 87

VCK COLLETS

DIMENSIONAL DATA

Collet Series	L	Collet Range (d)
VCK6	1.567" (39.8mm)	1/8" - 1/4" (2mm - 6mm)
VCK13	2.126" (54mm)	1/8" - 1/2" (3mm - 12mm)



VC COLLET CHUCKS

VCK6 COLLETS

Size range: 1/8" - 1/4"

Size range: 2.0 - 6.0mm
(0.079 - 0.236")

VCK13 COLLETS

Size range: 1/8" - 1/2"

Size range: 3 - 12mm
(0.118 - 0.472")

INCH

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

METRIC

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

INCH

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

METRIC

Part Number	Size	Collet Series
VCK13-3	3.0mm	VCK13
VCK13-4	4.0mm	VCK13
VCK13-5	5.00mm	VCK13
VCK13-6	6.00mm	VCK13
VCK13-7	7.00mm	VCK13
VCK13-8	8.00mm	VCK13
VCK13-9	9.00mm	VCK13
VCK13-10	10.00mm	VCK13
VCK13-11	11.00mm	VCK13
VCK13-12	12.00mm	VCK13

TIGHTENING TORQUE FOR VC COLLET CHUCKS

Collet Type	Size	Nut Tightening Torque (ft/lbs)	
		< Ø3mm	Ø3 - Ø6mm
VC	VCK6	7-22	22-37
	VCK13	29-55	



Nut Wrench
Page 88



Back-up Screw
Page 88



Coolant-thru Nut
Page 88

VC COLLET CHUCKS



VC COOLANT COLLET SYSTEM



Collet Chuck	Collet	Coolant Nut Part Number	Cutting Tool Size	Coolant-Thru Disk Part Number	Slotted Disk Part Number	Disk Wrench Part Number	Blank Disk (Machinable) Part Number
VC6	VCK6 Range: 2 - 6mm [1/8" - 1/4"]	VCN-6BJ	2mm	SKJ10-2C	SKJ10-2	SKJL-10	SKJ10-BLANK
			3mm	SKJ10-3C	SKJ10-3		
			4mm	SKJ10-4C	SKJ10-4		
			5mm	SKJ10-5C	SKJ10-5		
			6mm	SKJ10-6C	SKJ10-6		
			1/8"	SKJ10-1/8C	SKJ10-1/8		
			3/16"	SKJ10-3/16C	SKJ10-3/16		
			1/4"	SKJ10-1/4C	SKJ10-1/4		
VC13	VCK13 Range: 3 -12mm [1/8" - 1/2"]	VCN-13BJ	3mm	SKJ16-3C	SKJ16-3	SKJL-16	SKJ16-BLANK
			4mm	SKJ16-4C	SKJ16-4		
			5mm	SKJ16-5C	SKJ16-5		
			6mm	SKJ16-6C	SKJ16-6		
			7mm	SKJ16-7C	SKJ16-7		
			8mm	SKJ16-8C	SKJ16-8		
			10mm	SKJ16-10C	SKJ16-10		
			12mm	SKJ16-12C	SKJ16-12		
			1/8"	SKJ16-1/8C	SKJ16-1/8		
			3/16"	SKJ16-3/16C	SKJ16-3/16		
			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		

VC COLLET CHUCKS



VCK Collets
Page 86



Nut Wrench
Page 88



Back-up Screw
Page 88



Coolant-thru Nut
Page 87

VC COLLET CHUCK ACCESSORIES

VC BACK-UP SCREW

Part Number	Description
VC66-8A	Use with VC6 chucks
VC613-15A	Use with VC13 chucks



VC NUTS

Part Number	Description
VCN-6B	Standard Nut for VC6 chucks
VCN-6BJ	J Coolant Nut for VC6 chucks
VCN-13B	Standard Nut for VC13 chucks
VCN-13BJ	J Coolant Nut for VC13 chucks



VC NUT WRENCHES

Part Number	Description
GH10	VC6 Chuck Wrench
GH16	VC13 Chuck Wrench



TORQUE WRENCH AND ATTACHMENT FOR VC COLLET CHUCK

Part Number	Description
TQW-025	Torque Wrench for VC6 Collet Chuck Nut
TQW-200	Torque Wrench for VC13 Collet Chuck Nut
TQW-GH10(14X18)	VC6 Attachment for TQW-025 Chuck Wrench
TQW-GH16	VC13 Attachment for TQW-200 Chuck Wrench



COOLANT TUBE WRENCH

Part Number	Description
HSK32-WRENCH	Wrench for HSK32 Coolant Tube
HSK40-WRENCH	Wrench for HSK40 Coolant Tube
HSK50-WRENCH	Wrench for HSK50 Coolant Tube
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube



COOLANT TUBE

Part Number	Description
HSK40-TUBE	Coolant Tube for HSK40 holders
HSK63-TUBE	Coolant Tube for HSK63 holders
HSK100-TUBE	Coolant Tube for HSK100 holders



MMC COLLET CHUCKS



MMC COLLET CHUCKS

MMC COLLET CHUCKS



MMC COLLET CHUCK FEATURES

Accuracy in Small Diameter Cutting

The Mini-Mini Chuck (MMC) features a slim and compact body for precision machining with small diameter tools (up to 0.5"). It is an ideal toolholder for high-speed machining applications where clearance is needed.

High-Speed, High-Precision:

Max. 30,000 RPM (balanced at G2.5)

- Precision ground and pre-balanced, ensuring accuracy, reliability, and repeatability during high-speed operations.
- Most flexible Collet Chuck for machining Die Mold, Aerospace, and Medical parts by providing both clearance and accuracy.

High Runout Accuracy

- Within 0.00012" at 4 times the diameter of the cutting tool!

Coolant-thru Capabilities



Slim, Compact Nose and Front Clamping

No collet nut required! An internal draw-in collet clamping mechanism results in strong, high-precision gripping and allows for a slim nose that can access hard to reach areas.

Compact with Strong Gripping at Nose

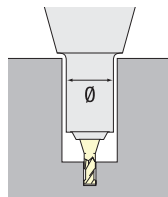
Collet Series Nose Diameters:



MMC 4: \varnothing 15mm (0.591")

MMC 8: \varnothing 20mm (0.787")

MMC 12: \varnothing 30mm (1.181")



Easy-to-use draw-in collet clamping mechanism

Clamp/unclamp with just a wrench!



"AT" type
Mini-Mini
Collet Chuck



"AA" type
Mini-Mini
Collet Chuck

Wrench included with all "AA" type
Mini-Mini Collet Chucks

MMC COLLET CHUCKS



CAT MMC COLLET CHUCKS

- No nut required.
- Slim, compact nose front clamping allows for greater rigidity and precision gripping.
- High concentricity and repeatability.
- Easy-to-use draw-in collet clamping pulled by standard side wrench.
- Pre-balanced for high-speed applications.



T.I.R.
<.00012" at 4xD



Speed
Up to 30,000 rpm



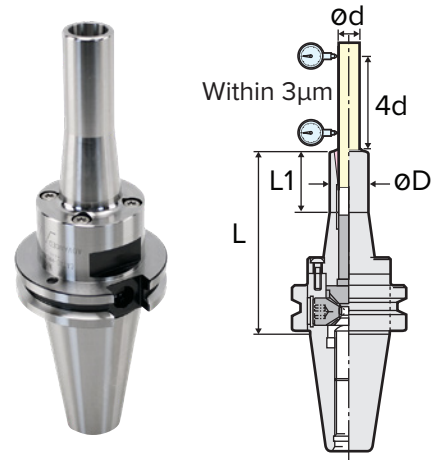
Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
CAT40-MMC4-90U-AA-IDU	MMC4	0.039 - 0.157" (1 - 4mm)	WRENCH-ALLEN6	3.54"	1.18"	0.59"	30K
CAT40-MMC8C-85U-AT-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	3.35"	1.42"	0.79"	30K
CAT40-MMC8C-90U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	3.54"	1.30"	0.79"	30K
CAT40-MMC8C-120U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.72"	1.57"	0.79"	30K
CAT40-MMC8C-125U-AT-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-THEX5-3.75	4.92"	1.42"	0.79"	30K
CAT40-MMC8C-135U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	5.31"	1.57"	0.79"	30K
CAT40-MMC12C-90U-AA-IDU	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	3.54"	1.38"	1.18"	30K
CAT40-MMC12C-120U-AA-IDU	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	4.72"	2.36"	1.18"	30K



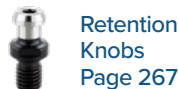
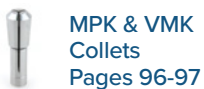
Notes:

- *Wrench included with holder except for AT-type holders.
- *AT denotes collet is drawn directly from the rear of the holder by a bolt.



CAT50

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
CAT50-MMC8C-105U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.14"	1.30"	0.79"	20K
CAT50-MMC8C-135U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	5.31"	1.57"	0.79"	20K
CAT50-MMC8C-165U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	6.50"	1.57"	0.79"	20K
CAT50-MMC12C-135U-AA-IDU	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	5.31"	2.36"	1.18"	20K
CAT50-MMC12C-165U-AA-IDU	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	6.50"	2.76"	1.18"	20K



BT MMC COLLET CHUCKS

- No nut required.
- Slim, compact nose front clamping allows for greater rigidity and precision gripping.
- High concentricity and repeatability.
- Easy-to-use draw-in collet clamping pulled by standard side wrench.
- Pre-balanced for high-speed applications.



T.I.R.
<.00012" at 4xD



Speed
Up to 30,000 rpm



Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT30

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
BT30-MMC4-105-AA	MMC4	0.039 - 0.157" (1 - 4mm)	WRENCH-ALLEN6	4.13"	1.18"	0.59"	30K
BT30-MMC8C-65-AT*	MMC8	0.079 - 0.394" (2 - 10mm)	EA573KL-15	2.56"	1.18"	0.79"	30K
BT30-MMC8C-105-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.13"	1.30"	0.79"	30K
BT30-MMC12C-105-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	4.13"	1.38"	1.18"	30K

Notes:

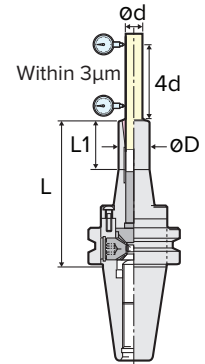
- *Wrench included with holder except for AT-type holders.
- *AT denotes collet is drawn directly from the rear of the holder by a draw bolt.



Wrench-THX5
(for AT-Type Chucks)



Wrench-ALLEN6
(for AA-Type Chucks)



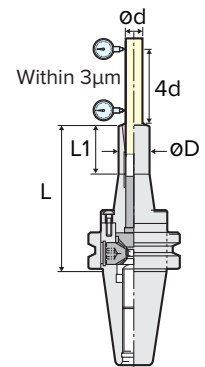
BT40

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
BT40-MMC4-90-AA	MMC4	0.039 - 0.157" (1 - 4mm)	WRENCH-ALLEN6	3.54"	1.26"	0.59"	30K
BT40-MMC8C-90-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	3.54"	1.30"	0.79"	30K
BT40-MMC8C-120-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.72"	1.57"	0.79"	30K
BT40-MMC8C-150-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	5.90"	1.57"	0.79"	30K
BT40-MMC12C-90-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	3.54"	1.38"	1.18"	30K
BT40-MMC12C-120-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	4.72"	2.36"	1.18"	30K
BT40-MMC12C-150-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	5.90"	2.76"	1.18"	30K

Note: Wrench included with holder.



Wrench-ALLEN6
(for AA-Type Chucks)



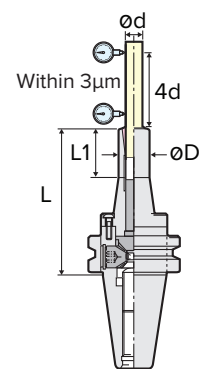
BT50

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
BT50-MMC4-105-AA	MMC4	0.039 - 0.157" (1 - 4mm)	WRENCH-ALLEN6	4.13"	1.18"	0.59"	20K
BT50-MMC8C-105-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.13"	1.30"	0.79"	20K
BT50-MMC8C-135-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	5.31"	1.57"	0.79"	20K
BT50-MMC12C-105-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	4.13"	1.38"	1.18"	20K
BT50-MMC12C-135-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	5.31"	2.36"	1.18"	20K

Note: Wrench included with holder.



Wrench-ALLEN6
(for AA-Type Chucks)



MPK & VMK
Collets
Pages 96-97



Retention
Knobs
Page 267

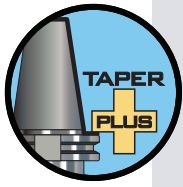


Tool
Clampers
Page 274

MMC COLLET CHUCKS

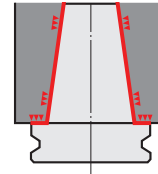


TAPER PLUS CAT & BT MMC COLLET CHUCKS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone

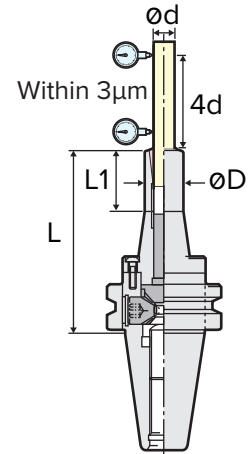


Taper Plus - BT30

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
NBT30-MMC4-105-AA	MMC4	0.039 - 0.157" (1 - 4mm)	WRENCH-ALLEN6	4.13"	1.18"	0.59"	30K
NBT30-MMC8C-65-AT*	MMC8	0.079 - 0.394" (2 - 10mm)	EA573KL-15	2.56"	1.18"	0.79"	30K
NBT30-MMC8C-105-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.13"	1.30"	0.79"	30K
NBT30-MMC12C-105-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	4.13"	1.38"	1.18"	30K

Notes:

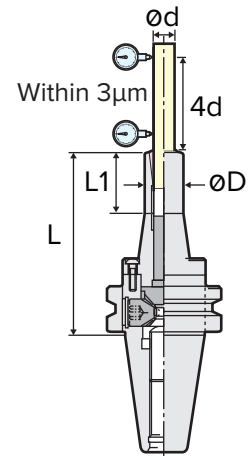
- *Wrench included with holder except for AT-type holders.
- *AT denotes collet is drawn directly from the rear of the holder by a draw bolt.



Taper Plus - BT40

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
NBT40-MMC8C-90-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	3.54"	1.30"	0.79"	30K
NBT40-MMC8C-120-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.72"	1.57"	0.79"	30K
NBT40-MMC12C-90-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	3.54"	1.38"	1.18"	30K

Note: Wrench included with holder.



Taper Plus - CAT40

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
NCAT40-MMC4-90U-AA-IDU	MMC4	0.039 - 0.157" (1 - 4mm)	WRENCH-ALLEN6	3.54"	1.18"	0.59"	30K
NCAT40-MMC8C-90U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	3.54"	1.30"	0.79"	30K
NCAT40-MMC8C-120U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.72"	1.57"	0.79"	30K
NCAT40-MMC8C-150U-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	5.90"	1.57"	0.79"	30K
NCAT40-MMC12C-90U-AA-IDU	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	3.54"	1.38"	1.18"	30K

Note: Wrench included with holder.

MMC COLLET CHUCKS



MPK & VMK Collets
Page 96-97



Retention Knobs
Page 267



Tool Clampers
Page 274

HSK MMC COLLET CHUCKS

- No nut required.
- Slim, compact nose front clamping allows for greater rigidity and precision gripping.
- High concentricity and repeatability.
- Easy-to-use draw-in collet clamping pulled by standard side wrench.
- Pre-balanced for high-speed applications.



T.I.R.
<.00012" at 4xD



Speed
Up to 30,000 rpm



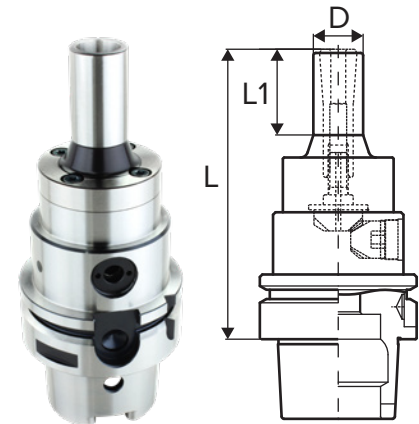
Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK63A/100A

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
HSK63A-MMC8C-107-AT-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	EA573KL-15	4.21"	1.42"	0.79"	30K
HSK63A-MMC8C-115-AA-IDU	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.53"	1.30"	0.79"	30K
HSK63A-MMC12C-110-AT	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	4.33"	1.38"	1.18"	30K
HSK63A-MMC12C-117-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	4.61"	1.28"	1.18"	30K
HSK63A-MMC12C-177-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	6.97"	2.76"	1.18"	30K
HSK100A-MMC8C-117-AT	MMC8	0.079 - 0.394" (2 - 10mm)	EA573KL-15	4.61"	1.42"	0.79"	30K
HSK100A-MMC8C-130-AA	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	5.12"	1.30"	0.79"	30K
HSK100A-MMC8C-145-AT	MMC8	0.079 - 0.394" (2 - 10mm)	EA573KL-15	5.71"	2.52"	0.79"	30K
HSK100A-MMC12C-130-AA	MMC12	0.157 - 0.5" (4 - 13mm)	WRENCH-ALLEN6	5.12"	1.38"	1.18"	20K



Notes:

- *Wrench included with holder except for AT-type holders.
- *AT denotes collet is drawn directly from the rear of the holder by a draw bolt.
- Coolant Tube and Wrench are sold separately (HSK63-TUBE/HSK63-WRENCH).



Wrench-THX5
(for AT-Type Chucks)



Wrench-ALLEN6
(for AA-Type Chucks)

Coolant Tube Wrench For HSK Holders

Part Number	Description
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube



Note: Coolant tube wrenches are needed to remove or install coolant tubes in HSK toolholders.

Coolant Tube For HSK Holders

Part Number	Description
HSK63-TUBE	Coolant Tube for HSK63 Holders
HSK100-TUBE	Coolant Tube for HSK100 Holders



MMC COLLET CHUCKS



POLYGONAL & STRAIGHT SHANK MMC COLLET CHUCKS

- No nut required.
- Slim, compact nose front clamping allows for greater rigidity and precision gripping.
- High concentricity and repeatability.
- Easy-to-use draw-in collet clamping pulled by standard side wrench.
- Pre-balanced for high-speed applications.



T.I.R.
 <.00012" at 4xD



Speed
 Up to 30,000 rpm



Coolant-Thru
 Thru-tool coolant

MILLING



REAMING



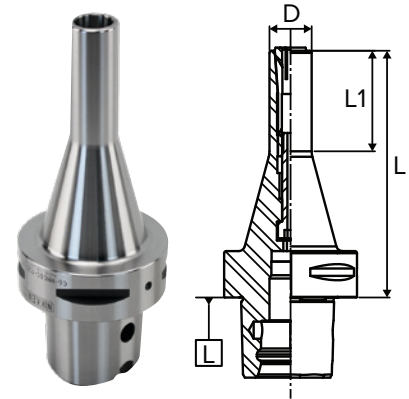
DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

C6

Part Number	Collet Series	Collet Range	Wrench	L	L1	D	Max. RPM
C6-MMC8C-120-AT	MMC8	0.079 - 0.394" (2 - 10mm)	EA573KL-15	4.72"	1.93"	0.79"	30K



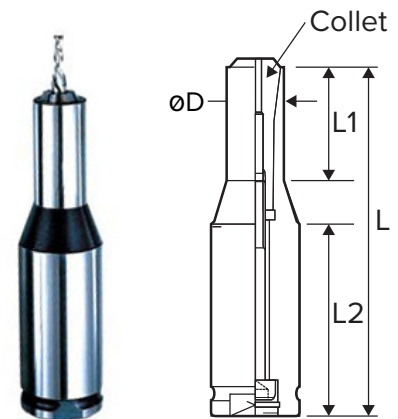
STRAIGHT SHANK

Part Number	Collet Series	Collet Range	Wrench	L	L1	L2	D
K1.1/4-MMC8C-122	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	4.80"	1.58"	2.64"	0.79"
K1.1/4-MMC8C-160	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	6.30"	1.58"	2.64"	0.79"
K3/4-MMC8C-100	MMC8	0.079 - 0.394" (2 - 10mm)	WRENCH-ALLEN6	3.94"	1.58"	2.62"	0.79"

Note: Wrench included with holder.



Wrench-ALLEN6
 (for AA-Type Chucks)



MMC COLLETS

MMC/MPK4 Collets

Part Number	Collet Series	Size
MPK4-1/16*	MPK4	1/16"
MPK4-3/32*	MPK4	3/32"
MPK4-1/8*	MPK4	1/8"
MPK4-1*	MPK4	1.0mm
MPK4-1.5*	MPK4	1.5mm
MPK4-2*	MPK4	2.0mm
MPK4-2.5*	MPK4	2.5mm
MPK4-3*	MPK4	3.0mm
MPK4-3.5*	MPK4	3.5mm
MPK4-4*	MPK4	4.0mm

Notes:

- MMC collets have minimal collapsibility. Highest accuracy and rigidity can be achieved when using cutting tools as close to nominal value as possible.
- *Available in sealed and jet slotted.



MPK4

D:0.394" (10mm)
d:1/16 - 3/32" (1 - 4mm)
L:1.260" (32mm)

PMK8

D:0.591" (15mm)
d:1/8 - 3/8" (2 - 8mm)
L:2.028" (51.5mm)

PMK12

D:0.827" (21mm)
d:3/16 - 1/2" (4 - 12mm)
L:2.205" (56mm)

MMC/PMK Collets

Part Number	Collet Series	Size	Part Number	Collet Series	Size
PMK4-1	PMK4	1.0mm	PMK8-2.4	PMK8	2.4mm
PMK4-1.2	PMK4	1.2mm	PMK8-2.6	PMK8	2.6mm
PMK4-1.4	PMK4	1.4mm	PMK8-3.175	PMK8	3.175mm
PMK4-1.6	PMK4	1.6mm	PMK8-3.2	PMK8	3.2mm
PMK4-1.8	PMK4	1.8mm	PMK8-3.6	PMK8	3.6mm
PMK4-2	PMK4	2.0mm	PMK8-4	PMK8	4.0mm
PMK4-2.2	PMK4	2.2mm	PMK8-4.6	PMK8	4.6mm
PMK4-2.4	PMK4	2.4mm	PMK8-5	PMK8	5.0mm
PMK4-2.6	PMK4	2.6mm	PMK8-5.6	PMK8	5.6mm
PMK4-2.8	PMK4	2.8mm	PMK8-6	PMK8	6.0mm
PMK4-3	PMK4	3.0mm	PMK8-6.4	PMK8	6.4mm
PMK4-3.2	PMK4	3.2mm	PMK8-6.6	PMK8	6.6mm
			PMK8-7	PMK8	7.0mm
			PMK8-7.6	PMK8	7.6mm
			PMK8-7.8	PMK8	7.8mm
			PMK8-8	PMK8	8.0mm
			PMK12-4	PMK12	4.0mm
			PMK12-6	PMK12	6.0mm
			PMK12-10	PMK12	10.0mm
			PMK12-12	PMK12	12.0mm

Features

- Coolant Collets are mechanically sealed.
- No additional accessories are required to make these collets coolant-thru the tool capable.
- 1000 psi high-pressure coolant capable.



VMK: Coolant Sealed Collet
VMK-JB: Jet Slotted Collet
MPK/PMK: Standard Collet



VMK COLLETS

Coolant Sealed Collets

Part Number	Collet Series	Size	Part Number	Collet Series	Size
VMK8-1/8	VMK8	1/8"	VMK12-3/16	VMK12	3/16"
VMK8-3/16	VMK8	3/16"	VMK12-1/4	VMK12	1/4"
VMK8-1/4	VMK8	1/4"	VMK12-5/16	VMK12	5/16"
VMK8-5/16	VMK8	5/16"	VMK12-3/8	VMK12	3/8"
VMK8-3/8	VMK8	3/8"	VMK12-7/16	VMK12	7/16"
VMK8-2	VMK8	2.0mm	VMK12-1/2	VMK12	1/2"
VMK8-3	VMK8	3.0mm	VMK12-4	VMK12	4.0mm
VMK8-4	VMK8	4.0mm	VMK12-5	VMK12	5.0mm
VMK8-5	VMK8	5.0mm	VMK12-6	VMK12	6.0mm
VMK8-6	VMK8	6.0mm	VMK12-8	VMK12	8.0mm
VMK8-7	VMK8	7.0mm	VMK12-10	VMK12	10mm
VMK8-8	VMK8	8.0mm	VMK12-12	VMK12	12mm
VMK8-10	VMK8	10.0mm			

Jet Slotted Collets

Part Number	Collet Series	Size	Part Number	Collet Series	Size
VMK8-1/8JB	VMK8	1/8"	VMK12-3/16J	VMK12	3/16"
VMK8-3/16J	VMK8	3/16"	VMK12-1/4J	VMK12	1/4"
VMK8-1/4J	VMK8	1/4"	VMK12-5/16J	VMK12	5/16"
VMK8-5/16J	VMK8	5/16"	VMK12-3/8J	VMK12	3/8"
VMK8-3/8J	VMK8	3/8"	VMK12-7/16J	VMK12	7/16"
VMK8-2J	VMK8	2.0mm	VMK12-1/2J	VMK12	1/2"
VMK8-2JB	VMK8	2.0mm	VMK12-4J	VMK12	4.0mm
VMK8-3JB	VMK8	3.0mm	VMK12-5J	VMK12	5.0mm
VMK8-4J	VMK8	4.0mm	VMK12-6J	VMK12	6.0mm
VMK8-5J	VMK8	5.0mm	VMK12-8J	VMK12	8.0mm
VMK8-6J	VMK8	6.0mm	VMK12-10J	VMK12	10.0mm
VMK8-8J	VMK8	8.0mm	VMK12-12J	VMK12	12.0mm
VMK8-10J	VMK8	10.0mm			

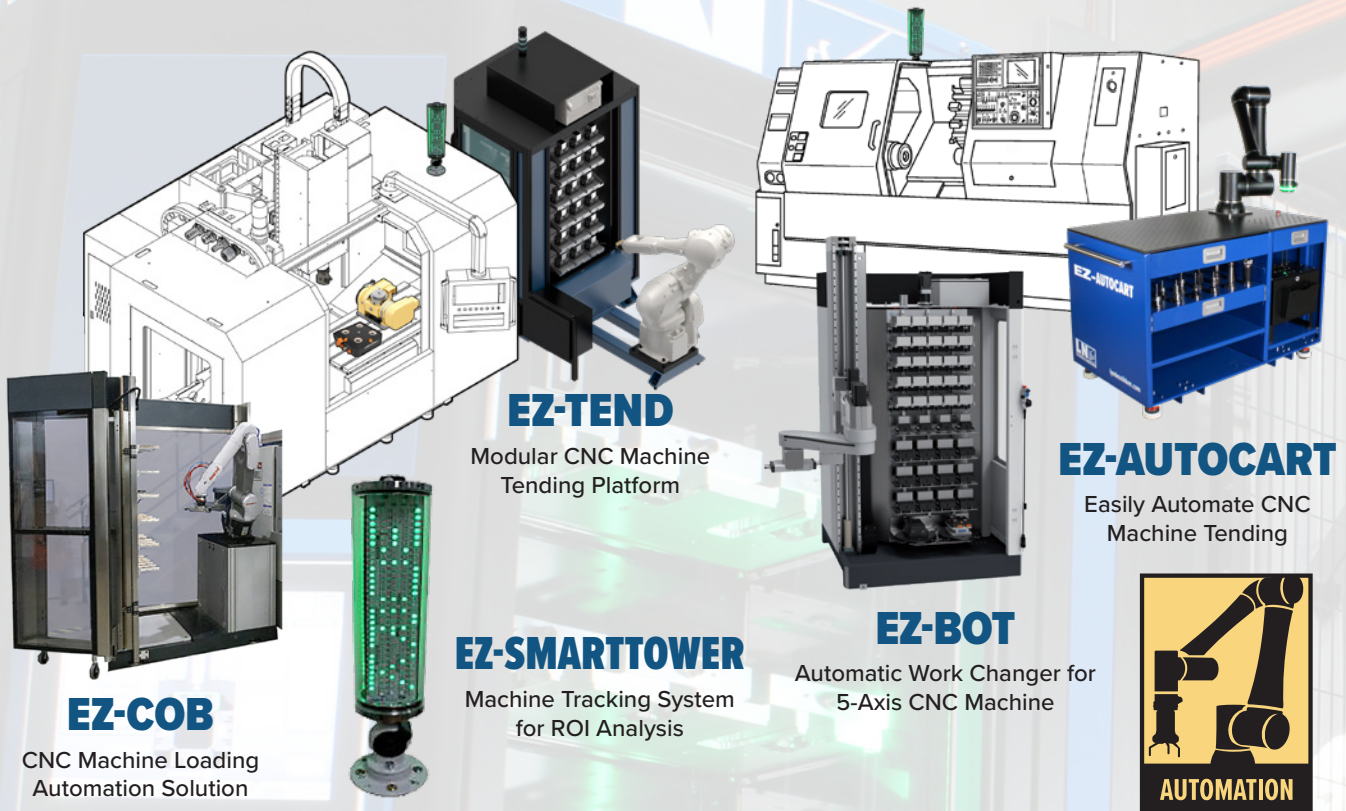
Features

- Collet slots allow coolant to be supplied directly to the periphery of the cutting tool.
- During pocket milling operations, coolant along the periphery of the cutting tool will also help flush out chips.



Enable Your Machine Shop to Thrive

Introducing EZ-Automation Solutions



Whether your challenges are fierce competition for skilled workers amid rising labor and benefit costs, demand for high mix, low volume quality parts, delivering quality parts on time, or modernizing for Industry 4.0/5.0 - these hurdles can be daunting.

Automation offers a solution that can bring efficiency and cost-effectiveness to your operations. The key is seamless integration, cost control, and simplifying job complexities.

Lyndex-Nikken introduces a new line of EZ-Automation solutions; user-friendly automation products that minimize the need for advanced robotics or automation skills, making it easier than ever to enhance your productivity.

Enable your machine shop to thrive with automation that streamlines operations, improves processes, and enables a bottom line that reflects your success. Lyndex-Nikken is your partner in growth.

SCAN TO LEARN MORE



847-367-4800 | sales@lyndexnikken.com
lyndexnikken.com

Connect With Us!



SHRINK FIT



SHRINK FIT

SHRINK FIT



SPECIFICATIONS & EQUIPMENT

THE INDUSTRY'S HIGHEST QUALITY SHRINK FIT LINE

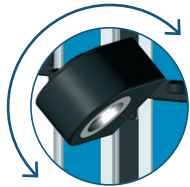
- High Speed: shrinking from 2 to 7 seconds
- Flexible Range: shrinking from 0.079" to 1.575" (2 to 40mm)

Shrink and unshrink any type of cutter or tool

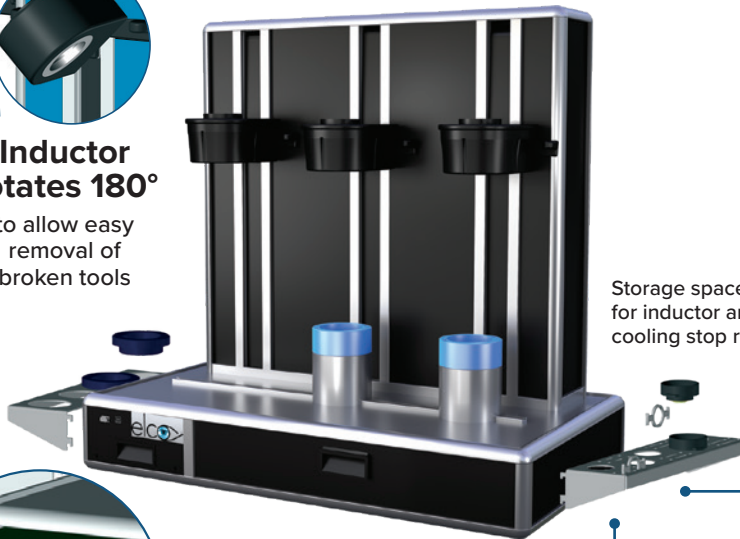
- HSS, Powdered Metal, Carbide, Steel, Heavy Metal, Shrink Fit extensions and reducers
(Tool Shank must have h6 tolerance)

FI-6

220V - Standard
440V - Optional



Inductor rotates 180°
to allow easy removal of broken tools



Storage space for inductor and cooling stop rings

START.2

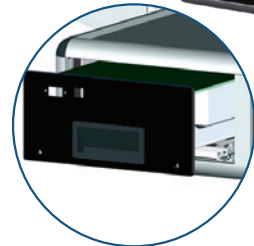
220V - Standard
440V - Optional

Auto shank size detection
for ease of use



Operating instructions

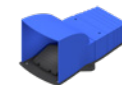
Storage space for chuck holders



AFTER SALES-SERVICE

Removable Electronics

- Compatible with Start.2 and Fi-6
- Unique slide-out Control Module allows for easy access and repair



OPTION

Foot pedal available allows for hands-free operation



OPTION

Back stop presetting (SF-PS-KIT) to determine the tool gauge before shrinking



Scan here to see our Start.2 video!



High Speed Cooling Unit (SF-START2-COOL-FAN40)

Cools tools less than 2 minutes with standard shop air pressure!
Cooling system compatible with all cutting tool geometries to optimize cooling time cycle (3° slope, 4.5° slope, cylindrical)



Remotely Controlled

- Compatible with Start.2 and Fi-6
- Shrink and Cooling unit linked and controlled by 1 pendant!

Registered models – Registered patents. Subject to change without notice.



SPECIFICATIONS & EQUIPMENT

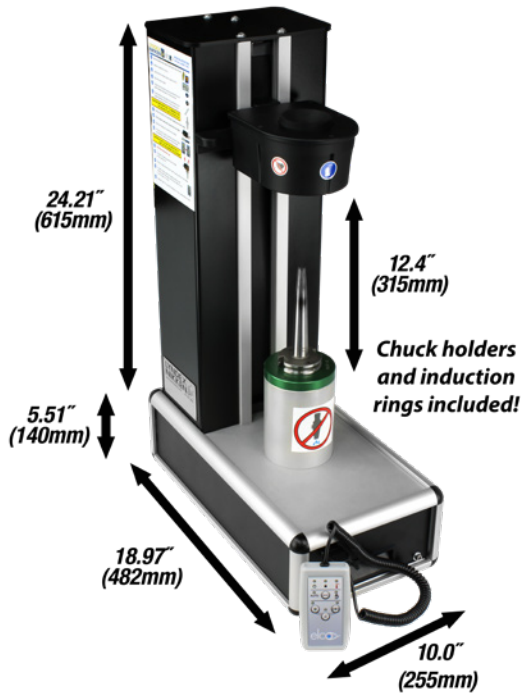
Functions	Start.2	Fi-6
Specifications	Part Number: SF-START2-UNIT	Part Number: SF-FI6-UNIT
Automatic tool size detection within the range of each inductor ring	■	■
Rapid heating cycle prevents heat transfer damage to the cutting tool and toolholder	■	■
Self regulated heating cycle allows for safe operation	■	■
Automatic or manual shrinking cycle time	■	■
Shrinking Ø 2 to Ø 40mm (.079"-1.575") with the same inductor	■	■
Large 64mm (2.52") inductor diameter provides flexibility for small to large cutting tools	■	■
Remote control pendant for ergonomic operation	■	■
Unique slide out control module allows for easy access and repair	■	■
Inductor rotates 180 degrees for broken cutter removal	■	■
Cooling system for the electronic board to allow high-speed shrinking		■
Power supply 380-480V/14kW/50-60Hz/3 phase	■	■
Power supply 200-240V/14kW/50-60Hz/3 phase	■	■

Equipment

1 air cooling unit (70-90 PSI)	■	
2 air cooling units (70-90 PSI)	□	■
Shrinking of cutting diameters larger than shank diameters	□	□
Shrinking system for reductions	□	□
Back stop presetting unit	□	□
Storage space for chuck holders	■	■
Storage space for inductor stop rings and cooling stop rings	■	■
Storage space for cooling stop rings	□	
Foot pedal allows for hands-free operation	□	□

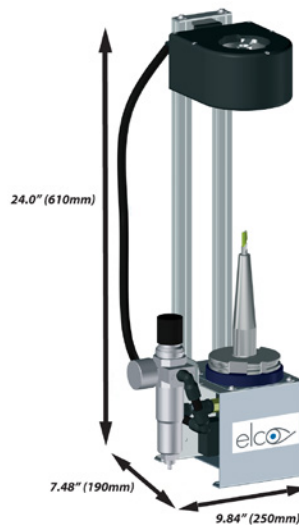
■ = Standard □ = Option

SHRINK FIT EQUIPMENT



START.2 SHRINK FIT UNIT

- The world's easiest shrink machine to operate.
- Provided with accessories for shrinking 0.079" - 1.575" (Ø 2 to Ø 40mm).
- Compact and Ergonomic Design.
- 1 cooling unit included, optional 2nd cooling unit can be connected.
- Shrink machine unit net weight - 41.9 lbs. (19 kg)

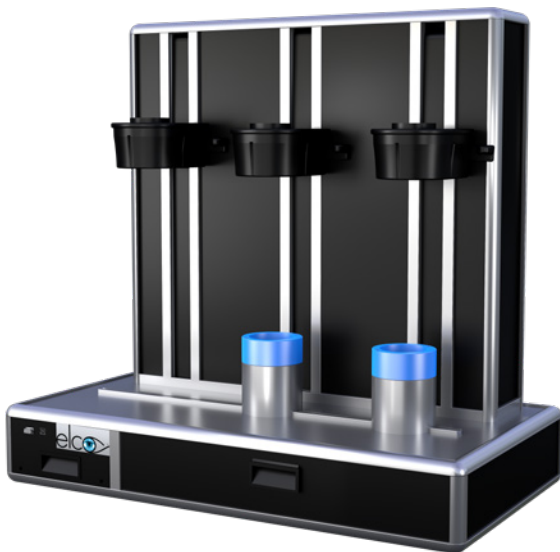


COOLING UNIT

- Rapid Cooling - Tapered internal design allows for even distribution of high pressure air.
- Provided with accessories for cooling 0.079" - 1.575" (Ø 2 to Ø 40mm).
- Compressed air supply: 70 to 90 psi.
- Equipped with a filter and a pressure-reducing gauge to regulate the pressure and the air flow.
- Weight: 11 lbs. (5 kg)



STORAGE RACKS (INCLUDED)



FI-6 SHRINK FIT UNIT

- **Fi-6 - speed and safety in one**
Speed - multiple cooling units to support high quantity tool assembly
Safety - Guide Rail prevents operator from handling hot tools
- **The electronic board is cooled to allow high-speed shrinking.**
- Provided with accessories for shrinking & cooling 0.079" - 1.575" (Ø 2 to Ø 40mm).
- **Dimensions:**
Length = 30.90" (785mm)
Depth = 20.08" (510mm)
Height = 34.45" (875mm)
- **Weight** (options excluded): 143.3 lbs. (65 kg)

PRESETTING UNIT (OPTIONAL)

- Part Number: SF-PS-KIT
- For length presetting
- For Fi-6 shrink fit unit only
- Accuracy: ± 0,050mm
- Repeatability: ± 0,020mm
- Capability: tool shank 0.24" - 1.26" (Ø 6 to Ø 32mm)



SHRINK FIT



SHRINK FIT UNIT PACKAGES

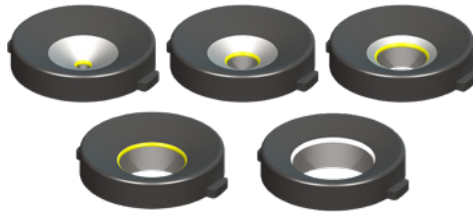
START.2 SHRINK FIT PACKAGE Accessories Included

SHRINK FIT UNIT AND COOLING UNIT



5 PIECE INDUCTION RING SET

5/64" - 3/16" (2-5mm) 1/4" - 1/2" (6-13mm) 9/16" - 7/8" (14-24mm)



1" - 1 1/4" (25-32mm) 1 1/4" - 1 1/2" (33-40mm)

STORAGE RACKS



5 PIECE COOLING BRACKET SET

5/64" - 3/16" (2-5mm) 1/4" - 1/2" (6-13mm) 9/16" - 7/8" (14-24mm)



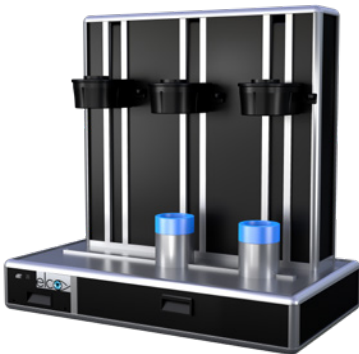
1" - 1 1/4" (25-32mm) 1 1/4" - 1 1/2" (33-40mm)

CHUCK HOLDERS
(CAT40/50, BT30-50, HSK25-100)
Included pair corresponds to selected Shrink Fit package



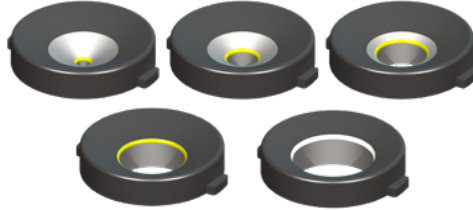
Fi-6 SHRINK FIT PACKAGE Accessories Included

SHRINK FIT UNIT



5 PIECE INDUCTION RING SET

5/64" - 3/16" (2-5mm) 1/4" - 1/2" (6-13mm) 9/16" - 7/8" (14-24mm)



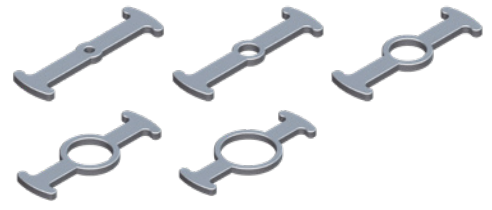
1" - 1 1/4" (25-32mm) 1 1/4" - 1 1/2" (33-40mm)

STORAGE RACKS



5 PIECE COOLING BRACKET SET

5/64" - 3/16" (2-5mm) 1/4" - 1/2" (6-13mm) 9/16" - 7/8" (14-24mm)



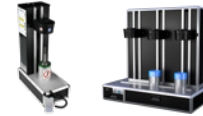
1" - 1 1/4" (25-32mm) 1 1/4" - 1 1/2" (33-40mm)

CHUCK HOLDERS
(ISO30/40/50, HSK25-100, PSC4-8)
Included pair corresponds to selected Shrink Fit package



CUSTOMIZE YOUR EQUIPMENT PACKAGE

Accessories



Start.2

Fi-6



POT/CHUCK HOLDER

	PART NUMBER	Start.2	Fi-6
For HSK 25 chuck	SF-POT-HSK25	<input type="checkbox"/>	<input type="checkbox"/>
For HSK 32 chuck	SF-POT-HSK32	<input type="checkbox"/>	<input type="checkbox"/>
For HSK 40 / PSC4 chuck	SF-POT-HSK40/C4	<input type="checkbox"/>	<input type="checkbox"/>
For HSK 50 / PSC5 chuck	SF-POT-HSK50/C5	<input type="checkbox"/>	<input type="checkbox"/>
For HSK 63 chuck	SF-POT-HSK63	<input type="checkbox"/>	<input type="checkbox"/>
For HSK 80 / PSC8 chuck	SF-POT-HSK80/C8	<input type="checkbox"/>	<input type="checkbox"/>
For HSK 100 chuck	SF-POT-HSK100	<input type="checkbox"/>	<input type="checkbox"/>
For BT 30 chuck	SF-POT-#30	<input type="checkbox"/>	<input type="checkbox"/>
For CAT / BT 40 chuck	SF-POT-#40	<input type="checkbox"/>	<input type="checkbox"/>
For CAT / BT 50 chuck	SF-POT-#50	<input type="checkbox"/>	<input type="checkbox"/>
For PSC Polygonal chuck	SF-POT-C6	<input type="checkbox"/>	<input type="checkbox"/>

Start.2:
Choose any 2 Pots

Fi-6:
Choose any 3 Pots



HEATING RING

	PART NUMBER	Start.2	Fi-6
Ø 2 to Ø 5 (5/64" - 3/16")	SF-HEAT-RING-2-5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ø 6 to Ø 13 (1/4" - 1/2")	SF-HEAT-RING-6-13	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ø 14 to Ø 24 (9/16" - 7/8")	SF-HEAT-RING-14-24	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ø 25 to Ø 32 (1" - 1 1/4")	SF-HEAT-RING-25-32	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ø 33 to Ø 40 (1 1/4" - 1 1/2")	SF-HEAT-RING-33-40	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



SPLIT HEATING RING

	PART NUMBER	Start.2	Fi-6
Ø 2 to Ø 5 (5/64" - 3/16")	SF-HEAT-RING-2-5(SP)	<input type="checkbox"/>	<input type="checkbox"/>
Ø 6 to Ø 13 (1/4" - 1/2")	SF-HEAT-RING-6-13(SP)	<input type="checkbox"/>	<input type="checkbox"/>
Ø 14 to Ø 24 (9/16" - 7/8")	SF-HEAT-RING-14-24(SP)	<input type="checkbox"/>	<input type="checkbox"/>
Ø 25 to Ø 32 (1" - 1 1/4")	SF-HEAT-RING-25-32(SP)	<input type="checkbox"/>	<input type="checkbox"/>
Ø 33 to Ø 40 (1 1/4" - 1 1/2")	SF-HEAT-RING-33-40(SP)	<input type="checkbox"/>	<input type="checkbox"/>



ADDITIONAL COOLING UNIT

Cooling unit for Fi-6			<input checked="" type="checkbox"/>
-----------------------	--	--	-------------------------------------



COOLING BRACKETS

	PART NUMBER	Start.2	Fi-6
Ø 2 to Ø 5 (5/64" - 3/16")	SF-COOL-BRACKET-2-6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> x2
Ø 6 to Ø 13 (1/4" - 1/2")	SF-COOL-BRACKET-6-14	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> x2
Ø 14 to Ø 24 (9/16" - 7/8")	SF-COOL-BRACKET-14-25	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> x2
Ø 25 to Ø 32 (1" - 1 1/4")	SF-COOL-BRACKET-25-33	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> x2
Ø 33 to Ø 40 (1 1/4" - 1 1/2")	SF-COOL-BRACKET-33-41	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> x2



SHRINKING WITH REDUCTIONS

Set up fixture Reduction Sleeve	SF-REDUCTION-FIXTURE	<input type="checkbox"/>	<input type="checkbox"/>
---------------------------------	----------------------	--------------------------	--------------------------

VARIOUS ACCESSORIES



Storage space for tools	SF-RACK-CUTTER		<input type="checkbox"/>
Storage space for chuck holders	SF-RACK-POT		<input type="checkbox"/>
Storage space for inductor & cooling stop rings	SF-RACK-HEAT-RING		<input type="checkbox"/>
Storage space for cooling stop rings	SF-RACK-COOL-STOP	<input type="checkbox"/>	
A pair of Kevlar gloves	SF-GLOVES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Plier for gripping small diameters	SF-PLIERS	<input type="checkbox"/>	<input type="checkbox"/>

■ = Standard □ = Option

SHRINK FIT



CUSTOMIZE YOUR EQUIPMENT PACKAGE

	PART NUMBER	Start.2	Fi-6	
SHRINK FIT CABINET				
Stainless Steel Trolley	SF-CABINET	<input type="checkbox"/>		
INDUCTOR				
Replacement Inductor	SF-INDUCTOR	<input type="checkbox"/>	<input type="checkbox"/>	
ELECTRONIC BOARD				
Motherboard 380 / 480V	SF-MOTHER-BOARD-380	<input type="checkbox"/>	<input type="checkbox"/>	
Motherboard 200 / 240 V	SF-MOTHER-BOARD	<input type="checkbox"/>	<input type="checkbox"/>	
REMOTE CONTROL				
Remote control	SF-CONTROL	<input type="checkbox"/>	<input type="checkbox"/>	

Presetting

	PART NUMBER	Start.2	Fi-6	
PRESETTING UNITS				
Presetting unit by back-stop (Accessories : please contact us)	SF-PS-UNIT	<input type="checkbox"/>		
Presetting unit + 3 rods + ruler + indicator + one set of guides and guide holder	SF-PS-KIT		<input type="checkbox"/>	
ACCESSORIES FOR PRESETTING UNITS				
Set of tools guides Ø 1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	SF-PS-TOOLGUIDE-KIT		<input checked="" type="checkbox"/>	
Presetting guides holder	SF-PS-GUIDE-HOLDER		<input checked="" type="checkbox"/>	
Presetting Clip Kit (19 sizes included in 1 kit)	SF-SPRING-CLIP-KIT		<input type="checkbox"/>	<div style="border: 1px solid black; padding: 5px;"> Spring Clip Kit -19 sizes in 1 kit: MM - 3, 4, 5, 6, 8, 10, 12, 16, 20, 25 INCH- 1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 1.0 </div>
Adapter for BT30 presetting	SF-PS-BT30-ADAPTER		<input type="checkbox"/>	
Adapter for CAT / BT40 presetting	SF-PS-CT/BT40-ADPTR		<input type="checkbox"/>	
Adapter for BT45 presetting	SF-PS-CT/BT45-ADPTR		<input type="checkbox"/>	
Adapter for CAT / BT50 presetting	SF-PS-CT/BT50-ADPTR		<input type="checkbox"/>	
Tool guide Ø 1/4" *	SF-PS-GUIDE-6M-0250		<input type="checkbox"/>	
Tool guide Ø 5/16" *	SF-PS-GUIDE-8M-0312		<input type="checkbox"/>	
Tool guide Ø 3/8" *	SF-PS-GUIDE-10M-0375		<input type="checkbox"/>	
Tool guide Ø 1/2" *	SF-PS-GUIDE-14M-0500		<input type="checkbox"/>	
Tool guide Ø 5/8" *	SF-PS-GUIDE-16M-0625		<input type="checkbox"/>	
Tool guide Ø 3/4" *	SF-PS-GUIDE-20M-0750		<input type="checkbox"/>	
Tool guide Ø 1" *	SF-PS-GUIDE-25M-1000		<input type="checkbox"/>	
Tool guide Ø 1 1/4" *	SF-PS-GUIDE-32M-1250		<input type="checkbox"/>	
Compact rod	SF-PS-COMPACT-ROD		<input type="checkbox"/>	
Standard & mold range rod	SF-PS-STD-ROD		<input type="checkbox"/>	
Rod (length 160 mm)	SF-PS-STD-ROD-LONG		<input type="checkbox"/>	
Ruler 300 mm	SF-PS-RULER		<input type="checkbox"/>	
Dial indicator	SF-PS-DIAL		<input type="checkbox"/>	

*Metric Available 6-32mm

■ = Standard □ = Option ■ = Replacement Part

CAT40 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRC tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Plugable Coolant Ports



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
CAT40-SF0125-3.15	1/8"	3.15"	2.00"	0.39"	0.71"		25K	1
CAT40-SF0125-5.12	1/8"	5.12"	1.50"	0.39"	0.63"	0.82"	25K	2
CAT40-SF0187-3.15	3/16"	3.15"	1.50"	0.39"	0.63"		25K	1
CAT40-SF0187-5.12	3/16"	5.12"	1.50"	0.39"	0.63"	0.82"	25K	2
CAT40-SF3-80	3mm	6.30"	2.00"	0.39"	0.71"		25K	1
CAT40-SF4-80	4mm	6.30"	1.75"	0.39"	0.67"		25K	1

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
CAT40-SF0250-3.15CP	1/4"	3.15"	1.50"	0.83"	1.06"		25K	1
CAT40-SF0250-5.12CP	1/4"	5.12"	1.50"	0.83"	1.06"	1.26"	25K	2
CAT40-SF0312-3.15CP	5/16"	3.15"	1.50"	0.83"	1.06"		25K	1
CAT40-SF0375-3.15CP	3/8"	3.15"	2.00"	0.95"	1.26"		25K	1
CAT40-SF0375-5.12CP	3/8"	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
CAT40-SF0437-3.15CP	7/16"	3.15"	2.00"	0.95"	1.26"		25K	1
CAT40-SF0500-3.15CP	1/2"	3.15"	2.00"	0.95"	1.26"		25K	1
CAT40-SF0500-5.12CP	1/2"	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
CAT40-SF0625-3.15CP	5/8"	3.15"	1.75"	1.06"	1.34"		25K	1
CAT40-SF0625-5.12CP	5/8"	5.12"	1.75"	1.06"	1.34"	1.51"	25K	2
CAT40-SF0750-3.15CP	3/4"	3.15"	2.23"	1.30"	1.65"		25K	1
CAT40-SF0750-5.12CP	3/4"	5.12"	2.25"	1.30"	1.65"	1.79"	25K	2
CAT40-SF1000-3.94CP	1"	3.94"	2.25"	1.73"	2.09"		25K	1
CAT40-SF1000-5.12CP	1"	5.12"	2.25"	1.73"	2.09"	2.22"	25K	2
CAT40-SF6-80CP	6mm	3.15"	1.50"	0.83"	1.06"		25K	1
CAT40-SF8-80CP	8mm	3.15"	1.50"	0.83"	1.06"		25K	1
CAT40-SF10-80CP	10mm	3.15"	1.98"	0.95"	1.26"		25K	1
CAT40-SF12-80CP	12mm	3.15"	2.00"	0.95"	1.26"		25K	1
CAT40-SF14-80CP	14mm	3.15"	1.75"	1.06"	1.34"		25K	1
CAT40-SF16-80CP	16mm	3.15"	1.75"	1.06"	1.34"		25K	1
CAT40-SF20-80CP	20mm	3.15"	2.23"	1.30"	1.65"		25K	1
CAT40-SF25-100CP	25mm	3.94"	2.25"	1.73"	2.09"		25K	1

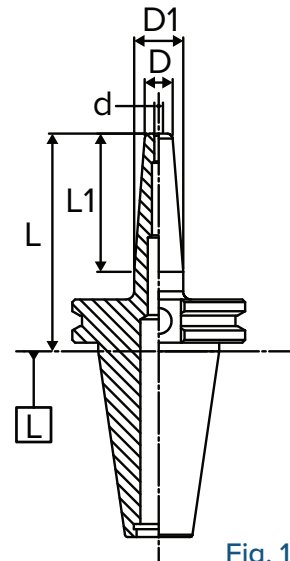


Fig. 1

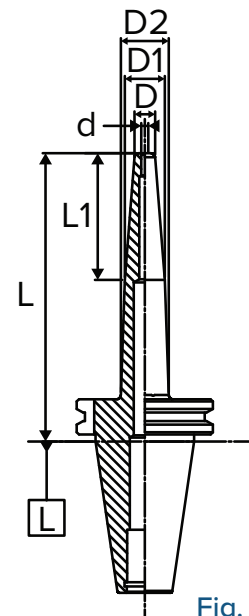


Fig. 2

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



SHRINK FIT



CAT40 SHRINK FIT HOLDERS

EXTENDED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
CAT40-SF0125-6.30	1/8"	6.30"	1.50"	0.39"	0.63"	0.91"	25K	3
CAT40-SF3-160	3mm	6.30"	1.50"	0.39"	0.63"	0.91"	25K	3

EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
CAT40-SF0250-6.30CP	1/4"	6.30"	1.50"	0.83"	1.06"	1.34"	25K	3
CAT40-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
CAT40-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
CAT40-SF0625-6.30CP	5/8"	6.30"	1.75"	1.06"	1.34"	1.59"	25K	3
CAT40-SF0750-6.30CP	3/4"	6.30"	2.25"	1.30"	1.65"	1.87"	25K	3
CAT40-SF1000-6.30CP	1"	6.30"	2.25"	1.73"	2.09"	2.31"	25K	3
CAT40-SF6-160CP	6mm	6.30"	1.50"	0.83"	1.06"	1.34"	25K	3
CAT40-SF8-160CP	8mm	6.30"	1.50"	0.83"	1.06"	1.34"	25K	3
CAT40-SF10-160CP	10mm	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
CAT40-SF12-160CP	12mm	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
CAT40-SF16-160CP	16mm	6.30"	1.75"	1.06"	1.34"	1.59"	25K	3
CAT40-SF20-160CP	20mm	6.30"	2.25"	1.30"	1.65"	1.87"	25K	3
CAT40-SF25-160CP	25mm	6.30"	2.25"	1.73"	2.09"	2.31"	25K	3

MOLD TYPE

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
CAT40-SF0125-3.15MT	1/8"	3.15"	1.75"	0.35"	0.63"	25K	1
CAT40-SF0125-6.30MT	1/8"	6.30"	3.25"	0.35"	0.87"	25K	1
CAT40-SF0250-3.15MT	1/4"	3.15"	2.25"	0.47"	0.83"	25K	1
CAT40-SF0250-6.30MT	1/4"	6.30"	3.75"	0.47"	1.06"	25K	1
CAT40-SF0375-6.30MT	3/8"	6.30"	4.00"	1.26"	0.63"	25K	1
CAT40-SF0500-3.15MT	1/2"	3.15"	2.00"	0.71"	1.06"	25K	1
CAT40-SF0625-3.15MT	5/8"	3.15"	2.00"	0.94"	1.32"	25K	1

Note:

- Mold Type & Rigid Type Shrink Fit Holders can be made as special.

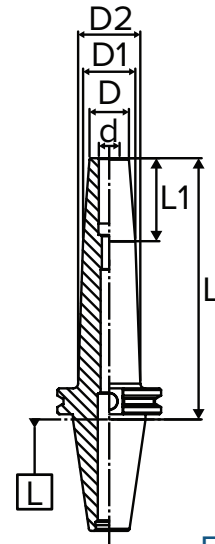


Fig. 3



SHRINK FIT

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



CAT50 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Plugable Coolant Ports



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
CAT50-SF0125-3.15	1/8"	3.15"	2.00"	0.39"	0.71"	25K	1
CAT50-SF3-80	3mm	3.15"	2.00"	0.39"	0.71"	25K	1

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
CAT50-SF0250-3.15CP	1/4"	3.15"	1.50"	0.83"	1.06"		25K	1
CAT50-SF0250-5.12CP	1/4"	5.12"	1.51"	0.83"	1.06"	1.26"	25K	2
CAT50-SF0375-3.15CP	3/8"	3.15"	2.00"	0.95"	1.26"		25K	1
CAT50-SF0375-5.12CP	3/8"	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
CAT50-SF0500-3.15CP	1/2"	3.15"	2.00"	0.95"	1.26"		25K	1
CAT50-SF0500-5.12CP	1/2"	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
CAT50-SF0625-3.15CP	5/8"	3.15"	1.75"	1.06"	1.34"		25K	1
CAT50-SF0625-5.12CP	5/8"	5.12"	1.75"	1.06"	1.34"	1.51"	25K	2
CAT50-SF0750-3.15CP	3/4"	3.15"	2.22"	1.30"	1.65"		25K	1
CAT50-SF0750-5.12CP	3/4"	5.12"	2.25"	1.30"	1.65"	1.79"	25K	2
CAT50-SF1000-3.94CP	1"	3.94"	2.25"	1.73"	2.09"		25K	1
CAT50-SF1000-5.12CP	1"	5.12"	2.25"	1.73"	2.09"	2.22"	25K	2
CAT50-SF1250-3.94CP	1.1/4"	3.94"	2.25"	1.73"	2.09"		25K	1
CAT50-SF1250-5.12CP	1.1/4"	5.12"	2.25"	1.73"	2.09"	2.22"	25K	2
CAT50-SF6-80CP	6mm	3.15"	1.50"	0.83"	1.06"		25K	1
CAT50-SF8-80CP	8mm	3.15"	1.50"	0.83"	1.06"		25K	1
CAT50-SF10-80CP	10mm	3.15"	2.00"	0.95"	1.26"		25K	1
CAT50-SF12-80CP	12mm	3.15"	2.00"	0.95"	1.26"		25K	1
CAT50-SF16-80CP	16mm	3.15"	1.75"	1.06"	1.34"		25K	1
CAT50-SF25-100CP	25mm	3.94"	2.25"	1.73"	2.09"		25K	1

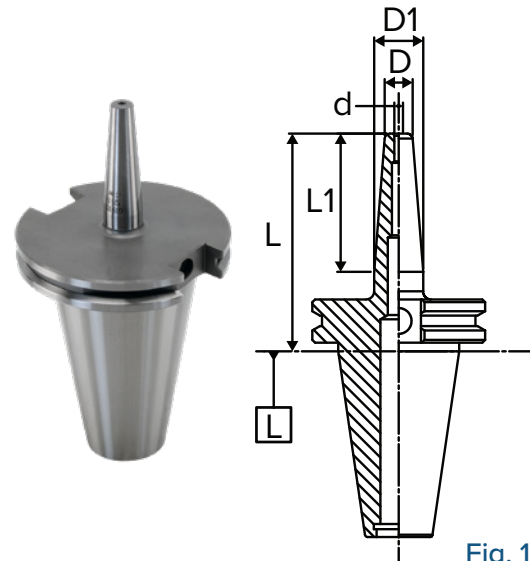


Fig. 1

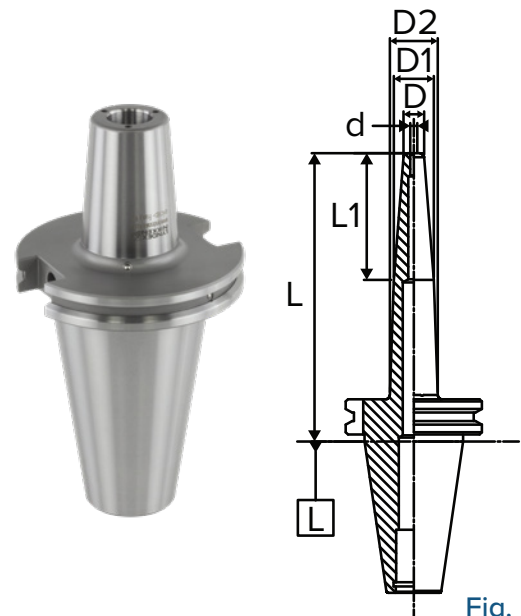
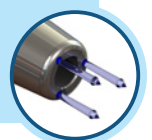


Fig. 2

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



SHRINK FIT



CAT50 SHRINK FIT HOLDERS

EXTENDED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
CAT50-SF0125-6.30	1/8"	6.30"	2.00"	0.39"	0.71"	0.95"	25K	3
CAT50-SF3-160	3mm	6.30"	2.00"	0.39"	0.71"	0.95"	25K	3

EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
CAT50-SF0250-6.30CP	1/4"	6.30"	1.51"	0.83"	1.06"	1.34"	25K	3
CAT50-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
CAT50-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
CAT50-SF0625-6.30CP	5/8"	6.30"	1.75"	1.06"	1.34"	1.59"	25K	3
CAT50-SF0750-6.30CP	3/4"	6.30"	2.25"	1.30"	1.65"	1.87"	25K	3
CAT50-SF1000-6.30CP	1"	6.30"	2.25"	1.73"	2.09"	2.30"	25K	3
CAT50-SF1250-6.30CP	1-1/4"	6.30"	2.25"	1.73"	2.09"	2.30"	25K	3
CAT50-SF6-160CP	6mm	6.30"	1.50"	0.83"	1.06"	1.34"	25K	3
CAT50-SF8-160CP	8mm	6.30"	1.50"	0.83"	1.06"	1.34"	25K	3
CAT50-SF10-160CP	10mm	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
CAT50-SF12-160CP	12mm	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
CAT50-SF16-160CP	16mm	6.30"	1.75"	1.06"	1.34"	1.59"	25K	3
CAT50-SF20-160CP	20mm	6.30"	2.25"	1.30"	1.65"	1.87"	25K	3
CAT50-SF25-160CP	25mm	6.30"	2.25"	1.73"	2.09"	2.30"	25K	3
CAT50-SF32-160CP	32mm	6.30"	2.25"	1.73"	2.09"	2.30"	25K	3



Fig. 3

SHRINK FIT

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



BT30 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Plugable Coolant Ports

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
BT30-SF0125-3.15	1/8"	3.15"	2.00"	0.39"	0.71"	-	25K	4
BT30-SF0125-6.30	1/8"	6.30"	2.00"	0.39"	0.71"	0.94"	25K	5
BT30-SF0187-3.15	3/16"	3.15"	1.50"	0.39"	0.63"	-	25K	4

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
BT30-SF0250-3.15CP	1/4"	3.15"	1.50"	0.83"	1.06"	25K	4
BT30-SF0375-3.15CP	3/8"	3.15"	1.75"	0.95"	1.26"	25K	4
BT30-SF0500-3.15CP	1/2"	3.15"	2.00"	0.95"	1.26"	25K	4
BT30-SF0625-3.15CP	5/8"	3.15"	1.75"	1.06"	1.34"	25K	4
BT30-SF0750-3.15CP	3/4"	3.15"	1.50"	1.30"	1.54"	25K	4

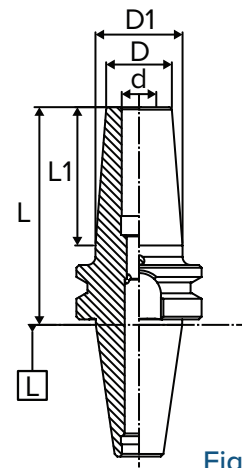


Fig. 4

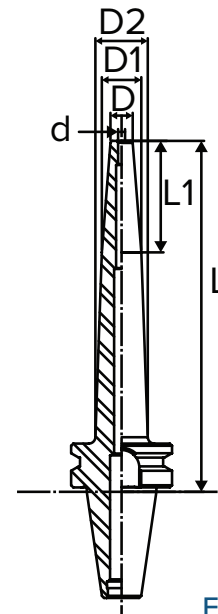
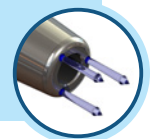


Fig. 5

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



SHRINK FIT



BT40 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Plugable Coolant Ports



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
BT40-SF0125-3.54	1/8"	3.54"	2.00"	0.39"	0.71"	-	25K	4
BT40-SF0125-5.12	1/8"	5.12"	2.00"	0.39"	0.71"	0.84"	25K	5
BT40-SF0187-3.54	3/16"	3.54"	1.50"	0.83"	1.06"	-	25K	4
BT40-SF0187-5.12	3/16"	5.12"	2.25"	0.39"	0.75"	0.87"	25K	5

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
BT40-SF0250-3.54CP	1/4"	3.54"	1.50"	0.83"	1.06"	-	25K	4
BT40-SF0250-5.12CP	1/4"	5.12"	1.50"	0.83"	1.06"	1.23"	25K	5
BT40-SF0312-3.54CP	5/16"	3.54"	1.50"	0.83"	1.06"	-	25K	4
BT40-SF0312-5.12CP	5/16"	5.12"	1.50"	0.83"	1.06"	1.23"	25K	5
BT40-SF0375-3.54CP	3/8"	3.54"	2.00"	0.95"	1.26"	-	25K	4
BT40-SF0375-5.12CP	3/8"	5.12"	2.00"	0.95"	1.26"	1.39"	25K	5
BT40-SF0500-3.54CP	1/2"	3.54"	2.00"	0.95"	1.26"	-	25K	4
BT40-SF0500-5.12CP	1/2"	5.12"	2.00"	0.95"	1.26"	1.39"	25K	5
BT40-SF0625-3.54CP	5/8"	3.54"	1.75"	1.06"	1.34"	-	25K	4
BT40-SF0750-3.54CP	3/4"	3.54"	2.00"	1.30"	1.61"	-	25K	4
BT40-SF1000-3.94CP	1"	3.94"	2.00"	1.73"	2.05"	-	25K	4

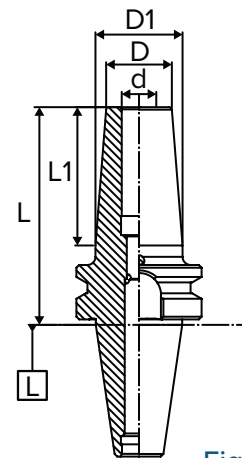


Fig. 4

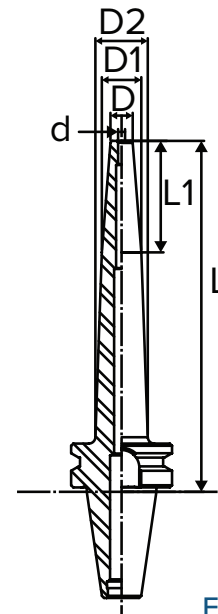
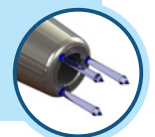


Fig. 5

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



BT40 SHRINK FIT HOLDERS

EXTENDED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
BT40-SF0125-6.30	1/8"	6.30"	2.00"	0.39"	0.71"	0.93"	25K	5
BT40-SF0187-6.30	3/16"	6.30"	1.50"	0.83"	1.06"	1.23"	25K	5

EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
BT40-SF0187-6.30CP	3/16"	6.30"	1.50"	0.83"	1.06"	1.31"	25K	5
BT40-SF0250-6.30CP	1/4"	6.30"	1.50"	0.83"	1.06"	1.32"	25K	5
BT40-SF0312-6.30CP	5/16"	6.30"	1.50"	0.83"	1.06"	1.32"	25K	5
BT40-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	1.48"	25K	5
BT40-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	1.48"	25K	5
BT40-SF0625-6.30CP	5/8"	6.30"	1.95"	1.07"	1.36"	1.57"	25K	5
BT40-SF0750-6.30CP	3/4"	6.30"	2.00"	1.30"	1.61"	1.83"	25K	5
BT40-SF1000-6.30CP	1"	6.30"	2.00"	1.73"	2.05"	2.26"	25K	5

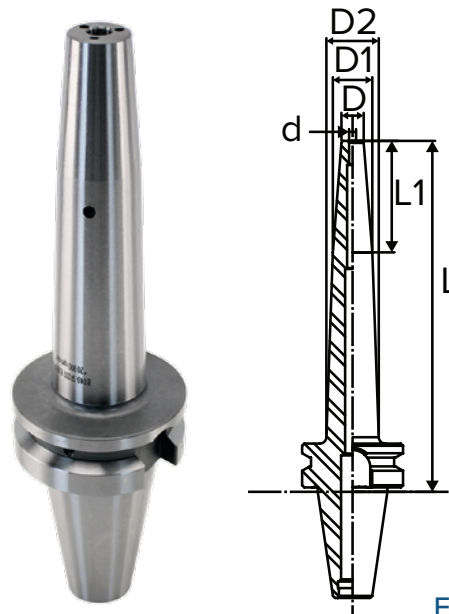


Fig. 5

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.





BT50 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Pluggable Coolant Ports



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
BT50-SF0125-3.94	1/8"	3.94"	2.00"	0.39"	0.71"	-	25K	4
BT50-SF0125-6.30	1/8"	6.30"	2.00"	0.39"	0.71"	0.90"	25K	5

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
BT50-SF0250-3.94CP	1/4"	3.94"	2.00"	0.39"	0.71"	25K	4
BT50-SF0375-3.94CP	3/8"	3.94"	1.50"	0.83"	1.06"	25K	4
BT50-SF0500-3.94CP	1/2"	3.94"	2.00"	0.95"	1.26"	25K	4
BT50-SF0625-3.94CP	5/8"	3.94"	1.75"	1.06"	1.34"	25K	4
BT50-SF0750-3.94CP	3/4"	3.94"	2.25"	1.30"	1.65"	25K	4
BT50-SF1000-3.94CP	1"	3.94"	2.25"	1.73"	2.09"	25K	4
BT50-SF1250-3.94CP	1-1/4"	3.94"	2.25"	1.73"	2.09"	25K	4

EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
BT50-SF0250-6.30CP	1/4"	6.30"	1.50"	0.83"	1.06"	1.29"	25K	5
BT50-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	1.45"	25K	5
BT50-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	1.45"	25K	5
BT50-SF0625-6.30CP	5/8"	6.30"	1.75"	1.06"	1.34"	1.54"	25K	5
BT50-SF0750-6.30CP	3/4"	6.30"	2.25"	1.30"	1.65"	1.82"	25K	5
BT50-SF1000-6.30CP	1"	6.30"	2.25"	1.73"	2.09"	2.26"	25K	5
BT50-SF1250-6.30CP	1-1/4"	6.30"	2.25"	1.73"	2.09"	2.26"	25K	5
BT50-SF8-160CP	8mm	6.30"	1.50"	0.83"	1.06"	1.29"	25K	5
BT50-SF10-160CP	10mm	6.30"	2.00"	0.95"	1.26"	1.45"	25K	5
BT50-SF12-160CP	12mm	6.30"	2.00"	0.95"	1.26"	1.45"	25K	5
BT50-SF16-160CP	16mm	6.30"	1.75"	1.06"	1.26"	1.54"	25K	5

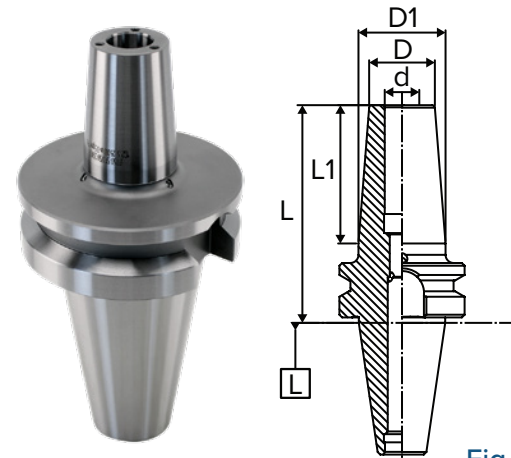


Fig. 4

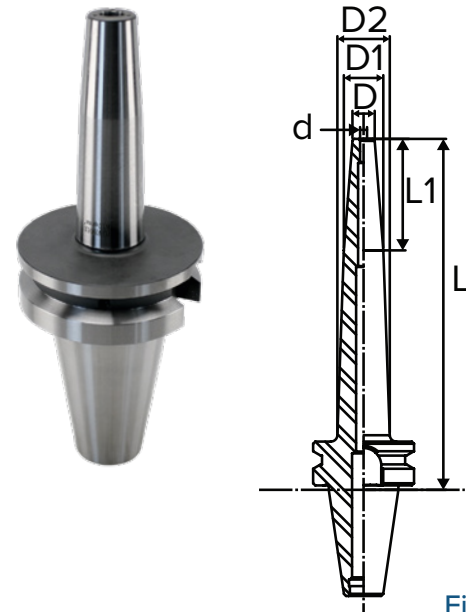


Fig. 5

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



NCAT40 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Plugable Coolant Ports

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NCAT40-SF0125-3.15	1/8"	3.15"	2.00"	0.39"	0.71"	-	25K	1
NCAT40-SF0125-5.12	1/8"	5.12"	1.50"	0.39"	0.75"	0.82"	25K	2
NCAT40-SF0187-3.15	3/16"	3.15"	1.50"	0.39"	0.63"	-	25K	1
NCAT40-SF0187-5.12	3/16"	5.12"	1.50"	0.39"	0.63"	0.82"	25K	2

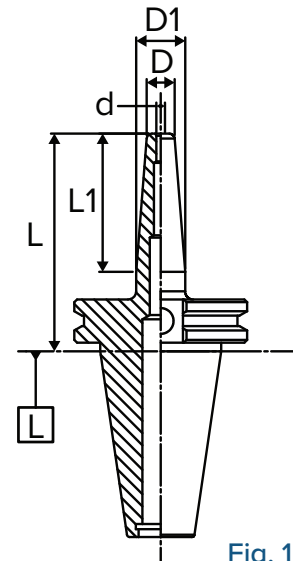


Fig. 1

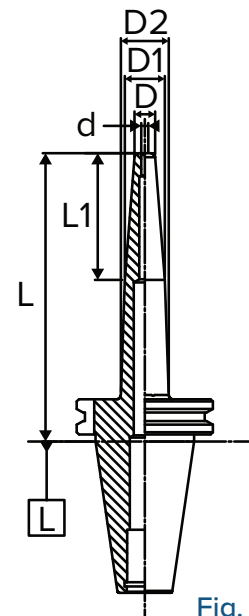


Fig. 2



NCAT40 SHRINK FIT HOLDERS

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NCAT40-SF0250-3.15CP	1/4"	3.15"	1.50"	0.83"	1.06"	-	25K	1
NCAT40-SF0250-5.12CP	1/4"	5.12"	1.50"	0.83"	1.06"	1.26"	25K	2
NCAT40-SF0312-3.15CP	5/16"	3.15"	1.75"	1.06"	1.34"	-	25K	1
NCAT40-SF0312-5.12CP	5/16"	5.12"	1.50"	0.83"	1.06"	1.26"	25K	2
NCAT40-SF0375-3.15CP	3/8"	3.15"	1.99"	0.95"	1.26"	-	25K	1
NCAT40-SF0375-5.12CP	3/8"	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
NCAT40-SF0500-3.15CP	1/2"	3.15"	2.00"	0.95"	1.26"	-	25K	1
NCAT40-SF0500-5.12CP	1/2"	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
NCAT40-SF0625-3.15CP	5/8"	3.15"	1.75"	1.06"	1.34"	-	25K	1
NCAT40-SF0625-5.12CP	5/8"	5.12"	1.75"	1.06"	1.34"	1.51"	25K	2
NCAT40-SF0750-3.15CP	3/4"	3.15"	2.22"	1.30"	1.67"	-	25K	1
NCAT40-SF0750-5.12CP	3/4"	5.12"	2.25"	1.30"	1.65"	1.79"	25K	2
NCAT40-SF1000-3.94CP	1"	3.94"	2.25"	1.73"	2.09"	-	25K	1
NCAT40-SF1000-5.12CP	1"	5.12"	2.25"	1.73"	2.09"	2.22"	25K	2
NCAT40-SF6-80CP	6mm	3.15"	1.50"	0.83"	1.06"	-	25K	1
NCAT40-SF6-130CP	6mm	5.12"	1.50"	0.83"	1.06"	1.26"	25K	2
NCAT40-SF8-80CP	8mm	3.15"	1.50"	0.83"	1.06"	-	25K	1
NCAT40-SF10-80CP	10mm	3.15"	1.99"	0.95"	1.26"	-	25K	1
NCAT40-SF10-130CP	10mm	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
NCAT40-SF12-80CP	12mm	3.15"	2.00"	0.95"	1.26"	-	25K	1
NCAT40-SF14-80CP	14mm	3.15"	1.75"	1.06"	1.34"	-	25K	1
NCAT40-SF16-80CP	16mm	3.15"	1.75"	1.06"	1.34"	-	25K	1

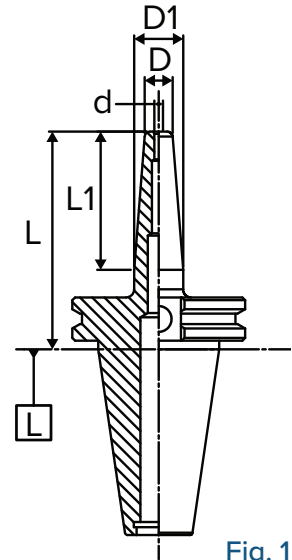


Fig. 1

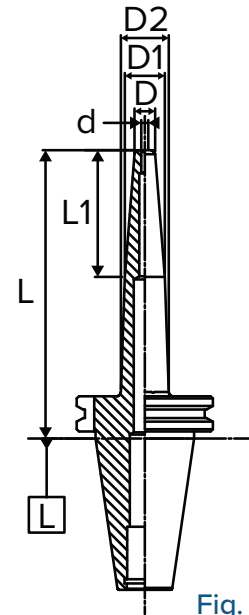
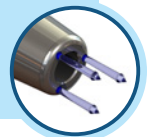


Fig. 2

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



NCAT40 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Plugable Coolant Ports

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

EXTENDED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NCAT40-SF0125-6.30	1/8"	6.30"	1.50"	0.39"	0.63"	0.91"	25K	3
NCAT40-SF0187-6.30	3/16"	6.30"	1.50"	0.39"	0.63"	0.91"	25K	3

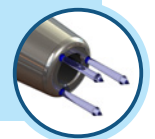
EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NCAT40-SF0250-6.30CP	1/4"	6.30"	1.50"	0.83"	1.06"	1.34"	25K	3
NCAT40-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
NCAT40-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
NCAT40-SF0625-6.30CP	5/8"	6.30"	1.75"	1.06"	1.34"	1.59"	25K	3
NCAT40-SF0750-6.30CP	3/4"	6.30"	2.25"	1.30"	1.65"	1.87"	25K	3
NCAT40-SF1000-6.30CP	1"	6.30"	2.25"	1.73"	2.09"	2.31"	25K	3



Fig. 3

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



SHRINK FIT



NCAT50 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Pluggable Coolant Ports



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
NCAT50-SF0125-3.15	1/8"	3.15"	2.00"	0.39"	0.71"	25K	1
NCAT50-SF0187-3.15	3/16"	3.15"	2.00"	0.39"	0.71"	25K	1

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NCAT50-SF0250-3.15CP	1/4"	3.15"	1.50"	0.83"	1.06"	-	25K	1
NCAT50-SF0250-5.12CP	1/4"	5.12"	1.50"	0.83"	1.06"	1.26"	25K	2
NCAT50-SF0312-3.15CP	5/16"	3.15"	1.50"	0.83"	1.06"	-	25K	1
NCAT50-SF0312-5.12CP	5/16"	5.12"	1.50"	0.83"	1.06"	1.26"	25K	2
NCAT50-SF0375-3.15CP	3/8"	3.15"	2.00"	0.95"	1.26"	-	25K	1
NCAT50-SF0375-5.12CP	3/8"	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
NCAT50-SF0437-3.15CP	7/16"	3.15"	2.00"	0.95"	1.26"	-	25K	1
NCAT50-SF0500-3.15CP	1/2"	3.15"	2.00"	0.95"	1.26"	-	25K	1
NCAT50-SF0500-5.12CP	1/2"	5.12"	2.00"	0.95"	1.26"	1.42"	25K	2
NCAT50-SF0625-3.15CP	5/8"	3.15"	1.75"	1.06"	1.34"	-	25K	1
NCAT50-SF0625-5.12CP	5/8"	5.12"	1.75"	1.06"	1.34"	1.51"	25K	2
NCAT50-SF0750-3.15CP	3/4"	3.15"	2.22"	1.30"	1.65"	-	25K	1
NCAT50-SF0750-5.12CP	3/4"	5.12"	2.25"	1.30"	1.65"	1.80"	25K	2
NCAT50-SF1000-3.94CP	1"	3.94"	2.25"	1.73"	2.09"	-	25K	1
NCAT50-SF1000-5.12CP	1"	5.12"	2.25"	1.73"	2.09"	2.23"	25K	2
NCAT50-SF1250-3.94CP	1-1/4"	3.15"	2.25"	1.73"	2.09"	-	25K	1
NCAT50-SF1250-5.12CP	1-1/4"	5.12"	2.25"	1.73"	2.09"	2.22"	25K	2
NCAT50-SF6-80CP	6mm	3.15"	1.50"	0.83"	1.06"	-	25K	1
NCAT50-SF8-80CP	8mm	3.15"	1.50"	0.83"	1.06"	-	25K	1
NCAT50-SF10-80CP	10mm	3.15"	2.00"	0.95"	1.26"	-	25K	1
NCAT50-SF14-80CP	14mm	3.15"	1.75"	1.06"	1.34"	-	25K	1

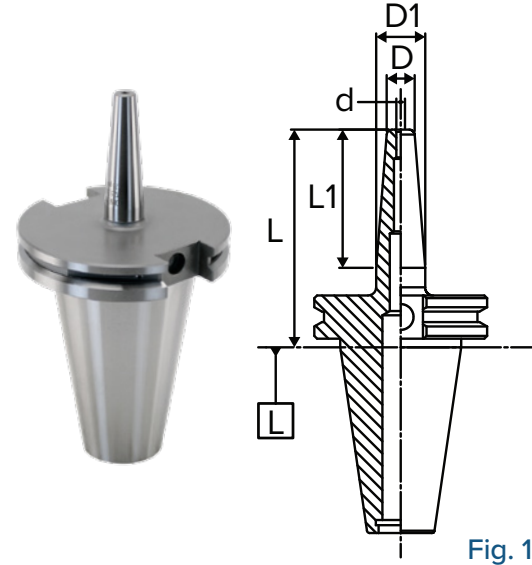


Fig. 1

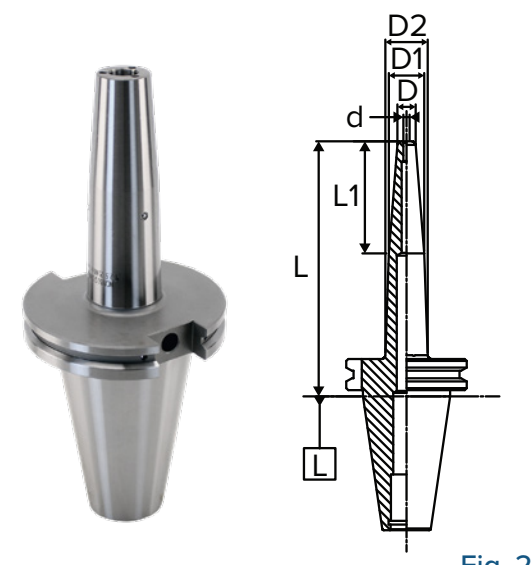


Fig. 2

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



SHRINK FIT

NCAT50 SHRINK FIT HOLDERS

EXTENDED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NCAT50-SF0125-6.30	1/8"	6.30"	2.00"	0.39"	0.71"	0.95"	25K	3

EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NCAT50-SF0250-6.30CP	1/4"	6.30"	1.50"	0.83"	1.06"	1.34"	25K	3
NCAT50-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
NCAT50-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	1.50"	25K	3
NCAT50-SF0625-6.30CP	5/8"	6.30"	1.75"	1.06"	1.34"	1.59"	25K	3
NCAT50-SF0750-6.30CP	3/4"	6.30"	2.25"	1.30"	1.65"	1.87"	25K	3
NCAT50-SF1000-6.30CP	1"	6.30"	2.25"	1.73"	2.09"	2.31"	25K	3
NCAT50-SF1250-6.30CP	1-1/4"	6.30"	2.25"	1.73"	2.09"	2.31"	25K	3

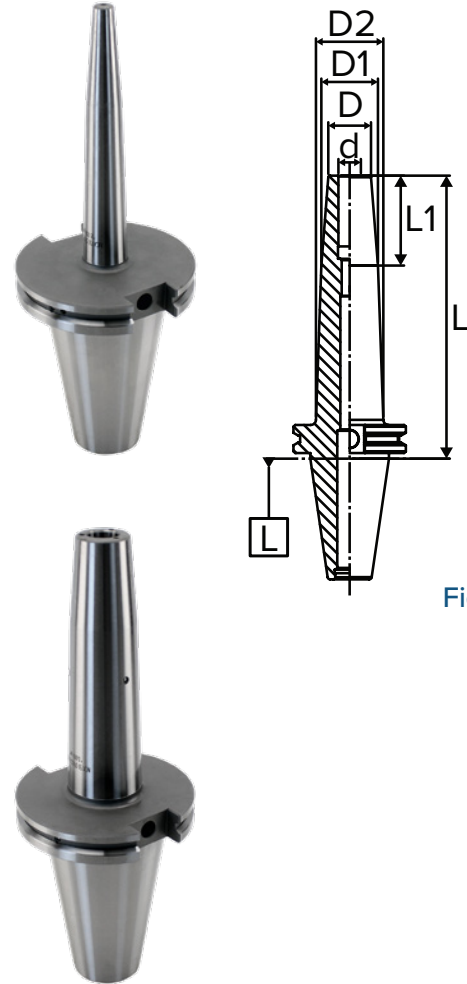


Fig. 3

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



SHRINK FIT



NBT30 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Pluggable Coolant Ports

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
NBT30-SF0125-3.15	1/8"	3.15"	2.00"	0.39"	0.71"	25K	4
NBT30-SF0187-3.15	3/16"	3.15"	1.50"	0.39"	0.63"	25K	4

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
NBT30-SF0250-3.15CP	1/4"	3.15"	1.50"	0.83"	1.06"	25K	4
NBT30-SF0375-3.15CP	3/8"	3.15"	1.75"	0.95"	1.26"	25K	4
NBT30-SF0500-3.15CP	1/2"	3.15"	2.00"	0.95"	1.26"	25K	4
NBT30-SF0625-3.15CP	5/8"	3.15"	1.75"	1.06"	1.34"	25K	4
NBT30-SF0750-3.15CP	3/4"	3.15"	1.50"	1.30"	1.54"	25K	4

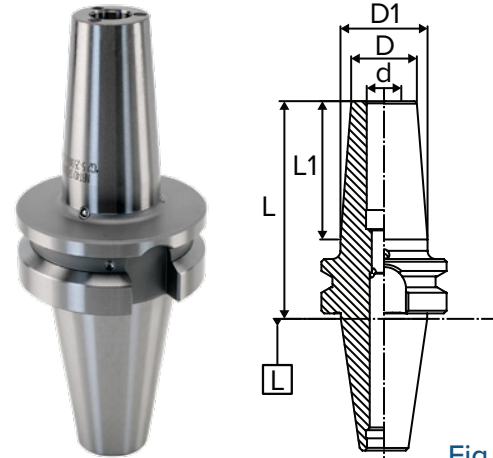


Fig. 4

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



NBT40 SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Plugable Coolant Ports

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
NBT40-SF0125-3.54	1/8"	3.54"	2.00"	0.39"	0.71"	25K	4
NBT40-SF0187-3.54	3/16"	3.54"	2.00"	0.39"	0.71"	25K	4

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NBT40-SF0250-3.54CP	1/4"	3.54"	1.50"	0.83"	1.06"	-	25K	4
NBT40-SF0375-3.54CP	3/8"	3.54"	2.00"	0.95"	1.26"	-	25K	4
NBT40-SF0500-3.54CP	1/2"	3.54"	2.00"	0.95"	1.26"	-	25K	4
NBT40-SF0500-5.12CP	1/2"	5.12"	2.00"	0.95"	1.26"	1.39"	25K	5
NBT40-SF0625-3.54CP	5/8"	3.54"	1.75"	1.06"	1.34"	-	25K	4
NBT40-SF0750-3.54CP	3/4"	3.54"	2.00"	1.30"	1.61"	-	25K	4
NBT40-SF0750-5.12CP	3/4"	5.12"	2.00"	1.30"	1.61"	1.75"	25K	5
NBT40-SF1000-3.54CP	1"	3.54"	2.00"	1.73"	2.05"	-	25K	4

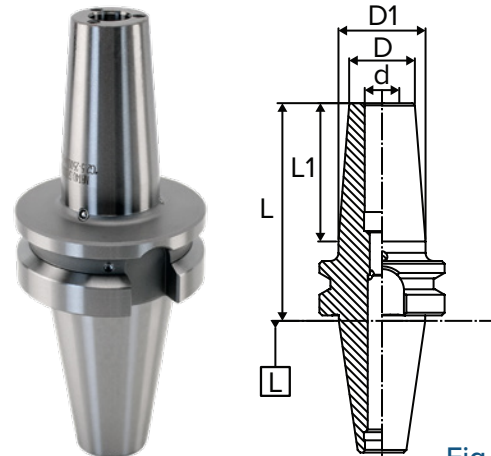


Fig. 4

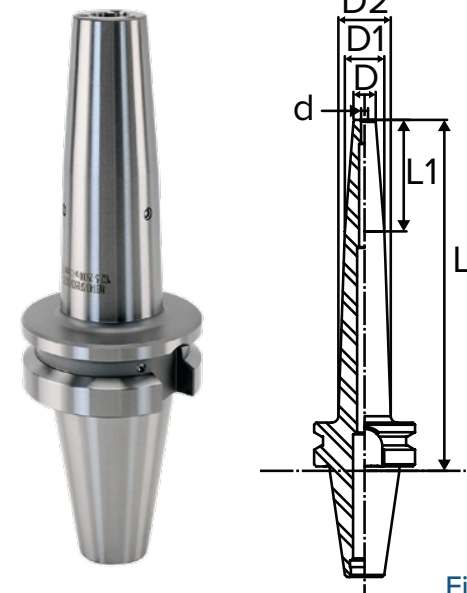


Fig. 5

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.





NBT40 SHRINK FIT HOLDERS

EXTENDED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NBT40-SF0125-6.30	1/8"	6.30"	2.00"	0.39"	0.71"	0.93"	25K	5

EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	D2	Max. RPM	Fig.
NBT40-SF0250-6.30CP	1/4"	6.30"	1.50"	0.83"	1.06"	1.32"	25K	5
NBT40-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	1.48"	25K	5
NBT40-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	1.48"	25K	5
NBT40-SF0625-6.30CP	5/8"	6.30"	1.95"	1.07"	1.37"	1.59"	25K	5
NBT40-SF0750-6.30CP	3/4"	6.30"	2.00"	1.30"	1.61"	1.83"	25K	5
NBT40-SF1000-6.30CP	1"	6.30"	2.00"	1.73"	2.05"	2.26"	25K	5

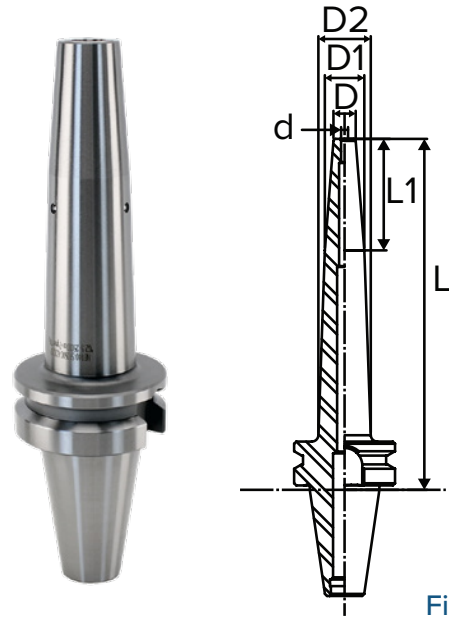


Fig. 5

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



HSK63A SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Center-thru

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H63A-SF0125-3.15	1/8"	3.15"	2.01"	0.39"	0.71"	25K	6

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H63A-SF0125-4.72CP	1/8"	4.72"	1.75"	0.79"	1.06"	25K	6
H63A-SF0187-4.72CP	3/16"	4.72"	1.75"	0.79"	1.06"	25K	6
H63A-SF0250-3.15CP	1/4"	3.15"	1.75"	0.79"	1.06"	25K	6
H63A-SF0250-4.72CP	1/4"	4.72"	1.75"	0.79"	1.06"	25K	6
H63A-SF0250-5.12CP	1/4"	5.12"	1.75"	0.79"	1.06"	25K	6
H63A-SF0312-3.15CP	5/16"	3.15"	1.75"	0.79"	1.06"	25K	6
H63A-SF0312-4.72CP	5/16"	4.72"	1.75"	0.79"	1.06"	25K	6
H63A-SF0312-5.12CP	5/16"	5.12"	1.75"	0.79"	1.06"	25K	6
H63A-SF0375-3.35CP	3/8"	3.35"	2.00"	0.95"	1.26"	25K	6
H63A-SF0375-4.72CP	3/8"	4.72"	2.00"	0.95"	1.26"	25K	6
H63A-SF0375-5.12CP	3/8"	5.12"	2.00"	0.95"	1.26"	25K	6
H63A-SF0500-3.54CP	1/2"	3.54"	2.00"	0.95"	1.26"	25K	6
H63A-SF0500-4.72CP	1/2"	4.72"	2.00"	0.95"	1.26"	25K	6
H63A-SF0500-5.12CP	1/2"	5.12"	2.00"	0.95"	1.26"	25K	6
H63A-SF0625-3.74CP	5/8"	3.74"	1.75"	1.06"	1.34"	25K	6
H63A-SF0625-4.72CP	5/8"	4.72"	1.75"	1.06"	1.34"	25K	6
H63A-SF0625-5.12CP	5/8"	4.72"	1.75"	1.06"	1.34"	25K	6
H63A-SF0750-3.94CP	3/4"	3.94"	2.25"	1.30"	1.65"	25K	6
H63A-SF0750-4.72CP	3/4"	4.72"	2.25"	1.30"	1.65"	25K	6
H63A-SF1000-4.53CP	1"	4.53"	2.00"	1.73"	2.05"	25K	6
H63A-SF6-80CP	6mm	3.15"	1.75"	0.79"	1.06"	25K	6
H63A-SF8-80CP	8mm	3.15"	1.75"	0.79"	1.06"	25K	6
H63A-SF8-120CP	8mm	4.72"	1.50"	0.83"	1.06"	25K	6
H63A-SF10-85CP	10mm	3.35"	2.00"	0.95"	1.26"	25K	6
H63A-SF10-120CP	10mm	4.72"	2.00"	0.95"	1.26"	25K	6
H63A-SF12-90CP	12mm	3.54"	2.00"	0.95"	1.26"	25K	6
H63A-SF12-120CP	12mm	4.72"	2.00"	0.95"	1.26"	25K	6
H63A-SF14-90CP	14mm	3.54"	1.75"	1.06"	1.34"	25K	6
H63A-SF16-95CP	16mm	3.74"	1.75"	1.06"	1.34"	25K	6

Note:

- Coolant tube and coolant wrench not included.
- Please see page 130 for more details.

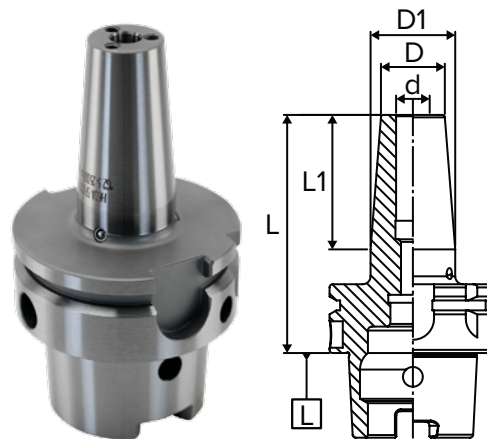


Fig. 6

Standard - DIN69893A / DIN 69882-8
Coolant Port Option - DIN69893A / DIN 69882-8

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.





HSK63A SHRINK FIT HOLDERS

EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H63A-SF0125-6.30CP	1/8"	6.30"	1.75"	0.79"	1.06"	25K	6
H63A-SF0187-6.30CP	3/16"	6.30"	1.75"	0.79"	1.06"	25K	6
H63A-SF0250-6.30CP	1/4"	6.30"	1.75"	0.79"	1.06"	25K	6
H63A-SF0312-6.30CP	5/16"	6.30"	1.75"	0.79"	1.06"	25K	6
H63A-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	25K	6
H63A-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	25K	6
H63A-SF0625-6.30CP	5/8"	6.30"	1.75"	0.95"	1.34"	25K	6
H63A-SF0750-6.30CP	3/4"	6.30"	2.25"	1.30"	1.65"	25K	6
H63A-SF1000-6.30CP	1"	6.30"	2.00"	1.73"	2.05"	25K	6
H63A-SF8-160CP	8mm	6.30"	1.75"	0.79"	1.06"	25K	6
H63A-SF10-160CP	10mm	6.30"	2.00"	0.95"	1.26"	25K	6
H63A-SF12-160CP	12mm	6.30"	2.00"	0.95"	1.26"	25K	6
H63A-SF16-160CP	16mm	6.30"	1.75"	1.06"	1.34"	25K	6
H63A-SF20-160CP	20mm	6.30"	2.25"	1.30"	1.65"	25K	6
H63A-SF25-160CP	25mm	6.30"	2.00"	1.73"	2.05"	25K	6

Note:

- Coolant tube and coolant wrench not included.
- Please see page 130 for more details.

MOLD TYPE

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H63A-SF0125-3.15MT	1/8"	3.15"	1.75"	0.35"	0.63"	25K	7
H63A-SF0125-6.30MT	1/8"	6.30"	3.25"	0.35"	0.87"	25K	7
H63A-SF0250-6.30MT	1/4"	6.30"	3.75"	0.47"	1.06"	25K	7
H63A-SF0375-3.35MT	3/8"	3.35"	1.75"	0.63"	0.91"	25K	7
H63A-SF0500-3.54MT	1/2"	3.54"	2.00"	0.71"	1.02"	25K	7
H63A-SF3-80MT	3mm	3.15"	1.75"	0.35"	0.63"	25K	7
H63A-SF3-160MT	3mm	6.30"	3.25"	0.35"	0.87"	25K	7
H63A-SF4-80MT	4mm	3.15"	1.87"	0.39"	0.67"	25K	7
H63A-SF6-160MT	6mm	6.30"	3.75"	0.47"	1.06"	25K	7

Note:

- Mold Type & Rigid Type Shrink Fit Holders can be made as special.

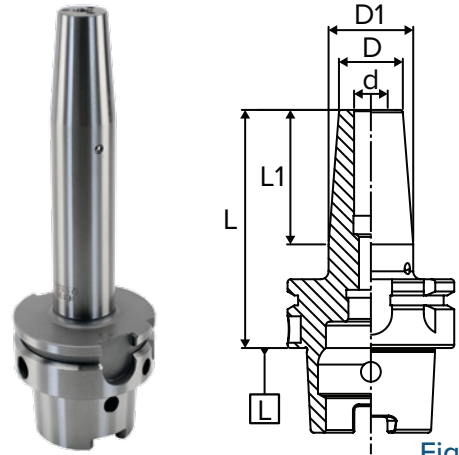


Fig. 6

Extended - DIN69893A / DIN 69882-8

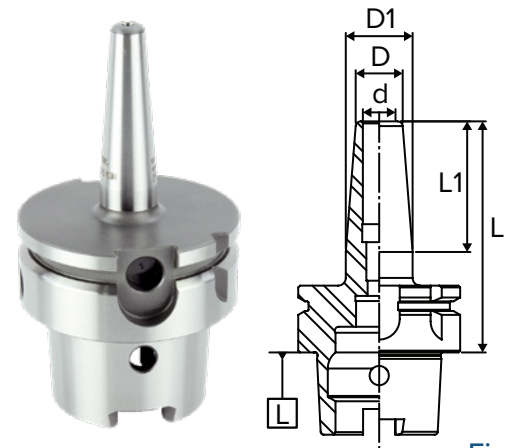


Fig. 7

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



HSK100A SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Center-thru

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H100A-SF0187-3.74	3/16"	3.74"	1.50"	0.39"	0.63"	25K	6

STANDARD COOLANT PORTED

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H100A-SF0250-3.54CP	1/4"	3.54"	1.50"	0.83"	1.06"	25K	6
H100A-SF0312-3.54CP	5/16"	3.54"	1.50"	0.83"	1.06"	25K	6
H100A-SF0375-3.54CP	3/8"	3.54"	2.00"	0.95"	1.26"	25K	6
H100A-SF0437-3.74CP	7/16"	3.74"	2.00"	0.95"	1.26"	25K	6
H100A-SF0500-3.74CP	1/2"	3.74"	2.00"	0.95"	1.26"	25K	6
H100A-SF0625-3.94CP	5/8"	3.94"	1.75"	1.06"	1.34"	25K	6
H100A-SF0750-4.13CP	3/4"	4.13"	2.25"	1.30"	1.65"	25K	6
H100A-SF1000-4.53CP	1"	4.53"	2.25"	1.73"	2.09"	25K	6
H100A-SF1250-4.72CP	1-1/4"	4.72"	2.25"	1.73"	2.09"	25K	6
H100A-SF4-85CP	4mm	3.35"	1.25"	0.59"	0.79"	25K	6
H100A-SF4-130CP	4mm	5.12"	1.25"	0.59"	0.79"	25K	6
H100A-SF6-85CP	6mm	3.35"	1.50"	0.83"	1.06"	25K	6
H100A-SF6-130CP	6mm	5.12"	1.50"	0.83"	1.06"	25K	6
H100A-SF8-85CP	8mm	3.54"	1.50"	0.83"	1.06"	25K	6
H100A-SF8-130CP	8mm	3.74"	1.50"	0.83"	1.06"	25K	6
H100A-SF10-90CP	10mm	3.54"	2.00"	0.95"	1.26"	25K	6
H100A-SF10-130CP	10mm	3.74"	2.00"	0.95"	1.26"	25K	6
H100A-SF12-95CP	12mm	3.74"	2.00"	0.95"	1.26"	25K	6
H100A-SF12-130CP	12mm	3.74"	2.00"	0.95"	1.26"	25K	6
H100A-SF14-95CP	14mm	3.74"	1.75"	1.06"	1.34"	25K	6
H100A-SF14-130CP	14mm	3.74"	1.75"	1.06"	1.34"	25K	6
H100A-SF16-80CP	16mm	3.150"	1.69"	1.06"	1.34"	25K	6
H100A-SF16-100CP	16mm	3.94"	1.75"	1.06"	1.34"	25K	6
H100A-SF16-130CP	16mm	3.74"	1.75"	1.06"	1.34"	25K	6
H100A-SF18-100CP	18mm	3.94"	2.25"	1.30"	1.65"	25K	6
H100A-SF18-130CP	18mm	5.12"	2.25"	1.30"	1.65"	25K	6
H100A-SF20-105CP	20mm	4.13"	2.25"	1.30"	1.65"	25K	6
H100A-SF20-130CP	20mm	3.74"	2.25"	1.30"	1.65"	25K	6
H100A-SF25-115CP	25mm	4.53"	2.25"	1.73"	2.09"	25K	6
H100A-SF25-130CP	25mm	3.74"	2.25"	1.73"	2.09"	25K	6
H100A-SF32-120CP	32mm	4.72"	2.25"	1.73"	2.09"	25K	6
H100A-SF32-130CP	32mm	3.74"	2.25"	1.73"	2.09"	25K	6

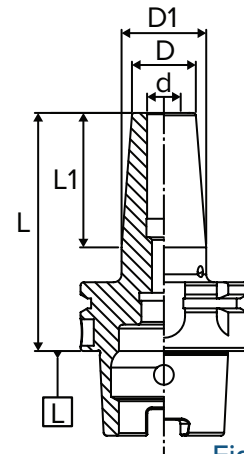


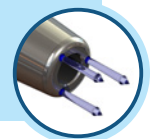
Fig. 6

Coolant Port Option - DIN69893A / DIN 69882-8

Note:

- Coolant tube and coolant wrench not included.
- Please see page 130 for more details.

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.





HSK100A SHRINK FIT HOLDERS

EXTENDED

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H100A-SF0187-6.30	3/16"	6.30"	2.75"	0.43"	0.87"	25K	6

EXTENDED COOLANT PORTED

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H100A-SF0250-6.30CP	1/4"	6.30"	1.50"	0.83"	1.06"	25K	6
H100A-SF0312-6.30CP	5/16"	6.30"	1.50"	0.83"	1.06"	25K	6
H100A-SF0375-6.30CP	3/8"	6.30"	2.00"	0.95"	1.26"	25K	6
H100A-SF0437-6.30CP	7/16"	6.30"	2.00"	0.95"	1.26"	25K	6
H100A-SF0500-6.30CP	1/2"	6.30"	2.00"	0.95"	1.26"	25K	6
H100A-SF0625-6.30CP	5/8"	6.30"	1.75"	1.06"	1.34"	25K	6
H100A-SF0750-6.30CP	3/4"	6.30"	2.25"	1.30"	1.65"	25K	6
H100A-SF1000-6.30CP	1"	6.30"	2.25"	1.73"	2.09"	25K	6
H100A-SF1250-6.30CP	1.1/4"	6.30"	2.25"	1.73"	2.09"	25K	6
H100A-SF6-160CP	6mm	6.30"	1.50"	0.83"	1.06"	25K	6
H100A-SF8-160CP	8mm	6.30"	1.50"	0.83"	1.06"	25K	6
H100A-SF10-160CP	10mm	6.30"	2.00"	0.95"	1.26"	25K	6
H100A-SF12-160CP	12mm	6.30"	2.00"	0.95"	1.26"	25K	6
H100A-SF14-160CP	14mm	6.30"	1.75"	1.06"	1.34"	25K	6
H100A-SF16-160CP	16mm	6.30"	1.75"	1.06"	1.34"	25K	6
H100A-SF18-160CP	18mm	6.30"	2.25"	1.30"	1.65"	25K	6
H100A-SF20-160CP	20mm	6.30"	2.25"	1.30"	1.65"	25K	6
H100A-SF25-160CP	25mm	6.30"	2.25"	1.73"	2.09"	25K	6
H100A-SF32-160CP	32mm	6.30"	2.25"	1.73"	2.09"	25K	6

Note:

- Coolant tube and coolant wrench not included.
- Please see page 130 for more details.

MOLD TYPE

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
H100A-SF4-85MT	4mm	3.35"	1.75"	0.39"	0.67"	25K	8
H100A-SF4-160MT	4mm	6.30"	3.00"	0.39"	0.87"	25K	8
H100A-SF6-85MT	6mm	3.35"	1.75"	0.47"	0.75"	25K	8
H100A-SF6-160MT	6mm	6.30"	3.75"	0.47"	1.06"	25K	8
H100A-SF8-85MT	8mm	3.35"	1.89"	0.55"	0.85"	25K	8
H100A-SF8-160MT	8mm	6.30"	3.37"	0.55"	1.06"	25K	8
H100A-SF10-90MT	10mm	3.54"	1.75"	0.63"	0.91"	25K	8
H100A-SF10-160MT	10mm	6.30"	4.00"	0.63"	1.26"	25K	8
H100A-SF12-95MT	12mm	3.74"	2.00"	0.71"	1.02"	25K	8
H100A-SF12-160MT	12mm	6.30"	3.50"	0.71"	1.26"	25K	8
H100A-SF16-100MT	16mm	3.94"	2.48"	0.94"	1.34"	25K	8
H100A-SF16-160MT	16mm	6.30"	2.50"	0.94"	1.34"	25K	8

Note:

- Mold Type & Rigid Type Shrink Fit Holders can be made as special.

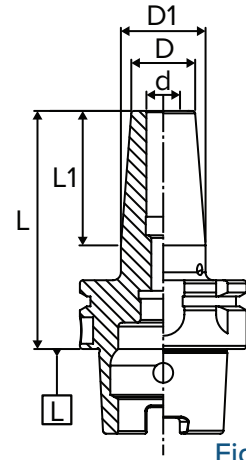


Fig. 6

Coolant Port Option - DIN69893A / DIN 69882-8

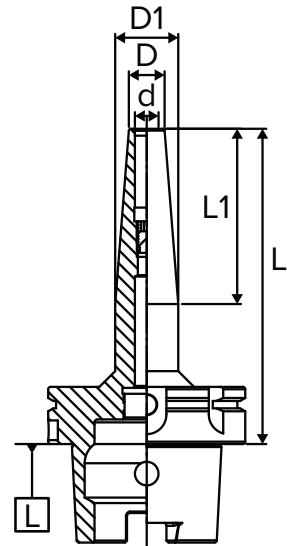
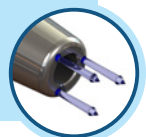


Fig. 8

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



POLYGONAL TAPER SHRINK FIT HOLDERS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Speed
Up to 25,000 rpm



Coolant-Thru
Center-thru

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STANDARD - C4/C5/C6/C8

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
C4-SF0125-2.95	1/8"	2.95"	1.50"	0.39"	0.63"	25K	9
C4-SF0125-4.72	1/8"	4.72"	1.50"	0.39"	0.63"	25K	9
C4-SF0187-2.95	3/16"	2.95"	1.50"	0.39"	0.63"	25K	9
C4-SF0187-4.72	3/16"	4.72"	1.50"	0.39"	0.63"	25K	9
C4-SF4-75	4mm	2.95"	1.75"	0.39"	0.67"	25K	9
C4-SF4-120	4mm	4.72"	2.25"	0.39"	0.75"	25K	9
C5-SF0125-2.95	1/8"	2.95"	1.50"	0.39"	0.63"	25K	9
C5-SF0125-4.72	1/8"	4.72"	2.00"	0.39"	0.71"	25K	9
C5-SF0187-2.95	3/16"	2.95"	1.50"	0.39"	0.63"	25K	9
C5-SF0187-4.72	3/16"	4.72"	2.00"	0.39"	0.71"	25K	9
C5-SF3-75	3mm	2.95"	1.75"	0.35"	0.63"	25K	9
C5-SF3-120	3mm	4.72"	2.25"	0.35"	0.71"	25K	9
C5-SF4-120	4mm	4.72"	2.25"	0.39"	0.75"	25K	9
C6-SF0125-3.15	1/8"	3.15"	1.50"	0.39"	0.63"	25K	9
C6-SF0125-4.72	1/8"	4.72"	2.00"	0.39"	0.71"	25K	9
C6-SF0187-3.15	3/16"	3.15"	1.50"	0.39"	0.63"	25K	9
C6-SF0187-4.72	3/16"	4.72"	2.00"	0.39"	0.71"	25K	9
C6-SF3-80	3mm	3.15"	1.75"	0.35"	0.63"	25K	9
C6-SF3-120	3mm	4.72"	2.25"	0.35"	0.71"	25K	9
C6-SF4-80	4mm	3.15"	1.75"	0.39"	0.67"	25K	9
C6-SF4-120	4mm	4.72"	2.25"	0.39"	0.75"	25K	9
C8-SF0125-3.15	1/8"	3.15"	1.50"	0.39"	0.63"	25K	9
C8-SF0125-5.12	1/8"	5.12"	2.00"	0.39"	0.71"	25K	9
C8-SF0187-3.15	3/16"	3.15"	1.50"	0.39"	0.63"	25K	9
C8-SF0187-5.12	3/16"	5.12"	2.00"	0.39"	0.71"	25K	9
C8-SF3-85	3mm	3.350"	1.75"	0.35"	0.63"	25K	9
C8-SF3-130	3mm	5.12"	2.25"	0.35"	0.71"	25K	9
C8-SF4-85	4mm	3.350"	1.75"	0.39"	0.67"	25K	9
C8-SF4-130	4mm	5.12"	2.25"	0.39"	0.75"	25K	9

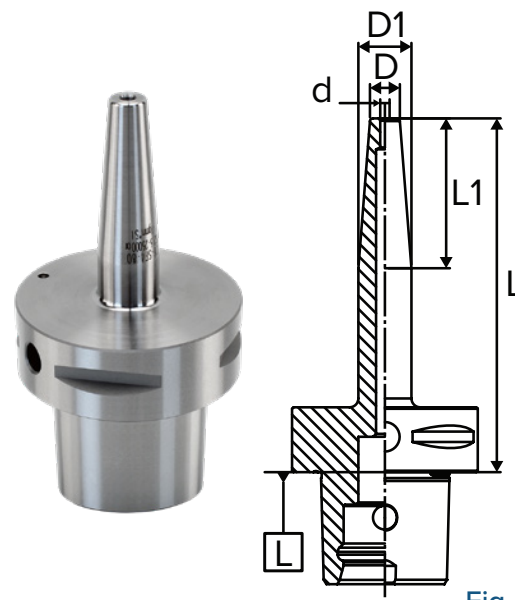


Fig. 9



POLYGONAL TAPER SHRINK FIT HOLDERS

STANDARD COOLANT PORTED - C4/C5

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
C4-SF0250-2.95CP	1/4"	2.95"	1.75"	0.79"	1.06"	25K	9
C4-SF0250-4.72CP	1/4"	4.72"	1.75"	0.79"	1.06"	25K	9
C4-SF0375-2.95CP	3/8"	2.95"	2.00"	0.95"	1.26"	25K	9
C4-SF0375-4.72CP	3/8"	4.72"	2.00"	0.95"	1.26"	25K	9
C4-SF0500-2.95CP	1/2"	2.95"	2.00"	0.95"	1.26"	25K	9
C4-SF0500-4.72CP	1/2"	4.72"	2.00"	0.95"	1.26"	25K	9
C4-SF0625-3.15CP	5/8"	3.15"	1.75"	1.06"	1.34"	25K	9
C4-SF0625-4.72CP	5/8"	4.72"	1.75"	1.06"	1.34"	25K	9
C4-SF6-75CP	6mm	2.95"	1.75"	0.79"	1.06"	25K	9
C4-SF6-120CP	6mm	4.72"	1.75"	0.79"	1.06"	25K	9
C4-SF10-75CP	10mm	2.95"	2.00"	0.95"	1.26"	25K	9
C5-SF0250-2.95CP	1/4"	2.95"	1.75"	0.79"	1.06"	25K	9
C5-SF0250-4.72CP	1/4"	4.72"	1.75"	0.79"	1.06"	25K	9
C5-SF0375-2.95CP	3/8"	2.95"	2.00"	0.95"	1.26"	25K	9
C5-SF0375-4.72CP	3/8"	4.72"	2.00"	0.95"	1.26"	25K	9
C5-SF0500-2.95CP	1/2"	2.95"	2.00"	0.95"	1.26"	25K	9
C5-SF0500-4.72CP	1/2"	4.72"	2.00"	0.95"	1.26"	25K	9
C5-SF0625-3.15CP	5/8"	3.15"	1.75"	1.06"	1.34"	25K	9
C5-SF0625-4.72CP	5/8"	4.72"	1.75"	1.06"	1.34"	25K	9
C5-SF0750-3.35CP	3/4"	3.35"	2.25"	1.30"	1.65"	25K	9
C5-SF0750-4.72CP	3/4"	4.72"	2.25"	1.30"	1.65"	25K	9
C5-SF6-75CP	6mm	2.95"	1.75"	0.79"	1.06"	25K	9
C5-SF6-120CP	6mm	4.72"	1.75"	0.79"	1.06"	25K	9
C5-SF8-75CP	8mm	2.95"	1.75"	0.79"	1.06"	25K	9
C5-SF12-75CP	12mm	2.95"	2.00"	0.95"	1.26"	25K	9

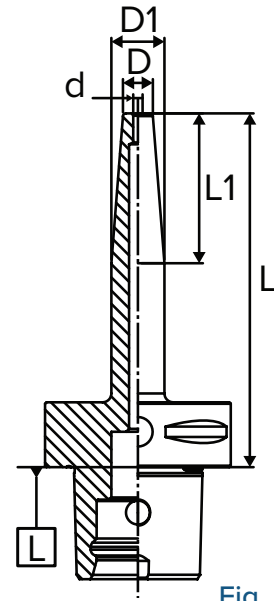


Fig. 9

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



POLYGONAL TAPER SHRINK FIT HOLDERS

STANDARD COOLANT PORTED - C6

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
C6-SF0250-3.15CP	1/4"	3.15"	1.75"	0.79"	1.06"	25K	9
C6-SF0250-4.72CP	1/4"	4.72"	1.75"	0.79"	1.06"	25K	9
C6-SF0312-3.15CP	5/16"	3.15"	1.75"	0.79"	1.06"	25K	9
C6-SF0375-3.15CP	3/8"	3.15"	2.00"	0.95"	1.26"	25K	9
C6-SF0375-4.72CP	3/8"	4.72"	2.00"	0.95"	1.26"	25K	9
C6-SF0500-3.15CP	1/2"	3.15"	2.00"	0.95"	1.26"	25K	9
C6-SF0500-4.72CP	1/2"	4.72"	2.00"	0.95"	1.26"	25K	9
C6-SF0625-3.35CP	5/8"	3.35"	1.75"	1.06"	1.34"	25K	9
C6-SF0625-4.72CP	5/8"	4.72"	1.75"	1.06"	1.34"	25K	9
C6-SF0750-3.35CP	3/4"	3.35"	2.25"	1.30"	1.65"	25K	9
C6-SF0750-4.72CP	3/4"	4.72"	2.25"	1.30"	1.65"	25K	9
C6-SF1000-3.54CP	1.0"	3.54"	2.25"	1.73"	2.09"	25K	9
C6-SF1000-4.72CP	1.0"	4.72"	2.25"	1.73"	2.09"	25K	9
C6-SF1250-3.74CP	1-1/4"	3.74"	2.25"	1.73"	2.09"	25K	9
C6-SF1250-4.72CP	1-1/4"	4.72"	2.25"	1.73"	2.09"	25K	9
C6-SF6-80CP	6mm	3.15"	1.75"	0.79"	1.06"	25K	9
C6-SF6-120CP	6mm	4.72"	1.75"	0.79"	1.06"	25K	9
C6-SF8-80CP	8mm	3.15"	1.75"	0.79"	1.06"	25K	9
C6-SF8-120CP	8mm	4.72"	1.75"	0.79"	1.06"	25K	9
C6-SF10-80CP	10mm	3.15"	2.00"	0.95"	1.26"	25K	9
C6-SF10-120CP	10mm	4.72"	2.00"	0.95"	1.26"	25K	9
C6-SF12-80CP	12mm	3.15"	2.00"	0.95"	1.26"	25K	9
C6-SF12-120CP	12mm	4.72"	2.00"	0.95"	1.26"	25K	9
C6-SF14-85CP	14mm	3.35"	1.75"	1.06"	1.34"	25K	9
C6-SF14-120CP	14mm	4.72"	1.75"	1.06"	1.34"	25K	9
C6-SF16-85CP	16mm	3.35"	1.75"	1.06"	1.34"	25K	9
C6-SF16-120CP	16mm	4.72"	1.75"	1.06"	1.34"	25K	9
C6-SF18-85CP	18mm	3.35"	2.25"	1.30"	1.65"	25K	9
C6-SF18-120CP	18mm	4.72"	2.25"	1.30"	1.65"	25K	9
C6-SF20-85CP	20mm	3.35"	2.25"	1.30"	1.65"	25K	9
C6-SF20-120CP	20mm	4.72"	2.25"	1.30"	1.65"	25K	9
C6-SF25-90CP	25mm	3.54"	2.25"	1.73"	2.09"	25K	9
C6-SF25-120CP	25mm	4.72"	2.25"	1.73"	2.09"	25K	9
C6-SF32-95CP	32mm	3.54"	2.25"	1.73"	2.09"	25K	9
C6-SF32-120CP	32mm	4.72"	2.25"	1.73"	2.09"	25K	9

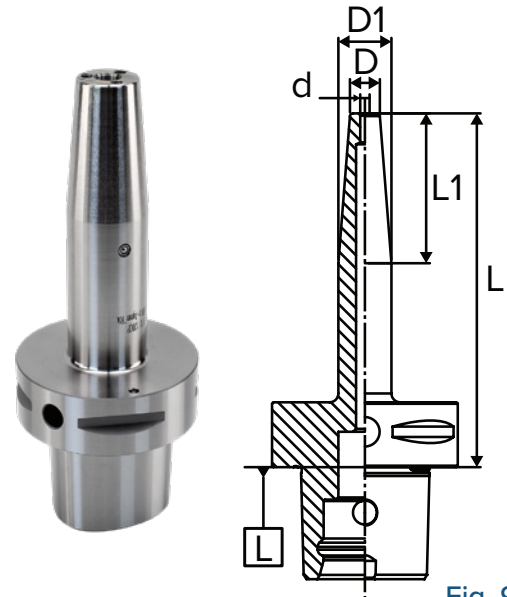


Fig. 9

SHRINK FIT

EXTENDED COOLANT PORTED - C6

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
C6-SF0750-6.30CP	3/4"	6.30"	2.25"	1.30"	1.65"	25K	9

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.





POLYGONAL TAPER SHRINK FIT HOLDERS

STANDARD COOLANT PORTED - C8

Part Number	d	L	L1	D	D1	Max. RPM	Fig.
C8-SF0250-3.15CP	1/4"	3.15"	1.75"	0.79"	1.06"	25K	9
C8-SF0250-5.12CP	1/4"	5.12"	1.75"	0.79"	1.06"	25K	9
C8-SF0375-3.54CP	3/8"	3.54"	2.00"	0.95"	1.26"	25K	9
C8-SF0375-5.12CP	3/8"	5.12"	2.00"	0.95"	1.26"	25K	9
C8-SF0500-3.54CP	1/2"	3.54"	2.00"	0.95"	1.26"	25K	9
C8-SF0500-5.12CP	1/2"	5.12"	2.00"	0.95"	1.26"	25K	9
C8-SF0625-3.74CP	5/8"	3.74"	1.75"	1.06"	1.34"	25K	9
C8-SF0625-5.12CP	5/8"	5.12"	1.75"	1.06"	1.34"	25K	9
C8-SF0750-3.74CP	3/4"	3.74"	2.25"	1.30"	1.65"	25K	9
C8-SF0750-5.12CP	3/4"	5.12"	2.25"	1.30"	1.65"	25K	9
C8-SF1000-3.94CP	1.0"	3.94"	2.25"	1.73"	2.09"	25K	9
C8-SF1000-5.12CP	1.0"	5.12"	2.25"	1.73"	2.09"	25K	9
C8-SF1250-3.94CP	1-1/4"	3.94"	2.25"	1.73"	2.09"	25K	9
C8-SF1250-5.12CP	1-1/4"	5.12"	2.25"	1.73"	2.09"	25K	9
C8-SF6-85CP	6mm	3.35"	1.75"	0.79"	1.06"	25K	9
C8-SF6-130CP	6mm	5.12"	1.75"	0.79"	1.06"	25K	9
C8-SF8-85CP	8mm	3.35"	1.75"	0.79"	1.06"	25K	9
C8-SF8-130CP	8mm	5.12"	1.75"	0.79"	1.06"	25K	9
C8-SF10-85CP	10mm	3.35"	2.00"	0.95"	1.26"	25K	9
C8-SF10-130CP	10mm	5.12"	2.00"	0.95"	1.26"	25K	9
C8-SF12-85CP	12mm	3.35"	2.00"	0.95"	1.26"	25K	9
C8-SF12-130CP	12mm	5.12"	2.00"	0.95"	1.26"	25K	9
C8-SF14-85CP	14mm	3.35"	1.75"	1.06"	1.34"	25K	9
C8-SF14-130CP	14mm	5.12"	1.75"	1.06"	1.34"	25K	9
C8-SF16-90CP	16mm	3.54"	1.75"	1.06"	1.34"	25K	9
C8-SF16-130CP	16mm	5.12"	1.75"	1.06"	1.34"	25K	9
C8-SF18-90CP	18mm	3.54"	2.25"	1.30"	1.65"	25K	9
C8-SF18-130CP	18mm	5.12"	2.25"	1.30"	1.65"	25K	9
C8-SF20-90CP	20mm	3.54"	2.25"	1.30"	1.65"	25K	9
C8-SF20-130CP	20mm	5.12"	2.25"	1.30"	1.65"	25K	9
C8-SF25-90CP	25mm	3.54"	2.25"	1.73"	2.09"	25K	9
C8-SF25-130CP	25mm	5.12"	2.25"	1.73"	2.09"	25K	9
C8-SF32-90CP	32mm	3.54"	2.25"	1.73"	2.09"	25K	9
C8-SF32-130CP	32mm	5.12"	2.25"	1.73"	2.09"	25K	9

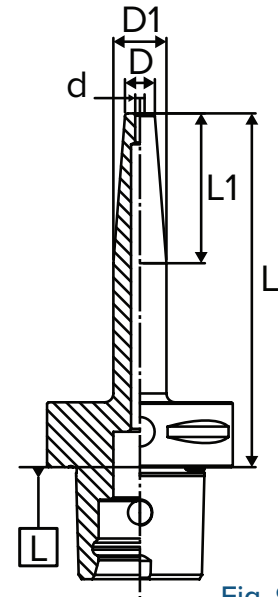


Fig. 9

"CP" stands for "Coolant Ported". Shrink fit is center-thru coolant capable. Contact us for additional coolant options.



SHRINK FIT HOLDER ACCESSORIES

COOLANT TUBE WRENCHES FOR HSK/POLYGON HOLDERS

Part Number	Description
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube
C4-WRENCH	Wrench for C4 Coolant Tube
C5-WRENCH	Wrench for C5 Coolant Tube
C6-WRENCH	Wrench for C6 Coolant Tube
C8-WRENCH	Wrench for C8 Coolant Tube



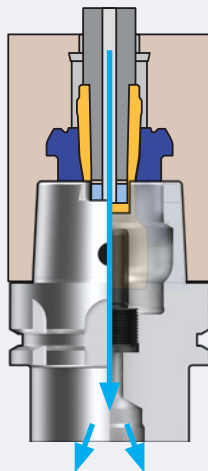
Note: Coolant tube wrenches are needed to remove or install coolant tubes in HSK/Polygon Shrink Fit toolholders.

COOLANT TUBES FOR HSK/POLYGON HOLDERS

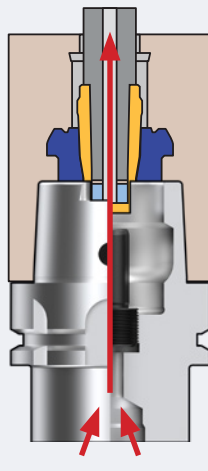
Part Number	Description
HSK63-TUBE	Coolant Tube for HSK63 holder
HSK100-TUBE	Coolant Tube for HSK100 holder
C4-TUBE	C4 Coolant Tube
C5-TUBE	C5 Coolant Tube
C6-TUBE	C6 Coolant Tube
C8-TUBE	C8 Coolant Tube



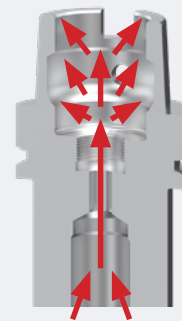
WHY EVERY HSK TOOLHOLDER SHOULD HAVE A COOLANT TUBE INSTALLED



The Coolant Tube is connected and sealed with the Spindle Coolant Nozzle for Thru-Spindle Coolant (TSC) application.



With the Coolant Tube connected and sealed with the Spindle Coolant Nozzle, back-flow contaminants are contained.



Without the Coolant Tube connected and sealed to contain them, contaminants can back-flow through collet gaps.

These contaminants can flood the HSK chamber and cause damage to the clamping mechanism. They can also travel higher and can damage other parts like spindle bearings.

Therefore - it is recommended that every HSK Holder have a coolant tube installed, regardless if Thru-Spindle Coolant is utilized or not.

Contact your local Lyndex-Nikken representatives for information regarding special pricing or replacement coolant tubes.



STRAIGHT SHANK EXTENSIONS

FEATURES

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced up to 25,000 RPM
- Increase cutting tool life, material removal rate and workpiece accuracy
- All shrink fit holders 6mm (1/4") and above include a backup screw

MATERIAL: H11 High Alloy Steel **HARDNESS:** 52 HRc tempered



T.I.R.
0.0001" in ID bore



Coolant-Thru
Center-thru

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

STRAIGHT SHANK EXTENSIONS

Part Number	d	L	L1	D	D1	Fig.
ST50-SF0125-6.30	1/8"	6.30"	1.81"	0.31"	0.50"	10
ST50-SF0187-6.30	3/16"	6.30"	1.81"	0.31"	0.50"	10
ST62-SF0125-6.30	1/8"	6.30"	3.01"	0.31"	0.63"	10
ST62-SF0187-6.30	3/16"	6.30"	3.01"	0.31"	0.63"	10
ST62-SF0250-6.30	1/4"	6.30"	1.50"	0.47"	0.63"	10
ST75-SF0250-6.30	1/4"	6.30"	2.68"	0.47"	0.75"	10
ST75-SF0312-6.30	5/16"	6.30"	1.16"	0.63"	0.75"	10
ST75-SF0375-6.30	3/8"	6.30"	1.16"	0.63"	0.75"	10
ST75-SF0500-6.30	1/2"	6.30"	0.41"	0.71"	0.75"	10
ST75-SF6-6.30	6mm	6.30"	0.87"	0.47"	0.75"	10
ST75-SF8-6.30	8mm	6.30"	1.02"	0.63"	0.75"	10
ST16M-SF3-160	3mm	6.30"	3.01"	0.32"	0.63"	10
ST16M-SF4-160	4mm	6.30"	3.01"	0.32"	0.63"	10
ST16M-SF5-160	5mm	6.30"	2.63"	0.36"	0.63"	10
ST16M-SF6-160	6mm	6.30"	1.50"	0.47"	0.63"	10
ST16M-SF8-160	8mm	6.30"	1.50"	0.48"	0.63"	10
ST20M-SF6-160	6mm	6.30"	3.01"	0.48"	0.79"	10
ST20M-SF8-160	8mm	6.30"	1.50"	0.63"	0.79"	10
ST20M-SF10-160	10mm	6.30"	1.50"	0.63"	0.79"	10

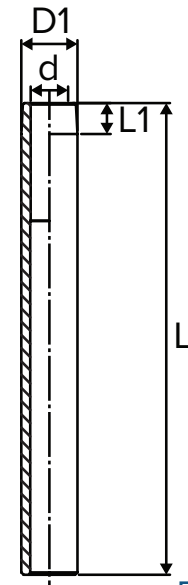
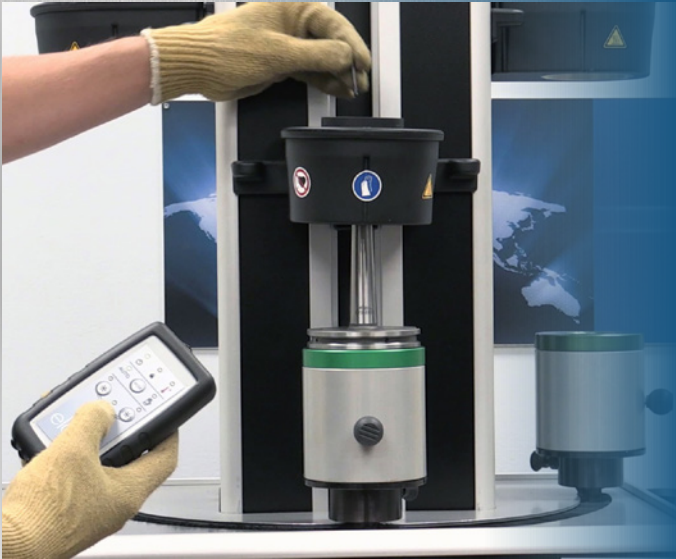


Fig. 10

SHRINK FIT IN-DEPTH TRAINING AND LIVE DEMOS



LEARN IN UNDER 30 MINUTES!

- Receive in-depth training on our Shrink Fit products to help maximize your productivity.
- Find out how Lyndex-Nikken's engineering, service group and product managers can further support your applications.

THE INDUSTRY'S HIGHEST QUALITY SHRINK FIT LINE

- High Speed: shrinking from 2 to 7 seconds
- Flexible Range: shrinking from 2 to 40mm (0.078" to 1.575")



**To schedule a demo, contact your Lyndex-Nikken
Regional Sales Manager or send an e-mail to:
sales@lyndexnikken.com**



847-367-4800 | sales@lyndexnikken.com
lyndexnikken.com

Connect With Us:



MILLING CHUCKS



MILLING CHUCKS

MILLING CHUCKS

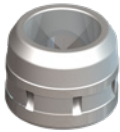


MILLING CHUCK FEATURES



Nikken is the inventor of the original Milling Chuck (U.S. Patent 7018919). Since its introduction in 1963, Nikken has sold over 3,000,000 Milling Chucks worldwide and has never stopped improving upon its original design. Featuring multi-roller bearings, spiral coolant slots, and a heavy-duty nut, the Milling Chuck is the most reliable and powerful toolholder available.

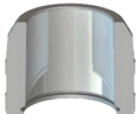
CONSTRUCTION AND DESIGN



Forged Nickel Chrome Molybdenum 4340 ground on taper and base.



Staggered, coated steel cage packs 140% more needle rollers than competitors. This provides more gripping power. The retainer is NOT made of phosphor bronze, but rather of special steel which will never break.



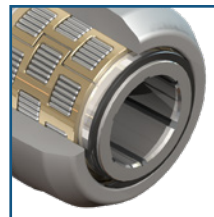
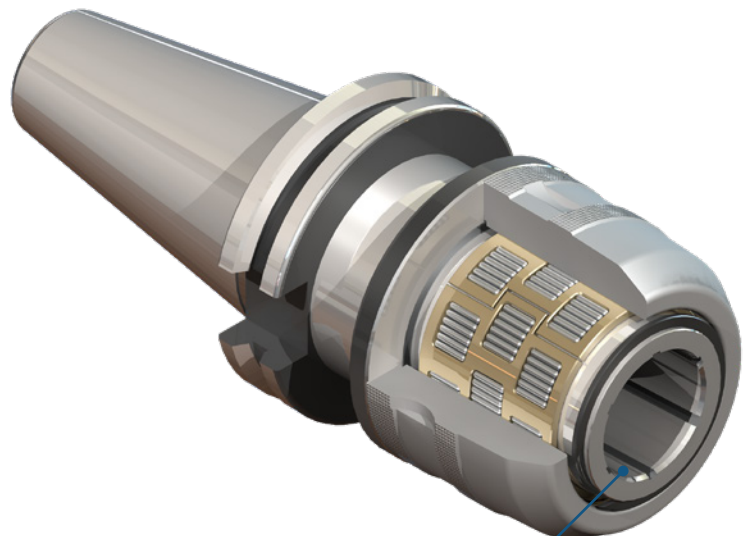
Thick nut exerts immense gripping strength by collapsing tight taper on the mill chuck body.



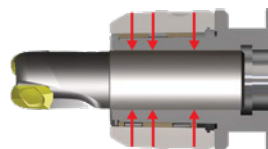
Solid 1-piece base and thick wall provides rigidity for heavy machining.



All milling chucks are cryogenically treated after heat treatment to stabilize concentrations of carbon. This prevents deformation and cracking when under stress for the life of the toolholder.



Inner bore coolant slots project coolant at 2 degrees, assuring high pressure and volume of coolant during high RPM operations.



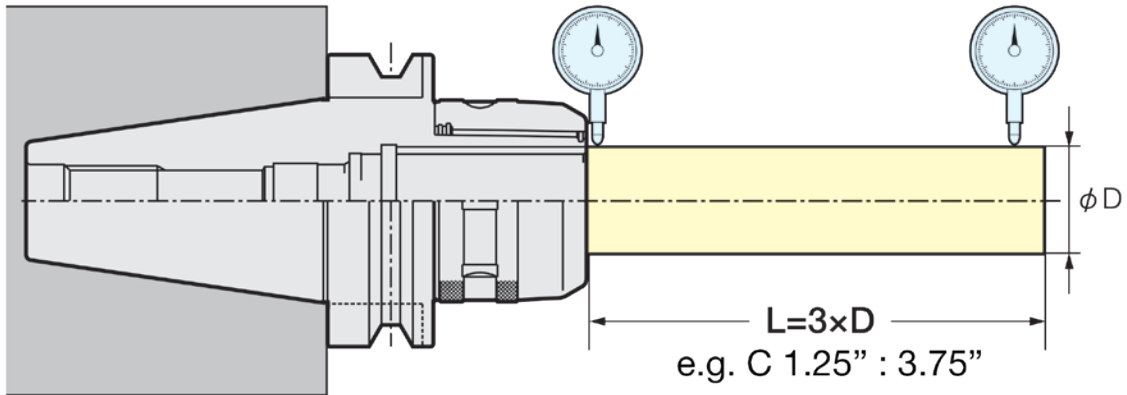
**STRONGEST
MECHANICALLY
GRIPPING HOLDER
IN THE WORLD!**



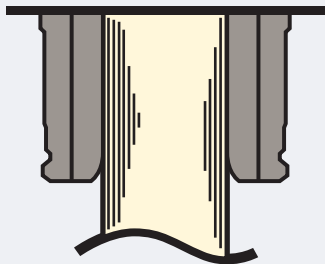
MILLING CHUCK FEATURES

Superior Run Out Accuracy

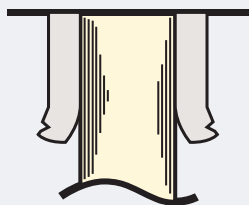
Within 0.0002"



- Flange and taper grinding of tool results in minimal T.I.R.
- Flange grinding is done for Taper Plus only and not for standard CAT/BT Toolholders
- 0.0002 at 3.75" from the nose—guaranteed



**NIKKEN
MILLING CHUCK**



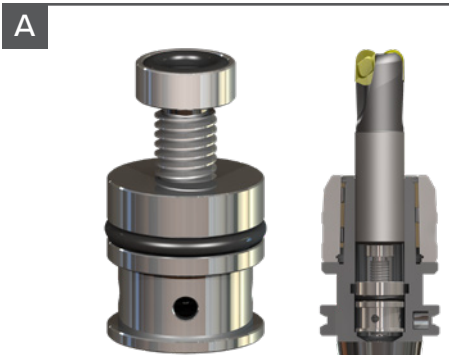
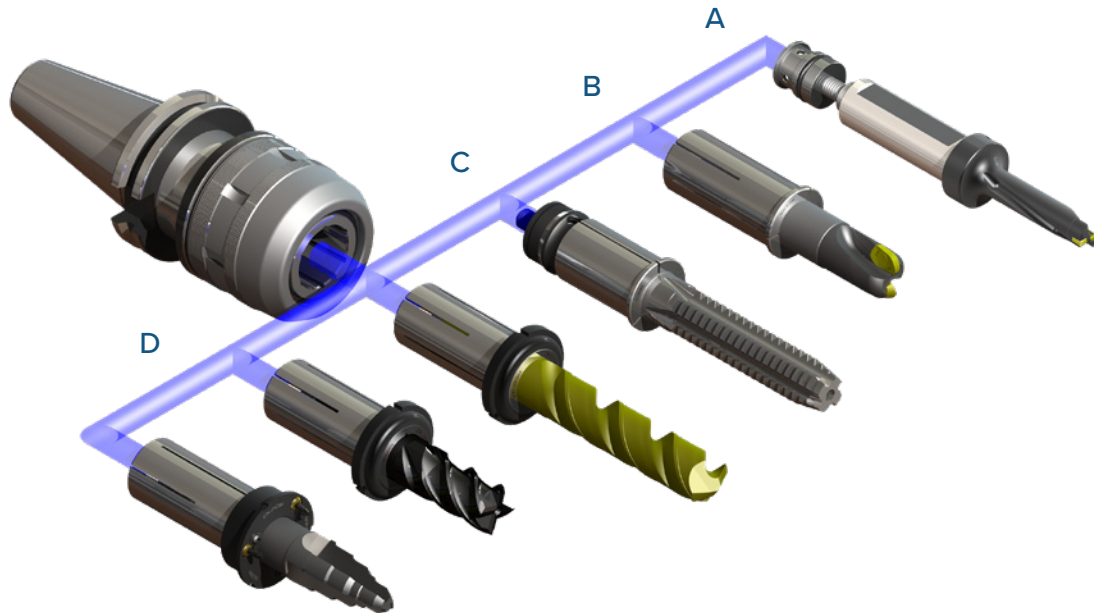
**OTHER
MILLING CHUCKS**

**STRONGEST GRIP
IN THE WORLD
UP TO 3,500 FT-LBS.!**

Nikken's patented Milling Chuck design allows clamping force to be distributed evenly around the entire cutting tool shank. Gripping force up to 3,600 ft-lbs. can be applied ensuring optimal cutting performance and rigidity.

MILLING CHUCK COLLET SYSTEM

Nikken Milling Chuck Collets provide uniform contact with cutting tool shanks manufactured with the most stringent specifications. When using with shanks that have h7 tolerance, the Collets produce much more gripping force and rigidity than traditional taper collets.



A DIRECT COOLANT PLUG (THRU-TOOL)

- By combining a backup screw and coolant plug in one, the inner diameter of the milling chuck can be used with or without coolant
- Coolant through cutter ports can easily be sealed by an o-ring located at the face of the coolant plug
- 1200 PSI capable
- Excellent for high torque deep drilling
- Available for inch and metric shanks



B KM COLLET

- High Precision KM reduction collets extend the chucking flexibility of the milling chuck. All inch and metric standard sizes can be held by the same toolholder.
- Can be used in conjunction with a coolant back up screw for high pressure (1200 PSI) applications.



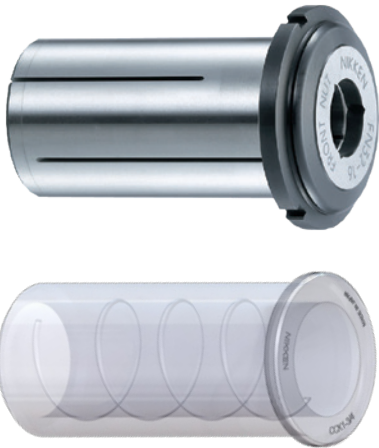
C NK COLLET

- High precision inch and metric NK reduction collets extend the chucking flexibility of the milling chuck and offer a built in back up screw for repeatability when replacing cutters.
- Easy set up since the NK fits directly into the inner diameter of the milling chuck.



MILLING CHUCK COOLANT COLLET SYSTEM

D



CCK COLLET: COOLANT-THRU

- High Pressure coolant application through existing slots
- CCK reduction collets offers flexibility to hold both metric and inch standard shanks
- Straight collet design eliminates taper tolerance variation between mating surfaces
- Many options available to configure how coolant is expelled
- The spiral grooves provide spaces for the oil film on the cutter shank and ID surface to escape to, which in turn helps maintain the gripping force

COOLANT-THRU NUT: CKFN-C

When paired with the Nikken Milling Chuck Coolant Collet (CCK), the Coolant-Thru Nut forms a complete seal around the cutting tool. This forms an ideal combination for Coolant-Thru cutting tools.



- Internal durable O-ring seals for high pressure (750 PSI)
- Prevents swarf and chips from packing on the collet face
- Available for inch and metric shanks

Both the Coolant Collet and the Coolant-Thru Nut must be ordered on size for each cutting tool (see pages 153-154 for sizes and part numbers).

JET-SLOTTED NUT: CKFN

When paired with the Nikken Milling Chuck Coolant Collet (CCK), the Jet-Slotted Nut allows coolant to travel down the shank of the cutting tool to the cutting edge. This combination is ideal for non Coolant-Thru cutting tools.



- 3 angled slots keep high pressure coolant (up to 1200 PSI) aimed toward the periphery of the cutter, even at high RPM
- Helps remove chips during deep pocketing applications
- Available for inch and metric shanks

Both the Coolant Collet and the Jet-Slotted Nut must be ordered on size for each cutting tool (see pages 153-154 for sizes and part numbers).

COOLANT NUT WITH ADJUSTABLE NOZZLES: CKFN-MN

- 3 adjustable nozzles help channel high pressure coolant to different cutter points (up to 750 PSI)
- Excellent for tools with multiple cutter points
- Available for inch and metric shanks



WHY UPGRADE TO THE NIKKEN MILLING CHUCK?

The Nikken Milling Chuck is a renowned universal toolholder that has proven its efficiency for years all over the world. Featuring a revolutionary design and collet system, the Nikken Milling Chuck allows for high-speed applications up to 25,000 RPM and offers incredible benefits compared to standard End Mill Holders such as higher accuracy and higher concentricity.

See below to find out what makes our Nikken Milling Chuck the best choice for any milling application.

LYNDEX-NIKKEN MILLING CHUCK

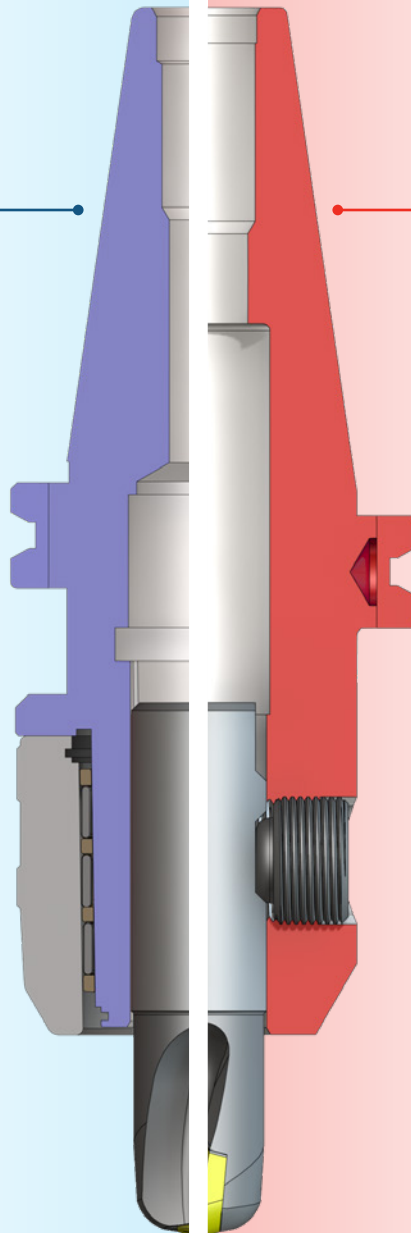
END MILL HOLDER

AT3 or better taper tolerance

AT4 taper tolerance

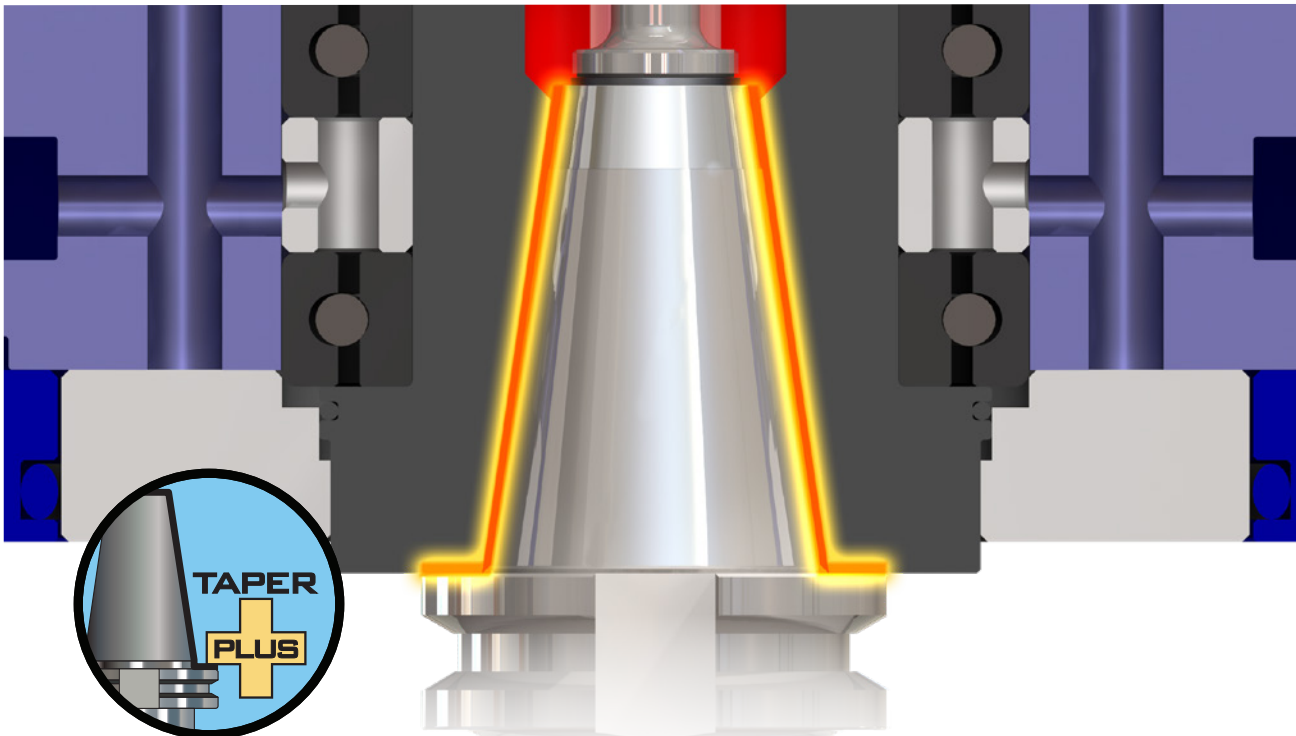
- Most powerful collet chuck in the world
- Symmetrical design—pre-balanced body and nut allow the milling chuck to operate beyond 25,000 RPM
- Outside bearing nut mechanically induces tight taper of the milling chuck to evenly collapse onto the cutting shank for high precision T.I.R.

- 120 year-old concept for holding tools
- Non-symmetrical design creates imbalance
- Requires tools with Weldon flats which create further imbalance
- Set screw shifts cutter off center which creates unacceptable run-out for precision milling





TAPER PLUS - DUAL CONTACT TOOLHOLDERS



Look for the Taper Plus logo for dual-taper and flange contact availability.

DUAL Taper & Flange Contact Advantages

- High Rigidity for smooth and stable cutting
- Vibration Dampening for increased productivity
- Outstanding Runout Accuracy for longer tool life
- Interchangeable between Standard and Dual Face Contact spindles for greater flexibility

The Power of the Dampening Effect

Taper and Flange Contact establishes 53.3% more surface area contact than just the taper alone, creating a dampening effect that eliminates chatter and vibration.

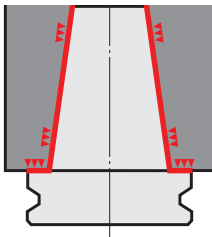
With the additional flange contact becoming a supportive cantilever, cutting rigidity is highly improved.

High Quality Taper Grinding

AT3 or better taper tolerance

- All 40 taper tool angles are manufactured within $\pm .0011$ degrees angular tolerance
- Largest diameter of taper (where rigidity is established) is held within ± 80 millionths (.00008")
- Precision ground taper ensures 80% or better taper contact

CAT/BT Dual Face Contact Spindle + Taper Plus Toolholder



CAT MILLING CHUCKS

FEATURES

- Nikken patented design
- Nut body contact, nose clamping and anti-vibration mechanism
- Thick body and internal slots provide extremely strong chucking torque and rigidity
- Quiet and stable heavy milling
- 140% more bearing surface than competitors' milling chucks



T.I.R.
<0.0002" at 3xD



Coolant-Thru
Thru-tool coolant

MILLING



REAMING



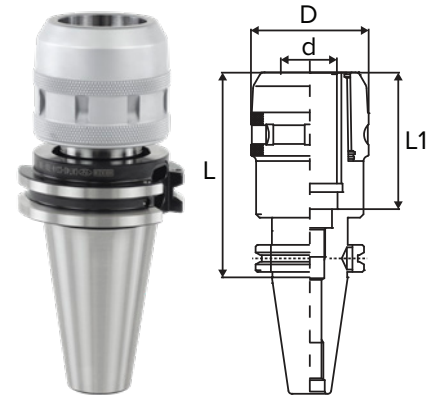
DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
CAT40-C3/4-70U-IDU*	KM3/4 or CCK3/4	0.125 - 0.750"	9HC22	0.75"	70	2.76"	3.15"	2.03"	20K
CAT40-C3/4-85U-IDU	KM3/4 or CCK3/4	0.125 - 0.750"	9HC22	0.75"	85	3.35"	3.15"	2.03"	20K
CAT40-C3/4-105U-IDU	KM3/4 or CCK3/4	0.125 - 0.750"	9HC22	0.75"	105	4.13"	3.15"	2.03"	20K
CAT40-C3/4-120U-IDU	KM3/4 or CCK3/4	0.125 - 0.750"	9HC22	0.75"	120	4.72"	3.15"	2.03"	20K
CAT40-C1-85U-IDU	KM1 or CCK1	0.125 - 1.000"	9HC25	1.00"	85	3.35"	3.15"	2.34"	20K
CAT40-C1-105U-IDU	KM1 or CCK1	0.125 - 1.000"	9HC25	1.00"	105	4.13"	3.15"	2.34"	20K
CAT40-C1.1/4-85U-IDU**	KM1.1/4 or CCK1.1/4	0.187 - 1.250"	9HC32	1.25"	85	3.35"	3.03"	2.52"	20K
CAT40-C1.1/4SL-105U-IDU	KM1.1/4 or CCK1.1/4	0.187 - 1.250"	9HC32	1.25"	105	4.13"	3.03"	2.72"	20K
CAT40-C1.1/4SL-120U-IDU	KM1.1/4 or CCK1.1/4	0.187 - 1.250"	9HC32	1.25"	120	4.72"	3.15"	2.72"	20K
CAT40-C32-105U-IDU	KM32 or CCK32	6 - 32mm	9HC32	32mm	105	4.13"	3.03"	2.52"	20K



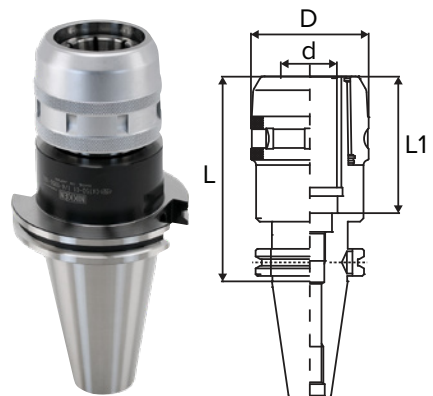
Note:

- Wrench not included.
- *CAT40-C3/4-70U Milling Chuck does not have safety recess.
- **Coolant-Thru nut and slotted nut will not fit CAT40-C1.1/4-85U (old generation)



CAT50

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
CAT50-C3/4-105U-IDU	KM3/4 or CCK3/4	0.125 - 0.750"	9HC22	0.75"	105	4.13"	3.15"	2.03"	8K
CAT50-C3/4-135U-IDU	KM3/4 or CCK3/4	0.125 - 0.750"	9HC22	0.75"	135	5.31"	3.15"	2.03"	6K
CAT50-C3/4-165U-IDU	KM3/4 or CCK3/4	0.125 - 0.750"	9HC22	0.75"	165	6.50"	3.15"	2.03"	6K
CAT50-C1-105U-IDU	KM1 or CCK1	0.125 - 1.000"	9HC25	1.00"	105	4.13"	3.15"	2.34"	8K
CAT50-C1-135U-IDU	KM1 or CCK1	0.125 - 1.000"	9HC25	1.00"	135	5.31"	3.15"	2.34"	6K
CAT50-C1.1/4-90U-IDU	KM1.1/4 or CCK1.1/4	0.187 - 1.250"	9HC32	1.25"	90	3.54"	4.13"	2.72"	8K
CAT50-C1.1/4-105U-IDU	KM1.1/4 or CCK1.1/4	0.187 - 1.250"	9HC32	1.25"	105	4.13"	4.13"	2.72"	8K
CAT50-C1.1/4-135U-IDU	KM1.1/4 or CCK1.1/4	0.187 - 1.250"	9HC32	1.25"	135	5.31"	4.13"	2.72"	6K
CAT50-C1.1/4-165U-IDU	KM1.1/4 or CCK1.1/4	0.187 - 1.250"	9HC32	1.25"	165	6.50"	4.13"	2.72"	6K
CAT50-C2-125U-IDU	KM2 or CCK2	1.000 - 2.000"	9HC50	2.00"	125	4.92"	3.23"	4.13"	6K
CAT50-C32-105U-IDU	KM32 or CCK32	6 - 32mm	9HC32	32mm	105	4.13"	4.13"	2.72"	8K
CAT50-C32-165U-IDU	KM32 or CCK32	6 - 32mm	9HC32	32mm	165	6.50"	4.13"	2.72"	6K



Note: Wrench not included.



KM & NK Collets
Pages 151-152



Spanner Wrench
Page 155



Back-Up Screw
Page 155



Coolant-Thru & Slotted Nuts
Page 153-154

CAT HIGH-SPEED MILLING CHUCKS

CAT40 HIGH SPEED

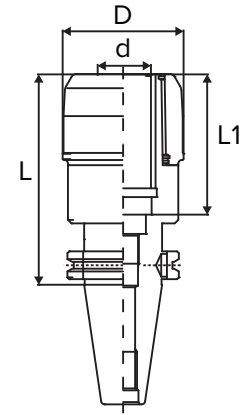
Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
CAT40-C3/4-85UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	85	3.35"	3.15"	2.05"	25K
CAT40-C3/4-105UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	105	4.72"	3.15"	2.05"	25K
CAT40-C3/4-120UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	120	4.72"	3.15"	2.05"	25K
CAT40-C1-85UG-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	85	3.35"	3.15"	2.36"	20K
CAT40-C1-105UG-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	105	4.13"	3.15"	2.36"	20K
CAT40-C1.1/4SL-105UG-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	105	4.13"	3.03"	2.72"	20K
CAT40-C1.1/4SL-120UG-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	120	4.72"	3.15"	2.72"	20K

Note:

- High-speed spanner wrench not included.
- High-speed CAT40 Milling Chucks use special high-speed spanner wrenches.



Available in **TAPER PLUS+**
Dual-taper and flange contact available.
See page 143.



CAT50 HIGH SPEED

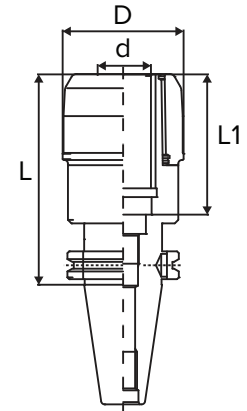
Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
CAT50-C3/4-105UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	105	4.13"	3.15"	2.05"	20K
CAT50-C3/4-135UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	135	5.31"	3.15"	2.05"	20K
CAT50-C1-105UG-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	105	4.13"	3.15"	2.36"	15K
CAT50-C1-135UG-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	135	5.31"	3.15"	2.36"	15K
CAT50-C1.1/4-105UG-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	105	4.13"	4.13"	2.72"	15K
CAT50-C1.1/4-135UG-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	135	5.31"	4.13"	2.72"	15K

Note:

- High-speed spanner wrench not included.
- High-speed CAT50 Milling Chucks use special high-speed spanner wrenches.



Available in **TAPER PLUS+**
Dual-taper and flange contact available.
See page 143.



KM & NK
Collets
Pages 151-152



Spanner
Wrench
Page 155

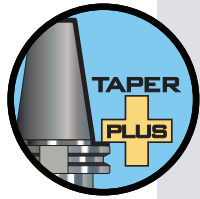


Back-Up
Screw
Page 155



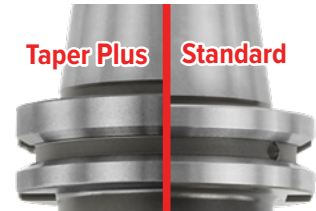
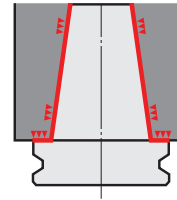
Coolant-Thru
& Slotted Nuts
Page 153-154

TAPER PLUS CAT MILLING CHUCKS



Taper Plus Advantages

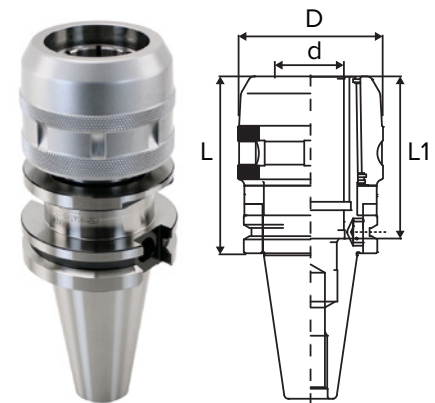
- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT40

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
NCAT40-C3/4-70U-IDU	KM3/4 or CCK3/4	0.125-1.000"	9HC22	0.75"	70	2.76"	3.15"	2.05"	20K
NCAT40-C3/4-85U-IDU	KM3/4 or CCK3/4	0.125-1.000"	9HC22	0.75"	85	3.35"	3.15"	2.03"	20K
NCAT40-C3/4-105U-IDU	KM3/4 or CCK3/4	0.125-1.000"	9HC22	0.75"	105	4.13"	3.15"	2.03"	20K
NCAT40-C3/4-120U-IDU	KM3/4 or CCK3/4	0.125-1.000"	9HC22	0.75"	120	4.72"	3.15"	2.03"	20K
NCAT40-C1-85U-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	85	3.35"	3.15"	2.34"	20K
NCAT40-C1-105U-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	105	4.13"	3.15"	2.34"	20K
NCAT40-C1.1/4SL-105U-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	105	4.13"	3.03"	2.72"	20K
NCAT40-C1.1/4SL-120U-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	120	4.72"	3.03"	2.72"	20K
NCAT40-C32-105U-IDU	KM32 or CCK32	6 - 32mm	9HC32	32mm	105	4.13"	3.03"	2.52"	20K

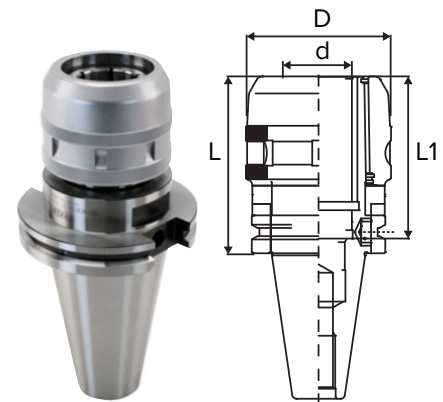
Note: "N" denotes Taper Plus dual face contact.



TAPER PLUS - CAT50

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
NCAT50-C3/4-105U-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	105	4.13"	3.15"	2.03"	8K
NCAT50-C3/4-135U-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	135	5.31"	3.15"	2.03"	6K
NCAT50-C3/4-165U-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	165	6.50"	3.15"	2.03"	6K
NCAT50-C1-105U-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	105	4.13"	3.15"	2.34"	8K
NCAT50-C1-135U-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	135	5.31"	3.15"	2.34"	6K
NCAT50-C1.1/4-90U-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	90	3.54"	3.19"	2.72"	8K
NCAT50-C1.1/4-105U-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	105	4.13"	3.19"	2.72"	8K
NCAT50-C1.1/4-135U-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	135	5.31"	3.19"	2.72"	6K
NCAT50-C1.1/4-165U-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	165	6.50"	3.19"	2.72"	6K
NCAT50-C2-125U-IDU	KM2 or CCK2	1.000-2.000"	9HC50	2.00"	125	4.92"	3.23"	4.13"	6K

Note: "N" denotes Taper Plus dual face contact.

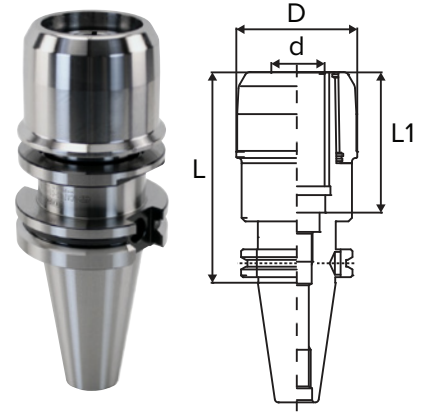


TAPER PLUS CAT HIGH-SPEED MILLING CHUCKS

TAPER PLUS - CAT40 HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
NCAT40-C3/4-70UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	70	2.76"	3.15"	1.89"	25K
NCAT40-C3/4-85UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	85	3.35"	3.15"	1.89"	25K
NCAT40-C3/4-105UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	105	4.13"	3.15"	1.89"	25K
NCAT40-C3/4-120UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	120	4.72"	3.15"	1.89"	25K
NCAT40-C1-85UG-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	85	3.35"	3.15"	2.15"	20K
NCAT40-C1-105UG-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	105	4.13"	3.15"	2.15"	20K
NCAT40-C1.1/4SL-85UG-IDU	KM1.1/4 or CCK1.1/4	0.125-1.250"	GH32	1.25"	85	3.35"	3.03"	2.68"	20K
NCAT40-C1.1/4SL-105UG-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	105	4.13"	3.03"	2.68"	20K

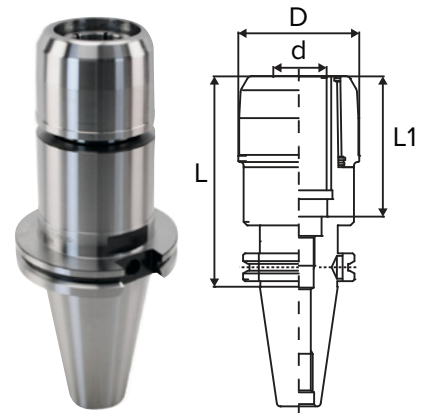
Note: "N" denotes Taper Plus dual face contact.



TAPER PLUS - CAT50 HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
NCAT50-C3/4-105UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	105	4.13"	3.15"	1.89"	20K
NCAT50-C3/4-135UG-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	135	5.31"	3.15"	1.89"	20K
NCAT50-C1-105UG-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	105	4.13"	3.15"	2.15"	15K
NCAT50-C1-135UG-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	135	5.31"	3.15"	2.15"	15K
NCAT50-C1.1/4-90UG-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	90	3.54"	3.19"	2.68"	15K
NCAT50-C1.1/4-105UG-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	105	4.13"	3.19"	2.68"	15K
NCAT50-C1.1/4-135UG-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	135	5.31"	3.19"	2.68"	15K

Note: "N" denotes Taper Plus dual face contact.



BT MILLING CHUCKS

FEATURES

- Nikken patented design
- Nut body contact, nose clamping and anti-vibration mechanism
- Thick body and internal slots provide extremely strong chucking torque and rigidity
- Quiet and stable heavy milling
- 140% more bearing surface than competitors' milling chucks



T.I.R.
<0.0002" at 3xD



Coolant-Thru
Thru-tool coolant

MILLING



REAMING



DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT30

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
BT30-C3/4-75*	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	75	2.95"	3.15"	2.03"	12K

Note:

- Wrench not included.
- "*" indicates stubby style.



Available in **TAPER PLUS+**
Dual-taper and flange contact

BT40

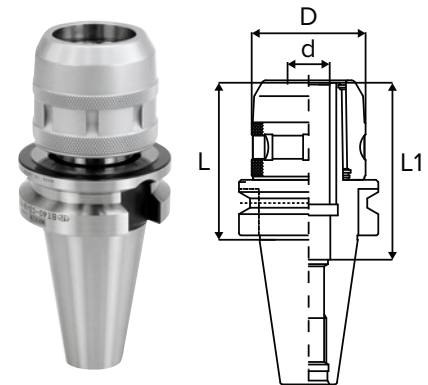
Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
BT40-C3/4-70*	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	70	2.76"	3.15"	2.03"	8K
BT40-C3/4-105	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	105	4.13"	3.15"	2.03"	8K
BT40-C1-70*	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	70	2.76"	3.15"	2.34"	8K
BT40-C1-90	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	90	3.54"	3.15"	2.34"	8K
BT40-C1.1/4-85	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	85	3.35"	3.03"	2.72"	8K
BT40-C1.1/4-120	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	120	4.72"	4.13"	2.72"	8K
BT40-C32-105	KM32 or CCK32	6 - 32mm	9HC32	32mm	105	4.13"	3.54"	2.72"	8K

Note:

- Wrench not included.
- "*" indicates stubby style.



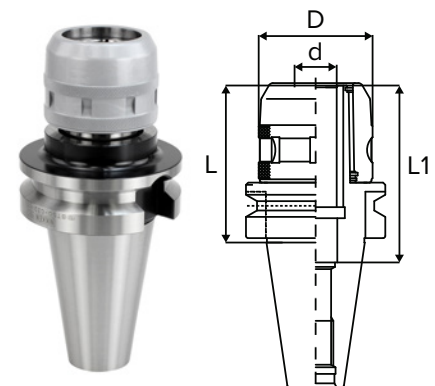
Available in **TAPER PLUS+**
Dual-taper and flange contact



BT50

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
BT50-C3/4-105	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	105	4.13"	3.15"	2.03"	8K
BT50-C3/4-135	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	135	5.31"	3.15"	2.03"	8K
BT50-C1-105	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	105	4.13"	3.15"	2.34"	8K
BT50-C1-135	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	135	5.31"	4.13"	2.34"	8K
BT50-C1.1/4-90	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	90	3.54"	4.13"	2.72"	8K
BT50-C1.1/4-105	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	105	4.13"	4.13"	2.72"	8K
BT50-C1.1/4-135	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	135	5.31"	4.13"	2.72"	6K
BT50-C32-90	KM32 or CCK32	6 - 32mm	9HC32	32mm	90	3.54"	4.13"	2.72"	8K
BT50-C32-105	KM32 or CCK32	6 - 32mm	9HC32	32mm	105	4.13"	4.13"	2.72"	8K
BT50-C32-120	KM32 or CCK32	6 - 32mm	9HC32	32mm	120	4.72"	4.13"	2.72"	8K
BT50-C32-135	KM32 or CCK32	6 - 32mm	9HC32	32mm	135	5.31"	4.13"	2.72"	6K
BT50-C32-165	KM32 or CCK32	6 - 32mm	9HC32	32mm	165	6.50"	4.13"	2.72"	6K
BT50-C32-200	KM32 or CCK32	6 - 32mm	9HC32	32mm	200	7.87"	4.13"	2.72"	2.4K
BT50-C32-250	KM32 or CCK32	6 - 32mm	9HC32	32mm	250	9.84"	4.13"	2.72"	2.4K
BT50-C32-300	KM32 or CCK32	6 - 32mm	9HC32	32mm	300	11.81"	4.13"	2.72"	2.4K
BT50-C32-400	KM32 or CCK32	6 - 32mm	9HC32	32mm	400	15.75"	4.13"	2.72"	2.4K
BT50-C32-500	KM32 or CCK32	6 - 32mm	9HC32	32mm	500	19.69"	4.13"	2.72"	2.4K
BT50-C2-105	KM2 or CCK2	1.000-2.000"	9HC50	2.00"	105	4.13"	3.54"	4.13"	6K

Note: Wrench not included.



MILLING CHUCKS

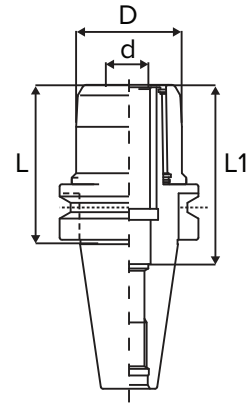
BT HIGH-SPEED MILLING CHUCKS

BT30 HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
BT30-C3/4-75G	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	75	2.95"	3.15"	1.89"	30K

Note:

- High-speed spanner wrench not included
- High-speed BT30 Milling Chucks use special high-speed spanner wrenches.

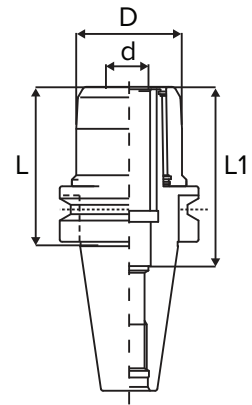


BT40 HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
BT40-C3/4-70G*	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	70	2.76"	3.15"	2.05"	25K
BT40-C3/4-105G	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	105	4.13"	3.15"	2.05"	25K
BT40-C1-70G*	KM1 or CCK1	0.125-1.000"	GH25	1.00"	70	2.76"	3.15"	2.15"	20K
BT40-C1-90G	KM1 or CCK1	0.125-1.000"	GH25	1.00"	90	3.54"	3.15"	2.15"	20K
BT40-C1.1/4-85G	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	85	3.35"	3.03"	2.68"	20K
BT40-C1.1/4-120G	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	120	4.72"	4.13"	2.68"	20K
BT40-C32-105G	KM32 or CCK32	6 - 32mm	9HC32	32mm	105	4.13"	3.54"	2.68"	20K

Note:

- "*" indicates stubby style.
- High-speed spanner wrench not included.
- High-speed BT40 Milling Chucks use special high-speed spanner wrenches.

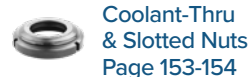


BT50 HIGH SPEED

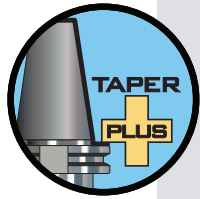
Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
BT50-C3/4-105G	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	105	4.13"	3.15"	1.89"	20K
BT50-C3/4-135G	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	135	5.31"	3.15"	1.89"	20K
BT50-C1-105G	KM1 or CCK1	0.125-1.000"	GH25	1.00"	105	4.13"	3.15"	2.15"	15K
BT50-C1-135G	KM1 or CCK1	0.125-1.000"	GH25	1.00"	135	5.31"	3.15"	2.15"	15K
BT50-C1.1/4-90G	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	90	3.54"	4.13"	2.68"	15K
BT50-C1.1/4-135G	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	135	5.31"	4.13"	2.68"	15K
BT50-C32-90G	KM32 or CCK32	6 - 32mm	9HC32	32mm	90	3.54"	4.13"	2.68"	15K
BT50-C32-165G	KM32 or CCK32	6 - 32mm	9HC32	32mm	165	6.50"	4.13"	2.68"	15K

Note:

- High-speed spanner wrench not included.
- High-speed BT50 Milling Chucks use special high-speed spanner wrenches.

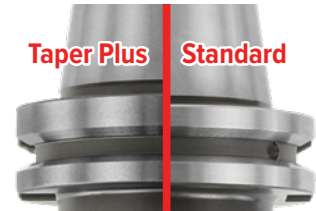
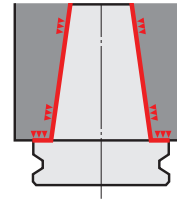


TAPER PLUS BT MILLING CHUCKS



Taper Plus Advantages

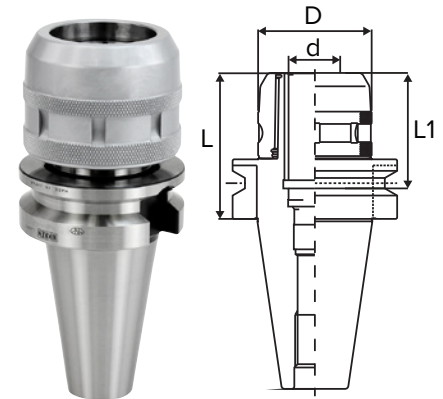
- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - BT30

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
NBT30-C3/4-70	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	70	2.76"	3.15"	2.03"	12K
NBT30-C3/4-75	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	75	2.95"	3.15"	2.03"	12K
NBT30-C1-75	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	75	2.95"	2.68"	2.17"	8K

Note: "N" denotes Taper Plus dual face contact.



TAPER PLUS - BT40

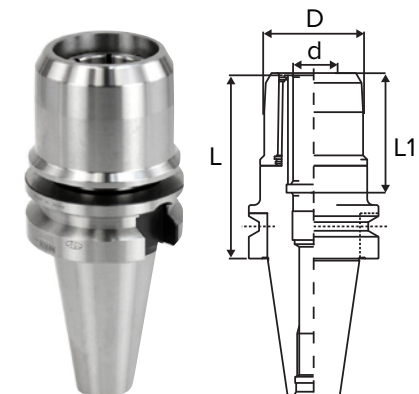
Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
NBT40-C3/4-70	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	70	2.76"	3.15"	2.03"	8K
NBT40-C1-70	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	70	2.76"	3.15"	2.34"	8K
NBT40-C1-90	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	90	3.54"	3.15"	2.34"	8K
NBT40-C1.1/4-85	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	85	3.35"	3.03"	2.72"	8K

Note: "N" denotes Taper Plus dual face contact.

TAPER PLUS - BT30 HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
NBT30-C3/4-75G	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	75	2.95"	3.15"	1.89"	30K
NBT30-C1-75G	KM1 or CCK1	0.125-1.000"	GH25	1.00"	75	2.95"	2.68"	2.15"	25K

Note: "N" denotes Taper Plus dual face contact.



TAPER PLUS - BT40 HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
NBT40-C3/4-70G	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	70	2.76"	3.15"	1.89"	25K
NBT40-C3/4-105G	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	105	4.13"	3.15"	1.89"	20K
NBT40-C1-70G	KM1 or CCK1	0.125-1.000"	GH25	1.00"	70	2.76"	3.15"	2.15"	20K
NBT40-C1-90G	KM1 or CCK1	0.125-1.000"	GH25	1.00"	90	3.54"	3.15"	2.15"	20K
NBT40-C1.1/4-85G	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	85	3.35"	3.03"	2.68"	20K
NBT40-C1.1/4-120G	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	120	4.72"	3.19"	2.68"	20K

Note: "N" denotes Taper Plus dual face contact.



KM & NK Collets
Pages 151-152



Spanner Wrench
Page 155



Back-Up Screw
Page 155



Coolant-Thru & Slotted Nuts
Page 153-154

MILLING CHUCKS

HSK MILLING CHUCKS

FEATURES

- Nikken patented design
- Nut body contact, nose clamping and anti-vibration mechanism
- Thick body and internal slots provide extremely strong chucking torque and rigidity
- Quiet and stable heavy milling
- 140% more bearing surface than competitors' milling chucks



T.I.R.
<0.0002" at 3xD



Speed
Up to 20,000 rpm



Coolant-Thru
Thru-tool coolant

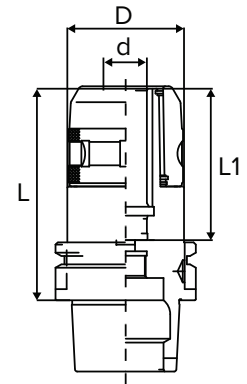


Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK63A

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
HSK63A-C3/4-95-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	95	3.74"	2.68"	2.03"	10K
HSK63A-C3/4-110-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	110	4.33"	3.15"	2.03"	10K
HSK63A-C1-100-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	100	3.94"	2.97"	2.34"	10K
HSK63A-C1-130	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	130	5.12"	3.20"	2.34"	6K
HSK63A-C1.1/4-110-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	110	4.33"	3.27"	2.72"	8K
HSK63A-C1.1/4-130	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	130	5.12"	3.19"	2.72"	8K

Note: Wrench, coolant tube and coolant tube wrench not included. Please see page 155 for more details.

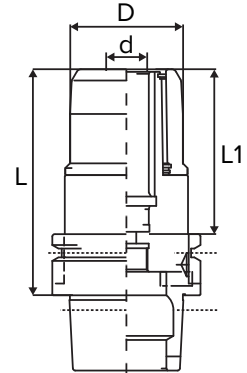


HSK63A HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
HSK63A-C3/4-70P	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	70	2.76"	2.05"	2.03"	20K
HSK63A-C3/4-95G-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	95	3.74"	2.68"	1.89"	20K
HSK63A-C3/4-110G-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	110	4.33"	3.15"	1.89"	20K
HSK63A-C1-100G-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	100	3.94"	2.97"	2.15"	20K
HSK63A-C1-130G	KM1 or CCK1	0.125-1.000"	GH25	1.00"	130	4.33"	3.15"	2.15"	20K
HSK63A-C1.1/4-110G-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	110	4.33"	3.27"	2.68"	15K

Note:

- High-speed spanner wrench, coolant tube and coolant tube wrench not included. Please see page 155 for more details.
- High-speed HSK63A Milling Chucks use special high-speed spanner wrenches.

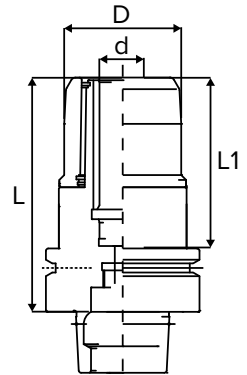


HSK63F HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
HSK63F-C3/4-95G	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	95	3.74"	2.68"	1.89"	25K
HSK63F-C1-100G	KM1 or CCK1	0.125-1.000"	GH25	1.00"	100	3.94"	2.97"	2.15"	20K
HSK63F-C1.1/4-110G	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	110	4.33"	3.27"	2.68"	15K

Note:

- High-speed spanner wrench, coolant tube, and coolant tube wrench not included. Please see page 155 for more details.
- High-speed HSK63F Milling Chucks use special high-speed spanner wrenches.



KM & NK Collets
Pages 151-152



Spanner Wrench
Page 155



Back-Up Screw
Page 155



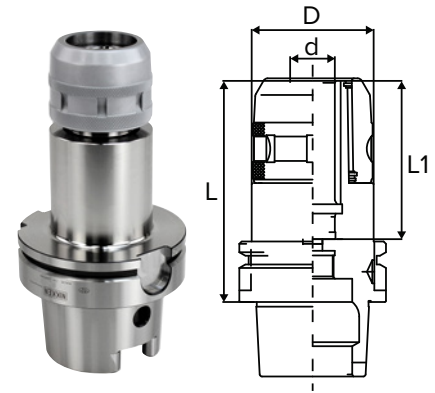
Coolant-Thru & Slotted Nuts
Page 153-154

HSK MILLING CHUCKS

HSK100A

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
HSK100A-C3/4-115-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	115	4.53"	3.15"	2.03"	8K
HSK100A-C3/4-135-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	135	5.31"	3.15"	2.03"	8K
HSK100A-C1-115-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	115	4.53"	3.15"	2.34"	8K
HSK100A-C1-135-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	135	5.31"	3.15"	2.34"	8K
HSK100A-C1.1/4-115-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	115	4.53"	3.27"	2.72"	8K
HSK100A-C1.1/4-165-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	165	6.50"	3.19"	2.72"	8K
HSK100A-C32-115	KM32 or CCK32	6 - 32mm	9HC32	32mm	115	4.53"	3.27"	2.72"	8K
HSK100A-C32-135	KM32 or CCK32	6 - 32mm	9HC32	32mm	135	5.31"	3.19"	2.72"	6K
HSK100A-C32-165	KM32 or CCK32	6 - 32mm	9HC32	32mm	165	6.50"	3.19"	2.72"	6K
HSK100A-C32-250	KM32 or CCK32	6 - 32mm	9HC32	32mm	250	9.84"	3.19"	2.72"	2K
HSK100A-C32-300	KM32 or CCK32	6 - 32mm	9HC32	32mm	300	11.81"	3.19"	2.72"	2K

Note: Wrench, coolant tube, and coolant tube wrench not included.
Please see page 155 for more details.

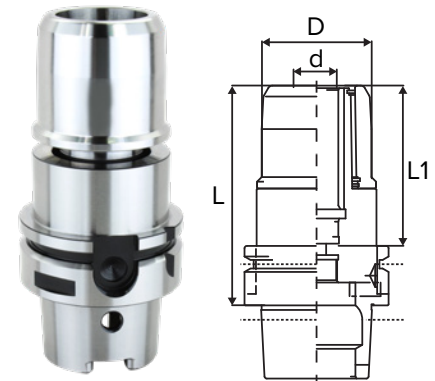


HSK100A HIGH SPEED

Part Number	Collet Series	Clamping Range	High-Speed Spanner Wrench	d	L (mm)	L	L1	D	Max. RPM
HSK100A-C3/4-115G-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	115	4.53"	3.15"	1.89"	20K
HSK100A-C3/4-135G-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	135	5.31"	3.15"	1.89"	20K

Note:

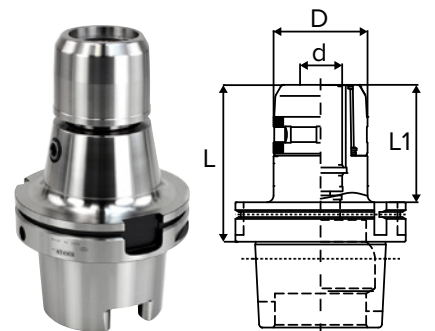
- High-speed spanner wrench, coolant tube, and coolant tube wrench not included. Please see page 155 for more details.
- High-speed HSK100A Milling Chucks use special high-speed spanner wrenches.



HSK125A

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
HSK125A-C1-115	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	115	4.53"	3.03"	2.34"	8K
HSK125A-C1.1/4-115	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	115	4.53"	3.07"	2.72"	8K
HSK125A-C2-125	KM2 or CCK2	1.000-2.000"	9HC50	2.00"	125	4.92"	3.46"	4.13"	3K

Note: Wrench, coolant tube, and coolant tube wrench not included.
Please see page 155 for more details.



KM & NK Collets
Pages 151-152



Spanner Wrench
Page 155



Back-Up Screw
Page 155



Coolant-Thru & Slotted Nuts
Page 153-154

MILLING CHUCKS

NMTB MILLING CHUCKS

FEATURES

- Nikken patented design
- Nut body contact, nose clamping and anti-vibration mechanism
- Thick body and internal slots provide extremely strong chucking torque and rigidity
- Quiet and stable heavy milling
- 140% more bearing surface than competitors' milling chucks



T.I.R.
<0.0002" at 3xD



Coolant-Thru
Thru-tool coolant

MILLING



REAMING



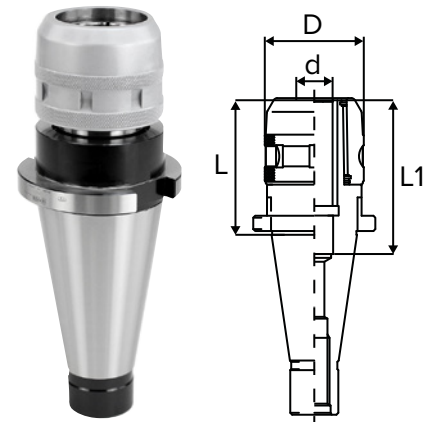
DRILLING



NMTB40

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
NMTB40-C3/4-70	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	70	2.76"	3.15"	2.03"	6K
NMTB40-C1.1/4-105	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	105	4.13"	3.15"	2.72"	6K

Note: Wrench not included.



NMTB50

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
NMTB50-C3/4-65	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	65	2.56"	3.15"	2.03"	6K
NMTB50-C1.1/4-90	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	90	3.54"	4.13"	2.72"	6K
NMTB50-C2-105	KM2 or CCK2	1.000-2.000"	9HC50	2.00"	105	4.13"	3.54"	4.13"	6K

Note:

- Wrench not included.
- All NMTB shanks are suitable for use with Erickson Quick Change spindles.



KM & NK Collets
Pages 151-152



Spanner Wrench
Page 155



Back-Up Screw
Page 155



Coolant-Thru & Slotted Nuts
Page 153-154

POLYGONAL TAPER MILLING CHUCKS

FEATURES

- Extremely stable and rigid connection between tool and the machine
- High torque and bending forces transmission due to simultaneous tapered polygon and face contact with machine spindle
- Self centering ability due to unique design
- Internal coolant supply, directly to the tool tip
- Best solution for all processes - both in turning and milling
- Modular design for flexible tooling
- Standardized interface as per ISO 26623



T.I.R.
≤0.0001" run out at cavity bore



Speed
Up to 25,000 rpm



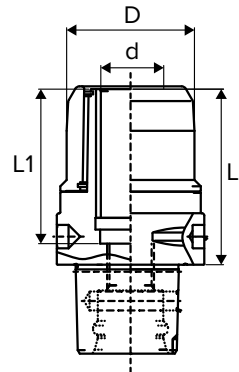
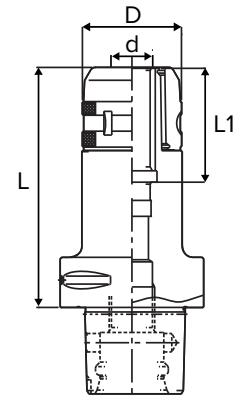
Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

C6/C8

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
C6-C3/4-75-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	75	2.95"	2.60"	2.03"	8K
C6-C3/4-90-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	90	3.54"	3.15"	2.03"	8K
C6-C3/4-120-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	120	4.72"	3.15"	2.03"	8K
C6-C1-75-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	75	2.95"	2.41"	2.34"	8K
C6-C1-90-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	90	3.54"	3.15"	2.34"	8K
C6-C1-120-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	120	4.72"	3.15"	2.34"	8K
C6-C1.1/4-75-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	75	2.95"	3.19"	2.72"	8K
C6-C1.1/4-120-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	120	4.72"	3.19"	2.72"	8K
C8-C3/4-90-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	90	3.54"	3.15"	2.03"	8K
C8-C3/4-105-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	105	4.13"	3.15"	2.03"	8K
C8-C3/4-135-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	135	5.31"	3.15"	2.03"	6K
C8-C3/4-165-IDU	KM3/4 or CCK3/4	0.125-0.750"	9HC22	0.75"	165	6.50"	3.15"	2.03"	6K
C8-C1-90-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	90	3.54"	3.15"	2.34"	8K
C8-C1-105-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	105	4.13"	3.15"	2.34"	8K
C8-C1-135-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	135	5.31"	3.15"	2.34"	6K
C8-C1-165-IDU	KM1 or CCK1	0.125-1.000"	9HC25	1.00"	165	6.50"	3.15"	2.34"	6K
C8-C1.1/4-90-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	90	3.54"	3.35"	2.72"	8K
C8-C1.1/4-105-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	105	4.13"	3.94"	2.72"	8K
C8-C1.1/4-135-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	135	5.31"	4.13"	2.72"	6K
C8-C1.1/4-165-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	9HC32	1.25"	165	6.50"	4.13"	2.72"	6K



C6 HIGH SPEED

Part Number	Collet Series	Clamping Range	Wrench	d	L (mm)	L	L1	D	Max. RPM
C6-C3/4-75G-IDU	KM3/4 or CCK3/4	0.125-0.750"	GH20	0.75"	75	2.95"	2.60"	1.89"	25K
C6-C1-75G-IDU	KM1 or CCK1	0.125-1.000"	GH25	1.00"	75	2.95"	2.60"	2.15"	20K
C6-C1.1/4-75G-IDU	KM1.1/4 or CCK1.1/4	0.187-1.250"	GH32	1.25"	75	2.95"	2.60"	2.68"	15K



Contact us to request a quote on supplying High Speed Polyagonal Taper Milling Chucks in any size from our factory.

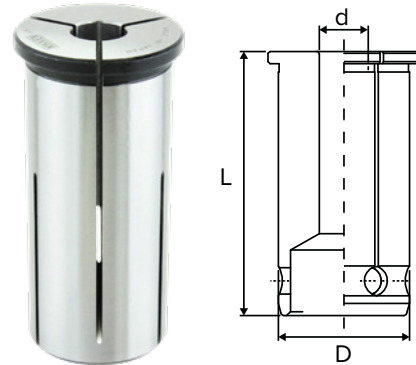
MILLING CHUCKS

KM COLLETS

Milling chuck collets are designed to ensure uniform fit around the cutting tool shank. This provides maximum gripping power as well as concentric positioning of the cutting tool.

Collet Series	L	D	d = Collet Range
KM3/4	2.087"	0.750"	1/8" - 5/8"
KM1	2.323"	1.000"	1/8" - 7/8"
KM1.1/4	2.539"	1.250"	3/16" - 1"
KM32mm	2.539"	1.259"	3/16" - 1"
KM2	3.268"	2.000"	1" - 1.1/2"

Note: KM Collets only collapse .001". For optimal performance, please use on-size cutting tools.



Collet Series	Inch		Metric	
	Size	Part Number	Size	Part Number
3/4"	1/8"	KM3/4-1/8	6mm	KM3/4-6
	3/16"	KM3/4-3/16	7mm	KM3/4-7
	1/4"	KM3/4-1/4	8mm	KM3/4-8
	5/16"	KM3/4-5/16	10mm	KM3/4-10
	3/8"	KM3/4-3/8	12mm	KM3/4-12
	7/16"	KM3/4-7/16	14mm	KM3/4-14
	1/2"	KM3/4-1/2	16mm	KM3/4-16
	9/16"	KM3/4-9/16	-	-
	5/8"	KM3/4-5/8	-	-
1"	1/8"	KM1-1/8	6mm	KM1-6
	3/16"	KM1-3/16	8mm	KM1-8
	1/4"	KM1-1/4	10mm	KM1-10
	5/16"	KM1-5/16	12mm	KM1-12
	3/8"	KM1-3/8	14mm	KM1-14
	7/16"	KM1-7/16	16mm	KM1-16
	1/2"	KM1-1/2	18mm	KM1-18
	9/16"	KM1-9/16	20mm	KM1-20
	5/8"	KM1-5/8	-	-
	3/4"	KM1-3/4	-	-
1.1/4"	7/8"	KM1-7/8	-	-
	1/8"	KM1.1/4-1/8	6mm	KM1.1/4-6
	3/16"	KM1.1/4-3/16	8mm	KM1.1/4-8
	1/4"	KM1.1/4-1/4	10mm	KM1.1/4-10
	5/16"	KM1.1/4-5/16	12mm	KM1.1/4-12
	3/8"	KM1.1/4-3/8	14mm	KM1.1/4-14
	7/16"	KM1.1/4-7/16	16mm	KM1.1/4-16
	1/2"	KM1.1/4-1/2	18mm	KM1.1/4-18
	9/16"	KM1.1/4-9/16	20mm	KM1.1/4-20
	5/8"	KM1.1/4-5/8	25mm	KM1.1/4-25
	11/16"	KM1.1/4-11/16	-	-
	3/4"	KM1.1/4-3/4	-	-
	7/8"	KM1.1/4-7/8	-	-
	15/16"	KM1.1/4-15/16	-	-
	2"	1/4"	KM2-1/4	-
3/4"		KM2-3/4	-	-
1"		KM2-1	-	-
1-1/4"		KM2-1.1/4	-	-
1-1/2"		KM2-1.1/2	-	-
1-3/4"		KM2-1.3/4	-	-
1-7/8"		KM2-1.7/8	-	-

Collet Series	Inch		Metric	
	Size	Part Number	Size	Part Number
32mm	1/8"	KM32-1/8	3mm	KM32-3
	3/16"	KM32-3/16	4mm	KM32-4
	1/4"	KM32-1/4	5mm	KM32-5
	5/16"	KM32-5/16	6mm	KM32-6
	3/8"	KM32-3/8	7mm	KM32-7
	7/16"	KM32-7/16	8mm	KM32-8
	1/2"	KM32-1/2	9mm	KM32-9
	9/16"	KM32-9/16	10mm	KM32-10
	5/8"	KM32-5/8	11mm	KM32-11
	11/16"	KM32-11/16	12mm	KM32-12
	3/4"	KM32-3/4	13mm	KM32-13
	7/8"	KM32-7/8	14mm	KM32-14
	1"	KM32-1	15mm	KM32-15
	-	-	16mm	KM32-16
	-	-	17mm	KM32-17
	-	-	18mm	KM32-18
	-	-	19mm	KM32-19
	-	-	20mm	KM32-20
	-	-	21mm	KM32-21
	-	-	22mm	KM32-22
	-	-	23mm	KM32-23
	-	-	24mm	KM32-24
	-	-	25mm	KM32-25
	-	-	26mm	KM32-26
	-	-	27mm	KM32-27
	-	-	28mm	KM32-28
	-	-	29mm	KM32-29
	-	-	30mm	KM32-30

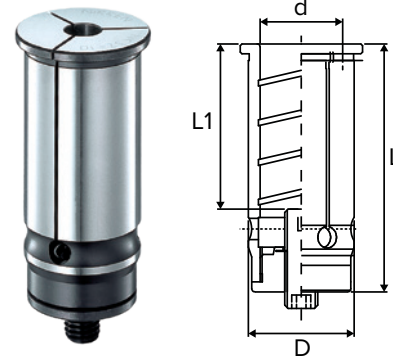
KM COLLET SET

Part Number	Description
KM3/4-SET-09	9 piece set 1/8" - 5/8"
KM3/4-SET-07-MM	7 piece set 6mm - 16mm
KM1-SET-10	10 piece set 1/8" - 7/8"
KM1-SET-08-MM	8 piece set 6mm - 20mm
KM1.1/4-SET-11	11 piece set 3/16" - 1"
KM1.1/4-SET-08-MM	8 piece set 6mm - 25mm
KM32-SET-11	11 piece set 3/16" - 1"
KM32-SET-09-MM	9 piece set 6mm - 26mm

NK COLLETS - DEPTH ADJUSTABLE

Collet Series	D	L	L1	d = Collet Range
NK3/4	0.750"	2.480"	1.968" max. depth	1/8" - 5/8"
NK1	1.000"	2.677"	2.165" max. depth	1/8" - 7/8"
NK1.1/4	1.250"	2.964"	2.401" max. depth	3/16" - 1"
NK32mm	1.259"	2.964"	2.401" max. depth	3/16" - 1"
NK2	2.000"	3.673"	3.110" max. depth	1" - 1.1/2"

Note: Cutter length adjustment on the collet is possible from front and back.



Collet Series	Inch		Metric	
	Size	Part Number	Size	Part Number
3/4"	1/8"	NK3/4-1/8	6mm	NK3/4-6
	3/16"	NK3/4-3/16	7mm	NK3/4-7
	1/4"	NK3/4-1/4	8mm	NK3/4-8
	5/16"	NK3/4-5/16	10mm	NK3/4-10
	3/8"	NK3/4-3/8	12mm	NK3/4-12
	7/16"	NK3/4-7/16	14mm	NK3/4-14
	1/2"	NK3/4-1/2	16mm	NK3/4-16
	9/16"	NK3/4-9/16	-	-
	5/8"	NK3/4-5/8	-	-
1"	1/8"	NK1-1/8	6mm	NK1-6
	3/16"	NK1-3/16	8mm	NK1-8
	1/4"	NK1-1/4	10mm	NK1-10
	5/16"	NK1-5/16	12mm	NK1-12
	3/8"	NK1-3/8	14mm	NK1-14
	7/16"	NK1-7/16	16mm	NK1-16
	1/2"	NK1-1/2	18mm	NK1-18
	5/8"	NK1-5/8	20mm	NK1-20
	3/4"	NK1-3/4	-	-
	7/8"	NK1-7/8	-	-
1.1/4"	3/16"	NK1.1/4-3/16	6mm	NK1.1/4-6
	1/4"	NK1.1/4-1/4	8mm	NK1.1/4-8
	5/16"	NK1.1/4-5/16	9mm	NK1.1/4-9
	3/8"	NK1.1/4-3/8	10mm	NK1.1/4-10
	7/16"	NK1.1/4-7/16	12mm	NK1.1/4-12
	1/2"	NK1.1/4-1/2	14mm	NK1.1/4-14
	9/16"	NK1.1/4-9/16	16mm	NK1.1/4-16
	5/8"	NK1.1/4-5/8	20mm	NK1.1/4-20
	3/4"	NK1.1/4-3/4	25mm	NK1.1/4-25
	7/8"	NK1.1/4-7/8	-	-
	15/16"	NK1.1/4-15/16	-	-

Collet Series	Inch		Metric	
	Size	Part Number	Size	Part Number
2"	1"	NK2-1	21mm	NK32-21
	1-1/4"	NK2-1-1/4	22mm	NK32-22
	1-1/2"	NK2-1-1/2	23mm	NK32-23
	-	-	24mm	NK32-24
	-	-	25mm	NK32-25
	-	-	26mm	NK32-26
32mm	3/16"	NK32-3/16	1mm	NK32-1
	1/4"	NK32-1/4	3mm	NK32-3
	5/16"	NK32-5/16	4mm	NK32-4
	3/8"	NK32-3/8	5mm	NK32-5
	7/16"	NK32-7/16	6mm	NK32-6
	1/2"	NK32-1/2	7mm	NK32-7
	9/16"	NK32-9/16	8mm	NK32-8
	5/8"	NK32-5/8	9mm	NK32-9
	11/16"	NK32-11/16	10mm	NK32-10
	3/4"	NK32-3/4	11mm	NK32-11
	13/16"	NK32-13/16	12mm	NK32-12
	7/8"	NK32-7/8	13mm	NK32-13
	15/16"	NK32-15/16	14mm	NK32-14
	1"	NK32-1	15mm	NK32-15
	-	-	16mm	NK32-16
	-	-	17mm	NK32-17
-	-	18mm	NK32-18	
-	-	19mm	NK32-19	
-	-	20mm	NK32-20	

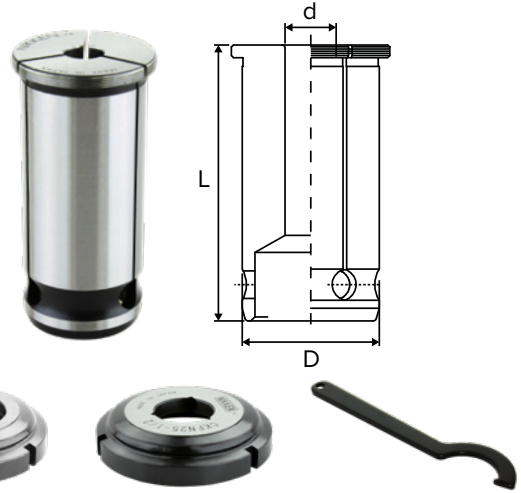
MILLING CHUCKS



CCK COOLANT COLLET SYSTEM

Collet Series	L	D	d = Collet Range
3/4"	2.086"	0.750"	1/8" - 5/8"
1"	2.320"	1.000"	1/8" - 7/8"
1.1/4"	2.539"	1.250"	3/16" - 1"
32mm	2.539"	1.259"	3/16" - 1"
2"	3.268"	2.000"	1" - 1.1/2"

Note: CCK Collets do not collapse.



Collet Series	Size	Coolant Collet	Coolant-Thru Nut	Slotted Nut	Disc Wrench
3/4"	1/8"	CCK3/4-1/8	CKFN20(3/4)-1/8C	CKFN20(3/4)-1/8	CCKL20
	3/16"	CCK3/4-3/16	CKFN20(3/4)-3/16C	CKFN20(3/4)-3/16	
	1/4"	CCK3/4-1/4	CKFN20(3/4)-1/4C	CKFN20(3/4)-1/4	
	5/16"	CCK3/4-5/16	CKFN20(3/4)-5/16C	CKFN20(3/4)-5/16	
	3/8"	CCK3/4-3/8	CKFN20(3/4)-3/8C	CKFN20(3/4)-3/8	
	7/16"	CCK3/4-7/16	CKFN20(3/4)-7/16C	CKFN20(3/4)-7/16	
	1/2"	CCK3/4-1/2	CKFN20(3/4)-1/2C	CKFN20(3/4)-1/2	
	9/16"	CCK3/4-9/16	CKFN20(3/4)-9/16C	CKFN20(3/4)-9/16	
	5/8"	CCK3/4-5/8	CKFN20(3/4)-5/8C	CKFN20(3/4)-5/8	
	3/4"	-	CKFN20(3/4)-3/4D	-	
	3/4"	-	CKFN20(3/4)-3/4DC	-	
	6mm	CCK3/4-6	CKFN20(3/4)-6C	CKFN20(3/4)-6	
	7mm	CCK3/4-7	CKFN20(3/4)-7C	CKFN20(3/4)-7	
	8mm	CCK3/4-8	CKFN20(3/4)-8C	CKFN20(3/4)-8	
	10mm	CCK3/4-10	CKFN20(3/4)-10C	CKFN20(3/4)-10	
	12mm	CCK3/4-12	CKFN20(3/4)-12C	CKFN20(3/4)-12	
	14mm	CCK3/4-14	CKFN20(3/4)-14C	CKFN20(3/4)-14	
	16mm	CCK3/4-16	CKFN20(3/4)-16C	CKFN20(3/4)-16	
20mm	-	CKFN20(3/4)-20DC	-		
1"	1/8"	CCK1-1/8	CKFN25(1)-1/8C	CKFN25(1)-1/8	CCKL25
	3/16"	CCK1-3/16	CKFN25(1)-3/16C	CKFN25(1)-3/16	
	1/4"	CCK1-1/4	CKFN25(1)-1/4C	CKFN25(1)-1/4	
	5/16"	CCK1-5/16	CKFN25(1)-5/16C	CKFN25(1)-5/16	
	3/8"	CCK1-3/8	CKFN25(1)-3/8C	CKFN25(1)-3/8	
	7/16"	CCK1-7/16	CKFN25(1)-7/16C	CKFN25(1)-7/16	
	1/2"	CCK1-1/2	CKFN25(1)-1/2C	CKFN25(1)-1/2	
	9/16"	CCK1-9/16	CKFN25(1)-9/16C	CKFN25(1)-9/16	
	5/8"	CCK1-5/8	CKFN25(1)-5/8C	CKFN25(1)-5/8	
	3/4"	CCK1-3/4	CKFN25(1)-3/4C	CKFN25(1)-3/4	
	7/8"	CCK1-7/8	CKFN25(1)-7/8C	CKFN25(1)-7/8	
	1"	-	CKFN25(1)-1D	-	
	1"	-	CKFN25(1)-1DC	-	
	6mm	CCK1-6	CKFN25(1)-6C	CKFN25(1)-6	
	8mm	CCK1-8	CKFN25(1)-8C	CKFN25(1)-8	
	10mm	CCK1-10	CKFN25(1)-10C	CKFN25(1)-10	
	12mm	CCK1-12	CKFN25(1)-12C	CKFN25(1)-12	
	14mm	CCK1-14	CKFN25(1)-14C	CKFN25(1)-14	
	16mm	CCK1-16	CKFN25(1)-16C	CKFN25(1)-16	
	18mm	CCK1-18	CKFN25(1)-18C	CKFN25(1)-18	
20mm	CCK1-20	CKFN25(1)-20C	CKFN25(1)-20		
25mm	-	CKFN25(1)-25D	-		
25mm	-	CKFN25(1)-25DC	-		

CCK COOLANT COLLET SYSTEM (CONT.)



Collet Series	Size	Coolant Collet	Coolant-Thru Nut	Slotted Nut	Disc Wrench
1.1/4"	3/16"	CCK1.1/4-3/16	CKFN32(1.1/4)-3/16C	CKFN32(1.1/4)-3/16	CCKL32
	1/4"	CCK1.1/4-1/4	CKFN32(1.1/4)-1/4C	CKFN32(1.1/4)-1/4	
	5/16"	CCK1.1/4-5/16	CKFN32(1.1/4)-5/16C	CKFN32(1.1/4)-5/16	
	3/8"	CCK1.1/4-3/8	CKFN32(1.1/4)-3/8C	CKFN32(1.1/4)-3/8	
	7/16"	CCK1.1/4-7/16	CKFN32(1.1/4)-7/16C	CKFN32(1.1/4)-7/16	
	1/2"	CCK1.1/4-1/2	CKFN32(1.1/4)-1/2C	CKFN32(1.1/4)-1/2	
	9/16"	CCK1.1/4-9/16	CKFN32(1.1/4)-9/16C	CKFN32(1.1/4)-9/16	
	5/8"	CCK1.1/4-5/8	CKFN32(1.1/4)-5/8C	CKFN32(1.1/4)-5/8	
	3/4"	CCK1.1/4-3/4	CKFN32(1.1/4)-3/4C	CKFN32(1.1/4)-3/4	
	7/8"	CCK1.1/4-7/8	CKFN32(1.1/4)-7/8C	CKFN32(1.1/4)-7/8	
	1"	CCK1.1/4-1	CKFN32(1.1/4)-1C	CKFN32(1.1/4)-1	
	1-1/4"	-	CKFN32(1.1/4)-1.1/4D	-	
	1-1/4"	-	CKFN32(1.1/4)-1.1/4DC	-	
	6mm	CCK1.1/4-6	CKFN32(1.1/4)-6C	CKFN32(1.1/4)-6	
	8mm	CCK1.1/4-8	CKFN32(1.1/4)-8C	CKFN32(1.1/4)-8	
	10mm	CCK1.1/4-10	CKFN32(1.1/4)-10C	CKFN32(1.1/4)-10	
	12mm	CCK1.1/4-12	CKFN32(1.1/4)-12C	CKFN32(1.1/4)-12	
	14mm	CCK1.1/4-14	CKFN32(1.1/4)-14C	CKFN32(1.1/4)-14	
	16mm	CCK1.1/4-16	CKFN32(1.1/4)-16C	CKFN32(1.1/4)-16	
	20mm	CCK1.1/4-20	CKFN32(1.1/4)-20C	CKFN32(1.1/4)-20	
25mm	CCK1.1/4-25	CKFN32(1.1/4)-25C	CKFN32(1.1/4)-25		
32mm	-	CKFN32(1.1/4)-32D	-		
32mm	-	CKFN32(1.1/4)-32DC	-		
2"	1"	CCK2-1	CKFN50(2)-1C	CKFN50(2)-1	CCKL50
	1-1/4"	CCK2-1.1/4	CKFN50(2)-1.1/4C	CKFN50(2)-1.1/4	
	1-1/2"	CCK2-1.1/2	CKFN50(2)-1.1/2C	CKFN50(2)-1.1/2	
32mm	3/16"	CCK32-3/16	CKFN32(1.1/4)-3/16C	CKFN32(1.1/4)-3/16	CCKL32
	1/4"	CCK32-1/4	CKFN32(1.1/4)-1/4C	CKFN32(1.1/4)-1/4	
	5/16"	CCK32-5/16	CKFN32(1.1/4)-5/16C	CKFN32(1.1/4)-5/16	
	3/8"	CCK32-3/8	CKFN32(1.1/4)-3/8C	CKFN32(1.1/4)-3/8	
	7/16"	CCK32-7/16	CKFN32(1.1/4)-7/16C	CKFN32(1.1/4)-7/16	
	1/2"	CCK32-1/2	CKFN32(1.1/4)-1/2C	CKFN32(1.1/4)-1/2	
	9/16"	CCK32-9/16	CKFN32(1.1/4)-9/16C	CKFN32(1.1/4)-9/16	
	5/8"	CCK32-5/8	CKFN32(1.1/4)-5/8C	CKFN32(1.1/4)-5/8	
	3/4"	CCK32-3/4	CKFN32(1.1/4)-3/4C	CKFN32(1.1/4)-3/4	
	7/8"	CCK32-7/8	CKFN32(1.1/4)-7/8C	CKFN32(1.1/4)-7/8	
	1"	CCK32-1	CKFN32(1.1/4)-1C	CKFN32(1.1/4)-1	
	1-1/4"	-	CKFN32(1.1/4)-1.1/4D	-	
	1-1/4"	-	CKFN32(1.1/4)-1.1/4DC	-	
	6mm	CCK32-6	CKFN32(1.1/4)-6C	CKFN32(1.1/4)-6	
	8mm	CCK32-8	CKFN32(1.1/4)-8C	CKFN32(1.1/4)-8	
	10mm	CCK32-10	CKFN32(1.1/4)-10C	CKFN32(1.1/4)-10	
	11mm	CCK32-11	CKFN32(1.1/4)-11C	CKFN32(1.1/4)-11	
	12mm	CCK32-12	CKFN32(1.1/4)-12C	CKFN32(1.1/4)-12	
	14mm	CCK32-14	CKFN32(1.1/4)-14C	CKFN32(1.1/4)-14	
	15mm	CCK32-15	CKFN32(1.1/4)-15C	CKFN32(1.1/4)-15	
16mm	CCK32-16	CKFN32(1.1/4)-16C	CKFN32(1.1/4)-16		
18mm	CCK32-18	CKFN32(1.1/4)-18C	CKFN32(1.1/4)-18		
20mm	CCK32-20	CKFN32(1.1/4)-20C	CKFN32(1.1/4)-20		
24mm	CCK32-24	CKFN32(1.1/4)-24C	CKFN32(1.1/4)-24		
28mm	CCK32-28	CKFN32(1.1/4)-28C	CKFN32(1.1/4)-28		
32mm	-	CKFN32(1.1/4)-32D	-		
32mm	-	CKFN32(1.1/4)-32DC	-		

MILLING CHUCKS

MILLING CHUCK ACCESSORIES

WRENCH

Standard Style Part Number	High Speed Style Part Number	Use With
9HC22	GH20	3/4" Milling Chuck
9HC25	GH25	1" Milling Chuck
9HC32	GH32 GH32S	1.1/4" and 32mm Milling Chuck - OD = 68mm 1.1/4" and 32mm Milling Chuck - OD = 62-64mm
9HC50	-	2" Milling Chuck
9HC50	-	2" Milling Chuck



Standard Wrench



High-Speed Wrench

BACK-UP SCREW

Coolant-Thru	Use With
750TL-3(C)	3/4" Milling Chuck
1000TL-3(C)	1" Milling Chuck
1250TL-2(C)	1.1/4" Milling Chuck with ID depth of 77mm or less
1250TL-3(C)	1.1/4" Milling Chuck with ID depth of 105mm or more

Note: All back-up screws are 1000 PSI capable.



COOLANT TUBE FOR HSK HOLDERS

Part Number	Description
HSK63-TUBE	Coolant Tube for HSK63 Holders
HSK100-TUBE	Coolant Tube for HSK100 Holders
HSK125A-TUBE	Coolant Tube for HSK125A Holders
C6-TUBE	Coolant Tube for C6 Holders
C8-TUBE	Coolant Tube for C8 Holders



COOLANT TUBE WRENCH FOR HSK HOLDERS

Coolant tube wrenches are needed to remove or install coolant tubes in HSK toolholders.

Part Number	Description
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube
HSK125-WRENCH	Wrench for HSK125 Coolant Tube
C6-WRENCH	Wrench for C6 Coolant Tube
C8-WRENCH	Wrench for C8 Coolant Tube



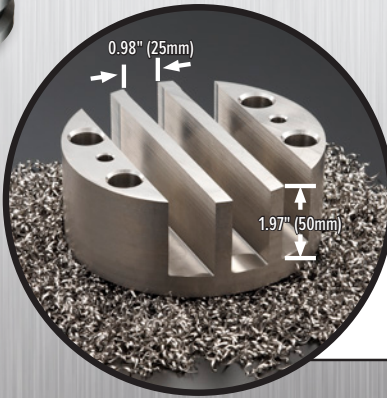
NIKKEN



X-TREME MILLING CHUCK

EXCELLENT RUNOUT AND POWERFUL GRIPPING

Exclusively developed for demanding applications and materials associated with the Aerospace and Energy industries.



Material: Ti6Al4V Titanium
0.98", 6 teeth Carbide Roughing End Mill
0.98" x 1.97" 1-Path Milling
No Pull-Out



847-367-4800 | sales@lyndexnikken.com
lyndexnikken.com





END MILL HOLDER FEATURES



Extreme Rigidity

Featuring the highest taper contact and high quality steel, our End Mill Holders provide extreme rigidity for even the heaviest machining applications.

Shank style available from stock: CAT, BT, HSK, NMTB, and Straight, with inch or metric bores. High rigidity, stubby style, extended lengths and Aerospace whistle notch End Mill Holders can be supplied upon request.

ARE YOU LOOKING FOR A BETTER
WAY TO HOLD END MILLS WITHOUT
SACRIFICING ACCURACY?
USE A MILLING CHUCK!



WHAT MAKES OUR NIKKEN MILLING CHUCK THE BEST CHOICE FOR ANY MILLING APPLICATION?

- The most powerful collet chuck in the world with strongest grip in the world—up to 3,500 ft-lbs.!
- Symmetrical design—pre-balanced body and nut allow the milling chuck to operate beyond 20,000 RPM
- Outside bearing nut mechanically induces tight taper of the milling chuck to evenly collapse onto the cutting shank for high precision T.I.R.
- 6 angled coolant slots are standard, providing high pressure and high volume of coolant directed toward the periphery of the cutting tool

For more information on our Milling Chucks line, [go to page 133.](#)

END MILL HOLDERS



CAT END MILL HOLDERS

FEATURES

- End mill ID bore T.I.R. < 0.0002"
- Through-spindle coolant capability
- AT3 or better taper



T.I.R.
< 0.0002" in ID bore



Coolant-Thru



Speed
Up to 25,000 RPM @ G2.5



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40 - INCH

Part Number	Ød	L	L1	L2	L3	D	D1	Set Screw Part Number	Max. RPM	Fig.
C4006-0125-1.38	1/8"	1.38"	0.63"	-	-	0.75"	-	S6-32X1/4	25K	1
C4006-0125-2.36	1/8"	2.36"	0.98"	1.38"	-	0.75"	1.75"	S6-32X1/4	25K	2
C4006-0125-4.00	1/8"	4.00"	2.62"	1.38"	-	0.75"	1.75"	S6-32X1/4	25K	2
C4006-0187-1.38	3/16"	1.38"	0.63"	-	-	0.75"	-	S8-32X1/4	25K	1
C4006-0187-2.50	3/16"	2.50"	1.12"	1.38"	-	0.75"	1.75"	S8-32X1/4	25K	2
C4006-0187-4.00	3/16"	4.00"	2.62"	1.38"	-	0.75"	1.75"	S8-32X1/4	25K	2
C4006-0250-1.38	1/4"	1.38"	0.63"	-	-	0.79"	-	S1/4-28X1/4	25K	1
C4006-0250-2.50	1/4"	2.50"	1.12"	1.38"	-	0.79"	1.75"	S1/4-28X1/4	25K	2
C4006-0250-4.00	1/4"	4.00"	2.62"	1.38"	-	0.79"	1.75"	S1/4-28X1/4	25K	2
C4006-0250-9.00	1/4"	9.00"	1.70"	5.69"	1.61"	0.79"	1.75"	S1/4-28X1/4	25K	3
C4006-0312-2.50	5/16"	2.50"	1.12"	1.38"	-	0.87"	1.75"	S5/16-24X1/4	25K	2
C4006-0312-4.00	5/16"	4.00"	2.67"	1.33"	-	0.87"	1.75"	S5/16-24X1/4	25K	2
C4006-0375-1.38	3/8"	1.38"	0.63"	-	-	1.00"	-	S3/8-24X5/16	25K	1
C4006-0375-2.50	3/8"	2.50"	1.12"	1.38"	-	1.00"	1.75"	S3/8-24X5/16	25K	2
C4006-0375-4.00	3/8"	4.00"	2.62"	1.38"	-	1.00"	1.75"	S3/8-24X5/16	25K	2
C4006-0375-5.00	3/8"	5.00"	3.62"	1.38"	-	1.00"	1.75"	S3/8-24X5/16	25K	2
C4006-0375-9.00	3/8"	9.00"	1.70"	5.72"	1.59"	1.00"	1.75"	S3/8-24X5/16	25K	3
C4006-0437-2.50	7/16"	2.50"	1.12"	1.38"	-	1.38"	1.75"	S7/16-20X3/8	25K	2
C4006-0437-4.00	7/16"	4.00"	2.65"	1.54"	-	1.38"	1.75"	S7/16-20X3/8	25K	2
C4006-0500-1.75	1/2"	1.75"	1.00"	-	-	1.38"	-	S7/16-20X3/8	25K	1
C4006-0500-2.50	1/2"	2.50"	1.12"	1.38"	-	1.38"	1.75"	S7/16-20X3/8	25K	2
C4006-0500-4.00	1/2"	4.00"	2.62"	1.38"	-	1.38"	1.75"	S7/16-20X3/8	25K	2
C4006-0500-5.00	1/2"	5.00"	3.62"	1.38"	-	1.38"	1.75"	S7/16-20X3/8	25K	2
C4006-0500-9.00	1/2"	9.00"	1.70"	5.72"	1.59"	1.38"	1.75"	S7/16-20X3/8	25K	3
C4006-0625-1.75	5/8"	1.75"	1.29"	-	-	1.65"	-	S9/16-18X1/2	25K	1
C4006-0625-3.00	5/8"	3.00"	1.62"	1.38"	-	1.65"	1.75"	S9/16-18X1/2	25K	2
C4006-0625-4.00	5/8"	4.00"	2.60"	1.40"	-	1.65"	1.75"	S9/16-18X1/2	25K	2
C4006-0625-5.50	5/8"	5.50"	4.12"	1.38"	-	1.65"	1.75"	S9/16-18X1/2	25K	2

Note:

- Set Screws are included.
- Extended Length End Mill Holders can be modified with DIN flange coolant ports.



Available in **TAPER PLUS**⁺
Dual-taper and flange contact

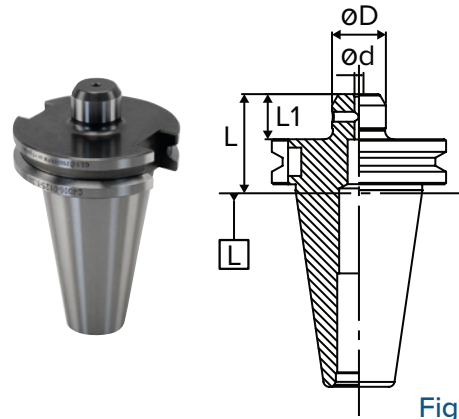


Fig. 1

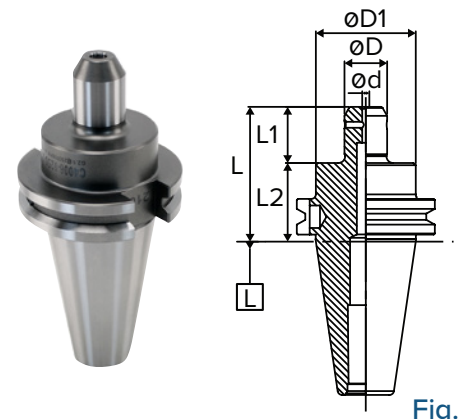


Fig. 2

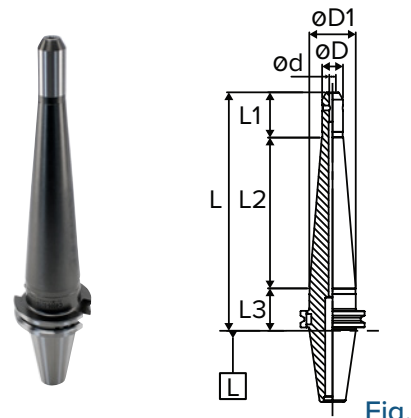


Fig. 3



Set Screws
Page 173



Retention Knobs
Page 267



Tool Clampers
Page 274

CAT END MILL HOLDERS

CAT40 - INCH (CONT.)

Part Number	Ød	L	L1	L2	D	Set Screw Part Number	Max. RPM	Fig.
C4006-0750-1.75	3/4"	1.75"	1.00"	-	1.89"	S5/8-18X1/2	25K	1
C4006-0750-3.00	3/4"	3.00"	2.25"	-	1.75"	S5/8-18X1/2	25K	1
C4006-0750-4.00	3/4"	4.00"	3.25"	-	1.75"	S5/8-18X1/2	25K	1
C4006-0750-5.50	3/4"	5.50"	4.76"	-	1.75"	S5/8-18X1/2	25K	1
C4006-0750-9.00	3/4"	9.00"	8.25"	-	1.75"	S5/8-18X1/2	25K	1
C4006-0875-1.75	7/8"	1.75"	1.00"	-	1.94"	S5/8-18X1/2	25K	1
C4006-0875-3.50	7/8"	3.50"	2.12"	1.38"	2.00"	S5/8-18X1/2 (2)	25K	4
C4006-1000-2.00	1"	2.00"	1.25"	-	2.25"	S3/4-16X11/16	25K	1
C4006-1000-4.00	1"	4.00"	2.62"	1.38"	2.36"	S3/4-16X11/16 (2)	25K	4
C4006-1000-6.00	1"	6.00"	4.61"	1.39"	2.36"	S3/4-16X11/16 (2)	25K	4

Note:

- Set Screws are included.
- Extended Length End Mill Holders can be modified with DIN flange coolant ports.

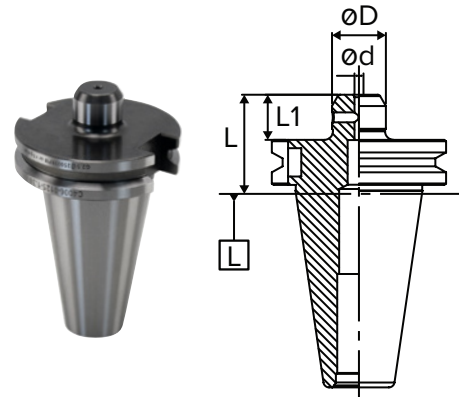


Fig. 1

CAT40 - METRIC

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
C4006-6-2.50	6mm	2.50"	1.12"	1.38"	0.79"	1.75"	S1/4-28X1/4	25K	2
C4006-8-2.50	8mm	2.50"	1.12"	1.38"	0.87"	1.75"	S5/16-24X1/4	25K	2
C4006-10-2.50	10mm	2.50"	1.12"	1.38"	1.00"	1.75"	S3/8-24X5/16	25K	2
C4006-12-2.50	12mm	2.50"	1.12"	1.38"	1.37"	1.74"	S7/16-20X3/8	25K	2
C4006-14-3.00	14mm	3.00"	1.62"	1.38"	1.65"	1.75"	S9/16-18X1/2	25K	2
C4006-16-3.00	16mm	3.00"	1.62"	1.38"	1.65"	1.75"	S9/16-18X1/2	25K	2
C4006-20-3.00	20mm	3.00"	2.25"	-	1.75"	-	S5/8-18X1/2	25K	1
C4006-25-4.00	25mm	4.00"	2.62"	1.38"	2.36"	-	S3/4-16X11/16 (2)	25K	4
C4006-32-4.00	32mm	4.00"	2.62"	1.38"	2.48"	-	S3/4-16X11/16 (2)	25K	4

Note: Set Screws are included.

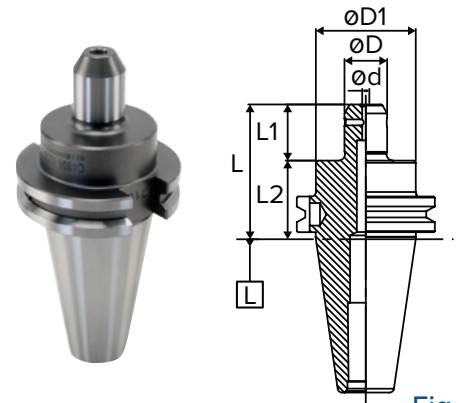


Fig. 2

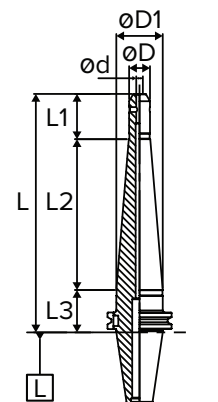


Fig. 3



Available in
TAPER PLUS
Dual-taper and flange contact
See page 163



TAPER PLUS+ COMBINING TAPER ACCURACY WITH FLANGE RIGIDITY!

- Outstanding Runout Accuracy for longer tool life
- Vibration Dampening for increased productivity
- High Rigidity for smooth and stable cutting



Set Screws
Page 173



Retention
Knobs
Page 267



Tool
Clampers
Page 274

END MILL HOLDERS



CAT END MILL HOLDERS

CAT50 - INCH

Part Number	Ød	L	L1	L2	L3	D	D1	Set Screw Part Number	Max. RPM	Fig.
C5006-0250-2.50	1/4"	2.50"	1.11"	1.39"	-	0.79"	2.75"	S1/4-28X1/4	25K	2
C5006-0250-4.00	1/4"	4.00"	2.62"	1.38"	-	0.79"	2.75"	S1/4-28X1/4	25K	2
C5006-0250-6.00	1/4"	6.00"	4.61"	1.39"	-	0.79"	2.75"	S1/4-28X1/4	25K	2
C5006-0250-8.00	1/4"	8.00"	1.49"	5.13"	1.38"	0.79"	2.75"	S1/4-28X1/4	25K	3
C5006-0312-2.50	5/16"	2.50"	1.11"	1.39"	-	0.87"	2.75"	S5/16-24X1/4	25K	2
C5006-0312-4.00	5/16"	4.00"	2.61"	1.39"	-	0.87"	2.75"	S5/16-24X1/4	25K	2
C5006-0312-6.00	5/16"	6.00"	4.61"	1.39"	-	0.87"	2.75"	S5/16-24X1/4	25K	2
C5006-0375-2.50	3/8"	2.50"	1.11"	1.39"	-	1.00"	2.75"	S3/8-24X5/16	25K	2
C5006-0375-4.00	3/8"	4.00"	2.61"	1.39"	-	1.00"	2.75"	S3/8-24X5/16	25K	2
C5006-0375-6.00	3/8"	6.00"	4.61"	1.39"	-	1.00"	2.75"	S3/8-24X5/16	25K	2
C5006-0375-8.00	3/8"	8.00"	1.50"	5.11"	1.39"	1.00"	2.75"	S3/8-24X5/16	25K	3
C5006-0437-2.50	7/16"	2.50"	1.11"	1.39"	-	1.38"	2.75"	S7/16-20X3/8	25K	2
C5006-0437-4.00	7/16"	4.00"	2.61"	1.39"	-	1.38"	2.75"	S7/16-20X3/8	25K	2
C5006-0437-6.00	7/16"	6.00"	4.61"	1.39"	-	1.38"	2.75"	S7/16-20X3/8	25K	2
C5006-0500-2.63	1/2"	2.63"	1.25"	1.38"	-	1.38"	2.75"	S7/16-20X3/8	25K	2
C5006-0500-4.00	1/2"	4.00"	2.61"	1.39"	-	1.38"	2.75"	S7/16-20X3/8	25K	2
C5006-0500-6.00	1/2"	6.00"	4.61"	1.39"	-	1.38"	2.75"	S7/16-20X3/8	25K	2
C5006-0500-8.00	1/2"	8.00"	1.50"	5.11"	1.39"	1.38"	2.75"	S7/16-20X3/8	25K	3
C5006-0625-3.00	5/8"	3.00"	1.62"	1.38"	-	1.65"	2.75"	S9/16-18X1/2	25K	2
C5006-0625-4.00	5/8"	4.00"	2.61"	1.39"	-	1.65"	2.75"	S9/16-18X1/2	25K	2
C5006-0625-6.00	5/8"	6.00"	4.61"	1.39"	-	1.65"	2.75"	S9/16-18X1/2	25K	2
C5006-0625-8.00	5/8"	8.00"	1.70"	4.95"	1.35"	1.65"	2.75"	S9/16-18X1/2	25K	3
C5006-0750-1.75	3/4"	1.75"	1.00"	0.75"	-	1.89"	-	S5/8-18X1/2	25K	1
C5006-0750-3.00	3/4"	3.00"	1.62"	1.38"	-	1.89"	2.75"	S5/8-18X1/2	25K	2
C5006-0750-4.00	3/4"	4.00"	2.62"	1.38"	-	1.89"	2.75"	S5/8-18X1/2	25K	2
C5006-0750-6.00	3/4"	6.00"	4.62"	1.38"	-	1.89"	2.75"	S5/8-18X1/2	25K	2
C5006-0750-8.00	3/4"	8.00"	1.70"	4.91"	1.39"	1.89"	2.75"	S5/8-18X1/2	25K	3
C5006-1000-2.00	1"	2.00"	1.25"	-	-	2.36"	-	S3/4-16X11/16	25K	1
C5006-1000-4.00	1"	4.00"	2.62"	1.38"	-	2.36"	2.75"	S3/4-16X11/16 (2)	25K	5
C5006-1000-6.00	1"	6.00"	4.62"	1.38"	-	2.36"	2.75"	S3/4-16X11/16 (2)	25K	5
C5006-1000-8.00	1"	8.00"	2.95"	3.66"	1.39"	2.36"	2.75"	S3/4-16X11/16 (2)	25K	6

Note:

- Set Screws are included.
- Extended Length End Mill Holders can be modified with DIN flange coolant ports.



Available in **TAPER PLUS**⁺
Dual-taper and flange contact

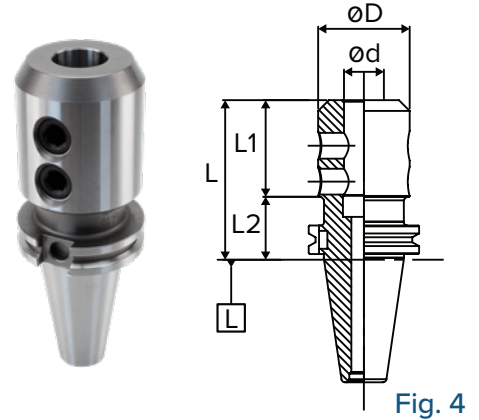


Fig. 4

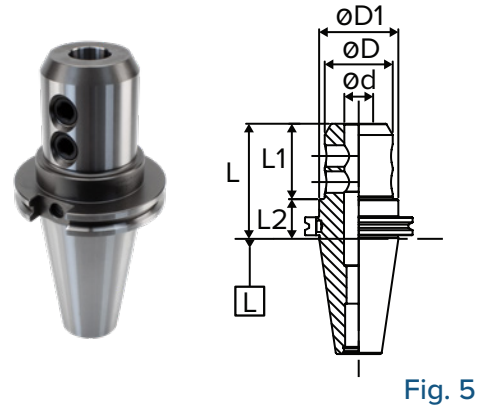


Fig. 5

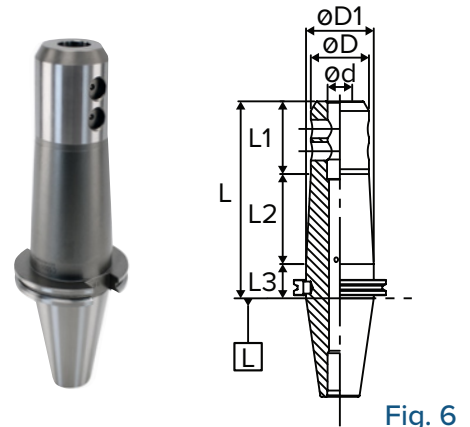


Fig. 6



Set Screws
Page 173



Retention
Knobs
Page 267



Tool
Clampers
Page 274

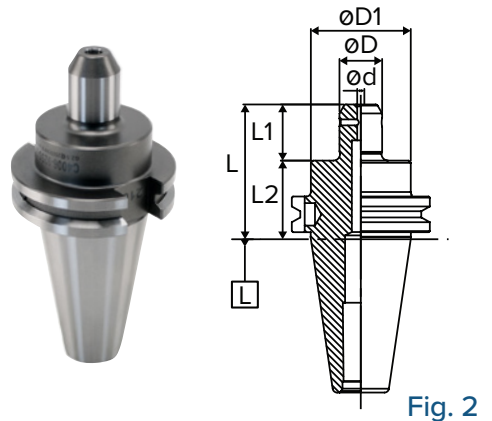
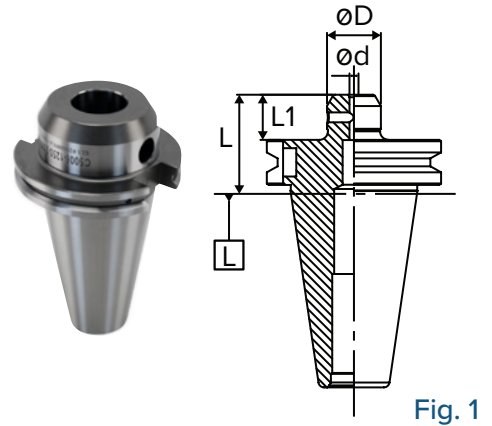
CAT END MILL HOLDERS

CAT50 - INCH (CONT.)

Part Number	Ød	L	L1	L2	L3	D	D1	Set Screw Part Number	Max. RPM	Fig.
C5006-1250-2.00	1-1/4"	2.00"	1.25"	-	-	2.75"	-	S3/4-16X11/16	25K	1
C5006-1250-4.00	1-1/4"	4.00"	2.62"	1.38"	-	2.48"	2.75"	S3/4-16X11/16 (2)	25K	5
C5006-1250-6.00	1-1/4"	6.00"	4.61"	1.39"	-	2.48"	2.75"	S3/4-16X11/16 (2)	25K	5
C5006-1250-8.00	1-1/4"	8.00"	2.95"	3.66"	1.39"	2.48"	2.75"	S3/4-16X11/16 (2)	25K	6
C5006-1500-2.25	1-1/2"	2.25"	1.50"	-	-	2.75"	-	S3/4-16X11/16	25K	1
C5006-1500-4.50	1-1/2"	4.50"	3.00"	1.50"	-	2.99"	2.75"	S3/4-16X11/16 (2)	25K	5
C5006-1500-7.00	1-1/2"	7.00"	5.61"	1.39"	-	2.99"	2.75"	S3/4-16X11/16 (2)	25K	5
C5006-2000-3.63	2"	3.63"	2.88"	0.75"	-	3.74"	-	S1-14X7/8 (1) S1-14X7/16 (1)	25K	7
C5006-2000-5.37	2"	5.37"	3.99"	1.38"	-	3.74"	-	S1-14X7/8 (2)	25K	4
C5006-2500-6.00	2-1/2"	6.00"	4.62"	1.38"	-	4.25"	-	S1-14X7/8 (2)	25K	4

Note:

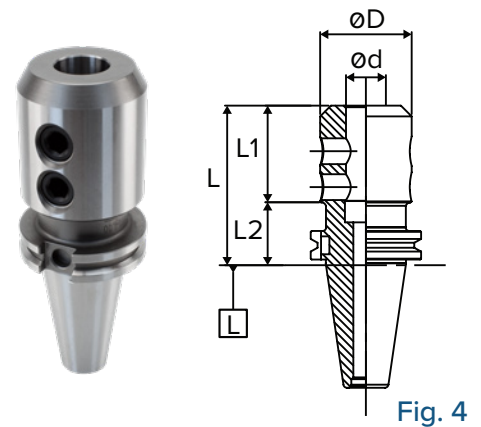
- Set Screws are included.
- Extended Length End Mill Holders can be modified with DIN flange coolant ports.



CAT50 - METRIC

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
C5006-6-2.50	6mm	2.50"	1.11"	1.39"	0.79"	2.75"	S1/4-28X1/4	25K	2
C5006-8-2.50	8mm	2.50"	1.11"	1.39"	0.87"	2.75"	S5/16-24X1/4	25K	2
C5006-10-2.50	10mm	2.50"	1.11"	1.39"	1.00"	2.75"	S3/8-24X5/16	25K	2
C5006-12-2.63	12mm	2.63"	1.25"	1.38"	1.38"	2.75"	S7/16-20X3/8	25K	2
C5006-14-3.00	14mm	3.00"	1.62"	1.38"	1.65"	2.75"	S9/16-18X1/2	25K	2
C5006-16-3.00	16mm	3.00"	1.61"	1.39"	1.65"	2.75"	S9/16-18X1/2	25K	2
C5006-18-3.00	18mm	3.00"	1.61"	1.39"	1.89"	2.75"	S5/8-18X1/2	25K	2
C5006-20-3.00	20mm	3.00"	1.61"	1.39"	1.89"	2.75"	S5/8-18X1/2	25K	2
C5006-25-4.00	25mm	4.00"	2.61"	1.39"	2.36"	2.75"	S3/4-16X11/16 (2)	25K	5
C5006-32-4.00	32mm	4.00"	2.61"	1.39"	2.48"	2.75"	S3/4-16X11/16 (2)	25K	5
C5006-40-4.50	40mm	4.50"	3.12"	1.38"	3.07"	-	S3/4-16X11/16 (2)	25K	4
C5006-42-4.50	42mm	4.50"	3.11"	1.39"	3.07"	-	S3/4-16X11/16 (2)	25K	4
C5006-50-5.37	50mm	5.31"	3.99"	1.32"	3.74"	-	S1-14X7/8 (2)	25K	4

Note: Set Screws are included.



Set Screws
Page 173



Retention
Knobs
Page 267

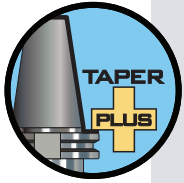


Tool
Clampers
Page 274

END MILL HOLDERS

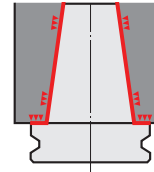


TAPER PLUS CAT END MILL HOLDERS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT40

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
NC4006-0500-2.50CP	1/2"	2.50"	1.12"	1.38"	1.38"	1.75"	S7/16-20X3/8	25K	2
NC4006-0500-4.00CP	1/2"	4.00"	1.12"	2.88"	1.38"	1.75"	S7/16-20X3/8	25K	2
NC4006-0625-3.00CP	5/8"	3.00"	1.62"	1.38"	1.65"	1.75"	S9/16-18X1/2	25K	2
NC4006-0750-3.00CP	3/4"	3.00"	2.25"	0.75"	1.75"	-	S5/8-18X1/2	25K	1
NC4006-0750-4.00CP	3/4"	4.00"	3.25"	0.75"	1.75"	-	S5/8-18X1/2	25K	1
NC4006-1000-2.00	1"	2.00"	1.25"	0.75"	2.25"	-	S3/4-16X11/16	25K	1
NC4006-1000-4.00CP	1"	4.00"	2.62"	1.38"	2.36"	-	S3/4-16X11/16 (2)	25K	4
NC4006-1250-4.00CP	1-1/4"	4.00"	2.62"	1.38"	2.48"	-	S3/4-16X11/16 (2)	25K	4
NC4006-1500-4.50CP	1-1/2"	4.50"	3.12"	1.38"	2.99"	-	S3/4-16X11/16 (2)	25K	4

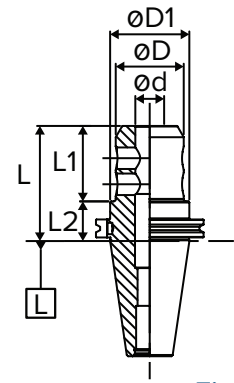


Fig. 5

TAPER PLUS - CAT50

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
NC5006-0500-2.63CP	1/2"	2.63"	1.25"	1.38"	1.38"	2.75"	S7/16-20X3/8	25K	2
NC5006-0500-4.00CP	1/2"	4.00"	2.62"	1.38"	1.38"	2.75"	S7/16-20X3/8	25K	2
NC5006-0625-3.00CP	5/8"	3.00"	1.62"	1.38"	1.65"	2.75"	S9/16-18X1/2	25K	2
NC5006-0625-4.00CP	5/8"	4.00"	2.62"	1.38"	1.65"	2.75"	S9/16-18X1/2	25K	2
NC5006-0750-3.00CP	3/4"	3.00"	1.62"	1.38"	1.89"	2.75"	S5/8-18X1/2	25K	2
NC5006-0750-4.00CP	3/4"	4.00"	2.62"	1.38"	1.89"	2.75"	S5/8-18X1/2	25K	2
NC5006-0750-6.00CP	3/4"	6.00"	4.62"	1.38"	1.89"	2.75"	S5/8-18X1/2	25K	2
NC5006-1000-4.00CP	1"	4.00"	2.62"	1.38"	2.36"	2.75"	S3/4-16X11/16 (2)	25K	5
NC5006-1000-6.00CP	1"	6.00"	4.62"	1.38"	2.36"	2.75"	S3/4-16X11/16 (2)	25K	5
NC5006-1250-4.00CP	1-1/4"	4.00"	2.62"	1.38"	2.48"	2.75"	S3/4-16X11/16 (2)	25K	5
NC5006-1250-6.00CP	1-1/4"	6.00"	4.61"	1.39"	2.48"	2.75"	S3/4-16X11/16 (2)	25K	5
NC5006-1500-4.50CP	1-1/2"	4.50"	3.12"	1.38"	2.99"	-	S3/4-16X11/16 (2)	25K	4
NC5006-2000-5.37CP	2"	5.37"	3.99"	1.38"	3.74"	-	S1-14X7/8 (2)	25K	4

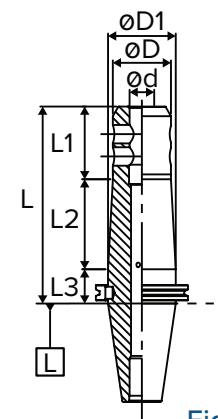


Fig. 6

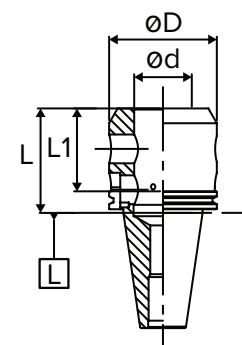
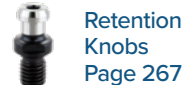


Fig. 7



BT END MILL HOLDERS

FEATURES

- End mill ID bore T.I.R. < 0.0002"
- Through-spindle coolant capability
- AT3 or better taper



T.I.R.
< 0.0002" in ID bore



Coolant-Thru



Speed
Up to 30,000 RPM @ G2.5



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT30 - INCH

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
B3006-0125-2.36	1/8"	2.36"	0.97"	1.39"	0.75"	1.18"	6-32X1/4	30K	8
B3006-0187-2.36	3/16"	2.36"	0.97"	1.39"	0.75"	1.26"	S8-32X1/4	30K	8
B3006-0250-2.36	1/4"	2.36"	0.99"	1.37"	0.79"	1.18"	S1/4-28X1/4	30K	8
B3006-0312-2.36	5/16"	2.36"	0.97"	1.39"	0.87"	1.38"	S5/16-24X1/4	30K	8
B3006-0375-2.36	3/8"	2.36"	0.97"	1.39"	1.00"	1.18"	S3/8-24X5/16	30K	8
B3006-0437-2.36	7/16"	2.36"	1.50"	0.86"	1.38"	-	S7/16-20X3/8	30K	9
B3006-0500-2.36	1/2"	2.36"	1.50"	0.86"	1.38"	-	S7/16-20X3/8	30K	9
B3006-0625-2.50	5/8"	2.50"	1.63"	0.87"	1.65"	-	S9/16-18X1/2	30K	9
B3006-0750-3.00	3/4"	3.00"	2.13"	0.87"	1.88"	-	S5/8-18X1/2	30K	10
B3006-0875-3.54	7/8"	3.54"	2.48"	1.06"	2.01"	-	S5/8-18X1/2 (2)	30K	11
B3006-1000-3.54	1"	3.54"	2.68"	0.86"	2.36"	-	S3/4-16X11/16 (2)	30K	11

Note: Set Screws are included.

BT30 - METRIC

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
B3006-6-2.50	6mm	2.50"	1.00"	1.50"	0.79"	1.18"	S1/4-28X1/4	30K	8
B3006-10-2.50	10mm	2.50"	1.00"	1.50"	1.00"	1.18"	S3/8-24X5/16	30K	8
B3006-12-2.50	12mm	2.50"	1.63"	0.87"	1.38"	-	S7/16-20X3/8	30K	9
B3006-16-2.50	16mm	2.50"	1.63"	0.87"	1.65"	-	S9/16-18X1/2	30K	9
B3006-20-3.50	20mm	3.50"	2.63"	0.87"	1.89"	-	S5/8-18X1/2	30K	9
B3006-25-3.50	25mm	3.50"	2.44"	1.06"	2.36"	-	S3/4-16X11/16 (2)	30K	11

Note: Set Screws are included.

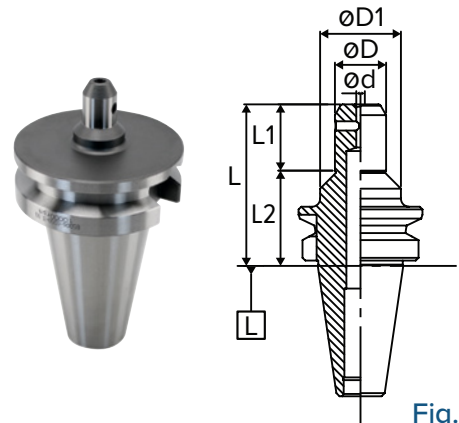


Fig. 8

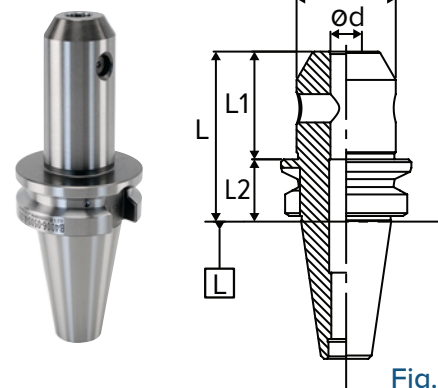


Fig. 9

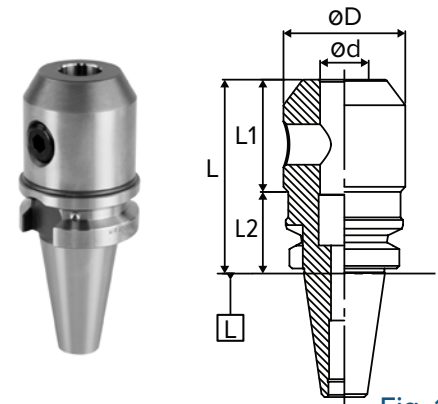


Fig. 10



Set Screws
Page 173



Retention Knobs
Page 267



Tool Clampers
Page 274

END MILL HOLDERS



BT END MILL HOLDERS

BT40 - INCH

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
B4006-0125-1.38	1/8"	1.38"	0.32"	1.07"	0.75"	-	S6-32X1/4	25K	9
B4006-0125-2.36	1/8"	2.36"	0.98"	1.38"	0.75"	1.75"	S6-32X1/4	25K	8
B4006-0125-4.00	1/8"	4.00"	2.94"	1.06"	0.75"	-	S6-32X1/4	25K	9
B4006-0187-2.50	3/16"	2.50"	1.12"	1.38"	0.75"	1.75"	S8-32X1/4	25K	8
B4006-0187-4.00	3/16"	4.00"	2.94"	1.06"	0.75"	-	S8-32X1/4	25K	9
B4006-0250-1.38	1/4"	1.38"	0.32"	1.07"	0.79"	-	S1/4-28X1/4	25K	9
B4006-0250-2.50	1/4"	2.50"	1.12"	1.38"	0.79"	1.75"	S1/4-28X1/4	25K	8
B4006-0250-4.00	1/4"	4.00"	2.62"	1.38"	0.79"	1.75"	S1/4-28X1/4	25K	8
B4006-0312-2.50	5/16"	2.50"	0.97"	1.53"	0.87"	1.18"	S5/16-24X1/4	25K	8
B4016-0312-4.00	5/16"	4.00"	2.94"	1.06"	0.87"	-	S5/16-24X1/4	25K	9
B4006-0375-2.50	3/8"	2.50"	1.12"	1.38"	1.00"	1.75"	S3/8-24x5/16	25K	8
B4006-0375-4.00	3/8"	4.00"	2.96"	1.04"	1.00"	-	S3/8-24x5/16	25K	9
B4006-0437-2.50	7/16"	2.50"	1.44"	1.06"	1.38"	-	S7/16-20X3/8	25K	9
B4006-0500-1.75	1/2"	1.75"	0.69"	1.06"	1.38"	-	S7/16-20X3/8	25K	9
B4006-0500-2.50	1/2"	2.50"	1.44"	1.06"	1.38"	-	S7/16-20X3/8	25K	9
B4006-0500-4.00	1/2"	4.00"	2.94"	1.06"	1.38"	-	S7/16-20X3/8	25K	9
B4006-0625-1.75	5/8"	1.75"	0.69"	1.06"	1.65"	-	S9/16-18X1/2	25K	9
B4006-0625-2.50	5/8"	2.50"	1.44"	1.06"	1.65"	-	S9/16-18X1/2	25K	9
B4006-0625-4.00	5/8"	4.00"	2.94"	1.06"	1.65"	-	S9/16-18X1/2	25K	9
B4006-0750-1.75	3/4"	1.75"	0.69"	1.06"	1.89"	-	S5/8-18X1/2	25K	9
B4006-0750-2.50	3/4"	2.50"	1.44"	1.06"	1.89"	-	S5/8-18X1/2	25K	9
B4006-0750-4.00	3/4"	4.00"	2.94"	1.06"	1.89"	-	S5/8-18X1/2	25K	9
B4006-0875-3.38	7/8"	3.38"	2.31"	1.07"	2.01"	-	S5/8-18X1/2 (2)	25K	12
B4006-1000-2.00	1"	2.00"	0.94"	1.06"	2.25"	-	S3/4-16X11/16	25K	9
B4006-1000-3.56	1"	3.54"	2.50"	1.04"	2.36"	-	S3/4-16X11/16 (2)	25K	12
B4006-1250-2.00	1-1/4"	2.00"	0.94"	1.06"	2.25"	-	S3/4-16X11/16	25K	9
B4006-1250-3.56	1-1/4"	3.54"	2.50"	1.04"	2.48"	-	S3/4-16X11/16 (2)	25K	12
B4006-1500-4.50	1-1/2"	4.50"	3.44"	1.06"	3.00"	-	S3/4-16X11/16 (2)	25K	12

Note: Set Screws are included.

BT40 - METRIC

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
B4006-6-2.50	6mm	2.50"	1.00"	1.50"	0.79"	1.18"	S1/4-28X1/4	25K	8
B4006-8-2.50	8mm	2.50"	1.00"	1.50"	0.87"	1.18"	S5/16-24X1/4	25K	8
B4006-10-2.50	10mm	2.50"	1.00"	1.50"	1.00"	1.18"	S3/8-24x5/16	25K	8
B4006-12-2.50	12mm	2.50"	1.44"	1.06"	1.38"	-	S7/16-20X3/8	25K	9
B4006-14-2.50	14mm	2.50"	1.44"	1.06"	1.65"	-	S9/16-18X1/2	25K	9
B4006-16-2.50	16mm	2.50"	1.44"	1.06"	1.65"	-	S9/16-18X1/2	25K	9
B4006-18-2.50	18mm	2.50"	1.44"	1.06"	1.89"	-	S5/8-18X1/2	25K	9
B4006-20-2.50	20mm	2.50"	1.44"	1.06"	1.89"	-	S5/8-18X1/2	25K	9
B4006-25-3.56	25mm	3.56"	2.50"	1.06"	2.36"	-	S3/4-16X11/16 (2)	25K	12
B4006-32-3.56	32mm	3.56"	2.50"	1.06"	2.48"	-	S3/4-16X11/16 (2)	25K	12

Note: Set Screws are included.

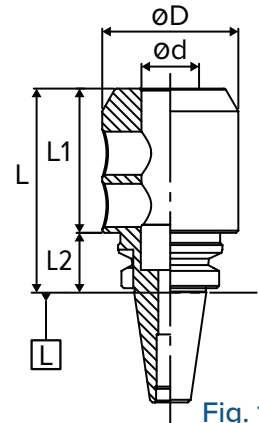


Fig. 11

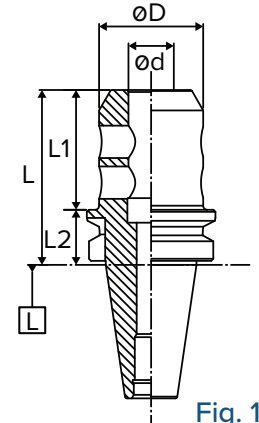


Fig. 12



Set Screws
Page 173



Retention
Knobs
Page 267



Tool
Clampers
Page 274

BT END MILL HOLDERS

BT50 - INCH

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
B5006-0250-3.00	1/4"	3.00"	0.76"	2.24"	0.79"	1.18"	S1/4-28X1/4	25K	8
B5006-0250-6.00	1/4"	6.00"	1.21"	4.79"	0.79"	1.18"	S1/4-28X1/4	25K	8
B5006-0375-2.75	3/8"	2.75"	1.26"	1.49"	1.00"	-	S3/8-24X5/16	25K	9
B5006-0375-6.00	3/8"	6.00"	4.50"	1.50"	1.00"	-	S3/8-24X5/16	25K	9
B5006-0500-3.00	1/2"	3.00"	1.50"	1.50"	1.38"	-	S7/16-20X3/8	25K	9
B5006-0500-6.00	1/2"	6.00"	4.50"	1.50"	1.38"	-	S7/16-20X3/8	25K	9
B5006-0625-3.00	5/8"	3.00"	1.50"	1.50"	1.65"	-	S9/16-18X1/2	25K	9
B5006-0750-3.00	3/4"	3.00"	1.50"	1.50"	1.89"	-	S5/8-18X1/2	25K	9
B5006-0750-6.00	3/4"	6.00"	4.50"	1.50"	1.89"	-	S5/8-18X1/2	25K	9
B5006-1000-4.00	1"	4.00"	2.50"	1.50"	2.36"	-	S3/4-16X11/16 (2)	25K	12
B5006-1000-6.00	1"	6.00"	4.50"	1.50"	2.36"	-	S3/4-16X11/16 (2)	25K	12
B5006-1250-4.00	1-1/4"	4.00"	2.50"	1.50"	2.48"	-	S3/4-16X11/16 (2)	25K	12
B5006-1250-6.00	1-1/4"	6.00"	4.50"	1.50"	2.48"	-	S3/4-16X11/16 (2)	25K	12
B5006-1500-4.50	1-1/2"	4.50"	3.00"	1.50"	3.00"	-	S3/4-16X11/16 (2)	25K	12
B5006-2000-5.00	2"	5.00"	3.00"	2.00"	3.74"	-	S1-14X5/8 (2)	25K	12

Note: Set Screws are included.

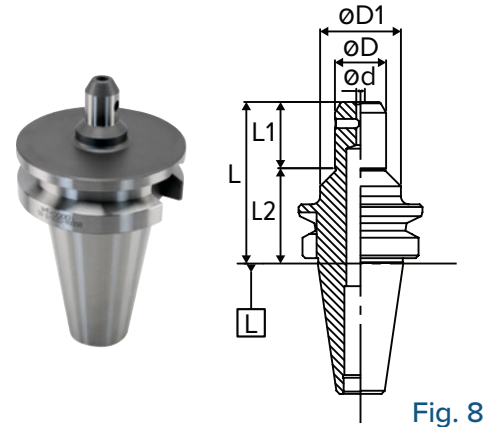


Fig. 8

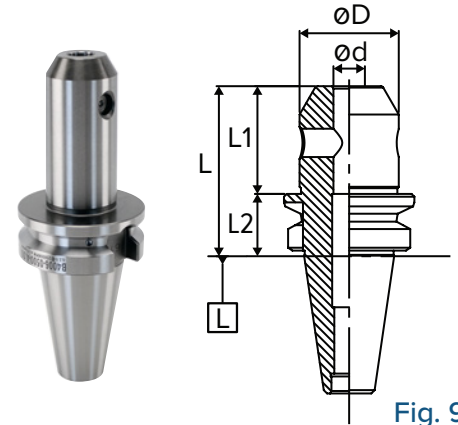


Fig. 9

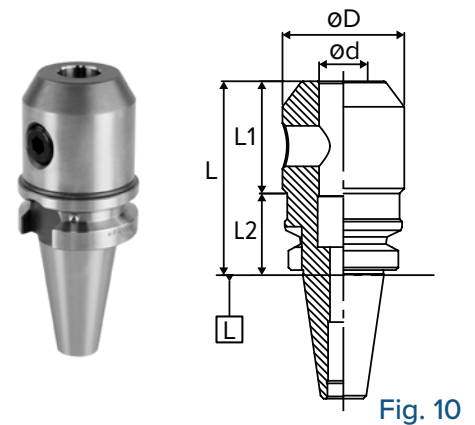


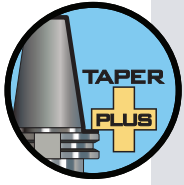
Fig. 10



END MILL HOLDERS

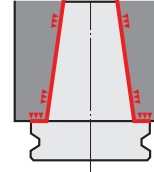


TAPER PLUS BT END MILL HOLDERS



Taper Plus (Dual Contact) Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - NBT30 - INCH

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
NB3006-0125-2.36CP	1/8"	2.36"	1.00"	1.36"	0.75"	1.18"	S6-32X1/4	30K	8
NB3006-0187-2.36CP	3/16"	2.36"	1.00"	1.36"	0.75"	1.26"	S8-32X1/4	30K	8
NB3006-0250-2.36CP	1/4"	2.36"	1.00"	1.36"	0.79"	1.18"	S1/4-28X1/4	30K	8
NB3006-0312-2.36CP	5/16"	2.36"	1.00"	1.36"	0.87"	1.38"	S5/16-24X1/4	30K	8
NB3006-0375-2.36CP	3/8"	2.36"	1.00"	1.36"	1.00"	1.18"	S3/8-24x5/16	30K	8
NB3006-0500-2.36CP	1/2"	2.36"	1.50"	0.86"	1.38"	-	S7/16-20x3/8	30K	9
NB3006-0625-2.50CP	5/8"	2.50"	1.63"	0.87"	1.65"	-	S9/16-18X1/2	30K	9
NB3006-0750-3.00CP	3/4"	3.00"	1.73"	1.27"	1.88"	-	S5/8-18x1/2	30K	10
NB3006-1000-3.54CP	1"	3.54"	2.44"	1.10"	2.36"	-	S3/4-16X11/16(2)	30K	11

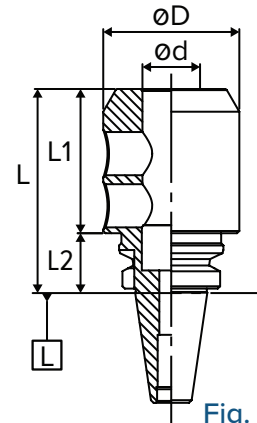


Fig. 11

TAPER PLUS - NBT40 - INCH

Part Number	Ød	L	L1	L2	D	Set Screw Part Number	Max. RPM	Fig.
NB4006-0500-4.00CP	1/2"	4.00"	2.94"	1.06"	1.38"	S7/16-20x3/8	25K	9
NB4006-1250-3.56CP	1-1/4"	3.54"	2.50"	1.04"	2.48"	S3/4-16X11/16 (2)	25K	12

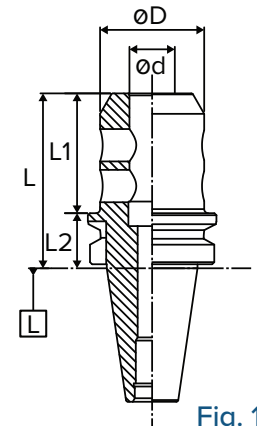


Fig. 12



Set Screws
Page 173



Retention
Knobs
Page 267



Tool
Clampers
Page 274

POLYGONAL TAPER END MILL HOLDERS

FEATURES

- End mill ID bore T.I.R. < 0.0002"
- Through-spindle coolant capability
- AT3 or better taper



T.I.R.
< 0.0002" in ID bore



Coolant-Thru



Speed
Up to 30,000 RPM @ G2.5



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

C4/C5/C6/C8 - INCH

Part Number	Ød	L	L1	D	Set Screw Part Number	Max. RPM	Fig.
C4-EM0250-50	1/4"	1.97"	1.18"	0.79"	S1/4-28X1/4	25K	13
C4-EM0375-50	3/8"	1.97"	1.18"	1.00"	S3/8-24X5/16	25K	13
C4-EM0500-55	1/2"	2.17"	1.38"	1.38"	S7/16-20X3/8	25K	13
C4-EM0625-55	5/8"	2.17"	1.38"	1.65"	S9/16-18X1/2	25K	13
C5-EM0250-50	1/4"	1.97"	1.18"	0.79"	S1/4-28XS1/4	25K	13
C5-EM0375-55	3/8"	2.17"	1.38"	1.00"	S3/8-24X5/16	25K	13
C5-EM0500-60	1/2"	2.36"	1.58"	1.38"	S7/16-20X3/8	25K	13
C5-EM0625-60	5/8"	2.36"	1.58"	1.65"	S9/16-18X1/2	25K	13
C5-EM0750-60	3/4"	2.36"	1.57"	1.89"	S5/8-18X1/2	25K	13
C5-EM1000-80	1"	3.15"	2.36"	2.36"	S3/4-16X11/16(2)	25K	14
C6-EM0250-55	1/4"	2.17"	1.30"	0.79"	S1/4-28X1/4	25K	13
C6-EM0375-60	3/8"	2.36"	1.50"	1.00"	S3/8-24X5/16	25K	13
C6-EM0500-60	1/2"	2.36"	1.50"	1.38"	S7/16-20X3/8	25K	13
C6-EM0625-65	5/8"	2.56"	1.69"	1.65"	S9/16-18X1/2	25K	13
C6-EM0750-65	3/4"	2.56"	1.69"	1.89"	S5/8-18X1/2	25K	13
C6-EM1000-80	1"	3.15"	2.28"	2.36"	S3/4-16X11/16(2)	25K	14
C6-EM1250-90	1-1/4"	3.54"	-	2.48"	S3/4-16X11/16(2)	25K	15
C8-EM0250-70	1/4"	2.76"	1.58"	0.79"	S1/4-28X1/4	25K	13
C8-EM0375-70	3/8"	2.76"	1.58"	1.00"	S3/8-24X5/16	25K	13
C8-EM0500-70	1/2"	2.76"	1.58"	1.38"	S7/16-20X3/8	25K	13
C8-EM0625-70	5/8"	2.76"	1.58"	1.65"	S9/16-18X1/2	25K	13
C8-EM0750-70	3/4"	2.76"	1.58"	1.89"	S5/8-18X1/2	25K	13
C8-EM1000-80	1"	3.15"	1.97"	2.36"	S3/4-16X11/16	25K	13
C8-EM1250-80	1-1/4"	3.15"	1.97"	2.48"	S3/4-16X11/16	25K	13

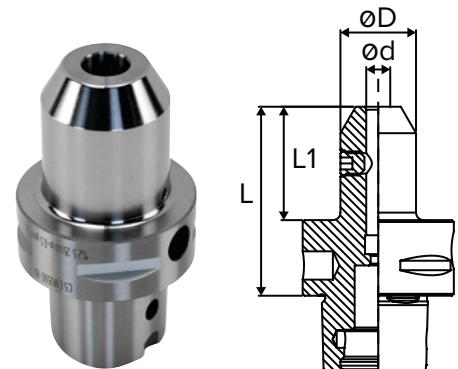


Fig. 13

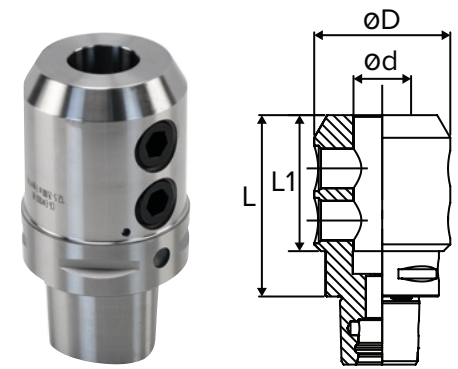


Fig. 14

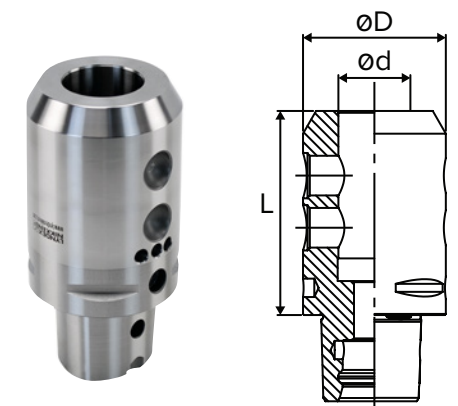


Fig. 15



Set Screws
Page 173



Retention
Knobs
Page 267



Tool
Clampers
Page 274

END MILL HOLDERS



HSK END MILL HOLDERS

FEATURES

- End mill ID bore T.I.R. < 0.0002"
- Through-spindle coolant capability
- AT3 or better taper



T.I.R.
< 0.0002" in ID bore



Coolant-Thru



Speed
Up to 25,000 RPM @ G2.5



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK63A

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
HSK63A-0187-3.00	3/16"	3.00"	1.58"	1.42"	0.75"	1.58"	S8-32X1/4	25K	16
HSK63A-0187-5.00	3/16"	5.00"	3.58"	1.42"	0.75"	1.58"	S8-32X1/4	25K	16
HSK63A-0250-3.00	1/4"	3.00"	1.58"	1.42"	0.79"	1.58"	S1/4-28X1/4	25K	16
HSK63A-0250-5.00	1/4"	5.00"	3.58"	1.42"	0.79"	1.58"	S1/4-28X1/4	25K	16
HSK63A-0312-3.00	5/16"	3.00"	1.98"	1.02"	0.87"	-	S5/16-24X1/4	25K	17
HSK63A-0312-5.00	5/16"	5.00"	3.98"	1.02"	0.87"	-	S5/16-24X1/4	25K	17
HSK63A-0375-3.50	3/8"	3.50"	2.48"	1.02"	1.00"	-	S3/8-24X5/16	25K	17
HSK63A-0375-5.00	3/8"	5.00"	3.98"	1.02"	1.00"	-	S3/8-24X5/16	25K	17
HSK63A-0437-4.00	7/16"	4.00"	2.98"	1.02"	1.38"	-	S7/16-20X3/8	25K	17
HSK63A-0437-5.00	7/16"	5.00"	3.98"	1.02"	1.38"	-	S7/16-20X3/8	25K	17
HSK63A-0500-4.00	1/2"	4.00"	2.98"	1.02"	1.38"	-	S7/16-20X3/8	25K	17
HSK63A-0500-5.00	1/2"	5.00"	3.98"	1.02"	1.38"	-	S7/16-20X3/8	25K	17
HSK63A-0625-4.00	5/8"	4.00"	2.98"	1.02"	1.65"	-	S9/16-18X1/2	25K	17
HSK63A-0625-5.00	5/8"	5.00"	3.98"	1.02"	1.65"	-	S9/16-18X1/2	25K	17
HSK63A-0750-4.50	3/4"	4.50"	3.48"	1.02"	1.89"	-	S5/8-18X1/2	25K	17
HSK63A-0750-6.00	3/4"	6.00"	4.98"	1.02"	1.89"	-	S5/8-18X1/2	25K	17
HSK63A-1000-4.50	1"	4.50"	2.85"	1.65"	2.36"	-	S3/4-16X11/16 (2)	25K	18
HSK63A-1000-6.00	1"	6.00"	4.35"	1.65"	2.36"	-	S3/4-16X11/16 (2)	25K	18
HSK63A-1250-4.50	1-1/4"	4.50"	2.85"	1.65"	2.48"	-	S3/4-16X11/16 (2)	25K	18
HSK63A-1250-6.00	1-1/4"	6.00"	4.35"	1.65"	2.48"	-	S3/4-16X11/16 (2)	25K	18

Note:

- Set Screws are included.
- Coolant tube and coolant tube wrench are sold separately.

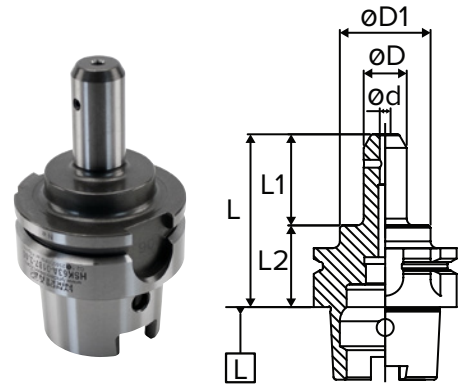


Fig. 16

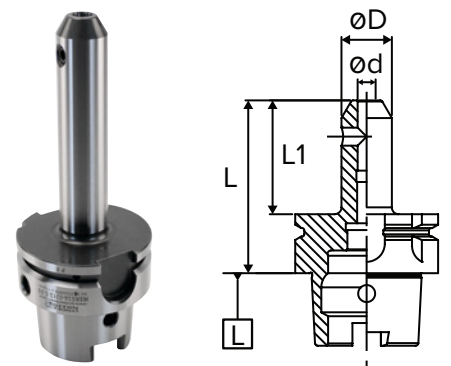


Fig. 17

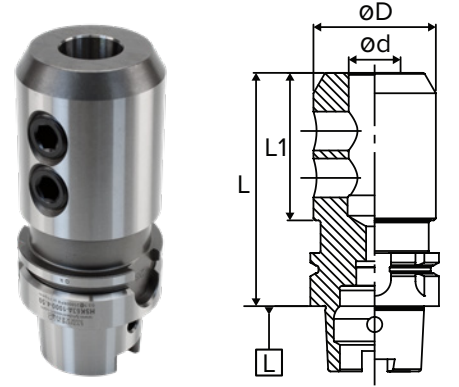
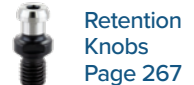


Fig. 18



HSK END MILL HOLDERS

HSK100A

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Max. RPM	Fig.
HSK100A-0250-4.00	1/4"	4.00"	2.47"	1.54"	0.79"	1.58"	S1/4-28X1/4	25K	19
HSK100A-0250-6.00	1/4"	6.00"	4.47"	1.54"	0.79"	1.58"	S1/4-28X1/4	25K	19
HSK100A-0312-4.00	5/16"	4.00"	2.47"	1.54"	0.87"	1.58"	S5/16-24X1/4	25K	19
HSK100A-0312-6.00	5/16"	6.00"	4.47"	1.54"	0.87"	1.58"	S5/16-24X1/4	25K	19
HSK100A-0375-4.00	3/8"	4.00"	2.47"	1.54"	1.00"	1.58"	S3/8-24X5/16	25K	19
HSK100A-0375-6.00	3/8"	6.00"	4.47"	1.54"	1.00"	1.58"	S3/8-24X5/16	25K	19
HSK100A-0437-4.00	7/16"	4.00"	1.38"	2.62"	1.38"	-	S7/16-20X3/8	25K	17
HSK100A-0437-6.00	7/16"	6.00"	4.86"	1.14"	1.38"	-	S7/16-20X3/8	25K	17
HSK100A-0500-4.00	1/2"	4.00"	2.86"	1.14"	1.38"	-	S7/16-20X3/8	25K	17
HSK100A-0500-6.00	1/2"	6.00"	4.86"	1.14"	1.38"	-	S7/16-20X3/8	25K	17
HSK100A-0625-4.00	5/8"	4.00"	2.86"	1.14"	1.65"	-	S9/16-18X1/2	25K	17
HSK100A-0625-6.00	5/8"	6.00"	4.86"	1.14"	1.65"	-	S9/16-18X1/2	25K	17
HSK100A-0750-4.00	3/4"	4.00"	2.86"	1.14"	1.89"	-	S5/8-18X1/2	25K	17
HSK100A-0750-6.00	3/4"	6.00"	4.86"	1.14"	1.89"	-	S5/8-18X1/2	25K	17
HSK100A-1000-4.00	1"	4.00"	2.86"	1.14"	2.36"	-	S3/4-16X11/16 (2)	25K	20
HSK100A-1000-6.00	1"	6.00"	4.86"	1.14"	2.36"	-	S3/4-16X11/16 (2)	25K	20
HSK100A-1250-4.00	1-1/4"	4.00"	2.86"	1.14"	2.48"	-	S3/4-16X11/16 (2)	25K	20
HSK100A-1250-6.00	1-1/4"	6.00"	4.86"	1.14"	2.48"	-	S3/4-16X11/16 (2)	25K	20
HSK100A-1500-4.00	1-1/2"	4.00"	2.86"	1.14"	2.99"	-	S3/4-16X11/16 (2)	25K	17
HSK100A-1500-6.00	1-1/2"	6.00"	4.86"	1.14"	2.99"	-	S3/4-16X11/16 (2)	25K	20

Note:

- Set Screws are included.
- Coolant tube and coolant tube wrench are sold separately.

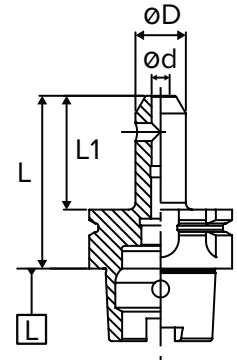


Fig. 17

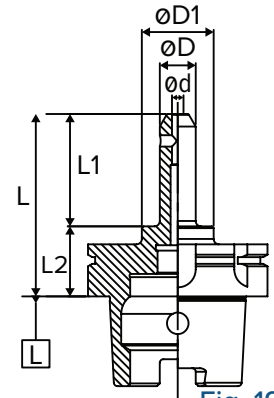


Fig. 19

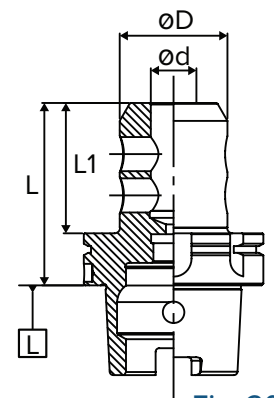


Fig. 20



Set Screws
Page 173



Retention
Knobs
Page 267



Tool
Clampers
Page 274

END MILL HOLDERS



NMTB END MILL HOLDERS

FEATURES

- End mill ID bore T.I.R. < 0.0002"
- AT3 or better taper



T.I.R.
< 0.0002" in ID bore



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

NMTB30

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Fig.
N3006-0125-1.75	1/8"	1.75"	1.00"	0.75"	0.75"	1.18"	S6-32X1/4	21
N3006-0250-1.75	1/4"	1.75"	1.03"	0.72"	0.79"	1.18"	S1/4-28X1/4	21
N3006-0375-1.75	3/8"	1.75"	1.00"	0.75"	1.00"	1.18"	S3/8-24X5/16	21
N3006-0500-1.75	1/2"	1.75"	1.33"	0.42"	1.38"	-	S7/16-20X3/8	22
N3006-0625-1.75	5/8"	1.75"	1.33"	0.42"	1.44"	-	S9/16-18X1/2	22
N3006-0750-2.25	3/4"	2.25"	1.44"	0.82"	1.89"	-	S5/8-18X1/2	23
N3006-0875-2.50	7/8"	2.50"	1.69"	0.82"	2.01"	-	S5/8-18X1/2	23
N3006-1000-2.69	1"	2.63"	1.87"	0.76"	2.36"	-	S3/4-16X11/16	23
N3006-1250-3.62	1-1/4"	3.54"	2.81"	0.73"	2.48"	-	S3/4-16X11/16 (2)	24

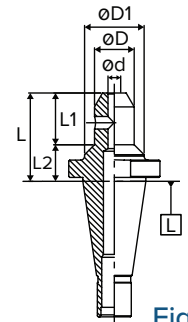


Fig. 21

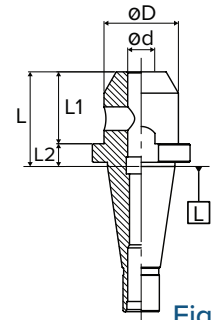


Fig. 22

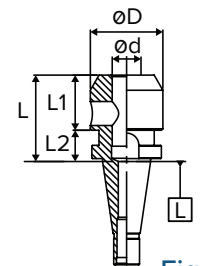


Fig. 23

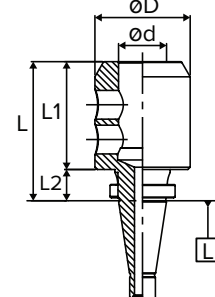


Fig. 24

NMTB40

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Fig.
N4006-0125-2.31	1/8"	2.31"	1.00"	1.31"	0.75"	1.18"	S6-32X1/4	21
N4006-0187-2.31	1/8"	2.31"	1.00"	1.31"	0.75"	1.18"	S8-32X1/4	21
N4006-0250-2.31	1/4"	2.31"	1.00"	1.31"	0.79"	1.18"	S1/4-28X1/4	21
N4006-0312-2.31	5/16"	2.31"	1.00"	1.31"	0.87"	1.18"	S5/16-24X1/4	21
N4006-0375-2.31	3/8"	2.31"	1.00"	1.31"	1.00"	1.18"	S3/8-24X5/16	21
N4006-0437-2.31	7/16"	2.31"	1.92"	0.39"	1.38"	-	S7/16-20X3/8	22
N4006-0500-2.31	1/2"	2.31"	1.92"	0.39"	1.38"	-	S7/16-20X3/8	22
N4006-0625-2.31	5/8"	2.31"	1.92"	0.39"	1.65"	-	S9/16-18X1/2	22
N4006-0750-2.31	3/4"	2.31"	1.92"	0.39"	1.89"	-	S5/8-18X1/2	22
N4006-0875-2.94	7/8"	2.95"	2.13"	0.82"	2.01"	-	S5/8-18X1/2 (2)	24
N4006-1000-3.37	1"	3.37"	2.57"	0.80"	2.36"	-	S3/4-16X11/16 (2)	24
N4006-1250-3.69	1-1/4"	3.69"	2.89"	0.81"	2.48"	-	S3/4-16X11/16 (2)	24

Note:

- Set Screws are included.
- NMTB shanks are suitable for use with Erickson Quick Change spindles.



R8 & STRAIGHT SHANK END MILL HOLDERS

FEATURES

- End mill ID bore T.I.R. < 0.0002"
- AT3 or better taper



T.I.R.
< 0.0002" in ID bore



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

R8

Part Number	Ød	L	L1	D	D1	Set Screw Part Number	Fig.
830-008-1.33	1/8"	1.33"	0.95"	0.75"	1.25"	S6-32X1/4	25
830-012-1.33	3/16"	1.33"	0.95"	0.75"	1.25"	S8-32X1/4	25
830-016-1.33	1/4"	1.33"	0.97"	0.79"	1.25"	S1/4-28X1/4	25
830-020-1.33	5/16"	1.33"	1.02"	0.87"	1.25"	S5/16-24X1/4	25
830-024-1.33	3/8"	1.33"	1.08"	1.00"	1.25"	S3/8-24X5/16	25
830-028-1.33	7/16"	1.33"	1.21"	1.38"	-	S7/16-20X3/8	26
830-032-1.33	1/2"	1.33"	1.21"	1.38"	-	S7/16-20X3/8	26
830-040-1.50	5/8"	1.50"	1.37"	1.65"	-	S9/16-18X1/2	26
830-048-2.37	3/4"	2.37"	2.24"	1.89"	-	S5/8-18X1/2	26
830-056-2.75	7/8"	2.75"	2.62"	2.01"	-	S5/8-18X1/2 (2)	27
830-064-3.25	1"	3.25"	3.12"	2.36"	-	S3/4-16X11/16 (2)	27
830-080-3.25	1-1/4"	3.25"	3.12"	2.48"	-	S3/4-16X11/16 (2)	27
830-096-3.75	1-1/2"	3.75"	3.62"	2.99"	-	S3/4-16X11/16 (2)	27

Note: Set Screws are included.

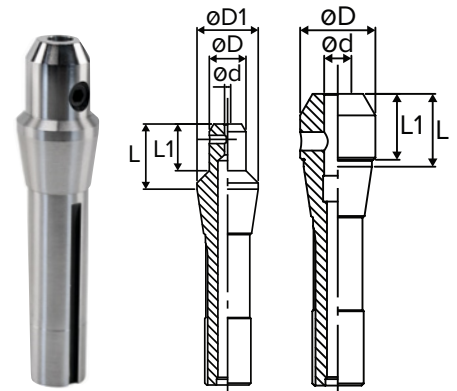


Fig. 25

Fig. 26

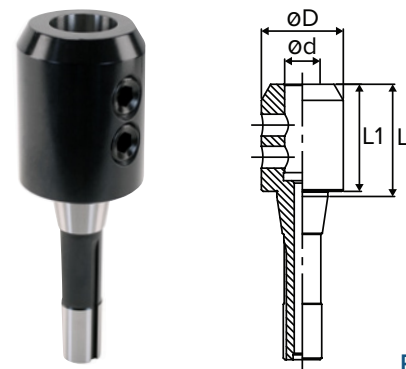


Fig. 27

STRAIGHT SHANK

Part Number	Ød	L	L1	L2	D	D1	Set Screw Part Number	Fig.
S7506-0125-6.00	1/8"	6.00"	1.00"	5.00"	0.50"	0.75"	S6-32X1/4	28
S7506-0187-6.00	3/16"	6.00"	-	-	0.75"	-	S8-32X1/4	29
S7506-0250-6.00	1/4"	6.00"	-	-	0.75"	-	S1/4-28X1/4	29
S7506-0312-6.00	5/16"	6.00"	-	-	0.75"	-	S5/16-24X1/4	29
S1006-0375-6.00	3/8"	6.00"	-	-	1.00"	-	S3/8-24X5/16	29
S1006-0500-6.00	1/2"	6.00"	-	-	1.00"	-	S1/4-28x1/4 (2)	30

Note: Set Screws are included.

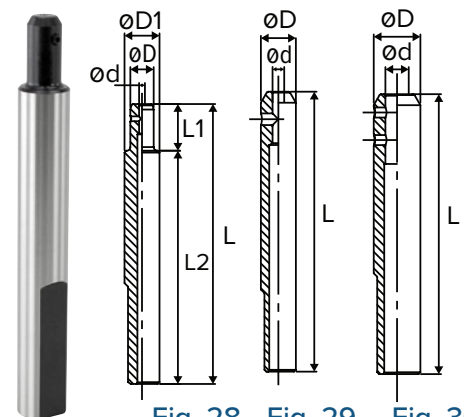


Fig. 28

Fig. 29

Fig. 30



Set Screws
Page 173



Retention
Knobs
Page 267



Tool
Clampers
Page 274

END MILL HOLDERS



END MILL HOLDER ACCESSORIES

REPLACEMENT SET SCREWS FOR END MILL HOLDERS

Part Number	Size of Holder Internal Diameter
S6-32X1/4	1/8"
S8-32X1/4	3/16"
S1/4-28x1/4	1/4", 6mm
S5/16-24X1/4	5/16", 8mm
S3/8-24X5/16	3/8", 10mm
S7/16-20X3/8	7/16", 1/2", 12mm
S9/16-18X1/2	5/8", 14-16mm
S5/8-18X1/2	3/4", 7/8", 18-20mm
S3/4-16X11/16	1", 1-1/4", 1-1/2", 25-42mm
S1-14x7/8	2", 2-1/2"



COOLANT TUBE FOR HSK HOLDERS

Part Number	Description
HSK40-TUBE	HSK40 Coolant Tube
HSK63-TUBE	HSK63 Coolant Tube
HSK100-TUBE	HSK100 Coolant Tube
C4-TUBE	C4 Coolant Tube
C5-TUBE	C5 Coolant Tube
C6-TUBE	C6 Coolant Tube
C8-TUBE	C8 Coolant Tube



COOLANT TUBE WRENCH FOR HSK HOLDERS

Part Number	Description
HSK40-WRENCH	Wrench for HSK40 Coolant Tube
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube
C4-WRENCH	Wrench for C4 Coolant Tube
C5-WRENCH	Wrench for C5 Coolant Tube
C6-WRENCH	Wrench for C6 Coolant Tube
C8-WRENCH	Wrench for C8 Coolant Tube

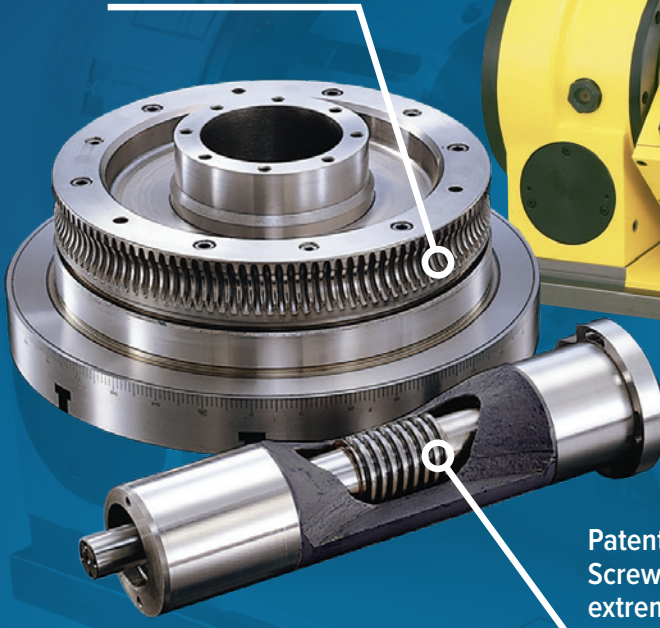


Note: Coolant tube wrenches are needed to remove or install coolant tubes in HSK toolholders.

YOUR CNC ROTARY TABLE SOLUTION

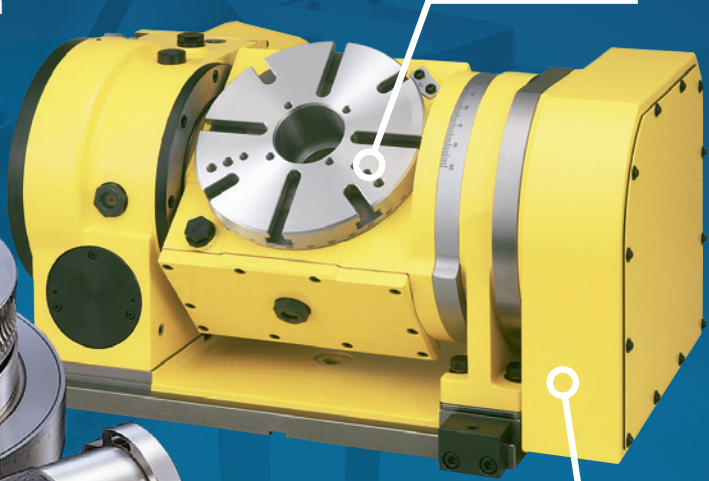
Heat Treated and Ion Nitrided Steel Worm Wheel greatly increases wear resistance and reduces backlash adjustment

Extreme rigidity, concentricity and precision with 4 arc second repeatability



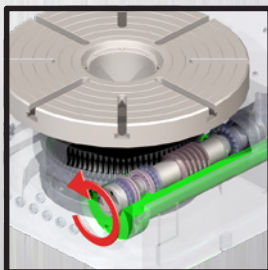
Patented Solid Carbide Worm Screw, thread ground for extreme accuracy and precision

Compact design to fit any CNC machining center



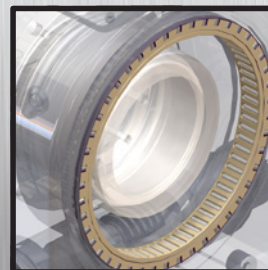
REDUCED SETUPS, INCREASED PRODUCTIVITY, *PROFITS IN YOUR POCKET!*

ROTARY TABLE FEATURES:



Unique Faceplate and Worm Wheel Assembly

- Unique shrunken fit worm wheel design onto solid faceplate and quill body for high precision concentricity
- Shorter distance from faceplate to gear allows for greater torsional forces to be sustained



Independent Tubular Thrust and Radial Bearings

- Custom paired and matched for every rotary table
- Provide vibration dampening and internal gear protection
- Extreme rigidity and concentric accuracy from needle roller bearings

SHELL MILL HOLDERS



SHELL MILL HOLDERS



SHELL MILL & FACE MILL HOLDER FEATURES

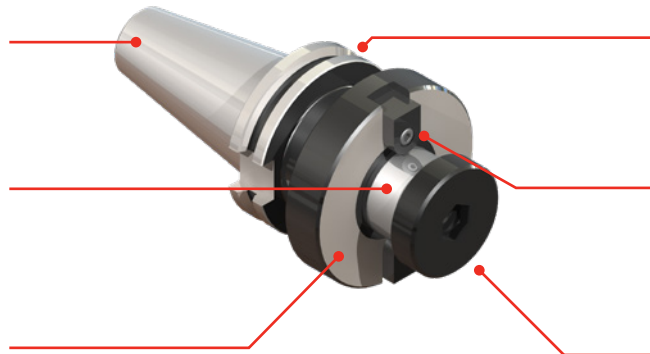
Our Shell Mill Holders are available in a wide variety of tapers and sizes, including CAT, BT, HSK, and R8. Both metric and inch sizes are available, accommodating face mills with pilot diameters ranging from 1/2" (12mm) to 2-1/2" (50mm).

Shell Mill Holder

Taper ground to AT3 or better to ensure 80% taper contact

h6 precision ground pilot for concentric and repeatable mounting of shell mill

Surface ground to maintain .0002" perpendicularity to centerline ensuring flat engagement of shell mill

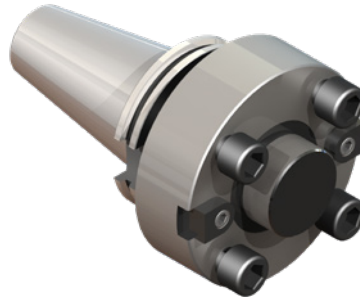


Made from low alloy steel SAE8620/20MnCr5

Keys included as standard for quick set up

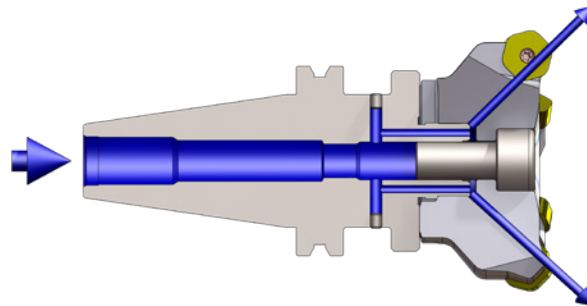
Heat-treated carbon steel nut prevents wear and increases clamping pressure

Face Mill Holder



Coolant-Thru Applications

For Coolant-Thru Shell Mills and Face Mills



Our shell mill and face mill holders come standard with coolant ports.

SHELL MILL HOLDERS



CAT SHELL MILL HOLDERS

- Accommodates face mills with pilot diameters ranging from 1/2" (12mm) to 2" (40mm)
- Pilot diameter sized for precision fit with cutter
- Removable/replaceable drive keys as standard
- Fine thread locking screw included
- AT3 or better taper



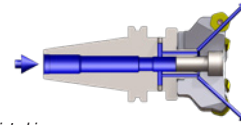
T.I.R.
 <.0004" run out at pilot



Coolant-Thru
 Thru-pilot (standard)



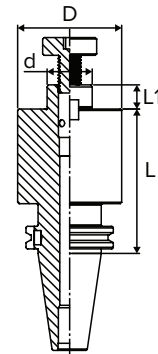
Speed
 Up to 20,000 rpm



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40 - INCH

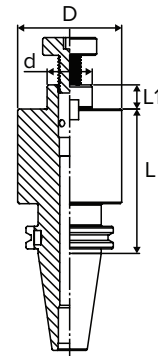
Part Number	d	L	D	L1	Key Size	Arbor Thread
C4001-0500-1.75CP	1/2"	1.75"	1.38"	0.57"	1/4"	1/4"-28
C4001-0750-1.75CP	3/4"	1.75"	1.93"	0.67"	5/16"	3/8"-24
C4001-0750-4.00CP	3/4"	4.00"	1.93"	0.67"	5/16"	3/8"-24
C4001-1000-1.75CP	1"	1.75"	2.38"	0.67"	3/8"	1/2"-20
C4001-1000-4.00CP	1"	4.00"	2.38"	0.67"	3/8"	1/2"-20
C4001-1250-2.00CP	1-1/4"	2.00"	2.88"	0.67"	1/2"	5/8"-18
C4001-1250-4.00CP	1-1/4"	4.00"	2.88"	0.67"	1/2"	5/8"-18
C4001-1500-2.00CP	1-1/2"	2.00"	2.88"	0.93"	5/8"	3/4"-16
C4001-1500-4.00CP	1-1/2"	4.00"	2.88"	0.93"	5/8"	3/4"-16



Available in **TAPER PLUS+**
 Dual-taper and flange contact

CAT50 - INCH

Part Number	d	L	D	L1	Key Size	Arbor Thread
C5001-0750-1.75CP	3/4"	1.75"	1.93"	0.67"	5/16"	3/8"-24
C5001-0750-4.00CP	3/4"	4.00"	1.93"	0.67"	5/16"	3/8"-24
C5001-0750-6.00CP	3/4"	6.00"	1.93"	0.67"	5/16"	3/8"-24
C5001-0750-8.00CP	3/4"	8.00"	1.93"	0.67"	5/16"	3/8"-24
C5001-1000-1.75CP	1"	1.75"	2.38"	0.69"	3/8"	1/2"-20
C5001-1000-4.00CP	1"	4.00"	2.38"	0.69"	3/8"	1/2"-20
C5001-1000-6.00CP	1"	6.00"	2.38"	0.69"	3/8"	1/2"-20
C5001-1000-8.00CP	1"	8.00"	2.38"	0.69"	3/8"	1/2"-20
C5001-1250-1.75CP	1-1/4"	1.75"	2.88"	0.69"	1/2"	5/8"-18
C5001-1250-4.00CP	1-1/4"	4.00"	2.88"	0.69"	1/2"	5/8"-18
C5001-1250-6.00CP	1-1/4"	6.00"	2.88"	0.69"	1/2"	5/8"-18
C5001-1250-8.00CP	1-1/4"	8.00"	2.88"	0.69"	1/2"	5/8"-18
C5001-1500-2.00CP	1-1/2"	2.00"	2.88"	0.93"	5/8"	3/4"-16
C5001-1500-4.00CP	1-1/2"	4.00"	2.88"	0.93"	5/8"	3/4"-16
C5001-1500-6.00CP	1-1/2"	6.00"	2.88"	0.93"	5/8"	3/4"-16
C5001-1500-8.00CP	1-1/2"	8.00"	2.88"	0.93"	5/8"	3/4"-16
C5001-2000-2.00CP	2"	2.00"	4.38"	0.93"	3/4"	1"-14
C5001-2000-4.00CP	2"	4.00"	4.38"	0.93"	3/4"	1"-14
C5001-2000-6.00CP	2"	6.00"	4.38"	0.93"	3/4"	1"-14



Available in **TAPER PLUS+**
 Dual-taper and flange contact



Replacement Keys
 Page 188

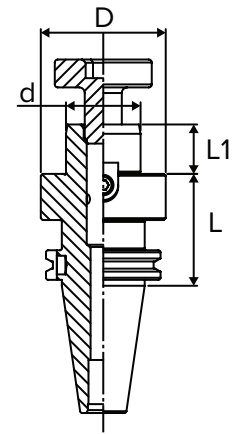


Replacement Arbor Screws
 Page 188

CAT SHELL/FACE MILL HOLDERS

CAT40 - METRIC

Part Number	d	L	D	L1	Key Size	Arbor Thread
C4001-22-50CP	22mm	50mm	40mm	19mm	10mm	M10
C4001-27-50CP	27mm	50mm	48mm	21mm	12mm	M12
C4001-32-50CP	32mm	50mm	58mm	24mm	14mm	M16
C4001-40-60CP	40mm	60mm	67mm	27mm	16mm	M20



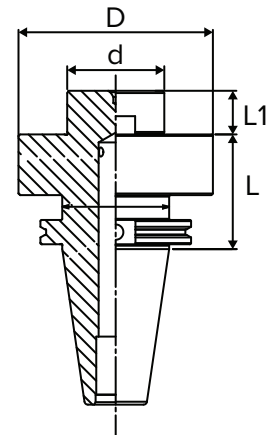
CAT50 - METRIC

Part Number	d	L	D	L1	Key Size	Arbor Thread
C5001-22-60CP	22mm	60mm	40mm	19mm	10mm	M10
C5001-27-60CP	27mm	60mm	48mm	21mm	12mm	M12
C5001-32-60CP	32mm	60mm	58mm	24mm	14mm	M16
C5001-40-60CP	40mm	60mm	67mm	27mm	16mm	M20

CAT50 - INCH FACE MILL HOLDERS

Part Number	d	L	D	L1	Key Size
C50F1-2000-2.95CP	2"	2.95"	5.06"	0.86"	3/4"
C50F1-2500-2.95CP	2-1/2"	2.95"	5.00"	1.14"	1"

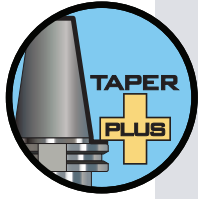
Note: Face Mill Holders are supplied with four 5/8-11 mounting bolts. Pitch circle diameter is 4".



SHELL MILL HOLDERS

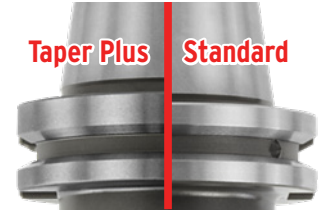
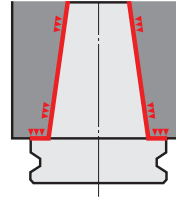


TAPER PLUS CAT - SHELL MILL HOLDERS



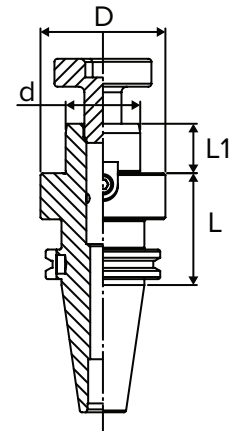
Taper Plus Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



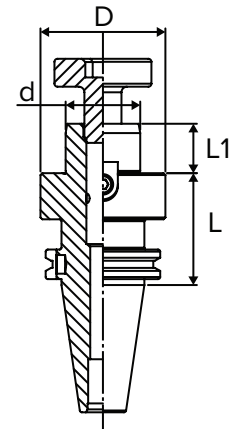
TAPER PLUS - CAT40 - INCH

Part Number	d	L	D	L1	Key Size	Arbor Thread
NC4001-0500-1.75CP	1/2"	1.75"	1.38"	0.57"	1/4"	1/4"-28
NC4001-0750-1.75CP	3/4"	1.75"	1.93"	0.67"	5/16"	3/8"-24
NC4001-0750-4.00CP	3/4"	4.00"	1.93"	0.67"	5/16"	3/8"-24
NC4001-1000-1.75CP	1"	1.75"	2.39"	0.67"	3/8"	1/2"-20
NC4001-1000-4.00CP	1"	4.00"	2.39"	0.67"	3/8"	1/2"-20
NC4001-1250-2.00CP	1-1/4"	2.00"	2.89"	0.67"	1/2"	5/8"-18
NC4001-1250-4.00CP	1-1/4"	4.00"	2.89"	0.67"	1/2"	5/8"-18
NC4001-1500-2.00CP	1-1/2"	2.00"	3.80"	0.93"	5/8"	3/4"-16



TAPER PLUS - CAT50 - INCH

Part Number	d	L	D	L1	Key Size	Arbor Thread
NC5001-0750-1.75CP	3/4"	1.75"	1.93"	0.67"	5/16"	3/8"-24
NC5001-0750-4.00CP	3/4"	4.00"	1.93"	0.67"	5/16"	3/8"-24
NC5001-0750-6.00CP	3/4"	6.00"	1.93"	0.67"	5/16"	3/8"-24
NC5001-0750-8.00CP	3/4"	8.00"	1.93"	0.67"	5/16"	3/8"-24
NC5001-1000-1.75CP	1"	1.75"	2.39"	0.69"	3/8"	1/2"-20
NC5001-1000-4.00CP	1"	4.00"	2.39"	0.69"	3/8"	1/2"-20
NC5001-1000-6.00CP	1"	6.00"	2.39"	0.69"	3/8"	1/2"-20
NC5001-1000-8.00CP	1"	8.00"	2.39"	0.69"	3/8"	1/2"-20
NC5001-1250-1.75CP	1-1/4"	1.75"	2.89"	0.69"	1/2"	5/8"-18
NC5001-1250-6.00CP	1-1/4"	6.00"	3.80"	0.69"	1/2"	5/8"-18
NC5001-1250-8.00CP	1-1/4"	8.00"	3.80"	0.69"	1/2"	5/8"-18
NC5001-1500-2.00CP	1-1/2"	2.00"	3.80"	0.93"	5/8"	3/4"-16
NC5001-1500-4.00CP	1-1/2"	4.00"	3.80"	0.93"	5/8"	3/4"-16
NC5001-1500-6.00CP	1-1/2"	6.00"	3.80"	0.93"	5/8"	3/4"-16
NC5001-1500-8.00CP	1-1/2"	8.00"	3.80"	0.93"	5/8"	3/4"-16
NC5001-2000-2.00CP	2"	2.00"	4.39"	0.93"	3/4"	1"-14

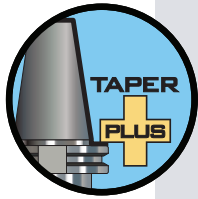


Replacement Keys
Page 188



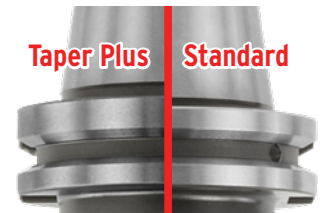
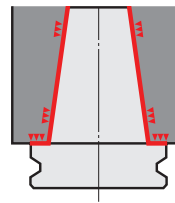
Replacement Arbor Screws
Page 188

TAPER PLUS CAT - FACE/SHELL MILL HOLDERS



Taper Plus Advantages

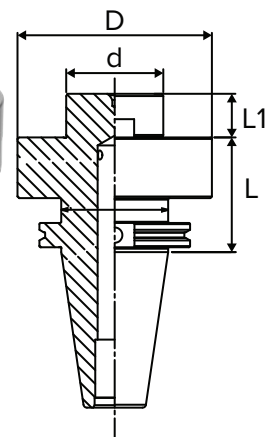
- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - CAT50 - INCH FACE MILL HOLDERS

Part Number	d	L	D	Key Size
NC50F1-2000-4.00CP	2"	4.00"	5.06"	3/4"
NC50F1-2500-2.95CP	2-1/2"	2.95"	5.00"	1"

Note: Face Mill Holders are supplied with four 5/8-11 mounting bolts. Pitch circle diameter is 4".



TAPER PLUS - CAT50 - METRIC

Part Number	d	L	D	L1	Key Size	Arbor Thread
NC5001-22-60CP	22mm	60mm	40mm	19mm	10mm	M10
NC5001-27-60CP	27mm	60mm	48mm	21mm	12mm	M12
NC5001-32-60CP	32mm	60mm	58mm	24mm	14mm	M16
NC5001-40-60CP	40mm	60mm	67mm	27mm	16mm	M20



SHELL MILL HOLDERS



BT SHELL MILL HOLDERS

- Accommodates face mills with pilot diameters ranging from 1/2" (12mm) to 1-1/2" (40mm)
- Pilot diameter sized for precision fit with cutter
- Removable/replaceable drive keys as standard
- Fine thread locking screw included
- AT3 or better taper



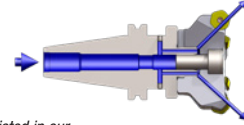
T.I.R.
 <.0004" run out at pilot



Coolant-Thru
 Thru-pilot (standard)



Speed
 Up to 20,000 rpm



MILLING



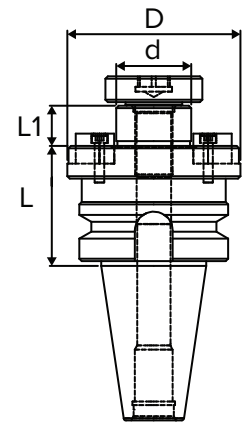
Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT30 - INCH

Part Number	d	L	D	L1	Key Size	Arbor Thread
B3001-0500-1.19CP	1/2"	1.19"	1.38"	0.57"	1/4"	1/4"-28
B3001-0750-1.19CP	3/4"	1.19"	2.00"	0.67"	5/16"	3/8"-24
B3001-1000-1.19CP	1"	1.19"	2.38"	0.67"	3/8"	1/2"-20



Available in **TAPER PLUS+**
 Dual-taper and flange contact



BT40 - INCH

Part Number	d	L	D	L1	Key Size	Arbor Thread
B4001-0500-1.75CP	1/2"	1.75"	1.38"	0.57"	1/4"	1/4"-28
B4001-0750-1.75CP	3/4"	1.75"	1.93"	0.67"	5/16"	3/8"-24
B4001-1000-1.75CP	1"	1.75"	2.38"	0.67"	3/8"	1/2"-20
B4001-1500-2.00CP	1-1/2"	2.00"	3.80"	0.92"	5/8"	3/4"-16

BT40 - METRIC

Part Number	d	L	D	L1	Key Size	Arbor Thread
B4001-22-50	22mm	50mm	40mm	19mm	10mm	M10
B4001-27-50	27mm	50mm	48mm	21mm	12mm	M12
B4001-32-50	32mm	50mm	58mm	24mm	14mm	M16
B4001-40-60	40mm	60mm	67mm	27mm	16mm	M20



Replacement Keys
 Page 188

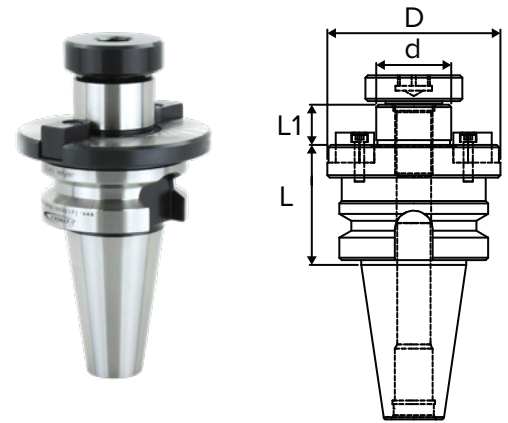


Replacement Arbor Screws
 Page 188

BT SHELL/FACE MILL HOLDERS

BT50 - INCH

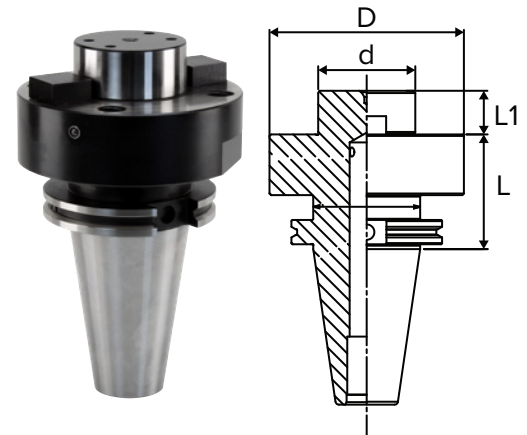
Part Number	d	L	D	L1	Key Size	Arbor Thread
B5001-0750-1.75CP	3/4"	1.75"	1.93"	0.67"	5/16"	3/8"-24
B5001-1000-1.75CP	1"	1.75"	2.38"	0.68"	3/8"	1/2"-20
B5001-1000-4.00CP	1"	4.00"	2.38"	0.69"	3/8"	1/2"-20
B5001-1000-6.00CP	1"	6.00"	2.38"	0.69"	3/8"	1/2"-20
B5001-1250-2.00CP	1-1/4"	2.00"	2.38"	0.68"	1/2"	5/8"-18
B5001-1500-2.00CP	1-1/2"	2.00"	2.38"	0.68"	5/8"	3/4"-16
B5001-1500-6.00CP	1-1/2"	6.00"	3.80"	0.94"	5/8"	3/4"-16
B5001-2000-2.00CP	2"	2.00"	3.80"	0.92"	3/4"	1"-14



BT50 - INCH FACE MILL HOLDERS

Part Number	d	L	D	L1	Key Size
B50F1-2500-3.00	2-1/2"	3.00"	5.00"	1.18"	1"

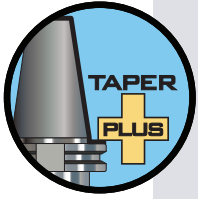
Note: Face Mill Holders are supplied with four 5/8-11 mounting bolts. Pitch circle diameter is 4".



SHELL MILL HOLDERS

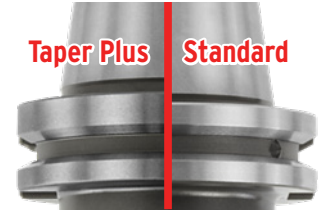
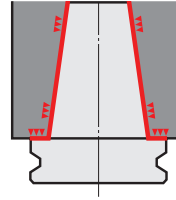


TAPER PLUS BT - SHELL MILL HOLDERS



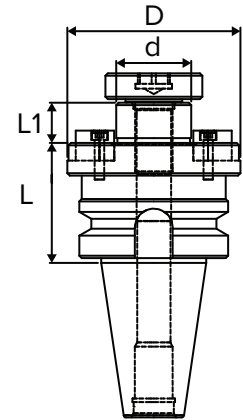
Taper Plus Advantages

- Outstanding runout accuracy for longer tool life
- Vibration dampening for increased productivity
- High rigidity for smooth and stable cutting
- Interchangeable between standard and dual face contact spindles
- 53% more surface area contact than just the taper alone



TAPER PLUS - BT30

Part Number	d	L	D	L1	Key Size	Arbor Thread
NB3001-0750-1.19CP	3/4"	1.19"	1.93"	0.67"	5/16"	3/8"-24
NB3001-1000-1.19CP	1"	1.19"	2.39"	0.67"	3/8"	1/2"-20



TAPER PLUS - BT40

Part Number	d	L	D	L1	Key Size	Arbor Thread
NB4001-0750-1.75CP	3/4"	1.75"	1.93"	0.67"	5/16"	3/8"-24
NB4001-1000-1.75CP	1"	1.75"	2.39"	0.67"	3/8"	1/2"-20
NB4001-1250-2.00CP	1-1/4"	2.00"	2.88"	0.67"	1/2"	5/8"-18
NB4001-1500-2.00CP	1-1/2"	2.00"	3.80"	0.92"	5/8"	3/4"-16



Replacement Keys
Page 188



Replacement Arbor Screws
Page 188

HSK SHELL MILL HOLDERS

- Accommodates face mills with pilot diameters ranging from 3/4" to 1-1/2"
- Pilot diameter sized for precision fit with cutter
- Removable/replaceable drive keys as standard
- Fine thread locking screw included
- AT3 or better taper



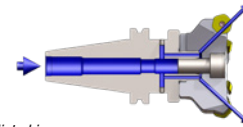
T.I.R.
 <.0004" run out at pilot



Coolant-Thru
 Thru-pilot (standard)



Speed
 Up to 20,000 rpm



MILLING

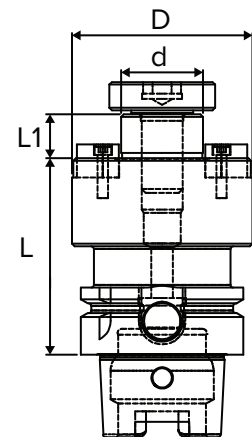


Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

HSK40A/63A

Part Number	d	L	D	L1	Key Size	Arbor Thread
HSK40A-SM0750-60CP	3/4"	2.36"	2.17"	0.67"	5/16"	3/8"-24
HSK40A-SM1000-60CP	1"	2.36"	2.75"	0.67"	3/8"	1/2"-20
HSK63A-SM0750-3.00CP	3/4"	3.00"	1.69"	0.67"	5/16"	3/8"-24
HSK63A-SM0750-5.00CP	3/4"	5.00"	1.69"	0.67"	5/16"	3/8"-24
HSK63A-SM1000-3.00CP	1"	3.00"	2.17"	0.67"	3/8"	1/2"-20
HSK63A-SM1000-5.00CP	1"	5.00"	2.17"	0.67"	3/8"	1/2"-20
HSK63A-SM1250-3.00CP	1-1/4"	3.00"	2.88"	0.67"	1/2"	5/8"-18
HSK63A-SM1250-5.00CP	1-1/4"	5.00"	3.80"	0.67"	1/2"	5/8"-18

Note: Coolant tube and coolant tube wrench are not included. See page 188 for more details.



HSK100A

Part Number	d	L	D	L1	Key Size	Arbor Thread
HSK100A-SM0750-4.00CP	3/4"	4.00"	1.93"	0.67"	5/16"	3/8"-24
HSK100A-SM0750-6.00CP	3/4"	6.00"	1.93"	0.67"	5/16"	3/8"-24
HSK100A-SM0750-8.00CP	3/4"	8.00"	1.93"	0.67"	5/16"	1/2"-20
HSK100A-SM1000-4.00CP	1"	4.00"	2.17"	0.67"	3/8"	1/2"-20
HSK100A-SM1000-6.00CP	1"	6.00"	2.17"	0.67"	3/8"	1/2"-20
HSK100A-SM1000-8.00CP	1"	8.00"	2.17"	0.67"	3/8"	1/2"-20
HSK100A-SM1250-4.00CP	1-1/4"	4.00"	2.88"	0.67"	1/2"	5/8"-18
HSK100A-SM1250-6.00CP	1-1/4"	6.00"	2.88"	0.67"	1/2"	5/8"-18
HSK100A-SM1250-8.00CP	1-1/4"	8.00"	2.88"	0.67"	1/2"	5/8"-18
HSK100A-SM1500-4.00CP	1-1/2"	4.00"	3.50"	0.91"	5/8"	3/4"-16
HSK100A-SM1500-6.00CP	1-1/2"	6.00"	3.50"	0.91"	5/8"	3/4"-16
HSK100A-SM2000-4.00CP	2"	4.00"	5.00"	0.91"	3/4"	1"-14
HSK100A-SM2000-6.00CP	2"	6.00"	5.00"	0.91"	3/4"	1"-14

Note: Coolant tube and coolant tube wrench are not included. See page 188 for more details.



Replacement Keys
 Page 188



Replacement Arbor Screws
 Page 188

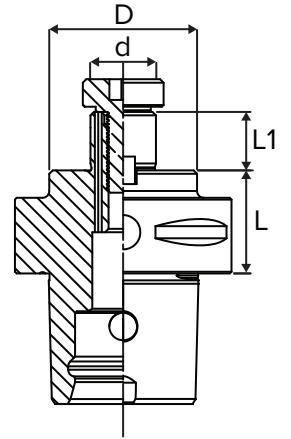
SHELL MILL HOLDERS



POLYGONAL TAPER SHELL MILL HOLDERS

C4/C5/C6/C8 - INCH

Part Number	d	L	D	L1	Key Size	Arbor Thread
C4-SM0750-30CP	3/4"	1.18"	1.69"	0.67"	5/16"	3/8"-24
C4-SM1000-30CP	1"	1.18"	2.17"	0.67"	3/8"	1/2"-20
C5-SM0750-25CP	3/4"	0.98"	1.69"	0.67"	5/16"	3/8"-24
C5-SM1000-25CP	1"	0.98"	2.17"	0.67"	3/8"	3/8"-24
C5-SM1250-40CP	1-1/4"	1.57"	2.76"	0.67"	1/2"	1/2"-20
C6-SM0750-100CP	3/4"	3.94"	1.69"	0.67"	5/16"	5/8"-18
C6-SM0750-30CP	3/4"	1.18"	1.69"	0.67"	5/16"	5/8"-18
C6-SM1000-100CP	1"	3.94"	2.17"	0.67"	3/8"	5/8"-18
C6-SM1000-30CP	1"	1.18"	2.17"	0.67"	3/8"	5/8"-18
C6-SM1250-30CP	1-1/4"	1.18"	2.76"	0.67"	1/2"	5/8"-18
C8-SM0750-30CP	3/4"	1.18"	3.15"	0.67"	5/16"	5/8"-18
C8-SM1000-30CP	1"	1.18"	3.15"	0.67"	3/8"	5/8"-18
C8-SM1250-30CP	1-1/4"	1.18"	3.15"	0.67"	1/2"	5/8"-18



Replacement Keys
Page 188



Replacement Arbor Screws
Page 188

NMTB SHELL MILL HOLDERS

- Accommodates face mills with pilot diameters ranging from 3/4" to 1"
- Pilot diameter sized for precision fit with cutter
- Removable/replaceable drive keys as standard
- Fine thread locking screw included
- AT3 or better taper



T.I.R.
 <.0004" run out at pilot

MILLING

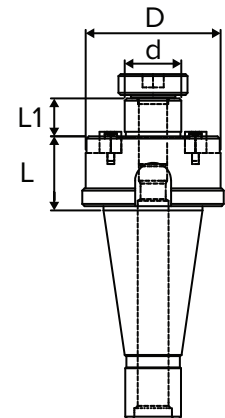


Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

NMTB30

Part Number	Taper	d	L	D	L1	Key Size	Arbor Thread
N3001-0750-1.31	NMTB30	3/4"	1.31"	2.00"	0.67"	5/16"	3/8"-24
N3001-1000-1.31	NMTB30	1"	1.31"	2.38"	0.67"	3/8"	1/2"-20

Note: NMTB shanks are suitable for use with Erickson Quick Change spindles.



SHELL MILL HOLDERS



R8 SHELL MILL HOLDERS

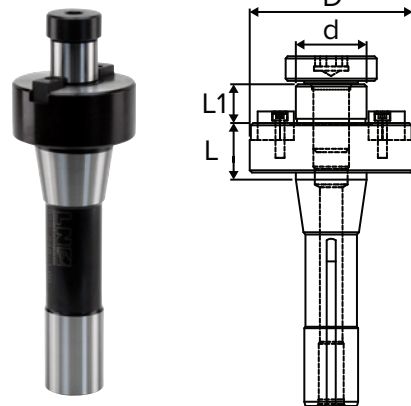
- Accommodates face mills with pilot diameters ranging from 1/2" (12mm) to 1.5" (38.1mm)
- Pilot diameter sized for precision fit with cutter
- Removable/replaceable drive keys as standard
- Fine thread locking screw included



T.I.R.
<.0004" run out at pilot

R8

Part Number	Taper	d	L	D	L1	Key Size	Arbor Thread
850-032-1.00	R8	1/2"	0.98"	1.38"	0.57"	1/4"	1/4"-28
850-048-1.00	R8	3/4"	0.98"	2.00"	0.69"	5/16"	3/8"-24
850-064-1.00	R8	1"	0.98"	2.38"	0.69"	3/8"	1/2"-20
850-080-1.00	R8	1-1/4"	0.98"	2.88"	0.69"	1/2"	5/8"-18
850-096-1.75	R8	1-1/2"	1.75"	3.50"	0.94"	5/8"	3/4"-16



Lyndex-Nikken Offers Single and Dual Plane Balancing for Large Diameter or Long Tooling Assemblies

Benefits of Shell Mill Holder Balancing:

- Balanced assemblies can reduce spindle vibration— prolonging the life of your cutting tools and spindle.
- Increase the quality and consistency of machined surface finishes.
- Achieves greater machined surface flatness.
- Balancing service is only required once during initial set up. Assembly balance is maintained until shell mill/face mill is removed.



Contact Lyndex-Nikken for more information



Replacement Keys
Page 188



Replacement Arbor Screws
Page 188

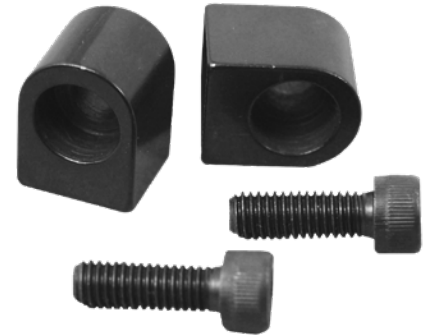
SHELL MILL HOLDERS



SHELL MILL HOLDER ACCESSORIES

REPLACEMENT KEYS

Part Number	Description	To Use with Holder Size
1/2-KEYSET	1/4" rotating pins (2 Pcs.)	1/2"
3/4-KEYSET	5/16" keys with screws (2 Pcs.)	3/4"
1-KEYSET	3/8" keys with screws (2 Pcs.)	1"
1-1/4-KEYSET	1/2" keys with screws (2 Pcs.)	1-1/4"
1-1/2-KEYSET	5/8" keys with screws (2 Pcs.)	1-1/2"
2-KEYSET	3/4" keys with screws (2 Pcs.)	2"
2-1/2-KEYSET	1" keys with screws (2 Pcs.)	2-1/2"
22-KEYSET	10mm keys with screws (2 Pcs.)	22mm
27-KEYSET	12mm keys with screws (2 Pcs.)	27mm
32-KEYSET	14mm keys with screws (2 Pcs.)	32mm
40-KEYSET	16mm keys with screws (2 Pcs.)	40mm



REPLACEMENT ARBOR SCREWS

Part Number	Head Diameter	Head Thickness	For the Following Shell/ Face Mill Sizes
A5/8-11	23.65mm (0.931")	15.7mm (0.618")	Face Mill Mounting Bolt
A1/4-28	17mm (0.669")	6mm (0.236")	1/2"
A3/8-24	23.5mm (0.925")	8mm (0.315")	3/4"
A1/2-20	31mm (1.220")	9.5mm (0.374")	1"
A5/8-18	41mm (1.614")	11mm (0.433")	1-1/4"
A3/4-16	49mm (1.929")	12.7mm (0.500")	1-1/2"
A1-14	68mm (2.677")	18mm (0.709")	2"
FM10	28mm (1.102")	9mm (0.354")	22mm
FM12	35mm (1.378")	9mm (0.354")	27mm
FM16	42mm (1.653")	12mm (0.472")	32mm
FM20	52mm (2.047")	15mm (0.590")	40mm



COOLANT TUBE WRENCHES FOR HSK HOLDERS/ POLYGON SHELL MILL HOLDERS

Part Number	Description
HSK40-WRENCH	Wrench for HSK40 Coolant Tube
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube
C4-WRENCH	Wrench for C4 Coolant Tube
C5-WRENCH	Wrench for C5 Coolant Tube
C6-WRENCH	Wrench for C6 Coolant Tube
C8-WRENCH	Wrench for C8 Coolant Tube



Coolant tube wrenches are needed to remove or install coolant tubes in HSK/Polygon Shell toolholders.

COOLANT TUBES FOR HSK HOLDERS/ POLYGON SHELL MILL HOLDERS

Part Number	Description
HSK40-TUBE	HSK40 Coolant Tube
HSK63-TUBE	HSK63 Coolant Tube
HSK100-TUBE	HSK100 Coolant Tube
C4-TUBE	C4 Coolant Tube
C5-TUBE	C5 Coolant Tube
C6-TUBE	C6 Coolant Tube
C8-TUBE	C8 Coolant Tube



DRILL CHUCKS & MORSE TAPER HOLDERS



DRILL/MORSE



DRILL CHUCKS &
MORSE TAPER HOLDERS

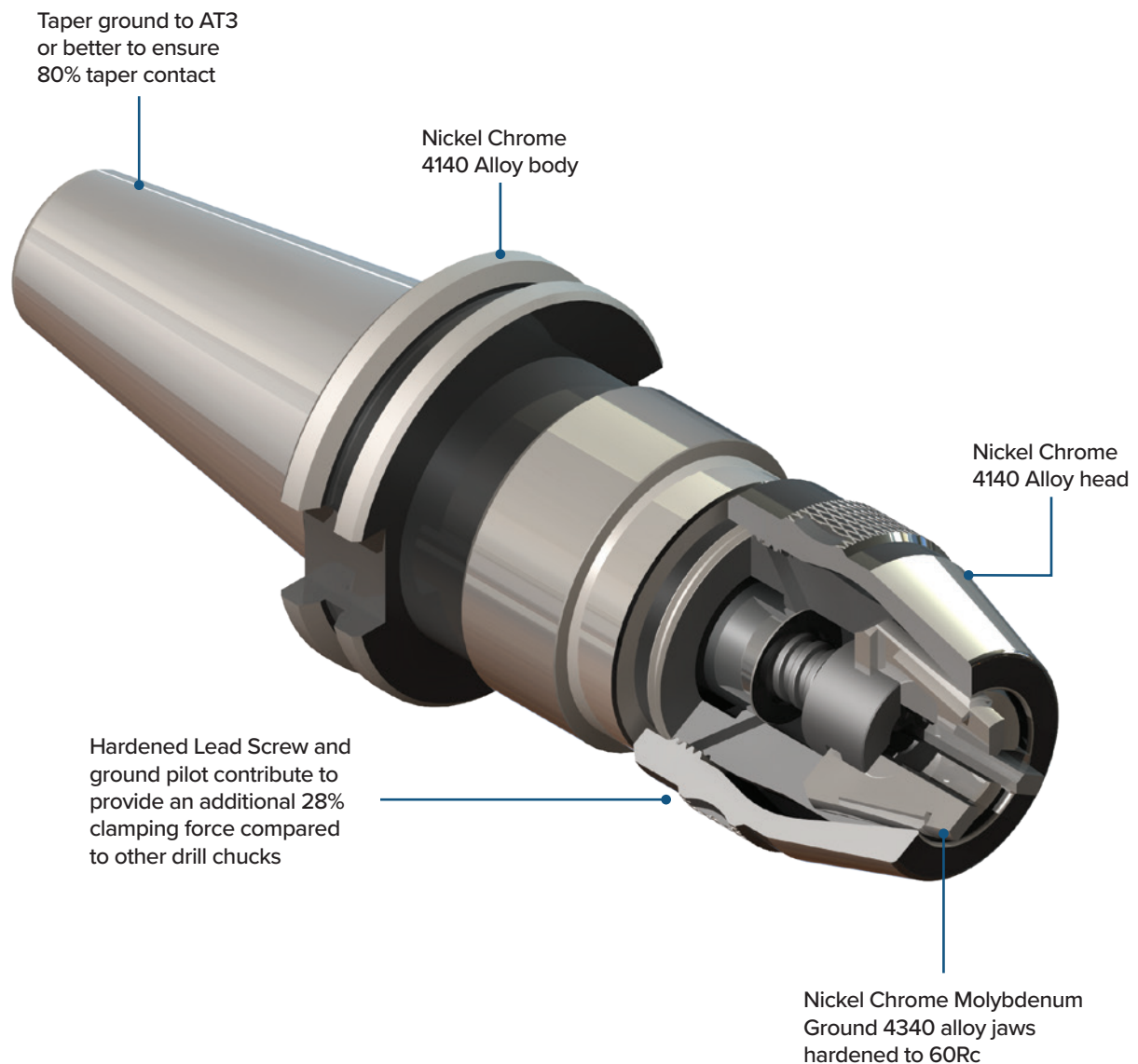


DRILL CHUCKS FEATURES

High-Precision, High-Rigidity, Compact Design

Our Drill Chucks feature a unique compact design and small head which prevent the drill from slipping during drilling operations.

- NPU8 is balanced to G6.3 @ 7,000 RPM
- NPU13 is balanced to G6.3 @ 5,000 RPM
- Short compact two-pieces design for flexible replacement of head only
- Maintenance free



DRILL CHUCKS & MORSE TAPER HOLDERS

CAT & BT INTEGRAL KEYLESS DRILL CHUCKS

FEATURES

- Compact design and small head prevent drill slippage during operation



Speed

NPU8 is balanced to G6.3 @ 7,000 RPM
NPU13 is balanced to G6.3 @ 5,000 RPM

REAMING

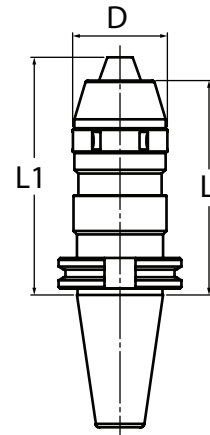


DRILLING



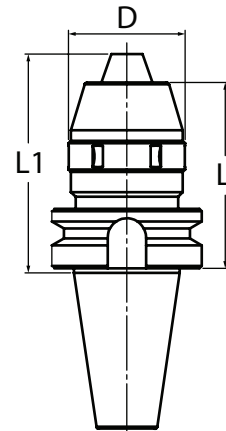
CAT40/50 TAPER

Part Number	Capacity	L	L1	D
CAT40-NPU8-80U-IDU	5/16" (8.0mm)	3.31"	3.58"	1.52"
CAT40-NPU8-110U-IDU	5/16" (8.0mm)	4.53"	4.80"	1.52"
CAT40-NPU13-105U-IDU	1/2" (13.0mm)	4.35"	4.82"	1.93"
CAT40-NPU13-130U-IDU	1/2" (13.0mm)	5.41"	5.88"	1.93"
CAT50-NPU8-80U-IDU	5/16" (8.0mm)	3.37"	3.76"	1.52"
CAT50-NPU13-90U-IDU	1/2" (13.0mm)	3.71"	4.19"	1.93"



BT30/40/50 TAPER

Part Number	Capacity	L	L1	D
BT30-NPU8-70	5/16" (8.0mm)	2.99"	3.27"	1.52"
BT30-NPU13-95	1/2" (13.0mm)	4.03"	4.50"	1.93"
BT40-NPU8-70	5/16" (8.0mm)	2.99"	3.27"	1.52"
BT40-NPU8-110	5/16" (8.0mm)	4.53"	4.80"	1.52"
BT40-NPU13-80	1/2" (13.0mm)	3.40"	3.87"	1.93"
BT40-NPU13-130	1/2" (13.0mm)	5.41"	5.88"	1.93"
BT50-NPU13-90	1/2" (13.0mm)	3.83"	4.30"	1.93"
BT50-NPU13-130	1/2" (13.0mm)	5.41"	5.88"	1.93"
BT50-NPU13-190	1/2" (13.0mm)	7.77"	8.24"	1.93"



Drill Chuck Wrench
Page 193



Replacement Drill Chuck
Page 193

NMTB & HSK DRILL CHUCKS

FEATURES

- Compact design and small head prevent drill slippage during operation



Speed

NPU8 is balanced to G6.3 @ 7,000 RPM
NPU13 is balanced to G6.3 @ 5,000 RPM

REAMING



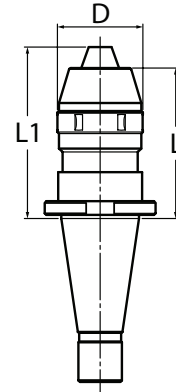
DRILLING



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

NMTB40/50

Part Number	Capacity	L	L1	D
NMTB40-NPU8-76	5/16" (8.0mm)	2.99"	3.27"	1.52"
NMTB40-NPU13-86	1/2" (13.0mm)	3.40"	3.87"	1.93"
NMTB50-NPU13-86	1/2" (13.0mm)	3.39"	3.86"	1.93"

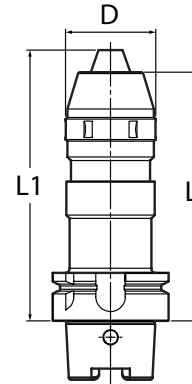


HSK63A/100A

Part Number	Capacity	L	L1	D
HSK63A-NPU8-120	5/16" (8.0mm)	4.73"	5.00"	1.52"
HSK63A-NPU13C-135-IDU**	1/2" (13.0mm)	5.36"	5.83"	1.93"
HSK100A-NPU13C-145-IDU**	1/2" (13.0mm)	5.71"	6.18"	1.93"

Note:

- Coolant Tubes and Coolant Tube Wrenches are sold separately. See page 153 for more details.
- **Coolant-thru capable





DRILL CHUCK ACCESSORIES

REPLACEMENT WRENCH FOR DRILL CHUCK

Part Number	Description
NPU8-SPAN	Fits 5/16" (8.0mm) Chucks
NPU13-SPAN	Fits 1/2" (13.0mm) Chucks



REPLACEMENT DRILL CHUCK

Part Number	Description
9NPU-8	Replacement 1/4" Chuck
9NPU-13	Replacement 1/2" Chuck



COOLANT TUBE WRENCH FOR HSK HOLDERS

Part Number	Description
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube



COOLANT TUBE FOR HSK HOLDERS

Part Number	Description
HSK63-TUBE	Coolant Tube for HSK63 Holders
HSK100-TUBE	Coolant Tube for HSK100 Holders





T.I.R.
0.0002" at JT pilot

REAMING



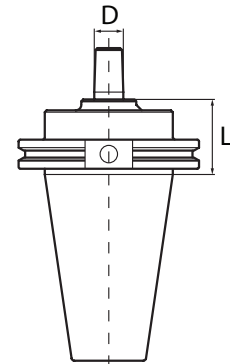
DRILLING



CAT & BT JACOBS® TAPER HOLDERS

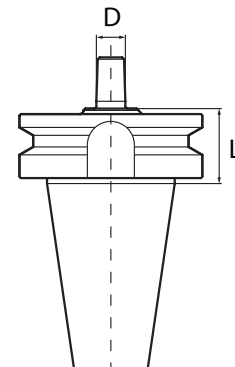
CAT40/50

Part Number	JT Size	L	D
C4003-0002-1.61	JT#2	1.61"	0.56"
C4003-0003-1.58	JT#3	1.58"	0.81"
C4003-0004-1.49	JT#4	1.49"	1.12"
C4003-0006-1.61	JT#6	1.61"	0.68"
C4003-0033-1.61	JT#33	1.61"	0.63"
C5003-0002-1.61	JT#2	1.61"	0.56"
C5003-0003-1.75	JT#3	1.75"	0.81"
C5003-0004-1.49	JT#4	1.49"	1.12"
C5003-0006-1.61	JT#6	1.61"	0.68"
C5003-0033-1.61	JT#33	1.61"	0.63"



BT30

Part Number	JT Size	L	D
B3003-0001-1.06	JT#1	1.06"	0.38"
B3003-0002-1.02	JT#2	1.02"	0.56"
B3003-0003-0.98	JT#3	0.98"	0.81"
B3003-0006-1.02	JT#6	1.02"	0.68"
B3003-0033-1.02	JT#33	1.02"	0.63"



BT40

Part Number	JT Size	L	D
B4003-0002-1.61	JT#2	1.61"	0.56"
B4003-0003-1.75	JT#3	1.75"	0.81"
B4003-0006-1.61	JT#6	1.61"	0.68"
B4003-0033-1.61	JT#33	1.61"	0.63"

BT50

Part Number	JT Size	L	D
B5003-0002-1.61	JT#2	1.61"	0.56"
B5003-0003-1.57	JT#3	1.57"	0.81"
B5003-0004-1.49	JT#4	1.49"	1.12"
B5003-0006-1.61	JT#6	1.61"	0.68"
B5003-0033-1.61	JT#33	1.61"	0.68"



DRILL CHUCKS & MORSE TAPER HOLDERS

NMTB & R8 JACOBS® TAPER HOLDERS

NMTB30

Part Number	JT Size	L	D
N3003-0002-0.59	JT#3	0.59"	0.81"
N3003-0003-0.55	JT#3	0.55"	0.81"
N3003-0006-0.59	JT#6	0.59"	0.68"
N3003-0033-0.59	JT#33	0.59"	0.63"

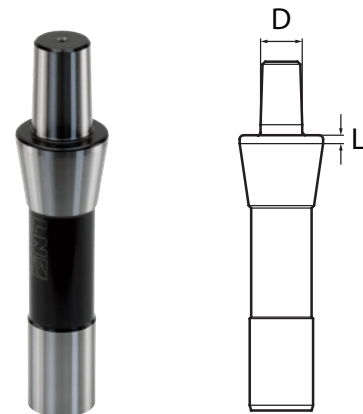
NMTB40

Part Number	JT Size	L	D
N4003-0001-0.69	JT#1	0.69"	0.38"
N4003-0002-0.65	JT#2	0.65"	0.56"
N4003-0003-0.61	JT#3	0.61"	0.81"
N4003-0006-0.65	JT#6	0.65"	0.68"
N4003-0033-0.65	JT#33	0.65"	0.63"



NMTB50

Part Number	JT Size	L	D
N5003-0002-1.34	JT#2	1.34"	0.56"
N5003-0003-1.30	JT#3	1.30"	0.56"
N5003-0004-1.22	JT#4	1.22"	1.12"
N5003-0006-1.34	JT#6	1.34"	0.68"
N5003-0033-1.34	JT#33	1.34"	0.63"



R8

Part Number	JT Size	L	D
870-001-0.13	JT#1	0.13"	0.38"
870-002-0.13	JT#2	0.13"	0.56"
870-003-0.13	JT#3	0.13"	0.81"
870-006-0.13	JT#6	0.13"	0.68"
870-033-0.13	JT#33	0.13"	0.63"



JACOBS® DRILL CHUCK ACCESSORIES

JACOBS® BRAND DRILL CHUCK

Part Number	Style	Jacobs® Taper Size	Description
8-1/2N	0 - 1/4"	JT#2	Heavy Duty Ball Bearing Chuck
100-J2	0 - 3/8"	JT#2	High Precision Keyless Chuck
100-J33	0 - 3/8"	JT#33	High Precision Keyless Chuck
11N	0 - 3/8"	JT#2	Heavy Duty Ball Bearing Chuck
130-JT33	1/32 - 1/2"	JT#33	High Precision High Torque Keyless Chuck
14N	0 - 1/2"	JT#3	Heavy Duty Ball Bearing Chuck
160-J6	1/8 - 5/8"	JT#6	High Precision Keyless Chuck
16N	1/8 - 5/8"	JT#3	Heavy Duty Ball Bearing Chuck
18N	1/8 - 3/4"	JT#4	Heavy Duty Ball Bearing Chuck
34-02	0 - 1/2"	JT#2	Heavy Duty Plain Bearing Chuck
34-06	0 - 1/2"	JT#6	Heavy Duty Plain Bearing Chuck
34-33	0 - 1/2"	JT#33	Heavy Duty Plain Bearing Chuck



REPLACEMENT KEY

Part Number	Description
K-3	Key for Plain Bearing Chuck



DRILL CHUCKS & MORSE TAPER HOLDERS



T.I.R.
0.0002" at ID bore

REAMING



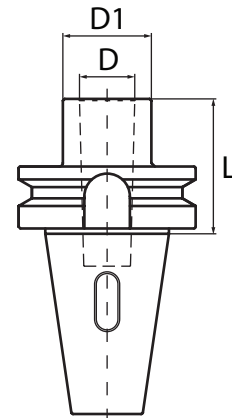
DRILLING



CAT & BT MORSE TAPER HOLDERS

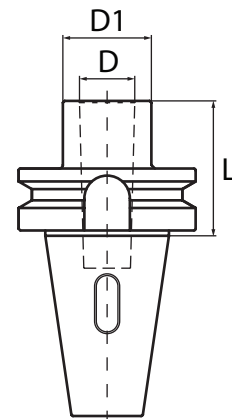
CAT40/50

Part Number	Size	L	D	D1
C4004-0001-1.75	MT#1	1.75"	0.48"	0.99"
C4004-0002-2.36	MT#2	2.36"	0.70"	1.26"
C4004-0003-3.00	MT#3	3.00"	0.94"	1.57"
C4004-0004-3.54	MT#4	3.54"	1.23"	1.97"
C5004-0002-1.75	MT#2	1.75"	0.70"	1.26"
C5004-0003-1.75	MT#3	1.75"	0.94"	1.57"
C5004-0004-3.00	MT#4	3.00"	1.23"	1.97"
C5004-0005-4.13	MT#5	4.13"	1.75"	2.75"



BT30/40/50

Part Number	Size	L	D	D1
B3004-0001-1.75	MT#1	1.75"	0.48"	0.99"
B3004-0002-2.36	MT#2	2.36"	0.70"	1.26"
B4004-0001-1.75	MT#1	1.75"	0.48"	0.99"
B4004-0002-2.36	MT#2	2.36"	0.70"	1.26"
B4004-0003-3.00	MT#3	3.00"	0.94"	1.57"
B4004-0004-3.54	MT#4	3.54"	1.97"	1.97"
B5004-0002-1.75	MT#2	1.75"	0.70"	1.26"
B5004-0003-1.75	MT#3	1.75"	0.94"	1.57"
B5004-0004-3.00	MT#4	3.00"	1.57"	1.97"
B5004-0005-4.13	MT#5	4.13"	1.75"	2.75"



R8 MORSE TAPER HOLDERS



T.I.R.
0.0002" at ID bore

REAMING

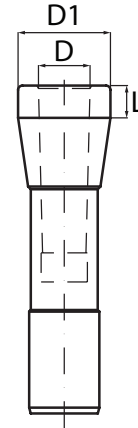


DRILLING



R8

Part Number	Size	L	D	D1
840-002-0.44	MT#2	0.44"	0.70"	1.26"
840-003-2.56	MT#3	2.13"	0.94"	1.57"



TAP HOLDERS



TAP HOLDERS

TAP HOLDERS



TAP HOLDER FEATURES

Our Tapping systems include tension-compression and rigid holders in all tapers and shanks. Coolant-thru available for both tension-compression and rigid style holders.



Tension Compression Tap Holders

- Interchangeable with all Bilz tap system sizes.
- Will compensate for the machine spindle over rotating, tap elongation or minor mismatching between rotation and feed.
- Spring tension (outward pressure) will help lead and engage the tap for consistent and on size tapped holes.
- Tension Compression holders assure accuracy and control to make sure the hole is tapped exactly on the pitch of the tap. This is extremely beneficial when tapping critical hole threads with 2B and 3B dimensional call outs.
- Quick and easy interchangeability of tap collets, repeatable within .008" positioning accuracy.
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force reducing the possibility of tap slippage.

Coolant-Thru Type

- Sealed internal mechanism allows high pressure center thru coolant to flow without contaminating the internal components.
- Chambered design also prevents back-flow of coolant into the spindle at higher pressures.
- Maximum pressure is 725 psi.

Rigid Tap Holders

- Excellent for fast tapping on synchronous cycles.
- Interchangeable with all Bilz tap system sizes.
- Quick and easy interchangeability of tap collets.
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage.

Coolant-Thru Type

- Sealed internal mechanism allows high pressure center thru coolant to flow without contaminating the internal components.
- Chambered design also prevents back-flow of coolant back into the spindle at higher pressures.
- Maximum pressure is 725 psi.

TAP HOLDERS



CAT TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



T.I.R. Minimal



Tension / Compression



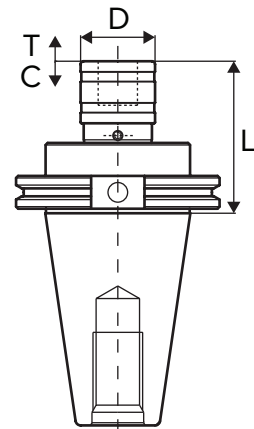
Set-Up Quick and easy



Coolant-Thru Thru-tap coolant

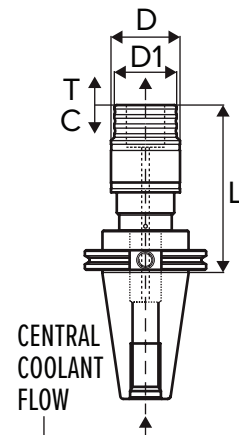
CAT40/50 TENSION/COMPRESSION TAP HOLDERS

Part Number	Taper	Tap Range		System	L	D	T	C
		Hand	Pipe					
C4005-0562-2.91	CT40	#0-9/16"	1/8"	#1	2.91"	1.43"	0.29"	0.29"
C4005-0875-3.86	CT40	5/16-7/8"	1/4-1/2"	#2	3.86"	2.09"	0.49"	0.49"
C4005-1375-7.97	CT40	13/16-1-3/8"	1/2-1"	#3	7.97"	3.07"	0.79"	0.79"
C5005-0562-2.91	CT50	#0-9/16"	1/8"	#1	2.91"	1.42"	0.29"	0.29"
C5005-0875-3.86	CT50	5/16-7/8"	1/4-1/2"	#2	3.86"	2.09"	0.49"	0.49"
C5005-1375-6.77	CT50	13/16-1-3/8"	1/2-1"	#3	6.77"	3.07"	0.79"	0.79"



CAT40/50 TENSION/COMPRESSION TAP HOLDERS - COOLANT-THRU

Part Number	Taper	Tap Range		System	L	D	D1	T	C
		Hand	Pipe						
C4005-0562-3.98(C)	CT40	#0-9/16"	1/8"	#1	3.98"	1.57"	1.28"	0.27"	0.12"
C4005-0875-5.40(C)	CT40	5/16-7/8"	1/4-1/2"	#2	5.40"	2.20"	1.99"	0.39"	0.20"
C4005-1375-9.54(C)	CT40	13/16-1-3/8"	1/2-1"	#3	9.54"	2.95"	2.76"	0.71"	0.51"
C5005-0562-3.98(C)	CT50	#0-9/16"	1/8"	#1	3.98"	1.57"	1.28"	0.27"	0.12"
C5005-0875-5.40(C)	CT50	5/16-7/8"	1/4-1/2"	#2	5.40"	2.20"	1.99"	0.39"	0.20"
C5005-1375-8.34(C)	CT50	13/16-1-3/8"	1/2-1"	#3	8.34"	2.95"	2.76"	0.71"	0.51"



Note: Maximum pressure is 725 psi.



Tap Collets
Pages 210-221



Tap Spanner Wrench
Page 222

CAT TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



Set-Up
Quick and easy



T.I.R.
Minimal



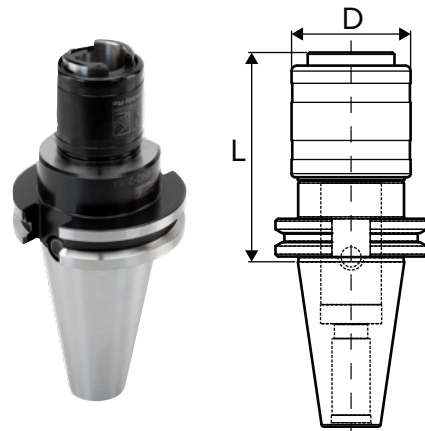
Coolant-Thru
Thru-tap coolant

CAT40/50 RIGID TAP HOLDERS

Part Number	Taper	Tap Range		System	L	D
		Hand	Pipe			
C40R5-0562-2.84	CT40	#0-9/16"	1/8"	#1	2.84"	1.26"
C40R5-0875-3.50	CT40	5/16-7/8"	1/4-1/2"	#2	3.50"	1.97"
C40R5-1375-6.24	CT40	13/16-1-3/8"	1/2-1"	#3	6.24"	2.83"
C50R5-0562-2.84	CT50	#0-9/16"	1/8"	#1	2.84"	1.26"
C50R5-0875-3.50	CT50	5/16-7/8"	1/4-1/2"	#2	3.50"	1.97"
C50R5-1375-5.04	CT50	13/16-1-3/8"	1/2-1"	#3	5.04"	2.83"

Note:

- These holders are designed for use with synchronized machining centers.
- These holders have no tension or compression.

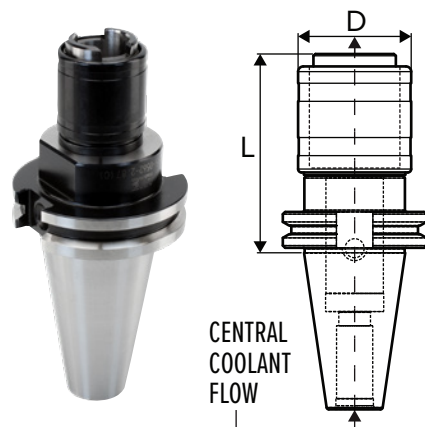


CAT40/50 RIGID TAP HOLDERS COOLANT-THRU

Part Number	Taper	Tap Range		System	L	D
		Hand	Pipe			
C40R5-0562-2.87(C)	CT40	#0-9/16"	1/8"	#1	2.87"	1.26"
C40R5-0875-3.50(C)	CT40	5/16-7/8"	1/4-1/2"	#2	3.50"	1.97"
C40R5-1375-6.24(C)	CT40	13/16-1-3/8"	1/2-1"	#3	6.24"	2.83"
C50R5-0562-2.87(C)	CT50	#0-9/16"	1/8"	#1	2.87"	1.26"
C50R5-0875-3.50(C)	CT50	5/16-7/8"	1/4-1/2"	#2	3.50"	1.97"
C50R5-1375-5.04(C)	CT50	13/16-1-3/8"	1/2-1"	#3	5.04"	2.83"

Note:

- These holders are designed for use with synchronized machining centers.
- These holders have no tension or compression.
- Maximum pressure is 725 psi.



Tap Collets
Pages 210-221



Tap Spanner Wrench
Page 222

TAP HOLDERS

BT TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



T.I.R. Minimal



Tension / Compression



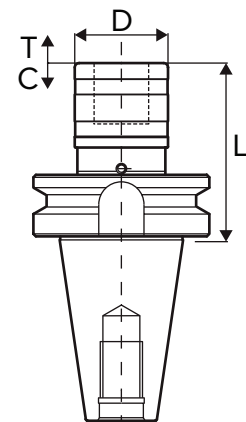
Set-Up Quick and easy



Coolant-Thru Thru-tap coolant

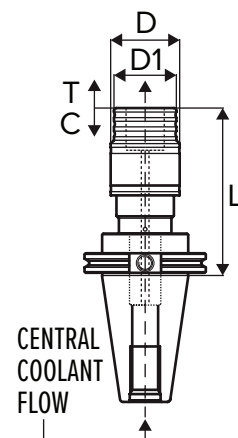
BT30/40/50 TENSION/COMPRESSION TAP HOLDERS

Part Number	Taper	Tap Range		System	L	D	T	C
		Hand	Pipe					
B3005-0562-2.40	BT30	#0-9/16"	1/8"	#1	2.40"	1.42"	0.295"	0.295"
B4005-0562-2.91	BT40	#0-9/16"	1/8"	#1	2.91"	1.43"	0.29"	0.29"
B4005-0875-3.86	BT40	5/16-7/8"	1/4-1/2"	#2	3.86"	2.09"	0.49"	0.49"
B4005-1375-7.64	BT40	13/16-1-3/8"	1/2-1"	#3	7.64"	3.07"	0.79"	0.79"
B5005-0562-3.26	BT50	#0-9/16"	1/8"	#1	3.26"	1.43"	0.29"	0.29"
B5005-0875-4.21	BT50	5/16-7/8"	1/4-1/2"	#2	4.21"	2.09"	0.49"	0.49"
B5005-1375-6.73	BT50	13/16-1-3/8"	1/2-1"	#3	6.73"	3.07"	0.79"	0.79"



BT30/40/50 TENSION/COMPRESSION TAP HOLDERS - COOLANT-THRU

Part Number	Taper	Tap Range		System	L	D	D1	T	C
		Hand	Pipe						
B3005-0562-4.37(C)	BT30	#0-9/16"	1/8"	#1	4.37"	1.57"	1.34"	0.27"	0.12"
B4005-0562-3.98(C)	BT40	#0-9/16"	1/8"	#1	3.98"	1.57"	1.28"	0.27"	0.12"
B4005-0875-5.36(C)	BT40	5/16-7/8"	1/4-1/2"	#2	5.36"	2.20"	1.99"	0.39"	0.20"
B4005-1375-9.21(C)	BT40	13/16-1-3/8"	1/2-1"	#3	9.21"	2.95"	2.76"	0.71"	0.51"
B5005-0562-4.33(C)	BT50	#0-9/16"	1/8"	#1	4.33"	1.57"	1.28"	0.27"	0.12"
B5005-0875-5.75(C)	BT50	5/16-7/8"	1/4-1/2"	#2	5.75"	2.20"	1.99"	0.39"	0.20"
B5005-1375-8.30(C)	BT50	13/16-1-3/8"	1/2-1"	#3	8.30"	2.95"	2.76"	0.71"	0.51"



Note: Maximum pressure is 725 psi.



Tap Collets
Pages 210-221



Tap Spanner Wrench
Page 222

BT TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



Set-Up
Quick and easy



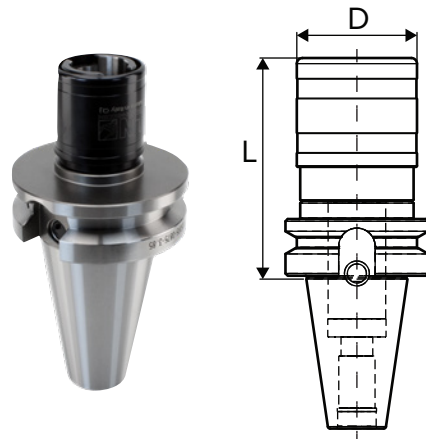
T.I.R.
Minimal



Coolant-Thru
Thru-tap coolant

BT30/40/50 RIGID TAP HOLDERS

Part Number	Taper	Tap Range		System	L	D
		Hand	Pipe			
B30R5-0562-2.36	BT30	#0-9/16"	1/8"	#1	2.36"	1.26"
B40R5-0562-2.84	BT40	#0-9/16"	1/8"	#1	2.84"	1.26"
B40R5-0875-3.50	BT40	#0-9/16"	1/8"	#1	3.50"	1.98"
B40R5-1375-5.91	BT40	#0-9/16"	1/8"	#1	5.91"	2.83"
B50R5-0562-3.19	BT50	#0-9/16"	1/8"	#1	3.19"	1.26"
B50R5-0875-3.85	BT50	#0-9/16"	1/8"	#1	3.85"	1.97"
B50R5-1375-5.00	BT50	#0-9/16"	1/8"	#1	5.00"	2.83"

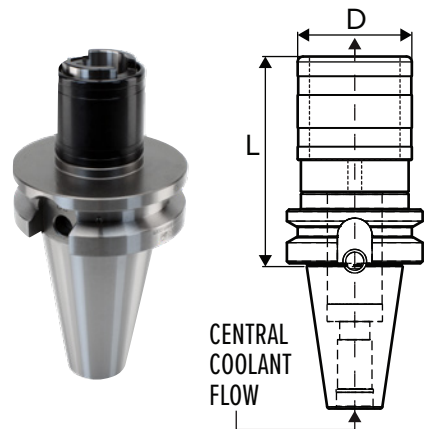


Note:

- These holders are designed for use with synchronized machining centers.
- These holders have no tension or compression.

BT30/40/50 RIGID TAP HOLDERS COOLANT-THRU

Part Number	Taper	Tap Range		System	L	D
		Hand	Pipe			
B30R5-0562-2.28(C)	BT30	#0-9/16"	1/8"	#1	2.28"	1.26"
B40R5-0562-2.87(C)	BT40	#0-9/16"	1/8"	#1	2.87"	1.26"
B40R5-0875-3.50(C)	BT40	5/16-7/8"	1/4-1/2"	#2	3.50"	1.97"
B40R5-1375-5.91(C)	BT40	13/16-1-3/8"	1/2-1"	#3	5.91"	2.83"
B50R5-0562-3.22(C)	BT30	#0-9/16"	1/8"	#1	3.22"	1.26"
B50R5-0875-3.85(C)	BT30	5/16-7/8"	1/4-1/2"	#2	3.85"	1.97"
B50R5-1375-5.00(C)	BT30	13/16-1-3/8"	1/2-1"	#3	5.00"	2.83"



Note:

- These holders are designed for use with synchronized machining centers.
- These holders have no tension or compression.
- Maximum pressure is 725 psi.



Tap Collets
Pages 210-221



Tap Spanner Wrench
Page 222

TAP HOLDERS

HSK TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



T.I.R. Minimal



Tension / Compression



Set-Up Quick and easy

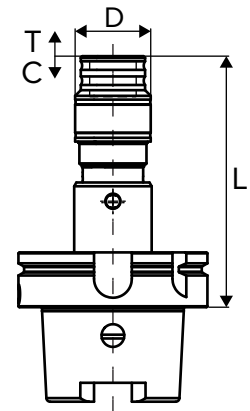


Coolant-Thru Thru-tap coolant

HSK63/100A TENSION/COMPRESSION TAP HOLDERS

Part Number	Tap Range		System	L	D	T	C
	Hand	Pipe					
HSK63A-TC0562-3.15	#0-9/16"	1/8"	#1	3.15"	1.42"	0.29"	0.29"
HSK63A-TC0875-4.72	5/16-7/8"	1/4-1/2"	#2	4.72"	2.09"	0.49"	0.49"
HSK63A-TC1375-7.72	13/16-1-3/8"	1/2-1"	#3	7.72"	3.07"	0.68"	0.68"
HSK100A-TC0562-3.23	#0-9/16"	1/8"	#1	3.23"	1.42"	0.29"	0.29"
HSK100A-TC0875-4.41	5/16-7/8"	1/4-1/2"	#2	4.41"	2.09"	0.49"	0.49"
HSK100A-TC1375-7.95	13/16-1-3/8"	1/2-1"	#3	7.95"	3.07"	0.68"	0.68"

Note: Coolant tube and coolant tube wrench are not included. See Page 222 for more details.

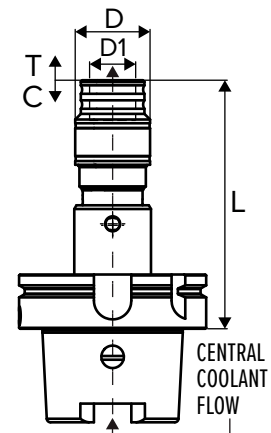


HSK63/100A TENSION/COMPRESSION TAP HOLDERS - COOLANT-THRU

Part Number	Tap Range		System	L	D	D1	T	C
	Hand	Pipe						
HSK63A-TC0562-4.92(C)	#0-9/16"	1/8"	#1	4.92"	1.57"	1.34"	0.29"	0.29"
HSK63A-TC0875-6.38(C)	5/16-7/8"	1/4-1/2"	#2	6.38"	2.21"	1.97"	0.27"	0.12"
HSK63A-TC1375-9.41(C)	13/16-1-3/8"	1/2-1"	#3	9.41"	3.07"	2.84"	0.68"	0.68"
HSK100A-TC0562-5.20(C)	#0-9/16"	1/8"	#1	5.20"	1.57"	1.34"	0.29"	0.29"
HSK100A-TC0875-6.62(C)	5/16-7/8"	1/4-1/2"	#2	6.62"	1.57"	1.28"	0.27"	0.12"

Note:

- Coolant tube and coolant tube wrench are not included. See Page 222 for more details.
- Maximum pressure is 725 psi.



Tap Collets
Pages 210-221



Tap Spanner
Wrench
Page 222



HSK
Coolant Tube
Page 222



HSK Coolant
Tube Wrench
Page 222

HSK TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



Set-Up
Quick and easy



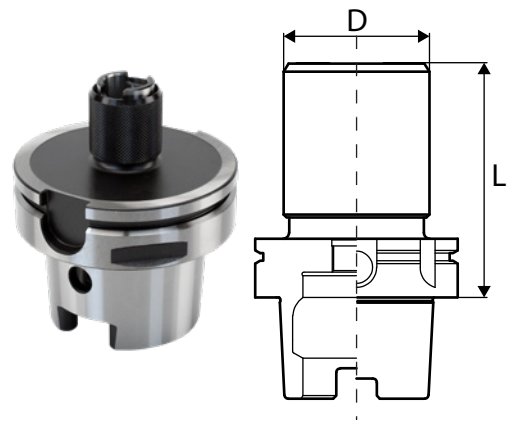
T.I.R.
Minimal



Coolant-Thru
Thru-tap coolant

HSK40/63/100 RIGID TAP HOLDERS

Part Number	Tap Range		System	L	D
	Hand	Pipe			
HSK40A-R0562-3.15	#0-9/16"	1/8"	#1	3.15"	1.26"
HSK63A-R0562-2.48	#0-9/16"	1/8"	#1	2.48"	1.26"
HSK63A-R0875-3.31	5/16-7/8"	1/4-1/2"	#2	3.31"	1.97"
HSK63A-R1375-5.12	13/16-1-3/8"	1/2-1"	#3	5.12"	2.83"
HSK100A-R0562-2.59	#0-9/16"	1/8"	#1	2.59"	1.26"
HSK100A-R0875-3.42	5/16-7/8"	1/4-1/2"	#2	3.42"	1.97"
HSK100A-R1375-4.57	13/16-1-3/8"	1/2-1"	#3	4.57"	2.83"

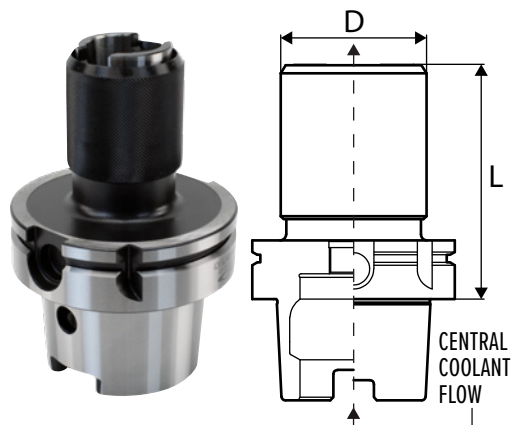


Note:

- Coolant tube and coolant tube wrench are not included. See Page 222 for more details.
- These holders are designed for use with synchronized machining centers.
- These holders have no tension or compression.

HSK40/63/100 RIGID TAP HOLDERS COOLANT-THRU

Part Number	Tap Range		System	L	D
	Hand	Pipe			
HSK40A-R0562-2.97(C)	#0-9/16"	1/8"	#1	2.97"	1.26"
HSK63A-R0562-2.76(C)	#0-9/16"	1/8"	#1	2.76"	1.26"
HSK63A-R0875-3.70(C)	5/16-7/8"	1/4-1/2"	#2	3.70"	1.97"
HSK100A-R0562-3.09(C)	#0-9/16"	1/8"	#1	3.09"	1.26"
HSK100A-R0875-3.94(C)	5/16-7/8"	1/4-1/2"	#2	3.94"	1.97"
HSK100A-R1375-5.32(C)	13/16-1-3/8"	1/2-1"	#3	5.32"	2.84"



Note:

- Coolant tube and coolant tube wrench are not included. See Page 222 for more details.
- These holders are designed for use with synchronized machining centers.
- These holders have no tension or compression.
- Maximum pressure is 725 psi.



Tap Collets
Pages 210-221



Tap Spanner
Wrench
Page 222



HSK
Coolant Tube
Page 222



HSK Coolant
Tube Wrench
Page 222

TAP HOLDERS

WELDON TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



T.I.R. Minimal



Tension / Compression



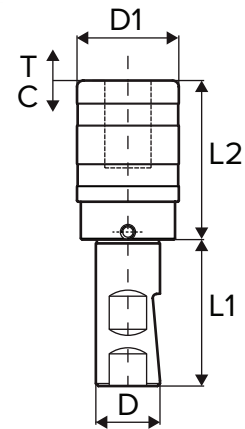
Set-Up Quick and easy



Coolant-Thru Thru-tap coolant

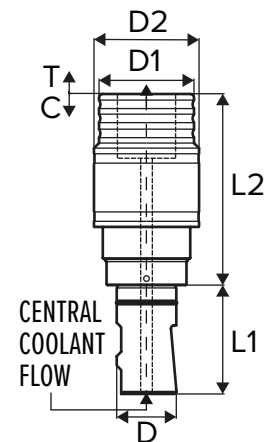
WELDON SHANK TENSION/COMPRESSION TAP HOLDERS

Part Number	Tap Range		System	D	D1	L1	L2	T	C
	Hand	Pipe							
W7505-0562-1.53	#0-9/16"	1/8"	#1	3/4"	1.43"	2.00"	1.53"	0.29"	0.29"
W1005-0562-1.53	#0-9/16"	1/8"	#1	1"	1.43"	2.28"	1.53"	0.29"	0.29"
W1205-0562-1.61	#0-9/16"	1/8"	#1	1-1/4"	1.43"	2.28"	1.61"	0.29"	0.29"
W1005-0875-2.48	5/16-7/8"	1/4-1/2"	#2	1"	2.09"	2.28"	2.48"	0.49"	0.49"
W1205-0875-2.48	5/16-7/8"	1/4-1/2"	#2	1-1/4"	2.09"	2.28"	2.48"	0.49"	0.49"
W1205-1375-5.00	13/16-1-3/8"	1/2-1"	#3	1-1/4"	3.07"	2.28"	5.00"	0.79"	0.79"
W1505-1375-4.65	13/16-1-3/8"	1/2-1"	#3	1-1/2"	3.07"	2.69"	4.65"	0.79"	0.79"



WELDON SHANK TENSION/COMPRESSION TAP HOLDERS - COOLANT-THRU

Part Number	Tap Range		System	D	D1	D2	L1	L2	T	C
	Hand	Pipe								
W25MR5-0562-38(C)	#0-9/16"	1/8"	#1	0.984"	1.29"	1.57"	2.28"	2.60"	0.27"	0.12"
W25MR5-0875-54(C)	5/16-7/8"	1/8"	#1	1"	1.29"	1.57"	2.28"	2.60"	0.27"	0.12"
W1000-TC1-2.60(C)	#0-9/16"	1/8"	#1	1"	1.29"	1.57"	2.28"	2.60"	0.27"	0.12"
W1000-TC2-4.02(C)	5/16-7/8"	1/4-1/2"	#2	1"	1.99"	2.20"	2.28"	4.02"	0.39"	0.20"
W1205-0562-2.60(C)	#0-9/16"	1/8"	#1	1-1/4"	1.29"	1.28"	2.28"	2.60"	0.27"	0.12"
W1205-0875-4.02(C)	5/16-7/8"	1/4-1/2"	#2	1-1/4"	1.99"	2.20"	2.28"	4.02"	0.39"	0.20"
W1205-1375-6.57(C)	13/16-1-3/8"	1/2-1"	#3	1-1/4"	2.75"	2.95"	2.28"	6.57"	0.71"	0.51"
W1500-TC3-6.57(C)	13/16-1-3/8"	1/2-1"	#3	1-1/2"	2.75"	2.95"	2.69"	6.57"	0.71"	0.51"



Note: Maximum pressure is 725 psi.



Tap Collets
Pages 210-221



Tap Spanner Wrench
Page 222

WELDON TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



Set-Up
Quick and easy



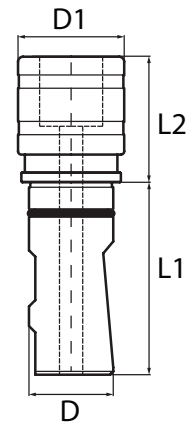
T.I.R.
Minimal



Coolant-Thru
Thru-tap coolant

WELDON SHANK RIGID TAP HOLDERS

Part Number	Tap Range		System	D	D1	L1	L2
	Hand	Pipe					
W25MR5-0562-37	#0-9/16"	1/8"	#1	0.984"	1.26"	2.08"	1.46"
W25MR5-0875-56	5/16-7/8"	1/4-1/2"	#2	0.984"	1.97"	2.08"	2.12"
W10R5-0562-1.46	#0-9/16"	1/8"	#1	1"	1.26"	2.28"	1.46"
W10R5-0875-2.12	5/16-7/8"	1/4-1/2"	#2	1"	1.97"	2.28"	2.12"
W12R5-1375-3.27	13/16-1-3/8"	1/2-1"	#3	1-1/4"	2.83"	2.28"	3.27"
W15R5-1375-5.96	13/16-1-3/8"	1/2-1"	#3	1-1/2"	2.83"	2.70"	3.28"

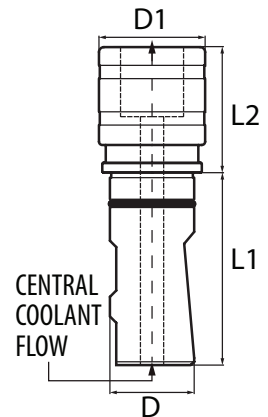


Note:

- These holders are designed for use with synchronized machining centers.
- These holders have no tension or compression.

WELDON SHANK RIGID TAP HOLDERS COOLANT-THRU

Part Number	Tap Range		System	D	D1	L1	L2
	Hand	Pipe					
W75R5-0562-1.46(C)	#0-9/16"	1/8"	#1	3/4"	1.26"	2.03"	1.49"
W25MR5-0562-38(C)	#0-9/16"	1/8"	#1	0.984"	1.26"	2.08"	1.49"
W25MR5-0875-54(C)	5/16-7/8"	1/4-1/2"	#2	0.984"	1.97"	2.08"	2.12"
W12R5-0562-1.65(C)	#0-9/16"	1/8"	#1	1-1/4"	1.26"	2.28"	1.65"
W12R5-0875-2.12(C)	5/16-7/8"	1/4-1/2"	#2	1-1/4"	1.97"	2.28"	2.12"
W1250-RT3-3.27(C)	13/16-1-3/8"	1/2-1"	#3	1-1/4"	2.83"	2.28"	3.27"



Note:

- These holders are designed for use with synchronized machining centers.
- These holders have no tension or compression.
- Maximum pressure is 725 psi.



TAP HOLDERS



STRAIGHT SHANK TAP HOLDERS

FEATURES

- Made to fit all Bilz standard style tap collets
- Quick and easy interchangeability of tap collets
- Retention balls and drive keys provide higher positioning accuracy and stronger gripping force, reducing the possibility of tap slippage



Utilizes quick change tap collets



T.I.R. Minimal



Tension / Compression



Set-Up Quick and easy



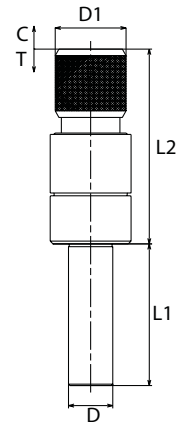
Coolant-Thru Thru-tap coolant

STRAIGHT SHANK TENSION/COMPRESSION TAP HOLDERS

Part Number	Tap Range		System	D	D1	L1	L2	T	C
	Hand	Pipe							
S1005-0562-4.17	#0-9/16"	1/8"	#1	1"	1.26"	3.50"	4.17"	0.79"	0.39"
S1005-0875-5.61	5/16-7/8"	1/4-1/2"	#2	1"	1.96"	3.50"	5.61"	0.85"	0.49"
S1205-0875-5.61	5/16-7/8"	1/4-1/2"	#2	1-1/4"	1.96"	4.00"	5.61"	0.85"	0.49"

Note:

- Straight Shank tooling may be used to extend tooling reach for extended length operations.
- This option is less costly than extended length integral shank tooling.
- Can be used on machining centers or lathes.



Tap Collets
Pages 210-221



Tap Spanner Wrench
Page 222

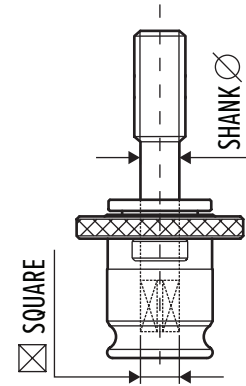
TAP COLLETS

POSITIVE DRIVE TAP COLLETS - ANSI STANDARD

Standard collets are used for standard and coolant-thru tap holders.

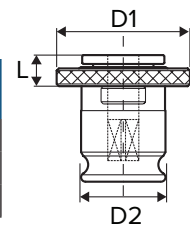
Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
NT05-006	#1	#0-6	0.141"	0.110"
NT05-008	#1	#8	0.168"	0.131"
NT05-010	#1	#10, 3/16"	0.194"	0.152"
NT05-012	#1	#12	0.220"	0.165"
NT05-016	#1	1/4"	0.255"	0.191"
NT05-020	#1	5/16"	0.318"	0.238"
NT05-024	#1	3/8"	0.381"	0.286"
NT05-028	#1	7/16"	0.323"	0.242"
NT05-032	#1	1/2"	0.367"	0.275"
NT05-036	#1	9/16"	0.429"	0.322"
NT10-020	#2	5/16"	0.318"	0.238"
NT10-024	#2	3/8"	0.381"	0.286"
NT10-028	#2	7/16"	0.323"	0.242"
NT10-032	#2	1/2"	0.367"	0.275"
NT10-036	#2	9/16"	0.429"	0.322"
NT10-040	#2	5/8"	0.480"	0.360"
NT10-044	#2	11/16"	0.542"	0.406"
NT10-048	#2	3/4"	0.590"	0.442"
NT10-052	#2	13/16"	0.652"	0.489"
NT10-056	#2	7/8"	0.697"	0.523"
NT15-052	#3	13/16"	0.652"	0.489"
NT15-056	#3	7/8"	0.697"	0.523"
NT15-060	#3	15/16"	0.760"	0.570"
NT15-064	#3	1"	0.800"	0.600"
NT15-072	#3	1-1/8"	0.896"	0.672"
NT15-080	#3	1-1/4"	1.021"	0.766"
NT15-088	#3	1-3/8"	1.108"	0.831"

Note: See pages 224-225 for details about dimensions cross over for ANSI, DIN, ISO, JIS Specification Taps.



DIMENSIONAL DATA

System	L	D1	D2
#1	0.27"	1.18"	0.75"
#2	0.43"	1.89"	1.22"
#3	0.55"	2.76"	1.89"



POSITIVE DRIVE TAP COLLET SETS

Part Number	Description
NT05-SET-10	10 Piece System #1 Positive Drive Tap Collet Set: 0-9/16" hand
NT10-SET-10	10 Piece System #2 Positive Drive Tap Collet Set: 5/16" - 7/8" hand
NT15-SET-07	7 Piece System #3 Positive Drive Tap Collet Set: 13/16" - 1-3/8" hand

TAP HOLDERS



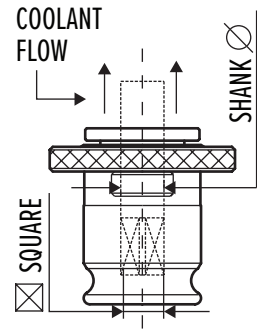
TAP COLLETS

POSITIVE DRIVE TAP COLLETS - ANSI STANDARD - SLOTTED

Slotted collets are designed for use with standard taps for coolant along the flute.

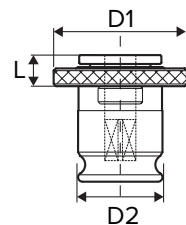
Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
NT05-006(S)	#1	#0-6	0.141"	0.110"
NT05-008(S)	#1	#8	0.168"	0.131"
NT05-010(S)	#1	#10, 3/16"	0.194"	0.152"
NT05-012(S)	#1	#12	0.220"	0.165"
NT05-016(S)	#1	1/4"	0.255"	0.191"
NT05-020(S)	#1	5/16"	0.318"	0.238"
NT05-024(S)	#1	3/8"	0.381"	0.286"
NT05-028(S)	#1	7/16"	0.323"	0.242"
NT05-032(S)	#1	1/2"	0.367"	0.275"
NT05-036(S)	#1	9/16"	0.429"	0.322"
NT10-020(S)	#2	5/16"	0.318"	0.238"
NT10-024(S)	#2	3/8"	0.381"	0.286"
NT10-028(S)	#2	7/16"	0.323"	0.242"
NT10-032(S)	#2	1/2"	0.367"	0.275"
NT10-036(S)	#2	9/16"	0.429"	0.322"
NT10-040(S)	#2	5/8"	0.480"	0.360"
NT10-044(S)	#2	11/16"	0.542"	0.406"
NT10-048(S)	#2	3/4"	0.590"	0.442"
NT10-052(S)	#2	13/16"	0.652"	0.489"
NT10-056(S)	#2	7/8"	0.697"	0.523"
NT15-052(S)	#3	13/16"	0.652"	0.489"
NT15-056(S)	#3	7/8"	0.697"	0.523"
NT15-060(S)	#3	15/16"	0.760"	0.570"
NT15-064(S)	#3	1"	0.800"	0.600"
NT15-072(S)	#3	1-1/8"	0.896"	0.672"
NT15-080(S)	#3	1-1/4"	1.021"	0.766"
NT15-088(S)	#3	1-3/8"	1.108"	0.831"

Note: See pages 224-225 for details about dimensions cross over for ANSI, DIN, ISO, JIS Specification Taps.



DIMENSIONAL DATA

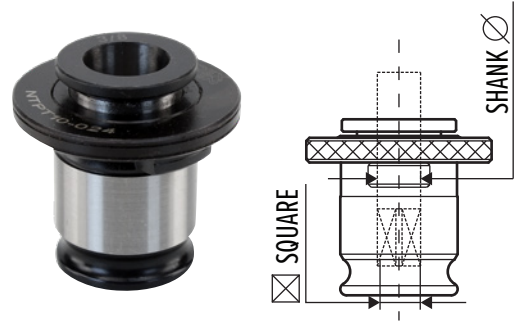
System	L	D1	D2
#1	0.27"	1.18"	0.75"
#2	0.43"	1.89"	1.22"
#3	0.55"	2.76"	1.89"



TAP COLLETS

POSITIVE DRIVE PIPE TAP COLLETS - ANSI STANDARD

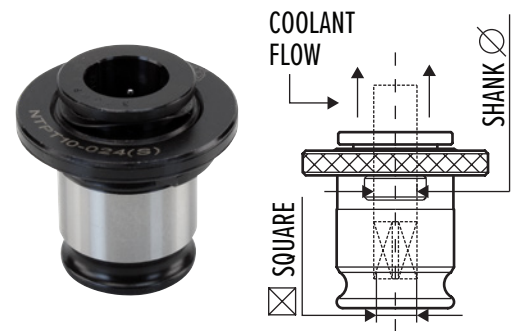
Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
NTPT05-008S	#1	1/8"S	0.313"	0.234"
NTPT05-008L	#1	1/8"L	0.437"	0.328"
NTPT10-016	#2	1/4"	0.562"	0.421"
NTPT10-024	#2	3/8"	0.700"	0.531"
NTPT10-032	#2	1/2"	0.687"	0.515"
NTPT15-032	#3	1/2"	0.687"	0.515"
NTPT15-048	#3	3/4"	0.906"	0.679"
NTPT15-064	#3	1"	1.125"	0.843"



POSITIVE DRIVE PIPE TAP COLLETS - ANSI STANDARD - SLOTTED

Slotted collets are designed for use with standard taps for coolant along the flute.

Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
NTPT05-008S(S)	#1	1/8"S	0.313"	0.234"
NTPT05-008L(S)	#1	1/8"L	0.437"	0.328"
NTPT10-016(S)	#2	1/4"	0.562"	0.421"
NTPT10-024(S)	#2	3/8"	0.700"	0.531"
NTPT10-032(S)	#2	1/2"	0.687"	0.515"
NTPT15-032(S)	#3	1/2"	0.687"	0.515"
NTPT15-048(S)	#3	3/4"	0.906"	0.679"
NTPT15-064(S)	#3	1/2"	1.125"	0.843"



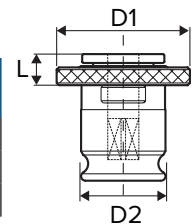
POSITIVE DRIVE PIPE TAP COLLET SETS

Part Number	Description
NTP05-SET-12	12 Piece System #1 Positive Drive Tap Collet Set: 0 - 9/16" hand and 1/8" pipe large & small
NTP10-SET-13	13 Piece System #2 Positive Drive Tap Collet Set: 5/16" - 7/8" hand and 1/4" - 1/2" pipe
NTP15-SET-10	10 Piece System #3 Positive Drive Tap Collet Set: 13/16" - 1-3/8" hand and 1/2" - 1" pipe

Note: See pages 224-225 for details about dimensions cross over for ANSI, DIN, ISO, JIS Specification Taps.

DIMENSIONAL DATA

System	L	D1	D2
#1	0.27"	1.18"	0.75"
#2	0.43"	1.89"	1.22"
#3	0.55"	2.76"	1.89"



TAP HOLDERS

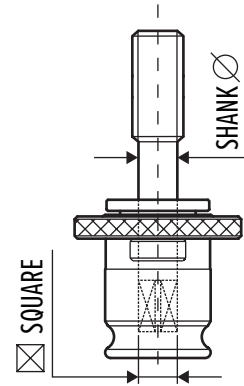
TAP COLLETS

POSITIVE DRIVE TAP COLLETS - ISO 529 STANDARD

Standard collets are used for standard and coolant-thru tap holders.

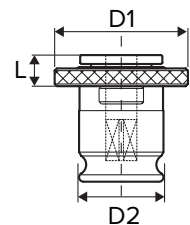
Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
SE1-2.24X1.8	#1	M3	2.24mm	1.80mm
SE1-2.50X2.0	#1	M3.5, M2	2.50mm	2.00mm
SE1-2.80X2.24	#1	M2.5, M2.2	2.80mm	2.24mm
SE1-3.15X2.50	#1	M4, M3	3.15mm	2.50mm
SE1-3.55X2.80	#1	M4.5, M3.5	3.55mm	2.80mm
SE1-4.0X3.15	#1	M5, M4	4.00mm	3.15mm
SE1-4.5X3.55	#1	M6	4.50mm	3.55mm
SE1-5.0X4.0	#1	M5	5.00mm	4.00mm
SE1-5.6X4.5	#1	M5	5.60mm	4.50mm
SE1-6.3X5.0	#1	M8, M6	6.30mm	5.00mm
SE1-7.1X5.6	#1	M7	7.10mm	5.60mm
SE1-8.0X6.3	#1	M11, M10, M8	8.00mm	6.30mm
SE1-9.0X7.1	#1	M12, M9	9.00mm	7.10mm
SE1-10.0X8.0	#1	M10	10.0mm	8.00mm
SE1-11.2X9.0	#1	M14	11.2mm	9.00mm
SE2-4.0X3.15	#2	M5, M4	4.00mm	3.15mm
SE2-4.5X3.55	#2	M6	4.50mm	3.55mm
SE2-5.0X4.0	#2	M5	5.00mm	4.00mm
SE2-5.6X4.5	#2	M5	5.60mm	4.50mm
SE2-6.3X5.0	#2	M8, M6	6.30mm	5.00mm
SE2-7.1X5.6	#2	M7	7.10mm	5.60mm
SE2-8.0X6.3	#2	M11, M10, M8	8.00mm	6.30mm
SE2-9.0X7.1	#2	M12, M9	9.00mm	7.10mm
SE2-10.0X8.0	#2	M10	10.0mm	8.00mm
SE2-11.2X9.0	#2	M14	11.2mm	9.00mm
SE2-12.5X10.0	#2	M16	12.5mm	10.0mm
SE2-14.0X11.2	#2	M20, M18	14.0mm	11.2mm
SE2-16.0X12.5	#2	M22	16.0mm	12.5mm
SE2-18.0X14.0	#2	M24	18.0mm	14.0mm
SE3-9.0X7.1	#3	M12, M9	9.00mm	7.10mm
SE3-10.0X8.0	#3	M10	10.0mm	8.00mm
SE3-11.2X9.0	#3	M14	11.2mm	9.00mm
SE3-12.5X10.0	#3	M16	12.5mm	10.0mm
SE3-14.0X11.2	#3	M20, M18	14.0mm	11.2mm
SE3-16.0X12.5	#3	M22	16.0mm	12.5mm
SE3-18.0X14.0	#3	M24	18.0mm	14.0mm
SE3-20.0X16.0	#3	M30, M27	20.0mm	16.0mm
SE3-22.4X18.0	#3	M33	22.4mm	18.0mm
SE3-25.0X20.0	#3	M36, M33	25.0mm	20.0mm
SE3-28.0X22.4	#3	M39, M40, M42	28.0mm	22.4mm

Note: See pages 224-225 for details about dimensions cross over for ANSI, DIN, ISO, JIS Specification Taps.



DIMENSIONAL DATA

System	L	D1	D2
#1	0.27"	1.18"	0.75"
#2	0.43"	1.89"	1.22"
#3	0.55"	2.76"	1.89"

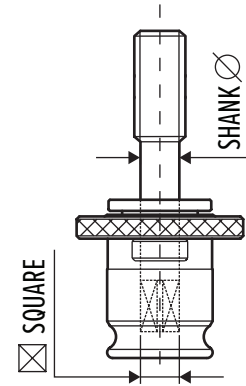


TAP COLLETS

POSITIVE DRIVE TAP COLLETS - DIN 371/376 STANDARD

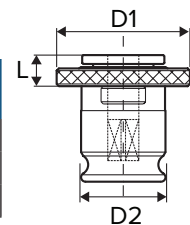
Standard collets are used for standard and coolant-thru tap holders.

Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
SE1-2.5X2.1	#1	M1.4, M1.8, M3	2.50mm	2.10mm
SE1-2.8X2.1	#1	M2, M2.2, M2.5, M4	2.80mm	2.10mm
SE1-3.5X2.7	#1	M3, M5	3.50mm	2.70mm
SE1-4.0X3.0	#1	M3.5	4.00mm	3.00mm
SE1-4.5X3.4	#1	M4, M6	4.50mm	3.40mm
SE1-6.0X4.9	#1	M5, M6, M8	6.00mm	4.90mm
SE1-7.0X5.5	#1	M10	7.00mm	5.50mm
SE1-8.0X6.2	#1	M8, M10	8.00mm	6.20mm
SE1-9.0X7.0	#1	M12	9.00mm	7.00mm
SE1-10.0X8.0	#1	M10	10.0mm	8.00mm
SE1-11.0X9.0	#1	M14	11.0mm	9.00mm
SE2-2.8X2.1	#2	M2, M2.2, M2.5, M4	2.80mm	2.10mm
SE2-3.5X2.7	#2	M3, M5	3.50mm	2.70mm
SE2-4.0X3.0	#2	M3.5	4.00mm	3.00mm
SE2-6.0X4.9	#2	M5, M6, M8	6.00mm	4.90mm
SE2-7.0X5.5	#2	M10	7.00mm	5.50mm
SE2-8.0X6.2	#2	M8, M10	8.00mm	6.20mm
SE2-9.0X7.0	#2	M12	9.00mm	7.00mm
SE2-10.0X8.0	#2	M10	10.00mm	8.00mm
SE2-11.0X9.0	#2	M14	11.0mm	9.00mm
SE2-12.0X9.0	#2	M16	12.0mm	9.00mm
SE2-14.0X11.0	#2	M18	14.0mm	11.00mm
SE2-16.0X12.0	#2	M20	16.0mm	12.00mm
SE2-18.0X14.5	#2	M22, M24	18.0mm	14.50mm
SE3-9.0X7.0	#3	M12	9.00mm	7.00mm
SE3-10.0X8.0	#3	M10	10.00mm	8.00mm
SE3-11.0X9.0	#3	M14	11.0mm	9.00mm
SE3-12.0X9.0	#3	M16	12.0mm	9.00mm
SE3-14.0X11.0	#3	M18	14.0mm	11.0mm
SE3-16.0X12.0	#3	M20	16.0mm	12.0mm
SE3-18.0X14.5	#3	M22, M24	18.0mm	14.5mm
SE3-20.0X16.0	#3	M27, M30	20.0mm	16.0mm
SE3-22.0X18.0	#3	M30	22.0mm	18.0mm
SE3-25.0X20.0	#3	M33, M36	25.0mm	20.0mm
SE3-28.0X22.0	#3	M36	28.0mm	22.0mm



DIMENSIONAL DATA

System	L	D1	D2
#1	0.27"	1.18"	0.75"
#2	0.43"	1.89"	1.22"
#3	0.55"	2.76"	1.89"



Note: See pages 224-225 for details about dimensions cross over for ANSI, DIN, ISO, JIS Specification Taps.



TAP HOLDERS



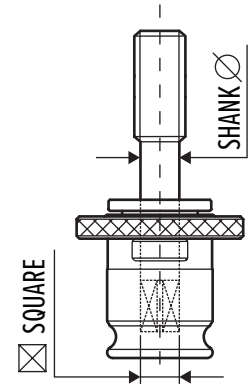
TAP COLLETS

POSITIVE DRIVE TAP COLLETS - JIS STANDARD

Standard collets are used for standard and coolant-thru tap holders..

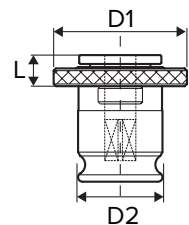
Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
SE1-3.0X2.5	#1	M2	3.00mm	2.50mm
SE1-4.0X3.2	#1	M3	4.00mm	3.20mm
SE1-5.0X4.0	#1	M4, M4.5	5.00mm	4.00mm
SE1-5.5X4.5	#1	M5, M5.5	5.50mm	4.50mm
SE1-6.0X4.5	#1	M6	6.00mm	4.50mm
SE1-6.2X5.0	#1	M7, M8	6.20mm	5.00mm
SE1-7.0X5.5	#1	M9, M10	7.00mm	5.50mm
SE1-8.0X6.0	#1	M11	8.00mm	6.00mm
SE1-8.5X6.5	#1	M12	8.50mm	6.50mm
SE1-9.5X7.0	#1	M13	9.50mm	7.00mm
SE1-10.5X8.0	#1	M14, M15	10.5mm	8.00mm
SE2-6.0X4.5	#2	M6	6.00mm	4.50mm
SE2-6.2X5.0	#2	M7, M8	6.20mm	5.00mm
SE2-7.0X5.5	#2	M9, M10	7.00mm	5.50mm
SE2-8.0X6.0	#2	M11	8.00mm	6.00mm
SE2-8.5X6.5	#2	M12	8.50mm	6.50mm
SE2-9.5X7.0	#2	M13	9.50mm	7.00mm
SE2-10.5X8.0	#2	M14, M15	10.5mm	8.00mm
SE2-12.5X10.0	#2	M16	12.5mm	10.0mm
SE2-13.0X10.0	#2	M17	13.0mm	10.0mm
SE2-14.0X11.0	#2	M18	14.0mm	11.0mm
SE2-15.0X12.0	#2	M20	15.0mm	12.0mm
SE2-17.0X13.0	#2	M22	17.0mm	13.0mm
SE3-10.5X8.0	#3	M14, M15	10.5mm	8.00mm
SE3-12.5X10.0	#3	M16	12.5mm	10.0mm
SE3-13.0X10.0	#3	M17	13.0mm	10.0mm
SE3-14.0X11.0	#3	M18	14.0mm	11.0mm
SE3-15.0X12.0	#3	M20	15.0mm	12.0mm
SE3-17.0X13.0	#3	M22	17.0mm	13.0mm
SE3-19.0X15.0	#3	M24, M25	19.0mm	15.0mm
SE3-20.0X15.0	#3	M26, M27	20.0mm	15.0mm
SE3-21.0X17.0	#3	M28	21.0mm	17.0mm
SE3-23.0X17.0	#3	M30	23.0mm	17.0mm
SE3-24.0X19.0	#3	M32	24.0mm	19.0mm
SE3-25.0X19.0	#3	M33	25.0mm	19.0mm
SE3-26.0X21.0	#3	M34, M35	26.0mm	21.0mm
SE3-28.0X21.0	#3	M36, M38	28.0mm	21.0mm

Note: See pages 224-225 for details about dimensions cross over for ANSI, DIN, ISO, JIS Specification Taps.



DIMENSIONAL DATA

System	L	D1	D2
#1	0.27"	1.18"	0.75"
#2	0.43"	1.89"	1.22"
#3	0.55"	2.76"	1.89"



TAP COLLETS

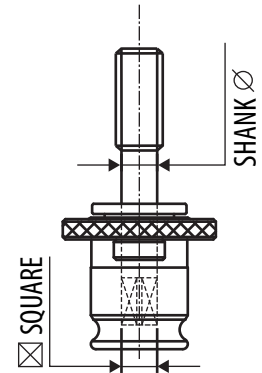
TORQUE CONTROL TAP COLLETS - ANSI STANDARD

Standard collets are used for standard and coolant-thru tap holders.
Adjustable torque - see preset torque tables on page 226.

Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
T05-006	#1	#0-6	0.141"	0.110"
T05-008	#1	#8	0.168"	0.131"
T05-010	#1	#10	0.194"	0.152"
T05-012	#1	#12	0.220"	0.165"
T05-016	#1	1/4"	0.255"	0.191"
T05-020	#1	5/16"	0.318"	0.238"
T05-024	#1	3/8"	0.381"	0.286"
T05-028	#1	7/16"	0.323"	0.242"
T05-032	#1	1/2"	0.367"	0.275"
T05-036	#1	9/16"	0.429"	0.322"
T10-020	#2	5/16"	0.318"	0.238"
T10-024	#2	3/8"	0.381"	0.286"
T10-028	#2	7/16"	0.323"	0.242"
T10-032	#2	1/2"	0.367"	0.275"
T10-036	#2	9/16"	0.429"	0.322"
T10-040	#2	5/8"	0.480"	0.360"
T10-044	#2	11/16"	0.542"	0.406"
T10-048	#2	3/4"	0.590"	0.442"
T10-052	#2	13/16"	0.652"	0.489"
T10-056	#2	7/8"	0.697"	0.523"
T10-064*	#2	1"	0.800"	0.600"
T15-052	#3	13/16"	0.652"	0.489"
T15-056	#3	7/8"	0.697"	0.523"
T15-060	#3	15/16"	0.760"	0.570"
T15-064	#3	1"	0.800"	0.600"
T15-072	#3	1-1/8"	0.896"	0.672"
T15-080	#3	1-1/4"	1.021"	0.766"
T15-088	#3	1-3/8"	1.108"	0.831"

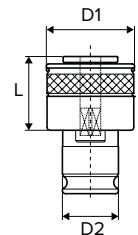
Note:

- *The tap is held with set screws.
- See pages 224-225 for details about dimensions cross over for ANSI, DIN, ISO, JIS Specification Taps.



DIMENSIONAL DATA

System	L	D1	D2
#1	0.98"	1.28"	0.75"
#2	1.34"	1.99"	1.22"
#3	1.77"	2.83"	1.89"



TORQUE CONTROL TAP COLLET SETS

Part Number	Description
T05-SET-10	10 Piece System #1 Torque Control Tap Collet Set: #0 - 9/16" hand
T10-SET-10	10 Piece System #2 Torque Control Tap Collet Set: 5/16" - 7/8" hand
T15-SET-07	7 Piece System #3 Torque Control Tap Collet Set: 13/16" - 1-3/8" hand



TAP HOLDERS

TAP COLLETS

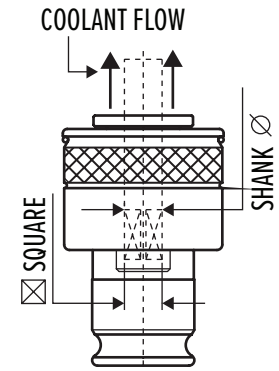
TORQUE CONTROL TAP COLLETS - ANSI STANDARD -SLOTTED

Slotted collets are designed for use with standard taps for coolant along the flute. Adjustable torque - see preset torque tables on page 226.

Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
T05-006(S)	#1	#0-6	0.141"	0.110"
T05-008(S)	#1	#8	0.168"	0.131"
T05-010(S)	#1	#10	0.194"	0.152"
T05-012(S)	#1	#12	0.220"	0.165"
T05-016(S)	#1	1/4"	0.255"	0.191"
T05-020(S)	#1	5/16"	0.318"	0.238"
T05-024(S)	#1	3/8"	0.381"	0.286"
T05-028(S)	#1	7/16"	0.323"	0.242"
T05-032(S)	#1	1/2"	0.367"	0.275"
T05-036(S)	#1	9/16"	0.429"	0.322"
T10-020(S)	#2	5/16"	0.318"	0.238"
T10-024(S)	#2	3/8"	0.381"	0.286"
T10-028(S)	#2	7/16"	0.323"	0.242"
T10-032(S)	#2	1/2"	0.367"	0.275"
T10-036(S)	#2	9/16"	0.429"	0.322"
T10-040(S)	#2	5/8"	0.480"	0.360"
T10-044(S)	#2	11/16"	0.542"	0.406"
T10-048(S)	#2	3/4"	0.590"	0.442"
T10-052(S)	#2	13/16"	0.652"	0.489"
T10-056(S)	#2	7/8"	0.697"	0.523"
T10-064(S)*	#2	1"	0.800"	0.600"
T15-052(S)	#3	13/16"	0.652"	0.489"
T15-056(S)	#3	7/8"	0.697"	0.523"
T15-060(S)	#3	15/16"	0.760"	0.570"
T15-064(S)	#3	1"	0.800"	0.600"
T15-072(S)	#3	1-1/8"	0.896"	0.672"
T15-080(S)	#3	1-1/4"	1.021"	0.766"
T15-088(S)	#3	1-3/8"	1.108"	0.831"

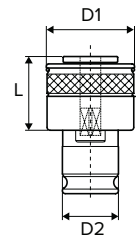
Note:

- *The tap is held with set screws.
- See pages 224-225 for details about dimensions cross over for ANSI, DIN, ISO, JIS Specification Taps.



DIMENSIONAL DATA

System	L	D1	D2
#1	0.98"	1.28"	0.75"
#2	1.34"	1.99"	1.22"
#3	1.77"	2.83"	1.89"

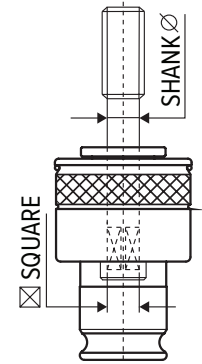


TAP COLLETS

TORQUE CONTROL PIPE TAP COLLETS - ANSI STANDARD

Adjustable torque - see preset torque tables on page 226.

Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
TPT05-008S	#1	1/8"S	0.313"	0.234"
TPT05-008L	#1	1/8"L	0.437"	0.328"
TPT10-016	#2	1/4"	0.562"	0.421"
TPT10-024	#2	3/8"	0.700"	0.531"
TPT10-032	#2	1/2"	0.687"	0.515"
TPT15-032	#3	1/2"	0.687"	0.515"
TPT15-048	#3	3/4"	0.906"	0.679"
TPT15-064	#3	1"	1.125"	0.843"

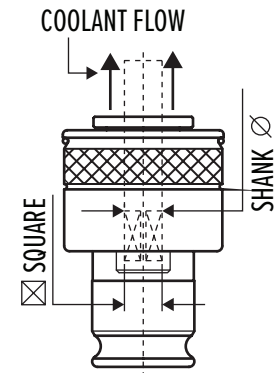


TORQUE CONTROL PIPE TAP COLLETS - ANSI STANDARD - SLOTTED

Slotted collets are designed for use with standard taps for coolant along the flute.

Adjustable torque - see preset torque tables on page 226.

Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
TPT05-008S(S)	#1	1/8"S	0.313"	0.234"
TPT05-008L(S)	#1	1/8"L	0.437"	0.328"
TPT10-016(S)	#2	1/4"	0.562"	0.421"
TPT10-024(S)	#2	3/8"	0.700"	0.531"
TPT10-032(S)	#2	1/2"	0.687"	0.515"
TPT15-032(S)	#3	1/2"	0.687"	0.515"
TPT15-048(S)	#3	3/4"	0.906"	0.679"
TPT15-064(S)	#3	1"	1.125"	0.843"

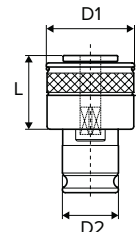


TORQUE CONTROL PIPE TAP COLLET SETS

Part Number	Description
TPO5-SET-12	12 Piece System #1 Torque Control Tap Collet Set: #0-9/16" hand and 1/8" pipe large & small
TP10-SET-13	13 Piece System #2 Torque Control Tap Collet Set: 5/16" - 7/8" hand and 1/4" - 1/2" pipe
TP15-SET-10	10 Piece System #3 Torque Control Tap Collet Set: 13/16" - 1-3/8" hand and 1/2" - 1" pipe

DIMENSIONAL DATA

System	L	D1	D2
#1	0.98"	1.28"	0.75"
#2	1.34"	1.99"	1.22"
#3	1.77"	2.83"	1.89"



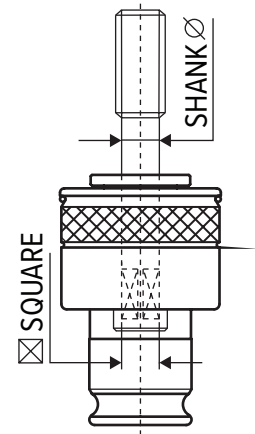
TAP HOLDERS

TAP COLLETS

TORQUE CONTROL TAP COLLETS - ISO 529 STANDARD

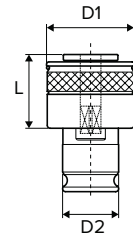
Standard collets are used for standard and coolant-thru tap holders.
Adjustable torque - see preset torque tables on page 226.

Part Number	System	Tap Size	Tap Shank \varnothing	Drive Square \boxtimes
SES1-2.50X2.0	#1	M3.5, M2	2.50mm	2.00mm
SES1-2.80X2.24	#1	M2.2, M2.5	2.80mm	2.24mm
SES1-3.15X2.50	#1	M4, M3	3.15mm	2.50mm
SES1-3.55X2.80	#1	M4.5, M3.5	3.55mm	2.80mm
SES1-4.0X3.15	#1	M5, M4	4.00mm	3.15mm
SES1-4.5X3.55	#1	M6	4.50mm	3.55mm
SES1-5.0X4.0	#1	M5	5.00mm	4.00mm
SES1-5.6X4.5	#1	M5.5, M7	5.60mm	4.50mm
SES1-6.3X5.0	#1	M8, M6	6.30mm	5.00mm
SES1-7.1X5.6	#1	M7	7.10mm	5.60mm
SES1-8.0X6.3	#1	M11, M10, M8	8.00mm	6.30mm
SES1-9.0X7.1	#1	M12, M9	9.00mm	7.10mm
SES1-10.0X8.0	#1	M10	10.0mm	8.00mm
SES1-11.2X9.0	#1	M14	11.2mm	9.00mm
SES2-4.0X3.15	#2	M4, M5	4.00mm	3.15mm
SES2-4.5X3.55	#2	M6	4.50mm	3.55mm
SES2-5.0X4.0	#2	M5	5.00mm	4.00mm
SES2-5.6X4.5	#2	M5.5, M7	5.60mm	4.50mm
SES2-6.3X5.0	#2	M8, M6	6.30mm	5.00mm
SES2-7.1X5.6	#2	M7	7.10mm	5.60mm
SES2-8.0X6.3	#2	M11, M10, M8	8.00mm	6.30mm
SES2-9.0X7.1	#2	M12, M9	9.00mm	7.10mm
SES2-10.0X8.0	#2	M10	10.0mm	8.00mm
SES2-11.2X9.0	#2	M14	11.2mm	9.00mm
SES2-12.5X10.0	#2	M16	12.5mm	10.0mm
SES2-13.0X10.0	#2	M17	13.0mm	10.0mm
SES2-14.0X11.2	#2	M20, M18	14.0mm	11.2mm
SES2-16.0X12.5	#2	M22	16.0mm	12.5mm
SES2-18.0X14.0	#2	M24	18.0mm	14.0mm
SES2-19.0X15.0	#2	M24, M25	19.0mm	15.0mm
SES3-9.0X7.1	#3	M9, M12	9.0mm	7.10mm
SES3-10.0X8.0	#3	M10	10.0mm	8.00mm
SES3-11.2X9.0	#3	M14	11.2mm	9.00mm
SES3-12.5X10.0	#3	M16	12.5mm	10.0mm
SES3-14.0X11.2	#3	M18, M20	14.0mm	11.2mm
SES3-18.0X14.0	#3	M24	18.0mm	14.0mm
SES3-20.0X16.0	#3	M30, M27	20.0mm	16.0mm
SES3-22.4X18.0	#3	M33	22.4mm	18.0mm
SES3-25.0X20.0	#3	M36, M33	25.0mm	20.0mm
SES3-28.0X22.4	#3	M42, M39	28.0mm	22.4mm



DIMENSIONAL DATA

System	L	D1	D2
#1	0.98"	1.28"	0.75"
#2	1.34"	1.99"	1.22"
#3	1.77"	2.83"	1.89"

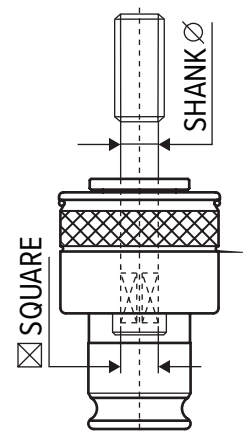


TAP COLLETS

TORQUE CONTROL TAP COLLETS - DIN 371/376 STANDARD

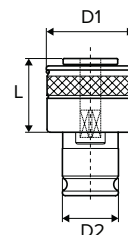
Standard collets are used for standard and coolant-thru tap holders.
Adjustable torque - see preset torque tables on page 226.

Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
SES1-2.5X2.1	#1	M1.4, M1.8, M3	2.50mm	2.10mm
SES1-2.8X2.1	#1	M2, M2.2, M2.5, M4	2.80mm	2.10mm
SES1-3.5X2.7	#1	M3, M5	3.50mm	2.70mm
SES1-4.0X3.0	#1	M3.5	4.00mm	3.00mm
SES1-4.5X3.4	#1	M4, M6	4.50mm	3.40mm
SES1-6.0X4.9	#1	M5, M6, M8	6.00mm	4.90mm
SES1-7.0X5.5	#1	M10	7.00mm	5.50mm
SES1-8.0X6.2	#1	M8, M10	8.00mm	6.20mm
SES1-9.0X7.0	#1	M12	9.00mm	7.00mm
SES1-10.0X8.0	#1	M10	10.0mm	8.00mm
SES1-11.0X9.0	#1	M14	11.0mm	9.00mm
SES2-3.5X2.7	#2	M3, M5	3.50mm	2.70mm
SES2-4.0X3.0	#2	M3.5	4.00mm	3.00mm
SES2-4.5X3.4	#2	M4, M6	4.50mm	3.40mm
SES2-6.0X4.9	#2	M5, M6, M8	6.00mm	4.90mm
SES2-7.0X5.5	#2	M10	7.00mm	5.50mm
SES2-8.0X6.2	#2	M8, M10	8.00mm	6.20mm
SES2-9.0X7.0	#2	M12	9.00mm	7.00mm
SES2-10.0X8.0	#2	M10	10.0mm	8.00mm
SES2-11.0X9.0	#2	M14	11.0mm	9.00mm
SES2-12.0X9.0	#2	M16	12.0mm	9.00mm
SES2-14.0X11.0	#2	M18	14.0mm	11.0mm
SES2-16.0X12.0	#2	M20	16.0mm	12.0mm
SES2-18.0X14.5	#2	M22, M24	18.0mm	14.5mm
SES3-8.0X6.2	#2	M8, M10	8.00mm	6.20mm
SES3-9.0X7.0	#3	M12	9.00mm	7.00mm
SES3-10.0X8.0	#3	M10	10.0mm	8.00mm
SES3-11.0X9.0	#3	M14	11.0mm	9.00mm
SES3-12.0X9.0	#3	M16	12.0mm	9.00mm
SES3-14.0X11.0	#3	M18	14.0mm	11.0mm
SES3-16.0X12.0	#3	M20	16.0mm	12.0mm
SES3-18.0X14.5	#3	M22, M24	18.0mm	14.5mm
SES3-20.0X16.0	#3	M27, M30	20.0mm	16.0mm
SES3-22.0X18.0	#3	M30	22.0mm	18.0mm
SES3-25.0X20.0	#3	M33, M36	25.0mm	20.0mm
SES3-28.0X22.0	#3	M36	28.0mm	22.0mm



DIMENSIONAL DATA

System	L	D1	D2
#1	0.98"	1.28"	0.75"
#2	1.34"	1.99"	1.22"
#3	1.77"	2.83"	1.89"



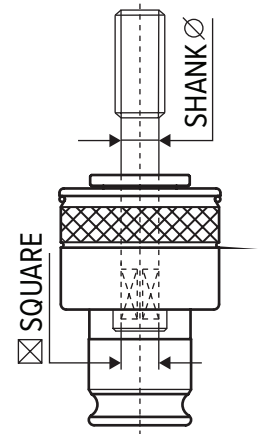
TAP HOLDERS

TAP COLLETS

TORQUE CONTROL TAP COLLETS - JIS STANDARD

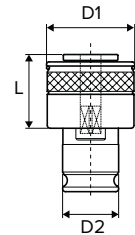
Standard collets are used for standard and coolant-thru tap holders.
Adjustable torque - see preset torque tables on page 226.

Part Number	System	Tap Size	Tap Shank ϕ	Drive Square \boxtimes
SES1-3.0X2.5	#1	M2	3.00mm	2.50mm
SES1-4.0X3.2	#1	M3	4.00mm	3.20mm
SES1-5.0X4.0	#1	M4, M4.5	5.00mm	4.00mm
SES1-5.5X4.5	#1	M5, M5.5	5.50mm	4.50mm
SES1-6.0X4.5	#1	M6	6.00mm	4.50mm
SES1-6.2X5.0	#1	M7, M8	6.20mm	5.00mm
SES1-7.0X5.5	#1	M9, M10	7.00mm	5.50mm
SES1-8.0X6.0	#1	M11	8.00mm	6.00mm
SES1-8.5X6.5	#1	M12	8.50mm	6.50mm
SES1-10.5X8.0	#1	M14, M15	10.5mm	8.00mm
SES2-6.0X4.5	#2	M6	6.00mm	4.50mm
SES2-6.2X5.0	#2	M7, M8	6.20mm	5.00mm
SES2-7.0X5.5	#2	M9, M10	7.00mm	5.50mm
SES2-8.0X6.0	#2	M11	8.00mm	6.00mm
SES2-8.5X6.5	#2	M12	8.50mm	6.50mm
SES2-9.5X7.0	#2	M13	9.50mm	7.00mm
SES2-10.5X8.0	#2	M14, M15	10.5mm	8.00mm
SES2-12.5X10.0	#2	M16	12.5mm	10.0mm
SES3-13.0X10.0	#2	M16	13.0mm	10.0mm
SES2-14.0X11.0	#2	M18	14.0mm	11.0mm
SES2-15.0X12.0	#2	M20	15.0mm	12.0mm
SES2-17.0X13.0	#2	M22	17.0mm	13.0mm
SES3-10.5X8.0	#3	M14, M15	10.5mm	8.00mm
SES3-12.5X10.0	#3	M16	12.5mm	10.0mm
SES3-13.0X10.0	#3	M17	13.0mm	10.0mm
SES3-14.0X11.0	#3	M18	14.0mm	11.0mm
SES3-15.0X12.0	#3	M20	15.0mm	12.0mm
SES3-17.0X13.0	#3	M22	17.0mm	13.0mm
SES3-19.0X15.0	#3	M24, M25	19.0mm	15.0mm
SES3-20.0X15.0	#3	M26, M27	20.0mm	15.0mm
SES3-21.0X17.0	#3	M28	21.0mm	17.0mm
SES3-23.0X17.0	#3	M30	23.0mm	17.0mm
SES3-23.0X17.0	#3	M30	23.0mm	17.0mm
SES3-24.0X19.0	#3	M32	24.0mm	19.0mm
SES3-25.0X19.0	#3	M33	25.0mm	19.0mm
SES3-26.0X21.0	#3	M34, M35	26.0mm	21.0mm
SES3-28.0X21.0	#3	M36, M38	28.0mm	21.0mm



DIMENSIONAL DATA

System	L	D1	D2
#1	0.98"	1.28"	0.75"
#2	1.34"	1.99"	1.22"
#3	1.77"	2.83"	1.89"



TAP HOLDER ACCESSORIES

TAP COLLET REDUCERS

Part Number	Description
CRE-2/1	System #2 Reduction Adapter to System #1
CRE-3/2	System #3 Reduction Adapter to System #2



TAP COLLET RACKS

Part Number	Description
RACK-ER20/1TAP	System #1 Tap Collet Rack, 24 piece capacity
RACK-ER32/2TAP	System #2 Tap Collet Rack, 32 piece capacity



SPANNER WRENCH FOR TAP HOLDERS

Part Number	Description
T05-SPAN	Fits System #1 Torque Control Tap Collets
T10-SPAN	Fits System #2 Torque Control Tap Collets
T15-SPAN	Fits System #3 Torque Control Tap Collets



COOLANT TUBE WRENCH FOR HSK HOLDERS

Part Number	Description
HSK40-WRENCH	Wrench for HSK40 Coolant Tube
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube



COOLANT TUBE FOR HSK HOLDERS

Part Number	Description
HSK40-TUBE	Coolant Tube for HSK40 holder
HSK63-TUBE	Coolant Tube for HSK63 holder
HSK100-TUBE	Coolant Tube for HSK100 holder

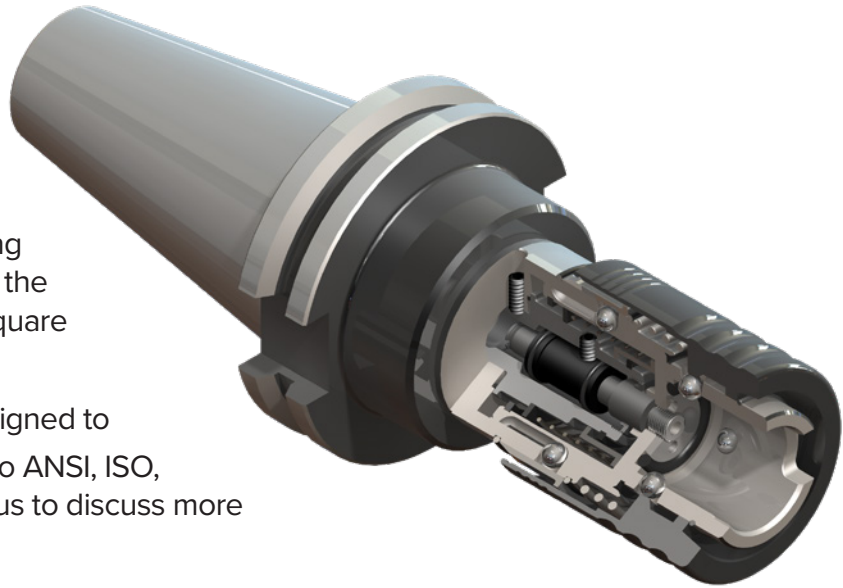




TAPPING - TECHNICAL DETAILS

Tap Shank Standards

- Tap shanks are manufactured to many international standards, each specified by their country of origin. Although most taps sold in North America comply with the ANSI B94.9 standard, we appreciate your assistance to help further qualify the matching tap collet necessary by providing the round shank size and the drive square dimensions.
- Please note not all taps were designed to be held in a tap collet compliant to ANSI, ISO, DIN or JIS standards. Please call us to discuss more alternatives for tapping.



Tap Collet Systems

- All Lyndex-Nikken tap collets are based on the “Bilz” standard quick-change system and will interchange with other manufacturers compliant to the same standard.
- Lyndex-Nikken does not offer tap collets for the Intertap system.
- Please take into consideration the nature of each application before determining which system (system 1,2 or 3) suits your needs. If the same tap collet size is offered within two different systems, we recommend that harder materials should utilize a larger tap collet series to help sustain the required torque capacity and rigidity for the operation.

Rigid Tap Holders

- Rigid Tap Holders should only be used on equipment that have the ability to synchronize spindle rotation and spindle feed, commonly referred to as “Direct Tapping”, “Rigid Tapping” or “Electronic Lead Screw Tapping”.
- Rigid Tap Holders do not have the tension and compression ability as a traditional float mechanism and therefore offer no protection from overloads such as under-sized holes, wornout taps or misplaced cored holes in castings.
- The use of Rigid Tap Holders on non-synchronized machinery will result in poor threads and/or damage to tapping holder or collets.

TAP DIMENSIONAL DATA

TAP HOLDERS

Shank Diameter		Square Diameter		U.S.		JIS	DIN 371	DIN 376	ISO
Inch	Metric	Inch	Metric	Metric	Inch	Metric	Metric	Metric	Metric
0.088	2.2	0.070	1.8				M3		
0.098	2.5	0.078	2.0				M3.5, M2		
0.098	2.5	0.083	2.1						M1 - M1.8
0.109	2.8	0.088	2.2				M2.5, M2.2		
0.110	2.8	0.083	2.1						M2 - M2.5
0.123	3.2	0.098	2.5				M4, M3		
0.138	3.5	0.106	2.7						M3
0.139	3.6	0.109	2.8				M4.5, M3.5		
0.141	3.6	0.110	2.8	M1.6 - M3.5	#0 - #6				
0.156	4.0	0.123	3.2				M5, M4		
0.157	4.0	0.118	3.0						M3.5
0.168	4.3	0.131	3.3	M4	#8				
0.176	4.5	0.139	3.6				M6		
0.177	4.5	0.134	3.4						M4
0.194	4.9	0.152	3.9	M5	#10				
0.196	5.0	0.156	4.0				M5		
0.197	5.0	0.157	4.0			M4			
0.217	5.5	0.177	4.5			M5			
0.219	5.6	0.176	4.5				M5		
0.220	5.6	0.165	4.2	M6	#12				
0.225	5.7	0.191	4.9		1/4"				
0.236	6.0	0.193	4.9					M8	
0.236	6.0	0.177	4.5			M6			
0.236	6.0	0.193	4.9						M5, M6
0.244	6.2	0.197	5.0			M7, M8			
0.246	6.3	0.196	5.0				M8, M6		
0.276	7.0	0.217	5.5			M9, M10		M10	
0.278	7.1	0.219	5.6				M7		
0.313	8.0	0.246	6.3				M11, M10, M8		
0.315	8.0	0.236	6.0			M11			
0.315	8.0	0.244	6.2						M8
0.318	8.1	0.238	6.0	M7, M8	5/16"				
0.323	8.2	0.242	6.1		7/16"				
0.335	8.5	0.256	6.5			M12			
0.352	9.0	0.278	7.1				M12, M9		
0.354	9.0	0.276	7.0					M12	
0.367	9.3	0.275	7.0	M12	1/2"				
0.381	9.7	0.286	7.3	M10	3/8"				
0.391	10.0	0.313	8.0				M10		
0.394	10.0	0.315	8.0						M10
0.413	10.5	0.315	8.0			M14, M15			
0.429	10.9	0.322	8.2	M14	9/16"				
0.433	11.0	0.354	9.0					M14	
0.438	11.2	0.352	9.0				M14		
0.451	11.5	0.406	10.3	M18	11/16"				
0.472	12.0	0.354	9.0					M16	
0.480	12.2	0.360	9.1	M16	5/8"				
0.489	12.5	0.391	10.0				M16		
0.492	12.5	0.394	10.0			M16			

TAP HOLDERS



TAP HOLDERS

TAP DIMENSIONAL DATA

Shank Diameter		Square Diameter		U.S.		JIS	DIN 371	DIN 376	ISO
Inch	Metric	Inch	Metric	Metric	Inch	Metric	Metric	Metric	Metric
0.512	13.0	0.394	10.0			M17			
0.547	14.0	0.438	11.2				M20, M18		
0.551	14.0	0.433	11.0			M18		M18	
0.590	15.0	0.442	11.2		3/4"				
0.591	15.0	0.472	12.0			M20			
0.626	16.0	0.489	12.5				M22		
0.630	16.0	0.472	12.0					M20	
0.652	16.6	0.489	12.4	M20	13/16"				
0.669	17.0	0.512	13.0			M22			
0.697	17.7	0.523	13.3	M22	7/8"				
0.704	18.0	0.547	14.0				M24		
0.709	18.0	0.571	14.5					M22, M24	
0.748	19.0	0.591	15.0			M25			
0.760	19.3	0.570	14.5	M24	15/16"				
0.782	20.0	0.626	16.0				M30, M27		
0.787	20.0	0.630	16.0					M27	
0.787	20.0	0.591	15.0			M26, M27			
0.800	20.3	0.600	15.2	M25	1"				
0.827	21.0	0.669	17.0			M28			
0.866	22.0	0.709	18.0					M30	
0.876	22.4	0.704	18.0				M33		
0.896	22.8	0.672	17.1	M27	1-1/16"				
0.906	23.0	0.669	17.0			M30			
0.945	24.0	0.748	19.0			M32			
0.978	25.0	0.782	20.0				M36, M33		
0.984	25.0	0.787	20.0					M33	
0.984	25.0	0.748	19.0			M33			
1.021	25.9	0.766	19.5	M30	1-3/16"				
1.024	26.0	0.827	21.0			M34, M35			
1.095	28.0	0.876	22.4				M42, M39		
1.102	28.0	0.866	22.0					M36	
1.102	28.0	0.827	21.0			M36, M38			
1.108	28.1	0.831	21.1	M33	1-5/16"				
1.181	30.0	0.906	23.0			M39, M40			
1.260	32.0	0.945	24.0					M39, M42	
1.260	32.0	1.024	26.0			M42			
1.417	36.0	1.142	29.0					M45, M48	
1.575	40.0	1.260	32.0					M52	

TORQUE CONTROL TAP COLLET TORQUE SPECIFICATIONS

PRESET TORQUE FOR TAP COLLETS - ANSI

Tap Size	Torque Setting (ft./lbs.)
#0-1	0.14
#2	0.22
#3	0.29
#4	0.36
#5	0.58
#6	0.72
#8	1
#10	2
#12	3

Tap Size	Torque Setting (ft./lbs.)
1/4"	4
5/16"	7
3/8"	12
7/16"	16
1/2"	24
9/16"	29
5/8"	36
11/16"	44
3/4"	51

Tap Size	Torque Setting (ft./lbs.)
13/16"	57
7/8"	72
15/16"	77
1"	101
1-1/8"	145

PRESET TORQUE FOR TAP COLLETS - ISO

Tap Shank x Square	Tap Size	Torque Setting (N.m)	
2.24 x 1.8	M 3	0.5	○
2.5 x 2	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	M 5	2	○
	M 7	6	○
5.6 x 4.5	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	■
	M 12	22	○
10 x 8	M 10	16	○
	M 14	36	○
11.2 x 9	M 16	40	○
	M 20	70	■
14 x 11.2	M 18	63	○
	M 22	80	○
16 x 12.5	M 24	125	○
	M 30	220	○
22.4 x 18	M 33	240	○
	M 36	280	■
25 x 20	M 36	280	■
	M 39	320	○
28 x 22.4	M 39	320	○
	M 42	420	■

PRESET TORQUE FOR TAP COLLETS - DIN

Tap Shank x Square	Tap Size	Torque Setting (N.m)	
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	M 3.5	0.8	○
	M 4	1.2	○
4.5 x 3.4	M 6	4	■
	M 5	2	■
6 x 4.9	M 6	4	■
	M 8	8	○
7 x 5.5	M 10	16	○
	M 8	8	○
8 x 6.2	M 8	8	○
	M 11	18	■
9 x 7	M 12	22	○
	M 10	16	○
10 x 8	M 14	36	○
	M 16	40	○
11 x 9	M 16	40	■
	M 18	63	○
12 x 9	M 16	40	○
	M 18	63	○
14 x 11	M 16	40	■
	M 18	63	○
16 x 12	M 20	70	○
	M 22	80	■
18 x 14.5	M 24	125	○
	M 27	140	○
20 x 16	M 27	140	○
	M 30	220	○
22 x 18	M 30	220	○
	M 33	240	○
25 x 20	M 33	240	○
	M 36	280	■
28 x 22	M 36	280	○

Note:

- - Standard setting
- - Setting on request

PRESET TORQUE FOR TAP COLLETS - JIS

Tap Shank x Square	Tap Size	Torque Setting (N.m)
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	12
7 x 5.5	M 10	22
8 x 6	M 11	25
8.5 x 6.5	M 12	31
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
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



TG/DA COLLET CHUCKS



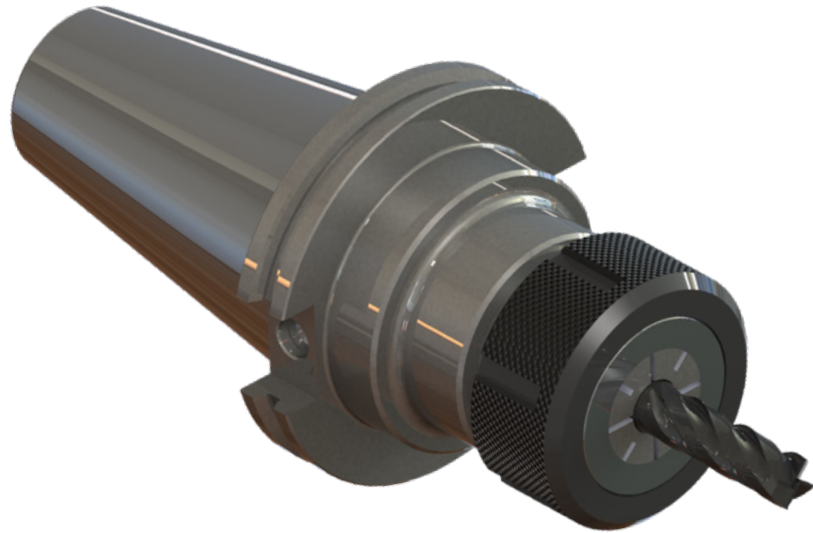
TG/DA COLLET CHUCKS

TG/DA COLLET CHUCKS



TG COLLET CHUCK FEATURES

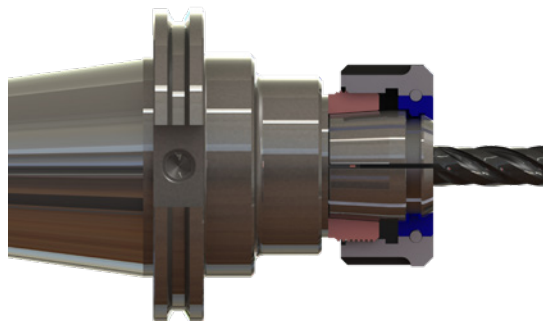
- Made from low-alloy steel SAE8620/20MnCr5
- Heat treated to 56-60 HRc
- Lyndex-Nikken TG holders provide great rigidity
- Tapers are ground to AT3 standards or better



- All Lyndex-Nikken TG Collet Chucks come standard with bearing nuts
- Bearing Nuts reduce collet twisting, maintaining repeatability of accuracy
- Improves T.I.R. to wear cutting tools evenly



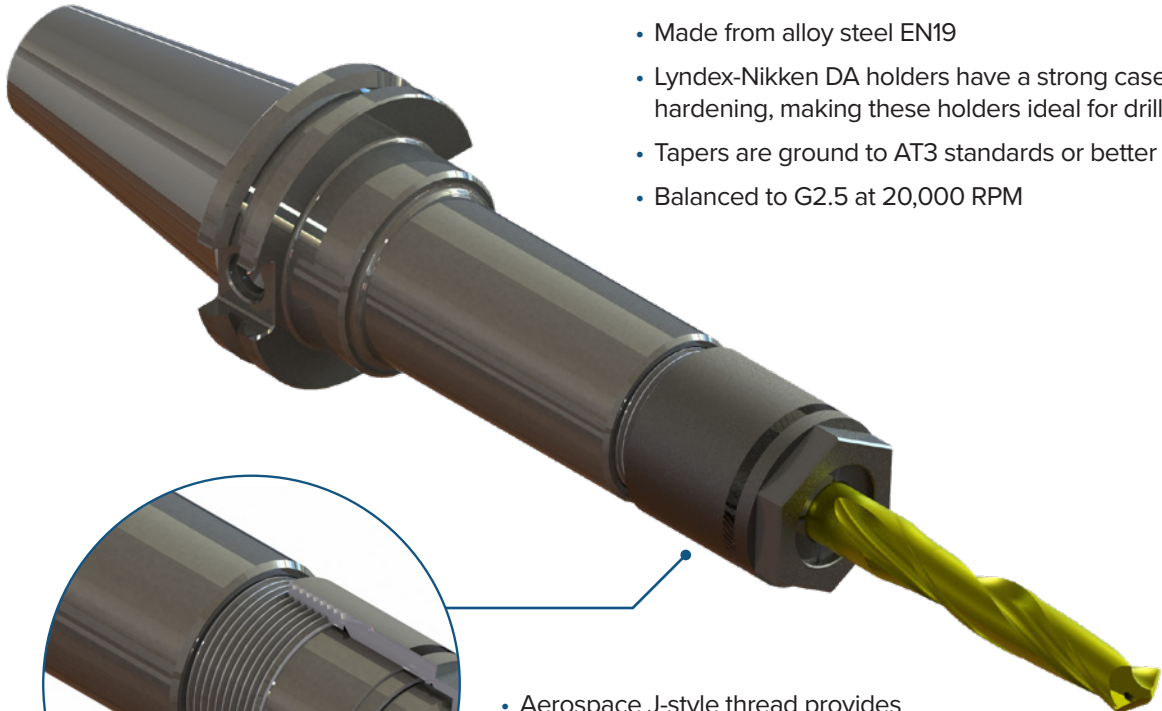
- Made from Spring Steel, heat treated and CNC slotted to maintain precision ID bore cylindricity
- Available in standard and high pressure coolant-thru capable style collets. Coolant collets are steel sealed and mechanically sealed by design.



- 8 degree included collet angle allows high precision and greater clamping torque than 16 degree ER collet chucks

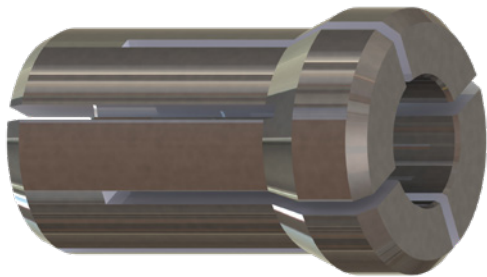


DA COLLET CHUCK FEATURES

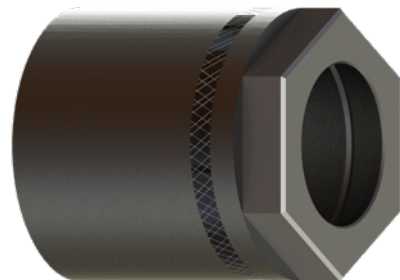


- Made from alloy steel EN19
- Lyndex-Nikken DA holders have a strong case hardening, making these holders ideal for drilling
- Tapers are ground to AT3 standards or better
- Balanced to G2.5 at 20,000 RPM

- Aerospace J-style thread provides smooth torque transmission between the nut and the holder, giving Lyndex-Nikken DA Collet Chucks high clamping torque.



- Made from Spring Steel
- Heat treated and stress relieved for optimal hardness and flexibility
- Precision ground and slotted



- Made from Spring Steel
- Ground mating surface to collet assures maximum clamping torque to the cutting tool

CAT TG COLLET CHUCKS

FEATURES

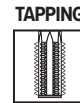
- Perpendicular contact between retention knob and holder
- AT3 or better taper



T.I.R.
<.0002" at collet face



Speed
Up to 20,000 rpm

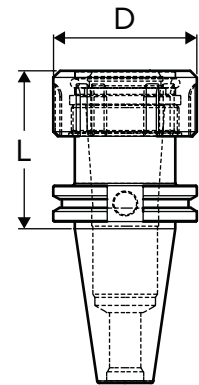


Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

CAT40

Part Number	Style	Collet Series	Collet Range	Nut Wrench	L	L2	Max. RPM
C4007-0750-3.00	Stubby	75TG	3/64-3/4"	75TG-SPAN	3.00"	1.89"	20K
C4007-1000-2.75	Stubby	100TG	3/64-1"	100TG-SPAN	2.76"	2.50"	20K
C4007-1000-3.50	Standard	100TG	3/64-1"	100TG-SPAN	3.50"	2.50"	20K
C4007-1000-5.50	Standard	100TG	3/64-1"	100TG-SPAN	5.51"	2.50"	20K

TG Collet Chucks come with back-up screw.

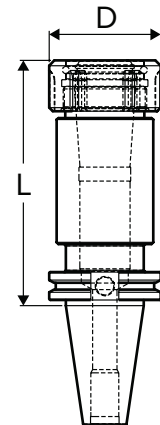


Stubby

CAT50

Part Number	Style	Collet Series	Collet Range	Nut Wrench	L	D	Max. RPM
C5007-1000-3.50	Standard	100TG	3/64-1"	100TG-SPAN	3.50"	2.50"	20K
C5007-1000-5.50	Standard	100TG	3/64-1"	100TG-SPAN	5.50"	2.50"	20K
C5007-1000-7.50	Standard	100TG	3/64-1"	100TG-SPAN	7.50"	2.50"	20K
C5007-1000-10.00	Standard	100TG	3/64-1"	100TG-SPAN	10.00"	2.50"	20K

TG Collet Chucks come with back-up screw.



Standard

Toolholder Assembly Procedure

To use: first insert the collet into the chuck nut by squeezing the collet and pressing its face into the chuck nut's retaining ring until the collet's collar is fully seated. Then load the assembly into the chuck, insert a cutting tool, and tighten with the appropriate nut wrench to the recommended tightening torque.

To remove: simply squeeze the collet while pulling it from the chuck nut at an angle.

When removing the back-up screw, TG Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See TG Coolant Collets on pages 233-235.



TG/DA COLLET CHUCKS



BT TG COLLET CHUCKS

FEATURES

- Perpendicular contact between retention knob and holder
- AT3 or better taper



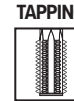
T.I.R.
<.0002" at collet face



Speed
Up to 20,000 rpm



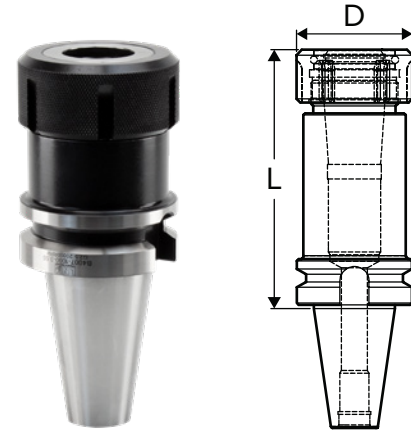
Coolant-Thru
Thru-tool coolant



Please note that the maximum RPM listed in our catalog may vary depending on the toolholder shank, weight, balanceability and the G rating.

BT30/40/50

Part Number	Style	Collet Series	Collet Range	Nut Wrench	L	D	Max. RPM
B3007-0750-2.50	BT30	75TG	3/64-3/4"	75TG-SPAN	2.50"	1.89"	20K
B3007-1000-3.94	BT30	100TG	3/64-1"	100TG-SPAN	3.94"	2.50"	20K
B4007-0750-3.00	BT40	75TG	3/64-3/4"	75TG-SPAN	3.00"	1.89"	20K
B4007-1000-3.50	BT40	100TG	3/64-1"	100TG-SPAN	3.50"	2.50"	20K
B5007-1000-3.50	BT50	100TG	3/64-1"	100TG-SPAN	3.50"	2.50"	20K
B4017-1000-5.50	BT50	100TG	3/64-1"	100TG-SPAN	5.50"	2.50"	20K



TG Collet Chucks come with back-up screw.

TG/DA COLLET CHUCKS

Toolholder Assembly Procedure

To use: first insert the collet into the chuck nut by squeezing the collet and pressing its face into the chuck nut's retaining ring until the collet's collar is fully seated. Then load the assembly into the chuck, insert a cutting tool, and tighten with the appropriate nut wrench to the recommended tightening torque.

To remove: simply squeeze the collet while pulling it from the chuck nut at an angle.

When removing the back-up screw, TG Collet Chucks have coolant-thru capabilities. No disc, special nut or wrench required!

See TG Coolant Collets on pages 233-235



TG Collets
Pages 233-235



TG Torque Wrench
Page 236



TG Back Up Screw
Page 236



TG Nut
Page 236

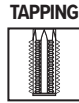
STRAIGHT SHANK TG COLLET CHUCKS



T.I.R.
 <.0002" at collet face



Coolant-Thru
 Thru-tool coolant



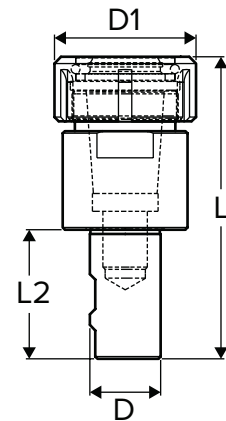
Features of Straight Shank Tooling

- Straight shank tooling may be used to extend tooling reach for extended length operations
- This option is less costly than extended length integral shank tooling
- Can be used on machining centers or lathes
- When loaded into larger holders, their reduced O.D. permits drilling operations within large holes or whenever tight clearances are encountered

STRAIGHT SHANK

Part Number	Collet Series	Collet Range	Nut Wrench	D	L	L2	D1
S1507-1000-9.00	100TG	3/64-1"	100TG-SPAN	2.50"	9.00"	6.00"	2.50"

TG Collet Chucks come with back-up screw.



Toolholder Assembly Procedure

To use: first insert the collet into the chuck nut by squeezing the collet and pressing its face into the chuck nut's retaining ring until the collet's collar is fully seated. Then load the assembly into the chuck, insert a cutting tool, and tighten with the appropriate nut wrench to the recommended tightening torque.

To remove: simply squeeze the collet while pulling it from the chuck nut at an angle.

TG/DA COLLET CHUCKS



TG/DA COLLET CHUCKS

75TG COLLETS

TG standard collets collapse approximately 1/64"

INCH

Size Range: 3/64" - 3/4"

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

INCH - COOLANT-THRU

Size Range: 1/8" - 3/4"

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



75TG COLLETS SETS

075-SET-12	12 Piece 75TG Collet Set: 1/16" - 3/4" by 1/16ths
075-SET-17	17 Piece 75TG Collet Set: 1/8" - 3/8" by 1/64ths
075-SET-23	23 Piece 75TG Collet Set: 1/16" - 3/4" by 1/32nds
075-SET-27	27 Piece 75TG Collet Set: 3/32" - 1/2" by 1/64ths
075-SET-45	45 Piece 75TG Collet Set: 1/16" - 3/4" by 1/64ths

Notes:

- Our coolant collets seal up to a maximum coolant pressure of 1000 psi.
- Range collapsibility is 0.004 - 0.006" for coolant collet.
- See dimensional data for TG Collets on page 235.

Our 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 will result. Coolant collets are steel sealed and mechanically sealed by design.

Notes: Cutter must be inserted the full length of the collet.

100TG COLLETS

TG standard collets collapse approximately 1/64"

INCH

Size Range: 3/64" - 1"

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

INCH - COOLANT-THRU

Size Range: 1/4" - 1"

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



100TG COOLANT COLLETS SETS

100-SET-11(C)	11 Piece 100TG Coolant Collet Set: 3/8" - 1" by 1/16ths
100-SET-21(C)	21 Piece 100TG Coolant Collet Set: 3/8" - 1" by 1/32nds
100-SET-41(C)	41 Piece 100TG Coolant Collet Set: 3/8" - 1" by 1/64ths

• Notes: Cutter must be inserted the full length of collet.

100TG COLLET SETS

100-SET-08	8 Piece 100TG Collet Set: 1/8" - 1" by 1/8ths
100-SET-11	11 Piece 100TG Collet Set: 3/8" - 1" by 1/16ths
100-SET-13-MM	13 Piece 100TG Collet Set: 4mm - 26mm
100-SET-15	15 Piece 100TG Collet Set: 1/8" - 1" by 1/16ths
100-SET-21	21 Piece 100TG Collet Set: 3/8" - 1" by 1/32nds
100-SET-23	23 Piece 100TG Collet Set: 1/16" - 3/4" by 1/32nds
100-SET-30	30 Piece 100TG Collet Set: 3/32" - 1" by 1/32nds
100-SET-41	41 Piece 100TG Collet Set: 3/8" - 1" by 1/64ths
100-SET-45	45 Piece 100TG Collet Set: 1/16" - 3/4" by 1/64ths
100-SET-59	59 Piece 100TG Collet Set: 3/32" - 1" by 1/64ths

Notes:

- Our TG coolant collets seal up to maximum coolant pressure of 1000 psi.
- Range collapsibility is 0.004 - 0.006" for coolant collet.
- See dimensional data for TG Collets on page 235.

Our 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 will result. Coolant collets are steel sealed and mechanically sealed by design.

Note: Cutter must be inserted the full length of the collet.

TG/DA COLLET CHUCKS



TG/DA COLLET CHUCKS

100TG COLLETS

TG standard collets collapse approximately 1/64"

METRIC

Size Range: 3mm - 26mm

Part Number	Size
100-203	3mm
100-204	4mm
100-205	5mm
100-206	6mm
100-207	7mm
100-208	8mm
100-210	10mm
100-211	11mm
100-212	12mm
100-213	13mm
100-214	14mm
100-216	16mm
100-218	18mm
100-219	19mm
100-220	20mm
100-222	22mm
100-224	24mm
100-225	25mm
100-226	26mm

METRIC - COOLANT-THRU

Size Range: 6mm - 26mm

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



Notes:

- Cutter must be inserted the full length of the collet.
- Our coolant collets seal up to a maximum coolant pressure of 1000 psi.
- Range collapsibility is 0.004 - 0.006" for coolant collet.
- See dimensional data for TG Collets on page 235.

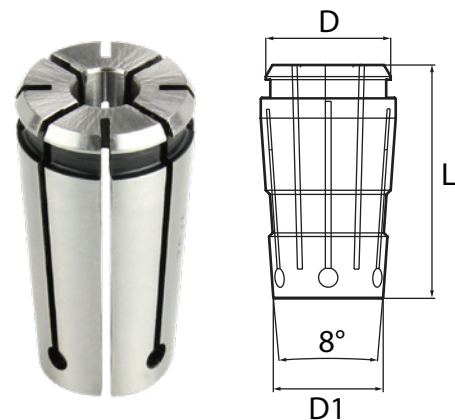
Our coolant collets are designed for use with cylindrical shank tools (no flats). Cutting tool should be inserted the full length of the collet. If these conditions are not met, coolant leakage will result. Coolant collets are steel sealed and mechanically sealed by design.

DIMENSIONAL DATA

Style	D	D1	L	Collet Range	Nut Tightening Torque
75TG	1.063"	0.871"	1.844"	3/64-3/4"	55 ft.lbs
100TG	1.278"	1.121"	2.386"	3/64-1"	75 ft.lbs

Notes:

- Tolerance: Guaranteed to be within 0.0002" at the collet nose.
- Accuracy: Less than 0.0005" at 4 x D.



TG ACCESSORIES

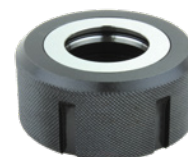
100TG COLLET RACK

Part Number	Description
RACK-5C/100TG/SK25	100TG Collet Rack, 30 piece capacity



REPLACEMENT NUT FOR TG COLLET CHUCK

Part Number	Description
75TG-NUT	75TG Nut
100TG-NUT	100TG Nut



SPANNER WRENCH FOR TG COLLET CHUCK

Part Number	Description
100TG-SPAN	Fits 100TG Collet Chuck Nut



TORQUE WRENCH AND ATTACHMENTS FOR TG COLLET CHUCK

Part Number	Description
TQW-200	Torque Wrench "Handle"
TQW-ER32/SK20/TG75(50)	TG75 Attachment for TQW-200 Torque Wrench
TQW-TG100(65)	100TG Attachment for TQW-200 Torque Wrench



TG/DA COLLET CHUCKS



CAT, BT & NMTB DA COLLET CHUCKS



T.I.R.
Minimal



Speed
Up to 20,000 rpm

REAMING

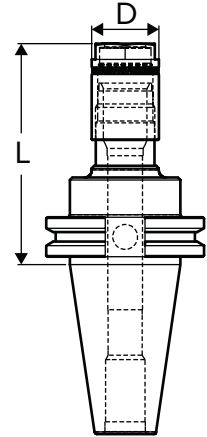


DRILLING



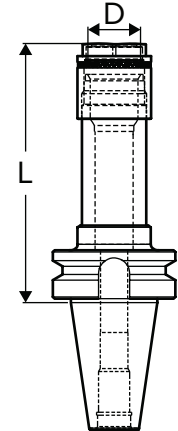
CAT40/50

Part Number	Taper	Collet Series	Collet Range	L	D	Max. RPM
C4007-0100-3.50	CAT40	100DA	3/64 - 9/16"	3.50"	1.06"	20K
C4007-0180-4.00	CAT40	180DA	3/64 - 3/4"	4.00"	1.44"	20K
C4007-0200-3.00	CAT40	200DA	3/64 - 3/8"	3.00"	0.86"	20K
C4007-0300-3.00	CAT40	300DA	3/64 - 1/4"	3.00"	0.55"	20K
C4017-0100-6.00	CAT40	100DA	3/64 - 9/16"	6.00"	1.06"	20K
C4017-0180-6.00	CAT40	180DA	3/64 - 3/4"	6.00"	1.44"	20K
C5017-0180-6.00	CAT50	180DA	3/64 - 3/4"	6.00"	1.44"	20K



BT30/40

Part Number	Taper	Collet Series	Collet Range	L	D	Max. RPM
B3007-0100-3.00	BT30	100DA	3/64 - 9/16"	3.00"	1.06"	20K
B3007-0180-3.00	BT30	180DA	3/64 - 3/4"	3.00"	1.44"	20K
B3007-0200-3.00	BT30	200DA	3/64 - 3/8"	3.00"	0.86"	20K
B3007-0300-3.00	BT30	300DA	3/64 - 1/4"	3.00"	0.55"	20K
B4007-0100-3.50	BT40	100DA	3/64 - 9/16"	3.50"	1.06"	20K
B4007-0180-4.00	BT40	180DA	3/64 - 3/4"	4.00"	1.44"	20K
B4007-0200-3.00	BT40	200DA	3/64 - 3/8"	3.00"	0.86"	20K
B4007-0300-3.00	BT40	300DA	3/64 - 1/4"	3.00"	0.55"	20K
B4017-0100-6.00	BT40	100DA	3/64 - 9/16"	6.00"	1.06"	20K
B4017-0180-6.00	BT40	180DA	3/64 - 3/4"	6.00"	1.44"	20K

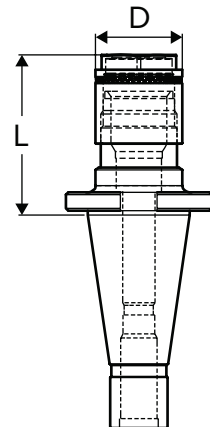


Note: For light or medium milling, we recommend using ER or TG Collet Chucks. DA Collet Chucks are not designed for milling and can crack at the nose when overtightened or radial load is applied. Product warranty does not apply against cracking of collet, toolholder, or collet nut.

NMTB30

Part Number	Taper	Collet Series	Collet Range	L	D	Max. RPM
N3007-0100-2.75	NMTB30	100DA	3/64-9/16"	2.75"	1.06"	20K
N3007-0200-2.50	NMTB30	200DA	3/64-3/8"	2.50"	0.86"	20K

NMTB shanks are suitable for use with Erickson Quick Change spindles.



TG/DA COLLET CHUCKS



DA Collets
Pages 239-40

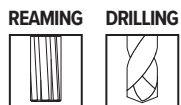


DA Back Up Screw
Page 241



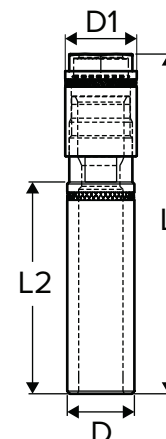
DA Nut
Page 241

DA COLLET CHUCK EXTENSION



DA COLLET CHUCK EXTENSIONS

Part Number	Collet Series	Collet Range	L	L1	L2	D	D1
010-EXT-100S	100DA	1/64-9/16"	4.92"	1.66"	3.00"	1"	1.06"
010-EXT-100	100DA	1/64-9/16"	7.48"	1.66"	5.50"	1"	1.06"
018-EXT-125S	180DA	3/64-3/4"	4.92"	1.83"	3.00"	1-1/4"	1.44"
018-EXT-125	180DA	3/64-3/4"	7.48"	1.83"	5.50"	1-1/4"	1.44"
020-EXT-750S	200DA	3/64-3/8"	4.72"	1.34"	3.00"	3/4"	0.86"
020-EXT-750	200DA	3/64-3/8"	7.09"	1.34"	5.50"	3/4"	0.86"
030-EXT-500S	300DA	3/64-1/4"	4.50"	1.18"	3.00"	1/2"	0.55"
030-EXT-500	300DA	3/64-1/4"	6.92"	1.18"	5.50"	1/2"	0.55"



Note: For light or medium milling, we recommend using ER or TG Collet Chucks. DA Collet Chucks are not designed for milling and can crack at the nose when overtightened or radial load is applied. Product warranty does not apply against cracking of collet, toolholder, or collet nut.



TG/DA COLLET CHUCKS

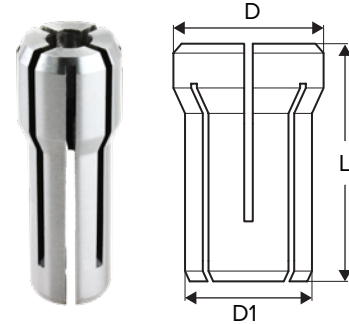


300DA & 200DA COLLETS

DA Collets collapse approximately 1/32"

DA COLLET DIMENSIONAL DATA

Style	D	D1	L	Collet Range	Nut Tightening Torque
300DA	0.375"	0.300"	1.000"	3/64-1/4"	18 ft.lbs
200DA	0.539"	0.453"	1.193"	3/64-3/8"	25 ft.lbs
100DA	0.769"	0.653"	1.441"	3/64-9/16"	35 ft.lbs
180DA	1.035"	0.873"	1.637"	3/64-3/4"	40 ft.lbs



300DA COLLETS

Size Range: 3/64" - 1/4"

Part Number	Size
030-003	3/64"
030-004	1/16"
030-005	5/64"
030-006	3/32"
030-007	7/64"
030-008	1/8"
030-009	9/64"
030-010	5/32"
030-011	11/64"
030-012	3/16"
030-013	13/64"
030-014	7/32"
030-015	15/64"
030-016	1/4"

200DA COLLETS

Size Range: 3/64" - 3/8"

Part Number	Size
020-003	3/64"
020-004	1/16"
020-005	5/64"
020-006	3/32"
020-007	7/64"
020-008	1/8"
020-009	9/64"
020-010	5/32"
020-011	11/64"
020-012	3/16"
020-013	13/64"
020-014	7/32"
020-015	15/64"
020-016	1/4"
020-017	17/64"
020-018	9/32"
020-019	19/64"
020-020	5/16"
020-021	21/64"
020-022	11/32"
020-023	23/64"
020-024	3/8"



TG/DA COLLET CHUCKS

300DA COLLETS SETS

Part Number	Size
030-SET-07	7 Piece 300DA Collet Set: 1/16 - 1/4" by 1/32nds
030-SET-09	9 Piece 300DA Collet Set: 1/8 - 1/4" by 1/64ths
030-SET-13	13 Piece 300DA Collet Set: 1/16 - 1/4" by 1/64ths
030-SET-14	14 Piece 300DA Collet Set: 3/64 - 1/4" by 1/64ths

200DA COLLETS SETS

Part Number	Size
020-SET-09	9 Piece 200DA Collet Set: 1/8 - 3/8" by 1/32nds
020-SET-11	11 Piece 200DA Collet Set: 1/16 - 3/8" by 1/32nds
020-SET-17	17 Piece 200DA Collet Set: 1/8 - 3/8" by 1/64ths
020-SET-21	21 Piece 200DA Collet Set: 1/16 - 3/8" by 1/64ths

100DA & 180DA COLLETS

DA collets collapse approximately 1/32"

100DA COLLETS

Size Range: 3/64" - 9/16"

Part Number	Size
010-003	3/64"
010-004	1/16"
010-005	5/64"
010-006	3/32"
010-007	7/64"
010-008	1/8"
010-009	9/64"
010-010	5/32"
010-011	11/64"
010-012	3/16"
010-013	13/64"
010-014	7/32"
010-015	15/64"
010-016	1/4"
010-017	17/64"
010-018	9/32"
010-019	19/64"
010-020	5/16"
010-021	21/64"
010-022	11/32"
010-023	23/64"
010-024	3/8"
010-025	25/64"
010-026	13/32"
010-027	27/64"
010-028	7/16"
010-029	29/64"
010-030	15/32"
010-031	31/64"
010-032	1/2"
010-033	33/64"
010-034	17/32"
010-035	35/64"
010-036	9/16"

Note: See dimensional data for DA collets on page 239.

180DA COLLETS

Size Range: 3/64" - 3/4"

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



100DA Collet

100DA COLLET SETS

010-SET-08	8 Piece 100DA Collet Set: 1/8 - 9/16" by 1/16ths
010-SET-11	11 Piece 100DA Collet Set: 1/4 - 9/16" by 1/32nds
010-SET-15	15 Piece 100DA Collet Set: 1/8 - 9/16" by 1/32nds
010-SET-17	17 Piece 100DA Collet Set: 1/16 - 9/16" by 1/32nds
010-SET-21	21 Piece 100DA Collet Sets: 1/4 - 9/16" by 1/64ths
010-SET-29	29 Piece 100DA Collet Set: 1/8 - 9/16" by 1/64ths
010-SET-33	33 Piece 100DA Collet Set: 1/16 - 9/16" by 1/64ths



180DA Collet

180DA COLLET SETS

018-SET-09	9 Piece 180DA Collet Set: 1/4 - 3/4" by 1/16ths
018-SET-17	17 Piece 180DA Collet Set: 1/4 - 3/4" by 1/32nds
018-SET-21	21 Piece 180DA Collet Set: 1/8 - 3/4" by 1/32nds
018-SET-33	33 Piece 180DA Collet Set: 1/4 - 3/4" by 1/64ths
018-SET-41	41 Piece 180DA Collet Set: 1/8 - 3/4" by 1/64ths



DA ACCESSORIES

REPLACEMENT NUT FOR DA COLLET CHUCK

Part Number	Description
100DA-NUT	100DA Nut
180DA-NUT	180DA Nut
200DA-NUT	200DA Nut
300DA-NUT	300DA Nut



REPLACEMENT BACK-UP SCREWS FOR DA COLLET CHUCK

Part Number	Description
100DA-3	Back-up screw for all CT, BT, NMTB 100DA Chucks
100DA-4	Back-up screw for 100DA Collet Chuck Extensions
180DA-3	Back-up screw for all CT, BT, 180DA Chucks
180DA-4	Back-up screw for 180DA Collet Chuck Extensions
200DA-3	Back-up screw for all CT, BT, NMTB 200DA Collet Chucks
200DA-4	Back-up screw for 200DA Collet Chuck Extensions
300DA-3	Back-up screw for all CT, BT, 300DA Collet Chucks
300DA-4	Back-up screw for 300DA Collet Chuck Extensions



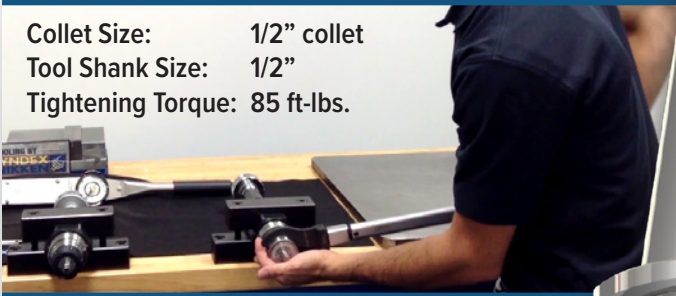
TORQUE TEST DEMOS

SEE THE DIFFERENCE IN TORQUE IN UNDER 10 MINUTES!

LYNDEX-NIKKEN

CAT40 ER32 High Torque Collet Chuck

Collet Size: 1/2" collet
Tool Shank Size: 1/2"
Tightening Torque: 85 ft-lbs.



Cutting tool GRIPS at 75 ft-lbs.

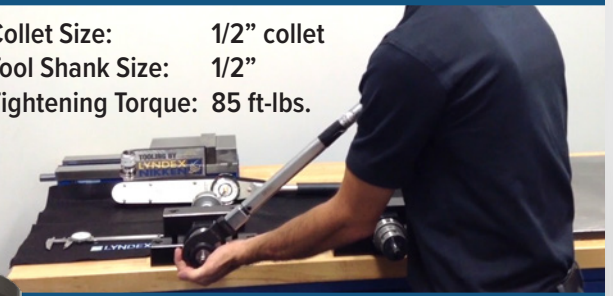


214% higher gripping force
than other brands!

OTHER BRANDS

CAT40 ER32 Collet Chuck

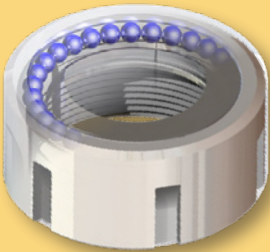
Collet Size: 1/2" collet
Tool Shank Size: 1/2"
Tightening Torque: 85 ft-lbs.



Cutting tool SLIPS at 35 ft-lbs.



View our ER Torque test by viewing on our YouTube channel. Not convinced? Contact us for a live demo!



BENEFITS OF HIGHER GRIPPING FORCE

- Precision ground bearing nut for additional gripping force* (*nut included as standard)
- Machine with higher chip load and reduce cycle time
- Reduction in end mill pulling reduces scrapping parts
- Eliminate over tightening that can lead to collet damage and excessive run-out
- Better overall cutting condition

To schedule a demo, contact your Lyndex-Nikken Regional Sales Manager OR send an e-mail to: solutionselling@lyndexnikken.com



847-367-4800 | sales@lyndexnikken.com
lyndexnikken.com

Connect With Us!



ANGLE HEADS/SPINDLE SPEEDER

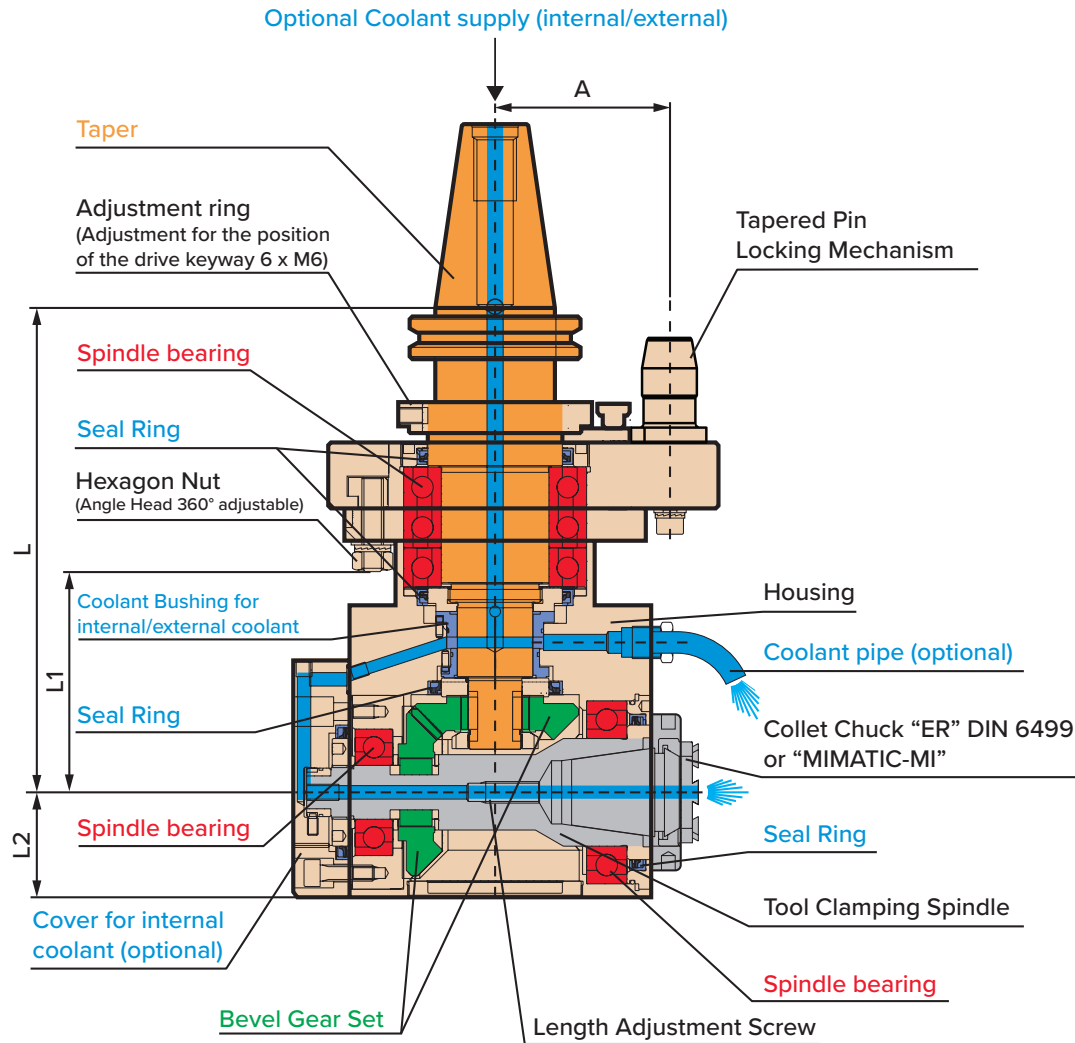


ANGLE HEADS/SPINDLE SPEEDER

**ANGLE HEADS/
SPINDLE SPEEDER**



TECHNICAL FEATURES



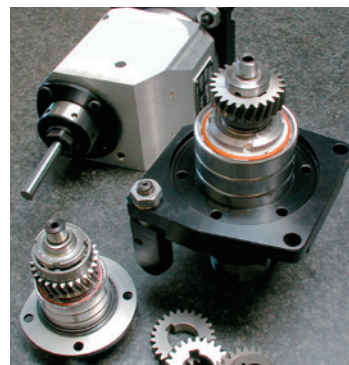
Our Angle Heads are equipped with hardened and ground gears and collet shafts. Units are also fitted with high-precision angular contact bearings, assuring extreme rigidity and accuracy. Compact designs maintain accurate spindle and tool centerline alignment while minimizing tool overhang - accuracy is maintained throughout the machining process from plane to plane.

Recessed Collet Seat



With our collet seat recessed into the body of the Angle Head, rigidity is optimized while maintaining a compact design.

High Precision Assembly



Our Angle Heads are assembled with high precision, P4 quality spindle bearings that are stabilized for high speeds up to 15,000 RPM and high torques up to 110 ft-lbs. The spiral beveled gears allow for high rigidity and smooth machining operations.

ANGLE HEADS/SPINDLE SPEEDER

TYPES OF FIXED ANGLE HEADS & SPINDLE SPEEDER



Standard Right Angle Heads



Offset Type Right Angle Heads



Economy 40 Taper Right Angle Heads



Slim Type Right Angle Heads



Twin Spindle Angle Heads



Universal Flexheads Internal Coolant



Quick Change Right Angle Heads
(Attachments sold separately)



Nikken Spindle Speeder
(Up to 20,000 RPM)



Check out the product catalog section on our website for more information and additional specifications on our Angle Heads and Spindle Speeder.



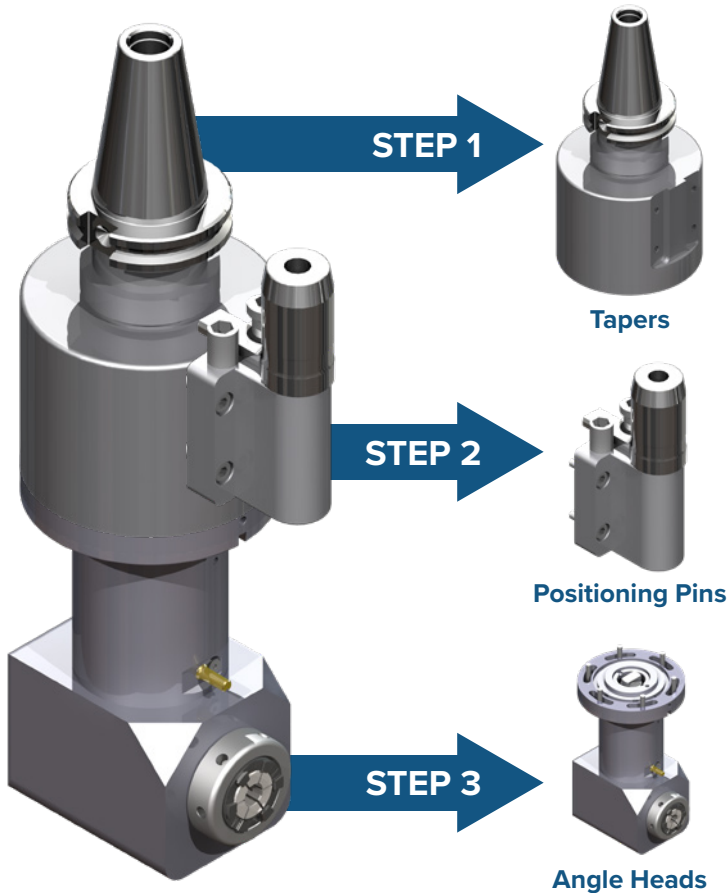
All Angle Heads come with a tapered positioning pin as standard



A flat pin can be made available upon request

MODULAR ANGLE HEAD ASSEMBLY

Construct a Modular Angle Head in 3 Easy Steps!



Modular Angle Head System Features

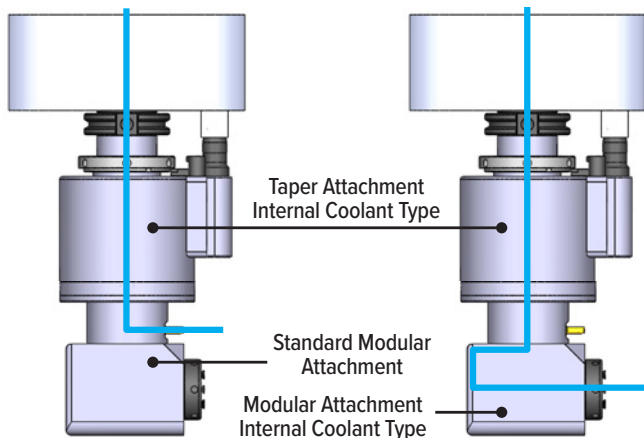
- Flexibility for a multitude of applications
- Adaptable with a wide variety of machine tapers
- Bolt style mounting system between taper and modular attachment for added rigidity
- Cost effective solution when Angle Heads are required on machines with different tapers
- 360 degree body and head rotation
- Tapered positioning pin for alignment accuracy

Modular Attachment Features

- Slim styles for inner bore work
- Stubby styles for added milling rigidity
- Extended Length styles for added reach
- Quick Change system for operations involving multiple tools
- Double output styles eliminate the necessity for two heads
- NSK output styles for small internal engraving and light duty drilling

COOLANT CONFIGURATIONS

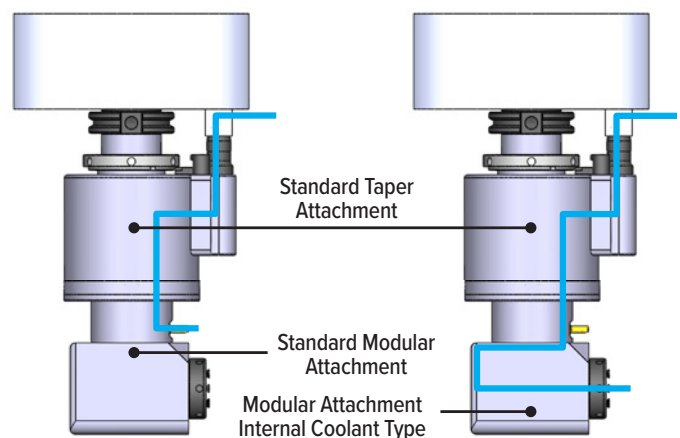
Coolant Supply Through The Spindle



External Coolant

Internal Coolant

Coolant Supply Through The Positioning Block



External Coolant

Internal Coolant

ANGLE HEADS/SPINDLE SPEEDER



MODULAR ANGLE HEAD SYSTEM

Flexibility for Any Application!

TAPERS



TAPER EXTENSION



MODULAR ATTACHMENTS



ER11 Adapter

ER11 Adapter Slim

ER11 Adapter Long

ER16 Adapter

ER16 Adapter Slim

ER16 Adapter Long

ER20 Adapter

ER20 Adapter Slim

ER20 Adapter Long

ER25 Adapter

ER25 Adapter Slim

ER25 Adapter Long

ER16 Double Output

ER25 Double Output

NSK Adapter

MI32 Quick Change

MI32 Quick Change Long

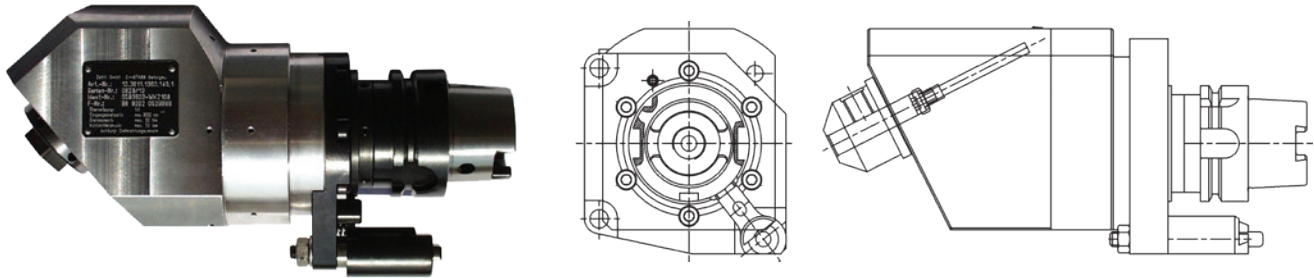
MI40 Quick Change

MI40 Long Quick Change

HIGH PRODUCTIVITY ANGLE HEADS

Fixed Angle Heads

Fixed Angle Heads ensures an accurate angle without the need to adjust or verify the cutting angle. Ideal for families of parts with a common fixed angle or for high production where optimized rigidity is required to reduce cycle times.



Multi-Spindle Drill Heads

Ideal for high production operations where drilling speed and accuracy must be optimized; Lyndex-Nikken Multi-Spindle units can be designed for all materials, multiple drill sizes, and a varying number of output spindles to match your application.

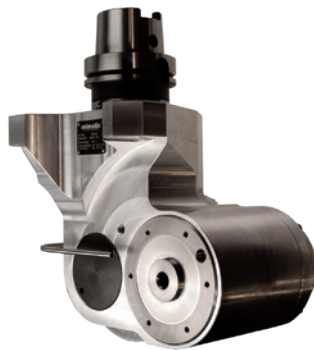


Special Angle Heads

From Gear Hobbing, Deep Bore Milling, High Torque Shell Mill Angle Heads, to High Speed Spindle Multiplier Angle Heads, we have your applications covered. Contact us for more details!



Saw Blade/Arbor Milling Head with additional support pins



Heavy Duty Offset Arbor Milling Head for diesel engine blocks



ER32 1-meter Extended Length Modular Tool with internal coolant



ER11 Extended Length Slim Line Angle Head for ID pocket milling

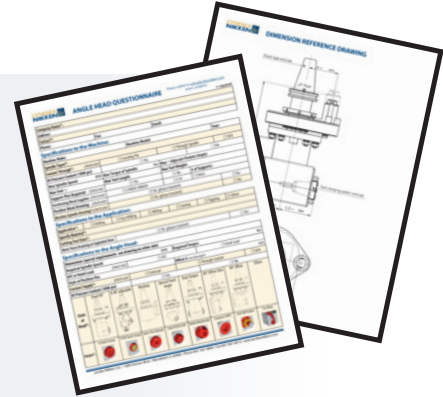
ENGINEERING SUPPORT

Complete Engineering Support from Start to Finish!

1

Selecting the Best Angle Head

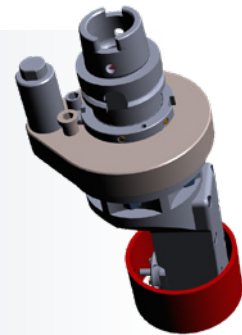
- Fill out our Angle Head Questionnaire.
- Provide dimensional and material information about your part via 3D model and/or CAD drawing.
- Additional information about the machine, current processes and cycle times are gathered.



2

Verification of Clearance and Application

- 3D models of Angle Heads are used to verify internal motion in space-critical locations.
- Applications are qualified by determining torque calculations of the machining operation, and is verified again that the Angle Head can sustain the desired process.



3

Automatic Tool Change and Weight Confirmation

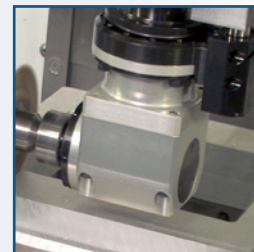
- ATC and weight clearances are confirmed.
- 3D printed Angle Heads and positioning blocks are available to ensure 100% dimensional accuracy and guarantees clearance while reducing cost and risk to the customer.



4

Selecting the Best Angle Head

- Additional support for positioning block design and integration of the unit are also available.
- Positioning blocks are made to specifications, ensuring that the Angle Head is positioned and locked into place during final installation.



SPECIAL CUSTOM POSITIONING BLOCK

**WHY RISK YOUR INVESTMENT?
WE HAVE YOU COVERED FROM DESIGN TO INSTALLATION!**

PRODUCT TRAINING SEMINARS

Receive in-depth training on the cutting edge solutions of our products to help maximize your profits and increase productivity.



SHRINK FIT UNITS & HOLDERS



ADVANCED TOOLHOLDERS



POWER CHUCKS & QUICK CHANGE FLEX COLLETS



LIVE TOOLING

IN-DEPTH TRAINING AND LIVE DEMOS



ANGLE HEADS

To schedule a demo, contact your Lyndex-Nikken Regional Sales Manager or send an e-mail to: solutionselling@lyndexnikken.com



847-367-4800 | sales@lyndexnikken.com
lyndexnikken.com

Connect With Us!



STUB MILL HOLDERS & BLANK BARS



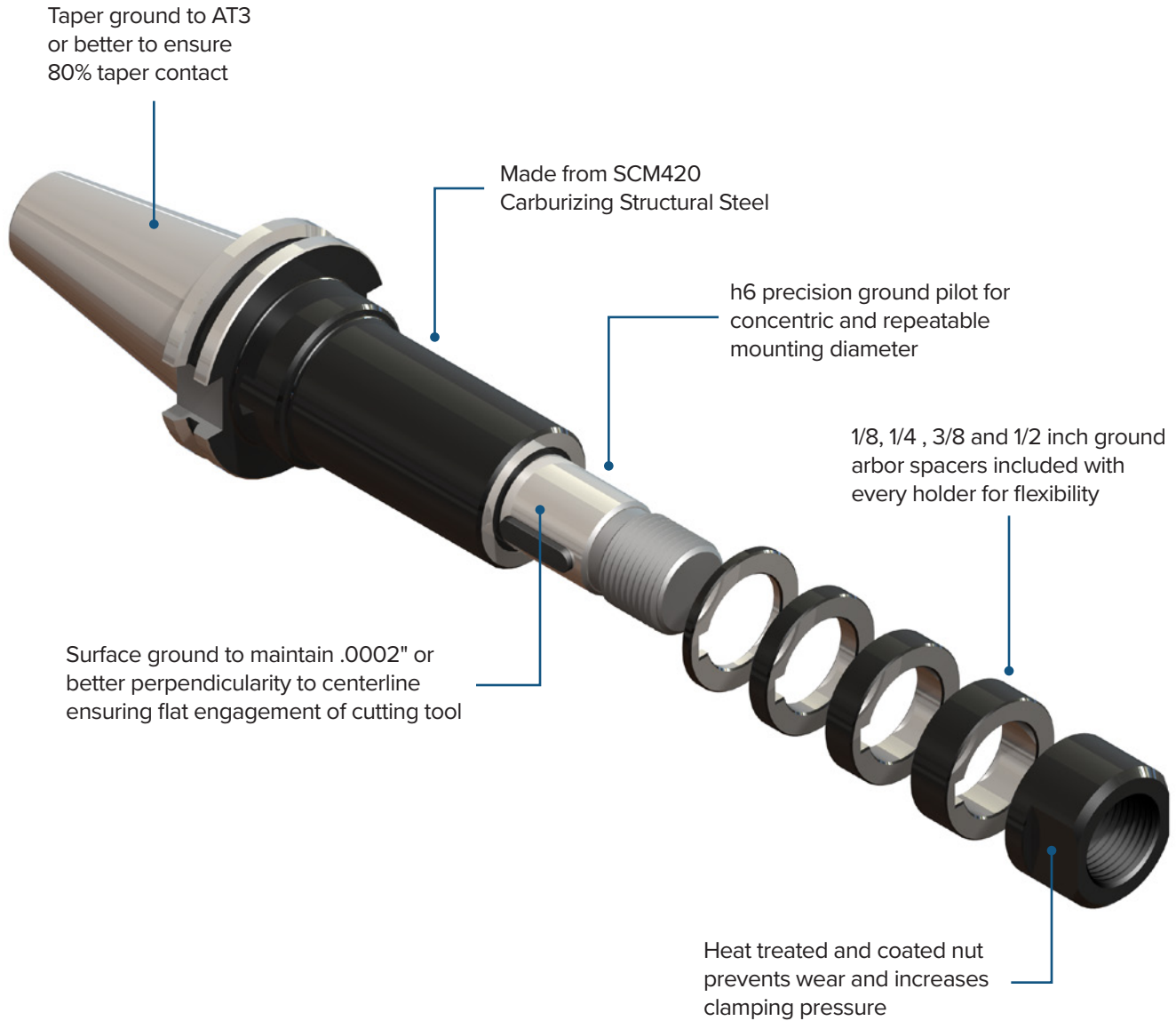
STUB & BLANK

**STUB MILL HOLDERS
& BLANK BARS**



STUB MILL HOLDER FEATURES

Our Stub Mill Holders feature hardened and ground tapers, location shafts and arbor spacers to ensure clamping of cutting tools and rigid machining capability.



STUB & BLANK

STUB MILL HOLDERS



CAT & BT STUB MILL HOLDERS

FEATURES

- Taper ground to AT3 or better to ensure 80% taper contact
- 1/8", 1/4", 3/8" and 1/2" ground arbor spacers included with every holder
- h6 precision ground pilot for concentric and repeatable mounting diameter



T.I.R.
< 0.0002" run out at pilot



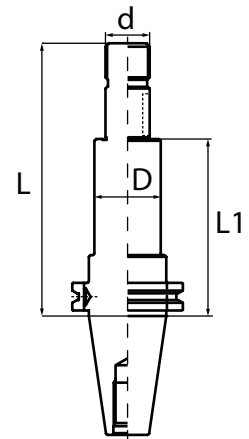
Set-Up
Quick and easy

CAT40/50

Part Number	Taper	d	L	D	L1	Key Size
C4002-1000-6.17	CT40	1"	6.17"	1.50"	4.00"	1/4"
C4002-1250-6.29	CT40	1-1/4"	6.29"	1.77"	4.00"	5/16"
C4002-1500-6.60	CT40	1-1/2"	6.60"	2.17"	4.00"	3/8"
C5002-1000-6.17	CT50	1"	6.17"	1.50"	4.00"	1/4"
C5002-1250-6.28	CT50	1-1/4"	6.28"	1.77"	4.00"	5/16"
C5002-1500-6.60	CT50	1-1/2"	6.60"	2.17"	4.00"	3/8"

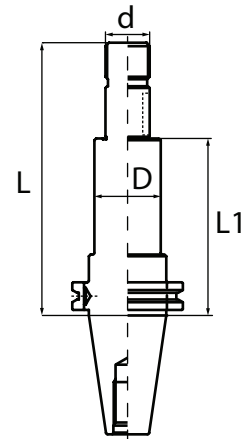
Notes:

- 1 pcs. each: 1/8", 1/4", 3/8" and 1/2" arbor spacers and securing nut included as standard with all listed toolholders.



BT30/40

Part Number	Taper	d	L	D	L1	Key Size
B3002-0750-4.97	BT30	3/4"	4.97"	1.26"	3.00"	1/4"
B3002-1000-5.17	BT30	1"	5.17"	1.50"	3.00"	1/4"
B4002-1000-5.18	BT40	1"	5.18"	1.50"	3.00"	1/4"
B4002-1250-5.32	BT40	1-1/4"	5.32"	1.77"	3.00"	1/4"
B4002-1500-5.60	BT40	1-1/2"	5.60"	2.17"	3.00"	1/4"



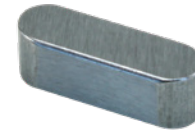
NCAT40/50

Part Number	Taper	d	L	D	L1	Key Size
NC4002-1000-6.17	NCAT40	1"	6.17"	1.50"	4.00"	1/4"
NC4002-1250-6.29	NCAT40	1-1/4"	6.29"	1.77"	4.00"	5/16"
NC5002-1000-6.17	NCAT50	1"	6.17"	1.50"	4.00"	1/4"

CAT & BT STUB MILL HOLDER ACCESSORIES

REPLACEMENT KEY FOR STUB MILL HOLDERS

Part Number	Description
3/4-STUBKEY	3/4"
1-STUBKEY	1"
1-1/4-STUBKEY	1-1/4"
1-1/2-STUBKEY	1-1/2"



REPLACEMENT NUT FOR STUB MILL HOLDERS

Part Number	Description	Length of Nut
3/4-STUBNUT	3/4"	18mm (0.70")
1-STUBNUT	1"	22.5mm (0.88")
1-1/4-STUBNUT	1-1/4"	22.5mm (0.88")
1-1/2-STUBNUT	1-1/2"	33.5mm (1.31")



REPLACEMENT SPACER FOR STUB MILL HOLDERS

Part Number	Description
SP3/4-1/8	1/8" Thick Spacer for 3/4" OD Holder
SP3/4-1/4	1/4" Thick Spacer for 3/4" OD Holder
SP3/4-3/8	3/8" Thick Spacer for 3/4" OD Holder
SP3/4-1/2	1/2" Thick Spacer for 3/4" OD Holder
SP1-1/8	1/8" Thick Spacer for 1" OD Holder
SP1-1/4	1/4" Thick Spacer for 1" OD Holder
SP1-3/8	3/8" Thick Spacer for 1" OD Holder
SP1-1/2	1/2" Thick Spacer for 1" OD Holder
SP1-1/4-1/8	1/8" Thick Spacer for 1-1/4" OD Holder
SP1-1/4-1/4	1/4" Thick Spacer for 1-1/4" OD Holder
SP1-1/4-3/8	3/8" Thick Spacer for 1-1/4" OD Holder
SP1-1/4-1/2	1/2" Thick Spacer for 1-1/4" OD Holder
SP1-1/2-1/8	1/8" Thick Spacer for 1-1/2" OD Holder
SP1-1/2-1/4	1/4" Thick Spacer for 1-1/2" OD Holder
SP1-1/2-3/8	3/8" Thick Spacer for 1-1/2" OD Holder
SP1-1/2-1/2	1/2" Thick Spacer for 1-1/2" OD Holder



BLANK BARS



CAT & BT BLANK BARS

FEATURES

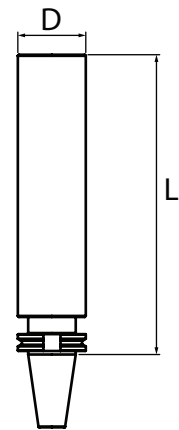
- Taper ground to AT3 or better to ensure 80% taper contact
- Suitable for all applications – even deep boring
- Ground and hardened surfaces except projection of the toolholder



Coolant-Thru
Opt. modification

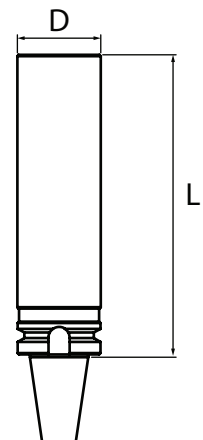
CAT40/50

Part Number	Taper	L	D
C4008-0013	CAT40	13.00"	2.50"
C5008-0013	CAT50	13.00"	3.88"



BT30/40/50

Part Number	Taper	L	D
B3008-0008	BT30	8.00"	2.25"
B4008-0013	BT40	13.00"	2.50"
B5008-0013	BT50	13.00"	3.88"



STUB & BLANK

TAPER PLUS CAT BLANK BARS

TAPER PLUS - NCAT40/50

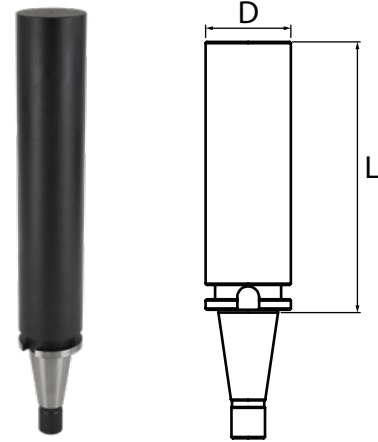
Part Number	Taper	L	D
NC4008-0013	NCAT40	13.00"	2.50"
NC5008-0013	NCAT50	13.00"	3.88"

NMTB & HSK BLANK BARS

NMTB40/50

Part Number	Taper	L	D
N4008-0013	NMTB40	13.00"	2.50"
N5008-0013	NMTB50	13.00"	3.88"

NMTB shanks are suitable for use with Erickson Quick Change spindles.

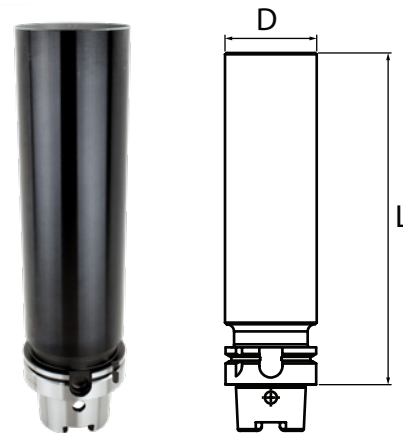


HSK63A/100A

Part Number	Taper	L	D
HSK63A-BLANK-13.00	HSK63A	13.00"	2.50"
HSK100A-BLANK-13.00	HSK100A	13.00"	3.76"

Note:

- Coolant tube and coolant tube wrench are not included.
- Other HSK sizes are available as specials. Please contact us for more information.



STUB & BLANK

COOLANT TUBE WRENCH FOR HSK HOLDERS

Part Number	Description
HSK63-WRENCH	Wrench for HSK63 Coolant Tube
HSK100-WRENCH	Wrench for HSK100 Coolant Tube

Note:

- Coolant tube wrenches are needed to remove or install coolant tubes in HSK toolholders.



COOLANT TUBE FOR HSK HOLDERS

Part Number	Description
HSK63-TUBE	Coolant Tube for HSK63 Holders
HSK100-TUBE	Coolant Tube for HSK100 Holders



R8/5C/3J/16C COLLETS



R8/5C/3J/16C

R8/5C/3J/16C COLLETS



R8 COLLETS

Part Number (Inch)	Size	Part Number (Inch)	Size	Part Number (Inch)	Size
800-004	1/16"	800-024	3/8"	800-044	11/16"
800-006	3/32"	800-026	13/32"	800-046	23/32"
800-008	1/8"	800-028	7/16"	800-048	3/4"
800-010	5/32"	800-030	15/32"	800-050*	25/32"
800-012	3/16"	800-032	1/2"	800-052*	13/16"
800-014	7/32"	800-034	17/32"	800-054*	27/32"
800-016	1/4"	800-036	9/16"	800-056*	7/8"
800-018	9/32"	800-038	19/32"	800-064*	1"
800-020	5/16"	800-040	5/8"		
800-022	11/32"	800-042	21/32"		

Note:

- *Cannot be used with cutting tools that have notches, flats, or Weldon Shank. We recommend using End Mill Holders.
- Limited cutting tool shank insertion depth. See drawings on website.

Part Number (Metric)	Size	Part Number (Metric)	Size	Part Number (Metric)	Size
820-003	3mm	820-009	9mm	820-015	15mm
820-004	4mm	820-010	10mm	820-016	16mm
820-005	5mm	820-011	11mm	820-017	17mm
820-006	6mm	820-012	12mm	820-018	18mm
820-007	7mm	820-013	13mm	820-019	19mm
820-008	8mm	820-014	14mm	820-020*	20mm

Note: *Limited cutting tool shank insertion depth. See drawing for depth.

R8 COLLET SETS

Part Number	Description	Size Range
810-SET-06	6 Piece R8 Collet Set	1/8" - 3/4" by 1/8ths
810-SET-08	8 Piece R8 Collet Set	1/8" - 1" by 1/8ths
810-SET-11	11 Piece R8 Collet Set	1/8" - 3/4" by 1/16ths
810-SET-12	12 Piece R8 Collet Set	1/8" - 3/4" by 1/16ths + 7/8"
810-SET-13	13 Piece R8 Collet Set	1/8" - 7/8" by 1/16ths
810-SET-14	14 Piece R8 Collet Set	1/16"-7/8" by 1/16ths
810-SET-21	21 Piece R8 Collet Set	1/8" - 3/4" by 1/32nds
810-SET-23	23 Piece R8 Collet Set	1/16" - 3/4" by 1/32nds
810-SET-25	25 Piece R8 Collet Set	1/8" - 7/8" by 1/32nds
810-SET-27	27 Piece R8 Collet Set	1/16" - 7/8" by 1/32nds
820-SET-18-MM	18 Piece R8 Metric Collet Set	3 - 20mm by 1mm

R8 COLLET RACK

Part Number	Description
RACK-R8/SK20	Metal Rack, holds 24 piece R8 Collets or R8 Chucks



ACCURACY

Size Range (Inch)	T.I.R.
1/16" - 3/8"	0.0007
13/32" - 1"	0.0011

Size Range (Metric)	T.I.R.
3 - 10 mm	0.0007
11 - 20mm	0.0011

CUTTING TOOL SHANK TOLERANCE

Collet Series	Gripping Range
R8 Collets	+0/- .004"

EMERGENCY COLLETS

Part Number (Inch)	Size
860-001S	R8 Steel Emergency Collet: 1/16" pilot hole



R8/5C/3J/16C COLLETS



5C COLLETS

5C ROUND COLLETS

Part Number (Inch)	Size	Part Number (Inch)	Size	Part Number (Inch)	Size
500-003	3/64"	500-027	27/64"	500-051	51/64"
500-004	1/16"	500-028	7/16"	500-052	13/16"
500-005	5/64"	500-029	29/64"	500-053	53/64"
500-006	3/32"	500-030	15/32"	500-054	27/32"
500-007	7/64"	500-031	31/64"	500-055	55/64"
500-008	1/8"	500-032	1/2"	500-056	7/8"
500-009	9/64"	500-033	33/64"	500-057	57/64"
500-010	5/32"	500-034	17/32"	500-058	29/32"
500-011	11/64"	500-035	35/64"	500-059	59/64"
500-012	3/16"	500-036	9/16"	500-060	15/16"
500-013	13/64"	500-037	37/64"	500-061	61/64"
500-014	7/32"	500-038	19/32"	500-062	31/32"
500-015	15/64"	500-039	39/64"	500-063	63/64"
500-016	1/4"	500-040	5/8"	500-064	1"
500-017	17/64"	500-041	41/64"	500-065*	1-1/64"
500-018	9/32"	500-042	21/32"	500-066*	1-1/32"
500-019	19/64"	500-043	43/64"	500-067*	1-3/64"
500-020	5/16"	500-044	11/16"	500-068*	1-1/16"
500-021	21/64"	500-045	45/64"	500-069*	1-5/64"
500-022	11/32"	500-046	23/32"	500-070*	1-3/32"
500-023	23/64"	500-047	47/64"	500-071*	1-7/64"
500-024	3/8"	500-048	3/4"	500-072*	1-1/8"
500-025	25/64"	500-049	49/64"		
500-026	13/32"	500-050	25/32"		

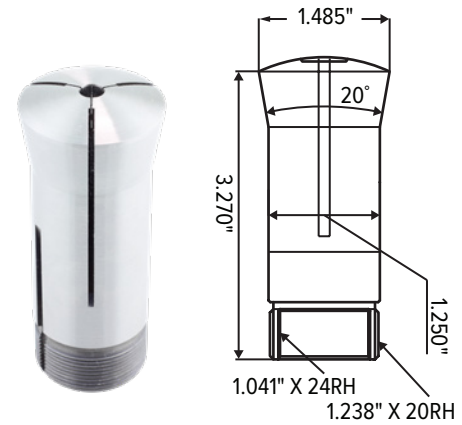
Note:

- *Collet has stepped internal diameter and cannot be used for bar feed work. Step depth approximately 40mm.

Part Number (Metric)	Size	Part Number (Metric)	Size	Part Number (Metric)	Size
520-003	3mm	520-011	11mm	520-019	19mm
520-004	4mm	520-012	12mm	520-020	20mm
520-005	5mm	520-013	13mm	520-021	21mm
520-006	6mm	520-014	14mm	520-022	22mm
520-007	7mm	520-015	15mm	520-023	23mm
520-008	8mm	520-016	16mm	520-024	24mm
520-009	9mm	520-017	17mm	520-025	25mm
520-010	10mm	520-018	18mm	520-026*	26mm

Note:

- *Collet has stepped internal diameter and cannot be used for bar feed work. Step depth approximately 40mm.



ACCURACY

Size Range (Inch)	T.I.R
3/64" - 25/64"	0.0008
13/32" - 45/64"	0.0011
23/32" - 1.1/8"	0.0015

Size Range (Metric)	T.I.R
3 - 10mm	0.0008
11 - 18mm	0.0011
19 - 26mm	0.0015

WORKPIECE TOLERANCE

Collet Series	Gripping Range
5C Collets	+0/-0.004"

EMERGENCY COLLETS

Part Number (Inch)	Size
560-001B	5C Brass collet has 1/16" pilot hole
560-001S	5C Steel emergency collet has 1/16" pilot hole and hardened threads



R8/5C/3J/16C



5C Collet Stops
Page 261



5C Collet Blocks
Page 261



5C Collet Rack
Page 261



5C Collet Wrench
Page 261

5C COLLETS

5C COLLET SETS

Part Number	Description	Size Range
510-SET-08	8 Piece 5C Collet Set	1/8" - 1" by 1/8ths
510-SET-09	9 Piece 5C Collet Set	1/8" - 1-1/8" by 1/8ths
510-SET-09S	9 Piece 5C Collet Set	1/16" + 1/8" - 1" by 1/8ths
510-SET-15	15 Piece 5C Collet Set	1/8" - 1" by 1/16ths
510-SET-16	16 Piece 5C Collet Set	1/8" - 1-1/16" by 1/16ths
510-SET-16S	16 Piece 5C Collet Set	1/16" - 1" by 1/16ths
510-SET-17	17 Piece 5C Collet Set	1/16" - 1-1/16" by 1/16ths
510-SET-18	18 Piece 5C Collet Set	1/16" - 1-1/8" by 1/16ths
510-SET-24-MM	24 Piece 5C Collet Set, Metric	3.0 - 26.0mm x 1.0mm
510-SET-29	29 Piece 5C Collet Set	1/8" - 1" by 1/32nds
510-SET-31	31 Piece 5C Collet Set	1/8" - 1-1/16" by 1/32nds
510-SET-31S	31 Piece 5C Collet Set	1/16" - 1" by 1/32nds
510-SET-33	33 Piece 5C Collet Set	1/16" - 1-1/16" by 1/32nds
510-SET-35	35 Piece 5C Collet Set	1/16" - 1-1/8" by 1/32nds
510-SET-61	61 Piece 5C Collet Set	1/8" - 1-1/16" by 64ths
510-SET-61S	61 Piece 5C Collet Set	1/16" - 1" by 64ths
510-SET-65	65 Piece 5C Collet Set	1/8" - 1-1/8" by 64ths
510-SET-65S	65 Piece 5C Collet Set	1/16" - 1-1/16" by 64ths
510-SET-69	69 Piece 5C Collet Set	1/16" - 1-1/8" by 64ths
580-SET-07-HEX	7 Piece 5C Hex Collet Set	1/8" - 7/8" by 1/8ths
580-SET-13-HEX	13 Piece 5C Hex Collet Set	1/8" - 7/8" by 1/16ths
580-SET-06-SQ	6 Piece 5C Square Collet Set	1/8" - 3/4" by 1/8ths
580-SET-11-SQ	11 Piece 5C Square Collet Set	1/8" - 3/4" by 1/16ths

5C HEX COLLETS

Part Number (Inch)	Size
530-008	1/8"
530-012	3/16"
530-016	1/4"
530-020	5/16"
530-024	3/8"
530-028	7/16"
530-032	1/2"
530-036	9/16"
530-040	5/8"
530-044	11/16"
530-048	3/4"
530-052	13/16"
530-056*	7/8"



Note: *Does not have ID threads.

5C SQUARE COLLETS

Part Number (Inch)	Size
540-008	1/8"
540-012	3/16"
540-016	1/4"
540-020	5/16"
540-024	3/8"
540-028	7/16"
540-032	1/2"
540-036	9/16"
540-040	5/8"
540-044	11/16"
540-048*	3/4"



Note: *Does not have ID threads.

ACCURACY (FOR 5C HEX & SQUARE)

Size Range	T.I.R
1/8" - 11/16"	0.0025
3/4" - 7/8"	0.0031

5C STEP COLLETS

Part Number (Inch)	Size
550-002	2"
550-003	3"
550-004	4"
550-005	5"
550-006	6"



Steps Collets have a soft face for easy machining while the 5C collet portion is hardened. 5C collet portion has external threads only to engage into the collet draw bar (no ID threads).



R8/5C/3J/16C COLLETS



5C COLLET ACCESSORIES

5C COLLET STOPS

Part Number	Description
570-ADJ	Adjustable Threaded Collet Stop
570-USA	Non-Threaded Depth Retainer 5C Collet Stop



570-ADJ



570-USA

5C COLLET BLOCKS

Part Number	Description
570-HEX	Hex Block with Tightening Ring
570-SQUARE	Square Block with Tightening Ring
570-CLOSE	Quick Closer
570-RING	Replacement Tightening Ring (ring only)
570-BLOCK	Complete Set (all of the above)



570-HEX



570-SQUARE



570-CLOSE

5C COLLET RACK

Part Number	Description
RACK-5C/100TG/SK25	Metal Rack holds 30x 5C, 100TG or SK25 Collets



5C COLLET WRENCH

Part Number	Description
5C-WRENCH	5C Collet Wrench



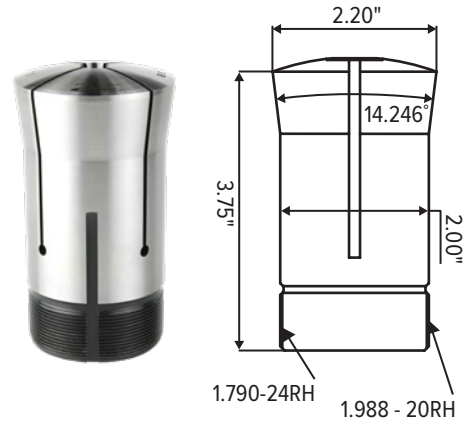
R8/5C/3J/16C

3J COLLETS

3J ROUND COLLETS

Part Number (Inch)	Size	Part Number (Inch)	Size
300-004	1/16"	300-041	41/64"
300-005	5/64"	300-042	21/32"
300-006	3/32"	300-043	43/64"
300-007	7/64"	300-044	11/16"
300-008	1/8"	300-045	45/64"
300-009	9/64"	300-046	23/32"
300-010	5/32"	300-047	47/64"
300-011	11/64"	300-048	3/4"
300-012	3/16"	300-049	49/64"
300-013	13/64"	300-050	25/32"
300-014	7/32"	300-051	51/64"
300-015	15/64"	300-052	13/16"
300-016	1/4"	300-053	53/64"
300-017	17/64"	300-054	27/32"
300-018	9/32"	300-055	55/64"
300-019	19/64"	300-056	7/8"
300-020	5/16"	300-057	57/64"
300-021	21/64"	300-058	29/32"
300-022	11/32"	300-059	59/64"
300-023	23/64"	300-060	15/16"
300-024	3/8"	300-061	61/64"
300-025	25/64"	300-062	31/32"
300-026	13/32"	300-063	63/64"
300-027	27/64"	300-064	1"
300-028	7/16"	300-068	1-1/16"
300-029	29/64"	300-072	1-1/8"
300-030	15/32"	300-076	1-3/16"
300-031	31/64"	300-080	1-1/4"
300-032	1/2"	300-084	1-5/16"
300-033	33/64"	300-088	1-3/8"
300-034	17/32"	300-092	1-7/16"
300-035	35/64"	300-096	1-1/2"
300-036	9/16"	300-100	1-9/16"
300-037	37/64"	300-104	1-5/8"
300-038	19/32"	300-108	1-11/16"
300-039	39/64"	300-112	1-3/4"
300-040	5/8"		

Note: All 3J Collets will have ID threads except Part Number 300-112.



ACCURACY

Size Range	T.I.R
1/16" - 25/64"	0.0008
13/32" - 45/64"	0.0011
23/32" - 1-3/4"	0.0015

WORKPIECE TOLERANCE

Collet Series	Gripping Range
3J Collets	+0/-0.004"

EMERGENCY COLLETS

Part Number (Inch)	Size
360-001S*	Steel Emergency Collet has 1/16" pilot



* Max Material Size: Round: 1.3/4"
 Square: 1.1/2"
 Hex: 1.1/4"

3J COLLET SETS

Part Number	Description	Size Range
300-SET-08	8 Piece 3J Collet Set	1/8" - 1" by 1/8ths
300-SET-18	18 Piece 3J Collet Set	1/16" - 1.1/8" by 1/16ths
300-SET-29	29 Piece 3J Collet Set	1/8" - 1" by 1/32nds
300-SET-32	32 Piece 3J Collet Set	1/16" - 1.1/16" by 1/32nds

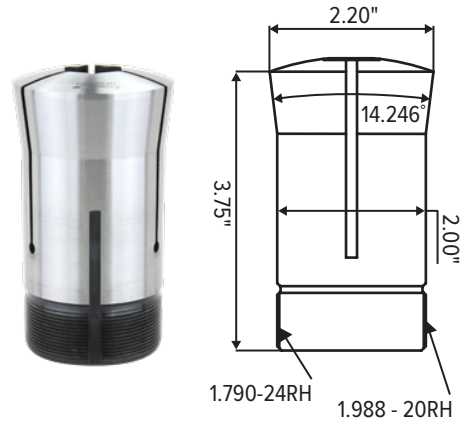
R8/5C/3J/16C COLLETS



3J COLLETS

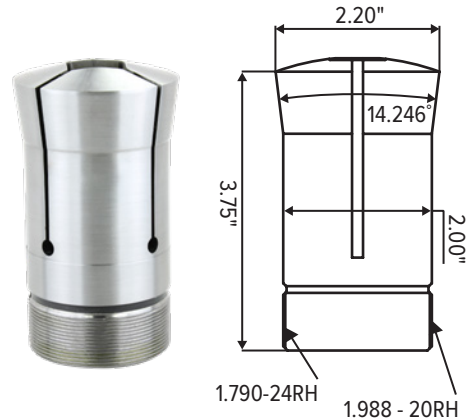
3J HEX COLLETS

Part Number (Inch)	Size	Part Number (Inch)	Size
330-016	1/4"	330-060	15/16"
330-020	5/16"	330-064	1"
330-024	3/8"	330-068	1-1/16"
330-028	7/16"	330-072	1-1/8"
330-032	1/2"	330-076	1-3/16"
330-036	9/16"	330-080	1-1/4"
330-040	5/8"	330-084	1-5/16"
330-044	11/16"	330-088	1-3/8"
330-048	3/4"	330-092	1-7/16"
330-052	13/16"	330-096	1-1/2"
330-056	7/8"		



3J SQUARE COLLETS

Part Number (Inch)	Size	Part Number (Inch)	Size
340-016	1/4"	340-052	13/16"
340-020	5/16"	340-056	7/8"
340-024	3/8"	340-060	15/16"
340-028	7/16"	340-064	1"
340-032	1/2"	340-068	1-1/16"
340-036	9/16"	340-072	1-1/8"
340-040	5/8"	340-076	1-3/16"
340-044	11/16"	340-080	1-1/4"
340-048	3/4"		



ACCURACY (FOR 3J HEX & SQUARE)

Size Range	T.I.R
1/4" - 11/16"	0.0025
3/4" - 1-1/2"	0.0031

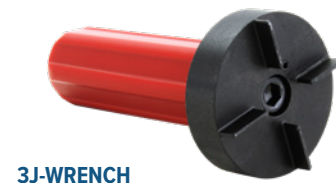
3J COLLET STOP

Part Number	Description
370-USA	Non-Threaded Depth Retainer 3J Collet Stop
370-ADJ	3J Collet Stop (for use with Collets with Internal Threads)



3J COLLET WRENCH

Part Number	Description
3J-WRENCH	4 Prong - to be used with 3J Round, 3J Square, 16C Square
16C-WRENCH	3 Prong - to be used with 16C Round, 16C Hex and 3J Hex



R8/5C/3J/16C

16C COLLETS

16C ROUND COLLETS

Part Number (Inch)	Size	Part Number (Inch)	Size
160-004	1/16"	160-040	5/8"
160-005	5/64"	160-041	41/64"
160-006	3/32"	160-042	21/32"
160-007	7/64"	160-043	43/64"
160-008	1/8"	160-044	11/16"
160-009	9/64"	160-045	45/64"
160-010	5/32"	160-046	23/32"
160-011	11/64"	160-047	47/64"
160-012	3/16"	160-048	3/4"
160-013	13/64"	160-049	49/64"
160-014	7/32"	160-050	25/32"
160-015	15/64"	160-051	51/64"
160-016	1/4"	160-052	13/16"
160-017	17/64"	160-053	53/64"
160-018	9/32"	160-054	27/32"
160-019	19/64"	160-055	55/64"
160-020	5/16"	160-056	7/8"
160-021	21/64"	160-057	57/64"
160-022	11/32"	160-058	29/32"
160-023	23/64"	160-059	59/64"
160-024	3/8"	160-060	15/16"
160-025	25/64"	160-061	61/64"
160-026	13/32"	160-062	31/32"
160-027	27/64"	160-063	63/64"
160-028	7/16"	160-064	1"
160-029	29/64"	160-066	1-1/32"
160-030	15/32"	160-068	1-1/16"
160-031	31/64"	160-072	1-1/8"
160-032	1/2"	160-076	1-3/16"
160-033	33/64"	160-080	1-1/4"
160-034	17/32"	160-084	1-5/16"
160-035	35/64"	160-088	1-3/8"
160-036	9/16"	160-092	1-7/16"
160-037	37/64"	160-096	1-1/2"
160-038	19/32"	160-100	1-9/16"
160-039	39/64"	160-104	1-5/8"



ACCURACY

Size Range	T.I.R
1/16" - 25/64"	0.0008
13/32" - 45/64"	0.0011
23/32" - 1-5/8"	0.0015

WORKPIECE TOLERANCE

Collet Series	Gripping Range
16C Collets	+0/-0.004"

EMERGENCY COLLETS

Part Number (Inch)	Size
166-001S*	Steel Emergency Collet has 1/16" pilot hole and hardened threads.



* Max Material Size: Round: 1.5/8"
 Square: 1.3/8"
 Hex: 1.3/16"

16C COLLET SETS

Part Number	Description	Size Range
160-SET-08	8 Piece 16C Collet Set	1/8" - 1" by 1/8ths
160-SET-18	18 Piece 16C Collet Set	1/16" - 1.1/16" by 1/16ths
160-SET-29	29 Piece 16C Collet Set	1/8" - 1" by 1/32nds

R8/5C/3J/16C COLLETS



16C COLLETS

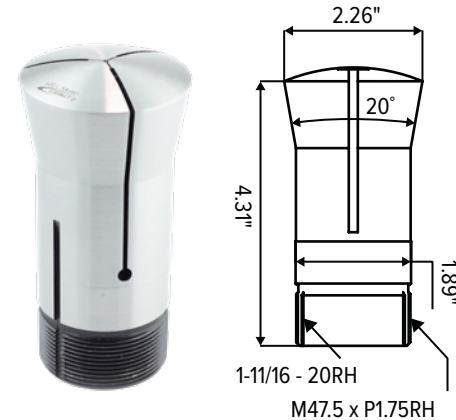
16C HEX COLLETS

Part Number (Inch)	Size	Part Number (Inch)	Size
163-008	1/8"	163-052	13/16"
163-012	3/16"	163-056	7/8"
163-016	1/4"	163-060	15/16"
163-020	5/16"	163-064	1"
163-024	3/8"	163-068	1-1/16"
163-028	7/16"	163-072	1-1/8"
163-032	1/2"	163-076	1-3/16"
163-036	9/16"	163-080	1-1/4"
163-040	5/8"	163-084	1-5/16"
163-044	11/16"	163-088	1-3/8"
163-048	3/4"		



16C SQUARE COLLETS

Part Number (Inch)	Size	Part Number (Inch)	Size
164-008	1/8"	164-044	11/16"
164-012	3/16"	164-048	3/4"
164-016	1/4"	164-052	13/16"
164-020	5/16"	164-056	7/8"
164-024	3/8"	164-060	15/16"
164-028	7/16"	164-064	1"
164-032	1/2"	164-068	1-1/16"
164-036	9/16"	164-072	1-1/8"
164-040	5/8"	164-076*	1-3/16"



Note: *Does not have ID threads.

ACCURACY (FOR 16C HEX & SQUARE)

Size Range	T.I.R
1/8" - 11/16"	0.0025
3/4" - 1-3/8"	0.0031

16C COLLET STOP

Part Number	Description
160-USA	Non-Threaded Depth Retainer 16C Collet Stop
160-ADJ	Threaded Depth Retainer 16C Collet Stop



16C COLLET WRENCH

Part Number	Description
16C-WRENCH	3 Prong - to be used with 16C Round, 16C Hex and 3J Hex



R8/5C/3J/16C



QUICK CHANGE FLEX COLLETS

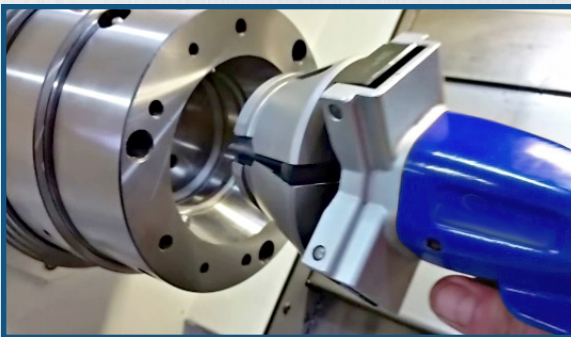
AVAILABLE NOW!



**COLLET CHANGE
IN 10 SECONDS!**



- **QUICK SET-UP TIME** - Collet can be switched to any size within seconds, not minutes
- **INCREASED PRECISION** - Collet accuracy is .0004" or better
- **INCREASED GRIP FORCE** - Collet collapses parallel to work piece, not angular
- **INCREASED CLAMPING RANGE** - Quick Change Flex collets allow work pieces to be up to +/- .0156" from nominal diameter



For more information and to download our QCFC Product Catalog, please visit:
lyndexnikken.com/online-catalogs



847-367-4800 | sales@lyndexnikken.com
lyndexnikken.com

Connect With Us!



RETENTION KNOBS



RETENTION KNOBS



RETENTION KNOBS

RETENTION KNOB FEATURES

Retention knobs come in many shapes and sizes. Many machining center manufacturers use different configurations on each of their models. Please provide us with the following information when ordering retention knobs:

- Machining Center Taper Size (40, 50 taper etc.) and flange type (CAT or BT)
- Brand and model of machining center
- Drawing of retention knob (if available)



CAT RETENTION KNOBS

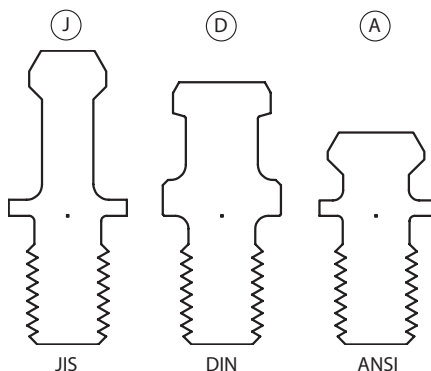
- Class 3A UNC Thread
- Magnetic particle crack tested
- Tensile and shear requirements per ISO and JIS standard
- All locations that make contact with ground spindle mechanism components are ground or hard turned
- Base of retention knob flange is ground to assure perpendicular alignment between retention knob and taper of toolholder
- Tight pitch diameter tolerance helps maintain accurate concentricity between threads and retention knob limiting the expansion or flaring of the small end of the taper



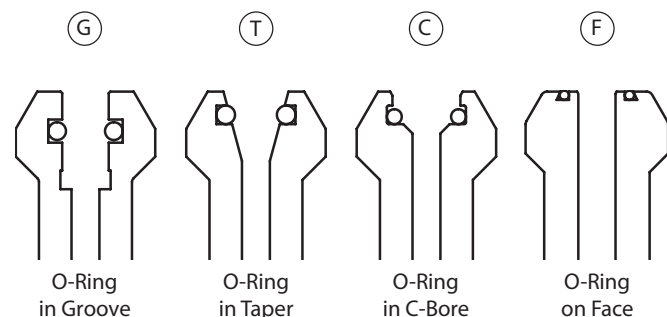
BT RETENTION KNOBS

- Class 4g6g metric thread
- Magnetic particle crack tested
- Tensile and shear requirements per JIS 6339
- All locations of the retention knob that make contact with ground spindle mechanism components are ground or hard turned
- Base of retention knob flange is ground to assure perpendicular alignment between retention knob and taper of toolholder
- Ground Pilot and tight pitch diameter tolerance help maintain accurate concentricity between threads and retention knob limiting the expansion or flaring of the small end of the taper

Retention Knob Style



O-Ring Type



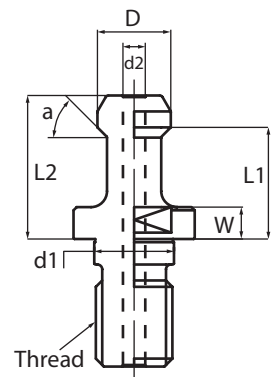
RETENTION KNOBS

CAT RETENTION KNOBS

Part Number	D	d1	d2	L1	L2	Angle Degree	W	Thread (UNC)	O-Ring	Torque Range (Ft-lbs)	Torque Wrench Attachment*	Style
C40-1500(R)-EU	0.748	0.641	0.276	0.793	1.030	15	0.276	5/8"-11	S-15	65-85	TQW-PS(19)	D
C40-1500-EU	0.748	0.512	0.276	0.793	1.030	15	0.276	5/8"-11	—	65-85	TQW-PS(19)	D
C40-1500-MATS-EU	0.748	0.512	0.276	0.787	1.024	15	0.157	5/8"-11	—	65-85	TQW-PS(19)	D
C40-1500-MORI-EU	0.748	0.641	0.276	0.793	1.030	15	0.236	5/8"-11	S-15, P-9	65-85	TQW-PS(19)	D
C40-1500-SOLID	0.748	0.512	—	0.793	1.030	15	0.276	5/8"-11	—	65-85	TQW-PS(19)	—
C40-4500(H)GFAC-EU	0.591	0.641	0.177	0.984	1.260	45	0.124	5/8"-11	S-15	65-85	TQW-PS(19)	—
C40-6000(H)-EU	0.591	0.512	0.177	0.990	1.266	30	0.124	5/8"-11	—	65-85	TQW-PS(19)	J
C40-9000(H)-EU	0.591	0.512	0.177	0.990	1.266	90	0.124	5/8"-11	—	65-85	TQW-PS(19)	J
C40-9000-EU	0.591	0.512	—	0.990	1.266	90	0.124	5/8"-11	—	65-85	TQW-PS(19)	J
C40S-4500(H)-EU	0.591	0.512	0.177	0.990	1.266	45	0.236	5/8"-11	—	65-85	TQW-PS(19)	J
C40S-4500-EU	0.591	0.512	—	0.990	1.266	45	0.236	5/8"-11	—	65-85	TQW-PS(19)	J
C40S-6000-EU	0.591	0.512	—	0.990	1.266	30	0.236	5/8"-11	—	65-85	TQW-PS(19)	J
C40S-9000-EU	0.591	0.512	—	0.990	1.266	90	0.236	5/8"-11	—	65-85	TQW-PS(19)	J
C40-STD-EU	0.740	0.512	0.276	0.433	0.640	45	0.118	5/8"-11	—	65-85	TQW-PS(19)	A
C40-STD-SOLID	0.740	0.512	—	0.433	0.640	45	0.118	5/8"-11	—	65-85	TQW-PS(19)	—
C50-1500(ISO)-EU	1.102	0.827	0.433	0.984	1.339	15	0.197	1"-8	—	85-110	TQW-PS(30)/ER20	D
C50-1500-EU	1.102	0.827	0.394	0.992	1.346	15	0.276	1"-8	—	85-110	TQW-PS(30)/ER20	D
C50-4500(H)-EU	0.906	0.827	0.236	1.386	1.780	45	0.394	1"-8	—	85-110	TQW-PS(30)/ER20	J
C50-4500-EU	0.906	0.827	—	1.386	1.780	45	0.394	1"-8	—	85-110	TQW-PS(30)/ER20	—
C50-6000(H)-EU	0.906	0.827	0.236	1.386	1.780	30	0.394	1"-8	—	85-110	TQW-PS(30)/ER20	J
C50-6000-EU	0.906	0.827	—	1.386	1.780	30	0.394	1"-8	—	85-110	TQW-PS(30)/ER20	J
C50-9000(H)-EU	0.906	0.827	0.236	1.386	1.780	90	0.394	1"-8	—	85-110	TQW-PS(30)/ER20	J
C50-9000-EU	0.906	0.827	—	1.386	1.780	90	0.394	1"-8	—	85-110	TQW-PS(30)/ER20	J
C50-9000-MORI-EU	0.906	1.031	0.315	1.386	1.780	90	0.394	1"-8	P-9, S-24	85-110	TQW-PS(30)/ER20	J, G
C50-MAKINO-EU	0.906	0.984	0.236	1.378	1.772	45	0.394	1"-8	P-22	85-110	TQW-PS(30)/ER20	J, L
C50-OKUMA(OH)-EU	0.906	1.024	0.236	1.378	1.772	30	0.394	1"-8	P-22	85-110	TQW-PS(30)/ER20	—
C50-STD-EU	1.142	0.768	0.461	0.701	1.004	45	0.197	1"-8	—	85-110	TQW-PS(32)	A
PS-874-EU	0.748	0.669	0.236	0.906	1.142	15	0.276	M16 P2	—	65-85	TQW-PS(19)	J
PS-B61-EU	0.906	1.024	0.236	1.378	1.772	30	0.394	1"-8	N-24	85-110	TQW-PS(30)/ER20	J, L
PS-B64-1-EU	0.740	0.641	0.157	0.440	0.640	45	0.118	5/8"-11	S-15	65-85	TQW-PS(19)	A
PS-037-1G	0.591	0.641	—	0.990	1.266	90	0.236	5/8"-11	S-15	65-85	TQW-PS(19)	J

Note:

- *Torque Wrench sold separately from Torque Wrench Attachments. See pages 41 and 88 for more details.



The drawing above details the seven critical dimensions needed to determine which retention stud is required.

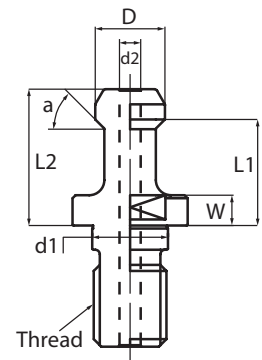
Please have these dimensions ready when you place your order, so that we may easily and quickly determine which retention stud is needed for your machining center.

BT RETENTION KNOBS

Part Number	D	d1	d2	L1	L2	Angle Degree	W	Thread	O-Ring	Torque Range (Ft-lbs)	Torque Wrench Attachment*	Style
PS-16	0.433	0.492	—	0.709	0.906	45	0.197	M12 P1.75	—	30-40	TQW-PS(13)	J
PS-17	0.433	0.492	—	0.709	0.906	30	0.197	M12 P1.75	—	30-40	TQW-PS(13)	J
PS-130E	0.433	0.492	0.098	0.709	0.906	30	0.197	M12 P1.75	—	30-40	TQW-PS(13)	J, L
PS-132	0.433	0.492	0.157	0.709	0.906	45	0.197	M12 P1.75	P-9	30-40	TQW-PS(13)	J
B30-4500-EU	0.433	0.492	—	0.709	0.906	45	0.197	M12 P1.75	—	30-40	TQW-PS(13)	J
B30-6000-EU	0.433	0.492	—	0.709	0.906	30	0.197	M12 P1.75	—	30-40	TQW-PS(13)	J
B40-1500(R)-EU	0.748	0.669	0.276	0.906	1.142	15	0.276	M16 P2	AS568-015	65-85	TQW-PS(19)	D
B40-1500-EU	0.748	0.669	0.276	0.906	1.142	15	0.276	M16 P2	—	65-85	TQW-PS(19)	D
B40-1500-MORI-EU	0.748	0.669	0.276	0.906	1.142	15	0.335	M16 P2	S-15, P-9	65-85	TQW-PS(19)	D, T
B40-4500(H)-EU	0.591	0.669	0.181	1.102	1.378	45	0.236	M16 P2	—	65-85	TQW-PS(19)	J
B40-4500-EU	0.591	0.669	—	1.102	1.378	45	0.236	M16 P2	—	65-85	TQW-PS(19)	J
B40-6000	0.591	0.669	—	1.102	1.378	30	0.236	M16 P2	—	65-85	TQW-PS(19)	J
B40-6000(H)	0.591	0.669	0.181	1.102	1.378	30	0.236	M16 P2	—	65-85	TQW-PS(19)	J
B40-9000-EU	0.591	0.669	—	1.102	1.378	90	0.236	M16 P2	—	65-85	TQW-PS(19)	J
B40-FADAL	0.740	0.669	—	0.552	0.752	45	0.236	M16 P2	—	65-85	TQW-PS(19)	A
B40-STD	0.740	0.669	0.276	0.433	0.640	45	0.118	M16 P2	—	65-85	TQW-PS(19)	A
PS-805	0.748	0.669	—	0.906	1.142	15	0.276	M16 P2	—	65-85	TQW-PS(19)	J
B50-4500(H)-EU	0.906	0.984	0.276	1.378	1.772	45	0.394	M24 P3	—	85-110	TQW-PS(30)/ER20	J
B50-4500-EU	0.906	0.984	—	1.378	1.772	45	0.394	M24 P3	—	85-110	TQW-PS(30)/ER20	J
B50-6000(H)-EU	0.906	0.984	0.276	1.378	1.772	30	0.394	M24 P3	—	85-110	TQW-PS(30)/ER20	J
B50-9000(H)	0.906	0.984	0.276	1.378	1.772	90	0.394	M24 P3	—	85-110	TQW-PS(30)/ER20	D
B50-9000-EU	0.906	0.984	—	1.378	1.772	90	0.394	M24 P3	—	85-110	TQW-PS(30)/ER20	D

Note:

- *Torque Wrench sold separately from Torque Wrench Attachments. See pages 41 and 88 for more details.



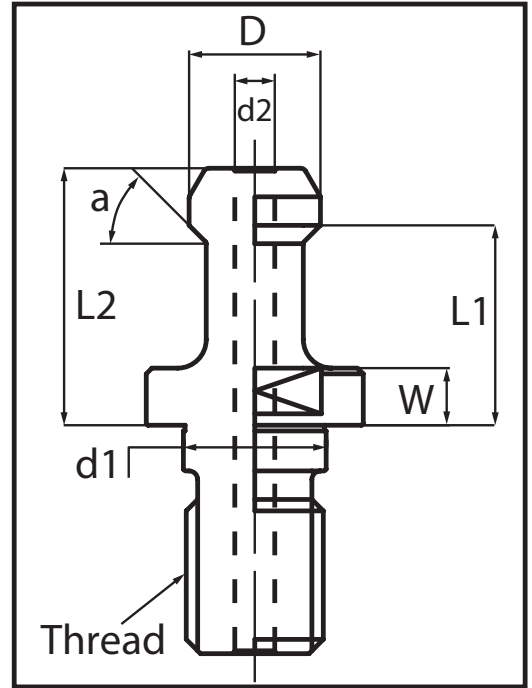
RETENTION KNOBS



RETENTION KNOB INQUIRY FORM

Please complete form with as much information as possible and return to sales@lyndexnikken.com.

CUSTOMER NAME:	
ADDRESS:	
CITY / STATE / ZIP:	
CONTACT:	
PHONE:	
EMAIL:	



Machine Information			Required Dimensions						Coolant Through		
Machine Make	Machine Model	Machine Taper	D	L1	L2	W	a	Thread	d1	d2	O-Ring (Y/N)

THE GLOBAL LEADER IN MANUFACTURING INNOVATION



LYNDEX-NIKKEN

NIKKEN X-TREME CHUCKS



Industry proven to eliminate pull-out. Developed exclusively for demanding applications in Aerospace and Energy.

QUICK CHANGE FLEX COLLETS



A wide selection of Quick Change Flex Collets & Chucks to handle any work-holding challenge. Can be switched within 10 seconds.

SK LIVE TOOLS



3x the gripping power of ER! Machine with higher chip load and reduced cycle time. New design allows for all internal coolant tools to be run dry continuously!

DIRECT DRIVE ROTARY TABLES



High speed, high accuracy rotary tables for high production needs.

ANGLE HEADS



A low investment to help obtain high productivity on machining centers.

SHRINK FIT



Combining narrow, precise and rigid shrink fit holders with an easy-to-use shrink machine.



847-367-4800 | sales@lyndexnikken.com
lyndexnikken.com

Connect With Us!





TOOL CLAMPERS



Lyndex-Nikken Tool Clampers are machinists' favorite tooling setup fixtures because they are so handy and practical. You'll gain immediate access to both the working end and the taper end and your toolholder will be secured by a vise-tight grip.

Easy to use, just place or mount your Tool Clamper in a convenient spot and slip a holder into its cradle. Raise the flange lock and secure it with an easy-to-grip thumb screw.

Tool Clamper provides maximum toolholder accessibility with minimum handling. Less handling means fewer chances of costly toolholders being dropped or damaged. Save the time and the hassles of using yesterday's toolholder loading and unloading techniques, and save the money you would spend on replacing damaged toolholders.

FEATURES

- Access both ends of your toolholders simultaneously
- Minimize toolholder handling
- Speed up your setup
- Convenient and practical
- Easy to use

UNIVERSAL TOOL CLAMPER

Part Number	Description
TCLA-30/50A/C5	Tool Clamper - BT30 / HSK50A / PSC C5 Adjustable
TCLA-40/63A/C6	Tool Clamper - BT40 / CAT40 / HSK63A / PSC C6 Adjustable
TCLA-50/100A/C10	Tool Clamper - BT50 / CAT50 / HSK100A / C10 Adjustable

NIKKEN TOOL CLAMPER

Part Number	Description
NCL-BT30	NIKKEN Tool Clamper - on size BT30 Taper
NCL-BT40	NIKKEN Tool Clamper - on size BT40 Taper
NCL-BT50	NIKKEN Tool Clamper - on size BT50 Taper
NCL-ICAT40	NIKKEN Tool Clamper - on size CAT40 / IT40 / SK40 Tapers
NCL-ICAT50	NIKKEN Tool Clamper - on size CAT50 / IT50 / SK50 Tapers



NIKKEN TOOL CLAMPER FOR HSK & ATC ALIGNMENT KIT

Nikken Tool clamper is designed for symmetrical holders without drive key slots or U-groove. By changing the clamper head to the suitable size, the same base can be used for the other taper sizes.

Changeable Lever
Clamp/Neutral/Unclamp



TCL-40GH

Clamper Head TCL-...HD



Clamper Base TCL-BD

NIKKEN TOOL CLAMPER FOR HSK TOOLING

Taper	Tool Clamper Complete Unit	Base Part Number	Head Part Number
HSK32E	TCL-32GH	TCL-BD	TCL-32HD
HSK40A, 40E	TCL-40GH		TCL-40HD
HSK50A, 50E	TCL-50GH		TCL-50HD
HSK63A, 63E, 63F	TCL-63GH		TCL-63HD
HSK100A	TCL-100GH		TCL-100HD

ATC ALIGNMENT KIT

The Automatic Tool Changer (ATC) allows for service on your machine to check alignment of the ATC arm with the spindle and magazine.

Part Number	Taper
ATC-ALIGN-BT30	#30
ATC-ALIGN-BT40	#40
ATC-ALIGN-BT50	#50
ATC-ALIGN-CAT40	CAT40
ATC-ALIGN-CAT40-MZ	CAT40 (Mazak)
ATC-ALIGN-CAT50	CAT50
ATC-ALIGN-CAT50-MZ	CAT50 (Mazak)
ATC-ALIGN-HSK63A	HSK63A
ATC-ALIGN-HSK100A	HSK100A

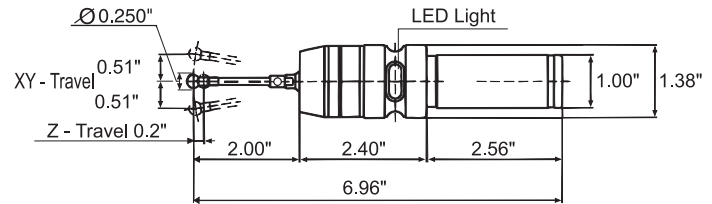


The ATC Alignment Kit consists of:

- Taper adapter
- Flange adapter
- Centering pin

POINTFINDER™

Locate the precise relative positioning of the workpiece to the spindle



PointFinder™ is an all-in-one replacement for primary axis setters, calipers, and depth and centering gauges. Not only is it quick and easy to use, its accuracy is beyond compare.

Simply load it into a toolholder and mount it into the machine's spindle. Gauge length pre-setting is unnecessary for X- or Y-axis coordinate determination. Move PointFinder slowly along either the X- or Y-axis toward the workpiece. Its bright LED flashes at the exact point where its 1/4" diameter probe touches the workpiece's surface. That point is exactly 1/8" away from spindle center. Z-axis coordinate determination requires pre-setting, and the point of probe contact marks the exact Z-axis coordinate.

With the workpiece locked into position, your other measurements are performed with the same ease and speed.

Part Number	Description
PF-2	PointFinder™ with 2" Stylus
PF-STYLUS-2	Replacement Stylus for PointFinder™ PF-2

FEATURES

Advanced Conductive Detection System

- Instant LED response
- Direct action—no relays
- Works with all metals
- Unaffected by cutting oil

Precise

- Position detection accuracy: +/- 0.0008"
- Stylus recovery accuracy: +/- 0.0008"
- Stylus to shank concentricity: +/- 0.0004"

Overrun Protected

- X-axis and Y-axis: 0.400"
- Z-axis: 0.200"

Versatile Design

- Convenient 1" straight shank configuration
- Projects 4.40" from holder when fully loaded

Hardened, Precision Ground Steel Construction

Easy to Use

- Measure without calipers
- Set depths, find centers without gauges
- Position your workpiece without primary axis setters

Time Saver

- Turn expensive setup time into profit-making production time

ACCESSORIES

ZEROSETTER™

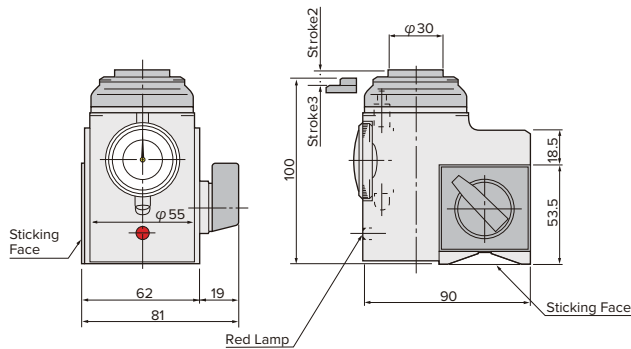
Quick, simple, precise Z-axis off setting

ZeroSetter™ assures fast reliable results every time you off-set your Z-axis. Your setup time will be reduced, so you'll gain valuable production time. Made of hardened tool steel, each setter is meticulously ground for top precision. ZeroSetter establishes an absolute gauge length of 4" or 6" that serves as your primary reference point. Its dial indicator is graduated in thousandths (0.001").

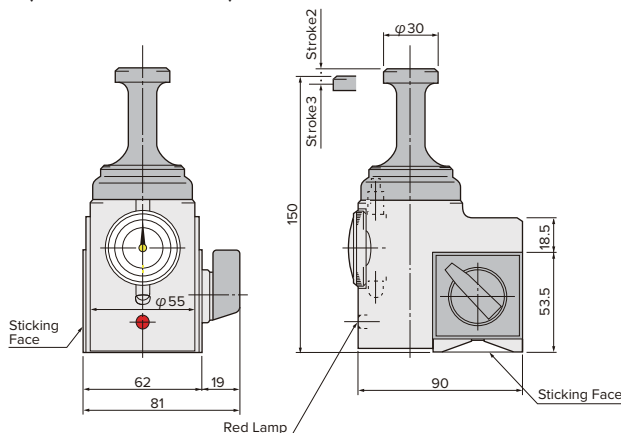


Part Number	Description
ZERO-SET2/50	2" / 50mm Gauge Length Zero Setter
HP-100WP	100mm Gauge Length Height Presetter - Rust and Dust Proof
HP-150WP	150mm Gauge Length Height Presetter - Rust and Dust Proof
HP-4WP	4" Gauge Length Height Presetter - Rust and Dust Proof
HP-6WP	6" Gauge Length Height Presetter - Rust and Dust Proof

HP-100WP
(Dimensions in mm)

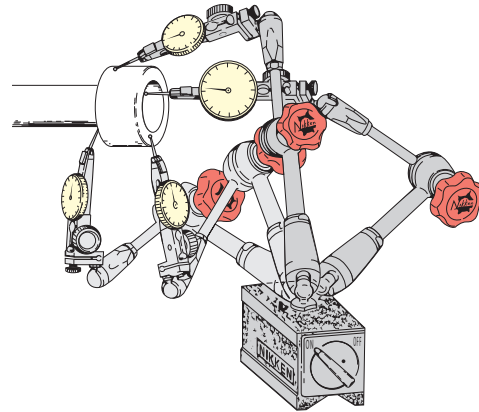
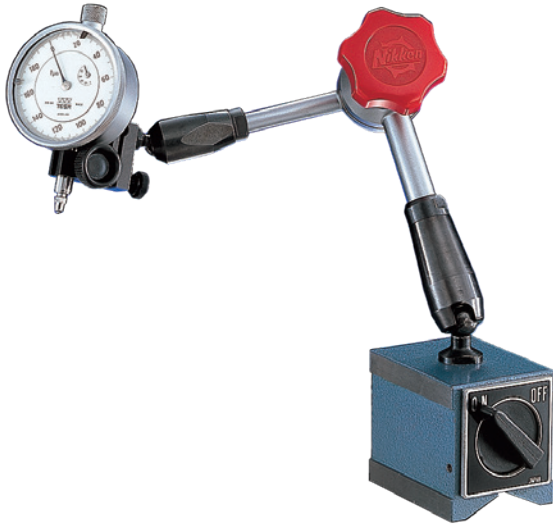


HP-150WP
(Dimensions in mm)



UNIVERSAL MICRO STAND

Our Micro stand is the ideal base to mount your dial test indicator for clocking or aligning your parts or equipment.



FEATURES

Long Reach

- 11.8" (300mm) max. (straight horizontal)
- Free flexing in any direction: vertical, lateral, longitudinal, rotational, etc.
- Can measure inside and outside diameters, end and back faces

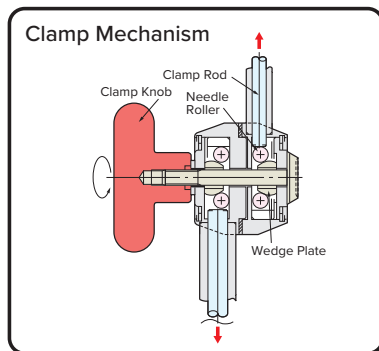
Clamp Mechanism

- Clamp knob prevents looseness due to machine vibration
- Articulated joints lock firmly and no fine (micron) movement will occur - even after being in the same position for 100 hours

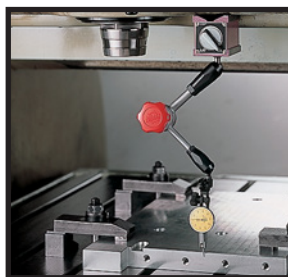
Strong Magnet

- Adapt to most surfaces including vertical, angular, uneven surfaces and more

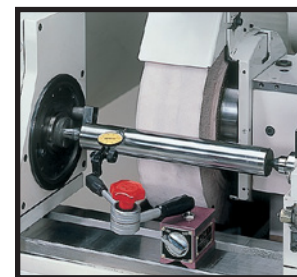
Part Number	Description
UDS-1	Universal Micro Stand with magnetic base



On Machining Center



On NC Lathe



On Grinding Machine

SPINDLE WIPES

These handy wipes quick-clean your spindles, assuring that your toolholder tapers make continuous positive contact with them for repeatable on-center performance. They're also perfect for cleaning the bores of your collet chucks.



FOR MACHINE SPINDLES

Part Number	Description
SPINDLE-WIPE-#30	Spindle Wipe 30 Taper
SPINDLE-WIPE-#40	Spindle Wipe 40 Taper
SPINDLE-WIPE-#50	Spindle Wipe 50 Taper
SPINDLE-WIPE-H100/125	Spindle Wipe HSK100A/C/E, HSK125B/D/F
SPINDLE-WIPE-H125/160	Spindle Wipe HSK125A/C, HSK160
SPINDLE-WIPE-H25/32	Spindle Wipe HSK25A/C/E, HSK32B/D/F
SPINDLE-WIPE-H32/40	Spindle Wipe HSK32A/C/E, HSK40B/D/F
SPINDLE-WIPE-H40/50	Spindle Wipe HSK32A/C/E, HSK40B/D/F
SPINDLE-WIPE-H50/63	Spindle Wipe HSK50A/C/E, HSK63B/D/F
SPINDLE-WIPE-H63/80	Spindle Wipe HSK50A/C/E, HSK63B/D/F
SPINDLE-WIPE-H80/100	Spindle Wipe HSK50A/C/E, HSK63B/D/F



SILICONE SPINDLE WIPE

Part Number	Description
CLEH-NT30-R	Silicone Spindle Wipe 30 Taper
CLEH-NT40-R	Silicone Spindle Wipe 40 Taper
CLEH-NT50-R	Silicone Spindle Wipe 50 Taper
CLEH-HSK63-R	Silicone Spindle Wipe HSK63A Taper
CLEH-HSK100-R	Silicone Spindle Wipe HSK100A Taper



TEST BARS

- Precision ground
- Maximum T.I.R. of 0.0002"
- Excellent for gauging spindle runout
- Packaged in wooden carry case

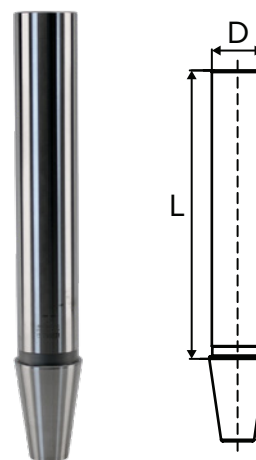


CAT40/50

Part Number	Taper	L	D
CAT40-TB1.3/4-14.00NF	CT40	14.00"	1.75"
CAT50-TB2.1/2-14.00NF	CT50	14.00"	2.50"

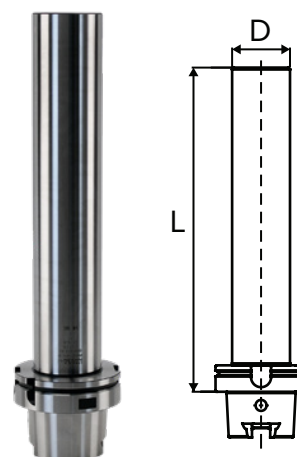
BT30/40/50

Part Number	Taper	L	D
BT30-TB1.1/4-10.00NF	BT30	10.00"	1.25"
BT40-TB1.3/4-14.00NF	BT40	14.00"	1.75"
BT50-TB2.1/2-14.00NF	BT50	14.00"	2.50"



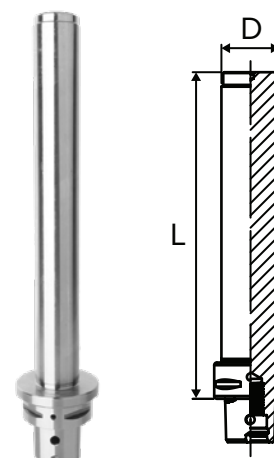
HSK63A/100A

Part Number	Taper	L	D
HSK63A-TB1.3/4-14.00	HSK63A	14.00"	1.75"
HSK100A-TB2.1/2-14.00	HSK100A	14.00"	2.50"



C4/C5/C6

Part Number	Taper	L	D
C4-TB32-180	C4	180mm	32mm
C5-TB40-280	C5	280mm	40mm
C6-TB40-352	C6	352mm	40mm



MOMIMEN CARBIDE INDEXABLE CHAMFERING & CENTER-DRILLING TOOLS

Achieve super long life and ultra fast cutting performance



Momimen SC1630C



Momimen SC1645C



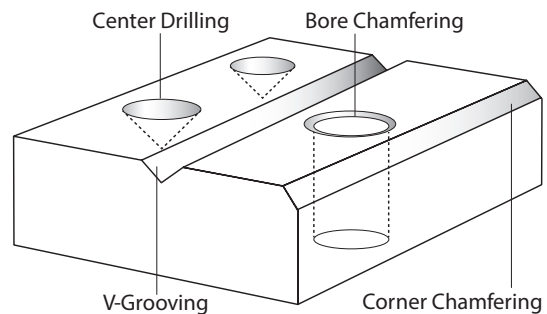
Momimen SC1660D (insert not included)

FEATURES

- Our CNC multi-purpose tool's patented inserts are specifically designed to eliminate the problems of chipping at the center point associated with conventional center drills
- Our unique tool holding system assures high accuracy and saves time when replacing inserts
- Our single blade system eliminates cutting vibration
- Momimen is durable (even for high speed cutting) which greatly improves productivity
- Momimen enables centering and chamfering work to be done on the same center

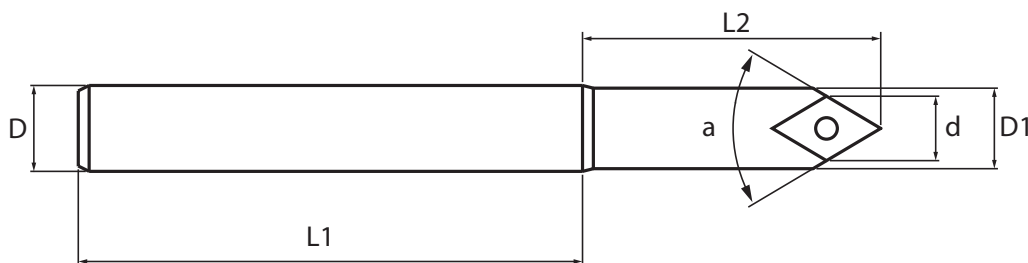
APPLICATIONS

- Center Drilling
- Corner Chamfering
- Bore Chamfering
- V-Groove Cutting



MOMIMEN CARBIDE INDEXABLE CHAMFERING & CENTER-DRILLING TOOLS

Indexable carbide tools for chamfering, center-drilling and v-grooving with one tool



MOMIMEN CHAMFER/CENTER DRILL

Part Number	L1	L2	D	d	a	D1	Insert Nose Radius (mm)
SC1630C	3.27"	1.23"	5/8"	0.625"	118°	0.650"	0.6
SC1645C	3.35"	1.15"	5/8"	0.500"	90°	0.551"	0.6
SC1660D*	3.75"	2.05"	5/8"	0.472"	60°	0.472"	0.4

*Insert for SC1660D not included.

INSERTS

Part Number	Grade	Application
C32GUX-NK1010	NK1010	Aluminum Cast Iron (Momimen 1630 and 1645)
C32GUX-NK2020	NK2020	Steel (Momimen 1630 and 1645)
D43GUX-NK1010	NK1010	Aluminum Cast Iron (Momimen 1660)
D43GUX-NK5050	NK5050	Steel (Momimen 1660)

Note: Insert package quantity is 12 pieces.

RECOMMENDED SPEEDS & FEEDS

Materials	For Center Drilling & V-Grooving			For Chamfer Milling (down cut)		
	RPM	IPM	Grade	RPM	IPM	Grade
Mild Steels	3000	3.2	NK2020	3000	8	NK2020
Stainless Steels	2000	2	NK2020	2500	6	NK2020
Die Steels	3000	2	NK2020	3000	6	NK2020
Cast Iron	3200	8	NK1010	3000	8	NK1010
Aluminum	4000	6	NK1010	4000	12	NK1010

CHIBIMOMI CARBIDE INDEXABLE CHAMFERING & CENTER-DRILLING TOOLS

Achieve super long life and ultra fast cutting performance



Chibimomi SCM1045C



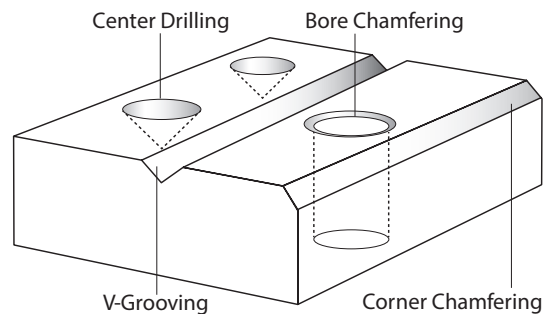
Chibimomi SCM1045CL

FEATURES

- 3/8" shank and 5/16" lip assure highly accurate machining in narrow and limited space points.
- Our patented insert eliminates cutting vibration and cracking.
- Our patented insert assures problem-free secondary deburring.
- Save time when replacing inserts because no tool compensation is needed.
- Number of toolholders in the ATC can be reduced because this can be used for multiple applications such as: spot drilling, countersinking and chamfering, bore chamfering, edge chamfering, and v-grooving.
- Greatly improves productivity due to high-speed cutting.

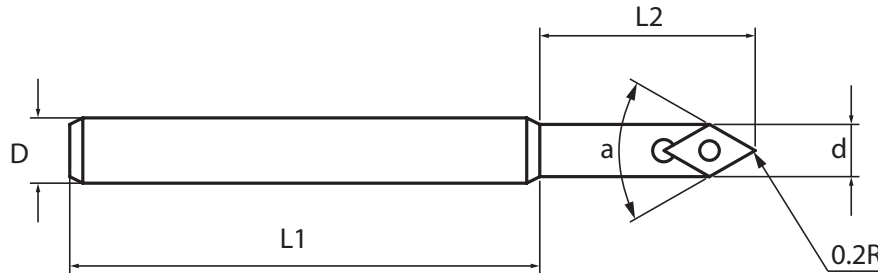
APPLICATIONS

- Center Drilling
- Corner Chamfering
- Bore Chamfering
- V-Groove Cutting



CHIBIMOMI CARBIDE INDEXABLE CHAMFERING & CENTER-DRILLING TOOLS

Indexable carbide tools for chamfering, center-drilling and v-grooving with one tool



CHIBIMOMI CHAMFER/CENTER DRILL

Part Number	L1	L2	D	d	a
SCM1045C	2.68"	1.37"	0.393"	0.315"	90°
SCM1045CL	5.14"	1.37"	3/8"	0.315"	90°

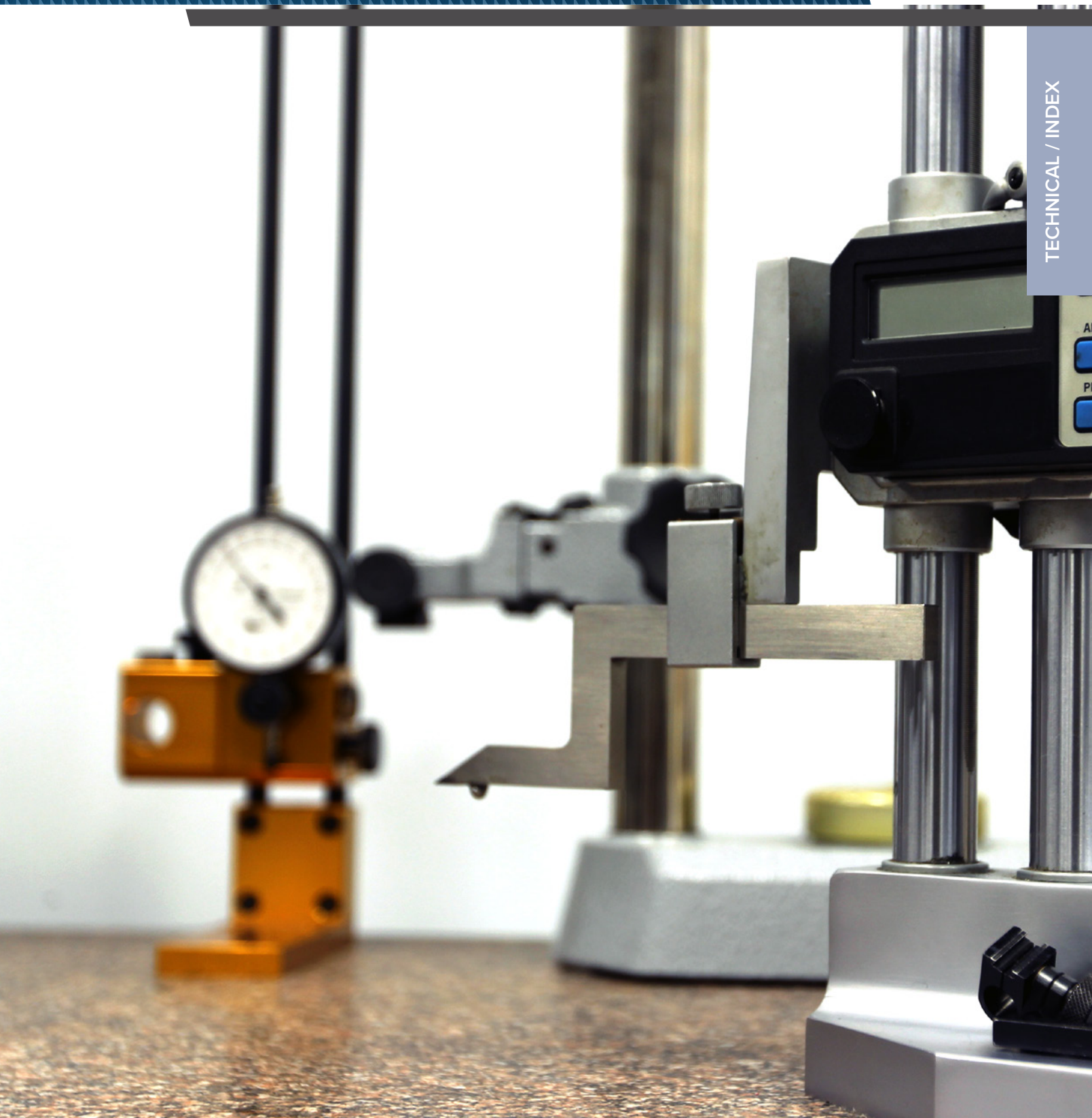
INSERTS

Part Number	Grade	Application
C22GUX-NK1010	NK1010	Steel
C22GUX-NK5050	NK5050	Steel

Note: Insert package quantity: 12 pieces.

RECOMMENDED SPEEDS & FEEDS

Materials	For Center Drilling & V-Grooving			For Chamfer Milling (down cut)		
	RPM	IPM	Grade	RPM	IPM	Grade
Mild Steels	3000	2	NK5050	3500	19	NK5050
Stainless Steels	2800	2	NK5050	3000	13	NK5050
Aluminum	4000	4	NK1010	5000	39	NK1010



LYNDEX-NIKKEN PRODUCT WARRANTY

TOOLHOLDER WARRANTY

- All standard tooling and collets from Lyndex-Nikken have a 1 year warranty against manufacturer defects and workmanship.
- Warranty is void if physical harm is done to the tool or misused outside of its intended purpose.



SHRINK FIT UNIT WARRANTY

- All shrink fit units have a 1 year warranty against manufacturer defects and workmanship.
- Proper installation is required to maintain the 1 year manufacturing warranty.
- 200V Units – MUST be on dedicated protected network with 3 Phase 200-240V 50-60Hz with a 32A circuit breaker with a 30mA differential.
- 400V Units – MUST be on dedicated protected network with 3 Phase 400-480V 50-60Hz with a 32A circuit breaker with a 30mA differential.
- Cooling Towers requires dry filtered air at 85-125psi and be securely mounted.
- Warranty is void if physical harm is done to the unit or used outside of its intended purpose.



ANGLE HEADS WARRANTY

- All angle heads come with a 1 year warranty against manufacturing defects and workmanship.
- All L/N angle heads need to be application approved in order for the warranty to be valid.
- Warranty becomes void if customer disassembles tool or if customer physically damages the tool.
- On repairs, there is a 6 month warranty on replacement parts and workmanship.
- Preventative Maintenance packages are available by request.
- Warranty DOES NOT apply for NSK attachments on Modular Angle Heads.
- Angle Heads should be checked periodically for heat generation / T.I.R. / noise generation and sent in accordingly.
- Internal coolant tools should be sent in every 6 months to 1 year based on usage.



LYNDEX-NIKKEN PRODUCT WARRANTY

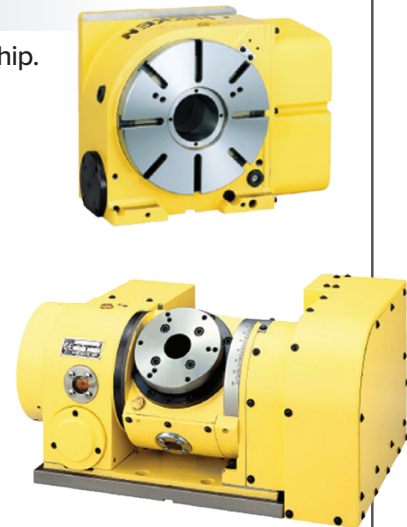
LIVE TOOLS WARRANTY

- All live tooling comes with a 1 year warranty against manufacturing defects and workmanship.
- Warranty becomes void if customer disassembles tool or if customer physically damages the tool.
- On repairs, there is a 6 month warranty on replacement parts and workmanship.
- Preventative Maintenance packages are available by request.
- Live tools should be checked periodically for heat generation / T.I.R. / noise generation and sent in accordingly.
- Internal coolant tools should be sent in every 6 months to 1 year based on usage.



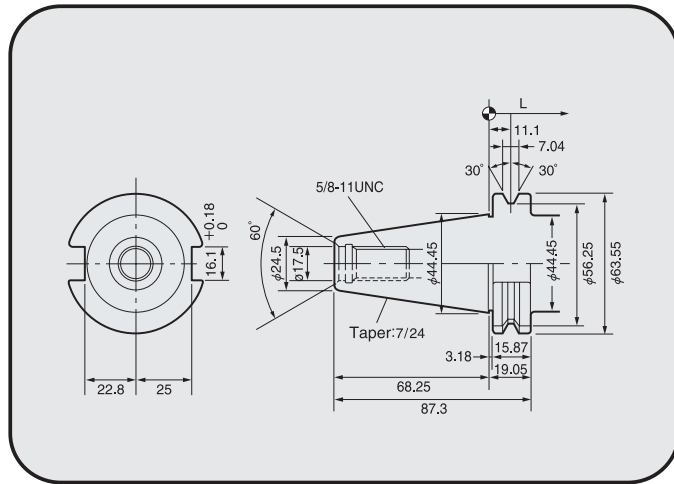
ROTARY TABLES WARRANTY

- Warranty of table is 1 year against manufacturer defects and workmanship.
- If customer has table repaired by Lyndex-Nikken, warranty on repair is 3 months against manufacturer defects and workmanship.
- Preventative Maintenance packages available by request.
- Warranty also covers all support tables, tailstocks, chucks and collet fixture assemblies as well.
- Warranty will also be void if installation of table is not by a certified technician from Lyndex-Nikken or other machine tool dealer.
- Failure to do so could result in damaged electrical components that Lyndex-Nikken will not be responsible for.
- Warranty is void if customer disassembles table or causes physical harm to the rotary table.

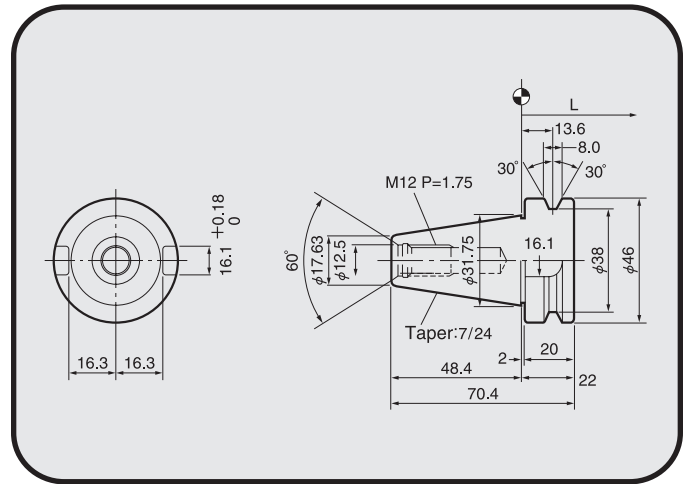


TAPER SPECIFICATIONS

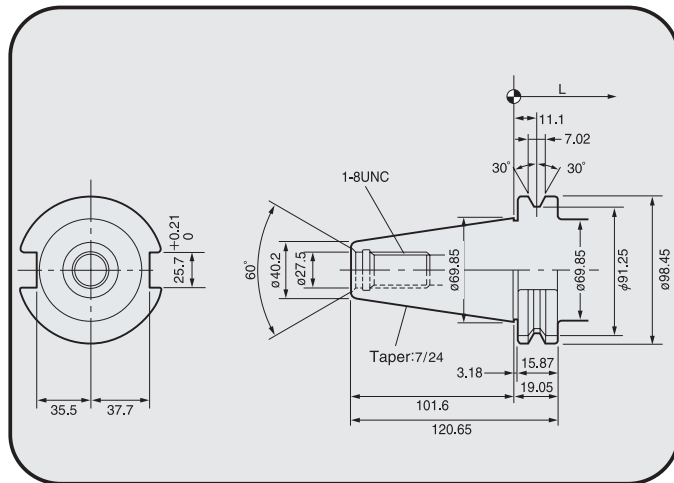
CAT40



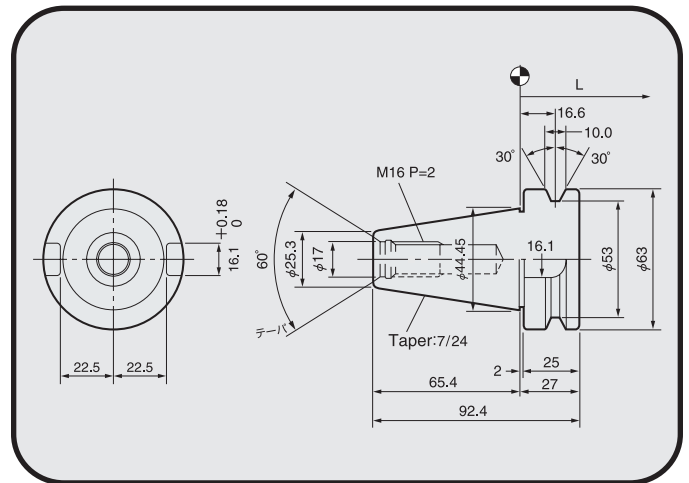
BT30



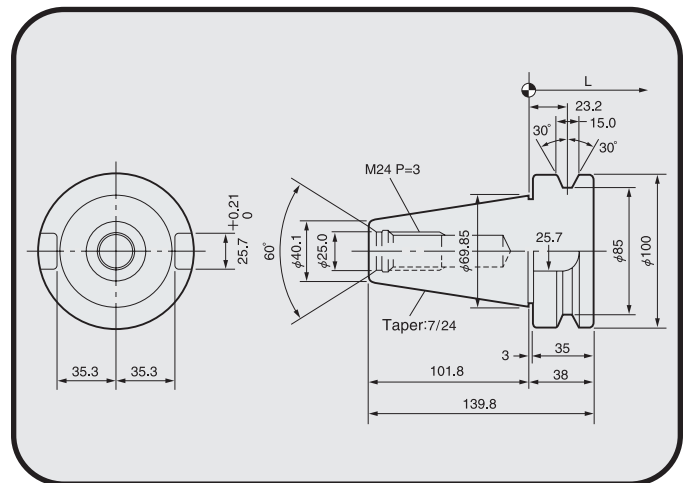
CAT50



BT40

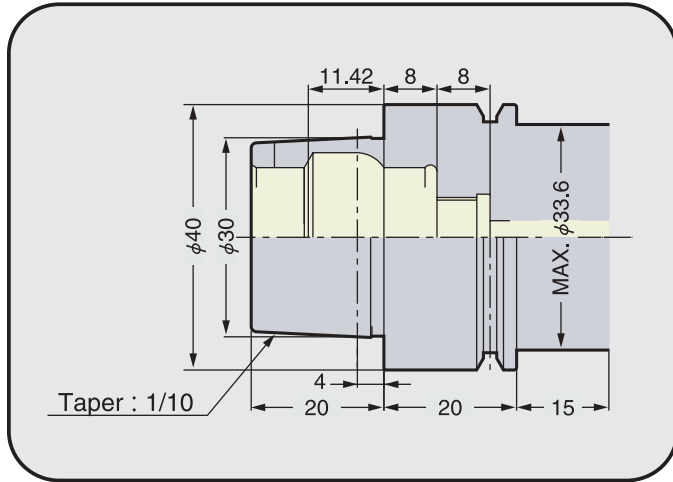


BT50

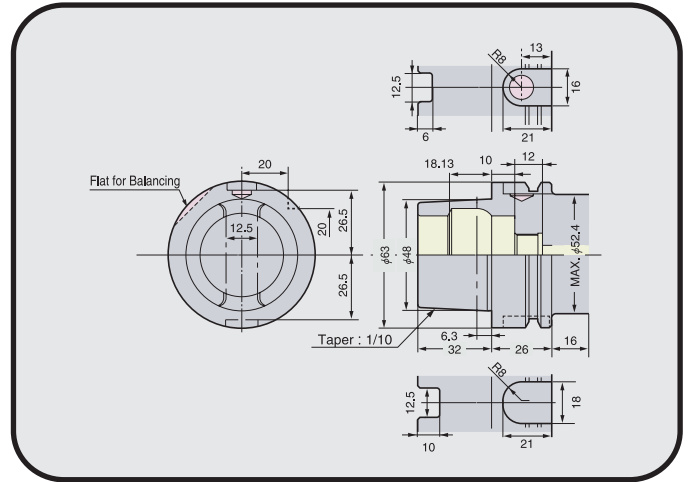


TAPER SPECIFICATIONS

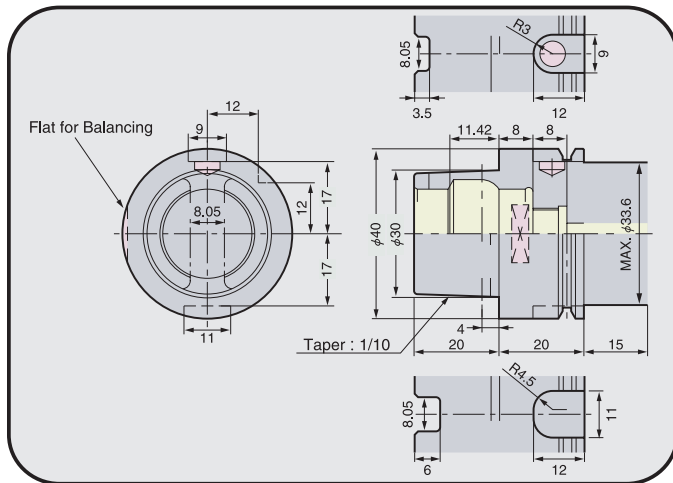
HSK40E



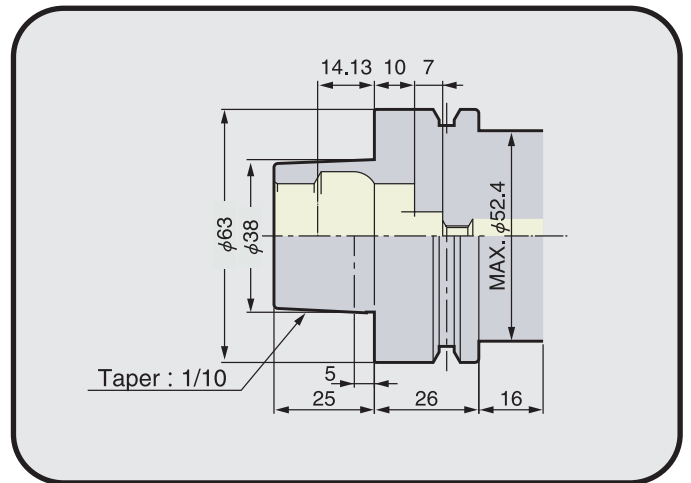
HSK63A



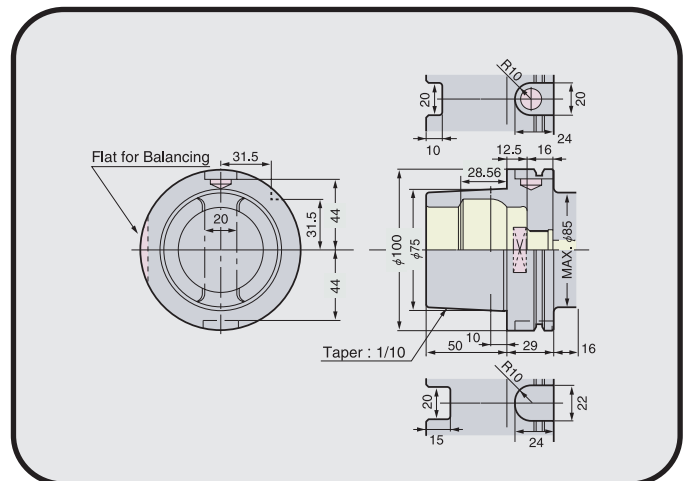
HSK40A



HSK63F

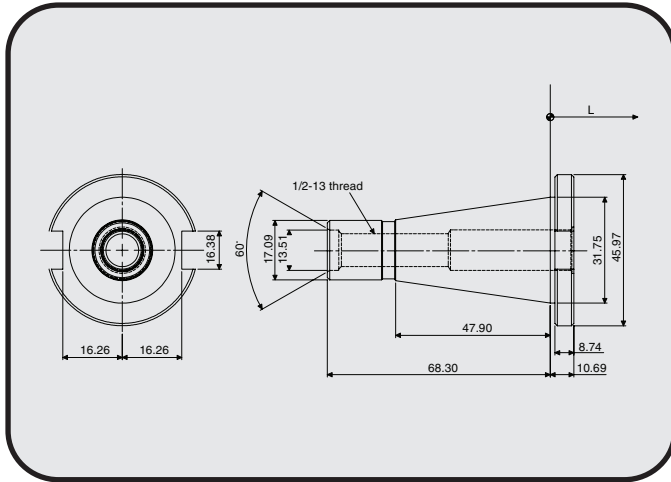


HSK100A

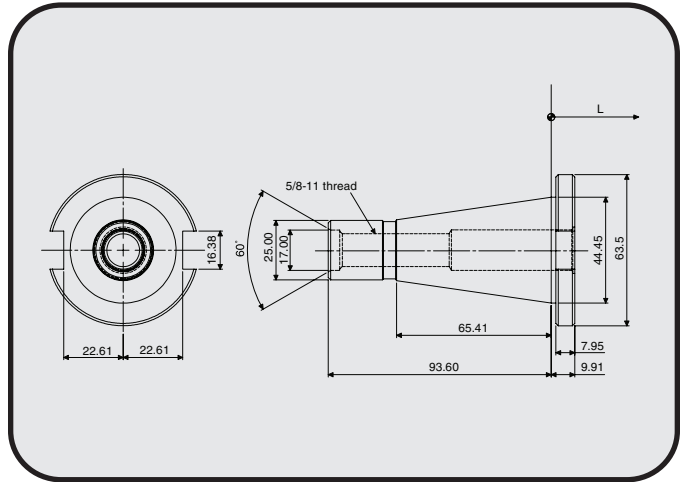


TAPER SPECIFICATIONS

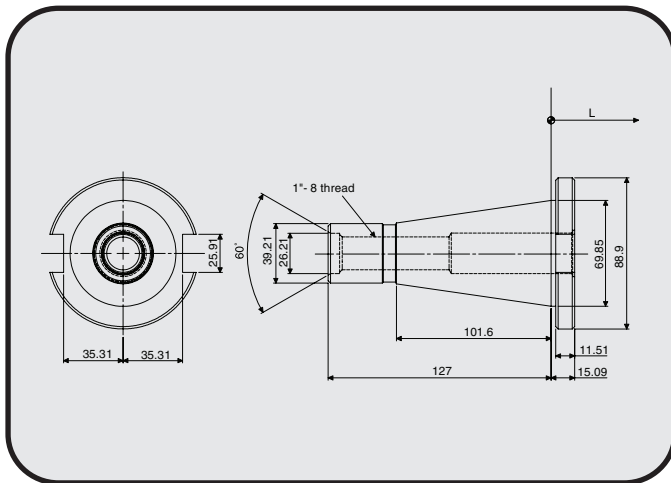
NMTB30



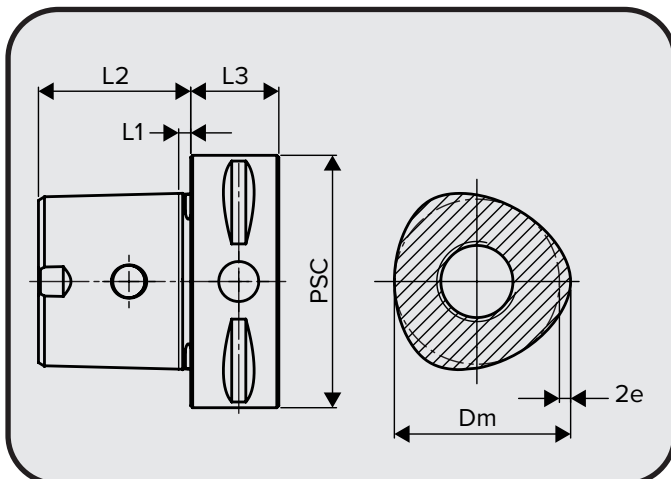
NMTB40



NMTB50



POLYGONAL C3-C8 - ISO 26623-1



PSC	Size	Dm	e	L1	L2	L3 min.
32	C3	22	0.70	2.50	19	15
40	C4	28	0.90	2.50	24	20
50	C5	35	1.12	3.00	30	20
63	C6	44	1.40	3.00	38	22
80	C8	55	2.00	3.00	48	30

Note: All dimensions in this chart are in millimeters.



SK DRILL CHART

FRACTION SIZE	# SIZE	LETTER SIZE	METRIC SIZE	DECIMAL INCHES	SK6 COLLETS	SK10 COLLETS	SK13 COLLETS	SK16 COLLETS	SK20 COLLETS	SK25 COLLETS
	80			0.0135						
	79			0.0145						
1/64				0.0156						
	78			0.0160						
	77			0.0180						
			0.5	0.0197						
	76			0.0200						
	75			0.0210						
	74			0.0225						
	73			0.0240						
	72			0.0250						
	71			0.0260						
	70			0.0280	SK6-0.8					
	69			0.0292	SK6-0.8					
			0.75	0.0295	SK6-0.8					
	68			0.0310	SK6-0.8					
1/32				0.0312	SK6-0.8					
	67			0.0320						
	66			0.0330						
	65			0.0350	SK6-1	SK10-1				
	64			0.0360	SK6-1	SK10-1				
	63			0.0370	SK6-1	SK10-1				
	62			0.0380	SK6-1	SK10-1				
	61			0.0390	SK6-1	SK10-1				
			1	0.0394	SK6-1	SK10-1				
	60			0.0400						
	59			0.0410						
	58			0.0420						
	57			0.0430						
	56			0.0465	SK6-1.25	SK10-1.25				
3/64				0.0469	SK6-1.25	SK10-1.25				
			1.25	0.0492	SK6-1.25	SK10-1.25				
	55			0.0520	SK6-1.5	SK10-1.5				
	54			0.0550	SK6-1.5	SK10-1.5				
			1.5	0.0591	SK6-1.5	SK10-1.5				
	53			0.0595						
1/16				0.0625	SK6-1.75	SK10-1.75				
	52			0.0635	SK6-1.75	SK10-1.75				
	51			0.0670	SK6-1.75	SK10-1.75				
			1.75	0.0689	SK6-1.75	SK10-1.75				
	50			0.0700	SK6-2	SK10-2				
	49			0.0730	SK6-2	SK10-2				
	48			0.0760	SK6-2	SK10-2				
5/64				0.0781	SK6-2	SK10-2				
	47			0.0785	SK6-2	SK10-2				
			2	0.0787	SK6-2	SK10-2				
	46			0.0810	SK6-2.25	SK10-2.25				
	45			0.0820	SK6-2.25	SK10-2.25				
	44			0.0860	SK6-2.25	SK10-2.25				

SK DRILL CHART

FRACTION SIZE	# SIZE	LETTER SIZE	METRIC SIZE	DECIMAL INCHES	SK6 COLLETS	SK10 COLLETS	SK13 COLLETS	SK16 COLLETS	SK20 COLLETS	SK25 COLLETS
			2.25	0.0886	SK6-2.25	SK10-2.25				
	43			0.0890	SK6-2.5	SK10-2.5				
	42			0.0935	SK6-2.5	SK10-2.5				
3/32				0.0938	SK6-2.5	SK10-2.5				
	41			0.0960	SK6-2.5	SK10-2.5				
	40			0.0980	SK6-2.5	SK10-2.5				
			2.5	0.0984	SK6-2.5	SK10-2.5				
	39			0.0995	SK6-2.75	SK10-2.75				
	38			0.1015	SK6-2.75	SK10-2.75				
	37			0.1040	SK6-2.75	SK10-2.75				
	36			0.1065	SK6-2.75	SK10-2.75				
			2.75	0.1083	SK6-2.75	SK10-2.75		SK16-3		
7/64				0.1094	SK6-3	SK10-3		SK16-3		
	35			0.1100	SK6-3	SK10-3	SK13-3	SK16-3		
	34			0.1110	SK6-3	SK10-3	SK13-3	SK16-3		
	33			0.1130	SK6-3	SK10-3	SK13-3	SK16-3		
	32			0.1160	SK6-3	SK10-3	SK13-3	SK16-3		
			3	0.1181	SK6-3	SK10-3	SK13-3	SK16-3		
	31			0.1200	SK6-3.5	SK10-3.5	SK13-3.5	SK16-3.5		
1/8				0.1250	SK6-3.5/SK6-1/8A	SK10-3.5/ SK10-1/8A	SK13-3.5/SK13-1/8A	SK16-3.5/ SK16-1/8A	SK20-1/8A	
			3.25	0.1280	SK6-3.5	SK10-3.5	SK13-3.5	SK16-3.5		
	30			0.1285	SK6-3.5	SK10-3.5	SK13-3.5	SK16-3.5		
	29			0.1360	SK6-3.5	SK10-3.5	SK13-3.5	SK16-3.5		
			3.5	0.1378	SK6-3.5	SK10-3.5	SK13-3.5	SK16-3.5		
	28			0.1405	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
9/64				0.1406	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
	27			0.1440	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
	26			0.1470	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
			3.75	0.1476	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
	25			0.1495	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
	24			0.1520	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
	23			0.1540	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
5/32				0.1562	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
	22			0.1570	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
			4	0.1575	SK6-4	SK10-4	SK13-4	SK16-4	SK20-4	
	21			0.1590	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
	20			0.1610	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
	19			0.1660	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
			4.25	0.1673	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
	18			0.1695	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
11/64				0.1719	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
	17			0.1730	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
	16			0.1770	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
			4.5	0.1772	SK6-4.5	SK10-4.5	SK13-4.5	SK16-4.5	SK20-4.5	
	15			0.1800	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
	14			0.1820	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
	13			0.1850	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
			4.75	0.1870	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
3/16				0.1875	SK6-5.0/SK6-3/16A	SK10-5/ SK10-3/16A	SK13-5/SK13-3/16A	SK16-5/ SK16-3/16A	SK20-5/ SK20-3/16A	SK25-3/16A

SK DRILL CHART

FRACTION SIZE	# SIZE	LETTER SIZE	METRIC SIZE	DECIMAL INCHES	SK6 COLLETS	SK10 COLLETS	SK13 COLLETS	SK16 COLLETS	SK20 COLLETS	SK25 COLLETS
	12			0.1890	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
	11			0.1910	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
	10			0.1935	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
	9			0.1960	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
			5	0.1969	SK6-5.0	SK10-5	SK13-5	SK16-5	SK20-5	
	8			0.1990	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
	7			0.2010	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
13/64				0.2031	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
	6			0.2040	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
	5			0.2055	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
			5.25	0.2067	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
	4			0.2090	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
	3			0.2130	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
			5.5	0.2165	SK6-5.5	SK10-5.5	SK13-5.5	SK16-5.5	SK20-5.5	
7/32				0.2188	SK6-6	SK10-6	SK13-6	SK16-6	SK20-6	
	2			0.2210	SK6-6	SK10-6	SK13-6	SK16-6	SK20-6	
			5.75	0.2264	SK6-6	SK10-6	SK13-6	SK16-6	SK20-6	
	1			0.2280	SK6-6	SK10-6	SK13-6	SK16-6	SK20-6	
		A		0.2340	SK6-6	SK10-6	SK13-6	SK16-6	SK20-6	
15/64				0.2344	SK6-6	SK10-6	SK13-6	SK16-6	SK20-6	
			6	0.2362	SK6-6	SK10-6	SK13-6	SK16-6	SK20-6	
		B		0.2380		SK10-6.5	SK13-6.5	SK16-6.5	SK20-6.5	
		C		0.2420		SK10-6.5	SK13-6.5	SK16-6.5	SK20-6.5	
		D		0.2460		SK10-6.5	SK13-6.5	SK16-6.5	SK20-6.5	
			6.25	0.2461		SK10-6.5	SK13-6.5	SK16-6.5	SK20-6.5	
1/4		E		0.2500	SK6-1/4A	SK10-6.5/ SK10-1/4A	SK13-6.5/ SK13-1/4A	SK16-6.5/ SK16-1/4A	SK20-6.5/ SK20-1/4A	SK25-1/4A
			6.5	0.2559		SK10-6.5	SK13-6.5	SK16-6.5	SK20-6.5	
		F		0.2570		SK10-7	SK13-7	SK16-7	SK20-7	
		G		0.2610		SK10-7	SK13-7	SK16-7	SK20-7	
17/64				0.2656		SK10-7	SK13-7	SK16-7	SK20-7	
			6.75	0.2657		SK10-7	SK13-7	SK16-7	SK20-7	
		H		0.2660		SK10-7	SK13-7	SK16-7	SK20-7	
		I		0.2720		SK10-7	SK13-7	SK16-7	SK20-7	
			7	0.2756		SK10-7	SK13-7	SK16-7	SK20-7	
		J		0.2770		SK10-7.5	SK13-7.5	SK16-7.5	SK20-7.5	
		K		0.2810		SK10-7.5	SK13-7.5	SK16-7.5	SK20-7.5	
9/32				0.2812		SK10-7.5	SK13-7.5	SK16-7.5	SK20-7.5	
			7.25	0.2854		SK10-7.5	SK13-7.5	SK16-7.5	SK20-7.5	
		L		0.2900		SK10-7.5	SK13-7.5	SK16-7.5	SK20-7.5	
		M		0.2950		SK10-7.5	SK13-7.5	SK16-7.5	SK20-7.5	SK25-8
			7.5	0.2953		SK10-7.5	SK13-7.5	SK16-7.5	SK20-7.5	SK25-8
19/64				0.2969		SK10-8	SK13-8	SK16-8	SK20-8	SK25-8
		N		0.3020		SK10-8	SK13-8	SK16-8	SK20-8	SK25-8
			7.75	0.3051		SK10-8	SK13-8	SK16-8	SK20-8	SK25-8
5/16				0.3125		SK10-8/ SK10-5/16A	SK13-8/ SK13-5/16A	SK16-8/ SK16-5/16A	SK20-8/ SK20-5/16A	SK25-8/ SK25-5/16A
			8	0.3150		SK10-8	SK13-8	SK16-8	SK20-8	SK25-8
		O		0.3160		SK10-8.5	SK13-8.5	SK16-8.5	SK20-8.5	
		P		0.3230		SK10-8.5	SK13-8.5	SK16-8.5	SK20-8.5	
			8.25	0.3248		SK10-8.5	SK13-8.5	SK16-8.5	SK20-8.5	

SK DRILL CHART

FRACTION SIZE	# SIZE	LETTER SIZE	METRIC SIZE	DECIMAL INCHES	SK6 COLLETS	SK10 COLLETS	SK13 COLLETS	SK16 COLLETS	SK20 COLLETS	SK25 COLLETS
21/64				0.3281		SK10-8.5	SK13-8.5	SK16-8.5	SK20-8.5	
		Q		0.3320		SK10-8.5	SK13-8.5	SK16-8.5	SK20-8.5	
			8.5	0.3346		SK10-8.5	SK13-8.5	SK16-8.5	SK20-8.5	
		R		0.3390		SK10-9	SK13-9	SK16-9	SK20-9	
11/32				0.3438		SK10-9	SK13-9	SK16-9	SK20-9	
			8.75	0.3445		SK10-9	SK13-9	SK16-9	SK20-9	
		S		0.3480		SK10-9	SK13-9	SK16-9	SK20-9	
			9	0.3543		SK10-9	SK13-9	SK16-9	SK20-9	
		T		0.3580		SK10-9.5	SK13-9.5	SK16-9.5	SK20-9.5	
23/64				0.3594		SK10-9.5	SK13-9.5	SK16-9.5	SK20-9.5	
			9.25	0.3642		SK10-9.5	SK13-9.5	SK16-9.5	SK20-9.5	
		U		0.3680		SK10-9.5	SK13-9.5	SK16-9.5	SK20-9.5	
			9.5	0.3740		SK10-9.5	SK13-9.5	SK16-9.5	SK20-9.5	SK25-10
3/8				0.3750		SK10-10/ SK10-3/8A	SK13-10/SK13-3/8A	SK16-10/ SK16-3/8A	SK20-10/ SK20-3/8A	SK25-10/SK25-3/8A
		V		0.3770		SK10-10	SK13-10	SK16-10	SK20-10	SK25-10
			9.75	0.3839		SK10-10	SK13-10	SK16-10	SK20-10	SK25-10
		W		0.3860		SK10-10	SK13-10	SK16-10	SK20-10	SK25-10
25/64				0.3906		SK10-10	SK13-10	SK16-10	SK20-10	SK25-10
			10	0.3937		SK10-10	SK13-10	SK16-10	SK20-10	SK25-10
		X		0.3970			SK13-10.5	SK16-10.5	SK20-10.5	
		Y		0.4040			SK13-10.5	SK16-10.5	SK20-10.5	
13/32				0.4063			SK13-10.5	SK16-10.5	SK20-10.5	
		Z		0.4130			SK13-10.5	SK16-10.5	SK20-10.5	
			10.5	0.4134			SK13-10.5	SK16-10.5	SK20-10.5	
27/64				0.4219			SK13-11	SK16-11	SK20-11	
			11	0.4331			SK13-11	SK16-11	SK20-11	
7/16				0.4375			SK13-11.5/SK13-7/16A	SK16-11.5/ SK16-7/16A	SK20-11.5/ SK20-7/16A	SK25-7/16A
			11.5	0.4528			SK13-11.5	SK16-11.5	SK20-11.5	
29/64				0.4531			SK13-12	SK16-12	SK20-12	SK25-12
15/32				0.4688			SK13-12	SK16-12	SK20-12	SK25-12
			12	0.4724			SK13-12	SK16-12	SK20-12	SK25-12
31/64				0.4844			SK13-12.5	SK16-12.5	SK20-12.5	
			12.5	0.4921			SK13-12.5	SK16-12.5	SK20-12.5	
1/2				0.5000			SK13-13/SK13-1/2A	SK16-13/ SK16-1/2A	SK20-13/ SK20-1/2A	SK25-1/2A
			13	0.5118			SK13-13	SK16-13	SK20-13	
33/64				0.5156				SK16-13.5	SK20-13.5	
17/32				0.5312				SK16-13.5	SK20-13.5	
			13.5	0.5315				SK16-13.5	SK20-13.5	
35/64				0.5469				SK16-14	SK20-14	
			14	0.5512				SK16-14	SK20-14	
9/16				0.5625				SK16-14.5/ SK16-9/16A	SK20-14.5/ SK20-9/16A	SK25-9/16A
			14.5	0.5709				SK16-14.5	SK20-14.5	
37/64				0.5781				SK16-15	SK20-15	
			15	0.5906				SK16-15	SK20-15	
19/32				0.5938				SK16-15.5	SK20-15.5	
39/64				0.6094				SK16-15.5	SK20-15.5	
			15.5	0.6102				SK16-15.5	SK20-15.5	
5/8				0.6250				SK16-16/ SK16-5/8A	SK20-16/ SK20-5/8A	SK25-16/ SK25-5/8A
			16	0.6299				SK16-16	SK20-16	SK25-16



SK DRILL CHART

FRACTION SIZE	# SIZE	LETTER SIZE	METRIC SIZE	DECIMAL INCHES	SK6 COLLETS	SK10 COLLETS	SK13 COLLETS	SK16 COLLETS	SK20 COLLETS	SK25 COLLETS
41/64				0.6406					SK20-16.5	SK25-16.5
			16.5	0.6496					SK20-16.5	SK25-16.5
21/32				0.6562					SK20-17	SK25-17
			17	0.6693					SK20-17	SK25-17
43/64				0.6719					SK20-17.5	SK25-17.5
11/16				0.6875					SK20-17.5	SK25-17.5
			17.5	0.6890					SK20-17.5	SK25-17.5
45/64				0.7031					SK20-18	SK25-18
			18	0.7087					SK20-18	SK25-18
23/32				0.7188					SK20-18.5	SK25-18.5
			18.5	0.7283					SK20-18.5	SK25-18.5
47/64				0.7344					SK20-19	SK25-19
			19	0.7480					SK20-19	SK25-19
3/4				0.7500					SK20-19.5/ SK20-3/4A	SK25-19.5/ SK25-3/4A
49/64				0.7656					SK20-19.5	SK25-19.5
			19.5	0.7677					SK20-19.5	SK25-19.5
25/32				0.7813					SK20-20	SK25-20
			20	0.7874					SK20-20	SK25-20
51/64				0.7969						SK25-20.5
			20.5	0.8071						SK25-20.5
13/16				0.8125						SK25-21
			21	0.8268						SK25-21
53/64				0.8281						SK25-21.5
27/32				0.8438						SK25-21.5
			21.5	0.8465						SK25-21.5
55/64				0.8594						SK25-22
			22	0.8661						SK25-22
7/8				0.8750						SK25-22.5/SK25-7/8A
			22.5	0.8858						SK25-22.5
57/64				0.8906						SK25-23
			23	0.9055						SK25-23
29/32				0.9062						SK25-23.5
59/64				0.9219						SK25-23.5
			23.5	0.9252						SK25-23.5
15/16				0.9375						SK25-24
			24	0.9449						SK25-24
61/64				0.9531						SK25-24.5
			24.5	0.9646						SK25-24.5
31/32				0.9688						SK25-25
			25	0.9843						SK25-25
63/64				0.9844						SK25-25.4
1				1						SK25-25.4

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
010-003	240	018-024	240	030-008	239	075-030(C)	233
010-004	240	018-025	240	030-009	239	075-031	233
010-005	240	018-026	240	030-010	239	075-031(C)	233
010-006	240	018-027	240	030-011	239	075-032	233
010-007	240	018-028	240	030-012	239	075-032(C)	233
010-008	240	018-029	240	030-013	239	075-033	233
010-009	240	018-030	240	030-014	239	075-033(C)	233
010-010	240	018-031	240	030-015	239	075-034	233
010-011	240	018-032	240	030-016	239	075-034(C)	233
010-012	240	018-033	240	030-EXT-500	238	075-035	233
010-013	240	018-034	240	030-EXT-500S	238	075-035(C)	233
010-014	240	018-035	240	030-SET-07	239	075-036	233
010-015	240	018-036	240	030-SET-09	239	075-036(C)	233
010-016	240	018-037	240	030-SET-13	239	075-037	233
010-017	240	018-038	240	030-SET-14	239	075-037(C)	233
010-018	240	018-039	240	032-SPAN	74	075-038	233
010-019	240	018-040	240	040-SPAN	74	075-038(C)	233
010-020	240	018-041	240	075-003	233	075-039	233
010-021	240	018-042	240	075-004	233	075-039(C)	233
010-022	240	018-043	240	075-005	233	075-040	233
010-023	240	018-044	240	075-006	233	075-040(C)	233
010-024	240	018-045	240	075-007	233	075-041	233
010-025	240	018-046	240	075-008	233	075-041(C)	233
010-026	240	018-047	240	075-008(C)	233	075-042	233
010-027	240	018-048	240	075-009	233	075-042(C)	233
010-028	240	018-EXT-125	238	075-009(C)	233	075-043	233
010-029	240	018-EXT-125S	238	075-010	233	075-043(C)	233
010-030	240	018-SET-09	240	075-010(C)	233	075-044	233
010-031	240	018-SET-17	240	075-011	233	075-044(C)	233
010-032	240	018-SET-21	240	075-011(C)	233	075-045	233
010-033	240	018-SET-33	240	075-012	233	075-045(C)	233
010-034	240	018-SET-41	240	075-012(C)	233	075-046	233
010-035	240	020-003	239	075-013	233	075-046(C)	233
010-036	240	020-004	239	075-013(C)	233	075-047	233
010-EXT-100	238	020-005	239	075-014	233	075-047(C)	233
010-EXT-100S	238	020-006	239	075-014(C)	233	075-048	233
010-SET-08	240	020-007	239	075-015	233	075-048(C)	233
010-SET-11	240	020-008	239	075-015(C)	233	075-SET-12	233
010-SET-15	240	020-009	239	075-016	233	075-SET-17	233
010-SET-17	240	020-010	239	075-016(C)	233	075-SET-23	233
010-SET-21	240	020-011	239	075-017	233	075-SET-27	233
010-SET-29	240	020-012	239	075-017(C)	233	075-SET-45	233
010-SET-33	240	020-013	239	075-018	233	08-MANUT	74
011-HEX	74	020-014	239	075-018(C)	233	08-NASPAN	74
016-SPAN	41, 74	020-015	239	075-019	233	1/2-KEYSET	188
018-003	240	020-016	239	075-019(C)	233	100-003	234
018-004	240	020-017	239	075-020	233	100-004	234
018-005	240	020-018	239	075-020(C)	233	100-005	234
018-006	240	020-019	239	075-021	233	100-006	234
018-007	240	020-020	239	075-021(C)	233	100-007	234
018-008	240	020-021	239	075-022	233	100-008	234
018-008	240	020-022	239	075-022(C)	233	100-009	234
018-009	240	020-023	239	075-023	233	100-010	234
018-010	240	020-024	239	075-023(C)	233	100-011	234
018-011	240	020-EXT-750	238	075-024	233	100-012	234
018-012	240	020-EXT-750S	238	075-024(C)	233	100-013	234
018-013	240	020-SET-09	239	075-025	233	100-014	234
018-014	240	020-SET-11	239	075-025(C)	233	100-015	234
018-015	240	020-SET-17	239	075-026	233	100-016	234
018-016	240	020-SET-21	239	075-026(C)	233	100-016(C)	234
018-017	240	020-SPAN	74	075-027	233	100-017	234
018-018	240	025-SPAN	74	075-027(C)	233	100-017(C)	234
018-019	240	030-003	239	075-028	233	100-018	234
018-020	240	030-004	239	075-028(C)	233	100-018(C)	234
018-021	240	030-005	239	075-029	233	100-019	234
018-022	240	030-006	239	075-029(C)	233	100-019(C)	234
018-023	240	030-007	239	075-030	233	100-020	234

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
100-020(C)	234	100-054	234	100-SET-30	234	160-053	264
100-021	234	100-054(C)	234	100-SET-41	234	160-054	264
100-021(C)	234	100-055	234	100-SET-41(C)	234	160-055	264
100-022	234	100-055(C)	234	100-SET-45	234	160-056	264
100-022(C)	234	100-056	234	100-SET-59	234	160-057	264
100-023	234	100-056(C)	234	100TG-NUT	236	160-058	264
100-023(C)	234	100-057	234	100TG-SPAN	236	160-059	264
100-024	234	100-057(C)	234	1-1/2-KEYSET	188	160-060	264
100-024(C)	234	100-058	234	1-1/2-STUBKEY	254	160-061	264
100-025	234	100-058(C)	234	1-1/2-STUBNUT	254	160-062	264
100-025(C)	234	100-059	234	1-1/4-KEYSET	188	160-063	264
100-026	234	100-059(C)	234	1-1/4-STUBKEY	254	160-064	264
100-026(C)	234	100-060	234	1-1/4-STUBNUT	254	160-066	264
100-027	234	100-060(C)	234	11N	196	160-068	264
100-027(C)	234	100-061	234	1250TL-2(C)	155	160-072	264
100-028	234	100-061(C)	234	1250TL-3(C)	155	160-076	264
100-028(C)	234	100-062	234	130-JT33	196	160-080	264
100-029	234	100-062(C)	234	14N	196	160-084	264
100-029(C)	234	100-063	234	160-004	264	160-088	264
100-030	234	100-063(C)	234	160-005	264	160-092	264
100-030(C)	234	100-064	234	160-006	264	160-096	264
100-031	234	100-064(C)	234	160-007	264	160-100	264
100-031(C)	234	1000TL-3(C)	155	160-008	264	160-104	264
100-032	234	100-203	235	160-009	264	160-ADJ	265
100-032(C)	234	100-204	235	160-010	264	160-J6	196
100-033	234	100-205	235	160-011	264	160-SET-08	264
100-033(C)	234	100-206	235	160-012	264	160-SET-18	264
100-034	234	100-206(C)	235	160-013	264	160-SET-29	264
100-034(C)	234	100-207	235	160-014	264	160-USA	265
100-035	234	100-208	235	160-015	264	163-008	265
100-035(C)	234	100-208(C)	235	160-016	264	163-012	265
100-036	234	100-210	235	160-017	264	163-016	265
100-036(C)	234	100-210(C)	235	160-018	264	163-020	265
100-037	234	100-211	235	160-019	264	163-024	265
100-037(C)	234	100-212	235	160-020	264	163-028	265
100-038	234	100-212(C)	235	160-021	264	163-032	265
100-038(C)	234	100-213	235	160-022	264	163-036	265
100-039	234	100-214	235	160-023	264	163-040	265
100-039(C)	234	100-214(C)	235	160-024	264	163-044	265
100-040	234	100-216	235	160-025	264	163-048	265
100-040(C)	234	100-216(C)	235	160-026	264	163-052	265
100-041	234	100-218	235	160-027	264	163-056	265
100-041(C)	234	100-218(C)	235	160-028	264	163-060	265
100-042	234	100-219	235	160-029	264	163-064	265
100-042(C)	234	100-220	235	160-030	264	163-068	265
100-043	234	100-220(C)	235	160-031	264	163-072	265
100-043(C)	234	100-222	235	160-032	264	163-076	265
100-044	234	100-222(C)	235	160-033	264	163-080	265
100-044(C)	234	100-224	235	160-034	264	163-084	265
100-045	234	100-224(C)	235	160-035	264	163-088	265
100-045(C)	234	100-225	235	160-036	264	164-008	265
100-046	234	100-225(C)	235	160-037	264	164-012	265
100-046(C)	234	100-226	235	160-038	264	164-016	265
100-047	234	100-226(C)	235	160-039	264	164-020	265
100-047(C)	234	100DA-3	241	160-040	264	164-024	265
100-048	234	100DA-4	241	160-041	264	164-028	265
100-048(C)	234	100DA-NUT	241	160-042	264	164-032	265
100-049	234	100-J2	196	160-043	264	164-036	265
100-049(C)	234	100-J33	196	160-044	264	164-040	265
100-050	234	100-SET-08	234	160-045	264	164-044	265
100-050(C)	234	100-SET-11	234	160-046	264	164-048	265
100-051	234	100-SET-11(C)	234	160-047	264	164-052	265
100-051(C)	234	100-SET-13-MM	234	160-048	264	164-056	265
100-052	234	100-SET-15	234	160-049	264	164-060	265
100-052(C)	234	100-SET-21	234	160-050	264	164-064	265
100-053	234	100-SET-21(C)	234	160-051	264	164-068	265
100-053(C)	234	100-SET-23	234	160-052	264	164-072	265

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
164-076	265	300-050	262	340-060	263	500-056	259
166-001S	264	300-051	262	340-064	263	500-057	259
16C-WRENCH	263, 265	300-052	262	340-068	263	500-058	259
16N	196	300-053	262	340-072	263	500-059	259
180DA-3	241	300-054	262	340-076	263	500-060	259
180DA-4	241	300-055	262	340-080	263	500-061	259
180DA-NUT	241	300-056	262	34-02	196	500-062	259
18N	196	300-057	262	34-06	196	500-063	259
1-KEYSET	188	300-058	262	34-33	196	500-064	259
1-STUBKEY	254	300-059	262	360-001S	262	500-065	259
1-STUBNUT	254	300-060	262	370-ADJ	263	500-066	259
200DA-3	241	300-061	262	370-USA	263	500-067	259
200DA-4	241	300-062	262	3J-WRENCH	263	500-068	259
200DA-NUT	241	300-063	262	40-KEYSET	188	500-069	259
2-1/2-KEYSET	188	300-064	262	500-003	259	500-070	259
22-KEYSET	188	300-068	262	500-004	259	500-071	259
27-KEYSET	188	300-072	262	500-005	259	500-072	259
2-KEYSET	188	300-076	262	500-006	259	510-SET-08	260
3/4-KEYSET	188	300-080	262	500-007	259	510-SET-09	260
3/4-STUBKEY	254	300-084	262	500-008	259	510-SET-09S	260
3/4-STUBNUT	254	300-088	262	500-009	259	510-SET-15	260
300-004	262	300-092	262	500-010	259	510-SET-16	260
300-005	262	300-096	262	500-011	259	510-SET-16S	260
300-006	262	300-100	262	500-012	259	510-SET-17	260
300-007	262	300-104	262	500-013	259	510-SET-18	260
300-008	262	300-108	262	500-014	259	510-SET-24-MM	260
300-009	262	300-112	262	500-015	259	510-SET-29	260
300-010	262	300DA-3	241	500-016	259	510-SET-31	260
300-011	262	300DA-4	241	500-017	259	510-SET-31S	260
300-012	262	300DA-NUT	241	500-018	259	510-SET-33	260
300-013	262	300-SET-08	262	500-019	259	510-SET-35	260
300-014	262	300-SET-18	262	500-020	259	510-SET-61	260
300-015	262	300-SET-29	262	500-021	259	510-SET-61S	260
300-016	262	300-SET-32	262	500-022	259	510-SET-65	260
300-017	262	32-KEYSET	188	500-023	259	510-SET-65S	260
300-018	262	330-016	263	500-024	259	510-SET-69	260
300-019	262	330-020	263	500-025	259	520-003	259
300-020	262	330-024	263	500-026	259	520-004	259
300-021	262	330-028	263	500-027	259	520-005	259
300-022	262	330-032	263	500-028	259	520-006	259
300-023	262	330-036	263	500-029	259	520-007	259
300-024	262	330-040	263	500-030	259	520-008	259
300-025	262	330-044	263	500-031	259	520-009	259
300-026	262	330-048	263	500-032	259	520-010	259
300-027	262	330-052	263	500-033	259	520-011	259
300-028	262	330-056	263	500-034	259	520-012	259
300-029	262	330-060	263	500-035	259	520-013	259
300-030	262	330-064	263	500-036	259	520-014	259
300-031	262	330-068	263	500-037	259	520-015	259
300-032	262	330-072	263	500-038	259	520-016	259
300-033	262	330-076	263	500-039	259	520-017	259
300-034	262	330-080	263	500-040	259	520-018	259
300-035	262	330-084	263	500-041	259	520-019	259
300-036	262	330-088	263	500-042	259	520-020	259
300-037	262	330-092	263	500-043	259	520-021	259
300-038	262	330-096	263	500-044	259	520-022	259
300-039	262	340-016	263	500-045	259	520-023	259
300-040	262	340-020	263	500-046	259	520-024	259
300-041	262	340-024	263	500-047	259	520-025	259
300-042	262	340-028	263	500-048	259	520-026	259
300-043	262	340-032	263	500-049	259	530-008	260
300-044	262	340-036	263	500-050	259	530-012	260
300-045	262	340-040	263	500-051	259	530-016	260
300-046	262	340-044	263	500-052	259	530-020	260
300-047	262	340-048	263	500-053	259	530-024	260
300-048	262	340-052	263	500-054	259	530-028	260
300-049	262	340-056	263	500-055	259	530-032	260

TECHNICAL / INDEX

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
530-036	260	810-SET-06	258	A5/8-11	188	B4001-0750-1.75CP	181	B4007-0020-2.50	54
530-040	260	810-SET-08	258	A5/8-18	188	B4001-1000-1.75CP	181	B4007-0020-4.00	54
530-044	260	810-SET-11	258	ATC-ALIGN-BT30	275	B4001-1500-2.00CP	181	B4007-0020-6.00	54
530-048	260	810-SET-12	258	ATC-ALIGN-BT40	275	B4001-22-50	181	B4007-0025-2.25	54
530-052	260	810-SET-13	258	ATC-ALIGN-BT50	275	B4001-27-50	181	B4007-0025-4.00	54
530-056	260	810-SET-14	258	ATC-ALIGN-CAT40	275	B4001-32-50	181	B4007-0025-6.00	54
540-008	260	810-SET-21	258	ATC-ALIGN-CAT40-MZ	275	B4001-40-60	181	B4007-0032-3.13	54
540-012	260	810-SET-23	258	ATC-ALIGN-CAT50	275	B4002-1000-5.18	253	B4007-0032-5.00	54
540-016	260	810-SET-25	258	ATC-ALIGN-CAT50-MZ	275	B4002-1250-5.32	253	B4007-0040-3.13	54
540-020	260	810-SET-27	258	ATC-ALIGN-HSK100A	275	B4002-1500-5.60	253	B4007-0100-3.50	237
540-024	260	820-003	258	ATC-ALIGN-HSK63A	275	B4003-0002-1.61	194	B4007-0180-4.00	237
540-028	260	820-004	258	B3001-0500-1.19CP	181	B4003-0003-1.75	194	B4007-0200-3.00	237
540-032	260	820-005	258	B3001-0750-1.19CP	181	B4003-0006-1.61	194	B4007-0300-3.00	237
540-036	260	820-006	258	B3001-1000-1.19CP	181	B4003-0033-1.61	194	B4007-0750-3.00	231
540-040	260	820-007	258	B3002-0750-4.97	253	B4004-0001-1.75	197	B4007-1000-3.50	231
540-044	260	820-008	258	B3002-1000-5.17	253	B4004-0002-2.36	197	B4008-0013	255
540-048	260	820-009	258	B3003-0001-1.06	194	B4004-0003-3.00	197	B40-1500(R)-EU	270
550-002	260	820-010	258	B3003-0002-1.02	194	B4004-0004-3.54	197	B40-1500-EU	270
550-003	260	820-011	258	B3003-0003-0.98	194	B4005-0562-2.91	203	B40-1500-MORI-EU	270
550-004	260	820-012	258	B3003-0006-1.02	194	B4005-0562-3.98(C)	203	B4016-0312-4.00	165
550-005	260	820-013	258	B3003-0033-1.02	194	B4005-0875-3.86	203	B4017-0100-6.00	237
550-006	260	820-014	258	B3004-0001-1.75	197	B4005-0875-5.36(C)	203	B4017-0180-6.00	237
560-001B	259	820-015	258	B3004-0002-2.36	197	B4005-1375-7.64	203	B4017-1000-5.50	231
560-001S	259	820-016	258	B3005-0562-2.40	203	B4005-1375-9.21(C)	203	B40-4500(H)-EU	270
570-ADJ	261	820-017	258	B3005-0562-4.37(C)	203	B4006-0125-1.38	165	B40-4500-EU	270
570-BLOCK	261	820-018	258	B3006-0125-2.36	164	B4006-0125-2.36	165	B40-6000	270
570-CLOSE	261	820-019	258	B3006-0187-2.36	164	B4006-0125-4.00	165	B40-6000(H)	270
570-HEX	261	820-020	258	B3006-0250-2.36	164	B4006-0187-2.50	165	B40-9000-EU	270
570-RING	261	820-SET-18-MM	258	B3006-0312-2.36	164	B4006-0187-4.00	165	B40-FADAL	270
570-SQUARE	261	830-008-1.33	172	B3006-0375-2.36	164	B4006-0250-1.38	165	B40R5-0562-2.84	204
570-USA	261	830-012-1.33	172	B3006-0437-2.36	164	B4006-0250-2.50	165	B40R5-0562-2.87(C)	204
580-SET-06-SQ	260	830-016-1.33	172	B3006-0500-2.36	164	B4006-0250-4.00	165	B40R5-0875-3.50	204
580-SET-07-HEX	260	830-020-1.33	172	B3006-0625-2.50	164	B4006-0312-2.50	165	B40R5-0875-3.50(C)	204
580-SET-11-SQ	260	830-024-1.33	172	B3006-0750-3.00	164	B4006-0375-2.50	165	B40R5-1375-5.91	204
580-SET-13-HEX	260	830-028-1.33	172	B3006-0875-3.54	164	B4006-0375-4.00	165	B40R5-1375-5.91(C)	204
5C-WRENCH	261	830-032-1.33	172	B3006-1000-3.54	164	B4006-0437-2.50	165	B40-STD	270
750TL-3(C)	155	830-040-1.50	172	B3006-10-2.50	164	B4006-0500-1.75	165	B5001-0750-1.75CP	182
75TG-NUT	236	830-048-2.37	172	B3006-12-2.50	164	B4006-0500-2.50	165	B5001-1000-1.75CP	182
800-004	258	830-056-2.75	172	B3006-16-2.50	164	B4006-0500-4.00	165	B5001-1000-4.00CP	182
800-006	258	830-064-3.25	172	B3006-20-3.50	164	B4006-0625-1.75	165	B5001-1000-6.00CP	182
800-008	258	830-080-3.25	172	B3006-25-3.50	164	B4006-0625-2.50	165	B5001-1250-2.00CP	182
800-010	258	830-096-3.75	172	B3006-6-2.50	164	B4006-0625-4.00	165	B5001-1500-2.00CP	182
800-012	258	840-002-0.44	198	B3007-0008-2.00	53	B4006-0750-1.75	165	B5001-1500-6.00CP	182
800-014	258	840-003-2.56	198	B3007-0008-4.00M	53	B4006-0750-2.50	165	B5001-2000-2.00CP	182
800-016	258	850-032-1.00	187	B3007-0011-2.00	53	B4006-0750-4.00	165	B5003-0002-1.61	194
800-018	258	850-048-1.00	187	B3007-0011-4.00	53	B4006-0875-3.38	165	B5003-0003-1.57	194
800-020	258	850-064-1.00	187	B3007-0016-2.36	53	B4006-1000-2.00	165	B5003-0004-1.49	194
800-022	258	850-080-1.00	187	B3007-0016-4.00	53	B4006-1000-3.56	165	B5003-0006-1.61	194
800-024	258	850-096-1.75	187	B3007-0016-5.00	53	B4006-10-2.50	165	B5003-0033-1.61	194
800-026	258	860-001S	258	B3007-0020-2.50	53	B4006-12-2.50	165	B5004-0002-1.75	197
800-028	258	870-001-0.13	195	B3007-0020-4.00	53	B4006-1250-2.00	165	B5004-0003-1.75	197
800-030	258	870-002-0.13	195	B3007-0025-2.00	53	B4006-1250-3.56	165	B5004-0004-3.00	197
800-032	258	870-003-0.13	195	B3007-0025-4.00	53	B4006-14-2.50	165	B5004-0005-4.13	197
800-034	258	870-006-0.13	195	B3007-0032-3.00	53	B4006-1500-4.50	165	B5005-0562-3.26	203
800-036	258	870-033-0.13	195	B3007-0032-5.00	53	B4006-16-2.50	165	B5005-0562-4.33(C)	203
800-038	258	9HC16	41	B3007-0100-3.00	237	B4006-18-2.50	165	B5005-0875-4.21	203
800-040	258	9HC22	41, 155	B3007-0180-3.00	237	B4006-20-2.50	165	B5005-0875-5.75(C)	203
800-042	258	9HC25	155	B3007-0200-3.00	237	B4006-25-3.56	165	B5005-1375-6.73	203
800-044	258	9HC32	155	B3007-0300-3.00	237	B4006-32-3.56	165	B5005-1375-8.30(C)	203
800-046	258	9HC50	155	B3007-0750-2.50	231	B4006-6-2.50	165	B5006-0250-3.00	166
800-048	258	9NPU-13	193	B3007-1000-3.94	231	B4006-8-2.50	165	B5006-0250-6.00	166
800-050	258	9NPU-8	193	B3008-0008	255	B4007-0008-4.00M	54	B5006-0375-2.75	166
800-052	258	A1/2-20	188	B30-4500-EU	270	B4007-0011-2.50	54	B5006-0375-6.00	166
800-054	258	A1/4-28	188	B30-6000-EU	270	B4007-0011-4.00	54	B5006-0500-3.00	166
800-056	258	A1-14	188	B30R5-0562-2.28(C)	204	B4007-0011-6.00	54	B5006-0500-6.00	166
800-064	258	A3/4-16	188	B30R5-0562-2.36	204	B4007-0016-3.50	54	B5006-0625-3.00	166
8-1/2N	196	A3/8-24	188	B4001-0500-1.75CP	181	B4007-0016-5.00	54	B5006-0750-3.00	166

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
B5006-0750-6.00	166	BT30-SK16-60	20	BT40-SF0312-5.12CP	111	BT50-C3/4-105	144	BT50-VC13-165	81
B5006-1000-4.00	166	BT30-SK16-60P	22	BT40-SF0312-6.30CP	112	BT50-C3/4-105G	145	BT50-VC6-105	81
B5006-1000-6.00	166	BT30-SK16-90	20	BT40-SF0375-3.54CP	111	BT50-C3/4-135	144	BT50-VC6-135	81
B5006-1250-4.00	166	BT30-SK16-90P	22	BT40-SF0375-5.12CP	111	BT50-C3/4-135G	145	BT50-VC6-165	81
B5006-1250-6.00	166	BT30-SK20-60	20	BT40-SF0375-6.30CP	112	BT50-C32-105	144	C22GUX-NK1010	284
B5006-1500-4.50	166	BT30-SK20-60P	22	BT40-SF0500-3.54CP	111	BT50-C32-120	144	C22GUX-NK5050	284
B5006-2000-5.00	166	BT30-SK20-90	20	BT40-SF0500-5.12CP	111	BT50-C32-135	144	C32GUX-NK1010	282
B5007-0016-4.12	55	BT30-SK20-90P	22	BT40-SF0500-6.30CP	112	BT50-C32-165	144	C32GUX-NK2020	282
B5007-0016-6.00	55	BT30-SK25-90	22	BT40-SF0625-3.54CP	111	BT50-C32-165G	145	C3-ER16-45	64
B5007-0020-2.75	55	BT30-SK25-90P	22	BT40-SF0625-6.30CP	112	BT50-C32-200	144	C3-ER20-45	64
B5007-0020-4.00	55	BT30-SK6-120	20	BT40-SF0750-3.54CP	111	BT50-C32-250	144	C3-TUBE	75
B5007-0025-2.63	55	BT30-SK6-120P	22	BT40-SF0750-6.30CP	112	BT50-C32-300	144	C3-WRENCH	75
B5007-0025-4.00	55	BT30-SK6-60	20	BT40-SF1000-3.94CP	111	BT50-C32-400	144	C4001-0500-1.75CP	177
B5007-0032-4.00	55	BT30-SK6-60P	22	BT40-SF1000-6.30CP	112	BT50-C32-500	144	C4001-0750-1.75CP	177
B5007-0032-6.00	55	BT30-SK6-90	20	BT40-SK10-120	21	BT50-C32-90	144	C4001-0750-4.00CP	177
B5007-0040-4.00	55	BT30-SK6-90P	22	BT40-SK10-120P	22	BT50-C32-90G	145	C4001-1000-1.75CP	177
B5007-0040-6.00	55	BT30-TB1.1/4-10.00NF	280	BT40-SK10-150	21	BT50-MMC12C-105-AA	92	C4001-1000-4.00CP	177
B5007-1000-3.50	231	BT30-VC13-120	81	BT40-SK10-150P	22	BT50-MMC12C-135-AA	92	C4001-1250-2.00CP	177
B5008-0013	255	BT30-VC13-60	81	BT40-SK10-180	21	BT50-MMC4-105-AA	92	C4001-1250-4.00CP	177
B50-4500(H)-EU	270	BT30-VC13-90	81	BT40-SK10-60	21	BT50-MMC8C-105-AA	92	C4001-1500-2.00CP	177
B50-4500-EU	270	BT30-VC6-45	81	BT30-VC6-60P	22	BT50-MMC8C-135-AA	92	C4001-1500-4.00CP	177
B50-6000(H)-EU	270	BT30-VC6-60	81	BT40-SK10-90	21	BT50-NPU13-130	191	C4001-22-50CP	178
B50-9000(H)	270	BT30-VC6-90	81	BT40-SK10-90P	22	BT50-NPU13-190	191	C4001-27-50CP	178
B50-9000-EU	270	BT40-C1.1/4-120	144	BT40-SK13-75	21	BT50-NPU13-90	191	C4001-32-50CP	178
B50F1-2500-3.00	182	BT40-C1.1/4-120G	145	BT40-SK13-90	21	BT50-SF0125-3.94	113	C4001-40-60CP	178
B50R5-0562-3.19	204	BT40-C1.1/4-85	144	BT40-SK16-120	21	BT50-SF0125-6.30	113	C4002-1000-6.17	253
B50R5-0562-3.22(C)	204	BT40-C1.1/4-85G	145	BT40-SK16-120P	22	BT50-SF0250-3.94CP	113	C4002-1250-6.29	253
B50R5-0875-3.85	204	BT40-C1-70	144	BT40-SK16-150	21	BT50-SF0250-6.30CP	113	C4002-1500-6.60	253
B50R5-0875-3.85(C)	204	BT40-C1-70G	145	BT40-SK16-150P	22	BT50-SF0375-3.94CP	113	C4003-0002-1.61	194
B50R5-1375-5.00	204	BT40-C1-90	144	BT40-SK16-180	21	BT50-SF0375-6.30CP	113	C4003-0003-1.58	194
B50R5-1375-5.00(C)	204	BT40-C1-90G	145	BT40-SK16-60	21	BT50-SF0500-3.94CP	113	C4003-0004-1.49	194
BT30-C3/4-75	144	BT40-C3/4-105	144	BT40-SK16-60P	22	BT50-SF0500-6.30CP	113	C4003-0006-1.61	194
BT30-C3/4-75G	145	BT40-C3/4-105G	145	BT40-SK16-90	21	BT50-SF0625-3.94CP	113	C4003-0033-1.61	194
BT30-ER16-100	53	BT40-C3/4-70	144	BT40-SK16-90P	22	BT50-SF0625-6.30CP	113	C4004-0001-1.75	197
BT30-ER16-70	53	BT40-C3/4-70G	145	BT40-SK20-120	21	BT50-SF0750-3.94CP	113	C4004-0002-2.36	197
BT30-ER20-100	53	BT40-C32-105	144	BT40-SK20-60	21	BT50-SF0750-6.30CP	113	C4004-0003-3.00	197
BT30-ER20-63.5	53	BT40-C32-105G	145	BT40-SK20-90	21	BT50-SF1000-3.94CP	113	C4004-0004-3.54	197
BT30-ER25-60	53	BT40-ER16-100	54	BT40-SK25-120	21	BT50-SF1000-6.30CP	113	C4005-0562-2.91	201
BT30-ER25-90	53	BT40-ER16-70	54	BT40-SK25-120P	22	BT50-SF10-160CP	113	C4005-0562-3.98(C)	201
BT30-ER32-100	53	BT40-ER20-100	54	BT40-SK25-75	21	BT50-SF12-160CP	113	C4005-0875-3.86	201
BT30-ER32-70	53	BT40-ER20-70	54	BT40-SK25-75P	22	BT50-SF1250-3.94CP	113	C4005-0875-5.40(C)	201
BT30-MMC12C-105-AA	92	BT40-ER25-100	54	BT40-SK25-90	21	BT50-SF1250-6.30CP	113	C4005-1375-7.97	201
BT30-MMC4-105-AA	92	BT40-ER25-70	54	BT40-SK25-90P	22	BT50-SF16-160CP	113	C4005-1375-9.54(C)	201
BT30-MMC8C-105-AA	92	BT40-ER32-100	54	BT40-SK6-120	21	BT50-SF8-160CP	113	C4006-0125-1.38	159
BT30-MMC8C-65-AT	92	BT40-ER32-70	54	BT40-SK6-120P	22	BT50-SK10-105	21	C4006-0125-2.36	159
BT30-NPU13-95	191	BT40-MMC12C-120-AA	92	BT40-SK6-150	21	BT50-SK10-105P	22	C4006-0125-4.00	159
BT30-NPU8-70	191	BT40-MMC12C-150-AA	92	BT40-SK6-150P	22	BT50-SK10-165	21	C4006-0187-1.38	159
BT30-SF0125-3.15	110	BT40-MMC12C-90-AA	92	BT40-SK6-60	21	BT50-SK10-165P	22	C4006-0187-2.50	159
BT30-SF0125-6.30	110	BT40-MMC4-90-AA	92	BT40-SK6-90	21	BT50-SK10-200	21	C4006-0187-4.00	159
BT30-SF0187-3.15	110	BT40-MMC8C-120-AA	92	BT40-SK6-90P	22	BT50-SK13-250	21	C4006-0250-1.38	159
BT30-SF0250-3.15CP	110	BT40-MMC8C-150-AA	92	BT40-TB1.3/4-14.00NF	280	BT50-SK16-105	21	C4006-0250-1.38	159
BT30-SF0375-3.15CP	110	BT40-MMC8C-90-AA	92	BT40-VC13-120	81	BT50-SK16-105P	22	C4006-0250-2.50	159
BT30-SF0500-3.15CP	110	BT40-NPU13-130	191	BT40-VC13-60	81	BT50-SK16-135	21	C4006-0250-4.00	159
BT30-SF0625-3.15CP	110	BT40-NPU13-80	191	BT40-VC13-90	81	BT50-SK16-165	21	C4006-0250-9.00	159
BT30-SF0750-3.15CP	110	BT40-NPU8-110	191	BT40-VC6-120	81	BT50-SK16-165P	22	C4006-0312-2.50	159
BT30-SK10-45	20	BT40-NPU8-70	191	BT40-VC6-60	81	BT50-SK16-200	21	C4006-0312-4.00	159
BT30-SK10-45P	22	BT40-SF0125-3.54	111	BT40-VC6-90	81	BT50-SK16-200	21	C4006-0375-1.38	159
BT30-SK10-60	20	BT40-SF0125-5.12	111	BT40-VC6-90	81	BT50-SK25-105	21	C4006-0375-2.50	159
BT30-SK10-60P	22	BT40-SF0125-6.30	112	BT50-C1.1/4-105	144	BT50-SK25-105P	22	C4006-0375-4.00	159
BT30-SK10-90	20	BT40-SF0187-3.54	111	BT50-C1.1/4-135	144	BT50-SK25-165	21	C4006-0375-5.00	159
BT30-SK10-90P	22	BT40-SF0187-5.12	111	BT50-C1.1/4-135G	145	BT50-SK25-165P	22	C4006-0375-9.00	159
BT30-SK13-120	20	BT40-SF0187-6.30	112	BT50-C1.1/4-90	144	BT50-SK25-200	21	C4006-0437-2.50	159
BT30-SK13-75	20	BT40-SF0187-6.30CP	112	BT50-C1.1/4-90G	145	BT50-SK6-105	21	C4006-0437-4.00	159
BT30-SK13-90	20	BT40-SF0250-3.54CP	111	BT50-C1-105	144	BT50-SK6-165	21	C4006-0500-1.75	159
BT30-SK13-90P	22	BT40-SF0250-5.12CP	111	BT50-C1-105G	145	BT50-SK6-165P	22	C4006-0500-2.50	159
BT30-SK16-120	20	BT40-SF0250-6.30CP	112	BT50-C1-135	144	BT50-TB2.1/2-14.00NF	280	C4006-0500-4.00	159
BT30-SK16-120P	22	BT40-SF0312-3.54CP	111	BT50-C1-135G	145	BT50-VC13-105	81	C4006-0500-5.00	159
				BT50-C2-105	144	BT50-VC13-135	81	C4006-0500-9.00	159

TECHNICAL / INDEX

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
C4006-0625-1.75	159	C40R5-0875-3.50	202	C5001-27-60CP	178	C5006-2500-6.00	162	C5-ER32-100	64
C4006-0625-3.00	159	C40R5-0875-3.50(C)	202	C5001-32-60CP	178	C5006-25-4.00	162	C5-ER32-57	64
C4006-0625-4.00	159	C40R5-1375-6.24	202	C5001-40-60CP	178	C5006-32-4.00	162	C5-ER40-60	64
C4006-0625-5.50	159	C40R5-1375-6.24(C)	202	C5002-1000-6.17	253	C5006-40-4.50	162	C5-SF0125-2.95	126
C4006-0750-1.75	160	C40S-4500(H)-EU	269	C5002-1250-6.28	253	C5006-42-4.50	162	C5-SF0125-4.72	126
C4006-0750-3.00	160	C40S-4500-EU	269	C5002-1500-6.60	253	C5006-50-5.37	162	C5-SF0187-2.95	126
C4006-0750-4.00	160	C40S-6000-EU	269	C5003-0002-1.61	194	C5006-6-2.50	162	C5-SF0187-4.72	126
C4006-0750-5.50	160	C40S-9000-EU	269	C5003-0003-1.75	194	C5006-8-2.50	162	C5-SF0250-2.95CP	127
C4006-0750-9.00	160	C40-STD-EU	269	C5003-0004-1.49	194	C5007-0016-12.00	51	C5-SF0250-4.72CP	127
C4006-0875-1.75	160	C40-STD-SOLID	269	C5003-0006-1.61	194	C5007-0016-4.12	51	C5-SF0375-2.95CP	127
C4006-0875-3.50	160	C4-EM0250-50	168	C5003-0033-1.61	194	C5007-0016-6.00	51	C5-SF0375-4.72CP	127
C4006-1000-2.00	160	C4-EM0375-50	168	C5004-0002-1.75	197	C5007-0016-8.00	51	C5-SF0500-2.95CP	127
C4006-1000-4.00	160	C4-EM0500-55	168	C5004-0003-1.75	197	C5007-0020-12.00	51	C5-SF0500-4.72CP	127
C4006-1000-6.00	160	C4-EM0625-55	168	C5004-0004-3.00	197	C5007-0020-2.50	51	C5-SF0625-3.15CP	127
C4006-10-2.50	160	C4-ER16-70	64	C5004-0005-4.13	197	C5007-0020-4.00	51	C5-SF0625-4.72CP	127
C4006-12-2.50	160	C4-ER20-52	64	C5005-0562-2.91	201	C5007-0020-6.00	51	C5-SF0750-3.35CP	127
C4006-14-3.00	160	C4-ER25-52	64	C5005-0562-3.98(C)	201	C5007-0020-8.00	51	C5-SF0750-4.72CP	127
C4006-16-3.00	160	C4-ER32-54	64	C5005-0875-3.86	201	C5007-0025-2.50	51	C5-SF12-75CP	127
C4006-20-3.00	160	C4-SF0125-2.95	126	C5005-0875-5.40(C)	201	C5007-0025-4.00	51	C5-SF3-120	126
C4006-25-4.00	160	C4-SF0125-4.72	126	C5005-1375-6.77	201	C5007-0025-6.00	51	C5-SF3-75	126
C4006-32-4.00	160	C4-SF0187-2.95	126	C5005-1375-8.34(C)	201	C5007-0025-8.00	51	C5-SF4-120	126
C4006-6-2.50	160	C4-SF0187-4.72	126	C5006-0250-2.50	161	C5007-0032-12.00	51	C5-SF6-120CP	127
C4006-8-2.50	160	C4-SF0250-2.95CP	127	C5006-0250-4.00	161	C5007-0032-4.00	51	C5-SF6-75CP	127
C4007-0008-2.50	49	C4-SF0250-4.72CP	127	C5006-0250-6.00	161	C5007-0032-6.00	51	C5-SF8-75CP	127
C4007-0008-4.00M	49	C4-SF0375-2.95CP	127	C5006-0250-8.00	161	C5007-0032-8.00	51	C5-SK10-60-IDU	31
C4007-0011-2.50	49	C4-SF0375-4.72CP	127	C5006-0312-2.50	161	C5007-0040-12.00	51	C5-SK13-60-IDU	31
C4007-0011-4.00	49	C4-SF0500-2.95CP	127	C5006-0312-4.00	161	C5007-0040-4.00	51	C5-SK16-60-IDU	31
C4007-0011-6.00	49	C4-SF0500-4.72CP	127	C5006-0312-6.00	161	C5007-0040-6.00	51	C5-SK20-75-IDU	31
C4007-0016-2.25	49	C4-SF0625-3.15CP	127	C5006-0375-2.50	161	C5007-0040-8.00	51	C5-SK25-75-IDU	31
C4007-0016-3.50	49	C4-SF0625-4.72CP	127	C5006-0375-4.00	161	C5007-1000-10.00	230	C5-SK6-60-IDU	31
C4007-0016-6.00	49	C4-SF10-75CP	127	C5006-0375-6.00	161	C5007-1000-3.50	230	C5-SM0750-25CP	185
C4007-0016-9.00	49	C4-SF4-120	126	C5006-0375-8.00	161	C5007-1000-5.50	230	C5-SM1000-25CP	185
C4007-0020-2.50	49	C4-SF4-75	126	C5006-0437-2.50	161	C5007-1000-7.50	230	C5-SM1250-40CP	185
C4007-0020-4.00	49	C4-SF6-120CP	127	C5006-0437-4.00	161	C5008-0013	255	C5-TB40-280	280
C4007-0020-6.00	49	C4-SF6-75CP	127	C5006-0437-6.00	161	C50-1500(ISO)-EU	269	C5-TUBE	41, 75, 130, 173, 188
C4007-0020-9.00	49	C4-SK10-60-IDU	31	C5006-0500-2.63	161	C50-1500-EU	269	C5-WRENCH	41, 75, 130, 173, 188
C4007-0025-2.50	49	C4-SK13-60-IDU	31	C5006-0500-4.00	161	C5017-0180-6.00	237	C6-C1.1/4-120-IDU	150
C4007-0025-4.00	49	C4-SK16-60-IDU	31	C5006-0500-6.00	161	C50-4500(H)-EU	269	C6-C1.1/4-75-IDU	150
C4007-0025-6.00	49	C4-SK20-75-IDU	31	C5006-0500-8.00	161	C50-4500(EU)	269	C6-C1.1/4-75-IDU	150
C4007-0032-0.76	49	C4-SK6-60-IDU	31	C5006-0625-3.00	161	C50-6000(H)-EU	269	C6-C1-120-IDU	150
C4007-0032-3.13	49	C4-SM0750-30CP	185	C5006-0625-4.00	161	C50-6000-EU	269	C6-C1-756-IDU	150
C4007-0032-5.00	49	C4-SM1000-30CP	185	C5006-0625-6.00	161	C50-9000(H)-EU	269	C6-C1-75-IDU	150
C4007-0032-9.00	49	C4-TB32-180	280	C5006-0625-8.00	161	C50-9000-EU	269	C6-C1-90-IDU	150
C4007-0040-3.13	49	C4-TUBE	41, 75, 130, 173, 188	C5006-0750-1.75	161	C50-9000-MORI-EU	269	C6-C3/4-120-IDU	150
C4007-0040-5.00	49	C4-WRENCH	41, 75, 130, 173, 188	C5006-0750-3.00	161	C50F1-2000-2.95CP	178	C6-C3/4-756-IDU	150
C4007-0100-3.50	237	C5001-0750-1.75CP	177	C5006-0750-4.00	161	C50F1-2500-2.95CP	178	C6-C3/4-75-IDU	150
C4007-0180-4.00	237	C5001-0750-4.00CP	177	C5006-0750-6.00	161	C50-MAKINO-EU	269	C6-C3/4-75-IDU	150
C4007-0200-3.00	237	C5001-0750-6.00CP	177	C5006-0750-8.00	161	C50-OKUMA(OH)-EU	269	C6-C3/4-75-IDU	150
C4007-0300-3.00	237	C5001-0750-8.00CP	177	C5006-1000-2.00	161	C50R5-0562-2.84	202	C6-EM0250-55	168
C4007-0750-3.00	230	C5001-0750-10.00CP	177	C5006-1000-4.00	161	C50R5-0562-2.87(C)	202	C6-EM0375-60	168
C4007-1000-2.75	230	C5001-0750-12.00CP	177	C5006-1000-6.00	161	C50R5-0875-3.50	202	C6-EM0500-60	168
C4007-1000-3.50	230	C5001-1000-1.75CP	177	C5006-1000-8.00	161	C50R5-0875-3.50(C)	202	C6-EM0625-65	168
C4007-1000-5.50	230	C5001-1000-4.00CP	177	C5006-10-2.50	162	C50R5-1375-5.04	202	C6-EM0750-65	168
C4008-0013	255	C5001-1000-6.00CP	177	C5006-12-2.63	162	C50R5-1375-5.04(C)	202	C6-EM1000-80	168
C40-1500(R)-EU	269	C5001-1000-8.00CP	177	C5006-1250-2.00	162	C50-STD-EU	269	C6-EM1250-90	168
C40-1500-EU	269	C5001-1250-1.75CP	177	C5006-1250-4.00	162	C5-EM0250-50	168	C6-ER16-100	64
C40-1500-MATS-EU	269	C5001-1250-4.00CP	177	C5006-1250-6.00	162	C5-EM0375-55	168	C6-ER20-100	64
C40-1500-MORI-EU	269	C5001-1250-6.00CP	177	C5006-1250-8.00	162	C5-EM0500-60	168	C6-ER20-60	64
C40-1500-SOLID	269	C5001-1250-8.00CP	177	C5006-14-3.00	162	C5-EM0625-60	168	C6-ER25-100	64
C4017-0100-6.00	237	C5001-1500-2.00CP	177	C5006-1500-2.25	162	C5-EM0750-60	168	C6-ER32-100	64
C4017-0180-6.00	237	C5001-1500-4.00CP	177	C5006-1500-4.50	162	C5-EM1000-80	168	C6-ER32-60	64
C40-4500(H)GFAC-EU	269	C5001-1500-6.00CP	177	C5006-1500-7.00	162	C5-ER16-100	64	C6-ER32-130	64
C40-6000(H)-EU	269	C5001-1500-8.00CP	177	C5006-16-3.00	162	C5-ER20-100	64	C6-ER32-60	64
C40-9000(H)-EU	269	C5001-2000-2.00CP	177	C5006-18-3.00	162	C5-ER20-130	64	C6-ER40-65	64
C40-9000-EU	269	C5001-2000-4.00CP	177	C5006-2000-3.63	162	C5-ER20-55	64	C6-MMC8C-120-AT	95
C40R5-0562-2.84	202	C5001-2000-6.00CP	177	C5006-2000-5.37	162	C5-ER25-100	64	C6-SF0125-3.15	126
C40R5-0562-2.87(C)	202	C5001-22-60CP	178	C5006-20-3.00	162	C5-ER25-55	64		

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
C6-SF0125-4.72	126			C8-SF6-130CP	129	CAT40-SF0250-3.15MT	107	CAT40-SK20-120U-IDU	14
C6-SF0187-3.15	126	C6-TUBE	41, 130, 155, 173, 188	C8-SF6-85CP	129	CAT40-SF0250-5.12CP	106	CAT40-SK20-120UP-IDU	15
C6-SF0187-4.72	126	C6-TUBE-1	75	C8-SF8-130CP	129	CAT40-SF0250-6.30CP	107	CAT40-SK20-150U-IDU	14
C6-SF0250-3.15CP	128			C8-SF8-85CP	129	CAT40-SF0250-6.30MT	107	CAT40-SK20-180U-IDU	14
C6-SF0250-4.72CP	128	C6-WRENCH	41, 130, 155, 173, 188	C8-SM0750-30CP	185	CAT40-SF0312-3.15CP	106	CAT40-SK20-65U-IDU	14
C6-SF0312-3.15CP	128	C8-C1.1/4-105-IDU	150	C8-SM1000-30CP	185	CAT40-SF0375-3.15CP	106	CAT40-SK20-65UP-IDU	15
C6-SF0375-3.15CP	128	C8-C1.1/4-135-IDU	150	C8-SM1250-30CP	185	CAT40-SF0375-5.12CP	106	CAT40-SK20-90U-IDU	14
C6-SF0375-4.72CP	128	C8-C1.1/4-165-IDU	150			CAT40-SF0375-6.30CP	107	CAT40-SK20-90UP-IDU	15
C6-SF0500-3.15CP	128	C8-C1.1/4-90-IDU	150	C8-TUBE	75, 130, 155, 173, 188	CAT40-SF0375-6.30MT	107	CAT40-SK25-120U-IDU	14
C6-SF0500-4.72CP	128	C8-C1-105-IDU	150			CAT40-SF0437-3.15CP	106	CAT40-SK25-120UP-IDU	15
C6-SF0625-3.35CP	128	C8-C1-135-IDU	150	C8-WRENCH	75, 130, 155, 173, 188	CAT40-SF0500-3.15CP	106	CAT40-SK25-90U-IDU	14
C6-SF0625-4.72CP	128	C8-C1-165-IDU	150	CAT40-C1.1/4-85U-IDU	140	CAT40-SF0500-3.15MT	107	CAT40-SK25-90UP-IDU	15
C6-SF0750-3.35CP	128	C8-C1-90-IDU	150	CAT40-C1.1/4SL-105UG-IDU	141	CAT40-SF0500-5.12CP	106	CAT40-SK6-120U-IDU	14
C6-SF0750-4.72CP	128	C8-C3/4-105-IDU	150	CAT40-C1.1/4SL-105U-IDU	140	CAT40-SF0500-6.30CP	107	CAT40-SK6-120UP-IDU	15
C6-SF0750-6.30CP	128	C8-C3/4-135-IDU	150	CAT40-C1.1/4SL-120UG-IDU	141	CAT40-SF0625-3.15CP	106	CAT40-SK6-150U-IDU	14
C6-SF1000-3.54CP	128	C8-C3/4-165-IDU	150	CAT40-C1.1/4SL-120U-IDU	140	CAT40-SF0625-3.15MT	107	CAT40-SK6-150UP-IDU	15
C6-SF1000-4.72CP	128	C8-C3/4-90-IDU	150	CAT40-C1-105UG-IDU	141	CAT40-SF0625-5.12CP	106	CAT40-SK6-90U-IDU	14
C6-SF10-120CP	128	C8-EM0250-70	168	CAT40-C1-105U-IDU	140	CAT40-SF0625-6.30CP	107	CAT40-SK6-90UP-IDU	15
C6-SF10-80CP	128	C8-EM0375-70	168	CAT40-C1-85U-IDU	141	CAT40-SF0750-3.15CP	106	CAT40-TB1.3/4-14.00NF	280
C6-SF12-120CP	128	C8-EM0500-70	168	CAT40-C1-85U-IDU	140	CAT40-SF0750-5.12CP	106	CAT40-VC13-120U-IDU	80
C6-SF1250-3.74CP	128	C8-EM0625-70	168	CAT40-C3/4-105UG-IDU	141	CAT40-SF0750-6.30CP	107	CAT40-VC13-60U-IDU	80
C6-SF1250-4.72CP	128	C8-EM0750-70	168	CAT40-C3/4-105U-IDU	140	CAT40-SF1000-3.94CP	106	CAT40-VC13-90U-IDU	80
C6-SF12-80CP	128	C8-EM1000-80	168	CAT40-C3/4-120UG-IDU	141	CAT40-SF1000-5.12CP	106	CAT40-VC6-120U-IDU	80
C6-SF14-120CP	128	C8-EM1250-80	168	CAT40-C3/4-120U-IDU	140	CAT40-SF1000-6.30CP	107	CAT40-VC6-60U-IDU	80
C6-SF14-85CP	128	C8-ER20-65	64	CAT40-C3/4-70U-IDU	140	CAT40-SF1000-160CP	107	CAT50-VC6-90U-IDU	80
C6-SF16-120CP	128	C8-ER25-70	64	CAT40-C3/4-85UG-IDU	141	CAT40-SF10-80CP	106	CAT50-C1.1/4-105UG-IDU	141
C6-SF16-85CP	128	C8-ER32-160	64	CAT40-C3/4-85U-IDU	140	CAT40-SF12-160CP	107	CAT50-C1.1/4-105U-IDU	140
C6-SF18-120CP	128	C8-ER32-70	64	CAT40-C32-105U-IDU	140	CAT40-SF12-80CP	106	CAT50-C1.1/4-135UG-IDU	141
C6-SF18-85CP	128	C8-ER40-70	64	CAT40-ER16-2.76	50	CAT40-SF14-80CP	106	CAT50-C1.1/4-135U-IDU	140
C6-SF20-120CP	128	C8-SF0125-3.15	126	CAT40-ER16-4.00	50	CAT40-SF16-160CP	107	CAT50-C1.1/4-165U-IDU	140
C6-SF20-85CP	128	C8-SF0125-5.12	126	CAT40-ER16-6.00	50	CAT40-SF16-80CP	106	CAT50-C1.1/4-90U-IDU	140
C6-SF25-120CP	128	C8-SF0187-3.15	126	CAT40-ER16-8.00	50	CAT40-SF20-160CP	107	CAT50-C1-105UG-IDU	141
C6-SF25-90CP	128	C8-SF0187-5.12	126	CAT40-ER20-2.76	50	CAT40-SF20-80CP	106	CAT50-C1-105U-IDU	140
C6-SF3-120	126	C8-SF0250-3.15CP	129	CAT40-ER20-4.00	50	CAT40-SF25-100CP	106	CAT50-C1-135UG-IDU	141
C6-SF32-120CP	128	C8-SF0250-5.12CP	129	CAT40-ER20-6.00	50	CAT40-SF25-160CP	107	CAT50-C1-135U-IDU	140
C6-SF32-95CP	128	C8-SF0375-3.54CP	129	CAT40-ER20-8.00	50	CAT40-SF3-160	107	CAT50-C2-125U-IDU	140
C6-SF3-80	126	C8-SF0375-5.12CP	129	CAT40-ER25-2.76	50	CAT40-SF3-80	106	CAT50-C3/4-105UG-IDU	141
C6-SF4-120	126	C8-SF0500-3.54CP	129	CAT40-ER25-4.00	50	CAT40-SF4-80	106	CAT50-C3/4-105U-IDU	140
C6-SF4-80	126	C8-SF0500-5.12CP	129	CAT40-ER25-6.00	50	CAT40-SF6-160CP	107	CAT50-C3/4-135UG-IDU	141
C6-SF6-120CP	128	C8-SF0625-3.74CP	129	CAT40-ER25-8.00	50	CAT40-SF6-80CP	106	CAT50-C3/4-135U-IDU	140
C6-SF6-80CP	128	C8-SF0625-5.12CP	129	CAT40-ER32-2.76	50	CAT40-SF8-160CP	107	CAT50-C3/4-165U-IDU	140
C6-SF8-120CP	128	C8-SF0750-3.74CP	129	CAT40-ER32-4.00	50	CAT40-SF8-80CP	106	CAT50-C32-105U-IDU	140
C6-SF8-80CP	128	C8-SF0750-5.12CP	129	CAT40-ER32-6.00	50	CAT40-SK10-120U-IDU	14	CAT50-C32-165U-IDU	140
C6-SK10-120-IDU	31	C8-SF1000-3.94CP	129	CAT40-ER32-8.00	50	CAT40-SK10-120UP-IDU	15	CAT50-ER16-4.00	52
C6-SK10-60-IDU	31	C8-SF1000-5.12CP	129	CAT40-ER40-3.15	50	CAT40-SK10-150U-IDU	14	CAT50-ER16-6.00	52
C6-SK10-90-IDU	31	C8-SF10-130CP	129	CAT40-ER40-4.00	50	CAT40-SK10-150UP-IDU	15	CAT50-ER16-8.00	52
C6-SK13-120-IDU	31	C8-SF10-85CP	129	CAT40-ER40-6.00	50	CAT40-SK10-180U-IDU	14	CAT50-ER20-4.00	52
C6-SK13-60-IDU	31	C8-SF12-130CP	129	CAT40-MMC12C-120U-AA-IDU	91	CAT40-SK10-60U-IDU	14	CAT50-ER20-6.00	52
C6-SK13-90-IDU	31	C8-SF1250-3.94CP	129	CAT40-MMC12C-90U-AA-IDU	91	CAT40-SK10-60UP-IDU	15	CAT50-ER20-8.00	52
C6-SK16-120-IDU	31	C8-SF1250-5.12CP	129	CAT40-MMC4-90U-AA-IDU	91	CAT40-SK10-90U-IDU	14	CAT50-ER25-4.00	52
C6-SK16-60-IDU	31	C8-SF12-85CP	129	CAT40-MMC8C-120U-AA-IDU	91	CAT40-SK10-90UP-IDU	15	CAT50-ER25-6.00	52
C6-SK16-90-IDU	31	C8-SF14-130CP	129	CAT40-MMC8C-125U-AT-IDU	91	CAT40-SK13-120U-IDU	14	CAT50-ER25-8.00	52
C6-SK20-120-IDU	31	C8-SF14-85CP	129	CAT40-MMC8C-135U-AA-IDU	91	CAT40-SK13-120UP-IDU	15	CAT50-ER32-4.00	52
C6-SK20-70-IDU	31	C8-SF16-130CP	129	CAT40-MMC8C-85U-AT-IDU	91	CAT40-SK13-150U-IDU	14	CAT50-ER32-6.00	52
C6-SK20-90-IDU	31	C8-SF16-90CP	129	CAT40-MMC8C-90U-AA-IDU	91	CAT40-SK13-150UP-IDU	15	CAT50-ER32-8.00	52
C6-SK25-120-IDU	31	C8-SF18-130CP	129	CAT40-NPU13-105U-IDU	191	CAT40-SK13-180U-IDU	14	CAT50-ER40-4.00	52
C6-SK25-75-IDU	31	C8-SF18-90CP	129	CAT40-NPU13-130U-IDU	191	CAT40-SK13-90U-IDU	14	CAT50-ER40-6.00	52
C6-SK25-90-IDU	31	C8-SF20-130CP	129	CAT40-NPU8-110U-IDU	191	CAT40-SK13-90UP-IDU	15	CAT50-ER40-8.00	52
C6-SK6-120-IDU	31	C8-SF20-90CP	129	CAT40-NPU8-80U-IDU	191	CAT40-SK16-120U-IDU	14	CAT50-ER50-4.00	52
C6-SK6-60-IDU	31	C8-SF25-130CP	129	CAT40-SF0125-3.15	106	CAT40-SK16-120UP-IDU	15	CAT50-ER50-6.00	52
C6-SK6-90-IDU	31	C8-SF25-90CP	129	CAT40-SF0125-3.15MT	107	CAT40-SK16-150U-IDU	14	CAT50-ER50-8.00	52
C6-SM0750-100CP	185	C8-SF3-130	126	CAT40-SF0125-5.12	106	CAT40-SK16-150UP-IDU	15	CAT50-MMC12C-135U-AA-IDU	91
C6-SM0750-30CP	185	C8-SF32-130CP	129	CAT40-SF0125-6.30	107	CAT40-SK16-180U-IDU	14	CAT50-MMC12C-165U-AA-IDU	91
C6-SM1000-100CP	185	C8-SF32-90CP	129	CAT40-SF0125-6.30MT	107	CAT40-SK16-60U-IDU	14	CAT50-MMC8C-105U-AA-IDU	91
C6-SM1000-30CP	185	C8-SF3-85	126	CAT40-SF0187-3.15	106	CAT40-SK16-60UP-IDU	15	CAT50-MMC8C-135U-AA-IDU	91
C6-SM1250-30CP	185	C8-SF4-130	126	CAT40-SF0187-5.12	106	CAT40-SK16-90U-IDU	14	CAT50-MMC8C-165U-AA-IDU	91
C6-TB40-352	280	C8-SF4-85	126	CAT40-SF0250-3.15CP	106	CAT40-SK16-90UP-IDU	15	CAT50-NPU13-90U-IDU	191

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
CAT50-NPU8-80U-IDU	191	CAT50-SK6-165U-IDU	14	CCK32-1/4	154	CKFN25(1)-10C	153	CKFN32(1.1/4)-3/4	154
CAT50-SF0125-3.15	108	CAT50-SK6-165UP-IDU	15	CCK32-10	154	CKFN25(1)-12	153	CKFN32(1.1/4)-3/4C	154
CAT50-SF0125-6.30	109	CAT50-SK6-195U-IDU	14	CCK32-11	154	CKFN25(1)-12C	153	CKFN32(1.1/4)-3/8	154
CAT50-SF0250-3.15CP	108	CAT50-TB2.1/2-14.00NF	280	CCK32-12	154	CKFN25(1)-14	153	CKFN32(1.1/4)-3/8C	154
CAT50-SF0250-5.12CP	108	CAT50-VC13-105U-IDU	80	CCK32-14	154	CKFN25(1)-14C	153	CKFN32(1.1/4)-3/2D	154
CAT50-SF0250-6.30CP	109	CAT50-VC13-135U-IDU	80	CCK32-15	154	CKFN25(1)-16	153	CKFN32(1.1/4)-3/2DC	154
CAT50-SF0375-3.15CP	108	CAT50-VC13-165U-IDU	80	CCK32-16	154	CKFN25(1)-16C	153	CKFN32(1.1/4)-5/16	154
CAT50-SF0375-5.12CP	108	CAT50-VC6-105U-IDU	80	CCK32-18	154	CKFN25(1)-18	153	CKFN32(1.1/4)-5/16C	154
CAT50-SF0375-6.30CP	109	CCK1.1/4-1	154	CCK32-20	154	CKFN25(1)-18C	153	CKFN32(1.1/4)-5/8	154
CAT50-SF0500-3.15CP	108	CCK1.1/4-1/2	154	CCK32-24	154	CKFN25(1)-19	153	CKFN32(1.1/4)-5/8C	154
CAT50-SF0500-5.12CP	108	CCK1.1/4-1/4	154	CCK32-28	154	CKFN25(1)-19C	153	CKFN32(1.1/4)-6	154
CAT50-SF0500-6.30CP	109	CCK1.1/4-10	154	CCK32-3/16	154	CKFN25(1)-19DC	153	CKFN32(1.1/4)-6C	154
CAT50-SF0625-3.15CP	108	CCK1.1/4-12	154	CCK32-3/4	154	CKFN25(1)-20	153	CKFN32(1.1/4)-7/16	154
CAT50-SF0625-5.12CP	108	CCK1.1/4-14	154	CCK32-3/8	154	CKFN25(1)-20C	153	CKFN32(1.1/4)-7/16C	154
CAT50-SF0625-6.30CP	109	CCK1.1/4-16	154	CCK32-5/16	154	CKFN25(1)-25D	153	CKFN32(1.1/4)-7/8	154
CAT50-SF0750-3.15CP	108	CCK1.1/4-20	154	CCK32-5/8	154	CKFN25(1)-3/16	153	CKFN32(1.1/4)-7/8C	154
CAT50-SF0750-5.12CP	108	CCK1.1/4-25	154	CCK32-6	154	CKFN25(1)-3/16C	153	CKFN32(1.1/4)-8	154
CAT50-SF0750-6.30CP	109	CCK1.1/4-3/16	154	CCK32-7/16	154	CKFN25(1)-3/4	153	CKFN32(1.1/4)-8C	154
CAT50-SF1000-3.94CP	108	CCK1.1/4-3/4	154	CCK32-7/8	154	CKFN25(1)-3/4C	153	CKFN32(1.1/4)-9/16	154
CAT50-SF1000-5.12CP	108	CCK1.1/4-3/8	154	CCK32-8	154	CKFN25(1)-3/8	153	CKFN32(1.1/4)-9/16C	154
CAT50-SF1000-6.30CP	109	CCK1.1/4-5/16	154	CCK32-9/16	154	CKFN25(1)-3/8C	153	CKFN50(2)-1	154
CAT50-SF10-160CP	109	CCK1.1/4-5/8	154	CCKL20	153	CKFN25(1)-5/16	153	CKFN50(2)-1.1/2	154
CAT50-SF10-80CP	108	CCK1.1/4-6	154	CCKL25	153	CKFN25(1)-5/16C	153	CKFN50(2)-1.1/2C	154
CAT50-SF12-160CP	109	CCK1.1/4-7/16	154	CCKL32	154	CKFN25(1)-5/8	153	CKFN50(2)-1.1/4	154
CAT50-SF1250-3.94CP	108	CCK1.1/4-7/8	154	CCKL50	154	CKFN25(1)-5/8C	153	CKFN50(2)-1.1/4C	154
CAT50-SF1250-5.12CP	108	CCK1.1/4-8	154	CKFN20(3/4)-1/2	153	CKFN25(1)-6	153	CKFN50(2)-1C	154
CAT50-SF1250-6.30CP	109	CCK1.1/4-9/16	154	CKFN20(3/4)-1/2C	153	CKFN25(1)-6C	153	CLEH-HSK100-R	279
CAT50-SF12-80CP	108	CCK1-1/2	153	CKFN20(3/4)-1/4	153	CKFN25(1)-7/16	153	CLEH-HSK63-R	279
CAT50-SF16-160CP	109	CCK1-1/4	153	CKFN20(3/4)-1/4C	153	CKFN25(1)-7/16C	153	CLEH-NT30-R	279
CAT50-SF16-80CP	108	CCK1-1/8	153	CKFN20(3/4)-1/8	153	CKFN25(1)-7/8	153	CLEH-NT40-R	279
CAT50-SF20-160CP	109	CCK1-10	153	CKFN20(3/4)-1/8C	153	CKFN25(1)-7/8C	153	CLEH-NT50-R	279
CAT50-SF25-100CP	108	CCK1-12	153	CKFN20(3/4)-10	153	CKFN25(1)-8	153	CRE-2/1	222
CAT50-SF25-160CP	109	CCK1-14	153	CKFN20(3/4)-10C	153	CKFN25(1)-8C	153	CRE-3/2	222
CAT50-SF3-160	109	CCK1-16	153	CKFN20(3/4)-12	153	CKFN25(1)-9/16	153	D43GUX-NK1010	282
CAT50-SF32-160CP	109	CCK1-18	153	CKFN20(3/4)-12C	153	CKFN25(1)-9/16C	153	D43GUX-NK5050	282
CAT50-SF3-80	108	CCK1-20	153	CKFN20(3/4)-14	153	CKFN32(1.1/4)-1	154	E08-NUT-MINI	74
CAT50-SF6-160CP	109	CCK1-3/16	153	CKFN20(3/4)-14C	153	CKFN32(1.1/4)-1.1/4D	154	E11-002	65
CAT50-SF6-80CP	108	CCK1-3/4	153	CKFN20(3/4)-16	153	CKFN32(1.1/4)-1.1/4DC	154	E11-003	65
CAT50-SF8-160CP	109	CCK1-3/8	153	CKFN20(3/4)-16C	153	CKFN32(1.1/4)-1/2	154	E11-004	65
CAT50-SF8-80CP	108	CCK1-5/16	153	CKFN20(3/4)-20DC	153	CKFN32(1.1/4)-1/2C	154	E11-005	65
CAT50-SK10-105U-IDU	14	CCK1-5/8	153	CKFN20(3/4)-3/16	153	CKFN32(1.1/4)-1/4	154	E11-006	65
CAT50-SK10-105UP-IDU	15	CCK1-6	153	CKFN20(3/4)-3/16C	153	CKFN32(1.1/4)-1/4C	154	E11-007	65
CAT50-SK10-165U-IDU	14	CCK1-7/16	153	CKFN20(3/4)-3/4D	153	CKFN32(1.1/4)-10	154	E11-008	65
CAT50-SK10-165UP-IDU	15	CCK1-7/8	153	CKFN20(3/4)-3/4DC	153	CKFN32(1.1/4)-10C	154	E11-009	65
CAT50-SK10-195U-IDU	14	CCK1-8	153	CKFN20(3/4)-3/8	153	CKFN32(1.1/4)-11	154	E11-010	65
CAT50-SK10-195UP-IDU	15	CCK1-9/16	153	CKFN20(3/4)-3/8C	153	CKFN32(1.1/4)-11C	154	E11-011	65
CAT50-SK10-225U-IDU	14	CCK2-1	154	CKFN20(3/4)-5/16	153	CKFN32(1.1/4)-12	154	E11-012	65
CAT50-SK13-105U-IDU	14	CCK2-1.1/2	154	CKFN20(3/4)-5/16C	153	CKFN32(1.1/4)-12C	154	E11-012(C)	65
CAT50-SK13-105UP-IDU	15	CCK2-1.1/4	154	CKFN20(3/4)-5/8	153	CKFN32(1.1/4)-14	154	E11-013	65
CAT50-SK13-165U-IDU	14	CCK3/4-1/2	153	CKFN20(3/4)-5/8C	153	CKFN32(1.1/4)-14C	154	E11-013(C)	65
CAT50-SK13-165UP-IDU	15	CCK3/4-1/4	153	CKFN20(3/4)-6	153	CKFN32(1.1/4)-15	154	E11-014	65
CAT50-SK13-195U-IDU	14	CCK3/4-1/8	153	CKFN20(3/4)-6C	153	CKFN32(1.1/4)-15C	154	E11-014(C)	65
CAT50-SK16-105U-IDU	14	CCK3/4-10	153	CKFN20(3/4)-7	153	CKFN32(1.1/4)-16	154	E11-015	65
CAT50-SK16-105UP-IDU	15	CCK3/4-12	153	CKFN20(3/4)-7/16	153	CKFN32(1.1/4)-16C	154	E11-015(C)	65
CAT50-SK16-165U-IDU	14	CCK3/4-14	153	CKFN20(3/4)-7/16C	153	CKFN32(1.1/4)-18	154	E11-016	65
CAT50-SK16-165UP-IDU	15	CCK3/4-16	153	CKFN20(3/4)-7C	153	CKFN32(1.1/4)-18C	154	E11-016(C)	65
CAT50-SK16-195U-IDU	14	CCK3/4-3/16	153	CKFN20(3/4)-8	153	CKFN32(1.1/4)-18C	154	E11-017	65
CAT50-SK16-195UP-IDU	15	CCK3/4-3/8	153	CKFN20(3/4)-8C	153	CKFN32(1.1/4)-20	154	E11-017(C)	65
CAT50-SK20-105U-IDU	14	CCK3/4-5/16	153	CKFN20(3/4)-9/16	153	CKFN32(1.1/4)-20C	154	E11-039	65
CAT50-SK20-195U-IDU	14	CCK3/4-5/8	153	CKFN20(3/4)-9/16C	153	CKFN32(1.1/4)-24	154	E11-059	65
CAT50-SK25-105UP-IDU	15	CCK3/4-6	153	CKFN25(1)-1/2	153	CKFN32(1.1/4)-24C	154	E11-078	65
CAT50-SK25-165U-IDU	14	CCK3/4-7	153	CKFN25(1)-1/2C	153	CKFN32(1.1/4)-25	154	E11-098	65
CAT50-SK25-165UP-IDU	15	CCK3/4-7/16	153	CKFN25(1)-1/4	153	CKFN32(1.1/4)-25C	154	E11-118	65
CAT50-SK25-195U-IDU	14	CCK3/4-8	153	CKFN25(1)-1/4C	153	CKFN32(1.1/4)-28	154	E11-137	65
CAT50-SK25-195UP-IDU	15	CCK3/4-9/16	153	CKFN25(1)-1/8	153	CKFN32(1.1/4)-28C	154	E11-157	65
CAT50-SK6-105U-IDU	14	CCK32-1	154	CKFN25(1)-1/8C	153	CKFN32(1.1/4)-3/16	154	E11-157(C)	65
CAT50-SK6-105UP-IDU	15	CCK32-1/2	154	CKFN25(1)-10	153	CKFN32(1.1/4)-3/16C	154	E11-177	65

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
E11-177(C)	65	E16-216	66	E20-032	67	E25-025(C)	68	E25-NUT-6	74
E11-196	65	E16-216(C)	66	E20-032(C)	67	E25-026	68	E25-NUT-S	74
E11-196(C)	65	E16-236	66	E20-078	67	E25-026(C)	68	E25-SET-13(C)	68
E11-216	65	E16-236(C)	66	E20-098	67	E25-027(C)	68	E25-SET-14-MM	68
E11-216(C)	65	E16-255	66	E20-118	67	E25-028	68	E25-SET-19	68
E11-236	65	E16-255(C)	66	E20-137	67	E25-028(C)	68	E25-SET-21(C)-MM	68
E11-236(C)	65	E16-275	66	E20-157	67	E25-029(C)	68	E32-008	69
E11-255	65	E16-275(C)	66	E20-177	67	E25-030	68	E32-010	69
E11-255(C)	65	E16-295	66	E20-196	67	E25-030(C)	68	E32-012	69
E11-275	65	E16-295(C)	66	E20-196(C)	67	E25-031(C)	68	E32-014	69
E11-275(C)	65	E16-314	66	E20-216(C)	67	E25-032	68	E32-016	69
E11-EXT-500	63	E16-314(C)	66	E20-236	67	E25-032(C)	68	E32-016(C)	69
E11-EXT-625	63	E16-334	66	E20-236(C)	67	E25-033(C)	68	E32-017(C)	69
E11-EXT-750	63	E16-334(C)	66	E20-255(C)	67	E25-034	68	E32-018	69
E11-NUT	74	E16-354	66	E20-275	67	E25-034(C)	68	E32-018(C)	69
E11-NUT-MINI	74	E16-354(C)	66	E20-275(C)	67	E25-035(C)	68	E32-019(C)	69
E11-SET-06(C)	65	E16-374	66	E20-295(C)	67	E25-036	68	E32-020	69
E11-SET-07(C)-MM	65	E16-374(C)	66	E20-314	67	E25-036(C)	68	E32-020(C)	69
E11-SET-12-MM	65	E16-393	66	E20-314(C)	67	E25-037(C)	68	E32-021(C)	69
E11-SET-14	65	E16-393(C)	66	E20-334(C)	67	E25-038	68	E32-022	69
E16-002	66	E16-EXT-100	63	E20-354	67	E25-038(C)	68	E32-022(C)	69
E16-004	66	E16-EXT-625	63	E20-354(C)	67	E25-039(C)	68	E32-023(C)	69
E16-006	66	E16-EXT-750	63	E20-374(C)	67	E25-040	68	E32-024	69
E16-006(C)	66	E16-NUT	74	E20-393	67	E25-040(C)	68	E32-024(C)	69
E16-007(C)	66	E16-NUT-G	74	E20-393(C)	67	E25-078	68	E32-025(C)	69
E16-008	66	E16-NUT-S	74	E20-413(C)	67	E25-118	68	E32-026	69
E16-008(C)	66	E16-SET-09-MM	66	E20-433	67	E25-137	68	E32-026(C)	69
E16-009(C)	66	E16-SET-11(C)	66	E20-433(C)	67	E25-157	68	E32-027(C)	69
E16-010	66	E16-SET-12	66	E20-452	67	E25-196	68	E32-028	69
E16-010(C)	66	E16-SET-13(C)-MM	66	E20-452(C)	67	E25-236	68	E32-028(C)	69
E16-011(C)	66	E16-SET-15(C)	66	E20-472	67	E25-236(C)	68	E32-029(C)	69
E16-012	66	E20-004	67	E20-472(C)	67	E25-255(C)	68	E32-030	69
E16-012(C)	66	E20-006	67	E20-492(C)	67	E25-275	68	E32-030(C)	69
E16-013(C)	66	E20-008	67	E20-511	67	E25-275(C)	68	E32-031(C)	69
E16-014	66	E20-010	67	E20-511(C)	67	E25-295(C)	68	E32-032	69
E16-014(C)	66	E20-010(C)	67	E20-EXT-100	63	E25-314	68	E32-032(C)	69
E16-015(C)	66	E20-011(C)	67	E20-EXT-125	63	E25-314(C)	68	E32-033(C)	69
E16-016	66	E20-012	67	E20-EXT-750	63	E25-334(C)	68	E32-034	69
E16-016(C)	66	E20-012(C)	67	E20-NUT	74	E25-354	68	E32-034(C)	69
E16-017(C)	66	E20-013(C)	67	E20-NUT-G	74	E25-354(C)	68	E32-035(C)	69
E16-018	66	E20-014	67	E20-NUT-S	74	E25-374(C)	68	E32-036	69
E16-018(C)	66	E20-014(C)	67	E20-SET-11-MM	67	E25-393	68	E32-036(C)	69
E16-019(C)	66	E20-015(C)	67	E20-SET-12(C)	67	E25-393(C)	68	E32-037(C)	69
E16-020	66	E20-016	67	E20-SET-15	67	E25-413(C)	68	E32-038	69
E16-020(C)	66	E20-016(C)	67	E20-SET-17(C)-MM	67	E25-433	68	E32-038(C)	69
E16-021(C)	66	E20-017(C)	67	E25-004	68	E25-433(C)	68	E32-039(C)	69
E16-022	66	E20-018	67	E25-006	68	E25-452	68	E32-040	69
E16-022(C)	66	E20-018(C)	67	E25-008	68	E25-452(C)	68	E32-040(C)	69
E16-023(C)	66	E20-019(C)	67	E25-010	68	E25-472	68	E32-041(C)	69
E16-024	66	E20-020	67	E25-012	68	E25-472(C)	68	E32-042	69
E16-024(C)	66	E20-020(C)	67	E25-014	68	E25-492(C)	68	E32-042(C)	69
E16-025(C)	66	E20-021(C)	67	E25-014(C)	68	E25-511	68	E32-043(C)	69
E16-026	66	E20-022	67	E25-015(C)	68	E25-511(C)	68	E32-044	69
E16-026(C)	66	E20-022(C)	67	E25-016	68	E25-531(C)	68	E32-044(C)	69
E16-039	66	E20-023(C)	67	E25-016(C)	68	E25-551	68	E32-045(C)	69
E16-059	66	E20-024	67	E25-017(C)	68	E25-551(C)	68	E32-046	69
E16-078	66	E20-024(C)	67	E25-018	68	E25-570	68	E32-046(C)	69
E16-098	66	E20-025(C)	67	E25-018(C)	68	E25-570(C)	68	E32-047(C)	69
E16-118	66	E20-026	67	E25-019(C)	68	E25-590	68	E32-048	69
E16-118(C)	66	E20-026(C)	67	E25-020	68	E25-590(C)	68	E32-048(C)	69
E16-137	66	E20-027(C)	67	E25-020(C)	68	E25-610(C)	68	E32-049(C)	69
E16-157	66	E20-028	67	E25-021(C)	68	E25-629	68	E32-050	69
E16-157(C)	66	E20-028(C)	67	E25-022	68	E25-629(C)	68	E32-050(C)	69
E16-177	66	E20-029(C)	67	E25-022(C)	68	E25-EXT-100	63	E32-118	69
E16-177(C)	66	E20-030	67	E25-023(C)	68	E25-EXT-125	63	E32-137	69
E16-196	66	E20-030(C)	67	E25-024	68	E25-EXT-750	63	E32-157	69
E16-196(C)	66	E20-031(C)	67	E25-024(C)	68	E25-NUT	74	E32-196	69

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
E32-236	69	E40-030	70	E40-688(C)	70	ET16-SET-04	72	ET32-318(C)	73
E32-275	69	E40-032	70	E40-708	70	ET20-138	71	ET32-323	72
E32-294(C)	69	E40-032(C)	70	E40-708(C)	70	ET20-157	71	ET32-323(C)	73
E32-314	69	E40-034	70	E40-728	70	ET20-168	71	ET32-354	72
E32-314(C)	69	E40-036	70	E40-728(C)	70	ET20-177	71	ET32-354(C)	73
E32-354	69	E40-036(C)	70	E40-748	70	ET20-194	71	ET32-367	72
E32-354(C)	69	E40-038	70	E40-748(C)	70	ET20-197	71	ET32-367(C)	73
E32-364(C)	69	E40-040	70	E40-767	70	ET20-220	71	ET32-381	72
E32-374(C)	69	E40-040(C)	70	E40-767(C)	70	ET20-236	71	ET32-381(C)	73
E32-393	69	E40-042	70	E40-787	70	ET20-255	71	ET32-394	72
E32-393(C)	69	E40-044	70	E40-787(C)	70	ET20-255(C)	73	ET32-429	72
E32-413(C)	69	E40-046	70	E40-807	70	ET20-275	71	ET32-429(C)	73
E32-433	69	E40-048	70	E40-807(C)	70	ET20-315	71	ET32-433	72
E32-433(C)	69	E40-050	70	E40-826	70	ET20-318	71	ET32-433(C)	73
E32-452	69	E40-052	70	E40-826(C)	70	ET20-318(C)	73	ET32-437	72
E32-452(C)	69	E40-054	70	E40-846(C)	70	ET20-323	71	ET32-472	72
E32-472	69	E40-056	70	E40-866	70	ET20-323(C)	73	ET32-480	72
E32-472(C)	69	E40-058	70	E40-866(C)	70	ET20-354	71	ET32-480(C)	73
E32-492(C)	69	E40-060	70	E40-885(C)	70	ET20-367	71	ET32-542	72
E32-511	69	E40-062	70	E40-905	70	ET20-367(C)	73	ET32-542(C)	73
E32-511(C)	69	E40-064	70	E40-905(C)	70	ET20-381	71	ET32-551	72
E32-531(C)	69	E40-1003	70	E40-925(C)	70	ET20-381(C)	73	ET32-562	72
E32-551	69	E40-1003(C)	70	E40-944	70	ET20-394	71	ET32-590	72
E32-551(C)	69	E40-1023	70	E40-944(C)	70	ET20-SET-08	72	ET32-590(C)	73
E32-561(C)	69	E40-1023(C)	70	E40-964(C)	70	ET25-138	71	ET32-630	72
E32-570(C)	69	E40-157	70	E40-984	70	ET25-157	71	ET32-652	72
E32-590	69	E40-196	70	E40-984(C)	70	ET25-168	71	ET32-652(C)	73
E32-590(C)	69	E40-216	70	E40-NUT	74	ET25-177	71	ET32-709	72
E32-610(C)	69	E40-236	70	E40-NUT-G	74	ET25-194	71	ET32-M12	72
E32-629	69	E40-255	70	E40-NUT-S	74	ET25-197	71	ET32-SET-15	72
E32-629(C)	69	E40-275	70	E40-SET-23-MM	70	ET25-220	71	ET40-236	72
E32-649(C)	69	E40-295	70	E40-SET-25	70	ET25-236	71	ET40-255	72
E32-669	69	E40-314	70	E40-SET-33(C)-MM	70	ET25-255	71	ET40-275	72
E32-669(C)	69	E40-334	70	E40-SET-6(C)	70	ET25-255(C)	73	ET40-315	72
E32-688	69	E40-354	70	E50-NUT-S	74	ET25-275	71	ET40-318	72
E32-688(C)	69	E40-374	70	ER08-SCREW(C)	75	ET25-315	71	ET40-323	72
E32-708	69	E40-393	70	ER11-SCREW(C)	75	ET25-318	71	ET40-323(C)	73
E32-708(C)	69	E40-393(C)	70	ER16-SCREW(C)	75	ET25-318(C)	73	ET40-354	72
E32-728(C)	69	E40-413	70	ER20-SCREW(C)	75	ET25-323	71	ET40-354(C)	73
E32-748	69	E40-413(C)	70	ER25-SCREW(C)	75	ET25-323(C)	73	ET40-367	72
E32-748(C)	69	E40-433	70	ER32-SCREW(C)	75	ET25-354	71	ET40-367(C)	73
E32-767	69	E40-433(C)	70	ER40-SCREW(C)	75	ET25-367	71	ET40-381	72
E32-767(C)	69	E40-452	70	ER8-039	65	ET25-367(C)	73	ET40-381(C)	73
E32-787	69	E40-452(C)	70	ER8-059	65	ET25-381	71	ET40-394	72
E32-787(C)	69	E40-472	70	ER8-078	65	ET25-381(C)	73	ET40-429	72
E32-EXT-100	63	E40-472(C)	70	ER8-098	65	ET25-394	71	ET40-429(C)	73
E32-EXT-125	63	E40-492	70	ER8-118	65	ET25-429	71	ET40-433	72
E32-NUT	74	E40-492(C)	70	ER8-137	65	ET25-429(C)	73	ET40-433(C)	73
E32-NUT-G	74	E40-511	70	ER8-157	65	ET25-433	71	ET40-437	72
E32-NUT-S	74	E40-511(C)	70	ER8-177	65	ET25-437	71	ET40-472	72
E32-SET-17(C)	69	E40-531	70	ER8-196	65	ET25-472	71	ET40-480	72
E32-SET-18-MM	69	E40-531(C)	70	ER8-EXT-500M	63	ET25-480	71	ET40-480(C)	73
E32-SET-21	69	E40-551	70	ER8-EXT-625M	63	ET25-480(C)	73	ET40-542	72
E32-SET-21(C)-MM	69	E40-551(C)	70	ER8-SET-09-MM	65	ET25-M8(C)	73	ET40-542(C)	73
E40-010	70	E40-570	70	ET16-138	71	ET25-SET-10	72	ET40-551	72
E40-012	70	E40-570(C)	70	ET16-157	71	ET32-157	72	ET40-562	72
E40-014	70	E40-590	70	ET16-168	71	ET32-168	72	ET40-590	72
E40-016	70	E40-590(C)	70	ET16-177	71	ET32-177	72	ET40-590(C)	73
E40-018	70	E40-610	70	ET16-194	71	ET32-194	72	ET40-630	72
E40-020	70	E40-610(C)	70	ET16-197	71	ET32-197	72	ET40-652	72
E40-020(C)	70	E40-629	70	ET16-220	71	ET32-220	72	ET40-652(C)	73
E40-022	70	E40-629(C)	70	ET16-236	71	ET32-236	72	ET40-687	72
E40-024	70	E40-649	70	ET16-255	71	ET32-255	72	ET40-697	72
E40-024(C)	70	E40-649(C)	70	ET16-255(C)	73	ET32-255(C)	73	ET40-697(C)	73
E40-026	70	E40-669	70	ET16-275	71	ET32-275	72	ET40-700	72
E40-028	70	E40-669(C)	70	ET16-315	71	ET32-315	72	ET40-709	72
E40-028(C)	70	E40-688	70	ET16-318(C)	73	ET32-318	72	ET40-760	72

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
ET40-760(C)	73	H100A-SF32-130CP	124	H63A-SF8-120CP	122	HSK100A-SK10C-105-IDU	27	HSK40E-VC6-65	82
ET40-787	72	H100A-SF32-160CP	125	H63A-SF8-160CP	123	HSK100A-SK10C-105P-IDU	29	HSK40E-VC6-90	82
ET40-800	72	H100A-SF4-130CP	124	H63A-SF8-80CP	122	HSK100A-SK10C-120-IDU	27		27, 41, 75,
ET40-800(C)	73	H100A-SF4-160MT	125	HP-100WP	277	HSK100A-SK10C-120P-IDU	29	HSK40-TUBE	88, 173, 188,
ET40-SET-17	72	H100A-SF4-85CP	124	HP-150WP	277	HSK100A-SK10C-150-IDU	27		222
FK-10	74	H100A-SF4-85MT	125	HP-4WP	277	HSK100A-SK10C-150P-IDU	29		27, 41, 75,
FM10	188	H100A-SF6-130CP	124	HP-6WP	277	HSK100A-SK10C-200-IDU	27	HSK40-WRENCH	88, 173, 188,
FM12	188	H100A-SF6-160CP	125	HSK100A-0250-4.00	170	HSK100A-SK16C-120-IDU	27		222
FM16	188	H100A-SF6-160MT	125	HSK100A-0250-6.00	170	HSK100A-SK16C-120P-IDU	29	HSK50-WRENCH	88
FM20	188	H100A-SF6-85CP	124	HSK100A-0312-4.00	170	HSK100A-SK16C-150-IDU	27	HSK63A-0187-3.00	169
GH10	41, 88	H100A-SF6-85MT	125	HSK100A-0312-6.00	170	HSK100A-SK16C-200-IDU	27	HSK63A-0187-5.00	169
GH12	41	H100A-SF8-130CP	124	HSK100A-0375-4.00	170	HSK100A-SK20C-120-IDU	27	HSK63A-0250-3.00	169
GH16	41, 88	H100A-SF8-160CP	125	HSK100A-0375-6.00	170	HSK100A-SK25C-145-IDU	27	HSK63A-0250-5.00	169
GH20	41, 155	H100A-SF8-160MT	125	HSK100A-0437-4.00	170	HSK100A-SK25C-145P-IDU	29	HSK63A-0312-3.00	169
GH25	41, 155	H100A-SF8-85CP	124	HSK100A-0437-6.00	170	HSK100A-SK6C-105-IDU	27	HSK63A-0312-5.00	169
GH32	155	H100A-SF8-85MT	125	HSK100A-0500-4.00	170	HSK100A-0500-4.00CP	184	HSK63A-0375-3.00	169
GH32S	155	H63A-SF0125-3.15	122	HSK100A-0500-6.00	170	HSK100A-SM0750-4.00CP	184	HSK63A-0375-5.00	169
GH6	41	H63A-SF0125-3.15MT	123	HSK100A-0625-4.00	170	HSK100A-SM0750-6.00CP	184	HSK63A-0437-4.00	169
H100A-SF0187-3.74	124	H63A-SF0125-4.72CP	122	HSK100A-0625-6.00	170	HSK100A-SM0750-8.00CP	184	HSK63A-0437-5.00	169
H100A-SF0187-6.30	125	H63A-SF0125-6.30CP	123	HSK100A-0750-4.00	170	HSK100A-SM1000-4.00CP	184	HSK63A-0500-4.00	169
H100A-SF0250-3.54CP	124	H63A-SF0125-6.30MT	123	HSK100A-0750-6.00	170	HSK100A-SM1000-6.00CP	184	HSK63A-0500-5.00	169
H100A-SF0250-6.30CP	125	H63A-SF0187-4.72CP	122	HSK100A-1000-4.00	170	HSK100A-SM1250-4.00CP	184	HSK63A-0625-4.00	169
H100A-SF0312-3.54CP	124	H63A-SF0187-6.30CP	123	HSK100A-1000-6.00	170	HSK100A-SM1250-6.00CP	184	HSK63A-0625-5.00	169
H100A-SF0312-6.30CP	125	H63A-SF0250-3.15CP	122	HSK100A-1250-4.00	170	HSK100A-SM1250-8.00CP	184	HSK63A-0750-4.50	169
H100A-SF0312-6.30MT	124	H63A-SF0250-4.72CP	122	HSK100A-1250-6.00	170	HSK100A-SM1500-4.00CP	184	HSK63A-0750-6.00	169
H100A-SF0375-3.54CP	124	H63A-SF0250-4.72CP	122	HSK100A-1500-4.00	170	HSK100A-SM1500-6.00CP	184	HSK63A-1000-4.50	169
H100A-SF0375-6.30CP	125	H63A-SF0250-6.30CP	123	HSK100A-1500-6.00	170	HSK100A-SM2000-4.00CP	184	HSK63A-1000-6.00	169
H100A-SF0437-3.74CP	124	H63A-SF0250-6.30MT	123	HSK100A-BLANK-13.00	256	HSK100A-SM2000-6.00CP	184	HSK63A-1250-4.50	169
H100A-SF0437-6.30CP	125	H63A-SF0312-3.15CP	122	HSK100A-C1.1/4-115-IDU	148	HSK100A-TB2.1/2-14.00	280	HSK63A-1250-6.00	169
H100A-SF0500-3.74CP	124	H63A-SF0312-4.72CP	122	HSK100A-C1.1/4-165-IDU	148	HSK100A-TC0562-3.23	205	HSK63A-BLANK-13.00	256
H100A-SF0500-6.30CP	125	H63A-SF0312-4.72CP	122	HSK100A-C1.1/4-165-IDU	148	HSK100A-TC0562-5.20(C)	205	HSK63A-C1.1/4-110G-IDU	147
H100A-SF0625-3.94CP	124	H63A-SF0312-5.12CP	122	HSK100A-C1-115-IDU	148	HSK100A-TC0875-4.41	205	HSK63A-C1.1/4-110-IDU	147
H100A-SF0625-6.30CP	125	H63A-SF0312-6.30CP	123	HSK100A-C1-135-IDU	148	HSK100A-TC0875-6.62(C)	205	HSK63A-C1.1/4-130	147
H100A-SF0750-4.13CP	124	H63A-SF0375-3.35CP	122	HSK100A-C3/4-115G-IDU	148	HSK100A-TC1375-7.95	205	HSK63A-C1-100G-IDU	147
H100A-SF0750-6.30CP	125	H63A-SF0375-3.35MT	123	HSK100A-C3/4-115-IDU	148	HSK100A-VC13-105	83	HSK63A-C1-100-IDU	147
H100A-SF1000-4.53CP	124	H63A-SF0375-4.72CP	122	HSK100A-C3/4-135-IDU	148			HSK63A-C1-130	147
H100A-SF1000-6.30CP	125	H63A-SF0375-5.12CP	122	HSK100A-C32-115	148			HSK63A-C1-130G	147
H100A-SF10-130CP	124	H63A-SF0375-6.30CP	123	HSK100A-C32-135	148			HSK63A-C3/4-110G-IDU	147
H100A-SF10-160CP	125	H63A-SF0500-3.54CP	122	HSK100A-C32-165	148			HSK63A-C3/4-110-IDU	147
H100A-SF10-160MT	125	H63A-SF0500-3.54MT	123	HSK100A-C32-250	148			HSK63A-C3/4-70P	147
H100A-SF10-90CP	124	H63A-SF0500-4.72CP	122	HSK100A-C32-300	148			HSK63A-C3/4-95G-IDU	147
H100A-SF10-90MT	125	H63A-SF0500-5.12CP	122	HSK100A-ER16-4.00	61			HSK63A-C3/4-95-IDU	147
H100A-SF12-130CP	124	H63A-SF0500-6.30CP	123	HSK100A-ER16-6.00	61	HSK125A-C1.1/4-115	148	HSK63A-ER11-4.33	60
H100A-SF12-160CP	125	H63A-SF0625-3.74CP	122	HSK100A-ER16-100	61	HSK125A-C1-115	148	HSK63A-ER16-3.00	60
H100A-SF12-160MT	125	H63A-SF0625-4.72CP	122	HSK100A-ER16S-100	61	HSK125A-C2-125	148	HSK63A-ER16-5.00	60
H100A-SF1250-4.72CP	124	H63A-SF0625-5.12CP	122	HSK100A-ER16S-160	61	HSK125A-TUBE	155	HSK63A-ER16S-100	60
H100A-SF1250-6.30CP	125	H63A-SF0625-6.30CP	123	HSK100A-ER20-4.00	61	HSK125-WRENCH	155	HSK63A-ER16S-160	60
H100A-SF12-95CP	124	H63A-SF0750-3.94CP	122	HSK100A-ER20-6.00	61	HSK32E-SK10-60P	28	HSK63A-ER16S-80	60
H100A-SF12-95MT	125	H63A-SF0750-4.72CP	122	HSK100A-ER25-4.00	61	HSK32E-SK6-50P	28	HSK63A-ER20-3.00	60
H100A-SF14-130CP	124	H63A-SF0750-6.30CP	123	HSK100A-ER25-6.00	61	HSK32-WRENCH	88	HSK63A-ER20-5.00	60
H100A-SF14-160CP	125	H63A-SF1000-4.53CP	122	HSK100A-ER32-4.00	61	HSK40A-ER11-75	60	HSK63A-ER20S-100	60
H100A-SF14-95CP	124	H63A-SF1000-6.30CP	123	HSK100A-ER32-6.00	61	HSK40A-ER16-75	60	HSK63A-ER20S-160	60
H100A-SF16-100CP	124	H63A-SF10-120CP	122	HSK100A-ER32S-100	61	HSK40A-ER20-75	60	HSK63A-ER20S-80	60
H100A-SF16-100MT	125	H63A-SF10-160CP	123	HSK100A-ER40-4.00	61	HSK40A-ER25-80	60	HSK63A-ER25-3.00	60
H100A-SF16-130CP	124	H63A-SF16-160CP	122	HSK100A-ER40-6.00	61	HSK40A-ER32-80	60	HSK63A-ER25-5.00	60
H100A-SF16-160CP	125	H63A-SF12-120CP	122	HSK100A-ER40S-120	61	HSK40A-R0562-2.97(C)	206	HSK63A-ER25S-150	60
H100A-SF16-160MT	125	H63A-SF12-160CP	123	HSK100A-MMC12C-130-AA	94	HSK40A-SM0750-60CP	184	HSK63A-ER32-4.00	60
H100A-SF16-80CP	124	H63A-SF14-90CP	122	HSK100A-MMC8C-117-AT	94	HSK40A-SM1000-60CP	184	HSK63A-ER32-6.00	60
H100A-SF18-100CP	124	H63A-SF16-160CP	123	HSK100A-MMC8C-130-AA	94	HSK40A-VC13-120	82	HSK63A-ER32S-100	60
H100A-SF18-130CP	125	H63A-SF16-95CP	122	HSK100A-MMC8C-145-AT	94	HSK40A-VC6-65	82	HSK63A-ER32S-160	60
H100A-SF18-160CP	125	H63A-SF20-160CP	123	HSK100A-NPU13C-145-IDU	192	HSK40A-VC6-90	82	HSK63A-ER40-4.00	60
H100A-SF20-105CP	124	H63A-SF25-160CP	123	HSK100A-R0562-2.59	206	HSK40E-SK10-60P	28	HSK63A-ER40-6.00	60
H100A-SF20-130CP	124	H63A-SF3-80MT	123	HSK100A-R0562-3.09(C)	206	HSK40E-SK16-80P	28	HSK63A-ER40S-120	60
H100A-SF20-160CP	125	H63A-SF3-80MT	123	HSK100A-R0875-3.42	206	HSK40E-SK6-60P	28	HSK63A-ER40S-80	60
H100A-SF25-115CP	124	H63A-SF4-80MT	123	HSK100A-R0875-3.94(C)	206	HSK40E-VC13-120	82	HSK63A-MMC12C-110-AT	94
H100A-SF25-130CP	124	H63A-SF6-160MT	123	HSK100A-R1375-4.57	206	HSK40E-VC13-90	82		
H100A-SF25-160CP	125	H63A-SF6-80CP	122	HSK100A-R1375-5.32(C)	206				

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
HSK63A-MMC12C-117-AA	94	K1.1/4-SK25-150	30	KM2-1/4	151	MPK4-2	96	NB3007-0016-4.00G	58
HSK63A-MMC12C-177-AA	94	K1.1/4-SK6-120	30	KM2-3/4	151	MPK4-2.5	96	NB3007-0016-5.00G	58
HSK63A-MMC8C-107-AT-IDU	94	K1.1/4-SK6-170	30	KM3/4-1/2	151	MPK4-3	96	NB3007-0016-6.00G	58
HSK63A-MMC8C-115-AA-IDU	94	K25-SK10-150	30	KM3/4-1/4	151	MPK4-3.5	96	NB3007-0020-2.50G	58
HSK63A-NPU13C-135-IDU	192	K25-SK6-130	30	KM3/4-1/8	151	MPK4-3/32	96	NB3007-0020-4.00G	58
HSK63A-NPU8-120	192	K-3	196	KM3/4-10	151	MPK4-4	96	NB3007-0025-2.00G	58
HSK63A-R0562-2.48	206	K3/4-MMC8C-100	95	KM3/4-12	151	N3001-0750-1.31	186	NB3007-0025-4.00G	58
HSK63A-R0562-2.76(C)	206	K3/4-SK10-100	30	KM3/4-14	151	N3001-1000-1.31	186	NB3007-0032-3.00G	58
HSK63A-R0875-3.31	206	K3/4-SK10-120	30	KM3/4-16	151	N3003-0002-0.59	195	NB3007-0032-5.00G	58
HSK63A-R0875-3.70(C)	206	K32-SK10-120	30	KM3/4-3/16	151	N3003-0003-0.55	195	NB4001-0750-1.75CP	183
HSK63A-R1375-5.12	206	K32-SK10-210	30	KM3/4-3/8	151	N3003-0006-0.59	195	NB4001-1000-1.75CP	183
HSK63A-SK10C-105-IDU	27	K32-SK16-120	30	KM3/4-5/16	151	N3003-0033-0.59	195	NB4001-1250-2.00CP	183
HSK63A-SK10C-105P-IDU	28	K32-SK16-210	30	KM3/4-5/8	151	N3006-0125-1.75	171	NB4001-1500-2.00CP	183
HSK63A-SK10C-120-IDU	27	K32-SK20-120	30	KM3/4-6	151	N3006-0250-1.75	171	NB4006-0500-4.00CP	167
HSK63A-SK10C-120P-IDU	28	K32-SK20-180	30	KM3/4-7	151	N3006-0375-1.75	171	NB4006-1250-3.56CP	167
HSK63A-SK10C-150-IDU	27	K32-SK6-120	30	KM3/4-7/16	151	N3006-0500-1.75	171	NB4007-0020-2.50G	59
HSK63A-SK10C-150P-IDU	28	K32-SK6-170	30	KM3/4-8	151	N3006-0625-1.75	171	NB4007-0020-4.00G	59
HSK63A-SK16C-120-IDU	27	KM1.1/4-1/2	151	KM3/4-9/16	151	N3006-0750-2.25	171	NB4007-0020-6.00G	59
HSK63A-SK16C-120P-IDU	28	KM1.1/4-1/4	151	KM3/4-SET-07-MM	151	N3006-0875-2.50	171	NB4007-0025-2.25G	59
HSK63A-SK16C-150-IDU	27	KM1.1/4-1/8	151	KM3/4-SET-09	151	N3006-1000-2.69	171	NB4007-0025-4.00G	59
HSK63A-SK16C-150P-IDU	28	KM1.1/4-10	151	KM32-1	151	N3006-1250-3.62	171	NB4007-0025-6.00G	59
HSK63A-SK25C-135-IDU	27	KM1.1/4-11/16	151	KM32-1/2	151	N3007-0011-2.00	62	NB4007-0032-3.13G	59
HSK63A-SK25C-135P-IDU	28	KM1.1/4-12	151	KM32-1/4	151	N3007-0016-1.77	62	NB4007-0032-5.00G	59
HSK63A-SK6C-100-IDU	27	KM1.1/4-14	151	KM32-1/8	151	N3007-0100-2.75	237	NB4007-0032-6.30G	59
HSK63A-SK6C-100P-IDU	28	KM1.1/4-15/16	151	KM32-10	151	N3007-0200-2.50	237	NBT30-C1-75G	146
HSK63A-SK6C-120-IDU	27	KM1.1/4-16	151	KM32-11	151	N4003-0001-0.69	195	NBT30-C1-75G	146
HSK63A-SK6C-120P-IDU	28	KM1.1/4-18	151	KM32-11/16	151	N4003-0002-0.65	195	NBT30-C3/4-70	146
HSK63A-SK6C-150-IDU	27	KM1.1/4-20	151	KM32-12	151	N4003-0003-0.61	195	NBT30-C3/4-75	146
HSK63A-SK6C-150P-IDU	28	KM1.1/4-25	151	KM32-13	151	N4003-0006-0.65	195	NBT30-C3/4-75G	146
HSK63A-SM0750-3.00CP	184	KM1.1/4-3/16	151	KM32-14	151	N4003-0033-0.65	195	NBT30-MMC12C-105-AA	93
HSK63A-SM0750-5.00CP	184	KM1.1/4-3/4	151	KM32-15	151	N4006-0125-2.31	171	NBT30-MMC4-105-AA	93
HSK63A-SM1000-3.00CP	184	KM1.1/4-3/8	151	KM32-16	151	N4006-0187-2.31	171	NBT30-MMC8C-105-AA	93
HSK63A-SM1000-5.00CP	184	KM1.1/4-5/16	151	KM32-17	151	N4006-0250-2.31	171	NBT30-MMC8C-65-AT	93
HSK63A-SM1250-3.00CP	184	KM1.1/4-5/8	151	KM32-18	151	N4006-0312-2.31	171	NBT30-SF0125-3.15	119
HSK63A-SM1250-5.00CP	184	KM1.1/4-6	151	KM32-19	151	N4006-0375-2.31	171	NBT30-SF0187-3.15	119
HSK63A-TB1.3/4-14.00	280	KM1.1/4-7/16	151	KM32-20	151	N4006-0437-2.31	171	NBT30-SF0250-3.15CP	119
HSK63A-TC0562-3.15	205	KM1.1/4-7/8	151	KM32-21	151	N4006-0500-2.31	171	NBT30-SF0375-3.15CP	119
HSK63A-TC0562-4.92(C)	205	KM1.1/4-8	151	KM32-22	151	N4006-0625-2.31	171	NBT30-SF0500-3.15CP	119
HSK63A-TC0875-4.72	205	KM1.1/4-9/16	151	KM32-23	151	N4006-0750-2.31	171	NBT30-SF0625-3.15CP	119
HSK63A-TC0875-6.38(C)	205	KM1.1/4-SET-08-MM	151	KM32-24	151	N4006-0875-2.94	171	NBT30-SF0750-3.15CP	119
HSK63A-TC1375-7.72	205	KM1.1/4-SET-11	151	KM32-25	151	N4006-1000-3.37	171	NBT30-SK10C-120	23
HSK63A-TC1375-9.41(C)	205	KM1-1/2	151	KM32-26	151	N4006-1250-3.69	171	NBT30-SK10C-120P	24
HSK63A-VC13-90-IDU	83	KM1-1/4	151	KM32-27	151	N4007-0016-1.77	62	NBT30-SK10C-45	23
HSK63F-C1.1/4-110G	147	KM1-1/8	151	KM32-28	151	N4007-0025-2.00	62	NBT30-SK10C-45P	24
HSK63F-C1-100G	147	KM1-10	151	KM32-29	151	N4008-0013	256	NBT30-SK10C-60	23
HSK63F-C3/4-95G	147	KM1-12	151	KM32-3	151	N5003-0002-1.34	195	NBT30-SK10C-60P	24
HSK63F-SK10C-105P	29	KM1-14	151	KM32-3/16	151	N5003-0003-1.30	195	NBT30-SK10C-75	23
HSK63F-SK16C-120P	29	KM1-16	151	KM32-3/4	151	N5003-0004-1.22	195	NBT30-SK10C-75P	24
HSK63F-VC13-120	83	KM1-18	151	KM32-3/8	151	N5003-0006-1.34	195	NBT30-SK10C-90	23
HSK63F-VC13-90	83	KM1-20	151	KM32-30	151	N5003-0033-1.34	195	NBT30-SK10C-90P	24
HSK63F-VC6-120	83	KM1-3/16	151	KM32-4	151	N5007-0016-2.00	62	NBT30-SK13C-120	23
HSK63F-VC6-65	83	KM1-3/4	151	KM32-5	151	N5007-0025-2.00	62	NBT30-SK13C-120P	24
HSK63F-VC6-90	83	KM1-3/8	151	KM32-5/16	151	N5008-0013	256	NBT30-SK13C-60	23
	27, 41, 75, 88, 94,	KM1-5/16	151	KM32-5/8	151	NB3001-0750-1.19CP	183	NBT30-SK13C-60P	24
	130, 155, 173, 188,	KM1-5/8	151	KM32-6	151	NB3001-1000-1.19CP	183	NBT30-SK13C-90	23
	193, 222, 256	KM1-6	151	KM32-7	151	NB3006-0125-2.36CP	167	NBT30-SK13C-90P	24
	27, 41, 75, 88, 94,	KM1-7/16	151	KM32-7/16	151	NB3006-0187-2.36CP	167	NBT30-SK16C-120	23
	130, 155, 173, 188,	KM1-7/8	151	KM32-7/8	151	NB3006-0250-2.36CP	167	NBT30-SK16C-120P	24
	193, 222, 256	KM1-8	151	KM32-8	151	NB3006-0312-2.36CP	167	NBT30-SK16C-60	23
		KM1-9/16	151	KM32-9	151	NB3006-0375-2.36CP	167	NBT30-SK16C-60P	24
K1.1/4-MMC8C-122	95	KM1-SET-08-MM	151	KM32-9/16	151	NB3006-0500-2.36CP	167	NBT30-SK16C-75	23
K1.1/4-MMC8C-160	95	KM1-SET-10	151	KM32-SET-09-MM	151	NB3006-0625-2.50CP	167	NBT30-SK16C-75P	24
K1.1/4-SK10-120	30	KM2-1	151	KM32-SET-11	151	NB3006-0750-3.00CP	167	NBT30-SK16C-90	23
K1.1/4-SK10-150	30	KM2-1.1/2	151	MPK4-1	96	NB3006-1000-3.54CP	167	NBT30-SK16C-90P	24
K1.1/4-SK10-210	30	KM2-1.1/4	151	MPK4-1.5	96	NB3007-0008-2.00M	58	NBT30-SK20-60	23
K1.1/4-SK16-120	30	KM2-1.3/4	151	MPK4-1/16	96	NB3007-0011-2.00	58	NBT30-SK20-60P	24
K1.1/4-SK16-150	30	KM2-1.7/8	151	MPK4-1/8	96	NB3007-0016-2.36G	58	NBT30-SK20C-75	23

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
NBT30-SK20C-75P	24	NBT40-SK16C-180	25	NC5001-0750-6.00CP	179	NCAT40-C3/4-85U-IDU	142	NCAT40-SK20C-120UP-IDU	17
NBT30-SK20C-90	23	NBT40-SK16C-200	25	NC5001-0750-8.00CP	179	NCAT40-C32-105U-IDU	142	NCAT40-SK20C-150U-IDU	16
NBT30-SK20C-90P	24	NBT40-SK16C-250	25	NC5001-1000-1.75CP	179	NCAT40-MMC12C-90U-AA-IDU	93	NCAT40-SK20C-150UP-IDU	17
NBT30-SK25-90	23	NBT40-SK16C-60	25	NC5001-1000-4.00CP	179	NCAT40-MMC4-90U-AA-IDU	93	NCAT40-SK20C-180U-IDU	16
NBT30-SK25-90P	24	NBT40-SK16C-60P	26	NC5001-1000-6.00CP	179	NCAT40-MMC8C-120U-AA-IDU	93	NCAT40-SK20C-65U-IDU	16
NBT30-SK6C-120	24	NBT40-SK16C-75	25	NC5001-1000-8.00CP	179	NCAT40-MMC8C-150U-AA-IDU	93	NCAT40-SK20C-65UP-IDU	17
NBT30-SK6C-120P	24	NBT40-SK16C-75P	26	NC5001-1250-1.75CP	179	NCAT40-MMC8C-90U-AA-IDU	93	NCAT40-SK20C-90U-IDU	16
NBT30-SK6C-60	23	NBT40-SK16C-90	25	NC5001-1250-6.00CP	179	NCAT40-SF0125-3.15	114	NCAT40-SK20C-90UP-IDU	17
NBT30-SK6C-60P	24	NBT40-SK16C-90P	26	NC5001-1250-8.00CP	179	NCAT40-SF0125-5.12	114	NCAT40-SK25C-120U-IDU	16
NBT30-SK6C-90	23	NBT40-SK25C-120	25	NC5001-1500-2.00CP	179	NCAT40-SF0125-6.30	116	NCAT40-SK25C-120UP-IDU	17
NBT30-SK6C-90P	24	NBT40-SK25C-120P	26	NC5001-1500-4.00CP	179	NCAT40-SF0187-3.15	114	NCAT40-SK25C-90U-IDU	16
NBT30-VC13-120	85	NBT40-SK25C-75	25	NC5001-1500-6.00CP	179	NCAT40-SF0187-5.12	114	NCAT40-SK25C-90UP-IDU	17
NBT30-VC13-60	85	NBT40-SK25C-75P	26	NC5001-1500-8.00CP	179	NCAT40-SF0187-6.30	116	NCAT40-SK6C-120U-IDU	16
NBT30-VC13-90	85	NBT40-SK25C-90	25	NC5001-2000-2.00CP	179	NCAT40-SF0250-3.15CP	115	NCAT40-SK6C-120UP-IDU	17
NBT30-VC6-45	85	NBT40-SK25C-90P	26	NC5001-22-60CP	180	NCAT40-SF0250-5.12CP	115	NCAT40-SK6C-150U-IDU	16
NBT30-VC6-60	85	NBT40-SK6C-120	25	NC5001-27-60CP	180	NCAT40-SF0250-6.30CP	116	NCAT40-SK6C-150UP-IDU	17
NBT30-VC6-90	85	NBT40-SK6C-120P	26	NC5001-32-60CP	180	NCAT40-SF0312-3.15CP	115	NCAT40-SK6C-90U-IDU	16
NBT40-C1.1/4-120G	146	NBT40-SK6C-150	25	NC5001-40-60CP	180	NCAT40-SF0312-5.12CP	115	NCAT40-SK6C-90UP-IDU	17
NBT40-C1.1/4-85	146	NBT40-SK6C-150P	26	NC5002-1000-6.17	253	NCAT40-SF0375-3.15CP	115	NCAT40-VC13-120U-IDU	84
NBT40-C1.1/4-85G	146	NBT40-SK6C-60	25	NC5006-0500-2.63CP	163	NCAT40-SF0375-5.12CP	115	NCAT40-VC13-60U-IDU	84
NBT40-C1-70	146	NBT40-SK6C-60P	26	NBT40-SK6C-60P	26	NCAT40-SF0375-6.30CP	116	NCAT40-VC13-90U-IDU	84
NBT40-C1-70G	146	NBT40-SK6C-90	25	NC5006-0625-3.00CP	163	NCAT40-SF0500-3.15CP	115	NCAT40-VC6-60U-IDU	84
NBT40-C1-90	146	NBT40-SK6C-90P	26	NC5006-0625-4.00CP	163	NCAT40-SF0500-5.12CP	115	NCAT40-VC6-90U-IDU	84
NBT40-C1-90G	146	NBT40-VC13-120	85	NC5006-0750-3.00CP	163	NCAT40-SF0500-6.30CP	116	NCAT50-C1.1/4-105UG-IDU	143
NBT40-C3/4-105G	146	NBT40-VC13-150	85	NC5006-0750-4.00CP	163	NCAT40-SF0625-3.15CP	115	NCAT50-C1.1/4-105U-IDU	142
NBT40-C3/4-70	146	NBT40-VC13-60	85	NC5006-0750-6.00CP	163	NCAT40-SF0625-5.12CP	115	NCAT50-C1.1/4-135UG-IDU	143
NBT40-C3/4-70G	146	NBT40-VC13-90	85	NC5006-1000-4.00CP	163	NCAT40-SF0625-6.30CP	116	NCAT50-C1.1/4-135U-IDU	142
NBT40-MMC12C-90-AA	93	NBT40-VC6-120	85	NC5006-1000-6.00CP	163	NCAT40-SF0750-3.15CP	115	NCAT50-C1.1/4-165U-IDU	142
NBT40-MMC8C-120-AA	93	NBT40-VC6-150	85	NC5006-1250-4.00CP	163	NCAT40-SF0750-5.12CP	115	NCAT50-C1.1/4-90UG-IDU	143
NBT40-MMC8C-90-AA	93	NBT40-VC6-60	85	NC5006-1250-6.00CP	163	NCAT40-SF0750-6.30CP	116	NCAT50-C1.1/4-90U-IDU	142
NBT40-SF0125-3.54	120	NBT40-VC6-90	85	NC5006-1500-4.50CP	163	NCAT40-SF1000-3.94CP	115	NCAT50-C1-105UG-IDU	143
NBT40-SF0125-6.30	121	NC4001-0500-1.75CP	179	NC5006-2000-5.37CP	163	NCAT40-SF1000-5.12CP	115	NCAT50-C1-105U-IDU	142
NBT40-SF0187-3.54	120	NC4001-0750-1.75CP	179	NC5007-0016-4.12G	57	NCAT40-SF1000-6.30CP	116	NCAT50-C1-135UG-IDU	143
NBT40-SF0250-3.54CP	120	NC4001-0750-4.00CP	179	NC5007-0016-6.00G	57	NCAT40-SF10-130CP	115	NCAT50-C1-135U-IDU	142
NBT40-SF0250-6.30CP	121	NC4001-1000-1.75CP	179	NC5007-0016-8.00G	57	NCAT40-SF10-80CP	115	NCAT50-C2-125U-IDU	142
NBT40-SF0375-3.54CP	120	NC4001-1000-4.00CP	179	NC5007-0020-12.00G	57	NCAT40-SF12-80CP	115	NCAT50-C3/4-105UG-IDU	143
NBT40-SF0375-6.30CP	121	NC4001-1250-2.00CP	179	NC5007-0020-4.00G	57	NCAT40-SF14-80CP	115	NCAT50-C3/4-105U-IDU	142
NBT40-SF0500-3.54CP	120	NC4001-1250-4.00CP	179	NC5007-0020-6.00G	57	NCAT40-SF16-80CP	115	NCAT50-C3/4-135UG-IDU	143
NBT40-SF0500-5.12CP	120	NC4001-1500-2.00CP	179	NC5007-0020-8.00G	57	NCAT40-SF6-130CP	115	NCAT50-C3/4-135U-IDU	142
NBT40-SF0500-6.30CP	121	NC4002-1000-6.17	253	NC5007-0025-4.00G	57	NCAT40-SF6-80CP	115	NCAT50-C3/4-165U-IDU	142
NBT40-SF0625-3.54CP	120	NC4002-1250-6.29	253	NC5007-0025-8.00G	57	NCAT40-SF8-80CP	115	NCAT50-SF0125-3.15	117
NBT40-SF0625-6.30CP	121	NC4006-0500-2.50CP	163	NC5007-0032-12.00G	57	NCAT40-SK10C-120U-IDU	16	NCAT50-SF0125-6.30	118
NBT40-SF0750-3.54CP	120	NC4006-0500-4.00CP	163	NC5007-0032-4.00G	57	NCAT40-SK10C-120UP-IDU	17	NCAT50-SF0187-3.15	117
NBT40-SF0750-5.12CP	120	NC4006-0625-3.00CP	163	NC5007-0032-6.00G	57	NCAT40-SK10C-150U-IDU	16	NCAT50-SF0250-3.15CP	117
NBT40-SF0750-6.30CP	121	NC4006-0750-3.00CP	163	NC5007-0032-8.00G	57	NCAT40-SK10C-150UP-IDU	17	NCAT50-SF0250-5.12CP	117
NBT40-SF1000-3.54CP	120	NC4006-0750-4.00CP	163	NC5007-0040-12.00G	57	NCAT40-SK10C-180U-IDU	16	NCAT50-SF0250-6.30CP	118
NBT40-SF1000-6.30CP	121	NC4006-1000-2.00	163	NC5007-0040-4.00G	57	NCAT40-SK10C-180UP-IDU	17	NCAT50-SF0312-3.15CP	117
NBT40-SK10C-120	25	NC4006-1000-4.00CP	163	NC5007-0040-6.00G	57	NCAT40-SK10C-90U-IDU	16	NCAT50-SF0312-5.12CP	117
NBT40-SK10C-120P	26	NC4006-1250-4.00CP	163	NC5007-0040-8.00G	57	NCAT40-SK10C-90UP-IDU	17	NCAT50-SF0375-3.15CP	117
NBT40-SK10C-150	25	NC4006-1500-4.50CP	163	NC5008-0013	255	NCAT40-SK13C-120U-IDU	16	NCAT50-SF0375-5.12CP	117
NBT40-SK10C-150P	26	NC4007-0016-3.50G	56	NC50F1-2000-4.00CP	180	NCAT40-SK13C-120UP-IDU	17	NCAT50-SF0375-6.30CP	118
NBT40-SK10C-180	25	NC4007-0016-6.00G	56	NC50F1-2500-2.95CP	180	NCAT40-SK13C-150U-IDU	16	NCAT50-SF0437-3.15CP	117
NBT40-SK10C-200	25	NC4007-0016-9.00G	56	NCAT40-C1.1/4SL-105UG-IDU	143	NCAT40-SK13C-150UP-IDU	17	NCAT50-SF0500-3.15CP	117
NBT40-SK10C-250	25	NC4007-0020-2.50G	56	NCAT40-C1.1/4SL-105U-IDU	142	NCAT40-SK13C-180U-IDU	16	NCAT50-SF0500-5.12CP	117
NBT40-SK10C-60	25	NC4007-0020-4.00G	56	NCAT40-C1.1/4SL-120U-IDU	142	NCAT40-SK13C-90U-IDU	16	NCAT50-SF0500-6.30CP	118
NBT40-SK10C-60P	26	NC4007-0020-6.00G	56	NCAT40-C1.1/4SL-85UG-IDU	143	NCAT40-SK13C-90UP-IDU	17	NCAT50-SF0625-3.15CP	117
NBT40-SK10C-75	25	NC4007-0020-9.00G	56	NCAT40-C1-105UG-IDU	143	NCAT40-SK16C-120U-IDU	16	NCAT50-SF0625-5.12CP	117
NBT40-SK10C-75P	26	NC4007-0025-2.50G	56	NCAT40-C1-105U-IDU	142	NCAT40-SK16C-120UP-IDU	17	NCAT50-SF0625-6.30CP	118
NBT40-SK10C-90	25	NC4007-0025-4.00G	56	NCAT40-C1-85UG-IDU	143	NCAT40-SK16C-150U-IDU	16	NCAT50-SF0750-3.15CP	117
NBT40-SK10C-90P	26	NC4007-0025-6.00G	56	NCAT40-C1-85U-IDU	142	NCAT40-SK16C-150UP-IDU	17	NCAT50-SF0750-5.12CP	117
NBT40-SK13C-60	25	NC4007-0032-3.13G	56	NCAT40-C3/4-105UG-IDU	143	NCAT40-SK16C-180U-IDU	16	NCAT50-SF0750-6.30CP	118
NBT40-SK13C-75	25	NC4007-0032-5.00G	56	NCAT40-C3/4-105U-IDU	142	NCAT40-SK16C-180UP-IDU	17	NCAT50-SF1000-3.94CP	117
NBT40-SK13C-75P	26	NC4007-0032-9.00G	56	NCAT40-C3/4-120UG-IDU	143	NCAT40-SK16C-60U-IDU	16	NCAT50-SF1000-5.12CP	117
NBT40-SK16C-120	25	NC4007-0040-3.13G	56	NCAT40-C3/4-120U-IDU	142	NCAT40-SK16C-90U-IDU	16	NCAT50-SF1000-6.30CP	118
NBT40-SK16C-120P	26	NC4008-0013	255	NCAT40-C3/4-70UG-IDU	143	NCAT40-SK16C-90UP-IDU	17	NCAT50-SF10-80CP	117
NBT40-SK16C-150	25	NC5001-0750-1.75CP	179	NCAT40-C3/4-70U-IDU	142	NCAT40-SK20-50U-IDU	16	NCAT50-SF1250-3.94CP	117
NBT40-SK16C-150P	26	NC5001-0750-4.00CP	179	NCAT40-C3/4-85UG-IDU	143	NCAT40-SK20C-120U-IDU	16	NCAT50-SF1250-5.12CP	117

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
NCAT50-SF1250-6.30CP	118	NK1-6	152	NMTB50-C3/4-65	149	NTPT05-008(S)	212	S1/4-28x1/4	173
NCAT50-SF14-80CP	117	NK1-7/16	152	NMTB50-NPU13-86	192	NTPT10-016	212	S1005-0562-4.17	209
NCAT50-SF6-80CP	117	NK1-7/8	152	NPU13-SPAN	193	NTPT10-016(S)	212	S1005-0875-5.61	209
NCAT50-SF8-80CP	117	NK1-8	152	NPU8-SPAN	193	NTPT10-024	212	S1006-0375-6.00	172
NCAT50-SK10C-105U-IDU	18	NK2-1	152	NT05-006	210	NTPT10-024(S)	212	S1006-0500-6.00	172
NCAT50-SK10C-105UP-IDU	19	NK2-1-1/2	152	NT05-006(S)	211	NTPT10-032	212	S1-14x7/8	173
NCAT50-SK10C-165U-IDU	18	NK2-1-1/4	152	NT05-008	210	NTPT10-032(S)	212	S1205-0875-5.61	209
NCAT50-SK10C-165UP-IDU	19	NK3/4-1/2	152	NT05-008(S)	211	NTPT15-032	212	S1507-1000-9.00	232
NCAT50-SK10C-195U-IDU	18	NK3/4-1/4	152	NT05-010	210	NTPT15-032(S)	212	S25-SK10-250	30
NCAT50-SK10C-195UP-IDU	19	NK3/4-1/8	152	NT05-010(S)	211	NTPT15-048	212	S25-SK10-300	30
NCAT50-SK10C-225U-IDU	18	NK3/4-1/8	152	NT05-012	210	NTPT15-048(S)	212	S3/4-16X11/16	173
NCAT50-SK16C-105U-IDU	18	NK3/4-12	152	NT05-012(S)	211	NTPT15-064	212	S3/8-24X5/16	173
NCAT50-SK16C-105UP-IDU	19	NK3/4-14	152	NT05-016	210	NTPT15-064(S)	212	S32-SK16-250	30
NCAT50-SK16C-165U-IDU	18	NK3/4-16	152	NT05-016(S)	211	NUT-ER32I	74	S32-SK16-300	30
NCAT50-SK16C-165UP-IDU	19	NK3/4-3/16	152	NT05-020	210	PF-2	276	S5/16-24X1/4	173
NCAT50-SK16C-195U-IDU	18	NK3/4-3/8	152	NT05-020(S)	211	PF-STYLUS-2	276	S5/8-18X1/2	173
NCAT50-SK25C-105U-IDU	18	NK3/4-5/16	152	NT05-024	210	PMK12-10	96	S6-32X1/4	173
NCAT50-SK25C-105UP-IDU	19	NK3/4-5/8	152	NT05-024(S)	211	PMK12-12	96	S7/16-20X3/8	173
NCAT50-SK25C-165U-IDU	18	NK3/4-6	152	NT05-028	210	PMK12-4	96	S7506-0125-6.00	172
NCAT50-SK25C-165UP-IDU	19	NK3/4-7	152	NT05-028(S)	211	PMK12-6	96	S7506-0187-6.00	172
NCAT50-SK25C-195U-IDU	18	NK3/4-7/16	152	NT05-032	210	PMK4-1	96	S7506-0250-6.00	172
NCAT50-SK6C-105U-IDU	18	NK3/4-8	152	NT05-032(S)	211	PMK4-1.2	96	S7506-0312-6.00	172
NCAT50-SK6C-165U-IDU	18	NK3/4-9/16	152	NT05-036	210	PMK4-1.4	96	S8-32X1/4	173
NCAT50-VC13-105U-IDU	84	NK32-1	152	NT05-036(S)	211	PMK4-1.6	96	S9/16-18X1/2	173
NCAT50-VC13-135U-IDU	84	NK32-1/2	152	NT05-040	210	PMK4-1.8	96	SC1630C	282
NCAT50-VC13-165U-IDU	84	NK32-1/4	152	NT10-020	210	PMK4-2	96	SC1645C	282
NCAT50-VC6-135U-IDU	84	NK32-10	152	NT10-020(S)	211	PMK4-2.2	96	SC1660D	282
NCAT50-VC6-165U-IDU	84	NK32-11	152	NT10-024	210	PMK4-2.4	96	SCM1045C	284
NCL-BT30	274	NK32-11/16	152	NT10-024(S)	211	PMK4-2.6	96	SCM1045CL	284
NCL-BT40	274	NK32-12	152	NT10-028	210	PMK4-2.8	96	SE1-10.0X8.0	213, 214
NCL-BT50	274	NK32-13	152	NT10-028(S)	211	PMK4-3	96	SE1-10.5X8.0	215
NCL-ICAT40	274	NK32-13/16	152	NT10-032	210	PMK4-3.2	96	SE1-11.0X9.0	214
NCL-ICAT50	274	NK32-14	152	NT10-032(S)	211	PMK8-2.4	96	SE1-11.2X9.0	213
NK1.1/4-1/2	152	NK32-15	152	NT10-036	210	PMK8-2.6	96	SE1-2.24X1.8	213
NK1.1/4-1/4	152	NK32-15/16	152	NT10-036(S)	211	PMK8-3.175	96	SE1-2.50X2.0	213
NK1.1/4-10	152	NK32-16	152	NT10-040	210	PMK8-3.2	96	SE1-2.5X2.1	214
NK1.1/4-12	152	NK32-17	152	NT10-040(S)	211	PMK8-3.6	96	SE1-2.80X2.24	213
NK1.1/4-14	152	NK32-18	152	NT10-044	210	PMK8-4	96	SE1-2.8X2.1	214
NK1.1/4-15/16	152	NK32-19	152	NT10-044(S)	211	PMK8-4.6	96	SE1-3.0X2.5	215
NK1.1/4-16	152	NK32-20	152	NT10-048	210	PMK8-5	96	SE1-3.15X2.50	213
NK1.1/4-20	152	NK32-21	152	NT10-048(S)	211	PMK8-5.6	96	SE1-3.55X2.80	213
NK1.1/4-25	152	NK32-22	152	NT10-052	210	PMK8-6	96	SE1-3.5X2.7	214
NK1.1/4-3/16	152	NK32-23	152	NT10-052(S)	211	PMK8-6.4	96	SE1-4.0X3.0	214
NK1.1/4-3/4	152	NK32-24	152	NT10-056	210	PMK8-6.6	96	SE1-4.0X3.15	213
NK1.1/4-3/8	152	NK32-25	152	NT10-056(S)	211	PMK8-7	96	SE1-4.0X3.2	215
NK1.1/4-5/16	152	NK32-26	152	NT10-SET-10	210	PMK8-7.6	96	SE1-4.5X3.4	214
NK1.1/4-5/8	152	NK32-3	152	NT15-052	210	PMK8-7.8	96	SE1-4.5X3.55	213
NK1.1/4-6	152	NK32-3/16	152	NT15-052(S)	211	PMK8-8	96	SE1-5.0X4.0	213, 215
NK1.1/4-7/16	152	NK32-3/4	152	NT15-056	210	PS-130E	270	SE1-5.5X4.5	215
NK1.1/4-7/8	152	NK32-3/8	152	NT15-056(S)	211	PS-132	270	SE1-5.6X4.5	213
NK1.1/4-8	152	NK32-4	152	NT15-060	210	PS-16	270	SE1-6.0X4.5	215
NK1.1/4-9	152	NK32-5	152	NT15-060(S)	211	PS-17	270	SE1-6.0X4.9	214
NK1.1/4-9/16	152	NK32-5/16	152	NT15-064	210	PS-805	270	SE1-6.2X5.0	215
NK1-1/2	152	NK32-5/8	152	NT15-064(S)	211	PS-874-EU	269	SE1-6.3X5.0	213
NK1-1/4	152	NK32-6	152	NT15-072	210	PS-B61-EU	269	SE1-7.0X5.5	214, 215
NK1-1/8	152	NK32-7	152	NT15-072(S)	211	PS-B64-1-EU	269	SE1-7.1X5.6	213
NK1-10	152	NK32-7/16	152	NT15-080	210	PS-037-16	269	SE1-8.0X6.0	215
NK1-12	152	NK32-7/8	152	NT15-080(S)	211	R8007-0016-1.00S	62	SE1-8.0X6.2	214
NK1-14	152	NK32-8	152	NT15-088	210	R8007-0020-2.00S	62	SE1-8.0X6.3	213
NK1-16	152	NK32-9	152	NT15-088(S)	211	R8007-0025-2.50S	62	SE1-8.5X6.5	215
NK1-18	152	NK32-9/16	152	NT15-SET-07	210	RACK-180DA/SK16/ER25	35, 74	SE1-9.0X7.0	214
NK1-20	152	NMTB40-C1.1/4-105	149	NTP05-SET-12	212	RACK-5C/100TG/SK25	37, 236, 261	SE1-9.0X7.1	213
NK1-3/16	152	NMTB40-C3/4-70	149	NTP10-SET-13	212	RACK-ER11/SK6	32, 74	SE1-9.5X7.0	215
NK1-3/4	152	NMTB40-NPU13-86	192	NTP15-SET-10	212	RACK-ER16/SK10	33, 74	SE2-10.0X8.0	213, 214
NK1-3/8	152	NMTB40-NPU8-76	192	NTPT05-008L	212	RACK-ER20/1TAP	74, 222	SE2-10.5X8.0	215
NK1-5/16	152	NMTB50-C1.1/4-90	149	NTPT05-008L(S)	212	RACK-ER32/2TAP	74, 222	SE2-11.0X9.0	214
NK1-5/8	152	NMTB50-C2-105	149	NTPT05-008S	212	RACK-R8/SK20	258	SE2-11.2X9.0	213

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
SE2-12.0X9.0	214	SES1-2.5X2.1	220	SES3-12.0X9.0	220	SK10-7AC	33	SK16-10A	35
SE2-12.5X10.0	213, 215	SES1-2.80X2.24	219	SES3-12.5X10.0	219, 221	SK10-8	33	SK16-10AC	35
SE2-13.0X10.0	215	SES1-2.8X2.1	220	SES3-13.0X10.0	221	SK10-8.5	33	SK16-11	35
SE2-14.0X11.0	214, 215	SES1-3.0X2.5	221	SES3-14.0X11.0	220, 221	SK10-8A	33	SK16-11.5	35
SE2-14.0X11.2	213	SES1-3.15X2.50	219	SES3-14.0X11.2	219	SK10-8AC	33	SK16-11AC	35
SE2-15.0X12.0	215	SES1-3.55X2.80	219	SES3-15.0X12.0	221	SK10-9	33	SK16-12	35
SE2-16.0X12.0	214	SES1-3.5X2.7	220	SES3-16.0X12.0	220	SK10-9.5	33	SK16-12.5	35
SE2-16.0X12.5	213	SES1-4.0X3.0	220	SES3-17.0X13.0	221	SK10-9AC	33	SK16-12A	35
SE2-17.0X13.0	215	SES1-4.0X3.15	219	SES3-18.0X14.0	219	SK10-SET-05-A	33	SK16-12AC	35
SE2-18.0X14.0	213	SES1-4.0X3.2	221	SES3-18.0X14.5	220	SK10-SET-05-AC	33	SK16-13	35
SE2-18.0X14.5	214	SES1-4.5X3.4	220	SES3-19.0X15.0	221	SK10-SET-08-AC-MM	33	SK16-13.5	35
SE2-2.8X2.1	214	SES1-4.5X3.55	219	SES3-20.0X15.0	221	SK10-SET-19-MM	33	SK16-13AC	35
SE2-3.5X2.7	214	SES1-5.0X4.0	219, 221	SES3-20.0X16.0	219, 220	SK13-1/2A	34	SK16-14	35
SE2-4.0X3.0	214	SES1-5.5X4.5	221	SES3-21.0X17.0	221	SK13-1/4A	34	SK16-14.5	35
SE2-4.0X3.15	213	SES1-5.6X4.5	219	SES3-22.0X18.0	220	SK13-1/4AC	34	SK16-14A	35
SE2-4.5X3.55	213	SES1-6.0X4.5	221	SES3-22.4X18.0	219	SK13-1/8A	34	SK16-14AC	35
SE2-5.0X4.0	213	SES1-6.0X4.9	220	SES3-23.0X17.0	221	SK13-10	34	SK16-15	35
SE2-5.6X4.5	213	SES1-6.2X5.0	221	SES3-24.0X19.0	221	SK13-10.5	34	SK16-15.5	35
SE2-6.0X4.5	215	SES1-6.3X5.0	219	SES3-25.0X19.0	221	SK13-10A	34	SK16-15AC	35
SE2-6.0X4.9	214	SES1-7.0X5.5	220, 221	SES3-25.0X20.0	219, 220	SK13-10AC	34	SK16-16	35
SE2-6.2X5.0	215	SES1-7.1X5.6	219	SES3-26.0X21.0	221	SK13-11	34	SK16-16A	35
SE2-6.3X5.0	213	SES1-8.0X6.0	221	SES3-28.0X21.0	221	SK13-11.5	34	SK16-16AC	35
SE2-7.0X5.5	214, 215	SES1-8.0X6.2	220	SES3-28.0X22.0	220	SK13-11AC	34	SK16-3	35
SE2-7.1X5.6	213	SES1-8.0X6.3	219	SES3-28.0X22.4	219	SK13-12	34	SK16-3.5	35
SE2-8.0X6.0	215	SES1-8.5X6.5	221	SES3-8.0X6.2	220	SK13-12.5	34	SK16-3/16A	35
SE2-8.0X6.2	214	SES1-9.0X7.0	220	SES3-9.0X7.0	220	SK13-12A	34	SK16-3/8A	35
SE2-8.0X6.3	213	SES1-9.0X7.1	219	SES3-9.0X7.1	219	SK13-12AC	34	SK16-3/8AC	35
SE2-8.5X6.5	215	SES2-10.0X8.0	219, 220	SK10-1	33	SK13-13	34	SK16-3A	35
SE2-9.0X7.0	214	SES2-10.5X8.0	221	SK10-1.25	33	SK13-13AC	34	SK16-4	35
SE2-9.0X7.1	213	SES2-11.0X9.0	220	SK10-1.5	33	SK13-3	34	SK16-4.5	35
SE2-9.5X7.0	215	SES2-11.2X9.0	219	SK10-1.75	33	SK13-3.5	34	SK16-4A	35
SE3-10.0X8.0	213, 214	SES2-12.0X9.0	220	SK10-1/4A	33	SK13-3/16A	34	SK16-5	35
SE3-10.5X8.0	215	SES2-12.5X10.0	219, 221	SK10-1/4AC	33	SK13-3/8A	34	SK16-5.5	35
SE3-11.0X9.0	214	SES2-13.0X10.0	219	SK10-1/8A	33	SK13-3/8AC	34	SK16-5/16A	35
SE3-11.2X9.0	213	SES2-14.0X11.0	220, 221	SK10-1/8AC	33	SK13-4	34	SK16-5/16AC	35
SE3-12.0X9.0	214	SES2-14.0X11.2	219	SK10-10	33	SK13-4.5	34	SK16-5/8A	35
SE3-12.5X10.0	213, 215	SES2-15.0X12.0	221	SK10-10A	33	SK13-4AC	34	SK16-5/8AC	35
SE3-13.0X10.0	215	SES2-16.0X12.0	220	SK10-10AC	33	SK13-5	34	SK16-5A	35
SE3-14.0X11.0	214, 215	SES2-16.0X12.5	219	SK10-2	33	SK13-5.5	34	SK16-6	35
SE3-14.0X11.2	213	SES2-17.0X13.0	221	SK10-2.25	33	SK13-5/16A	34	SK16-6.5	35
SE3-15.0X12.0	215	SES2-18.0X14.0	219	SK10-2.5	33	SK13-5/16AC	34	SK16-6A	35
SE3-16.0X12.0	214	SES2-18.0X14.5	220	SK10-2.75	33	SK13-5AC	34	SK16-6AC	35
SE3-16.0X12.5	213	SES2-19.0X15.0	219	SK10-3	33	SK13-6	34	SK16-7	35
SE3-17.0X13.0	215	SES2-3.5X2.7	220	SK10-3.5	33	SK13-6.5	34	SK16-7.5	35
SE3-18.0X14.0	213	SES2-4.0X3.0	220	SK10-3/16A	33	SK13-6AC	34	SK16-7/16A	35
SE3-18.0X14.5	214	SES2-4.0X3.15	219	SK10-3/16AC	33	SK13-7	34	SK16-7/16AC	35
SE3-19.0X15.0	215	SES2-4.5X3.4	220	SK10-3/8A	33	SK13-7.5	34	SK16-7AC	35
SE3-20.0X15.0	215	SES2-4.5X3.55	219	SK10-3/8AC	33	SK13-7/16A	34	SK16-8	35
SE3-20.0X16.0	213, 214	SES2-5.0X4.0	219	SK10-3A	33	SK13-7/16AC	34	SK16-8.5	35
SE3-21.0X17.0	215	SES2-5.6X4.5	219	SK10-3AC	33	SK13-7AC	34	SK16-8A	35
SE3-22.0X18.0	214	SES2-6.0X4.5	221	SK10-4	33	SK13-8	34	SK16-8AC	35
SE3-22.4X18.0	213	SES2-6.0X4.9	220	SK10-4.5	33	SK13-8.5	34	SK16-9	35
SE3-23.0X17.0	215	SES2-6.2X5.0	221	SK10-4A	33	SK13-8A	34	SK16-9.5	35
SE3-24.0X19.0	215	SES2-6.3X5.0	219	SK10-4AC	33	SK13-8AC	34	SK16-9/16A	35
SE3-25.0X19.0	215	SES2-7.0X5.5	220, 221	SK10-5	33	SK13-9	34	SK16-9/16AC	35
SE3-25.0X20.0	213, 214	SES2-7.1X5.6	219	SK10-5.5	33	SK13-9.5	34	SK16-9AC	35
SE3-26.0X21.0	215	SES2-8.0X6.0	221	SK10-5/16A	33	SK13-9AC	34	SK16-SET-09-A	35
SE3-28.0X21.0	215	SES2-8.0X6.2	220	SK10-5/16AC	33	SK13-SET-07-A	34	SK16-SET-11-AC-MM	35
SE3-28.0X22.0	214	SES2-8.0X6.3	219	SK10-5A	33	SK13-SET-09-AC-MM	34	SK16-SET-27-MM	35
SE3-28.0X22.4	213	SES2-8.5X6.5	221	SK10-5AC	33	SK13-SET-21-MM	34	SK20-1/2A	36
SE3-9.0X7.0	214	SES2-9.0X7.0	220	SK10-6	33	SK16-1/2A	35	SK20-1/2AC	36
SE3-9.0X7.1	213	SES2-9.0X7.1	219	SK10-6.2	33	SK16-1/2AC	35	SK20-1/4A	36
SES1-10.0X8.0	219, 220	SES2-9.5X7.0	221	SK10-6.5	33	SK16-1/4A	35	SK20-1/4A	36
SES1-10.5X8.0	221	SES3-10.0X8.0	219, 220	SK10-6A	33	SK16-1/4AC	35	SK20-1/8A	36
SES1-11.0X9.0	220	SES3-10.5X8.0	221	SK10-6AC	33	SK16-1/8A	35	SK20-10	36
SES1-11.2X9.0	219	SES3-11.0X9.0	220	SK10-7	33	SK16-10	35	SK20-10.5	36
SES1-2.50X2.0	219	SES3-11.2X9.0	219	SK10-7.5	33	SK16-10.5	35	SK20-10A	36
								SK20-11	36

INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
SK20-11.5	36	SK25-18.5	37	SKG10-10HGA	43	SKJ10-6.2	38	SKJ16-5/16C	87
SK20-12	36	SK25-19	37	SKG-12	42	SKJ10-6.5	38	SKJ16-5/8	39
SK20-12.5	36	SK25-19.5	37	SKG-12H	42	SKJ10-6C	87	SKJ16-5/8C	39
SK20-12A	36	SK25-20	37	SKG-12HA	42	SKJ10-7	38	SKJ16-5C	39, 87
SK20-12AC	36	SK25-20.5	37	SKG-12L	42	SKJ10-7.5	38	SKJ16-6	39
SK20-13	36	SK25-20A	37	SKG-12MF	42	SKJ10-8	38	SKJ16-6	87
SK20-13.5	36	SK25-20AC	37	SKG-12S	42	SKJ10-8.5	38	SKJ16-6.5	39
SK20-14	36	SK25-21	37	SKG13-10HG	43	SKJ10-9	38	SKJ16-6C	39
SK20-14.5	36	SK25-21.5	37	SKG13-10HGA	43	SKJ10-9.5	38	SKJ16-6C	87
SK20-15	36	SK25-22	37	SKG-15	42	SKJ10-BLANK	39, 87	SKJ16-7	39, 87
SK20-15.5	36	SK25-22.5	37	SKG-15H	42	SKJ16-1/2	39	SKJ16-7/16	39
SK20-16	36	SK25-23	37	SKG-15HA	42	SKJ16-1/2	87	SKJ16-7/16	87
SK20-16.5	36	SK25-23.5	37	SKG16-10HG	43	SKJ16-1/2C	39	SKJ16-7/16C	39
SK20-16A	36	SK25-24	37	SKG16-10HGA	43	SKJ16-1/2C	87	SKJ16-7/16C	87
SK20-16AC	36	SK25-24.5	37	SKG16-12HG	43	SKJ16-1/4	39	SKJ16-7C	39, 87
SK20-17	36	SK25-25	37	SKG16-12HGA	43	SKJ16-1/4	87	SKJ16-8	39
SK20-17.5	36	SK25-25.4	37	SKG16-12HGB	43	SKJ16-1/4C	39	SKJ16-8	87
SK20-18	36	SK25-25.4AC	37	SKG16-12HGBA	43	SKJ16-1/4C	87	SKJ16-8.5	39
SK20-18.5	36	SK25-25A	37	SKG16-12HGE	43	SKJ16-1/8	39, 87	SKJ16-8.5C	39
SK20-18AC	36	SK25-25AC	37	SKG-18H	42	SKJ16-1/8C	39, 87	SKJ16-8C	39
SK20-19	36	SK25-3/16A	37	SKG-18HA	42	SKJ16-10	39	SKJ16-8C	87
SK20-19.5	36	SK25-3/4A	37	SKG-18L	42	SKJ16-10	87	SKJ16-9	39
SK20-20	36	SK25-3/4AC	37	SKG-18S	42	SKJ16-10.3	39	SKJ16-9.5	39
SK20-20A	36	SK25-3/8A	37	SKG20-12HG	43	SKJ16-10.5	39	SKJ16-9.5C	39
SK20-20AC	36	SK25-5/16A	37	SKG20-12HGE	43	SKJ16-10.5C	39	SKJ16-9/16	39
SK20-3/16A	36	SK25-5/8A	37	SKG20-12MFHG	43	SKJ16-10C	39	SKJ16-9/16C	39
SK20-3/4A	36	SK25-7/16A	37	SKG20-16HG	43	SKJ16-10C	87	SKJ16-9C	39
SK20-3/4AC	36	SK25-7/8A	37	SKG20-18HG	43	SKJ16-11	39	SKJ16-BLANK	39, 87
SK20-3/8A	36	SK25-7/8AC	37	SKG20-18HGB	43	SKJ16-11.5	39	SKJ25-1	40
SK20-4	36	SK25-8	37	SKG-22	42	SKJ16-11.5C	39	SKJ25-1/2	40
SK20-4.5	36	SK25-8A	37	SKG-22H	42	SKJ16-11C	39	SKJ25-1/2C	40
SK20-4A	36	SK25-9/16A	37	SKG25-18HGC	43	SKJ16-12	39	SKJ25-1/4	40
SK20-5	36	SK25-SET-08-A	37	SKG25-18HGD	43	SKJ16-12	87	SKJ25-1/4C	40
SK20-5.5	36	SK25-SET-19-MM	37	SKG25-18HGE	43	SKJ16-12.5	39	SKJ25-10	40
SK20-5/16A	36	SK6-0.8	32	SKG25-24HG	43	SKJ16-12.5C	39	SKJ25-10C	40
SK20-5/8A	36	SK6-1	32	SKG25-24HGA	43	SKJ16-12C	39	SKJ25-11/16	40
SK20-5/8AC	36	SK6-1.25	32	SKG-28	42	SKJ16-12C	87	SKJ25-11/16C	40
SK20-6	36	SK6-1.5	32	SKG-28H	42	SKJ16-13	39	SKJ25-11C	40
SK20-6.5	36	SK6-1.75	32	SKG6-6HG	43	SKJ16-13.5C	39	SKJ25-12	40
SK20-6A	36	SK6-1/4A	32	SKJ10-1/4	38	SKJ16-13C	39	SKJ25-12.5	40
SK20-7	36	SK6-1/8A	32	SKJ10-1/4	87	SKJ16-14	39	SKJ25-12C	40
SK20-7.5	36	SK6-1/8AC	32	SKJ10-1/4C	87	SKJ16-14.5	39	SKJ25-13/16	40
SK20-7/16A	36	SK6-2	32	SKJ10-1/8	38	SKJ16-14.5C	39	SKJ25-13/16C	40
SK20-7/16AC	36	SK6-2.25	32	SKJ10-1/8	87	SKJ16-14C	39	SKJ25-14	40
SK20-8	36	SK6-2.5	32	SKJ10-1/8C	87	SKJ16-15	39	SKJ25-14C	40
SK20-8.5	36	SK6-2.75	32	SKJ10-10	38	SKJ16-15.5	39	SKJ25-15/16	40
SK20-8A	36	SK6-2A	32	SKJ10-2	87	SKJ16-15C	39	SKJ25-15/16C	40
SK20-9	36	SK6-3	32	SKJ10-2C	87	SKJ16-16	39	SKJ25-16	40
SK20-9.5	36	SK6-3.5	32	SKJ10-3	38	SKJ16-16C	39	SKJ25-16.5	40
SK20-9/16A	36	SK6-3/16A	32	SKJ10-3	87	SKJ16-3	39, 87	SKJ25-16C	40
SK20-9/16AC	36	SK6-3/16AC	32	SKJ10-3.5	38	SKJ16-3.5	39	SKJ25-17	40
SK20-SET-10-A	36	SK6-3A	32	SKJ10-3/16	38	SKJ16-3.5C	39	SKJ25-17.5	40
SK20-SET-21-MM	36	SK6-3AC	32	SKJ10-3/16	87	SKJ16-3/16	39, 87	SKJ25-17.5C	40
SK20-SET-33-MM	36	SK6-4	32	SKJ10-3/16C	87	SKJ16-3/16C	39, 87	SKJ25-17C	40
SK25-1/2A	37	SK6-4.5	32	SKJ10-3/8	38	SKJ16-3/8	39	SKJ25-18	40
SK25-1/4A	37	SK6-4A	32	SKJ10-3C	87	SKJ16-3/8	87	SKJ25-18C	40
SK25-10	37	SK6-4AC	32	SKJ10-4	38	SKJ16-3/8C	39	SKJ25-1C	40
SK25-10A	37	SK6-5	32	SKJ10-4	87	SKJ16-3/8C	87	SKJ25-20	40
SK25-12	37	SK6-5.5	32	SKJ10-4.5	38	SKJ16-3C	39, 87	SKJ25-20C	40
SK25-12A	37	SK6-5A	32	SKJ10-4C	87	SKJ16-4	39, 87	SKJ25-22	40
SK25-16	37	SK6-5AC	32	SKJ10-5	38	SKJ16-4.5	39	SKJ25-23	40
SK25-16.5	37	SK6-6	32	SKJ10-5	87	SKJ16-4C	39, 87	SKJ25-24	40
SK25-16A	37	SK6-6A	32	SKJ10-5.5	38	SKJ16-5	39, 87	SKJ25-25	40
SK25-16AC	37	SK6-6AC	32	SKJ10-5/16	38	SKJ16-5.5	39	SKJ25-25C	40
SK25-17	37	SK6-SET-16-MM	32	SKJ10-5C	87	SKJ16-5/16	39	SKJ25-3/16	40
SK25-17.5	37	SKG-8	42	SKJ10-6	38	SKJ16-5/16C	87	SKJ25-3/16C	40
SK25-18	37	SKG10-10HG	43	SKJ10-6	87	SKJ16-5/16C	39	SKJ25-3/4	40

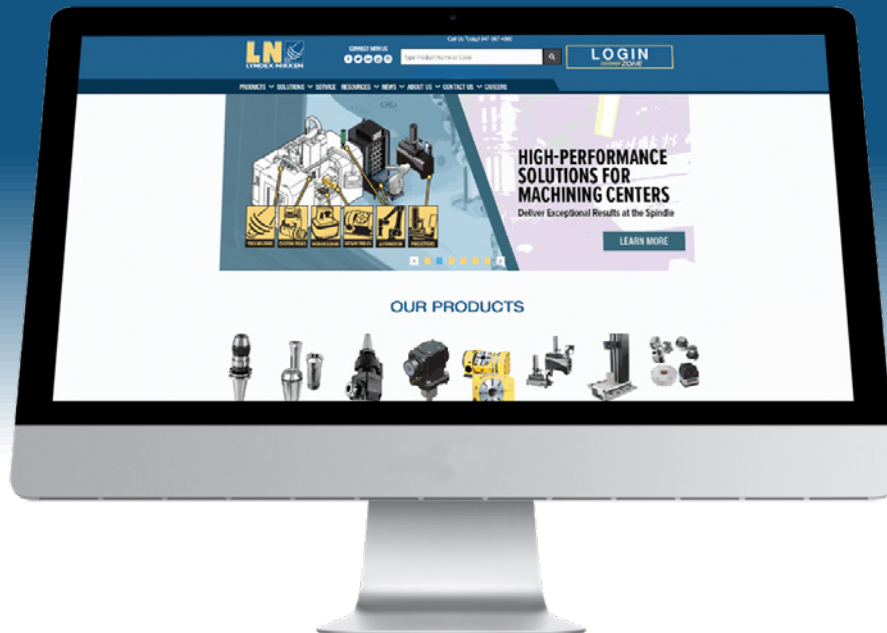
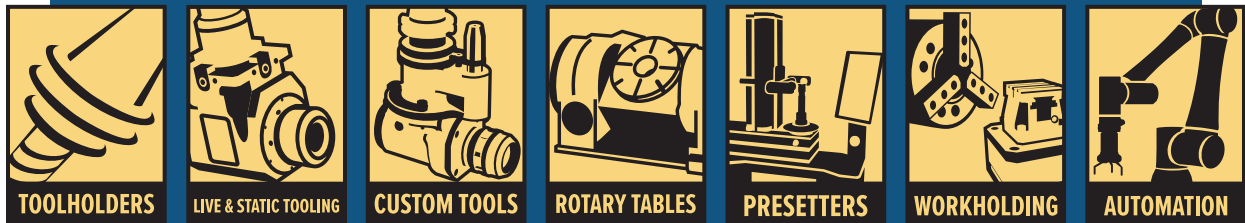
INDEX

Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page	Part Number	Page
SKJ25-3/4C	40	SP1-1/2-1/4	254	T10-020(S)	217	TOW-E25-G	75	VMK12-3/8J	97
SKJ25-3/8	40	SP1-1/2-1/8	254	T10-024	216	TOW-E32-G	75	VMK12-4	97
SKJ25-3/8C	40	SP1-1/2-3/8	254	T10-024(S)	217	TOW-E40-G	75	VMK12-4J	97
SKJ25-4C	40	SP1-1/4	254	T10-028	216	TOW-ER11HEX	75	VMK12-5	97
SKJ25-5/16	40	SP1-1/4-1/2	254	T10-028(S)	217	TOW-ER16/SK13(30)	41, 75	VMK12-5/16	97
SKJ25-5/16C	40	SP1-1/4-1/4	254	T10-032	216	TOW-ER16HEX	75	VMK12-5/16J	97
SKJ25-5/8	40	SP1-1/4-1/8	254	T10-032(S)	217	TOW-ER20/T650(35)	75	VMK12-5J	97
SKJ25-5/8C	40	SP1-1/4-3/8	254	T10-036	216	TOW-ER25(40)	75	VMK12-6	97
SKJ25-6	40	SP1-1/8	254	T10-036(S)	217	TOW-ER32/SK20/T675(50)	41, 75, 236	VMK12-6J	97
SKJ25-6C	40	SP1-3/8	254	T10-040	216	TOW-ER40/C1(60)	75	VMK12-7/16	97
SKJ25-7	40	SP3/4-1/2	254	T10-040(S)	217	TOW-ER8NA	75	VMK12-7/16J	97
SKJ25-7/16	40	SP3/4-1/4	254	T10-044	216	TOW-ER8NA	75	VMK12-8	97
SKJ25-7/16C	40	SP3/4-1/8	254	T10-044(S)	217	TOW-GH10(14X18)	88	VMK12-8J	97
SKJ25-7/8	40	SP3/4-3/8	254	T10-048	216	TOW-GH16	88	VMK8-1/4	97
SKJ25-7/8C	40	SPINDLE-WIPE-#30	279	T10-048(S)	217	TOWS-E08M	75	VMK8-1/4J	97
SKJ25-8	40	SPINDLE-WIPE-#40	279	T10-052	216	TOWS-E11M	75	VMK8-1/8	97
SKJ25-8.5C	40	SPINDLE-WIPE-#50	279	T10-052(S)	217	TOWS-E16M	75	VMK8-1/8JB	97
SKJ25-8C	40	SPINDLE-WIPE-H100/125	279	T10-056	216	TOWS-E20M	75	VMK8-10	97
SKJ25-BLANK	40	SPINDLE-WIPE-H125/160	279	T10-056(S)	217	TOWS-E25M	75	VMK8-10J	97
SKJ6-1/4	38	SPINDLE-WIPE-H25/32	279	T10-064	216	TOW-SK06	41	VMK8-2	97
SKJ6-1/8	38	SPINDLE-WIPE-H32/40	279	T10-064(S)	217	TOW-SK10	41	VMK8-2J	97
SKJ6-2	38	SPINDLE-WIPE-H40/50	279	T10-SET-10	216	TOW-SK16(45)	41	VMK8-2JB	97
SKJ6-2.25	38	SPINDLE-WIPE-H50/63	279	T10-SPAN	222	TOW-SK25(55)	41	VMK8-3	97
SKJ6-2.5	38	SPINDLE-WIPE-H63/80	279	T15-052	216	TOW-TG100(65)	236	VMK8-3/16	97
SKJ6-2C	38	SPINDLE-WIPE-H80/100	279	T15-052(S)	217	UDS-1	278	VMK8-3/16J	97
SKJ6-3	38	ST16M-SF3-160	131	T15-056	216	VCG13-15A	88	VMK8-3/8	97
SKJ6-3.5	38	ST16M-SF4-160	131	T15-056(S)	217	VCG6-8A	88	VMK8-3/8J	97
SKJ6-3.5C	38	ST16M-SF5-160	131	T15-060	216	VCK13-1/2	86	VMK8-3JB	97
SKJ6-3/16	38	ST16M-SF6-160	131	T15-060(S)	217	VCK13-1/4	86	VMK8-4	97
SKJ6-3C	38	ST16M-SF8-160	131	T15-064	216	VCK13-1/8	86	VMK8-4J	97
SKJ6-4	38	ST20M-SF10-160	131	T15-064(S)	217	VCK13-10	86	VMK8-5	97
SKJ6-4.5	38	ST20M-SF6-160	131	T15-072	216	VCK13-11	86	VMK8-5/16	97
SKJ6-4.5C	38	ST20M-SF8-160	131	T15-072(S)	217	VCK13-12	86	VMK8-5/16J	97
SKJ6-4C	38	ST50-SF0125-6.30	131	T15-080	216	VCK13-3	86	VMK8-5J	97
SKJ6-5	38	ST50-SF0187-6.30	131	T15-080(S)	217	VCK13-3/16	86	VMK8-6	97
SKJ6-5.5	38	ST62-SF0125-6.30	131	T15-088	216	VCK13-3/8	86	VMK8-6J	97
SKJ6-5.5C	38	ST62-SF0187-6.30	131	T15-088(S)	217	VCK13-4	86	VMK8-7	97
SKJ6-5C	38	ST62-SF0250-6.30	131	T15-SET-07	216	VCK13-5	86	VMK8-8	97
SKJ6-6	38	ST75-SF0250-6.30	131	T15-SPAN	222	VCK13-5/16	86	VMK8-8J	97
SKJ6-6C	38	ST75-SF0312-6.30	131	TCLA-30/50A/C5	274	VCK13-6	86	W1000-TC1-2.60(C)	207
SKJ6-BLANK	38	ST75-SF0375-6.30	131	TCLA-40/63A/C6	274	VCK13-7	86	W1000-TC2-4.02(C)	207
SKJL-10	38, 87	ST75-SF0500-6.30	131	TCLA-50/100A/C10	274	VCK13-7/16	86	W1005-0562-1.53	207
SKJL-16	39, 87	ST75-SF6-6.30	131	TP05-SET-12	218	VCK13-8	86	W1005-0875-2.48	207
SKJL-25	40	ST75-SF8-6.30	131	TP10-SET-13	218	VCK13-9	86	W10R5-0562-1.46	208
SKJL-6	38	T05-006	216	TP15-SET-10	218	VCK6-1/4	86	W10R5-0875-2.12	208
SKL-10	41	T05-006(S)	217	TP105-008L	218	VCK6-1/8	86	W1205-0562-1.61	207
SKL-6W	41	T05-008	216	TP105-008L(S)	218	VCK6-2	86	W1205-0562-2.60(C)	207
SKN-10BJ	38	T05-008(S)	217	TP105-008S	218	VCK6-3	86	W1205-0875-2.48	207
SKN-10BJ (GH)	38	T05-010	216	TP105-008S(S)	218	VCK6-3/16	86	W1205-0875-4.02(C)	207
SKN-10K	41	T05-010(S)	217	TPT10-016	218	VCK6-4	86	W1205-1375-5.00	207
SKN-13B	41	T05-012	216	TPT10-016(S)	218	VCK6-5	86	W1205-1375-6.57(C)	207
SKN-16B	41	T05-012(S)	217	TPT10-024	218	VCK6-6	86	W1250-RT3-3.27(C)	208
SKN-16BJ	39	T05-016	216	TP110-024(S)	218	VCN-13B	88	W12R5-0562-1.65(C)	208
SKN-16BJ (GH)	39	T05-016(S)	217	TP110-032	218	VCN-13BJ	87, 88	W12R5-0875-2.12(C)	208
SKN-20B	41	T05-020	216	TP110-032(S)	218	VCN-6B	88	W12R5-1375-3.27	208
SKN-25B	41	T05-020(S)	217	TP115-032	218	VCN-6BJ	87, 88	W1500-TC3-6.57(C)	207
SKN-25BJ	40	T05-024	216	TP115-032(S)	218	VMK12-1/2	97	W1505-1375-4.65	207
SKN-25BJ (GH)	40	T05-024(S)	217	TP115-048	218	VMK12-1/2J	97	W15R5-1375-5.96	208
SKN-6WK	41	T05-028	216	TP115-048(S)	218	VMK12-1/4	97	W25MR5-0562-37	208
SKN-6WKJ	38	T05-028(S)	217	TP115-064	218	VMK12-1/4J	97	W25MR5-0562-38(C)	207, 208
SKN-6WKJ (GH)	38	T05-032	216	TP115-064(S)	218	VMK12-10	97	W25MR5-0875-54(C)	207, 208
SKR-10	41	T05-032(S)	217	TQW-025	41, 75, 88	VMK12-10J	97	W25MR5-0875-56	208
SKR-16	41	T05-036	216	TQW-200	41, 75, 88, 236	VMK12-12	97	W7505-0562-1.53	207
SKR-25	41	T05-036(S)	217	TQW-E16-G	75	VMK12-12J	97	W75R5-0562-1.46(C)	208
SKR-6	41	T05-SET-10	216	TQW-E20-G	75	VMK12-3/16	97	ZERO-SET2/50	277
SP1-1/2	254	T05-SPAN	222			VMK12-3/16J	97		
SP1-1/2-1/2	254	T10-020	216			VMK12-3/8	97		

LYNDEX-NIKKEN PRODUCT LINE

Lyndex-Nikken's complete line of quality toolholders, rotary tables, presetters, machine tool accessories, and automation solutions help manufacturers improve their accuracy, efficiency, and productivity. Backed by over a half century of experience, Lyndex-Nikken sets the standard for high quality and innovative tooling and automation technology. Featuring advanced designs and rigid components, our machine tool accessories and automation solutions are built from the ground up for long-lasting precision, reliability, and productivity.

Manufacturers choose Lyndex-Nikken quality products for the machining results they get – and that gives them a competitive edge.

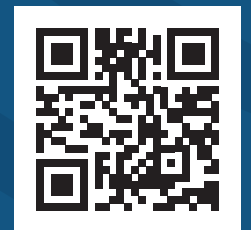


lyndexnikken.com

CNC TOOLING SYSTEM CATALOG



1468 Armour Boulevard | Mundelein, IL 60060
Phone: 847.367.4800 | Fax: 847.367.4815 | sales@lyndexnikken.com
lyndexnikken.com



SCAN TO CHECK OUT
OUR PRODUCTS ONLINE