



MASTER TOOLHOLDING CATALOG

Toolholding, Tapping, and Boring solutions



Toolholding



Tapping



Boring



HISTORY

- 1948 Parlec is established in Rochester N.Y., as a job shop specializing in the manufacturing of Sulky Hubs.
- 1973 Parlec begins producing and distributing the Numertap and Autofacer product lines.
- 1977 Parlec expands its product line with the introduction of Toolholders, which are sold as Numertap and Autofacer accessories.
- 1980 The first Parsetter TMM® is produced.
- 1985 Parlec builds a new 42,000 square-foot, state-of-the-art manufacturing facility just outside of Rochester in Fairport, N.Y.
- 1992 Parlec begins to manufacture and distribute its own line of Boring Tools.
- 1997 Parlec becomes ISO 9001 certified. Parlec's sales triple from 1992-1997.
- 1998 Parlec further enhances its product line to include Workholding. Construction of a 58,000 square-foot plant addition begins.
- 2003 Parlec enters the Asian market with the opening of a sales and service office in Nanjing China.
- 2004 Parlec acquires Bristol Tool. Driven and static tools are added to Parlec's extensive product line. A new sales, engineering and distribution facility opens in Bristol, England.
- 2006 Parlec continues to expand its world wide footprint by opening a Wholly Owned Foreign Enterprise in Nanjing. This gives the company full sales, engineering, customer support and distribution capabilities on 3 continents.
- 2009 Sales offices are opened in Tianjin, Xian, Wuxi, and Chengdu to expand the China presence.
- 2010 Parlec partners with Gerardi for distribution of Driven & Static Tooling in Europe. Parlec begins distribution of Right angle heads in China.
- 2012 Parlec successfully completes a \$5 million dollar capital investment campaign to automate and expand its manufacturing capabilities in the United States.
- 2014 Parlec partners with TDM Systems.

Tool Machining Solutions



Tool Presetting, Measuring
and Inspection Systems



Widest Range of Rigid, Tension
and Compression Tapping



Precision Modular
Boring Systems



Toolholding Production and
High Performance Solutions



PARLEC

TOOLHOLDING

TECHNICAL OVERVIEW	12
CAT V Flange and BT Taper Specifications.....	12
SimulFit®	13
Coolant Supply Options.....	14
HSK Taper Specifications	15
SELECTION GUIDE.....	16
Concentricity, Rotational Speed & Balance	16
Performance Systems.....	20
Production Systems.....	21
Specialty Toolholders.....	22

HIGH PRECISION TOOLHOLDING SOLUTIONS

ERos® Toolholders.....	25
ERos® System Features.....	26
ERos® Collet Chucks.....	29
ERos® System Accessories.....	33
ERos® Extreme Performance 2 Micron Collets.....	34
SimulFit® Toolholders	38
SimulFit® Shell Mill Holders.....	39
SimulFit® End Mill Holders	40
SimulFit® ER Collet Chucks	42
SimulFit® Milling Chucks.....	45
Shrink Fit Holders.....	46
Stop Screw.....	51
Power Milling Chucks	52
Coolant Back-Up Screws.....	52
Bushings and Back-Up Screws.....	54
ER Toolholders.....	55
ER Toolholder Performance Choices	55
ER System Features	56
High Performance ER Collet System w/ Power Nut	59
Performance ER Collet System w/ Coolant Nut	64
Production ER Collet System w/ DIN Flush Nut.....	69
Collet Performance Choices.....	74
ER Standard Collets	75
ER Tap Collets	78
AA Grade 5 Micron Collets	79

TABLE OF CONTENTS

ERS Steel Sealed Collets.....	82
Straight Shank Collet Chucks	83
ER Coolant Nut Seals	84
Straight Shank Collet Chucks	85
Back-Up Screws, Nuts and Wrenches.....	86

PRODUCTION TOOLHOLDING SYSTEMS

Single-Angle Collet Chuck Holders.....	88
Single-Angle Collet Chucks.....	88
Single-Angle Standard Collets.....	90
Single-Angle Sealed Collets.....	92
Single-Angle Coolant Seals.....	94
Back-Up Screws, Nuts and Wrenches.....	95
Double-Angle Collet Chuck Holders	96
Double-Angle Collet Chucks	96
Double-Angle Standard Collets	98
Double-Angle Sealed Collets	100
Double-Angle Coolant Seals	102
Back-Up Screws and Nuts	103
Double-Angle Extensions	104
Numerfloat Floating Reamer Holders	105
End Mill Holders	106
Shell Mill Holders.....	115
Screws and Drive Keys.....	120
Stub Arbor Tapers	121
Spacers and Nuts	123
Morse Taper Holders	124
Jacobs Taper Holders.....	125
Boring Head Holders	126
Blank Bars.....	128
Tightening Fixtures.....	129
Retention Knobs	130
ANSI/ISO and DIN	131
MAS BT	132
Quotation Request Sheet.....	133

EVOLUTION ANGLE HEADS

TECHNICAL OVERVIEW	136
Interchangeable Drive Tapers	138

Cost Savings.....	139
ATC/MTC Evolution Line	140
Automatic Tool Change (ATC) Series Evolution Line	142
ATC Series Evolution Line.....	142
ATC Internal Coolant and Output Options	143
Automatic Tool Change (ATC) Series Evolution Line	142
ATC Slim Series.....	144
ATC Milling Series	148
ATC High Torque Milling Series.....	158
FR90-16.....	167
Manual Tool Change (MTC) Series Evolution Line	172
MTC Series Evolution Line.....	172
MTC Internal Coolant and Output Options	163
MTC Milling Series	174
MTC High Torque Milling Series	175
ATC and MTC Accessories.....	179
Collets, Nuts and Wrenches.....	180
Collet Performance Selection Guide.....	181
Anti-Rotation	182
Stop-Block	182
Stop-Block Mounting Example	184
Angle Head Mounting Example	185
MTC Accessories	186
MTC Angle Head Mounting Example	187
Quotation Request Sheet.....	188

TAPPING

SELECTION GUIDE.....	191
Tapping Solutions.....	182
Numertap® 700 and 770 Systems	194
Quotation Request Sheet.....	195
Numertap® Size Chart.....	196
Numertap® 80.....	198
Torque-Controlled Tapping.....	195
Tap Adapters.....	199
Numertap® 700	200
Torque-Controlled Tapping.....	200

TABLE OF CONTENTS

Tap Adapters.....	201
Numertap® 770.....	202
Tension & Compression Tapping Attachments	202
Tension Only & Synchronous (Rigid) Tapping Attachments.....	203
Tap Adapters.....	204
Tap Adapters-3" Extended	205
Tap Adapters-6" Extended	206
ER Collet Tap Adapters.....	207
ER Tapping Collets.....	208
Numertap® 6000.....	209
Synchronous or Tension & Compression Tapping Attachments	209
Tap Adapters.....	210
Numertap® 100	211
Synchronous or Tension & Compression Tapping Attachments...	211
Numertap® 200	212
Synchronous or Tension & Compression Tapping Attachments..	212
Numertap® 300	213
Synchronous or Tension & Compression Tapping Attachments..	213
Numertap® 100, 200 & 300 Tap Adapters	214
TECHNICAL INFORMATION.....	215
Trouble Shooting Guide	215
Torque Requirements & Speeds.....	216
Programming Information	217
Compression Stroke Adjustment.....	218
Tap Installation	220
BORING	
SELECTION GUIDE.....	223
New Boring Features and Benefits.....	224
Selection Guide.....	226
Quotation Request Sheet.....	227
Modular Shanks	230
BT Shanks	230
V Flange Shanks.....	231
HSK Shanks.....	232
NMTB Shanks, Straight Shanks, & Heavy Metal Ext.	233
Modular Components.....	234

Extensions & Reductions	234
Collet Chucks, End Mill & Shell Mill Holders	235
Modular Components	234
Extensions & Reductions	234
Collet Chucks, End Mill & Shell Mill Holders	235
Twin Bore Roughing System	236
Twin Bore Roughing .95" to 6.00" (25 mm to 152.4 mm)	236
Insert Holders	237
Components	238
Roughing Speeds, Feed Rates & Machining Allowance	239
Adjusting for Balanced Cutting	240
Adjusting for Stepped Cutting	241
Small Diameter Boring	242
Small Diameter Balanced Boring Tools	242
Balanced Modular Boring Bars	243
Bars & Bushings, .078" (2 mm to 11 mm)	244
Boring Tool Kit	245
Operating Instructions	246
Application Guide	247
Precision Finish Boring System	248
Series 3 Precision Inch Finish Heads	248
Series 3 Precision Inch Finish Heads, Insert Holders	249
Operating Instructions	250
Finish Boring Speeds	252
Finish Boring Feeds	253
Large Diameter Boring System	254
Large Diameter Tree	254
Extension Base Coupler	255
Extension Bases	256
Range Extension Slide and Riser	257
Rough Boring Holder Base	258
Finish Boring Unit	259
Insert Selection Guide	260
Inserts Information	260
Insert Carbide Grades	262
Inserts	264

TABLE OF CONTENTS

Diamond Inserts	264
Triangular Inserts.....	265
Trigon/Square Inserts	266
Precision Finish Boring Legacy System.....	267
Series 2 Replacement Insert Holder	267
Insert Holder Blanks Series 2, Finish Head Components	268
Large Diameter Legacy System	269
Extension Bases.....	269
Ring Holders and Boring Heads	270

QUALITY SPECIFICATIONS

Product Warranty	272
Safety Warnings.....	273
Manufacturing Specifications	274

PART NUMBER INDEX

Part Number Index.....	276
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Engineered
Solutions to

Help you Profit



Tool Measuring & Inspection

- Smartphone Simplicity
- American Made
- Micron Precision
- Under \$10,000



Evolution

Angle Head Solutions by Gerardi

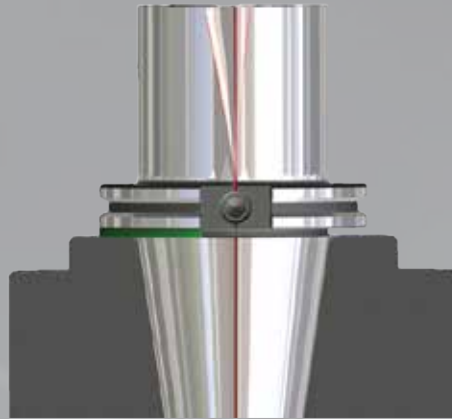
- Modular Components
- High Grade Gears, Bearings and seals
- Up to 10,000 RPM
- USA Testing, Repair, and Refurb Facility

Parlec offers a complete line of performance Toolholding, Presetting & Measuring, Boring, Tapping and Angle Head product solutions.

*BIG-PLUS® is a registered trademark of Daishowa Seiki Kabushiki Kaisha and that Daishowa Seiki Kabushiki Kaisha does not endorse or sponsor the products of Parlec.



EROS[®]



SimulFit[®]

Extreme Performance Toolholding System

- Unmatched Concentricity and Precision
- High Speed Operation
- Superior Grip Force
- USA Testing, Repair, and Refurb Facility

Dual Contact Taper Connection

- Compatible with BIG-PLUS[®] Spindle
- Stocked Inventory
- Increased Rigidity up to 28%
- American Made



Quality, Precision, Innovation

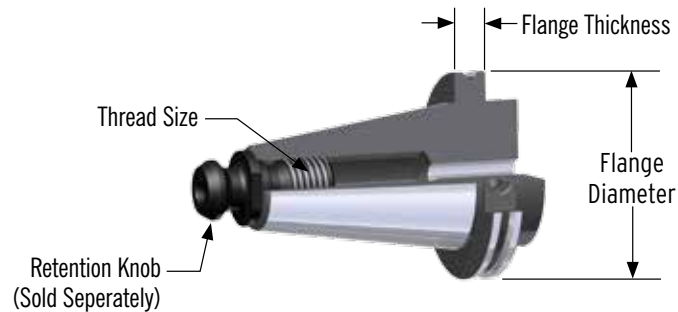


CONNECTION IS EVERYTHING

No matter what the spindle application, Parlec offers simple, highly repeatable and versatile tooling solution.

CAT V Flange Taper Specifications

- Meets or exceeds ASME B5.50-2009 specifications and all current specification updates except where improvements are made for high speed operation.
- All Parlec CAT tooling incorporates ParSymmetry for balance and chip hole for identification.

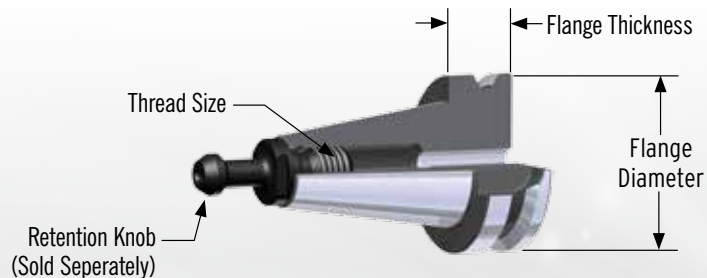


CAT TAPER SPECIFICATIONS

Taper Type	Gage Diameter	Flange Diameter	Flange Thickness	Thread Size
C40	1.750	2.50	.625	5/8" - 11"
C50	2.750	3.87	.625	1" - 8"
C60	4.250	5.50	.625	1 1/4" - 7"
C40F	1.750	2.50	.711	5/8" - 11"
C50F	2.750	3.87	.691	1" - 8"

BT Taper Specifications

- Meets or exceeds JIS B6339-1986 specifications.
- Taper is toleranced so that any error increases rate of taper only. Refer to Manufacturing Specifications for tolerance specifications.



BT TAPER SPECIFICATIONS

Taper Type	Gage Diameter	Flange Diameter	Flange Thickness	Thread Size
B30	1.25	1.81	0.787	M12 - 1.75
B40	1.75	2.48	0.984	M16 - 2.0
B50	2.75	3.94	1.378	M24 - 3.0
B30F	1.25	1.81	0.865	M12 - 1.75
B40F	1.75	2.48	1.062	M16 - 2.0

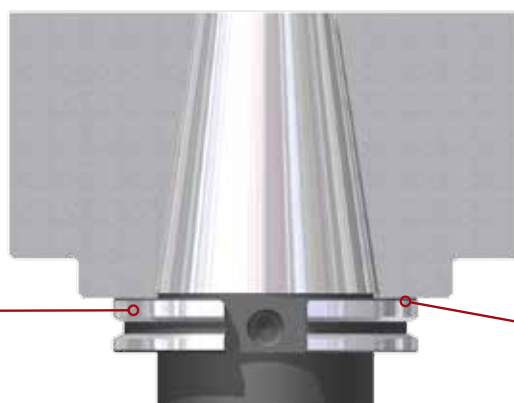


CONNECTION IS EVERYTHING SIMULFIT® SYSTEM—DUAL CONTACT TAPER

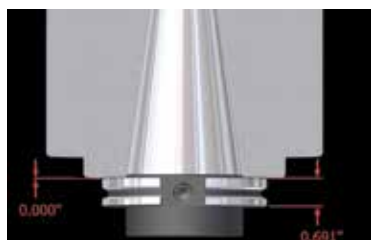
- Traditional steep taper connection is taper only.
- Simultaneous contact of taper and face will improve rigidity of the connection up to 28%.
- Simultaneous fit is not exclusive to HSK, but is suitable for steep taper.

+ 28%

Larger contact diameter increases resistance to bending by up to 28%



Face contact gives positive Z position and prevents shift during operation



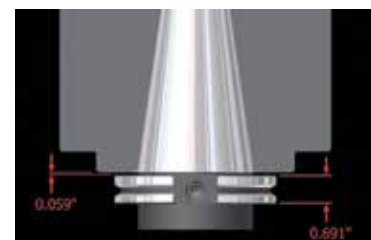
Spindle Compatible to BIG-PLUS®

- Steep taper holder designed to fit a BIG-PLUS® compatible spindle
- Result is taper and face simultaneous contact only



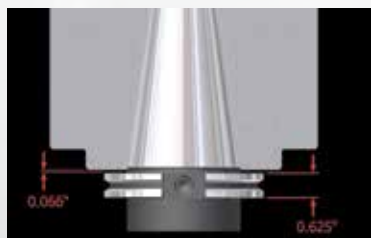
Standard Spindle

- Standard Cat (ANSI B5.50) holder
- Result is traditional taper only contact



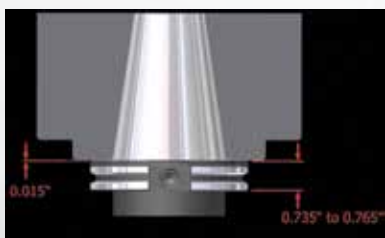
BIG-PLUS® Spindle with Standard Tooling

- Steep taper holder designed to fit a BIG-PLUS® compatible spindle
- Result is traditional taper only contact



Spindle Compatible to BIG-PLUS®

- Standard Cat (ANSI B5.50) holder
- Result is traditional taper only contact



Standard Spindle

- Modified Cat (ANSI B5.50) holder fitted with a custom spacer for use in non-qualified spindle
- Result is taper and face simultaneous contact only

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COOLANT SUPPLY OPTIONS

Available coolant supply from the spindle

- > Through the spindle
- > Flange Entry (Form B)

Standard Through Coolant



Coolant delivered from the spindle through the knob and exits through the cutting tool. Coolant through knobs sold separately. See page 127-130.

AD/B Convertible Coolant



With Screws: Coolant delivered from the spindle through the knob and exits through the cutting tool. Coolant through knobs sold separately. See page 127-130.



Without Screws: Coolant delivered from the spindle through the flange and exits through the cutting tool. Solid knob required. Solid knobs sold separately. See page 127-130.

Through Spindle

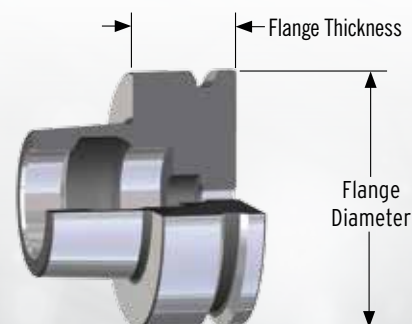
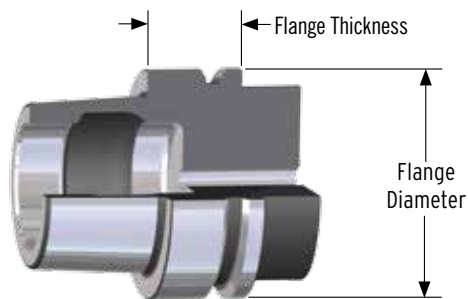
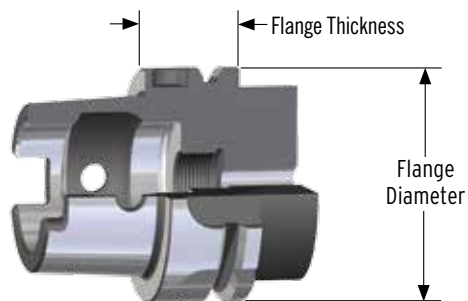
- Through holes are standard in all Parlec holders where applicable. Solid and through hole retention knobs are available to accommodate coolant and non-coolant applications.

Through-Flange

- Combined with solid retention knobs Form B holes through flange, accept the coolant from the spindle.
- Available standard for many tools and available as a standard modification for most tools.
- Form B convertible or AD/B (BC) is available in many sizes.
- The AD/B (BC) style can be used as either through the spindle, as supplied, or converted to Form B, through the flange.
- Flange entry is enabled by removing two screws.



CONNECTION IS EVERYTHING



HSK Form A Taper Specifications

- Meets DIN 69893-1 Form A specifications.
- Drive slots for moderate to heavy cutting forces.



Tube Wrench

HSK COOLANT TUBES

Taper Type	Part No.	Tube Wrench No.
HSK40A	H40TUBE	H40W
HSK63A	H63TUBE	H63W
HSK100A	H100TUBE	H100W



Coolant Tube

HSK Form E Taper Specifications

- Meets DIN 69893-1 Form A specifications.
- No drive slots or orientation slots for high speed operation.

HSK Form F Taper Specifications

- Meets DIN 69893-1 Form A specifications.
- Larger face contact area for higher torsional load at higher speeds.

HSK TAPERS

Taper Type	Flange Diameter	Flange Thickness
HSK40A	40	35
HSK63A	63	42
HSK100A	100	45
HSK32E	32	35
HSK40E	40	35
HSK63F	63	42

Parlec provides tooling in a variety of taper styles. HSK is available in other forms and sizes upon request.



ROTATIONAL SPEED AND BALANCE

A toolholder is the interface between a precision machine spindle and a precision cutting tool. The toolholder has three base elements; the taper connection, the retaining device and the cutting tool connection.

TAPER DESIGN PRINCIPLES

Common toolholders for machine tool spindles today are typically one of two classes of taper; steep taper (Cat, BT, DIN) and hollow taper (HSK).

Steep Taper

Steep Taper is the most commonly used taper principal. It is offered in different configurations, CAT, DIN, BT or others such as SK, NMTB, etc. The steep taper is held into the spindle through the use of a retention knob or pull stud that is affixed to the nose of the taper or by a draw bar internal to the machine spindle. The steep taper designs are available with taper only contact or SimulFit®, simultaneous taper and face contact. SimulFit® is available in two standard forms and can be retrofitted to any spindle even if the face is not qualified.

The steep taper is also available with through the spindle coolant, or flange entry coolant. Flange entry coolant also known as Form B or convertible Form AD/B (BC), is offered standard on many tools and available through modification on most tools.

Steep Taper provides very good durability and excellent dampening characteristics for speeds ranging from very low to moderately high. The typical maximum is 30,000 rpm for 30 taper, 20,000 rpm for 40 taper and 15,000 rpm for 50 taper. At higher speeds the spindle may expand due to centrifugal forces allowing the taper to draw into the spindle. This restricts the practical speeds that steep taper can be used. The length of the steep taper allows for a straight line bending mode based on applied side forces.

Hollow Taper

HSK tools have a much shallower taper and an internal drawbar. HSK is translated from the German name Kegel-Holhschafte or hohl shaft kegel. HSK tools are available in many sizes and forms. Due to the face contact (no movement allowed) and the hollow thin wall (expands to fill the spindle) of the HSK design, the spindle speed is not restricted by draw-in of the holder due to centrifugal forces. HSK spindles can exceed speeds of 40,000 rpm. HSK Form E and F spindles do not utilize drive keys and therefore are not practical at lower speed, higher force applications. The short thin wall taper and face contact provide a stiffer bending mode at lower forces and very rapid bending at higher forces. This results in a less dynamic stiffness mode.



BALANCE DESIGN PRINCIPLES

Toolholders are a very important element in the overall performance of cutting tools at high speeds. The forces generated against a machine tool spindle can come from many places. One of them is unbalance. When the cutting forces are low and the spindle speeds are high then the forces from unbalance can cause damage to the machine tool spindle bearings. High uneven cutting forces generated by an endmill in an traditional endmill holder can greatly overshadow forces generated by unbalance. However if a precision collet, shrink or other symmetrically designed systems are used at high speed, the unbalance can be a large contributor to the spindle bearing wear. Balance should be properly applied to the holder, and often the holder assembly, when the forces from unbalance will affect the performance above that of the normal cutting forces.

Balanced Toolholders

Tools that are designed for high speed operation are balanced to G2.5 at speeds up to 30,000 rpm. This will include such tools as ER Collet Chucks, Shrink Fit, ERos®, etc. Parlec will balance most tools with a standard taper connection to G2.5 and up to 40,000 rpm. The maximum capable balance is 1 g/mm . Any time you have a tool that will mount with a device that can change the balance, such as a side lock end mill, hydraulic chuck, milling chuck, collet chuck with standard threads, tightening and loosening of the device will change the effective balance. Unbalanced assembly results anytime a cutting tool has uneven flutes, uneven grinds, or is chucked in a way that has runout. Under extremely high speed and low force applications, it is best to balance as an assembly.

Balanceable Toolholders

The use of balanceable Toolholders provide the benefit of balance correction, at each assembly, when a precision level of balance is preferred. This solution requires that the user have a balancing machine. Parlec's radial offset technology provides a non-intrusive, low cost precision method of balancing toolholder assemblies.

Parlec ParSymmetry Toolholders

All Parlec toolholders are designed with ParSymmetry. This ensures that the unbalanced design of the flange is eliminated.



SELECTING THE PROPER TOOLHOLDER TYPE

Friction Drive vs. Positive Drive

The most common positive drive toolholder is the weldon end mill holder. This type of system requires flats or some other feature on the cutting tool shank raising the cost of the cutting tool. The positive drive nature virtually eliminates pull out or spinning potential during a cut.

Friction drive such as Collet Chucks and Shrink Holders are more likely to result in concentric and higher speed operations. Clamping relies on either compression, as in power milling and hydraulic chucks, or wedging, as in collets, to do the clamping on the round shank. In the case of friction drive, the question is how much torque, vibration, force or combination of these will it take to allow slipping.

Types of friction drive holders include EROS®, heat shrink, ER collet chucks, power milling chucks, hydraulic chucks, single and double angle collet chucks.

Variables:

- Reduction bushing systems consume some of the clamping force to absorb the clearance between the holder and the reduction bushing as well as the reduction bushing and the tool shank. This results in much less performance when not used on size.
- Collets use linear travel to create a wedge to generate the clamping force. Most collet systems are designed to collapse a considerable distance. When the collet collapses below its nominal size the od and id of the collet are no longer matched to the holder seat and the cutter shank diameter lessening the contact area. This results in reduced concentricity and grip force.
- Heat shrink utilizes thermal expansion to give a clearance to insert the tool. The cooling of the holder shrinks the body back to the original size. The cutting tool interference with this movement creates the clamping force. There is no action in this process to make up for variables in bore or cutting tool shank diameters.

Collet style vs. Bore Style

Collet style tools are made to be more flexible than a tool with a sized bore such as heat shrink or weldon style. This can be more cost effective but adds complexity to the assembly process and requires better and more defined cleaning and storage techniques. Collets or reduction bushings allow a common holder to be used on many size applications. This is especially valuable to a job shop environment where the jobs may change many times.



SELECTING THE BEST COLLET TYPE TOOLHOLDING SYSTEM

HIGH PRECISION

Eros® System is designed to provide the ultimate in EXTREME performance. Eros® offers all of the benefits of a collet system but is designed to eliminate all of the errors that come from the typical collet flexible collapse system. Eros® is **ER ON SIZE**. Machined for the best fit and precision without the forced collapse provides the best combination for precision, rigidity, grip force and speed.

ER Collet System is the best of the production and higher quality systems for flexible machining operations. It is available in different configurations to address the precision, quality and ruggedness to fit a wide spectrum of drilling and lighter milling applications. Great balance of precision, rigidity, grip, speed and durability and affordability.

Power Milling Chucks are a good product to use when heavy rough milling with either cobalt or carbide solid tools. Typically they would be used when the speed is lower and the feed per tooth is higher. The system has very good concentricity and very good grip force.

Single Angle Collet Chucks System has been a good general purpose product for many years.

The longer collet with a lower angle provides good grip force. The design uses an acme thread to give strength to the clamping nut thread. The result is good durability but will not center the nut providing a large mass variable for balance. Suitable for larger drills at lower RPM's.

Double Angle Collet Chucks System is old and out of date technology. The two separate clamping angles allow significant error between the collet and the collet seat. This results in poor concentricity and poor grip force. The nose diameter of the Extension style gives the best radial clearance of any system. The price is extremely low, but the value is not good based on minimum control of tolerance and lack of performance.

PRODUCTION



TOOLHOLDING SELECTION GUIDE

Parlec features a diverse product range of traditional toolholding solutions, including: ER Collet Chucks, Shrink Fit Holders, Power Milling Chucks, Shell Mill Holders Single-Angle Collet Systems, Double-Angle Collet Systems, and Weldon End Mill Holders. Our products are manufactured to maintain precision, functionality and durability for traditional and high-speed operation.



ERos® Collet Chuck

EXTREME PERFORMANCE

RPM

3 MICRON

AD/B

COOLANT

For extreme performance and any high speed, high concentricity tool requirement. The .00012" gage runout tolerance at 3X the tool diameter with the balanced and aerodynamic design, provides the highest performance available equal to shrink fit or proprietary designs without high start-up costs. The collet based design provides the simplest solution to extreme performance requirements.



ER Collet Chuck

SIMULFIT®

RPM

5 MICRON

12 MICRON

AD/B

COOLANT

For most drilling and lighter higher speed milling applications. Very good concentricity and very good balance. Safe operational speed as high as 30,000 rpm. Larger sizes have a limit based on centrifugal forces.



Shrink Fit Holders

EXTREME PERFORMANCE

RPM

3 MICRON

AD/B

COOLANT

For nominal size drilling with higher speed and higher feed milling applications. Excellent concentricity and excellent balance. No moving features, and thin nose diameters, make it exceptional for high speed machining. Safe operating speeds are extremely high due to little impact from centrifugal forces.



Power Milling Chucks

RPM

SIMULFIT®

5 MICRON

TRADITIONAL

COOLANT

For precision in moderate and lower speed milling and nominal drilling applications. Very good concentricity and good side load capability. Movable large clamping nut restricts the balance and centrifugal force capability, limiting the speed to 8,000 to 12,000 rpm.



Shell Mill Holders

SIMULFIT®

AD/B

COOLANT

For use with indexable shell mill cutters. For both heavy duty and high speed applications. Available with coolant through options.



Single-Angle Collet System

12 MICRON

TRADITIONAL

AD/B

COOLANT

For heavy drilling and some milling applications. The system provides good concentricity and good grip force. The nut system does not lend itself for good balance considerations at higher speeds.



Double-Angle Collet System

TRADITIONAL

AD/B

COOLANT

For smaller drilling application where clearance is necessary. The system is the simplest to use but lacks the characteristics for concentricity and grip force. Not suitable for precision high speed applications.



Weldon End Mill Holders

SIMULFIT®

TRADITIONAL

AD/B

COOLANT

For heavy machining using tools with Weldon flats. The side lock design compromises concentricity and is not useable in higher speed applications. The positive drive of the screw is unmatched for force to prevent slippage and pull out in heavy roughing applications.

OTHER PRODUCTION SYSTEMS



Stub Arbors



Morse Taper Holders



Jacobs Taper Holders



Boring Heads



Probe Holders



PARLEC DELIVERS SO YOU CAN DELIVER.



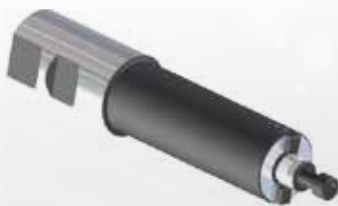
HSK Program—HSK 63 Form A and HSK 100 Form A Blanks

- Custom second ends for shrink fit, end mill and shell mill holders, collet chucks, aerospace configurations, etc.
- Projections ranging from 2-300 mm and wide variety of coolant delivery features.
- Pre-balanced and balanceable designs available.



CAT Program—CAT 40 and CAT 50 Blanks

- Custom second ends for shrink fit, shell mill holders, end mill holders, ER, single angle and double angle collet chucks, stub arbors, and aerospace applications.
- Projections ranging from 2-300 mm and wide variety of coolant delivery features.
- Pre-balanced and balanceable designs available.



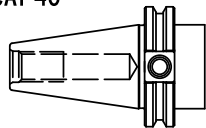
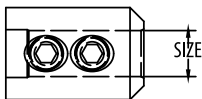
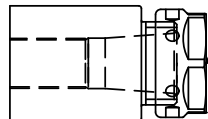
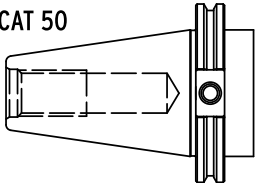
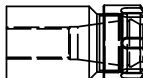
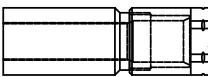
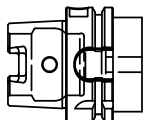
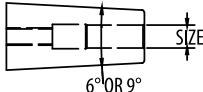
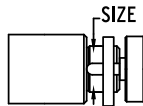
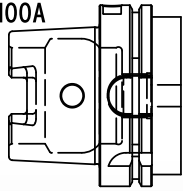
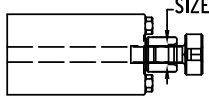
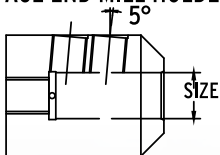
Custom Programs

If your outgoing tool requirements are outside those listed above please consult with the Parlec Technical Sales Manager in your area or a Parlec Product Specialist who will assist you in qualifying for a custom program.



Customer Contact Information: _____
 Name: _____
 Company: _____
 Phone: _____
 E-Mail: _____

Distributor Contact Information: _____
 Name: _____
 Company: _____
 Phone: _____
 E-Mail: _____

SHANK	TOOL BODY	
CAT 40 	END MILL HOLDER (EM) 	SINGLE ANGLE COLLET CHUCK (SC)  COLLET SIZE 0.75, 1.00, 1.50
CAT 50 	ER COLLET CHUCK (ER)  COLLET SIZE 11,16,20,25,32,40	DOUBLE ANGLE COLLET CHUCK (DC)  COLLET SIZE 300,200,100,180
HSK 63A 	SHRINK FIT HOLDER (SF)  6° OR 9°	STUB ARBOR (SA)  SIZE
HSK 100A 	SHELL MILL HOLDER (SM)  SIZE	AEROSPACE END MILL HOLDER (AEM)  5° SIZE

DISCLAIMER: restrictions apply to some diameters and lengths. For program limitations, please call 1-800-866-5872

1. Select a shank from the Shank options listed above, record your selection in Box 1.
2. Record your desired diameter/size in Box 2.
3. Select a tool body for the options listed above, record your selection in Box 3.
4. Record your desired projection length in Box 4.
5. Select any additional options.
6. Record any additional notes.
7. Fax (1-800-866-5917) or E-Mail (esales@parlec.com) completed RFQ.
8. Other special configurations available upon request. Please attach drawing for further review.

BOX 1-Shank BOX 2-Diameter/Size BOX 3-Tool Body BOX 4-Projection

OPTIONS, PLEASE SELECT:

AD/B COOLANT: _____
 COOLANT PORTS: _____

BALANCEABLE: _____
 PREBALANCED: _____

NOTES: _____





Toolholding

HIGH PRECISION TOOLHOLDING SOLUTIONS

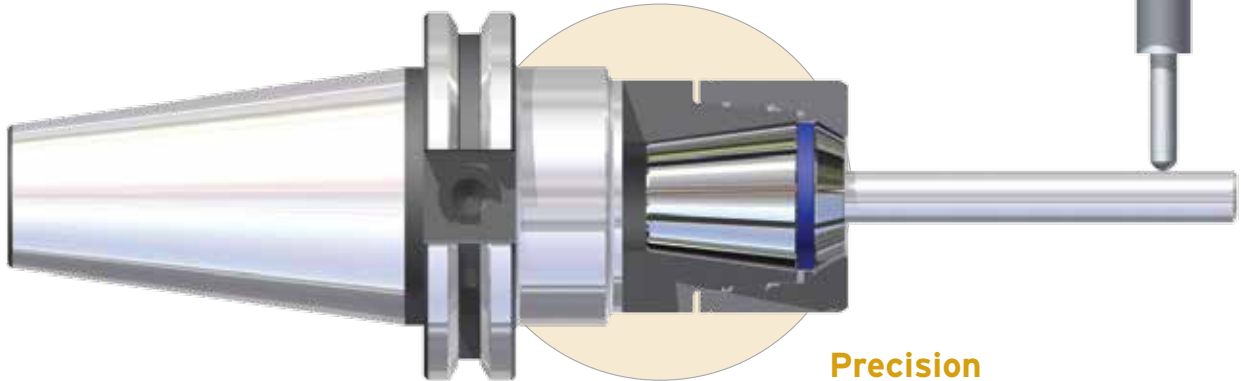
Parlec offers a complete range of Precision Toolholding Systems, engineered for high speed operation, superior grip force and longer tool life.



ERos[®] is an extremely high precision, high grip force solution that doesn't require an expensive heat shrink or clamping machine.

Concentricity

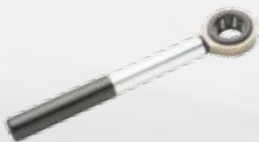
The ERos[®] collet system is one of the best collet chucks that money can buy. The 2 Micron collet combined with the precision chuck, achieves a system accuracy of $\leq .00012$ " or 3 Microns. This level of accuracy is the best available in the world.



Precision

The extreme performance of the ERos[®] system is a result of extremely tight manufacturing tolerances. The extreme precision is achieved by exceeding the already tight specifications of the ISO 15488.

LOW START UP COST



VS.



Simplicity

The price to performance ratio in the ERos[®] system is the best available. Based on precision, holding force and flexibility, it performs at levels equal to or higher than systems with expensive start up costs such as heat shrink or clamping machines. And individually equal to or less expensive. The relatively low cost of the 2 Micron collets allow inexpensive retooling compared to hydraulics, shrink or proprietary systems. ERos[®] is a combination of quality, precision and technology yielding an EXTREME performance chuck at an attainable price point without need for significant investment for assembly/disassembly equipment.

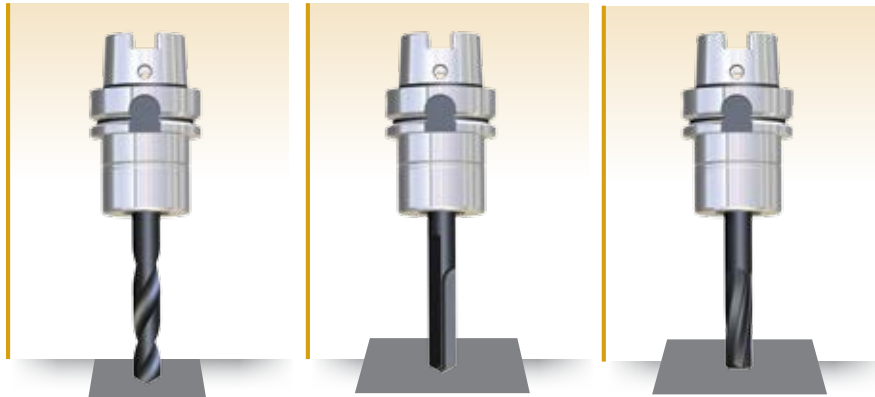


It's simplicity that results in extreme performance.

Versatility

The ERos[®] system is versatile in performance and application. The collet design offers the flexibility for use in multiple applications.

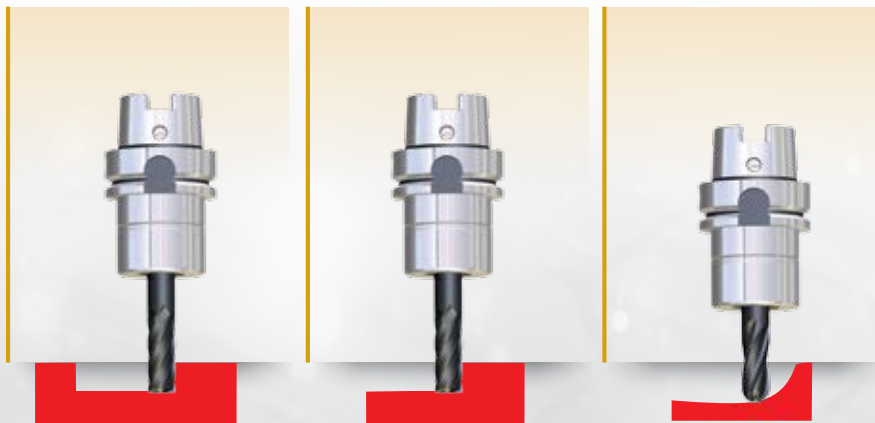
Drilling and Reaming



Form Grinding



Milling

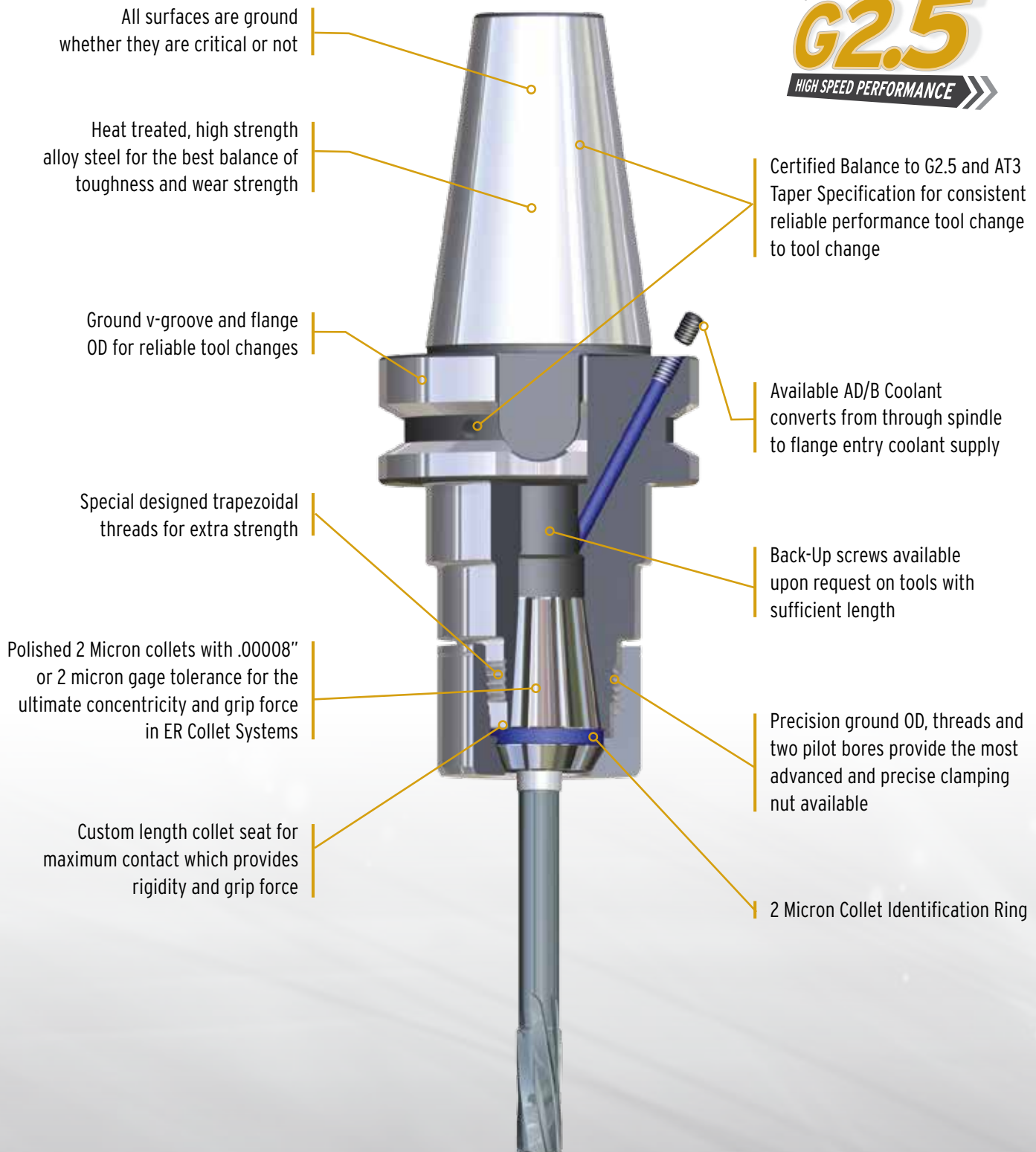


Extended



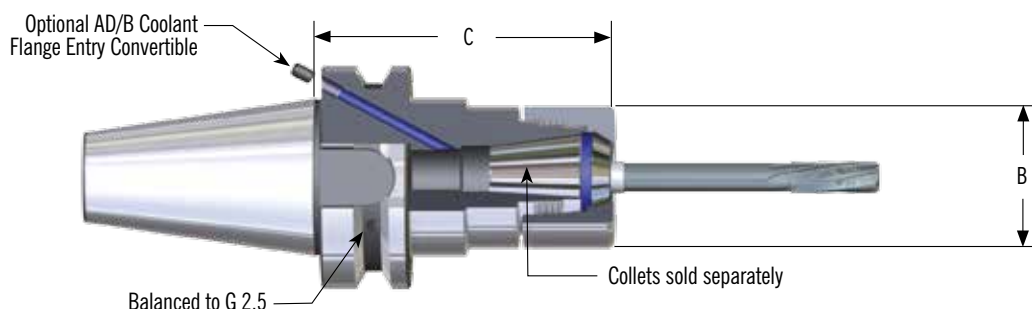


PARLEC EROS[®] SYSTEM FEATURES





EROS® BT COLLET CHUCKS



BT 30 BALANCED UP TO 25,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER11	BT30-11EROSM196	Through	0.63	1.96	EROS11MN	88 in/lbs.	EROS11MWN
	BT30-11EROSM394			3.94			
ER16	BT30-16EROS196	Through	1.18	1.96	EROS16N	41 ft/lbs.	EROS16NW
	BT30-16EROS354			3.54			
	BT30-16EROS472			4.72			
ER20	BT30-20EROS295	Through	1.26	2.95	EROS20N	58 ft/lbs.	EROS20NW
ER32	BT30-32EROS236	Through	1.97	2.36	EROS32N	105 ft/lbs.	EROS32NW
	BT30-32EROS354			3.54			

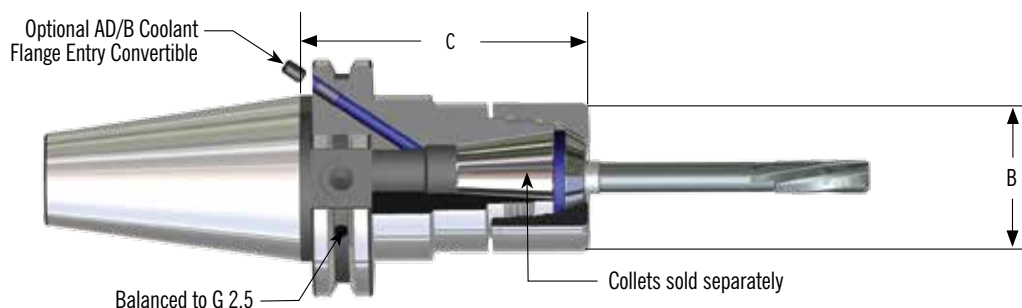
BT 40 BALANCED UP TO 25,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER11	BT40BC-11EROSM295	AD/B	0.63	2.95	EROS11MN	88 in/lbs.	EROS11MWN
	BT40BC-11EROSM394			3.94			
	BT40BC-11EROSM630			6.30			
ER16	BT40BC-16EROSM472	AD/B	0.94	4.72	EROS16MN	29 ft/lbs.	EROS16MWN
	BT40BC-16EROS275		1.18	2.75	EROS16N	41 ft/lbs.	EROS16NW
	BT40BC-16EROS394			3.94			
	BT40BC-16EROS630			6.30			
ER20	BT40BC-20EROS295	AD/B	1.26	2.95	EROS20N	58 ft/lbs.	EROS20NW
	BT40BC-20EROS472			4.72			
ER32	BT40BC-32EROS275	AD/B	1.97	2.75	EROS32N	105 ft/lbs.	EROS32NW
	BT40BC-32EROS472			4.72			
ER40	BT40-40EROS394	Through	2.48	3.94	EROS40N	150 ft/lbs.	EROS40NW

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 33-37.



EROS® CAT COLLET CHUCKS



CAT 40 BALANCED UP TO 25,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER11	C40BC-11EROSM400	AD/B	0.63	4.00	EROS11MN	88 in/lbs.	EROS11MNW
ER16	C40BC-16EROS250	AD/B	1.18	2.50	EROS16N	41 ft/lbs.	EROS16NW
	C40BC-16EROS400	AD/B		4.00			
	C40BC-16EROS500	AD/B		5.00			
ER20	C40BC-20EROS300	AD/B	1.26	3.00	EROS20N	58 ft/lbs.	EROS20NW
	C40BC-20EROS400	AD/B		4.00			
ER32	C40BC-32EROS300	AD/B	1.97	3.00	EROS32N	105 ft/lbs.	EROS32NW
	C40BC-32EROS400	AD/B		4.00			
	C40BC-32EROS500	AD/B		5.00			
	C40BC-32EROS600	AD/B		6.00			
ER40	C40BC-40EROS400	AD/B	2.48	4.00	EROS40N	150 ft/lbs.	EROS40NW

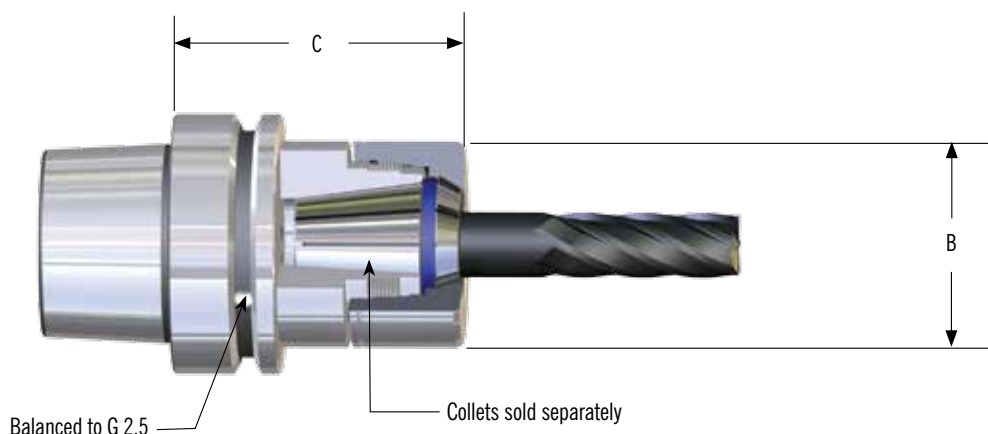
CAT 50 BALANCED UP TO 20,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER16	C50BC-16EROS400	AD/B	1.18	4.00	EROS16N	41 ft/lbs.	EROS16NW
	C50BC-16EROS600	AD/B		6.00			
ER20	C50BC-20EROS400	AD/B	1.26	4.00	EROS20N	58 ft/lbs.	EROS20NW
	C50BC-20EROS600	AD/B		6.00			
ER32	C50BC-32EROS350	AD/B	1.97	3.50	EROS32N	105 ft/lbs.	EROS32NW
	C50BC-32EROS400	AD/B		4.00			
	C50BC-32EROS600	AD/B		6.00			
ER40	C50BC-40EROS400	AD/B	2.48	4.00	EROS40N	150 ft/lbs.	EROS40NW

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 33-37.



EROS® HSK COLLET CHUCKS



HSK 32 FORM E BALANCED UP TO 30,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER20	H32E-20EROS196	Through	1.26	1.96	EROS20N	58 ft/lbs.	EROS20NW

HSK 40 FORM E BALANCED UP TO 30,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER11	H40E-11EROSM196	Through	0.63	1.96	EROS11MN	88 in/lbs.	EROS11MNW
ER16	H40E-16EROSM394	Through	1.18	3.94	EROS16MN	41 ft/lbs.	EROS16MNW

HSK 63 FORM F BALANCED UP TO 30,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER32	H63F-32EROS255	Through	1.97	2.55	EROS32N	105 ft/lbs.	EROS32NW

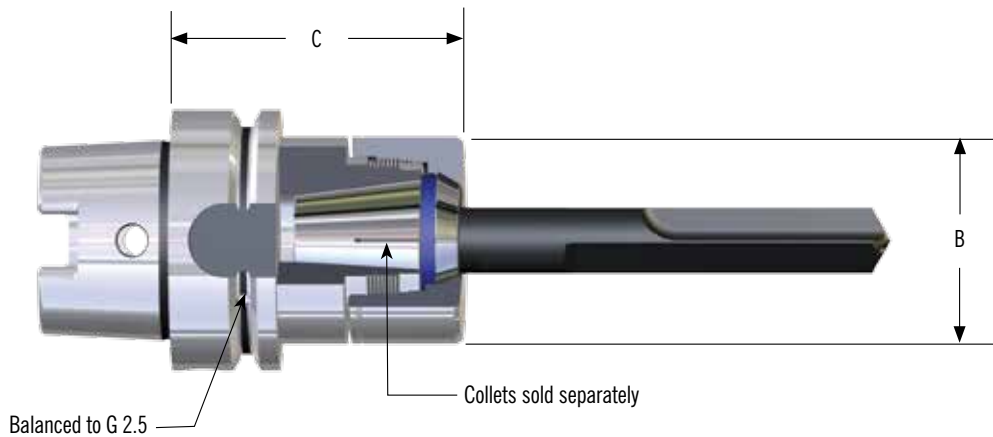
HSK 40 FORM A BALANCED UP TO 25,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER11	H40A-11EROSM236	Through	0.63	2.36	EROS11MN	88 in/lbs.	EROS11MNW
ER16	H40A-16EROS236	Through	1.18	2.36	EROS16N	41 ft/lbs.	EROS16NW

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-130. Order Collets and Collet Nut Wrench separately, see pages 33-37.



EROS® HSK COLLET CHUCKS



HSK 63 FORM A BALANCED UP TO 25,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER11	H63A-11EROSM275	Through	0.63	2.75	EROS11MN	88 in/lbs.	EROS11MNW
	H63A-11EROSM511	Through		5.11			
ER16	H63A-16EROS216	Through	1.18	2.16	EROS16N	41 ft/lbs.	EROS16NW
	H63A-16EROS394	Through		3.94			
	H63A-16EROS630	Through		6.30			
	H63A-16EROSM511	Through		5.11	EROS16MN	22 ft/lbs.	EROS16MNW
ER20	H63A-20EROS236	Through	1.26	2.36	EROS20N	58 ft/lbs.	EROS20NW
	H63A-20EROS394	Through		3.94			
ER32	H63A-32EROS275	Through	1.97	2.75	EROS32N	105 ft/lbs.	EROS32NW
	H63A-32EROS394	Through		3.94			
	H63A-32EROS630	Through		6.30			
ER40	H63A-40EROS314	Through	2.48	3.14	EROS40N	150 ft/lbs.	EROS40NW

HSK 100 FORM A BALANCED UP TO 20,000 RPM

Size	Part Number	Coolant	B (Dia.)	C	Collet Nut (Incl.)	Maximum Nut Torque	Wrench
ER16	H100A-16EROS394	Through	1.18	3.94	EROS16N	41 ft/lbs.	EROS16NW
	H100A-16EROS630	Through		6.30			
ER32	H100A-32EROS394	Through	1.97	3.94	EROS32N	105 ft/lbs.	EROS32NW
	H100A-32EROS630	Through		6.30			
	H100A-32EROS787	Through		7.87			
ER40	H100A-40EROS394	Through	2.48	3.94	EROS40N	150 ft/lbs.	EROS40NW

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 33-37.



EROS® SYSTEM ACCESSORIES

REPLACEMENT NUTS

Part Number	B (Dia.)
EROS11MN	0.63
EROS16MN	0.94
EROS16N	1.18
EROS20N	1.26
EROS32N	1.97
EROS40N	2.48



ERos® Mini Nut



ERos® Nut

ROLLER WRENCH

Part Number	B (Dia.)
EROS11MNW	0.63
EROS16MNW	0.94
EROS16NW	1.18
EROS20NW	1.26
EROS32NW	1.97
EROS40NW	2.48



ERos® Roller Wrench

TORQUE WRENCH

Size	Wrench	Nose Piece
EROS 11M	EROSTW100	EROS11MTWN
EROS 16M		EROS16MTWN
EROS 16		EROS16TWN
EROS 20		EROS20TWN
EROS 32	EROSTW200	EROS32TWN
EROS 40	EROSTW300	EROS40TWN



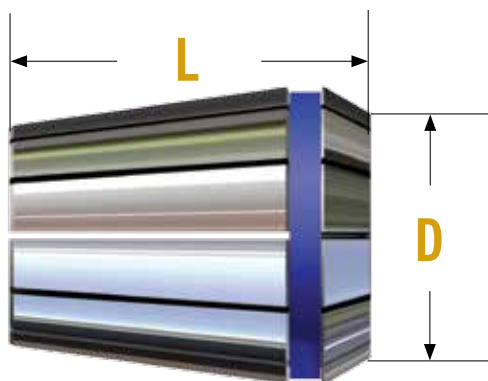
Torque Wrench

COLLET DIMENSIONS

COLLET SIZE	ER11	ER16	ER20	ER32	ER40
LENGTH (L)	0.708	1.082	1.240	1.574	1.811
DIAMETER (D)	0.452	0.669	0.827	1.300	1.614



EROS® 2 MICRON COLLETS



ERos® 2 Micron Collet

* For collet dimensions see page 33



2 MICRON EROS® COLLETS

ERos® 11 COLLETS

PART NUMBER	SIZE	*RANGE
EROS11-1MM	1 mm	h8
EROS11-1.5MM	1.5 mm	h8
EROS11-2MM	2 mm	h8
EROS11-2.5MM	2.5 mm	h8
EROS11-3MM	3 mm	h8
EROS11-3.5MM	3.5 mm	h8
EROS11-4MM	4 mm	h8
EROS11-4.5MM	4.5 mm	h8
EROS11-5MM	5 mm	h8
EROS11-5.5MM	5.5 mm	h8
EROS11-6MM	6 mm	h8
EROS11-6.5MM	6.5 mm	h8
EROS11-7MM	7 mm	h8

*Per ISO 286-2

ERos® 11 COLLETS

PART NUMBER	SIZE	*RANGE
EROS11-1/16	1/16"	h8
EROS11-1/8	1/8"	h8
EROS11-3/16	3/16"	h8
EROS11-1/4	1/4"	h8

*Per ISO 286-2

SETS

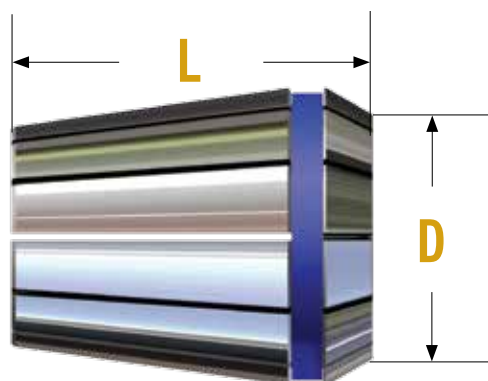
ERos® 11 METRIC SET

ERos® 11 INCH SET

PART NUMBER	EROS11-S013	EROS11-SI004
NUMBER OF PIECES	13 Pieces	4 Pieces
RANGE	1-7 mm	1/16" - 1/4"



EROS® 2 MICRON COLLETS



ERos® 2 Micron Collet

* For collet dimensions see page 33



2 MICRON EROS® COLLETS EROS® 16 - EROS® 40 METRIC

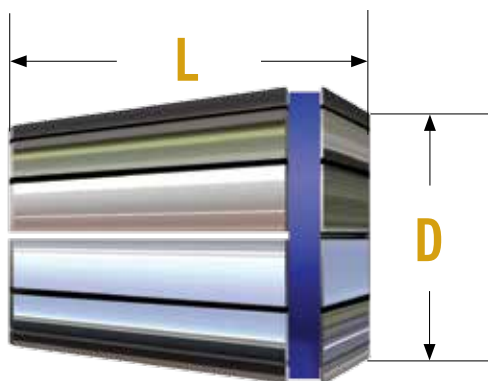
PART NUMBER				SIZE	*RANGE
ERos® 16 Metric	ERos® 20 Metric	ERos® 32 Metric	ERos® 40 Metric		
EROS16-3MM	EROS20-3MM	EROS32-3MM	-	3 mm	h8
EROS16-4MM	EROS20-4MM	EROS32-4MM	-	4 mm	h8
EROS16-5MM	EROS20-5MM	EROS32-5MM	-	5 mm	h8
EROS16-6MM	EROS20-6MM	EROS32-6MM	-	6 mm	h8
EROS16-7MM	EROS20-7MM	EROS32-7MM	-	7 mm	h8
EROS16-8MM	EROS20-8MM	EROS32-8MM	-	8 mm	h8
EROS16-9MM	EROS20-9MM	EROS32-9MM	-	9 mm	h8
EROS16-10MM	EROS20-10MM	EROS32-10MM	EROS40-10MM	10 mm	h8
-	EROS20-11MM	EROS32-11MM	EROS40-11MM	11 mm	h8
-	EROS20-12MM	EROS32-12MM	EROS40-12MM	12 mm	h8
-	EROS20-13MM	EROS32-13MM	EROS40-13MM	13 mm	h8
-	-	EROS32-14MM	EROS40-14MM	14 mm	h8
-	-	EROS32-15MM	EROS40-15MM	15 mm	h8
-	-	EROS32-16MM	EROS40-16MM	16 mm	h8
-	-	EROS32-17MM	EROS40-17MM	17 mm	h8
-	-	EROS32-18MM	EROS40-18MM	18 mm	h8
-	-	EROS32-19MM	EROS40-19MM	19 mm	h8
-	-	EROS32-20MM	EROS40-20MM	20 mm	h8
-	-	-	EROS40-21MM	21 mm	h8
-	-	-	EROS40-22MM	22 mm	h8
-	-	-	EROS40-23MM	23 mm	h8
-	-	-	EROS40-24MM	24 mm	h8
-	-	-	EROS40-25MM	25 mm	h8
-	-	-	EROS40-26MM	26 mm	h8

*Per ISO 286-2

ERos® 16 Metric Set	ERos® 20 Metric Set	ERos® 32 Metric Set	ERos® 40 Metric Set	SETS
EROS16-S008	EROS20-S011	EROS32-S018	EROS40-S017	PART NUMBER
8 Pieces	11 Pieces	18 Pieces	17 Pieces	NUMBER OF PIECES
3-10 mm	3-13 mm	3-20 mm	10-26 mm	RANGE



EROS[®] 2 MICRON COLLETS

ERos[®] 2 Micron Collet

* For collet dimensions see page 33



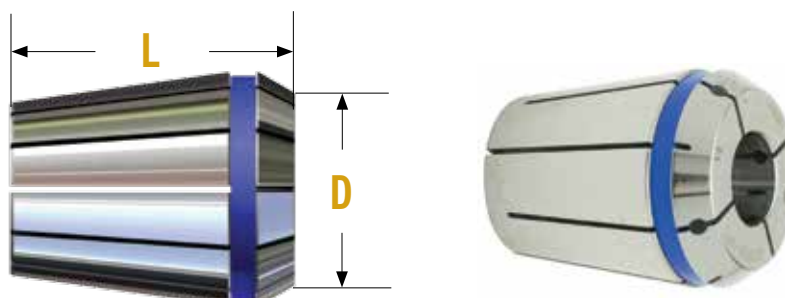
2 MICRON EROS[®] COLLETS EROS[®] 16 - EROS[®] 40 INCH

PART NUMBER				SIZE	*RANGE
ERos [®] 16 Inch	ERos [®] 20 Inch	ERos [®] 32 Inch	ERos [®] 40 Inch		
EROS16-1/8	EROS20-1/8	EROS32-1/8	-	1/8"	h8
EROS16-5/32	-	-	-	5/32"	h8
EROS16-3/16	EROS20-3/16	EROS32-3/16	-	3/16"	h8
EROS16-7/32	-	-	-	7/32"	h8
EROS16-1/4	EROS20-1/4	EROS32-1/4	-	1/4"	h8
EROS16-9/32	-	-	-	9/32"	h8
EROS16-5/16	EROS20-5/16	EROS32-5/16	-	5/16"	h8
EROS16-3/8	EROS20-3/8	EROS32-3/8	EROS40-3/8	3/8"	h8
-	EROS20-7/16	EROS32-7/16	-	7/16"	h8
-	EROS20-1/2	EROS32-1/2	EROS40-1/2	1/2"	h8
-	-	EROS32-9/16	-	9/16"	h8
-	-	EROS32-5/8	EROS40-5/8	5/8"	h8
-	-	EROS32-3/4	EROS40-3/4	3/4"	h8
-	-	-	EROS40-7/8	7/8"	h8
-	-	-	EROS40-1	1"	h8
ERos [®] 16 Inch Set	ERos [®] 20 Inch Set	ERos [®] 32 Inch Set	ERos [®] 40 Inch Set	SETS	
EROS16-SI008	EROS20-SI007	EROS32-SI010	EROS40-SI006	PART NUMBER	
8 Pieces	7 Pieces	10 Pieces	6 Pieces	NUMBER OF PIECES	
1/8" - 3/8"	1/8" - 1/2"	1/8" - 3/4"	3/8" - 1"	RANGE	

*Per ISO 286-2



EROS[®] 2 MICRON COOLANT SEALED COLLETS

ERos[®] 2 Micron Collet

* For collet dimensions see page 33

2 MICRON EROS[®] COOLANT SEALED COLLETS EROS[®] 16 - EROS[®] 40 METRIC

PART NUMBER			SIZE	*RANGE
ERos [®] 16 Metric	ERos [®] 20 Metric	ERos [®] 32 Metric		
EROSC16-3MM	EROSC20-3MM	-	3 mm	h8
EROSC16-4MM	EROSC20-4MM	EROSC32-4MM	4 mm	h8
EROSC16-6MM	EROSC20-6MM	EROSC32-6MM	6 mm	h8
EROSC16-8MM	EROSC20-8MM	EROSC32-8MM	8 mm	h8
EROSC16-10MM	EROSC20-10MM	EROSC32-10MM	10 mm	h8
-	EROSC20-12MM	EROSC32-12MM	12 mm	h8
-	-	EROSC32-14MM	14 mm	h8
-	-	EROSC32-16MM	16 mm	h8
-	-	EROSC32-18MM	18 mm	h8
-	-	EROSC32-20MM	20 mm	h8
ERos [®] 16 Metric Set	ERos [®] 20 Metric Set	ERos [®] 32 Metric Set	SETS	
EROSC16-S005	EROSC20-S006	EROSC32-S009	PART NUMBER	
5 Pieces	6 Pieces	9 Pieces	NUMBER OF PIECES	
3, 4, 6, 8, 10 mm	3, 4, 6, 8, 10, 12 mm	4-20 mm (Even)	RANGE	

2 MICRON EROS[®] COOLANT SEALED COLLETS EROS[®] 16 - EROS[®] 40 INCH

PART NUMBER			SIZE	*RANGE
ERos [®] 16 Inch	ERos [®] 20 Inch	ERos [®] 32 Inch		
EROSC16-1/8	-	-	1/8"	h8
EROSC16-3/16	-	-	3/16"	h8
EROSC16-1/4	EROSC20-1/4	EROSC32-1/4	1/4"	h8
EROSC16-5/16	EROSC20-5/16	EROSC32-5/16	5/16"	h8
EROSC16-3/8	EROSC20-3/8	EROSC32-3/8	3/8"	h8
-	EROSC20-1/2	EROSC32-1/2	1/2"	h8
-	-	EROSC32-5/8	5/8"	h8
-	-	EROSC32-3/4	3/4"	h8
ERos [®] 16 Inch Set	ERos [®] 20 Inch Set	ERos [®] 32 Inch Set	SETS	
EROSC16-SI005	EROSC20-SI004	EROSC32-SI006	PART NUMBER	
5 Pieces	4 Pieces	6 Pieces	NUMBER OF PIECES	
1/8", 3/16", 1/4", 5/16", 3/8"	1/4", 5/16", 3/8", 1/2"	1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	RANGE	

*Per ISO 286-2



SIMULFIT® SYSTEM—DUAL CONTACT TAPER

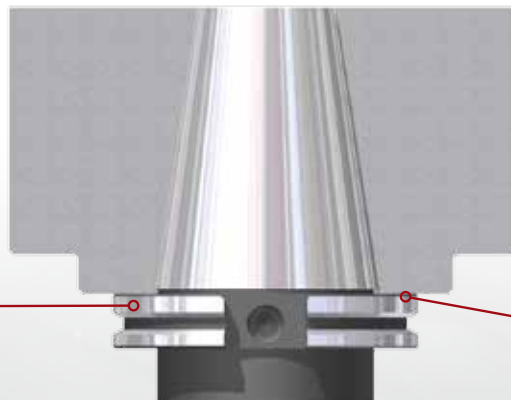


Connection is Everything!

- Constructed of alloy steel for long, durable service life.
- Shiny taper with black oxide finish for the best combination of accuracy and durability.
- Hardened to Rc: 52-56 to avoid damaging collet chuck threads.
- Available as Shell Mill Holders, End Mill Holders, ER Collet Chucks, and Milling Chucks.
- Designed to reduce tool deflection, vibration and cycle times.
- Compatible with BIG-PLUS® spindle.

+ 28%

Larger contact diameter increases resistance to bending by up to 28%

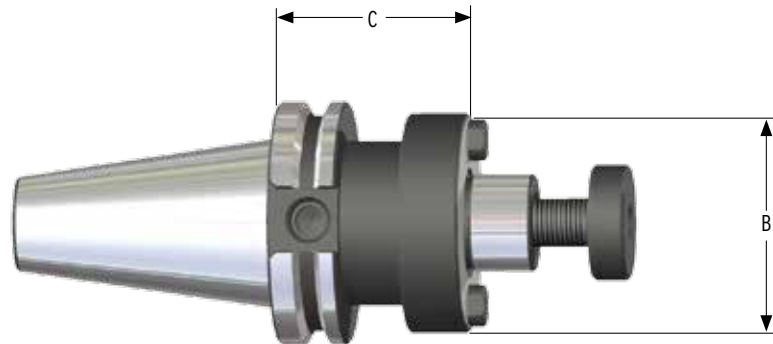


Face contact gives positive Z position and prevents shift during operation

*BIG-PLUS® is a registered trademark of Daishowa Seiki Kabushiki Kaisha and that Daishowa Seiki Kabushiki Kaisha does not endorse or sponsor the products of Parlec. Additional details available, see page 13.



SIMULFIT® SHELL MILL HOLDERS



BT 30 SIMULFIT®

Size	Part Number with SimulFit®	B (Dia.)	C
3/4"	B30F-75SM118	1.75	1.18
1"	B30F-10SM177	2.38	1.77

BT 40 SIMULFIT®

Size	Part Number with SimulFit®	B (Dia.)	C
3/4"	B40F-75SM2	1.75	2.00
1"	B40F-10SM2	2.25	2.00
1 1/4"	B40F-12SM2	2.75	2.25
1 1/2"	B40F-15SM2	3.75	2.25

CAT 40 SIMULFIT®

Size	Part Number with SimulFit®	B (Dia.)	C
3/4"	C40F-75SM1	1.75	1.38
	C40F-75SM200		2.00
	C40F-75SM4		4.00
1"	C40F-10SM1	2.25*	1.00
	C40F-10SM2	2.25	2.00
	C40F-10SM4		4.00
1 1/4"	C40F-12SM1	2.75*	1.62
	C40F-12SM2	2.75	2.25
1 1/2"	C40F-15SM2	3.75	2.40
	C40F-15SM4		4.00

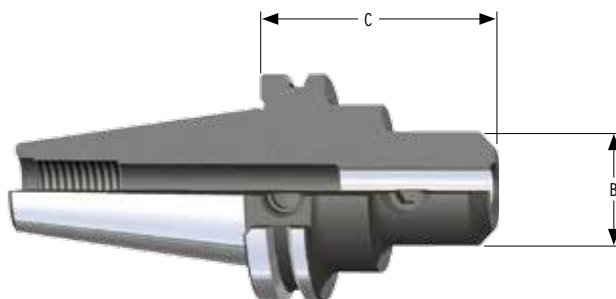
CAT 50 SIMULFIT®

Size	Part Number with SimulFit®	B (Dia.)	C
3/4"	C50F-75SM1	1.75	1.50
	C50F-75SM3		3.50
	C50F-75SM5		5.50
1"	C50F-10SM2	2.25	2.00
	C50F-10SM4		4.00
	C50F-10SM6		6.00
	C50F-10SM8		8.00
1 1/4"	C50F-12SM3	2.75	3.50
	C50F-12SM5		5.50
1 1/2"	C50F-15SM2	3.75	2.40
	C50F-15SM4		4.00
	C50F-15SM6		6.00
2"	C50F-20SM2	4.88	2.40
	C50F-20SM4		4.00
2 1/2"	C50F-25SM2		2.40

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. *Does not have tool changer safe zone, may not fit some machines, and deviate from ANSI B5.50/2009.



SIMULFIT® END MILL HOLDERS



BT 30 SIMULFIT® TAPER

Size	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth
1/4"	B30F-25EM238	2	0.81	2.38	3.31
3/8"	B30F-37EM238	2	1.38	2.38	3.31
1/2"	B30F-50EM238	2	1.38	2.38	2.00
5/8"	B30F-62EM250	2	1.44	2.50	2.24
3/4"	B30F-75EM250	2	2.00	2.50	2.25
1"	B30F-10EM275	2	2.38	2.75	2.50

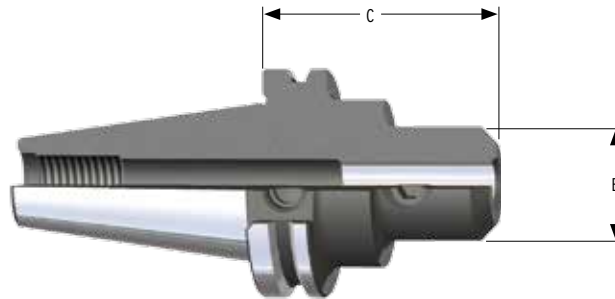
BT 40 SIMULFIT® TAPER

Size	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth
1/2"	B40F-50EM2	2	1.25	2.25	3.00
5/8"	B40F-62EM2	2	1.50	2.25	3.07
3/4"	B40F-75EM3	2	1.75	3.38	3.94
1"	B40F-10EM4	2	2.00	4.00	4.50
1 1/4"	B40F-12EM4	2	2.50	4.00	3.35

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Style descriptions, see page 107. Order Retention Knobs separately, see pages 130-132.



SIMULFIT® END MILL HOLDERS



CAT 40 SIMULFIT® TAPER

Size	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth
1/2"	C40F-50EM1	1	1.75	1.75	3.00
	C40F-50EM2	2	1.25	2.62	3.80
	C40F-50EM4	2		4.62	
5/8"	C40F-62EM2	2	1.50	2.75	3.62
	C40F-62EM3	2		3.00	3.21
3/4"	C40F-75EM1	1	1.75	1.75	2.37
	C40F-75EM300	2		3.00	3.94
	C40F-75EM6	2		6.00	
1"	C40F-10EM1	1	2.00*	1.75	2.38
	C40F-10EM3	2	2.00	3.00	3.00
	C40F-10EM4	2		4.00	4.50
1 1/4"	C40F-12EM2	1	2.25*	2.00	2.38
	C40F-12EM4	2	2.50	4.00	3.35
	C40F-12EM6	2	2.50	6.00	
1 1/2"	C40F-15EM462	2	2.62	4.62	2.38

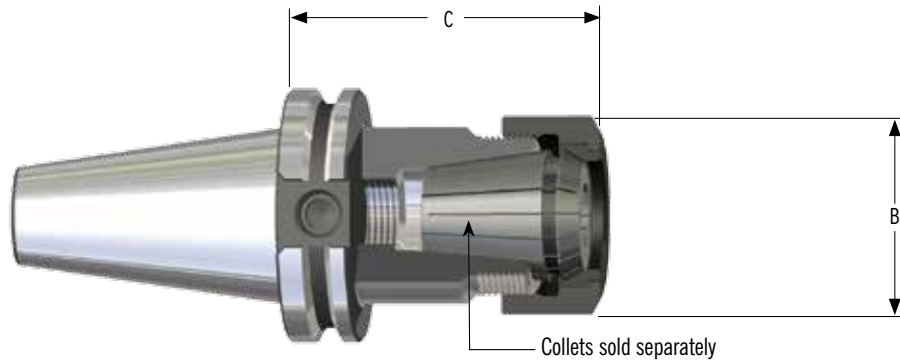
CAT 50 SIMULFIT® TAPER

Size	Part Number w/ SimulFit®	Style	B (Dia.)	C	Socket Depth
1/2"	C50F-50EM4	2	1.25	4.62	5.00
	C50F-50EM6	3		6.62	
5/8"	C50F-62EM5	2	1.50	5.75	3.62
	C50F-62EM7	3		7.75	
3/4"	C50F-75EM3	2	1.75	3.75	4.00
	C50F-75EM5	2		5.75	
1"	C50F-10EM4	2	2.00	4.00	4.50
	C50F-10EM6	2		6.00	
	C50F-10EM8	3		8.00	
1 1/4"	C50F-12EM2	2	2.75	2.62	3.50
	C50F-12EM4	2	2.50	4.00	3.50
	C50F-12EM6	2		6.00	
	C50F-12EM8	2		8.00	
1 1/2"	C50F-15EM4	2	2.75	4.00	4.50
	C50F-15EM6	2		6.00	
	C50F-15EM8	2		8.00	
2"	C50F-20EM5	2	3.75	5.62	3.63

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Style descriptions, see page 107. Order Retention Knobs separately, see pages 130-132. *Does not have tool changer safe zone, may not fit some machines, and deviate from ANSI B5.50/2009.



SIMULFIT® ER COLLET CHUCKS WITH POWER NUT



BT 30 SIMULFIT® BALANCED UP TO 25,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	B30F-16ERP248	1.11	2.48	1.83
ER20	B30F-20ERP248	1.34	2.48	2.48
ER32	B30F-32ERP248	1.97	2.48	3.88

BT 40 SIMULFIT® BALANCED UP TO 25,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	B40F-16ERP312	1.11	3.12	2.00
	B40F-16ERP512		5.12	
ER32	B40F-32ERP412	1.97	4.12	3.88
	B40F-32ERP612		6.12	

CAT 40 SIMULFIT® BALANCED UP TO 25,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	C40F-16ERP262	1.11	2.62	2.43
	C40F-16ERP412		4.12	
	C40F-16ERP512		5.12	
	C40F-16ERP812		8.12	
ER20	C40F-20ERP612	1.34	6.12	4.00
ER25	C40F-25ERP612	1.62	6.12	4.00
ER32	C40F-32ERP312	1.97	3.12	3.88
	C40F-32ERP412		4.12	
	C40F-32ERP612		6.12	

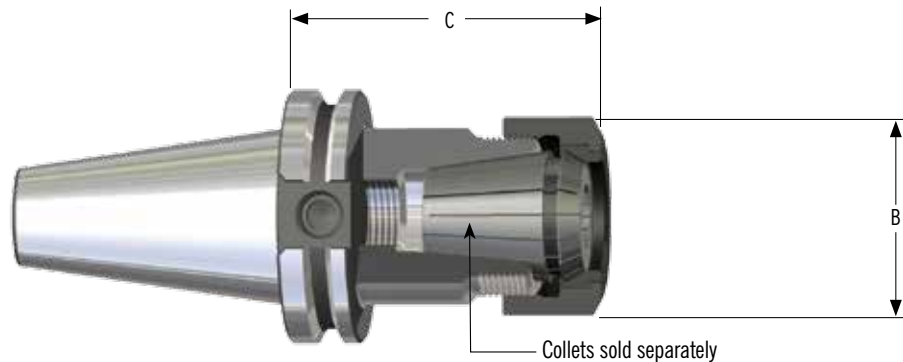
CAT 50 SIMULFIT® BALANCED UP TO 20,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	C50F-16ERP412	1.11	4.12	2.50
	C50F-16ERP612		6.12	
	C50F-16ERP812		8.12	
ER32	C50F-32ERP412	1.97	4.12	3.88
	C50F-32ERP612		6.12	
	C50F-32ERP812		8.12	
ER40	C50F-40ERP412	2.47	4.12	4.10

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



SIMULFIT® ER COLLET CHUCKS WITH COOLANT NUT



BT 40 SIMULFIT® BALANCED UP TO 25,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	B40F-16ERC322	1.11	3.22	2.00
	B40F-16ERC522		5.22	
ER32	B40F-32ERC422	1.97	4.22	3.88
	B40F-32ERC622		6.22	

CAT 40 SIMULFIT® BALANCED UP TO 25,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	C40F-16ERC272	1.11	2.72	2.43
	C40F-16ERC422		4.22	
	C40F-16ERC522		5.22	
	C40F-16ERC822		8.22	
ER20	C40F-20ERC622	1.34	6.22	4.00
ER25	C40F-25ERC622	1.67	6.22	4.00
ER32	C40F-32ERC322	1.97	3.22	3.88
	C40F-32ERC422		4.22	
	C40F-32ERC622		6.22	

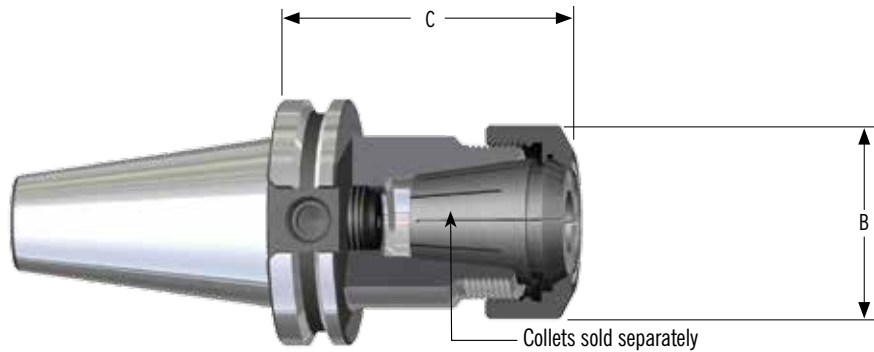
CAT 50 SIMULFIT® BALANCED UP TO 20,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	C50F-16ERC422	1.11	4.22	2.50
	C50F-16ERC622		6.22	
	C50F-16ERC822		8.22	
ER32	C50F-32ERC422	1.97	4.22	3.88
	C50F-32ERC622		6.22	
	C50F-32ERC822		8.22	
ER40	C50F-40ERC422	2.47	4.22	4.10

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



SIMULFIT® ER COLLET CHUCKS WITH FLUSH NUT



BT 30 SIMULFIT® BALANCED UP TO 25,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	B30F-16ERF236	1.11	2.36	1.83
ER20	B30F-20ERF236	1.34	2.36	2.48
ER32	B30F-32ERF236	1.97	2.36	3.88

BT 40 SIMULFIT® BALANCED UP TO 25,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	B40F-16ERF300	1.11	3.00	2.00
	B40F-16ERF500		5.00	3.50
ER32	B40F-32ERF400	1.97	4.00	3.88
	B40F-32ERF600		6.00	

CAT 40 SIMULFIT® BALANCED UP TO 25,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	C40F-16ERF250	1.11	2.50	2.43
	C40F-16ERF400		4.00	
	C40F-16ERF800		8.00	
ER20	C40F-20ERF600	1.34	6.00	3.88
ER25	C40F-25ERF600			3.50
ER32	C40F-32ERF300	1.97	3.00	3.88
	C40F-32ERF400		4.00	
	C40F-32ERF600		6.00	

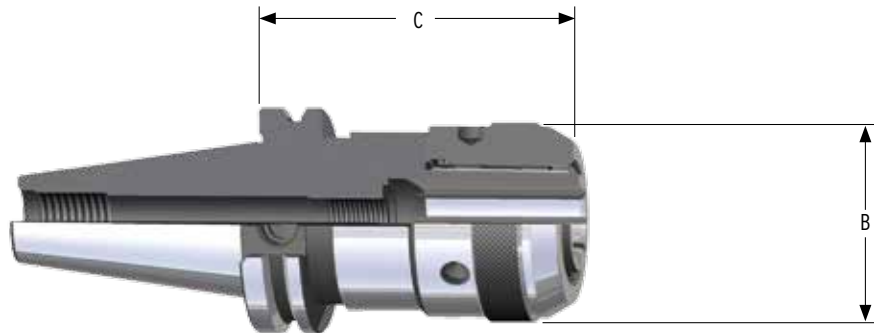
CAT 50 SIMULFIT® BALANCED UP TO 20,000 RPM

Size	Part Number with SimulFit®	B (Dia.)	C	Socket Depth
ER16	C50F-16ERF400	1.11	4.00	2.50
	C50F-16ERF600		6.00	
	C50F-16ERF800		8.00	
ER32	C50F-32ERF400	1.97	4.00	3.88
	C50F-32ERF600		6.00	
	C50F-32ERF800		8.00	
ER40	C50F-40ERF400	2.47	4.00	4.10

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



SIMULFIT® MILLING CHUCKS



CAT 40 SIMULFIT®

Size	Part Number with SimulFit®	Coolant Type*	B (Dia.)	C	Socket Depth	Optional Coolant B/U Screw
3/4"	C40F-75MC3	Through	2.19	3.71	2.24	9/16 - 18LH
1 1/4"	C40F-12MC4	Through	2.75	4.13	2.69	5/8 - 18LH

CAT 50 SIMULFIT®

Size	Part Number with SimulFit®	Coolant Type*	B (Dia.)	C	Socket Depth	Optional Coolant Back-Up Screw
3/4"	C50F-75MC3	Through	2.19	3.96	2.24	9/16 - 18LH
1 1/4"	C50F-12MC4	Through	2.75	4.13	2.69	15/16 - 16LH

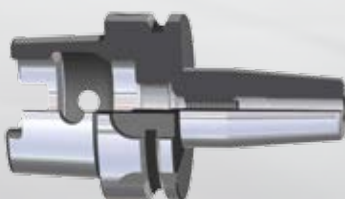
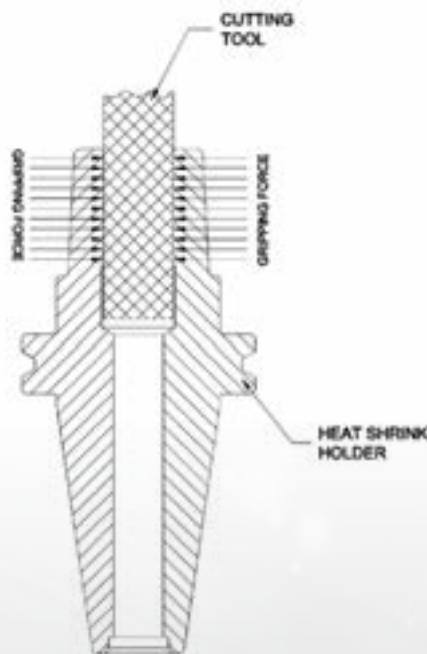
Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Reduction Bushings, see page 54 and Wrench (100CNW) separately.



HEAT SHRINK HOLDERS



Heat Shrink C50-50SF630-9 shown here.



For Maximum Gripping Power with Exceptional Concentricity

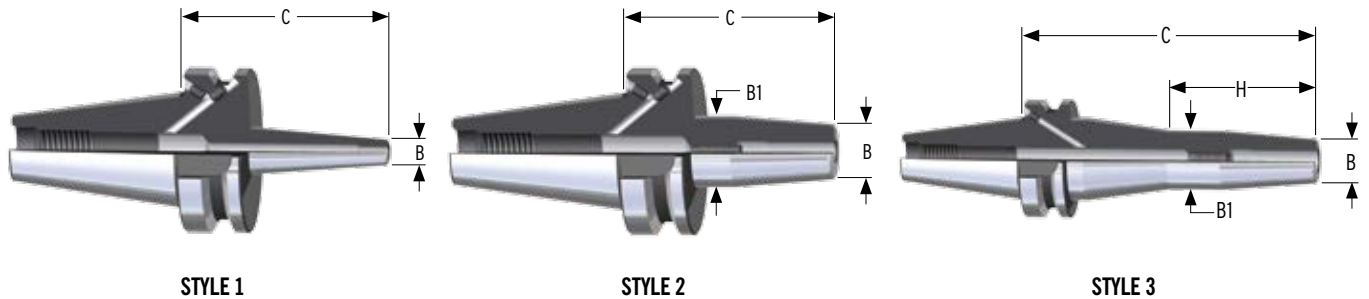
- The use of Heat Shrink Tooling allows for greater speeds and feeds, better finishes, increased tool life, and increased productivity due to its High Speed Machining capability and simplicity of use.
- Simple and fast to use. The total time elapsed to remove one cutting tool and insert another is less than 10 seconds.
- Constructed with double tempered Tool Steel for exceptional durability and cycle life. No mechanical clamping devices are used. With proper use, toolholder life should exceed that of standard End Mill holders.
- Chip load distributed evenly along cutting edge of tool which results in longer tool life. Tool is gripped 360°, along the entire length of the bore resulting in an evenly distributed clamping force and increased concentricity.
- Improved balance design with no moving pieces. Low centrifugal Forces due to low holder mass.
- Coolant through holders require no special backup screws or seals. The interference fit between the ID of the toolholder and cutting tool shank forms the seal, preventing the coolant from flowing anywhere else except through the cutting tool. Coolant grooves and coolant porting also available.

Technical Specifications

- Standard holders have 4.5° angle nose for compatibility with most heat shrink machines.
- Balanced to G 2.5 at up to 25,000 rpm, refer to charts for each taper size.
- Available from stock in BT, Cat and HSK Tapers. Also available from stock in short and extended lengths. Other lengths, medium and extra-long, available upon request.
- Standard with AD/B coolant entry. Coolant ports available as an option in sizes from 1/4" and up. Concentricity of $\leq .0001"$ with tool shrunk in holder.



HEAT SHRINK BT HOLDERS



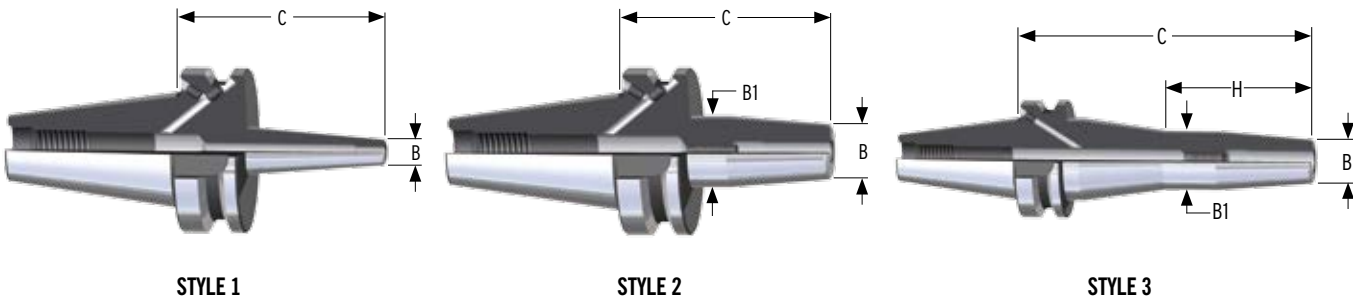
BT 40 BALANCED UP TO 25,000 RPM WITH AD/B COOLANT

Size	Part Number	Style	(B Dia.)	B1 (Dia.)	C	Socket Depth	H	Optional Stop Screw
3/16"	BT40-18SF354-9	1	0.39	0.72	3.54	-	-	-
1/4"	BT40-25SF354-9	2	0.83	1.06	3.54	1.33	-	BS-SFM058-16
	BT40-25SF630-9	3			6.30		3.15	
5/16"	BT40-31SF354-9	2	0.83	1.06	3.54	1.45	-	BS-SFM061-16
	BT40-31SF630-9	3			6.30		3.15	
3/8"	BT40-38SF354-9	2	0.94	1.26	3.54	1.65	-	BS-SFM081-16
	BT40-38SF630-9	3			6.30		3.15	
7/16"	BT40-43SF354-9	2	0.94	1.26	3.54	1.65	-	BS-SFM081-16
1/2"	BT40-50SF354-9	2	0.94	1.26	3.54	1.85	-	BS-SFM101-20
	BT40-50SF630-9	3			6.30		3.15	
5/8"	BT40-62SF354-9	2	1.06	1.34	3.54	1.97	-	BS-SFM121-20
	BT40-62SF630-9	2			6.30		-	
3/4"	BT40-75SF354-9	2	1.30	1.65	3.54	2.05	-	BS-SFM161-20
	BT40-75SF630-9	2			6.30		-	
7/8"	BT40-88SF354-9	2	1.30	1.65	3.54	2.04	-	BS-SFM161-20
	BT40-88SF630-9	2			6.30		-	
1"	BT40-10SF394-9	2	1.73	2.05	3.94	2.28	-	BS-SFM161-20
	BT40-10SF630-9	2			6.30		-	
1 1/4"	BT40-12SF394-9	2	1.73	2.05	3.94	2.44	-	BS-SFM161-20
	BT40-12SF630-9	2			6.30		-	

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



HEAT SHRINK CAT HOLDERS



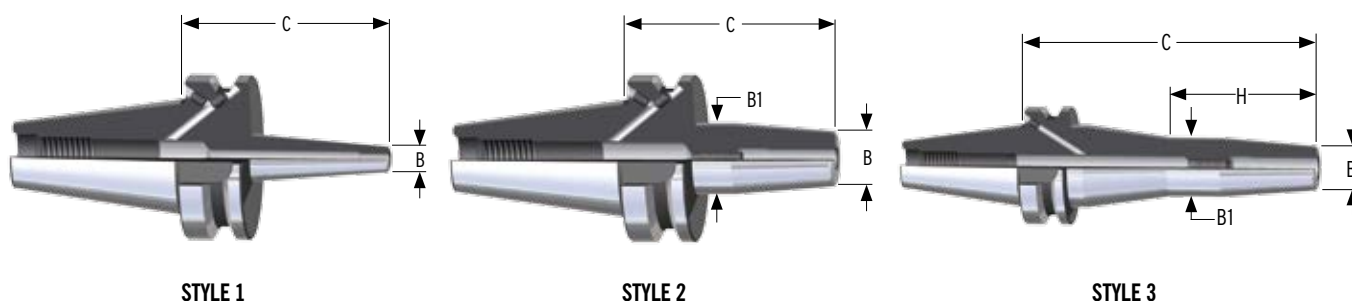
CAT 40 BALANCED UP TO 25,000 RPM WITH AD/B COOLANT

Size	Part Number	Style	(B Dia.)	B1 (Dia.)	C	Socket Depth	H	Optional Stop Screw
3/16"	C40-18SF315-9	1	0.39	0.72	3.15	-	-	-
1/4"	C40-25SF315-9	2	0.83	1.06	3.15	1.33	-	BS-SFM058-16
	C40-25SF630-9	3			6.30		3.15	
5/16"	C40-31SF315-9	2	0.83	1.06	3.15	1.45	-	BS-SFM061-16
	C40-31SF630-9	3			6.30		3.15	
3/8"	C40-38SF315-9	2	0.94	1.26	3.15	1.69	-	BS-SFM081-16
	C40-38SF630-9	3			6.30		3.15	
1/2"	C40-50SF315-9	2	0.94	1.26	3.15	1.85	-	BS-SFM101-20
	C40-50SF630-9	3			6.30		3.15	
5/8"	C40-62SF315-9	2	1.06	1.34	3.15	1.97	-	BS-SFM121-20
	C40-62SF630-9	3			6.30		3.15	
3/4"	C40-75SF315-9	2	1.30	1.65	3.15	2.05	-	BS-SFM161-20
	C40-75SF630-9	2			6.30		-	
1"	C40-10SF394-9	2	1.73	2.09	3.94	2.28	-	BS-SFM161-20
	C40-10SF630-9	2			6.30		-	
1 1/4"	C40-12SF394-9	2	1.73	2.09	3.94	2.44	-	BS-SFM161-20
	C40-12SF630-9	2			6.30		-	
6mm	C40-M06SF80-9	2	21	27	80	34	-	BS-SFM058-16
8mm	C40-M08SF80-9	2	21	27	80	37	-	BS-SFM061-16
10mm	C40-M10SF80-9	2	24	32	80	42	-	BS-SFM081-16
12mm	C40-M12SF80-9	2	24	32	80	47	-	BS-SFM101-20
16mm	C40-M16SF80-9	2	27	34	80	50	-	BS-SFM121-20
20mm	C40-M20SF80-9	2	33	42	80	52	-	BS-SFM161-20
25mm	C40-M25SF100-9	2	44	53	100	58	-	BS-SFM161-20
32mm	C40-M32SF100-9	2	44	53	100	62	-	BS-SFM161-20

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



HEAT SHRINK CAT HOLDERS



CAT 50 BALANCED UP TO 20,000 RPM WITH AD/B COOLANT

Size	Part Number	Style	B (Dia.)	B1 (Dia.)	C	Socket Depth	H	Optional Stop Screw
1/4"	C50-25SF315-9	2	0.83	1.06	3.15	1.33	-	BS-SFM058-16
	C50-25SF630-9	3			6.30		3.15	
5/16"	C50-31SF315-9	2	0.83	1.06	3.15	1.45	-	BS-SFM061-16
	C50-31SF630-9	3			6.3		3.15	
3/8"	C50-38SF315-9	2	0.94	1.26	3.15	1.69	-	BS-SFM081-16
	C50-38SF630-9	3			6.30		3.15	
1/2"	C50-50SF315-9	2	0.94	1.26	3.15	1.85	-	BS-SFM101-20
	C50-50SF630-9	3			6.30		3.15	
5/8"	C50-62SF315-9	2	1.06	1.34	3.15	1.97	-	BS-SFM121-20
	C50-62SF630-9	3			6.3		3.15	
3/4"	C50-75SF315-9	2	1.3	1.65	3.15	2.05	-	BS-SFM161-20
	C50-75SF630-9	3			6.30		3.15	
1"	C50-10SF394-9	2	1.73	2.09	3.94	2.28	-	BS-SFM161-20
	C50-10SF630-9	2			6.30		-	
1 1/4"	C50-12SF394-9	2	1.73	2.09	3.94	2.44	-	BS-SFM161-20
	C50-12SF630-9	2			6.30		-	
6mm	C50-M06SF80-9	2	21	27	80	34	-	BS-SFM058-16
	C50-M06SF160-9	3			160		80	
8mm	C50-M08SF80-9	2	21	27	80	37	-	BS-SFM061-16
	C50-M08SF160-9	3			160		80	
10mm	C50-M10SF80-9	2	24	32	80	42	-	BS-SFM081-16
	C50-M10SF160-9	2			160		80	
12mm	C50-M12SF80-9	2	24	32	80	47	-	BS-SFM101-20
	C50-M12SF160-9	2			160		-	
16mm	C50-M16SF80-9	2	27	34	80	50	-	BS-SFM121-20
	C50-M16SF160-9	3			160		80	
20mm	C50-M20SF80-9	2	33	42	80	52	-	BS-SFM161-20
	C50-M20SF160-9	3			160		80	
25mm	C50-M25SF100-9	2	44	53	100	58	-	BS-SFM161-20
	C50-M25SF160-9	2			160		-	
32mm	C50-M32SF100-9	2	44	53	100	62	-	BS-SFM161-20
	C50-M32SF160-9	2			160		-	

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



Heat Shrink HSK Holders

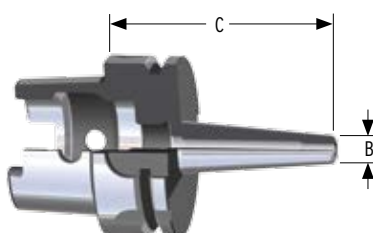
HSK 63 FORM A BALANCED UP TO 25,000 RPM

Size	Part Number	Style	(B Dia.)	B1	C	Socket Depth	H	Optional Stop Screw
1/8"	H63A-01SF315-9	1	0.39	0.62	3.15	-	-	-
3/16"	H63A-18SF315-9	1	0.39	-	3.15	-	-	-
1/4"	H63A-25SF315-9	2	0.83	1.06	3.15	1.33	-	BS-SFM058-16
	H63A-25SF630-9	2			6.30		-	
5/16"	H63A-31SF315-9	2	0.83	1.06	3.15	1.45	-	BS-SFM061-16
	H63A-31SF630-9	3			6.30		3.15	
3/8"	H63A-38SF335-9	2	0.94	1.26	3.35	1.69	-	BS-SFM081-16
	H63A-38SF630-9	3			6.30		3.15	
1/2"	H63A-50SF354-9	2	0.94	1.26	3.54	1.85	-	BS-SFM101-20
	H63A-50SF630-9	3			6.30		3.15	
5/8"	H63A-62SF374-9	2	1.06	1.34	3.74	1.97	-	BS-SFM121-20
	H63A-62SF630-9	3			6.3		3.15	
3/4"	H63A-75SF394-9	2	1.30	1.65	3.94	2.05	-	BS-SFM161-20
	H63A-75SF630-9	2			6.30		-	
1"	H63A-10SF453-9	2	1.73	2.09	4.53	2.28	-	BS-SFM161-20
	H63A-10SF630-9	2			6.30		-	
1 1/4"	H63A-12SF472-9	2	1.73	2.09	4.72	2.44	-	BS-SFM161-20
	H63A-12SF630-9	2			6.30		-	
4mm	H63A-M04SF80-9	1	10	-	80	-	-	-
6mm	H63A-M06SF80-9	2	21	27	80	34	-	BS-SFM058-16
	H63A-M06SF130-9	2			130		80	
	H63A-M06SF160-9	3			160		80	
8mm	H63A-M08SF80-9	2	21	27	80	37	-	BS-SFM061-16
	H63A-M08SF130-9	3			130		-	
	H63A-M08SF160-9	3			160		80	
10mm	H63A-M10SF85-9	2	24	32	85	42	-	BS-SFM081-16
	H63A-M10SF130-9	2			130		80	
	H63A-M10SF160-9	2			160		80	
12mm	H63A-M12SF90-9	2	24	32	90	47	-	BS-SFM101-20
	H63A-M12SF130-9	2			130		-	
	H63A-M12SF160-9	2			160		-	
16mm	H63A-M16SF95-9	2	27	34	95	50	-	BS-SFM121-20
	H63A-M16SF130-9	3			130		80	
	H63A-M16SF160-9	3			160		80	
20mm	H63A-M20SF100-9	2	33	42	100	52	-	BS-SFM161-20
	H63A-M20SF160-9	2			160		-	
25mm	H63A-M25SF115-9	2	44	53	115	58	-	BS-SFM161-20
	H63A-M25SF160-9	2			160		-	
32mm	H63A-M32SF120-9	2	44	53	120	62	-	BS-SFM161-20
	H63A-M32SF160-9	2			160		-	

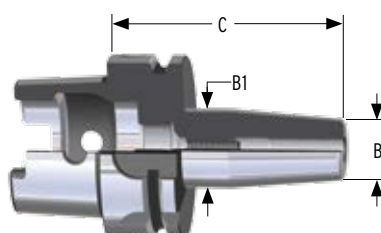
Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



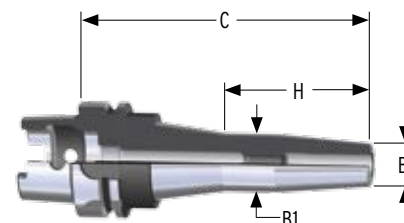
HEAT SHRINK HSK HOLDERS



STYLE 1



STYLE 2



STYLE 3

HSK 100 FORM A BALANCED UP TO 20,000 RPM

Size	Part Number	Style	(B Dia.)	B1	C	Socket Depth	H	Optional Stop Screw
1/4"	H100A-25SF335-9	2	0.83	1.06	3.35	1.33	-	BS-SFM058-16
	H100A-25SF630-9	3			6.30		3.15	
5/16"	H100A-31SF335-9	2	0.83	1.06	3.35	1.45	-	BS-SFM061-16
	H100A-31SF630-9	3			6.30		3.15	
3/8"	H100A-38SF354-9	2	0.94	1.26	3.54	1.69	-	BS-SFM081-16
	H100A-38SF630-9	3			6.30		3.15	
1/2"	H100A-50SF374-9	2	0.94	1.26	3.74	1.85	-	BS-SFM101-20
	H100A-50SF630-9	3			6.30		3.15	
5/8"	H100A-62SF394-9	2	1.06	1.34	3.94	1.97	-	BS-SFM121-20
	H100A-62SF630-9	3			6.30		3.15	
3/4"	H100A-75SF413-9	2	1.30	1.65	4.13	2.05	-	BS-SFM161-20
	H100A-75SF630-9	3			6.30		3.15	
1"	H100A-10SF453-9	2	1.73	2.09	4.53	2.28	-	BS-SFM161-20
	H100A-10SF630-9	3			6.30		3.15	
1 1/4"	H100A-12SF472-9	2	1.73	2.09	4.72	2.44	-	BS-SFM161-20
	H100A-12SF630-9	3			6.30		3.15	

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 127-129.

STOP SCREWS

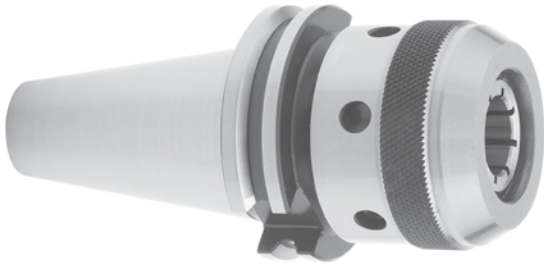
Part Number	Thread	Hex	Length
BS-SFM058-16	M5X.8	2.5 mm	.630 (16 mm)
BS-SFM061-16	M6X1	3 mm	.630 (16 mm)
BS-SFM081-16	M8X1	4 mm	.630 (16 mm)
BS-SFM101-20	M10X1	5 mm	.787 (20 mm)
BS-SFM121-20	M12X1	6 mm	.787 (20 mm)
BS-SFM161-20	M16X1	8 mm	.787 (20 mm)

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.





Power Milling Chucks



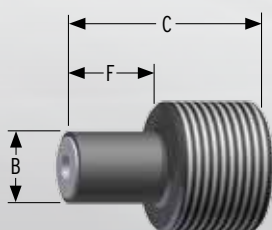
Power Milling Chuck
C40-75MC shown here.

For precision in moderate and lower speed milling and nominal drilling applications.

- Constructed of alloy steel for long, durable service life.
- Hardened to Rc: 56-60 for long service life.
- Shiny taper with black oxide finish for the best combination of accuracy and durability.
- End mill socket T.I.R. $\leq .0002''$.
- Through-spindle coolant capability.
- ParSymmetry™ design for high-speed operation.
- Flange-entry coolant is available on request.
See Manufacturing Specifications section in the back of the catalog for details.



COOLANT BACK-UP SCREWS:



Size quote available
upon request.

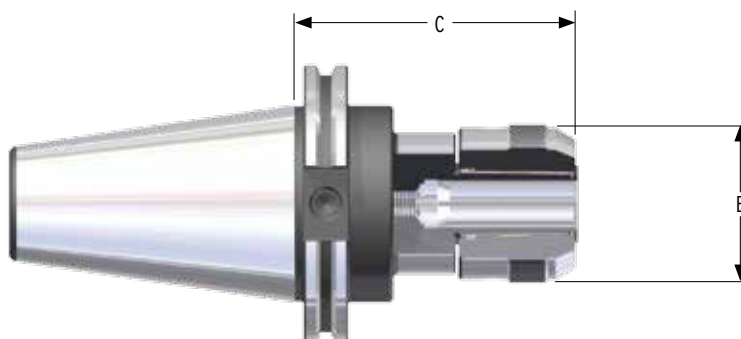
STANDARD

Part Number	L. H. Thread Size	Hole	B	C	Hex	F
CBS12MC-515	15/16" - 16"	.187	.515	1.38	3/16"	.68
CBS12-4MC-515	5/8" - 18"	.187	.515	1.38	3/16"	.68
CBS75MC-470	9/16" - 18"	.187	.470	1.00	5/32"	.50

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



Power Milling Chucks



BT 40 TAPER

Size	Part Number	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	B/U Screw Thread
3/4	B40-75MC3	-	2.19	3.64	2.24	9/16 - 18LH
1 1/4	B40-12MC4	-	2.75	4.44	2.69	15/16 - 16LH

CAT 40 TAPER

Size	Part Number	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	B/U Screw Thread
3/4	C40-75MC2	-	2.19	2.48	2.24	9/16 - 18LH
	C40-75MC3	C40F-75MC3		3.71		
1 1/4	C40-12MC4	C40F-12MC4	2.75	4.13	2.69	5/8 - 18LH

CAT 50 TAPER

Size	Part Number	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	B/U Screw Thread
3/4	C50-75MC3	C50F-75MC3	2.19	3.96	2.24	9/16 - 18LH
1 1/4	C50-12MC4	C50F-12MC4	2.75	4.13	2.69	15/16 - 16LH
	C50-12MC6	-		6.00		
	C50-12MC8	-		8.00		

HSK 63 FORM A TAPER

Size	Part Number	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	B/U Screw Thread
3/4	H63-75MC350	-	2.19	3.50	2.24	-
1 1/4	H63-12MC4	-	2.75	4.00	2.69	-

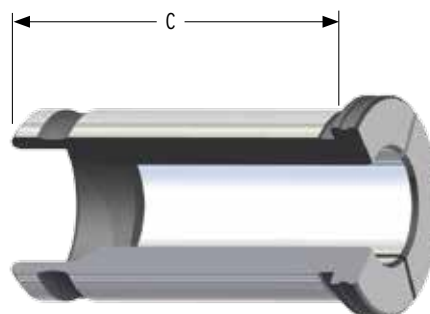
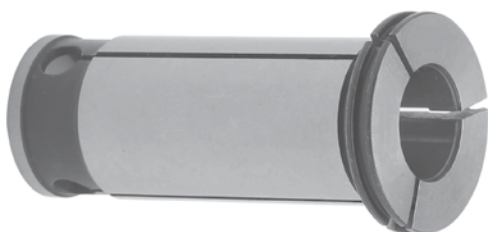
HSK 100 FORM A TAPER

Size	Part Number	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	B/U Screw Thread
1 1/4	H100-12MC425	-	2.75	4.25	2.69	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Reduction Bushings, see page 54 and Wrench (100CNW) separately.



BUSHINGS AND BACK-UP SCREWS



12MC BUSHINGS (INCH)

Part Number	I.D.	O.D.	C
12MCRB-188	.1875	1.25	2.75
12MCRB-250	.2500	1.25	2.75
12MCRB-313	.3125	1.25	2.75
12MCRB-375	.3750	1.25	2.75
12MCRB-500	.5000	1.25	2.75
12MCRB-563	.5625	1.25	2.75
12MCRB-625	.6250	1.25	2.75
12MCRB-750	.7500	1.25	2.75
12MCRB-875	.8750	1.25	2.75
12MCRB-100	1.0000	1.25	2.75

12MC BUSHINGS (METRIC)

Part Number	I.D.	O.D.	C
12MCRB-08MM	8	1.25	2.75
12MCRB-10MM	10	1.25	2.75
12MCRB-12MM	12	1.25	2.75
12MCRB-14MM	14	1.25	2.75
12MCRB-16MM	16	1.25	2.75
12MCRB-20MM	20	1.25	2.75
12MCRB-25MM	25	1.25	2.75

75MC BUSHINGS (INCH)

Part Number	I.D.	O.D.	C
75MCRB-188	.1875	.75	2.00
75MCRB-250	.2500	.75	2.00
75MCRB-313	.3125	.75	2.00
75MCRB-375	.3750	.75	2.00
75MCRB-437	.4375	.75	2.00
75MCRB-500	.5000	.75	2.00
75MCRB-563	.5625	.75	2.00
75MCRB-625	.6250	.75	2.00

75MC BUSHINGS (METRIC)

Part Number	I.D.	O.D.	C
75MCRB-06MM	6	.75	2.00
75MCRB-08MM	8	.75	2.00
75MCRB-10MM	10	.75	2.00
75MCRB-12MM	12	.75	2.00
75MCRB-14MM	14	.75	2.00
75MCRB-16MM	16	.75	2.00



COLLET CHUCK PERFORMANCE CHOICES

> Performance Selection

Production ER System



Performance Chuck with Standard Flush Nut,
Balanced to G2.5

PART NUMBER: C40-16ERF300, pages 69-73
AD/B PART NUMBER: C40BC-16ERF300

Standard Grade Collet

PART NUMBER: ER16-0250, pages 75-77

High Performance ER System



Performance Chuck with Power Nut,
Balanced to G2.5

PART NUMBER: C40-16ERP312, pages 59-63
AD/B PART NUMBER: C40BC-16ERP312

Standard Grade Collet

PART NUMBER: ER16-0250, pages 75-77

High Performance Plus ER System



Performance Chuck with Power Nut,
Balanced to G2.5

PART NUMBER: C40-16ERP312, pages 59-63
AD/B PART NUMBER: C40BC-16ERP312

Grade AA, 5 Micron Collet

PART NUMBER: 5UMER16-0250, pages 79-81

> Performance Selection with Coolant Delivery Options

Production ER System



Performance Chuck with Standard Flush Nut,
Balanced to G2.5

PART NUMBER: C40-16ERF300, pages 69-73
AD/B PART NUMBER: C40BC-16ERF300

Standard Grade Collet

PART NUMBER: ERS16-0250, pages 75-77

Performance ER System



Performance Chuck with Coolant Seal Nut,
Balanced to G2.5

PART NUMBER: C40-16ERC322, pages 64-68
AD/B PART NUMBER: C40BC-16ERC322

Standard Grade Collet and Nut Seal

PART NUMBER: ER16-0250, pages 75-77
PART NUMBER: CS16-0255, page 84

Performance Plus ER System



Performance Chuck with Coolant Seal Nut,
Balanced to G2.5

PART NUMBER: C40-16ERC322, pages 64-68
AD/B PART NUMBER: C40BC-16ERC322

**Grade AA, 5 Micron Collet and
Collet Nut Seal**

PART NUMBER: 5UMER16-0250, pages 79-81
PART NUMBER: CS16-0255, page 84



Concentricity = Tool Life

Improve your systems performance and tool life by combining high performance collet chucks and high performance collets. Upgrade today for higher performance and operational cost savings!



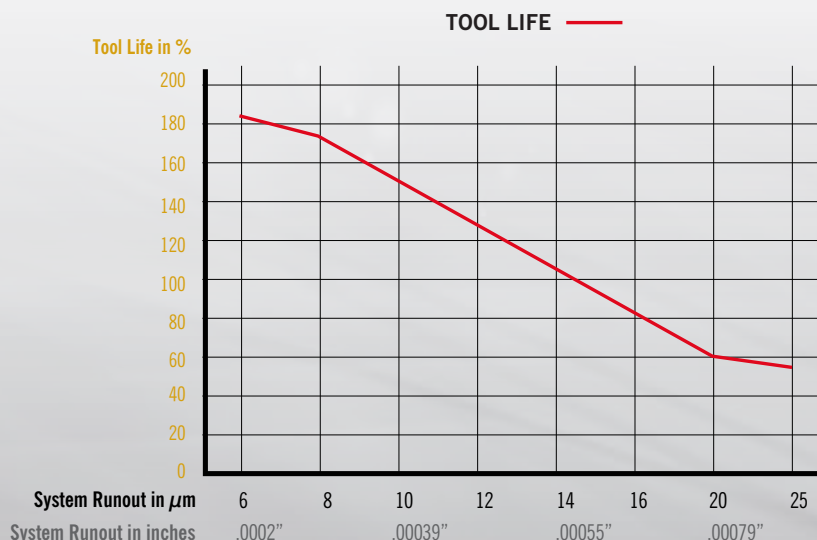
Technical Features

- Gage tolerance of a Class AA 5 micron collet is .0002" (.005mm) runout at distance to the ISO 15488, measured as TIR
- Measured in gage with AT2 taper and maximum 1 micron runout of taper

Collet Diameter	Length at measurement	Class 1	Class 2	Parlec Class AA (5 Micron)
.039 - .063 (1-1.6)	.098 (2.5)	.0006 (.015)	.0004 (.010)	.0002 (.005)
.063 - .118 (1.6 - 3)	.393 (10)			
.118 - .280 (3 - 7)	.630 (20)			
.280 - .394 (7-10)	.984 (25)			
.394 - .708 (10-18)	1.57 (40)	.0008 (.020)	.0006 (.015)	
.708 - 1.08 (18-26)	1.97 (50)			
1.08 - 1.18 (26-30)	2.36 (60)	.0010 (.025)	.0008 (.020)	

*Reference ISO 15488

Tool Life Prediction of Carbide Tools



Total Cost of Poor Runout TOOLING COST

Utilizing Standard Production System

	Per Cutting Tool	TOTAL
Pieces	250	3000
Cost of Drill	\$100	\$1200
Standard Collet Cost	\$32	\$32
Total Cost		\$1232

Utilizing Grade AA Performance System

	Per Cutting Tool	TOTAL
Pieces	681	3000
Cost of Drill	\$100	\$500
Grade AA Collet Cost	\$60	\$60
Total Cost		\$560



> Effects of Runout on the Cutting Edges

Flute 1

High runout flute takes a heavier than planned cut requiring slowing of planned feed.



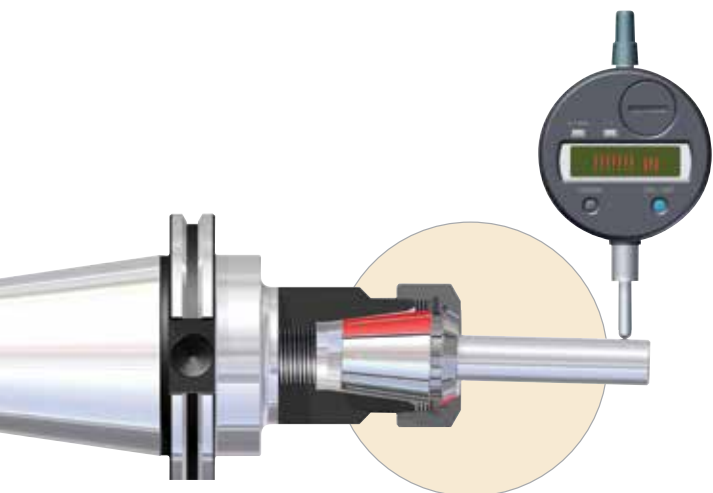
Flute 2

Middle runout flute performs as planned.



Flute 3

Low runout flute does not take enough chip to dissipate heat and wears prematurely.



> Technical Features

Standard DIN style nuts can restrict the uniform contact of the top angle of the collet creating uneven clamping. This will create runout in addition to the normal result of the collet seat and collet. Nuts with friction races are designed to increase grip force and decrease angular deflection. Use Collet Chucks with the Parlec Power Nut for best results.

> Other AA Collet Design Features and Benefits

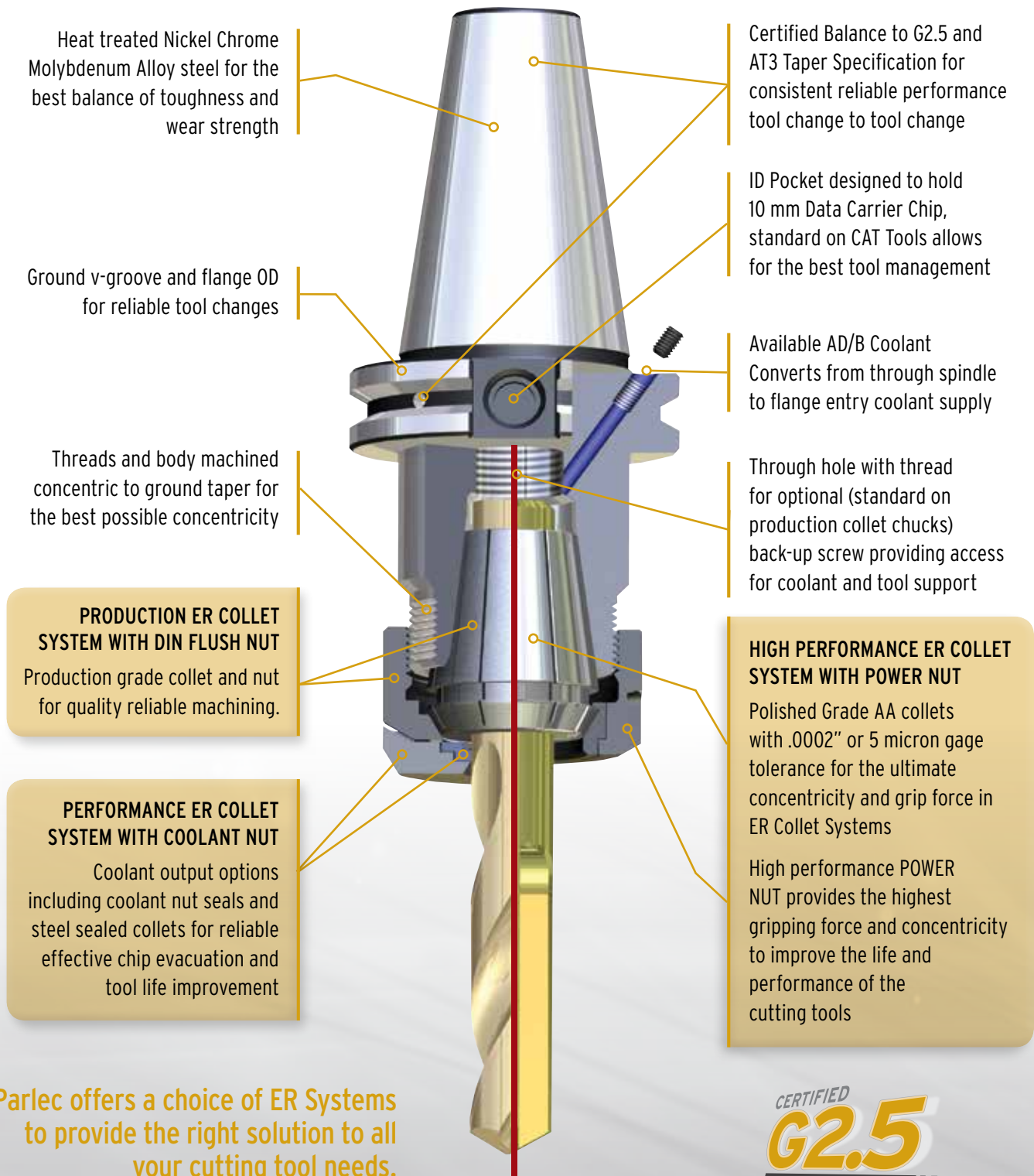
- 12 slots instead of 16 allows for more than enough collapse and increase in the area of contact with less tendency to distort.
- All edges are deburred and rounded to promote good interface with the taper of the chuck without the tendency to damage it. This results in more consistent repeatability of the system.
- Collets are polished to eliminate minor blemishes that tend to promote corrosion. Better corrosion resistance will result in longer product life of both the collet and the holder.
- Highly polished OD surfaces reduce the amount of force absorbed by friction between the collet and the collet chuck seat, increasing the grip force on the cutting tool. The inside bore of the collet is intentionally left unpolished to increase the friction between the collet and the cutting tool shank.

< The result of an improved AA collet in a quality chuck is increased gripping force, improved rigidity, decreased runout and an overall satisfaction in your collet chuck system.





PARLEC ER SYSTEM FEATURES



CERTIFIED
G2.5
HIGH SPEED PERFORMANCE



HIGH PERFORMANCE ER COLLET SYSTEM WITH POWER NUT



High Performance
ER Collet Chuck with Power Nut

- Constructed of alloy steel for long, durable service life.
- Hardened to Rc: 52-56 to avoid damaging collet chuck threads.
- Collet seat taper T.I.R. $\leq .0002''$.
- Accepts DIN 6499 collets.

Collet Chuck Taper	Balance Up To
BT 30	25,000 RPM
BT 40	25,000 RPM
CAT 40	25,000 RPM
CAT 50	20,000 RPM
HSK 63A	25,000 RPM
HSK 100A	20,000 RPM

> Collet Choices



ER Standard
Collet



ER Tap
Collet



ER AA Grade
5 Micron Collet



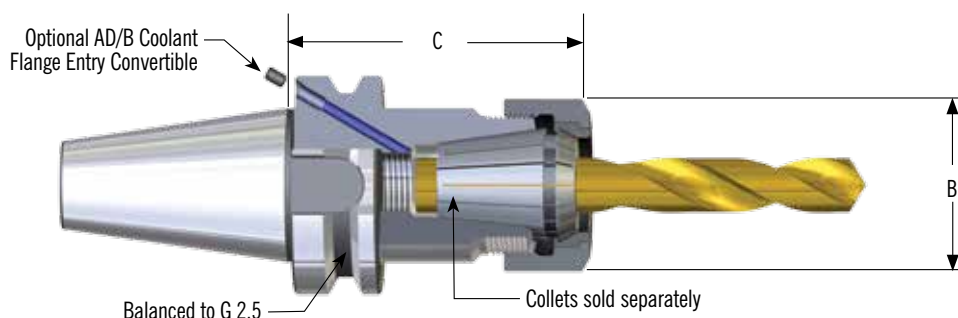
ERS Steel
Sealed Collet

COLLET RANGE SPECIFICATIONS

Collet Size	Range Inch	Range Metric	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	.020" to .393"	.5 mm to 10 mm	16ERHPN	42 ft. lbs.	BS-20
ER20	.039" to .511"	1 mm to 13 mm	20ERHPN	60 ft. lbs.	BS-09
ER25	.039" to .630"	1 mm to 16 mm	25ERPN	86 ft. lbs.	BS-11
ER32	.078" to .787"	2 mm to 20 mm	32ERPN	100 ft. lbs.	BS-18
ER40	.118" to 1.181"	3 mm to 30 mm	40ERPN	146 ft. lbs.	BS-10



HIGH PERFORMANCE ER COLLET CHUCKS WITH POWER NUT



BT 30 BALANCED UP TO 25,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	B30-16ERP248	-	B30F-16ERP248	1.10	2.48	1.83	16ERHPN	42 ft. lbs.	BS-20
ER20	B30-20ERP248	-	B30F-20ERP248	1.34	2.48	2.48	20ERHPN	60 ft. lbs.	BS-09
ER32	B30-32ERP248	-	B30F-32ERP248	1.97	2.48	3.88	32ERP	100 ft. lbs.	BS-18

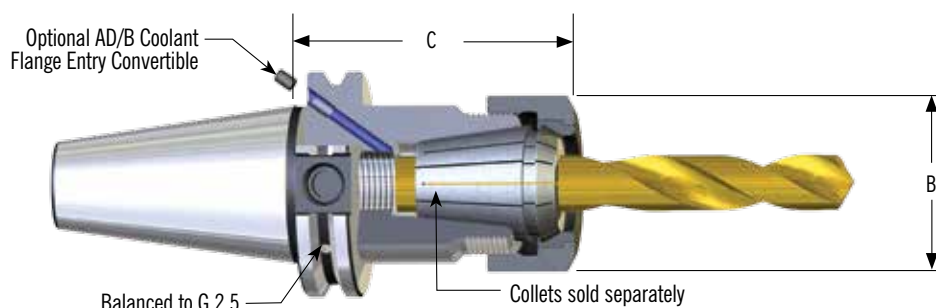
BT 40 BALANCED UP TO 25,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	B40-16ERP262	-	-	1.10	2.62	1.50	16ERHPN	42 ft. lbs.	BS-20
	B40-16ERP312	B40BC-16ERP312	B40F-16ERP312		3.12	2.00			
	B40-16ERP412	B40BC-16ERP412	-		4.00	3.50			
	B40-16ERP512	B40BC-16ERP512	B40F-16ERP512		5.00	2.00			
ER20	B40-20ERP412	-	-	1.34	4.12	1.50	20ERHPN	60 ft. lbs.	BS-09
	B40-20ERP612	-	-		6.12	2.00			
ER25	B40-25ERP412	-	-	1.64	4.12	1.50	25ERP	86 ft. lbs.	BS-11
	B40-25ERP612	-	-		6.12	2.00			
ER32	B40-32ERP412	B40BC-32ERP412	B40F-32ERP412	1.97	4.12	3.88	32ERP	100 ft. lbs.	BS-18
	B40-32ERP612	-	B40F-32ERP612		6.12				
ER40	B40-40ERP412	B40BC-40ERP412	-	2.47	4.12	4.10	40ERP	146 ft. lbs.	BS-10
	B40-40ERP612	-	-		6.12				

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



HIGH PERFORMANCE ER COLLET CHUCKS WITH POWER NUT



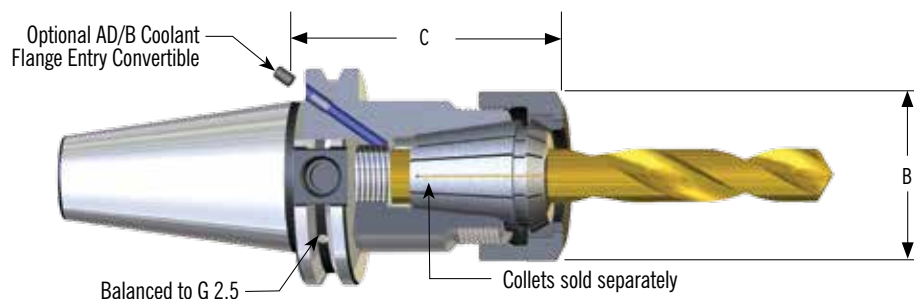
CAT 40 BALANCED UP TO 25,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	C40-16ERP262	C40BC-16ERP262	C40F-16ERP262	1.10	2.62	2.43	16ERHPN	42 ft. lbs.	BS-20
	C40-16ERP312	-	-		3.12				
	C40-16ERP412	C40BC-16ERP412	C40F-16ERP412		4.12				
	C40-16ERP512	C40BC-16ERP512	-		5.12				
	C40-16ERP812	-	C40F-16ERP812	1.10	8.12				
ER20	C40-20ERP312	C40BC-20ERP312	-	1.34	3.12	2.43	20ERHPN	60 ft. lbs.	BS-09
	C40-20ERP412	C40BC-20ERP412	-		4.12	3.88			
	C40-20ERP612	C40BC-20ERP612	C40F-20ERP612		6.12				
	C40-20ERP812	-	-		8.12				
ER25	C40-25ERP262	C40BC-25ERP262	-	1.64	2.62	2.50	25ERP	86 ft. lbs.	BS-11
	C40-25ERP412	C40BC-25ERP412	-		4.12	3.50			
	C40-25ERP612	C40BC-25ERP612	C40F-20ERP612		6.12				
ER32	C40-32ERP248	-	-	1.97	2.48	3.88	32ERP	100 ft. lbs.	BS-18
	C40-32ERP312	C40BC-32ERP312	C40F-32ERP312		3.12				
	C40-32ERP412	C40BC-32ERP412	C40F-32ERP412		4.12				
	C40-32ERP612	C40BC-32ERP612	C40F-32ERP612		5.12				
	C40-32ERP812	-	-		8.12				
ER40	C40-40ERP412	C40BC-40ERP412	-	2.47	4.12	4.1	40ERP	146 ft. lbs.	BS-10
	C40-40ERP612	-	-		6.12				

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



HIGH PERFORMANCE ER COLLET CHUCKS WITH POWER NUT



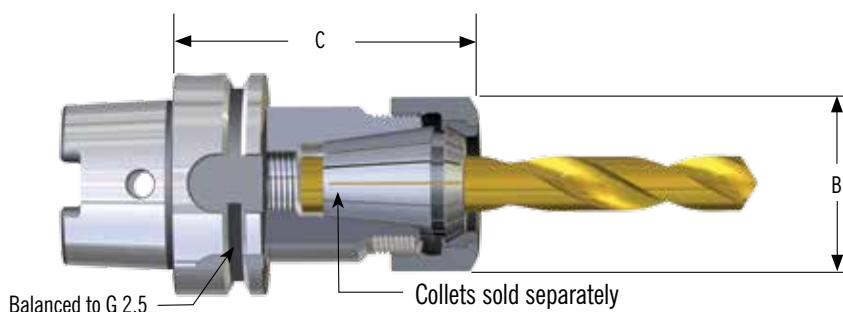
CAT 50 BALANCED UP TO 20,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	C50-16ERP412	C50BC-16ERP412	C50F-16ERP412	1.10	4.12	2.50	16ERHPN	42 ft. lbs.	BS-20
	C50-16ERP612	C50BC-16ERP612	C50F-16ERP612		6.12				
	C50-16ERP812	-	C50F-16ERP812		8.12				
	C50-16ERP1012	-	-		10.12				
ER20	C50-20ERP412	C50BC-20ERP412	-	1.34	4.12	3.88	20ERHPN	60 ft. lbs.	BS-09
	C50-20ERP612	C50BC-20ERP612	-		6.12				
	C50-20ERP812	-	-		8.12				
ER25	C50-25ERP412	C50BC-25ERP412	-	1.64	4.12	4.00	25ERP	86 ft. lbs.	BS-11
	C50-25ERP612	C50BC-25ERP612	-		6.12				
	C50-25ERP812	-	-		8.12				
	C50-25ERP1012	-	-		10.12				
ER32	C50-32ERP412	C50BC-32ERP412	C50F-32ERP412	1.97	4.12	3.88	32ERP	100 ft. lbs.	BS-18
	C50-32ERP612	C50BC-32ERP612	C50F-32ERP612		6.12				
	C50-32ERP812	-	C50F-32ERP812		8.12				
	C50-32ERP1012	-	-		10.12				
ER40	C50-40ERP412	C50BC-40ERP412	C50F-40ERP412	2.47	4.12	4.10	40ERP	146 ft. lbs.	BS-10
	C50-40ERP612	C50BC-40ERP612	-		6.12				
	C50-40ERP812	-	-		8.12				
	C50-40ERP1012	-	-		10.12				

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



HIGH PERFORMANCE ER COLLET CHUCKS WITH POWER NUT



HSK 63 FORM A BALANCED UP TO 25,000 RPM

Size	Part Number	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	H63-16ERP406	1.10	4.06	2.10	16ERHPN	42 ft. lbs.	BS-20
	H63-16ERP642		6.42	3.00			
ER20	H63-20ERP406	1.34	4.06	1.88	20ERHPN	60 ft. lbs.	BS-09
ER25	H63-25ERP327	1.64	3.27	2.30	25ERP	86 ft. lbs.	BS-11
ER32	H63-32ERP327	1.97	3.27	1.80	32ERP	100 ft. lbs. 100 ft. lbs.	BS-18 BS-18
	H63-32ERP406		4.06	2.50			
	H63-32ERP484		4.84				
ER40	H63-40ERP406	2.47	4.06	2.50	40ERP	146 ft. lbs.	BS-10

HSK 100 FORM A BALANCED UP TO 20,000 RPM

Size	Part Number	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	H100-16ERP406	1.10	4.06	2.10	16ERHPN	42 ft. lbs.	BS-20
	H100-16ERP642		6.42	3.00			
ER20	H100-20ERP406	1.34	4.06	2.08	20ERHPN	60 ft. lbs.	BS-09
	H100-20ERP642		6.42	3.38			
ER25	H100-25ERP406	1.64	4.06	2.30	25ERP	86 ft. lbs.	BS-11
ER32	H100-32ERP406	1.97	4.06	2.30	32ERP	100 ft. lbs.	BS-18
	H100-32ERP642		6.42	3.00			
ER40	H100-40ERP406	2.47	4.06	2.30	40ERP	146 ft. lbs.	BS-10
	H100-40ERP484		4.84	3.00			

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Collets and Collet Nut Wrenches separately, see pages 74-86.



PERFORMANCE ER COLLET SYSTEM WITH COOLANT NUT



Performance ER Collet
System with Coolant Nut

CERTIFIED
G2.5
HIGH SPEED PERFORMANCE

- Constructed of alloy steel for long, durable service life.
- Hardened to Rc: 52-56 to avoid damaging collet chuck threads.
- Collet seat taper T.I.R. $\leq .0002''$.
- Accepts DIN 6499 collets.

Collet Chuck Taper	Balance Up To
BT 30	25,000 RPM
BT 40	25,000 RPM
CAT 40	25,000 RPM
CAT 50	20,000 RPM
HSK 63A	25,000 RPM
HSK 100A	20,000 RPM

> Collet Choices

Coolant Nut Seals see page 82



ER Standard
Collet



ER Tap
Collet



ER AA Grade
5 Micron Collet



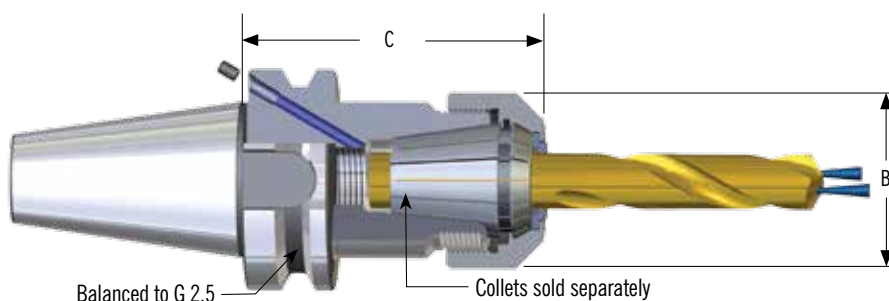
ERS Steel
Sealed Collet

COLLET RANGE SPECIFICATIONS

Part Number	Range Inch	Range Metric	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER11	.020" to .275"	.5 mm to 7 mm	11ERHN	22 ft. lbs.	029-909
ER16	.020" to .393"	1 mm to 10 mm	16ERHCN	52 ft. lbs.	BS-20
ER20	.039" to .511"	1 mm to 13 mm	20ERHN	74 ft. lbs.	BS-09
ER25	.039" to .630"	1 mm to 16 mm	25ERN	95 ft. lbs.	BS-11
ER32	.078" to .787"	2 mm to 20 mm	32ERN	125 ft. lbs.	BS-18
ER40	.118" to 1.181"	3 mm to 30 mm	40ERN	162 ft. lbs.	BS-10



PERFORMANCE ER COLLET CHUCKS WITH COOLANT NUT



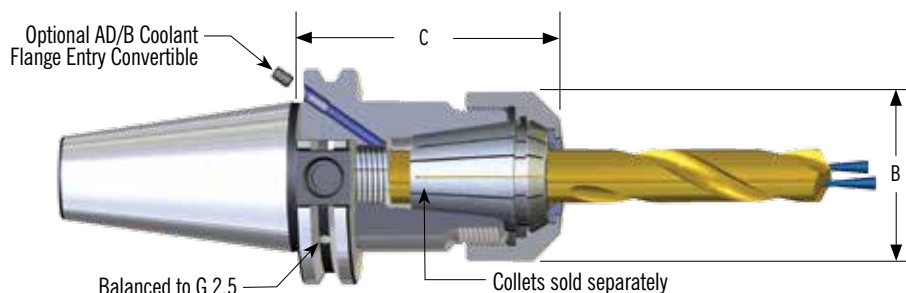
BT 40 BALANCED UP TO 25,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	C	B (Dia.)	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	B40-16ERC272	-	-	2.72	1.10	1.50	16ERHCN	52 ft. lbs.	BS-20
	B40-16ERC322	B40BC-16ERC322	B40F-16ERC322	3.22		2.00			
	B40-16ERC422	B40BC-16ERC422	-	4.22		3.50			
	B40-16ERC522	B40BC-16ERC522	B40F-16ERC522	5.22		2.00			
ER20	B40-20ERC422	-	-	4.22	1.34	1.50	20ERHCN	74 ft. lbs.	BS-09
	B40-20ERC622	-	-	6.22		2.00			
ER25	B40-25ERC422	-	-	4.22	1.64	1.50	25ERCN	95 ft. lbs.	BS-11
	B40-25ERC622	-	-	6.22		2.00			
ER32	B40-32ERC422	B40BC-32ERC422	B40F-32ERC422	4.22	1.97	3.88	32ERCN	125 ft. lbs.	BS-18
	B40-32ERC622	-	B40F-32ERC622	6.22					
ER40	B40-40ERC422	B40BC-40ERC422	-	4.22	2.47	4.10	40ERCN	162 ft. lbs.	BS-10
	B40-40ERC622	-	-	6.22					

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



PERFORMANCE ER COLLET CHUCKS WITH COOLANT NUT



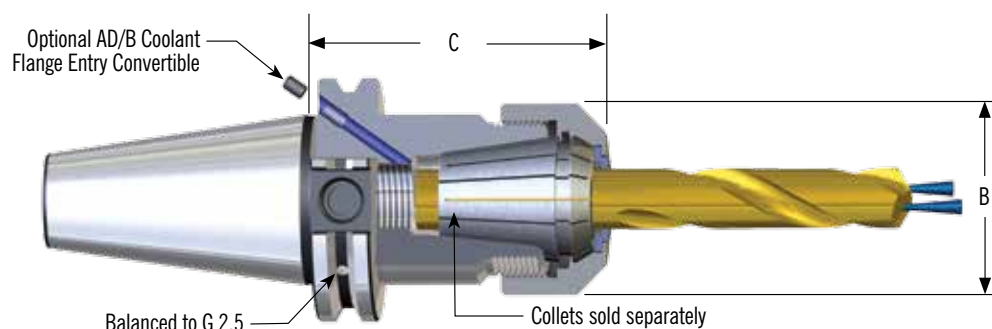
CAT 40 BALANCED UP TO 25,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	C	B (Dia.)	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	C40-16ERC272	C40BC-16ERC272	C40F-16ERC272	2.72	1.10	2.43	16ERHCN	52 ft. lbs.	BS-20
	C40-16ERC322	C40BC-16ERC322	-	3.22					
	C40-16ERC422	C40BC-16ERC422	C40F-16ERC422	4.22					
	C40-16ERC522	C40BC-16ERC522	C40F-16ERC522	5.22					
	C40-16ERC822	-	C40F-16ERC822	6.22					
ER20	C40-20ERC322	C40BC-20ERC322	-	3.22	1.34	2.43	20ERHCN	74 ft. lbs.	BS-09
	C40-20ERC422	C40BC-20ERC422	-	4.22		3.88			
	C40-20ERC622	C40BC-20ERC622	C40F-20ERC622	6.22					
	C40-20ERC822	-	-	8.22					
ER25	C40-25ERC272	C40BC-25ERC272	-	2.72	1.64	2.50	25ERCN	95 ft. lbs.	BS-11
	C40-25ERC422	C40BC-25ERC422	-	4.22		3.50			
	C40-25ERC622	C40BC-25ERC622	C40F-25ERC622	6.22					
ER32	C40-32ERC258	-	-	2.58	1.97	3.88	32ERCN	125 ft. lbs.	BS-18
	C40-32ERC322	C40BC-32ERC322	C40F-32ERC322	3.22					
	C40-32ERC422	C40BC-32ERC422	C40F-32ERC422	4.22					
	C40-32ERC622	C40BC-32ERC622	C40F-32ERC622	6.22					
	C40-32ERC822	-	-	8.22					
ER40	C40-40ERC422	C40BC-40ERC422	-	4.22	2.47	4.10	40ERCN	162 ft. lbs.	BS-10
	C40-40ERC622	-	-	6.22					

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



PERFORMANCE ER COLLET CHUCKS WITH COOLANT NUT



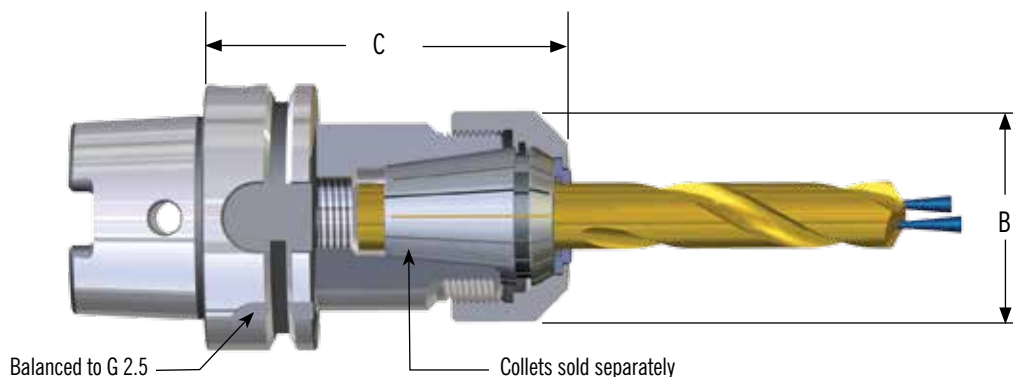
CAT 50 BALANCED UP TO 20,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	C	B (Dia.)	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	C50-16ERC422	C50BC-16ERC422	C50F-16ERC422	4.22	1.10	2.50	16ERHCN	52 ft. lbs.	BS-20
	C50-16ERC622	C50BC-16ERC622	C50F-16ERC622	6.22					
	C50-16ERC822	-	C50F-16ERC822	8.22					
	C50-16ERC1022	-	-	10.22					
ER20	C50-20ERC422	C50BC-20ERC422	-	4.22	1.34	3.88	20ERHCN	74 ft. lbs.	BS-09
	C50-20ERC622	C50BC-20ERC622	-	6.22					
	C50-20ERC822	-	-	8.22					
ER25	C50-25ERC422	C50BC-25ERC422	-	4.22	1.64	4.00	25ERCN	95 ft. lbs.	BS-11
	C50-25ERC622	C50BC-25ERC622	-	6.22					
	C50-25ERC822	-	-	8.22					
	C50-25ERC1022	-	-	10.22					
ER32	C50-32ERC422	C50BC-32ERC422	C50F-32ERC422	4.22	1.97	3.88	32ERCN	125 ft. lbs.	BS-18
	C50-32ERC622	C50BC-32ERC622	C50F-32ERC622	6.22					
	C50-32ERC822	-	C50F-32ERC822	8.22					
	C50-32ERC1022	-	-	10.22					
ER40	C50-40ERC422	C50BC-40ERC422	C50F-40ERC422	4.22	2.47	4.10	40ERCN	162 ft. lbs.	BS-10
	C50-40ERC622	C50BC-40ERC622	-	6.22					
	C50-40ERC822	-	-	8.22					
	C50-40ERC1022	-	-	10.22					

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



PERFORMANCE ER COLLET CHUCKS WITH COOLANT NUT



HSK 63 FORM A BALANCED UP TO 25,000 RPM

Size	Part Number	C	B (Dia.)	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	H63-16ERC416	4.16	1.10	2.10	16ERHCN	52 ft. lbs.	BS-20
	H63-16ERC652	6.52		3.00			
ER20	H63-20ERC416	4.16	1.34	1.88	20ERHCN	74 ft. lbs.	BS-09
ER25	H63-25ERC337	3.37	1.64	2.30	25ERCN	95 ft. lbs.	BS-11
ER32	H63-32ERC337	3.37	1.97	1.80	32ERCN	125 ft. lbs.	BS-18
	H63-32ERC416	4.16		2.50			
	H63-32ERC494	4.94					
ER40	H63-40ERC416	4.16	2.47	2.50	40ERCN	162 ft. lbs.	BS-10

HSK 100 FORM A BALANCED UP TO 20,000 RPM

Size	Part Number	C	B (Dia.)	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	H100-16ERC416	4.16	1.10	2.10	16ERHCN	52 ft. lbs.	BS-20
	H100-16ERC652	6.52		3.00			
ER20	H100-20ERC416	4.16	1.34	2.08	20ERHCN	74 ft. lbs.	BS-09
	H100-20ERC652	6.52		3.38			
ER25	H100-25ERC416	4.16	1.64	2.30	25ERCN	95 ft. lbs.	BS-11
ER32	H100-32ERC416	4.16	1.97	2.30	32ERCN	125 ft. lbs.	BS-18
	H100-32ERC652	6.52		3.00			
ER40	H100-40ERC416	4.16	2.47	2.30	40ERCN	162 ft. lbs.	BS-10
	H100-40ERC494	4.94		3.00			

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Collets and Collet Nut Wrench separately, see pages 74-86.



PRODUCTION ER COLLET SYSTEM WITH DIN FLUSH NUT



Production ER Collet
Chuck with Flush Nut



- Constructed of alloy steel for long, durable service life.
- Hardened to Rc: 52-56 to avoid damaging collet chuck threads.
- Collet seat taper T.I.R. $\leq .0002"$.
- Accepts DIN 6499 collets.

Collet Chuck Taper	Balance Up To
BT 30	25,000 RPM
BT 40	25,000 RPM
CAT 40	25,000 RPM
CAT 50	20,000 RPM
HSK 63A	25,000 RPM
HSK 100A	20,000 RPM

> Collet Choices



ER Standard
Collet



ER Tap
Collet



ER AA Grade
5 Micron Collet



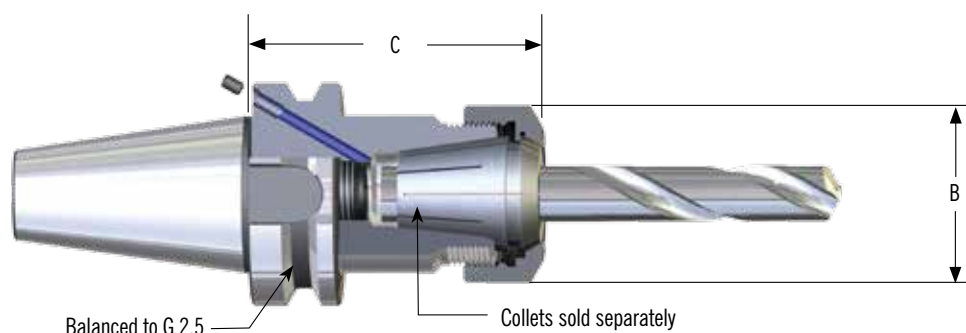
ERS Steel
Sealed Collet

COLLET RANGE SPECIFICATIONS

Collet Size	Range Inch	Range Metric	Collet Nut (Incl.)	Nut Torque	B/U Screw Not (Incl.)
ER11	.020" to .275"	.5 mm to 7 mm	11ERHN	22 ft. lbs.	029-909
ER16	.020" to .393"	1 mm to 13 mm	16ERHCN	52 ft. lbs.	BS-20
ER20	.039" to .511"	1 mm to 13 mm	20ERHN	74 ft. lbs.	BS-09
ER25	.039" to .630"	1 mm to 16 mm	25ERN	95 ft. lbs.	BS-11
ER32	.078" to .787"	2 mm to 20 mm	32ERN	125 ft. lbs.	BS-18
ER40	.118" to 1.181"	3 mm to 30 mm	40ERN	162 ft. lbs.	BS-10



PERFORMANCE ER COLLET CHUCKS WITH DIN FLUSH NUT



BT 30 BALANCED UP TO 25,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	B30-16ERF236	-	B30F-16ERF236	1.10	2.36	1.83	16ERHN	52 ft. lbs.	BS-20
ER20	B30-20ERF236	-	B30F-20ERF236	1.34	2.36	2.48	20ERHN	74 ft. lbs.	BS-09
ER32	B30-32ERF236	-	B30F-32ERF236	1.97	2.36	3.88	32ERN	125 ft. lbs.	BS-18

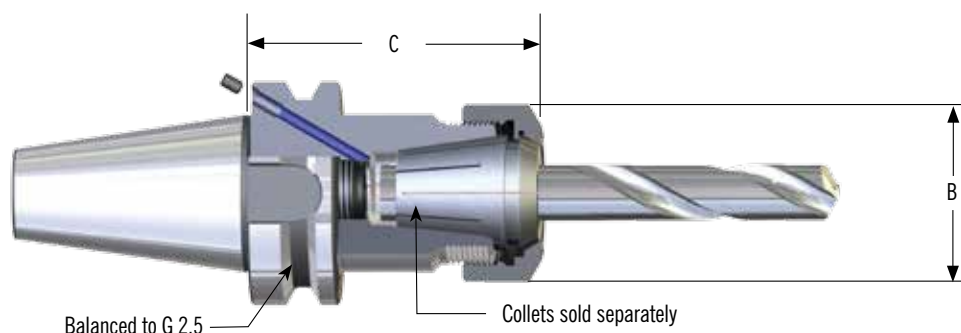
BT 40 BALANCED UP TO 25,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER11	B40-11ERF400	B40BC-11ERF400	-	0.75	4.00	2.25	11ERHN	22 ft. lbs.	029-909
ER16	B40-16ERF250	-	-	1.10	2.50	1.50	16ERHN	52 ft. lbs.	BS-20
	B40-16ERF300	B40BC-16ERF300	B40F-16ERF300		3.00	2.00			
	B40-16ERF400	B40BC-16ERF400	B40F-16ERF500		4.00	3.50			
	B40-16ERF500	B40BC-16ERF500	-		5.00	2.00			
ER20	B40-20ERF400	-	-	1.34	4.00	1.50	20ERHN	74 ft. lbs.	BS-09
	B40-20ERF600	-	-		6.00	2.00			
ER25	B40-25ERF400	-	-	1.64	4.00	1.50	25ERN	95 ft. lbs.	BS-11
	B40-25ERF600	-	-		6.00	2.00			
ER32	B40-32ERF400	B40BC-32ERF400	B40F-32ERF400	1.97	4.00	3.88	32ERN	125 ft. lbs.	BS-18
	B40-32ERF600	-	B40F-32ERF600		6.00				
ER40	B40-40ERF400	B40BC-40ERF400	-	2.47	4.00	4.10	40ERN	162 ft. lbs.	BS-10
	B40-40ERF600	-	-		6.00				

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



PERFORMANCE ER COLLET CHUCKS WITH DIN FLUSH NUT



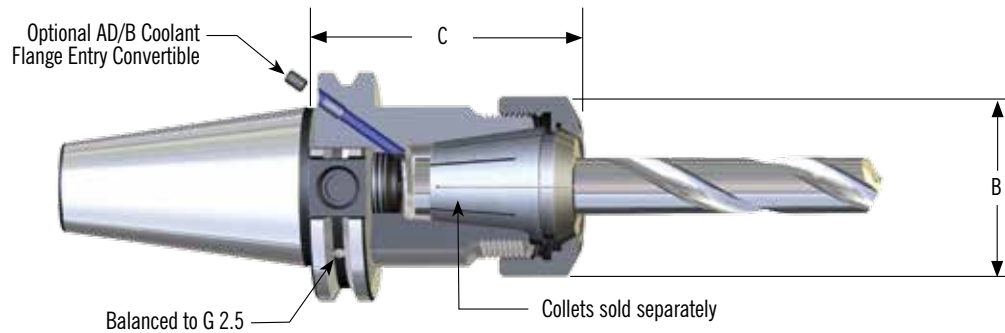
CAT 40 BALANCED UP TO 25,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER11	C40-11ERF250	-	-	0.75	2.50	2.25	11ERHN	22 ft. lbs.	029-909
	C40-11ERF400	-	-		4.00				
	C40-11ERF600	-	-		6.00				
ER16	C40-16ERF250	C40BC-16ERF250	C40F-16ERF250	1.10	2.50	2.43	16ERHN	52 ft. lbs.	BS-20
	C40-16ERF300	C40BC-16ERF300	-		3.00				
	C40-16ERF400	C40BC-16ERF400	C40F-16ERF400		4.00				
	C40-16ERF500	C40BC-16ERF500	-		5.00				
	C40-16ERF800	-	C40F-16ERF800		8.00				
ER20	C40-20ERF300	C40BC-20ERF300	-	1.34	3.00	2.43	20ERHN	74 ft. lbs.	BS-09
	C40-20ERF400	C40BC-20ERF400	-		4.00	3.88			
	C40-20ERF600	C40BC-20ERF600	C40F-20ERF600		6.00				
	C40-20ERF800	-	-		8.00				
ER25	C40-25ERF250	C40BC-25ERF250	-	1.64	2.50	2.50	25ERN	95 ft. lbs.	BS-11
	C40-25ERF400	C40BC-25ERF400	-		4.00	3.50			
	C40-25ERF600	C40BC-25ERF600	C40BC-25ERF600		6.00				
ER32	C40-32ERF236	-	-	1.97	2.36	3.88	32ERN	125 ft. lbs.	BS-18
	C40-32ERF300	C40BC-32ERF300	C40F-32ERF300		3.00				
	C40-32ERF400	C40BC-32ERF400	C40F-32ERF400		4.00				
	C40-32ERF600	C40BC-32ERF600	C40F-32ERF600		6.00				
	C40-32ERF800	-	-		8.00				
ER40	C40-40ERF400	C40BC-40ERF400	-	2.47	4.00	4.10	40ERN	162 ft. lbs.	BS-10
	C40-40ERF600	-	-		6.00				

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



PERFORMANCE ER COLLET CHUCKS WITH DIN FLUSH NUT



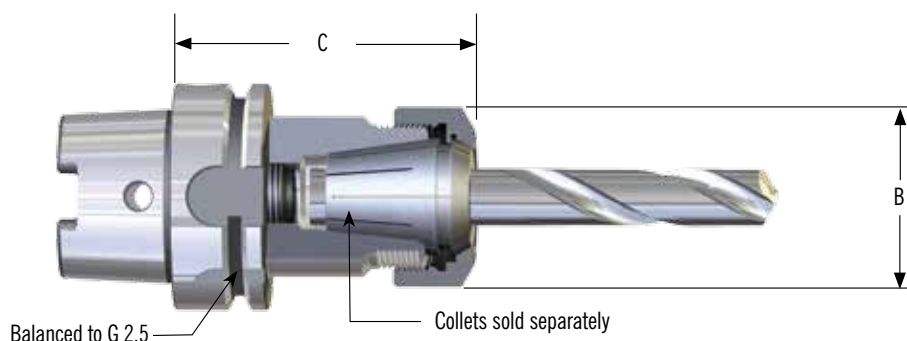
CAT 50 BALANCED UP TO 20,000 RPM

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	C50-16ERF400	C50BC-16ERF400	C50F-16ERF400	1.10	4.00	2.50	16ERHN	52 ft. lbs.	BS-20
	C50-16ERF600	C50BC-16ERF600	C50F-16ERF600		6.00				
	C50-16ERF800	-	C50F-16ERF800		8.00				
	C50-16ERF1000	-	-		10.00				
ER20	C50-20ERF400	C50BC-20ERF400	-	1.34	4.00	3.88	20ERHN	74 ft. lbs.	BS-09
	C50-20ERF600	C50BC-20ERF600	-		6.00				
	C50-20ERF800	-	-		8.00				
ER25	C50-25ERF400	C50BC-25ERF400	-	1.64	4.00	4.00	25ERN	95 ft. lbs.	BS-11
	C50-25ERF600	C50BC-25ERF600	-		6.00				
	C50-25ERF800	-	-		8.00				
	C50-25ERF1000	-	-		10.00				
ER32	C50-32ERF400	C50BC-32ERF400	C50F-32ERF400	1.97	4.00	3.88	32ERN	125 ft. lbs.	BS-18
	C50-32ERF600	C50BC-32ERF600	C50F-32ERF600		6.00				
	C50-32ERF800	-	C50F-32ERF800		8.00				
	C50-32ERF1000	-	-		10.00				
ER40	C50-40ERF400	C50BC-40ERF400	C50F-40ERF400	2.47	4.00	4.10	40ERN	162 ft. lbs.	BS-10
	C50-40ERF600	C50BC-40ERF600	-		6.00				
	C50-40ERF800	-	-		8.00				
	C50-40ERF1000	-	-		10.00				

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



PERFORMANCE ER COLLET CHUCKS WITH DIN FLUSH NUT



HSK 63 FORM A BALANCED UP TO 25,000 RPM

Size	Part Number	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	H63-16ERF394	1.10	3.94	2.10	16ERHN	52 ft. lbs.	BS-20
	H63-16ERF630		6.30	3.00			
ER20	H63-20ERF394	1.34	3.94	1.88	20ERHN	74 ft. lbs.	BS-09
ER25	H63-25ERF315	1.64	3.15	2.30	25ERN	95 ft. lbs.	BS-11
ER32	H63-32ERF315	1.97	3.15	1.80	32ERN	125 ft. lbs.	BS-18
	H63-32ERF394		3.94	2.50			
	H63-32ERF472		4.72				
ER40	H63-40ERF394	2.47	3.94	2.50	40ERN	162 ft. lbs.	BS-10

HSK 100 FORM A BALANCED UP TO 20,000 RPM

Size	Part Number	B (Dia.)	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Not Incl.)
ER16	H100-16ERF394	1.10	3.94	2.10	16ERHN	52 ft. lbs.	BS-20
	H100-16ERF630		6.30	3.00			
ER20	H100-20ERF394	1.34	3.94	2.08	20ERHN	74 ft. lbs.	BS-09
	H100-20ERF630		6.30	3.38			
ER25	H100-25ERF394	1.64	3.94	2.30	25ERN	95 ft. lbs.	BS-11
ER32	H100-32ERF394	1.97	3.94	2.30	32ERN	125 ft. lbs.	BS-18
	H100-32ERF630		6.30	3.00			
ER40	H100-40ERF394	2.47	3.94	2.30	40ERN	162 ft. lbs.	BS-10
	H100-40ERF472		4.72	3.00			

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Collets and Collet Nut Wrench separately, see pages 74-86.



COLLET PERFORMANCE CHOICES



ER Standard
Collet



ER Tap
Collet



ER AA Grade
5 Micron Collet



ERS Steel
Sealed Collet



Coolant
Nut



Coolant
Seal

COLLET SELECTION

ER STANDARD COLLET

(ER Standard Collets see page 75–77)

- For use in ER collet chucks for drilling, reaming, boring, tapping, and milling.
- Meets DIN 6499-B industry standard.
- Collapse range .0393" (1 mm) maximum.
- Size 11 collapse range .020" (1/2 mm) maximum.
- For higher runout tolerance use HIGH CONCENTRICITY GRADE AA, 5 Micron COLLETS

ER TAP COLLETS

(ER Tap Collets see page 78)

- Designed for use with production ER Tapping tools.
- Provide maximum concentricity with positive driving force.

ER AA GRADE 5 MICRON COLLET

(ER AA Grade 5 Micron Collets see page 79–81)

HIGH CONCENTRICITY >>>

- Evenly distributed cutting edges for high performance machining.
- .0002" (5 micron) gage tolerance.
- Exceeds DIN requirements.
- Recommended use on size.
- 12 slots, deburred and polished.
- Increased grip force with reduced friction to collet seat.
- Improve system performance and lower cost per piece when used with a quality chuck.

COLLET SELECTION WITH COOLANT OPTIONS

ERS STEEL SEALED COLLET

(ER Steel Sealed Collets see page 82–83)

- For use with regular straight shank tools.
- Withstands coolant pressure up to 1,800 psi.
- Collet collapse is .005."

COOLANT NUT SEAL SYSTEM

(Coolant Seals see page 84 & Coolant Nuts see page 86)

- Allows full range of collet when used with standard collets.
- Allows coolant seal with grade AA, 5 Micron collets.
- Prevents abrasive machining dust of chips from contaminating collet system.
- Seals up to 1,200 psi.

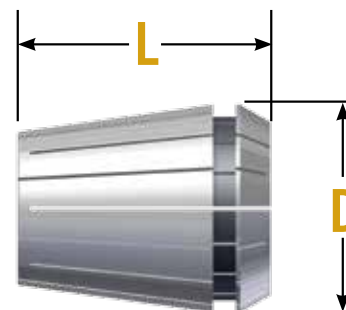
COLLET SIZE	ER11	ER16	ER20	ER25	ER32	ER40
LENGTH (L)	0.708	1.082	1.240	1.338	1.574	1.811
DIAMETER (D)	0.452	0.669	0.827	1.023	1.300	1.614



ER STANDARD COLLETS



ER Standard Collet



* For specifications see page 74

ER11 STANDARD COLLETS METRIC

Part Number	Metric Range
ER11-0039	.5-1 mm
ER11-0059	1-1.5 mm
ER11-0078	1-2 mm
ER11-0098	1.5-2.5 mm
ER11-0118	2-3 mm
ER11-0137	2.5-3.5 mm
ER11-0157	3-4 mm
ER11-0177	4-4.5 mm
ER11-0196	4-5 mm
ER11-0216	4.5-5.5 mm
ER11-0236	5-6 mm
ER11-0255	5.5-6.5 mm
ER11-0275	6-7 mm

ER11 Metric Set	SETS
ER11-S013	PART NUMBER
13 Pieces	NUMBER OF PIECES
.5-7 mm	RANGE

ER11 STANDARD COLLETS INCH

Part Number	Inch Range
ER11-0062	.0428-.0625
ER11-0093	.0740-.0938
ER11-0125	.1053-.1250
ER11-0157	.1378-.1575
ER11-0187	.1678-.1875
ER11-0218	.1990-.2187
ER11-0250	.2303-.2500

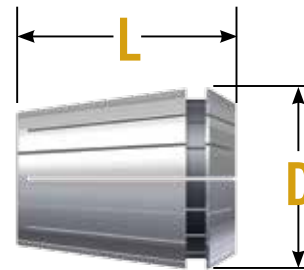
ER11 Inch Set	SETS
ER11-S007	PART NUMBER
7 Pieces	NUMBER OF PIECES
1/16" - 1/4"	RANGE



ER STANDARD COLLETS



ER Standard Collet



* For specifications see page 74

ER16-ER40 ER STANDARD COLLETS INCH

PART NUMBER					
ER16 Inch	ER20 Inch	ER25 Inch	ER32 Inch	ER40 Inch	Inch Range
ER16-0062	ER20-0062	ER25-0062	-	-	.0400-.0620
ER16-0093	ER20-0093	ER25-0093	ER32-0093	-	.0540-.0930
ER16-0125	ER20-0125	ER25-0125	ER32-0125	ER40-0125	.0860-.1250
ER16-0156	ER20-0156	ER25-0156	ER32-0156	-	.1170-.1560
ER16-0187	ER20-0187	ER25-0187	ER32-0187	ER40-0187	.1480-.1870
ER16-0218	ER20-0218	ER25-0218	ER32-0218	ER40-0218	.1790-.2180
ER16-0250	ER20-0250	ER25-0250	ER32-0250	ER40-0250	.2110-.2500
ER16-0281	ER20-0281	ER25-0281	ER32-0281	ER40-0281	.2420-.2810
ER16-0312	ER20-0312	ER25-0312	ER32-0312	ER40-0312	.2730-.3120
ER16-0343	ER20-0343	ER25-0343	ER32-0343	ER40-0343	.3040-.3430
ER16-0375	ER20-0375	ER25-0375	ER32-0375	ER40-0375	.3360-.3750
ER16-0406	ER20-0406	ER25-0406	ER32-0406	ER40-0406	.3666-.4060
-	ER20-0437	ER25-0437	ER32-0437	ER40-0437	.3980-.4370
-	ER20-0468	ER25-0468	ER32-0468	ER40-0468	.4290-.4680
-	ER20-0500	ER25-0500	ER32-0500	ER40-0500	.4610-.5000
-	-	ER25-0531	ER32-0531	ER40-0531	.4920-.5310
-	-	ER25-0562	ER32-0562	ER40-0562	.5230-.5620
-	-	ER25-0593	ER32-0593	ER40-0593	.5544-.5937
-	-	ER25-0625	ER32-0625	ER40-0625	.5860-.6250
-	-	-	ER32-0656	ER40-0656	.6170-.6560
-	-	-	ER32-0687	ER40-0687	.6480-.6870
-	-	-	ER32-0718	ER40-0718	.6794-.7187
-	-	-	ER32-0750	ER40-0750	.7110-.7500
-	-	-	ER32--0781	ER40-0781	.7419-.7812
-	-	-	-	ER40-0812	.7732-.8125
-	-	-	-	ER40-0843	.8044-.8437
-	-	-	-	ER40-0875	.8360-.8750
-	-	-	-	ER40-0906	.8669-.9062
-	-	-	-	ER40-0937	.8982-.9375
-	-	-	-	ER40-0984	.9449-.9843
-	-	-	-	ER40-1000	.9610-1.0000

ER16 Inch Set	ER20 Inch Set	ER25 Inch Set	ER32 Inch Set	ER40 Inch Set	SETS
ER16-S012	ER20-S014	ER25-S016	ER32-S022	ER40-S024	PART NUMBER
12 Pieces	14 Pieces	15 Pieces	22 Pieces	24 Pieces	NUMBER OF PIECES
1/16"-13/32"	3/32"-1/2"	3/16"-5/8"	3/32"-3/4"	9/32"-1"	RANGE



ER STANDARD COLLETS

ER16-ER40 ER STANDARD COLLETS METRIC

PART NUMBER					
ER16 Metric	ER20 Metric	ER25 Metric	ER32 Metric	ER40 Metric	Metric Range
ER16-0039	-	-	-	-	.5-1 mm
ER16-0078	ER20-0078	ER25-0078	-	-	1-2 mm
ER16-0098	-	-	-	-	2-2.5 mm
ER16-0118	ER20-0118	ER25-0118	ER32-0118	ER40-0118	2-3 mm
ER16-0137	-	-	-	-	2.5-3.5 mm
ER16-0157	ER20-0157	ER25-0157	ER32-0157	ER40-0157	3-4 mm
ER16-0177	-	-	-	-	3.5-4.5 mm
ER16-0196	ER20-0196	ER25-0196	ER32-0196	ER40-0196	4-5 mm
ER16-0216	-	-	-	-	4.5-5.5 mm
ER16-0236	ER20-0236	ER25-0236	ER32-0236	ER40-0236	5-6 mm
ER16-0255	-	-	-	-	5.5-6.5 mm
ER16-0275	ER20-0275	ER25-0275	ER32-0275	ER40-0275	6-7 mm
ER16-0295	-	-	-	-	6.5-7.5 mm
ER16-0315	ER20-0315	ER25-0315	ER32-0315	ER40-0315	7-8 mm
ER16-0334	-	-	-	-	7.5-8.5 mm
ER16-0354	ER20-0354	ER25-0354	ER32-0354	ER40-0354	8-9 mm
ER16-0393	ER20-0393	ER25-0393	ER32-0393	ER40-0393	9-10 mm
-	ER20-0433	ER25-0433	ER32-0433	ER40-0433	10-11 mm
-	ER20-0472	ER25-0472	ER32-0472	ER40-0472	11-12 mm
-	ER20-0511	ER25-0511	ER32-0511	ER40-0511	12-13 mm
-	-	ER25-0551	ER32-0551	ER40-0551	13-14 mm
-	-	ER25-0590	ER32-0590	ER40-0590	14-15 mm
-	-	ER25-0630	ER32-0630	ER40-0630	15-16 mm
-	-	-	ER32-0669	ER40-0669	16-17 mm
-	-	-	ER32-0708	ER40-0708	17-18 mm
-	-	-	ER32-0748	ER40-0748	18-19 mm
-	-	-	ER32-0787	ER40-0787	19-20 mm
-	-	-	-	ER40-0826	20-21 mm
-	-	-	-	ER40-0866	21-22 mm
-	-	-	-	ER40-0905	22-23 mm
-	-	-	-	ER40-0944	23-24 mm
-	-	-	-	ER40-0984	24-25 mm
-	-	-	-	ER40-1023	25-26 mm
-	-	-	-	ER40-1063	26-27 mm
-	-	-	-	ER40-1102	27-28 mm
-	-	-	-	ER40-1141	28-29 mm
-	-	-	-	ER40-1181	29-30 mm

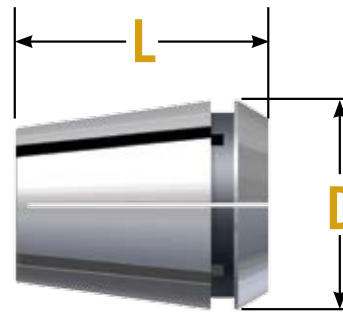
ER16 Metric Set	ER20 Metric Set	ER25 Metric Set	ER32 Metric Set	ER40 Metric Set	SETS
ER16-S010	ER20-S012	ER25-S015	ER32-S018	ER40-S023	PART NUMBER
10 Pieces	12 Pieces	15 Pieces	18 Pieces	23 Pieces	NUMBER OF PIECES
1-10 mm x 1 mm	2-13 mm	2-16 mm	3-20 mm	4-26 mm	RANGE



ER TAP COLLETS



ER Tap Collet



* For specifications see page 74

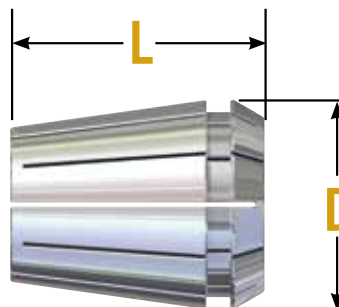
ER16-ER40 ER TAP COLLETS INCH METRIC

PART NUMBER					Inch Range	ANSI Metric
ER16	ER20	ER25	ER32	ER40		
ERT16-#0-6	-	-	ERT32-#0-6	-	#0-#6	
ERT16-#8	ERT20-#8	ERT25-#8	ERT32-#8	-	#8	M4
ERT16-#10	ERT20-#10	ERT25-#10	ERT32-#10	-	#10	M4.5, M5
ERT16-#12	ERT20-#12	ERT25-#12	ERT32-#12	-	#12	
-	-	ERT25-012N	ERT32-012N	ERT40-012N	1/8" NPT	
ERT16-025	ERT20-025	ERT25-025	ERT32-025	ERT40-025	1/4"	M6, M6.5
-	-	-	ERT32-025N	ERT40-025N	1/4" NPT	
ERT16-031	ERT20-031	ERT25-031	ERT32-031	ERT40-031	5/16"	M7, M8
ERT16-037	ERT20-037	ERT25-037	ERT32-037	ERT40-037	3/8"	M10
-	-	-	-	ERT40-037N	3/8" NPT	
ERT16-043	ERT20-043	ERT25-043	ERT32-043	ERT40-043	7/16"	
ERT16-050	ERT20-050	ERT25-050	ERT32-050	ERT40-050	1/2"	M12, M12.5
-	-	-	-	ERT40-050N	1/2" NPT	
-	-	ERT25-056	ERT32-056	ERT40-056	9/16"	M14
-	-	ERT25-062	ERT32-062	ERT40-062	5/8"	M16
-	-	-	ERT32-068	ERT40-068	11/16"	M18
-	-	-	ERT32-075	ERT40-075	3/4"	
-	-	-	ERT32-081	ERT40-081	13/16"	M20
-	-	-	-	ERT40-087	7/8"	M22
-	-	-	-	ERT40-093	15/16"	M24
-	-	-	-	ERT40-100	1"	M25

ER16 Inch Set	ER20 Inch Set	ER25 Inch Set	ER32 Inch Set	ER40 Inch Set	SETS
ERT16-S009	ERT20-S008	ERT25-S011	ERT32-S016	ERT40-S017	PART NUMBER
9 Pieces	8 Pieces	11 Pieces	16 Pieces	17 Pieces	NUMBER OF PIECES



AA GRADE 5 MICRON ER PRECISION COLLETS

ER Grade AA
5 Micron Collet

* For specifications see page 74

AA GRADE 5 MICRON ER PRECISION COLLETS ER 11

PART NUMBER		
ER11 Metric	Recommended Usage $\pm .004"$ (.1 mm)	Max. Collapse Range
5UMER11-0039	1 mm	0.5 mm
5UMER11-0059	1.5 mm	0.5 mm
5UMER11-0078	2 mm	0.5 mm
5UMER11-0098	2.5 mm	0.5 mm
5UMER11-0118	3 mm	0.5 mm
5UMER11-0137	3.5 mm	0.5 mm
5UMER11-0157	4 mm	0.5 mm
5UMER11-0177	4.5 mm	0.5 mm
5UMER11-0196	5 mm	0.5 mm
5UMER11-0216	5.5 mm	0.5 mm
5UMER11-0236	6 mm	0.5 mm
5UMER11-0255	6.5 mm	0.5 mm
5UMER11-0275	7 mm	0.5 mm

PART NUMBER		
ER11 Inch	Recommended Usage $\pm .004"$ (.1 mm)	Max. Collapse Range
5UMER11-0062	1/16"	0.5 mm
5UMER11-0093	3/32"	0.5 mm
5UMER11-0125	1/8"	0.5 mm
5UMER11-0156	5/32"	0.5 mm
5UMER11-0187	3/16"	0.5 mm
5UMER11-0218	7/32"	0.5 mm
5UMER11-0250	1/4"	0.5 mm

SETS

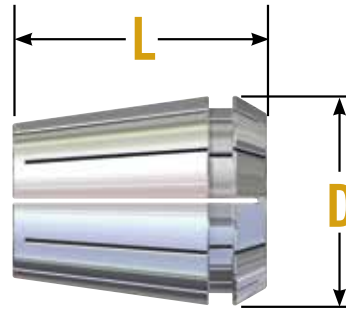
	ER11 Metric Set	ER11 Inch Set
PART NUMBER	5UMER11-SM013	5UMER11-SI007
NUMBER OF PIECES	13 Pieces	13 Pieces
RANGE	1-7 mm	1/16"-1/4"



AA GRADE 5 MICRON ER PRECISION COLLETS



ER Grade AA
5 Micron Collet



* For specifications see page 74

AA GRADE 5 MICRON ER PRECISION COLLETS INCH

PART NUMBER					Recommended Usage = / - .004" (.1 mm)	Maximum Collapse Range
ER16 Inch	ER20 Inch	ER25 Inch	ER32 Inch	ER40 Inch		
5UMER16-0062	-	-	-	-	1/16"	0.5 mm
5UMER16-0093	-	-	-	-	3/32"	0.5 mm
5UMER16-0125	5UMER20-0125	5UMER25-0125	5UMER32-0125	5UMER40-0125	1/8"	1 mm
5UMER16-0156	5UMER20-0157	5UMER25-0157	5UMER32-0157	5UMER40-0157	5/32"	1 mm
5UMER16-0187	5UMER20-0187	5UMER25-0187	5UMER32-0187	5UMER40-0187	3/16"	1 mm
5UMER16-0218	-	-	-	-	7/32"	1 mm
5UMER16-0250	5UMER20-0250	5UMER25-0250	5UMER32-0250	5UMER40-0250	1/4"	1 mm
5UMER16-0281	-	-	-	-	9/32"	1 mm
5UMER16-0312	5UMER20-0312	5UMER25-0312	5UMER32-0312	5UMER40-0312	5/16"	1 mm
5UMER16-0343	-	-	-	-	11/32"	1 mm
5UMER16-0375	5UMER20-0375	5UMER25-0375	5UMER32-0375	5UMER40-0375	3/8"	1 mm
5UMER16-0406	-	-	-	-	13/32"	1 mm
-	5UMER20-0437	5UMER25-0437	5UMER32-0437	5UMER40-0437	7/16"	1 mm
-	5UMER20-0472	5UMER25-0472	5UMER32-0472	5UMER40-0472	15/32"	1 mm
-	5UMER20-0500	5UMER25-0500	5UMER32-0500	5UMER40-0500	1/2"	1 mm
-	-	5UMER25-0562	5UMER32-0562	5UMER40-0562	9/16"	1 mm
-	-	5UMER25-0625	5UMER32-0625	5UMER40-0625	5/8"	1 mm
-	-	-	5UMER32-0687	5UMER40-0687	11/16"	1 mm
-	-	-	5UMER32-0750	5UMER40-0750	3/4"	1 mm
-	-	-	5UMER32-0812	5UMER40-0812	13/16"	1 mm
-	-	-	-	5UMER40-0875	7/8"	1 mm
-	-	-	-	5UMER40-1000	1"	1 mm

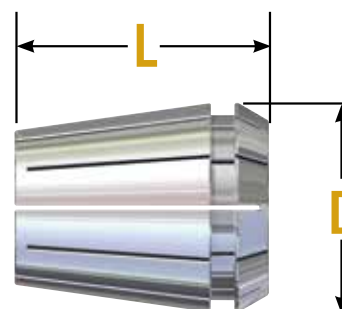
ER16 Inch Set	ER20 Inch Set	ER25 Inch Set	ER32 Inch Set	ER40 Inch Set	SETS
5UMER16-SI010	5UMER20-SI009	5UMER25-SI011	5UMER32-SI014	5UMER40-SI016	PART NUMBER
10 Pieces	9 Pieces	11 Pieces	14 Pieces	16 Pieces	NUMBER OF PIECES
3/32"-3/8" 1/16" and 13/32" (Not Incl.) in set	1/8"-1/2"	1/8"-5/8"	1/8"-13/16"	1/8"-1"	RANGE



AA GRADE 5 MICRON ER PRECISION COLLETS



ER Grade AA
5 Micron Collet



* For specifications see page 74

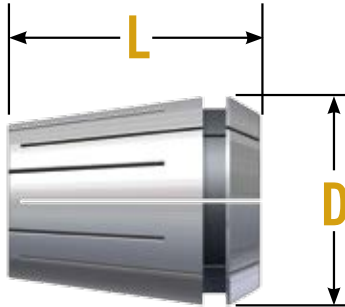
AA GRADE 5 MICRON ER PRECISION COLLETS METRIC

PART NUMBER					Recommended Usage =/.004" (.1 mm)	Max. Collapse Range
ER16 Metric	ER20 Metric	ER25 Metric	ER32 Metric	ER40 Metric		
5UMER16-0039	-	-	-	-	1 mm	0.5 mm
5UMER16-0078	5UMER20-0078	5UMER25-0078	-	-	2 mm	0.5 mm
5UMER16-0118	5UMER20-0118	5UMER25-0118	5UMER32-0118	-	3 mm	1 mm
5UMER16-0157	5UMER20-0157	5UMER25-0157	5UMER32-0157	5UMER40-0157	4 mm	1 mm
5UMER16-0196	5UMER20-0196	5UMER25-0196	5UMER32-0196	5UMER40-0196	5 mm	1 mm
5UMER16-0236	5UMER20-0236	5UMER25-0236	5UMER32-0236	5UMER40-0236	6 mm	1 mm
5UMER16-0275	5UMER20-0275	5UMER25-0275	5UMER32-0275	5UMER40-0275	7 mm	1 mm
5UMER16-0315	5UMER20-0315	5UMER25-0315	5UMER32-0315	5UMER40-0315	8 mm	1 mm
5UMER16-0354	5UMER20-0354	5UMER25-0354	5UMER32-0354	5UMER40-0354	9 mm	1 mm
5UMER16-0393	5UMER20-0393	5UMER25-0393	5UMER32-0393	5UMER40-0393	10 mm	1 mm
-	5UMER20-0433	5UMER25-0433	5UMER32-0433	5UMER40-0433	11 mm	1 mm
-	5UMER20-0472	5UMER25-0472	5UMER32-0472	5UMER40-0472	12 mm	1 mm
-	5UMER20-0511	5UMER25-0511	5UMER32-0511	5UMER40-0511	13 mm	1 mm
-	-	5UMER25-0551	5UMER32-0551	5UMER40-0551	14 mm	1 mm
-	-	5UMER25-0590	5UMER32-0590	5UMER40-0590	15 mm	1 mm
-	-	5UMER25-0630	5UMER32-0630	5UMER40-0630	16 mm	1 mm
-	-	-	5UMER32-0669	5UMER40-0669	17 mm	1 mm
-	-	-	5UMER32-0708	5UMER40-0708	18 mm	1 mm
-	-	-	5UMER32-0748	5UMER40-0748	19 mm	1 mm
-	-	-	5UMER32-0787	5UMER40-0787	20 mm	1 mm
-	-	-	-	5UMER40-0826	21 mm	1 mm
-	-	-	-	5UMER40-0866	22 mm	1 mm
-	-	-	-	5UMER40-0905	23 mm	1 mm
-	-	-	-	5UMER40-0944	24 mm	1 mm
-	-	-	-	5UMER40-0984	25 mm	1 mm
-	-	-	-	5UMER40-1023	26 mm	1 mm

ER16 Metric Set	ER20 Metric Set	ER25 Metric Set	ER32 Metric Set	ER40 Metric Set	SETS
5UMER16-SM010	5UMER20-SM012	5UMER25-SM015	5UMER32-SM018	5UMER40-SM023	PART NUMBER
10 Pieces	12 Pieces	15 Pieces	18 Pieces	23 Pieces	NUMBER OF PIECES
1-10 mm	2-13 mm	2-16 mm	3-20 mm	4-26 mm	RANGE



ERS STEEL SEALED COLLETS



* For specifications see page 74



ERS Steel
Sealed Collet

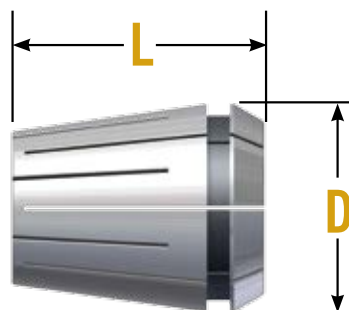
ER16-ER40 STEEL SEALED COLLETS INCH

PART NUMBER					
ER16 Inch	ER20 Inch	ER25 Inch	ER32 Inch	ER40 Inch	Inch Range
ERS16-0125	-	-	-	-	0.1250
ERS16-0157	ERS20-0157	ERS25-0157	ERS32-0157	-	0.1562
ERS16-0187	ERS20-0187	ERS25-0187	ERS32-0187	-	0.1875
ERS16-0218	ERS20-0218	ERS25-0218	ERS32-0218	-	0.2188
ERS16-0250	ERS20-0250	ERS25-0250	ERS32-0250	ERS40-0250	0.2500
ERS16-0281	ERS20-0281	ERS25-0281	ERS32-0281	ERS40-0281	0.2813
ERS16-0312	ERS20-0312	ERS25-0312	ERS32-0312	ERS40-0312	0.3125
ERS16-0343	ERS20-0343	ERS25-0343	ERS32-0343	ERS40-0343	0.3438
ERS16-0375	ERS20-0375	ERS25-0375	ERS32-0375	ERS40-0375	0.3750
ERS16-0406	ERS20-0406	ERS25-0406	ERS32-0406	ERS40-0406	0.4063
-	ERS20-0437	ERS25-0437	ERS32-0437	ERS40-0437	0.4375
-	-	ERS25-0468	ERS32-0468	ERS40-0468	0.4688
-	ERS20-0500	ERS25-0500	ERS32-0500	ERS40-0500	0.5000
-	-	ERS25-0531	ERS32-0531	ERS40-0531	0.5313
-	-	ERS25-0562	ERS32-0562	ERS40-0562	0.5625
-	-	ERS25-0593	ERS32-0593	ERS40-0593	0.5938
-	-	ERS25-0625	ERS32-0625	ERS40-0625	0.6250
-	-	-	ERS32-0656	ERS40-0656	0.6563
-	-	-	ERS32-0687	ERS40-0687	0.6875
-	-	-	ERS32-0718	ERS40-0718	0.7188
-	-	-	ERS32-0750	ERS40-0750	0.7500
-	-	-	ERS32-0781	ERS40-0781	0.7183
-	-	-	-	ERS40-0875	0.8750
-	-	-	-	ERS40-1000	1.0000

ER16 Inch Set	ER20 Inch Set	ER25 Inch Set	ER32 Inch Set	ER40 Inch Set	SETS
ERS16-S010	ERS20-S011	ERS25-S016	ERS32-S021	ERS40-S020	PART NUMBER
10 Pieces	11 Pieces	16 Pieces	21 Pieces	20 Pieces	NUMBER OF PIECES
1/8"-13/32	5/32"-1/2"	5/32"-5/8"	5/32"-25/32"	1/4"-1"	RANGE



ERS STEEL SEALED COLLETS



* For specifications see page 74



ERS Steel
Sealed Collet

ER16-ER40 STEEL SEALED COLLETS METRIC

PART NUMBER					
ER16 Metric	ER20 Metric	ER25 Metric	ER32 Metric	ER40 Metric	Metric Range
ERS16-0157	ERS20-0157	ERS25-0157	ERS32-0157	-	4 mm
ERS16-0196	ERS20-0196	ERS25-0196	ERS32-0196	-	5 mm
ERS16-0236	ERS20-0236	ERS25-0236	ERS32-0236	ERS40-0236	6 mm
ERS16-0275	ERS20-0275	ERS25-0275	ERS32-0275	ERS40-0275	7 mm
ERS16-0315	ERS20-0315	ERS25-0315	ERS32-0315	ERS40-0315	8 mm
ERS16-0354	ERS20-0354	ERS25-0354	ERS32-0354	ERS40-0354	9 mm
ERS16-0393	ERS20-0393	ERS25-0393	ERS32-0393	ERS40-0393	10 mm
-	ERS20-0433	ERS25-0433	ERS32-0433	ERS40-0433	11 mm
-	ERS20-0472	ERS25-0472	ERS32-0472	ERS40-0472	12 mm
-	ERS20-0511	ERS25-0511	ERS32-0511	ERS40-0511	13 mm
-	-	ERS25-0551	ERS32-0551	ERS40-0551	14 mm
-	-	ERS25-0590	ERS32-0590	ERS40-0590	15 mm
-	-	ERS25-0630	ERS32-0630	ERS40-0630	16 mm
-	-	-	ERS32-0669	ERS40-0669	17 mm
-	-	-	ERS32-0708	ERS40-0708	18 mm
-	-	-	ERS32-0748	ERS40-0748	19 mm
-	-	-	ERS32-0787	ERS40-0787	20 mm
-	-	-	-	ERS40-0826	21 mm
-	-	-	-	ERS40-0866	22 mm
-	-	-	-	ERS40-0905	23 mm
-	-	-	-	ERS40-0944	24 mm
-	-	-	-	ERS40-0984	25 mm
-	-	-	-	ERS40-1023	26 mm

ER16 Metric Set	ER20 Metric Set	ER25 Metric Set	ER32 Metric Set	ER40 Metric Set	SETS
ERS16-S007	ERS20-S010	ERS25-S013	ERS32-S017	ERS40-S021	PART NUMBER
7 Pieces	10 Pieces	13 Pieces	17 Pieces	21 Pieces	NUMBER OF PIECES
4-10 mm	4-13 mm	4-16 mm	4-20 mm	6-26 mm	RANGE



ER COOLANT NUT SEALS

ER16-ER40 COOLANT NUT SEALS

PART NUMBER						
ER16 Metric/Inch	ER20 Metric/Inch	ER25 Metric/Inch	ER32 Metric/Inch	ER40 Metric/Inch	Metric Range	Inch Range
CS16-0138	CS20-0138	CS25-0138	CS32-0138	CS40-0138	3-3.5 mm	.1181 – .1378
CS16-0157	CS20-0157	CS25-0157	CS32-0157	CS40-0157	3.5-4 mm	.1378 – .1575
CS16-0177	CS20-0177	CS25-0177	CS32-0177	CS40-0177	4-4.5 mm	.1575 – .1772
CS16-0197	CS20-0197	CS25-0197	CS32-0197	CS40-0197	4.5-5 mm	.1772 – .1969
CS16-0217	CS20-0217	CS25-0217	CS32-0217	CS40-0217	5-5.5 mm	.1969 – .2165
CS16-0236	CS20-0236	CS25-0236	CS32-0236	CS40-0236	5.5-6 mm	.2165 – .2362
CS16-0256	CS20-0256	CS25-0256	CS32-0256	CS40-0256	6-6.5 mm	.2362 – .2559
CS16-0276	CS20-0276	CS25-0276	CS32-0276	CS40-0276	6.5-7 mm	.2559 – .2756
CS16-0295	CS20-0295	CS25-0295	CS32-0295	CS40-0295	7-7.5 mm	.2756 – .2953
CS16-0315	CS20-0315	CS25-0315	CS32-0315	CS40-0315	7.5-8 mm	.2953 – .3150
CS16-0335	CS20-0335	CS25-0335	CS32-0335	CS40-0335	8-8.5 mm	.3150 – .3346
CS16-0354	CS20-0354	CS25-0354	CS32-0354	CS40-0354	8.5-9 mm	.3346 – .3543
CS16-0374	CS20-0374	CS25-0374	CS32-0374	CS40-0374	9-9.5 mm	.3543 – .3740
CS16-0394	CS20-0394	CS25-0394	CS32-0394	CS40-0394	9.5-10 mm	.3740 – .3937
-	CS20-0413	CS25-0413	CS32-0413	CS40-0413	10-10.5 mm	.3937 – .4134
-	CS20-0433	CS25-0433	CS32-0433	CS40-0433	10-5-11 mm	.4134 – .4331
-	CS20-0453	CS25-0453	CS32-0453	CS40-0453	11-11.5 mm	.4331 – .4528
-	CS20-0472	CS25-0472	CS32-0472	CS40-0472	11-5-12 mm	.4528 – .4724
-	CS20-0492	CS25-0492	CS32-0492	CS40-0492	12-12.5 mm	.4724 – .4921
-	CS20-0512	CS25-0512	CS32-0512	CS40-0512	12.5-13 mm	.4921 – .5118
-	-	CS25-0531	CS32-0531	CS40-0531	13-13.5 mm	.5118 – .5315
-	-	CS25-0551	CS32-0551	CS40-0551	13.5-14 mm	.5315 – .5512
-	-	CS25-0571	CS32-0571	CS40-0571	14-14.5 mm	.5512 – .5709
-	-	CS25-0591	CS32-0591	CS40-0591	14.5-15 mm	.5709 – .5906
-	-	CS25-0610	CS32-0610	CS40-0610	15-15.5 mm	.5906 – .6102
-	-	CS25-0630	CS32-0630	CS40-0630	15.5-16 mm	.6102 – .6299
-	-	-	CS32-0650	CS40-0650	16-16.5 mm	.6299 – .6496
-	-	-	CS32-0669	CS40-0669	16.5-17 mm	.6496 – .6693
-	-	-	CS32-0689	CS40-0689	17-17.5 mm	.6693 – .6890
-	-	-	CS32-0709	CS40-0709	17.5-18 mm	.6890 – .7087
-	-	-	CS32-0728	CS40-0728	18-18.5 mm	.7087 – .7283
-	-	-	CS32-0748	CS40-0748	18.5-19 mm	.7283 – .7480
-	-	-	CS32-0768	CS40-0768	19-19.5 mm	.7480 – .7677
-	-	-	CS32-0787	CS40-0787	19.5-20 mm	.7677 – .7874
-	-	-	-	CS40-0807	20-20.5 mm	.7874 – .8071
-	-	-	-	CS40-0826	20.5-21 mm	.8071 – .8268
-	-	-	-	CS40-0846	21-21.5 mm	.8268 – .8465
-	-	-	-	CS40-0866	21.5-22 mm	.8465 – .8661
-	-	-	-	CS40-0885	22-22.5 mm	.8661 – .8858
-	-	-	-	CS40-0905	22.5-23 mm	.8858 – .9055
-	-	-	-	CS40-0925	23-23.5 mm	.9055 – .9252
-	-	-	-	CS40-0944	23.5-24 mm	.9252 – .9449
-	-	-	-	CS40-0964	24-24.5 mm	.9449 – .9646
-	-	-	-	CS40-0984	24.5-25 mm	.9646 – .9843
-	-	-	-	CS40-1003	25-25.5 mm	.9843 – 1.0039
-	-	-	-	CS40-1023	25.5-26 mm	1.0039 – 1.0236



STRAIGHT SHANK COLLET CHUCKS



ER Extension ER16-750-750



ER11 COLLET SERIES .020" TO .275" (.5MM TO 7MM)

Part Number	A (Dia.)	B (Dia.)	C	D	OAL	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque	Wrench
ER11-500-6H	.500	.615	5.50	2.90	6.75	LN-ER11	029-909	22 ft. lbs.	ECN56W
ER11-625-6H	.625	.615	5.51	1.65	6.75	LN-ER11	029-909	22 ft. lbs.	ECN56W
ER11-750-6H	.750	.750	6.00	2.00	6.75	11ERHN	029-088	22 ft. lbs.	300CNW

ER16 COLLET SERIES .020" TO .393" (.5MM TO 10MM)

Part Number	A (Dia.)	B (Dia.)	C	D	OAL	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque	Wrench
ER16-750-550	.750	1.100	4.00	2.00	5.50	16ERHPN	BS-20	42 ft. lbs.	ECN20W
ER16-750-750	.750	1.100	6.00	2.00	7.50	16ERHPN	BS-20	42 ft. lbs.	ECN20W
ER16-750-7H	.750	0.850	6.30	3.90	7.00	LN-ER16	BS-20	42 ft. lbs.	ECN78W

ER20 COLLET SERIES .039" TO .511" (1MM TO 13MM)

Part Number	A (Dia.)	B (Dia.)	C	D	OAL	Collet Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque	Wrench
ER20-100-7H	1.000	1.209	6.40	6.50	7.20	LN-ER20	BS-SF5818LH-.75	60 ft. lbs.	ENC20W
ER20-625-560H	.625	1.344	3.94	1.66	-	20ERN	029-E08	60 ft. lbs.	20ERENW
ER20-750-6H	.750	1.344	6.00	1.81	7.70	20ERHPN	029-E12	60 ft. lbs.	20ERHNW

ER25 COLLET SERIES .039" TO .630" (1MM TO 16MM)

Part Number	A (Dia.)	B (Dia.)	C	D	OAL	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque	Wrench
ER25-100-531	1.000	1.375	3.94	3.90	5.31	25EREN	029-E12	86 ft. lbs.	25ERENW
ER25-750-4	.750	1.660	4.00	1.81	6.10	25ERN	029-E12	86 ft. lbs.	25ERNW
ER25-750-531	.750	1.660	3.94	1.31	5.31	25ERP	029-E12	86 ft. lbs.	25ERNW

ER32 COLLET SERIES .078" TO .787" (2MM TO 20MM)

Part Number	A (Dia.)	B (Dia.)	C	D	OAL	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque	Wrench
ER32-100-425	1.000	1.970	2.00	3.63	4.25	32ERP	BS-11	100 ft. lbs.	32ERNW
ER32-125-6	1.250	1.970	5.75	3.00	8.00	32ERP	BS-11	100 ft. lbs.	32ERNW
ER32-750-425	.750	1.970	2.00	3.85	4.25	32ERP	BS-20	100 ft. lbs.	32ERNW

ER40 COLLET SERIES .118" TO 1.181" (3MM TO 30MM)

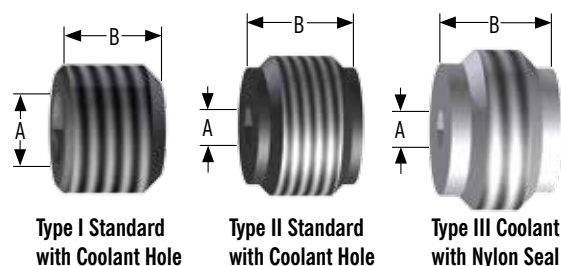
Part Number	A (Dia.)	B (Dia.)	C	D	OAL	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque	Wrench
ER40-125-2	1.250	2.359	2.37	3.75	4.75	40ERN	029-E18	146 ft. lbs.	40ERNW
ER40-125-413	1.250	2.359	1.70	1.77	4.13	40ERP	029-E18	146 ft. lbs.	40ERNW

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



ER TYPE 1 & 2 BACKUP SCREWS

Type 1 Part Number	Type 2 Part Number	A	B	Thread Left Hand
029-909	-	5/32"	1/4"	5/16"-24
-	BS-09	3/16"	9/16"	9/16"-18
-	BS-10	3/16"	9/16"	1 1/8"-16
-	BS-11	5/16"	9/16"	11/16"-16
-	BS-18	3/16"	9/16"	13/16"-16
BS-20	-	7/32"	3/8"	7/16"-20



STANDARD WRENCHES

Part Number	Collet Series	Style
300CNW	ER11	Hex
ECN20W	ER16	Hex
20ERHNW	ER20	Hex
25ERNW	ER25	Spanner
32ERNW	ER32	Spanner
40ERNW	ER40	Spanner



TORQUE WRENCHES

Part Number	Range	Length
TW-45	5 - 45 ft. lbs.	12
TW-150	30 - 150 ft. lbs.	16.6
TW-220	45 - 220 ft. lbs.	22.2

POWER NUTS FOR MAXIMUM GRIP FORCE AND CONCENTRICITY

Part Number	ER Size	B	Size and Style	Standard Wrench	Torque Wrench Nose
16ERHPN	ER16	1.11	1" Hex	ECN20W	TWN-16ERHNW
20ERHPN	ER20	1.34	1 3/16" Hex	20ERHNW	TWN-20ERHNW
25ERPN	ER25	1.67	Spanner	25ERNW	TWN-25ERNW
32ERPN	ER32	1.97	Spanner	32ERNW	TWN-32ERNW
40ERPN	ER40	2.47	Spanner	40ERNW	TWN-40ERNW



Power Nut

FLUSH NUTS FOR MINIMUM OVERHANG

Part Number	ER Size	B	Size and Style	Standard Wrench	Torque Wrench Nose
11ERHN	ER11	0.75	11/16" Hex	300CNW	-
16ERHN	ER16	1.11	1" Hex	ECN20W	TWN-16ERHNW
20ERHN	ER20	1.34	1 3/16" Hex	20ERHNW	TWN-20ERHNW
25ERN	ER25	1.67	Spanner	25ERNW	TWN-25ERNW
32ERN	ER32	1.97	Spanner	32ERNW	TWN-32ERNW
40ERN	ER40	2.47	Spanner	40ERNW	TWN-40ERNW



Flush Nut

COOLANT NUTS FOR USE WITH COOLANT NUT SEALS

Part Number	ER Size	B	Size and Style	Standard Wrench	Torque Wrench Nose
16ERHCN	ER16	1.11	1" Hex	ECN20W	TWN-16ERHNW
20ERHCN	ER20	1.34	1 3/16" Hex	20ERHNW	TWN-20ERHNW
25ERCN	ER25	1.67	Spanner	25ERNW	TWN-25ERNW
32ERCN	ER32	1.97	Spanner	32ERNW	TWN-32ERNW
40ERCN	ER40	2.47	Spanner	40ERNW	TWN-40ERNW



Coolant Nut

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



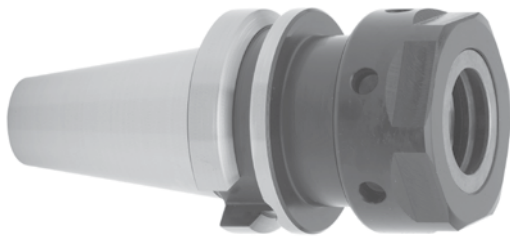
Toolholding

PRODUCTION TOOLHOLDING SOLUTIONS

From production to performance toolholders, Parlec offers the most complete line of toolholding solutions. Unmatched in quality, reliability and value.



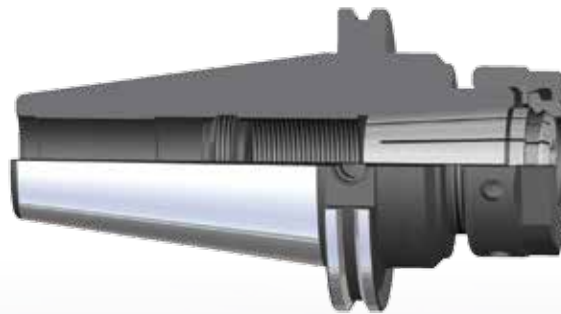
SINGLE-ANGLE COLLET CHUCKS



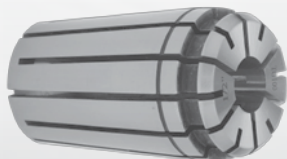
Single-Angle Collet Chuck C50-10SA500 shown here.

*See Manufacturing Specifications section in the back of the catalog for details.

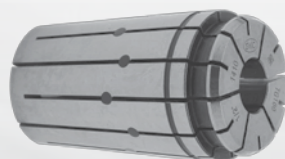
- Constructed of alloy steel for long, durable service life.
- Hardened to Rc: 52-56 to avoid damaging collet chuck threads.
- Shiny taper with black oxide finish for the best combination of accuracy and durability.
- Collet seat taper T.I.R. $\leq .0002''$.
- Collet face within .06" of nut face for maximum rigidity.
- Collet can be removed with single hand. No tooling required and improved collet life.
- Precision ball bearing type collet races provide higher clamping forces.
- Through-spindle coolant capability.
- ParSymmetry design for high-speed operation.
- Flange-entry coolant is the same as DIN Form B. Other sizes available on request.



System Accessories



Single-Angle Collet



Single-Angle Sealed Collet



Single-Angle Coolant Back up Screw



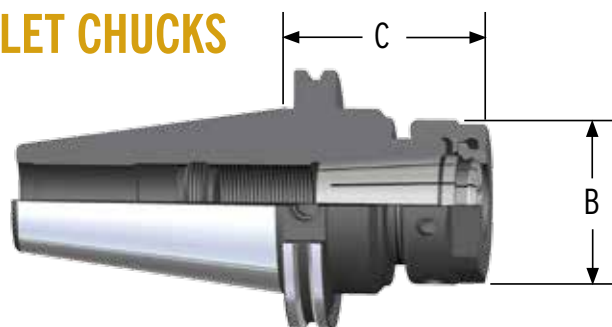
Single-Angle Golden Seal

COLLET RANGE SPECIFICATIONS

Collet Size	Range Inch	Range Metric	Collet Nut (Incl.)	Nut Torque
75PG	.031" to .750"	.8 mm to 19 mm	75HCN	60 ft. lbs.
100 PG	.031" to 1.000"	.8 mm to 25.4 mm	100HCN	60 ft. lbs.
150 PG	.0484" to 1.500"	12.3 mm to 38.1 mm	15CN	70 ft. lbs.



SINGLE-ANGLE COLLET CHUCKS



BT 40 TAPER

Size	Part Number	Part Number with AD/B Coolant	B (Dia.)	C	Socket Depth	Stop Screw (Incl.)	Collet Nut (Incl.)	Nut Torque
75PG	B40-75SC3	-	2.10	2.75	3.00	BS-18	75HCN	60 ft. lbs.
100PG	B40-10SC3	-	2.44	3.00	3.40	BS-08	100HCN	60 ft. lbs.
150PG	B40-10SC5	-	2.44	5.00	5.00	BS-10	15CN	70 ft. lbs.

CAT 40 TAPER

Size	Part Number	Part Number with AD/B Coolant	B (Dia.)	C	Socket Depth	Stop Screw (Incl.)	Collet Nut (Incl.)	Nut Torque
75PG	C40-75SC3	C40BC-75SC300	2.10	3.00	3.00	BS-18	75HCN	60 ft. lbs.
	-	C40BC-75SC600		6.00	3.00			
100PG	C40-10SC3	C40BC-10SC300	2.44	3.00	3.35	BS-08	100HCN	60 ft. lbs.
	C40-10SC5	-		5.00	4.54			
	C40-10SC6	C40BC-10SC650		6.50	6.00			
150PG	C40-15SC4	-	3.43	4.88	4.21	BS-10	15CN	70 ft. lbs.

CAT 50 TAPER

Size	Part Number	Part Number with AD/B Coolant	B (Dia.)	C	Socket Depth	Stop Screw (Incl.)	Collet Nut (Incl.)	Nut Torque
75PG	-	C50BC-75SC300	2.10	3.00	3.00	BS-18	75HCN	60 ft. lbs.
	-	C50BC-75SC600		6.00				
100PG	C50-10SC3	C50BC-10SC300	2.44	3.00	4.00	BS-10	100HCN	60 ft. lbs.
	C50-10SC4	-		3.50	4.25			
	C50-10SC5	-		5.50	5.89			
	C50-10SC7	C50BC-10SC750		7.50	5.50			
150PG	C50-15SC3	-	3.43	3.00	3.50	BS-15	15CN	70 ft. lbs.
	C50-15SC4	-		3.50	4.00			
	C50-15SC5	-		5.50	-			
	C50-15SC7	-		7.50	5.89			

NMTB 40 TAPER

Size	Part Number	Part Number with AD/B Coolant	B (Dia.)	C	Socket Depth	Stop Screw (Incl.)	Collet Nut (Incl.)	Nut Torque
100PG	N40-10SC3	-	2.44	3.00	3.50	BS-08	100HCN	60 ft. lbs.

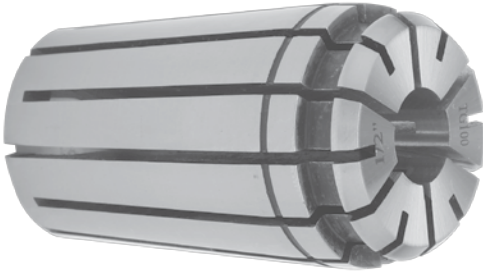
NMTB 50 TAPER

Size	Part Number	Part Number with AD/B Coolant	B (Dia.)	C	Socket Depth	Stop Screw (Incl.)	Collet Nut (Incl.)	Nut Torque
100PG	N50-10SC3	-	2.44	3.00	4.50	BS-10	100HCN	60 ft. lbs.
150PG	N50-15SC3	-	3.43	3.00	4.50	BS-15	15CN	70 ft. lbs.

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



SINGLE-ANGLE COLLETS



Single-Angle Collet 100PG-0500 shown here.

- Collapse range .016" maximum.
- .0005" T.I.R. measured at a length 4X the pin diameter or a maximum of 2".



COLLET

Type	L	D
75PG	1.844	1.062
100PG	2.375	1.379
150PG	3.000	2.001

75PG COLLET SETS

Part Number	Quantity	Range	Increments
75PG-S016	46	3/64 - 3/4	1/64
75PG-S031	23	1/16 - 3/4	1/32
75PG-S062	12	1/16 - 3/4	1/16

100PG COLLET SETS

Part Number	Quantity	Range	Increments
100PG-S016	59	3/32 - 1	1/64
100PG-S021	21	3/8 - 1	1/32
100PG-S031	30	3/32 - 1	1/32
100PG-S041	41	3/8 - 1	1/64
100PG-S062	15	1/8 - 1	1/16
100PG-S125	8	1/8 - 1	1/8

150PG COLLET SETS

Part Number	Quantity	Range	Increments
150PG-S016	65	1/2 - 1 1/2	1/64
150PG-S031	33	1/2 - 1 1/2	1/32

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



STANDARD COLLET SERIES

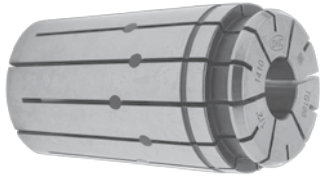
75PG Part No.	100PG Part No.	150PG Part No.	Inch Range	Metric Range
-	100PG-10MM	-	-	9.5-10
-	100PG-12MM	-	-	11.5-12
-	100PG-14MM	-	-	13.5-14
-	100PG-16MM	-	-	15.5-16
-	100PG-18MM	-	-	17.5-18
-	100PG-20MM	-	-	19.5-20
75PG-0046	100PG-0046	-	.0312 - .0469	1
75PG-0062	100PG-0062	-	.0469 - .0625	1.5
75PG-0078	100PG-0078	-	.0625 - .0781	2
75PG-0093	100PG-0093	-	.0781 - .0938	-
75PG-0109	100PG-0109	-	.0938 - .1094	2.5
75PG-0125	100PG-0125	-	.1094 - .1250	3
75PG-0140	100PG-0140	-	.1250 - .1406	3.5
75PG-0156	100PG-0156	-	.1406 - .1562	-
75PG-0171	100PG-0171	-	.1562 - .1719	4
75PG-0187	100PG-0187	-	.1719 - .1875	4.5
75PG-0203	100PG-0203	-	.1875 - .2031	5
75PG-0218	100PG-0218	-	.2031 - .2188	5.5
75PG-0234	100PG-0234	-	.2188 - .2344	-
75PG-0250	100PG-0250	-	.2344 - .2500	6
75PG-0265	100PG-0265	-	.2500 - .2656	6.5
75PG-0281	100PG-0281	-	.2656 - .2812	7
75PG-0296	100PG-0296	-	.2812 - .2969	7.5
75PG-0312	100PG-0312	-	.2969 - .3125	-
75PG-0328	100PG-0328	-	.3125 - .3281	8
75PG-0343	100PG-0343	-	.3281 - .3438	8.5
75PG-0359	100PG-0359	-	.3438 - .3594	9
75PG-0375	100PG-0375	-	.3594 - .3750	9.5
75PG-0390	100PG-0390	-	.3750 - .3906	-
75PG-0406	100PG-0406	-	.3906 - .4062	10
75PG-0421	100PG-0421	-	.4062 - .4219	10.5
75PG-0437	100PG-0437	-	.4219 - .4375	11
75PG-0453	100PG-0453	-	.4375 - .4531	11.5
75PG-0468	100PG-0468	-	.4531 - .4688	-
75PG-0484	100PG-0484	-	.4688 - .4844	12
75PG-0500	100PG-0500	150PG-0500	.4844 - .5000	12.7
75PG-0515	100PG-0515	150PG-0515	.5000 - .5156	13
75PG-0531	100PG-0531	150PG-0531	.5156 - .5312	13.5
75PG-0546	100PG-0546	150PG-0546	.5312 - .5469	-
75PG-0562	100PG-0562	150PG-0562	.5469 - .5625	14
75PG-0578	100PG-0578	150PG-0578	.5625 - .5781	14.5
75PG-0593	100PG-0593	150PG-0593	.5781 - .5938	15
75PG-0609	100PG-0609	150PG-0609	.5938 - .6094	-
75PG-0625	100PG-0625	150PG-0625	.6094 - .6250	15.5
75PG-0640	100PG-0640	150PG-0640	.6250 - .6406	16
75PG-0656	100PG-0656	150PG-0656	.6406 - .6562	16.5
75PG-0671	100PG-0671	150PG-0671	.6562 - .6719	17
75PG-0687	100PG-0687	150PG-0687	.6719 - .6875	-
75PG-0703	100PG-0703	150PG-0703	.6875 - .7031	17.5

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.

75PG Part No.	100PG Part No.	150PG Part No.	Inch Range	Metric Range
75PG-0718	100PG-0718	150PG-0718	.7031 - .7188	18
75PG-0734	100PG-0734	150PG-0734	.7188 - .7344	18.5
75PG-0750	100PG-0750	150PG-0750	.7344 - .7500	19
-	100PG-0765	150PG-0765	.7500 - .7656	-
-	100PG-0781	150PG-0781	.7656 - .7812	19.5
-	100PG-0796	150PG-0796	.7812 - .7969	20
-	100PG-0812	150PG-0812	.7969 - .8125	20.5
-	100PG-0828	150PG-0828	.8125 - .8281	21
-	100PG-0843	150PG-0843	.8281 - .8438	-
-	100PG-0859	150PG-0859	.8438 - .8594	21.5
-	100PG-0875	150PG-0875	.8594 - .8750	22
-	100PG-0890	150PG-0890	.8750 - .8906	22.5
-	100PG-0906	150PG-0906	.8906 - .9062	23
-	100PG-0921	150PG-0921	.9062 - .9219	-
-	100PG-0937	150PG-0937	.9219 - .9375	23.5
-	100PG-0953	150PG-0953	.9375 - .9531	24
-	100PG-0968	150PG-0968	.9531 - .9688	24.5
-	100PG-0984	150PG-0984	.9688 - .9844	25
-	100PG-1000	150PG-1000	.9844 - 1.0000	-
-	-	150PG-1015	1.0000 - 1.0156	25.5
-	-	150PG-1031	1.0156 - 1.0312	26
-	-	150PG-1046	1.0312 - 1.0469	26.5
-	-	150PG-1062	1.0469 - 1.0625	27
-	-	150PG-1078	1.0625 - 1.0781	-
-	-	150PG-1093	1.0781 - 1.0938	27.5
-	-	150PG-1109	1.0938 - 1.1094	28
-	-	150PG-1125	1.1094 - 1.1250	28.5
-	-	150PG-1140	1.1250 - 1.1406	29
-	-	150PG-1156	1.1406 - 1.1562	-
-	-	150PG-1171	1.1562 - 1.1719	29.5
-	-	150PG-1187	1.1719 - 1.1875	30
-	-	150PG-1203	1.1875 - 1.2031	30.5
-	-	150PG-1218	1.2031 - 1.2188	31
-	-	150PG-1234	1.2188 - 1.2344	-
-	-	150PG-1250	1.2344 - 1.2500	31.5
-	-	150PG-1265	1.2500 - 1.2656	32
-	-	150PG-1281	1.2656 - 1.2812	32.5
-	-	150PG-1296	1.2812 - 1.2969	33
-	-	150PG-1312	1.2969 - 1.3125	-
-	-	150PG-1328	1.3125 - 1.3281	33.5
-	-	150PG-1343	1.3281 - 1.3438	34
-	-	150PG-1359	1.3438 - 1.3594	34.5
-	-	150PG-1375	1.3594 - 1.3750	35
-	-	150PG-1390	1.3750 - 1.3906	-
-	-	150PG-1406	1.3906 - 1.4062	35.5
-	-	150PG-1421	1.4062 - 1.4219	36
-	-	150PG-1437	1.4219 - 1.4375	36.5
-	-	150PG-1453	1.4375 - 1.4531	37
-	-	150PG-1468	1.4531 - 1.4688	-
-	-	150PG-1484	1.4688 - 1.4844	37.5
-	-	150PG-1500	1.4844 - 1.5000	38



HIGH PRESSURE COOLANT OPTIONS



Single-Angle Sealed Collets (RPG)

- Collet slots are sealed to prevent coolant escape.
- Collapse range .005".
- Seals up to 600 psi.



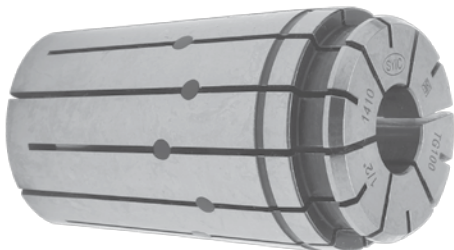
Single-Angle Coolant Back-Up Screws with Nylon Face

- Tool shank must protrude through the collet.
- Seals up to 600 psi.



Single-Angle GOLDEN SEAL™ Coolant Seals

- For use with straight-shank cutting tools with internal coolant-fed oil hole.
- Use on existing collets, no special collet nut, tools or hardware required.
- Golden Seal is simply inserted into the collet nut and the tool assembled as normal.
- Golden Seal is an excellent means to stop collet contamination at any psi from chips or grinding dust.
- Seals 800 psi.

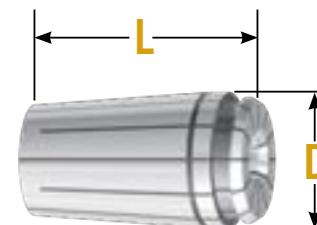


Single-Angle Sealed Collets

- Collapse range .005" maximum.
- Withstands coolant pressure up to 600 psi.

COLLET

Type	L	D
75PG	1.844	1.062
100PG	2.375	1.379
150PG	3.000	2.001



SEALED COLLETS

100RPG Part No.	Size (inches)
100RPG-0187	.187
100RPG-0218	.218
100RPG-0234	.234
100RPG-0250	.250
100RPG-0265	.265
100RPG-0281	.281
100RPG-0296	.296
100RPG-0312	.312
100RPG-0328	.328
100RPG-0343	.343
100RPG-0359	.359
100RPG-0375	.375
100RPG-0390	.390
100RPG-0406	.406
100RPG-0421	.421
100RPG-0437	.437
100RPG-0453	.453
100RPG-0468	.468
100RPG-0484	.484
100RPG-0500	.500
100RPG-0515	.515
100RPG-0531	.531
100RPG-0546	.546
100RPG-0562	.562
100RPG-0578	.578
100RPG-0593	.593
100RPG-0609	.609
100RPG-0625	.625
100RPG-0640	.640
100RPG-0656	.656
100RPG-0671	.671
100RPG-0687	.687
100RPG-0703	.703
100RPG-0718	.718

100RPG Part No.	150RPG Part No.	Size (inches)
100RPG-0734	-	.734
100RPG-0750	-	.750
100RPG-0765	-	.765
100RPG-0781	-	.781
100RPG-0796	-	.796
100RPG-0812	-	.812
100RPG-0828	-	.828
100RPG-0843	-	.843
100RPG-0859	-	.859
100RPG-0875	-	.875
100RPG-0890	-	.890
100RPG-0906	-	.906
100RPG-0921	-	.921
100RPG-0937	-	.937
100RPG-0953	-	.953
100RPG-0968	-	.968
100RPG-0984	-	.984
100RPG-1000	150RPG-1000	1.000
-	150RPG-1250	1.250
-	150RPG-1500	1.500

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



PG 100 COOLANT SEALS

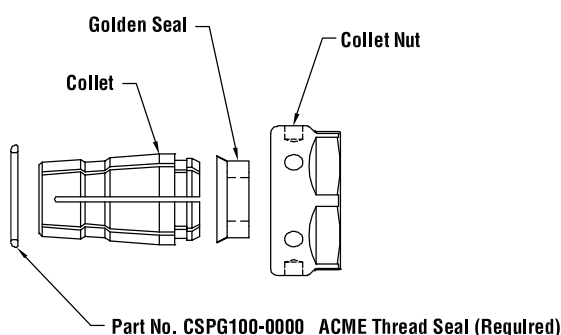
Part Number	Range (Inch)	Range (mm)
CSPG100-0141	.122 - .141	3.1 - 3.6
CSPG100-0160	.142 - .160	3.6 - 4.1
CSPG100-0180	.161 - .180	4.1 - 4.6
CSPG100-0200	.181 - .200	4.6 - 5.1
CSPG100-0220	.201 - .220	5.1 - 5.6
CSPG100-0240	.221 - .240	5.6 - 6.1
CSPG100-0260	.241 - .260	6.1 - 6.6
CSPG100-0280	.261 - .280	6.6 - 7.1
CSPG100-0300	.281 - .300	7.1 - 7.6
CSPG100-0319	.301 - .319	7.6 - 8.1
CSPG100-0339	.320 - .339	8.1 - 8.6
CSPG100-0359	.340 - .359	8.6 - 9.1
CSPG100-0379	.360 - .379	9.1 - 9.6
CSPG100-0398	.380 - .398	9.6 - 10.1
CSPG100-0417	.399 - .417	10.1 - 10.6
CSPG100-0437	.418 - .437	10.6 - 11.1
CSPG100-0457	.438 - .457	11.1 - 11.6
CSPG100-0477	.458 - .477	11.6 - 12.1
CSPG100-0497	.478 - .497	12.1 - 12.6
CSPG100-0516	.498 - .516	12.6 - 13.1
CSPG100-0536	.517 - .536	13.1 - 13.6
CSPG100-0556	.547 - .556	13.6 - 14.1
CSPG100-0575	.557 - .575	14.1 - 14.6
CSPG100-0595	.576 - .595	14.6 - 15.1
CSPG100-0614	.596 - .614	15.1 - 15.6
CSPG100-0634	.615 - .634	15.6 - 16.1
CSPG100-0654	.635 - .654	16.1 - 16.6
CSPG100-0673	.655 - .673	16.6 - 17.1
CSPG100-0693	.674 - .693	17.1 - 17.6
CSPG100-0713	.694 - .713	17.6 - 18.1
CSPG100-0732	.714 - .732	18.1 - 18.6
CSPG100-0752	.733 - .752	18.6 - 19.1
CSPG100-0772	.753 - .772	19.1 - 19.6
CSPG100-0792	.773 - .792	19.6 - 20.1
CSPG100-0811	.793 - .811	20.1 - 20.6
CSPG100-0831	.812 - .831	20.6 - 21.1
CSPG100-0851	.832 - .851	21.1 - 21.6
CSPG100-0870	.852 - .870	21.6 - 22.1
CSPG100-0890	.871 - .890	22.1 - 22.6
CSPG100-0910	.891 - .910	22.6 - 23.1
CSPG100-0929	.911 - .929	23.1 - 23.6
CSPG100-0949	.930 - .949	23.6 - 24.1
CSPG100-0969	.950 - .969	24.1 - 24.6
CSPG100-0988	.970 - .988	24.6 - 25.1
CSPG100-1008	.989 - 1.008	25.1 - 25.6
CSPG100-S046	.122 - 1.008	3.1 - 25.6

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.

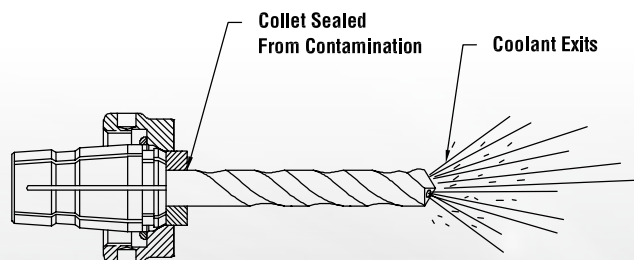
Single-Angle Coolant Seals



Single-Angle Golden Seal shown here.



PART# CSPG100-0000

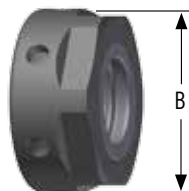




SINGLE-ANGLE COLLET NUTS:



Style 1 Spanner



Style 2 Hex/Spanner

75PG COLLET SERIES

Part Number	Style	Type	B
75HCN	2	Hex/Spanner	2.10

Order Collet Nut Wrench **75HCNW** separately.

100PG COLLET SERIES

Part Number	Style	Type	B
100HCN	2	Hex/Spanner	2.44

Order Collet Nut Wrench **100HCNW** (Hex) or **100CNW** (Spanner) separately.

150PG COLLET SERIES

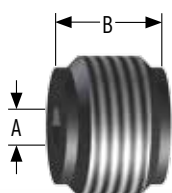
Part Number	Style	Type	B
15CN	1	Spanner	3.43

Order Collet Nut Wrench **100CNW** separately.

BACK-UP SCREWS:



Type BS-15
shown here.



Standard
with Coolant Hole

BACK UP SCREWS

Part No.	A	B	Thread (Left-Hand)
BS-08	3/16	.56	15/16-16
BS-10	3/16	.56	1 1/8-16
BS-15	3/16	.75	1 5/8-12
BS-18	3/16	.56	13/16-16

Seals up to 750 psi.

SINGLE-ANGLE COLLET WRENCHES:



Open End



Adjustable Pin Spanner
Wrench **100CNW** shown here

WRENCHES

Nut Collet Size	Part Number	Type	Size (Inches)
75PG	75HCNW	Open End	1 7/8
100PG/150PG	100CNW	Pin Spanner	-
100PG	100HCNW	Open End	2 1/4

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



DOUBLE-ANGLE COLLET CHUCKS



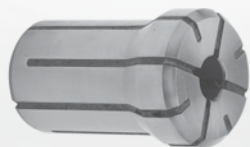
- Constructed of alloy steel for long, durable service life.
- Hardened to Rc: 52-56 to avoid damaging collet chuck threads.
- Shiny taper with black oxide finish for the best combination of accuracy and durability.
- Collet seat taper T.I.R. $\leq .0004"$.
- Through-spindle coolant capability.
- ParSymmetry design for high-speed operation.
- Flange-entry coolant is the same as DIN Form B. Other sizes available on request.

Double-Angle Collet Chuck C40-20DC3 shown here.

*See Manufacturing Specifications section in the back of the catalog for details.



System Accessories



Double-Angle Sealed Collet



Double-Angle Collet



Double-Angle Golden Seal



Back-up Screw



Double-Angle Collet Nut

COLLET RANGE SPECIFICATIONS

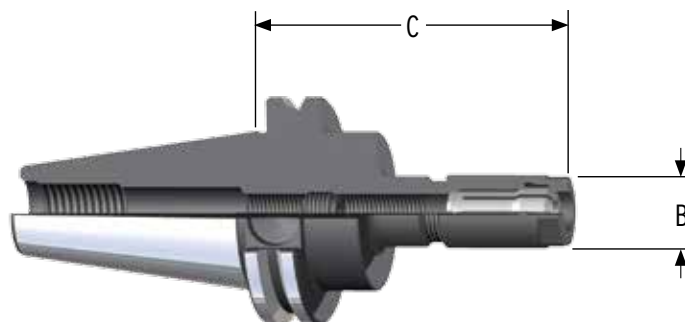
Collet Size	Range Inch	Range Metric	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA300	.031" to .250"	.8 mm to 6.4 mm	CN30	25 ft.lbs.	029-909
DA200	.031" to .375"	.8 mm to 9.5 mm	CN20	30 ft. lbs.	BS-20
DA180	.031" to .750"	.8 mm to 19 mm	ECN75	40 ft. lbs.	BS-18

*N30-20DC2 uses 029-028 back up screw

*B30-18DC300 uses 180CN collet nut



DOUBLE-ANGLE COLLET CHUCKS



BT 40 TAPER

Size	Part Number	B	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA300	B40-30DC3	0.62	3.00	2.75	CN30	25 ft. lbs.	029-909
DA200	B40-20DC2	1.10	2.75	2.25	CN20	30 ft. lbs.	BS-20
DA180	B40-18DC3	1.44	3.00	3.25	ECN75	40 ft. lbs.	BS-18

CAT 40 TAPER

Size	Part Number	B	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA300	C40-30DC3	0.62	3.38	3.00	CN30	25 ft. lbs.	029-909
	C40-30DC5	0.62	5.15	3.00			
DA200	C40-20DC2	1.10	2.73	2.50	CN20	30 ft. lbs.	BS-20
	C40-20DC3	0.81	3.00	3.00			
	C40-20DC5	0.81	5.00	5.00			
DA180	C40-18DC2	1.44	2.95	3.00	ECN75	40 ft. lbs.	BS-18
	C40-18DC3	1.44	3.38	3.56			
	C40-18DC5	1.44	5.15	4.88			

CAT 50 TAPER

Size	Part Number	B	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA180	C50-18DC3	1.44	3.38	3.30	ECN75	40 ft. lbs.	BS-18
	C50-18DC6	1.44	6.15	6.00			
	C50-18DC8	1.44	8.15	5.86			

NMTB 30 TAPER

Size	Part Number	B	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA200	N30-20DC2	0.81	2.25	3.00	CN20	30 ft. lbs.	BS-20
DA180	N30-18DC2	1.44	2.25	3.00	ECN75	40 ft. lbs.	BS-18

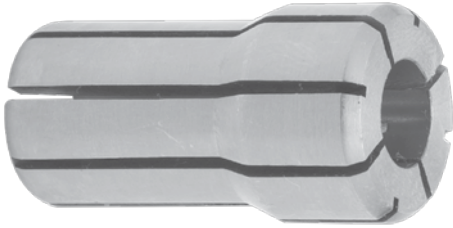
NMTB 40 TAPER

Size	Part Number	B	C	Socket Depth	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA200	N40-20DC2	0.81	2.15	3.00	CN20	30 ft. lbs.	BS-20
DA180	N40-18DC2	1.44	2.15	3.00	ECN75	40 ft. lbs.	BS-18

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



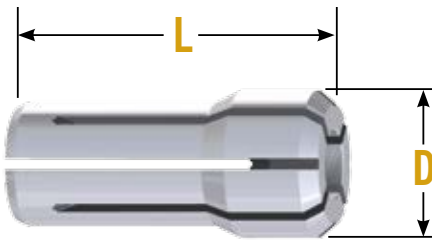
DOUBLE-ANGLE COLLETS



Double-Angle Collet
DA100-0375 shown here

Double Angle Collet

- Collapse range .016" maximum.



COLLET

Type	L	D
DA300	1.000	.375
DA200	1.187	.539
DA100	1.437	.769
DA180	1.639	1.025

Order Collets separately.

DA300 COLLET SETS

Part Number	Quantity	Range	Increments
DA300-S016	14	3/64 - 1/4	1/64
DA300-S031	7	1/16 - 1/4	1/32

DA200 COLLET SETS

Part Number	Quantity	Range	Increments
DA200-S016	21	3/64 - 3/8	1/64
DA200-S031	11	1/16 - 3/8	1/32

DA180 COLLET SETS

Part Number	Quantity	Range	Increments
DA180-S016	33	1/4 - 3/4	1/64
DA180-S021	21	1/8 - 3/4	1/32
DA180-S031	17	1/4 - 3/4	1/32
DA180-S045	45	1/16 - 3/4	1/64
DA180-S062	12	1/16 - 3/4	1/16

DA100 COLLET SETS

Part Number	Quantity	Range	Increments
DA100-S016	29	1/8 - 9/16	1/64
DA100-S031	15	1/8 - 9/16	1/32
DA100-S033	33	1/16 - 9/16	1/64

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



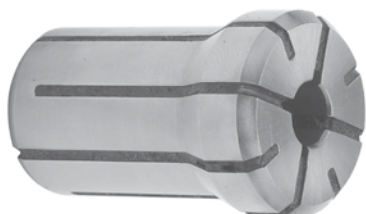
STANDARD COLLET SERIES

DA300 Part No.	DA200 Part No.	DA100 Part No.	DA180 Part No.	Range Inch	Range Metric
DA300-0046	DA200-0046	DA100-0046	DA180-0046	.0312 – .0469	1
DA300-0062	DA200-0062	DA100-0062	DA180-0062	.0469 – .0625	1.5
DA300-0078	DA200-0078	DA100-0078	DA180-0078	.0625 – .0781	2
DA300-0093	DA200-0093	DA100-0093	DA180-0093	.0781 – .0938	—
DA300-0109	DA200-0109	DA100-0109	DA180-0109	.0938 – .1094	2.5
DA300-0125	DA200-0125	DA100-0125	DA180-0125	.1094 – .1250	3
DA300-0140	DA200-0140	DA100-0140	DA180-0140	.1250 – .1406	3.5
DA300-0156	DA200-0156	DA100-0156	DA180-0156	.1406 – .1562	—
DA300-0171	DA200-0171	DA100-0171	DA180-0171	.1562 – .1719	4
DA300-0187	DA200-0187	DA100-0187	DA180-0187	.1719 – .1875	4.5
DA300-0203	DA200-0203	DA100-0203	DA180-0203	.1875 – .2031	5
DA300-0218	DA200-0218	DA100-0218	DA180-0218	.2031 – .2188	5.5
DA300-0234	DA200-0234	DA100-0234	DA180-0234	.2188 – .2344	—
DA300-0250	DA200-0250	DA100-0250	DA180-0250	.2344 – .2500	6
—	DA200-0265	DA100-0265	DA180-0265	.2500 – .2656	6.5
—	DA200-0281	DA100-0281	DA180-0281	.2656 – .2812	7
—	DA200-0296	DA100-0296	DA180-0296	.2812 – .2969	7.5
—	DA200-0312	DA100-0312	DA180-0312	.2969 – .3125	—
—	DA200-0328	DA100-0328	DA180-0328	.3125 – .3281	8
—	DA200-0343	DA100-0343	DA180-0343	.3281 – .3438	8.5
—	DA200-0359	DA100-0359	DA180-0359	.3438 – .3594	9
—	DA200-0375	DA100-0375	DA180-0375	.3594 – .3750	9.5
—	DA200-0390	DA100-0390	DA180-0390	.3750 – .3906	—
—	—	DA100-0406	DA180-0406	.3906 – .4062	10
—	—	DA100-0421	DA180-0421	.4062 – .4219	10.5
—	—	DA100-0437	DA180-0437	.4219 – .4375	11
—	—	DA100-0453	DA180-0453	.4375 – .4531	11.5
—	—	DA100-0468	DA180-0468	.4531 – .4688	—
—	—	DA100-0484	DA180-0484	.4688 – .4844	12
—	—	DA100-0500	DA180-0500	.4844 – .5000	12.5
—	—	DA100-0515	DA180-0515	.5000 – .5156	13
—	—	DA100-0531	DA180-0531	.5156 – .5312	13.5
—	—	DA100-0546	DA180-0546	.5312 – .5469	—
—	—	DA100-0562	DA180-0562	.5469 – .5625	14
—	—	—	DA180-0578	.5625 – .5781	14.5
—	—	—	DA180-0593	.5781 – .5938	15
—	—	—	DA180-0609	.5938 – .6094	—
—	—	—	DA180-0625	.6094 – .6250	15.5
—	—	—	DA180-0640	.6250 – .6406	16
—	—	—	DA180-0656	.6406 – .6562	16.5
—	—	—	DA180-0671	.6562 – .6719	17
—	—	—	DA180-0687	.6719 – .6875	—
—	—	—	DA180-0703	.6875 – .7031	17.5
—	—	—	DA180-0718	.7031 – .7188	18
—	—	—	DA180-0734	.7188 – .7344	18.5
—	—	—	DA180-0750	.7344 – .7500	19

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



HIGH PRESSURE COOLANT OPTIONS



Double-Angle Sealed Collets (RDA)

- Collet slots are sealed to prevent coolant escape.
- Collapse range .005".
- Seals up to 600 psi.

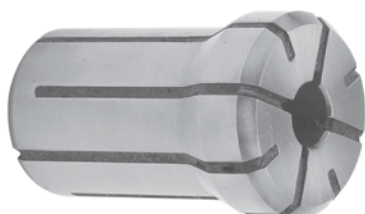


Double-Angle GOLDEN SEAL™ Coolant Seals

- Designed for use with through-coolant tools.
- No special collet nut is required.
- Golden Seal is simply inserted into the collet nut and the tool assembled as normal.
- Golden Seal is an excellent means to stop collet contamination at any psi from chips or grinding dust. Seals 800 psi.



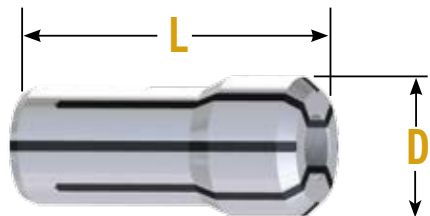
DOUBLE-ANGLE SEALED COLLETS (RPG)



COLLET

Type	L	D
DA300	1.000	.375
DA200	1.187	.539
DA100	1.437	.769
DA180	1.639	1.025

Order Collets separately.



SEALED COLLET SERIES

DA300 Part No.	DA200 Part No.	DA100 Part No.	DA180 Part No.	Size (inches)
RDA300-0125	RDA200-0125	RDA100-0125	-	.1250
RDA300-0140	RDA200-0141	RDA100-0141	-	.1406
RDA300-0156	RDA200-0156	RDA100-0156	-	.1562
RDA300-0172	RDA200-0172	RDA100-0171	-	.1719
RDA300-0188	RDA200-0188	RDA100-0188	-	.1875
RDA300-0203	RDA200-0203	RDA100-0203	-	.2031
RDA300-0219	RDA200-0219	RDA100-0219	-	.2188
RDA300-0234	RDA200-0234	RDA100-0234	-	.2344
RDA300-0250	RDA200-0250	RDA100-0250	RDA180-0250	.2500
-	RDA200-0266	RDA100-0266	RDA180-0266	.2656
-	RDA200-0281	RDA100-0281	RDA180-0281	.2812
-	RDA200-0297	RDA100-0297	RDA180-0297	.2969
-	RDA200-0312	RDA100-0312	RDA180-0312	.3125
-	RDA200-0328	RDA100-0328	RDA180-0328	.3281
-	RDA200-0344	RDA100-0344	RDA180-0344	.3438
-	RDA200-0359	RDA100-0359	RDA180-0359	.3594
-	RDA200-0375	RDA100-0375	RDA180-0375	.3750
-	RDA200-0391	RDA100-0391	RDA180-0391	.3906
-	-	RDA100-0406	RDA180-0406	.4062
-	-	RDA100-0422	RDA180-0422	.4219
-	-	RDA100-0438	RDA180-0438	.4375
-	-	RDA100-0453	RDA180-0453	.4531
-	-	RDA100-0469	RDA180-0469	.4688
-	-	RDA100-0484	RDA180-0484	.4844
-	-	RDA100-0500	RDA180-0500	.5000
-	-	RDA100-0516	RDA180-0516	.5156
-	-	RDA100-0531	RDA180-0531	.5312
-	-	RDA100-0547	RDA180-0547	.5469
-	-	RDA100-0562	RDA180-0562	.5625
-	-	-	RDA180-0578	.5781
-	-	-	RDA180-0594	.5938
-	-	-	RDA180-0609	.6094
-	-	-	RDA180-0625	.6250
-	-	-	RDA180-0641	.6406
-	-	-	RDA180-0656	.6562
-	-	-	RDA180-0672	.6719
-	-	-	RDA180-0688	.6875
-	-	-	RDA180-0703	.7031
-	-	-	RDA180-0719	.7188
-	-	-	RDA180-0734	.7344
-	-	-	RDA180-0750	.7500

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.

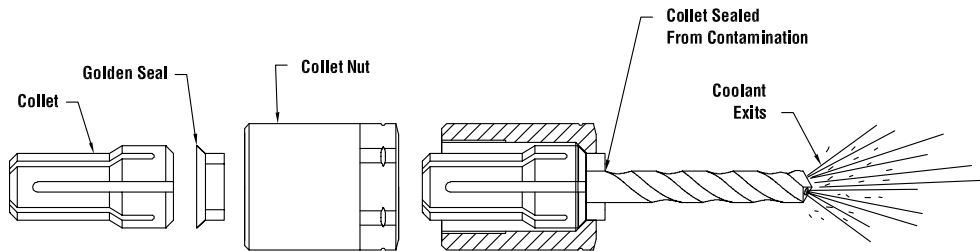


DOUBLE-ANGLE COOLANT SEALS



Double-Angle Golden Seal shown here.

- For use with straight-shank cutting tools with internal coolant-fed oil hole.
- Use on existing collets, no special collet nut, tools or hardware required.
- Golden Seal is simply inserted into the collet nut and the tool assembled as normal.
- Golden Seal is an excellent means to stop collet contamination at any psi from chips or grinding dust.
- Seals 800 psi.



DA COOLANT SEALS

DA200 Part No.	DA100 Part No.	DA180 Part No.	Range Inch	Range Metric
CSDA20-0141	CSDA10-0141	-	.122 - .141	3.1-3.6
CSDA20-0160	CSDA10-0160	-	.142 - .160	3.6-4.1
CSDA20-0180	CSDA10-0180	-	.161 - .180	4.1-4.6
CSDA20-0200	CSDA10-0200	-	.181 - .200	4.6-5.1
CSDA20-0220	CSDA10-0220	-	.201 - .220	5.1-5.6
CSDA20-0240	CSDA10-0240	-	.221 - .240	5.6-6.1
CSDA20-0260	CSDA10-0260	CSDA18-0260	.241 - .260	6.1-6.6
CSDA20-0280	CSDA10-0280	CSDA18-0280	.261 - .280	6.6-7.1
-	CSDA10-0300	CSDA18-0300	.281 - .300	7.1-7.6
-	CSDA10-0319	CSDA18-0319	.301 - .319	7.6-8.1
-	CSDA10-0339	CSDA18-0339	.320 - .339	8.1-8.6
-	CSDA10-0359	CSDA18-0359	.340 - .359	8.6-9.1
-	CSDA10-0379	CSDA18-0379	.360 - .379	9.1-9.6
-	CSDA10-0398	CSDA18-0398	.380 - .398	9.6-10.1
-	CSDA10-0417	CSDA18-0417	.399 - .417	10.1-10.6
-	CSDA10-0437	CSDA18-0437	.418 - .437	10.6-11.1
-	CSDA10-0457	CSDA18-0457	.438 - .457	11.1-11.6
-	CSDA10-0477	CSDA18-0477	.458 - .477	11.6-12.1
-	CSDA10-0497	CSDA18-0497	.478 - .497	12.1-12.6
-	CSDA10-0500	-	0.500	12.7
-	-	CSDA18-0516	.498 - .516	12.6-13.1
-	-	CSDA18-0536	.517 - .536	13.1-13.6

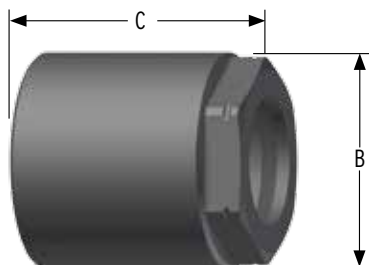
DA COOLANT SEALS

DA200 Part No.	DA100 Part No.	DA180 Part No.	Range Inch	Range Metric
-	-	CSDA18-0556	.537 - .556	13.6-14.1
-	-	CSDA18-0575	.557 - .575	14.1-14.6
-	-	CSDA18-0595	.576 - .595	14.6-15.1
-	-	CSDA18-0614	.596 - .614	15.1-15.6
-	-	CSDA18-0634	.615 - .634	15.6-16.1
-	-	CSDA18-0654	.635 - .654	16.1-16.6
-	-	CSDA18-0673	.655 - .673	16.6-17.1
-	-	CSDA18-0693	.674 - .693	17.1-17.6
CSDA20-S008	CSDA10-S019	CSDA18-S023	.537 - 1.008	13.6-25.6

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



Double-Angle Compression Nuts:



DA300 COLLET SERIES

Part Number	B	C	Hex	Thread Size	Wrench
CN30	.62	1.10	1/2	1/2 - 28	300CNW
ECN50	.56	1.10	1/2	7/16 - 32	ECN50W

Order Collet Nut Wrench separately.

DA200 COLLET SERIES

Part Number	B	C	Hex	Thread Size	Wrench
CN20	1.10	.88	1	3/4 - 16	ECN20W
ECN75	.81	1.38	3/4	11/16 - 20	ECN75W

Order Collet Nut Wrenches separately.

DA100 COLLET SERIES

Part Number	B	C	Hex	Thread Size	Wrench
ECN10	1.06	1.50	15/16	15/16 - 20	ECN10W

Order Collet Nut Wrench separately.

DA180 COLLET SERIES

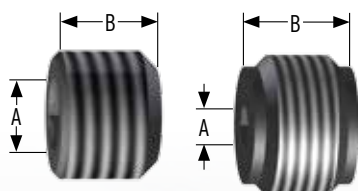
Part Number	B	C	Hex	Thread Size	Wrench
ECN12	1.44	1.60	1 1/4	1 1/4 - 16	ECN12W

Order Collet Nut Wrenches separately.

Double-Angle Type I and II Back-Up Screws:



Type II BS-18 shown here.



Type I Standard
with Coolant Hole

Type II Standard
with Coolant Hole

STANDARD

Type I Part No.	Type II Part No.	A	B	Thread (Left Hand)
029-028	—	1/4	1/2	1/2 - 13
029-904	—	1/4	3/8	1/2 - 13-RH**
029-909	—	5/32	1/4	5/16 - 24
029-910	—	7/32	3/8	7/16 - 20
029-911	—	5/16	1/2	5/8 - 18
—	BS-18	3/16	9/16	13/16 - 16
—	BS-20	7/32	3/8	7/16 - 20

** Right-hand thread only.

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



DOUBLE-ANGLE EXTENSIONS:



Extension EXT 750 shown here with tool.

DA300 COLLET SERIES

Part Number	Range	A (Dia.)	B (Dia.)	C	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque
EXT 500	.031-.250 (.8-6.4)	.500	.56	1.322	ECN50C	029-909	20 ft. lbs.

Order Collet Nut Wrench **ECN50W** separately.

DA200 COLLET SERIES

Part Number	Range	A (Dia.)	B (Dia.)	C	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque
EXT 750	.031-.391 (.75-9.9)	.750	.81	1.686	ECN75C	BS-20	30 ft. lbs.

Order Collet Nut Wrench **ECN75W** separately.

DA100 COLLET SERIES

Part Number	Range	A (Dia.)	B (Dia.)	C	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque
EXT 100	.031-.562 (.8-14.3)	1.000	1.06	1.829	ECN10C	029-911	35 ft. lbs.

Order Collet Nut Wrench **ECN10W** separately.

DA180 COLLET SERIES

Part Number	Range	A (Dia.)	B (Dia.)	C	Comp Nut (Incl.)	Stop Screw (Incl.)	Nut Tightening Torque
EXT 125	.031-.750 (.8-19)	1.250	1.44	1.813	ECN12C	BS-18	40 ft. lbs.

Order Collet Nut Wrench **ECN12W** separately.



Open End Wrench **ECN20W** shown here

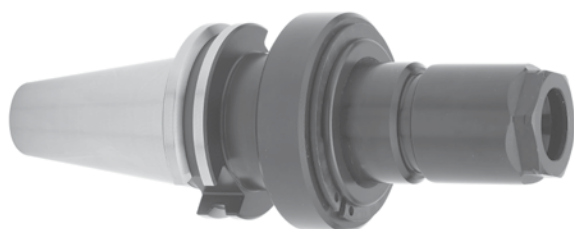
WRENCHES

Part Number	Type	Size (Inches)
ECN56W	Open End	9/16
ECN50W	Open End	1/2
ECN75W	Open End	3/4
ECN78W	Open End	7/8
ECN10W	Open End	15/16
ECN20W	Open End	1
ECN12W	Open End	1 1/4
180CNW	Open End	1 1/2

Other sizes available on request. Please call Parlec or your local Parlec representative for more information.



NUMERFLOAT FLOATING REAMER HOLDERS



Numerfloat C40-75FH5C shown here.

- For use with reamers or porting tools.
- Recommended for use with spiral flute reamers. Large diameter straight flute reamers with an even number of teeth may chatter.
- Floating tool holders feature .015" of radial float and 1° angular float. This allows reamers and other tools to follow the existing drilled hole.



BT 40 TAPER

Size	Part Number	Range Inch	Range Metric	Coolant Type	B	C	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
100 PG	B40-10FH5C	.031" to 1.000"	.8 mm to 25.4 mm	Through	2.44	5.25	100HCN	60 ft. lbs.	BS-18

CAT 40 TAPER

Size	Part Number	Range Inch	Range Metric	Coolant Type	B	C	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA180	C40-75FH5C	.031" to .750"	.8 mm to 19 mm	Through	1.44	5.06	ECN75	40 ft. lbs.	BS-18
100 PG	C40-10FH5C	0.46" to 1.000"	1.0 mm to 25.4 mm	Through	2.44	5.25	100HCN	60 ft. lbs.	BS-18

CAT 50 TAPER

Size	Part Number	Range Inch	Range Metric	Coolant Type	B	C	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA180	C50-75FH5C	.031" to .750"	.8 mm to 19 mm	Through	1.44	5.06	ECN75	40 ft. lbs.	BS-18
100 PG	C50-10FH5C	.031" to 1.000"	.8 mm to 25.4 mm	Through	2.44	5.25	100HCN	60 ft. lbs.	BS-18
150 PG	C50-15FH6C	1.500" to 1.500"	2.7 mm to 38 mm	Through	3.43	6.50	3.43	6.50	3.43

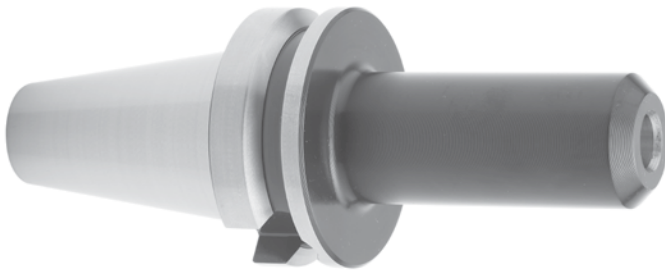
STRAIGHT SHANK

Size	Part Number	Range Inch	Range Metric	Coolant Type	B	C	Collet Nut (Incl.)	Nut Torque	B/U Screw (Incl.)
DA180	S10-75FH5C	.031" to .750"	.8 mm to 19 mm	Through	1.44	5.06	ECN75	40 ft. lbs.	BS-18
100 PG	S10-10FH5C	.031" to 1.000"	.8 mm to 25.4 mm	Through	2.44	5.25	100HCN	60 ft. lbs.	BS-18
	S20-10FH5C	.031" to 1.000"	.8 mm to 25.4 mm	Through	2.44	5.25	100HCN	60 ft. lbs.	BS-18

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. Order Collets and Collet Nut Wrench separately, see pages 74-86.



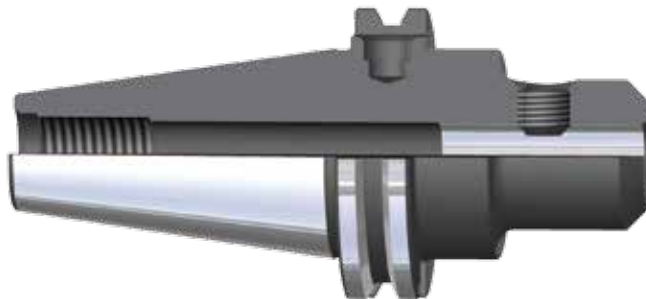
END MILL HOLDERS



End Mill Holder B40-50EM4 shown here.

*See Manufacturing Specifications section in the back of the catalog for details.

- Constructed of alloy steel for long, durable service life.
- Shiny taper with black oxide finish for the best combination of accuracy and durability.
- End Mill Socket T.I.R. $\leq .0002''$.
- Through-spindle coolant capability.
- ParSymmetry design for high-speed operation.
- Flange-entry coolant is the same as DIN Form B. Other sizes available on request.



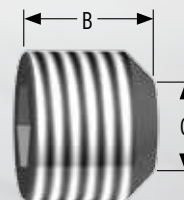
SET SCREWS

Part Number	Type	Thread	B	C	Hex
029-014	SHSS**	10 - 32	.25	-	3/32
029-018	SHSS**	1/4 - 28	.25	-	1/8
029-902	Weldon	3/8 - 24	.31	.282	3/16
029-917	Weldon	7/16 - 20	.38	.332	7/32
029-918	Weldon	9/16 - 18	.43	.402	1/4
029-920	Weldon	5/8 - 18	.62	.454	7/16
029-922	Weldon	3/4 - 16	.62	.517	3/8
029-924	Weldon	3/8 - 24	.38	.282	3/16
029-925	Weldon	5/8 - 18	.50	.454	5/16
029-926	Weldon	3/4 - 16	.50	.517	3/8
029-928	Weldon	1" - 14	.88	.702	9/16
029-929	Weldon	7/16 - 20	.31	.332	7/32

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. ** SHSS = Socket Head Set Screw.

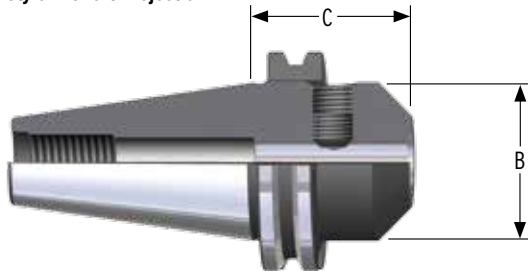


End Mill Set Screw
029-924 shown here.

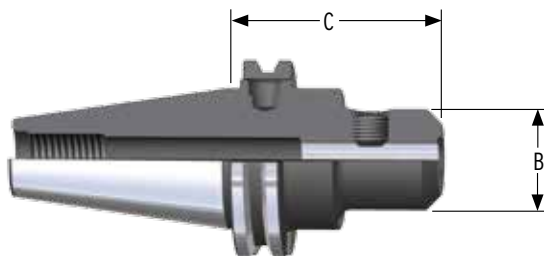




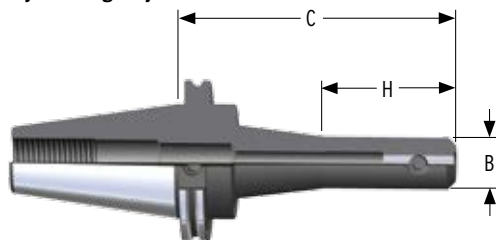
Style 1-Short Projection



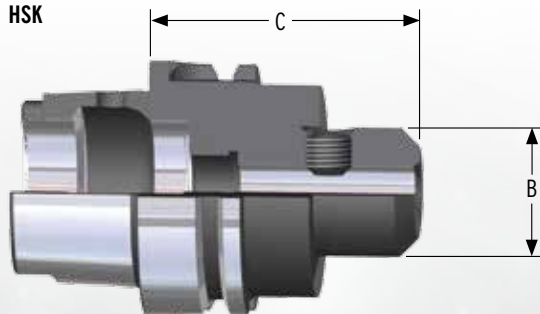
Style 2-Extended Projection



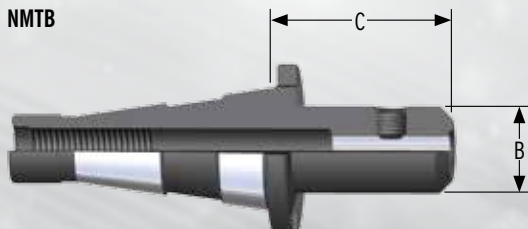
Style 3-Long Projection



HSK

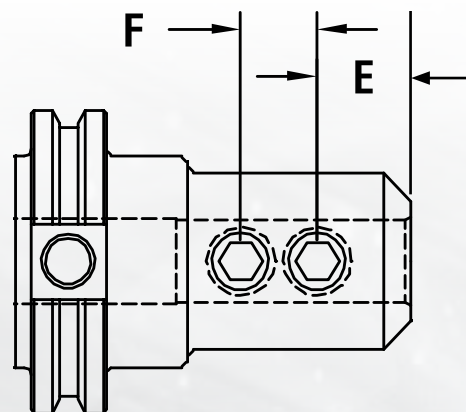


NMTB



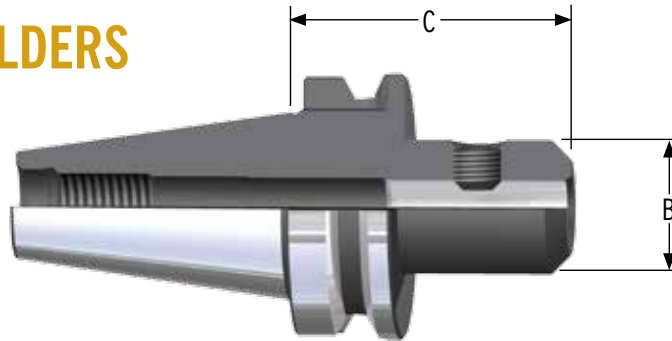
TECHNICAL SPECIFICATIONS

Bore Size	E	F	Set Screw	Tightening Torque
1/8"	0.38	-	029-014	3 ft.
3/16"	0.50	-	029-018	4 ft.
1/4"	0.38	-	029-018	7 ft.
5/16"	0.60	-	029-023	9 ft.
3/8"	0.75	-	029-023	12 ft.
7/16"	0.75	-	029-902	14 ft.
1/2"	0.88	-	029-917	17 ft.
9/16"	0.88	-	029-917	19 ft.
5/8"	0.94	-	029-918	31 ft.
3/4"	1.00	-	029-925	45 ft.
7/8"	1.00	0.81	029-925	48 ft.
1"	1.12	1.00	029-926	69 ft.
1 1/4"	1.12	1.00	029-922	69 ft.
1 1/2"	1.12	1.00	029-922	69 ft.
6 mm	0.38	-	029-018	7 ft.
8 mm	0.44	-	029-018	9 ft.
10 mm	0.75	-	029-902	12 ft.
12 mm	0.88	-	029-917	17 ft.
14 mm	0.88	-	029-917	17 ft.
16 mm	0.94	-	029-918	31 ft.
18 mm	1.00	-	029-925	43 ft.
20 mm	1.00	-	029-925	43 ft.
25 mm	1.12	1.00	029-926	69 ft.
32 mm	1.12	1.00	029-922	69 ft.
40 mm	1.12	1.00	029-922	69 ft.





BT END MILL HOLDERS



BT 30 TAPER

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth	H
1/8"	B30-01EM238	-	-	2	0.75	2.38	3.31	-
3/16"	B30-18EM238	-	-	2	0.75	2.38	3.31	-
1/4"	B30-25EM238	-	B30F-25EM238	2	0.81	2.38	3.31	-
5/16"	B30-31EM238	-	-	2	1.00	2.38	3.31	-
3/8"	B30-37EM238	-	B30F-37EM238	2	1.38	2.38	3.31	-
1/2"	B30-50EM238	-	B30F-50EM238	2	1.38	2.38	2.00	-
5/8"	B30-62EM250	-	B30F-62EM250	2	1.44	2.50	2.24	-
3/4"	B30-75EM250	-	B30F-75EM250	2	2.00	2.50	2.25	-
1"	B30-10EM275	-	B30F-10EM275	2	2.38	2.75	2.50	-

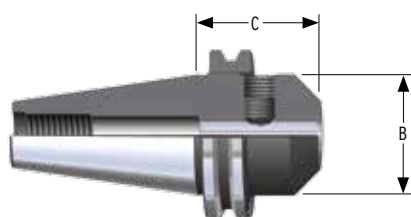
BT 40 TAPER

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth	H
1/8"	B40-01EM2	-	-	2	0.69	2.25	3.00	-
3/16"	B40-18EM2	-	-	2	0.69	2.25	3.00	-
1/4"	B40-25EM2	-	-	2	0.88	2.25	3.00	-
5/16"	B40-31EM2	-	-	2	1.00	2.25	3.00	-
3/8"	B40-37EM2	B40BC-37EM2	-	2	1.00	2.25	3.00	-
	B40-37EM4	-	-	2		4.00	4.00	-
7/16"	B40-43EM2	-	-	2	1.25	2.25	3.00	-
1/2"	B40-50EM1	-	-	2	1.75	1.75	2.75	-
	B40-50EM2	B40BC-50EM2	B40F-50EM2	2	1.25	2.25	3.00	-
	B40-50EM4	-	-	2		4.00	4.50	-
9/16"	B40-56EM2	-	-	2	1.25	2.25	3.50	-
5/8"	B40-62EM1	-	-	2	1.50	1.75	2.75	-
	B40-62EM2	B40BC-62EM2	B40F-62EM2	2		2.25	3.50	-
	B40-62EM6	-	-	2		6.00		-
3/4"	B40-75EM1	-	-	2	1.75	1.75	2.75	-
	B40-75EM3	B40BC-75EM2	B40F-75EM3	2		3.38	2.38	-
	B40-75EM6	-	-	2		6.00	3.88	-
7/8"	B40-87EM3	-	-	2	1.88	3.75	4.18	-
1"	B40-10EM1	-	-	2	2.00	1.75	2.38	-
	B40-10EM4	B40BC-10EM4	B40F-10EM4	2		4.00	4.44	-
	B40-10EM6	-	-	2		2.50	6.00	4.50
1 1/4"	B40-12EM2	-	-	2	2.50	2.00	2.38	-
	B40-12EM4	B40BC-12EM4	B40F-12EM4	2		4.00		-
1 1/2"	B40-15EM4	-	-	2	2.62	4.00	2.38	-

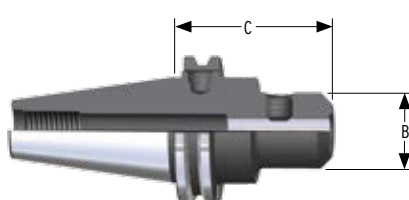
Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



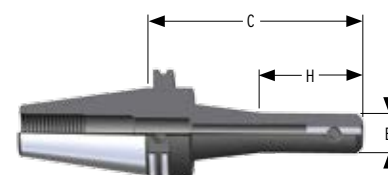
CAT END MILL HOLDERS



STYLE 1



STYLE 2



STYLE 3

CAT 40 TAPER

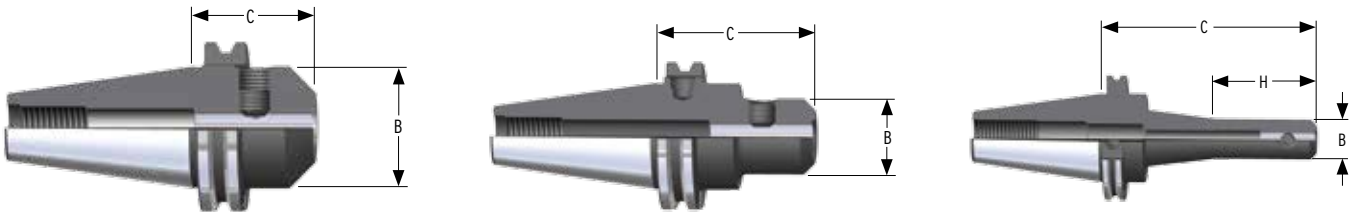
Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth	H
1/8"	C40-01EM1	-	-	1	0.69	1.75	3.00	-
	C40-01EM2	-	-	2		2.50	3.80	-
	C40-01EM3	-	-	2	1.00	3.00	3.00	-
	C40-01EM6	-	-	3		3.00	3.00	2.12
3/16"	C40-18EM1	-	-	1	0.69	1.75	3.00	-
	C40-18EM2	C40BC-18EM2	-	2		2.50	3.80	-
	C40-18EM3	-	-	2	1.00	3.00	3.00	-
	C40-18EM6	-	-	3		6.00	3.80	2.50
1/4"	C40-25EM1	-	-	1	0.88	1.75	3.00	-
	C40-25EM2	C40BC-25EM2	-	2		2.50	3.80	-
	C40-25EM3	-	-	2	1.00	3.00	3.00	-
	C40-25EM6	-	-	3		6.00	3.80	2.50
5/16"	C40-31EM1	-	-	1	1.00	1.75	3.00	-
	C40-31EM2	C40BC-31EM2	-	2		2.50	3.80	-
	C40-31EM6	-	-	3		6.00	3.80	3.00
3/8"	C40-37EM1	C40BC-37EM1	-	1	1.00	1.75	3.00	-
	C40-37EM2	C40BC-37EM2	-	2		2.50	3.80	-
	C40-37EM4	-	-	3		4.50	3.80	1.00
	C40-37EM6	-	-	3		6.00	3.80	2.50
7/16"	C40-43EM1	-	-	1	1.25	1.75	3.00	-
	C40-43EM2	-	-	2		2.62	3.80	-
1/2"	C40-50EM1	C40BC-50EM1	C40F-50EM1	1	1.75	1.75	3.00	-
	C40-50EM2	C40BC-50EM2	C40F-50EM2	2	1.25	2.62	3.80	-
	C40-50EM4	-	C40F-50EM4	2		4.62	3.80	-
	C40-50EM6	-	-	3		6.00	3.12	3.00
9/16"	C40-56EM1	-	-	1	1.75	1.75	2.18	-
	C40-56EM2	-	-	2	1.25	2.62	2.05	-
5/8"	C40-62EM1	C40BC-62EM1	-	1	1.75	1.75	2.24	-
	C40-62EM2	C40BC-62EM2	C40F-62EM2	2	1.50	2.75	3.62	-
	C40-62EM3	-	C40F-62EM3	2		3.00	3.21	-
	C40-62EM6	-	-	2		6.00	3.31	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.

*Does not have tool changer safe zone, may not fit some machines, and deviate from ANSI B5.50/2009.



CAT END MILL HOLDERS



CAT 40 TAPER

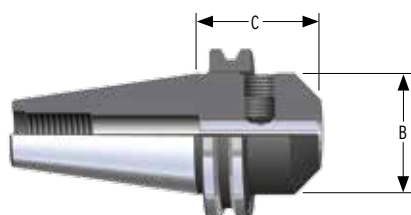
Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth	H
3/4"	C40-75EM1	C40BC-75EM1	C40F-75EM1	1	1.75	1.75	2.37	-
	C40-75EM300	-	C40F-75EM300	2		3.00	3.94	-
	C40-75EM3	C40BC-75EM3	-	2		3.50		-
	C40-75EM6	-	C40F-75EM6	2		6.00		-
7/8"	C40-87EM1	-	-	1	2.00*	1.75	2.38	-
	C40-87EM3	-	-	2	1.75	3.75	4.25	-
	C40-87EM350	-	-	2	1.88	3.50		-
	C40-87EM6	-	-	2		6.00		-
1"	C40-10EM1	C40BC-10EM1	C40F-10EM1	1	2.00*	1.75	2.38	-
	C40-10EM3	-	C40F-10EM3	2		3.00	3.00	-
	C40-10EM4	C40BC-10EM4	C40F-10EM4	2	2.00	4.00	4.50	-
	C40-10EM6	-	-	2		6.00		-
1 1/4"	C40-12EM2	-	C40F-12EM2	1	2.25*	2.00	2.38	-
	C40-12EM4	C40BC-12EM4	C40F-12EM4	2	2.50	4.00	3.75	-
	C40-12EM425	-	-	2		4.25		-
	C40-12EM6	-	C40F-12EM6	2		6.00		-
1 1/2"	C40-15EM4	C40BC-15EM4	-	2	2.62	4.00	2.38	-
	C40-15EM462	-	C40F-15EM462	2		4.62		-
	C40-15EM6	-	-	2		6.00		-
6 mm	C40-M06EM2	-	-	2	0.88	2.50	3.50	-
8 mm	C40-M08EM2	-	-	2	1.00	2.50	3.50	-
10 mm	C40-M10EM2	-	-	2	1.00	2.50	3.50	-
12 mm	C40-M12EM2	-	-	2	1.25	2.62	3.50	-
14 mm	C40-M14EM2	-	-	2	1.25	2.25	2.00	-
16 mm	C40-M16EM2	-	-	2	1.50	2.75	2.13	-
18 mm	C40-M18EM2	-	-	2	1.75	2.75	2.25	-
20 mm	C40-M20EM3	-	-	2	1.75	3.50	2.25	-
25 mm	C40-M25EM4	-	-	2	2.00	4.00	3.00	-
32 mm	C40-M32EM4	-	-	2	2.50	4.00	2.60	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.

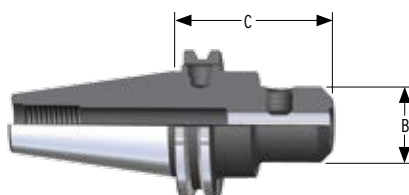
*Does not have tool changer safe zone, may not fit some machines, and deviate from ANSI B5.50/2009.



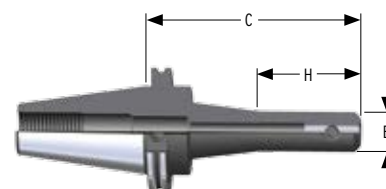
CAT END MILL HOLDERS



STYLE 1



STYLE 2



STYLE 3

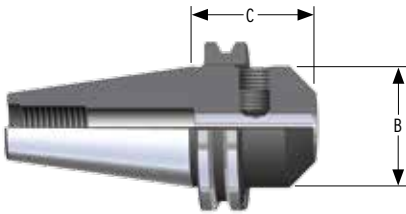
CAT 50 TAPER

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth	H
1/8"	C50-01EM2	-	-	2	0.69	2.50	3.00	-
3/16"	C50-18EM2	-	-	2	0.69	2.50	3.80	-
1/4"	C50-02EM2	-	-	2	0.88	2.50	3.00	-
	C50-02EM450	-	-	2		4.50		-
5/16"	C50-31EM2	-	-	2	1.00	2.50	3.00	-
	C50-31EM450	-	-	2		4.50		-
3/8"	C50-37EM2	C50BC-37EM2	-	2	1.00	2.50	3.00	-
	C50-37EM4	-	-	2		4.50		-
	C50-37EM6	C50BC-37EM6	-	3		6.50		3.00
	C50-37EM8	-	-	3		8.00		
7/16"	C50-43EM2	-	-	2	1.25	2.62	3.00	-
1/2"	C50-50EM2	C50BC-50EM2	-	2	1.25	2.62	5.00	-
	C50-50EM4	-	C50F-50EM4	2		4.62		-
	C50-50EM6	C50BC-50EM6	C50F-50EM6	3		6.62		3.13
	C50-50EM8	-	-	3		8.00		
9/16"	C50-56EM2	-	-	2	1.50	2.62	3.00	-
5/8"	C50-62EM3	C50BC-62EM3	-	2	1.50	3.75	3.50	-
	C50-62EM5	-	C50F-62EM5	2		5.75		-
	C50-62EM7	-	C50F-62EM7	3		7.75		4.25
3/4"	C50-75EM1	-	-	1	2.75	1.62	4.00	-
	C50-75EM3	C50BC-75EM3	C50F-75EM3	2	1.75	3.75		-
	C50-75EM5	-	C50F-75EM5	2		5.75		-
	C50-75EM7	C50BC-75EM7	-	3		7.75		4.25
7/8"	C50-87EM3	C50BC-87EM3	-	2	1.88	3.75	4.19	-
	C50-87EM5	-	-	2		5.75		-
	C50-87EM7	C50BC-87EM7	-	3		7.75		4.25

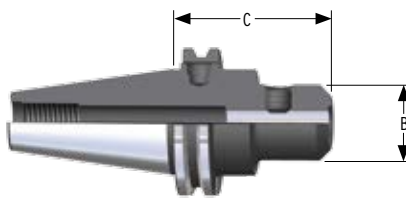
Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



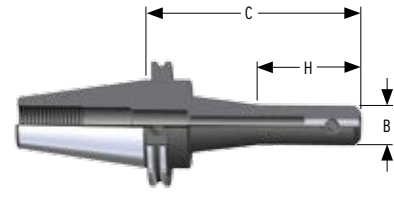
CAT END MILL HOLDERS



STYLE 1



STYLE 2



STYLE 3

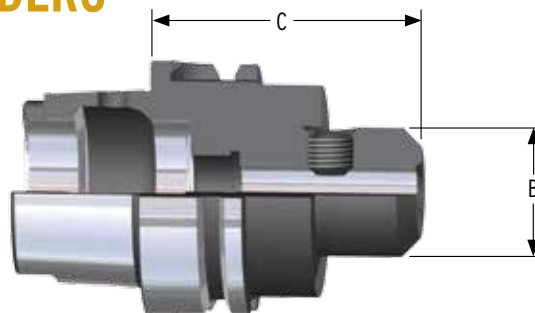
CAT 50 TAPER

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	Style	B (Dia.)	C	Socket Depth	H
1"	C50-10EM1	-	-	1	2.75	1.62	2.50	-
	C50-10EM4	C50BC-10EM4	C50F-10EM4	2	2.00	4.00	4.44	-
	C50-10EM6	-	C50F-10EM6	2		6.00		-
	C50-10EM8	C50BC-10EM8	C50F-10EM8	3		8.00		4.50
1 1/4"	C50-12EM2	-	C50F-12EM2	2	2.75	2.62	3.50	-
	C50-12EM4	C50BC-12EM4	C50F-12EM4	2	2.50	4.00	3.35	-
	C50-12EM6	-	C50F-12EM6	2		6.00		-
	C50-12EM8	C50BC-12EM8	C50F-12EM8	2		8.00		-
1 1/2"	C50-15EM2	-	-	2	2.75	2.62	2.25	-
	C50-15EM4	C50BC-15EM4	C50F-15EM4	2		4.00	4.50	-
	C50-15EM6	-	C50F-15EM6	2		6.00		-
	C50-15EM8	C50BC-15EM8	C50F-15EM8	2		8.00		-
2"	C50-20EM5	C50BC-20EM5	C50F-20EM5	2	3.75	5.62	3.50	-
	C50-20EM7	-	-	2		7.62		-
	C50-20EM9	C50BC-20EM9	-	2		9.62		-
2 1/2"	C50-25EM6	-	-	2	4.00	6.50	4.00	-
10 mm	C50-M10EM2	-	-	2	1.00	2.50	4.25	-
12 mm	C50-M12EM2	-	-	2	1.25	2.62	4.25	-
14 mm	C50-M14EM2	-	-	2	1.50	2.62	4.38	-
16 mm	C50-M16EM3	-	-	2	1.50	3.75	2.13	-
20 mm	C50-M20EM3	-	-	2	1.75	3.75	2.25	-
25 mm	C50-M25EM4	-	-	2	2.00	4.00	3.00	-
32 mm	C50-M32EM4	-	-	2	2.50	4.00	2.60	-
40 mm	C50-M40EM4	-	-	2	2.75	4.00	3.25	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



HSK END MILL HOLDERS



HSK 63 FORM A TAPER

Size	Part Number	Style	B (Dia.)	C	Socket Depth	H
3/16"	H63-18EM2	2	1.00	2.56	1.53	-
1/4"	H63-25EM2	2	1.10	2.56	1.53	-
3/8"	H63-37EM2	2	1.38	2.56	1.54	-
1/2"	H63-50EM3	2	1.63	3.13	2.10	-
5/8"	H63-62EM3	2	1.88	3.13	2.10	-
3/4"	H63-75EM3	2	1.94	3.13	2.12	-
1"	H63-10EM4	2	2.56	4.25	2.75	-
1 1/4"	H63-12EM4	2	2.81	4.25	3.23	-

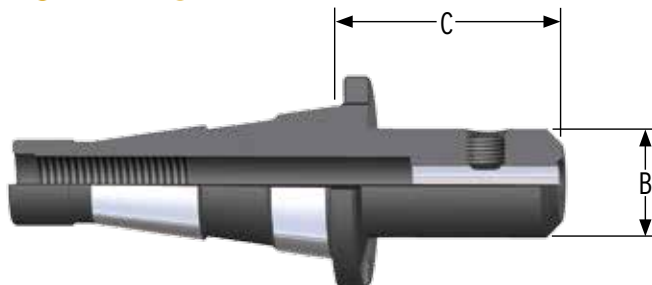
HSK 100 FORM A TAPER

Size	Part Number	Style	B (Dia.)	C	Socket Depth	H
1/4"	H100-25EM3	2	1.10	3.12	1.98	-
3/8"	H100-37EM3	2	1.38	3.13	1.98	-
1/2"	H100-50EM3	2	1.63	3.13	2.98	-
5/8"	H100-62EM4	2	1.88	4.00	2.86	-
	H100-62EM600	2		6.00	2.75	-
3/4"	H100-75EM4	2	1.94	4.00	2.86	-
	H100-75EM600	2	1.75	6.00	3.12	-
1"	H100-10EM4	2	2.56	4.00	2.85	-
	H100-10EM600	2	2.00	6.00	4.50	-
1 1/4"	H100-12EM4	2	2.81	4.00	2.85	-
	H100-12EM600	2	2.75	6.00	3.35	-
1 1/2"	H100-15EM4	2	3.00	4.00	3.63	-
	H100-15EM600	2	2.75	6.00	4.00	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



NMTB END MILL HOLDERS



NMTB 40 TAPER

Size	Part Number	Style	B (Dia.)	C	Socket Depth	H
3/16"	N40-18EM2	2	0.69	2.31	4.50	-
1/4"	N40-25EM2	2	0.88	2.31	4.50	-
3/8"	N40-37EM2	2	1.00	2.31	4.50	-
1/2"	N40-50EM2	2	1.25	2.31	4.50	-
5/8"	N40-62EM2	2	1.50	2.31	3.50	-
3/4"	N40-75EM2	2	1.75	2.31	3.38	-
7/8"	N40-87EM2	2	1.88	2.94	4.18	-
1"	N40-10EM3	2	2.00	3.38	4.44	-
1 1/4"	N40-12EM3	2	2.50	3.68	3.38	-
1 1/2"	N40-15EM4	2	2.62	4.00	2.55	-

NMTB 50 TAPER

Size	Part Number	Style	B (Dia.)	C	Socket Depth	H
3/8"	N50-37EM2	2	1.00	2.50	2.56	-
1/2"	N50-50EM2	2	1.25	2.62	3.06	-
5/8"	N50-62EM3	2	1.50	3.75	3.50	-
3/4"	N50-75EM3	2	1.75	3.75	3.38	-
7/8"	N50-87EM3	2	1.88	3.75	4.18	-
1"	N50-10EM4	2	2.00	4.00	4.44	-
1 1/4"	N50-12EM4	2	2.50	4.00	3.50	-
1 1/2"	N50-15EM4	2	2.62	4.00	2.62	-
2"	N50-20EM5	2	3.75	5.62	3.38	-
2 1/2"	N50-25EM6	2	4.00	6.50	3.38	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



SHELL MILL HOLDERS



HSK Shell Mill H100-12SM2 shown here.

*See Manufacturing Specifications section in the back of the catalog for details.

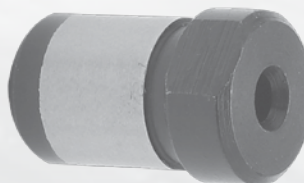
- Constructed of alloy steel for long, durable service life.
- Hardened to Rc: 56-60 for long service life.
- Shiny taper with black oxide finish for the best combination of accuracy and durability.
- Shell mill pilot T.I.R. $\leq 0.0002''$.
- ParSymmetry design for high-speed operation.



System Accessories



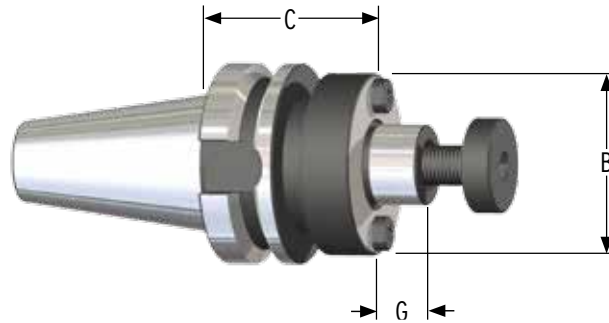
Shell Mill Screw



Drive Key



BT SHELL MILL HOLDERS



BT 30 TAPER

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B	C	G	Drive Key (Incl.)	Lock Screw (Incl.)	Cap Screw (Incl.)
3/4"	B30-75SM118	-	B30F-75SM118	1.75	1.18	0.68	75KY	-	028-192
1"	B30-10SM177	-	B30F-10SM177	2.38	1.77	0.68	10KY	10LS	028-188

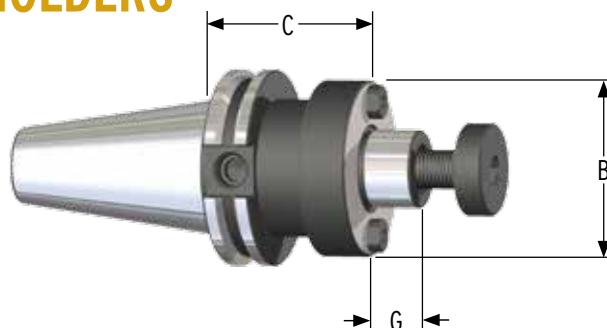
BT 40 TAPER

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B	C	G	Drive Key (Incl.)	Lock Screw (Incl.)	Cap Screw (Incl.)
3/4"	B40-75SM2	B40BC-75SM2	B40F-75SM2	1.75	2.00	0.68	75KY	-	028-192
	B40-75SM4	-			4.00				
1"	B40-10SM2	B40BC-10SM2	B40F-10SM2	2.25	2.00	0.68	10KY	10LS	028-188
	B40-10SM4	-			4.00				
1 1/4"	B40-12SM2	B40BC-12SM2	B40F-12SM2	2.75	2.25	0.68	12KY	12LS	028-193
1 1/2"	B40-15SM2	B40BC-15SM2	B40F-15SM2	3.75	2.25	0.94	15KY	15LS	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



CAT SHELL MILL HOLDERS



CAT 40 TAPER

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B	C	G	Drive Key (Incl.)	Lock Screw (Incl.)	Cap Screw (Incl.)
3/4"	C40-75SM1	-	C40F-75SM1	1.75	1.38	0.68	75KY	-	028-192
	C40-75SM2	C40BC-75SM2	-		1.50				
	C40-75SM200	-	C40F-75SM200		2.00				
	C40-75SM4	-	C40F-75SM4		4.00				
1"	C40-10SM1	-	C40F-10SM1	2.25*	1.00	0.68	10KY	10LS	028-188
	C40-10SM2	C40BC-10SM2	C40F-10SM2	2.25	2.00				
	C40-10SM4	-	C40F-10SM4		4.00				
1 1/4"	C40-12SM1	-	C40F-12SM1	2.75*	1.62	0.68	12KY	12LS	028-193
	C40-12SM2	C40BC-12SM2	C40F-12SM2	2.75	2.25				
	C40-12SM4	-	-		4.00				
1 1/2"	C40-15SM2	C40BC-15SM2	C40F-15SM2	3.75	2.40	0.94	15KY	15LS	-
	C40-15SM4	-	C40F-15SM4		4.00				

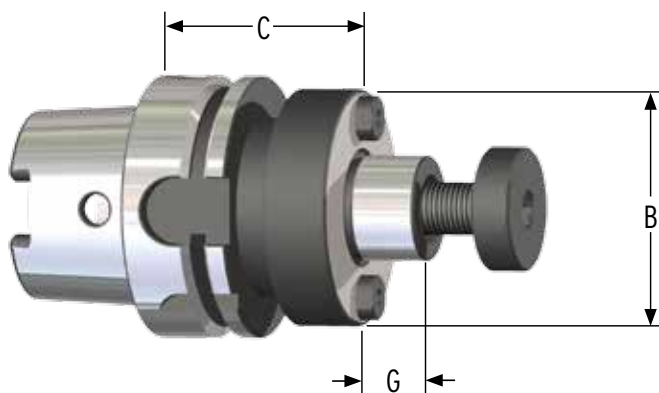
CAT 50 TAPER

Size	Part Number	Part Number with AD/B Coolant	Part Number with SimulFit®	B	C	G	Drive Key (Incl.)	Lock Screw (Incl.)	Cap Screw (Incl.)
3/4"	C50-75SM1	C50BC-75SM1	C50F-75SM1	1.75	1.50	0.68	75KY	-	028-192
	C50-75SM3	C50BC-75SM3	C50F-75SM3		3.50				
	C50-75SM5	-	C50F-75SM5		5.50				
1"	C50-10SM2	C50BC-10SM2	C50F-10SM2	2.25	2.00	0.68	10KY	10LS	028-188
	C50-10SM4	C50BC-10SM4	C50F-10SM4		4.00				
	C50-10SM6	-	C50F-10SM6		6.00				
	C50-10SM8	-	C50F-10SM8		8.00				
1 1/4"	C50-12SM1	C50BC-12SM1	-	2.75	1.50	0.68	12KY	12LS	028-193
	C50-12SM3	C50BC-12SM3	C50F-12SM3		3.50				
	C50-12SM5	-	C50F-12SM5		5.50				
1 1/2"	C50-15SM2	C50BC-15SM2	C50F-15SM2	3.75	2.40	0.94	15KY	15LS	-
	C50-15SM4	C50BC-15SM4	C50F-15SM4		4.00				
	C50-15SM6	-	C50F-15SM6		6.00				
2"	C50-20SM2	C50BC-20SM2	C50F-20SM2	4.88	2.40	0.94	20KY	20LS	-
	C50-20SM4	-	C50F-20SM4		4.00				
	C50-20SM6	-	-		6.00				
2 1/2"	C50-25SM2	C50BC-25SM2	C50F-25SM2	4.88	2.40	1.12	25KY	25LS	-
	C50-25SM4	-	-		4.00				
	C50-25SM6	-	-		6.00				
	C50-25FM1	-	-	5.061	2.50				

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132. *Does not have tool changer safe zone, may not fit some machines, and deviate from ANSI B5.50/2009.



HSK SHELL MILL HOLDERS



HSK 63 FORM A TAPER

Size	Part Number	B	C	G	Drive Key (Incl.)	Lock Screw (Incl.)	Cap Screw (Incl.)
3/4"	H63-75SM2	1.75	2.37	0.68	75KY	-	028-192
1"	H63-10SM2	2.25	2.63	0.68	10KY	10LS	028-188
1 1/4"	H63-12SM2	2.75	2.37	0.68	12KY	12LS	028-193
1 1/2"	H63-15SM2	3.75	2.62	0.94	15KY	15LS	-

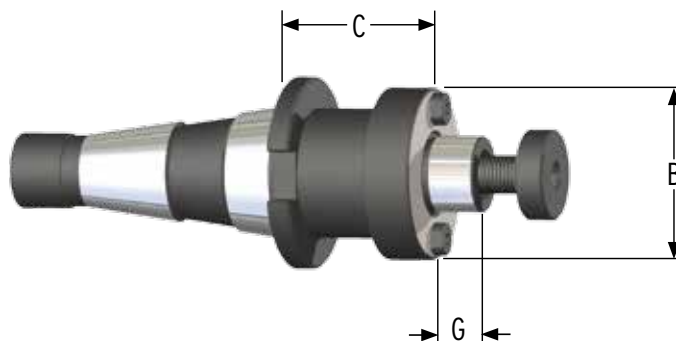
HSK 100 FORM A TAPER

Size	Part Number	B	C	G	Drive Key (Incl.)	Lock Screw (Incl.)	Cap Screw (Incl.)
3/4"	H100-75SM3	1.75	3.00	0.68	75KY	-	028-192
1"	H100-10SM2	2.25	2.37	0.68	10KY	10LS	028-188
1 1/4"	H100-12SM1	2.75	1.87	0.68	12KY	12LS	028-193
1 1/2"	H100-15SM2	3.75	2.88	0.94	15KY	15LS	-
2"	H100-20SM2	4.88	2.37	0.94	20KY	20LS	-
2 1/2"	H100-25SM2	4.88	2.87	1.12	25KY	25LS	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



NMTB SHELL MILL HOLDERS



NMTB 40 TAPER

Size	Part Number	B	C	G	Drive Key (Incl.)	Lock Screw (Incl.)	Cap Screw (Incl.)
3/4"	N40-75SM1	1.75	0.88	0.68	75KY	-	028-192
1"	N40-10SM1	2.25	1.31	0.68	10KY	10LS	028-188
1 1/4"	N40-15SM1	3.75	1.62	0.68	12KY	12LS	028-193

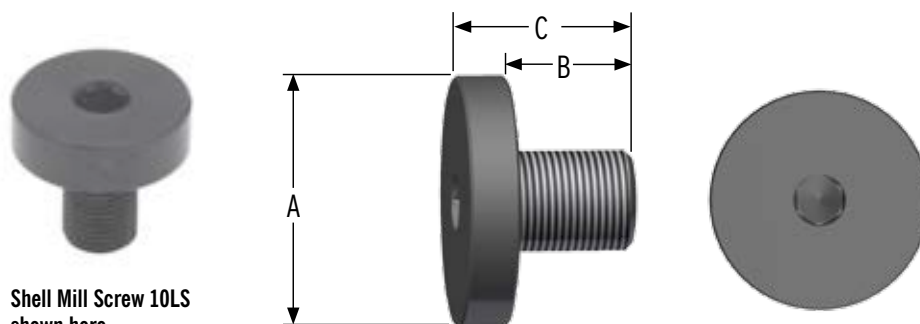
NMTB 50 TAPER

Size	Part Number	B	C	G	Drive Key (Incl.)	Lock Screw (Incl.)	Cap Screw (Incl.)
3/4"	N50-75SM1	1.75	1.50	0.68	75KY	-	028-192
1"	N50-10SM2	2.25	2.00	0.68	10KY	10LS	028-188
1 1/4"	N50-12SM2	2.75	1.50	0.68	12KY	12LS	028-193
1 1/2"	N50-15SM2	3.75	2.40	0.94	15KY	15LS	-
2"	N50-20SM2	4.88	2.40	0.94	20KY	20LS	-
2 1/2"	N50-25FM2	5.061	2.50	1.12	25KY	25LS	-

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



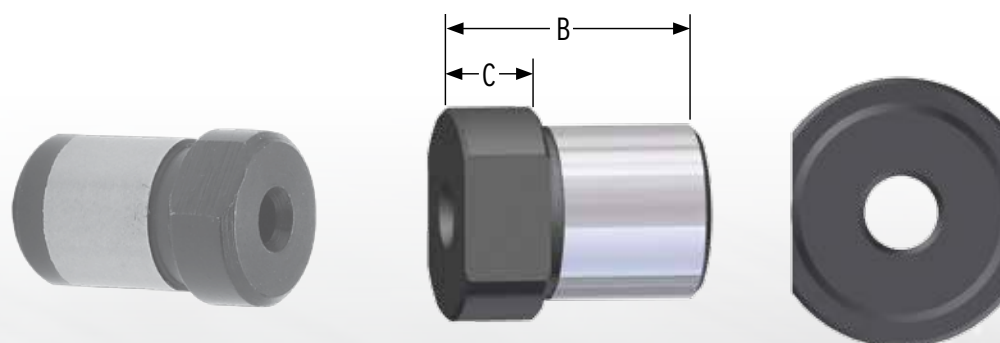
SCREW AND DRIVE KEYS



Shell Mill Screw 10LS shown here.

LOCK SCREWS/SOCKETHEAD CAP SCREWS

Part Number	A	B	C	Thread	Hex	Style	Torque ft. lbs.
75LS	.88	.38	.97	3/8 - 24	.250	Lock Screw	45
10LS	1.19	.28	1.20	1/2 - 20	.312	Lock Screw	60
12LS	1.50	.50	1.38	5/8 - 18	.312	Lock Screw	70
15LS	1.88	.50	1.75	3/4 - 16	.375	Lock Screw	75
20LS	2.50	.50	1.94	1 - 14	.500	Lock Screw	100
25LS	3.12	.50	1.95	1 - 14	.500	Lock Screw	
028-188	.75	.50	1.75	1/2 - 20	.375	Sockethead Cap Screw	60
028-192	.56	.37	1.37	3/8 - 24	.312	Sockethead Cap Screw	45
028-193	.94	.62	1.87	5/8 - 18	.500	Sockethead Cap Screw	70



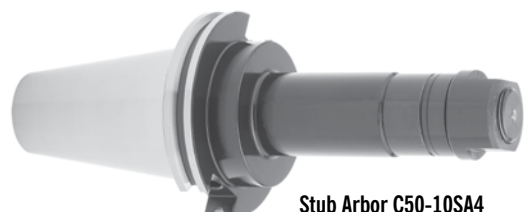
DRIVE KEYS

Part Number	Key	B	C
75KY	.31	.52	.16
10KY	.38	.67	.19
12KY	.50	.86	.25
15KY	.62	1.04	.31
20KY	.75	1.10	.38
25KY	1.00	1.23	.50

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



STUB ARBOR HOLDERS



Stub Arbor C50-10SA4 shown here.

- Constructed of alloy steel for long, durable service life.
 - Hardened to Rc: 56-60 for long, durable service life.
 - Shiny taper with black oxide finish for the best combination of accuracy and durability.
 - Arbor Shaft T.I.R. $\leq 0.0002''$.
 - ParSymmetry design for high-speed operation.
- See Manufacturing Specifications section in the back of the catalog for details.



Style 1



Style 2

System Accessories



Stub Arbor Lock Screw



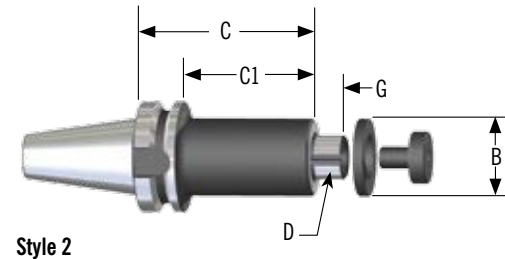
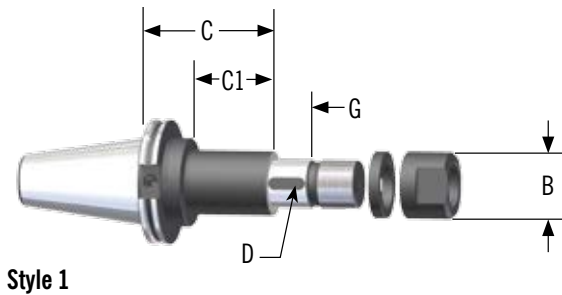
Stub Arbor Spacer

COLLET RANGE SPECIFICATIONS SPACERS (INCL.) - NUMBER THICKNESS

Pilot Size		0.125	0.25	0.375	0.5	0.75	Drive Key (Incl.)	Lock Screw (Incl.)
1"	1	014-906	-	014-907	-	014-908	SAK-10	013-502
1"	2	014-906	014-921	014-907	-	-	SAK-V10	10LS
1 1/4"	1	014-903	-	014-904	-	014-905	SAK-12	013-503
1 1/4"	2	-	014-915	014-904	-	-	SAK-V12	12LS
1 1/2"	1	014-909	-	014-910	-	014-911	SAK-15	013-501
1 1/2"	2	014-909	014-902	-	014-901	-	SAK-V15	15LS
2"		014-912	-	014-913	-	014-914	SAK-20	013-500



BT & CAT STUB ARBOR HOLDERS



BT 40 TAPER

Size	Part Number	Style	C	C1	G	D	Pilot Size	B	Drive Key (Incl.)	Lock Screw (Incl.)
1"	B40-10SA400	2	4	2.97	0.72	0.25	1	1.75	SAK-V10	10LS
1 1/4"	B40-12SA400	2	4	2.94	0.72	0.31	1.25	1.75	SAK-12	013-503

CAT 40 TAPER

Size	Part Number	Style	C	C1	G	D	Pilot Size	B	Drive Key (Incl.)	Lock Screw (Incl.)
1"	C40-10SA4	1	4	2.62	1.25	0.25	1	1.56	SAK-10	013-502
	C40-10SA400	2	4	3.25	0.72	0.25	1	1.75	SAK-V10	10LS
1 1/4"	C40-12SA4	1	4	2.45	1.25	0.31	1.25	1.88	SAK-12	013-503
	C40-12SA400	2	4	3.25	0.72	0.31	1.25	1.75	SAK-V12	12LS
1 1/2"	C40-15SA400	2	4	1.5	0.98	0.37	1.5	2.12	SAK-V15	15LS

CAT 50 TAPER

Size	Part Number	Style	C	C1	G	D	Pilot Size	B	Drive Key (Incl.)	Lock Screw (Incl.)
1"	C50-10SA4	1	4	2.62	1.25	0.25	1	1.56	SAK-10	013-502
	C50-10SA500	2	5	1.7	0.72	0.25	1	1.5	SAK-V10	10LS
	C50-10SA6	1	6	4.62	1.25	0.25	1	1.56	SAK-10	013-502
1 1/4"	C50-12SA4	1	4	2.62	1.25	0.31	1.25	1.88	SAK-12	013-503
	C50-12SA6	1	6	4.62	1.25	0.31	1.25	1.88	SAK-12	013-503
	C50-12SA600	2	6	1.5	0.72	0.31	1.25	1.75	SAK-V12	12LS
1 1/2"	C50-15SA4	1	4	2.62	1.25	0.37	1.5	2	SAK-15	013-501
	C50-15SA6	1	6	2.62	1.25	0.37	1.5	2	SAK-15	013-501
	C50-15SA600	2	6	1.62	0.98	0.37	1.5	2.12	SAK-V15	15LS
2"	C50-20SA6	1	6	5.25	1.25	0.5	2	2.75	SAK-20	013-500

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



SPACERS & NUTS



Stub Arbor Spacer 014-921 and Stub Arbor Nut 013-502 shown here.



SPACERS

Part Number	Arbor Size	Thickness
014-901	1.50	.500
014-902	1.50	.250
014-903	1.25	.125
014-904	1.25	.375
014-905	1.25	.750
014-906	1.00	.125
014-907	1.00	.375
014-908	1.00	.750
014-909	1.50	.125
014-910	1.50	.375
014-911	1.50	.750
014-912	2.00	.125
014-913	2.00	.375
014-914	2.00	.750
014-915	1.25	.250
014-921	1.00	.250

NUTS

Part Number	Arbor Size	Thread Size	Length
013-502	1.00	1.00 - 14	1.00
013-503	1.25	1.25 - 12	1.25
013-501	1.50	1.50 - 12	1.50
013-500	2.00	2.00 - 12	1.75

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.

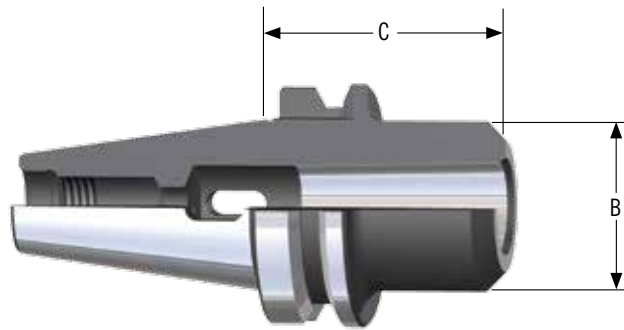


MORSE TAPER HOLDERS



Morse Taper Holder
C40-03MT2 shown here.

- Constructed of alloy steel for long, durable service life.
 - Hardened to Rc: 56-60 for long service life.
 - Shiny taper with black oxide finish for the best combination of accuracy and durability.
 - Taper T.I.R. $\leq .0002''$.
 - ParSymmetry design for high-speed operation.
- See Manufacturing Specifications section in the back of the catalog for details.



BT 40 TAPER

Part Number	Taper Size	A (Dia.)	B (Dia.)	C
B40-02MT1	2	0.7	1.75	1.75
B40-03MT2	3	0.938	1.75	2.5

NMTB 40 TAPER

Part Number	Taper Size	A (Dia.)	B (Dia.)	C
N40-03MT2	3	0.938	1.75	2.5
N40-04MT3	4	1.231	2	3.5

CAT 40 TAPER

Part Number	Taper Size	A (Dia.)	B (Dia.)	C
C40-01MT1	1	0.475	1.75	1.75
C40-02MT1	2	0.7	1.75	1.75
C40-03MT2	3	0.938	1.75	2.5
C40-04MT3	4	1.231	2	3.5

NMTB 50 TAPER

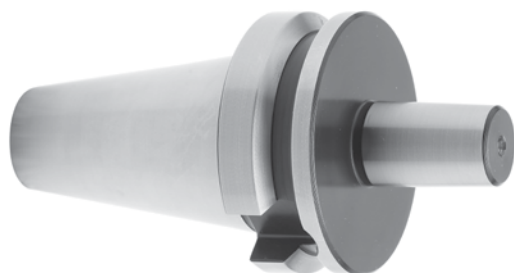
Part Number	Taper Size	A (Dia.)	B (Dia.)	C
N50-02MT1	2	0.7	2.75	1.5
N50-03MT2	3	0.938	2.25	2.31
N50-04MT3	4	1.231	2.25	3.18
N50-05MT4	5	1.748	2.75	4.75

CAT 50 TAPER

Part Number	Taper Size	A (Dia.)	B (Dia.)	C
C50-01MT1	1	0.475	2.75	1.5
C50-02MT1	2	0.7	2.75	1.5
C50-03MT2	3	0.938	2.25	2.31
C50-04MT3	4	1.231	2.25	3.18
C50-05MT4	5	1.748	2.75	4.75

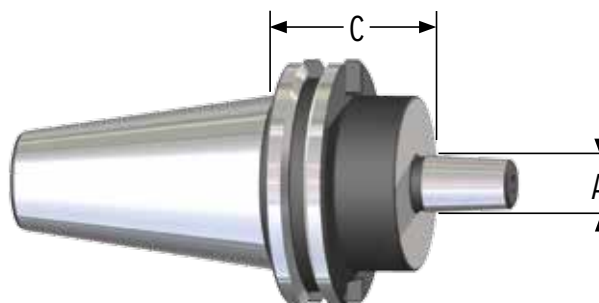


JACOBS TAPER HOLDERS



Jacobs Taper Arbor
B40-3JT1 shown here.

- Constructed of alloy steel for long, durable service life.
 - Hardened to Rc: 56-60 for long service life.
 - Shiny taper with black oxide finish for the best combination of accuracy and durability.
 - Taper T.I.R. $\leq 0.0002''$.
 - ParSymmetry design for high-speed operation.
- See Manufacturing Specifications section in the back of the catalog for details.



BT 40 TAPER

Part Number	Arbor Size	A (Dia.)	C
B40-02JT1	02	0.559	1.18
B40-03JT1	03	0.811	1.18
B40-06JT1	06	0.676	1.18
B40-33JT1	33	0.624	1.18

NMTB 30 TAPER

Part Number	Arbor Size	A (Dia.)	C
N30-02JT1	02	0.559	1
N30-03JT1	03	0.811	1
N30-06JT1	06	0.676	1
N30-33JT1	33	0.624	1

CAT 40 TAPER

Part Number	Arbor Size	A (Dia.)	C
C40-02JT1	02	0.559	1.5
C40-03JT1	03	0.811	1.5
C40-04JT1	04	1.124	1.5
C40-06JT1	06	0.676	1.5
C40-33JT1	33	0.624	1.5

NMTB 40 TAPER

Part Number	Arbor Size	A (Dia.)	C
N40-02JT1	02	0.559	1
N40-03JT1	03	0.811	1
N40-04JT1	04	1.124	1
N40-06JT1	06	0.676	1
N40-33JT1	33	0.624	1

CAT 50 TAPER

Part Number	Arbor Size	A (Dia.)	C
C50-02JT1	02	0.559	1.5
C50-03JT1	03	0.811	1.5
C50-04JT1	04	1.124	1.5
C50-06JT1	06	0.676	1.5
C50-33JT1	33	0.624	1.5

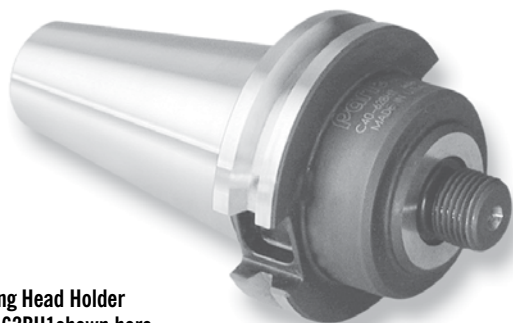
NMTB 50 TAPER

Part Number	Arbor Size	A (Dia.)	C
N50-03JT1	03	0.811	1.5
N50-04JT1	04	1.124	1.5
N50-33JT1	33	0.624	1.5

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



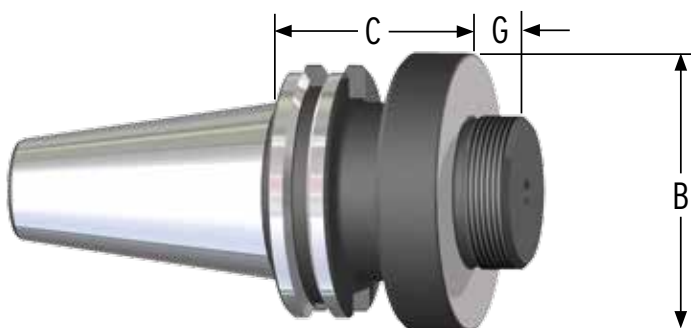
BORING HEAD HOLDERS



Boring Head Holder
C40-62BH1 shown here.

- Constructed of alloy steel for long, durable service life.
- Hardened to Rc: 56-60 for long service life.
- Shiny taper with black oxide finish for the best combination of accuracy and durability.
- ParSymmetry design for high-speed operation.

*See Manufacturing Specifications section in the back of the catalog for details.



CAT 40 TAPER

Part Number	Thread Size	B	C	G	Thread
C40-87BH1	7/8"-20	1.75	1.5	0.44	7/8" -20
C40-15BH188	1 1/2"-18	2.73	1.88	0.56	1 1/2" - 18

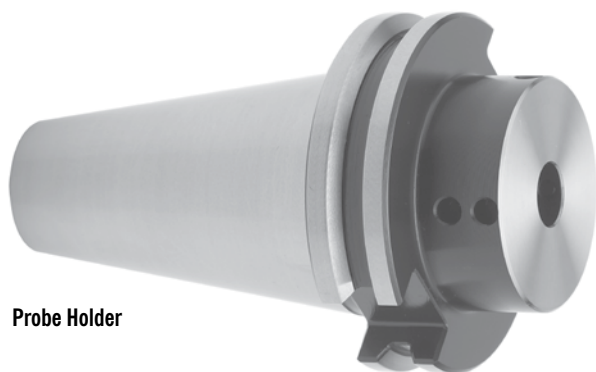
CAT 50 TAPER

Part Number	Thread Size	B	C	G	Thread
C50-15BH1	1 1/2"-18	2.75	1.5	0.5	1 1/2" - 18

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



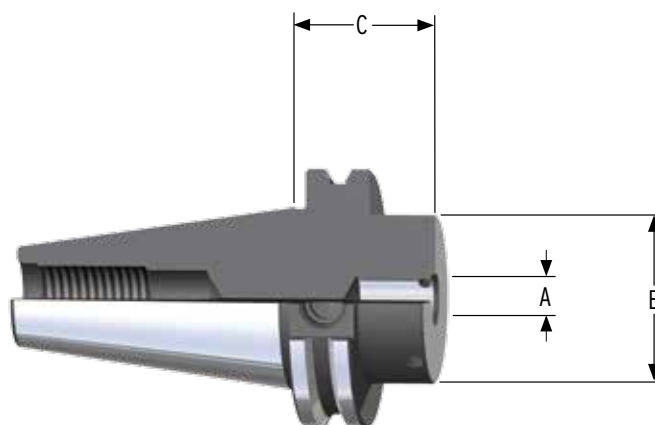
PROBE HOLDERS



Probe Holder

For manual setting & inspection

- Constructed of alloy steel for long, durable service life.
 - Shiny taper with black oxide finish for the best combination of accuracy and durability.
- See Manufacturing Specifications section in the back of the catalog for details.



BT 30 TAPER

Part Number	Taper Type	A (Dia.)	B (Dia.)	C	Set Screw (Incl.)
B30H-M11PH1	BT30Haas	.440"	1.625	1.702	029-092
B30-M11PH1	BT30				

BT 40 TAPER

Part Number	Taper Type	A (Dia.)	B (Dia.)	C	Set Screw (Incl.)
B40-M11PH1	BT40	.440"	1.625	1.702	029-092
B50-M11PH1	BT50			2.136	

CAT 40 TAPER

Part Number	Taper Type	A (Dia.)	B (Dia.)	C	Set Screw (Incl.)
C40-M11PH1	CAT40	.440"	1.625	1.39	029-092

CAT 50 TAPER

Part Number	Taper Type	A (Dia.)	B (Dia.)	C	Set Screw (Incl.)
C50-M11PH1	CAT50	.440"	1.625	1.39	029-092

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



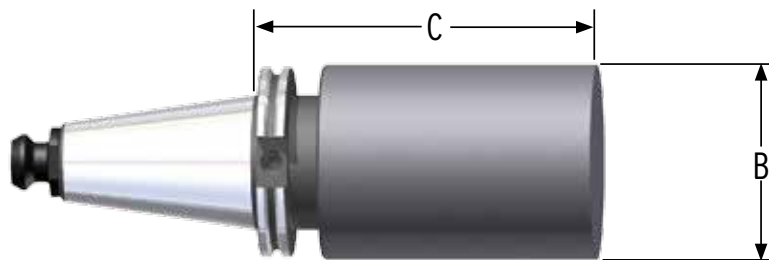
BLANK BARS



Blank Bar C50-40BB12 shown here.

- Constructed of ANSI 8620 for long, durable service life.
- Taper hardened to Rc: 56-60 for long service life.
- Body hardened to Rc: 15-30 to allow for machining.
- Shiny taper with black oxide finish for the best combination of accuracy and durability.
- ParSymmetry design for high-speed operation.

*See Manufacturing Specifications section in the back of the catalog for details.



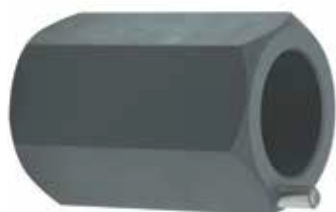
BLANK BARS

Part Number	Taper Type	B	C
B30-23BB500	BT30	2.38	5
B40-30BB700	BT40	3	7
C40-25BB8	CAT40	2.5	8
C50-27BB8	CAT50	2.75	8
C50-40BB1	CAT50	4	11
C50-40BB7	CAT50	4	7
C50-61BB7	CAT50	6.12	7
N40-25BB512	NMTB40	2.5	5.12

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information. Order Retention Knobs separately, see pages 130-132.



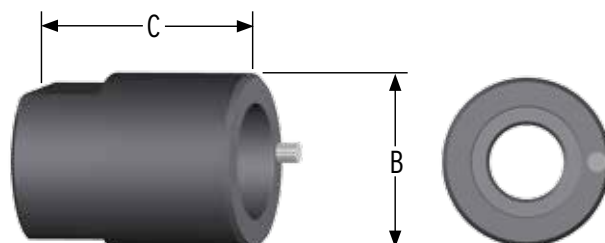
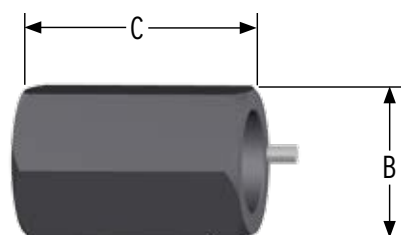
TIGHTENING FIXTURES



Taper Type Fixture
TF40 shown here.

BENCH OR VISE MOUNT TYPE

Part Number	Taper Size	B	C	Thread	Style
TF30	30	2.50	3.50	3/8 - 16	Hex
TF40	40	2.50	4.00	3/8 - 16	Hex
TF50	50	4.25	5.50	3/8 - 16	Flats - 3.50



BENCH MOUNT SWIVEL:

- For Tool locking and retention knob mounting.
- Mounts directly to workbench.

BENCH MOUNT SWIVEL

Part Number	Taper Size
TFBS30	BT30
TFBS40	CAT40/BT40
TFBS50	CAT50/BT50
TFBSH63	HSK63A
TFBSH100	HSK100A

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



RETENTION KNOBS



ANSI Type
40TRK shown here.



MAS BT Type
4001TRK shown here.



DIN Type
DIN50ATRK shown here

NEW! As part of Parlec's ongoing initiative to improve our product's performance, all retention knobs now have a piloted design.

Parlec offers retention knobs for over 100 styles of machine tools

- Material, heat treat, and dimensions are to ANSI specifications.
- Manufactured using alloy steel.
- Case hardened to ensure long service life.
- Core is tempered for tough shock resistance.

WARNING: Machine tool manufacturers have used many various styles and sizes of retention knobs. They often look very similar and appear to be interchangeable. The use of the incorrect knob, or the incorrect use of a knob, may result in injury or property damage. It is the responsibility of the end user to check that the supplied knobs are correct for the machine tool and taper type.

It is very important not to intermix metric retention knobs with inch toolholders. Be sure to fully tighten the retention knob. Failure to do so may result in the toolholder coming loose during operation.

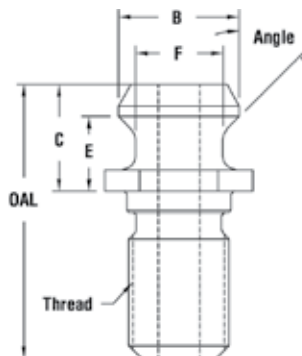
The use of a sealing and or thread lock is recommended. Overtightening may cause a toolholder taper deformation.

Ordering Instructions:

Please provide a drawing of your knob or supply the information on the retention knob quotation request sheet on page 130.



40TRK
shown
here.

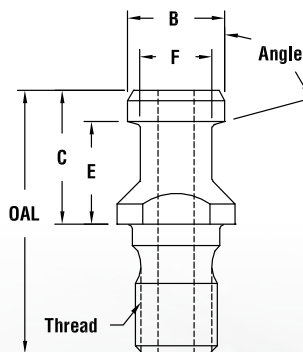


ANSI/ISO RETENTION KNOBS

Part Number	Thread	Angle	OAL	B	C	E	F	Coolant Hole	Specification/Feature
40NTRK	5/8 - 11	45	1.68	.740	.640	.440	.490	-	ANSI STD Solid
40TRK	5/8 - 11	45	1.68	.740	.640	.440	.490	.281	ANSI STD
50NTRK	1 - 8	45	2.54	1.140	1.000	.700	.820	-	ANSI STD Solid
50TRK	1 - 8	45	2.54	1.140	1.000	.700	.820	.468	ANSI STD
A40TRK	M16 - 2	45	1.65	.740	.640	.440	.490	.281	ANSI For Metric Shank
A50TRK	M24 - 3	45	2.58	1.140	1.000	.700	.820	.468	ANSI For Metric Shank
M50TRK	1 - 8	45	2.30	1.140	1.000	.700	.820	.468	MAZAK O-Ring Seal Groove



DIN50ATRK
shown
here.



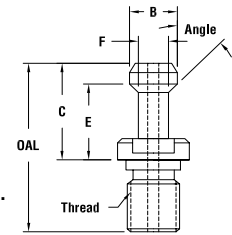
DIN RETENTION KNOBS

Part Number	Thread	Angle	OAL	B	C	E	F	Coolant Hole	Specification/Feature
4030TRK	5/8 - 11	75	2.06	.747	1.020	.788	.550	.281	DIN For Inch Shank
5030TRK	1" - 8	75	2.88	1.100	1.345	.990	.827	.468	DIN For Inch Shank
DIN40ATRK	M16 - 2	75	2.12	.747	1.024	.788	.549	.276	DIN STD Coolant

Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



4009TRKC
shown here.



MAS BT RETENTION KNOBS

Part Number	Thread	Angle	OAL	B	C	E	F	Coolant Hole	Specification/Feature
3001TRK	1/2-13	45	1.42	.393	.787	.630	.236	-	CHIRON INCH SHANK
3002TRK	M12-1.75	45	1.42	.393	.787	.630	.236	-	CHIRON METRIC SHANK
3003TRK	M12-1.75	45	1.70	.430	.908	.710	.273	-	MAS BT 45 DEG
3003TRKC	M12-1.75	45	1.70	.430	.908	.710	.273	.125	MAS BT 45 DEG
3004TRK	M12-1.75	60	1.70	.430	.908	.710	.273	-	MAS BT 60 DEG
4001TRK	5/8-11	90	2.32	.588	1.275	.988	.393	-	-
4001TRKC	5/8-11	90	2.32	.588	1.275	.988	.393	.197	-
4002TRK	M16-2	90	2.36	.588	1.376	1.102	.393	-	MAS BT 90 DEG
4003TRK	M16-2	45	2.36	.588	1.376	1.102	.393	-	MAS BT 45 DEG
4003TRKC	M16-2	45	2.36	.588	1.376	1.102	.393	.197	-
4004TRK	M16-2	60	2.36	.588	1.376	1.102	.393	-	MAS BT 60 DEG
4005TRK	5/8-11	45	2.31	.588	1.268	.988	.393	-	-
4005TRKC	5/8-11	45	2.31	.588	1.268	.988	.393	.157	-
4008TRK	5/8-11	75	2.06	.744	1.024	.787	.549	-	-
4008TRKC	5/8-11	75	2.06	.744	1.024	.787	.549	.276	-
4009TRK	5/8-11	45	2.30	.588	1.264	.990	.393	-	-
4009TRKC	5/8-11	45	2.30	.588	1.264	.990	.393	.197	-
4010TRK	5/8-11	75	2.13	.748	1.142	.906	.551	.276	-
4014TRK	5/8-11	60	2.31	.588	1.268	.990	.393	-	-
4014TRKC	5/8-11	60	2.31	.588	1.268	.990	.393	.197	-
4020TRK	M16-2	15	2.26	.748	1.142	.905	.550	.276	-
5001TRK	1-8	90	3.31	.904	1.770	1.378	.667	-	-
5001TRKC	1-8	90	3.31	.904	1.770	1.378	.667	.250	-
5002TRK	M24-3	90	3.34	.904	1.770	1.378	.667	-	MAS BT 90 DEG
5003TRK	M24-3	45	3.34	.904	1.770	1.378	.667	-	MAS BT 45 DEG
5003TRKC	M24-3	45	3.34	.904	1.770	1.378	.667	.250	-
5004TRK	M24-3	60	3.34	.904	1.770	1.378	.667	-	MAS BT 60 DEG
5005TRK	1-8	45	3.33	.904	1.791	1.378	.667	-	-
5005TRKC	1-8	45	3.33	.904	1.791	1.378	.667	.250	-
5014TRK	1-8	60	3.31	.904	1.770	1.378	.667	-	-
5014TRKC	1-8	60	3.31	.904	1.770	1.378	.667	.250	-
5021TRK	1-8	90	2.77	.940	1.234	.907	.708	-	-
C400TRK	5/8-11	45	2.48	.588	1.436	1.137	.406	-	-
C400TRKC	5/8-11	45	2.48	.588	1.436	1.137	.404	.157	-
F40TRK	M16-2	45	1.85	.740	.752	.552	.490	-	FADAL BT40
M400TRK	5/8-11	90	1.91	.588	1.053	.777	.393	-	-
MAK050TRK	1-8	45	3.14	.904	1.780	1.386	.667	.236	MAKINO
MH500TRK	1-8	90	2.32	.904	1.780	1.386	.667	-	-
MS5034TRK	1-8	90	2.76	.940	1.218	.903	.706	.315	-
MZ40TRK	M16-2	45	1.85	.740	.752	.552	.490	.281	FADAL BT40

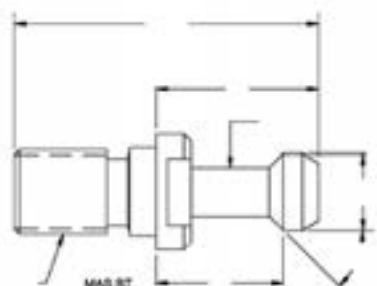
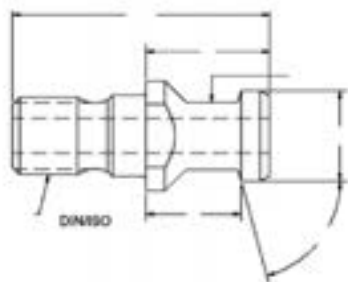
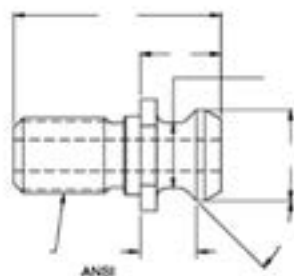
Other sizes available upon request. Please call Parlec or your local Parlec representative for more information.



QUOTATION REQUEST SHEET

CONTACT INFORMATION For quick response, just photocopy this page, complete all information (please include Part Print where appropriate) and simply FAX back to Parlec at 1-800-866-5917

Company _____			
Contact Name _____	Title _____		
Business Address _____	City _____	State _____	Zip _____
Phone _____	Fax _____	Email _____	



If required knob is not shown, please select the most similar design and specify dimensions.

MACHINE CENTER INFORMATION

Machine Make _____

Machine Model _____

Taper Size _____

Coolant Hole Diameter _____

☐ Hole Through ☐ Partial Hole ☐ No Hole

Special Features _____
