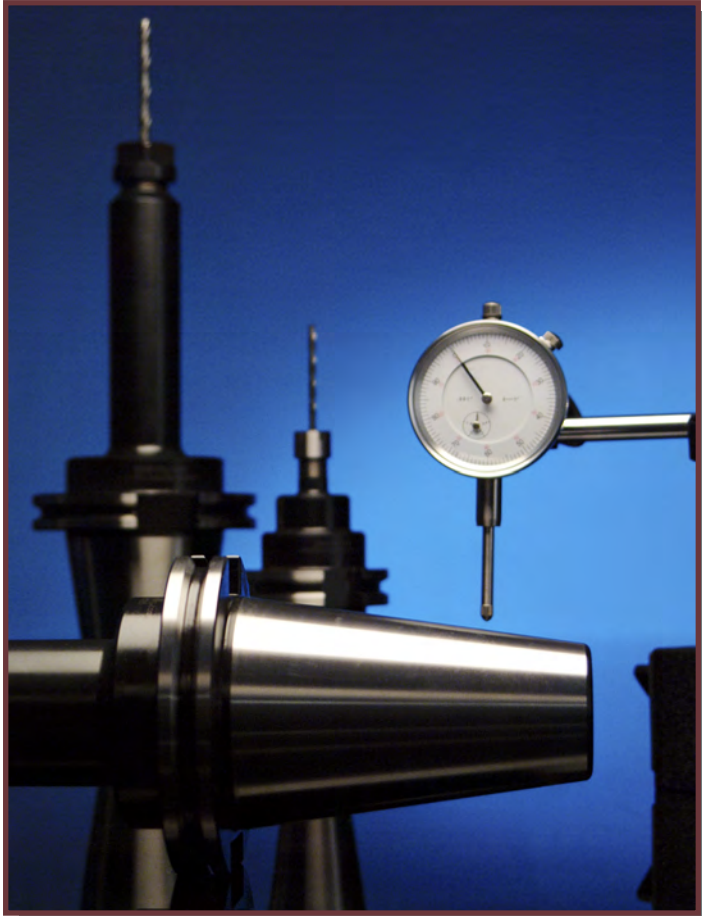


Briney
Tooling Systems

“Your Value Added Partner In Manufacturing”



Briney Q-Certified

We guarantee our tooling quality - workmanship and runout - to meet or exceed industry standards. Our goal is to provide tooling that retains its factory quality during normal use in a CNC machining environment longer than any competitive type, thus providing our customers a reliable tool for quality machining at a low life cycle cost. Should a Briney toolholder fail for any reason other than abuse or misuse, return it to the factory for a replacement.



HISTORY

- 1989** Briney got its start making selected holders for both Valenite and Universal.
- 1992** Printed first catalog and attended first IMTS Technology Show.
- 1994** Built the first USA Shrink-Fit holder for Tooling Innovations. In addition, Awarded Fadal contract for private labeled holders.
- 1996** Briney was the first licensed Shrink-Fit manufacturer and started manufacturing them under the Tooling Innovations name.
- 1997** One of the first companies to manufacturer HSK holders domestically. Also became Boeing's largest supplier of Shrink-Fit and conventional holders.
- 2000** Our Shrink-Fit adapters were on the first automotive program (Kenosha 2.7 engine program) to be dedicated to using Shrink-Fit toolholders. This resulted in the lowest tooling cost per engine in all of Daimler Chrysler.
- 2001** Expanded Shrink-Fit into Ford (Woodhaven, MI) and GM (Toluca, MX).
- 2003** Dropped Tooling Innovations name.
- 2004** Launched Tru-Position Eccentric End Mill Adapters with the lowest T.I.R. in the market.
- 2007** Started manufacturing "European design" Shrink-Fit, to meet the European standard.
- 2010** Released Thermax II, first induction unit dedicated to working with both "USA design" and "European design" Shrink-Fit adapters.
- 2012** Expanded offering in ER Collets by adding Tru Precision sealed and rigid tap collets.
- 2014** Expanded line of toolholding to include Briney Dual Contact Toolholders.

Abbreviation: DC/ST (Dual Contact or Standard Part Number)

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About Briney

Briney is an ISO 9001:2008 certified Michigan based privately-owned corporation with a dedicated commitment to quality from the corporate executives, managing staff, and the entire highly-skilled and experienced work force. Briney is committed to serving the American machining industry and the world market. Briney uses the "Quality Team" manufacturing philosophy, along with 5S Lean Manufacturing philosophy implementing the best ideas from all levels of the company, thus producing quality products and new innovative manufacturing ideas and tooling designs.

SELECTION

Look to Briney for a complete line of toolholders in Shrink-Fit or conventional styles for your CNC machining center or your manual milling machine: CAT Shank 40, 50: BT Shank 30, 40, 50: NMTB(QC) Shank 30, 40, 50: HSK 63 A,C,E, HSK80 A, F and 100 A,C, and Collet Chuck and Shrink-Fit Extensions. Bilz Quick Change Tapping systems for all shank styles, and LlambrichUSA Drill Chucks. TG, BR/ER, DA, and BF/AF, collets are available from stock in all the popular sizes.



Note: Briney manufactures Tru Position End Mill Adapters. For more information SEE PAGES 40-41.

QUALITY

Shank quality is the key to machining accuracy. Briney shanks and bores are ground on state-of-the-art CNC grinding equipment, enabling Briney to provide the most accurate shank and concentricity in the industry. All shanks are traverse-ground to **AT3** ANSI tolerance (.00012" taper per ft.) and inspected with the latest, most accurate air/electronic dedicated gaging system. Toolholder I.D.s (collet chuck tapers, end mill adapters, etc.) are traverse-ground on CNC ID grinders under simulated operating conditions.

This enables Briney to offer, "The best repeatability and concentricity from tool shank to cutting tool in the industry." All grinding operations are closely monitored to ensure the highest quality and consistency.

The result of these quality features is superior performance, longer tool life, increased speeds and feed rates, and better surface finish resulting in lower operating costs.

Materials used for all Briney Tooling are certified and traceable to NIST standards. With in-plant heat treating,

Briney controls the carburizing and hardening process to ensure all tools have a .050 minimum case depth to maximize tool life and reduce distortion from prolonged use, mishaps, and mishandling.

Shanks are ground after black-oxide to guarantee the best concentricity, superior finish, and better spindle contact.

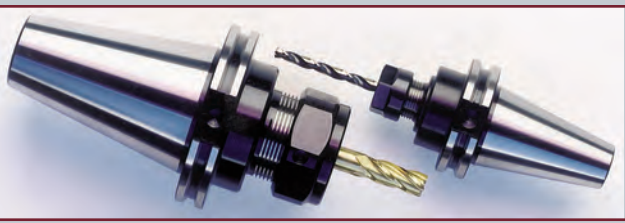
The critical grinding process is the last operation. This eliminates any distortion by heat treating or changing surface conditions of the tool. These conditions will affect the concentricity or cause the tool to be difficult for your toolchanger to operate. Both deeper case hardening and superior shank accuracy extend tool life, providing superior quality and superior value.

CUSTOM TOOLHOLDER SPECIALISTS

Count on Briney to manufacture your special tool holding requirements to the same high quality as standard Briney products. Fax or E-mail your requirements to **1-989-269-9559** or **briney@geminigroup.net** and you will receive a prompt quotation on your requirements. Our design team will provide a computer generated print for your approval before manufacturing to ensure the toolholder is manufactured precisely to your specifications at time of order. Typically we have the fastest deliveries in the industry on custom made toolholders!

BALANCED TOOLING

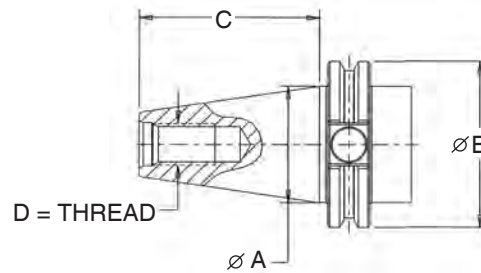
Briney leads the industry with the most complete line of high quality balanced tools. Choose the tooling to match your machining speeds. While the improved design of our standard tooling will perform well in most machining applications, for higher spindle speeds choose our Tru Velocity™ (TV) tooling. Briney's Tru Velocity line is balanced to 20,000 RPM. For even higher speeds, Briney's Maximum Velocity™ (MV) tooling is fully balanced and designed to perform up to speeds of 30,000 RPM. Also available from Briney is Balanced Engineered tooling for ultra high-speed applications – you choose the speed, and we'll balance to it. Whatever your balanced tooling needs, Briney is your choice for tooling.



SHANK DATA

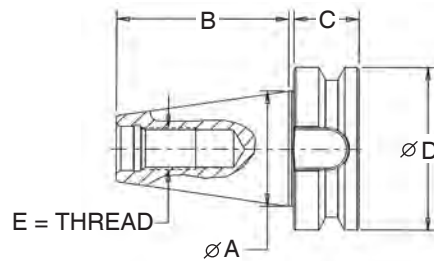
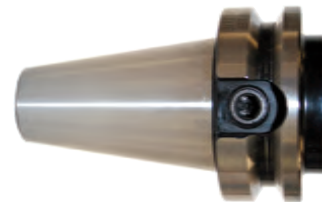
CAT SHANKS

SHANK SIZE	A GAUGE DIA.	B HEAD DIA.	C TAPER LENGTH	D RETENTION KNOB THREAD
V30	1.250	1.812	1.875	1/2-13
V40	1.750	2.500	2.687	5/8-11
V45	2.250	3.250	3.250	3/4-10
V50	2.750	3.875	4.000	1-8



BT SHANKS

SHANK SIZE	A GAUGE DIA.	B TAPER LENGTH	C HEAD WIDTH	D HEAD DIA.	E RETENTION KNOB THREAD
*BT30	1.250	1.906	.787	1.810	M12 X 1.75
*BT35	1.500	2.220	.866	2.087	M12 X 1.75
BT40	1.750	2.575	.984	2.480	M16 X 2.0
BT50	2.750	4.008	1.378	3.937	M24 X 3.0

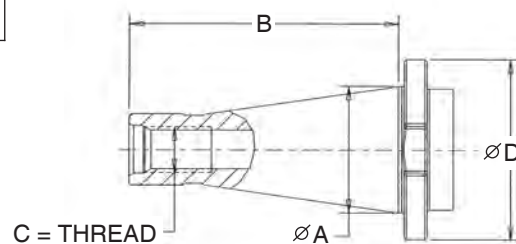


NOTE: Made to JIS B6339 - 1992 Specifications (equivalent to ISO 7388/1 - 1983)

*.4920 pilot for pull stud

NMTB OR QUICK CHANGE SHANKS

SHANK SIZE	A GAUGE DIA.	B TAPER LENGTH	C RETENTION KNOB THREAD	D HEAD DIA.
NMTB or QC30	1.250	2.688	1/2-13	1.81
NMTB or QC40	1.750	3.688	5/8-11	2.50
NMTB or QC50	2.750	5.00	1-8	3.50



All Briney NMTB toolholders are qualified for Erickson tool change system.

DUAL CONTACT TECHNICAL DATA

Briney Tooling Systems Introduces the new line of Briney Dual Contact Toolholders

Dual Contact spindles are often standard on machines ordered with a CAT or BT interface. While Dual Contact spindles work with all CAT or BT holders, there is a dramatic performance advantage when used with Briney Dual Contact toolholders.

A standard steep-taper tool system is designed to make contact along a fixed taper in the machining center spindle. The tool is held firm against this taper by a drawbar mechanism. When a conventional holder is seated in the spindle, there is a 3mm gap between the toolholder flange and the spindle face.

Dual contact, involving the toolholder shank (taper) and the toolholder flange, is a method to eliminate pull-back of the toolholder. Precision machining for the spindle bore, toolholder taper and flange creates a connection that allows the taper and face to seat at the same time thus creating dual or simultaneous contact on the two surfaces.

The steep-taper contacts the spindle taper and flange contact on the spindle face make a solid union in both the axial and radial planes. In operation, dual contact tool holders are resistant to axial movement because the face contact prevents the toolholder from being pulled up into the spindle at high speed.

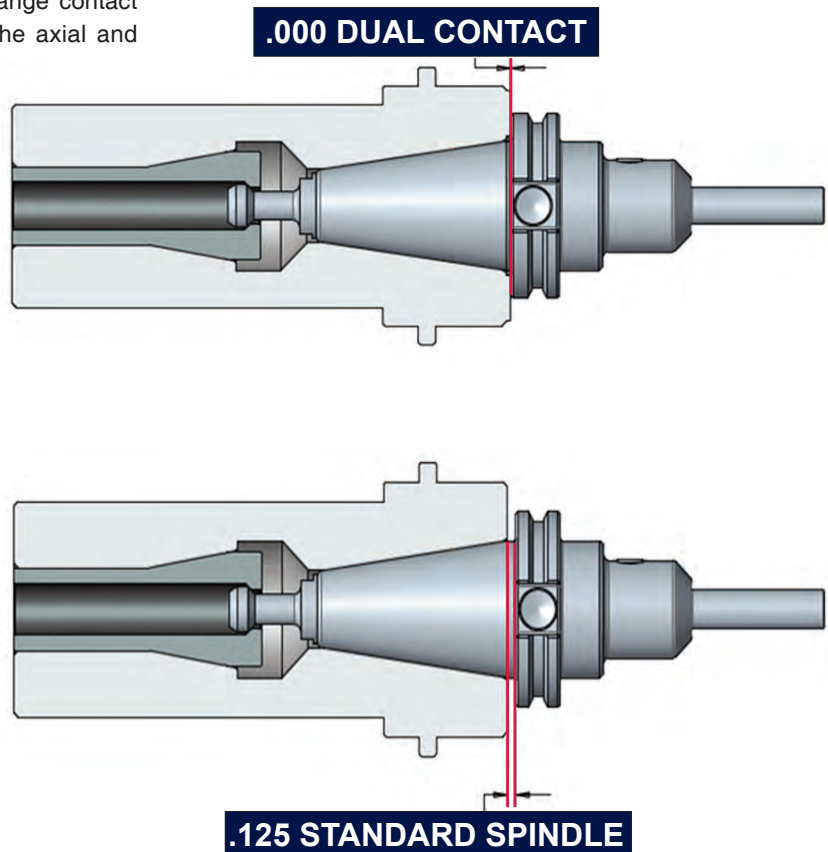
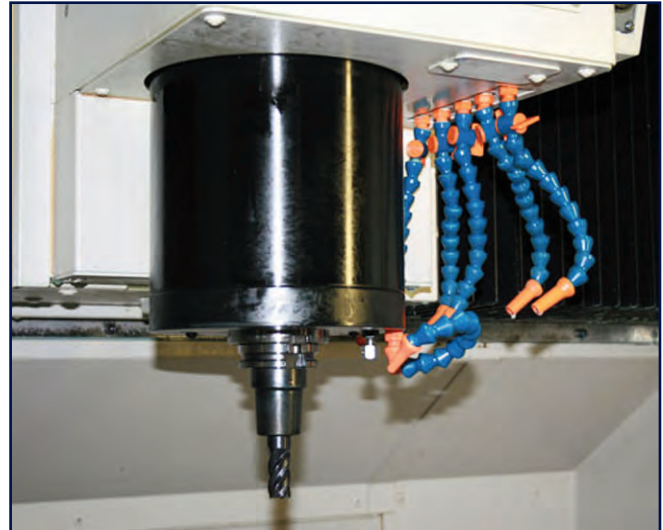
To achieve dual contact for the tool shank taper and the flange, 1.5mm is added to the spindle face and 1.5mm is added to the toolholder flange. The taper is not changed.

Adding this material effectively closes the 3mm gap between the spindle face and the toolholder flange. Eliminating the gap allows these tools to have dual contact.

As shops move production rates continuously up the high speed curve, a rigid connection between toolholder and spindle becomes critical.

Advantages of tooling up milling machines equipped with big spindles:

- Best possible T.I.R.
- Provide added stability and tool rigidity
- Increased quality of surface finish
- Increases the life of the spindle
- Increases tool life



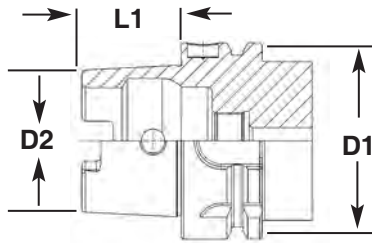
* Dual Contact part numbers are listed in first column of tables throughout catalog.



HSK SHANK DATA DIN 69893

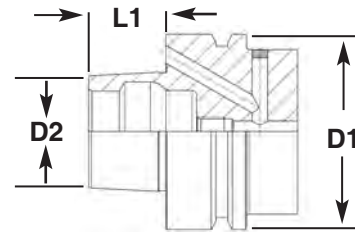
FORM A

Automatic Tool Change



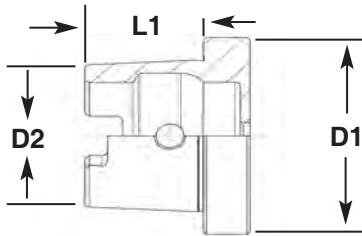
FORM B

Automatic Tool Change With Additional Face Contact And Coolant Through Face



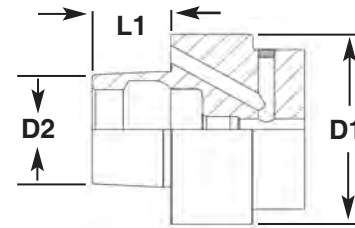
FORM C

Manual Clamping



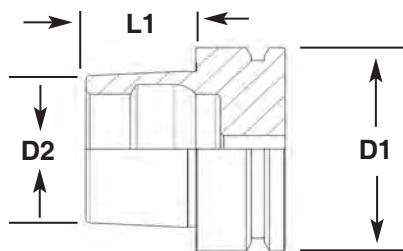
FORM D

Manual Additional Face Contact And Coolant Through Face



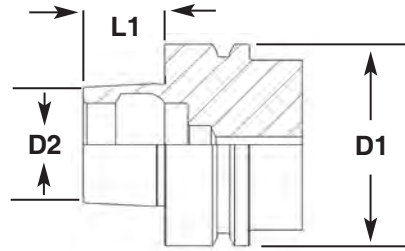
FORM E

Ultra High Speed Applications



FORM F

Ultra High Speed With Additional Face Contact

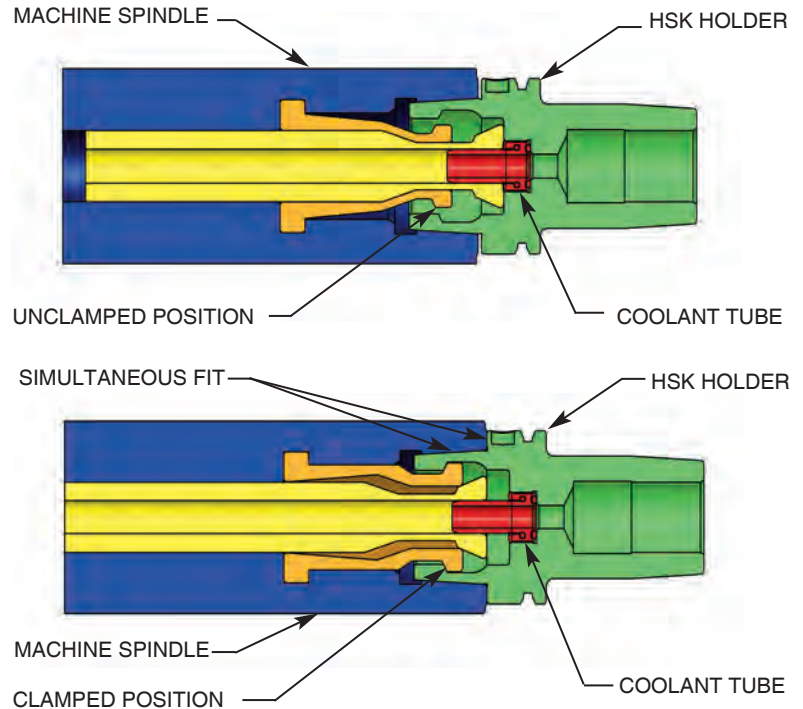


FORM A/C/E

D1	D2	L1
25 (.984)	18 (.708)	13 (.511)
32 (1.2598)	24 (.945)	16 (.630)
40 (1.5748)	30 (1.181)	20 (.787)
50 (1.9685)	38 (1.496)	25 (.984)
63 (2.4803)	48 (1.890)	32 (1.260)
80 (3.1496)	60 (2.362)	40 (1.575)
100 (3.9370)	75 (2.953)	50 (1.969)
125 (4.9213)	95 (3.740)	63 (2.480)

FORM B/D/F

D1	D2	L1
N.A.	N.A.	N.A.
N.A.	N.A.	N.A.
40 (1.5748)	24 (.945)	16 (.630)
50 (1.9685)	30 (1.181)	20 (.787)
63 (2.4803)	38 (1.496)	25 (.984)
80 (3.1496)	48 (1.890)	32 (1.260)
100 (3.9370)	60 (2.362)	40 (1.575)
125 (4.9213)	75 (2.953)	50 (1.969)



THE HSK CONNECTION

The HSK connection is the internationally recognized standard for superior high speed toolholder performance. Briney offers the premium toolholder with superior materials and processes. These improvements provide extended wear and superior durability due to specialized heat treat processes and increased rigidity and dependability due to design.

The HSK connection utilizes the combination of face contact and improved taper contact to provide users with:

- Balanced to 20,000/30,000 RPM at G2.5 and can be balanced higher depending on the requirements.
- Increased Rigidity / Repeatability: Taper and face contact increase positioning accuracy thus reducing run out and increasing rigidity.
- Superior High Speed Performance: The short taper and hollow shank design results in a reduction in the holder weight, therefore reducing spindle stresses. Interior taper clamping reduces the effects that centrifugal forces generates at higher speeds.
- High Torque Transmission: The combination of face contact and taper contact create improved friction. This in conjunction with positive drive key design improve torque transfer under heavy cutting loads.

Since its introduction in 1993, HSK has proven to be the new world standard for high speed toolholding. Briney combines the HSK connection with improved materials and processes to provide the highest quality HSK toolholders in the industry.

Briney Offers You Choices in Coolant Toolholders

Coolant Shower Tooling

Briney Coolant Shower Toolholders (SFCS) or (EC) are used for CNC milling applications on machines with through the spindle or flange coolant delivery.

Coolant Shower toolholders are engineered to direct the coolant flow toward the cutter. The coolant surrounds the cutting tool and clears chips out of the cutter's path.

Briney Coolant Shower end mill holders and shrink fit holders help increase tool performance on any machining application.



NOTE! To order coolant shower for Shrink-Fit tooling, please add a "CS" after the SF in the part number, EXAMPLE: HSK63ASFCS-050-630D.

NOTE! To order surround coolant for standard End Mill Adapter tooling, please add a "CS" after the E in the part number. EXAMPLE: V40ECS-050-262.

Coolant Thru Flange Tooling

Briney builds coolant-thru-the-flange (CTF) holders. CTF holders are sometimes referred to as DIN B holders. DIN 69871 Form B calls for metric retention knob threads and an orientation notch.

DIN 69871 also calls for a larger safety diameter than CTF holders. CTF holders are used primarily in Mori Seiki machining centers to accommodate thru the flange coolant routing. For Mori Seiki machining centers please have model & serial number for proper CTF hole size.



NOTE! To order coolant-thru-the-flange tooling specify with an CTF after part number.

EXAMPLE: V40SF-018-275-CTF or see back page of book for details.

Surround Coolant Tooling

Briney Tooling Systems offers the ultimate in surround coolant toolholders (SFC) or (EC). By utilizing the shrink fit connection, which creates an air and coolant tight seal, coolant grooves can be added to the bore., to direct coolant down the flutes of the cutting tool, directly onto the cutting edge. Our system eliminates the need for special coolant thru tools, sealing accessories or altering the tool shank for coolant delivery.



NOTE! To order surround coolant for Shrink-Fit tooling, please add a "C" after the SF in the part number, EXAMPLE: V40SFC-050-450.

NOTE! To order surround coolant for standard End Mill Adapter tooling, please add a "C" after the E in the part number. EXAMPLE: V40EC-050-450

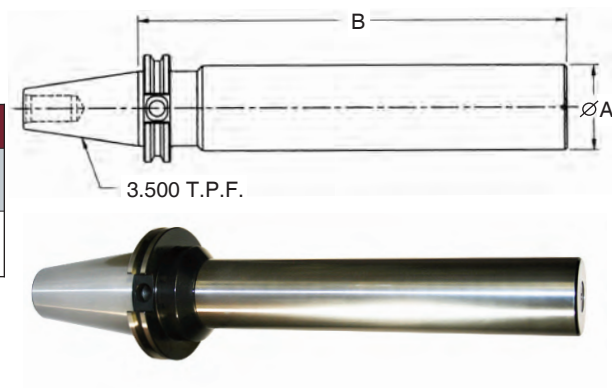
PRECISION TEST BARS

Regular inspection of machine spindle is recommended to ensure production stability.

- Certified with actual dimensions etched on Test Bars.
- Bar concentric to taper within .0002" T.I.R.

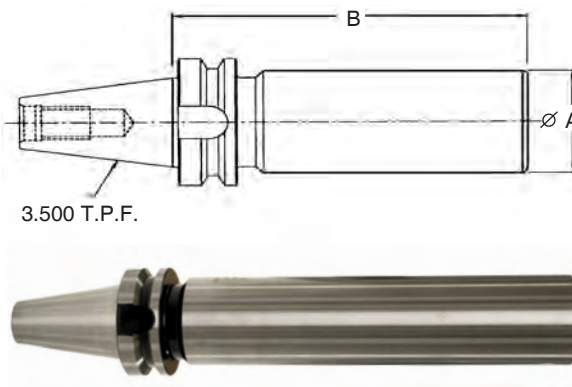
CAT PRECISION TEST BARS

PART NUMBER	A O.D. DIA.	B GAUGE LENGTH	CONCENTRICITY
V40PTB-200-1000	2.00	10.00	.0002
V50PTB-200-1200	2.00	12.00	



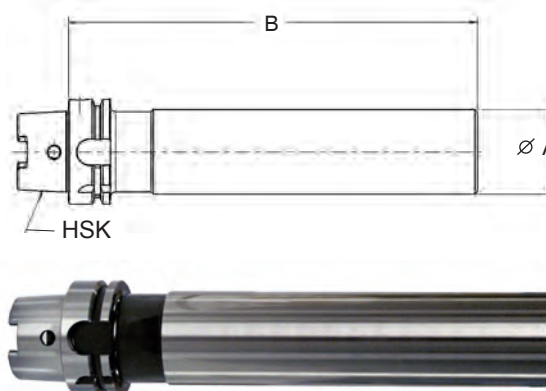
BT PRECISION TEST BARS

PART NUMBER	A O.D. DIA.	B GAUGE LENGTH	CONCENTRICITY
BT30PTB-150-800	1.50	8.00	.0002
BT40PTB-200-1000	2.00	10.00	
BT50PTB-200-1200	2.00	12.00	



HSK PRECISION TEST BARS

PART NUMBER	A O.D. DIA.	B GAUGE LENGTH	CONCENTRICITY	COMPATIBLE WITH
HSK50APT-150-800	1.50	8.00	.0002	HSK50-A/C/E* HSK63-B/D/F*
HSK63APT-200-1000	2.00	10.00	.0002	HSK63-A/C/E* HSK80-B/D/F*
HSK80APT-200-1000	2.00	10.00	.0002	HSK80-A/C/E* HSK100-B/D/F*
HSK100APT-200-1200	2.00	12.00	.0002	HSK100-A/C/E* HSK125-B/D/F*



* When manually changing tools.

Note: Precision Test Bars ship with certs in a wooden box.

SHRINKER TOOLING BENEFITS

For critical high speed or high precision cutting applications, the Shrinker's TIR and tremendous holding strength are benefit enough — most toolholders simply can't achieve this degree of precision. Shrinker technology and design provides these benefits:

- Best possible TIR (Total Indicator Reading).
- Best possible balance.
- Best available gripping power.
- Increased tool and spindle life.
- Thin profile holders for machining hard-to-reach places.
- Design and build custom holders for any application.
- Short gauge lengths available for increased rigidity.
- Ability to preset for required tool length.
- Ideal for end milling, drilling, reaming, boring and all other critical rotary tool applications regardless of cutting tool material.
- Eliminates wrenches, collets, set screws and other accessories.
- Reduces costs associated with tool changes, holder maintenance and machine downtime.



Heat expands the inside diameter.



Cooling contracts the inside diameter.



HOW IT WORKS:

The concept is simple. Each Shrinker toolholder is manufactured with an inside diameter slightly smaller than the shank diameter of the cutting tool. A heat induction unit is used to quickly heat the holder end of the Shrinker, expanding this inside diameter. At this point, the tool shank slips easily into the holder. As the holder cools, the resulting thermal contraction exerts a tremendous, uniform pressure around the entire surface of the tool shank leaving total concentric gripping strength.

Removing the tool is just as simple — you simply reverse the process! Tool changes can be accomplished in seconds, dramatically increasing machining productivity by reducing tool change downtime.

SHRINKER ADVANTAGES



SUPERIOR CONCENTRICITY - The concentricity of Shrink Fit Tooling is guaranteed .0002" or better with the cutting tool set in the shrunk condition.

SUPERIOR BALANCE - Shrink Fit Tools are manufactured for high speed operation. Balance pockets are machined in the drive keys on all V-Flange tooling, eliminating the inherent imbalance in V-Flange tooling. Shrink Fit tools are dynamically balanced on our Hoffman 2 plane balancing machine to G 2.5 at 20,000 RPM's. Special tools can be manufactured to a G1.0 tolerance at 30,000 RPM. This results in balanced chip loads, better finishes, and increased speeds and feed rates. With no set screws the toolholder remains in balance leaving the cutting tool as the only variable.

SUPERIOR RIGIDITY - The average gripping force imposed on the shank of the cutting tool is 10,000 lbs. – more than 5 times that of collet, milling, or hydraulic chucks. It would take over 100 horsepower in order to turn the tool within the bore of the toolholder. An additional advantage is the shank of the tool is gripped 360 degrees the entire length of the bore. Impossible with milling chucks and hydraulic chucks. These chucks leave an area of up to 1/4 inch from the end of the toolholder with no force applied to the tool shank. Using the Shrinker gives you the closest possible rigidity to an Integral Shank Tool with lower costs and more flexibility.

SUPERIOR TOOL LIFE - The Shrinker Toolholding System extends tool life up to 100% or more. With the superior holding force, concentricity, and balance, the chip load is evenly distributed on the cutting edge. The rigidity established with the Shrinker enables cutting tool technology to be pushed to the maximum.

SUPERIOR HIGH SPEED OPERATION - In extreme high speed operations centrifical force becomes an important factor in desired speeds and feed rates. With the holding force induced by the Shrinker system being superior, no other system can meet and maintain the clamping force. The Shrinker System is a must in extreme high speed applications and is superior at any speed. A very important feature of Balanced Shrinker Tooling is the extended spindle life with the superior balance and rigidity the Shrinker offers.

SUPERIOR OPERATING PARAMETERS - No holding system offers shorter extension length capability with concentricity of .0002" or less. Milling and hydraulic chucks offer excellent concentricity, but the mechanical clamping system requires additional extension and sacrifices rigidity. Conventional end mill holders can provide very short extension lengths, but sacrifice concentricity and provide 2 or 3 point clamping. The thin profile required for the Shrinker enable the operations to be performed with less interference. Tooling can be preset by simply controlling the depth the shank extends into the bore.

SIMPLE OPERATION - The Shrinker System is truly the easiest system to use. The induction tool changer is by far the fastest and simplest method to change tooling, enabling the operator to remove the dull tool and insert the new tool. Seconds after the new tool is inserted, the bore shrinks back and can then be cooled. No wrenches to find, no vices, uniform chucking without torque wrenches, and faster than conventional clamping methods.

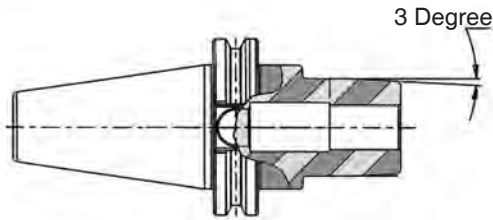
CONCLUSION - The Shrinker Toolholding System is by far the most economical system in the world today. The increased productivity and increased tool life can be measured. Additionally, reduced toolchange down time will contribute to the considerable reduction in costs.



DIFFERENCES BETWEEN USA & EUROPEAN DESIGN

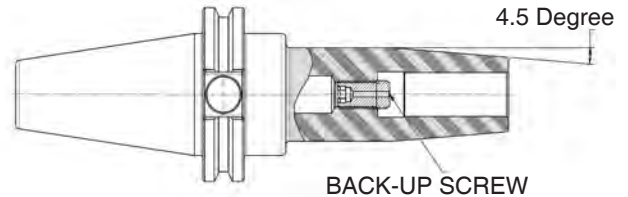
SHRINK-FIT
CAT 40 & 50

USA STANDARD SHRINK-FIT TOOLHOLDERS



Sample part number
USA DESIGN
V40SF-025-275

EUROPEAN STANDARD SHRINK-FIT TOOLHOLDERS



Sample part number
EUROPEAN DESIGN
V40SF-025-315D

USA STANDARD

- 3-degree nose angle
- No back-up screw—
No limit tool insertion
depth
- Superior holding force
- Consistant wall
thickness throughout
entire design

SHARED FEATURES

- Materials certified and
traceable to NIST standards
- 360-degree tool grip along the
entire length of bore resulting in
an evenly distributed clamping
force and superior concentricity
- Balanced to 20,000 RPM
at G2.5
- Surround coolant optional
upon request
(see page 7)

EUROPEAN STANDARD

- 4.5-degree nose angle
- Adjustable screw for tool
depth—Limited tool
insertion depth.
- Less interference in
shrinker bore

NOTE* All T.I.R. values are based on 4 x's diameter to length ratio.

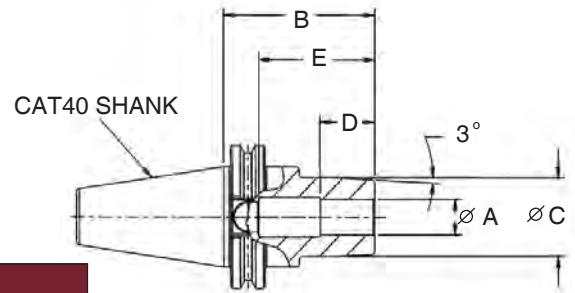
CAT 40 USA DESIGNED ADAPTERS - INCH

SHRINK-FIT
CAT 40

Shrink-Fit Holder Features

- Maximum .0002" T.I.R. or better
- Balanced to 20,000 RPM at G2.5
- Certified H-13 material

For surround coolant option (see page 7)



STANDARD LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
—	V40SF-012-275	.1250	2.750	.875	.375	*
—	V40SF-018-275	.1875	2.750	.937	.500	*
—	V40SF-025-275	.2500	2.750	1.000	.750	*
—	V40SF-031-275	.3125	2.750	1.062	.750	*
BDCV40SF-038-275	V40SF-038-275	.3750	2.750	1.125	.750	*
—	V40SF-044-275	.4375	2.750	1.188	1.00	*
BDCV40SF-050-275	V40SF-050-275	.5000	2.750	1.250	1.00	*
BDCV40SF-062-275	V40SF-062-275	.6250	2.750	1.375	1.00	2.12
BDCV40SF-075-275	V40SF-075-275	.7500	2.750	1.500	1.25	2.25
—	V40SF-088-275	.8750	2.750	1.625	1.25	2.25
BDCV40SF-100-275	V40SF-100-275	1.0000	2.750	1.750	1.25	2.62
BDCV40SF-125-275	V40SF-125-275	1.2500	2.750	2.000	1.50	2.750

INTERMEDIATE LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
—	V40SF-012-400	.1250	4.000	.875	.375	*
—	V40SF-018-400	.1875	4.000	.937	.500	*
—	V40SF-025-400	.2500	4.000	1.000	.750	*
—	V40SF-031-400	.3150	4.000	1.125	.750	*
BDCV40SF-038-400	V40SF-038-400	.3750	4.000	1.125	1.00	*
BDCV40SF-050-400	V40SF-050-400	.5000	4.000	1.250	1.00	*
BDCV40SF-062-400	V40SF-062-400	.6250	4.000	1.375	1.00	2.12
BDCV40SF-075-400	V40SF-075-400	.7500	4.000	1.500	1.00	2.00
BDCV40SF-100-400	V40SF-100-400	1.0000	4.000	1.750	1.25	2.62
BDCV40SF-125-400	V40SF-125-400	1.2500	4.000	2.000	1.50	2.75

EXTENDED LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
—	V40SF-018-600	.1875	6.000	.937	.500	*
—	V40SF-025-600	.2500	6.000	1.000	.750	*
—	V40SF-031-600	.3125	6.000	1.125	.750	*
BDCV40SF-038-600	V40SF-038-600	.3750	6.000	1.125	.750	*
BDCV40SF-050-600	V40SF-050-600	.5000	6.000	1.250	1.00	*
BDCV40SF-062-600	V40SF-062-600	.6250	6.000	1.375	1.00	2.12
BDCV40SF-075-600	V40SF-075-600	.7500	6.000	1.500	1.25	2.25
—	V40SF-088-600	.8750	6.000	1.625	1.25	2.25
BDCV40SF-100-600	V40SF-100-600	1.0000	6.000	1.750	1.25	2.62
BDCV40SF-125-600	V40SF-125-600	1.2500	6.000	2.000	1.50	2.75

[* Through holder to retention knob thread.]

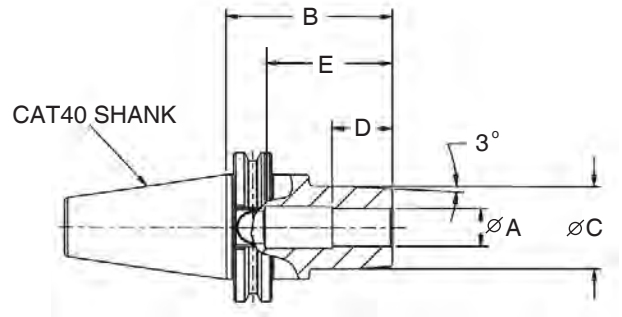


CAT 40 USA DESIGNED ADAPTERS - METRIC

SHRINK-FIT
CAT 40

Shrink-Fit Holder Features

- Increased tool and spindle life
- Best available gripping power and most rigid
- Extremely long toolholder life



For surround coolant option (see page 7)

METRIC STANDARD LENGTH (mm)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
—	V40SF-6M-70	.2362 [6]	2.7559 [70]	1.0 [25.40]	.75 [19.05]	*
—	V40SF-8M-70	.3150 [8]	2.7559 [70]	1.12 [28.58]	1.0 [25.40]	*
BDCV40SF-10M-70	V40SF-10M-70	.3937 [10]	2.7559 [70]	1.12 [28.58]	1.0 [25.40]	*
BDCV40SF-12M-70	V40SF-12M-70	.4724 [12]	2.7559 [70]	1.25 [31.75]	1.0 [25.40]	*
BDCV40SF-14M-70	V40SF-14M-70	.5512 [14]	2.7559 [70]	1.25 [31.75]	1.0 [25.40]	1.75 [44.45]
BDCV40SF-16M-70	V40SF-16M-70	.6299 [16]	2.7559 [70]	1.38 [34.93]	1.0 [25.40]	2.17 [55.118]
BDCV40SF-18M-70	V40SF-18M-70	.7087 [18]	2.7559 [70]	1.38 [34.93]	1.25 [31.75]	2.17 [55.118]
BDCV40SF-20M-70	V40SF-20M-70	.7874 [20]	2.7559 [70]	1.5 [38.10]	1.25 [31.75]	2.17 [55.118]
BDCV40SF-25M-70	V40SF-25M-70	.9843 [25]	2.7559 [70]	1.75 [44.5]	1.25 [31.75]	2.47 [62.74]
BDCV40SF-32M-70	V40SF-32M-70	1.2598 [32]	2.7559 [70]	2.0 [50.80]	1.5 [38.10]	2.76 [70.104]



METRIC INTERMEDIATE LENGTH (mm)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
—	V40SF-6M-100	.2362 [6]	3.937 [100]	1.0 [25.40]	.75 [19.05]	*
—	V40SF-8M-100	.3150 [8]	3.937 [100]	1.12 [28.58]	1.0 [25.40]	*
BDCV40SF-10M-100	V40SF-10M-100	.3937 [10]	3.937 [100]	1.12 [28.58]	1.0 [25.40]	*
BDCV40SF-12M-100	V40SF-12M-100	.4724 [12]	3.937 [100]	1.25 [31.75]	1.0 [25.40]	*
BDCV40SF-14M-100	V40SF-14M-100	.5512 [14]	3.937 [100]	1.25 [31.75]	1.0 [25.40]	1.75 [44.45]
BDCV40SF-16M-100	V40SF-16M-100	.6299 [16]	3.937 [100]	1.38 [34.93]	1.0 [25.40]	2.17 [55.118]
BDCV40SF-18M-100	V40SF-18M-100	.7087 [18]	3.937 [100]	1.38 [34.93]	1.25 [31.75]	2.17 [55.118]
BDCV40SF-20M-100	V40SF-20M-100	.7874 [20]	3.937 [100]	1.5 [38.10]	1.25 [31.75]	2.17 [55.118]
BDCV40SF-32M-100	V40SF-32M-100	1.2598 [32]	3.937 [100]	2.0 [50.80]	1.5 [38.10]	2.76 [70.104]



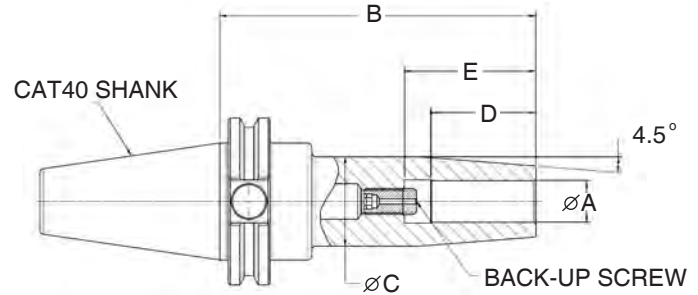
[* Through holder to retention knob thread.]

CAT 40 EUROPEAN DESIGN ADAPTERS - INCH

SHRINK-FIT
CAT 40

Shrink-Fit Holder Features

- Maximum .0002" T.I.R. or better
- Balanced to 20,000 RPM at G2.5
- Certified H-13 material



For surround coolant option (see page 7)

STANDARD LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V40SF-012-315D	.125	3.15	.750	.500	*	N/A
—	V40SF-018-315D	.1875	3.15	.750	.500	*	N/A
—	V40SF-025-315D	.250	3.15	1.062	1.042	1.167	M5-DIN-SSS
—	V40SF-031-315D	.3125	3.15	1.062	1.024	1.417	M6-DIN-SSS
BDCV40SF-038-315D	V40SF-038-315D	.375	3.15	1.260	1.260	1.654	M8-DIN-SSS
BDCV40SF-050-315D	V40SF-050-315D	.500	3.15	1.260	1.457	1.850	M8-DIN-SSS



INTERMEDIATE LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V40SF-025-472D	.250	4.724	1.062	1.042	1.167	M5-DIN-SSS
—	V40SF-031-472D	.3125	4.724	1.062	1.024	1.417	M6-DIN-SSS
BDCV40SF-038-472D	V40SF-038-472D	.375	4.724	1.260	1.260	1.654	M8-DIN-SSS
BDCV40SF-050-472D	V40SF-050-472D	.500	4.724	1.260	1.457	1.850	M8-DIN-SSS
BDCV40SF-062-472D	V40SF-062-472D	.625	4.724	1.339	1.575	1.969	M10-DIN-SSS
BDCV40SF-075-472D	V40SF-075-472D	.750	4.724	1.654	1.654	2.047	M10-DIN-SSS
BDCV40SF-100-472D	V40SF-100-472D	1.00	4.724	2.087	1.890	2.284	M10-DIN-SSS
BDCV40SF-125-472D	V40SF-125-472D	1.25	4.724	2.087	2.008	2.402	M10-DIN-SSS



EXTENDED LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V40SF-025-630D	.250	6.299	1.062	1.042	1.167	M5-DIN-SSS
—	V40SF-031-630D	.3125	6.299	1.062	1.024	1.417	M6-DIN-SSS
BDCV40SF-038-630D	V40SF-038-630D	.375	6.299	1.260	1.260	1.654	M8-DIN-SSS
BDCV40SF-050-630D	V40SF-050-630D	.500	6.299	1.260	1.457	1.850	M8-DIN-SSS
BDCV40SF-062-630D	V40SF-062-630D	.625	6.299	1.339	1.575	1.969	M10-DIN-SSS
BDCV40SF-075-630D	V40SF-075-630D	.750	6.299	1.654	1.654	2.047	M10-DIN-SSS
BDCV40SF-100-630D	V40SF-100-630D	1.00	6.299	2.087	1.890	2.284	M10-DIN-SSS
BDCV40SF-125-630D	V40SF-125-630D	1.25	6.299	2.087	2.008	2.402	M10-DIN-SSS

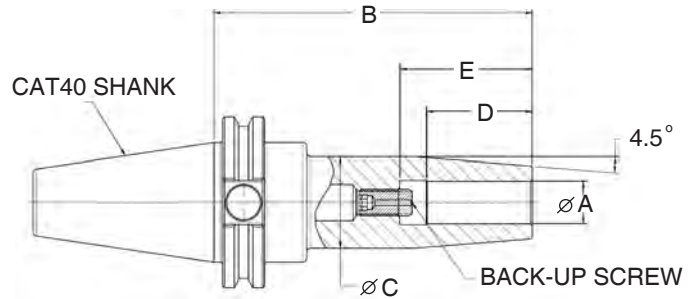


[* Through holder to retention knob thread.]

CAT 40 EUROPEAN DESIGNED ADAPTERS METRIC

Shrink-Fit Holder Features

- Increased tool and spindle life
- Best available gripping power and most rigid
- Extremely long toolholder life



SHRINK-FIT
CAT 40

For surround coolant option (see page 7)

METRIC STANDARD LENGTH (mm)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V40SF-6M-80D	.2362 [6]	3.15 [80]	1.062 [27]	1.042 [26.5]	1.167 [29.6]	M5-DIN-SSS
—	V40SF-8M-80D	.3150 [8]	3.15 [80]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
BDCV40SF-10M-80D	V40SF-10M-80D	.3937 [10]	3.15 [80]	1.260 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
BDCV40SF-12M-80D	V40SF-12M-80D	.4724 [12]	3.15 [80]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV40SF-14M-80D	V40SF-14M-80D	.5512 [14]	3.15 [80]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS



METRIC INTERMEDIATE LENGTH (mm)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V40SF-6M-120D	.2362 [6]	4.724 [120]	1.062 [27]	1.042 [26.5]	1.167 [29.6]	M5-DIN-SSS
—	V40SF-8M-120D	.3150 [8]	4.724 [120]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
BDCV40SF-10M-120D	V40SF-10M-120D	.3937 [10]	4.724 [120]	1.260 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
BDCV40SF-12M-120D	V40SF-12M-120D	.4724 [12]	4.724 [120]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV40SF-14M-120D	V40SF-14M-120D	.5512 [14]	4.724 [120]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV40SF-16M-120D	V40SF-16M-120D	.6299 [16]	4.724 [120]	1.339 [34]	1.575 [40]	1.969 [50]	M10-DIN-SSS
BDCV40SF-18M-120D	V40SF-18M-120D	.7087 [18]	4.724 [120]	1.575 [40]	1.575 [40]	1.969 [50]	M10-DIN-SSS
BDCV40SF-20M-120D	V40SF-20M-120D	.7874 [20]	4.724 [120]	1.654 [42]	1.654 [42]	2.047 [52]	M10-DIN-SSS
BDCV40SF-25M-120D	V40SF-25M-120D	.9843 [25]	4.724 [120]	2.087 [53]	1.890 [48]	2.284 [58]	M10-DIN-SSS
BDCV40SF-32M-120D	V40SF-32M-120D	1.2598 [32]	4.724 [120]	2.087 [53]	2.008 [51]	2.402 [61]	M10-DIN-SSS



METRIC EXTENDED LENGTH (mm)

DUAL CONTACT PART NUMBER ³⁰	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V40SF-6M-160D	.2362 [6]	6.299 [160]	1.062 [27]	1.042 [26.5]	1.167 [29.6]	M5-DIN-SSS
—	V40SF-8M-160D	.3150 [8]	6.299 [160]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
BDCV40SF-10M-160D	V40SF-10M-160D	.3937 [10]	6.299 [160]	1.260 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
BDCV40SF-12M-160D	V40SF-12M-160D	.4724 [12]	6.299 [160]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV40SF-14M-160D	V40SF-14M-160D	.5512 [14]	6.299 [160]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV40SF-16M-160D	V40SF-16M-160D	.6299 [16]	6.299 [160]	1.339 [34]	1.575 [40]	1.969 [50]	M10-DIN-SSS
BDCV40SF-18M-160D	V40SF-18M-160D	.7087 [18]	6.299 [160]	1.575 [40]	1.575 [40]	1.969 [50]	M10-DIN-SSS
BDCV40SF-20M-160D	V40SF-20M-160D	.7874 [20]	6.299 [160]	1.654 [42]	1.654 [42]	2.047 [52]	M10-DIN-SSS
BDCV40SF-25M-160D	V40SF-25M-160D	.9843 [25]	6.299 [160]	2.087 [53]	1.890 [48]	2.284 [58]	M10-DIN-SSS
BDCV40SF-32M-160D	V40SF-32M-160D	1.2598 [32]	6.299 [160]	2.087 [53]	2.008 [51]	2.402 [61]	M10-DIN-SSS



CAT 50 USA DESIGNED ADAPTERS - INCH

SHRINK-FIT
CAT 50

STANDARD LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH BARREL	C BEARING SURFACE	D TOOL DEPTH	E
—	V50SF-012-300	.1250	3.00	.875	.375	*
—	V50SF-018-300	.1875	3.00	.937	.500	*
—	V50SF-025-300	.2500	3.00	1.000	.750	*
—	V50SF-031-300	.3125	3.00	1.125	.750	*
BDCV50SF-038-300	V50SF-038-300	.3750	3.00	1.125	.750	*
BDCV50SF-050-300	V50SF-050-300	.5000	3.00	1.250	1.00	*
BDCV50SF-062-300	V50SF-062-300	.6250	3.00	1.375	1.00	*
BDCV50SF-075-300	V50SF-075-300	.7500	3.00	1.500	1.25	*
—	V50SF-088-300	.8750	3.00	1.625	1.25	2.25
BDCV50SF-100-300	V50SF-100-300	1.0000	3.00	1.750	1.25	2.62
BDCV50SF-125-300	V50SF-125-300	1.2500	3.00	2.000	1.50	2.75
BDCV50SF-150-300	V50SF-150-300	1.5000	3.00	2.250	1.75	2.75
—	V50SF-200-300	2.0000	3.00	2.750	2.00	3.00

INTERMEDIATE LENGTH

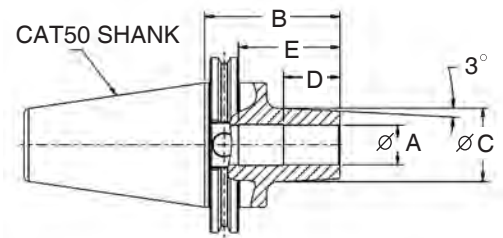
DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH BARREL	C BEARING SURFACE	D TOOL DEPTH	E
—	V50SF-012-400	.1250	4.00	.875	.375	*
—	V50SF-018-400	.1875	4.00	.937	.500	*
—	V50SF-025-400	.2500	4.00	1.000	.750	*
BDCV50SF-038-400	V50SF-038-400	.3750	4.00	1.125	.750	*
BDCV50SF-050-400	V50SF-050-400	.5000	4.00	1.250	1.00	*
BDCV50SF-062-400	V50SF-062-400	.6250	4.00	1.375	1.00	*
BDCV50SF-075-400	V50SF-075-400	.7500	4.00	1.500	1.25	*
BDCV50SF-100-400	V50SF-100-400	1.0000	4.00	1.750	1.25	2.62
BDCV50SF-125-400	V50SF-125-400	1.2500	4.00	2.000	1.50	2.75
BDCV50SF-150-400	V50SF-150-400	1.5000	4.00	2.250	1.75	2.75

EXTENDED LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH BARREL	C BEARING SURFACE	D TOOL DEPTH	E
—	V50SF-018-500	.1875	5.00	.937	.500	*
—	V50SF-025-500	.2500	5.00	1.000	.750	*
—	V50SF-031-500	.3125	5.00	1.125	.750	*
BDCV50SF-038-500	V50SF-038-500	.3750	5.00	1.125	.750	*
BDCV50SF-050-500	V50SF-050-500	.5000	5.00	1.250	1.00	*
BDCV50SF-062-500	V50SF-062-500	.6250	5.00	1.375	1.00	*
BDCV50SF-075-500	V50SF-075-500	.7500	5.00	1.500	1.25	*
—	V50SF-088-500	.8750	5.00	1.625	1.25	2.25
BDCV50SF-100-500	V50SF-100-500	1.0000	5.00	1.750	1.25	2.62
BDCV50SF-125-500	V50SF-125-500	1.2500	5.00	2.000	1.50	2.75
BDCV50SF-150-500	V50SF-150-500	1.5000	5.00	2.250	1.75	2.75
—	V50SF-200-500	2.0000	5.00	2.750	2.00	3.00

EXTRA EXTENDED LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH BARREL	C BEARING SURFACE	D TOOL DEPTH	E
—	V50SF-018-700	.1875	7.00	.937	.500	*
—	V50SF-025-700	.2500	7.00	1.000	.750	*
BDCV50SF-038-700	V50SF-038-700	.3750	7.00	1.125	.750	*
BDCV50SF-050-700	V50SF-050-700	.5000	7.00	1.250	1.00	*
BDCV50SF-062-700	V50SF-062-700	.6250	7.00	1.375	1.00	*
BDCV50SF-075-700	V50SF-075-700	.7500	7.00	1.500	1.25	*
—	V50SF-088-700	.8750	7.00	1.625	1.25	2.25
BDCV50SF-100-700	V50SF-100-700	1.0000	7.00	1.750	1.25	2.62
BDCV50SF-125-700	V50SF-125-700	1.2500	7.00	2.000	1.50	2.75
BDCV50SF-150-700	V50SF-150-700	1.5000	7.00	2.250	1.75	2.75
—	V50SF-200-700	2.0000	7.00	2.750	2.00	3.00



Shrink-Fit Holder Features

- Maximum .0002" T.I.R. or better
- Balanced to 20,000 RPM at G2.5
- Certified H-13 material



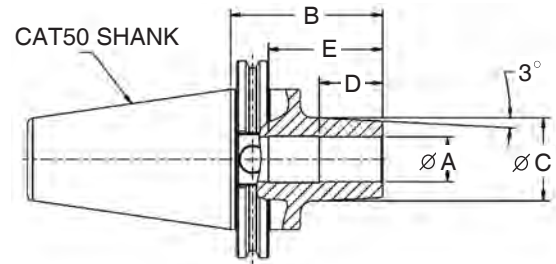
For surround coolant option (see page 7.)

[* Through holder to retention knob thread.]



Shrink-Fit Holder Features

- Increased tool and spindle life
- Best available gripping power and most rigid
- Extremely long toolholder life



SHRINK-FIT
CAT 50

For surround coolant option (see page 7)

METRIC STANDARD LENGTH (mm)						
DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
—	V50SF-6M-75	.2362 [6]	2.9528 [75]	1.0 [25.40]	.75 [19.05]	*
—	V50SF-8M-75	.3150 [8]	2.9528 [75]	1.12 [28.58]	1.0 [25.40]	*
BDCV50SF-10M-75	V50SF-10M-75	.3937 [10]	2.9528 [75]	1.12 [28.58]	1.0 [25.40]	*
BDCV50SF-12M-75	V50SF-12M-75	.4724 [12]	2.9528 [75]	1.25 [31.75]	1.0 [25.40]	*
BDCV50SF-14M-75	V50SF-14M-75	.5512 [14]	2.9528 [75]	1.25 [31.75]	1.0 [25.40]	*
BDCV50SF-16M-75	V50SF-16M-75	.6299 [16]	2.9528 [75]	1.38 [34.93]	1.0 [25.40]	*
BDCV50SF-18M-75	V50SF-18M-75	.7087 [18]	2.9528 [75]	1.38 [34.93]	1.25 [31.75]	*
BDCV50SF-20M-75	V50SF-20M-75	.7874 [20]	2.9528 [75]	1.5 [38.10]	1.25 [31.75]	*
BDCV50SF-25M-75	V50SF-25M-75	.9843 [25]	2.9528 [75]	1.75 [44.45]	1.25 [31.75]	2.25 [57.15]
BDCV50SF-32M-75	V50SF-32M-75	1.2598 [32]	2.9528 [75]	2.0 [50.80]	1.5 [38.10]	2.7 [68.58]



METRIC INTERMEDIATE LENGTH (mm)						
DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
—	V50SF-6M-100	.2362 [6]	3.937 [100]	1.0 [25.40]	.75 [19.05]	*
—	V50SF-8M-100	.3150 [8]	3.937 [100]	1.12 [28.58]	1.0 [25.40]	*
BDCV50SF-10M-100	V50SF-10M-100	.3937 [10]	3.937 [100]	1.12 [28.58]	1.0 [25.40]	*
BDCV50SF-12M-100	V50SF-12M-100	.4724 [12]	3.937 [100]	1.25 [31.75]	1.0 [25.40]	*
BDCV50SF-14M-100	V50SF-14M-100	.5512 [14]	3.937 [100]	1.25 [31.75]	1.0 [25.40]	*
BDCV50SF-16M-100	V50SF-16M-100	.6299 [16]	3.937 [100]	1.38 [34.93]	1.0 [25.40]	*
BDCV50SF-18M-100	V50SF-18M-100	.7087 [18]	3.937 [100]	1.38 [34.93]	1.25 [31.75]	*
BDCV50SF-20M-100	V50SF-20M-100	.7874 [20]	3.937 [100]	1.5 [38.10]	1.25 [31.75]	*
BDCV50SF-25M-100	V50SF-25M-100	.9843 [25]	3.937 [100]	1.75 [44.45]	1.25 [31.75]	2.25 [57.15]
BDCV50SF-32M-100	V50SF-32M-100	1.2598 [32]	3.937 [100]	2.0 [50.80]	1.5 [38.10]	2.7 [68.58]



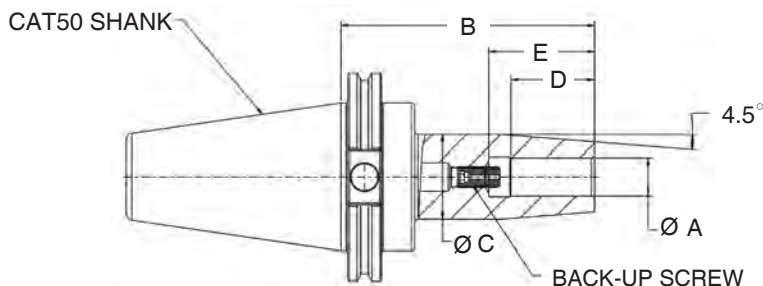
[* Through holder to retention knob thread.]

CAT 50 EUROPEAN DESIGNED ADAPTERS - INCH

SHRINK-FIT
CAT 50

Shrink-Fit Holder Features

- Maximum T.I.R. .0002" or better
- Balanced to 20,000 RPM at G2.5
- Certified H-13 Material



For surround coolant option (see page 7)

STANDARD LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V50SF-025-315D	.250	3.15	1.062	1.042	1.167	M5-DIN-SSS
—	V50SF-031-315D	.3125	3.15	1.062	1.024	1.417	M6-DIN-SSS
BDCV50SF-038-315D	V50SF-038-315D	.375	3.15	1.260	1.260	1.654	M8-DIN-SSS
—	V50SF-044-315D	.437	3.15	1.260	1.457	1.850	M8-DIN-SSS
BDCV50SF-050-315D	V50SF-050-315D	.500	3.15	1.260	1.457	1.850	M8-DIN-SSS



INTERMEDIATE LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V50SF-025-472D	.250	4.724	1.062	1.042	1.167	M5-DIN-SSS
—	V50SF-031-472D	.3125	4.724	1.062	1.024	1.417	M6-DIN-SSS
BDCV50SF-038-472D	V50SF-038-472D	.375	4.724	1.260	1.260	1.654	M8-DIN-SSS
BDCV50SF-050-472D	V50SF-050-472D	.500	4.724	1.260	1.457	1.850	M8-DIN-SSS
BDCV50SF-062-472D	V50SF-062-472D	.625	4.724	1.339	1.575	1.969	M10-DIN-SSS
BDCV50SF-075-472D	V50SF-075-472D	.750	4.724	1.654	1.654	2.047	M10-DIN-SSS
BDCV50SF-100-472D	V50SF-100-472D	1.00	4.724	2.087	1.890	2.284	M10-DIN-SSS
BDCV50SF-125-472D	V50SF-125-472D	1.25	4.724	2.087	2.008	2.402	M10-DIN-SSS



EXTENDED LENGTH

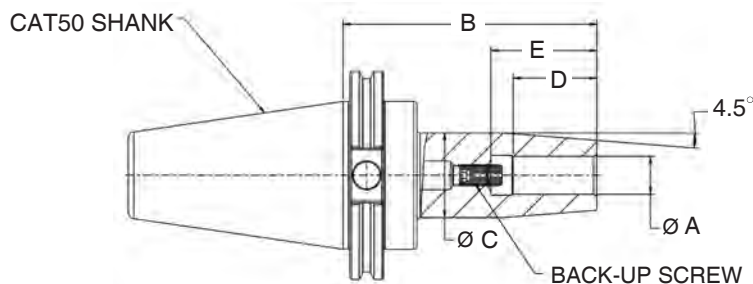
DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V50SF-025-630D	.250	6.299	1.062	1.042	1.167	M5-DIN-SSS
—	V50SF-031-630D	.3125	6.299	1.062	1.024	1.417	M6-DIN-SSS
BDCV50SF-038-630D	V50SF-038-630D	.375	6.299	1.260	1.260	1.654	M8-DIN-SSS
BDCV50SF-050-630D	V50SF-050-630D	.500	6.299	1.260	1.457	1.850	M8-DIN-SSS
BDCV50SF-062-630D	V50SF-062-630D	.625	6.299	1.339	1.575	1.969	M10-DIN-SSS
BDCV50SF-075-630D	V50SF-075-630D	.750	6.299	1.654	1.654	2.047	M10-DIN-SSS
BDCV50SF-100-630D	V50SF-100-630D	1.00	6.299	2.087	1.890	2.284	M10-DIN-SSS
BDCV50SF-125-630D	V50SF-125-630D	1.25	6.299	2.087	2.008	2.402	M10-DIN-SSS



CAT 50 EUROPEAN DESIGNED ADAPTERS - METRIC

Shrink-Fit Holder Features

- Increased tool and spindle life
- Best available gripping power and most rigid
- Extremely long toolholder life



SHRINK-FIT
CAT 50

For surround coolant option (see page 7)

METRIC STANDARD LENGTH (mm)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V50SF-6M-80D	.2362 [6]	3.15 [80]	1.062 [27]	1.042 [26.47]	1.167 [29.65]	M5-DIN-SSS
—	V50SF-8M-80D	.3150 [8]	3.15 [80]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
—	V50SF-10M-80D	.3937 [10]	3.15 [80]	1.260 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
BDCV50SF-12M-80D	V50SF-12M-80D	.4724 [12]	3.15 [80]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV50SF-14M-80D	V50SF-14M-80D	.5512 [14]	3.15 [80]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS



METRIC INTERMEDIATE LENGTH (mm)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V50SF-6M-120D	.2362 [6]	4.724 [120]	1.062 [27]	1.042 [26.47]	1.167 [29.65]	M5-DIN-SSS
—	V50SF-8M-120D	.3150 [8]	4.724 [120]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
—	V50SF-10M-120D	.3937 [10]	4.724 [120]	1.062 [27]	1.260 [32]	1.654 [42]	M8-DIN-SSS
BDCV50SF-12M-120D	V50SF-12M-120D	.4724 [12]	4.724 [120]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV50SF-14M-120D	V50SF-14M-120D	.5512 [14]	4.724 [120]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV50SF-16M-120D	V50SF-16M-120D	.6299 [16]	4.724 [120]	1.339 [34]	1.575 [40]	1.969 [50]	M10-DIN-SSS
BDCV50SF-18M-120D	V50SF-18M-120D	.7087 [18]	4.724 [120]	1.575 [40]	1.575 [40]	1.969 [50]	M10-DIN-SSS
BDCV50SF-20M-120D	V50SF-20M-120D	.7874 [20]	4.724 [120]	1.654 [42]	1.654 [42]	2.047 [52]	M10-DIN-SSS
BDCV50SF-25M-120D	V50SF-25M-120D	.9843 [25]	4.724 [120]	2.087 [53]	1.890 [48]	2.284 [58]	M-10-DIN-SSS
BDCV50SF-32M-120D	V50SF-32M-120D	1.2598 [32]	4.724 [120]	2.087 [53]	2.008 [51]	2.402 [61]	M-10-DIN-SSS



METRIC EXTENDED LENGTH (mm)

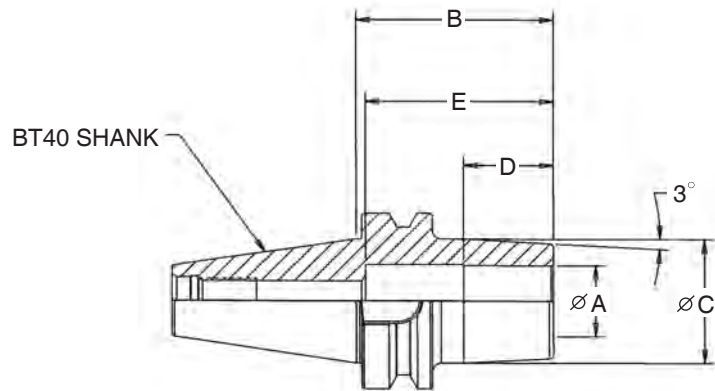
DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
—	V50SF-6M-160D	.2362 [6]	6.299 [160]	1.062 [27]	1.042 [26.47]	1.167 [29.65]	M5-DIN-SSS
—	V50SF-8M-160D	.3150 [8]	6.299 [160]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
—	V50SF-10M-160D	.3937 [10]	6.299 [160]	1.260 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
BDCV50SF-12M-160D	V50SF-12M-160D	.4724 [12]	6.299 [160]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV50SF-14M-160D	V50SF-14M-160D	.5512 [14]	6.299 [160]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
BDCV50SF-16M-160D	V50SF-16M-160D	.6299 [16]	6.299 [160]	1.339 [34]	1.575 [40]	1.969 [50]	M10-DIN-SSS
BDCV50SF-18M-160D	V50SF-18M-160D	.7087 [18]	6.299 [160]	1.575 [40]	1.575 [40]	1.969 [50]	M10-DIN-SSS
BDCV50SF-20M-160D	V50SF-20M-160D	.7874 [20]	6.299 [160]	1.654 [42]	1.654 [42]	2.047 [52]	M10-DIN-SSS
BDCV50SF-25M-160D	V50SF-25M-160D	.9843 [25]	6.299 [160]	2.087 [53]	1.890 [48]	2.284 [58]	M10-DIN-SSS
BDCV50SF-32M-160D	V50SF-32M-160D	1.2598 [32]	6.299 [160]	2.087 [53]	2.008 [51]	2.402 [61]	M10-DIN-SSS



BT 40 ADAPTERS USA DESIGNED ADAPTERS - INCH

Shrink-Fit Holder Features

- Maximum T.I.R. .0002" or better
- Balanced to 20,000 RPM at G2.5
- Certified H-13 Material



For surround coolant option (see page 7)

STANDARD LENGTH

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
—	BT40SF-018-275	.1875	2.75	.937	.500	*
—	BT40SF-025-275	.2500	2.75	1.000	.750	*
—	BT40SF-038-275	.3750	2.75	1.125	.750	*
BDCBT40SF-038-350	—	.3750	3.50	1.125	.750	*
—	BT40SF-050-275	.5000	2.75	1.250	1.00	*
BDCBT40SF-050-350	—	.5000	3.50	1.250	1.00	*
—	BT40SF-062-275	.6250	2.75	1.375	1.250	2.12
BDCBT40SF-062-350	—	.6250	3.50	1.375	1.250	2.50
—	BT40SF-075-275	.7500	2.75	1.500	1.25	2.25
BDCBT40SF-075-400	—	.7500	4.00	1.625	1.250	2.50
—	BT40SF-088-275	.8750	2.75	1.625	1.25	2.25
—	BT40SF-100-275	1.0000	2.75	1.750	1.25	2.25
BDCBT40SF-100-400	—	1.0000	4.00	1.750	1.250	2.25
—	BT40SF-125-275	1.2500	2.75	2.000	1.50	2.50
BDCBT40SF-125-400	—	1.2500	4.00	2.000	1.50	2.50
—	BT40SF-150-275	1.5000	2.75	2.250	1.75	2.75



EXTENDED LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
BT40SF-018-600	.1875	6.00	.937	.500	*
BT40SF-025-600	.2500	6.00	1.000	.750	*
BT40SF-038-600	.3750	6.00	1.125	.750	*
BT40SF-050-600	.5000	6.00	1.250	1.00	*
BT40SF-062-600	.6250	6.00	1.375	1.250	2.12
BT40SF-075-600	.7500	6.00	1.500	1.25	2.25
BT40SF-088-600	.8750	6.00	1.625	1.25	2.25
BT40SF-100-600	1.0000	6.00	1.750	1.25	2.25
BT40SF-125-600	1.2500	6.00	2.000	1.50	2.50
BT40SF-150-600	1.5000	6.00	2.250	1.75	2.75

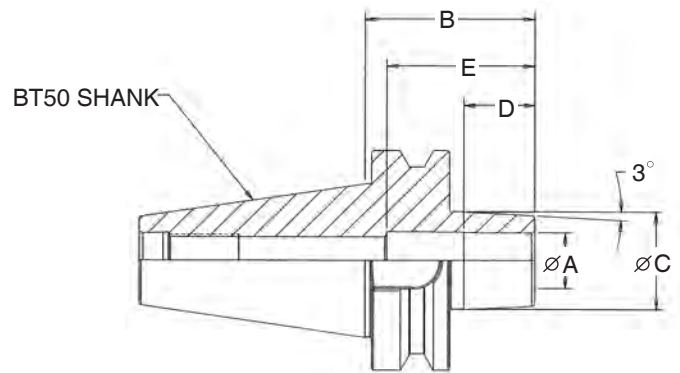


[* Through holder to retention knob thread.]

BT 50 ADAPTER USA DESIGNED ADAPTERS - INCH

Shrink-Fit Holder Features

- Increased tool and spindle life
- Best available gripping power and most rigid
- Extremely long toolholder life



SHRINK-FIT
BT 50

For surround coolant option (see page 7)

STANDARD LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
BT50SF-018-300	.1875	3.00	.937	.500	*
BT50SF-025-300	.2500	3.00	1.000	.750	*
BT50SF-038-300	.3750	3.00	1.125	.750	*
BT50SF-050-300	.5000	3.00	1.250	1.00	*
BT50SF-062-300	.6250	3.00	1.375	1.25	*
BT50SF-075-300	.7500	3.00	1.500	1.25	2.00
BT50SF-088-300	.8750	3.00	1.625	1.25	2.25
BT50SF-100-300	1.0000	3.00	1.750	1.25	2.25
BT50SF-125-300	1.2500	3.00	2.000	1.50	2.50
BT50SF-150-300	1.5000	3.00	2.250	1.75	2.75
BT50SF-200-300	2.0000	3.00	2.750	2.00	3.00



EXTENDED LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
BT50SF-018-500	.1875	5.00	.937	.500	*
BT50SF-025-500	.2500	5.00	1.000	.750	*
BT50SF-038-500	.3750	5.00	1.125	.750	*
BT50SF-050-500	.5000	5.00	1.250	1.00	*
BT50SF-062-500	.6250	5.00	1.375	1.25	*
BT50SF-075-500	.7500	5.00	1.500	1.25	2.00
BT50SF-088-500	.8750	5.00	1.625	1.25	2.25
BT50SF-100-500	1.0000	5.00	1.750	1.25	2.25
BT50SF-125-500	1.2500	5.00	2.000	1.50	2.50
BT50SF-150-500	1.5000	5.00	2.250	1.75	2.75
BT50SF-200-500	2.0000	5.00	2.750	2.00	3.00



[* Through holder to retention knob thread.]

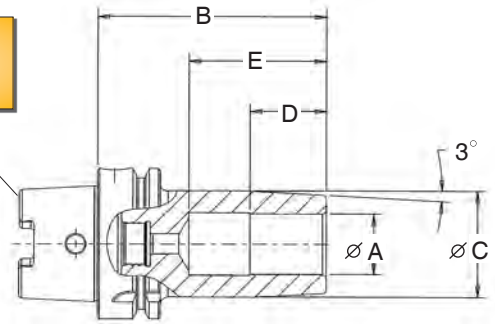
HSK63A USA DESIGNED ADAPTERS - INCH/METRIC

Shrink-Fit Holder Features

- Maximum T.I.R. .0002" or better
- Suitable for carbide and HSS cutting tools
- Certified H-13 Material

HSK 63A Adapters are balanced at 20,000 R.P.M. at G2.5 specification.

HSK63A SHANK



For surround coolant option (see page 7)

STANDARD LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
HSK63ASF-018-236	.1875	2.36	.937	.500	*
HSK63ASF-025-236	.2500	2.36	1.000	.750	*
HSK63ASF-031-236	.3120	2.36	1.125	.750	*
HSK63ASF-038-256	.3750	2.56	1.125	.750	1.25
HSK63ASF-044-295	.4375	2.95	1.250	1.00	1.75
HSK63ASF-050-295	.5000	2.95	1.250	1.00	1.75
HSK63ASF-062-315	.6250	3.15	1.375	1.00	2.12
HSK63ASF-075-315	.7500	3.15	1.500	1.25	2.00
HSK63ASF-100-374	1.0000	3.74	1.750	1.25	2.25
HSK63ASF-125-394	1.2500	3.94	2.000	1.50	2.50



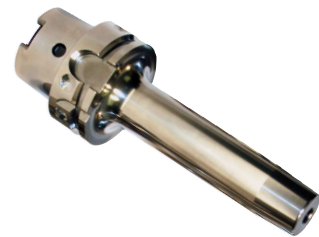
INTERMEDIATE LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
HSK63ASF-018-315	.1875	3.15	.937	.500	*
HSK63ASF-025-315	.2500	3.15	1.000	.750	*
HSK63ASF-031-315	.3125	3.15	1.125	.750	*
HSK63ASF-038-315	.3750	3.15	1.125	.750	1.25
HSK63ASF-050-354	.5000	3.54	1.250	1.00	1.75
HSK63ASF-062-394	.6250	3.94	1.375	1.00	2.12
HSK63ASF-075-394	.7500	3.94	1.500	1.25	2.00
HSK63ASF-100-433	1.0000	4.33	1.750	1.25	2.25
HSK63ASF-125-433	1.2500	4.33	2.000	1.50	2.50



EXTENDED LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
HSK63ASF-018-590	.1875	5.90	.937	.500	*
HSK63ASF-025-590	.2500	5.90	1.000	.750	*
HSK63ASF-038-590	.3750	5.90	1.125	.750	1.25
HSK63ASF-050-590	.5000	5.90	1.250	1.00	1.75
HSK63ASF-062-590	.6250	5.90	1.375	1.00	2.12
HSK63ASF-075-590	.7500	5.90	1.500	1.25	2.00
HSK63ASF-100-590	1.0000	5.90	1.750	1.25	2.25
HSK63ASF-125-590	1.2500	5.90	2.000	1.50	2.50



METRIC LENGTH (mm)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
HSK63ASF-6M-80	.2362 [6]	3.15 [80]	1.0 [25.40]	.75 [19.05]	*
HSK63ASF-8M-80	.3150 [8]	3.15 [80]	1.12 [28.58]	1.0 [25.40]	*
HSK63ASF-10M-80	.3937 [10]	3.15 [80]	1.12 [28.58]	1.0 [25.40]	1.5 [38.10]
HSK63ASF-12M-90	.4724 [12]	3.54 [90]	1.25 [31.75]	1.0 [25.40]	1.75 [44.45]
HSK63ASF-14M-95	.5512 [14]	3.74 [95]	1.25 [31.75]	1.0 [25.40]	1.75 [44.45]
HSK63ASF-16M-100	.6299 [16]	3.94 [100]	1.38 [34.93]	1.0 [25.40]	2.17 [55.12]
HSK63ASF-18M-100	.7087 [18]	3.94 [100]	1.38 [34.93]	1.25 [31.75]	2.17 [55.12]
HSK63ASF-20M-100	.7874 [20]	3.94 [100]	1.5 [38.10]	1.25 [31.75]	2.17 [55.12]
HSK63ASF-25M-100	.9843 [25]	3.94 [100]	1.75 [44.45]	1.25 [31.75]	2.47 [62.74]
HSK63ASF-32M-110	1.2598 [32]	4.33 [110]	2.0 [50.80]	1.5 [38.10]	2.25 [57.15]



[* Through to coolant socket.]

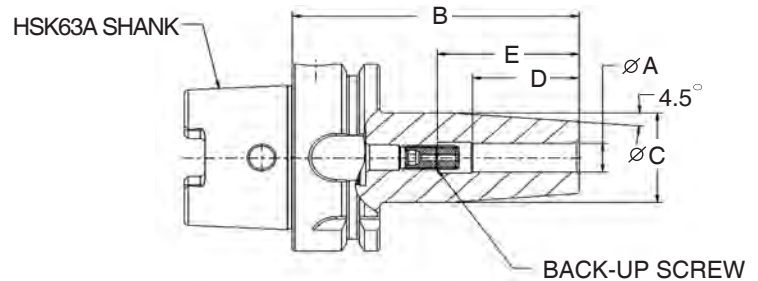
SHRINK-FIT
HSK63A

HSK63A EUROPEAN DESIGNED ADAPTERS - INCH

Shrink-Fit Holder Features

- Increased tool and spindle life
- Best available gripping power and most rigid
- Extremely long toolholder life

HSK 63A Adapters are balanced at 20,000 R.P.M. at G2.5 specification.



For surround coolant option (see page 7)

STANDARD LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK63ASF-012-315D	.1250	3.15	.630	.500	*	N/A
HSK63ASF-018-315D	.1875	3.15	.750	.500	*	N/A
HSK63ASF-025-315D	.250	3.15	1.062	1.042	1.167	M5-DIN-SSS
HSK63ASF-031-315D	.3125	3.15	1.062	1.024	1.417	M6-DIN-SSS
HSK63ASF-038-335D	.375	3.346	1.260	1.260	1.654	M8-DIN-SSS
HSK63ASF-050-354D	.500	3.543	1.260	1.457	1.850	M8-DIN-SSS



INTERMEDIATE LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK63ASF-018-472D	.1875	4.724	.750	.500	*	N/A
HSK63ASF-025-472D	.250	4.724	1.062	1.042	1.167	M5-DIN-SSS
HSK63ASF-031-472D	.3125	4.724	1.062	1.024	1.417	M6-DIN-SSS
HSK63ASF-038-472D	.375	4.724	1.260	1.260	1.654	M8-DIN-SSS
HSK63ASF-050-472D	.500	4.724	1.260	1.457	1.850	M8-DIN-SSS
HSK63ASF-062-472D	.625	4.724	1.339	1.575	1.969	M10-DIN-SSS
HSK63ASF-075-472D	.750	4.724	1.654	1.654	2.047	M10-DIN-SSS
HSK63ASF-100-472D	1.00	4.724	2.087	1.890	2.284	M10-DIN-SSS
HSK63ASF-125-472D	1.25	4.724	2.087	2.008	2.402	M10-DIN-SSS



EXTENDED LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK63ASF-018-630D	.1875	6.299	.750	1.024	1.417	M5-DIN-SSS
HSK63ASF-025-630D	.250	6.299	1.062	1.042	1.167	M6-DIN-SSS
HSK63ASF-031-630D	.3125	6.299	1.062	1.260	1.654	M8-DIN-SSS
HSK63ASF-038-630D	.375	6.299	1.260	1.457	1.850	M8-DIN-SSS
HSK63ASF-050-630D	.500	6.299	1.260	1.575	1.969	M10-DIN-SSS
HSK63ASF-062-630D	.625	6.299	1.339	1.654	2.047	M10-DIN-SSS
HSK63ASF-075-630D	.750	6.299	1.654	1.890	2.284	M10-DIN-SSS
HSK63ASF-100-630D	1.00	6.299	2.087	2.008	2.402	M10-DIN-SSS
HSK63ASF-125-630D	1.25	6.299	2.087	2.008	2.402	M10-DIN-SSS



[* Through to coolant socket.]

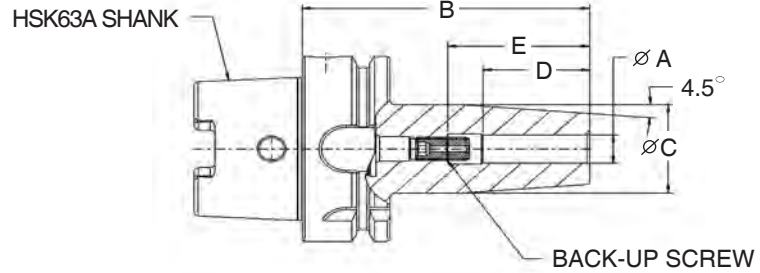
SHRINK-FIT
HSK63A

HSK63A EUROPEAN DESIGNED ADAPTERS - METRIC

Shrink-Fit Holder Features

- Maximum T.I.R. .0002" or better
- Suitable for carbide and HSS cutting tools
- Certified H-13 Material

HSK 63A Adapters are balanced at 20,000 R.P.M. at G2.5 specification.



For surround coolant option (see page 7)

METRIC STANDARD LENGTH (mm)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK63ASF-6M-80D	.2362 [6]	3.15 [80]	1.062 [27]	1.042 [26.47]	1.167 [29.65]	M5-DIN-SSS
HSK63ASF-8M-80D	.3150 [8]	3.15 [80]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
HSK63ASF-10M-85D	.3937 [10]	3.346 [85]	1.260 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
HSK63ASF-12M-90D	.4724 [12]	3.543 [90]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
HSK63ASF-14M-90D	.5512 [14]	3.543 [90]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS



METRIC INTERMEDIATE LENGTH (mm)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK63ASF-6M-120D	.2362 [6]	4.724 [120]	1.062 [27]	1.042 [26.47]	1.167 [29.65]	M5-DIN-SSS
HSK63ASF-8M-120D	.3150 [8]	4.724 [120]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
HSK63ASF-10M-120D	.3937 [10]	4.724 [120]	1.260 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
HSK63ASF-12M-120D	.4724 [12]	4.724 [120]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
HSK63ASF-14M-120D	.5512 [14]	4.724 [120]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
HSK63ASF-16M-120D	.6299 [16]	4.724 [120]	1.339 [34]	1.575 [40]	1.969 [50]	M10-DIN-SSS
HSK63ASF-18M-120D	.7087 [18]	4.724 [120]	1.575 [40]	1.575 [40]	1.969 [50]	M10-DIN-SSS
HSK63ASF-20M-120D	.7874 [20]	4.724 [120]	1.654 [42]	1.654 [42]	2.047 [52]	M10-DIN-SSS
HSK63ASF-25M-120D	.9843 [25]	4.724 [120]	2.087 [53]	1.890 [48]	2.284 [58]	M-10-DIN-SSS
HSK63ASF-32M-120D	1.2598 [32]	4.724 [120]	2.087 [53]	2.008 [51]	2.402 [61]	M-10-DIN-SSS



METRIC EXTENDED LENGTH (mm)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK63ASF-6M-160D	.2362 [6]	6.299 [160]	1.062 [27]	1.042 [26.47]	1.167 [29.65]	M5-DIN-SSS
HSK63ASF-8M-160D	.3150 [8]	6.299 [160]	1.062 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
HSK63ASF-10M-160D	.3937 [10]	6.299 [160]	1.260 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
HSK63ASF-12M-160D	.4724 [12]	6.299 [160]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
HSK63ASF-14M-160D	.5512 [14]	6.299 [160]	1.260 [32]	1.457 [37]	1.850 [47]	M8-DIN-SSS
HSK63ASF-16M-160D	.6299 [16]	6.299 [160]	1.339 [34]	1.575 [40]	1.969 [50]	M10-DIN-SSS
HSK63ASF-18M-160D	.7087 [18]	6.299 [160]	1.575 [40]	1.575 [40]	1.969 [50]	M10-DIN-SSS
HSK63ASF-20M-160D	.7874 [20]	6.299 [160]	1.654 [42]	1.654 [42]	2.047 [52]	M10-DIN-SSS
HSK63ASF-25M-160D	.9843 [25]	6.299 [160]	2.087 [53]	1.890 [48]	2.284 [58]	M10-DIN-SSS
HSK63ASF-32M-160D	1.2598 [32]	6.299 [160]	2.087 [53]	2.008 [51]	2.402 [61]	M10-DIN-SSS



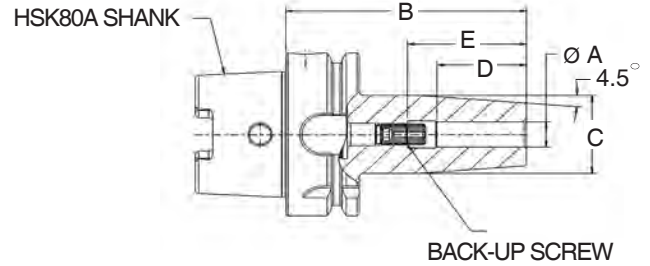
HSK80A EUROPEAN DESIGNED ADAPTERS - INCH

Shrink-Fit Holder Features

- Increased tool and spindle life
- Best available gripping power and most rigid
- Extremely long toolholder life

HSK 80A Adapters are balanced at 20,000 R.P.M. at G2.5 specification.

For surround coolant option (see page 7)



HSK80A SHRINK FIT / EUROPEAN / ENGLISH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK80ASF-025-335D	.250	3.35	1.063	.500	1.167	M5-DIN-SSS
HSK80ASF-031-335D	.312	3.35	1.063	1.024	1.417	M6-DIN-SSS
HSK80ASF-038-354D	.375	3.543	1.260	1.260	1.654	M8-DIN-SSS
HSK80ASF-050-374D	.500	3.740	1.260	1.457	1.850	M8-DIN-SSS
HSK80ASF-062-394D	.625	3.937	1.338	1.575	1.969	M10-DIN-SSS
HSK80ASF-075-394D	.750	3.937	1.338	1.575	1.969	M10-DIN-SSS
HSK80ASF-100-453D	1.00	4.527	2.086	1.890	2.284	M10-DIN-SSS
HSK80ASF-125-472D	1.25	4.724	2.086	2.008	2.402	M10-DIN-SSS



SHRINK-FIT
HSK80A/F

HSK80A SHRINK FIT / EUROPEAN / METRIC (mm)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK80ASF-6M-85D	.236 [6]	3.35[85]	1.063 [27]	.50 [12.7]	1.167 [29.65]	M5-DIN-SSS
HSK80ASF-8M-85D	.315 [8]	3.35 [85]	1.063 [27]	1.024 [26]	1.417 [36]	M6-DIN-SSS
HSK80ASF-10M-90D	.394 [10]	3.543 [90]	1.26 [32]	1.260 [32]	1.654 [42]	M8-DIN-SSS
HSK80ASF-12M-95D	.472 [12]	3.74 [95]	1.26 [32]	1.457 [37]	1.85 [47]	M8-DIN-SSS
HSK80ASF-14M-95D	.551[14]	3.74 [95]	1.34 [34]	1.457 [37]	1.85 [47]	M8-DIN-SSS
HSK80ASF-16M-100D	.630 [16]	3.94 [100]	1.34 [34]	1.575 [40]	1.969 [50]	M10-DIN-SSS
HSK80ASF-18M-100D	.708 [18]	3.94 [100]	1.65 [42]	1.575 [40]	1.969 [50]	M10-DIN-SSS
HSK80ASF-20M-105D	.787 [20]	4.133 [105]	1.653 [42]	1.654 [42]	2.047 [52]	M10-DIN-SSS
HSK80ASF-25M-115D	.984 [25]	4.53 [115]	2.086 [53]	1.890 [48]	2.284 [58]	M10-DIN-SSS
HSK80ASF-32M-120D	1.26 [32]	4.724 [120]	2.086 [53]	2.008 [51]	2.402 [61]	M10-DIN-SSS



[*Through to coolant socket.]

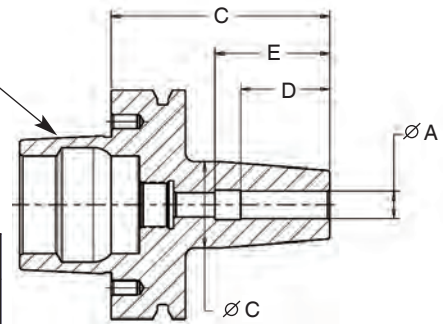
HSK63F/80F MAKINO/PIN STYLE ADAPTERS - INCH

Shrink-Fit Holder Features

- Maximum T.I.R. .0002" or better
- Suitable for carbide and HSS cutting tools
- Certified H-13 Material

HSK SHANK STYLE

HSK 63F/80F Adapters are balanced at 30,000 R.P.M. at G2.5 specification.



For surround coolant option (see page 7)

HSK63F SHRINK FIT ADAPTERS (INCH)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK63FMSF-012-315D	.125	3.15	.750	.375	2.65	N/A
HSK63FMSF-018-315D	.187	3.15	.750	.500	2.65	N/A
HSK63FMSF-025-315D	.250	3.15	1.063	1.042	1.417	M5-DIN-SSS
HSK63FMSF-031-315D	.312	3.15	1.063	1.042	1.417	M6-DIN-SSS
HSK63FMSF-038-335D	.375	3.354	1.260	1.260	1.693	M8-DIN-SSS
HSK63FMSF-050-354D	.500	3.543	1.260	1.457	1.890	M8-DIN-SSS
HSK63FMSF-062-374D	.625	5.740	1.340	1.575	2.008	M10-DIN-SSS
HSK63FMSF-075-394D	.750	3.940	1.650	1.654	2.008	M10-DIN-SSS
HSK63FMSF-100-453D	1.00	4.530	2.09	1.890	1.930	M10-DIN-SSS

HSK63F SHRINK FIT ADAPTERS (METRIC)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK63FMSF-3M-80D	.118 [3]	3.15 [80]	.75 [19]	.375 [9.5]	*	N/A
HSK63FMSF-4M-80D	.157 [4]	3.15 [80]	.75 [19]	.50 [12.7]	*	N/A
HSK63FMSF-5M-80D	.196 [5]	3.15 [80]	.75 [19]	.50 [12.7]	*	N/A
HSK63FMSF-6M-80D	.236 [6]	3.15 [80]	1.063 [27]	1.042 [26.5]	1.417 [36]	M5-DIN-SSS
HSK63FMSF-8M-80D	.315 [8]	3.15 [80]	1.063 [27]	1.042 [26.5]	1.417 [36]	M6-DIN-SSS
HSK63FMSF-10M-85D	.394 [10]	3.35 [85]	1.26 [32]	1.26 [32]	1.693 [43]	M8-DIN-SSS
HSK63FMSF-12M-90D	.472 [12]	3.54 [90]	1.26 [32]	1.457 [37]	1.89 [48]	M8-DIN-SSS
HSK63FMSF-16M-95D	.63 [16]	3.74 [95]	1.34 [34]	1.575 [40]	2.008 [51]	M10-DIN-SSS
HSK63FMSF-20M-100D	.709 [20]	3.94 [100]	1.65 [42]	1.654 [42]	2.008 [51]	M10-DIN-SSS
HSK63FMSF-25M-115D	.984 [25]	4.53 [115]	2.09 [53]	1.890 [48]	1.93 [49]	M10-DIN-SSS

HSK80F SHRINK FIT ADAPTERS (INCH)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK80FMSF-025-300D	.250	3.00	1.063	1.042	1.417	M5-DIN-SSS
HSK80FMSF-031-300D	.312	3.00	1.063	1.042	1.417	M6-DIN-SSS
HSK80FMSF-038-300D	.375	3.00	1.220	1.260	1.693	M8-DIN-SSS
HSK80FMSF-044-300D	.437	3.00	1.260	1.260	1.693	M8-DIN-SSS
HSK80FMSF-050-300D	.500	3.00	1.300	1.457	1.890	M8-DIN-SSS
HSK80FMSF-062-300D	.625	3.00	1.417	1.575	2.008	M10-DIN-SSS
HSK80FMSF-075-300D	.750	3.00	1.614	1.654	2.008	M10-DIN-SSS
HSK80FMSF-100-300D	1.00	3.00	2.047	1.890	1.930	M10-DIN-SSS
HSK80FMSF-125-350D	1.25	3.50	2.087	2.008	2.560	M10-DIN-SSS

HSK80F SHRINK FIT ADAPTERS (METRIC)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH	BACK-UP SCREW
HSK80FMSF-6M-80D	.236 [6]	3.15 [80]	1.063 [27]	1.042 [26.5]	1.417 [36]	M5-DIN-SSS
HSK80FMSF-8M-80D	.315 [8]	3.15 [80]	1.063 [27]	1.042 [26.5]	1.417 [36]	M6-DIN-SSS
HSK80FMSF-10M-85D	.394 [10]	3.354 [85]	1.260 [32]	1.260 [32]	1.693 [43]	M8-DIN-SSS
HSK80FMSF-12M-90D	.472 [12]	3.543 [90]	1.299 [33]	1.457 [37]	1.89 [48]	M8-DIN-SSS
HSK80FMSF-14M-90D	.557 [14]	3.543 [90]	1.417 [36]	1.457 [37]	1.89 [48]	M10-DIN-SSS
HSK80FMSF-16M-95D	.630 [16]	3.740 [95]	1.417 [36]	1.575 [40]	2.008 [51]	M10-DIN-SSS
HSK80FMSF-20M-100D	.787 [20]	3.940 [100]	1.614 [41]	1.654 [42]	2.008 [51]	M10-DIN-SSS
HSK80FMSF-25M-115D	.984 [25]	4.530 [115]	2.047 [52]	1.890 [48]	1.930 [49]	M10-DIN-SSS

[* Through to coolant socket.]



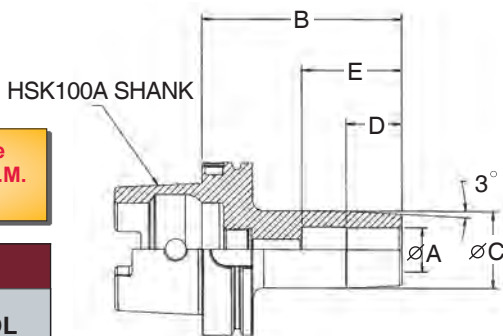
HSK100A USA DESIGNED ADAPTERS - INCH/METRIC

Shrink-Fit Holder Features

- Increased tool and spindle life
- Best available gripping power and most rigid
- Extremely long toolholder life

HSK 100A Adapters are balanced at 20,000 R.P.M. at G2.5 specification.

For surround coolant option (see page 7)



STANDARD LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
HSK100ASF-025-315	.2500	3.15	1.000	.750	*
HSK100ASF-038-315	.3750	3.15	1.125	1.00	*
HSK100ASF-050-315	.5000	3.15	1.250	1.00	1.75
HSK100ASF-062-315	.6250	3.15	1.375	1.00	1.75
HSK100ASF-075-315	.7500	3.15	1.500	1.25	1.75
HSK100ASF-100-315	1.0000	3.15	1.750	1.25	1.75
HSK100ASF-125-315	1.2500	3.15	2.000	1.50	1.75
HSK100ASF-150-315	1.5000	3.15	2.250	1.75	1.75



INTERMEDIATE LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
HSK100ASF-038-394	.3750	3.94	1.125	1.00	*
HSK100ASF-050-394	.5000	3.94	1.250	1.00	1.75
HSK100ASF-062-394	.6250	3.94	1.375	1.00	2.00
HSK100ASF-075-433	.7500	4.33	1.500	1.25	2.00
HSK100ASF-100-472	1.0000	4.72	1.750	1.25	2.25
HSK100ASF-125-472	1.2500	4.72	2.000	1.50	2.50
HSK100ASF-150-472	1.5000	4.72	2.250	1.75	2.75



SHRINK-FIT
HSK100A

EXTENDED LENGTH

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
HSK100ASF-025-650	.2500	6.50	1.000	.750	*
HSK100ASF-031-650	.3125	6.50	1.062	.750	*
HSK100ASF-038-650	.3750	6.50	1.125	1.00	*
HSK100ASF-044-650	.4375	6.50	1.250	1.00	*
HSK100ASF-050-650	.5000	6.50	1.250	1.00	1.75
HSK100ASF-062-650	.6250	6.50	1.375	1.00	2.00
HSK100ASF-075-650	.7500	6.50	1.500	1.25	2.00
HSK100ASF-100-650	1.0000	6.50	1.750	1.25	2.25
HSK100ASF-125-650	1.2500	6.50	2.000	1.50	2.50
HSK100ASF-150-650	1.5000	6.50	2.250	1.75	2.75



METRIC INTERMEDIATE LENGTH (mm)

PART NUMBER	A I.D.	B GAUGE LENGTH	C BARREL	D BEARING SURFACE	E TOOL DEPTH
HSK100ASF-6M-100	.2362 [6]	3.94 [100]	1.0 [25.40]	.75 [19.05]	*
HSK100ASF-8M-100	.3149 [8]	3.94 [100]	1.12 [28.58]	1.0 [25.40]	*
HSK100ASF-10M-100	.3937 [10]	3.94 [100]	1.12 [28.58]	1.0 [25.40]	*
HSK100ASF-12M-100	.4724 [12]	3.94 [100]	1.25 [31.75]	1.0 [25.40]	1.9 [48.26]
HSK100ASF-14M-105	.5512 [14]	4.13 [105]	1.38 [34.93]	1.0 [25.40]	1.75 [44.45]
HSK100ASF-16M-110	.6299 [16]	4.33 [110]	1.38 [34.93]	1.0 [25.40]	2.17 [55.12]
HSK100ASF-18M-110	.7087 [18]	4.33 [110]	1.5 [38.10]	1.25 [31.75]	2.17 [55.12]
HSK100ASF-20M-120	.7874 [20]	4.72 [120]	1.5 [38.10]	1.25 [31.75]	2.17 [55.12]
HSK100ASF-25M-120	.9843 [25]	4.72 [120]	1.75 [44.45]	1.25 [31.75]	2.25 [57.15]
HSK100ASF-32M-120	1.2598 [32]	4.72 [120]	2.0 [50.80]	1.5 [38.10]	2.25 [57.15]

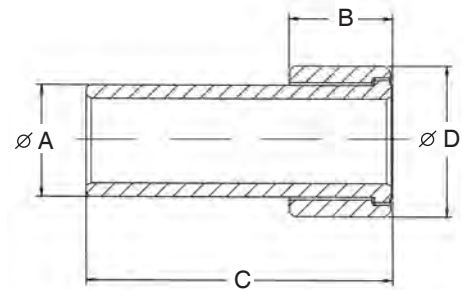


[* Through holder to coolant socket.]

HSK COOLANT TUBES & WRENCHS

HSK COOLANT TUBES

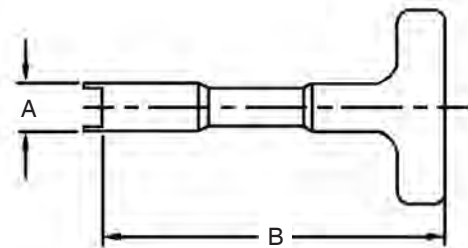
PART NUMBER	TAPER SIZE	A	B	C	D
TICT-HSK50	HSK50	.394	.374	1.299	M16X1
TICT-HSK63	HSK63	.472	.452	1.425	M18X1
TICT-HSK80	HSK80	.551	.531	1.575	M20X1.5
TICT-HSK100	HSK100	.630	.610	1.716	M24X1.5



SHRINK-FIT
ACCESSORIES

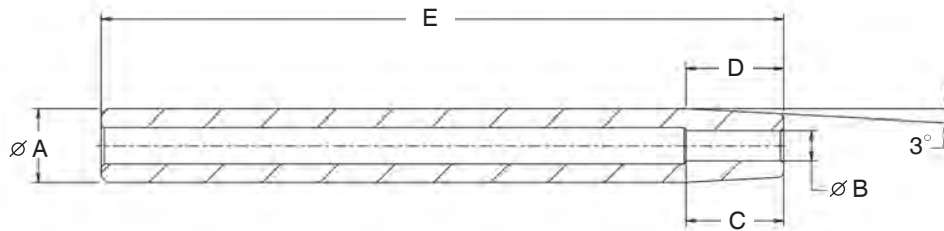
INSTALLATION WRENCH

PART NUMBER	TAPER SIZE	A	B
TIIW-HSK50	HSK50	.591	4.92
TIIW-HSK63	HSK63	.669	5.71
TIIW-HSK80	HSK80	.787	5.71
TIIW-HSK100	HSK100	.886	6.50



Shrink-Fit Extension Features

- Best available gripping power and most rigid
- Maximum T.I.R. .0002" or better
- Certified H-13 Material



STANDARD LENGTH

PART NUMBER	A O.D.	B I.D.	C I.D. LENGTH	D ANGLE DEPTH	E O.A.L.
SS075SF-012-700	0.750	0.125	0.375	0.500	7.0
SS075SF-018-700	0.750	0.187	0.500	0.500	7.0
SS075SF-025-700	0.750	0.250	0.750	1.000	7.0
SS075SF-031-700	0.750	0.312	1.000	1.000	7.0
SS075SF-038-700	0.750	0.375	1.000	1.000	7.0

METRIC STANDARD LENGTH (mm)

PART NUMBER	A O.D.	B I.D.	C I.D. LENGTH	D ANGLE DEPTH	E O.A.L.
SS075SF-3M-700	0.750	.1181 [3]	0.500	0.500	7.0
SS075SF-6M-700	0.750	.2362 [6]	1.000	1.000	7.0
SS075SF-8M-700	0.750	.3149 [8]	1.000	1.000	7.0
SS075SF-10M-700	0.750	.3937 [10]	1.250	1.000	7.0

STANDARD LENGTH

PART NUMBER	A O.D.	B I.D.	C I.D. LENGTH	D ANGLE DEPTH	E O.A.L.
SS100SF-012-700	1.000	0.125	0.375	0.500	7.0
SS100SF-018-700	1.000	0.187	0.500	0.500	7.0
SS100SF-025-700	1.000	0.250	0.750	1.000	7.0
SS100SF-031-700	1.000	0.312	1.000	1.000	7.0
SS100SF-038-700	1.000	0.375	1.000	1.000	7.0
SS100SF-044-700	1.000	0.437	1.000	1.000	7.0
SS100SF-050-700	1.000	0.500	1.000	1.000	7.0

METRIC STANDARD LENGTH (mm)

PART NUMBER	A O.D.	B I.D.	C I.D. LENGTH	D ANGLE DEPTH	E O.A.L.
SS100SF-3M-700	1.000	.1181 [3]	0.500	0.500	7.0
SS100SF-6M-700	1.000	.2362 [6]	0.750	1.000	7.0
SS100SF-8M-700	1.000	.3149 [8]	1.000	1.000	7.0
SS100SF-10M-700	1.000	.3937 [10]	1.000	1.000	7.0
SS100SF-12M-700	1.000	.4724 [12]	1.000	1.000	7.0



SHRINK-FIT
EXTENSION

Our quality manufactured straight shank shrink-fit extensions are manufactured from premium tool steel, through hardened to Rc 48-52. The entire length of bearing O.D. is precision ground to the H6 tolerance for easy use with other shrink-fit and standard tooling. Extensions can easily be altered by customers in length and outer profile to suit your specific needs.

BILZ INDUCTION HEATING UNIT



The **BISG3400TWK-WS** Table Top, water cooled universal shrink-fit for professional use of shrinking technology. With its unique coil changing system, the amount of power transferred to different clamping chucks is guaranteed within a short period of time. Compared to other systems, this makes it possible to clamp even the smallest diameter tools. This allows for a constant preparation of a high number of tools.

Universal Table Unit: This controlled unit is simple to use. All that needs to be done is to select the tool diameter range. After the induction coil is positioned around the tool holder, push the start button and the coil heats the tool holder appropriately. When heat cycle is completed, move the coil upward away from tool, raise the cooling sleeve and press the cooling button, allowing the tool to cool in seconds.

CAPABILITIES:

- Works with both USA and European designed Adapters
- Works with both carbide and high speed steel cutting tool shanks

BILZ ISG 3400 TABLE TOP WATER COOLED INDUCTION HEATING UNIT

PART NUMBER	DESCRIPTION
BISG3400TWK-WS	Vertical unit with 480V/3 phase power requirement.

Ready-to-use accessories included with purchase of unit



TECHNICAL DATA


Dimensions D x W x H	800mm x 560mm x 950mm 31.5" x 22" x 38"	Max Tool Length	400mm 15.75"
Clamping Range SC	3-32mm 1/8" - 1-1/4"	Max. Cooling Length	160mm 6.3"
Clamping Range HSS	6-32mm 1/4" - 1-1/4"	Cooling System	Liquid/Emulsion
Coil	Quick Change	Cooling Time	20 seconds
Electric Current Supply	3x480V-16A	Geometry Independent Cooling	Yes
Power kW	11 kW	Max Machine Interface	HSK100 CAT50
Weight	115 lbs	Required Accessories	Setting Pot
Cycle Time	Less than 45 seconds	Operation	Manual

BILZ INDUCTION UNIT ACCESSORIES

Shrinking Unit BISG3400TWK-WS includes:

Induction coil, 4-changing discs, clamping ring, setting pot, gloves as-well-as 1 litre coolant concentrate (corresponds to a complete filling of the coolant tank).


Changing discs one-piece
Supplied with unit



For an optimal shielding of the magnetic field between coil and tool shank.

Clamping- Ø	Briney Part #
3 - 5,9 mm	BISGS3201-0
6 - 12 mm	BISGS3201-1
12, 1 - 22 mm	BISGS3201-2
22, 1 - 32 mm	BISGS3201-3

Gloves
(Contained in the scope of supply of the unit)



To the protection from possible burns and cuts

	Briney Part #
	BVA662-10


Clamping ring
Supplied with unit



For a secure support of the changing discs in the coil

	Briney Part #
	BISGS309


Setting pots for toolholders



For the reception and correct positioning of the chuck onto the shrinking unit

Chuck-type	Briney Part #
For HSK Chucks	
HSK-32	BT3-WWK/HSK32
HSK-40	BT3-WWK/HSK40
HSK-50	BT3-WWK/HSK50
HSK-63	BT3-WWK/HSK63
HSK-80	BT3-WWK/HSK80
HSK-100	BT3-WWK/HSK100
For SK/ BT/ CAT Chucks	
SK30/ BT30/ CAT30	BT3-WWK/SK30
SK40/ BT40/ CAT40	BT3-WWK/SK40
SK50/ BT50/ CAT50	BT3-WWK/SK50
More toolholders available on request	


Induction coil
Contained in the scope of the unit, only with option "coil change"



Universal coil for a clamping range of Ø 3-32 mm, which is realized with 4-changing discs

Clamping- Ø	Briney Part #
3 - 32 mm	BISGS3200-1

Cooling emulsion
(Contained in the scope of supply of the unit)



Cooling emulsion to protect the chuck against corrosion

Clamping- Ø	Briney Part #
1 litre (supplier)	BZERASOL 120/1
5 litres	BZETASOL 120/5
System cleaner	Bhebro@pure
5-litres	10 TP/5

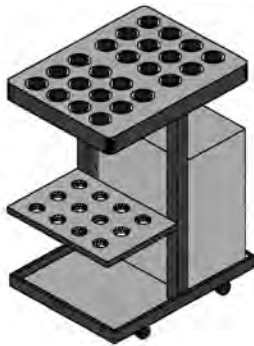
INDUCTION UNIT ACC.

COOLING DEVICES



TI 12CB/CU II

12-station cooling unit with self contained cooler unit for temperature regulation of the block and interchangeable cooling sleeves. The unit includes 12-TI 1CB interchangeable cooling blocks to customize the unit to meet your needs. The 12-station block is designed and supplied with coolant channels throughout the block. Fittings, piping, pump and adjustable cooler unit to regulate the temperature of the coolant and block for rapid cooling of inducted heated tooling. The unit is mounted on a free standing shelving unit with casters for better mobility. The storage shelves hold between 10 and 40 toolholders based on the size of the toolholders.



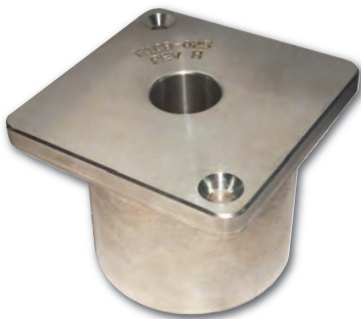
TI 24CB/CU II

24-station cooling unit is manufactured from aluminum. Comes complete with moveable stand with shelves for tooling. Includes 24 TI 1CB single cooling blocks to customize the unit to meet the needs of the customers. The 24-station block is designed and supplied with coolant channels throughout the block, fittings, piping and fully contained chiller unit to regulate the temperature of the coolant and block within +/- 2 degrees. The unit is free standing on a shelving unit with casters for easy movement. The storage shelves hold between 10 and 40 toolholders based on the size of the holders. This unit is designed for high volume shrink fit users.

COOLING UNITS

PART NUMBER	DESCRIPTION
TI12CB/CUII	12-Station with Chiller
TI24CB/CUII	Deluxe Cooling Unit 24-Station with Chiller

INDUCTION UNIT & ACC.



TI 1 CB

Single aluminum cooling blocks to dissipate the heat from the toolholder. The interior diameter is tapered to match taper on O.D. of toolholder. The toolholder uses conduction to draw the heat from the holder. The cooling blocks can be immersed in water or coolant between tool changes to speed the cooling process. Average cooling times using a cold cooling block is 90 seconds. The cooling blocks can be ordered by specifying the ID size of the toolholder that is to be used.

WARNING: Do not immerse toolholders in water or coolant without cooling first, it could cause distortion or breakage of toolholder due to rapid cooling (quenching) of the steel.

COOLING SLEEVES

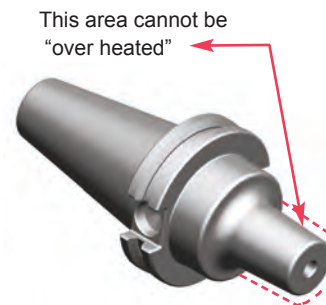
PART NUMBER	CUTTING TOOL SIZE	PART NUMBER	CUTTING TOOL SIZE	PART NUMBER	CUTTING TOOL SIZE
TI1CB018	.187	TI1CB075	.750	TI1CB-8M	8MM
TI1CB025	.250	TI1CB088	.875	TI1CB-10M	10MM
TI1CB031	.312	TI1CB100	1.00	TI1CB-12M	12MM
TI1CB038	.375	TI1CB125	1.25	TI1CB-16M	16MM
TI1CB044	.437	TI1CB150	1.50	TI1CB-20M	20MM
TI1CB050	.500	TI1CB200	2.00	TI1CB-25M	25MM
TI1CB062	.625	TI1CB-6M	6MM	TI1CB-32M	32MM



Briney Tooling Systems uses the finest of materials and craftsmanship for our products. In order to get the best performance from your machine tool and tool holding devices, there are a few considerations that should be made:



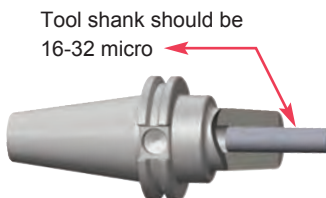
1. For best results, **toolholder shanks must remain clean.** This can be accomplished by using a mild cleaning solution and a lint-free rag and protect from rusting during storage.
2. All storage pots in your automatic tool-changer magazine must remain clean and free of debris.
3. Toolholder shanks are precision ground to AT3 (within .00012" per foot of taper) or better, proper care must be taken to prevent damage to the taper.



4. Proper heating levels must be maintained while inserting and removing tools to prevent possible personal injury and tool holder damage.
5. The diameter of the cutting tool shank **must meet industry standards for size, roundness, and surface finish** to take full advantage of the "shrinker" technology. The shank diameter needs to be H6 from nominal size and round within .0001 with nothing under a 16 micro finish. Example: Briney part # V40SF-050-275 would require a cutting tool shank to be .4999 to .4995 inches in diameter.



6. Toolholders are designed to accept cutters with solid shanks. Flats of any type will adversely affect the gripping force.
7. The preferred finish on the cutting tool shank should be 16-32 micro to prevent slippage.



8. The cutting tool should not bottom out in the bore of our holders; damage could result in the tool and/or holder. It is recommended that .015 inches be allowed for shrinkage of the tool holder after the cutter is installed.
9. It is highly recommended that only carbide tooling be used on cutter diameters equal to or smaller than .375 inches. Removal is very difficult for steel bodies at this size.

If you have any questions regarding the proper or safe use of our products, please call us at 1-800-752-8035, e-mail us at briney@geminigroup.net, or see our web page www.brineytooling.com.

START-UP PACKAGES CAT 40 & 50 SHRINK-FIT

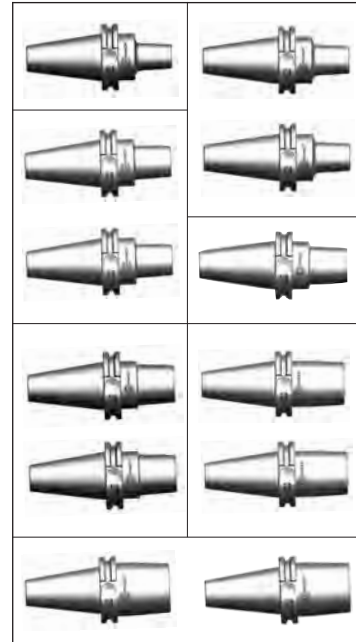
* Our most popular toolholders at cost savings.

These items are a suggested package of Shrink-Fit toolholders to allow you to perform the various machining operations on your new CNC mill.



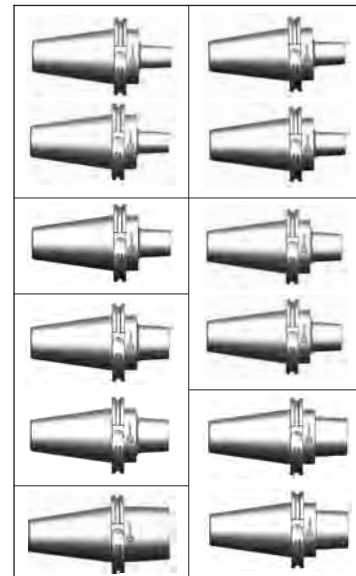
CAT 40 SHRINK FIT TOOL HOLDER PACKAGE ONLY

PART NUMBER	CAT 40 SERIES	DESCRIPTION	QUANTITY
V40SF-TH-PKG-12	V40SF-025-275	CAT 40 SHRINK FIT ADAPTER: 1/4" I.D. X 2-3/4" GAUGE LENGTH	1
	V40SF-038-275	CAT 40 SHRINK FIT ADAPTER: 3/8" I.D. X 2-3/4" GAUGE LENGTH	2
	V40SF-050-275	CAT 40 SHRINK FIT ADAPTER: 1/2" I.D. X 2-3/4" GAUGE LENGTH	2
	V40SF-062-275	CAT 40 SHRINK FIT ADAPTER: 5/8" I.D. X 2-3/4" GAUGE LENGTH	1
	V40SF-075-275	CAT 40 SHRINK FIT ADAPTER: 3/4" I.D. X 2-3/4" GAUGE LENGTH	2
	V40SF-100-275	CAT 40 SHRINK FIT ADAPTER: 1" I.D. X 2-3/4" GAUGE LENGTH	2
	V40SF-125-275	CAT 40 SHRINK FIT ADAPTER: 1-1/4" I.D. X 2-3/4" GAUGE LENGTH	2



CAT 50 SHRINK FIT TOOL HOLDER PACKAGE ONLY

PART NUMBER	CAT 50 SERIES	DESCRIPTION	QUANTITY
V50SF-TH-PKG-12	V50SF-038-300	CAT 50 SHRINK FIT ADAPTER: 3/8" I.D. X 3" GAUGE LENGTH	2
	V50SF-050-300	CAT 50 SHRINK FIT ADAPTER: 1/2" I.D. X 3" GAUGE LENGTH	2
	V50SF-062-300	CAT 50 SHRINK FIT ADAPTER: 5/8" I.D. X 3" GAUGE LENGTH	1
	V50SF-075-300	CAT 50 SHRINK FIT ADAPTER: 3/4" I.D. X 3" GAUGE LENGTH	2
	V50SF-100-300	CAT 50 SHRINK FIT ADAPTER: 1" I.D. X 3" GAUGE LENGTH	2
	V50SF-125-300	CAT 50 SHRINK FIT ADAPTER: 1-1/4" I.D. X 3" GAUGE LENGTH	2
	V50SF-150-300	CAT 50 SHRINK FIT ADAPTER: 1-1/2" I.D. X 3" GAUGE LENGTH	1



START-UP PACKAGE

NOTE: THE ABOVE ITEMS DO NOT INCLUDE RETENTION KNOBS.
PLEASE INFORM BRINEY OF THE MAKE & MODEL OF YOUR MACHINE AND WE WILL QUOTE THE PROPER KNOBS.

START-UP PACKAGES HSK 63A & 100A SHRINK-FIT

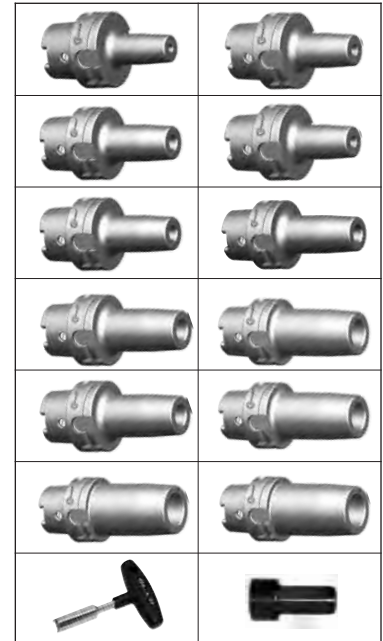
* Our most popular toolholders at cost savings.

These items are a suggested package of Shrink-Fit toolholders to allow you to perform the various machining operations on your new CNC mill.



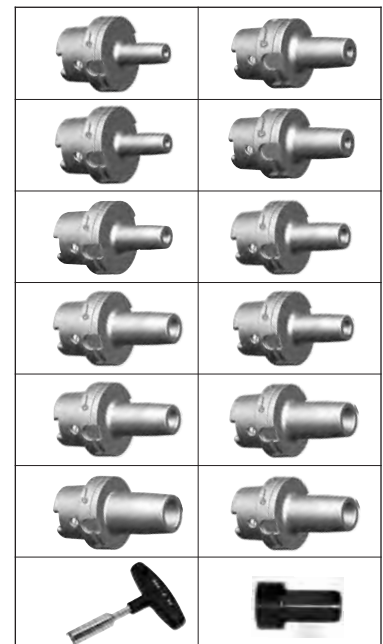
HSK63A SHRINK FIT TOOLHOLDER PACKAGE ONLY

PART NUMBER	HSK63A SERIES	DESCRIPTION	QUANTITY
HSK63ASF-TH-PKG-12	HSK63ASF-025-315	HSK63A SHRINK FIT ADAPTER: 1/4" I.D. X 3.15" GAUGE LENGTH	1
	HSK63ASF-038-315	HSK63A SHRINK FIT ADAPTER: 3/8" I.D. X 3.15" GAUGE LENGTH	2
	HSK63ASF-050-354	HSK63A SHRINK FIT ADAPTER: 1/2" I.D. X 3.54" GAUGE LENGTH	2
	HSK63ASF-062-394	HSK63A SHRINK FIT ADAPTER: 5/8" I.D. X 3.94" GAUGE LENGTH	1
	HSK63ASF-075-394	HSK63A SHRINK FIT ADAPTER: 3/4" I.D. X 3.94" GAUGE LENGTH	2
	HSK63ASF-100-433	HSK63A SHRINK FIT ADAPTER: 1" I.D. X 4.33" GAUGE LENGTH	2
	HSK63ASF-125-433	HSK63A SHRINK FIT ADAPTER: 1-1/4" I.D. X 4.33" GAUGE LENGTH	2
	TICT-HSK63	COOLANT TUBES	12
	TIIW-HSK63	COOLANT TUBE WRENCH	1



HSK100A SHRINK FIT TOOLHOLDER PACKAGE ONLY

PART NUMBER	HSK100A SERIES	DESCRIPTION	QUANTITY
HSK100ASF-TH-PKG-12	HSK100ASF-038-394	HSK100A SHRINK FIT ADAPTER: 3/8" I.D. X 3.94" GAUGE LENGTH	2
	HSK100ASF-050-394	HSK100A SHRINK FIT ADAPTER: 1/2" I.D. X 3.94" GAUGE LENGTH	2
	HSK100ASF-062-394	HSK100A SHRINK FIT ADAPTER: 5/8" I.D. X 3.94" GAUGE LENGTH	1
	HSK100ASF-075-433	HSK100A SHRINK FIT ADAPTER: 3/4" I.D. X 4.33" GAUGE LENGTH	2
	HSK100ASF-100-472	HSK100A SHRINK FIT ADAPTER: 1" I.D. X 4.72" GAUGE LENGTH	2
	HSK100ASF-125-472	HSK100A SHRINK FIT ADAPTER: 1-1/4" I.D. X 4.72" GAUGE LENGTH	2
	HSK100ASF-150-472	HSK100A SHRINK FIT ADAPTER: 1-1/2" I.D. X 4.72" GAUGE LENGTH	1
	TICT-HSK100	COOLANT TUBES	12
	TIIW-HSK100	COOLANT TUBE WRENCH	1



START-UP PACKAGES

NOTE: THE ABOVE ITEMS DO NOT INCLUDE RETENTION KNOBS. PLEASE INFORM BRINEY OF THE MAKE & MODEL OF YOUR MACHINE, AND WE WILL QUOTE THE PROPER KNOBS.



SPECIAL & CUSTOM TOOLING REQUIREMENTS

If unable to find a toolholder in our catalog because of special requirements, at time of order, our design team will produce a computer generated print for your approval before manufacturing your custom toolholder. This ensures you receive the toolholder you need manufactured to your specifications. Typically, we have the fastest deliveries in the industry on custom made toolholders after print is approved.

Count on Briney to manufacture your special toolholding requirements to the same high-quality as standard Briney products. Quick turn-arounds due to total in-house processes including heat treat.

NON-STANDARD FEATURES

- GAUGE LENGTHS
- PILOT DIAMETERS
- ID's
- TAPER STYLES
- SLOTS
- NOTCHES
- HOLES (COOLANT-THRU-FLANGE)
- ERROR-PROOFING HSK HOLDERS
- LARGER DIAMETER TOOLHOLDERS
- LONG REACH TOOLHOLDERS
- SHORT LENGTH TOOLHOLDERS
- METRIC SIZES

PRECISION CNC TOOLHOLDING

- ✓ END MILL ADAPTERS
- ✓ COLLET CHUCKS
- ✓ JACOBS TAPER ADAPTERS
- ✓ SHELL MILL ADAPTERS
- ✓ HSK ADAPTERS
- ✓ BORING HEAD ADAPTERS
- ✓ BLANK BARS
- ✓ CHUCK JAWS
- ✓ PRECISION TEST BARS
- ✓ MORSE TAPER ADAPTERS



START-UP PACKAGES CAT 40 & 50 TOOLHOLDERS

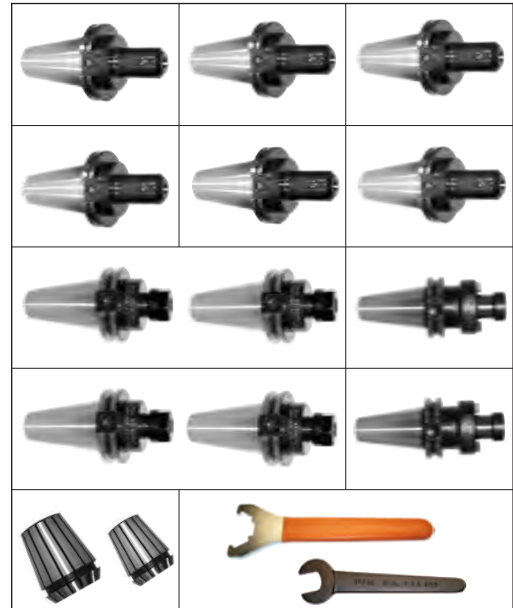
START-UP
PACKAGES

These items are a suggested package of toolholders to allow you to perform the various machining operations on your new CNC mill.



CAT40 TOOLHOLDER PACKAGE (INCLUDES)

PART NUMBER	CAT40 SERIES	DESCRIPTION	QUANTITY
BRI-V40-TK	V40E-025-250	END MILL HOLDER for 1/4" - 2.5"	1
	V40E-038-250	END MILL HOLDER for 3/8" - 2.5"	1
	V40E-050-262	END MILL HOLDER for 1/2" - 2.62"	1
	V40E-062-375	END MILL HOLDER for 5/8" - 3.75"	1
	V40E-075-375	END MILL HLDER for 3/4" - 3.75"	1
	V40E-100-400	END MILL HOLDER for 1" - 4"	1
	V40BR-16-250	ER16 - 2.5" COLLET CHUCK	2
	V40BR-32-400	ER32 - 4" COLLET CHUCK	2
	V40SM-075-138	SHELL MILL HOLDER .750" - 1.38"	1
	V40SM-100-206	SHELL MILL HOLDER 1" - 2.06"	1
	BR16-00 INCH	ER16 COLLET SET 1/16" - 13/32" X 1/32"	One 12 piece set
	BR32-00 INCH	ER32 COLLET SET 3/32" - 3/4" X 1/32"	One 22 piece set
	BR16HW	WRENCH for ER16 COLLET CHUCK	1
	BR32SW	WRENCH for ER32 COLLET CHUCK	1



CAT50 TOOLHOLDER PACKAGE (INCLUDES)

PART NUMBER	CAT50 SERIES	DESCRIPTION	QUANTITY
BRI-V50-TK	V50E-025-250	END MILL HOLDER for 1/4" - 2.5"	1
	V50E-038-250	END MILL HOLDER for 3/8" - 2.5"	1
	V50E-050-262	END MILL HOLDER for 1/2" - 2.62"	1
	V50E-062-375	END MILL HOLDER for 5/8" - 3.75"	1
	V50E-075-375	END MILL HLDER for 3/4" - 3.75"	1
	V50E-100-400	END MILL HOLDER for 1" - 4"	1
	V50BR-16-400	ER16 - 4" COLLET CHUCK	2
	V50BR-32-400	ER32 - 4" COLLET CHUCK	2
	V50SM-075-150	SHELL MILL HOLDER .750" - 1.50"	1
	V50SM-100-200	SHELL MILL HOLDER 1" - 2.00"	1
	BR16-00 INCH	ER16 COLLET SET 1/16" - 13/32" X 1/32"	One 12 Piece set
	BR32-00 INCH	ER32 COLLET SET 3/32" - 3/4" X 1/32"	One 22 piece set
	BR16HW	WRENCH for ER16 COLLET CHUCK	1
	BR32SW	WRENCH for ER32 COLLET CHUCK	1



NOTE: THE ABOVE ITEMS DO NOT INCLUDE RETENTION KNOBS.

PLEASE INFORM BRINEY OF THE MAKE & MODEL OF YOUR MACHINE AND WE WILL QUOTE THE PROPER KNOBS.



START-UP PACKAGES HSK63A & BT 40 TOOLHOLDERS

These items are a suggested package of toolholders to allow you to perform the various machining operations on your new CNC mill.



START-UP PACKAGE

HSK63A TOOLHOLDER PACKAGE (INCLUDES)

PART NUMBER	HSK63A SERIES	DESCRIPTION	QUANTITY
BRI-HSK63A-TK	HSK63AE-025-236	END MILL HOLDER for 1/4" - 2.36"	1
	HSK63AE-038-315	END MILL HOLDER for 3/8" - 3.15"	1
	HSK63AE-050-354	END MILL HOLDER for 1/2" - 3.54"	1
	HSK63AE-062-394	END MILL HOLDER for 5/8" - 3.94	1
	HSK63AE-075-394	END MILL HOLDER for 3/4" - 3.94	1
	HSK63AE-100-433	END MILL HOLDER for 1" - 4.33"	1
	HSK63ABR-16-65M	ER16 - 65MM COLLET CHUCK	2
	HSK63ABR-32-80M	ER32 - 80MM COLLET CHUCK	2
	HSK63ASM-075-197	SHELL MILL HOLDER .750" - 1.97"	1
	HSK63ASM-100-225	SHELL MILL HOLDER 1" - 2.16"	1
	BR16-00 INCH	ER16 COLLET SET 1/16" - 13/32" X 1/32"	One 12 piece set
	BR32-00 INCH	ER32 COLLET SET 3/32" - 3/4" X 1/32"	One 22 piece set
	BR16HW	WRENCH for ER16 COLLET CHUCK	1
	BR32SW	WRENCH for ER32 COLLET CHUCK	1
	TICT-HSK63	COOLANT TUBES	12
TIIW-HSK63	COOLANT TUBE WRENCH	1	



BT40 TOOLHOLDER PACKAGE (INCLUDES)

PART NUMBER	BT40 SERIES	DESCRIPTION	QUANTITY
BRI-BT40-TK	BT40E-025-250	END MILL HOLDER for 1/4" - 2.5"	1
	BT40E-038-250	END MILL HOLDER for 3/8" - 2.5"	1
	BT40E-050-262	END MILL HOLDER for 1/2" - 2.62"	1
	BT40E-062-375	END MILL HOLDER for 5/8" - 3.75"	1
	BT40E-075-375	END MILL HOLDER for 3/4" - 3.75"	1
	BT40E-100-400	END MILL HOLDER for 1" - 4"	1
	BT40BR-16-250	ER16 - 2.5" COLLET CHUCK	2
	BT40BR-32-300	ER32 - 3" COLLET CHUCK	2
	BT40SM-075-138	SHELL MILL HOLDER .750" - 1.38"	1
	BT40SM-100-206	SHELL MILL HOLDER 1" - 2.06"	1
	BR16-00 INCH	ER16 COLLET SET 1/16" - 13/32" X 1/32"	One 12 piece set
	BR32-00 INCH	ER32 COLLET SET 3/32" - 3/4" X 1/32"	One 22 piece set
	BR16HW	WRENCH for ER16 COLLET CHUCK	1
	BR32SW	WRENCH for ER32 COLLET CHUCK	1



NOTE: THE ABOVE ITEMS DO NOT INCLUDE RETENTION KNOBS.

PLEASE INFORM BRINEY OF THE MAKE & MODEL OF YOUR MACHINE AND WE WILL QUOTE THE PROPER KNOBS.

TRU POSITION END MILL ADAPTERS

TRU POSITION
TOOLING



Toolholder runout reduced to 0.0002" - after clamping.

Briney Tru Position eccentric ground tooling, an innovative proven end mill holder design dramatically reduces total indicator runout (TIR) typical of all end mill holders using a set screw or Weldon flat set screw. Improving the out-of-concentric condition of the tool holder bore from .0008" to .0002", the Briney holders feature an eccentric bore, imparting .0003" eccentricity in the direction of the set screw.

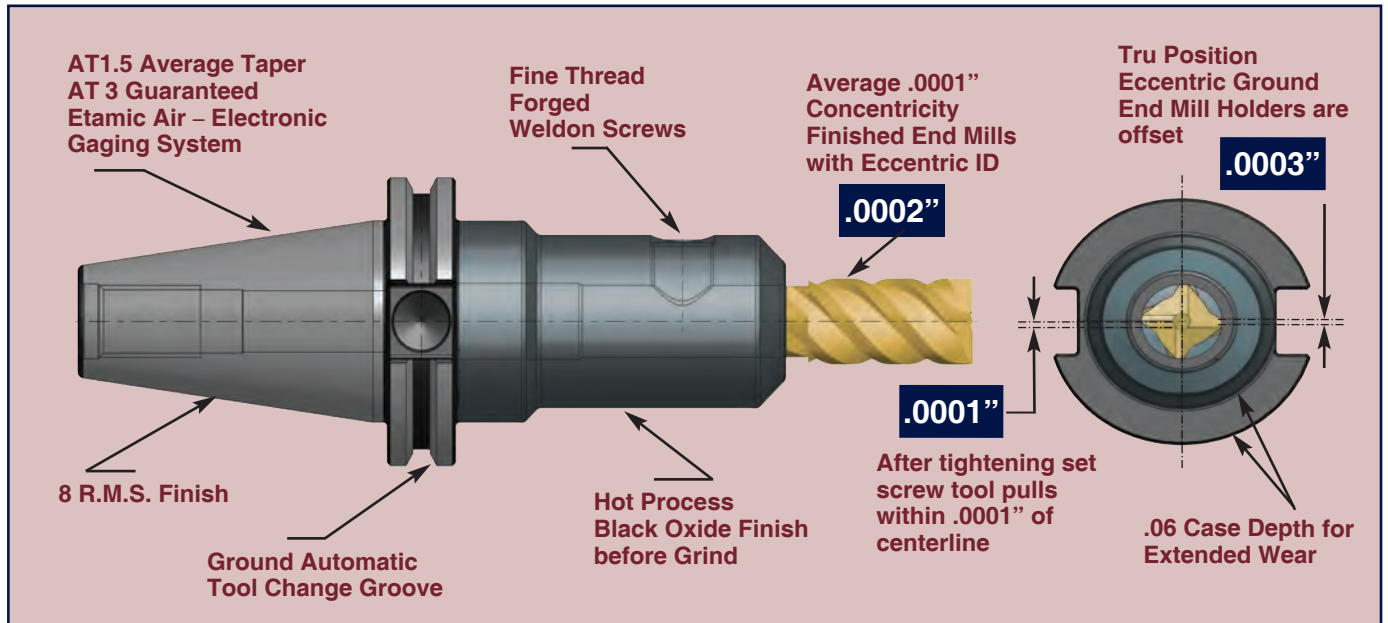
For example, a standard 1" toolholder bore diameter is 1.0001", and the end mill for that holder is .9997"; the clearance between the diameters is .0004". With the Briney .0003" eccentric bore, as the set screw is tightened, the clearance is pushed to within .0001" of center, while the standard holder maintains the .0004" clearance and the clearances are pushed .0004" off-center. So, when a set screw is turned down in the standard holder and the tool is rotated 180 degrees, the total runout is .0008".

Tru Position Eccentric Ground Toolholders are available in these styles:

- CAT40
- CAT50
- BT40
- BT50
- NMTB30
- NMTB40
- NMTB50
- HSK63A
- HSK100A



TRU POSITION ECCENTRIC GROUND TOOLHOLDING



TRU POSITION TOOLING

The Briney Tru Position Eccentric Bore concept. A special grinding technique reduces runout in all Briney end mill holders to .0002" from .0008" typical in other holders. For every .0001" of TIR in your holder assembly your tool life can be reduced up to 10%. Save up to 60% on tool life simply by using Briney Eccentric Bore holders.



With the Briney Tru Position Eccentric Bore Tooling, the shallow recess of the .0003" eccentric ground into the bore effectively reduces the potential off-center condition of the tool caused by the application of the set screw, keeping TIR to .0002" when the tool is rotated and properly located.

An internal grinding technique reduces bore runout in Briney end mill holders after clamping from .0008" typical in every other holder to our new standard .0002" — regardless of size, without affecting other toolholder features and tolerances. All Briney catalog holders are ground with bores featuring the offset, improving milling quality and tool and holder life without additional cost to the user.

ADVANTAGES INCLUDE:

- Less runout means a more even chip load and a lot less chatter
- Fewer passes to mill slots because of improved on-center rotation, saving time and improving machining quality
- Up to twice the tool life you can get than any other end mill holder plus half the tooling replacement expense because tools last longer

BRINEY offers a choice to match your high speed needs:
Tru Velocity and Maximum Velocity Balanced Tooling

Briney
Tooling Systems

TRU VELOCITY
TOOLING



Dynamic Balancing Machine

TRU VELOCITY Balanced Tooling

- Static or dynamic balanced for speeds up to **20,000 RPM at G2.5**.
- Recommended for all machines over 8,000 RPM and up to 20,000 RPM.
- Concentric .0002" shank-to-bore.
- CNC precision traverse ground to AT3 Taper Quality.

MAXIMUM VELOCITY Dynamic Balanced Tooling

- Dynamically balanced for speeds up to **30,000 RPM at G2.5**.
- Recommended for machines 20,000 RPM to 30,000 RPM spindle speed.
- Concentric .0002" shank-to-bore.
- CNC precision traverse ground to AT3 Taper Quality.

Benefits:

- Extended tool life.
- Optimum speeds and feed rates.
- Increased accuracy and repeatability.
- Eliminates vibration and chatter.
- Increases productivity.
- Increased accuracy and repeatability.
- Superior surface finish.
- Cost savings (tooling and machine time).
- Less spindle wear.

NOTE!

To order balanced tooling example:

TRU VELOCITY:

V40E-050-262TV (20,000 R.P.M.)

MAXIMUM VELOCITY:

V40E-050-262MV (30,000 R.P.M.)



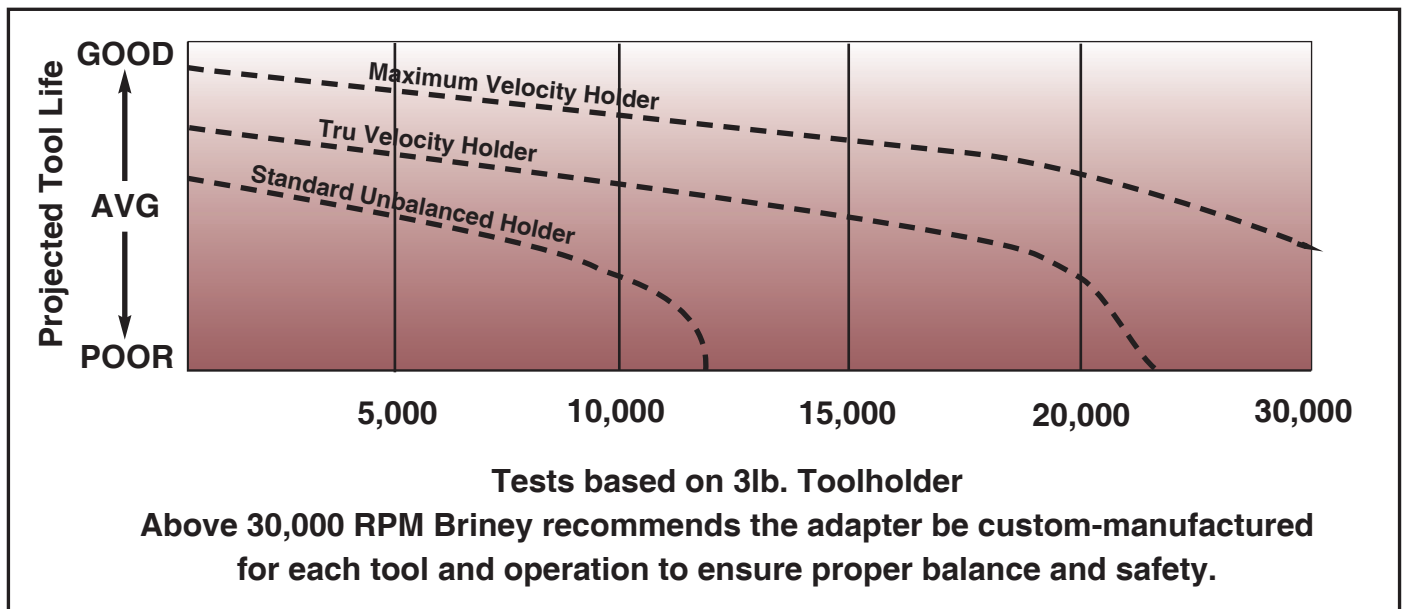
Understanding Unbalance Tolerance

The American National Standards Institute for Balance Quality of Rigid Rotating Bodies ANSI S.19-1989, defines permissible residual unbalance for a rotating body relative to its maximum service speed. Machine builders follow this specification in manufacturing spindles used in today's machining centers. Balance quality specifications for spindles is G 2.5mm/sec. However, the typical Cat V Flange tool has 250 gr/mm unbalance due to the unequaled drive slots in the original design.

To correct for this design unbalance, all Briney tooling is manufactured with an altered standard drive slot to properly equalize the weight. This change in tool design enables the Dynamically Balanced Briney **Tru Velocity™** tools to meet the G 2.5 tolerance of machine spindles. **Tru Velocity** tools can run up to 20,000 RPM without putting undue stress on the machine spindle.

In developing the formulas for unbalance, spindle speed is the primary factor in determining the balance tolerance. For machines with spindle speeds that exceed 20,000 RPM, the amount of unbalance allowed to meet the G 2.5 specification is greatly reduced.

TRU VELOCITY
TOOLING



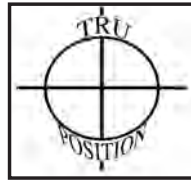
To meet this stricter balance specification, Briney offers **Maximum Velocity™** tooling. **Maximum Velocity** tools are manufactured with improved designs, special operations, and improved accessory items.

The final step in the process is a complete dynamic balancing operation. Our dynamic balancing machine is a state-of-the-art hard bearing 2-plane balancing system with spindleless drive and highly sensitive electronic measuring system. Briney **Maximum Velocity** tooling is balanced to G 2.5 or better at 30,000 RPM. This specification meets or exceeds the spindle balance specification for all machine tool builders. For spindle speeds over 30,000 RPM, contact Briney for a quotation on **Balanced Engineered** tooling. These special tooling requirements will be engineered and manufactured to meet the high speed specification required and then custom balanced with the cutting tools assembled to ensure the correct balance at ultra high speed.

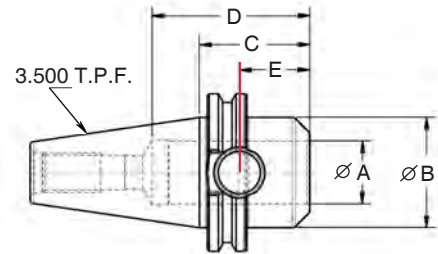
CAT 40 SHANK

End Mill Adapter Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- I.D. ground eccentrically for best T.I.R. in the industry
- Certified 8620 Material



For surround coolant option (see page 7)



END MILL ADAPTERS (STUB LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	SET SCREW SIZE	END MILL TYPE
BDCV40E-050-175	V40E-050-175	.500	1.75	1.75	*	.88	7/16-20W	SINGLE END
BDCV40E-062-175	V40E-062-175	.625	1.75	1.75	2.38	.94	9/16-18W	
BDCV40E-075-175	V40E-075-175	.750	1.75	1.75	2.25	1.00	5/8-18W	
BDCV40E-100-175	V40E-100-175	1.000	1.75	1.75	2.50	1.12	3/4-16W	
*BDCV40E-125-200	*V40E-125-200	1.250	2.25	2.00	2.35	1.12	3/4-16W	

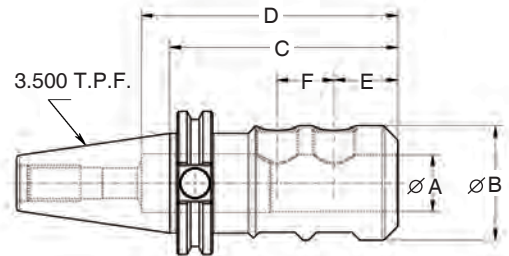
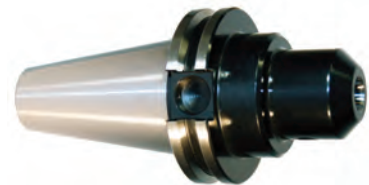
Order retention knobs separately, specify machine make and model #.

*Cannot be used with some automatic tool changers.

Tru Position built in on CAT 40 End Mill Adapters: refer to pages 40-41.

END MILL ADAPTERS (STANDARD LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
—	V40E-012-250	.125	.68	2.50	*	.31	—	8-32W	SINGLE END OR DOUBLE END
—	V40E-018-250	.1875	.68	2.50	*	.44	—	1/4-28W	
—	V40E-025-250	.250	.88	2.50	*	.44	—	1/4-28W	
—	V40E-031-250	.3125	1.00	2.50	*	.44	—	1/4-28W	
BDCV40E-038-250	V40E-038-250	.375	1.00	2.50	*	.74	—	3/8-24W	
—	V40E-044-250	.4375	1.25	2.50	*	.74	—	3/8-24W	
BDCV40E-050-262	V40E-050-262	.500	1.25	2.62	*	.88	—	7/16-20W	
BDCV40E-062-375	V40E-062-375	.625	1.50	3.75	3.62	.94	—	9/16-18W	
BDCV40E-075-375	V40E-075-375	.750	1.75	3.75	4.00	1.00	—	5/8-18W	
—	V40E-088-400	.875	2.00	4.00	4.00	1.00	.81	5/8-18W	
—	V40E-100-300	1.000	2.00	3.00	2.50	1.12	—	3/4-16W	SINGLE END
BDCV40E-100-400	V40E-100-400	1.000	2.00	4.00	4.50	1.12	1.00	3/4-16W	DOUBLE END
BDCV40E-125-425	V40E-125-425	1.250	2.50	4.25	2.50	1.12	1.00	3/4-16W	SINGLE END
BDCV40E-150-462	V40E-150-462	1.500	2.75	4.62	2.75	1.12	1.00	3/4-16W	SINGLE END

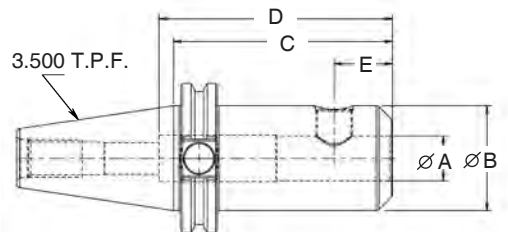
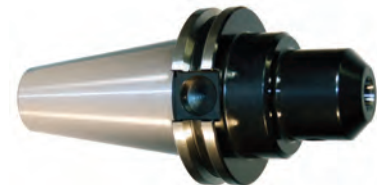


Order retention knobs separately, specify machine make and model #.

Tru Position built in on CAT 40 End Mill Adapters: refer to pages 40-41.

END MILL ADAPTERS (METRIC STANDARD LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
—	V40E-6MM-250	.2362 [6]	.88	2.50	*	.44	—	M6 W	DOUBLE END
—	V40E-8MM-250	.3150 [8]	1.00	2.50	*	.44	—	M8 W	
BDCV40E-10MM-250	V40E-10MM-250	.3937 [10]	1.00	2.50	*	.74	—	M10 W	
BDCV40E-12MM-262	V40E-12MM-262	.4724 [12]	1.25	2.62	*	.88	—	M12 W	
BDCV40E-16MM-375	V40E-16MM-375	.6299 [16]	1.50	3.75	3.62	.94	—	M16 W	
BDCV40E-20MM-375	V40E-20MM-375	.7874 [20]	1.75	3.75	4.00	1.00	—	M16 W	
—	V40E-25MM-375	.9842 [25]	2.00	3.75	5.00	1.00	1.00	M20 W	



Order retention knobs separately, specify machine make and model #.

Tru Position built in on CAT 40 End Mill Adapters: refer to pages 40-41.

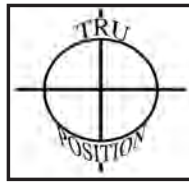
[* Through holder to retention knob thread.]



CAT 40 SHANK

End Mill Adapter Features

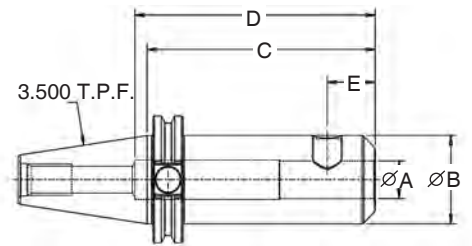
- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.



For surround coolant option (see page 7)

END MILL ADAPTERS (INTERMEDIATE LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
—	V40E-025-450	.250	.88	4.50	*	.44	—	1/4-28W	SINGLE END OR DOUBLE END
BDCV40E-038-450	V40E-038-450	.375	1.00	4.50	*	.74	—	3/8-24W	
BDCV40E-050-450	V40E-050-450	.500	1.25	4.50	*	.88	—	7/16-20W	
BDCV40E-062-475	V40E-062-475	.625	1.50	4.75	3.62	.94	—	9/16-18W	
BDCV40E-075-475	V40E-075-475	.750	1.75	4.75	4.00	1.00	—	5/8-18W	



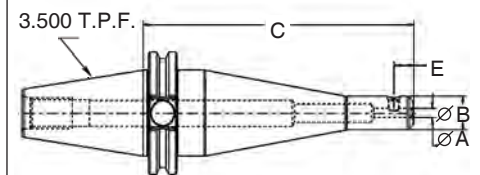
CAT TOOLING

Order retention knobs separately, specify machine make and model #.
Tru Position built in on CAT40 End Mill Adapters: refer to pages 40-41.

Style A Tapered

END MILL ADAPTERS (EXTENDED LENGTH)

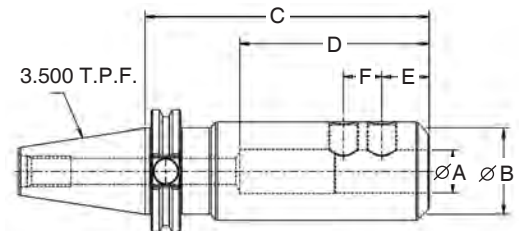
DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	STYLE TYPE	END MILL TYPE
—	V40E-018-600	.1875	.68	6.00	*	.44	—	1/4-28W	A	SINGLE END OR DOUBLE END
—	V40E-025-600	.250	.88	6.00	*	.44	—	1/4-28W	A	
BDCV40E-038-600	V40E-038-600	.375	1.00	6.00	*	.74	—	3/8-24W	A	
BDCV40E-050-600	V40E-050-600	.500	1.25	6.00	*	.88	—	7/16-20W	B	
BDCV40E-062-600	V40E-062-600	.625	1.50	6.00	3.62	.94	—	9/16-18W	B	
BDCV40E-075-600	V40E-075-600	.750	1.75	6.00	4.00	1.00	—	5/8-18W	B	
—	V40E-088-600	.875	2.00	6.00	4.00	1.00	.81	5/8-18W	B	
BDCV40E-100-600	V40E-100-600	1.000	2.00	6.00	4.50	1.12	1.00	3/4-16W	B	SINGLE END
BDCV40E-125-600	V40E-125-600	1.250	2.50	6.00	2.50	1.12	1.00	3/4-16W	B	



Style B Straight

Order retention knobs separately, specify machine make and model #.
Tru Position built in on CAT 40 End Mill Adapters: refer to pages 40-41.

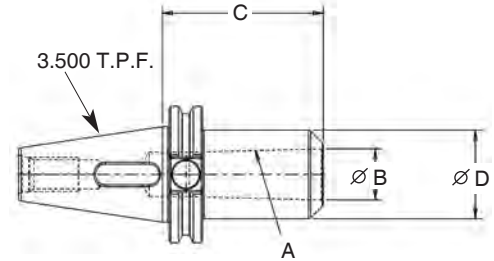
[* Through holder to retention knob thread.]



CAT 40 SHANK

Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Concentricity of .0002 or less from the tool shank to bore
- Certified 8620 Material



MORSE TAPER ADAPTERS

PART NUMBER	A MORSE TAPER	B MOUTH DIAMETER	C GAUGE LENGTH	D BARREL DIAMETER
V40-MT1	1	.475	1.750	1.000
V40-MT2	2	.700	2.440	1.250
V40-MT3	3	.938	3.000	1.620
V40-MT4	4	1.231	3.750	2.000

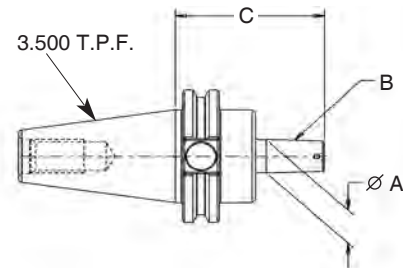
Order retention knobs separately, specify machine make and model #.

CAT TOOLING

JACOBS TAPER ADAPTERS

PART NUMBER	A JACOBS TAPER	B J. T. GAUGE DIAMETER	C GAUGE LENGTH
V40-JT2	2	.559	2.438
V40-JT3	3	.811	2.769
V40-JT4	4	1.12	3.218
V40-JT6	6	.676	2.593
V40-JT33	33	.624	2.557

Order retention knobs separately, specify machine make and model #.
Drill chucks sold separately, pages 101 and 102.



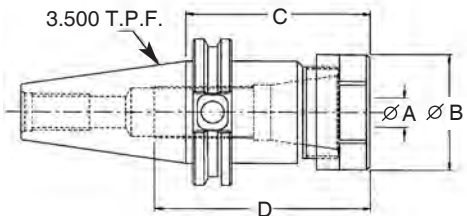
BR/ER COLLET CHUCKS

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BDCV40BR-11-300	V40BR-11-300	BR11	.019-.276	.63	3.00	4.00	BRCN-11M	5/16-LH	BR11MW
BDCV40BR-16-250	V40BR-16-250	BR16	.019-.406	1.10	2.50	3.00	BRCN-16	7/16-LH	BR16HW
BDCV40BR-16-400	V40BR-16-400	BR16	.019-.406	1.10	4.00	3.00	BRCN-16	7/16-LH	BR16HW
BDCV40BR-16-500	V40BR-16-500	BR16	.019-.406	1.10	5.00	3.00	BRCN-16	7/16-LH	BR16HW
BDCV40BR-20-275	V40BR-20-275	BR20	.039-.512	1.34	2.75	3.00	BRCN-20	9/16-LH	BR20HW
BDCV40BR-20-400	V40BR-20-400	BR20	.039-.512	1.34	4.00	3.00	BRCN-20	9/16-LH	BR20HW
BDCV40BR-20-525	V40BR-20-525	BR20	.039-.512	1.34	5.25	3.00	BRCN-20	9/16-LH	BR20HW
BDCV40BR-25-250	V40BR-25-250	BR25	.039-.630	1.65	2.50	3.00	BRCN-25	M18LH	BR25SW
BDCV40BR-25-400	V40BR-25-400	BR25	.039-.630	1.65	4.00	3.00	BRCN-25	M18LH	BR25SW
BDCV40BR-25-600	V40BR-25-600	BR25	.039-.630	1.65	6.00	3.00	BRCN-25	M18LH	BR25SW
—	V40BR-32-075	BR32	.079-.787	—	.75	1.89	BRCN-32SW	—	BRSW-32
BDCV40BR-32-238	V40BR-32-238	BR32	.079-.787	1.97	2.38	3.00	BRCN-32	7/8-LH	BR32SW
—	V40BR-32-300	BR32	.079-.787	1.97	3.00	3.00	BRCN-32	7/8-LH	BR32SW
BDCV40BR-32-400	V40BR-32-400	BR32	.079-.787	1.97	4.00	3.00	BRCN-32	7/8-LH	BR32SW
BDCV40BR-32-600	V40BR-32-600	BR32	.079-.787	1.97	6.00	3.00	BRCN-32	7/8-LH	BR32SW
BDCV40BR-40-315	V40BR-40-315	BR40	.118-1.024	3.07	3.15	5.00	BRCN-40	1-1/8-LH	BR40SW

Order retention knobs separately, specify machine make and model #.
Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 80, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95 and 96.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Recommended tightening torque reference page 85.



BR/ER Collet Chucks are all balanced at 20,000 R.P.M. at G2.5 specification.



Collet Chuck Features

- Collet nut and back-up stop screw included
- Laser etched for identification and traceability
- Black Oxide finish before grind

TG COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
V40CH-075-275	BTG075	.094-.750	2.08	2.75	3.31	BTGCN-075-II	13/16-LH	BTG075SW-II
V40CH-100-300	BTG100	.094-1.000	2.44	3.00	3.68	BTGCN-100-II	—	BTG100SW-II
V40CH-100-400	BTG100	.094-1.000	2.44	4.00	4.68	BTGCN-100-II	1-1/8-LH	BTG100SW-II
V40CH-100-550	BTG100	.094-1.000	2.44	5.50	5.68	BTGCN-100-II	1-1/8-LH	BTG100SW-II
V40CH-100-650	BTG100	.094-1.000	2.44	6.50	7.18	BTGCN-100-II	1-1/8-LH	BTG100SW-II
*V40CH-150-488	BTG150	.500-1.50	3.25	4.88	3.22	BTGCN-150	1-5/8-LH	BTG150SW

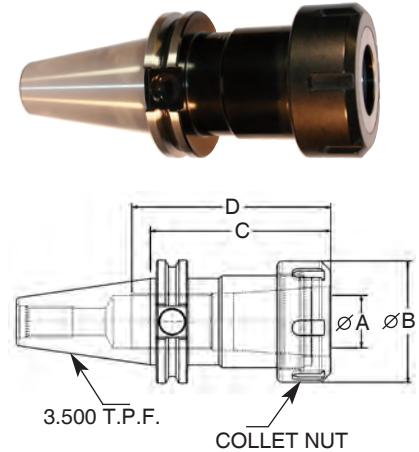
Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 81 and 97.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BTG75 - 60 ft/lbs. BTG100 - 75 ft/lbs. BTG150 - 90 ft/lbs.

* No Safety Diameter



CAT
TOOLING

DOUBLE ANGLE COLLET CHUCKS

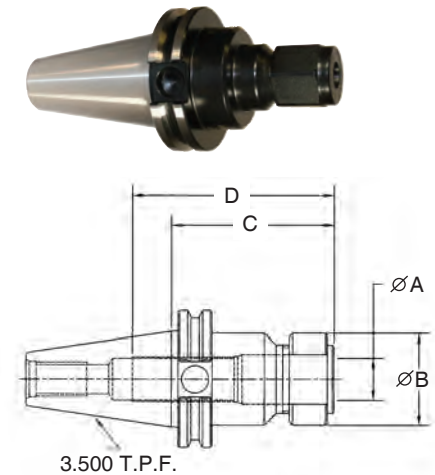
PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
V40DA-100-300	DA100	.062-.562	1.39	3.00	3.00	DACN-100	5/8-LH	DA-10-W
V40DA-180-300	DA180	.062-.750	1.70	3.00	2.75	DACN-180	13/16-LH	DA-18-W
V40DA-180-500	DA180	.062-.750	1.70	5.00	2.75	DACN-180	13/16-LH	DA-18-W
V40DA-200-300	DA200	.062-.375	1.125	3.00	3.00	DACN-200	7/16-LH	DA-20-W
V40DA-200-500	DA200	.062-.375	1.125	5.00	3.00	DACN-200	7/16-LH	DA-20-W
V40DA-300-300	DA300	.031-.250	.86	3.00	3.82	DACN-300	5/16-LH	DA-30-W

Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 82 and 98.

NOTE! Do not exceed the following torque recommendations:

DA300 - 20 ft/lbs. DA200 - 25 ft/lbs. DA100 - 35 ft/lbs. DA180 - 45 ft/lbs.



BF/AF COLLET CHUCKS

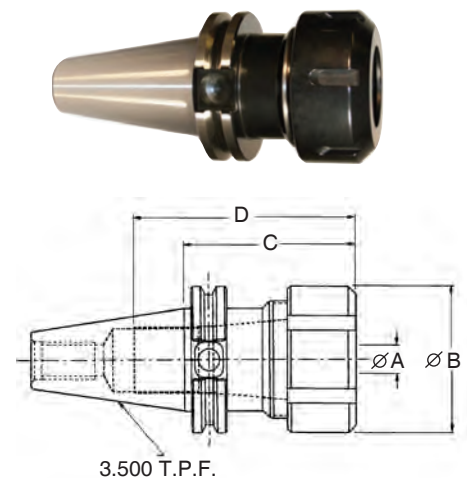
PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
V40BF-075-272	BF075	.109-.750	1.94	2.72	3.50	BFCN-75	13/16-LH	BFG75SW
V40BF-100-300	BF100	.219-1.000	2.50	3.00	3.25	BFCN-100	—	BFG100SW

Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 83 and 99.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BF075 - 60 ft/lbs. BF100 - 75 ft/lbs. Interchangeable with TSD/Universal AF collets.



CAT 40 SHANK

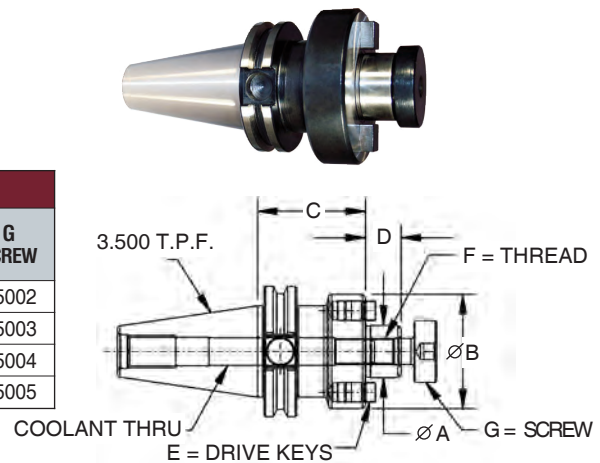
Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Quality ensured thru ISO 9001:2008 policies
- Certified 8620 Material

SHELL MILL ADAPTERS (STANDARD LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E DRIVE KEY	F SCREW THREAD	G SCREW
BDCV40SM-075-138	V40SM-075-138	.750	1.75	1.375	.68	.31	3/8-24	B5002
BDCV40SM-100-206	V40SM-100-206	1.000	2.19	2.062	.68	.38	1/2-20	B5003
BDCV40SM-125-212	V40SM-125-212	1.250	2.88	2.125	.68	.50	5/8-18	B5004
BDCV40SM-150-240	V40SM-150-240	1.500	3.81	2.406	.94	.62	3/4-16	B5005

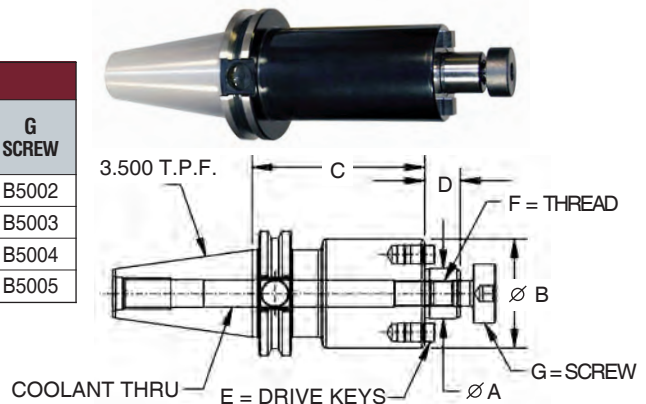
Order retention knobs separately, specify machine make & model #.
Includes shell screw and drive keys.



SHELL MILL ADAPTERS (EXTENDED LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E DRIVE KEY	F SCREW THREAD	G SCREW
BDCV40SM-075-400	V40SM-075-400	.750	1.75	4.00	.68	.31	3/8-24	B5002
BDCV40SM-100-400	V40SM-100-400	1.000	2.19	4.00	.68	.38	1/2-20	B5003
BDCV40SM-125-400	V40SM-125-400	1.250	2.88	4.00	.68	.50	5/8-18	B5004
BDCV40SM-150-400	V40SM-150-400	1.500	3.81	4.00	.94	.62	3/4-16	B5005

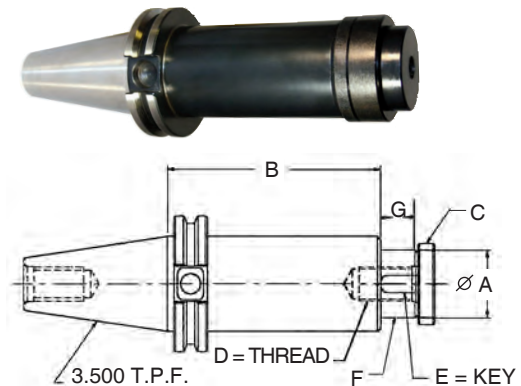
Order retention knobs separately, specify machine make & model #.
Includes shell screw and drive keys.



STUB ARBOR SCREW TYPE

PART NUMBER	A ARBOR DIA.	B GAUGE LENGTH	C SCREW	D THREAD	E KEY	F SPACER	G PILOT LENGTH
V40SA-100-400	1.00	4.00	B5003	1/2-20	.250	B6031	.580
V40SA-125-400	1.25	4.00	B5004	5/8-18	.312	B6041	.715
V40SA-150-400	1.50	4.00	B5005	3/4-16	.375	B6051	.715

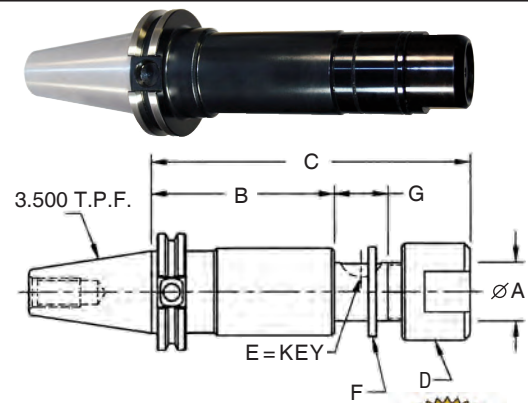
Order retention knobs separately, specify machine make & model #.
Includes 2 spacers, 1/4 and 1/2, key and standard shell screw.
Additional spacers available, page 104.



STUB ARBOR NUT TYPE

PART NUMBER	A ARBOR DIA.	B GAUGE LENGTH	C LENGTH OVER NUT	D NUT	E KEY	F SPACER	G PILOT LENGTH
V40SAN-100-400	1.00	4.00	6.19	B5030	.250	B6030	1.19
V40SAN-125-400	1.25	4.00	6.44	B5040	.312	B6040	1.19
V40SAN-150-400	1.50	4.00	6.69	B5050	.375	B6050	1.19

Order retention knobs separately, specify machine make & model #.
Includes 3 spacers, 1/8, 3/8, 3/4, key and nut. Additional spacers available on page 104.



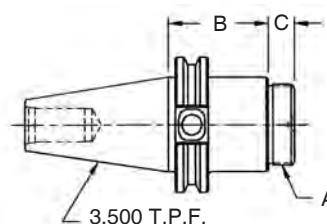
Briney Toolholder Features

- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.

BORING HEAD ADAPTERS

PART NUMBER	A THREAD	B GAUGE LENGTH	C PILOT LENGTH	BORING HEAD MFG. FIT
V40BH-625-18	5/8-18	1.50	.45	BRIDGEPORT #1 BORING HD ERICKSON #37 OR #50
V40BH-875-20	7/8-20	1.80	.51	CRITERION BORING HD
V40BH-150-18	1-1/2-18	1.80	.51	CRITERION BORING HD
V40BH-200-12	2"/12	2.00	.62	FLYNN #32, 33, 36, 47, 48, 49, 65, 67, 68

Order retention knobs separately, specify machine make and model #.

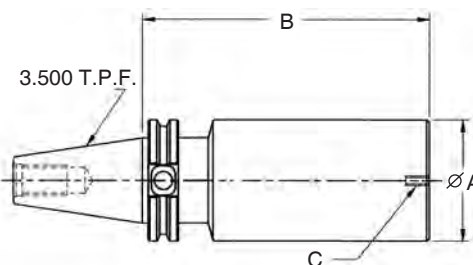


CAT
TOOLING

BLANK BARS

PART NUMBER	A O.D. DIA.	B GAUGE LENGTH	C TAPPED HOLE	MATERIAL
V40BB-250-600	2.50	6.00	10-24 x 1/2"	PHT 4150
V40BB-250-800	2.50	8.00	10-24 x 1/2"	
V40BB-400-600	4.00	6.00	1/4-20 x 3/4"	
V40BB-400-800	4.00	8.00	1/4-20 x 3/4"	
V40BB-400-1200	4.00	12.00	1/4-20 x 3/4"	

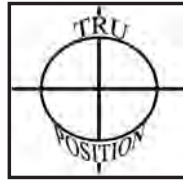
Order retention knobs separately, specify machine make and model #.



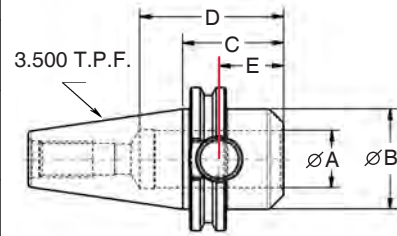
CAT 50 SHANK

End Mill Adapter Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- I.D. ground eccentrically for best T.I.R. in industry
- Certified 8620 Material



For surround coolant option (see page 7)



END MILL ADAPTERS (STUB LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	SET SCREW SIZE	END MILL TYPE
BDCV50E-062-206	V50E-062-206	.625	2.75	2.06	*	.94	9/16-18W	SINGLE OR DOUBLE
BDCV50E-075-206	V50E-075-206	.750	2.75	2.06	*	1.00	5/8-18W	
BDCV50E-100-225	V50E-100-225	1.00	2.75	2.25	4.50	1.12	3/4-16W	SINGLE END
BDCV50E-125-225	V50E-125-225	1.25	2.75	2.25	2.75	1.12	3/4-16W	
BDCV50E-150-275	V50E-150-275	1.50	2.75	2.75	2.75	1.12	3/4-16W	

Order retention knobs separately, specify machine make and model #.
Tru Position built in on CAT 50 End Mill Adapters: refer to pages 40-41.

END MILL ADAPTERS (STANDARD LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
—	V50E-018-250	.1875	.68	2.50	*	.56	—	1/4-28W	SINGLE END OR DOUBLE END
—	V50E-025-250	.250	.875	2.50	*	.56	—	1/4-28W	
—	V50E-031-250	.3125	1.00	2.50	*	.56	—	1/4-28W	
BDCV50E-038-250	V50E-038-250	.375	1.00	2.50	*	.75	—	3/8-24W	SINGLE END
—	V50E-044-250	.4375	1.25	2.50	*	.75	—	3/8-24W	
BDCV50E-050-262	V50E-050-262	.500	1.25	2.62	*	.88	—	7/16-20W	
BDCV50E-062-375	V50E-062-375	.625	1.50	3.75	*	.94	—	9/16-18W	SINGLE END
BDCV50E-075-375	V50E-075-375	.750	1.75	3.75	*	1.00	—	5/8-18W	
—	V50E-088-375	.875	2.00	3.75	4.00	1.00	.81	5/8-18W	
BDCV50E-100-400	V50E-100-400	1.000	2.00	4.00	4.50	1.12	1.00	3/4-16W	SINGLE END
BDCV50E-125-400	V50E-125-400	1.250	2.50	4.00	2.50	1.12	1.00	3/4-16W	
BDCV50E-150-400	V50E-150-400	1.500	2.75	4.00	2.75	1.50	1.00	3/4-16W	
—	V50E-175-400	1.750	3.12	4.00	2.75	1.12	1.00	3/4-16W	SINGLE END
BDCV50E-200-562	V50E-200-562	2.000	3.75	5.62	3.50	1.41	1.50	1" - 14W	

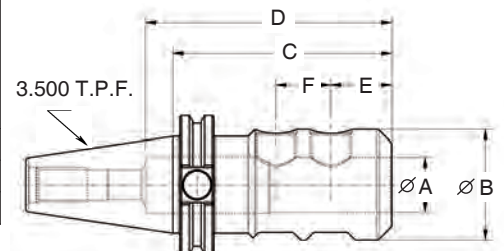
Order retention knobs separately, specify machine make and model #.
Tru Position built in on CAT 50 End Mill Adapters: refer to pages 40-41.

END MILL ADAPTERS (METRIC STANDARD LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
—	V50E-6MM-250	.2362 [6]	.875	2.50	*	.44	—	M6 W	SINGLE END OR DOUBLE END
—	V50E-8MM-250	.3150 [8]	1.00	2.50	*	.44	—	M8 W	
—	V50E-10MM-250	.3937 [10]	1.00	2.50	*	.74	—	M10 W	
BDCV50E-12MM-262	V50E-12MM-262	.4724 [12]	1.25	2.62	*	.88	—	M12 W	DOUBLE END
BDCV50E-16MM-375	V50E-16MM-375	.6299 [16]	1.50	3.75	*	.94	—	M16 W	
—	V50E-18MM-375	.7087 [18]	1.75	3.75	*	1.00	—	M16 W	
BDCV50E-20MM-375	V50E-20MM-375	.7874 [20]	1.75	3.75	*	1.00	—	M16 W	DOUBLE END
BDCV50E-25MM-400	V50E-25MM-400	.9843 [25]	2.00	4.00	4.50	1.12	1.00	M20 W	
BDCV50E-32MM-400	V50E-32MM-400	1.2598 [32]	2.50	4.00	2.52	1.12	1.00	M20 W	SINGLE END
BDCV50E-40MM-400	V50E-40MM-400	1.5748 [40]	2.75	4.00	2.50	1.12	1.00	M20 W	SINGLE END

Order retention knobs separately, specify machine make and model #.
Tru Position built in on CAT 50 End Mill Adapters: refer to pages 40-41.

[* Through holder to retention knob thread.]



End Mill Adapter Features

- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.

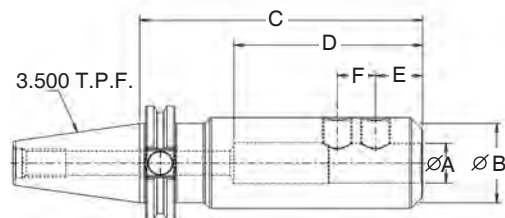
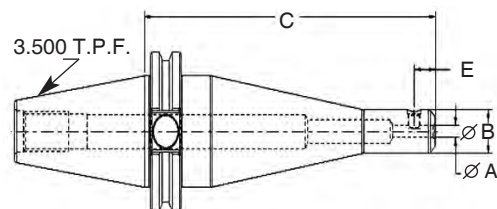


For surround coolant option (see page 7)

END MILL ADAPTERS (INTERMEDIATE LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	STYLE TYPE	END MILL TYPE
—	V50E-018-450	.1875	.68	4.50	★	.56	—	1/4-28W	A	SINGLE END OR DOUBLE END
—	V50E-025-450	.250	.875	4.50	★	.56	—	1/4-28W	A	
—	V50E-031-450	.3125	1.00	4.50	★	.56	—	1/4-28W	A	
BDCV50E-038-450	V50E-038-450	.375	1.00	4.50	★	.75	—	3/8-24W	B	
—	V50E-044-450	.4375	1.25	4.50	★	.75	—	3/8-24W	B	
BDCV50E-050-462	V50E-050-462	.500	1.25	4.62	★	.88	—	7/16-20W	B	
BDCV50E-062-575	V50E-062-575	.625	1.50	5.75	★	.94	—	9/16-18W	B	
BDCV50E-075-575	V50E-075-575	.750	1.75	5.75	★	1.00	—	5/8-18W	B	
—	V50E-088-575	.875	2.00	5.75	4.00	1.00	.81	5/8-18W	B	SINGLE END
BDCV50E-100-600	V50E-100-600	1.000	2.00	6.00	4.50	1.12	1.00	3/4-16W	B	
BDCV50E-125-600	V50E-125-600	1.250	2.50	6.00	2.50	1.12	1.00	3/4-16W	B	
BDCV50E-150-600	V50E-150-600	1.500	2.75	6.00	2.75	1.50	1.00	3/4-16W	B	
BDCV50E-200-762	V50E-200-762	2.000	3.75	7.62	3.50	1.41	1.50	1" - 14W	B	

Order retention knobs separately, specify machine make and model #.
Tru Position built in on CAT 50 End Mill Adapters: refer to pages 40-41.

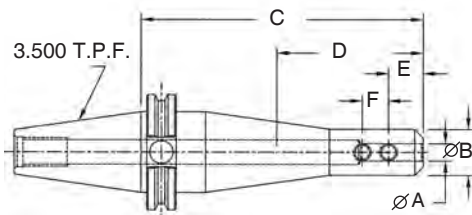


Print Style B Straight For Intermediate & Extended Length

END MILL ADAPTERS (EXTENDED LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPT	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	STYLE TYPE	END MILL TYPE
—	V50E-018-650	.1875	.68	6.50	★	.56	—	1/4-28W	A	SINGLE END OR DOUBLE END
—	V50E-025-650	.250	.875	6.50	★	.56	—	1/4-28W	A	
—	V50E-031-650	.3125	1.00	6.50	★	.56	—	1/4-28W	A	
BDCV50E-038-650	V50E-038-650	.375	1.00	6.50	★	.75	—	3/8-24W	A	
—	V50E-044-650	.4375	1.25	6.50	★	.75	—	3/8-24W	A	
BDCV50E-050-662	V50E-050-662	.500	1.25	6.62	★	.88	—	7/16-20W	A	
BDCV50E-062-775	V50E-062-775	.625	1.50	7.75	★	.94	—	9/16-18W	A	
BDCV50E-075-775	V50E-075-775	.750	1.75	7.75	★	1.00	—	5/8-18W	A	
—	V50E-088-775	.875	2.00	7.75	4.00	1.00	.81	5/8-18W	A	SINGLE END
BDCV50E-100-800	V50E-100-800	1.000	2.00	8.00	4.50	1.12	1.00	3/4-16W	B	
BDCV50E-125-800	V50E-125-800	1.250	2.50	8.00	2.50	1.12	1.00	3/4-16W	B	
BDCV50E-150-800	V50E-150-800	1.500	2.75	8.00	2.75	1.50	1.00	3/4-16W	B	
BDCV50E-200-962	V50E-200-962	2.000	3.75	9.62	3.50	1.41	1.50	1" - 14W	B	

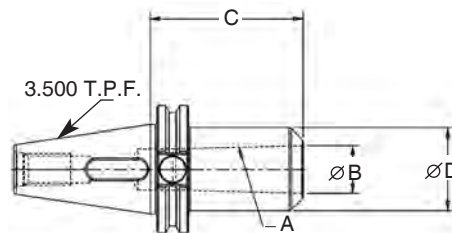
Order retention knobs separately, specify machine make and model #.
Tru Position built in on CAT End Mill Adapters: refer to pages 40-41.



[★ Through holder to retention knob thread.]

Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Extremely long toolholder life due to deepest case depths in industry
- Certified 8620 Material



MORSE TAPER ADAPTERS

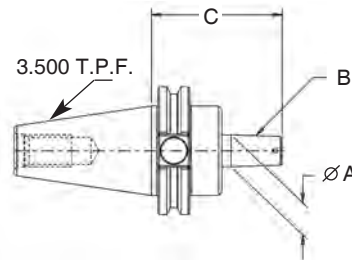
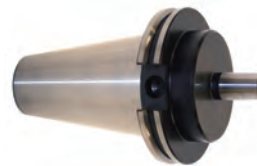
PART NUMBER	A MORSE TAPER	B MOUTH DIAMETER	C GAUGE LENGTH	D BARREL DIAMETER
V50-MT2	2	.700	2.00	1.25
V50-MT3	3	.938	2.50	1.62
V50-MT4	4	1.231	3.38	2.00
V50-MT5	5	1.748	3.75	2.75

Order retention knobs separately, specify machine make and model #.

JACOBS TAPER ADAPTERS

PART NUMBER	A JACOBS TAPER	B J. T. GAUGE DIAMETER	C GAUGE LENGTH
V50-JT2	2	.559	2.438
V50-JT3	3	.811	2.769
V50-JT4	4	1.12	3.218
V50-JT6	6	.676	2.593
V50-JT33	33	.624	2.557

Order retention knobs separately, specify machine make and model #.
Drill chucks sold separately, pages 101 and 102.



BR/ER COLLET CHUCKS

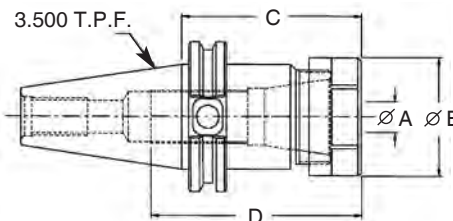
DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BDCV50BR-16-400	V50BR-16-400	BR16	.019-.406	1.10	4.00	3.00	BRCN-16	7/16-LH	BR16HW
BDCV50BR-16-500	V50BR-16-500	BR16	.019-.406	1.10	5.00	3.00	BRCN-16	7/16-LH	BR16HW
BDCV50BR-16-700	V50BR-16-700	BR16	.019-.406	1.10	7.00	3.00	BRCN-16	7/16-LH	BR16HW
BDCV50BR-20-400	V50BR-20-400	BR20	.039-.512	1.34	4.00	3.00	BRCN-20	9/16-LH	BR20HW
BDCV50BR-20-600	V50BR-20-600	BR20	.039-.512	1.34	6.00	3.00	BRCN-20	9/16-LH	BR20HW
BDCV50BR-25-400	V50BR-25-400	BR25	.039-.630	1.65	4.00	3.00	BRCN-25	M18LH	BR25SW
BDCV50BR-25-600	V50BR-25-600	BR25	.039-.630	1.65	6.00	3.00	BRCN-25	M18LH	BR25SW
BDCV50BR-32-400	V50BR-32-400	BR32	.079-.787	1.97	4.00	3.00	BRCN-32	7/8-LH	BR32SW
BDCV50BR-32-650	V50BR-32-650	BR32	.079-.787	1.97	6.50	3.00	BRCN-32	7/8-LH	BR32SW
BDCV50BR-40-400	V50BR-40-400	BR40	.118-1.024	2.48	4.00	3.00	BRCN-40	1-1/8-LH	BR40SW
BDCV50BR-40-630	V50BR-40-630	BR40	.118-1.024	2.48	6.30	3.00	BRCN-40	1-1/8-LH	BR40SW

Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 80, 87, 88, 89, 90, 91, 92, 93, 94, 95 and 96.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Recommended tightening torque refer to page 85.



BR/ER Collet Chucks are all balanced at 20,000 R.P.M. at G2.5 specification.



Collet Chuck Features

- Collet nut and back-up stop screw included
- Laser etched for identification and traceability
- Black Oxide finish before grind

TG COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
V50CH-100-300	BTG100	.094-1.000	2.44	3.00	4.50	BTGCN-100-II	1-1/8-LH	BTG100SW-II
V50CH-100-550	BTG100	.094-1.000	2.44	5.50	7.00	BTGCN-100-II	1-1/8-LH	BTG100SW-II
V50CH-100-750	BTG100	.094-1.000	2.44	7.50	9.00	BTGCN-100-II	1-1/8-LH	BTG100SW-II
V50CH-150-300	BTG150	.500-1.500	3.25	3.00	4.50	BTGCN-150	1-5/8-LH	BTG150SW
V50CH-150-500	BTG150	.500-1.500	3.25	5.00	7.00	BTGCN-150	1-5/8-LH	BTG150SW
V50CH-150-700	BTG150	.500-1.500	3.25	7.00	9.00	BTGCN-150	1-5/8-LH	BTG150SW

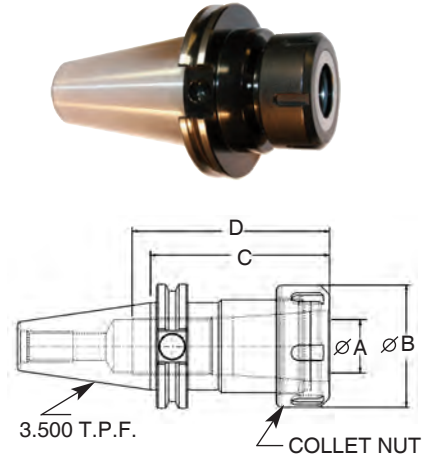
Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 81 and 97.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations:

BTG100 - 75 ft/lbs. BTG150 - 90 ft/lbs.



CAT
TOOLING

DOUBLE ANGLE COLLET CHUCKS

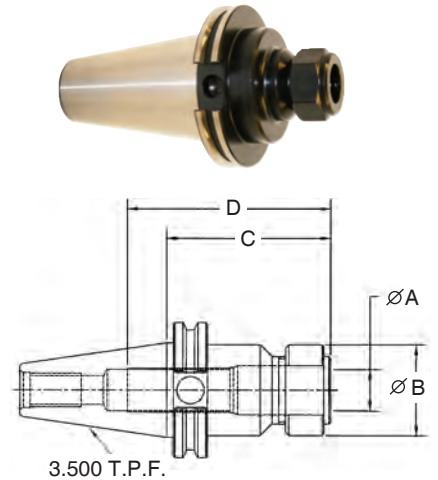
PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
V50DA-100-300	DA100	.047-.562	1.39	3.00	3.00	DACN-100	5/8-LH	DA-10-W
V50DA-100-600	DA100	.047-.562	1.39	6.00	3.00	DACN-100	5/8-LH	DA-10-W
V50DA-180-300	DA180	.047-.750	1.70	3.00	4.04	DACN-180	13/16-LH	DA-18-W
V50DA-180-600	DA180	.047-.750	1.70	6.00	4.04	DACN-180	13/16-LH	DA-18-W

Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw.

Purchase collets and wrenches separately, pages 82 and 98.

NOTE! Do not exceed the following torque recommendations: DA100 - 35 ft/lbs. DA180 - 45 ft/lbs.



BF/AF COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
V50BF-100-300	BF100	.219-1.000	2.50	3.00	4.44	BFCN-100	1-1/8-LH	BFG100SW
V50BF-100-600	BF100	.219-1.000	2.50	6.00	6.00	BFCN-100	1-1/8-LH	BFG100SW

Order retention knobs separately, specify machine make and model #.

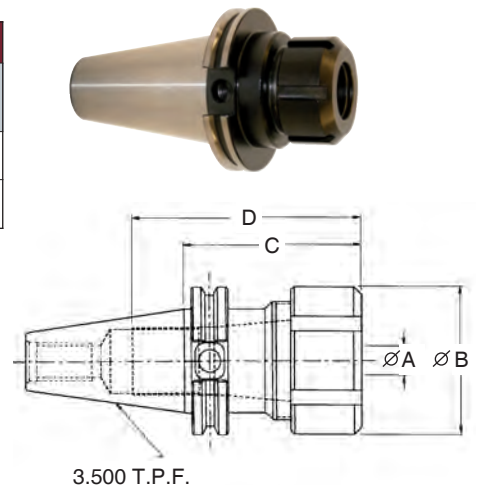
Includes collet nut and standard stop screw.

Purchase collets and wrenches separately, pages 83 and 99.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BF100 - 75 ft/lbs.

Interchangeable with TSD/Universal AF collets.



SHELL MILL ADAPTERS (STANDARD LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E DRIVE KEY	F SCREW THREAD	G SCREW
BDCV50SM-075-150	V50SM-075-150	.750	2.750	1.50	.68	.31	3/8-24	B5002
BDCV50SM-100-200	V50SM-100-200	1.000	2.190	2.00	.68	.38	1/2-20	B5003
BDCV50SM-125-150	V50SM-125-150	1.250	2.750	1.50	.68	.50	5/8-18	B5004
BDCV50SM-150-240	V50SM-150-240	1.500	3.810	2.40	.93	.62	3/4-16	B5005
BDCV50SM-200-240	V50SM-200-240	2.000	4.875	2.40	.93	.75	1 - 14	B5006
BDCV50SM-250-240	V50SM-250-240	2.500	4.875	2.40	1.125	1.00	1 - 14	B5007

SHELL MILL ADAPTERS (INTERMEDIATE LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E DRIVE KEY	F SCREW THREAD	G SCREW
BDCV50SM-075-350	V50SM-075-350	.750	1.750	3.50	.68	.31	3/8-24	B5002
BDCV50SM-100-400	V50SM-100-400	1.000	2.190	4.00	.68	.38	1/2-20	B5003
BDCV50SM-125-350	V50SM-125-350	1.250	2.880	3.50	.68	.50	5/8-18	B5004
BDCV50SM-150-400	V50SM-150-400	1.500	3.810	4.00	.93	.62	3/4-16	B5005
* BDCV50SM-200-400	* V50SM-200-400	2.000	4.875	4.00	.93	.75	1 - 14	B5006
* BDCV50SM-250-400	* V50SM-250-400	2.500	4.875	4.00	1.125	1.00	1 - 14	B5007

SHELL MILL ADAPTERS (EXTENDED LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E DRIVE KEY	F SCREW THREAD	G SCREW
BDCV50SM-075-550	V50SM-075-550	.750	1.750	5.50	.68	.31	3/8-24	B5002
BDCV50SM-100-600	V50SM-100-600	1.000	2.190	6.00	.68	.38	1/2-20	B5003
BDCV50SM-125-550	V50SM-125-550	1.250	2.880	5.50	.68	.50	5/8-18	B5004
BDCV50SM-150-600	V50SM-150-600	1.500	3.810	6.00	.93	.62	3/4-16	B5005
* BDCV50SM-200-600	* V50SM-200-600	2.000	4.875	6.00	.93	.75	1 - 14	B5006
* BDCV50SM-250-600	* V50SM-250-600	2.500	4.875	6.00	1.125	1.00	1 - 14	B5007

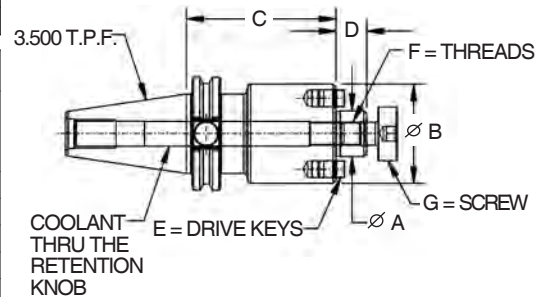
Order retention knobs separately, specify machine make and model #.

Includes shell screw and drive keys.

* Includes 4 5/8-11 tapped holes on a 4" bolt circle.

Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Quality ensured thru ISO 9001:2008 policies
- Certified 8620 Material

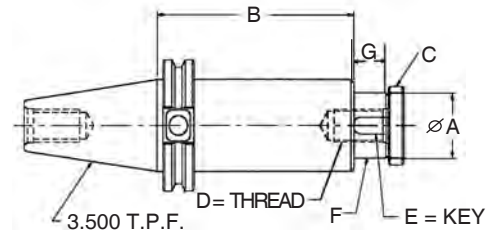


STUB ARBOR SCREW TYPE

PART NUMBER	A ARBOR DIA.	B GAUGE LENGTH	C SCREW	D THREAD	E KEY	F SPACER	G PILOT LENGTH
V50SA-125-400	1.25	4.00	B5004	5/8-18	.312	B6041	.715
V50SA-150-400	1.50	4.00	B5005	3/4-16	.375	B6051	.715

Order retention knobs separately, specify machine make and model #.

Includes 1/4 and 1/2 spacers, key and shell screw. Additional spacers available, page 104.

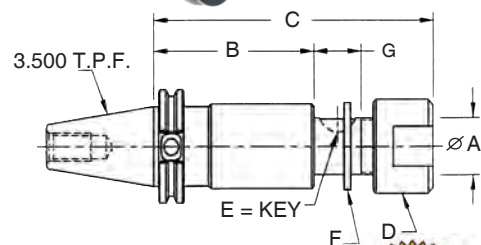


STUB ARBOR NUT TYPE

PART NUMBER	A ARBOR DIA.	B GAUGE LENGTH	C LENGTH OVER NUT	D NUT	E KEY	F SPACER	G PILOT LENGTH
V50SAN-125-400	1.25	4.00	6.44	B5040	.312	B6040	1.19
V50SAN-150-400	1.50	4.00	6.69	B5050	.375	B6050	1.19

Order retention knobs separately, specify machine make and model #.

Includes 3 spacers, 1/8, 3/8, 3/4, key and nut. Additional spacers available, page 104.



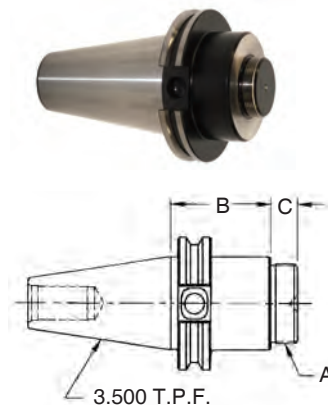
Briney Toolholder Features

- Extremely long toolholder life due to deepest case depths in industry
- Quality insured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.

BORING HEAD ADAPTERS

PART NUMBER	A THREAD	B GAUGE LENGTH	C PILOT LENGTH	BORING HEAD MFG. FIT
V50BH-625-18	5/8-18	2.18	.44	ERICKSON #37 OR #50
V50BH-150-18	1-1/2-18	2.18	.44	CRITERION, SPI & YUASA
V50BH-200-12	2"/12	2.18	.44	FLYNN #32, 33, 36, 47, 48, 49, 65, 67, 68

Order retention knobs separately, specify machine make and model #.

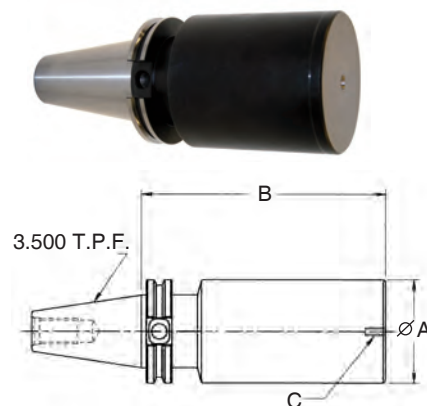


CAT
TOOLING

BLANK BARS

PART NUMBER	A O.D. DIA.	B GAUGE LENGTH	C TAPPED HOLE	MATERIAL
V50BB-400-600	4.00	6.00	1/4-20 x 3/4"	PHT 4150
V50BB-400-800	4.00	8.00	1/4-20 x 3/4"	
V50BB-600-1200	6.00	12.00	1/4-20 x 3/4"	

Order retention knobs separately, specify machine make and model #.



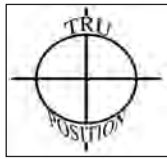
CAT 60 Toolholders are manufactured upon request in all styles:

- END MILL ADAPTERS
- MORSE TAPER ADAPTERS
- JACOBS TAPER ADAPTERS
- BR/ER COLLET CHUCKS
- TG COLLET CHUCKS
- DOUBLE ANGLE COLLET CHUCKS
- BF/AF COLLET CHUCKS
- SHELL MILL ADAPTERS
- BLANK BARS



Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Black Oxide finish before grind
- Certified 8620 Material

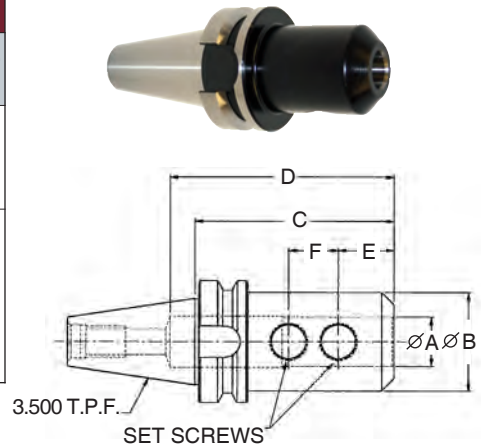


For surround coolant option (see page 7)

END MILL ADAPTERS

PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
BT30E-018-250	.1875	.68	2.50	*	.44	—	1/4-28W	SINGLE END OR DOUBLE END
BT30E-025-250	.250	.88	2.50	*	.44	—	1/4-28W	
BT30E-038-250	.375	1.00	2.50	*	.75	—	3/8-24W	
BT30E-050-250	.500	1.25	2.50	2.00	.88	—	7/16-20W	SINGLE END
BT30E-062-300	.625	1.50	3.00	2.62	.94	—	9/16-18W	
BT30E-075-300	.750	1.75	3.00	2.62	1.00	—	5/8-18W	
BT30E-088-400	.875	2.00	4.00	3.13	1.00	.81	5/8-18W	
BT30E-100-400	1.000	2.00	4.00	2.50	1.12	1.00	3/4-16W	

Order retention knobs separately, specify machine make and model #.
Tru Position built in on BT30E End Mill Adapters: refer to pages 40-41.

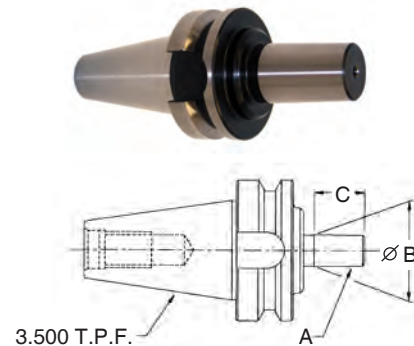


BT TOOLING

JACOBS TAPER ADAPTERS

PART NUMBER	A JACOBS TAPER	B J. T. GAUGE DIAMETER	C GAUGE LENGTH
BT30-JT2	2	.559	2.122
BT30-JT3	3	.811	2.454
BT30-JT33	33	.624	2.242

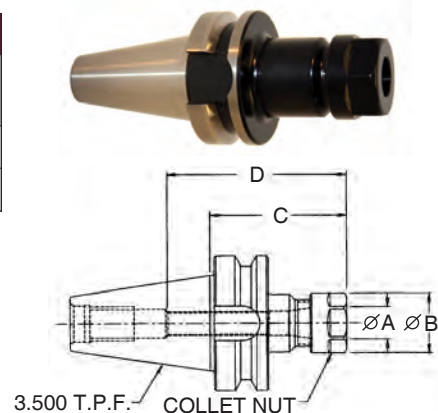
Order retention knobs separately, specify machine make and model #.
Drill chucks sold separately, pages 101 and 102.



BR/ER COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BT30BR-16-275	BR16	.019-.393	1.10	2.75	3.00	BRCN-16	7/16-LH	BR16HW
BT30BR-32-275	BR32	.078-.787	1.97	2.75	2.75	BRCN-32	—	BR32SW

Order retention knobs separately, specify machine make and model #.
Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 80, 87, 88, 93 and 94.
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.
NOTE! Recommended tightening torque reference page 85.



[* Through holder to retention knob thread.]

BR/ER Collet Chucks are all balanced at 20,000 R.P.M. at G2.5 specification.



Briney Toolholder Features

- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.

TG COLLET CHUCKS

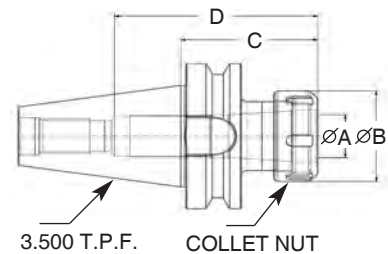
PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BT30CH-075-300	BTG075	.094-7.50	2.08	3.00	3.12	BTGCN-075-II	—	BTG075SW-II

Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 81 and 97.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BTG75 - 60 ft/lbs.



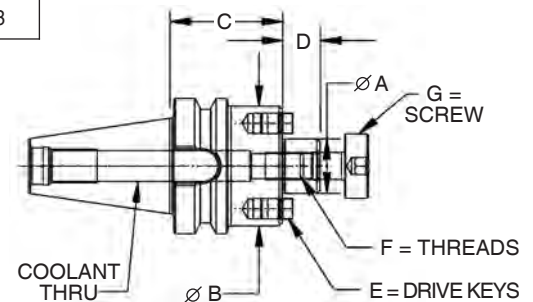
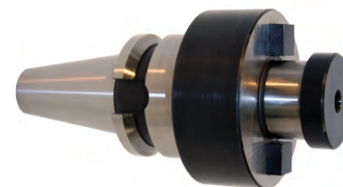
BT
TOOLING

SHELL MILL ADAPTERS (STANDARD LENGTH)

PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E KEY	F THREAD	G SCREW
BT30SM-075-200	.750	1.750	2.00	.687	.31	3/8-24	B5002
BT30SM-100-200	1.000	2.19	2.00	.687	.38	1/2-20	B5003

Order retention knobs separately, specify machine make and model #.

Includes shell screw and drive keys.



BT 40 SHANK

End Mill Adapter Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- I.D. ground eccentrically for best T.I.R. in industry
- Certified 8620 Material

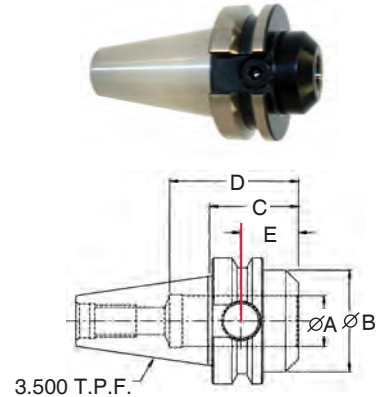


For surround coolant option (see page 7)

END MILL ADAPTERS (STUB LENGTH)

PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	SET SCREW SIZE	END MILL TYPE
BT40E-050-175	.500	1.25	1.75	*	.88	7/16-20W	SINGLE OR DOUBLE
BT40E-062-175	.625	1.50	1.75	2.38	.94	9/16-18W	
BT40E-075-175	.750	1.75	1.75	2.25	1.00	5/8-18W	
BT40E-100-175	1.000	2.00	1.75	2.50	1.12	3/4-16W	
BT40E-125-200	1.250	2.25	2.00	2.50	1.12	3/4-16W	

Order retention knobs separately, specify machine make and model #.
Tru Position built in on BT40E End Mill Adapters: refer to pages 40-41.

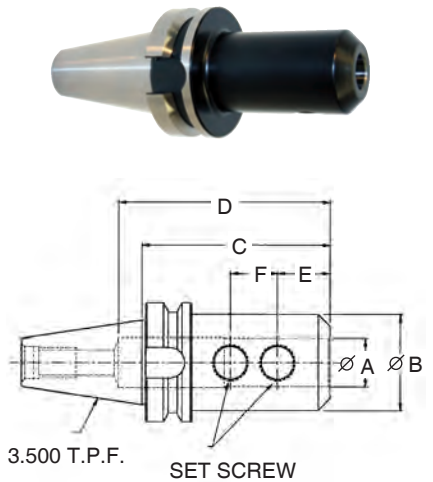


BT TOOLING

END MILL ADAPTERS (STANDARD LENGTH)

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
—	BT40E-018-250	.1875	.68	2.50	*	.44	—	1/4-28W	SINGLE END OR DOUBLE END
—	BT40E-025-250	.250	.88	2.50	*	.44	—	1/4-28W	
—	BT40E-031-250	.3125	1.00	2.50	*	.44	—	1/4-28W	
—	BT40E-038-250	.375	1.00	2.50	*	.74	—	3/8-24W	
—	BT40E-044-250	.4375	1.25	2.50	*	.74	—	3/8-24W	
—	BT40E-050-262	.500	1.25	2.62	*	.88	—	7/16-20W	
BDCBT40E-050-300	—	.500	1.25	3.00	*	.88	—	7/16-20W	
BDCBT40E-062-300	—	.625	1.50	3.00	3.02	.94	—	9/16-18W	
—	BT40E-062-375	.625	1.50	3.75	3.62	.94	—	9/16-18W	
—	BT40E-075-375	.750	1.75	3.75	4.00	1.00	—	5/8-18W	
BDCBT40E-075-400	—	.750	1.75	4.00	4.25	1.00	—	5/8-18W	
—	BT40E-088-400	.875	2.00	4.00	4.00	1.00	.81	5/8-18W	
BDCBT40E-100-400	BT40E-100-400	1.000	2.00	4.00	4.50	1.12	1.00	3/4-16W	
BDCBT40E-125-400	—	1.250	2.50	4.00	2.50	1.12	1.00	3/4-16W	
—	BT40E-125-425	1.250	2.50	4.25	2.50	1.12	1.00	3/4-16W	
—	BT40E-150-462	1.500	2.75	4.62	2.75	1.12	1.00	3/4-16W	

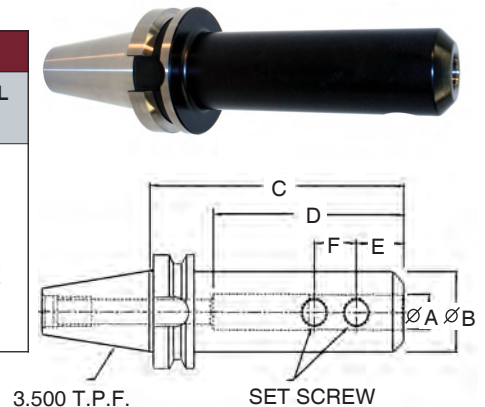
Order retention knobs separately, specify machine make and model #.
Tru Position built in on BT40E End Mill Adapters: refer to pages 40-41.



END MILL ADAPTERS (EXTENDED LENGTH)

PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	SET SCREW SIZE	END MILL TYPE
BT40E-038-600	.375	1.00	6.00	*	.74	3/8-24W	SINGLE OR DOUBLE
BT40E-050-600	.500	1.25	6.00	*	.88	7/16-20W	
BT40E-062-600	.625	1.50	6.00	3.62	.94	9/16-18W	
BT40E-075-600	.750	1.75	6.00	4.00	1.00	5/8-18W	
BT40E-088-600	.875	2.00	6.00	4.00	1.00	5/8-18W	
BT40E-100-600	1.000	2.00	6.00	4.00	1.12	3/4-16W	

Order retention knobs separately, specify machine make and model #.
Tru Position built in on BT40E End Mill Adapters: refer to pages 40-41.

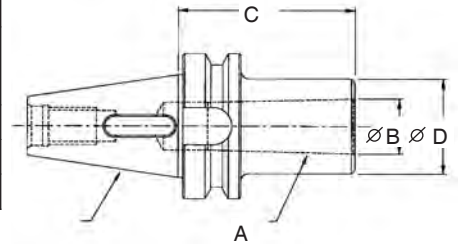


[* Through holder to retention knob thread.]



Briney Toolholder Features

- Extremely long toolholder life due to deepest case depths in industry
- Black Oxide finish before grind
- Completely manufactured in the U.S.A.



3.500 T.P.F.

MORSE TAPER ADAPTERS

PART NUMBER	A MORSE TAPER	B MOUTH DIAMETER	C GAUGE LENGTH	D BARREL DIAMETER
BT40-MT2	2	.700	1.25	2.44
BT40-MT3	3	.938	1.62	3.00
BT40-MT4	4	1.231	2.00	3.75

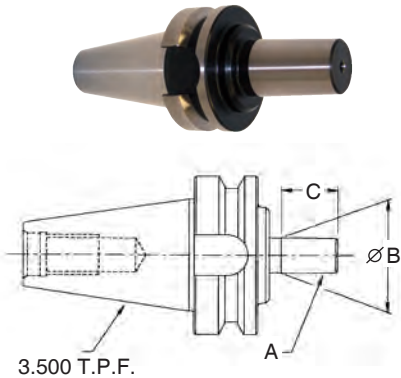
Order retention knobs separately, specify machine make and model #.

JACOBS TAPER ADAPTERS

PART NUMBER	A JACOBS TAPER	B J. T. GAUGE DIAMETER	C GAUGE LENGTH
BT40-JT2	2	.559	2.300
BT40-JT3	3	.811	2.634
BT40-JT4	4	1.12	3.083
BT40-JT6	6	.676	2.458
BT40-JT33	33	.624	2.244

Order retention knobs separately, specify machine make and model #.

Drill chucks sold separately, pages 101 and 102.



3.500 T.P.F.

BT TOOLING

BR/ER COLLET CHUCKS

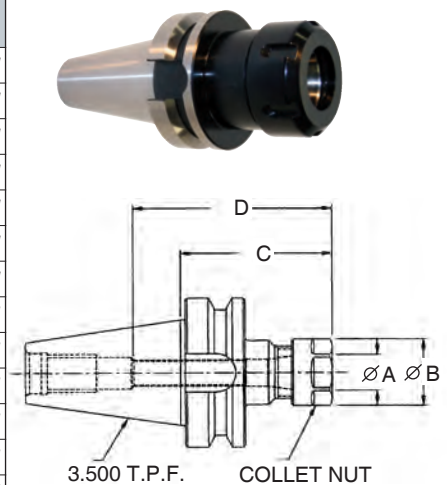
DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
—	BT40BR-16-250	BR16	.019-.406	1.10	2.50	2.85	BRCN-16	7/16-LH	BR16HW
BDCBT40BR-16-275	—	BR16	.019-.406	1.10	2.75	2.93	BRCN-16	7/16-LH	BR16HW
BDCBT40BR-16-394	—	BR16	.019-.406	1.10	3.94	3.02	BRCN-16	7/16-LH	BR16HW
—	BT40BR-16-500	BR16	.019-.406	1.10	5.00	3.25	BRCN-16	7/16-LH	BR16HW
BDCBT40BR-20-275	BT40BR-20-275	BR20	.039-.512	1.34	2.75	3.00	BRCN-20	9/16-LH	BR20HW
BDCBT40BR-20-400	BT40BR-20-400	BR20	.039-.512	1.34	4.00	3.00	BRCN-20	9/16-LH	BR20HW
BDCBT40BR-25-275	—	BR20	.039-.512	1.34	2.75	2.85	BRCN-20	9/16-LH	BR20HW
—	BT40BR-25-590	BR25	.039-.630	1.65	5.90	4.00	BRCN-25	M18LH	BR25SW
BDCBT40BR-32-275	—	BR32	.079-.787	1.97	2.75	2.85	BRCN-32	7/8-LH	BR32SW
—	BT40BR-32-300	BR32	.079-.787	1.97	3.00	2.50	BRCN-32	7/8-LH	BR32SW
BDCBT40BR-32-394	—	BR32	.079-.787	1.97	3.94	3.75	BRCN-32	7/8-LH	BR32SW
BDCBT40BR-32-630	—	BR32	.079-.787	1.97	6.30	6.00	BRCN-32	7/8-LH	BR32SW
—	BT40BR-40-315	BR40	.118-1.024	2.48	3.15	3.00	BRCN-40	1-1/8-LH	BR40SW

Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 80, 87, 88, 89, 90, 91, 92, 93, 94, 95 and 96.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Recommended tightening torque reference page 85.



3.500 T.P.F.

COLLET NUT

BR/ER Collet Chucks are all balanced at 20,000 R.P.M. at G2.5 specification.

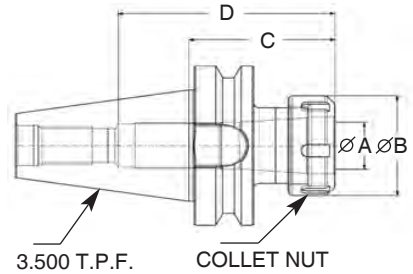
Collet Chuck Features

- Collet nut and back-up stop screw included
- Laser etched for identification and traceability
- Black Oxide finish before grind



TG COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BT40CH-075-275	BTG075	.094-.750	2.08	2.75	3.31	BTGCN-075-II	13/16-LH	BTG075SW-II
BT40CH-100-300	BTG100	.094-1.000	2.44	3.00	3.68	BTGCN-100-II	1-1/8-LH	BTG100SW-II
BT40CH-100-500	BTG100	.094-1.000	2.44	5.00	5.68	BTGCN-100-II	1-1/8-LH	BTG100SW-II



Order retention knobs separately, specify machine make and model #.

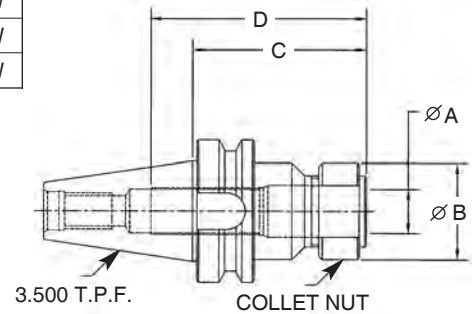
Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 81 and 97.
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BTG075 - 60 ft/lbs. BTG100 - 75 ft/lbs.

BT TOOLING

DOUBLE ANGLE COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BT40DA-200-300	DA200	.047-.390	1.125	3.00	3.00	DACN-200	7/16-LH	DA-20-W
BT40DA-100-300	DA100	.047-.562	1.39	3.00	3.00	DACN-100	9/16-LH	DA-10-W
BT40DA-180-300	DA180	.047-.750	1.70	3.00	2.75	DACN-180	13/16-LH	DA-18-W



Order retention knobs separately, specify machine make and model #.

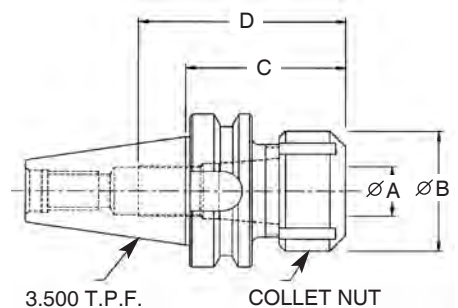
Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 82 and 98.

NOTE! Do not exceed the following torque recommendations: DA300 - 20 ft/lbs. DA200 - 25 ft/lbs.

DA100 - 35 ft/lbs. DA180 - 45 ft/lbs.

BF/AF COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BT40BF-075-256	BF75	.109-.750	1.94	2.56	3.12	BFCN-75	13/16-LH	BFG75SW
BT40BF-100-315	BF100	.219-1.000	2.50	3.15	3.25	BFCN-100	1-1/8-LH	BFG100SW



Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 83 and 99.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BF075 - 60 ft/lbs. BF100 - 75 ft/lbs.

Interchangeable with TSD/Universal AF collets.



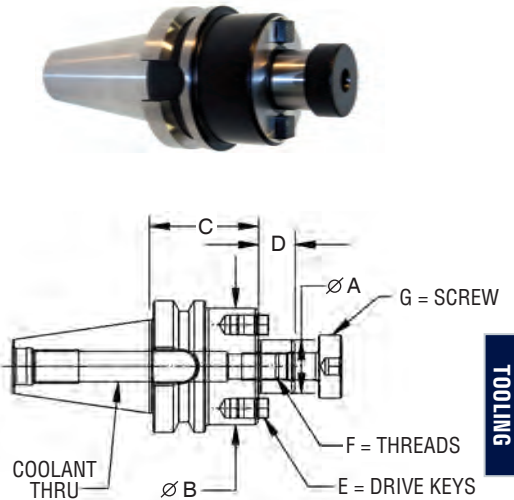
Briney Toolholder Features

- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.

SHELL MILL ADAPTERS

DUAL CONTACT PART NUMBER	STANDARD PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E KEY	F THREAD	G SCREW
—	BT40SM-075-138	.750	1.75	1.375	.68	.31	3/8-24	B5002
BDCBT40SM-075-200	—	.750	1.75	2.00	.68	.31	3/8-24	B5002
BDCBT40SM-100-200	—	1.000	2.19	2.00	.68	.38	1/2-20	B5003
—	BT40SM-100-206	1.000	2.19	2.06	.68	.38	1/2-20	B5003
BDCBT40SM-125-200	—	1.250	2.88	2.00	.68	.50	5/8-18	B5004
—	BT40SM-125-212	1.250	2.88	2.12	.68	.50	5/8-18	B5004
BDCBT40SM-150-200	—	1.500	3.81	2.00	.94	.62	3/4-16	B5005
—	BT40SM-150-240	1.500	3.81	2.40	.94	.62	3/4-16	B5005

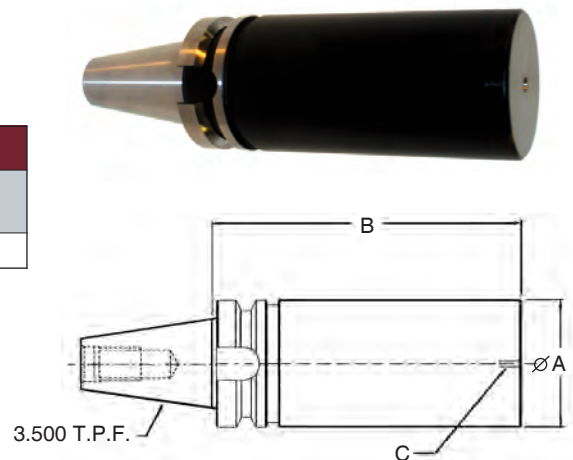
Order retention knobs separately, specify machine make and model #.
Includes shell screw and drive keys.



BLANK BARS

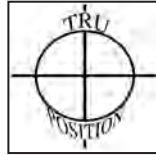
PART NUMBER	A O.D. DIA.	B GAUGE LENGTH	C TAPPED HOLE	MATERIAL
BT40BB-250-600	2.50	6.00	10-24 x 1/2"	PHT 4150

Order retention knobs separately, specify machine make and model #.

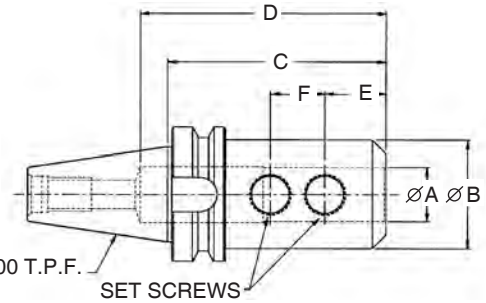


Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Black Oxide finish before grind
- Certified 8620 Material



For surround coolant option (see page 7)



END MILL ADAPTERS

PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
BT50E-038-300	.375	1.00	3.00	—	.750	—	3/8-24W	SINGLE END OR DOUBLE END
BT50E-050-300	.500	1.25	3.00	—	.875	—	7/16-20W	
BT50E-062-300	.625	1.50	3.00	—	.937	—	9/16-18W	
BT50E-075-300	.750	1.75	3.00	4.00	1.000	—	5/8-18W	
BT50E-088-400	.875	2.00	4.00	4.00	1.000	.81	5/8-18W	
BT50E-100-400	1.000	2.00	4.00	4.50	1.125	1.00	3/4-16W	SINGLE END
BT50E-125-400	1.250	2.50	4.00	2.50	1.125	1.00	3/4-16W	
BT50E-150-462	1.500	2.75	4.62	2.75	1.125	1.00	3/4-16W	
BT50E-200-525	2.000	3.75	5.25	3.50	1.406	1.50	1-14W	

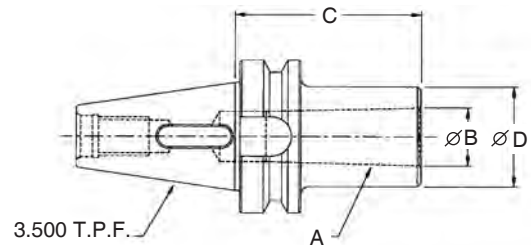
Order retention knobs separately, specify machine make and model #.

Tru Position built in on BT50E End Mill Adapters: refer to pages 40-41.

MORSE TAPER ADAPTERS

PART NUMBER	A MORSE TAPER	B MOUTH DIAMETER	C GAUGE LENGTH	D BARREL DIAMETER
BT50-MT2	2	.700	2.00	1.25
BT50-MT3	3	.938	2.50	1.62
BT50-MT4	4	1.231	3.75	2.00
BT50-MT5	5	1.748	4.81	2.75

Order retention knobs separately, specify machine make and model #.

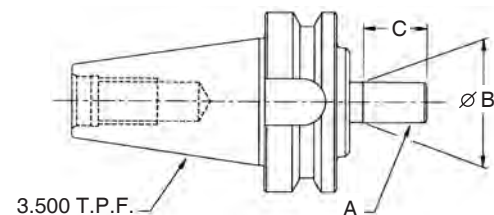
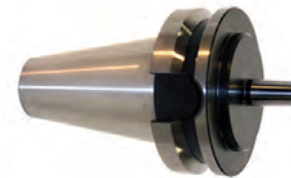


JACOBS TAPER ADAPTERS

PART NUMBER	A JACOBS TAPER	B J.T. GAUGE DIAMETER	C GAUGE LENGTH
BT50-JT3	3	.811	3.144
BT50-JT6	6	.676	2.968
BT50-JT33	33	.624	2.932

Order retention knobs separately, specify machine make and model #.

Drill chucks sold separately, pages 101 and 102.



Briney Toolholder Features

- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.

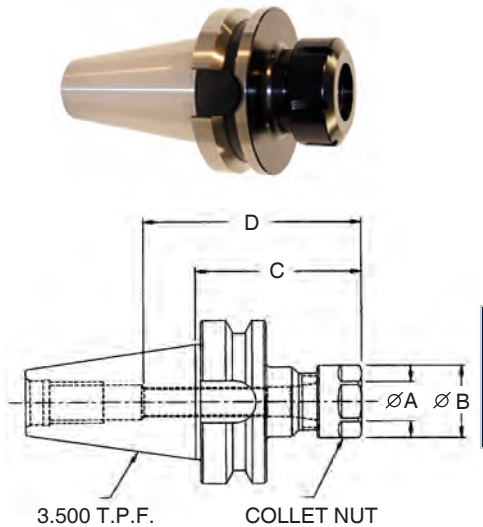
BR/ER COLLET CHUCKS								
PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BT50BR-16-532	BR16	.019-.406	1.10	5.32	3.00	BRCN-16	7/16-LH	BR16HW
BT50BR-20-532	BR20	.039-.512	1.34	5.32	3.00	BRCN-20	9/16-LH	BR20HW
BT50BR-32-532	BR32	.079-.787	1.97	5.32	3.00	BRCN-32	7/8-LH	BR32SW
BT50BR-40-315	BR40	.118-1.024	2.48	3.15	4.00	BRCN-40	1-1/8-LH	BR40SW

Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 80, 87, 88, 89, 90, 93, 94, 95, and 96.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Recommended tightening torque reference page 85.



BR/ER Collet Chucks are all balanced at 20,000 R.P.M. at G2.5 specification.

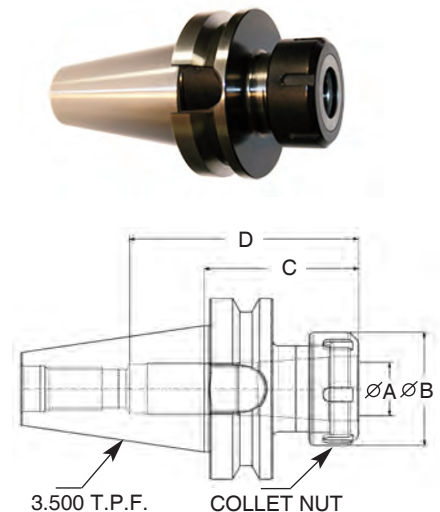
TG COLLET CHUCKS								
PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
BT50CH-100-350	BTG100	.094-1.000	2.44	3.50	4.75	BTGCN-100-II	1-1/8-LH	BTG100SW-II
BT50CH-100-600	BTG100	.094-1.000	2.44	6.00	4.15	BTGCN-100-II	1-1/8-LH	BTG100SW-II
BT50CH-150-350	BTG150	.500-1.500	3.25	3.50	4.50	BTGCN-150	1-5/8-LH	BTG150SW

Order retention knobs separately, specify machine make and model #.

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 81 and 97.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BTG100 - 75 ft/lbs. BTG150 - 90 ft/lbs.



Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Black Oxide finish before grind
- Laser etched for clear identification

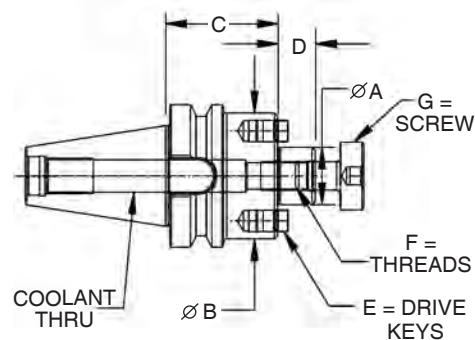
SHELL MILL ADAPTERS

PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E KEY	F THREAD	G SCREW
BT50SM-075-200	.750	1.75	2.00	.68	.31	3/8-24	B5002
BT50SM-100-200	1.000	2.19	2.00	.68	.38	1/2-20	B5003
BT50SM-125-200	1.250	2.88	2.00	.68	.50	5/8-18	B5004
BT50SM-150-240	1.500	3.88	2.40	.94	.62	3/4-16	B5005
BT50SM-200-350	2.000	4.88	3.50	.94	.75	1 - 14	B5006
BT50SM-250-350	2.500	4.88	3.50	1.125	1.00	1 - 14	B5007

Order retention knobs separately, specify machine make and model #.

Includes shell screw and drive key.

*Includes 4 5/8-11 tapped holes on a 4" bolt circle.

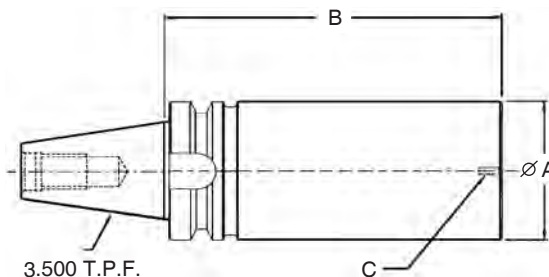


BT TOOLING

BLANK BARS

PART NUMBER	A O.D. DIA.	B GAUGE LENGTH	C TAPPED HOLE	MATERIAL
BT50BB-400-600	4.00	6.00	1/4-20 x 3/4"	PHT 4150

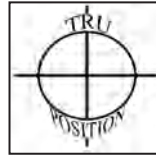
Order retention knobs separately, specify machine make and model #.



NMTB QC 30 SHANK

Briney Toolholder Features

- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.

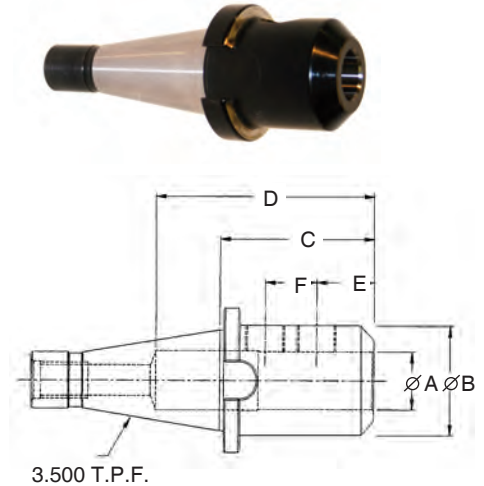


For surround coolant option (see page 7)

END MILL ADAPTERS

PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
NMTB30E-018-175	.1875	.688	1.75	*	.44	—	1/4-28W	SINGLE OR DOUBLE END
NMTB30E-025-175	.250	.875	1.75	*	.44	—	1/4-28W	
NMTB30E-038-175	.375	1.00	1.75	*	.75	—	3/8-24W	
NMTB30E-050-175	.500	1.25	1.75	3.12	.88	—	7/16-20W	SINGLE END ONLY
NMTB30E-062-175	.625	1.44	1.75	2.13	.94	—	9/16-18W	
NMTB30E-075-213	.750	1.75	2.13	2.25	1.00	—	5/8-18W	SINGLE END ONLY
NMTB30E-100-275	1.000	2.00	2.75	2.50	1.12	—	3/4-16W	
NMTB30E-125-375	1.250	2.50	3.75	2.50	1.12	1.00	3/4-16W	

All Briney NMTB toolholders are qualified for Erickson Tool Change System.
Tru Position built in on NMTB30E End Mill Adapters: refer to pages 40-41.

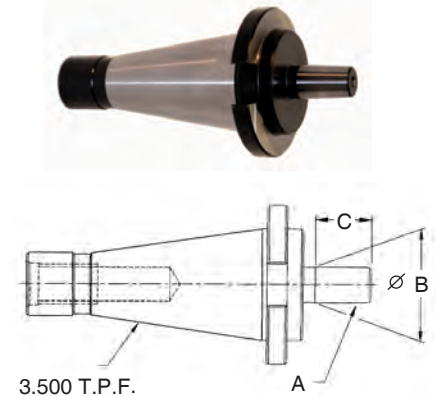


NMTB-QC
TOOLING

JACOBS TAPER ADAPTERS

PART NUMBER	A JACOBS TAPER	B J.T. GAUGE DIAMETER	C GAUGE LENGTH
NMTB30-JT2	2	.559	.88
NMTB30-JT3	3	.811	1.21
NMTB30-JT33	33	.624	1.00

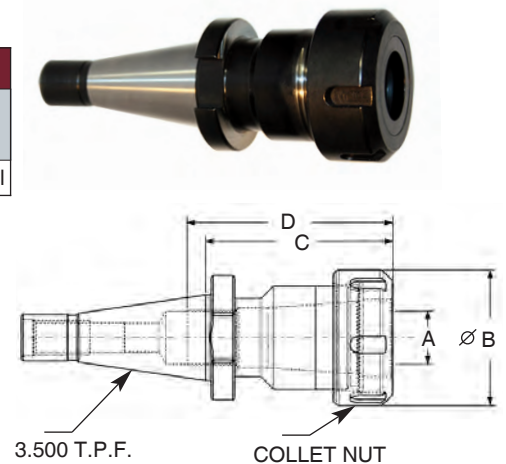
All Briney NMTB toolholders are qualified for Erickson Tool Change System.
 Drill chucks sold separately, pages 101 and 102.



TG COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
NMTB30CH-075-275	BTG075	.094-.750	2.08	2.75	3.06	BTGCN-075-II	13/16-LH	BTG075SW-II

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 81 and 97.
 NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.
 All Briney NMTB tool holders are qualified for Erickson Tool Change System.
 NOTE! Do not exceed the following torque recommendations: BTG75 - 60 ft/lbs.



[* Through holder to retention knob thread.]

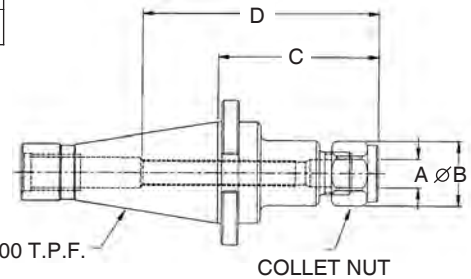
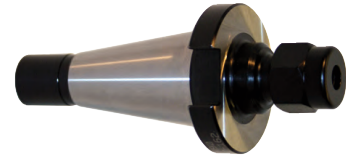
Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Laser etched for clear identification
- Certified 8620 Material

DOUBLE ANGLE COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
NMTB30DA-300-162	DA300	.031-.250	.860	1.62	2.24	DACN-300	5/16-LH	DA-30-W
NMTB30DA-200-300	DA200	.047-.390	1.13	3.00	3.80	DACN-200	7/16-LH	DA-20-W
NMTB30DA-180-300	DA300	.047-.750	1.70	3.00	3.12	DACN180	13/16-LH	DA-18-W

Includes collet nut and standard stop screw. Purchase collets and wrenches separately, pages 82 and 98. All Briney NMTB toolholders are qualified for Erickson Tool Change System.
NOTE! Do not exceed the following torque recommendations: DA300 - 20 ft/lbs. DA200 - 25 ft/lbs. DA180 - 45 ft/lbs.

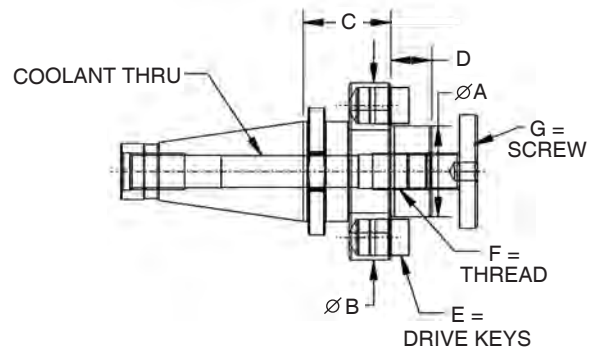
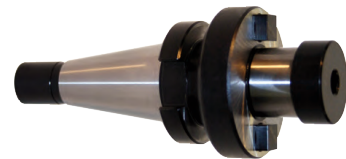


NMTB-QC
TOOLING

SHELL MILL ADAPTERS

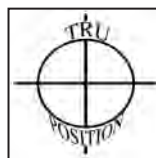
PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E KEY	F THREAD	G SCREW
NMTB30SM-075-131	.750	1.750	1.312	.687	.31	3/8-24	B5002
NMTB30SM-100-131	1.000	2.190	1.312	.687	.38	1/2-20	B5003
NMTB30SM-125-144	1.250	2.880	1.438	.687	.50	5/8-18	B5004

Includes shell screw and drive keys. All Briney NMTB toolholders are qualified for Erickson Tool Change System.



Briney Toolholder Features

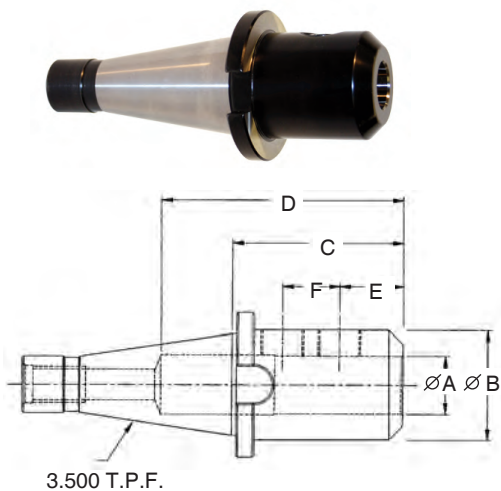
- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.



For surround coolant option (see page 7)

END MILL ADAPTERS

PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
NMTB40E-018-231	.1875	.688	2.31	*	.44	—	1/4-28W	SINGLE OR DOUBLE END
NMTB40E-025-231	.250	.875	2.31	*	.44	—	1/4-28W	
NMTB40E-038-231	.375	1.00	2.31	*	.74	—	3/8-24W	
NMTB40E-050-231	.500	1.25	2.31	*	.88	—	7/16-20W	
NMTB40E-062-231	.625	1.50	2.31	3.62	.94	—	9/16-18W	
NMTB40E-075-231	.750	1.75	2.31	4.00	1.00	—	5/8-18W	
NMTB40E-100-300	1.000	1.90	3.00	4.25	1.12	1.00	3/4-16W	SINGLE END ONLY
NMTB40E-125-306	1.250	2.50	3.06	2.50	1.12	1.00	3/4-16W	
NMTB40E-150-395	1.500	2.75	3.95	2.75	1.12	1.00	3/4-16W	

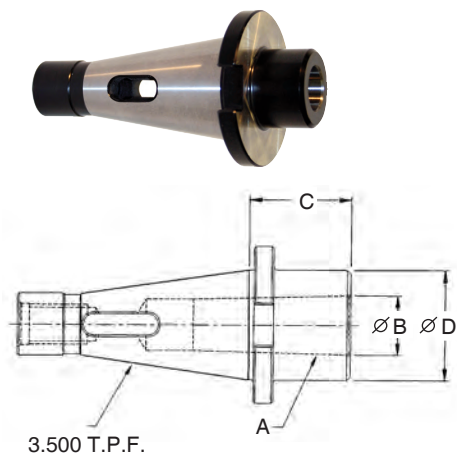


All Briney NMTB toolholders are qualified for Erickson Tool Change System.
Tru Position built in on NMTB40E End Mill Adapters: refer to pages 40-41.

NMTB-QC TOOLING

MORSE TAPER ADAPTERS

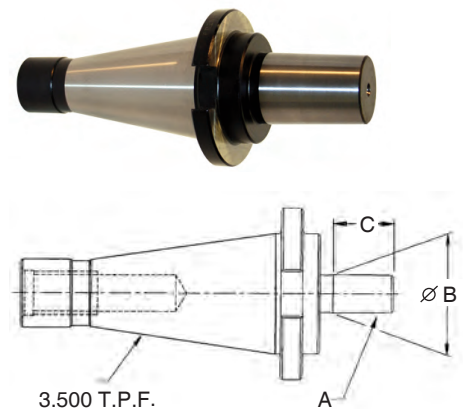
PART NUMBER	A MORSE TAPER	B MOUTH DIAMETER	C GAUGE LENGTH	D BARREL DIAMETER
NMTB40-MT2	2	.700	1.25	1.25
NMTB40-MT3	3	.938	1.62	1.75
NMTB40-MT4	4	1.231	3.50	2.00



All Briney NMTB toolholders are qualified for Erickson Tool Change System.

JACOBS TAPER ADAPTERS

PART NUMBER	A JACOBS TAPER	B J.T. GAUGE DIAMETER	C GAUGE LENGTH
NMTB40-JT2	2	.559	.88
NMTB40-JT3	3	.811	1.21
NMTB40-JT4	4	1.12	1.66
NMTB40-JT6	6	.676	1.00
NMTB40-JT33	33	.624	1.00



All Briney NMTB toolholders are qualified for Erickson Tool Change System.
 Drill chucks sold separately, pages 101 and 102.

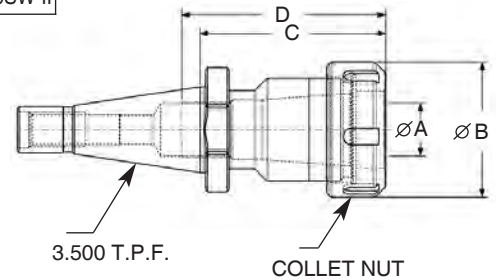
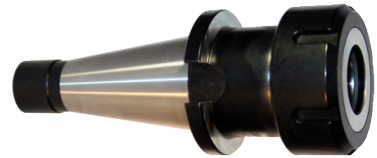
[* Through holder to retention knob thread.]

Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Black Oxide finish before grind
- Certified 8620 Material

TG COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
NMTB40CH-075-275	BTG075	.094-.750	2.08	2.75	3.06	BTGCN-075-II	13/16-LH	BTG075SW-II
NMTB40CH-100-300	BTG100	.094-1.000	2.44	3.00	3.68	BTGCN-100-II	1-1/8-LH	BTG100SW-II

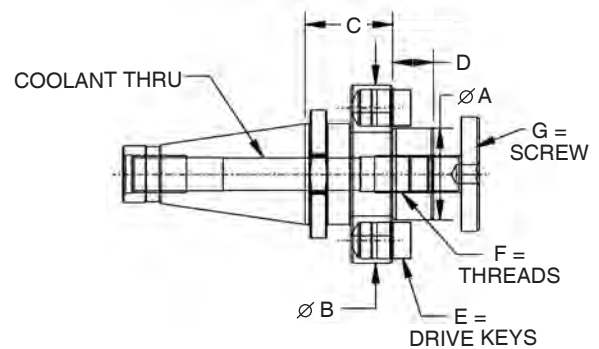
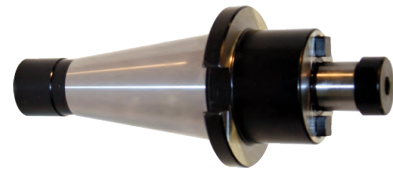


Includes collet nut and standard stop screw. Purchase collets separately, pages 81 and 97.
 All Briney NMTB toolholders are qualified for Erickson Tool Change System.
 NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.
 NOTE! Do not exceed the following torque recommendations:
 BTG75 - 60 ft/lbs. BTG100 - 75 ft/lbs.

NMTB-QC
TOOLING

SHELL MILL ADAPTERS

PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E KEY	F THREAD	G SCREW
NMTB40SM-075-150	.750	1.750	1.500	.687	.31	3/8-24	B5002
NMTB40SM-100-150	1.000	2.190	1.500	.687	.38	1/2-20	B5003
NMTB40SM-125-150	1.250	2.880	1.500	.687	.50	5/8-18	B5004
NMTB40SM-150-240	1.500	3.810	2.400	.937	.62	3/4-16	B5005

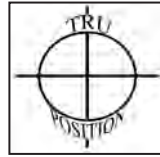


Includes shell screw and drive keys.
 All Briney NMTB toolholders are qualified for Erickson Tool Change System.



Briney Toolholder Features

- Extremely long toolholder life due to deepest case depths in industry
- Quality ensured thru ISO 9001:2008 policies
- Completely manufactured in the U.S.A.



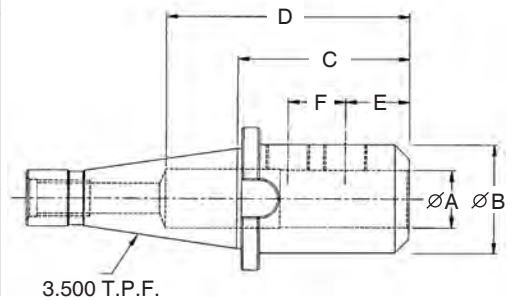
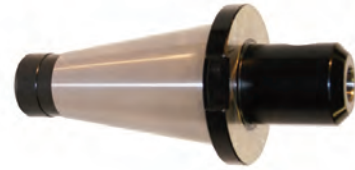
For surround coolant option (see page 7)

END MILL ADAPTERS

PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E S. SCREW LOCATION	F DIST. BTW S. SCREWS	SET SCREW SIZE	END MILL TYPE
NMTB50E-038-275	.375	1.00	2.75	*	.75	—	3/8-24W	SINGLE OR DOUBLE END
NMTB50E-050-275	.500	1.25	2.75	*	.88	—	7/16-20W	
NMTB50E-062-275	.625	1.50	2.75	*	.94	—	9/16-18W	
NMTB50E-075-275	.750	1.75	2.75	*	1.00	—	5/8-18W	
NMTB50E-100-275	1.000	2.00	2.75	4.50	1.12	—	3/4-16W	
NMTB50E-125-275	1.250	2.50	2.75	2.50	1.12	1.00	3/4-16W	SINGLE END
NMTB50E-150-350	1.500	2.75	3.50	2.75	1.12	1.00	3/4-16W	
NMTB50E-200-475	2.000	3.75	4.75	3.50	1.41	1.50	1"-14W	

All Briney NMTB toolholders are qualified for Erickson Tool Change System.

Tru Position built in on NMTB50E End Mill Adapters: refer to pages 40-41.

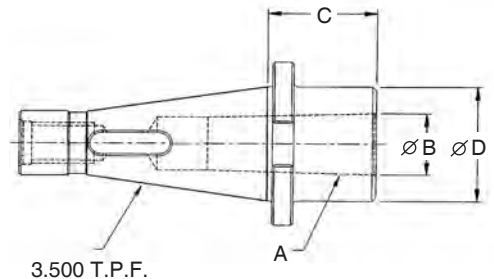
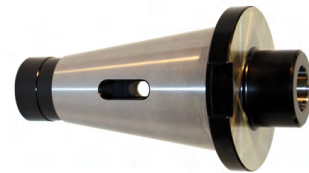


NMTB-QC
TOOLING

MORSE TAPER ADAPTERS

PART NUMBER	A MORSE TAPER	B MOUTH DIAMETER	C GAUGE LENGTH	D BARREL DIAMETER
NMTB50-MT2	2	.700	2.44	1.25
NMTB50-MT3	3	.938	1.62	1.62
NMTB50-MT4	4	1.231	3.75	2.00
NMTB50-MT5	5	1.748	3.75	2.75

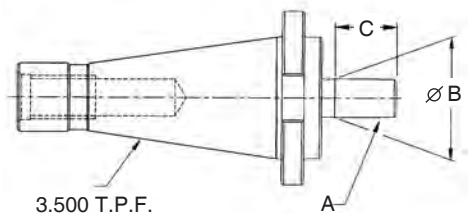
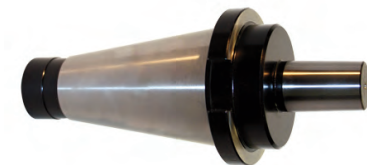
All Briney NMTB toolholders are qualified for Erickson Tool Change System.



JACOBS TAPER ADAPTERS

PART NUMBER	A JACOBS TAPER	B J.T. GAUGE DIAMETER	C GAUGE LENGTH
NMTB50-JT2	2	.559	.88
NMTB50-JT3	3	.811	1.21
NMTB50-JT4	4	1.12	1.66
NMTB50-JT6	6	.676	1.00
NMTB50-JT33	33	.624	1.00

All Briney NMTB toolholders are qualified for Erickson Tool Change System.
Drill chucks sold separately, pages 101 and 102.



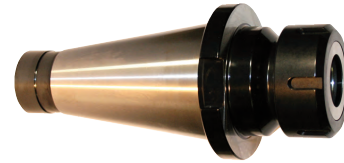
[* Through holder to retention knob thread.]

Briney Toolholder Features

- Ground tapers ranging from AT2 to AT3 for maximum spindle contact
- Laser etched for clear identification
- Certified 8620 Material

TG COLLET CHUCKS

PART NUMBER	COLLET SERIES	A COLLET RANGE	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
NMTB50CH-100-300	BTG100	.094-1.000	2.44	3.00	3.68	BTGCN-100-II	1-1/8-LH	BTG100SW-II



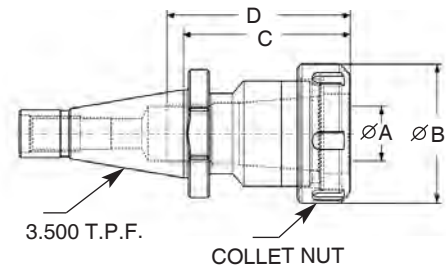
Includes collet nut and standard stop screw.

Purchase collets and wrenches separately, pages 81 and 97.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

All Briney NMTB toolholders are qualified for Erickson Tool Change System.

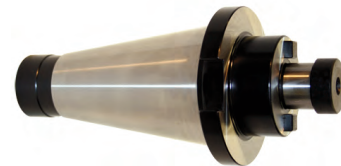
NOTE! Do not exceed the following torque recommendations: BTG100 - 75 ft/lbs.



NMTB-OC TOOLING

SHELL MILL ADAPTERS

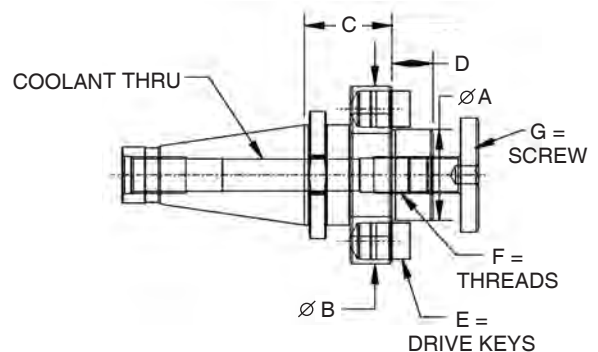
PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D LENGTH OF PILOT	E KEY	F THREAD	G SCREW
NMTB50SM-075-150	.750	1.75	1.50	.68	.31	3/8-24	B5002
NMTB50SM-100-150	1.000	2.19	1.50	.68	.38	1/2-20	B5003
NMTB50SM-125-150	1.250	2.88	1.50	.68	.50	5/8-18	B5004
NMTB50SM-150-240	1.500	3.81	2.40	.93	.62	3/4-16	B5005
* NMTB50SM-200-240	2.000	4.875	2.40	.93	.75	1 - 14	B5006
* NMTB50SM-250-240	2.500	4.875	2.40	1.125	1.00	1 - 14	B5007



Includes shell screw and drive keys.

All Briney NMTB toolholders are qualified for Erickson Tool Change System.

*Includes 4 5/8-11 tapped holes on a 4" bolt circle.



HSK 63A SHANK

All HSK tooling is balanced at a G2.5 specification. Forms of HSK "A thru F" have different R.P.M. values. See specific catalog page for details. Choose Briney HSK for maximum rigidity in high speed machining. It's the pinnacle of toolholder rigidity, concentricity and consistent position accuracy.

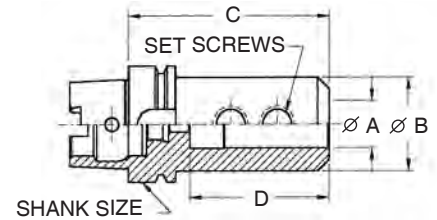
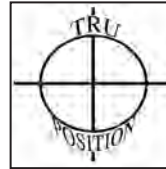
HSK 63A tooling is balanced at 20,000 R.P.M. at G2.5 specification.

Select the size and style you need from HSK25 thru HSK125 sizes and styles A thru F from stock or manufactured to order.

For surround coolant option (see page 7)

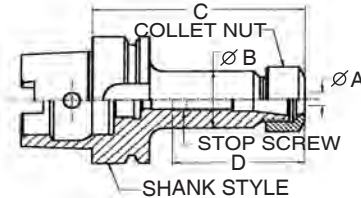
END MILL ADAPTERS

PART NUMBER	SHANK SIZE	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E SET SCREW
HSK63AE-018-236	63A	.1875	.688	2.362	1.88	1/4-28W
HSK63AE-025-236	63A	.2500	.875	2.362	1.81	1/4-28W
HSK63AE-038-315	63A	.3750	1.00	3.150	1.90	3/8-24W
HSK63AE-050-354	63A	.5000	1.25	3.543	2.53	7/16-20W
HSK63AE-062-394	63A	.6250	1.50	3.937	2.75	9/16-18W
HSK63AE-075-394	63A	.7500	1.75	3.937	2.75	5/8-18W
HSK63AE-100-433	63A	1.000	2.00	4.330	3.00	3/4-16W
HSK63AE-125-433	63A	1.250	2.50	4.330	2.50	3/4-16W



Order coolant tubes separately, page 28.

Tru Position built in on HSK63A & HSK100A End Mill Adapters, refer to pages 40-41.



BR/ER COLLET CHUCK ADAPTERS

PART NUMBER	SHANK SIZE	A COLLET RANGE IN./MM	COLLET SERIES	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
HSK63ABR-16-65M	HSK63A	.019-.406/5-10	BR16	1.1024 [28]	2.559/65	2.0078 [51]	BRCN16	—	BR16HW
HSK63ABR-16-100M	HSK63A	.019-.406/5-10	BR16	1.1024 [28]	3.937/100	2.0078 [51]	BRCN16	7/16 LH	BR16HW
HSK63ABR-16-120M	HSK63A	.019-.406/5-10	BR16	1.1024 [28]	4.724/120	2.0078 [51]	BRCN16	7/16 LH	BR16HW
HSK63ABR-16-160M	HSK63A	.019-.406/5-10	BR16	1.1024 [28]	6.299/160	2.0078 [51]	BRCN16	7/16 LH	BR16HW
HSK63ABR-20-70M	HSK63A	.039-.512/1-13	BR20	1.3385 [34]	2.756/70	2.1654 [55]	BRCN20	—	BR20HW
HSK63ABR-20-100M	HSK63A	.039-.512/1-13	BR20	1.3385 [34]	3.937/100	2.1654 [55]	BRCN20	9/16 LH	BR20HW
HSK63ABR-20-120M	HSK63A	.039-.512/1-13	BR20	1.3385 [34]	4.724/120	2.1654 [55]	BRCN20	9/16 LH	BR20HW
HSK63ABR-20-170M	HSK63A	.039-.512/1-13	BR20	1.3385 [34]	6.693/170	2.1654 [55]	BRCN20	9/16 LH	BR20HW
HSK63ABR-25-80M	HSK63A	.039-.630/1-16	BR25	1.6535 [42]	3.150/80	2.3622 [60]	BRCN25	M18 LH	BR25SW
HSK63ABR-25-120M	HSK63A	.039-.630/1-16	BR25	1.6535 [42]	4.724/120	2.3622 [60]	BRCN25	M18 LH	BR25SW
HSK63ABR-25-175M	HSK63A	.039-.630/1-16	BR25	1.6535 [42]	6.889/175	2.3622 [60]	BRCN25	M18 LH	BR25SW
HSK63ABR-32-80M	HSK63A	.079-.787/2-20	BR32	1.9685 [50]	3.937/80	2.6969 [68.5]	BRCN32	7/8 LH	BR32SW
HSK63ABR-32-100M	HSK63A	.079-.787/2-20	BR32	1.9685 [50]	3.937/100	2.6969 [68.5]	BRCN32	7/8 LH	BR32SW
HSK63ABR-32-130M	HSK63A	.079-.787/2-20	BR32	1.9685 [50]	5.118/130	2.6969 [68.5]	BRCN32	7/8 LH	BR32SW
HSK63ABR-32-180M	HSK63A	.079-.787/2-20	BR32	1.9685 [50]	7.087/180	2.6969 [68.5]	BRCN32	7/8 LH	BR32SW
HSK63ABR-40-100M	HSK63A	.118-1.024/3-26	BR40	2.4803 [63]	3.937/100	2.7559 [70]	BRCN40	1-1/8 LH	BR40SW
HSK63ABR-40-160M	HSK63A	.118-1.024/3-26	BR40	2.4803 [63]	6.299/160	2.7559 [70]	BRCN40	1-1/8 LH	BR40SW

Purchase collets and wrenches separately, pages 80, 87, 88, 89, 90, 91, 92, 93, 94, 95 and 96.

Order coolant tubes separately, page 28.

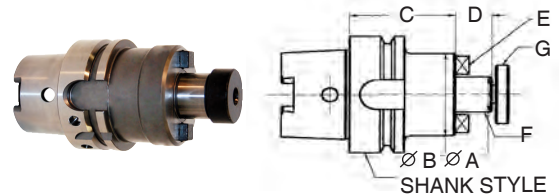
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Recommended tightening torque reference page 85.

HSK TOOLING & ACC.

SHELL MILL ADAPTERS

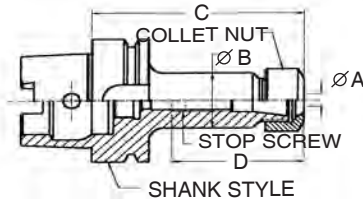
PART NUMBER	SHANK SIZE	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E KEY	F THREAD	G SCREW
HSK63ASM-075-197	HSK63A	.7500	1.750	1.968	.68	.31	3/8-24	B5002
HSK63ASM-100-225	HSK63A	1.000	2.190	2.250	.68	.38	1/2-20	B5003
HSK63ASM-125-216	HSK63A	1.250	2.880	2.165	.68	.50	5/8-18	B5004



Order coolant tubes separately, page 28.

HSK 80A SHANK

HSK 80A tooling is balanced at 20,000 R.P.M. at G2.5 specification.



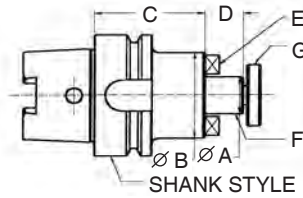
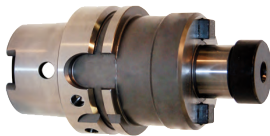
BR/ER COLLET CHUCK ADAPTERS

PART NUMBER	SHANK SIZE	A COLLET RANGE IN./MM	COLLET SERIES	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
HSK80ABR-16-100M	HSK80A	.019-.406/5-10	BR16	1.1024 [28]	3.937 [100]	2.0078 [51]	BRCN16	7/16 LH	BR16HW
HSK80ABR-25-100M	HSK80A	.039-.630/1-16	BR25	1.654 [42]	3.937 [100]	2.362 [60]	BRCN25	M18 LH	BR25SW
HSK80ABR-32-100M	HSK80A	.079-.787/2-20	BR32	1.969 [50]	3.937 [100]	2.697 [68.5]	BRCN32	7/8 LH	BR32SW

Purchase collets and wrenches separately, pages 80, 87, 88, 89, 90, 91, 92, 93, 94, 95 and 96.
Order coolant tubes separately, page 28.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.
NOTE! Recommended tightening torque reference page 85.

HSK TOOLING & ACC.



SHELL MILL ADAPTERS

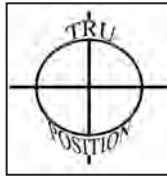
PART NUMBER	SHANK SIZE	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E KEY	F THREAD	G SCREW
HSK80ASM-075-200	HSK80A	.7500	1.750	2.000	.68	.31	3/8-24	B5002
HSK80ASM-100-216	HSK80A	1.000	2.750	2.165	.68	.38	1/2-20	B5003
HSK80ASM-125-216	HSK80A	1.250	2.880	2.165	.68	.50	5/8-18	B5004

Order coolant tubes separately, page 28.



HSK 100A SHANK

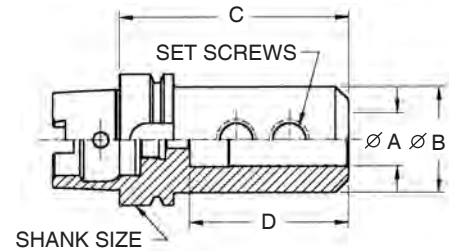
HSK 100A tooling is balanced at 20,000 R.P.M. at G2.5 specification.



For surround coolant option (see page 7)

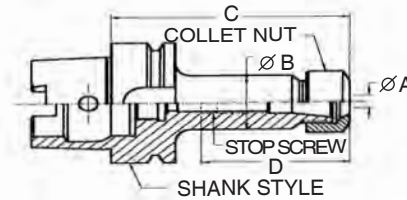
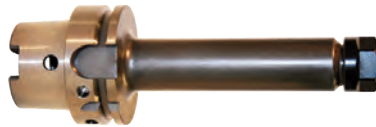
END MILL ADAPTERS

PART NUMBER	SHANK SIZE	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E SET SCREWS
HSK100AE-038-394	100A	.3750	1.00	3.937	1.90	3/8-24W
HSK100AE-050-394	100A	.5000	1.25	3.937	2.53	7/16-20W
HSK100AE-062-394	100A	.6250	1.50	3.937	2.75	9/16-18W
HSK100AE-075-433	100A	.7500	1.75	4.330	2.75	5/8-18W
HSK100AE-100-472	100A	1.000	2.00	4.724	3.00	3/4-16W
HSK100AE-125-472	100A	1.250	2.50	4.724	2.50	3/4-16W
HSK100AE-150-472	100A	1.500	2.75	4.724	2.75	3/4-16W



Order coolant tubes separately, page 28.

Tru Position built in on HSK63A & HSK100A End Mill Adapters, refer to pages 40-41.



HSK ACCESSORIES

BR/ER COLLET CHUCK ADAPTERS

PART NUMBER	SHANK SIZE	A COLLET RANGE IN./MM	COLLET SERIES	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	COLLET NUT	STOP SCREW	COLLET NUT WRENCH
HSK100ABR-16-394	HSK100A	.019-.406/5-10	BR16	1.1024 [28]	3.937/100	2.0078 [51]	BRCN16	7/16 LH	BR16HW
HSK100ABR-32-394	HSK100A	.079-.787/2-20	BR32	1.9685 [50]	3.937/100	2.0078 [51]	BRCN32	7/8 LH	BR32SW
HSK100ABR-40-472	HSK100A	.118-1.024/3-26	BR40	2.4803 [63]	4.724/120	3.2480 [82.5]	BRCN40	1-1/8 LH	BR40SW

Purchase collets and wrenches separately, pages 80, 87, 88, 89, 90, 91, 92, 93, 94, 95 and 96.

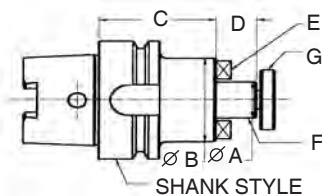
Order coolant tubes separately, page 28.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Recommended tightening torque reference page 85.

SHELL MILL ADAPTERS

PART NUMBER	SHANK SIZE	A ARBOR DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	E KEY	F THREAD	G SCREW
HSK100ASM-075-197	HSK100A	.7500	1.750	1.968	.68	.31	3/8-24	B5002
HSK100ASM-100-216	HSK100A	1.000	2.750	2.165	.68	.38	1/2-20	B5003
HSK100ASM-125-216	HSK100A	1.250	2.880	2.165	.68	.50	5/8-18	B5004
HSK100ASM-150-236	HSK100A	1.500	3.810	2.362	.93	.62	3/4-16	B5005



Order coolant tubes separately, page 28.

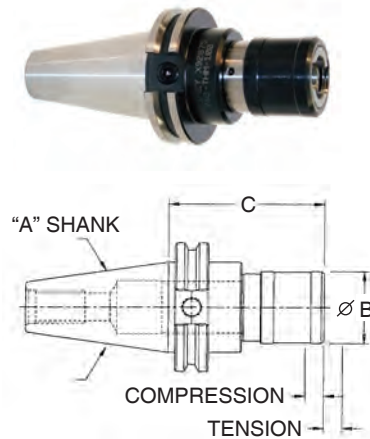


QUICK CHANGE TAPPING SYSTEM T/C

CAT TENSION/COMPRESSION TAP HOLDERS

PART NUMBER	CHUCK SIZE	A SHANK	TAP SIZE RANGE	B O.D.	C GAUGE LENGTH	TENSION	COMPRESSION
BWFLK1-V40	#1	CAT40	0-9/16 hand, 1/8 pipe	1.42	2.955	.300	.300
BWFLK2-V40	#2	CAT40	5/16-7/8 hand, 1/4-1/2 pipe	2.09	3.855	.490	.490
BWFLK1-V50	#1	CAT50	0-9/16 hand, 1/8 pipe	1.42	2.955	.300	.300
BWFLK2-V50	#2	CAT50	5/16-7/8 hand, 1/4-1/2 pipe	2.09	3.855	.490	.490
BWFLK3-V50	#3	CAT50	13/16-1-3/8 hand, 3/4-1" pipe	3.07	5.780	.790	.790

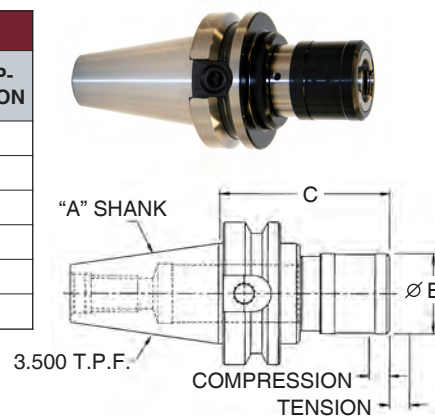
NOTE: All holders are a 2 piece modular system. Purchase tap adapters separately (page 76 and 77). Tap holder consists of 1 CAT Shank Tap Holder (refer to page 78) as well as 1 Tension/Compression Tap Chuck (refer to bottom of this page).



BT TENSION/COMPRESSION TAP HOLDERS

PART NUMBER	CHUCK SIZE	A SHANK	TAP SIZE RANGE	B O.D.	C GAUGE LENGTH	TENSION	COMPRESSION
BWFLK1-BT30	#1	BT30	0-9/16 hand, 1/8 pipe	1.42	3.580	.300	.300
BWFLK1-BT40	#1	BT40	0-9/16 hand, 1/8 pipe	1.42	2.642	.300	.300
BWFLK2-BT40	#2	BT40	5/16-7/8 hand, 1/4-1/2 pipe	2.09	3.542	.490	.490
BWFLK1-BT50	#1	BT50	0-9/16 hand, 1/8 pipe	1.42	3.255	.300	.300
BWFLK2-BT50	#2	BT50	5/16-7/8 hand, 1/4-1/2 pipe	2.09	4.355	.490	.490
BWFLK3-BT50	#3	BT50	13/16-1-3/8 hand, 3/4-1" pipe	3.07	5.655	.790	.790

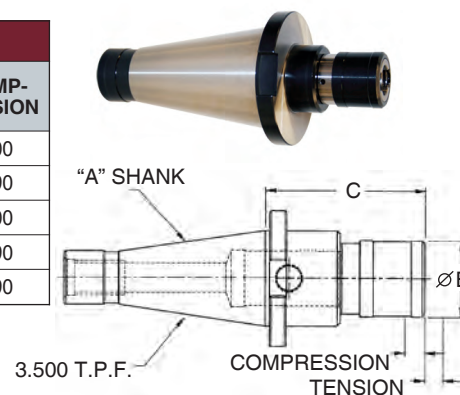
NOTE: All holders are a 2 piece modular system. Purchase tap adapters separately (pages 76 and 77). Tap holder consists of 1 BT Shank Tap Holder (refer to page 78) as well as 1 Tension/Compression Tap Chuck (refer to bottom of this page).



NMTB QC TENSION/COMPRESSION TAP HOLDERS

PART NUMBER	CHUCK SIZE	A SHANK	TAP SIZE RANGE	B O.D.	C GAUGE LENGTH	TENSION	COMPRESSION
BWFLK1-NMTB40	#1	NMTB40	0-9/16 hand, 1/8-1/4 pipe	1.42	2.96	.300	.300
BWFLK2-NMTB40	#2	NMTB40	5/16-7/8 hand, 1/4-1/2 pipe	2.09	3.86	.490	.490
BWFLK1-NMTB50	#1	NMTB50	0-9/16 hand, 1/8-1/4 pipe	1.42	2.96	.300	.300
BWFLK2-NMTB50	#2	NMTB50	5/16-7/8 hand, 1/4-1/2 pipe	2.09	3.86	.490	.490
BWFLK3-NMTB50	#3	NMTB50	13/16-1-3/8 hand, 3/4-1" pipe	3.07	5.16	.790	.790

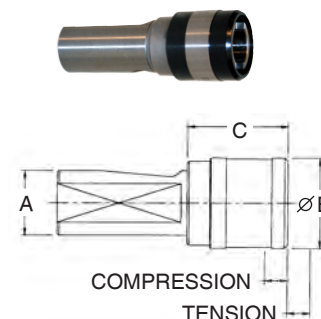
NOTE: All holders are a 2 piece modular system. Purchase tap adapters separately (pages 76 and 77). Tap holder consists of 1 NMTB QS Shank Tap Holder (refer to page 78) as well as 1 Tension/Compression Tap Chuck (refer to bottom of this page).



TENSION/COMPRESSION STRAIGHT SHANK TAP CHUCKS

PART NUMBER	CHUCK SIZE	A SHANK	TAP SIZE RANGE	B O.D.	C GAUGE LENGTH	TENSION	COMPRESSION
BWFLK1-1SS	#1	1.00	0-9/16 hand, 1/8 pipe	1.42	1.580	.300	.300
BWFLK2-1SS	#2	1.00	5/16-7/8 hand, 1/4-1/2 pipe	2.09	2.480	.490	.490
BWFLK3-1.50SS	#3	1.50	13/16-1-3/8 hand, 3/4-1" pipe	3.07	3.780	.790	.790

NOTE: Purchase tap adapters separately, pages 76 and 77.



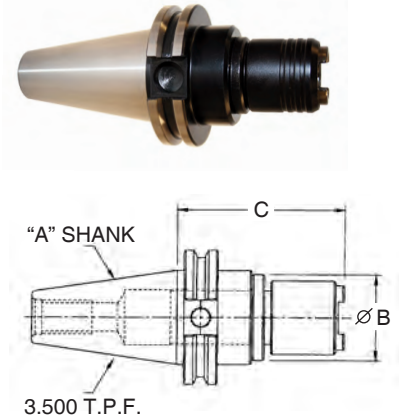
Proper Tapping System identification is based on the capability of machine.
Please consult owners manual for proper choices.



CAT RIGID TAP HOLDERS

PART NUMBER	CHUCK SIZE	A SHANK	TAP SIZE RANGE	B O.D.	C GAUGE LENGTH
BWF1-V40	#1	CAT40	0-9/16 hand, 1/8 pipe	1.42	2.955
BWF2-V40	#2	CAT40	5/16-7/8 hand, 1/4-1/2 pipe	2.09	3.855
BWF1-V50	#1	CAT50	0-9/16 hand, 1/8 pipe	1.42	2.955
BWF2-V50	#2	CAT50	5/16-7/8 hand, 1/4-1/2 pipe	2.09	3.855
BWF3-V50	#3	CAT50	13/16-1-3/8 hand, 3/4-1" pipe	3.07	5.780

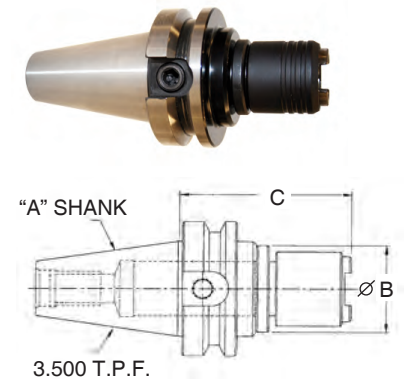
NOTE: All holders are a 2 piece modular system. Purchase tap adapters separately (pages 76 and 77). Tap holder consists of 1 CAT Shank Tap Holder (refer to page 78) as well as 1 Rigid Tap Chuck (refer to bottom of this page).



BT RIGID TAP HOLDERS

PART NUMBER	CHUCK SIZE	A SHANK	TAP SIZE RANGE	B O.D.	C GAUGE LENGTH
BWF1-BT30	#1	BT30	0-9/16 hand, 1/8 pipe	1.42	3.580
BWF1-BT40	#1	BT40	0-9/16 hand, 1/8 pipe	1.42	2.642
BWF2-BT40	#2	BT40	5/16-7/8 hand, 1/4-1/2 pipe	2.09	3.542
BWF1-BT50	#1	BT50	0-9/16 hand, 1/8 pipe	1.42	3.255
BWF2-BT50	#2	BT50	5/16-7/8 hand, 1/4-1/2 pipe	2.09	4.355
BWF3-BT50	#3	BT50	13/16-1-3/8 hand, 3/4-1" pipe	3.07	5.655

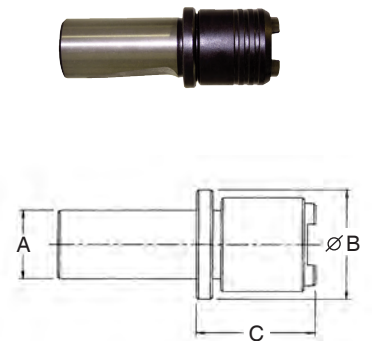
NOTE: All holders are a 2 piece modular system. Purchase tap adapters separately (pages 76 and 77). Tap holder consists of 1 BT Shank Tap Holder (refer to page 78) as well as 1 Rigid Tap Chuck (refer to bottom of this page).



RIGID STRAIGHT SHANK TAP CHUCKS

PART NUMBER	CHUCK SIZE	A SHANK	TAP SIZE RANGE	B O.D.	C GAUGE LENGTH
BWF1-1SS	#1	1.00	0-9/16 hand, 1/8 pipe	1.42	1.457
BWF2-1SS	#2	1.00	5/16-7/8 hand, 1/4-1/2 pipe	2.09	2.126
BWF3-1.50SS	#3	1.50	13/16-1-3/8 hand, 3/4-1" pipe	3.07	3.350

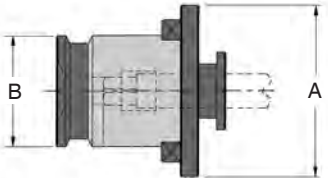
NOTE: All holders are 2 piece modular system. Purchase tap adapters separately, pages 76 and 77 .



Proper Tapping System identification is based on the capability of machine.
Please consult owners manual for proper choices.



TAP ADAPTERS - ANSI (U.S. STANDARD TAPS)

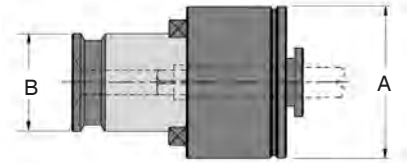


How to Order:

Select the positive drive **OR** torque control style and order by part number. Adapter size and holder size must match.

Positive Drive Adapter, for positive depth control. Quick Change, change taps or tap sizes in 2 seconds, by hand, without the aid of any tools.

Torque Control Adapter, with safety clutch, protects against breakage of worn taps and when tap bottoms out. Quick Change, change taps or tap sizes in 2 seconds, by hand, without the aid of any tools.

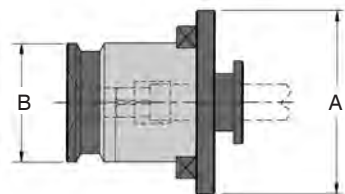


TAPPING SYSTEMS

POSITIVE DRIVE			TORQUE CONTROL			SERIES	ADAPTER TAP SIZE	SHANK DIA.	SQUARE DIA.
PART NUMBER	A	B	PART NUMBER	A	B				
BWE1-6	1.18"	.748"	BWES1-6	1.18"	.748"	#1	#0-#6 (M1.6-M3.5)	.141"	.110"
BWE1-8			#8 (M4)				.168"	.131"	
BWE1-10			#10 (M4.5, M5)				.194"	.152"	
BWE1-12			#12				.220"	.165"	
BWE1-1/4			1/4 (M6, M6.3)				.255"	.191"	
BWE1-5/16			5/16 (M7, M8)				.318"	.238"	
BWE1-3/8			3/8 (M10)				.381"	.286"	
BWE1-7/16			7/16				.323"	.242"	
BWE1-1/2			1/2 (M12, M12.5)				.367"	.275"	
BWE1-9/16			9/16 (M14)				.429"	.322"	
BWER1-1/8SSPT			1/8 S.S.				.312"	.234"	
BWER1-1/8LSPT			1/8 L.S.				.437"	.328"	
BWE1-0012			12 pc. set (contains 1 each of above)					BWES1-0012	12 pc. set (contains 1 each of above)
BWE2-5/16	1.89"	1.22"	BWES2-5/16	1.89"	1.22"	#2	5/16 (M7, M8)	.318"	.238"
BWE2-3/8			3/8 (M10)				.381"	.286"	
BWE2-7/16			7/16				.323"	.242"	
BWE2-1/2			1/2 (M12, M12.5)				.367"	.275"	
BWE2-9/16			9/16 (M14)				.429"	.322"	
BWE2-5/8			5/8 (M16)				.480"	.360"	
BWE2-11/16			11/16 (M18)				.542"	.406"	
BWE2-3/4			3/4				.590"	.442"	
BWE2-13/16			13/16 (M20)				.652"	.489"	
BWE2-7/8			7/8 (M22)				.697"	.523"	
BWER2-1/4PT			1/4PT				.562"	.421"	
BWER2-3/8PT			3/8PT				.700"	.531"	
BWER2-1/2PT			1/2PT				.687"	.515"	
BWE2-0013	13 pc. set (contains 1 each of above)		BWES2-0013	13 pc. set (contains 1 each of above)		#2			
BWE3-13/16	2.76"	1.89"	BWES3-13/16	2.76"	1.89"	#3	13/16 (M20)	.652"	.489"
BWE3-7/8			7/8 (M22)				.697"	.523"	
BWE3-15/16			15/16 (M24)				.760"	.570"	
BWE3-1			1 (M25)				.800"	.600"	
BWE3-1-1/8			1-1/8 (M27)				.896"	.672"	
BWE3-1-1/4			1-1/4 (M30)				1.021"	.766"	
BWE3-1-3/8			1-3/8 (M33)				1.108"	.831"	
BWER3-3/4PT			3/4PT				.906"	.679"	
BWER3-1PT			1PT				1.125"	.843"	
BWE3-0009			9 pc. set (contains 1 each of above)					BWES3-0009	9 pc. set (contains 1 each of above)

Tap Chucks sold separately on pages 74 and 75.



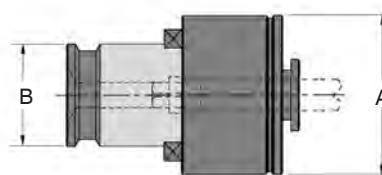


How to Order:

Select the positive drive **OR** torque control style and order by part number. Adapter size and holder size must match.

Positive Drive Adapter, for positive depth control. Quick Change, change taps or tap sizes in 2 seconds, by hand, without the aid of any tools.

Torque Control Adapter, with safety clutch, protects against breakage of worn taps and when tap bottoms out. Quick Change, change taps or tap sizes in 2 seconds, by hand, without the aid of any tools.



POSITIVE DRIVE			TORQUE CONTROL			SERIES	ADAPTER TAP SIZE	SHANK DIA.	SQUARE DIA.					
PART NUMBER	A	B	PART NUMBER	A	B									
BWE1-M3DIN371	1.18"	.748"	BWES1-M3DIN371	1.18"	.748"	#1	M3 (DIN371)	.137"	.106"					
BWE1-M4DIN371			M5 (DIN376)											
BWE1-M5DIN371			M4 (DIN371)				.177"	.133"						
BWE1-M6DIN371			M6 (DIN376)											
BWE1-M8DIN371			M5 & M6 (DIN371)				.236"	.192"						
BWE1-M8DIN376			M8 (DIN376)											
BWE1-M10DIN371			M5 & M6 (DIN371)				.236"	.192"						
BWE1-M10DIN376			M8 (DIN376)											
BWE1-M12DIN376			M8 (DIN376)				.236"	.192"						
BWE1-M14DIN376			M8 (DIN376)											
BWE2-M6DIN371			1.89"				1.22"	BWES2-M6DIN371	1.89"	1.22"	#2	M5 & M6 (DIN371)	.236"	.192"
BWE2-M8DIN371								M8 (DIN371)						
BWE2-M8DIN376								M8 (DIN376)				.236"	.192"	
BWE2-M10DIN371								M10 (DIN371)						
BWE2-M10DIN376	M10 (DIN376)	.275"		.216"										
BWE2-M12DIN376	M12 (DIN376)													
BWE2-M14DIN376	M12 (DIN376)	.354"		.275"										
BWE2-M16DIN376	M14 (DIN376)													
BWE2-M18DIN376	M16 (DIN376)	.472"		.354"										
BWE2-M20DIN376	M18 (DIN376)													
BWE3-M14DIN376	2.76"	1.89"		BWES3-M14DIN376	2.76"	1.89"		#3				M14 (DIN376)	.433"	.354"
BWE3-M16DIN376				M16 (DIN376)										
BWE3-M18DIN376				M18 (DIN376)								.551"	.433"	
BWE3-M20DIN376				M20 (DIN376)										
BWE3-M22DIN376			M20 (DIN376)	.629"			.472"							
BWE3-M24DIN376			M22 (DIN376)											
BWE3-M27DIN376			M24 (DIN376)	.708"			.570"							
BWE3-M30DIN376			M27 (DIN376)											
BWE3-M33DIN376			M30 (DIN376)	.866"			.708"							
			M33 (DIN376)											

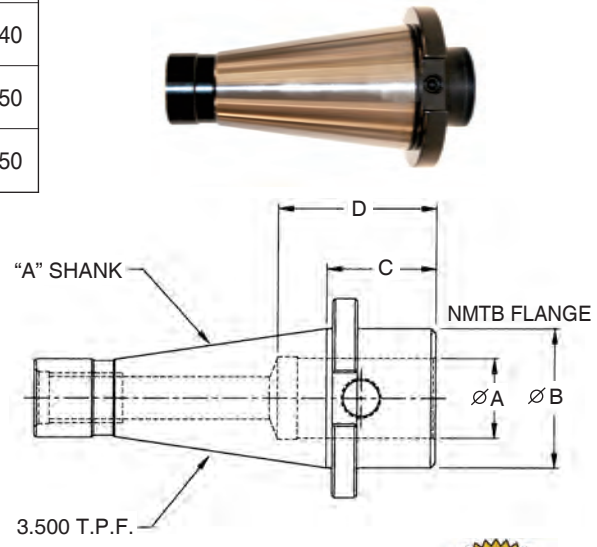
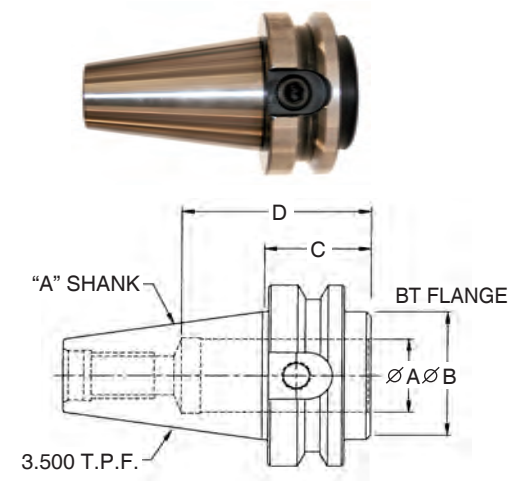
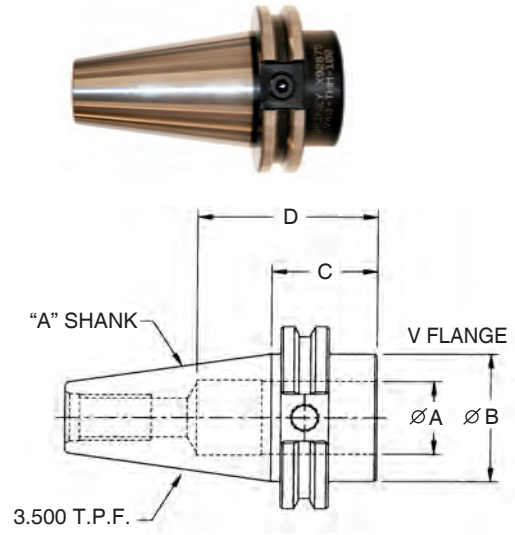
TAPPING SYSTEMS

Tap Chucks sold separately on pages 74 and 75.

TAP CHUCK ADAPTERS

CAT FLANGE, BT FLANGE, AND NMTB FLANGE TAPPING HEAD HOLDERS

PART NUMBER	A I.D. DIA.	B O.D. DIA.	C GAUGE LENGTH	D TOOL DEPTH	SET SCREW	SHANK
V40-THM-075	.750	1.375	2.00	2.40	1/2-20W	CAT40
V40-THM-100	1.00	1.75	1.38	2.35	1/2-20W	CAT40
V50-THM-075	.750	2.75	1.38	2.40	1/2-20W	CAT50
V50-THM-100	1.00	2.75	1.38	2.20	1/2-20W	CAT50
V50-THM-150	1.50	2.75	1.38	3.50	1/2-20W	CAT50
BT30-THM-075	.750	2.00	2.00	2.40	1/2-20W	BT30
BT30-THM-100	1.00	2.00	2.33	2.13	1/2-20W	BT30
BT40-THM-075	.750	1.75	1.38	2.40	1/2-20W	BT40
BT40-THM-100	1.00	1.75	1.38	2.20	1/2-20W	BT40
BT50-THM-075	.750	2.75	1.88	2.40	1/2-20W	BT50
BT50-THM-100	1.00	2.75	1.88	2.20	1/2-20W	BT50
BT50-THM-150	1.50	2.75	1.88	3.60	1/2-20W	BT50
NMTB40-THM-100	1.00	1.75	1.38	2.20	1/2-20W	NMTB40
NMTB50THM-100	1.00	2.75	1.38	2.20	1/2-20W	NMTB50
NMTB50THM-150	1.50	2.75	1.38	3.60	1/2-20W	NMTB50

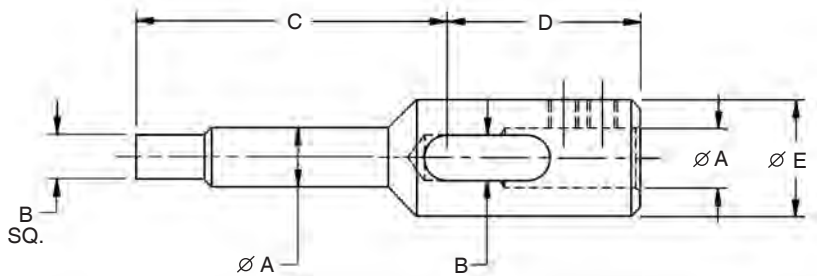


Holds either Tension/Compression or Rigid Tap Chucks (see bottom of pages: 74 & 75).

TAPPING SYSTEMS



TAP EXTENSIONS



TAP EXTENSIONS

PART NUMBER	TAP SIZE	A I.D. DIA.	B SLOT WIDTH	C SHANK LENGTH	D GAUGE LENGTH	E O.D. DIA.
BT0-6-200	#0 - #6	.141	.120	2.00	1.04	.50
BT-8-200	#8	.168	.131	2.00	1.03	.50
BT-10-200	#10	.194	.162	2.00	1.11	.50
BT-250-200	1/4	.255	.201	2.00	1.18	.75
BT-312-200	5/16	.318	.248	2.00	1.14	.75
BT-375-200	3/8	.381	.296	2.00	1.18	.75
BT-437-200	7/16	.323	.252	2.00	1.33	.75
BT-500-200	1/2	.367	.285	2.00	1.28	.75
BT-562-300	9/16	.429	.332	3.00	1.42	.75
BT-625-300	5/8	.480	.370	3.00	1.51	1.12
BT-750-300	3/4	.590	.452	3.00	1.63	1.12
BT-875-300	7/8	.697	.533	3.00	2.15	1.12
BPT125S-200	1/8 PIPE SS	.312	.244	2.00	1.15	.75
BPT125L-200	1/8 PIPE LS	.437	.338	2.00	1.00	.75
BPT250-200	1/4 PIPE	.562	.431	2.00	1.05	1.00
BPT375-300	3/8 PIPE	.700	.541	3.00	1.25	1.12
BPT500-300	1/2 PIPE	.687	.525	3.00	1.35	1.12

TAPPING SYSTEMS

BR/ER COLLET CHUCK EXTENSIONS

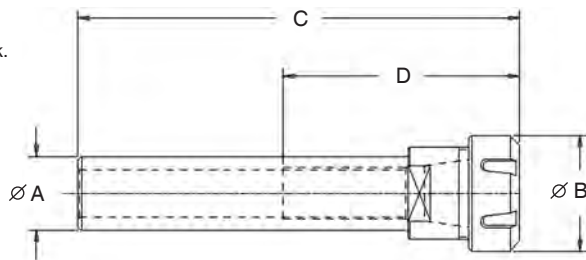
BR/ER COLLET EXTENSIONS

PART NUMBER	COLLET SERIES	COLLET RANGE	A DIA.	B DIA.	C O.A.L.	D	COLLET NUT	STOP SCREW	WRENCH
SS050BR-11-660	BR11	.019-.276	.500	.64	6.60	3.50	BRCN-11M	M6RH	BR11MW
SS075BR-16-700	BR16	.019-.406	.750	.870	7.00	4.00	BRCN-16M	M10RH	BR16MW
SS100BR-20-700	BR20	.039-.512	1.00	1.10	7.00	4.00	BRCN-20M	M12RH	BR20MW
SS100BR-25-700	BR25	.039-.630	1.00	1.61	7.00	4.00	BRCN-25	M16RH	BR25SW
SS125BR-32-750	BR32	.079-.787	1.25	1.97	7.50	4.00	BRCN-32	7/8LH	BR32SW

Purchase collets separately, page 86 , 87, 88, 89, 90, 91, 92, 93 and 94.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

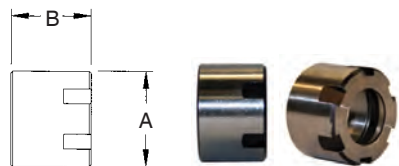
NOTE! Recommended tightening torque reference page 85.



BR/ER COLLET NUTS

PART NUMBER	COLLET NUT	A	B	STYLE	WRENCH	THREAD SIZE
BRCN-11M	BR11	.64	.43	A	BR11MW	M13 x .75
BRCN-16M	BR16	.870	.670	A	BR16MW	M19 x 1.00
BRCN-16	BR16	1.10	.670	B	BR16HW	M22 x 1.5
BRCN-20M	BR20	1.10	.750	A	BR20MW	M24 x 1.00
BRCN-20	BR20	1.34	.750	B	BR20HW	M25 x 1.5
BRCN-25	BR25	1.61	.790	C	BR25SW	M32 x 1.5
BRCN-32	BR32	1.97	.870	C	BR32SW	M40 x 1.5
BRCN-40	BR40	2.46	1.12	C	BR40SW	M50 x 1.5
*BRCN-32SW	BR32	—	.437	D	BRSW-32	1-5/8 - 16

STYLE A SPANNER



STYLE B HEX



STYLE C SPANNER



STYLE D SPANNER



*Note: BRCN-32SW nut is specifically for our Briney Zero Chuck Part # V40BR-32-075.

BR/ER WRENCHES

PART NUMBER	COLLET NUT	STYLE
BR11MW	BRCN-11M	A
BR11HW	BRCN-11	B
BR16MW	BRCN-16M	A
BR16HW	BRCN-16	B
BR20MW	BRCN-20M	A
BR20HW	BRCN-20	B
BR25SW	BRCN-25	C
BR32SW	BRCN-32	C
BR40SW	BRCN-40	C
*BRSW-32	BRCN-32SW	D

STYLE A SPANNER



STYLE B HEX



STYLE C SPANNER



STYLE D SPANNER



*Note: BRSW-32 wrench is specifically for our Briney Zero Chuck Part # V40BR-32-075.

COLLET CHUCK EXTENSIONS



TG COLLET CHUCK EXTENSIONS

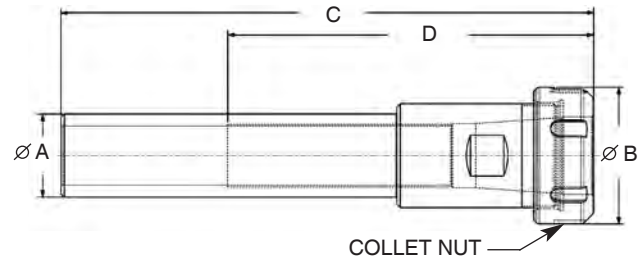
TG COLLET EXTENSIONS

PART NUMBER	COLLET SERIES	COLLET RANGE	A DIA.	B DIA.	C O.A.L.	D	COLLET NUT	STOP SCREW	WRENCH
SS125CH-075-800	TG075	.094-.750	1.250	1.87	8.00	4.00	BTGCN-075-II	13/16LH	BTG075SW-II
SS150CH-100-975	TG100	.094-1.000	1.500	2.44	9.75	6.00	BTGCN-100-II	1-1/8LH	BTG100SW-II
SS200CH-150-100	TG150	.500-1.500	2.000	3.25	10.00	6.00	BTGCN-150	1-5/8LH	BTG150SW

Purchase collets separately, page 97.

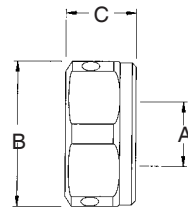
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BTG75 - 60 ft/lbs. BTG100 - 75 ft/lbs. BTG150 - 90 ft/lbs.

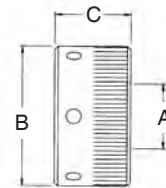


TG COLLET NUTS

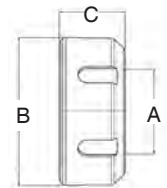
PART NUMBER	A COLLET SERIES	B	C	STYLE	THREAD SIZE
BTGCN-075	TG075	1.87	.910	A	1-1/2" - 12
*BTGCN-100	TG100	2.245	1.10	A	1-7/8" - 12
BTGCN-150	TG150	3.25	1.75	B	2-5/8" - 12
BTGCN-075-II	TG075	1.95	.905	C	1-1/2" - 12
BTGCN-100-II	TG100	2.48	1.06	C	1-7/8" - 12



STYLE A



STYLE B



STYLE C

* Hex or Spanner wrenches will work

COLLET CHUCK EXTENSIONS

TG WRENCHES

PART NUMBER	COLLET NUT	STYLE
BTG075HW	BTGCN-075	HEX
BTG100HW	BTGCN-100	HEX
BTG100SW	BTGCN-100	HOOK SPANNER
BTG150SW	BTGCN-150	HOOK SPANNER
BTG075SW-II	BTGCN-075	SPANNER
BTG100SW-II	BTGCN-100	SPANNER

STYLE HEX



STYLE HOOK SPANNER



STYLE SPANNER



DOUBLE ANGLE COLLET CHUCK EXTENSIONS

DOUBLE ANGLE COLLET EXTENSIONS

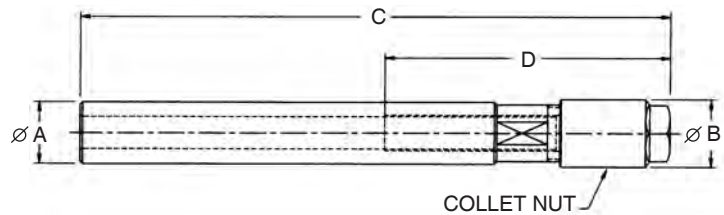
PART NUMBER	COLLET SERIES	COLLET RANGE	A DIA.	B DIA.	C O.A.L.	D	COLLET NUT	STOP SCREW	WRENCH
SS050DA-300-688	DA300	.031-.250	.500	.562	6.88	.500	DANP-300	5/16LH	DANP30W
SS075DA-200-723	DA200	.047-.390	.750	.812	7.23	.687	DANP-200	7/16LH	DANP20W
SS100DA-100-750	DA100	.047-.562	1.000	1.062	7.50	.875	DANP-100	9/16LH	DANP10W
SS125DA-180-741	DA180	.047-.750	1.250	1.437	7.41	1.187	DANP-180	13/16LH	DANP18W

Purchase collets separately, page 98.

NOTE! Do not exceed the following torque recommendations:

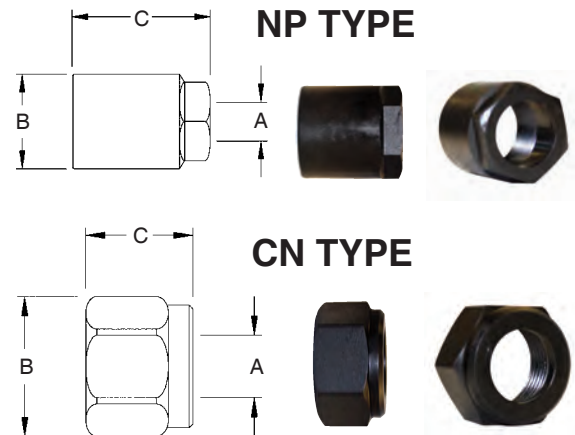
DA300 - 12 ft/lbs. DA200 - 25 ft/lbs. DA100 - 35 ft/lbs. DA180 - 45 ft/lbs.

NOTE! Nose Piece nut (NP) thread size different from standard nuts (CN).



DOUBLE ANGLE COLLET NUTS

PART NUMBER	A COLLET SERIES	B	C	THREAD SIZE
NP TYPE				
DANP-300	DA300	.560	1.00	7/16" - 32
DANP-200	DA200	.810	1.35	11/16" - 20
DANP-100	DA100	1.060	1.50	15/16" - 20
DANP-180	DA180	1.440	1.60	1-3/16" - 20
CN TYPE				
DACN-300	DA300	.840	.690	9/16" - 18
DACN-200	DA200	1.110	.980	3/4" - 16
DACN-100	DA100	1.400	.910	1" - 14
DACN-180	DA180	1.700	.875	1-1/4" - 12



COLLET CHUCK EXTENSIONS

DOUBLE ANGLE WRENCHES

PART NUMBER	COLLET NUT	A
DANP30W	DANP-300	1/2
DANP20W	DANP-200	11/16
DANP10W	DANP-100	7/8
DANP18W	DANP-180	1-3/16
DA-30-W	DACN-300	3/4
DA-20-W	DACN-200	1"
DA-10-W	DACN-100	1-1/4
DA-18-W	DACN-180	1-1/2



STYLE
HEX



BF COLLET CHUCK EXTENSIONS

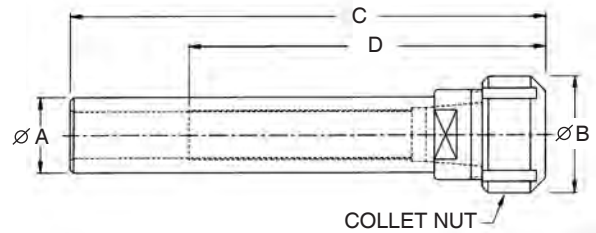
BF COLLET EXTENSIONS

PART NUMBER	COLLET SERIES	COLLET RANGE	A DIA.	B DIA.	C O.A.L.	D	COLLET NUT	STOP SCREW	WRENCH
SS075BF-038-700	BF38	.094-.375	.75	1.13	7.00	2.13	BFCN-038	3/8-24LH	BFG38HW
SS100BF-050-750	BF50	.109-.500	1.00	1.43	7.50	5.50	BFCN-50	9/16 LH	BFG50HW
SS125BF-075-800	BF75	.109-.750	1.25	1.94	8.00	6.00	BFCN-75	13/16LH	BFG75SW
SS150BF-100-975	BF100	.218-1.000	1.50	2.50	9.75	6.75	BFCN-100	1-1/8 LH	BFG100SW

Purchase collets separately, page 99.

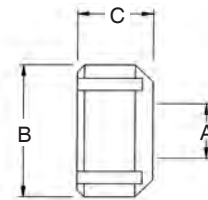
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

NOTE! Do not exceed the following torque recommendations: BF050 - 40 ft/lbs. BF038 - 25ft/lbs. BF075 - 60 ft/lbs. BF100 - 75 ft/lbs.



BF COLLET NUTS

PART NUMBER	A COLLET SERIES	B	C	STYLE	THREAD SIZE
BFCN-038	BF38	1.13	.63	HEX	13/16" - 12
BFCN-50	BF50	1.43	.69	HEX	1" - 12
BFCN-75	BF75	1.94	1.06	SPANNER	1-1/2" - 12
BFCN-100	BF100	2.50	1.19	SPANNER	2" - 12



NOTE! Interchangeable with Universal Accura-flex™ nuts.

BF WRENCHES

PART NUMBER	COLLET NUT	A	STYLE
BFG38HW	BF38	1.00	HEX
BFG50HW	BF50	1.25	HEX
BFG75SW	BF75	1.94	SPANNER
BFG100SW	BF100	2.50	SPANNER

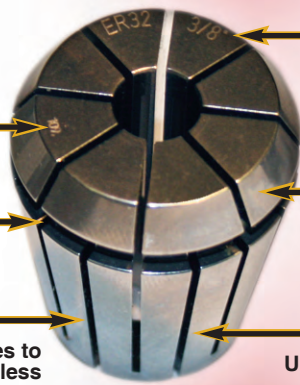


COLLET CHUCK
EXTENSIONS

BR/ER COLLETS FEATURES & BENEFITS



BRINEY BR/ER COLLET FEATURES



Lot Number
Ability to trace manufacturing history.

Unique Slot Design
Allows collets to collapse allowing for superior TIR over full range of collet.

Material
Unique Spring Steel which contributes to higher tool work life, lower tool cost and less set up time resulting in lower production cost.

Available In
Standard, Tru Precision, Metallic Sealed Collets and Rigid Tap Collets to meet all applications.

Superior Finish
Better surface finish which reduces vibration and ensures consistent even wear of cutting tools. It also results in tighter production tolerances.

Clamping Length
Up to 20% more than other manufacturers.

Cheaper collets almost triple the cost of production. . .
Improved accuracy and higher precision equal superior results. . .

BRINEY BR/ER COLLET BENEFITS

Markings: Collet type, size markings

^ *Eliminates the chance of error*

Product Traceability: Lot number on all Briney collets

^ *Quality control if tracing through entire manufacturing process*

Origin: BR/ER collet system

^ *Proven system and reliable - most widely used collet system in the world*

Quality: Made to ISO 9001; DIN 6499 specifications

^ *Product dependability for applications which require highest concentricity*

Material: Specially designed spring steel

^ *Durability and increased collet and tool life, as well as, lower production costs*

Wide Clamping Range: 16 slot design

^ *Providing the lowest T.I.R. equal to or better than nominal diameter collets*

Broad Product Range: Types BR/ER 11 up to BR/ER 40; clamping dia. 0.5 - 26mm (.019 - 1.024")

^ *Used for drilling, milling, reaming, tapping and grinding*



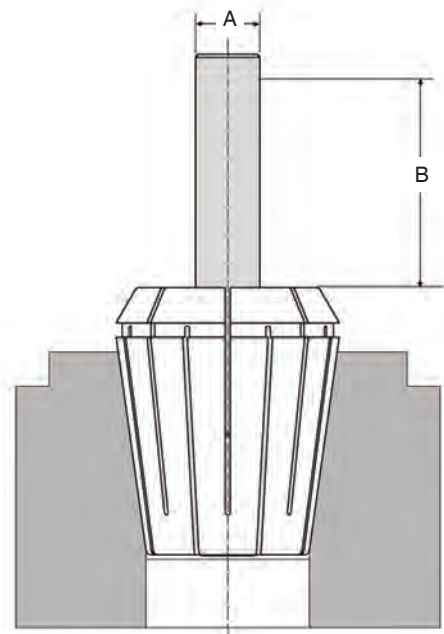
Concentricity T.I.R.

ER (Standard) and
ER-TP (Tru-Precision)

Clamping Range			T.I.R. max.	
From A	To A	B Distance To	BR/ER	BR/ER-TP
.039" (1.0mm)	.062" (1.6mm)	.236" (6.0mm)		
.062" (1.6mm)	.118" (3.0mm)	.393" (10.0mm)	0.0004"	0.0002"
.118" (3.0mm)	.236" (6.0mm)	.629" (16.0mm)	(0.010mm)	(0.005mm)
.236" (6.0mm)	.393" (10.0mm)	.984" (25.0mm)		
.393" (10.0mm)	.708" (18.0mm)	1.574" (40.0mm)	0.0004"	0.0002"
.708" (18.0mm)	1.023" (26.0mm)	1.968" (50.0mm)	(0.010mm)	(0.005mm)
1.023" (26.0mm)	1.338" (34.0mm)	2.362" (60.0mm)	0.0006"	0.0004"
			(0.015mm)	(0.010mm)

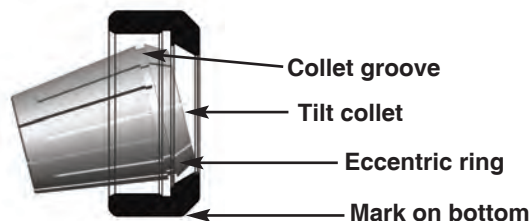
NOTE! Improper assembly can permanently damage the concentricity of the collet and may result in damage to the clamping nut.

Only assemble the clamping nuts with correctly assembled collets!

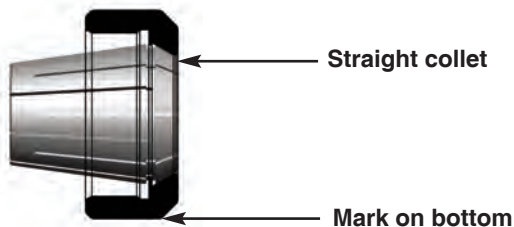


Assembly Instructions

Insert groove of collet into eccentric ring of the clamping nut at the mark on the bottom of the nut. Push collet in the direction of the arrow until it clicks in place. Screw nut with collet onto toolholder.



After the nut is unscrewed from the toolholder, press on the face of the collet while simultaneously pushing sideways on the back of the collet opposite the mark until it disengages from the clamping nut.



Clamping Nuts Tightening Torque

Recommended Tightening Torque

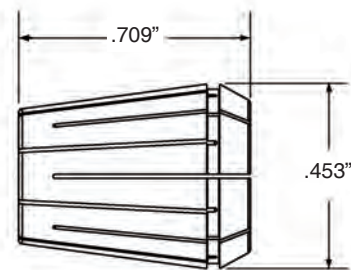
Nut Torque (ft-lbs)				
COLLET SIZE	Ø MM	Ø INCH	ER COLLETS	ER TAP COLLETS
ER11	1.0 - 2.5	0.0390 - 0.098	6	6
	3.0 - 7.0	0.1180 - 0.256	20	12
ER16	1	0.039	6	
	1.5 - 3.5	0.059 - 0.138	15	
	4.0 - 4.5	0.157 - 0.177	30	30
ER 20	5.0 - 10.0	0.197 - 0.394	40	32
	1	0.039	12	
	1.5 - 6.5	0.059 - 0.256	25	25
ER 25	7.0 - 13.0	0.276 - 0.512	60	26
	1.0 - 3.5	0.039 - 0.138	20	
	4.0 - 4.5	0.157 - 0.177	40	40
ER 32	5.0 - 7.5	0.196 - 0.295	60	60
	8.0 - 16.0	0.315 - 0.630	80	80
	2.0 - 2.5	0.078 - 0.098	20	
ER 40	3.0 - 7.5	0.118 - 0.291	100	100
	8.0 - 20.0	0.315 - 0.787	100	110
	3.0 - 8.5	0.118 - 0.335	130	130
	9.0 - 26.0	0.354 - 1.023	130	130

The maximum torque must not be more than 25% above the recommended tightening torque. Higher tightening torque may result in the damage of the toolholder.

BR11/ER11 SERIES COLLETS

BR11/ER11 INCH (Individual Collet Sizes & Collet Sets)

PART NUMBER BR11 Standard Precision	PART NUMBER BR11 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR11-1/16	*BR11-1/16-TP	.0625 - .0425	1.59 - 1.09
*BR11-3/32	*BR11-3/32-TP	.0938 - .0738	2.38 - 1.88
*BR11-1/8	*BR11-1/8-TP	.1250 - .1050	3.18 - 2.68
*BR11-5/32	*BR11-5/32-TP	.1563 - .1363	3.97 - 3.47
*BR11-3/16	*BR11-3/16-TP	.1875 - .1675	4.76 - 4.26
*BR11-7/32	*BR11-7/32-TP	.2188 - .1988	5.56 - 5.06
*BR11-1/4	*BR11-1/4-TP	.2500 - .2300	6.35 - 5.85
BR11-00 INCH	BR11-00-TP INCH	Collet Sets come in Standard and TP *Sizes are included in Sets	



BR11/ER11 METRIC (Individual Collet Sizes & Collet Sets)

PART NUMBER BR11 Standard Precision	PART NUMBER BR11 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR11-01	*BR11-01-TP	.0394 - .0197	1.00 - 0.50
*BR11-02	*BR11-02-TP	.0591 - .0394	1.50 - 1.00
*BR11-03	*BR11-03-TP	.0787 - .0591	2.00 - 1.50
*BR11-04	*BR11-04-TP	.0984 - .0787	2.50 - 2.00
*BR11-05	*BR11-05-TP	.1181 - .0984	3.00 - 2.50
*BR11-06	*BR11-06-TP	.1378 - .1181	3.50 - 3.00
*BR11-07	*BR11-07-TP	.1575 - .1378	4.00 - 3.50
*BR11-08	*BR11-08-TP	.1772 - .1575	4.50 - 4.00
*BR11-09	*BR11-09-TP	.1969 - .1722	5.00 - 4.50
*BR11-10	*BR11-10-TP	.2165 - .1969	5.50 - 5.00
*BR11-11	*BR11-11-TP	.2362 - .2165	6.00 - 5.50
*BR11-12	*BR11-12-TP	.255 - .2362	6.50 - 6.00
*BR11-13	*BR11-13-TP	.2756 - .2559	7.00 - 6.50
BR11-00	BR11-00-TP	Collet Sets come in Standard and TP *Sizes are included in Sets	

Conventional BR/ER Collets

Standard Precision max T.I.R.: .0004" Tru Precision max T.I.R.: .0002" Intended for use in drilling, milling, reaming and grinding applications.

We recommend Tru Precision collets for high speed cutting applications, with the lowest T.I.R. values are required. T.I.R. improves tool life, part finish and reduces spindle wear.

BR11/ER11 RIGID TAP COLLETS - ANSI (U.S. Standard Taps)

PART NUMBER	TAP SIZE (ANSI)		SHANK DIA. (Inch)	SQUARE DIA. (Inch)
	Inch	Metric		
BR11-#0TC	#0	M1.6	.141	.110
BR11-#1TC	#1	M1.8	.141	.110
BR11-#2TC	#2	M2, M2.2	.141	.110
BR11-#3TC	#3	M2.5	.141	.110
BR11-#4TC	#4	—	.141	.110
BR11-#5TC	#5	M3, M3.15	.141	.110
BR11-#6TC	#6	M3.5	.141	.110
BR11-#8TC	#8	—	.168	.131
BR11-#10TC	#10	—	.194	.152

BR11/ER11 RIGID TAP COLLETS - DIN376 (European Standard Taps)

PART NUMBER	METRIC TAP SIZE (DIN)		SHANK DIA. (Metric)	SQUARE DIA. (Metric)
	371	376		
BR11-M4TC-DIN376	M2 - M2.5	M4	2.8 (.110")	2.1 (.082")
BR11-M5TC-DIN376	M3	M5	3.5 (.137")	2.7 (.106")
BR11-M6TC-DIN376	M4	M6	4.5 (.177")	3.4 (.133")
BR11-M8TC-DIN376	M5, M6	M8	6.0 (.236")	4.9 (.192")

Rigid Tap BR/ER Collets

Manufactured with an internal square for tight grip of tap. No additional toolholders and clamping nuts are necessary. Intended for use on CNC machines that have synchronized machine spindle speed and feed rates.

If shank and square sizes of metric taps differ from what is listed, please call the factory to see if it can be lines up with something standard.

BR11/ER11 INCH SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR11	Clamping Capacity	
	(inch)	(mm)
BR11-1/8 SEALED	.1250 - .1154	3.18 - 2.93
BR11-3/16 SEALED	.1875 - .1776	4.76 - 4.51
BR11-7/32 SEALED	.2188 - .2091	5.53 - 5.31
BR11-1/4 SEALED	.2500 - .2402	6.35 - 6.10
BR11-00 INCH SEALED	Consists of one each of the above collets.	

BR11/ER11 METRIC SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR11	Clamping Capacity	
	(inch)	(mm)
BR11-03 SEALED	.1181 - .1083	3.00 - 2.75
BR11-04 SEALED	.1575 - .1476	4.00 - 3.75
BR11-05 SEALED	.1969 - .1870	5.00 - 4.75
BR11-06 SEALED	.2362 - .2264	6.00 - 5.75
BR11-07 SEALED	.2756 - .2658	7.00 - 6.75
BR11-00 SEALED	Consists of one each of the above collets.	

Sealed BR/ER Collets

Metallic sealed—unique slot design will seal the tool to the collet and the collet to the toolholder. No additional toolholders and clamping nuts are necessary. For use with coolant through tooling applications up to 2000psi.

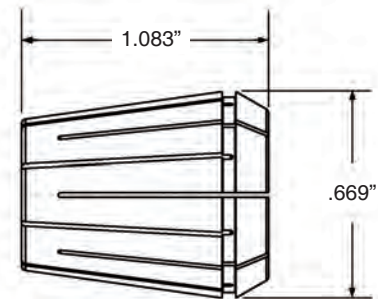
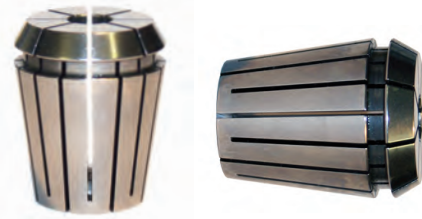
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.



BR16/ER16 SERIES COLLETS

BR16/ER16 INCH (Individual Collet Sizes & Collet Sets)

PART NUMBER BR16 Standard Precision	PART NUMBER BR16 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR16-1/16	*BR16-1/16-TP	.0625 - .0425	1.59 - 1.09
*BR16-3/32	*BR16-3/32-TP	.0938 - .0738	2.38 - 1.88
*BR16-1/8	*BR16-1/8-TP	.1250 - .0850	3.18 - 2.18
*BR16-5/32	*BR16-5/32-TP	.1563 - .1163	3.97 - 2.97
*BR16-3/16	*BR16-3/16-TP	.1875 - .1475	4.76 - 3.76
*BR16-7/32	*BR16-7/32-TP	.2188 - .1788	5.56 - 4.56
*BR16-1/4	*BR16-1/4-TP	.2500 - .2100	6.35 - 5.35
*BR16-9/32	*BR16-9/32-TP	.2813-.2413	7.14 - 6.14
*BR16-5/16	*BR16-5/16-TP	.3125-.2725	7.94 - 6.94
*BR16-11/32	*BR16-11/32-TP	.3438-.3038	8.73 - 7.73
*BR16-3/8	*BR16-3/8-TP	.3750-.3350	9.53 - 8.53
*BR16-13/32	*BR16-13/32-TP	.4063-.3663	10.32 - 9.32
BR16-00 INCH	BR16-00-TP INCH	Collet Sets come in Standard and TP *Sizes are included in Sets	



BR16/ER16 METRIC (Individual Collet Sizes & Collet Sets)

PART NUMBER BR16 Standard Precision	PART NUMBER BR16 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR16-01	*BR16-01-TP	.0394 - .0197	1.00 - 0.50
*BR16-02	*BR16-02-TP	.0787 - .0394	2.00 - 1.00
*BR16-03	*BR16-03-TP	.1181 - .0787	3.00 - 2.00
*BR16-04	*BR16-04-TP	.1575 - .1181	4.00 - 3.00
*BR16-05	*BR16-05-TP	.1969 - .1575	5.00 - 4.00
*BR16-06	*BR16-06-TP	.2362 - .1969	6.00 - 5.00
*BR16-07	*BR16-07-TP	.2756 - .2362	7.00 - 6.00
*BR16-08	*BR16-08-TP	.3150 - .2756	8.00 - 7.00
*BR16-09	*BR16-09-TP	.3543 - .3150	9.00 - 8.00
*BR16-10	*BR16-10-TP	.3937 - .3543	10.00 - 9.00
BR16-00	BR16-00-TP	Collet Sets come in Standard and TP *Sizes are included in Sets	

Conventional BR/ER Collets

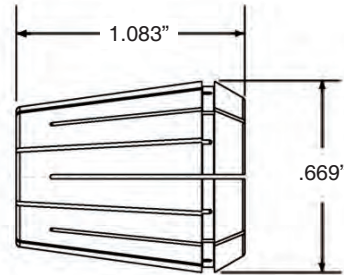
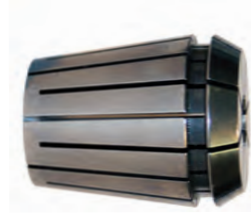
Standard Precision max T.I.R. .0004"
Tru Precision max T.I.R. .0002"
Intended for use in drilling, milling, reaming and grinding applications. We recommend Tru Precision collets for high speed cutting applications, with the lowest T.I.R. values are required. T.I.R. improves tool life, part finish and reduces spindle wear.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

BR16/ER16 SERIES COLLETS

BR16/ER16 RIGID TAP COLLETS - ANSI (U.S. Standard Taps)

PART NUMBER	TAP SIZE (ANSI)		SHANK DIA. (Inch)	SQUARE DIA. (Inch)
	Inch	Metric		
BR16-#0TC	#0	M1.6	.141	.110
BR16-#1TC	#1	M1.8	.141	.110
BR16-#2TC	#2	M2, M2.2	.141	.110
BR16-#3TC	#3	M2.5	.141	.110
BR16-#4TC	#4	—	.141	.110
BR16-#5TC	#5	M3, M3.15	.141	.110
BR16-#6TC	#6	M3.5	.141	.110
BR16-#8TC	#8	M4	.168	.131
BR16-#10TC	#10	M4.5, M5	.194	.152
BR16-#12TC	#12	—	.220	.165
BR16-1/4TC	1/4	M6, M6.3	.255	.191
BR16-5/16TC	5/16	M7, M8	.318	.238



BR16/ER16 RIGID TAP COLLETS - DIN376 (European Standard Taps)

PART NUMBER	METRIC TAP SIZE (DIN)		SHANK DIA. (Metric)	SQUARE DIA. (Metric)
	371	376		
BR16-M6TC-DIN376	M4	M6	4.5 (.177")	3.4 (.133")
BR16-M8TC-DIN376	M5, M6	M8	6.0 (.236")	4.9 (.192")
BR16-M10TC-DIN376	—	M10	7.0 (.275")	5.5 (.216")
BR16-M12TC-DIN376	—	M12	9.0 (.354")	7.0 (.275")

Rigid Tap BR/ER Collets

Manufactured with an internal square for tight grip of tap. No additional toolholders and clamping nuts are necessary. Intended for use on CNC machines that have synchronized machine spindle speed and feed rates. If shank and square sizes of metric taps differ from what is listed, please call the factory to see if it can be lined up with something standard.

BR16/ER16 INCH SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR16	Clamping Capacity	
	(inch)	(mm)
*BR16-1/8 SEALED	.1250	3.18
BR16-5/32 SEALED	.1563	3.97
BR16-3/16 SEALED	.1875	4.76
BR16-7/32 SEALED	.2188 - .1991	5.56 - 5.06
BR16-1/4 SEALED	.2500 - .2303	6.35 - 5.85
BR16-9/32 SEALED	.2813 - .2616	7.14 - 6.64
BR16-5/16 SEALED	.3125 - .2929	7.94 - 7.44
BR16-11/32 SEALED	.3438 - .3241	8.73 - 8.23
BR16-3/8 SEALED	.3750 - .3556	9.53 - 9.03
BR16-13/32 SEALED	.4063 - .3866	10.32 - 9.82
BR16-00 INCH SEALED	Consists of one each of the above collets.	

* Sizes listed with no clamping range are produced to maintained the lowest T.I.R. possible. Larger diameter collets have a .020" (0.5 mm) range.

BR16/ER16 METRIC SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR16	Clamping Capacity	
	(inch)	(mm)
*BR16-03 SEALED	.1181	3.00
*BR16-04 SEALED	.1575	4.00
BR16-05 SEALED	.1969 - .1772	5.00 - 4.50
BR16-06 SEALED	.2362 - .2165	6.00 - 5.50
BR16-07 SEALED	.2756 - .2559	7.00 - 6.50
BR16-08 SEALED	.3150 - .2953	8.00 - 7.50
BR16-09 SEALED	.3543 - .3347	9.00 - 8.50
BR16-10 SEALED	.3937 - .3740	10.00 - 9.50
BR16-00 SEALED	Consists of one each of the above collets.	

Sealed BR/ER Collets

Metallic sealed—unique slot design will seal the tool to the collet and the collet to the toolholder. No additional toolholders and clamping nuts are necessary.

For use with coolant through tooling applications up to 2000psi.

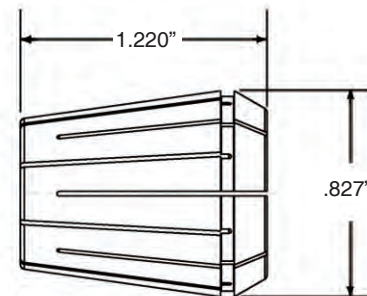
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.



BR20/ER20 SERIES COLLETS

BR20/ER20 INCH (Individual Collet Sizes & Collet Sets)

PART NUMBER BR20 Standard Precision	PART NUMBER BR20 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR20-1/16	*BR20-1/16-TP	.0787 - .0394	2.00 - 1.00
*BR20-3/32	*BR20-3/32-TP	.1181 - .0787	3.00 - 2.00
*BR20-1/8	*BR20-1/8-TP	.1250 - .0850	3.18 - 2.18
*BR20-5/32	*BR20-5/32-TP	.1575 - .1181	4.00 - 3.00
*BR20-3/16	*BR20-3/16-TP	.1875 - .1475	4.76 - 3.76
*BR20-7/32	*BR20-7/32-TP	.2362 - .1969	6.00 - 5.00
*BR20-1/4	*BR20-1/4-TP	.2500 - .2100	6.35 - 5.35
*BR20-9/32	*BR20-9/32-TP	.3150 - .2756	8.00 - 7.00
*BR20-5/16	*BR20-5/16-TP	.3125 - .2725	7.94 - 6.94
*BR20-11/32	*BR20-11/32-TP	.3543 - .3150	9.00 - 8.00
*BR20-3/8	*BR20-3/8-TP	.3750 - .3350	9.53 - 8.53
*BR20-13/32	*BR20-13/32-TP	.4330 - .3937	11.00 - 10.00
*BR20-7/16	*BR20-7/16-TP	.4375 - .3975	11.11 - 10.11
*BR20-15/32	*BR20-15/32-TP	.4724 - .4375	12.00 - 11.00
*BR20-1/2	*BR20-1/2-TP	.5000 - .4600	12.70 - 11.70
BR20-00 INCH	BR20-00-TP INCH	Collet Sets come in Standard and TP *Sizes are included in Sets	



BR20/ER20 METRIC (Individual Collet Sizes & Collet Sets)

PART NUMBER BR20 Standard Precision	PART NUMBER BR20 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR20-01	*BR 20-01-TP	.0787 - .0394	2.00 - 1.00
*BR20-02	*BR20-02-TP	.1181 - .0787	3.00 - 2.00
*BR20-03	*BR20-03-TP	.1575 - .1181	4.00 - 3.00
*BR20-04	*BR20-04-TP	.1969 - .1575	5.00 - 4.00
*BR20-05	*BR20-05-TP	.2362 - .1969	6.00 - 5.00
*BR20-06	*BR20-06-TP	.2756 - .2362	7.00 - 6.00
*BR20-07	*BR20-07-TP	.3150 - .2756	8.00 - 7.00
*BR20-08	*BR20-08-TP	.3543 - .3150	9.00 - 8.00
*BR20-09	*BR20-09-TP	.3937 - .3543	10.00 - 9.00
*BR20-10	*BR20-10-TP	.4330 - .3937	11.00 - 10.00
*BR20-11	*BR20-11-TP	.4724 - .4375	12.00 - 11.00
*BR20-12	*BR20-12-TP	.5118 - .4724	13.00 - 12.00
BR20-00	BR20-00-TP	Collet Sets come in Standard and TP *Sizes are included in Sets	

Conventional BR/ER Collets

Standard Precision max T.I.R. .0004"
Tru Precision max T.I.R. .0002"
Intended for use in drilling, milling, reaming and grinding applications. We recommend Tru Precision collets for high speed cutting applications, with the lowest T.I.R. values are required. T.I.R. improves tool life, part finish and reduces spindle wear.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

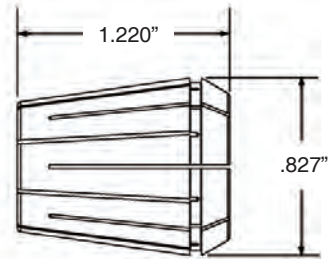
BR20/ER20 SERIES COLLETS

BR20/ER20 RIGID TAP COLLETS - ANSI (U.S. Standard Taps)

PART NUMBER	TAP SIZE (ANSI)		SHANK DIA. (Inch)	SQUARE DIA. (Inch)
	Inch	Metric		
BR20-#8TC	#8	M4	.168	.131
BR20-#10TC	#10	M4.5, M5	.194	.152
BR20-#12TC	#12	—	.220	.165
BR20-1/4TC	1/4	M6, M6.3	.255	.191
BR20-5/16TC	5/16	M7, M8	.318	.238
BR20-3/8TC	3/8	M10	.381	.286
BR20-7/16TC	7/16	—	.323	.242
BR20-1/2TC	1/2	M12, M12.5	.367	.275

BR20/ER20 RIGID TAP COLLETS - DIN376 (European Standard Taps)

PART NUMBER	METRIC TAP SIZE (DIN)		SHANK DIA. (Metric)	SQUARE DIA. (Metric)
	371	376		
BR20-M6TC-DIN376	M4	M6	4.5 (.177")	3.4 (.133")
BR20-M8TC-DIN376	M5, M6	M8	6.0 (.236")	4.9 (.192")
BR20-M10TC-DIN376	—	M10	7.0 (.275")	5.5 (.216")
BR20-M12TC-DIN376	—	M12	9.0 (.354")	7.0 (.275")
BR20-M14TC-DIN376	—	M14	11.0 (.433")	9.0 (.354")
BR20-M16TC-DIN376	—	M16	12.0 (.472")	9.0 (.354")



Rigid Tap BR/ER Collets

Manufactured with an internal square for tight grip of tap. No additional toolholders and clamping nuts are necessary. Intended for use on CNC machines that have synchronized machine spindle speed and feed rates. If shank and square sizes of metric taps differ from what is listed, please call the factory to see if it can be lined up with something standard.

BR20/ER20 INCH SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR20	Clamping Capacity	
	(inch)	(mm)
*BR20-1/8 SEALED	.1250	3.18
*BR20-5/32 SEALED	.1563	3.97
BR20-3/16 SEALED	.1875	4.76
BR20-7/32 SEALED	.2188	5.56
BR20-1/4 SEALED	.2500 - .2303	6.35
BR20-9/32 SEALED	.2813 - .2616	7.14 - 6.64
BR20-5/16 SEALED	.3125 - .2929	7.94 - 7.44
BR20-11/32 SEALED	.3438 - .3241	8.73 - 8.23
BR20-3/8 SEALED	.3750 - .3556	9.53 - 9.03
BR20-13/32 SEALED	.4063 - .3866	10.32 - 9.82
BR20-7/16 SEALED	.4375 - .4177	11.11 - 10.61
BR20-15/32 SEALED	.4687 - .4491	11.91 - 11.41
BR20-1/2 SEALED	.5000 - .4803	12.70 - 12.20
BR20-00 INCH SEALED	Consists of one each of the above collets.	

Sealed BR/ER Collets

Metallic sealed—unique slot design will seal the tool to the collet and the collet to the toolholder. No additional toolholders and clamping nuts are necessary. For use with coolant through tooling applications up to 2000psi.

BR20/ER20 METRIC SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR20	Clamping Capacity	
	(inch)	(mm)
*BR20-03 SEALED	0.1181	3.00
*BR20-04 SEALED	0.1575	4.00
BR20-05 SEALED	0.1969	5.00
BR20-06 SEALED	0.2362	6.00
BR20-07 SEALED	0.2756 - 0.2559	7.00 - 6.50
BR20-08 SEALED	0.3150 - 0.2953	8.00 - 7.50
BR20-09 SEALED	0.3543 - 0.3347	9.00 - 8.50
BR20-10 SEALED	0.3937 - 0.3740	10.00 - 9.50
BR20-11 SEALED	0.4330 - 0.4134	11.00 - 10.50
BR20-12 SEALED	0.4724 - 0.4528	12.00 - 11.50
BR20-13 SEALED	0.5118 - 0.4921	13.00 - 12.50
BR20-00 SEALED	Consists of one each of the above collets.	

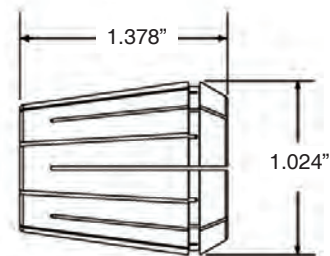
* Sizes listed with no clamping range are produced to maintained the lowest T.I.R. possible. Larger diameter collets have a .020" (0.5 mm) range.

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.



BR25/ER25 SERIES COLLETS

BR25/ER25 INCH (Individual Collet Sizes & Collet Sets)			
PART NUMBER BR25 Standard Precision	PART NUMBER BR25 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR25-1/16	*BR25-1/16-TP	.0787 - .0394	2.00 - 1.00
*BR25-3/32	*BR25-3/32-TP	.1181 - .0787	3.00 - 2.00
*BR25-1/8	*BR25-1/8-TP	.1250 - .0850	3.18 - 2.18
*BR25-5/32	*BR25-5/32-TP	.1575 - .1181	4.00 - 3.00
*BR25-3/16	*BR25-3/16-TP	.1875 - .1475	4.76 - 3.76
*BR25-7/32	*BR25-7/32-TP	.2362 - .1969	6.00 - 5.00
*BR25-1/4	*BR25-1/4-TP	.2500 - .2100	6.35 - 5.35
*BR25-9/32	*BR25-9/32-TP	.3150 - .2756	8.00 - 7.00
*BR25-5/16	*BR25-5/16-TP	.3125 - .2725	7.94 - 6.94
*BR25-11/32	*BR25-11/32-TP	.3543 - .3150	9.00 - 8.00
*BR25-3/8	*BR25-3/8-TP	.3750 - .3350	9.53 - 8.53
*BR25-13/32	*BR25-13/32-TP	.4330 - .3937	11.00 - 10.00
*BR25-7/16	*BR25-7/16-TP	.4375 - .3975	11.11 - 10.11
*BR25-15/32	*BR25-15/32-TP	.4724 - .4375	12.00 - 11.00
*BR25-1/2	*BR25-1/2-TP	.5000 - .4600	12.70 - 11.70
*BR25-17/32	*BR25-17/32-TP	.5512 - .5118	14.00 - 13.00
*BR25-9/16	*BR25-9/16-TP	.5625 - .5225	14.29 - 13.29
*BR25-19/32	*BR25-19/32-TP	.6250 - .5820	15.88 - 14.88
*BR25-5/8	*BR25-5/8-TP	.6250 - .5820	15.88 - 14.88
BR25-00 INCH	BR25-00-TP INCH	Collet Sets come in Standard and TP *Sizes are included in Sets	



BR25/ER25 METRIC (Individual Collet Sizes & Collet Sets)			
PART NUMBER BR25 Standard Precision	PART NUMBER BR25 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR25-01	*BR25-01-TP	.0787 - .0394	2.00 - 1.00
*BR25-02	*BR25-02-TP	.1181 - .0787	3.00 - 2.00
*BR25-03	*BR25-03-TP	.1575 - .1181	4.00 - 3.00
*BR25-04	*BR25-04-TP	.1969 - .1575	5.00 - 4.00
*BR25-05	*BR25-05-TP	.2362 - .1969	6.00 - 5.00
*BR25-06	*BR25-06-TP	.2756 - .2362	7.00 - 6.00
*BR25-07	*BR25-07-TP	.3150 - .2756	8.00 - 7.00
*BR25-08	*BR25-08-TP	.3543 - .3150	9.00 - 8.00
*BR25-09	*BR25-09-TP	.3937 - .3543	10.00 - 9.00
*BR25-10	*BR25-10-TP	.4330 - .3937	11.00 - 10.00
*BR25-11	*BR25-11-TP	.4724 - .4375	12.00 - 11.00
*BR25-12	*BR25-12-TP	.5118 - .4724	13.00 - 12.00
*BR25-13	*BR25-13-TP	.5512 - .5118	14.00 - 13.00
*BR25-14	*BR25-14-TP	.5905 - .5512	15.00 - 14.00
*BR25-15	*BR25-15-TP	.6300 - .5905	16.00 - 15.00
BR25-00	BR25-00-TP	Collet Sets come in Standard and TP *Sizes are included in Sets	

Conventional BR/ER Collets
 Standard Precision max T.I.R. .0004"
 Tru Precision max T.I.R. .0002"
 Intended for use in drilling, milling, reaming and grinding applications.
 We recommend Tru Precision collets for high speed cutting applications, with the lowest T.I.R. values are required.
 T.I.R. improves tool life, part finish and reduces spindle wear.

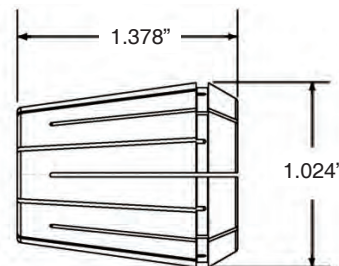
COLLETS

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

BR25/ER25 SERIES COLLETS

BR25/ER25 RIGID TAP COLLETS - ANSI (U.S. Standard Taps)

PART NUMBER	TAP SIZE (ANSI)		SHANK DIA. (Inch)	SQUARE DIA. (Inch)
	Inch	Metric		
BR25-#8TC	#8	M4	.168	.131
BR25-#10TC	#10	M4.5, M5	.194	.152
BR25-#12TC	#12	—	.220	.165
BR25-1/4TC	1/4	M6, M6.3	.255	.191
BR25-5/16TC	5/16	M7, M8	.318	.238
BR25-3/8TC	3/8	M10	.381	.286
BR25-7/16TC	7/16	—	.323	.242
BR25-1/2TC	1/2	M12, M12.5	.367	.275
BR25-9/16TC	9/16	M14	.429	.322
BR25-5/8TC	5/8	M16	.480	.360
BR25-3/4TC	3/4	—	.590	.442
BR25-1/8TC-PIPE	1/8 PIPE	—	.437	.328



BR25/ER25 RIGID TAP COLLETS - DIN376 (European Standard Taps)

PART NUMBER	METRIC TAP SIZE (DIN)		SHANK DIA. (Metric)	SQUARE DIA. (Metric)
	371	376		
BR25-M6TC-DIN376	M4	M6	4.5 (.177")	3.4 (.133")
BR25-M8TC-DIN376	M5, M6	M8	6.0 (.236")	4.9 (.192")
BR25-M10TC-DIN376	—	M10	7.0 (.275")	5.5 (.216")
BR25-M12TC-DIN376	—	M12	9.0 (.354")	7.0 (.275")
BR25-M14TC-DIN376	—	M14	11.0 (.433")	9.0 (.354")
BR25-M16TC-DIN376	—	M16	12.0 (.472")	9.0 (.354")
BR25-M18TC-DIN376	—	M18	14.0 (.551")	11.0 (.433")
BR25-M20TC-DIN376	—	M20	16.0 (.629")	12.0 (.472")

Rigid Tap BR/ER Collets

Manufactured with an internal square for tight grip of tap. No additional toolholders and clamping nuts are necessary. Intended for use on CNC machines that have synchronized machine spindle speed and feed rates. If shank and square sizes of metric taps differ from what is listed, please call the factory to see if it can be lined up with something standard.

BR25/ER25 INCH SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR25	Clamping Capacity	
	(inch)	(mm)
*BR25-7/32 SEALED	.2188	5.56
*BR25-1/4 SEALED	.2500	6.35
BR25-9/32 SEALED	.2813	7.14
BR25-5/16 SEALED	.3125 - .2929	7.94 - 7.44
BR25-11/32 SEALED	.3438 - .3241	8.73 - 8.23
BR25-3/8 SEALED	.3750 - .3556	9.53 - 9.03
BR25-13/32 SEALED	.4063 - .3866	10.32 - 9.82
BR25-7/16 SEALED	.4375 - .4177	11.11 - 10.61
BR25-15/32 SEALED	.4687 - .4491	11.91 - 11.41
BR25-1/2 SEALED	.5000 - .4803	12.70 - 12.20
BR25-17/32 SEALED	.5313 - .5116	13.49 - 12.99
BR25-9/16 SEALED	.5625 - .5425	14.29 - 13.79
BR25-19/32 SEALED	.5934 - .5741	15.08 - 14.58
BR25-5/8 SEALED	.6250 - .6055	15.88 - 15.38
BR25-00 SEALED	Consists of one each of the above collets.	

* Sizes listed with no clamping range are produced to maintained the lowest T.I.R. possible. Larger diameter collets have a .020" (0.5 mm) range.

BR25/ER25 METRIC SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR25	Clamping Capacity	
	(inch)	(mm)
*BR25-06 SEALED	.2362	6.00
*BR25-07 SEALED	.2756	7.00
BR25-08 SEALED	.3150 - .2953	8.00 - 7.50
BR25-09 SEALED	.3543 - .3347	9.00 - 8.50
BR25-10 SEALED	.3937 - .3740	10.00 - 9.50
BR25-11 SEALED	.4331 - .4134	11.00 - 10.50
BR25-12 SEALED	.4724 - .4528	12.00 - 11.50
BR25-13 SEALED	.5118 - .4921	13.00 - 12.50
BR25-14 SEALED	.5512 - .5315	14.00 - 13.50
BR25-15 SEALED	.5905 - .5709	15.00 - 14.50
BR25-16 SEALED	.6300 - .6102	16.00 - 15.50
BR25-00 SEALED	Consists of one each of the above collets.	

Sealed BR/ER Collets

Metallic sealed—unique slot design will seal the tool to the collet and the collet to the toolholder. No additional toolholders and clamping nuts are necessary. For use with coolant through tooling applications up to 2000psi.

COLLETS

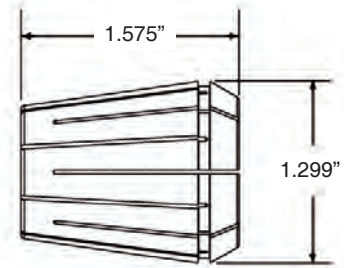
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.



BR32/ER32 SERIES COLLETS

BR32/ER32 INCH (Individual Collet Sizes & Collet Sets)

PART NUMBER BR32 Standard Precision	PART NUMBER BR32 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR32-3/32	*BR32-3/32-TP	.1181 - .0787	3.00 - 2.00
*BR32-1/8	*BR32-1/8-TP	.1250 - .0850	3.18 - 2.18
*BR32-5/32	*BR32-5/32-TP	.1575 - .1181	4.00 - 3.00
*BR32-3/16	*BR32-3/16-TP	.1875 - .1475	4.76 - 3.76
*BR32-7/32	*BR32-7/32-TP	.2362 - .1969	6.00 - 5.00
*BR32-1/4	*BR32-1/4-TP	.2500 - .2100	6.35 - 5.35
*BR32-9/32	*BR32-9/32-TP	.3125 - .2725	7.94 - 6.94
*BR32-5/16	*BR32-5/16-TP	.3125 - .2725	7.94 - 6.94
*BR32-11/32	*BR32-11/32-TP	.3543 - .3150	9.00 - 8.00
*BR32-3/8	*BR32-3/8-TP	.3750 - .3350	9.53 - 8.35
*BR32-13/32	*BR32-13/32-TP	.4330 - .3937	11.00 - 10.00
*BR32-7/16	*BR32-7/16-TP	.4375 - .3975	11.11 - 10.11
*BR32-15/32	*BR32-15/32-TP	.4724 - .4375	12.00 - 11.00
*BR32-1/2	*BR32-1/2-TP	.5000 - .4600	12.70 - 11.70
*BR32-17/32	*BR32-17/32-TP	.5512 - .5118	14.00 - 13.00
*BR32-9/16	*BR32-9/16-TP	.5625 - .5225	14.29 - 13.29
*BR32-19/32	*BR32-19/32-TP	.6250 - .5850	15.88 - 14.88
*BR32-5/8	*BR32-5/8-TP	.6250 - .5850	15.88 - 14.88
*BR32-21/32	*BR32-21/32-TP	.6693 - .6300	17.00 - 16.00
*BR32-11/16	*BR32-11/16-TP	.6875 - .6475	17.46 - 16.46
*BR32-23/32	*BR32-23/32-TP	.7480 - .7078	19.00 - 18.00
*BR32-3/4	*BR32-3/4-TP	.7500 - .7100	19.05 - 18.05
BR32-00 INCH	BR32-00-TP INCH	Collet Sets come in Standard and TP *Sizes are included in Sets	



BR32/ER32 METRIC (Individual Collet Sizes & Collet Sets)

PART NUMBER BR32 Standard Precision	PART NUMBER BR32 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR32-02	*BR32-02-TP	.1181 - .0787	3.00 - 2.00
*BR32-03	*BR32-03-TP	.1575 - .1181	4.00 - 3.00
*BR32-04	*BR32-04-TP	.1969 - .1575	5.00 - 4.00
*BR32-05	*BR32-05-TP	.2362 - .1969	6.00 - 5.00
*BR32-06	*BR32-06-TP	.2756 - .2362	7.00 - 6.00
*BR32-07	*BR32-07-TP	.3150 - .2756	8.00 - 7.00
*BR32-08	*BR32-08-TP	.3543 - .3150	9.00 - 8.00
*BR32-09	*BR32-09-TP	.3937 - .3543	10.00 - 9.00
*BR32-10	*BR32-10-TP	.4330 - .3937	11.00 - 10.00
*BR32-11	*BR32-11-TP	.4724 - .4375	12.00 - 11.00
*BR32-12	*BR32-12-TP	.5118 - .4724	13.00 - 12.00
*BR32-13	*BR32-13-TP	.5512 - .5118	14.00 - 13.00
*BR32-14	*BR32-14-TP	.5905 - .5512	15.00 - 14.00
*BR32-15	*BR32-15-TP	.6300 - .5905	16.00 - 15.00
*BR32-16	*BR32-16-TP	.6693 - .6300	17.00 - 16.00
*BR32-17	*BR32-17-TP	.7087 - .6693	18.00 - 17.00
*BR32-18	*BR32-18-TP	.7480 - .7078	19.00 - 18.00
*BR32-19	*BR32-19-TP	.7874 - .7480	20.00 - 19.00
BR32-00	BR32-00-TP	Collet Sets come in Standard and TP *Sizes are included in Sets	

Conventional BR/ER Collets

Standard Precision max T.I.R. .0004"
Tru Precision max T.I.R. .0002"
Intended for use in drilling, milling, reaming and grinding applications. We recommend Tru Precision collets for high speed cutting applications, with the lowest T.I.R. values are required. T.I.R. improves tool life, part finish and reduces spindle wear.

COLLETS

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

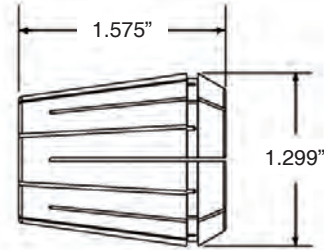
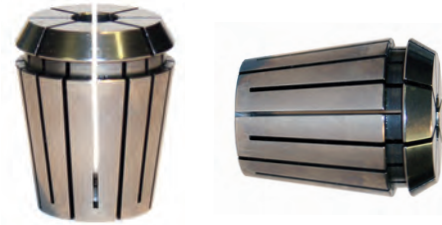
BR32/ER32 SERIES COLLETS

BR32/ER32 RIGID TAP COLLETS - ANSI (U.S. Standard Taps)

PART NUMBER	TAP SIZE (ANSI)		SHANK DIA. (Inch)	SQUARE DIA. (Inch)
	Inch	Metric		
BR32-#8TC	#8	M4	.168	.131
BR32-#10TC	#10	M4.5, M5	.194	.152
BR32-#12TC	#12	—	.220	.165
BR32-1/4TC	1/4	M6, M6.3	.255	.191
BR32-5/16TC	5/16	M7, M8	.318	.238
BR32-3/8TC	3/8	M10	.381	.286
BR32-7/16TC	7/16	—	.323	.242
BR32-1/2TC	1/2	M12, M12.5	.367	.275
BR32-9/16TC	9/16	M14	.429	.322
BR32-5/8TC	5/8	M16	.480	.360
BR32-11/16TC	11/16	M18	.542	.406
BR32-3/4TC	3/4	—	.590	.442
BR32-13/16TC	13/16	M20	.652	.489
BR32-1/8TC-PIPE	1/8 PIPE	—	.437	.328
BR32-1/4TC-PIPE	1/4 PIPE	—	.562	.421

BR32/ER32 RIGID TAP COLLETS - DIN376 (European Standard Taps)

PART NUMBER	METRIC TAP SIZE (DIN)		SHANK DIA. (Metric)	SQUARE DIA. (Metric)
	371	376		
BR32-M6TC-DIN376	M4	M6	4.5 (.177")	3.4 (.133")
BR32-M8TC-DIN376	M5, M6	M8	6.0 (.236")	4.9 (.192")
BR32-M10TC-DIN376	—	M10	7.0 (.275")	5.5 (.216")
BR32-M12TC-DIN376	—	M12	9.0 (.354")	7.0 (.275")
BR32-M14TC-DIN376	—	M14	11.0 (.433")	9.0 (.354")
BR32-M16TC-DIN376	—	M16	12.0 (.472")	9.0 (.354")
BR32-M18TC-DIN376	—	M18	14.0 (.551")	11.0 (.433")
BR32-M20TC-DIN376	—	M20	16.0 (.629")	12.0 (.472")
BR32-M22TC-DIN376	—	M22	18.0 (.708")	14.5 (.570")
BR32-M24TC-DIN376	—	M24	18.0 (.708")	14.5 (.570")
BR32-M27TC-DIN376	—	M27	20.0 (.787")	16.0 (.629")



Rigid Tap BR/ER Collets

Manufactured with an internal square for tight grip of tap. No additional toolholders and clamping nuts are necessary. Intended for use on CNC machines that have synchronized machine spindle speed and feed rates. If shank and square sizes of metric taps differ from what is listed, please call the factory to see if it can be lines up with something standard.

BR32/ER32 INCH SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR32	Clamping Capacity	
	(inch)	(mm)
*BR32-1/4 SEALED	.2500	6.35
BR32-9/32 SEALED	.2813	7.14
BR32-5/16 SEALED	.3125 - .2929	7.94 - 7.44
BR32-11/32 SEALED	.3438 - .3241	8.73 - 8.23
BR32-3/8 SEALED	.3750 - .3556	9.53 - 9.03
BR32-13/32 SEALED	.4063 - .3866	10.32 - 9.82
BR32-7/16 SEALED	.4375 - .4177	11.11 - 10.61
BR32-15/32 SEALED	.4687 - .4491	11.91 - 11.41
BR32-1/2 SEALED	.5000 - .4803	12.70 - 12.20
BR32-17/32 SEALED	.5313 - .5116	13.49 - 12.99
BR32-9/16 SEALED	.5625 - .5425	14.29 - 13.79
BR32-19/32 SEALED	.5934 - .5741	15.08 - 14.58
BR32-5/8 SEALED	.6250 - .6055	15.88 - 15.38
BR32-21/32 SEALED	.6563 - .6366	16.67 - 16.17
BR32-11/16 SEALED	.6875 - .6677	17.46 - 16.96
BR32-23/32 SEALED	.7188 - .6991	18.26 - 17.76
BR32-3/4 SEALED	.7500 - .7303	19.05 - 18.55
BR32-00 SEALED	Consists of one each of the above collets.	

* Sizes listed with no clamping range are produced to maintained the lowest T.I.R. possible. Larger diameter collets have a .020" (0.5 mm) range.

BR32/ER32 METRIC SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR32	Clamping Capacity	
	(inch)	(mm)
*BR32-06 SEALED	.2362	6.00
*BR32-07 SEALED	.2756	7.00
BR32-08 SEALED	.3150 - .2953	8.00 - 7.50
BR32-09 SEALED	.3543 - .3347	9.00 - 8.50
BR32-10 SEALED	.3937 - .3740	10.00 - 9.50
BR32-11 SEALED	.4331 - .4134	11.00 - 10.50
BR32-12 SEALED	.4724 - .4528	12.00 - 11.50
BR32-13 SEALED	.5118 - .4921	13.00 - 12.50
BR32-14 SEALED	.5512 - .5315	14.00 - 13.50
BR32-15 SEALED	.5905 - .5709	15.00 - 14.50
BR32-16 SEALED	.6300 - .6102	16.00 - 15.50
BR32-17 SEALED	.6693 - .6496	17.00 - 16.50
BR32-18 SEALED	.7087 - .6890	18.00 - 17.50
BR32-19 SEALED	.7480 - .7284	19.00 - 18.50
BR32-20 SEALED	.7087 - .6890	20.00 - 19.50
BR32-00 SEALED	Consists of one each of the above collets.	

Sealed BR/ER Collets

Metallic sealed—unique slot design will seal the tool to the collet and the collet to the toolholder. No additional toolholders and clamping nuts are necessary. For use with coolant through tooling applications up to 2000psi.

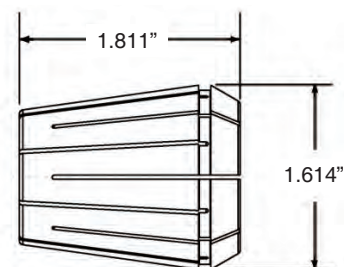
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.



BR40/ER40 SERIES COLLETS

BR40/ER40 INCH (Individual Collet Sizes & Collet Sets)

PART NUMBER BR40 Standard Precision	PART NUMBER BR40 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR40-1/8	*BR40-1/8-TP	.1250 - .0850	3.18 - 2.18
*BR40-5/32	*BR40-5/32-TP	.1575 - .1181	4.00 - 3.00
*BR40-3/16	*BR40-3/16-TP	.1875 - .1475	4.76 - 3.76
*BR40-7/32	*BR40-7/32-TP	.2362 - .1969	6.00 - 5.00
*BR40-1/4	*BR40-1/4-TP	.2500 - .2100	6.35 - 5.35
*BR40-9/32	*BR40-9/32-TP	.3125 - .2725	7.94 - 6.94
*BR40-5/16	*BR40-5/16-TP	.3125 - .2725	7.94 - 6.94
*BR40-11/32	*BR40-11/32-TP	.3543 - .3150	9.00 - 8.00
*BR40-3/8	*BR40-3/8-TP	.3750 - .3350	9.53 - 8.53
*BR40-13/32	*BR40-13/32-TP	.4330 - .3937	11.00 - 10.00
*BR40-7/16	*BR40-7/16-TP	.4375 - .3975	11.11 - 10.11
*BR40-15/32	*BR40-15/32-TP	.4724 - .4375	12.00 - 11.00
*BR40-1/2	*BR40-1/2-TP	.5000 - .4600	12.70 - 11.70
*BR40-17/32	*BR40-17/32-TP	.5512 - .5118	14.00 - 13.00
*BR40-9/16	*BR40-9/16-TP	.5625 - .5225	14.29 - 13.29
*BR40-19/32	*BR40-19/32-TP	.6250 - .5850	15.88 - 14.88
*BR40-5/8	*BR40-5/8-TP	.6250 - .5850	15.88 - 14.88
*BR40-21/32	*BR40-21/32-TP	.6693 - .6300	17.00 - 16.00
*BR40-11/16	*BR40-11/16-TP	.6875 - .6475	17.46 - 16.46
*BR40-23/32	*BR40-23/32-TP	.7480 - .7078	19.00 - 18.00
*BR40-3/4	*BR40-3/4-TP	.7500 - .7100	19.05 - 18.05
*BR40-25/32	*BR40-25/32-TP	.7874 - .7480	20.00 - 19.00
*BR40-13/16	*BR40-13/16-TP	.8125 - .7725	20.64 - 19.64
*BR40-27/32	*BR40-27/32-TP	.8661 - .8268	22.00 - 21.00
*BR40-7/8	*BR40-7/8-TP	.8750 - .8350	22.23 - 21.23
*BR40-29/32	*BR40-29/32-TP	.9449 - .9055	24.00 - 23.00
*BR40-15/16	*BR40-15/16-TP	.9449 - .9055	24.00 - 23.00
*BR40-31/32	*BR40-31/32-TP	.9843 - .9449	25.00 - 24.00
*BR40-1	*BR40-1-TP	1.0000 - .9600	25.40 - 24.40
BR40-00 INCH	BR40-00-TP INCH	Collet Sets come in Standard and TP *Sizes are included in Sets	



BR40/ER40 METRIC (Individual Collet Sizes & Collet Sets)

PART NUMBER BR40 Standard Precision	PART NUMBER BR40 Tru Precision	Clamping Capacity	
		(inch)	(mm)
*BR40-01	*BR40-01-TP	.1575 - .1181	4.00 - 3.00
*BR40-02	*BR40-02-TP	.1969 - .1575	5.00 - 4.00
*BR40-03	*BR40-03-TP	.2362 - .1969	6.00 - 5.00
*BR40-04	*BR40-04-TP	.2756 - .2362	7.00 - 6.00
*BR40-05	*BR40-05-TP	.3150 - .2756	8.00 - 7.00
*BR40-06	*BR40-06-TP	.3543 - .3150	9.00 - 8.00
*BR40-07	*BR40-07-TP	.3937 - .3543	10.00 - 9.00
*BR40-08	*BR40-08-TP	.4330 - .3937	11.00 - 10.00
*BR40-09	*BR40-09-TP	.4724 - .4375	12.00 - 11.00
*BR40-10	*BR40-10-TP	.5118 - .4724	13.00 - 12.00
*BR40-11	*BR40-11-TP	.5512 - .5118	14.00 - 13.00
*BR40-12	*BR40-12-TP	.5905 - .5512	15.00 - 14.00
*BR40-13	*BR40-13-TP	.6300 - .5905	16.00 - 15.00
*BR40-14	*BR40-14-TP	.6693 - .6300	17.00 - 16.00
*BR40-15	*BR40-15-TP	.7087 - .6693	18.00 - 17.00
*BR40-16	*BR40-16-TP	.7480 - .7078	19.00 - 18.00
*BR40-17	*BR40-17-TP	.7874 - .7480	20.00 - 19.00
*BR40-18	*BR40-18-TP	.8268 - .7874	21.00 - 20.00
*BR40-19	*BR40-19-TP	.8661 - .8268	22.00 - 21.00
*BR40-20	*BR40-20-TP	.9055 - .8661	23.00 - 22.00
*BR40-21	*BR40-21-TP	.9449 - .9055	24.00 - 23.00
*BR40-22	*BR40-22-TP	.9843 - .9449	25.00 - 24.00
*BR40-23	*BR40-23-TP	1.0236 - .9843	26.00 - 25.00
BR40-00	BR40-00-TP	Collet Sets come in Standard and TP *Sizes are included in Sets	

Conventional BR/ER Collets

Standard Precision max T.I.R. .0004"
Tru Precision max T.I.R. .0002"
Intended for use in drilling, milling, reaming and grinding applications. We recommend Tru Precision collets for high speed cutting applications, with the lowest T.I.R. values are required. T.I.R. improves tool life, part finish and reduces spindle wear.

COLLETS

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

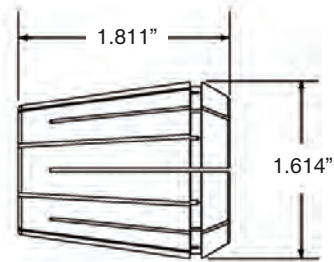
BR40/ER40 SERIES COLLETS

BR40/ER40 RIGID TAP COLLETS - ANSI (U.S. Standard Taps)

PART NUMBER	TAP SIZE (ANSI)		SHANK DIA. (Inch)	SQUARE DIA. (Inch)
	Inch	Metric		
BR40-1/4TC	1/4	M6, M6.3	.255	.191
BR40-5/16TC	5/16	M7, M8	.318	.238
BR40-3/8TC	3/8	M10	.381	.286
BR40-7/16TC	7/16	—	.323	.242
BR40-1/2TC	1/2	M12, M12.5	.367	.275
BR40-9/16TC	9/16	M14	.429	.322
BR40-5/8TC	5/8	M16	.480	.360
BR40-11/16TC	11/16	M18	.542	.406
BR40-3/4TC	3/4	—	.590	.442
BR40-13/16TC	13/16	M20	.652	.489
BR40-7/8TC	7/8	M22	.697	.523
BR40-15/16TC	15/16	M24	.760	.570
BR40-1TC	1	M25	.800	.600
BR40-1/8TC-PIPE	1/8 PIPE	—	.437	.328
BR40-1/4TC-PIPE	1/4 PIPE	—	.562	.421
BR40-3/8TC-PIPE	3/8 PIPE	—	.700	.531

BR40/ER40 RIGID TAP COLLETS - DIN376 (European Standard Taps)

PART NUMBER	METRIC TAP SIZE (DIN)		SHANK DIA. (Metric)	SQUARE DIA. (Metric)
	371	376		
BR40-M8TC-DIN376	M5, M6	M8	6.0 (.236")	4.9 (.192")
BR40-M10TC-DIN376	—	M10	7.0 (.275")	5.5 (.216")
BR40-M12TC-DIN376	—	M12	9.0 (.354")	7.0 (.275")
BR40-M14TC-DIN376	—	M14	11.0 (.433")	9.0 (.354")
BR40-M16TC-DIN376	—	M16	12.0 (.472")	9.0 (.354")
BR40-M18TC-DIN376	—	M18	14.0 (.551")	11.0 (.433")
BR40-M20TC-DIN376	—	M20	16.0 (.629")	12.0 (.472")
BR40-M22TC-DIN376	—	M22	18.0 (.708")	14.5 (.570")
BR40-M24TC-DIN376	—	M24	18.0 (.708")	14.5 (.570")
BR40-M27TC-DIN376	—	M27	20.0 (.787")	16.0 (.629")
BR40-M30TC-DIN376	—	M30	22.0 (.866")	18.0 (.708")



Rigid Tap BR/ER Collets

Manufactured with an internal square for tight grip of tap. No additional toolholders and clamping nuts are necessary. Intended for use on CNC machines that have synchronized machine spindle speed and feed rates. If shank and square sizes of metric taps differ from what is listed, please call the factory to see if it can be lined up with something standard.

BR40/ER40 INCH SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR40	Clamping Capacity	
	(inch)	(mm)
*BR40-1/4 SEALED	.2500	6.35
BR40-5/16 SEALED	.3125	7.94
BR40-3/8 SEALED	.3750 - .3556	9.53 - 9.03
BR40-7/16 SEALED	.4375 - .4177	11.11 - 10.61
BR40-1/2 SEALED	.5000 - .4803	12.70 - 12.20
BR40-9/16 SEALED	.5625 - .5425	14.29 - 13.79
BR40-5/8 SEALED	.6250 - .6055	15.88 - 15.38
BR40-11/16 SEALED	.6875 - .6677	17.46 - 16.96
BR40-3/4 SEALED	.7500 - .7303	19.05 - 18.55
BR40-13/16 SEALED	.8125 - .7929	20.64 - 20.14
BR40-7/8 SEALED	.8750 - .8555	22.23 - 21.73
BR40-1 SEALED	1.0000 - .9803	25.40 - 24.90
BR40-00 INCH SEALED	Consists of one each of the above collets.	

Sealed BR/ER Collets

Metallic sealed—unique slot design will seal the tool to the collet and the collet to the toolholder. No additional toolholders and clamping nuts are necessary. For use with coolant through tooling applications up to 2000psi.

- * Sizes listed with no clamping range are produced to maintained the lowest T.I.R. possible. Larger diameter collets have a .020" (0.5 mm) range.

BR40/ER40 METRIC SEALED COLLETS For Coolant Through Tooling

PART NUMBER BR40	Clamping Capacity	
	(inch)	(mm)
*BR40-06 SEALED	.2362	6.00
BR40-08 SEALED	.3150 - .2953	8.00 - 7.50
BR40-10 SEALED	.3937 - .3740	10.00 - 9.50
BR40-11 SEALED	.4331 - .4134	11.00 - 10.50
BR40-12 SEALED	.4724 - .4528	12.00 - 11.50
BR40-13 SEALED	.5118 - .4921	13.00 - 12.50
BR40-14 SEALED	.5512 - .5315	14.00 - 13.50
BR40-15 SEALED	.5906 - .5709	15.00 - 14.50
BR40-16 SEALED	.6300 - .6102	16.00 - 15.50
BR40-17 SEALED	.6693 - .6496	17.00 - 16.50
BR40-18 SEALED	.7087 - .6890	18.00 - 17.50
BR40-19 SEALED	.7480 - .7283	19.00 - 18.50
BR40-20 SEALED	.7877 - .7680	20.00 - 19.50
BR40-21 SEALED	.8268 - .8071	21.00 - 20.50
BR40-22 SEALED	.8661 - .8465	22.00 - 21.50
BR40-23 SEALED	.9055 - .8858	23.00 - 22.50
BR40-24 SEALED	.9449 - .9252	24.00 - 23.50
BR40-25 SEALED	.9843 - .9646	25.00 - 24.50
BR40-26 SEALED	1.0236 - 1.0039	25.00 - 24.50
BR40-00 SEALED	Consists of one each of the above collets.	

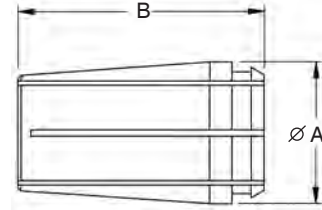
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.



TG STYLE COLLETS

PART NUMBER	PART NUMBER	I.D.	DECIMAL	PART NUMBER	I.D.	DECIMAL
BTG075-3/32	BTG100-3/32	3/32	.0937	BTG150-1/2	1/2	.5000
BTG075-7/64	BTG100-7/64	7/64	.1093	BTG150-33/64	33/64	.5156
BTG075-1/8	BTG100-1/8	1/8	.1250	BTG150-17/32	17/32	.5312
BTG075-9/64	BTG100-9/64	9/64	.1406	BTG150-35/64	35/64	.5468
BTG075-5/32	BTG100-5/32	5/32	.1562	BTG150-9/16	9/16	.5625
BTG075-11/64	BTG100-11/64	11/64	.1718	BTG150-37/64	37/64	.5781
BTG075-3/16	BTG100-3/16	3/16	.1875	BTG150-19/32	19/32	.5937
BTG075-13/64	BTG100-13/64	13/64	.2031	BTG150-39/64	39/64	.6093
BTG075-7/32	BTG100-7/32	7/32	.2187	BTG150-5/8	5/8	.6250
BTG075-15/64	BTG100-15/64	15/64	.2343	BTG150-41/64	41/64	.6406
BTG075-1/4	BTG100-1/4	1/4	.2500	BTG150-21/32	21/32	.6562
BTG075-17/64	BTG100-17/64	17/64	.2656	BTG150-43/64	43/64	.6718
BTG075-9/32	BTG100-9/32	9/32	.2812	BTG150-11/16	11/16	.6875
BTG075-19/64	BTG100-19/64	19/64	.2998	BTG150-45/64	45/64	.7031
BTG075-5/16	BTG100-5/16	5/16	.3125	BTG150-23/32	23/32	.7187
BTG075-21/64	BTG100-21/64	21/64	.3281	BTG150-47/64	47/64	.7343
BTG075-11/32	BTG100-11/32	11/32	.3437	BTG150-3/4	3/4	.7500
BTG075-23/64	BTG100-23/64	23/64	.3593	BTG150-49/64	49/64	.7656
BTG075-3/8	BTG100-3/8	3/8	.3750	BTG150-25/32	25/32	.7812
BTG075-25/64	BTG100-25/64	25/64	.3906	BTG150-51/64	51/64	.7968
BTG075-13/32	BTG100-13/32	13/32	.4062	BTG150-13/16	13/16	.8125
BTG075-27/64	BTG100-27/64	27/64	.4218	BTG150-53/64	53/64	.8281
BTG075-7/16	BTG100-7/16	7/16	.4375	BTG150-27/32	27/32	.8438
BTG075-29/64	BTG100-29/64	29/64	.4531	BTG150-55/64	55/64	.8437
BTG075-15/32	BTG100-15/32	15/32	.4687	BTG150-7/8	7/8	.8593
BTG075-31/64	BTG100-31/64	31/64	.4843	BTG150-57/64	57/64	.8906
BTG075-1/2	BTG100-1/2	1/2	.5000	BTG150-29/32	29/32	.9062
BTG075-33/64	BTG100-33/64	33/64	.5156	BTG150-59/64	59/64	.9218
BTG075-17/32	BTG100-17/32	17/32	.5312	BTG150-15/16	15/16	.9375
BTG075-35/64	BTG100-35/64	35/64	.5468	BTG150-61/64	61/64	.9531
BTG075-9/16	BTG100-9/16	9/16	.5625	BTG150-31/32	31/32	.9687
BTG075-37/64	BTG100-37/64	37/64	.5781	BTG150-63/64	63/64	.9843
BTG075-19/32	BTG100-19/32	19/32	.5937	BTG150-1	1"	1.000
BTG075-39/64	BTG100-39/64	39/64	.6093	BTG150-1-1/64	1-1/64	1.0156
BTG075-5/8	BTG100-5/8	5/8	.6250	BTG150-1-1/32	1-1/32	1.0312
BTG075-41/64	BTG100-41/64	41/64	.6406	BTG150-1-3/64	1-3/64	1.0469
BTG075-21/32	BTG100-21/32	21/32	.6562	BTG150-1-1/16	1-1/16	1.0625
BTG075-43/64	BTG100-43/64	43/64	.6718	BTG150-1-5/64	1-5/64	1.0781
BTG075-11/16	BTG100-11/16	11/16	.6875	BTG150-1-3/32	1-3/32	1.0937
BTG075-45/64	BTG100-45/64	45/64	.7031	BTG150-1-7/64	1-7/64	1.1094
BTG075-23/32	BTG100-23/32	23/32	.7187	BTG150-1-1/8	1-1/8	1.1250
BTG075-47/64	BTG100-47/64	47/64	.7343	BTG150-1-9/64	1-9/64	1.1406
BTG075-3/4	BTG100-3/4	3/4	.7500	BTG150-1-5/32	1-5/32	1.1562
	BTG100-49/64	49/64	.7656	BTG150-1-11/64	1-11/64	1.1719
	BTG100-25/32	25/32	.7812	BTG150-1-3/16	1-3/16	1.1875
	BTG100-51/64	51/64	.7968	BTG150-1-13/64	1-13/64	1.2031
	BTG100-13/16	13/16	.8125	BTG150-1-7/32	1-7/32	1.2188
	BTG100-53/64	53/64	.8281	BTG150-1-15/64	1-15/64	1.2344
	BTG100-27/32	27/32	.8438	BTG150-1-1/4	1-1/4	1.2500
	BTG100-55/64	55/64	.8437	BTG150-1-17/64	1-17/64	1.2656
	BTG100-7/8	7/8	.8593	BTG150-1-9/32	1-9/32	1.2812
	BTG100-57/64	57/64	.8906	BTG150-1-19/64	1-19/64	1.2969
	BTG100-29/32	29/32	.9062	BTG150-1-5/16	1-5/16	1.3125
	BTG100-59/64	59/64	.9218	BTG150-1-21/64	1-21/64	1.3281
	BTG100-15/16	15/16	.9375	BTG150-1-11/32	1-11/32	1.3438
	BTG100-61/64	61/64	.9531	BTG150-1-23/64	1-23/64	1.3594
	BTG100-31/32	31/32	.9687	BTG150-1-3/8	1-3/8	1.3750
	BTG100-63/64	63/64	.9843	BTG150-1-25/64	1-25/64	1.3906
	BTG100-1	1"	1.000	BTG150-1-13/32	1-13/32	1.4062
				BTG150-1-27/64	1-27/64	1.4219
				BTG150-1-7/16	1-7/16	1.4375
				BTG150-1-29/64	1-29/64	1.4531
				BTG150-1-15/32	1-15/32	1.4688
				BTG150-1-31/64	1-31/64	1.4844
				BTG150-1-1/2	1-1/2	1.5000

BTG/TG STYLE COLLETS



SERIES	A O.D. DIA.	B
BTG075	1.062	1.844
BTG100	1.379	2.375
BTG150	2.00	3.00

COLLET SETS

PART NUMBER	COLLET SERIES	COLLET RANGE	COLLETS IN SET	RANGE OF COLLET SET
BTG075-11	75	1/8-3/4	11	1/8-3/4x1/16
BTG075-21	75	1/8-3/4	21	1/8-3/4x1/32
BTG075-41	75	1/8-3/4	41	1/8-3/4x1/64
BTG100-15	100	1/8-1	15	1/8-1x1/16
BTG100-21	100	3/8-1	21	3/8-1x1/32
BTG100-30	100	3/32-1	30	3/32-1x1/32
BTG100-59	100	3/32-1	59	3/32-1x1/64

NOTE! When ordering sealed collets specify (Sealed) after part number. Sealed collets are exact size only. Exact size collets have minimal collapse.

All standard collets have a 1/64 collapsibility.

COLLET SETS

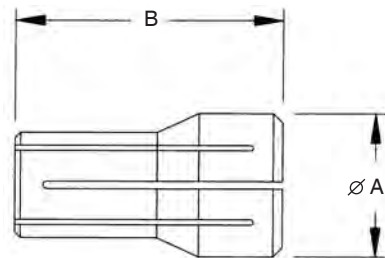
PART NUMBER	COLLET SERIES	COLLET RANGE	COLLETS IN SET	RANGE OF COLLET SET
BTG150-33	150	1/2-1-1/2	33	1/2-1-1/2x1/32
BTG150-65	150	1/2-1-1/2	65	1/2-1-1/2x1/64

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

DOUBLE ANGLE STYLE COLLETS

DOUBLE ANGLE STYLE COLLETS

DOUBLE ANGLE 300	DOUBLE ANGLE 200	DOUBLE ANGLE 100	DOUBLE ANGLE 180	I.D.	DECIMAL
DA-300-1/32				1/32	0.0313
DA-300-3/64	DA-200-3/64	DA-100-3/64	DA-180-3/64	3/64	0.0469
DA-300-1/16	DA-200-1/16	DA-100-1/16	DA-180-1/16	1/16	0.0625
DA-300-5/64	DA-200-5/64	DA-100-5/64	DA-180-5/64	5/64	0.0781
DA-300-3/32	DA-200-3/32	DA-100-3/32	DA-180-3/32	3/32	0.0938
DA-300-7/64	DA-200-7/64	DA-100-7/64	DA-180-7/64	7/64	0.1094
DA-300-1/8	DA-200-1/8	DA-100-1/8	DA-180-1/8	1/8	0.1250
DA-300-9/64	DA-200-9/64	DA-100-9/64	DA-180-9/64	9/64	0.1406
DA-300-5/32	DA-200-5/32	DA-100-5/32	DA-180-5/32	5/32	0.1563
DA-300-11/64	DA-200-11/64	DA-100-11/64	DA-180-11/64	11/64	0.1719
DA-300-3/16	DA-200-3/16	DA-100-3/16	DA-180-3/16	3/16	0.1875
DA-300-13/64	DA-200-13/64	DA-100-13/64	DA-180-13/64	13/64	0.2031
DA-300-7/32	DA-200-7/32	DA-100-7/32	DA-180-7/32	7/32	0.2188
DA-300-15/64	DA-200-15/64	DA-100-15/64	DA-180-15/64	15/64	0.2344
DA-300-1/4	DA-200-1/4	DA-100-1/4	DA-180-1/4	1/4	0.2500
	DA-200-17/64	DA-100-17/64	DA-180-17/64	17/64	0.2656
	DA-200-9/32	DA-100-9/32	DA-180-9/32	9/32	0.2813
	DA-200-19/64	DA-100-19/64	DA-180-19/64	19/64	0.2969
	DA-200-5/16	DA-100-5/16	DA-180-5/16	5/16	0.3125
	DA-200-21/64	DA-100-21/64	DA-180-21/64	21/64	0.3281
	DA-200-11/32	DA-100-11/32	DA-180-11/32	11/32	0.3437
	DA-200-23/64	DA-100-23/64	DA-180-23/64	23/64	0.3593
	DA-200-3/8	DA-100-3/8	DA-180-3/8	3/8	0.3750
	DA-200-25/64	DA-100-25/64	DA-180-25/64	25/64	0.3906
		DA-100-13/32	DA-180-13/32	13/32	0.4063
		DA-100-27/64	DA-180-27/64	27/64	0.4219
		DA-100-7/16	DA-180-7/16	7/16	0.4375
		DA-100-29/64	DA-180-29/64	29/64	0.4531
		DA-100-15/32	DA-180-15/32	15/32	0.4688
		DA-100-31/64	DA-180-31/64	31/64	0.4844
		DA-100-1/2	DA-180-1/2	1/2	0.5000
		DA-100-33/64	DA-180-33/64	33/64	0.5156
		DA-100-17/32	DA-180-17/32	17/32	0.5313
		DA-100-35/64	DA-180-35/64	35/64	0.5469
		DA-100-9/16	DA-180-9/16	9/16	0.5625
		DA-180-37/64		37/64	0.5781
		DA-180-19/32		19/32	0.5938
		DA-180-39/64		39/64	0.6094
		DA-180-5/8		5/8	0.6250
		DA-180-41/64		41/64	0.6406
		DA-180-21/32		21/32	0.6563
		DA-180-43/64		43/64	0.6719
		DA-180-11/16		11/16	0.6875
		DA-180-45/64		45/64	0.7031
		DA-180-23/32		23/32	0.7188
		DA-180-47/64		47/64	0.7344
		DA-180-3/4		3/4	0.7500



SERIES	A O.D. DIA.	B
DA-300	.375	1.000
DA-200	.539	1.187
DA-100	.769	1.437
DA-180	1.025	1.639

NOTE! Sealed DA Collets are not available.

All standard collets have a 1/64 collapsibility.

COLLET SETS

PART NUMBER	COLLET SERIES	COLLETS IN SET	RANGE OF COLLET SET
DA-300-7	300	7	1/16-1/4x1/32
DA-300-14	300	14	3/64-1/4x1/64
DA-200-9	200	9	1/8-3/8x1/32
DA-200-11	200	11	1/16-3/8x1/32
DA-200-21	200	21	1/16-3/8x1/64
DA-100-15	100	15	1/8-9/16x1/32
DA-100-29	100	29	1/8-9/16x1/64
DA-180-17	180	17	1/4-3/4x1/32
DA-180-33	180	33	1/4-3/4x1/64

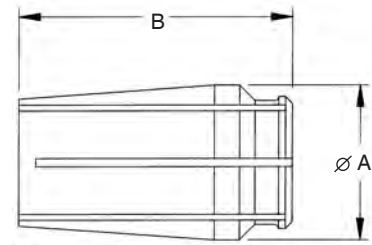
NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.



BF/AF STYLE COLLETS

BF COLLETS

PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	PART NUMBER	I.D.	DECIMAL
BF025-5/64	BF038-5/64				5/64	.0781
BF025-3/32	BF038-3/32				3/32	.0937
BF025-7/64	BF038-7/64	BF050-7/64	BF075-7/64		7/64	.1093
BF025-1/8	BF038-1/8	BF050-1/8	BF075-1/8		1/8	.1250
BF025-9/64	BF038-9/64	BF050-9/64	BF075-9/64		9/64	.1406
BF025-5/32	BF038-5/32	BF050-5/32	BF075-5/32		5/32	.1562
BF025-11/64	BF038-11/64	BF050-11/64	BF075-11/64		11/64	.1718
BF025-3/16	BF038-3/16	BF050-3/16	BF075-3/16		3/16	.1875
BF025-13/64	BF038-13/64	BF050-13/64	BF075-13/64		13/64	.2031
BF025-7/32	BF038-7/32	BF050-7/32	BF075-7/32	BF100-7/32	7/32	.2187
BF025-15/64	BF038-15/64	BF050-15/64	BF075-15/64	BF100-15/64	15/64	.2343
BF025-1/4	BF038-1/4	BF050-1/4	BF075-1/4	BF100-1/4	1/4	.2500
BF038-17/64	BF050-17/64	BF075-17/64	BF100-17/64		17/64	.2656
BF038-9/32	BF050-9/32	BF075-9/32	BF100-9/32		9/32	.2812
BF038-19/64	BF050-19/64	BF075-19/64	BF100-19/64		19/64	.2968
BF038-5/16	BF050-5/16	BF075-5/16	BF100-5/16		5/16	.3125
BF038-21/64	BF050-21/64	BF075-21/64	BF100-21/64		21/64	.3281
BF038-11/32	BF050-11/32	BF075-11/32	BF100-11/32		11/32	.3437
BF038-23/64	BF050-23/64	BF075-23/64	BF100-23/64		23/64	.3593
BF038-3/8	BF050-3/8	BF075-3/8	BF100-3/8		3/8	.3750
BF050-25/64	BF075-25/64	BF100-25/64			25/64	.3906
BF050-13/32	BF075-13/32	BF100-13/32			13/32	.4062
BF050-27/64	BF075-27/64	BF100-27/64			27/64	.4218
BF050-7/16	BF075-7/16	BF100-7/16			7/16	.4375
BF050-29/64	BF075-29/64	BF100-29/64			29/64	.4531
BF050-15/32	BF075-15/32	BF100-15/32			15/32	.4687
BF050-31/64	BF075-31/64	BF100-31/64			31/64	.4843
BF050-1/2	BF075-1/2	BF100-1/2			1/2	.5000
BF075-33/64	BF100-33/64				33/64	.5156
BF075-17/32	BF100-17/32				17/32	.5312
BF075-35/64	BF100-35/64				35/64	.5468
BF075-9/16	BF100-9/16				9/16	.5625
BF075-37/64	BF100-37/64				37/64	.5781
BF075-19/32	BF100-19/32				19/32	.5937
BF075-39/64	BF100-39/64				39/64	.6093
BF075-5/8	BF100-5/8				5/8	.6250
BF075-41/64	BF100-41/64				41/64	.6406
BF075-21/32	BF100-21/32				21/32	.6562
BF075-43/64	BF100-43/64				43/64	.6718
BF075-11/16	BF100-11/16				11/16	.6875
BF075-45/64	BF100-45/64				45/64	.7031
BF075-23/32	BF100-23/32				23/32	.7187
BF075-47/64	BF100-47/64				47/64	.7383
BF075-3/4	BF100-3/4				3/4	.7500
BF100-49/64					49/64	.7656
BF100-25/32					25/32	.7812
BF100-51/64					51/64	.7968
BF100-13/16					13/16	.8125
BF100-53/64					53/64	.8281
BF100-27/32					27/32	.8437
BF100-55/64					55/64	.8593
BF100-7/8					7/8	.8750
BF100-57/64					57/64	.8906
BF100-29/32					29/32	.9062
BF100-59/64					59/64	.9218
BF100-15/16					15/16	.9375
BF100-61/64					61/64	.9531
BF100-31/32					31/32	.9688
BF100-63/64					63/64	.9840
BF100-1					1"	1.000



SERIES	A O.D. DIA.	B
BF025	.438	1.000
BF038	.563	1.030
BF050	.720	1.160
BF075	1.131	2.020
BF100	1.446	2.500

NOTE! Sealed Flex Collets not available.

All collets have 1/64 collapsibility.

COLLET SETS

PART NUMBER	COLLET SERIES	COLLET RANGE	COLLETS IN SET	RANGE OF COLLET SET
BF025-6	25	3/32-1/4	6	3/32-1/4x1/32
BF025-12	25	5/64-1/4	12	5/64-1/4x1/64
BF038-10	38	3/32-3/8	10	3/32-3/8x1/32
BF038-20	38	5/64-3/8	20	5/64-3/8x1/64
BF050-13	50	1/8-1/2	13	1/8-1/2x1/32
BF050-25	50	1/8-1/2	25	1/8-1/2x1/64
BF075-21	75	1/8-3/4	21	1/8-3/4x1/32
BF075-41	75	1/8-3/4	41	1/8-3/4x1/64
BF100-21	100	3/8-1	21	3/8-1x1/32
BF100-41	100	3/8-1	41	3/8-1x1/64

NOTE! Collet must be assembled into collet nut before inserting tool or assembling onto chuck.

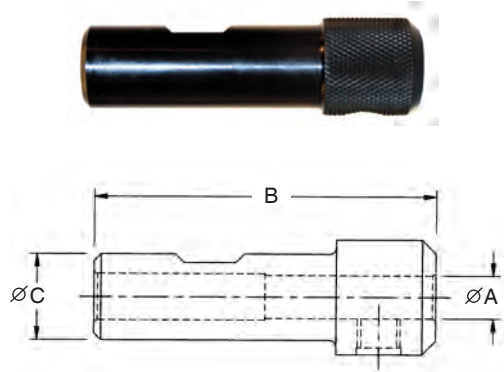
COLLETS

NOTE! Briney Flex Collets are equivalent to Acura-Flex Collets.

ACCESSORIES - STRAIGHT SHANK ADAPTERS

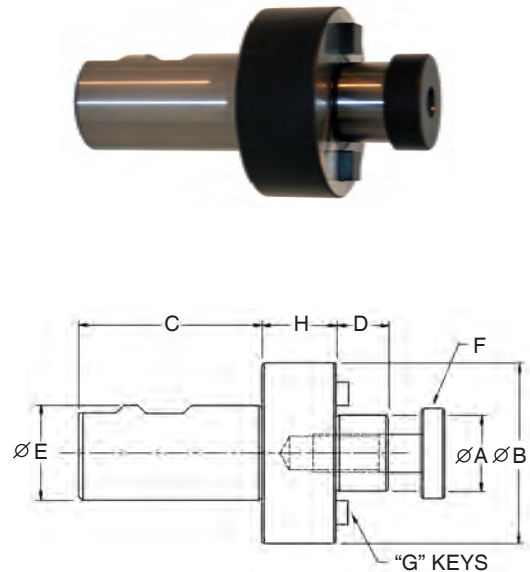
END MILL ADAPTERS

PART NUMBER	A I.D. DIA.	B OVER-ALL LENGTH	C O.D. DIA.
SS050E-012-225	.1250	2.25	.5000
SS050E-018-225	.1875	2.25	.5000
SS050E-025-300	.2500	3.00	.5000
SS050E-031-312	.3125	3.12	.5000
SS075E-012-250	.1250	2.50	.7500
SS075E-018-250	.1875	2.50	.7500
SS075E-025-262	.2500	2.62	.7500
SS075E-031-275	.3125	2.75	.7500
SS075E-038-300	.3750	3.00	.7500
SS125E-038-362	.3750	3.62	1.250
SS125E-050-375	.5000	3.75	1.250
SS125E-062-400	.6250	4.00	1.250
SS125E-075-400	.7500	4.00	1.250



SHELL MILL ADAPTERS

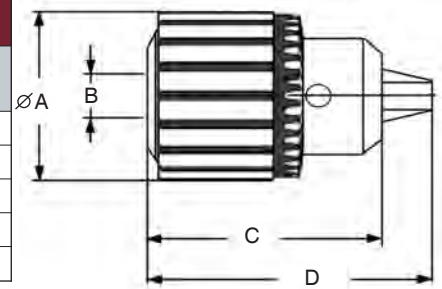
PART NUMBER	A ARBOR DIA.	B O.D. DIA.	C SHANK LENGTH	D LENGTH OF PILOT	E DIA.	F SCREW	G KEY	H
SS125SM-075	.7500	2.000	2.43	.68	1.250	B5002	.31	.992
SS125SM-100	1.000	2.375	2.43	.68	1.250	B5003	.38	.992





KEYED PLAIN BEARING DRILL CHUCK TAPER MOUNT

PART NO.	MODEL NO.	JACOBS EQUIVALENT	CAPACITY		A	MOUNT B	C	D	KEY
			MIN	MAX					
BL40113B	CY-16 J-3	3A	0.015"	0.625"	2.17	3JT	3.07	3.74	K3
BL40116B	CYX-13 J-2	34-02	0.015"	0.500"	2.05	2JT	2.70	3.31	K3
BL40117B	CYX-13 J-6	34-06	0.015"	0.500"	2.05	6JT	2.70	3.31	K3
BL40118B	CYX-13 J-33	34-33	0.015"	0.500"	2.05	33JT	2.70	3.31	K3
BL40120B	CY-19 J-3	36	0.015"	0.750"	2.95	3JT	3.90	4.72	K4



Features

- Jaws center-ground for absolute straightness and alignment.
- Jaws specially treated to ensure extended thread life and high gripping surface hardness.
- Through-hardened sleeve teeth, plus hardened nose and keyholes provide outstanding wear resistance.
- Each chuck 100% inspected for performance and precision.
- Designed for heavy and medium duty applications using portable, bench, or floor-mounted power tools.

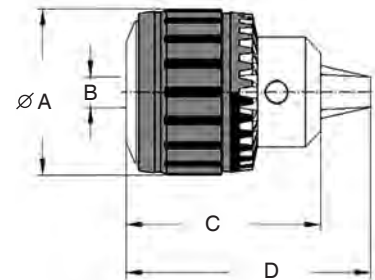


See these pages for adapters:

- | | |
|-----------------------------|------------------------------|
| Page 46. for CAT40 Adapters | Page 62. for BT50 Adapters |
| Page 52. for CAT50 Adapters | Page 65. for NMTB30 Adapters |
| Page 56. for BT30 Adapters | Page 67. for NMTB40 Adapters |
| Page 59. for BT40 Adapters | Page 69. for NMTB50 Adapters |

KEYED BALL BEARING DRILL CHUCK TAPER MOUNT

PART NO.	MODEL NO.	JACOBS EQUIVALENT	CAPACITY		A	MOUNT B	C	D	KEY
			MIN	MAX					
BL40070B	CBB-08 J2	8-1/2N	0.015"	0.312"	1.25	2JT	1.55	2.00	K30
BL40071B	CBB-10 J2	11N	0.031"	0.375"	1.85	2JT	2.17	2.76	K32
BL40072B	CBB-13 J3	14N	0.031"	0.500"	2.44	3JT	2.96	3.70	K3
BL40073B	CBB-16 J3	16N	0.031"	0.625"	2.00	3JT	3.19	4.02	K4
BL40074B	CBB-19 J4	18N	0.031"	0.750"	2.96	4JT	3.90	4.93	K4



Features

- Ball bearing construction maximizes gripping force and drilling accuracy.
- Jaws center-ground for absolute straightness and alignment.
- Jaws specially treated to ensure extended thread life and high gripping surface hardness.
- Through-hardened sleeve teeth, plus hardened nose and keyholes provide outstanding wear resistance.
- Each chuck 100% inspected for performance and precision.
- Engineered for heavy duty, close tolerance production drilling. Designed to work a wide range of production drilling equipment, jig bores, milling machines, lathes, and radials.

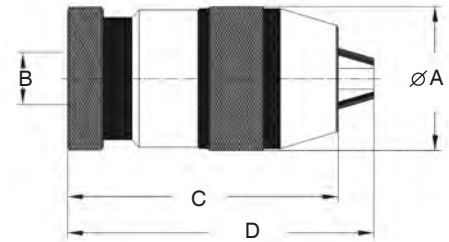


ACCESSORIES & HARDWARE

LLAMBRICH USA

HIGH PRECISION KEYLESS DRILL CHUCKS

PART NO.	MODEL NO.	JACOBS EQUIVALENT	CAPACITY		A	MOUNT B	C	D
			MIN	MAX				
BL9681B	JKP-100 J-2	JKP 100-J2	0	0.375"	1.69	2JT	3.19	3.51
BL9680B	JKP-100 J-33	JKP 100-J33	0	0.375"	1.69	33JT	3.19	3.51
BL9683B	JKP-130 J-2	JKP 130-J2	0.031"	0.500"	1.93	2JT	3.59	4.06
BL9682B	JKP-130 J-33	JKP 130-J33	0.031"	0.500"	1.93	33JT	3.59	4.06
BL9684B	JKP-130 J-6	JKP 130-J6	0.031"	0.500"	1.93	6JT	3.59	4.06
BL9685B	JKP-160 J-6	JKP 160-J6	0.125"	0.625"	2.17	6JT	3.74	4.22



Features

- Certified and guaranteed in writing to .0016" T.I.R.
- Self-tightening feature automatically increases gripping force proportional to increased torque to prevent tool shank slippage.
- All components exposed to wear are completely hardened to maintain accuracy and extend chuck life.
- Well suited for use on drill presses with high accuracy; jig bore machines, horizontal and vertical milling machines, and production drilling machines.
- Toolholding capacity up to 5/8" (.625").

See these pages for adapters:

Page 46. for CAT40 Adapters	Page 62. for BT50 Adapters
Page 52. for CAT50 Adapters	Page 65. for NMTB30 Adapters
Page 56. for BT30 Adapters	Page 67. for NMTB40 Adapters
Page 59. for BT40 Adapters	Page 69. for NMTB50 Adapters

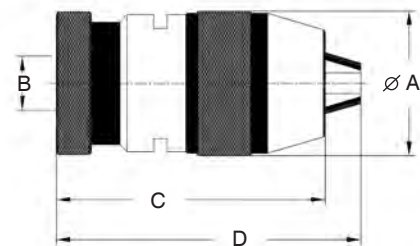
Chuck Capacity	Minimum Drill Ø
0-1/8"	0.012"
0-1/4"	0.012"
0-5/16"	0.012"
0-3/8"	0.020"
1/32"-1/2"	0.039"
1/8"-5/8"	0.118"

Valid for JKP And JKT



HIGH TORQUE / PRECISION KEYLESS DRILL CHUCKS

PART NO.	MODEL NO.	JACOBS EQUIVALENT	CAPACITY		A	MOUNT B	C	D
			MIN	MAX				
BL30527B	JKT-130 J-2	JKT 130-J2	0.031"	0.500"	1.30	2JT	2.44	2.76
BL30528B	JKT-130 J-33	JKT 130-J33	0.031"	0.500"	1.30	33JT	2.44	2.76
BL30529B	JKT-130 J-6	JKT 130-J2	0.031"	0.500"	1.50	6JT	2.64	2.92
BL30530B	JKT-160 J-6	JKT 160-J6	0.125"	0.625"	1.50	6JT	2.64	2.92



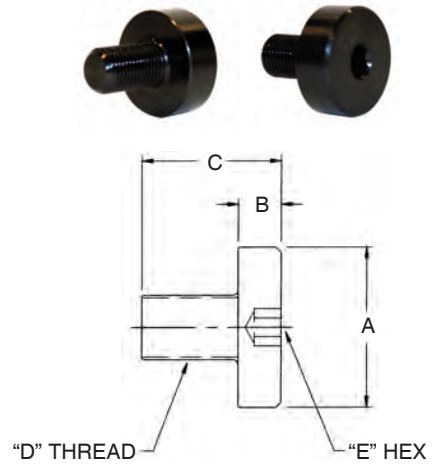
Features

- JKT offers the same features as the JKP with the addition of milled wrench flats to be used in applications where more tool clamping force is necessary. Clamping forces can be increased up to 3 times with light wrench tightening versus the standard hand tightening.
- Certified and guaranteed in writing to .0016" T.I.R.
- Self-tightening feature automatically increases gripping force proportional to increased torque to prevent tool shank slippage.
- All components exposed to wear are completely hardened to maintain accuracy and extend chuck life.
- Well suited for use on drill presses with high accuracy; jig bore machines, horizontal and vertical milling machines, and production drilling machines.
- Toolholding capacity up to 5/8" (.625").



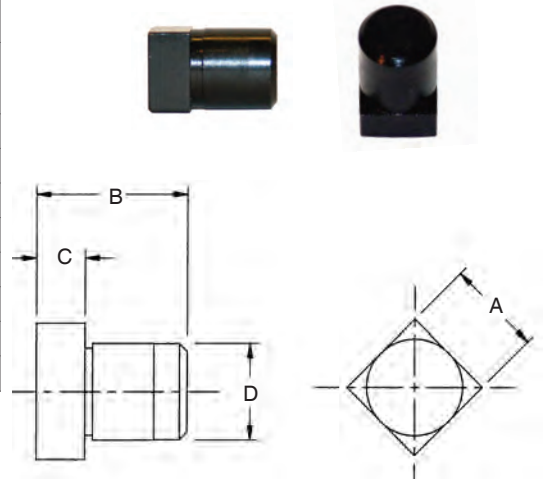
SHELL MILL SCREWS

PART NUMBER	A	B	C	D	E
B5001	.62	.34	.84	1/4-28	3/16
B5002	.88	.37	1.00	3/8-24	1/4
B5003	1.19	.43	1.25	1/2-20	5/16
B5004	1.50	.37	1.25	5/8-18	5/16
B5005	1.865	.50	1.62	3/4-16	3/8
B5006	2.50	.50	1.93	1-14	1/2
B5007	3.12	.62	1.93	1-14	1/2



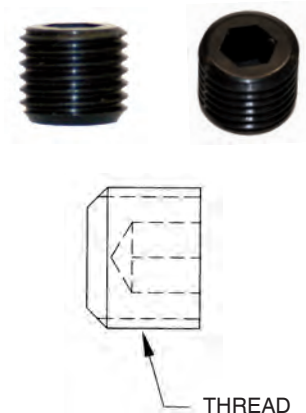
SHELL MILL DRIVE KEYS

PART NUMBER	A	B	C	D DIA.	ADAPTER PILOT SIZE
BDK-250	.250	.50	.13	.251	.500
BDK-312	.312	.50	.16	.313	.750
BDK-375	.375	.59	.19	.376	1.000
BDK-500	.500	.78	.25	.501	1.250
BDK-625	.625	.96	.31	.626	1.500
BDK-750	.750	1.03	.38	.751	2.000
BDK-100	1.00	1.38	.50	1.001	2.500
BDK-100A	1.00	1.09	.50	1.001	2.500



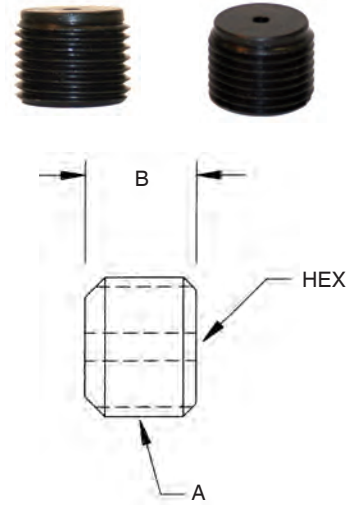
END MILL SET SCREWS (WELDON FORGED)

PART NUMBER	THREAD SIZE	LENGTH
10-32W	10-32	.25
1/4-28W	1/4-28	.25
3/8-24W	3/8-24	.31
7/16-20W	7/16-20	.38
9/16-18W	9/16-18	.50
5/8-18W	5/8-18	.50
3/4-16W	3/4-16	.50
1-14W	1-14	.88



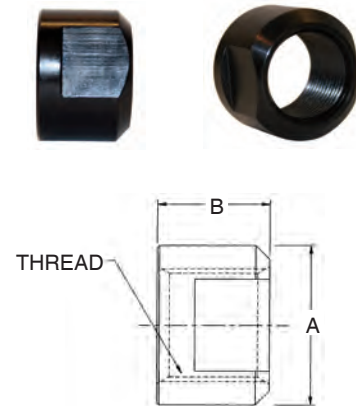
STOP SCREWS

PART NUMBER	A THREAD SIZE	B LENGTH
5/16LH	5/16-24LH	.38
7/16LH	7/16-20LH	.50
9/16LH	9/16-18LH	.50
5/8LH	5/8-18LH	.50
13/16LH	13/16-16LH	.62
7/8LH	7/8-14LH	.62
1-1/8LH	1-1/8-16LH	.62
1-1/2LH	1-1/2-12LH	.62
1-5/8LH	1-5/8-12LH	.62
M6RH	M6x1.0	.39
M10RH	M10x1.5	.39
M12RH	M12x1.0	.39
M16RH	M16x2.0	.47
M18LH	M18x2.5LH	.50
M5-DIN-SSS	M5x.8	.63
M6-DIN-SSS	M6x1.0	.63
M8-DIN-SSS	M8x1.25	.63
M10-DIN-SSS	M10x1.5	.79



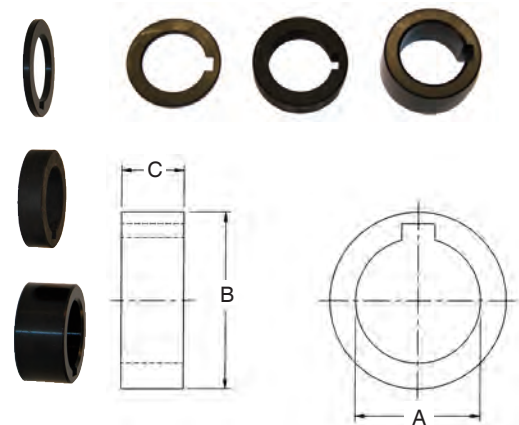
STUB ARBOR NUTS

PART NUMBER	A	B	THREAD
B5030	1.50	1.00	1-1/4
B5040	1.88	1.25	1-1/4-12
B5050	2.08	1.50	1-1/2-12



STUB ARBOR SPACER SETS

PART NUMBER	A	B	C SET INCLUDES 1 EACH
B6030	1.003	1.56	1/8-3/8-3/4
B6040	1.253	1.88	1/8-3/8-3/4
B6050	1.503	2.12	1/8-3/8-3/4
B6031	1.003	1.56	1/4-1/2
B6041	1.253	1.88	1/4-1/2
B6051	1.503	2.12	1/4-1/2



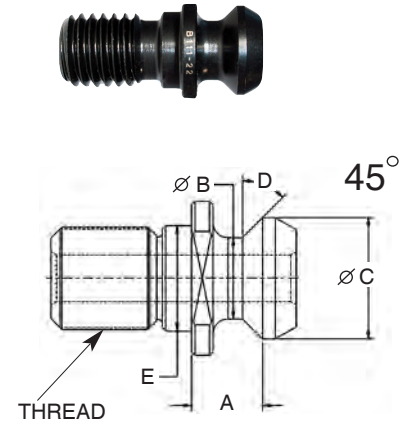
ACCESSORIES - STANDARD RETENTION KNOBS

Retention Knobs

Please make sure the Retention Knob you order is correct for your machine. By using the wrong Retention Knob may cause damage to your machine spindle, the toolholder, and could cause safety risks.

STYLE: ANSI / ANSI

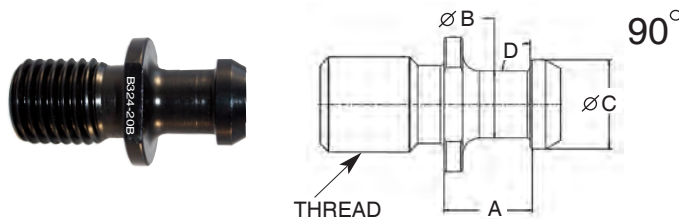
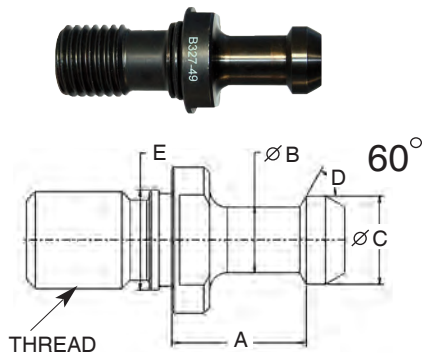
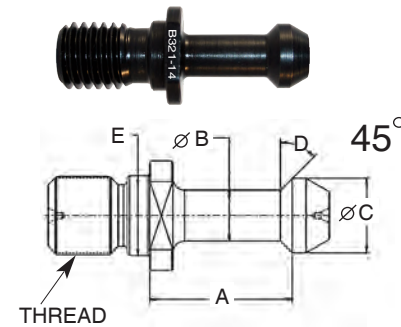
PART NUMBER	TAPER SIZE	A GAUGE LENGTH	B DIA.	C DIA.	D	E PILOT DIA.	THREAD	HOLE	O-RING	SOCKET
B111-22	V40	.440	.490	.740	45°	.640	5/8-11	Y	NO	BRKW40
B111-23	V40	.440	.490	.740	45°	.640	5/8-11	N	—	BRKW40
B111-26	BT40	.552	.490	.740	45°	.668	M16x2.0	N	—	BRKW40
B111-26A	BT40	.552	.490	.740	45°	.668	M16X2.0	Y	NO	BRKW40
B111-35	V45	.580	.605	.940	45°	—	3/4-10	N	—	BRKW45
B111-33	V45	.580	.605	.940	45°	.765	3/4-10	Y	NO	BRKW45
B111-44	V50	.700	.820	1.140	45°	1.03	1-8	Y	NO	BRKW50
B171-44	V50	.700	.820	1.140	45°	1.03	1-8	Y	NO	BRKW50M
B111-46	V50	.700	.820	1.140	45°	1.03	1-8	N	—	BRKW50
B111-55	V60	1.080	1.045	1.460	45°	1.295	1-1/4-7	Y	NO	N/A



STYLE: ANSI / JMTBA

PART NUMBER	TAPER SIZE	A GAUGE LENGTH	B DIA.	C DIA.	D	E PILOT DIA.	THREAD	HOLE	O-RING	SOCKET
B171-22	V40	1.139	.406	.594	45°	—	5/8-11	N	—	BRKW40
B171-23 *(B171-22C)	V40	1.139	.406	.594	45°	—	5/8-11	Y	NO	BRKW40
B321-14	V40	.988	.392	.588	45°	.640	5/8-11	N	—	BRKW40
B321-14C	V40	.988	.392	.588	45°	.640	5/8-11	Y	NO	BRKW40
B324-18B	V50	.904	.706	.942	90°	—	1-8	N	—	BRKW50
B324-20B	V50	.904	.706	.942	90°	—	1-8	Y	NO	BRKW50
B126-22	V40	1.000	.392	.589	45°	—	5/8-11	N	—	BRKW40M
B327-49	V50	1.384	.688	.903	60°	1.023	1-8	Y	YES	BRKW50

*(B171-22C) part number in parenthesis has been replaced with part number B171-23

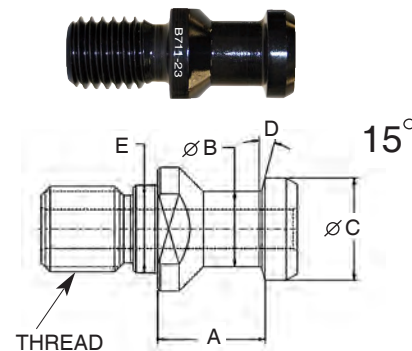


STYLE: DIN / DIN A

PART NUMBER	TAPER SIZE	A GAUGE LENGTH	B DIA.	C DIA.	D	E PILOT DIA.	THREAD	HOLE	O-RING	SOCKET
B711-23	V40	.788	.549	.747	15°	.640	5/8-11	Y	NO	BRKW40
B711-25	V40	.788	.549	.747	15°	.640	5/8-11	N	NO	BRKW40
B711-45	V50	.984	.825	1.101	15°	1.030	1-8	Y	NO	BRKW50M
B711-47	V50	.984	.825	1.101	15°	1.030	1-8	N	NO	BRKW50M

Toolholder taper information that will help when selecting the proper retention knob:

- Toolholder taper (BT, CAT, NMTB, Etc.). See page 3 for shank data if unclear.
 - Solid or through coolant requirements. If through coolant, is an O-ring needed? If so, where are they located?
- If replacing existing knobs, are there any numbers on it to cross for identification purposes?



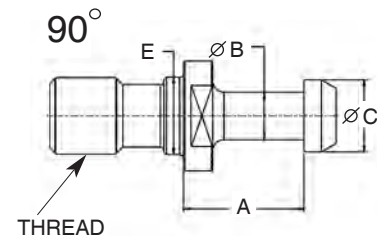
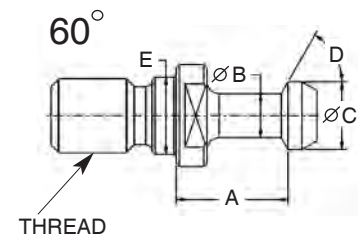
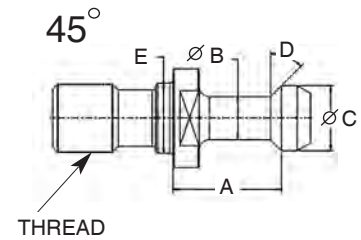
RETENTION
KNOBS

ACCESSORIES - STANDARD RETENTION KNOBS

Retention Knobs

Please make sure the Retention Knob you order is correct for your machine. By using the wrong Retention Knob may cause damage to your machine spindle, the toolholder, and could cause safety risks.

STYLE: JMTBA / JMTBA										
PART NUMBER	TAPER SIZE	A GAUGE LENGTH	B DIA.	C DIA.	D	E PILOT DIA.	THREAD	HOLE	O-RING	SOCKET
B311-09	BT30	.707	.274	.431	45°	.491	M12x1.75	N	—	BRKW30M
B311-09C	BT30	.707	.274	.431	45°	.491	M12x1.75	Y	NO	BRKW30M
B311-09A	BT30	.707	.274	.431	60°	.491	M12x1.75	N	—	BRKW30M
B311-13	BT40	1.100	.392	.589	45°	.668	M16x2.0	N	—	BRKW40
B311-13D	BT40	1.100	.392	.589	45°	.668	M16x2.0	Y	NO	BRKW40
B311-13A	BT40	1.100	.392	.589	60°	.668	M16x2.0	N	—	BRKW40
B311-13E	BT40	1.100	.392	.589	60°	.668	M16x2.0	Y	NO	BRKW40
B311-13B	BT40	1.100	.392	.589	90°	.668	M16x2.0	N	—	BRKW40
B311-13F	BT40	1.100	.392	.589	90°	.668	M16x2.0	Y	NO	BRKW40
B311-14	V40	.988	.392	.589	45°	.640	5/8-11	N	—	BRKW40
B315-14 *(B311-14C)	V40	.988	.392	.589	45°	.640	5/8-11	Y	NO	BRKW40
B311-14A	V40	.988	.392	.589	60°	.640	5/8-11	N	—	BRKW40
B311-14B	V40	.988	.392	.589	90°	.640	5/8-11	N	—	BRKW40
B311-17	BT50	1.376	.668	.903	45°	.983	M24x3.0	N	—	BRKW50M
B316-43 *(B311-17C)	BT50	1.376	.668	.903	45°	.983	M24x3.0	Y	NO	BRKW50M
B311-18	V50	1.384	.668	.903	45°	1.03	1"-8	N	—	BRKW50
B316-45 *(B311-18C)	V50	1.384	.668	.903	45°	1.03	1"-8	Y	NO	BRKW50
B316-47	V50	1.384	.668	.903	45°	1.03	1"-8	Y	YES	BRKW50
B311-18A	V50	1.384	.668	.903	60°	1.03	1"-8	N	—	BRKW50
B318-44A *(B311-18A-C)	V50	1.384	.668	.903	60°	1.03	1"-8	Y	NO	BRKW50
B311-18B	V50	1.384	.668	.903	90°	1.03	1"-8	N	—	BRKW50
B342-18B *(B311-18B-C)	V50	1.384	.668	.903	90°	1.03	1"-8	Y	NO	BRKW50



* (B311-14C) part number in parenthesis has been replaced with part number B315-14
 * (B311-17C) part number in parenthesis has been replaced with part number B316-43
 * (B311-18C) part number in parenthesis has been replaced with part number B316-45
 * (B311-18A-C) part number in parenthesis has been replaced with part number B318-44A
 * (B311-18B-C) part number in parenthesis has been replaced with part number B342-18B

Toolholder taper information that will help when selecting the proper retention knob:

- Toolholder taper (BT, CAT, NMTB, Etc.). See page 3 for shank data if unclear.
- Solid or through coolant requirements. If through coolant, is an O-ring needed? If so, where are they located?
- If replacing existing knobs, are there any numbers on it to cross for identification purposes?

RETENTION KNOBS



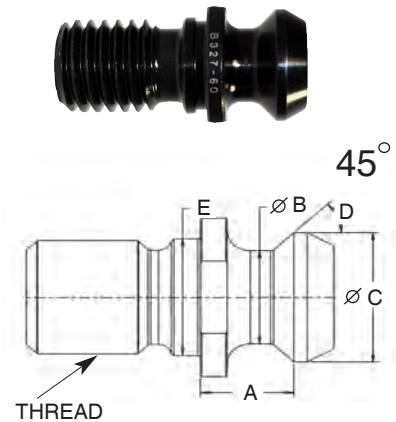
ACCESSORIES - STANDARD RETENTION KNOBS

Retention Knobs

Please make sure the Retention Knob you order is correct for your machine. By using the wrong Retention Knob may cause damage to your machine spindle, the toolholder, and could cause safety risks.

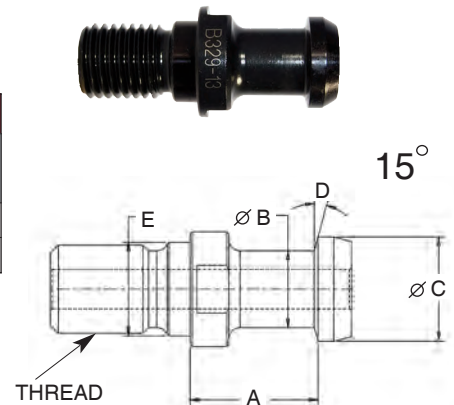
STYLE: JMTBA / ANSI

PART NUMBER	TAPER SIZE	A GAGE LENGTH	B DIA.	C DIA.	D	E PILOT DIA.	THREAD	HOLE	O-RING	SOCKET
B312-26H	V40	.440	.490	.740	45°	.641	5/8-11	N	NO	BRKW40
B312-26	V40	.440	.490	.740	45°	.641	5/8-11	Y	NO	BRKW40
B327-60	V40	.440	.490	.740	45°	.641	5/8-11	Y	YES	BRKW40
B312-46	V50	.700	.820	1.140	45°	1.026	1-8	Y	YES	BRKW50M



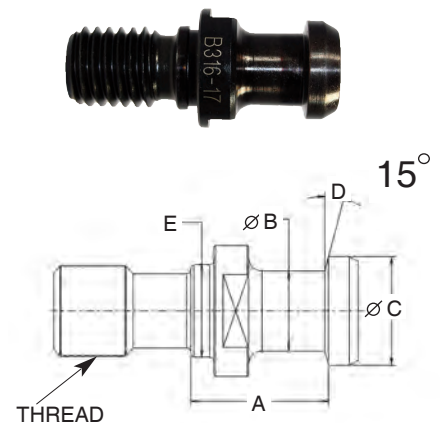
STYLE: JMTBA / ISO

PART NUMBER	TAPER SIZE	A GAGE LENGTH	B DIA.	C DIA.	D	E PILOT DIA.	THREAD	HOLE	O-RING	SOCKET
B329-12	BT40	.904	.549	.746	15°	.669	M16X2	N	NO	BRKW40
B329-13	BT40	.904	.549	.746	15°	.669	M16X2	Y	NO	BRKW40



STYLE: ISO / ISO

PART NUMBER	TAPER SIZE	A GAGE LENGTH	B DIA.	C DIA.	D	E PILOT DIA.	THREAD	HOLE	O-RING	SOCKET
B316-16	V40	.792	.549	.746	15°	.641	5/8-11	N	NO	BRKW40
B316-17	V40	.792	.549	.746	15°	.641	5/8-11	Y	YES	BRKW40



Toolholder taper information that will help when selecting the proper retention knob:

- Toolholder taper (BT, CAT, NMTB, Etc.). See page 3 for shank data if unclear.
- Solid or through coolant requirements. If through coolant, is an O-ring needed? If so, where are they located? If replacing existing knobs, are there any numbers on it to cross for identification purposes?

RETENTION KNOBS

ACCESSORIES - RETENTION KNOBS

REFERENCE WHEN ORDERING RETENTION KNOBS

Attention: _____

Company: _____

Please Provide Dimensional Data on sketch below for knob required. _____

What type of tooling is knob going to be used for? _____

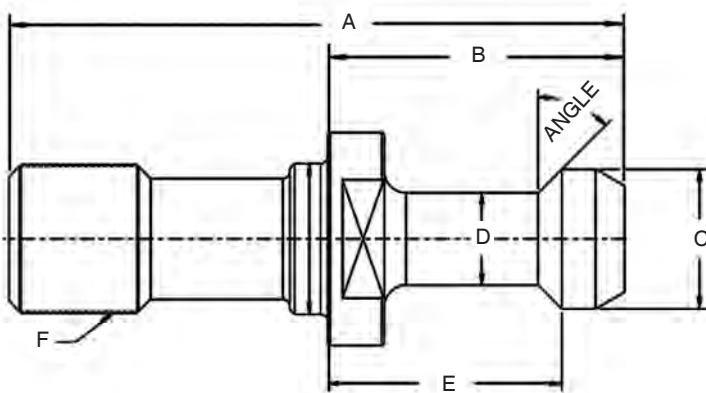
Do you require the knob to have a coolant hole? _____

If through coolant, any mention of O-Rings? If so, what locations? _____

If you have a competitors knob number, we may be able to cross. It is? _____

Machine make & model number? _____

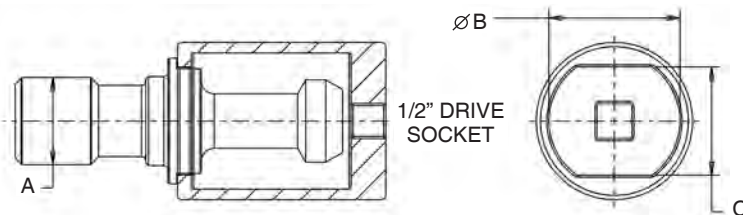
BRINEY CONTACT: _____



A _____
B _____
C _____
D _____
E _____
F _____
ANGLE _____

Facts Regarding Retention Knobs and Sockets

- Lifetime Guarantee
- Made in the USA
- Sockets have 1/2" drive



SOCKET TO FIT RETENTION KNOB TYPE

PART NUMBER	SIZE TAPER	1/2 INCH DRIVE SOCKET FITS RETENTION KNOB TYPE	A THREAD SIZE	B SHOULDER DIA. MAX.	C WRENCH SIZE MAX.
BRKW30	30	ANSI	1/2-13 UNC	0.655	0.535
BRKW30M	30	JMTBA	& M-12	0.675	0.511
BRKW30D	30	DIN	M-12	0.675	0.556
BRKW40	40	ANSI, JMTBA, ISO TYPE A, DIN	5/8-11 UNC	0.944	0.755
BRKW40M	40	ISO TYPE B	& M-16	0.894	0.711
BRKW50	50	ANSI	1.00-8 UNC	1.450	1.255
BRKW50M	50	JMTBA, ISO TYPE A & B, DIN	& M-24	1.500	1.185

Torque value, laser marked on socket. We have marked the torque value in ft./lbs. on the outside of the socket to make sure that the number is available whenever you use the sockets.

Extend the life span for the Retention Knob and toolholder. Retention Knobs can be tightened uniformly with the use of a torque wrench and a socket. This gives the exact tightness that the manufacturer's specifications require.

Warning: Open end wrenches or crescent wrenches can slip off the Retention Knob and result in rounding off of corners and damage to the Retention Knob.

Safety note: An open end wrench or crescent wrenches can slip off the Retention Knob and injure the operator.

Sockets aid in the installation and removal of Retention Knobs. By using a Socket and a Torque Wrench the ideal tightness is achieved, without rounding off the Retention Knob's corners. Sockets are designed to work when flats are up to .020 under Wrench Size Max.

Installation Information: Install Retention Knobs to Manufacturer's Torque Specifications using a torque wrench. Improper installation may result in loose knobs, if under tightened or knobs which crack or break, if over tightened. Torque (FT.-LBS.) specifications supplied with Sockets.

NOTE! Some Retention Knobs have mixed standards. Check the shoulder Diameter and Wrench sizes carefully when selecting a Socket to fit your requirements.

MODULAR TOOL STORAGE SYSTEM

TOOL CART

PART NUMBER	DESCRIPTION	CAPACITY
*BTK-TOOLSCOOT-40	Tool storage cart for BT40, CAT40 & NMTB40 taper toolholders	90 total (18 per shelf)
*BTK-TOOLSCOOT-50	Tool storage cart for BT50, CAT50 & NMTB50 taper toolholders	50 total (10 per shelf)
*BTK-TOOLSCOOT-HSK63A	Tool storage cart for HSK63A taper toolholders	90 total (18 per shelf)
*BTK-TOOLSCOOT-HSK100A	Tool storage cart for HSK100A taper toolholders	50 total (10 per shelf)

* Includes 5 adjustable shelves for your toolholding requirements and 1 utility shelf to hold collet racks or other accessories. It also includes 3 built-in top slots for securing chuck wrenches.

CNC TOOL CADDY

Mobile storage for CNC tool holders

Dimensions 57"H x 28 1/2"W x 28" D

Complete with casters that are rated to 1,200 lbs.

Shipping weight: 139 lbs.

TOOL SHELVES

PART NUMBER	DESCRIPTION	CAPACITY
BTS-40T	Extra Shelf for BT40, CAT40 & NMTB40 taper toolholders	Holds 18 toolholders
BTS-50T	Extra Shelf for BT50, CAT50 & NMTB50 taper toolholders	Holds 10 toolholders
BTS-HSK63AT	Extra Shelf for HSK63A taper toolholders	Holds 18 toolholders
BTS-HSK100AT	Extra Shelf for HSK100A taper toolholders	Holds 10 toolholders
BTS-UTILITY	Flat Shelf for accessory items	Accessories

TOOL CADDY SHELVES

Shelves can be installed flat or at a 20 degree angle

Nylon inserts protect and securely hold toolholders

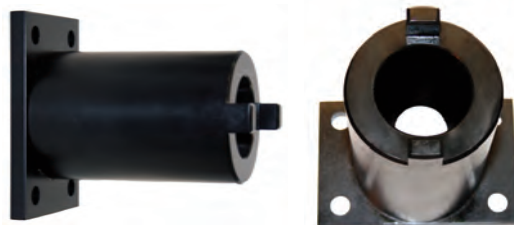
16 gauge steel shelves for strength & rugged durability



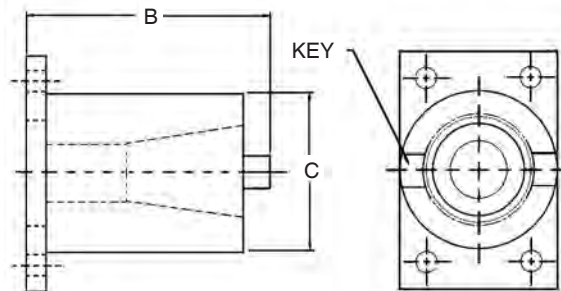
ACCESSORIES - TIGHTENING FIXTURES

TIGHTENING FIXTURE (ALL TAPERS)

PART NUMBER	SHANK SIZE	B	C	KEY
B30TF	30	3.91	3.00	.62
B35TF	35	4.65	3.00	.62
B40TF	40	4.65	3.00	.62
B45TF	45	4.90	3.50	.75
B50TF	50	6.35	4.00	1.00
B60TF	60	9.00	6.00	1.00



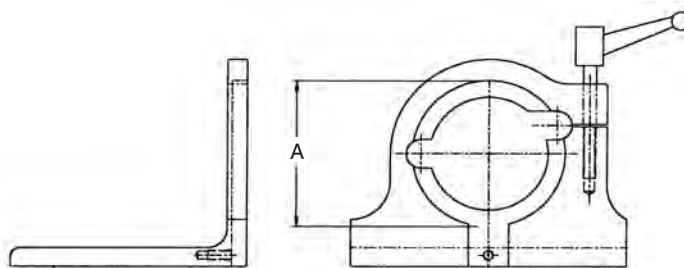
All tightening fixtures fit CAT, BT, shank and NMTB tooling. Bolt down or use in vise.



LOCKING TIGHTENING FIXTURE

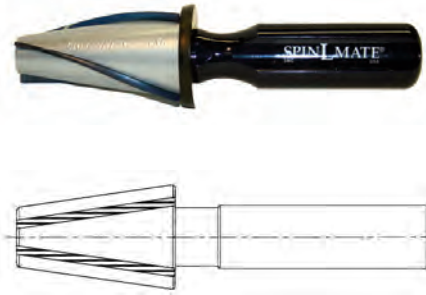
PART NUMBER	A SHANK SIZE	B
B40LTF	40	FOR CAT & BT ADAPTERS ONLY
B50LTF	50	

For use in any position, to access tool or retention knob.



SPINDLEMATE CLEANER KIT

PART NUMBER	DESCRIPTION
B30-Spindle	30 Taper 3.50 T.P.F.
B35-Spindle	35 Taper 3.50 T.P.F.
B40-Spindle	40 Taper 3.50 T.P.F.
B45-Spindle	45 Taper 3.50 T.P.F.
B50-Spindle	50 Taper 3.50 T.P.F.
B200-Spindle	Q Switch 200 Taper 2.00 T.P.F.



Complete with one set of standard, varnish and polish blades.
(Will not work in some Quick Change Spindles due to Draw Bar will not retract).

SPINDLEMATE BLADE KITS

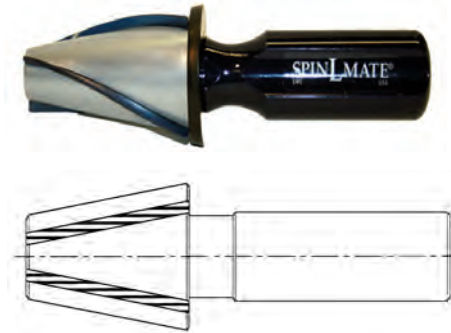
PART NUMBER			SPINDLE
STANDARD	VARNISH	POLISH	
B30-ST	B30-VR	B30-EP	B30
B35-ST	B35-VR	B35-EP	B35
B40-ST	B40-VR	B40-EP	B40
B45-ST	B45-VR	B45-EP	B45
B50-ST	B50-VR	B50-EP	B50
B200-ST	B200-VR	B200-EP	B200
3 Blade/Set	3 Blade/Set	6 Blade/Set	



Note: Standard blades are black or dark blue in color.
Varnish blades are yellow in color.
Polish blades are brownish-red in color.

COLLET SPINDLEMATE CLEANER KIT

PART NUMBER	DESCRIPTION
BTG075-Collet	TG75 Collet Taper
BTG100-Collet	TG100 Collet Taper
BTG150-Collet	TG150 Collet Taper
BR16-Collet	ER16 Collet Taper
BR20-Collet	ER20 Collet Taper
BR25-Collet	ER25 Collet Taper
BR32-Collet	ER32 Collet Taper



Complete with one set of standard, varnish and polish blades.
(Will not work in some Quick Change Spindles due to Draw Bar will not retract).

COLLET SPINDLEMATE BLADE KITS

PART NUMBER			SPINDLE
STANDARD	VARNISH	POLISH	
BTG075-ST	BTG075-VR	BTG075-EP	BTG75
BTG100-ST	BTG100-VR	BTG100-EP	BTG100
BTG150-ST	BTG150-VR	BTG150-EP	BTG150
BR16-ST	BR16-VR	BR16-EP	BR16
BR20-ST	BR20-VR	BR20-EP	BR20
BR25-ST	BR25-VR	BR25-EP	BR25
BR32-ST	BR32-VR	BR32-EP	BR32
3 Blade/Set	3 Blade/Set	6 Blade/Set	



Note: Standard blades are black or dark blue in color.
Varnish blades are yellow in color.
Polish blades are brownish-red in color.

THINK SAFETY . . .

In today's machining industry, modern machines operate at higher speeds. Hot chips may be projected from the workpiece and may cause serious injury if not properly guarded. These tools may also break and fragment if they are over-stressed or accidentally impacted into the workpiece. Proper protection for the operator and proper guards on the machine must be in place at all times to ensure operator safety. With today's carbide cutting tools pushing maximum speeds and feeds, safety must be a consideration.

BRINEY has no control over the use of its products after purchase. BRINEY recommends that all guidelines for operation of metal cutting equipment and cutting tools be strictly adhered to. Following these guidelines will ensure safe metal cutting operation on all your machine tools. BRINEY is not responsible for injuries caused by misuse of tools or improperly guarded equipment and operators.

For more information contact Briney at: **800-752-8035**

RECORD YOUR MACHINING CENTERS FOR FUTURE REFERENCE

Machine Make & Model # _____	Machine Make & Model # _____
Retention Knob Part # _____	Retention Knob Part # _____
Machine Make & Model # _____	Machine Make & Model # _____
Retention Knob Part # _____	Retention Knob Part # _____

NOTES

NUMBERS							
1/4-28W	103	B40LTF	111	BDCV40E-062-375	44	BDCV40SF-32M-160D	15
10-32W	103	B40-Spindle	112	BDCV40E-062-475	45	BDCV40SF-32M-70	13
1-1/2LH	104	B40-ST	112	BDCV40E-062-600	45	BDCV40SM-075-138	48
1-1/8LH	104	B40TF	111	BDCV40E-075-175	44	BDCV40SM-075-400	48
1-14W	103	B40-VR	112	BDCV40E-075-275	44	BDCV40SM-100-206	48
13/16LH	104	B45-EP	112	BDCV40E-075-475	45	BDCV40SM-100-400	48
1-5/8LH	104	B45-Spindle	112	BDCV40E-075-600	45	BDCV40SM-125-212	48
3/4-16W	103	B45-ST	112	BDCV40E-100-175	44	BDCV40SM-125-400	48
3/8-24W	103	B45TF	111	BDCV40E-100-400	44	BDCV40SM-150-240	48
5/16LH	104	B45-VR	112	BDCV40E-100-600	45	BDCV40SM-150-400	48
5/8-18W	103	B5001	103	BDCV40E-10MM-250	44	BDCV50BR-16-400	52
5/8LH	104	B5002	103	BDCV40E-125-200	44	BDCV50BR-16-500	52
7/16-20W	103	B5003	103	BDCV40E-125-425	44	BDCV50BR-16-700	52
7/16LH	104	B5004	103	BDCV40E-125-600	45	BDCV50BR-20-400	52
7/8LH	104	B5005	103	BDCV40E-12MM-262	44	BDCV50BR-20-600	52
9/16-18W	103	B5006	103	BDCV40E-150-462	44	BDCV50BR-25-400	52
9/16LH	104	B5007	103	BDCV40E-16MM-375	44	BDCV50BR-25-600	52
		B5030	104	BDCV40E-20MM-375	44	BDCV50BR-32-400	52
		B5040	104	BDCV40SF-038-275	12	BDCV50BR-32-650	52
		B5050	104	BDCV40SF-038-315D	14	BDCV50BR-40-400	52
		B50-EP	112	BDCV40SF-038-400	12	BDCV50BR-40-630	52
		B50LTF	111	BDCV40SF-038-472D	14	BDCV50E-038-250	50
		B50-Spindle	112	BDCV40SF-038-600	12	BDCV50E-038-450	51
		B50-ST	112	BDCV40SF-038-630D	14	BDCV50E-038-650	51
		B50TF	111	BDCV40SF-050-275	12	BDCV50E-050-262	50
		B50-VR	112	BDCV40SF-050-315D	14	BDCV50E-050-462	51
		B6030	104	BDCV40SF-050-400	12	BDCV50E-050-662	51
		B6031	104	BDCV40SF-050-472D	14	BDCV50E-062-206	50
		B6040	104	BDCV40SF-050-600	12	BDCV50E-062-375	50
		B6041	104	BDCV40SF-050-630D	14	BDCV50E-062-575	51
		B6050	104	BDCV40SF-062-275	12	BDCV50E-062-775	51
		B6051	104	BDCV40SF-062-400	12	BDCV50E-075-208	50
		B60TF	111	BDCV40SF-062-472D	14	BDCV50E-075-375	50
		B711-23	105	BDCV40SF-062-600	12	BDCV50E-075-575	51
		B711-25	105	BDCV40SF-062-630D	14	BDCV50E-075-775	51
		B711-45	105	BDCV40SF-075-275	12	BDCV50E-100-225	50
		B711-47	105	BDCV40SF-075-400	12	BDCV50E-100-400	50
		BDCBT40BR-16-275	59	BDCV40SF-075-472D	14	BDCV50E-100-600	51
		BDCBT40BR-16-394	59	BDCV40SF-075-600	12	BDCV50E-100-800	51
		BDCBT40BR-20-275	59	BDCV40SF-075-630D	14	BDCV50E-125-225	50
		BDCBT40BR-20-400	59	BDCV40SF-100-275	12	BDCV50E-125-400	50
		BDCBT40BR-25-275	59	BDCV40SF-100-400	12	BDCV50E-125-600	51
		BDCBT40BR-32-275	59	BDCV40SF-100-472D	14	BDCV50E-125-800	51
		BDCBT40BR-32-394	59	BDCV40SF-100-600	12	BDCV50E-12MM-262	50
		BDCBT40BR-32-630	59	BDCV40SF-100-630D	14	BDCV50E-150-275	50
		BDCBT40E-050-300	58	BDCV40SF-10M-100	13	BDCV50E-150-400	50
		BDCBT40E-062-300	58	BDCV40SF-10M-120D	15	BDCV50E-150-600	51
		BDCBT40E-075-400	58	BDCV40SF-10M-160D	15	BDCV50E-150-800	51
		BDCBT40E-100-400	58	BDCV40SF-10M-70	13	BDCV50E-16MM-375	50
		BDCBT40E-125-400	58	BDCV40SF-10M-80D	15	BDCV50E-200-562	50
		BDCBT40SF-038-350	20	BDCV40SF-125-275	12	BDCV50E-200-762	51
		BDCBT40SF-050-350	20	BDCV40SF-125-400	12	BDCV50E-200-962	51
		BDCBT40SF-062-350	20	BDCV40SF-125-472D	14	BDCV50E-20MM-375	50
		BDCBT40SF-075-400	20	BDCV40SF-125-600	12	BDCV50E-25MM-400	50
		BDCBT40SF-100-400	20	BDCV40SF-125-630D	14	BDCV50E-25MM-400	50
		BDCBT40SF-125-400	20	BDCV40SF-12M-100	13	BDCV50E-32MM-400	50
		BDCBT40SM-075-200	61	BDCV40SF-12M-120D	15	BDCV50E-40MM-400	50
		BDCBT40SM-100-200	61	BDCV40SF-12M-160D	15	BDCV50SF-038-300	16
		BDCBT40SM-125-200	61	BDCV40SF-12M-70	13	BDCV50SF-038-315D	18
		BDCBT40SM-150-200	61	BDCV40SF-12M-80D	15	BDCV50SF-038-400	16
		BDCV40BR-11-300	46	BDCV40SF-14M-100	13	BDCV50SF-038-472D	18
		BDCV40BR-16-250	46	BDCV40SF-14M-120D	15	BDCV50SF-038-500	16
		BDCV40BR-16-400	46	BDCV40SF-14M-160D	15	BDCV50SF-038-630D	18
		BDCV40BR-16-500	46	BDCV40SF-14M-70	13	BDCV50SF-038-700	16
		BDCV40BR-20-275	46	BDCV40SF-14M-80D	15	BDCV50SF-050-300	16
		BDCV40BR-20-400	46	BDCV40SF-16M-100	13	BDCV50SF-050-315D	18
		BDCV40BR-20-525	46	BDCV40SF-16M-120D	15	BDCV50SF-050-400	16
		BDCV40BR-25-250	46	BDCV40SF-16M-160D	15	BDCV50SF-050-472D	18
		BDCV40BR-25-400	46	BDCV40SF-16M-70	13	BDCV50SF-050-500	16
		BDCV40BR-32-238	46	BDCV40SF-18M-100	13	BDCV50SF-050-630D	18
		BDCV40BR-32-400	46	BDCV40SF-18M-120D	15	BDCV50SF-050-700	16
		BDCV40BR-32-600	46	BDCV40SF-18M-160D	15	BDCV50SF-062-300	16
		BDCV40BR-40-315	46	BDCV40SF-18M-70	13	BDCV50SF-062-400	16
		BDCV40E-038-250	44	BDCV40SF-20M-100	13	BDCV50SF-062-472D	18
		BDCV40E-038-450	45	BDCV40SF-20M-120D	15	BDCV50SF-062-500	16
		BDCV40E-038-600	45	BDCV40SF-20M-160D	15	BDCV50SF-062-630D	18
		BDCV40E-050-175	44	BDCV40SF-20M-70	13	BDCV50SF-062-700	16
		BDCV40E-050-262	44	BDCV40SF-25M-120D	15	BDCV50SF-075-300	16
		BDCV40E-050-450	45	BDCV40SF-25M-160D	15	BDCV50SF-075-400	16
		BDCV40E-050-600	45	BDCV40SF-25M-70	13	BDCV50SF-075-472D	18
		BDCV40E-062-175	44	BDCV40SF-32M-100	13	BDCV50SF-075-500	16
				BDCV40SF-32M-120D	15	BDCV50SF-075-630D	18



How To Order Briney Tooling

Sample part number of Briney Tooling:

V50CH-100-300TV

SHANK/TAPER TYPE	SHANK/TAPER SIZE	HOLDER TYPE	SERIES / SIZE	LENGTH	OPTIONAL FEATURES
V - Caterpillar Standard Shank BT - JIS Standard Shank NMTB - NMTBA / QC Shank SS - Straight Shank HSK - DIN 69893 BDCV - CAT Shank-Dual Contact	30 - Steep Taper Size (3.5 TPF) 35 - Steep Taper Size (3.5 TPF) 40 - Steep Taper Size (3.5 TPF) 45 - Steep Taper Size (3.5 TPF) 50 - Steep Taper Size (3.5 TPF) 60 - Steep Taper Size (3.5 TPF) 25* - HSK Taper Size 32* - HSK Taper Size 40* - HSK Taper Size 50* - HSK Taper Size 63* - HSK Taper Size 80* - HSK Taper Size 100* - HSK Taper Size 125* - HSK Taper Size * Must specify form letter (A - F) see page 5 for details. Straight Shanks: SS038 = 3/8" Shank SS050 = 1/2" Shank SS075 = 3/4" Shank SS100 = 1" Shank	BB - Blank Bars BF - Briney Flex Collet Chuck BH - Boring Head Adapter BR - ER Collet Chuck CH - TG Style Collet Chuck DA - Double Angle Collet Chuck E - End Mill Adapter EC - End Mill Adapter with Coolant Slots in ID ECS - End Mill Coolant Shower JT - Jacobs Taper MT - Morse Taper PTB - Precision Test Bar SA - Stub Arbor - Screw Type SAN - Stub Arbor - Nut Type SF - Shrink-Fit SFC - Shrink-Fit with Surround Coolant Option SFCS - Shrink-Fit Coolant Shower SM - Shell Mill Adapter THM - Tap Chuck Adapter	For: Blank Bars - Blank / OD Dia. Briney Flex - Collet Series Boring Head - Thread Size ER - Collet Series TG - Collet Series DA - Collet Series End Mill - ID Size Jacobs Taper - Taper Size Morse Taper - Taper Size Test Bar - Bar / OD Dia. Stub Arbor - Arbor Dia. Shrink-Fit - ID Size Shell Mill - Pilot Dia. Tap Chuck Adapter - ID Size	Taper Shanks - Gauge Line / Projection Straight Shanks - Overall Length	BBL - Balanceable BC - Balluff Chip CTF - Coolant Thru Flange option only (Most Mori Seiki accept the CTF option) D - European Design (Shrink-Fit only) DBL - Dual Plane Balanceable DIN B - DIN 69871 Form B (True DIN B: Metric Ret. Thread, Positioning Knotch, Coolant Thru Flange) MV - Balanced to 30,000 RPM at G2.5 TV - Balanced to 20,000 RPM at G2.5

Sample part number of Briney Collet:

BTG100-3/4-Sealed

COLLET TYPE	COLLET SERIES	COLLET I.D. SIZE	OPTIONAL FEATURES
BR (ER) BTG (TG) DA BF (AF)	BR (11, 16, 20, 25, 32, 40) BTG (75, 100) DA (300, 200, 100, 180) BF (25, 38, 50, 75, 100)	INCH: Size in Fractional form METRIC: Size followed by (M)	SEALED: (Epoxy sealed for coolant thru tooling) TC: (Tap Collet) UP: (Ultra Precision)

ORDER TOLL FREE 1-800-752-8035 or
EMAIL: briney@geminigroup.net
WEBSITE: www.brineytooling.com

DECIMAL EQUIVALENTS

Inch-Wire	Decimal	Inch-Wire	Decimal	Inch-Wire	Decimal	Inch-Wire	Decimal
.1mm	.0039	45	.0820	5	.2055	29/64	.4531
.2mm	.0079	44	.0860	4	.2090	15/32	.4688
.3mm	.0118	43	.0890	3	.2130	12mm	.4724
80	.0135	42	.0935	7/32	.2188	31/64	.4844
79	.0145	3/32	.0938	2	.2210	1/2	.5000
1/64	.0156	41	.0960	1	.2280	13mm	.5118
4mm	.0157	40	.0980	A	.2340	33/64	.5156
78	.0160	39	.0995	15/64	.2344	17/32	.5312
77	.0180	38	.1015	6mm	.2362	35/64	.5469
.5mm	.0197	37	.1040	B	.2380	14mm	.5512
76	.0200	36	.1065	C	.2420	9/16	.5625
75	.0210	7/64	.1094	D	.2460	37/64	.5781
74	.0225	35	.1100	1/4	.2500	15mm	.5906
.6mm	.0236	34	.1110	F	.2570	19/32	.5938
73	.0240	33	.1130	G	.2610	39/64	.6094
72	.0250	32	.1160	17/64	.2656	5/8	.6250
71	.0260	3mm	.1181	H	.2660	16mm	.6299
7mm	.0276	31	.1200	I	.2720	41/64	.6406
70	.0280	1/8	.1250	7mm	.2756	21/32	.6562
69	.0292	30	.1285	J	.2770	17mm	.6693
68	.0310	29	.1360	K	.2810	43/64	.6719
1/32	.0312	28	.1405	9/32	.2812	11/16	.6875
.8mm	.0315	9/64	.1406	L	.2900	45/64	.7031
67	.0320	27	.1440	M	.2950	18mm	.7087
66	.0330	26	.1470	19/64	.2969	23/32	.7188
65	.0350	25	.1495	N	.3020	47/64	.7344
9mm	.0354	24	.1520	5/16	.3125	19mm	.7480
64	.0360	23	.1540	8mm	.3150	3/4	.7500
63	.0370	5/32	.1562	O	.3160	49/64	.7656
62	.0380	22	.1570	P	.3230	25/32	.7812
61	.0390	4mm	.1575	21/64	.3281	20mm	.7874
1mm	.0394	21	.1590	Q	.3320	51/64	.7969
60	.0400	20	.1610	R	.3390	13/16	.8125
59	.0410	19	.1660	11/32	.3438	21mm	.8268
58	.0420	18	.1695	S	.3480	53/64	.8281
57	.0430	11/64	.1719	9mm	.3543	27/32	.8438
56	.0465	17	.1730	T	.3580	55/64	.8594
3/64	.0469	16	.1770	23/64	.3594	22mm	.8661
55	.0520	15	.1800	U	.3680	7/8	.8750
54	.0550	14	.1820	3/8	.3750	57/64	.8906
53	.0595	13	.1850	V	.3770	23mm	.9055
1/16	.0625	3/16	.1875	W	.3860	29/32	.9062
52	.0635	12	.1890	25/64	.3906	59/64	.9219
51	.0670	11	.1910	10mm	.3937	15/16	.9375
50	.0700	10	.1935	X	.3970	24mm	.9449
49	.0730	9	.1960	Y	.4040	61/64	.9531
48	.0760	5mm	.1968	13/32	.4062	31/32	.9688
5/64	.0781	8	.1990	Z	.4130	25mm	.9842
47	.0785	7	.2010	27/64	.4219	63/64	.9844
2mm	.0787	13/64	.2031	11mm	.4331	1	1.0000
46	.0810	6	.2040	7/16	.4375		

AMERICAN THREAD SIZES

FORMULA:
MAJOR DIAMETER - .01229 X % OF FULL THREAD = DRILLED HOLE SIZE
OF THREAD # OF THREADS PER INCH

TAP DRILL SIZES

TAP SIZE	PITCH	FORM	THREAD MINOR 65%	TAP SIZE	PITCH	FORM	THREAD MINOR 65%	TAP SIZE	PITCH	FORM	THREAD MINOR 65%
# 0	80	NF	.0494	1/4	20	NC	.2078	1-1/4	7	NC	1.1294
# 1	64	NC	.0599		28	NF	.2199		12	NF	1.1797
	72	NF	.0613	5/16	18	NC	.2656	1-1/2	6	NC	1.3593
# 2	56	NC	.0710		24	NF	.2774		12	NF	1.4296
	64	NF	.0729	3/8	16	NC	.3223	1-3/4	5	NC	1.5811
# 3	48	NC	.0815		24	NF	.3399	2"	4-1/2	NC	1.8124
	56	NF	.0840	7/16	14	NC	.3772	1/8	27	NPSC	.343
# 4	40	NC	.0909		20	NF	.3953	1/4	18	NPSC	.437
	48	NF	.0945	1/2	13	NC	.4351	3/8	18	NPSC	.578
# 5	40	NC	.1039		20	NF	.4578	1/2	14	NPSC	.718
	44	NF	.1059	9/16	12	NC	.4922	3/4	14	NPSC	.921
# 6	32	NC	.1117		18	NF	.5156	1"	11-1/2	NPSC	1.156
	40	NF	.1169	5/8	11	NC	.5483	1-1/4	11-1/2	NPSC	1.500
# 8	32	NC	.1377		18	NF	.5781	1-1/2	11-1/2	NPSC	1.750
	36	NF	.1406	11/16	11	NS	.6107	2"	11-1/2	NPSC	2.218
# 10	24	NC	.1549		16	NS	.6347	1/16	27	NPT/NPTF	.242
	32	NF	.1610	3/4	10	NC	.6656	1/8	27	NPT/NPTF	.332
# 12	24	NC	.1790		16	NF	.6973	1/4	18	NPT/NPTF	.437
	28	NF	.1850	7/8	9	NC	.7812	3/8	18	NPT/NPTF	.562
					14	NF	.8147	1/2	14	NPT/NPTF	.703
				1"	8	NC	.8945	3/4	14	NPT/NPTF	.906
					12	NF	.9296	1"	11-1/2	NPT/NPTF	1.140
					14	NS	.9397	1-1/4	11-1/2	NPT/NPTF	1.484
				1-1/8	7	NC	1.0044	1-1/2	11-1/2	NPT/NPTF	1.718
					12	NF	1.0547	2"	11-1/2	NPT/NPTF	2.187

METRIC THREAD SIZES

FORMULA:
MAJOR DIAMETER - % THREAD X MM PITCH = DRILLED HOLE SIZE (MM)
OF THREAD (MM) 76.980

TAP DRILL SIZES - METRIC

TAP SIZE	PITCH	FORM	THREAD MINOR 65%	TAP SIZE	PITCH	FORM	THREAD MINOR 65%	TAP SIZE	PITCH	FORM	THREAD MINOR 65%
M1.6	0.35	STD.	.0514	M6	1.0	STD.	.2030	M16	2.0	STD.	.5634
M2	0.4	STD.	.0654	M7	1.0	STD.	.2423	M18	2.5	STD.	.6256
M2.5	0.45	STD.	.0835	M8	1.25	STD.	.2734	M20	2.5	STD.	.7043
M3	0.5	STD.	.1015	M10	1.5	STD.	.3438	M24	3.0	STD.	.8452
M4	0.7	STD.	.1342	M12	1.75	STD.	.4143	M30	3.5	STD.	1.0648
M5	0.8	STD.	.1703	M14	2.0	STD.	.4847	M36	4.0	STD.	1.2844



Briney

Tooling Systems



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700 E. Soper Road . Bad Axe, Michigan 48413
Phone: 989-269-9558 . Toll Free: 800-752-8035 . Fax: 989-269-9559
Website: www.brineytooling.com . Email: briney@geminigroup.net