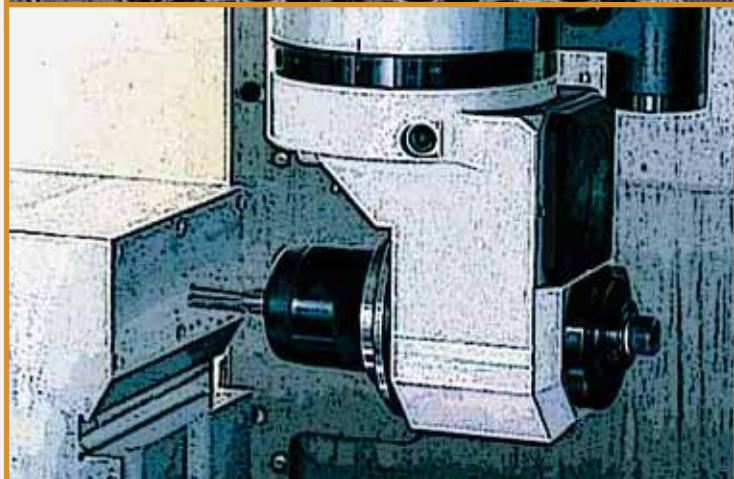
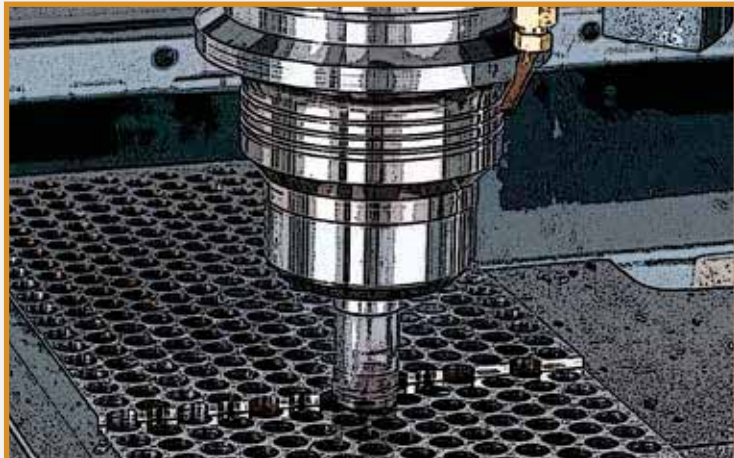


Vol. 1



BIG DAISHOWA

HIGH PRECISION TOOL HOLDER SYSTEMS



A PRODUCT OF:

BIG KAISER[®]
PRECISION TOOLING INC.
Higher Performance. Guaranteed.

PREMIUM PROVIDER OF TOOL HOLDERS



Tool holders for advanced metalworking environments—from standard production machining challenges to extreme precision and complex applications—these superior products deliver lower costs through higher efficiency.



OVERVIEWS & APPLICATION EXAMPLESPg. 4-27



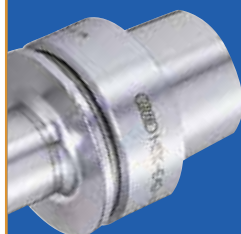
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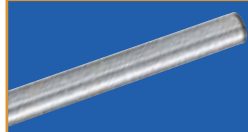
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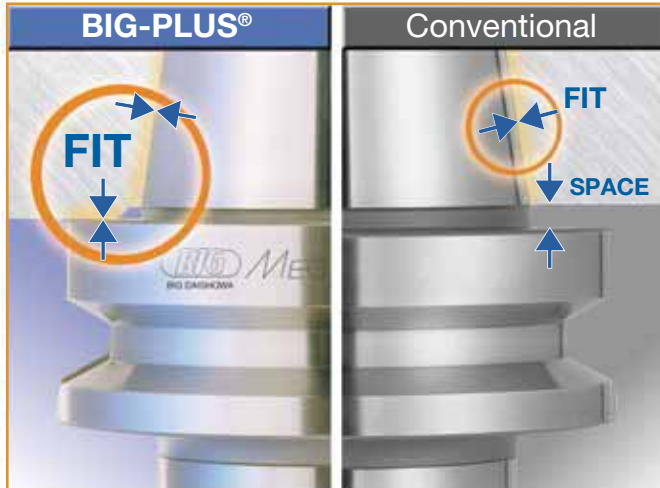
STRAIGHT SHANKS/NC LATHE TOOLS

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Simultaneous Taper & Flange Fit

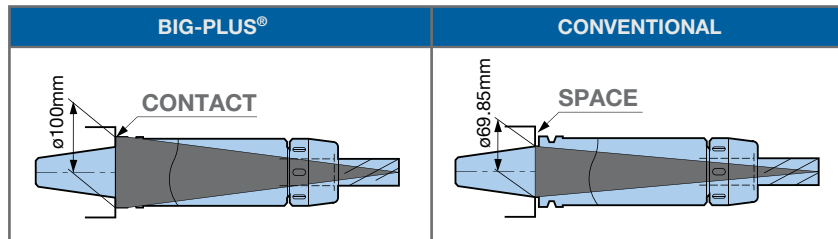
BIG-PLUS® surpasses all other spindle concepts while offering interchangeability with existing machines and tool holders.

- Improved surface finish & dimensional accuracy
- Extended tool life
- Prevention of fretting corrosion caused by heavy cutting
- Improvement of ATC repeatability
- Elimination of Z-axial movement at high speeds
- Improved roundness of boring operations

Basic Concept

The BIG-PLUS® Spindle System is based on the most current available standards in ASME B5.50, JIS B6339 and DIN 69871. A conventional steep taper tool holder is supported on a reference diameter called the gauge line. On the contrary, a BIG-PLUS® tool holder is supported on the flange face, which brings remarkable improvement to rigidity.

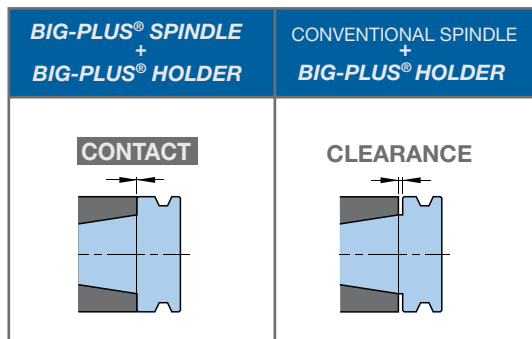
Increased Contact Diameter (Example of BT50)



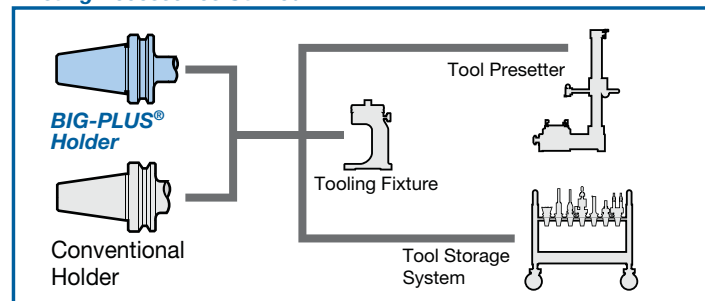
Taper No.	Conventional	BIG-PLUS®
CV50	ø2.750	ø3.875
CV40	ø1.750	ø2.500
BT30	ø1.250	ø1.811

Perfect Interchangeability

BIG-PLUS® tool holders can be used on existing standard machine spindles. Existing standard tool holders can also be used on BIG-PLUS® spindles. In this case however, simultaneous contact cannot be attained. Although other simultaneous contact systems require exclusive new accessories, BIG-PLUS® tooling uses existing accessories such as a tool presetter and tool holder fixture as it is based on a conventional steep taper shank. Further, it is not necessary to modify tool magazines and ATC devices of existing machines.



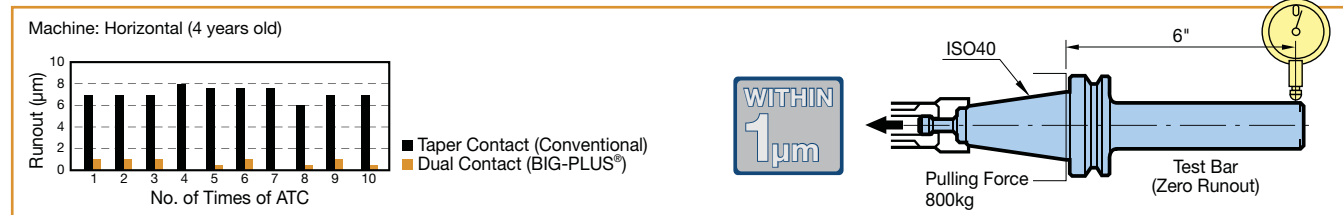
Existing Accessories Utilized



Improvement of ATC Repeatability

The BIG-PLUS® Spindle System assures the highest precision location of the tool holder in the spindle when using the ATC for loading tools as a result of the dual contact, which precisely positions the tool holder within 1 micron.

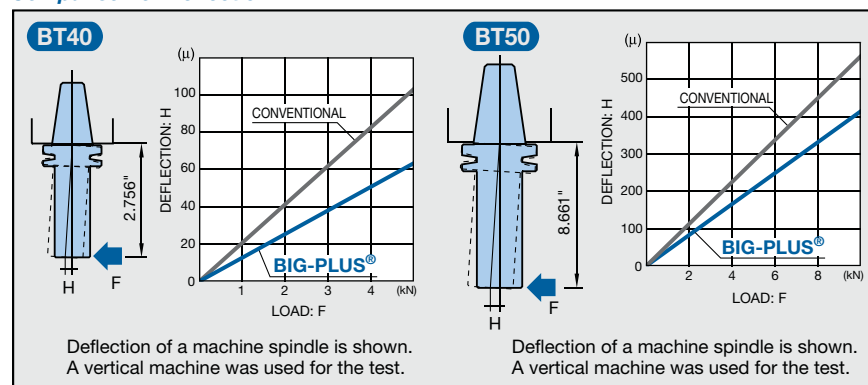
ATC Repeatability



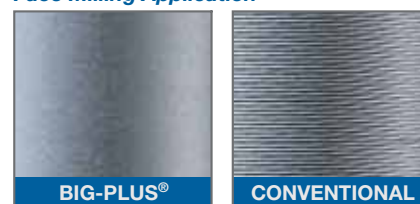
Minimized Deflection for Maximum Machining Accuracy & Superior Finish

With BIG-PLUS® simultaneous contact, machining rigidity is greatly enhanced due to the larger contact diameter of the tool holder flange face. This larger face contact, combined with the taper contact, works together to resist deflection. With less deflection, greater machining accuracy and superior finish can be achieved.

Comparison of Deflection



Face Milling Application



Cutting Conditions

Machine: 40 Taper (Horizontal Machining Center)
Cutter: Face Mill ϕ 5" (cutting edges)
Work Material: A2017 Duralumin
Cutting Depth: .094"

• Please be aware that dual contact tool holders other than licensed BIG-PLUS® tool holders may damage BIG-PLUS® spindles

Strict Gauge Control

BIG-PLUS® spindles produced by the licensed machine or spindle builders are strictly controlled in dimensions by the BIG original Master Gauge. Only the BIG-PLUS® trademarked tool holders can achieve the optimal performance fully and safely.

Gauges for Machine Spindle



BIG-PLUS® Spindle System Machine Builders

The BIG-PLUS® Spindle System is offered by many of the world's leading manufacturers of machining centers. Some of the machine and spindle builders who have produced BIG-PLUS® spindles are as follows:

ACCUWAY, **ADVANCED MACHINE**, ALEX-TECH, AMS, ANCA, AONO GIKEN, ARES, ASA TECH, AWEA, BERG SPANNTTECHNIK, BOST, BROTHER, CHEVALIER, CHUO-SEIKI, CITIZEN, COLGAR, CROSS HÜLLER EX-CELL-O LAMB, D.S. TECHNOLOGIE, DAH LIH, DAIYA SEIKI, DIXI, DMC, DMG MORI SEIKI AD, DMG MORI SEIKI CO., LTD., DOOSAN, **DYNAMAX**, EGURO, ENSHU, FADAL, FANUC, FEMCO, FIRST, **FISCHER**, FOREST-LINÉ, FPT, FRANZ KESSLER, FUJI SEIKI, GIDDINGS & LEWIS, **GTI SPINDLE TECHNOLOGY**, HARDINGE, HNK, HOMMA, HORKOS, HOWA, HST, HWACHEON, IBAG, IBARMIA INNOVATEK, IKGAI, INOUE KOSOKU KIKAI, JOHNFORD, JTEKT, JUNGWOO M.S., KARATS, KASHIFUJI, KASWIN, KENTURN, KITAMURA, KIWA, KMT, KOMATSU NTC, KONDA, KOYO, KPTEC, KURAKI, LAZZATI, MAGNIX, MAKINO, MAKINO SEIKI, MANDELLI, MATSUURA, MAZAK, MECTRON, MILLTRONICS, MITSUBISHI, MITSUBOSHI KOGYO, MITSUI SEIKI, MOTOKUBO, N.S.S, NACHI, NAKAMURA, NEO, NICOLÁS CORREA, NIIGATA, NIPPON BEARING, NISHIJIMAX, NISSIN-MFG, NOMURA, **NORTHLAND TOOL**, NSK, O-M, OBATAKE, OHTORI, OKK, OKUMA, OMLAT, PAMA, PIETRO CARNAGHI, PMC, QUASER, REIDEN, ROKU ROKU, ROYAL, SAJO, SEMPUCO, **SETCO**, SHAN RONG, SHODA, SHW, SKG, SKODA, SMEC, SNK, SODICK, SORALUCE, SPINDER, SPINTEC, **SPS**, STARRAGHECKERT, STUDER, SUGINO, SUNWOO, **SUPERIOR SPINDLE SERVICE**, TAJMAC-ZPS, TAKAMAZ KIKAI KOUGYOU, TAKISAWA, TANABE, THETA, TONGTAI, TOS VARNSDORF, TOHSHIBA, TOYO SEIKI, TSUDAKOMA, TSUGAMI, UGINT, UTSUNOMIYA, VICTOR TAICHUNG, VISION WIDE TECH CO., LTD, VYU CHENG, WALDRICH COBURG, WELE, WIA, YAMASAKI GIKEN, YAMASHINA, YASDA, YASUNAGA, YCM, YU HUNG, ZAYER

(As of June 2014)

• Bold company names are North American licensed BIG-PLUS® spindle rebuilders



HSK TOOLING SYSTEM

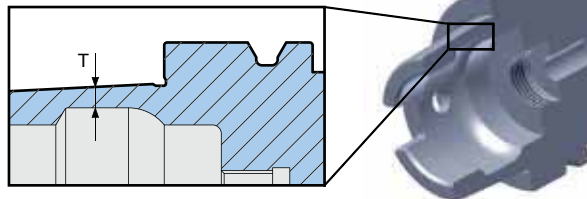
ISO 12164/DIN 69893

Selected materials and strict control of dimensional accuracy for the optimum quality. Wide range of standard holders to meet all production requirements.

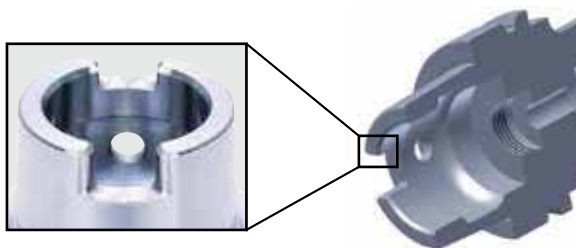


Premium Material Selection

Since HSK is a hollow taper shank, the material has a critical role for optimum performance. BIG uses carefully selected high grade alloy steels. Particularly, BIG uses die steel materials for HSK40 and smaller where the cross section of shank taper is very thin.



HSK Type	HSK Size					
	25	32	40	50	63	100
T	.043	.049	.076	.102	.137	.204

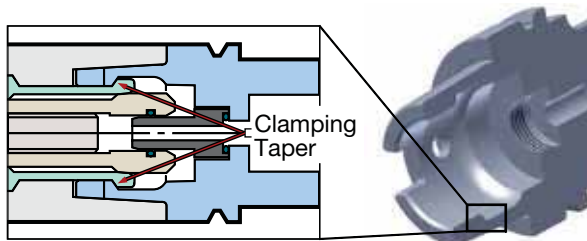


Drive Key Form

HSK Shanks according to Form A are designed to carry out torque transmission by the round shaped key-way at the end of the taper. Because of the importance of this round shaped geometry, BIG provides finishing of this feature after heat treatment.

Important Tool Retention Feature

Internal clamping of HSK tools is defined by the location of highly concentrated forces from the machine tool. Accuracy and position of this form will affect the rigidity, repeatability and precision of tool holders. BIG provides finish machining of this area after heat treatment.



AVAILABLE IN
TURNING TOOLS
HSK FORM T
HSK-T63/T100 (ISO 12164-3)



BIG CAPTO

ISO 26623-1

A dual contact modular turning and rotating tool holder system that strengthens the performance of MTC's. The BIG CAPTO modular tooling system offers better efficiency, material selection and heat treatment.

* The trademark CAPTO is licensed from Sandvik Coromant



Excellent Repeatability & Runout

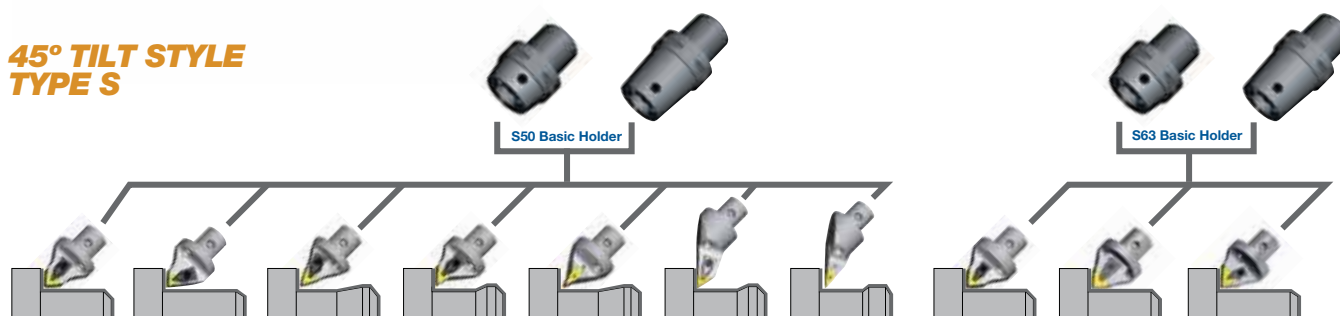
High repeatability is achieved due to the perfect fit of the polygon taper to drive spindle rotation. The combination of a self-centering 1:20 taper and the long taper edge assures stable runout accuracy.

A Wider Range of Rotating BIG CAPTO Tooling than Any Other Provider

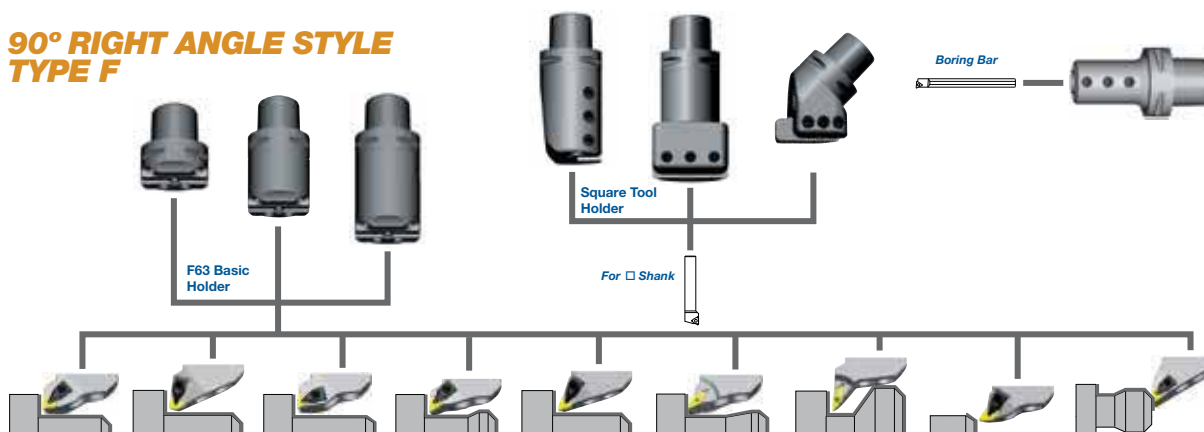


As a licensed manufacturer since 2002, BIG Daishowa through BIG Kaiser offers a wider range of rotating BIG CAPTO tooling than any other provider. Extended reach collet chucks feature the world-class New Baby Collet system with less than 3 microns guaranteed accuracy at 4xD. Other solutions with BIG CAPTO include the Mega ER Grip, Hydraulic Chucks, the Mega E Collet Chuck system, Mega D Milling Chucks for the highest rigidity while end milling, Mega Micro Chucks with the world's smallest collet system for reaching into tight areas, and many more.

45° TILT STYLE TYPE S



90° RIGHT ANGLE STYLE TYPE F



MEGA CHUCK SERIES OVERVIEW

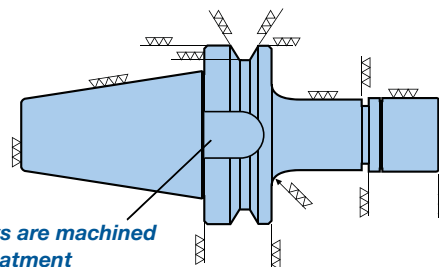


MEGA CHUCK[®] SERIES

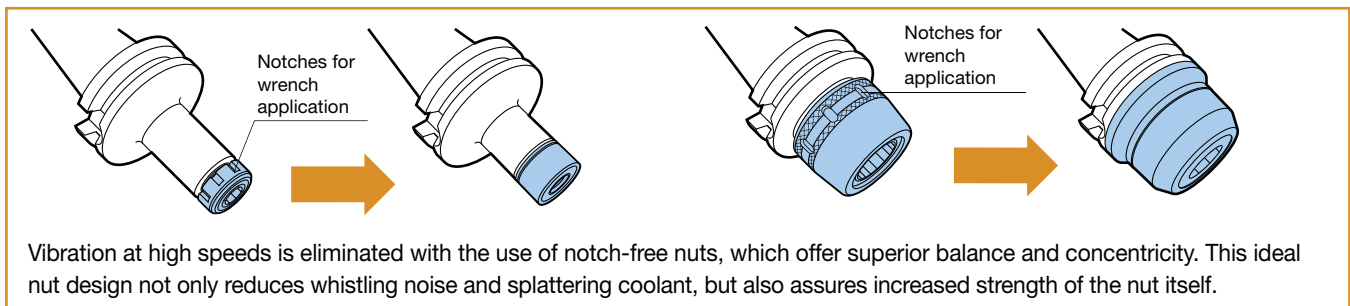
Wide variety of collets and chuck bodies to cover all high-speed ultra-precision machining applications.

Precision Ground and Balanced for High Speed Machining

Mega Chucks are micro—mirror ground—finished on all surfaces to assure perfect concentricity for high speed machining. The drive keyway is machined after heat treatment.



Notch-Free Design Mega Nut Prevents Vibration & Reduces Noise



Easy & Firm Clamping by the Mega Wrench

The unique Mega Wrench has a one-way clutch system with roller bearings and a ratchet function which is capable of safely and evenly applying force to the entire nut periphery.



A Variety of Mega Chucks Available





MEGA MICRO CHUCK®

Clamping Range: $\phi.018"$ -.317" ($\phi.45$ -8.05mm)

Extremely slim design of body and nut provides superior balance and concentricity and is ideal for reaching into confined areas.



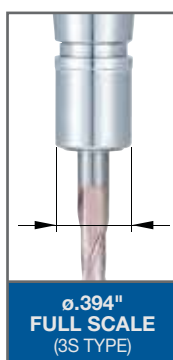
**MAX
50,000
RPM**



End Milling



Drilling



Extremely Slim Design Nut
 $\phi.394"/.472"/.551"/.709"$
3S/4S/6S/8S Type

Slim design avoids interference.
Ideal for small mold making
combining speed and high
precision capability.



NEW!

**Sealed Nut for
Through-Tool
Coolant**



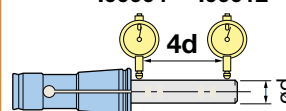
**HIGH
PRECISION**

**High Concentricity
Mega Micro Collet**

100% concentricity inspection.
Guaranteed runout within .00004"
at the nose. Available for higher
precision in steps of $\phi.004"$ ($\phi.1$ mm)

Guaranteed Max Runout

$.00004"$ $.00012"$



**All BIG Collets are AA Grade and
inspected twice for accuracy**

A Variety of Interfaces for High Speed Machining

STRAIGHT TYPE



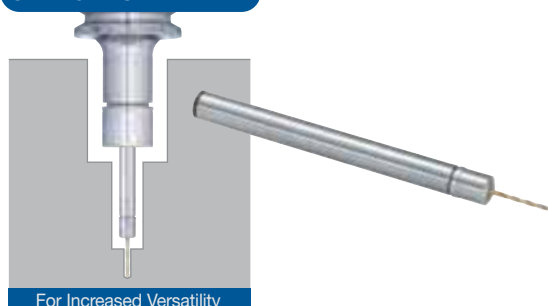
Where Access is Restricted

TAPER TYPE



For Increased Rigidity

STRAIGHT SHANK TYPE



For Increased Versatility

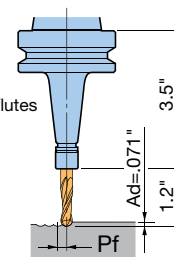
Maximum Performance

.004" Increments for Higher Precision

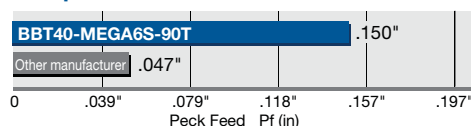
124 collet models available in .004" (.1mm) increments.
Reduced collapsability optimizes precision.

Cutting Conditions

Machine: BBT40 Vertical Machining Center
Holder: BBT40-MEGA6S-90T
Cutter: Carbide Ball Nose End Mill $\phi.236$, 2-flutes
Work Material: 1050 Steel
Cutting Speed: 740 SFM
Spindle Speed: 12,000 RPM
Feed Rate: 28.3 IPM
Radial Depth of Cut: .001"
Axial Depth of Cut: .071"



Comparison of Peck Feed Amount



**Rigid taper design avoids chatter even with
high peck feed milling leading to dramatically
reduced machining time**

MEGA NEW BABY CHUCK OVERVIEW



MEGA NEW BABY CHUCK®

CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm)

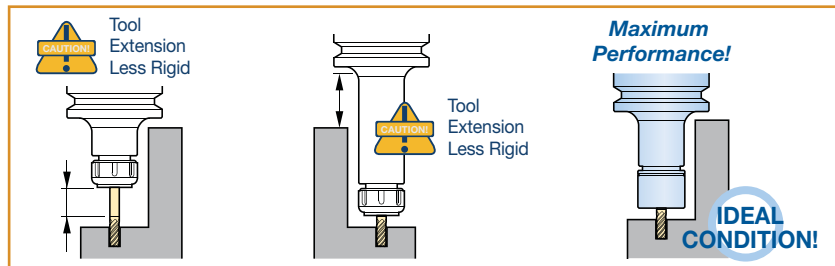
High speed design, offered in six different collet series sizes. Utilizes ultra precision New Baby Collets which guarantee a runout at the collet nose of less than .00004".

MAX
40,000
RPM



Wide Range Available as Standard

Ideal length and diameter of the holder is the key to precision machining. If selection is limited, an increased tool extension reduces performance.

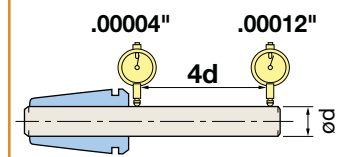


High Precision Collet, Close to Submicron New Baby Collet

The NBC collet is 100% inspected to guarantee accuracy. Material, production, heat treatment... everything is selected for precision.



Guaranteed Max Runout



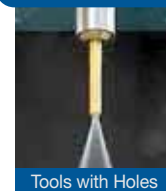
All BIG Collets are AA Grade and inspected twice for accuracy

Two Way Coolant—Sealed Collet Nut Mega Perfect Seal

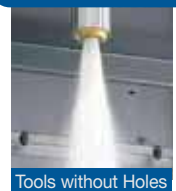
- Standard NBC Collet is used
- High dust resistance



THROUGH TOOLS



JET THROUGH

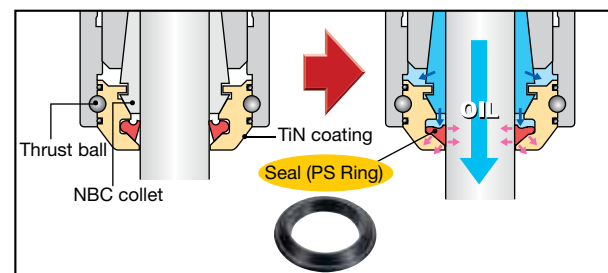
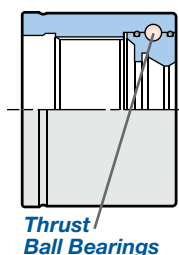


Coolant Through Tools

Unique sealed collet nut for coolant-through tools. The sealing performance increases with higher coolant pressure. Remove the sealing ring to supply coolant to the periphery of the cutting tool.

Precision Nut to Optimize Performance of the Collet

Thrust ball bearings eliminate distortion of the collet during tightening. The patented design prevents the ball bearings from moving at high speed. Threads are finished after heat treatment.





MEGA ER GRIP®

CLAMPING RANGE: ϕ .075"-.787" (ϕ 1.9-20mm)

High precision collet, nut and body that outperforms standard ER systems. Reliable and stable runout accuracy will also tremendously contribute to improving machining capability and cost reduction.

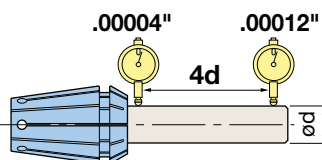
MAX
35,000
RPM



The ER Collet with the Best Runout Accuracy in the World

Measurement Standards:

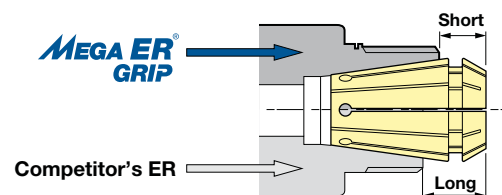
In accordance with
DIN 6499 and ISO 15488



Clamping Range	DIN / ISO		BIG BIG DAISHOWA MEGA ER® Within .00012"
	Class 1	Class 2	
ϕ .079" - ϕ .394"	.00039"	.00059"	
ϕ .394" - ϕ .787"	.00059"	.00079"	

High Rigidity Body that Increases the Contact Area of the Collet

By increasing the contact length of the internal taper of chuck bodies, the undesired overhang of the collet is reduced. This modification of the standard improves 3 of the most important requirements for the collet chuck: rigidity, runout accuracy and clamping force. (Conventional DIN collets can also be used)



**Two Way Coolant—Sealed Collet Nut
Mega ER Perfect Seal**

With "Through Tools", coolant is supplied from the coolant holes of the cutter (such as drills) and "Jet Through" directs the coolant around the cutter periphery (such as end mills). Both methods can be adapted with the same Perfect Seal Nut according to the desired use.



MAX COOLANT
PRESSURE
1,000
PSI

THROUGH TOOLS



Tools with Holes

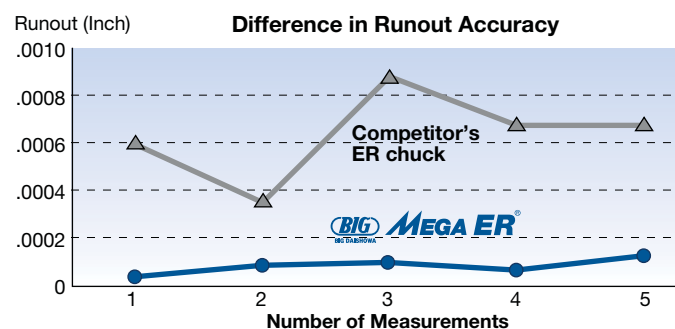
JET THROUGH



Tools without Holes

The Test Bar Clamped by Mega ER Grip is Measured at 5xd

BIG's Mega ER Grip can provide repeatable performance by assembling the precision ERC collets with its chuck body and clamping nut, resulting in complete harmony of the tool holder assembly.



The Runout Accuracy Greatly Affects the Tool Life

The runout accuracy has a great influence on the tool life. The tool life achieved with Mega ER Grip is about 3 times the tool life obtained with conventional collet chucks.

Competitor's



Runout of .0006"

**BIG
BIG DAISHOWA
MEGA ER GRIP**



Runout within .000079"

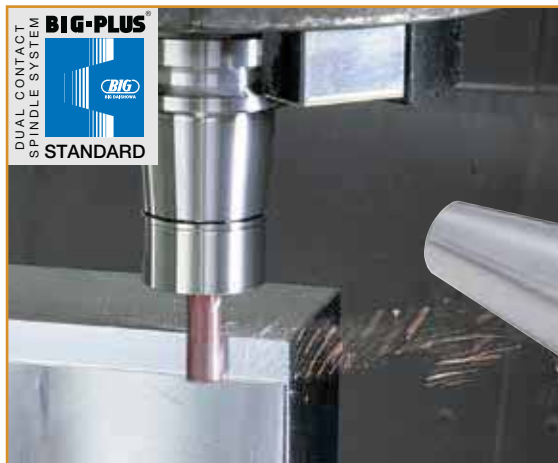
800 holes

ϕ .118" carbide drill
1040 Steel
.472" depth of cut

**NUMBER OF HOLES
IMPROVED BY
2.9 times**

2,300 holes

MEGA E CHUCK OVERVIEW

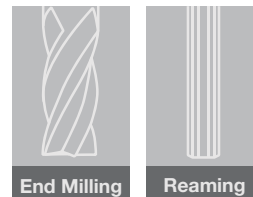


MEGA E CHUCK®

CLAMPING RANGE: ϕ .125"-.500" (ϕ 3-12mm)

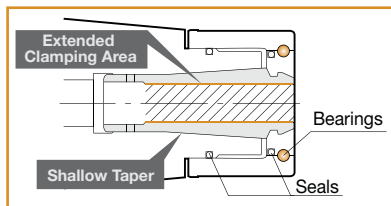
Collet chuck designed exclusively for end milling up to ϕ .500" with high concentricity & rigidity.

MAX
40,000
RPM



High Gripping Strength Collet

Gripping force is an important element for end milling with a collet chuck. The long gripping length of the collet in the Mega E series provides a powerful gripping force. The shallower taper of the collet improves concentricity in order to achieve better surface finishes and longer cutting tool life.



Clamping Nut with Thrust Ball Bearings

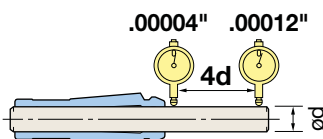
Eliminates distortion of the collet during tightening for higher gripping force and improved concentricity.



High Concentricity Mega E Collet

100% concentricity inspection. Runout within 1 μ m at nose is guaranteed.

Guaranteed Max Runout



HIGH
PRECISION

Ultimate Performance in Both Chip Volume and Surface Finish



BBT40-MEGA6E-90

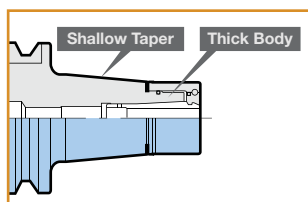


Other Manufacturer

Cutter	Model	Radial DOC	Axial DOC	Removal ci/min	Power (hp)
ϕ .236	MEGA6E	.118	.354	2.801	4.56
	OTHER MANUFACTURER	.020	.354	.464	1.47
ϕ .472	MEGA13E	.472	.709	5.602	4.02
	OTHER MANUFACTURER	.118	.709	1.404	1.61

Substantial and Tapered Body Design

Thick body eliminates chatter and deflection. Tapered extension provides the rigidity to prevent vibration.



All BIG Collets are
AA Grade and
inspected twice for
accuracy

Use only cutting tool shanks with the exact same diameter as the collet bore diameter.

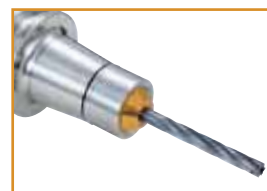
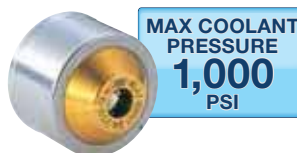


Slit-Through Coolant

Coolant is reliably directed to the cutting surface through slits in the collet. Tool life is extended with improved surface finish as a result of smooth chip evacuation.

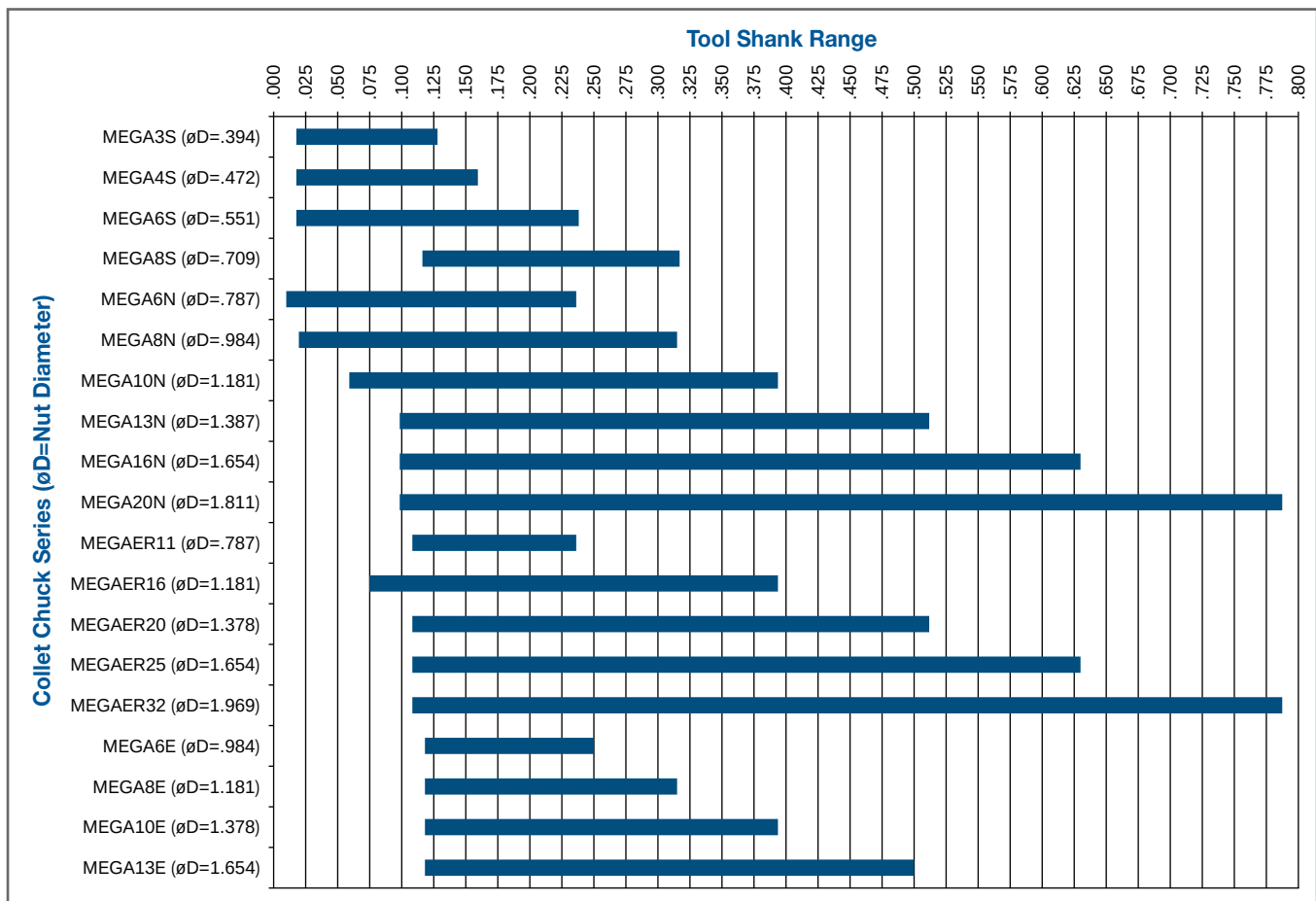
Sealed Collet Nut — Mega E Perfect Seal

Sealed collet nut to supply coolant reliably through cutting tool.



Ideal for burnishing drills and reamers due to the extended gripping length of the Mega E Chuck.

Collet Chuck Series	Taper Type																		
	BCV		BBT			HSK										BIG CAPTO			
	40	50	30	40	50	A40	A50	A63	A100	A125	E25	E32	E40	E50	F63	C4	C5	C6	C8
MEGA3S	•		•	•		•	•	•			•	•	•	•			•	•	
MEGA4S	•		•	•		•	•	•			•	•	•	•	•		•	•	
MEGA6S	•		•	•		•	•	•			•	•	•	•	•		•	•	
MEGA8S	•		•	•				•											
MEGA6N	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
MEGA8N	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
MEGA10N	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
MEGA13N	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•
MEGA16N	•	•	•	•	•	•	•	•	•				•	•	•	•	•	•	•
MEGA20N	•	•	•	•	•	•	•	•	•					•	•	•	•	•	•
MEGAER11	•																		
MEGAER16	•	•	•					•	•	•						•	•	•	
MEGAER20	•	•	•					•	•							•	•	•	
MEGAER25	•	•	•					•	•							•	•	•	
MEGAER32	•	•	•					•	•	•							•	•	
MEGA6E	•		•	•	•	•	•	•	•				•	•	•	•	•	•	•
MEGA8E	•		•	•	•	•	•	•	•				•	•	•	•	•	•	•
MEGA10E	•		•	•	•	•	•	•	•				•	•	•	•	•	•	•
MEGA13E	•	•	•	•	•	•	•	•	•				•	•	•	•	•	•	•



MEGA DOUBLE POWER CHUCK OVERVIEW



MEGA DOUBLE POWER CHUCK®

CLAMPING RANGE: ϕ .625"- ϕ 1.500" (ϕ 16-50mm)

High rigidity design for heavy cutting. Flange contacting nut and simultaneous taper & flange contact assure highest rigidity.

MAX
30,000
RPM



Stabilizing Contact Between Flange & Nut Provides Exceptional Rigidity

The expanded contact diameter of the nut of the Mega Double Power Chuck to the flange provides the highest rigidity as if the chuck and nut were one solid piece. This superior rigidity assures heavier duty machining without chatter.



Released



Tightened

Coolant is reliably directed to cutting tool periphery from chuck nose.

Secure Coolant Supply

Two types are individually designed for the most effective coolant supply.

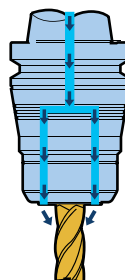
- Improved surface finish
- Smoother chip evacuation
- Extended tool life
- Cooling & lubrication of tools



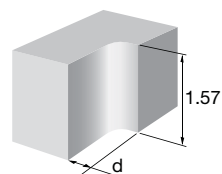
Through Tools



Jet Through

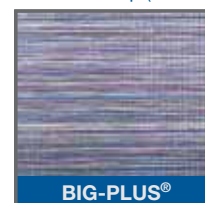


High Rigidity Achieves Higher Level of Stability

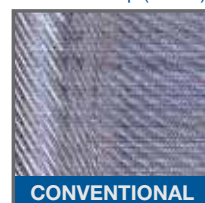


BBT50-MEGA32D-105
Radial d= .551" (14mm)
Power= 20.3hp (15.2kW)

Other Manufacturer (L=90)
Radial d= .374" (9.5mm)
Power= 12.3hp (9.2kW)



BIG-PLUS®



CONVENTIONAL

Cutting Conditions

Cutter: Coated Carbide End Mill ϕ 32mm, 4-flutes

Work Material: A36 Steel (JIS SS400)

Cutting Speed: 925 SFM (282 m/min)

Spindle Speed: 2,800 RPM

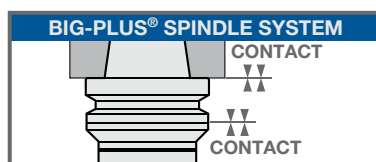
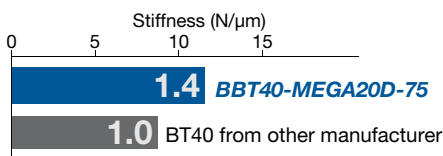
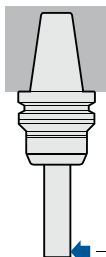
Feed Rate: 44 IPM (1,120 mm/min)

Flange Contacting Nut Together with BIG-PLUS®

Stabilizing contact of nut to the flange provides exceptional rigidity in addition to the BIG-PLUS® effect.

1.4 times increased rigidity

Comparison test proves increased stiffness compared to others.



A Variety of Straight Collets Available



PJC Collet
For jet-through



PSC Collet
For coolant-through



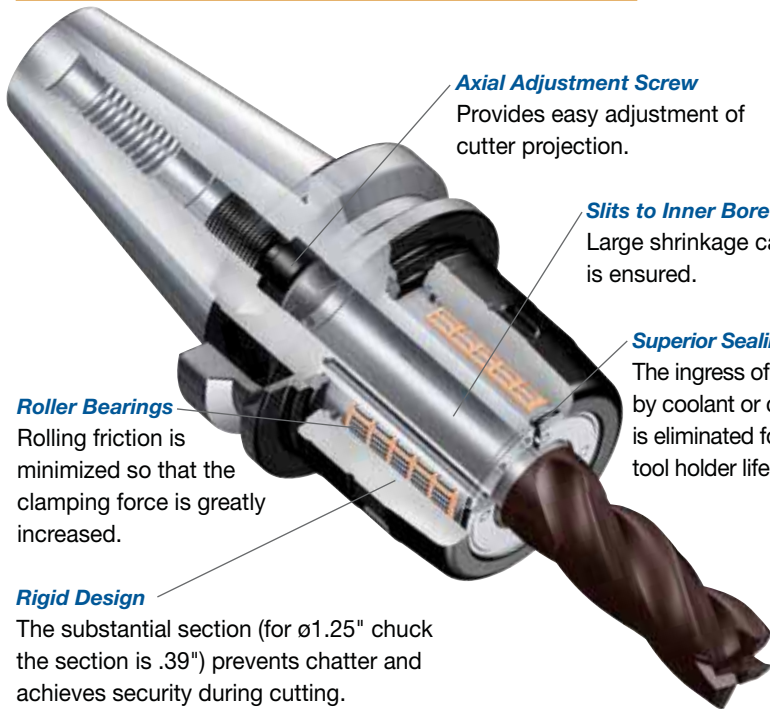
Straight Collet (Type "C")
Reduction sleeve



NEW Hi-POWER MILLING CHUCK

CLAMPING RANGE: ϕ .750"-1.500" (ϕ 16-42mm)

For high precision heavy cutting. The New Hi-Power Milling Chuck combines high accuracy with high torque capability and rigidity.



Axial Adjustment Screw

Provides easy adjustment of cutter projection.

Slits to Inner Bore

Large shrinkage capability is ensured.

Superior Sealing

The ingress of contamination by coolant or cutting particles is eliminated for extended tool holder life.

Roller Bearings

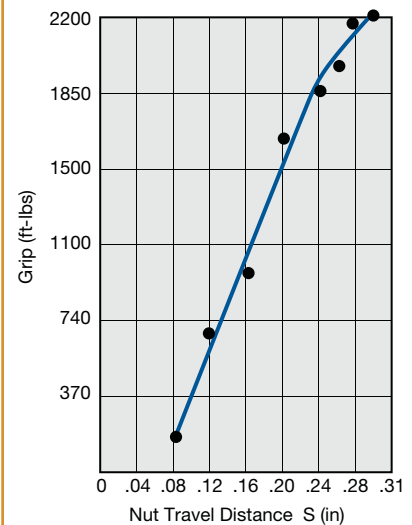
Rolling friction is minimized so that the clamping force is greatly increased.

Rigid Design

The substantial section (for ϕ 1.25" chuck the section is .39") prevents chatter and achieves security during cutting.

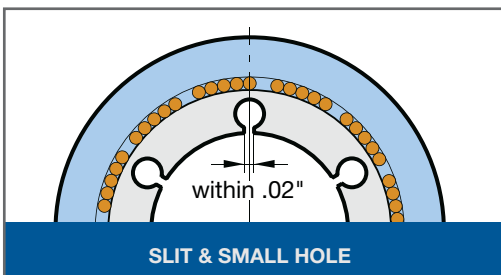
GRIPPING POWER OF NEW HI-POWER MILLING CHUCK (HMC1.250)

High Gripping Force



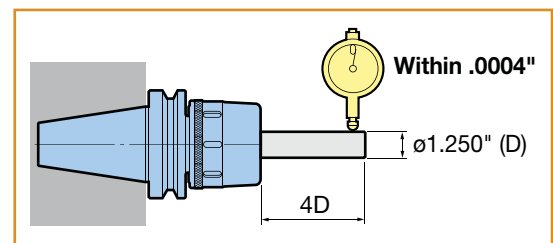
Secure and Reliable Slit Design

The annular section needs to be substantial in order to provide rigidity, but still retain the ability to collapse in order to provide sufficient grip. The section of the New Hi-Power Milling Chuck has combined holes and slits at regular intervals in order to combine both requirements.



Precise Concentricity

Concentricity is assured with the integral design and the clamping by mechanical compression of the annular section using the rolling bearing system. All models are inspected and double checked to meet runout accuracy of .0004" T.I.R. at 4xD.





HYDRAULIC CHUCK

CLAMPING RANGE: ϕ .250"-1.250" (ϕ 4-32mm)

For high precision machining. Ideal tool holders for machining processes that require high accuracy such as drills, reamers, ball mills, end mills, diamond reamers and grinding tools.

**MAX
40,000
RPM**



End Milling



Drilling



Reaming

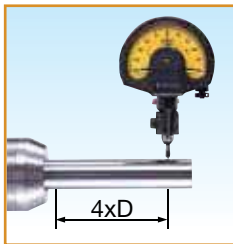
Wide variety of clamping diameters & projections

Allowable Shank Tolerance of Cutting Tools (h6)

REFERENCE INFORMATION "h6" INCH SERIES		REFERENCE INFORMATION "h6" METRIC SERIES	
Cutting Tool Shank ϕ	Allowable Tolerance	Cutting Tool Shank ϕ	Allowable Tolerance (m μ)
1/4", 3/8"	+0, -.00035"	4, 6, 8, 10mm	+0, -8mm
1/2", 5/8"	+0, -.00043"	12, 14, 16, 18mm	+0, -11mm
3/4", 1", 1 1/4"	+0, -.0005"	20, 25, 32mm	+0, -13mm

Balanced for High Speed Machining

Pre-balanced to less than 15g mm for vibration free machining.



Runout Accuracy Less Than .00012"

High precision runout accuracy less than .00012" at 4xD improves the workpiece surface finish and extends tool life.

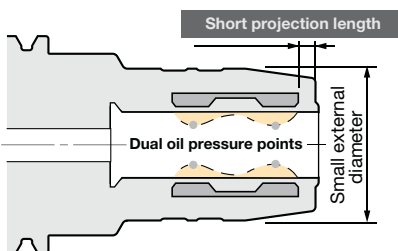
Easy Clamping with 1 Wrench



The cutting tool can be clamped or unclamped easily and securely with just 1 wrench.

**HIGH RUNOUT
ACCURACY
<3 μ m**

Integral Sleeve Construction



Compared with the traditional two-part construction sealed with O-rings, BIG Hydraulic Chucks are long lasting and maintenance free. Also, the rigidity is greatly improved by the short projection length and dual pressure points.

SUPER SLIM Type

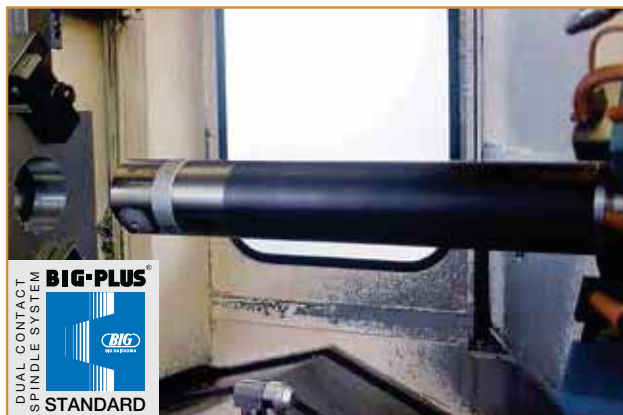
Ideal for High Precision 5-Axis Machining

Nose Diameter Min: ϕ .552"
Further evolution of the high precision Hydraulic Chuck program presents the slim design to eliminate interference.



**MAX
35,000
RPM**

Slim + High Speed

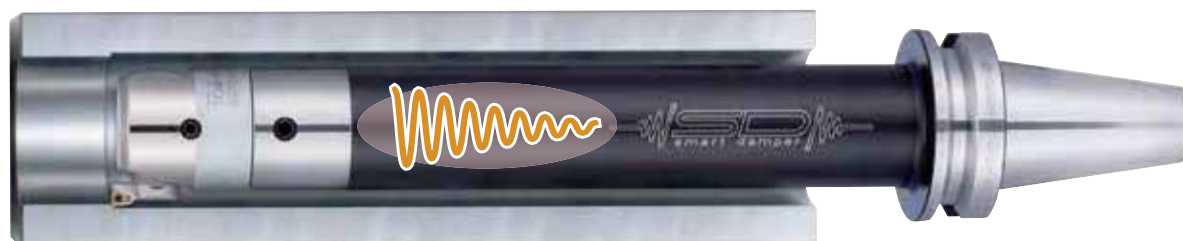


SMART DAMPER

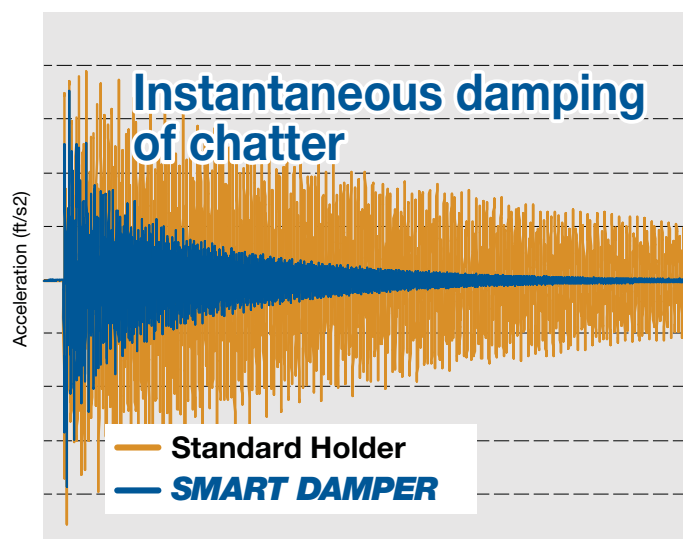


Integrated Damping System

For deep-hole finish boring and extended reach face milling. A unique dynamic damping system eliminates vibration for higher productivity. Quiet, vibration-free boring or milling with Smart Damper long projection tools provides better surface finishes and higher metal removal rates.



Time (S)



Tool Holders with Built-in Damping System

RATIO
6:1 L/D

Kaiser Boring: $\phi 1.614''$ - $8.000''$
Face Mills: $\phi 2.500''$ - $3.000''$

Finish Boring of Ductile Nodular Cast Iron

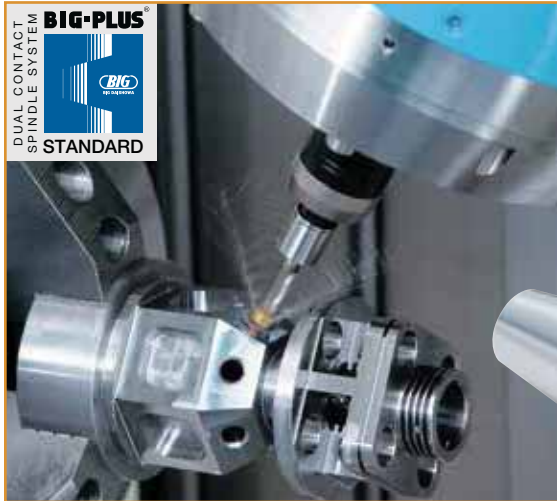
Cutting Conditions

Machine: HMC (BBT50)
BIG-PLUS®
Boring Dia: $\phi 2.677''$
Depth of Hole: $16''$ (L/D=6:1)
Insert Nose Radius: R .016"
Feed Rate: .008"/rev.
Depth of Cut: .012"/ ϕ

Tool Holder	Cutting Speed (SFM)				Result
	80	165	325	500	
Competitor (w/o damping system)	○	×	×	×	Outperforms competitor's holder by 6X higher productivity.
SMART DAMPER Built-in damping mechanism	○	○	○	◎	Superior surface finish and better tool life due to the increased cutting speed.

× = Vibration ○ = Acceptable ◎ = Excellent Surface Finish

MEGA SYNCHRO TAPPING HOLDER OVERVIEW

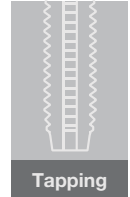


MEGA SYNCHRO[®] Tapping Holder

TAPPING RANGE: ANSI: No.0-AP1", JIS/DIN/ISO: M1-M36

Tool holder for rigid tapping compensates for synchronization errors during rigid tapping. Improves thread quality and tool life by reducing thrust loads caused by synchronization errors up to 90%.

* Patent is licensed from EMUGE



Tapping

47 Body Models and 258 Tap Holder Models are Available

Large tap series achieves a maximum of AP1". An extensive variety of bodies suitable for many spindle types. Short, middle & long tap holders are standardized to cover between No.6 and AP1" (M2 and M36). The slim design avoids interference.



Drive Key



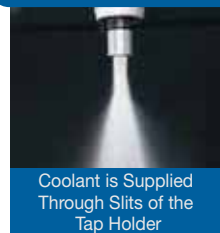
Secure Drive

The body and Tap Holder are fixed with a drive key in the rotation direction as well as the square of the tap.

Coolant Through Center Capability for All Models

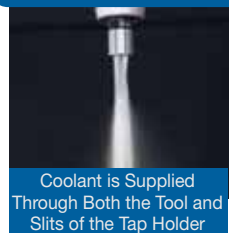
Coolant is supplied both through the tool and to the tool periphery simultaneously.

JET-THROUGH



Coolant is Supplied
Through Slits of the
Tap Holder

THROUGH TOOL



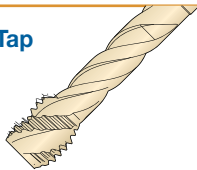
Coolant is Supplied
Through Both the Tool and
Slits of the Tap Holder



BIG Mega Synchro Tapping Holder compensates for synchronization errors with any type of tap.

Minimized thrust load to both the tap and workpiece improves thread quality and tap life.

Load To Tap

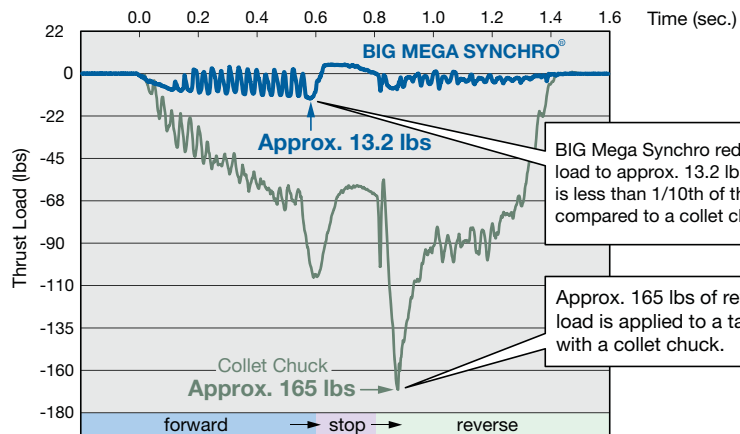


Spiral Tap

AU:1/4-20, N=1,000 RPM

Spiral grooves on spiral tap cause loading in the reverse direction, similar to an end mill.

※ Measured by Kistler Dynamometer



BIG Mega Synchro reduces load to approx. 13.2 lbs. This is less than 1/10th of the load compared to a collet chuck.

Approx. 165 lbs of reversal load is applied to a tap held with a collet chuck.

Comparison of Surface Finish

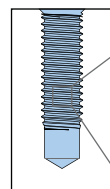
Tapping of exotic materials tends to cause a compressed burr on the thread surface. BIG Mega Synchro compensates for synchronization errors and minimizes the cutting load. Fine surface finish of threads is achieved.



MGT3 For Small Tap

Tapping Range: ANSI: No.0-No.6, JIS/DIN/ISO: M1-M3
Eliminating synchronization errors and minimizing dynamic runout at high speeds provides stable thread quality and extended tool life.

- BBT Shank
- Cylindrical Shank
- N/C Lathe Tooling



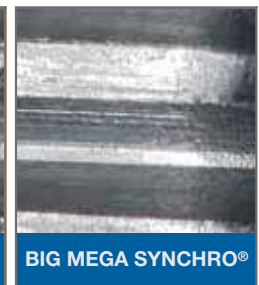
Spiral Tap

No.10-24

Material: 4130



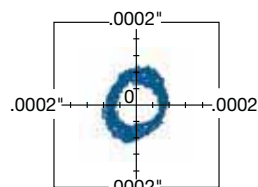
COLLET CHUCK



BIG MEGA SYNCHRO®



Mega Micro Nut



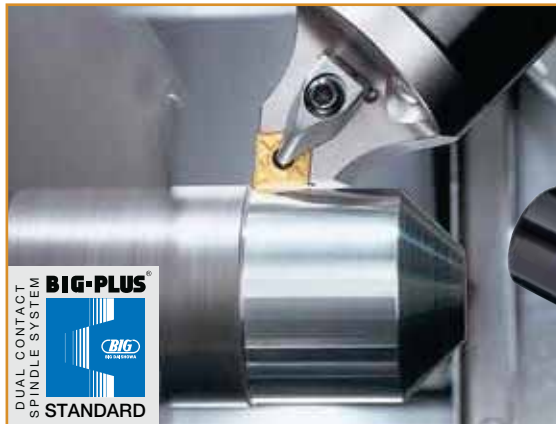
Dynamic runout accuracy within .0002" (5μm) even at 5,000 RPM

Plotted position of a test bar
(at .630" distance on .157" diameter)

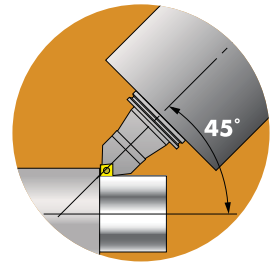
TURNING TOOLS

45° TILT STYLE, TYPE S OVERVIEW

The very first modular tooling system for turning applications. A modular tooling system offers better efficiency, material selection, heat treatment and optimal tool lengths. The serious damage on tool holders caused by broken inserts can now be easily and economically replaced. Boring bar & square tool holders options also available.

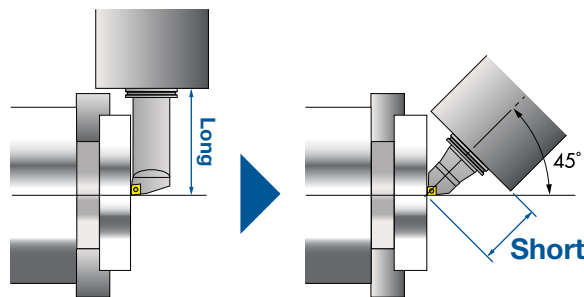
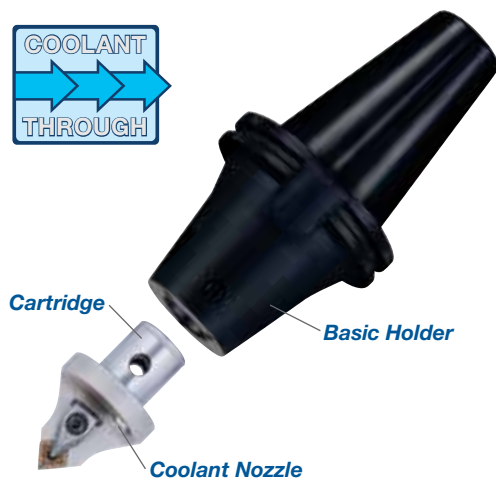
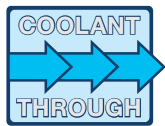


45° TILT STYLE TYPE S



Minimized Cutting Forces

Tilting the "B" axis 45° helps to minimize the cutting forces transmitted to the machine spindle. This force reduction increases the life of the machine spindle.



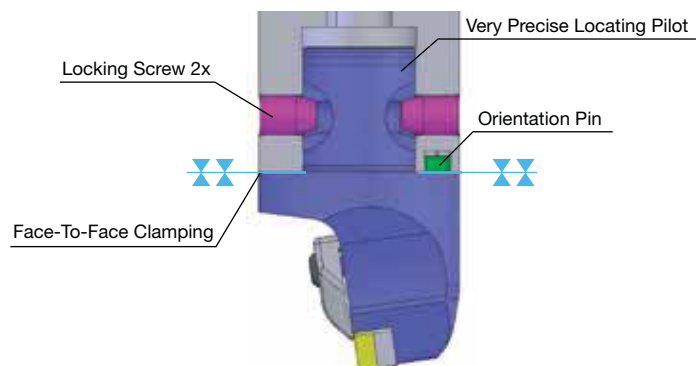
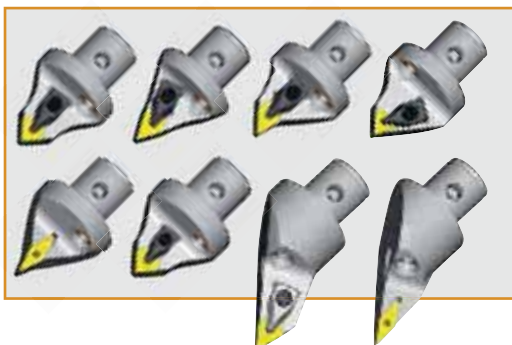
With the "B" axis at 45°, accessibility problems with the chuck or tailstock are overcome to minimize tool length.

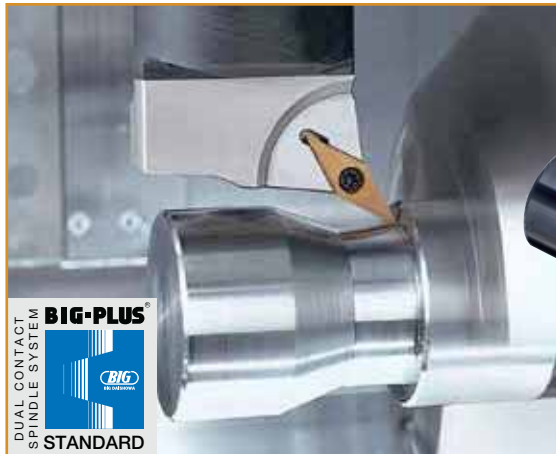
Secure and Rigid Type S Cartridge Clamping System

Using highly sophisticated and modern machine tools, Type S Cartridges are made to very close tolerances required for turning accuracy and repeatability. The cartridge is located in the basic holder by means of a precision ground pilot and secured by 2 opposing radial screws with a 15° taper. With a slight offset to locating sockets, high face-to-face clamping force of the two components is generated. To maintain precise locations and orientation, an additional locating pin is included for positive transfer of cutting torque.

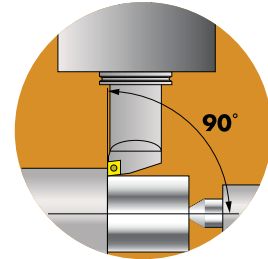
AVAILABLE IN
BCV, BBT, HSK
& BIG CAPTO

17 Cartridges for 45° Tilt Style Type S



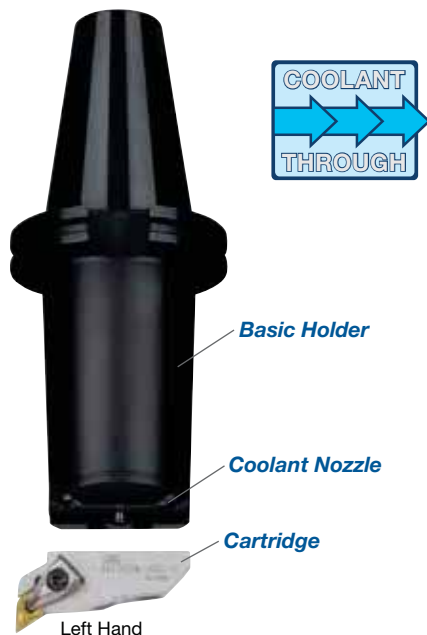


90° RIGHT ANGLE STYLE TYPE F



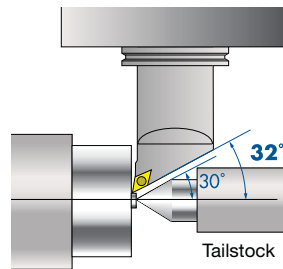
Right or Left Hand Versions Available

Two different basic holders are available and all can be assembled with either the right or left hand version of cartridges.



Left Hand

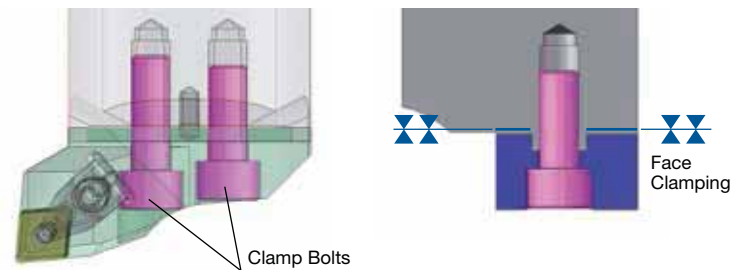
AVAILABLE IN
BCV, BBT, HSK
& BIG CAPTO



Center proximity type cartridge is also available, minimizing tailstock interference.

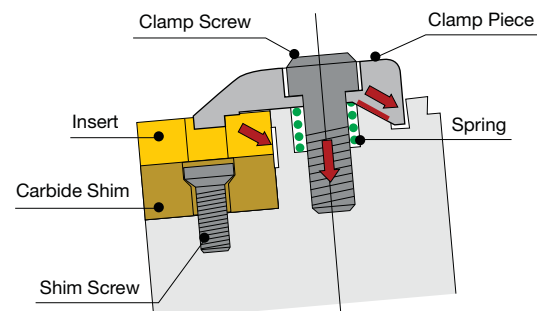
Simple and Positive Clamping

Type F uses two clamping bolts that press the cartridge onto the basic holder. The torque is transmitted by an interlocking drive slot.



Safe and Easy Clamping of Inserts

The double-clamping system simultaneously pushes an insert downward and draws it into the contact faces to achieve secure and rigid clamping.



36 Cartridges for 90° Right Angle Style Type F





ANGLE HEAD

Eliminate multiple set-ups and combine vertical, horizontal and angular operations on one machine. One original set-up saves time, speeds production and guarantees better accuracy.



A Variety of Compact and Rigid Heads Suitable for all Kinds of Machining Applications

AG90 SERIES



AGU SERIES



ULTRA SMALL HEAD



Special Versions Available

We are able to design and manufacture special Angle Heads such as custom angles or long type models to answer every machining condition.

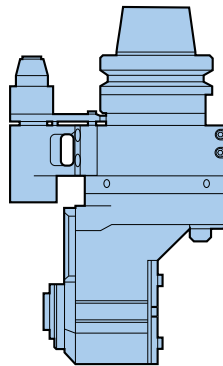




A wide range of compact and rigid heads, from milling chuck types to universal types, suitable for all kinds of machining applications.

Build-Up/HMC Type

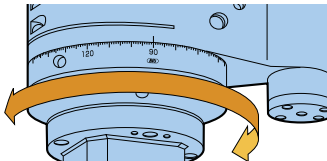
Overhang is minimized for added rigidity and strength. As a result, the projection length with the cutting tool is shorter, which reduces the overall load on the Angle Head and thus improves the unit's cutting capabilities. Further, the minimized overhang helps eliminate interference with the ATC (automatic tool changer) and connecting storage pockets in the tool magazine. High Rigidity S-Type, which has a steel housing and a stronger locating pin assembly, is also available.



**ATC may not be utilized for some machining centers.*

Cutter Head Adjustable 360°

Reference faces are provided on both sides of all heads for easier setting of cutter directions.



Superior Quality Components

For smooth and powerful operation and to minimize noise and vibration, all Angle Heads are equipped with hardened and ground chrome-nickel steel spiral bevel gears, super precision hardened and ground spindles, and high precision angular contact ball bearings.



Innovative Sealing Method

The advanced no contact sealing method prevents coolant and particle contamination better than any other sealing method.



MAX COOLANT
PRESSURE
150
PSI

Unique Coolant Jacket

Jacket allows coolant coming through the stop block to be efficiently directed to the cutting tool edge while simultaneously cooling the Angle Head.



Extra Long NBS Style Angle Heads

Available with 4" (100mm), 8" (200mm) and 12" (300mm) extensions. Any 50 taper or HSK-A100 size NBS head can be extended for drilling or milling on workpieces with long reach requirements.



HIGH SPINDLE HOLDER OVERVIEW



HIGH SPINDLE

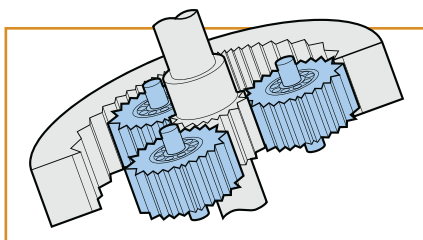
High Spindle improves drilling and end milling performance on existing machining centers by multiplying the spindle speed 4, 5 or 6 times.

MAX
20,000
RPM



Reinforced Gear Driving System

The planetary gears, which have been constantly upgraded since the development of our first "High Spindle" back in 1970, achieves smooth operation with minimal heat generation and high torque transmission.



Reduce Load To Machine Spindle

Continuous use at high spindle speeds will reduce the life of a machine spindle due to the excessive load to the motor and bearings. The High Spindle reduces this load and greatly extends the life of a costly machine spindle.

Multi-Directional Coolant Supply

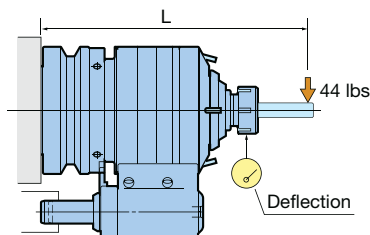
Universal coolant nozzles are capable of being adjusted to suit the length of the cutting tool. Thus, the maximum coolant delivery to the cutting edge is assured.

- High Spindle can be operated without coolant running through the housing



Rigidity Increased 1.7 Times

Larger diameter body and spindle with double angular contact bearings and reinforced locating pin assembly greatly increase rigidity.

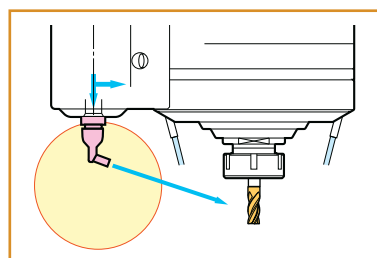


Catalog Number	L	Deflection	Comparison
BBT40-GTG5-10-140-65	7.87	.0014	58% less
BBT50-GTG6-10-158-80	8.66	.0010	78% less
BBT50-GTG4-16-177-80	9.45	.0004	93% less

- Comparison against previous model

Pinpoint Coolant Jet for Shorter Cutting Tools

A 1/8 pipe tap thread is provided in the High Spindle so that various types of customer supplied coolant-jet nozzles can be utilized which will provide pinpoint delivery to the cutting edge of short tools (BCV/BBT taper models only).





AIR POWER SPINDLE

High-speed micro-machining can be done on a normal machining center, eliminating the need of an expensive high-speed machine.

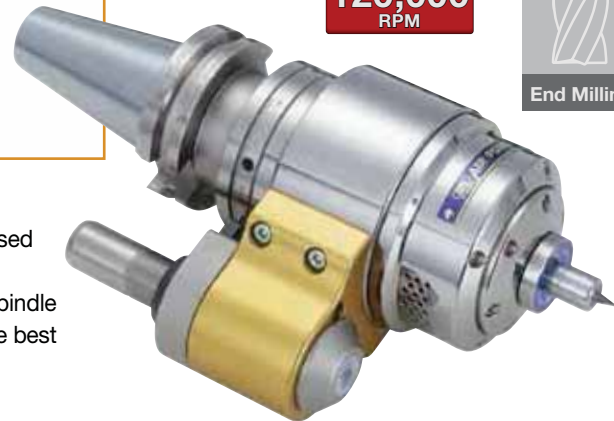
MAX
120,000
RPM



End Milling



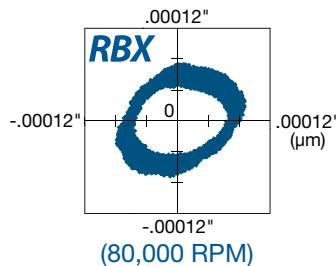
Drilling



Dynamic Runout Accuracy

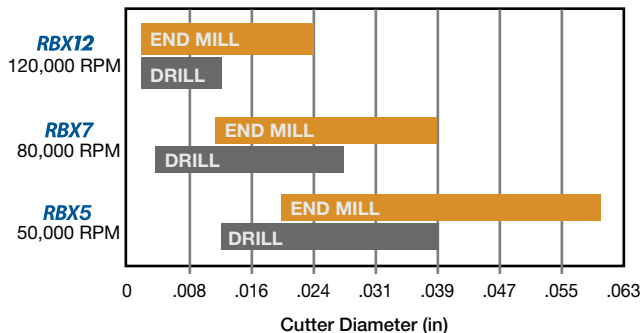
Most problems associated with micro-machining are caused by poor dynamic runout of a machine spindle. We have established a runout measuring system that can detect spindle movement during rotation at high speed and achieved the best dynamic runout accuracy.

Plotted position of a test bar at the max spindle speed



- Improved machining accuracy
- Extended tool life
- Superior surface finish

Recommended Clamping Range



• The table is just for reference. Machining range may change according to material, cutting conditions and cutting tools

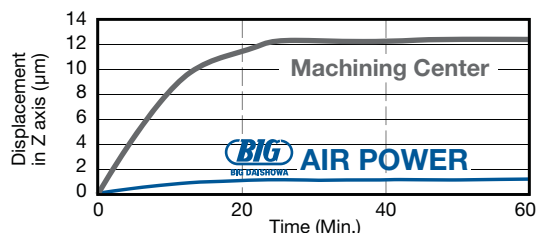
Application Example

RBX7	OUTSTANDING RUNOUT ACCURACY PERMITS SUPER THIN WALL CUTTING	
	Cutter	0.02" (0.5mm) Rib-End Mill
	Spindle speed	70,000 RPM
	Feed	59 IPM (1,500 mm/min)
	D.O.C	Ad= .0008" (.02mm)

Minimized Spindle Expansion

Air turbine drive prevents thermal expansion of the spindle, which is essential for high accuracy micro-machining.

Axial displacement compared to operating time



Automatic Tool Change

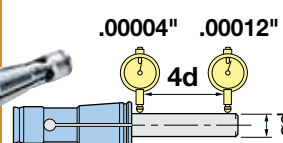
ATC type is available by supplying air via a stop block to enhance productivity with unmanned operation.
Air Pressure: 90 PSI
Air Consumption: 7 CFM

Mega Micro Collet NBC4S Collet

Max Cutter Shank: .157"



Guaranteed Max Runout



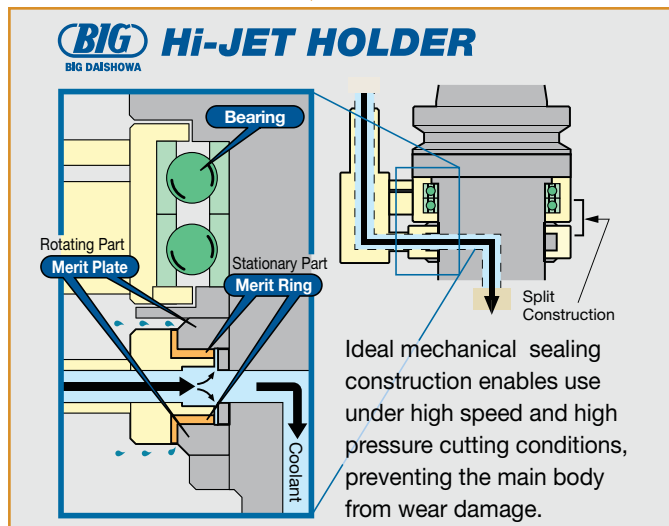
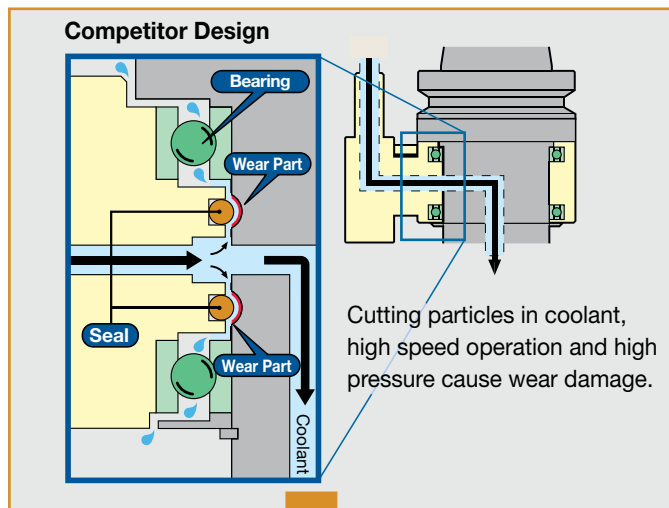


Hi-JET HOLDER

Coolant feed for water-soluble coolant only. Bearings are in a separate housing from the coolant for extended life.



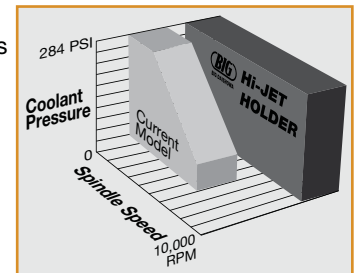
Non-Contact Seal Design Eliminates Wear Damage to Body



Suitable For Small Dia. Cutters Due to High Speed and Pressure

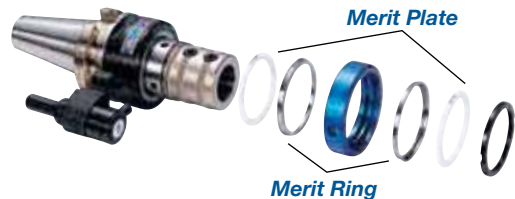
Small diameter cutters require high spindle speeds to maintain high cutting speed and high coolant pressure due to their small dia. coolant holes. The Hi-Jet

Holder accepts even smaller diameter shanks, providing high spindle speeds (max 10,000 RPM) and high coolant pressures (max 284 PSI).

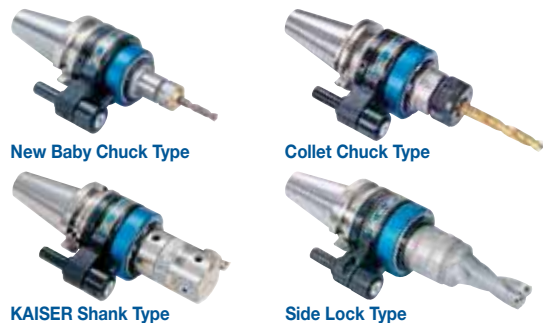


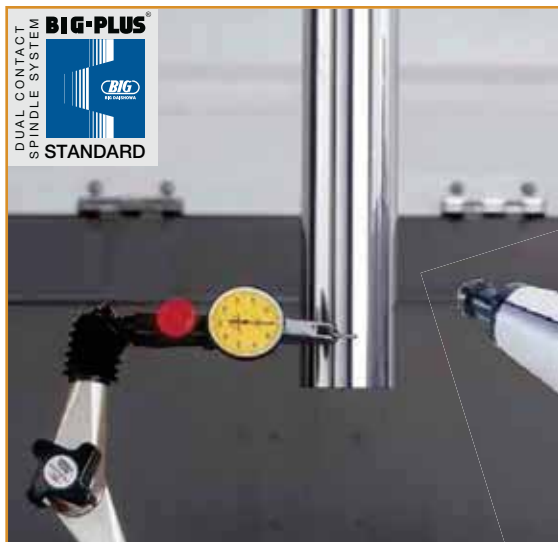
Easy Maintenance by Replacement of Wear Parts

Easily replaceable Merit Sets consist of Merit Plates, Merit Rings and O-Rings.



A Variety of Hi-Jet Holders Available





DYNA TEST

Periodic inspection of machine tools is recommended to control production stability. The cause of machine tool runout stems from wear of the spindle bearings. Regular inspection with Dyna Test helps identify potential problems, and can reduce downtime and costly repairs of the machine tool spindle.

AVAILABLE IN
BCV, BBT, HSK
& BIG CAPTO

For Maintaining the Precision of Your Equipment to Ensure a Stable Production Environment

PRECISION STANDARDS OF BIG DAISHOWA TEST ARBORS	
Runout	.002mm (.00008")
Roundness	.001mm (.00004")
Cylindricity	.003mm (.00012")
Roughness	Ra: .1µm (.000004")
Taper Contact	AT1
Diameter Tol.	±.005mm (.0002")

- BIG Daishowa provides high quality test bars produced under a strict quality control system



Aluminum Case

An aluminum case is provided to protect and store the test bars.

Calibration Certificate and Traceability System

BIG Daishowa can offer a Calibration Certificate with traceability on request as per ISO9000 requirements.



Test Arbor

Measures dynamic runout of machine spindle during rotation. Reduce downtime and costly spindle repairs.



ACCESSORIES



Pullstud Bolts CAT40/50.....	Pg. 30
Dyna Test BCV40/50	Pg. 31
ATC Alignment Tool BCV40/50	Pg. 31
BIG-PLUS® Cleaner BCV40/50	Pg. 31

MEGA CHUCKS



Mega S—Mega Micro BCV40	Pg. 32
Clamping Range: $\phi.018$ "-.317"	
Mega N—Mega New Baby BCV40/50	Pg. 33-34
Clamping Range: $\phi.010$ "-.787"	
Mega ER Grip BCV40/50	Pg. 35
Clamping Range: $\phi.075$ "-.787"	
Mega E BCV40/50	Pg. 36
Clamping Range: $\phi.125$ "-.500"	
Mega DS—Mega Double Power BCV40/50 & BCV40H/50H	Pg. 37-38
Clamping Range: $\phi.625$ "-1.500"	

NEW Hi-POWER MILLING CHUCKS



BCV40/50.....	Pg. 39
Clamping Range: $\phi.750$ "-1.500"	

HYDRAULIC CHUCKS



BCV40/50.....	Pg. 40-42
Clamping Range: $\phi.250$ "-1.250"	

SMART DAMPER



BCV40/50.....	Pg. 43
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BASIC ARBORS



Shell Mill Holder BCV40/50.....	Pg. 44
Face Mill Holder BCV40/50.....	Pg. 45
End Mill Holder BCV40/50.....	Pg. 46
Clamping Range: $\phi.375$ "-2.000"	
Shrink Fit Holder BCV40/50.....	Pg. 47
Clamping Range: $\phi.250$ "-1.250"	
Blank Bar BCV40/50	Pg. 48

MODULAR HOLDERS



KAISER KAB/CKN, BIG Komet ABS & BIG CAPTO BCV40/50.....	Pg. 49-51
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MEGA SYNCHRO



BCV40/50.....	Pg. 52
Tapping Range: No.2-AP1 (ANSI) M2-M36 (JIS/DIN/ISO)	

TURNING TOOLS



45° Type S & 90° Type F Basic Holder BCV40Y/50Y.....	Pg. 53
Square Tool Holder 180° & 45° BCV40Y/50Y.....	Pg. 54
Boring Bar Holder BCV40Y/50Y.....	Pg. 55
Clamping Range: $\phi.625$ "-2.000"	

PROFIT MAKER TOOLS



Angle Head—AG90 NBS Type BCV40/50.....	Pg. 56-57
Clamping Range: $\phi.010$ "-.787"	
Angle Head—AG90 NBS Extra Long Type BCV40/50.....	Pg. 58-59
Clamping Range: $\phi.010$ "-.787"	
Angle Head—AG90 Compact Type BCV40.....	Pg. 60
Clamping Range: $\phi.098$ "-.512"	
Angle Head—AG90 Slender Drive BCV40/50.....	Pg. 61
Clamping Range: $\phi.118$ "-.236"	
Angle Head—AG90 Build-Up Type BCV50.....	Pg. 62
Angle Head—AG90 HMC Type BCV50.....	Pg. 63
Clamping Range: $\phi1.250$ "	
Angle Head—AG90 Universal Type BCV40/50.....	Pg. 64
Clamping Range: $\phi.098$ "-.787"	
Angle Head—AGU30 Type BCV40/50.....	Pg. 65
Clamping Range: $\phi.098$ "-.787"	
High Spindle BCV40/50.....	Pg. 67
Clamping Range: $\phi.059$ "-.630"	
Air Power Spindle— RBX5/7/12 BCV40/50.....	Pg. 68-69
Hi-Jet Holder CV40/50.....	Pg. 70-71

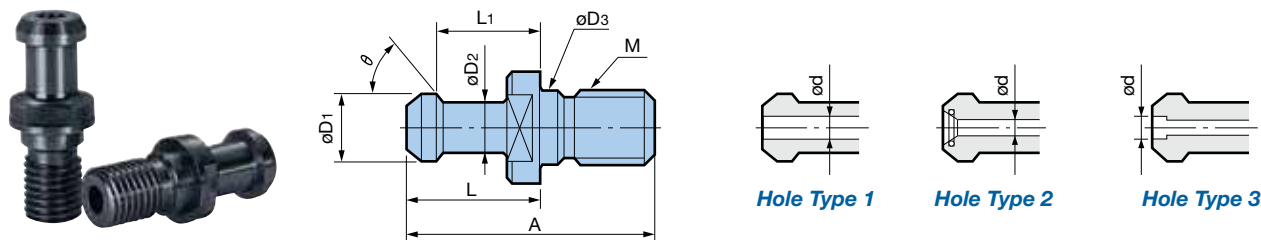
PULLSTUD BOLTS

CAT40/50

BCV

Before Ordering

Be sure to check the dimensions of the required pullstud bolt by referring to the specification sheet of the machine tool. In the case of machines with coolant-through spindle capability, provide us a copy of the pullstud bolt drawing, as the sealing method may vary even among machines with the same model number.



CAT40

Catalog Number	ϕD_1	ϕD_2	ϕD_3	A	L	L_1	θ	M	Hole Type	ϕd	Standard or Machine Make
P40T-1CMGHA	.591	.394	—	2.126	1.266	.990	45°	5/8"-11	1	.118	MAS -1 CAT with Hole
P40T-1C1MGH			.641	2.250					2		TOYODA
P40T-2CH	.591	.394	—	2.126	1.266	.990	60°		1	.118	MAS-2 CAT with Hole
PVD40CMGH1	.748	.551	.641	2.008	1.024	.787	75°		1	.276	KITAMURA
40PCH	.748	.551	.641	2.126	1.029	.793	75°		1	.276	JIS CAT with Hole
PMO40CMG	.748	.551	—	1.887	1.029	.793	75°		2	.276	MORI SEIKI
POM40CFMG	.591	.394	—	2.244	1.266	.990	90°		None	—	MORI SEIKI
PYN40C	.740	.490	.641	1.500	.640	.440	45°		1	.276	MAZAK

- Machine tool builders have used many various shapes and sizes of retention knobs
- The use of the incorrect knob may result in injury or property damage for your machining center

CAT50

Catalog Number	øD ₁	øD ₂	øD ₃	A	L	L ₁	θ	M	Hole Type	ød	Standard or Machine Make
P50T-1CH	.906	.669	—	3.080	1.780	.386	45°	1"-8	1	.315	MAS-1 CAT with Hole
P50T-1CH4				3.346	1.771	1.377			2	.236	TOYODA
P50T-2C	.906	.669	—	3.346	1.780	1.386	60°		None	—	MAS-2 CAT
P50T-2CH				1.771	1.377	1			.157	MAS-2 CAT with Hole	
P50T-2CH2						1			.157	SNK	
P50T-2CH11						2			.236	OKUMA HOWA	
PVD50CH1	1.102	.826	—	2.902	1.377	.984	75°		1	.236	MORI SEIKI
PVD50CH2			1.031	2.919	1.344	.990			1	.452	MORI SEIKI
POM50CH1	.906	.669	—	3.346	1.780	1.386	90°		2	.315	MORI SEIKI
POM50CF									None	—	MORI SEIKI
PYN50C	1.140	.820	1.031	2.303	1.000	.700	45°		3	.629	MAZAK
PMK50CH	1.102	.827	—	2.598	1.34	.992	75°		1	.394	MATSUURA

- Machine tool builders have used many various shapes and sizes of retention knobs
- The use of the incorrect knob may result in injury or property damage for your machining center

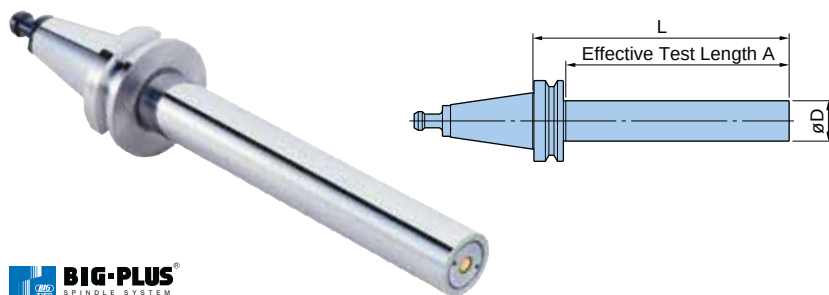


Mega Pullstud Bolt

MG in the model numbers stand for Mega Pullstud Bolt. Tensile strength is improved by utilizing tool steel. Especially recommended for BIG-PLUS® dual contact applications.

Dyna Test

Helps identify potential problems, and can reduce downtime and costly repairs of the machine tool spindle.



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

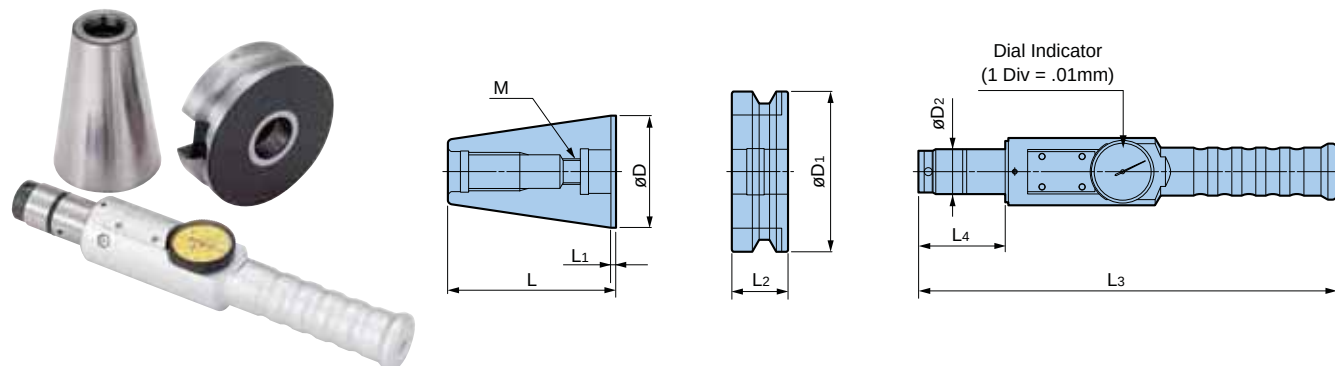
Catalog Number	L	A	øD
BCV40-2.000-L13.5SD	13.500	12.500	2.000
BCV50-2.000-L13.5SD	13.500	12.500	



BCV

ATC Alignment Tool

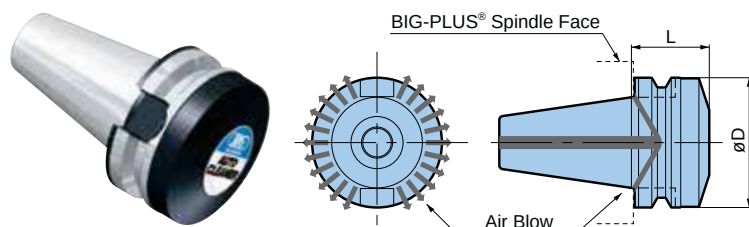
For re-aligning the center between the machine tool spindle and ATC gripper. It can also be used for re-aligning the ATC gripper and tool magazine pots.



Catalog Number	øD	øD1	øD2	L	L1	L2	L3	L4	M
CV40-ATC20	1.750	2.500	.787	2.812	.123	.958	9.882	1.732	1/2"-13
CV50-ATC28	2.750	3.875	1.102	4.125	.123	1.301	10.276	2.126	5/8"-11

BIG-PLUS® Cleaner

Blowing air cleans the BIG-PLUS® machine spindle face of all debris.



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

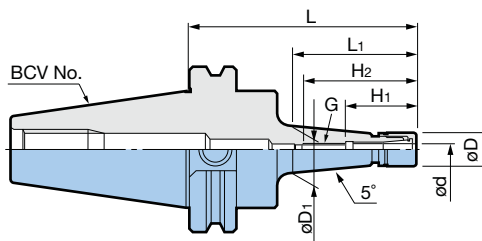
Catalog Number	L	øD
SCV40-ASC-1.750T	1.750	2.480
SCV50-ASC-2.5T	2.480	3.875

- When the cleaner is clamped into a BIG-PLUS® machine spindle, faces have 1mm (.039") clearance

MEGA MICRO CHUCK BIG-PLUS® BCV40

CLAMPING RANGE: .018"-.317" — For Micro Drill & End Mill Applications

MAX
35,000
RPM



Catalog Number	ød	øD	D1	L	L1	H1	H2	G	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BCV40-MEGA3S-2.5T	.018-.128	.394	.47	2.50	1.01	.87	1.50	M4 P0.7	NBC3S-□	MGN3S	MGR10	35,000	2.2
-4T			.76	4.00	2.38							25,000	2.4
-MEGA4S-2.5T	.018-.159	.472	.54	2.50	1.01	1.04	1.85	M5 P0.8	NBC4S-□	MGN4S	MGR12	35,000	2.2
-4T			.78	4.00	2.38							25,000	2.4
-MEGA6S-2.5T	.018-.238	.551	.60	2.50	1.01	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	35,000	2.2
-4T			.84	4.00	2.38							25,000	2.4
-MEGA8S-3.5T	.116-.317	.709	.91	3.50	1.93	1.22	1.99	M9 P0.75	NBC8S-□	MGN8S	MGR18	30,000	2.4
-6T			1.35	6.00	4.50							15,000	3.1

- Mega Micro Nut is included
- Collet and wrench must be ordered separately
- Weight does not include collet
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always achievable

ACCESSORIES

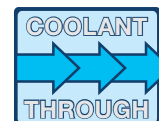


MEGA NEW BABY CHUCK BIG-PLUS® BCV40

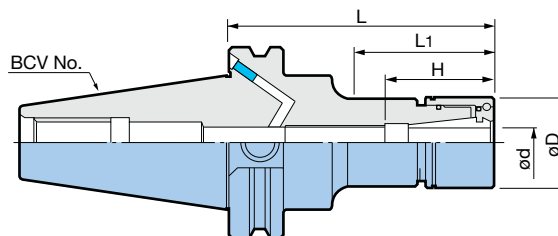


CLAMPING RANGE: ϕ .010"-.787" — For Drills, Reamers, Taps & Finishing End Mills

**MAX
35,000
RPM**



COOLANT BORES IN
ACCORDANCE TO
DIN69871/FORM B



Catalog Number	ϕd	ϕD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BCV40-MEGA6N-2.5	.010-.236	.787	2.50	1.04	.91-1.69	NBC6-□	MGN6	MGR20	35,000	2.3
-4			4.00	2.22					30,000	2.5
-5			5.00	3.22					20,000	2.7
-6			6.00	4.22					15,000	2.8
-MEGA8N-2.5	.020-.315	.984	2.50	1.04	1.02-1.77	NBC8-□	MGN8	MGR25	35,000	2.4
-4			4.00	2.30					30,000	2.7
-5			5.00	3.30					20,000	2.9
-6			6.00	4.30					15,000	3.1
-MEGA10N-2.5	.059-.394	1.181	2.50	1.05	1.50-1.89	NBC10-□	MGN10	MGR30	35,000	2.5
-4			4.00	2.38					25,000	3.0
-5			5.00	3.38					20,000	3.2
-6			6.00	4.38					15,000	3.5
-MEGA13N-2.5	.098-.512	1.387	2.50	1.17	1.73-2.48	NBC13-□	MGN13	MGR35	30,000	2.7
-4			4.00	2.46					25,000	3.2
-5			5.00	3.46					20,000	3.5
-6			6.00	4.46					15,000	4.0
-MEGA16N-2.5	.098-.630	1.654	2.50	1.18	1.89-2.48	NBC16-□	MGN16	MGR42L	30,000	2.9
-4			4.00	2.62					20,000	3.6
-5			5.00	3.62					15,000	4.2
-6			6.00	4.62					12,000	4.7
-MEGA20N-2.5	.098-.787	1.811	2.50	1.75	2.01	NBC20-□	MGN20	MGR46L	30,000	3.0
-4			4.00	3.25					20,000	4.0
-5			5.00	4.25					15,000	4.6
-6			6.00	5.25					12,000	5.3

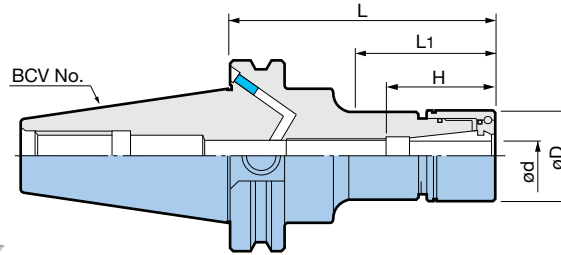
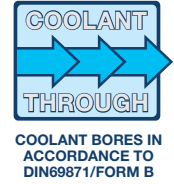
- Mega New Baby Nut is included, collet and wrench must be ordered separately
- Weight does not include collet
- "H" indicates the adjustment length with an adjusting screw
- Designed to be capable of supplying coolant through spindle and flange
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable
- Bores on Form B are sealed with set screws on delivery

ACCESSORIES

COLLET PG. 236	MEGA NUT PG. 248	PERFECT SEAL PG. 250	MEGA WRENCH PG. 259	SCREW PG. 262
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MEGA NEW BABY CHUCK BIG-PLUS® BCV50

CLAMPING RANGE: $\varnothing$.010"-.787" — For Drills, Reamers, Taps & Finishing End Mills



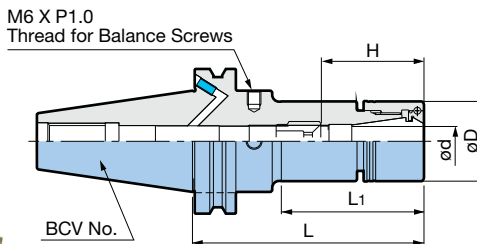
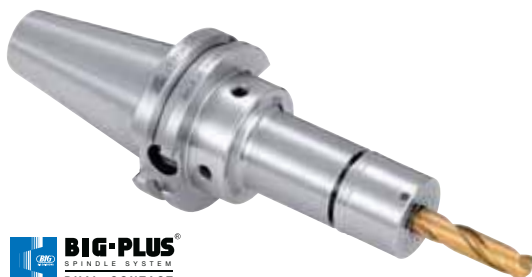
Catalog Number	$\varnothing d$	$\varnothing D$	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BCV50-MEGA6N-3.5	.010-.236	.787	3.50	1.72	.91-1.69	NBC6-□	MGN6	MGR20	20,000	7.0
-5			5.00	3.03					20,000	7.1
-6			6.00	4.03					15,000	7.3
-MEGA8N-3.5	.020-.315	.984	3.50	1.72	1.02-1.77	NBC8-□	MGN8	MGR25	20,000	7.1
-5			5.00	3.03					20,000	7.4
-6			6.00	4.03					15,000	7.6
-MEGA10N-3.5	.059-.394	1.181	3.50	1.72	1.50-1.89	NBC10-□	MGN10	MGR30	20,000	7.3
-5			5.00	3.03					20,000	7.7
-6			6.00	4.03					15,000	7.9
-8			8.00	6.03					12,000	8.6
-MEGA13N-3.5	.098-.512	1.378	3.50	1.72	1.73-2.48	NBC13-□	MGN13	MGR35	18,000	7.5
-5			5.00	3.22					18,000	8.1
-6			6.00	4.03					16,000	8.5
-8			8.00	6.03					12,000	9.3
-MEGA16N-3.5	.098-.630	1.654	3.50	1.72	1.89-2.68	NBC16-□	MGN16	MGR42L	17,000	7.8
-5			5.00	3.22					17,000	8.7
-6			6.00	4.22					16,000	9.3
-8			8.00	6.22					13,000	10.4
-MEGA20N-3.5	.098-.787	1.811	3.50	1.80	2.01-2.68	NBC20-□	MGN20	MGR46L	16,000	8.1
-5			5.00	3.22					16,000	9.0
-6			6.00	4.22					15,000	9.7
-8			8.00	6.22					13,000	11.0

- Mega New Baby Nut is included
- Collet and wrench must be ordered separately
- Weight does not include collet
- "H" indicates the adjustment length with an adjusting screw
- Designed to be capable of supplying coolant through spindle and flange
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable
- Bores on Form B are sealed with set screws on delivery

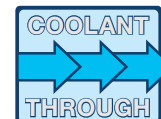
ACCESSORIES

 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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CLAMPING RANGE: ϕ .075"-.787" — For Drills, Reamers, Taps & Finishing End Mills



**MAX
35,000
RPM**



COOLANT BORES IN
ACCORDANCE TO
DIN69871/FORM B

BCV

Catalog Number	ød	øD	L	L ₁	H	Collet	Nut (NOT Included)	Wrench	Max RPM	Weight (lbs.)
BCV40-MEGAER11-4NL	.108-.236	.787	4.00	2.48	.91-1.69	ERC11-□	MERN11*	MGR20	30,000	2.5
-MEGAER16-3NL	.075-.394	1.181	3.00	1.50	1.38-1.85	ERC16-□	MERN16*	MGR30L	35,000	3.1
-4NL			4.00	2.48					25,000	3.3
-5NL			5.00	3.46					20,000	3.5
-6NL			6.00	4.49					15,000	4.0
-MEGAER20-3NL			.108-.512	1.378					3.00	1.50
-4NL	4.00	2.48			25,000	3.5				
-5NL	5.00	3.50			20,000	4.0				
-6NL	6.00	4.49			15,000	4.2				
-MEGAER25-3NL	.108-.630	1.654	3.00	1.61	1.73-2.56	ERC25-□	MERN25*	MGR42L	30,000	3.5
-4NL			4.00	2.60	1.73-2.64				20,000	4.0
-5NL			5.00	3.58					15,000	4.4
-6NL			6.00	4.61					12,000	4.8
-MEGAER32-3.25NL	.108-.787	1.969	3.25	—	1.97-2.68	ERC32-□	MERN32*	MGR50L	30,000	3.7
-4NL			4.00						20,000	4.4
-5NL			5.00						15,000	5.1
-6NL			6.00						12,000	5.9
BCV50-MEGAER16-3.5NL	.075-.394	1.181	3.50	1.85	1.39-1.84	ERC16-□	MERN16*	MGR30L	20,000	8.4
-5NL			5.00	3.35					20,000	8.8
-6NL			6.00	4.33					15,000	9.0
-MEGAER20-3.5NL	.108-.512	1.378	3.50	1.85	1.65-2.43	ERC20-□	MERN20*	MGR35L	18,000	8.6
-5NL			5.00	3.35					18,000	9.0
-6NL			6.00	4.33					16,000	9.5
-MEGAER25-3.5NL	.108-.630	1.654	3.50	1.85	1.74-2.65	ERC25-□	MERN25*	MGR42L	17,000	8.8
-5NL			5.00	3.35					17,000	9.5
-6NL			6.00	4.33					16,000	9.9
-MEGAER32-3.5NL	.108-.787	1.969	3.50	1.89	1.97-2.68	ERC32-□	MERN32*	MGR50L	16,000	9.0
-5NL			5.00	3.39					16,000	10.1
-6NL			6.00	4.37					15,000	11.0

*Nut, adjusting screw, balance screws, collet and wrench are not included

- Weight does not include collet
- "H" indicates the adjustment length with an adjusting screw
- Mega ER Grip is not able to use DIN6499 Form-A collets and ESX collets
- The "max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "max" allowable speed may not always be achievable
- Bores on Form B are sealed with set screws on delivery

CAUTION

To maintain the accuracy of the tool assembly, do not use collets and nuts manufactured by another company with the chuck body of BIG's Mega ER Grip. We cannot guarantee the accuracy statement for our collets if they are assembled on the chuck body of another manufacturer.

ACCESSORIES

COLLET PG. 240	MEGA NUT* PG. 255	PERFECT SEAL PG. 256	SOLID NUT PG. 255	MEGA WRENCH PG. 259	SCREW PG. 262
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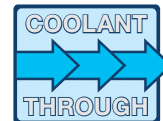
*Mega Nut is the recommended nut to achieve high accuracy and clamping force

MEGA E CHUCK BIG-PLUS® BCV40/50

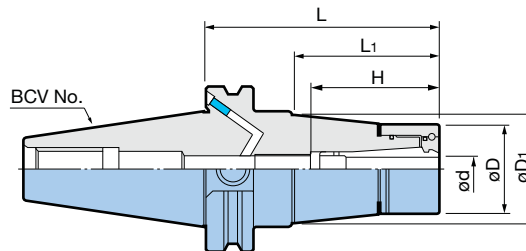
CLAMPING RANGE: ϕ .125"-.500" (ϕ 3mm- ϕ 12mm)

Exclusively for High Speed Finish End Milling

**MAX
35,000
RPM**



COOLANT BORES IN
ACCORDANCE TO
DIN69871/FORM B



Catalog Number	ϕd	ϕD	ϕD_1	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BCV40-MEGA6E-3	.125-.250 (3mm-6mm)	.984	1.09	3.00	1.50	1.45-1.77	MEC6-□	MEN6	MGR25	35,000	2.5
-4			1.25	4.00	2.42					29,000	3.0
-5			1.45	5.00	3.54					29,000	3.4
-6			1.50	6.00	4.54					20,000	3.8
-MEGA8E-3	.125-.250 (3mm-8mm)	1.181	1.28	3.00	1.50	1.65-2.00	MEC8-□	MEN8	MGR30	30,000	2.8
-4			1.46	4.00	2.54					29,000	3.2
-5			1.55	5.00	3.58					29,000	3.6
-6			1.69	6.00	4.58					20,000	4.3
-MEGA10E-3	.125-.375 (3mm-10mm)	1.378	1.48	3.00	1.54	1.89-2.28	MEC10-□	MEN10	MGR35	30,000	2.9
-4			1.65	4.00	2.58					29,000	3.4
-5			1.65	5.00	3.58					29,000	3.9
-6			1.65	6.00	4.58					22,000	4.5
-8			1.65	8.00	6.62					16,000	5.2
-MEGA13E-3	.125-.500 (3mm-12mm)	1.654	1.65	3.00	1.62	1.96-2.36	MEC13-□	MEN13	MGR42L	30,000	3.2
-4			1.65	4.00	2.62					29,000	3.8
-5			1.65	5.00	3.62					29,000	4.3
-6			1.65	6.00	4.62					22,000	4.9
-8			1.65	8.00	6.62					16,000	6.1
BCV50-MEGA13E-4	.125-.500 (3mm-12mm)	1.654	1.90	4.00	2.42	1.96-2.36	MEC13-□	MEN13	MGR42L	18,000	8.5
-5			2.07	5.00	3.42					18,000	9.3
-6			2.25	6.00	4.42					16,000	10.6
-8			2.42	8.00	6.50					12,000	12.8

- Mega E Nut is included
- Collet and wrench must be ordered separately
- Weight does not include collet
- "H" indicates the adjustment length with an adjusting screw
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable
- Bores on Form B are sealed with set screws on delivery

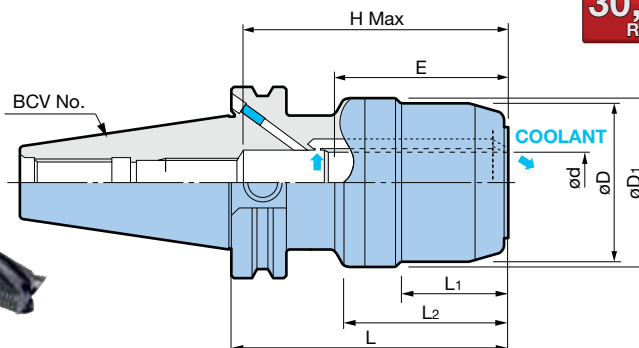
ACCESSORIES



MEGA DOUBLE POWER CHUCK BIG-PLUS® BCV40/50



CLAMPING RANGE: ϕ .625"-1.500" — For Heavy Duty End Milling



**MAX
30,000
RPM**



COOLANT BORES IN
ACCORDANCE TO
DIN69871/FORM B



Catalog Number	ϕd	ϕD	ϕD_1	L	L ₁	L ₂	H	Min Clamping Length E	Wrench	Max RPM	Weight (lbs.)
BCV40-MEGA.625DS-3.5A	.625	1.654	2.071	3.59	1.06	2.01	2.88	2.13	MGR42L	30,000	3.9
-MEGA.750DS-3.5A	.750	1.969	2.193	3.59	1.40	2.09	3.44	2.25	MGR50L	30,000	4.0
-MEGA1.000DS-3.5A	1.000	2.441	2.469	3.59	1.61	2.09	3.44	2.50	MGR62L	27,000	4.6
-MEGA1.250DS-4A	1.250	2.756	2.783	4.09	1.42	2.36	3.63	2.75	MGR70L	26,000	5.1
BCV50-MEGA.625DS-4	.625	1.811	2.165	4.09	1.02	1.42	2.88	2.13	MGR46L	21,000	8.8
-6				6.09		1.42				19,000	10.8
-MEGA.750DS-4	.750	2.362	2.717	4.09	1.10	2.72	3.44	2.25	MGR60L	20,000	9.9
-6				6.09		4.72				17,000	13.0
-MEGA1.000DS-4	1.000	2.756	3.031	4.09	1.34	2.58	3.63	2.50	MGR70L	20,000	10.6
-6				6.09		4.58				17,000	14.3
-MEGA1.250DS-4	1.250	3.150	3.386	4.09	1.65	2.53	4.22	2.75	MGR80L	20,000	11.3
-6				6.09		4.53				15,000	15.9
-MEGA1.500DS-4.5	1.500	3.898	3.925	4.58	1.65	2.86	4.29	2.75	MGR99L	15,000	14.6

- Wrench must be ordered separately
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable
- Tools with flats should not be used in Mega Double Power Chucks
- Bores on Form B are sealed with set screws on delivery

ACCESSORIES



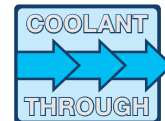
MEGA DOUBLE POWER CHUCK BIG-PLUS® BCV40H/50H

CLAMPING RANGE: ϕ .625"-1.500"

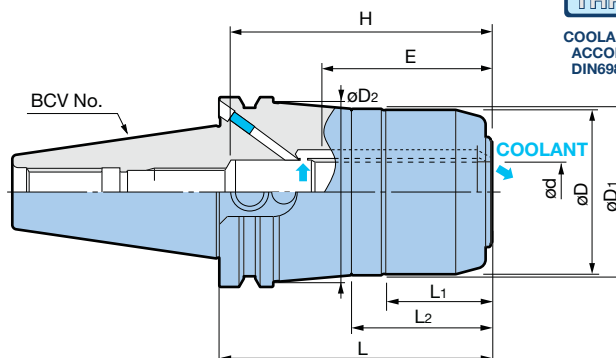
High Rigidity Type for Heavy Duty End Milling

**HIGHER
RIGIDITY**

**MAX
30,000
RPM**



COOLANT BORES IN
ACCORDANCE TO
DIN69871/FORM B



Catalog Number	ϕd	ϕD	ϕD_1	ϕD_2	L	L ₁	L ₂	H	Min Clamping Length E	Wrench	Max RPM	Weight (lbs.)
BCV40H-MEGA.625DS-3.5A	.625	1.654	2.071	2.39	3.59	1.06	1.42	2.87	2.25	MGR42L	30,000	3.6
-MEGA.750DS-3.5A	.750	1.969	2.193	2.39	3.59	1.40	1.85	3.44	2.29	MGR50L	30,000	4.0
-MEGA1.000DS-3.5A	1.000	2.441	2.469	—	3.59	1.61	—	3.42	2.33	MGR62L	27,000	4.6
-MEGA1.250DS-4A	1.250	2.756	2.783	—	4.09	1.42	—	3.63	2.64	MGR70L	26,000	5.1
BCV50H-MEGA.750DS-4	.750	2.362	2.717	2.99	4.09	1.10	1.51	3.44	2.29	MGR60L	20,000	9.9
-6				3.09	6.09						17,000	13.0
-MEGA1.000DS-4	1.000	2.756	3.031	3.32	4.09	1.34	1.87	3.63	2.64	MGR70L	20,000	10.6
-6				3.32	6.09						17,000	14.3
-MEGA1.250DS-4	1.250	3.150	3.386	3.57	4.09	1.65	2.23	4.22	2.88	MGR80L	20,000	11.3
-6				3.57	6.09						15,000	15.9
-MEGA1.500DS-4.5	1.500	3.898	3.925	—	4.58	1.65	—	4.29	2.88	MGR99L	15,000	14.6

- Wrench must be ordered separately
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable
- Tools with flats should not be used in Mega Double Power Chucks
- Bores on Form B are sealed with set screws on delivery

CAUTION

H type conforms to ASME B5.50-2009 standard for safe zone. Interference with tool changer may occur on machines made to an older standard. Consult engineering for specific information about the intended machine.

ACCESSORIES

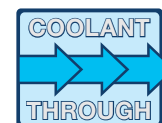
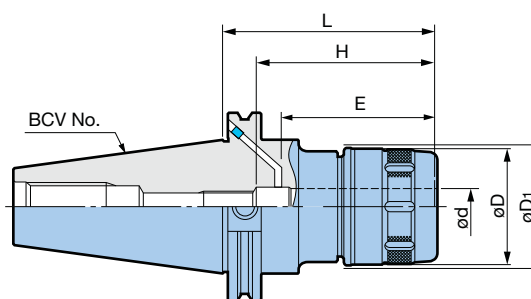


NEW Hi-POWER MILLING CHUCK BIG-PLUS® BCV40/50



CLAMPING RANGE: ϕ .750"-1.500"

For Heavy Duty End Milling



COOLANT BORES IN
ACCORDANCE TO
DIN69871/FORM B



Catalog Number	ϕd	ϕD	ϕD_1	L	H	Min Clamping Length E	Wrench	Weight (lbs.)
BCV40-HMC.750S-3.5	.750	1.969	2.008	3.50	3.34	2.25	FK45-50L	3.6
-HMC1.000S-3.5	1.000	2.323	2.362	3.50	3.42	2.50	FK58-62L	4.2
-HMC1.250S-4	1.250	2.677	2.717	4.00	3.54	2.75	FK68-75L	4.7
BCV50-HMC.750-4	.750	2.362	2.402	4.00	3.34	2.25	FK58-62	9.0
-HMC1.000-4	1.000	2.441	2.480	4.00	3.54	2.50	FK58-62	9.2
-HMC1.250-4	1.250	3.150	3.189	4.00	4.13	2.75	FK80-90	8.9
-HMC1.500-4.5	1.500	3.898	3.937	4.50	4.21	2.75	FK92-100	13.2

- Wrench and axial length adjusting screw must be ordered separately
- Bores on Form B are sealed with set screws on delivery

ACCESSORIES

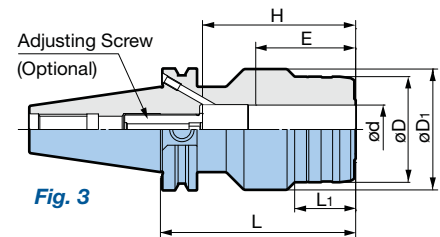
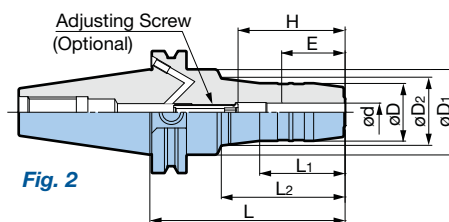
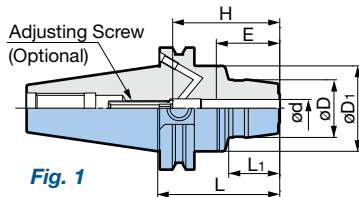
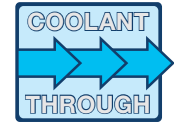
COLLET PG. 246	PERFECT SEAL/ JET COLLET PG. 244	WRENCH PG. 261	SCREW PG. 262
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HYDRAULIC CHUCK BIG-PLUS® BCV40

CLAMPING RANGE: ϕ .250"-1.250" (ϕ 20mm)

For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools



Catalog Number	Fig.	ød	øD	øD ₁	øD ₂	L	L ₁	L ₂	H	Min Clamping Length E	Adjusting Screw	Weight (lbs.)
BCV40-HDC.250-2.5	1	.250	1.024	1.750	—	2.50	1.02	—	1.10-1.97	1.10	HDA6-05032	2.4
-4	2				1.20	4.00	1.75	2.48				3.1
-5.5					1.75	5.50		4.09				3.8
-HDC.375-2.5	1	.375	1.181	1.750	—	2.50	1.04	—	1.30-2.17	1.30	HDA10-08032	2.7
-4	2				1.37	4.00	1.75	2.52				3.1
-5.5					1.75	5.50		4.09				4.0
-HDC.500-2.5	1	.500	1.299	1.750	—	2.50	.98	—	1.50-2.36	1.50	HDA12-10032	2.7
-4	2				1.75	4.00	1.75	2.60				3.3
-5.5						5.50		4.09				4.0
-HDC.625-3	1	.625	1.496	1.750	—	3.00	1.54	—	1.69-2.76	1.69	HDA16-12030	2.9
-4	2				1.75	4.00	2.00	2.60			HDA16-12037	3.3
-5.5						5.50		4.09				4.2
-HDC.750-3	1	.750	1.654	1.750	—	3.00	1.57	—	1.69-2.76	1.69	HDA16-12030	3.1
-4	2				1.75	4.00	2.00	2.60			HDA16-12037	3.6
-5.5						5.50		4.13				4.4
-HDC1.000-3	3	1.000	2.165	2.480	—	3.00	.61	—	2.05-3.15	2.05	HDA16-12015	4.0
-4						4.00	1.25				HDA25-16039	4.7
-5						5.00	1.75					5.8
-HDC1.250-4	3	1.250	2.677	2.953	—	4.00	1.25	—	2.20-3.15	2.20	HDA25-16039	5.8
-HDC20-90	2	20mm	1.653	1.750	—	3.54	1.58	—	1.69-2.76	1.69	HDA16-12037	4.4

- Adjustable cutter length H is the adjustable length in the use of adjusting screw
- Max insertion length is the length when adjusting screw is not used

ACCESSORIES

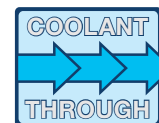


CAUTION

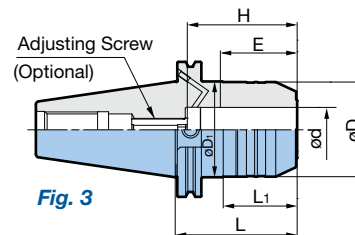
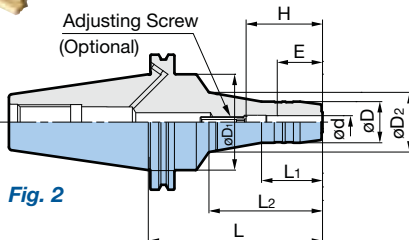
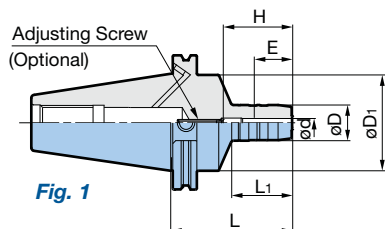
Use only cutting tools that have a shank tolerance of h6 (see table Pg. 16).
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Roughing end mills are not recommended for use with Hydraulic Chucks.
Do not tighten the clamping screw without first inserting a cutting tool into the tool holder.
Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E".

CLAMPING RANGE: ϕ .250"-1.250" (ϕ 32mm)

For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools



BCV



Catalog Number	Fig.	ød	øD	øD ₁	øD ₂	L	L ₁	L ₂	H	Min Clamping Length E	Adjusting Screw	Weight (lbs.)
BCV50-HDC.250-3.5	1	.250	1.024	2.75	—	3.50	1.75	—	1.10-1.97	1.10	HDA6-05032	7.3
-5	1.53				5.00	3.19		8.0				
-6.5	2.13				6.50	4.92		9.1				
-HDC.375-3.5	1	.375	1.181	2.750	—	3.50	1.75	—	1.30-2.17	1.30	HDA10-08032	7.3
-5	1.71				5.00	3.27		8.0				
-6.5	2.31				6.50	4.96		9.3				
-HDC.500-3.5	1	.500	1.299	2.750	—	3.50	1.75	—	1.50-2.36	1.50	HDA12-10032	7.6
-5	1.85				5.00	3.31		8.2				
-6.5	2.45				6.50	5.00		9.6				
-HDC.625-3.5	1	.625	1.496	2.750	—	3.50	1.75	—	1.69-2.76	1.69	HDA16-12037	7.8
-5	1.97				5.00	2.00		3.35				8.7
-6.5	2.57				6.50			5.04				10.2
-HDC.750-3.5	1	.750	1.654	2.750	—	3.50	1.75	—	1.69-2.76	1.69	HDA16-12037	8.0
-5	2.15				5.00	2.00		3.43				8.9
-6.5	(2.750)			2.75	6.50		5.12	10.7				
-HDC1.000-3.5	3	1.000	2.480	2.750	—	3.50	2.03	—	2.05-3.15	2.05	HDA25-16039	8.9
-5						5.00	3.54					10.7
-6.5						6.50	5.04					12.7
-HDC1.250-3.5	3	1.250	2.717	2.750	—	3.50	2.09	—	2.20-3.15	2.20	HDA25-16039	10.6
-5						5.00	3.58					11.8
-6.5						6.50	5.08					14.4
-HDC32-90	3	32mm	2.677	2.953	—	3.54	2.13	—	2.20-3.15	2.20	HDA25-16039	9.6

- Adjustable cutter length H is the adjustable length in the use of adjusting screw
- Max insertion length is the length when adjusting screw is not used

ACCESSORIES



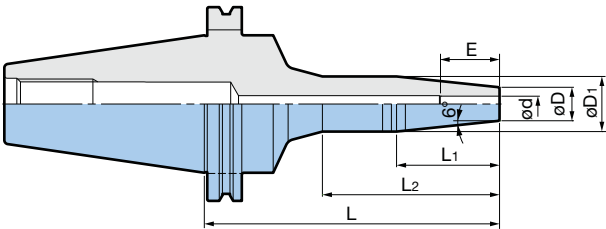
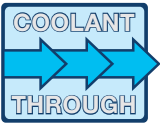
CAUTION

Use only cutting tools that have a shank tolerance of h6 (see table Pg. 16).
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Roughing end mills are not recommended for use with Hydraulic Chucks.
Do not tighten the clamping screw without first inserting a cutting tool into the tool holder.
Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E".

HYDRAULIC CHUCK SUPER SLIM BIG-PLUS® BCV40/50

CLAMPING RANGE: ø6-12mm

For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools



Catalog Number	ød	øD	øD1	L	L1	L2	Min Clamping Length E	Weight (lbs.)
BCV40-HDC6S-125	6mm	.511	1.024	4.92	2.24	3.23	1.02	2.9
-HDC8S-125	8mm	.669	1.102		2.05		1.18	2.9
-HDC10S-125	10mm	.748	1.181			3.27	1.26	3.1
-HDC12S-125	12mm	.827	1.260			3.35	1.38	3.1
BCV50-HDC6S-150	6mm	.551	1.024	5.91	2.24	3.54	1.02	7.7
-HDC8S-150	8mm	.669	1.102		2.05		1.18	7.9
-HDC10S-150	10mm	.748	1.181			3.66	1.26	7.9
-HDC12S-150	12mm	.827	1.260			3.74	1.38	8.1

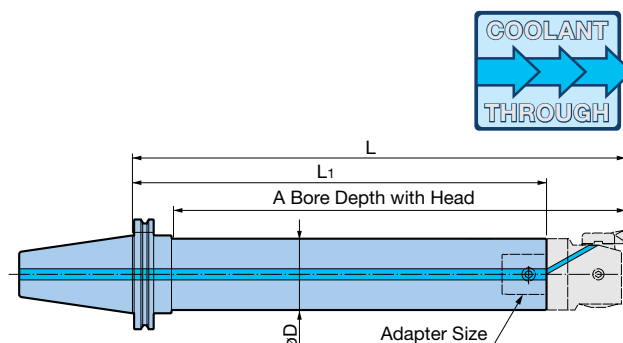
• Adjusting Screw cannot be used

CAUTION

Use only cutting tools that have a shank tolerance of h6 (see table Pg. 16).
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Roughing end mills are not recommended for use with Hydraulic Chucks.
Do not tighten the clamping screw without first inserting a cutting tool into the tool holder.
Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E".

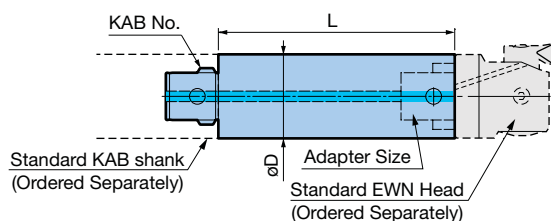


For Deep Hole Finish Boring



Catalog Number	Adapter Size	øD	L	L ₁	A	Weight (lbs.)
11.368.646	KAB4	1.535	11.58	9.73	10.00	10.9
11.368.657	KAB5	1.968	14.38	12.13	12.80	19.0
11.368.668	KAB6	2.520	17.42	14.62	16.00	25.5

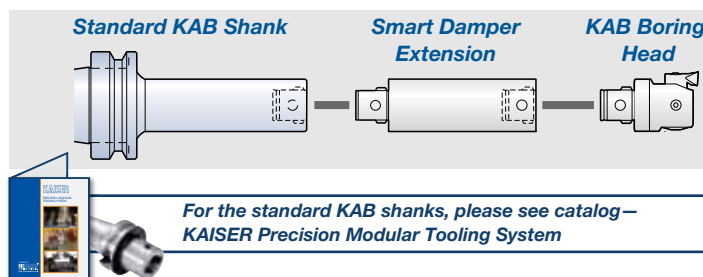
- Dimensions L & A are length when assembled with respective EWN head
- Insert is aligned with drive keys for tool orientation
- Boring head, inserts, etc. are sold separately



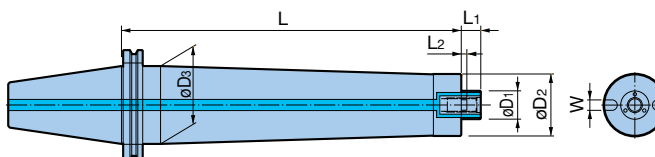
KAISER Extension

Catalog Number	Adapter Size	øD	L	Weight (lbs.)
CK44DP-120	KAB4	1.535	4.724	2.9
CK55DP-150	KAB5	1.968	5.906	5.7
CK66DP-180	KAB6	2.520	7.087	11.7

- Additional reductions cannot be used together with the Smart Damper Extensions



For Extended Reach Milling



Catalog Number	øD ₁	øD ₂	øD ₃	L	L ₁	L ₂	W	Weight (lbs.)
BCV50-SM1.000DP-12	1.000	2.190	2.750	12.00	.69	.20	.375	20.0

- By utilizing a clamping bolt with a center hole, coolant can be supplied through the bolt

CAUTION

Damping function may become less effective over time due to the break-down of special elastomers used in the damping mechanism. If excessive vibration occurs after 1 year of continued use, it is recommended to return Smart Damper bars for overhaul. Please contact BIG Kaiser for details of repair.

SHELL MILL HOLDER BIG-PLUS® BCV40/50

BCV

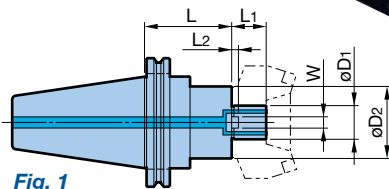


Fig. 1

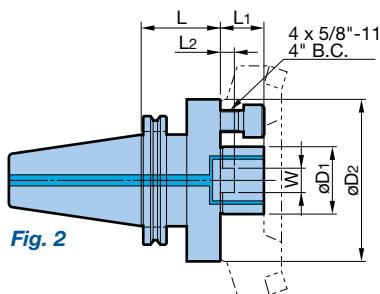
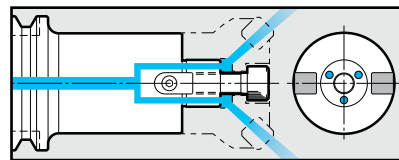
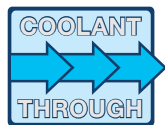


Fig. 2



Catalog Number	Fig.	øD ₁	øD ₂	øD ₃	L	L ₁	L ₂	L ₃	W	G	Weight (lbs.)
BCV40-SMC.750-2	1	.750	1.689	.88	2.00	.69	.16	.38	.313	3/8"-24	2.7
-4					4.00						4.0
-6					6.00						5.2
-SMC1.000-2		1.000	2.189	1.12	2.00		.22	.375	1/2"-20	3.1	
-4					4.00					4.4	
-6					6.00					5.6	
-SMC1.250-2		1.250	2.752	1.50	2.00		.28	.50	.500	5/8"-18	3.6
-SMC1.500-2		1.500	3.626	1.86		.93	.38		.625	3/4"-16	4.8
BCV50-SMC.750-2	1	.750	1.689	.88	2.00	.69	.16	.38	.313	3/8"-24	7.4
-4					4.00						8.7
-6					6.00						9.9
-SMC1.000-2		1.000	2.189	1.12	2.00		.22	.375	1/2"-20	7.6	
-4					4.00					9.6	
-6					6.00					11.7	
-8					8.00					13.7	
-10					10.00					15.7	
-12					12.00					17.7	
-SMC1.250-2		1.250	2.752	1.50	2.00		.28	.500	5/8"-18	8.2	
-4					4.00					11.4	
-6					6.00					14.6	
-8					8.00					17.8	
-10					10.00					20.5	
-12					12.00					23.7	
-SMC1.500-2		1.500	3.626	1.88	2.00	.93	.38	.50	.625	3/4"-16	9.2
-4					4.00						12.8
-6					6.00						16.0
-8					8.00						25.5
-10					10.00						31.1
-12					12.00						37.0
-SMC2.000-2.5	2	2.000	4.874	2.50	2.50	1.13	.44		.750	1"-14	11.1
-4					4.00						16.0
-6					6.00						25.5
-SMC2.500-2.5		2.500	4.874	3.13	2.50				1.000	1"-14	13.7

CAUTION

For high speed applications, Shell Mill Holders should be balanced together with the cutters

ACCESSORIES



FACE MILL HOLDER BIG-PLUS® BCV40/50

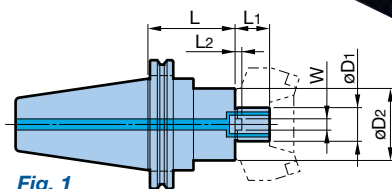


Fig. 1

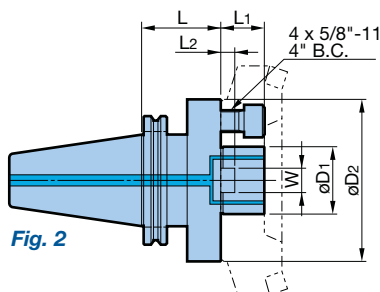
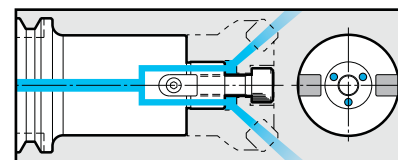
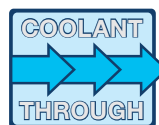


Fig. 2



Catalog Number	Fig.	øD ₁	øD ₂	øD ₃	L	L ₁	L ₂	L ₃	W	G	Weight (lbs.)
BCV40-FMH22-47-50	2	22mm	1.850	.63	1.97	.71	.20	.39	.394	M10x1.5	2.8
-60-50	2	22mm	2.362	.63		.71	.20	.39	.394	M10x1.5	3.1
-FMH27-76-50	2	27mm	2.992	.71		.79	.24	.47	.472	M12x1.75	3.5
-FMH32-76-50	2	32mm	2.992	.94		.87	.28	.63	.551	M16x2	3.5
BCV50-FMH22-47-50	1	22mm	1.850	.63	1.97	.71	.20	.39	.394	M10x1.5	7.4
-60-50	1	22mm	2.362	.63		.71	.20	.39	.394	M10x1.5	7.7
-FMH27-76-50	2	27mm	2.992	.71		.79	.24	.47	.472	M12x1.75	8.0
-FMH32-76-60	2	32mm	2.992	.94		.87	.28	.63	.551	M16x2	8.0
BCV50H-FMH60-90	2	60mm	5.512	—	3.54	1.58	.44	—	1.000	M20x2.5	20.0

CAUTION

For high speed applications, Face Mill Holders should be balanced together with the cutters

ACCESSORIES



END MILL HOLDER BIG-PLUS® BCV40/50

CLAMPING RANGE: ϕ .375"-2.000"

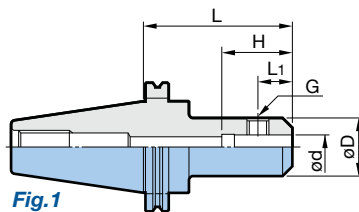


Fig.1

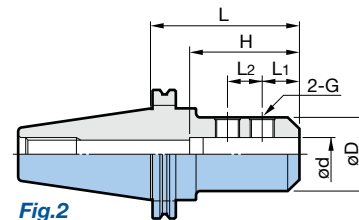


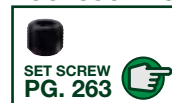
Fig.2

Catalog Number	Fig.	ød	øD	L	L ₁	L ₂	H	G	Weight (lbs.)
BCV40-EM.500-3	1	.500	1.375	3.00	.87	—	3.00	7/16"-20	2.7
-4.5				4.50					3.3
-EM.625-3		.625	1.625	3.00	.94		3.50	9/16"-18	2.8
-4.5				4.50					3.6
-EM.750-1.5		.750	1.750	1.50	1.13		2.25	5/8"-18	2.0
-3				3.00	1.00		3.88		2.8
-4.5				1					4.50
-EM1.000-3	2	1.000	2.252	3.00	1.13	1.00	3.13	3/4"-16	3.2
-4.5				4.50					4.8
-EM1.250-4.5		1.250	2.750						6.1
-EM1.500-5	1	1.500	2.750	5.00					6.4
BCV50-EM.375-6	1	.375	1.000	6.00	.75	—	3.00	3/8"-24	7.4
-EM.500-4.5		.500	1.375	4.50	.87		3.00	7/16"-20	7.7
-6				6.00					8.3
-EM.625-4.5		.625	1.625	4.50	.94		3.50	9/16"-18	8.0
-6				6.00					8.8
-EM.750-4.5	2	.750	1.750	4.50	1.00	—	3.88	5/8"-18	8.2
-6				6.00					9.0
-EM1.000-4.5		1.000	2.252	4.50	1.13	1.00	3.13	3/4"-16	9.1
-6				6.00					10.5
-8				8.00					12.5
-EM1.250-4.5		1.250	2.750	4.50					10.3
-6				6.00					12.6
-8				8.00					15.6
-EM1.500-4.5		1.500	2.750	4.50					9.9
-6				6.00					12.2
-8				8.00					15.2
-EM2.000-6		2.000	3.500	6.00	1.38	1.38	4.33	1"-14	14.4
-EM2.500-6		2.500	3.937	6.00	1.56	1.56	3.74	1"-14	16.3

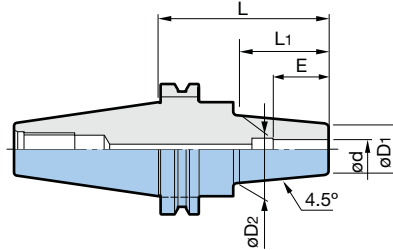
CAUTION

For high speed applications, Mega Double Power Chucks are recommended instead of End Mill Holders.

ACCESSORIES



CLAMPING RANGE: ϕ .250"-1.250" (ϕ 8-12mm)



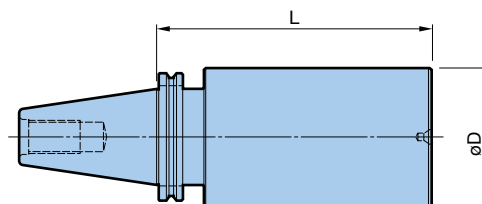
Catalog Number	ød	øD ₁	øD ₂	L	L ₁	E	Weight (lbs.)	
BCV40-SF.250-3.5	.250	.787	1.06	3.50	1.50	.87	2.6	
-SF.375-3.5	.375	.945	1.26		2.00	1.22	2.7	
-SF.500-3.5	.500					1.42	2.7	
-6						6.00	3.4	
-SF.625-3.5	.625	1.063	1.34	3.50	1.50	1.54	2.7	
-6				6.00			3.6	
-SF.750-4	.750	1.299	1.65	4.00	2.25	1.85	3.1	
-6				6.00			4.2	
-SF1.000-4				4.00			3.8	
-6	1.000	1.732	2.09	6.00			5.6	
BCV50-SF.500-4	.500	.945	1.26	4.00			2.00	1.42
-SF.625-4	.625	1.063	1.34	4.00	1.75	1.54	7.5	
-SF.750-4	.750	1.299	1.65	4.00	2.27	1.61	7.7	
-6				6.00			8.8	
-SF1.000-4	1.000	1.732	2.09	4.00		1.85	8.4	
-6				6.00			10.2	
-SF1.250-4				4.00			8.1	
-6	1.250				6.00		2.01	9.8



Catalog Number	ϕd	ϕD_1	ϕD_2	L	L ₁	E	Weight (lbs.)
BCV40-SF8-80	8mm	.827	1.06	3.15	2.17	1.02	2.2
-SF10-80	10mm	.945	1.26	3.15	2.17	1.22	2.4
-SF12-80	12mm	.945	1.26	3.15	2.17	1.42	2.4

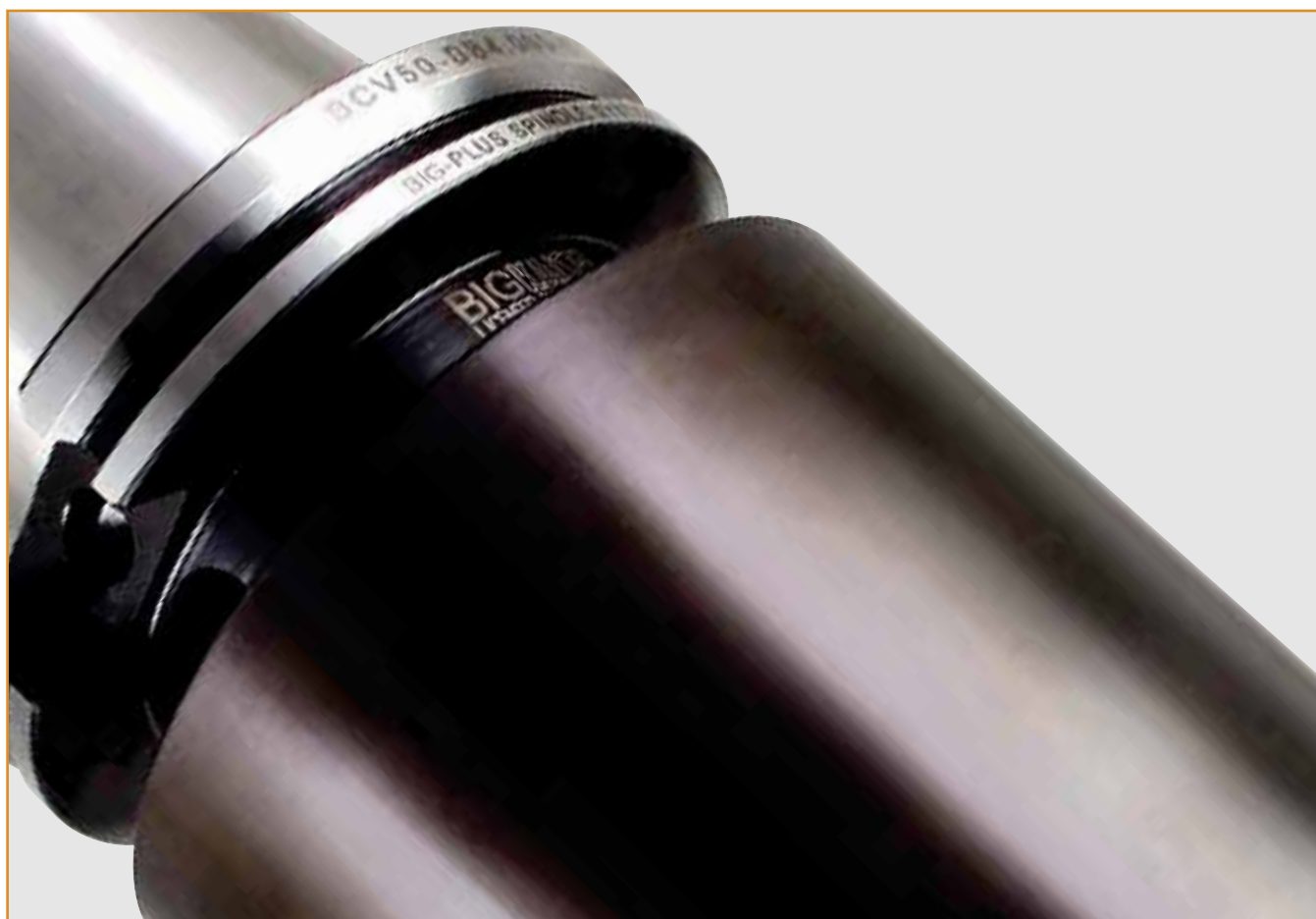
BLANK BAR BIG-PLUS® BCV40/50

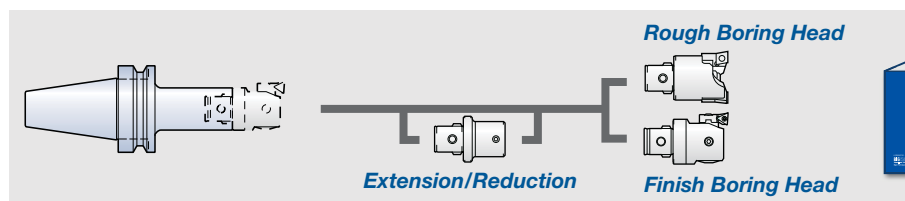
BCV



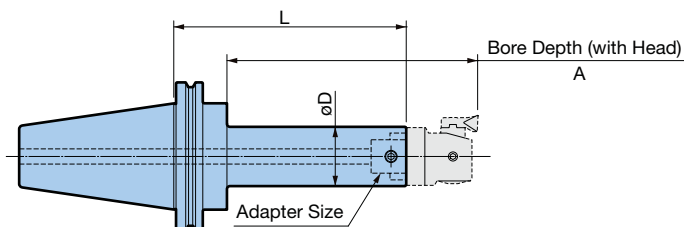
Catalog Number	øD	L
BCV40-BB2.500-8	2.50	8.00
-BB4.000-6	4.00	6.00
BCV50-BB4.000-8	4.00	8.00
-BB6.000-8	6.00	

- Do not heat treat after machining





For entire KAISER Boring System,
please see catalog – KAISER Precision
Modular Tooling System



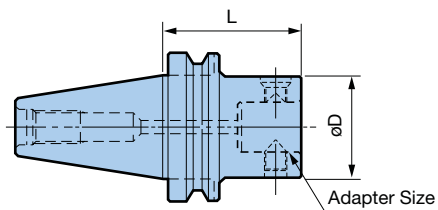
Catalog Number	Taper Size	Adapter Size	øD	L	A	Weight (lbs.)
11.368.441	BCV40	KAB4	1.535	2.874	3.15	3.0
11.368.444				6.024	6.30	5.0
11.368.451		KAB5	1.968	2.480	3.15	3.0
11.368.454				5.630	6.30	6.0
11.368.462		KAB6	2.491	2.716	3.94	3.0
11.368.464				5.079	6.30	6.5
11.368.642	BCV50	KAB4	1.535	3.611	3.94	8.0
11.368.644				6.026	6.30	8.3
11.368.645				7.589	7.88	8.8
11.368.652		KAB5	1.968	3.268	3.94	7.5
11.368.654				5.630	6.30	9.2
11.368.655				7.205	7.88	11.0
11.368.656		KAB6	2.491	9.567	10.24	12.8
11.368.662				2.716	3.94	7.6
11.368.664				5.079	6.30	10.5
11.368.665				6.654	7.88	13.0
11.368.666				9.016	10.24	15.8
11.368.667				11.378	12.60	18.5
11.368.674		KAB7	3.543	3.268	6.30	9.8
11.368.675				5.315	8.55	15.7
11.368.676				7.205	10.24	21.0



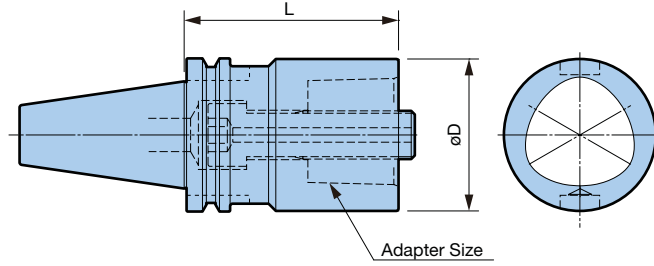
Catalog Number	Taper Size	Adapter Size	øD	L	A	Weight (lbs.)
11.368.462N	BCV40	CKN6	2.491	2.716	3.94	3.0
11.368.662N	BCV50	CKN6				7.6
11.368.674N	BCV50	CKN7	3.543	3.268	6.30	9.8

BIG KOMET ABS BIG-PLUS® BCV40/50

BCV



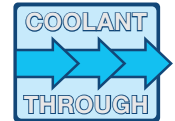
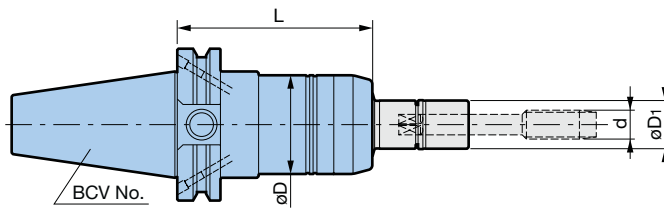
Catalog Number	Adapter Size	øD	L	Weight (lbs.)
BCV40-ABS50-75	ABS50	1.969	2.953	2.8
-ABS63-90	ABS63	2.480	3.543	3.5
BCV50-ABS40-60	ABS40	1.575	2.362	7.0
-ABS50-60	ABS50	1.969	2.362	7.1
-ABS63-80	ABS63	2.480	3.150	7.7
-ABS80-100	ABS80	3.150	3.937	10.0
-ABS100-125	ABS100	3.937	4.921	15.0



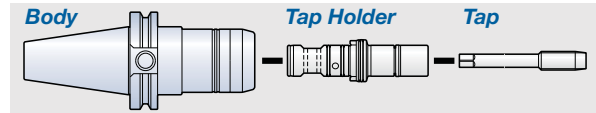
Catalog Number	Adapter Size	øD	L	Weight (lbs.)
BCV40Y-C5-3	C5	1.969	3.000	3.6
-C6-3.5	C6	2.480	3.500	4.2
BCV50Y-C5-1.5	C5	1.969	1.500	7.5
-C6-2	C6	2.480	2.000	7.5
-C8-3	C8	3.150	3.000	8.9

MEGA SYNCHRO BIG-PLUS® BCV40/50

TAPPING RANGE: No.2-AU3/4



COOLANT BORES IN
ACCORDANCE TO
DIN69871/FORM B



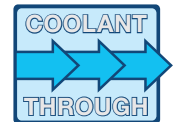
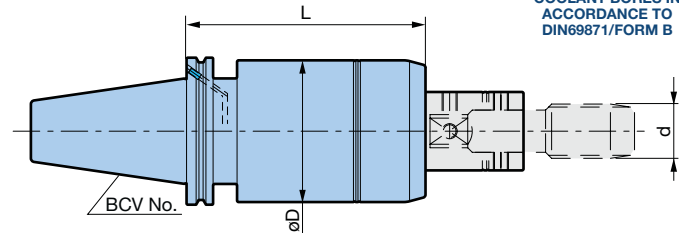
Catalog Number	Tapping Range d*	øD	øD1	L	Weight (lbs.)
BCV40-MGT6-3.25	No.2–No.12	1.42	.63	3.25	2.9
-MGT12-3.25	AU1/4–AU7/16	1.61	.79	3.25	3.1
-MGT20-4.5	AU1/2–AU3/4 AP1/8–AP1/4	2.13	1.18	4.50	4.0
BCV50-MGT6-3.25	No.2–No.12	1.42	.63	3.25	8.6
-MGT12-3.25	AU1/4–AU7/16	1.61	.79	3.25	8.8
-MGT20-4	AU1/2–AU3/4 AP1/8–AP1/4	2.13	1.18	4.00	9.7

*AU3/8 is included in the MGT20 series

- Tap Holder and wrench must be ordered separately
- Rigid tapping function is required on the machine tool

- Designed to be capable of supplying coolant through spindle and flange
- Bores on Form B are sealed with set screws on delivery

TAPPING RANGE: AU13/16-AU1-3/8



COOLANT BORES IN
ACCORDANCE TO
DIN69871/FORM B



Catalog Number	Tapping Range d	øD	L	Weight (lbs.)
BCV50-MGT36-6.5	AU13/16–AU1-3/8 AP3/8–AP1	3.70	6.50	15.8

- MGT Set Screw and Adjust Screw are included, Tap Holder must be ordered separately
- Designed to be capable of supplying coolant through spindle and flange

- Rigid tapping function is required on the machine tool
- Bores on Form B are sealed with set screws on delivery

ACCESSORIES

 TAP HOLDER PG. 268	 MEGA NUT PG. 276	 SYNCHRO ADJUSTER PG. 276	 O-RING PG. 276	 MEGA WRENCH PG. 259	 SCREW PG. 276
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Modular Tooling System for Turning Applications

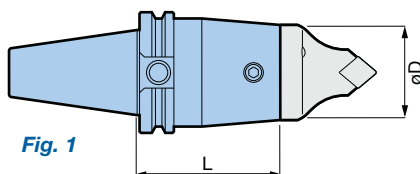


Fig. 1

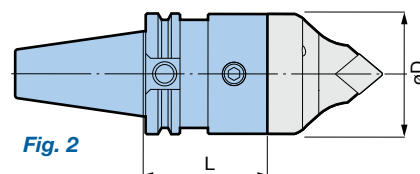
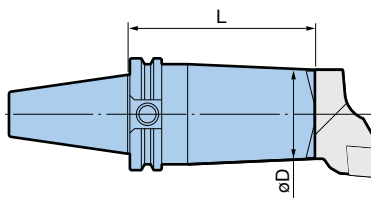


Fig. 2

Catalog Number	Type	Fig.	øD	L	Clamp Screw (2x)
BCV40Y-S50-3	S50	1	1.969	3.000	10.690.435
-S63-2.625	S63	2	2.480	2.625	10.690.436
BCV50Y-S50-3.5	S50	1	1.969	3.500	10.690.435
-S50-4.5				4.500	
-S63-4.125	S63	2	2.480	4.125	10.690.436

- Basic Holders include a locking screw

ACCESSORIES



Catalog Number	Type	øD	L
BCV40Y-F63-4.125	F63	2.480	4.125
BCV50Y-F63-5.125			5.125

- Basic Holders include M10x22L and M10x25L screws for clamping cartridges
- Wrench is not included

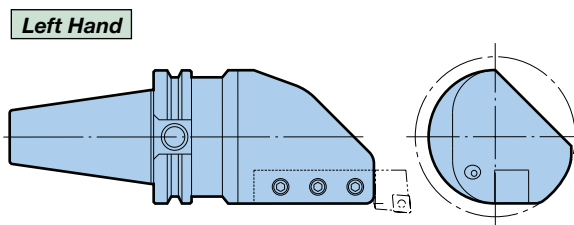
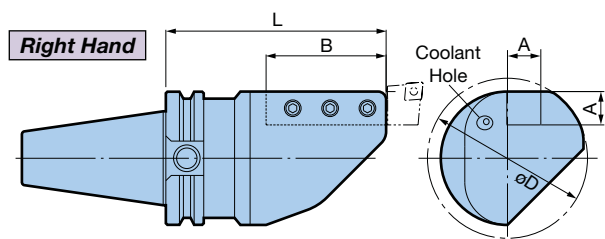
ACCESSORIES



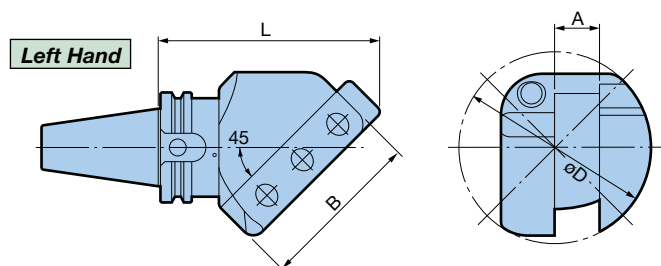
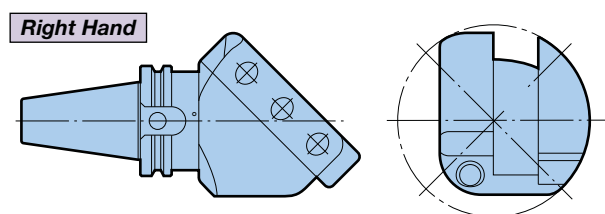
TURNING TOOLS—SQUARE HOLDER

BIG-PLUS® BCV40Y/50Y

For Square Holder Turning Applications



Catalog Number	Hand	A	L	B	øD
BCV40Y-180-BH1.000L-5	L	1.000	5.00	3.50	3.74
-180-BH1.000R-5	R				
BCV50Y-180-BH1.000L-5	L	1.000	5.00	3.42	4.92
-180-BH1.000R-5	R				
-180-BH1.250L-5	L	1.250		3.35	5.04
-180-BH1.250R-5	R				



Catalog Number	Hand	A	L	B	ϕD
BCV40Y-45-BH1.000L-4.75	L	1.000	4.75	3.43	4.33
-45-BH1.000R-4.75	R				
BCV50Y-45-BH1.000L-5.5	L	1.000	5.50	3.35	5.32
-45-BH1.000R-5.5	R				
-45-BH1.250L-5.5	L	1.250	5.50	3.35	6.69
-45-BH1.250R-5.5	R				

CLAMPING RANGE: ϕ .625"-2.000"

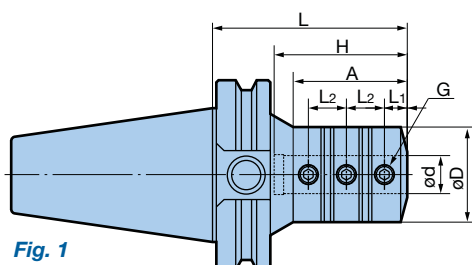


Fig. 1

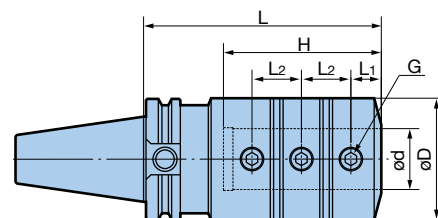


Fig. 2

Catalog Number	Fig.	ϕd	ϕD	L	L ₁	L ₂	H	A	G
BCV40Y-BSL.625-3.5	1	.625	1.575	3.50	.394	.787	2.68	2.48	M10P1.25
-BSL.750-3.5		.750	1.929	3.50	.472	.787	2.52	2.56	
-BSL1.000-4		1.000	2.165	4.00	.551	.906	2.91	3.25	
-BSL1.250-5	2	1.250	2.520	5.00	.630	1.024	3.27	—	M12P1.5
-BSL1.500-5.5		1.500	3.150	5.50	.709	1.260	3.86	—	M16P1.5
BCV50Y-BSL.625-3.5	1	.625	1.575	3.50	.394	.827	2.72	2.48	M10P1.25
-BSL.750-3.5		.750	1.969	3.50	.472	.787	2.52	2.36	
-BSL1.000-4		1.000	2.165	4.00	.551	.906	2.91	2.76	
-BSL1.250-4.5		1.250	2.520	4.50	.394	1.024	3.27	3.35	M12P1.5
-BSL1.500-5		1.500	3.150	5.00	.709	1.260	3.86	4.09	
-BSL2.000-5.25		2.000	3.543	5.25	.709	1.417	4.53	4.50	M16P1.5

- Interchangeable between center-through and side-through coolant supply by using plugs
- Plug A (1 pc.) and Plug B (2 pcs.) are included as standard

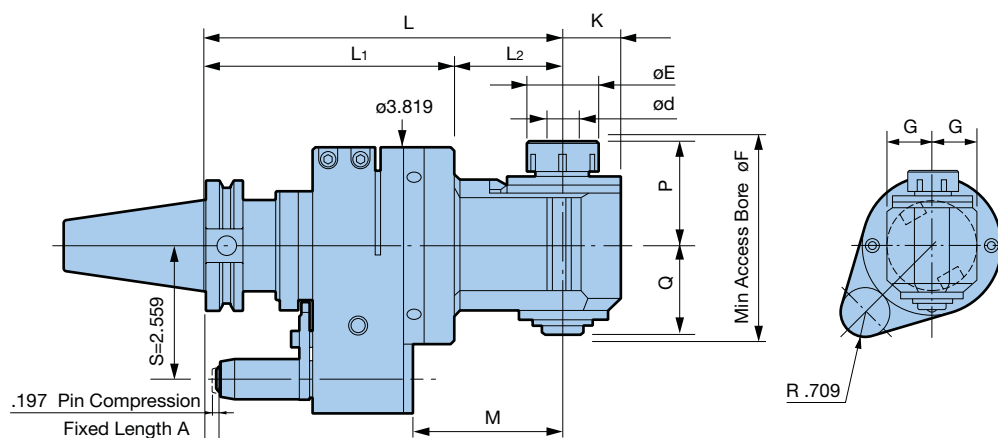


Catalog Number	Plug A	Plug B
BSL.625	M18xP1.5	M6xP1.0
BSL.750	M6xP1.0	
BSL1.000		
BSL1.250	M8xP1.25	
BSL1.500		
BSL2.000		

ANGLE HEAD—AG90 NBS TYPE BIG-PLUS® BCV40

CLAMPING RANGE: ϕ .010"-.787"

MAX
6,000
RPM



BIG-PLUS
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ϕd	ϕE	G	K	L	L ₁	L ₂	M	P	Q	ϕF	Collet	Max RPM	Weight (lbs.)
BCV40-AG90/NBS6-180	.010-.236	.787	.827	.669	7.09	4.92	2.17	3.03	1.30	1.14	2.638	NBC6-□	6,000	11.2
-210					8.27		3.35	4.21						11.7
-240					9.45		4.53	5.39						12.1
-270					10.63		5.71	6.58						12.5
-AG90/NBS10-180	.059-.394	1.181	1.181	.984	7.09	4.92	2.17	3.03	1.77	1.69	3.583	NBC10-□	6,000	12.1
-210					8.27		3.35	4.21						13.0
-240					9.45		4.53	5.39						13.7
-AG90/NBS13-180	.098-.512	1.378	1.220	1.102	7.09	4.92	2.17	3.03	2.05	1.77	3.976	NBC13-□	6,000	12.3
-210					8.27		3.35	4.21						13.2
-240					9.45		4.53	5.39						13.9
-AG90/NBS20S-175S	.098-.787	1.811	1.378	1.299	6.89	4.80	2.09	2.84	2.56	2.44	5.197	NBC20-□	3,000	17.6

- The standard fixed length A is .315, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Nut and wrench are included but collet must be ordered separately
- For greater rigidity High Rigidity S-Type with a steel housing and a stronger locating pin assembly is also available, please add "S" after each model number when ordering High Rigidity Type
- New Baby Collet for End Mill model NBC□-□EAA cannot be used

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

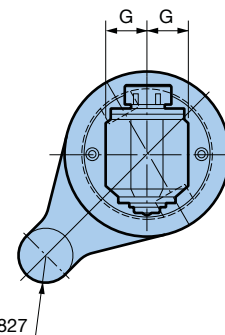
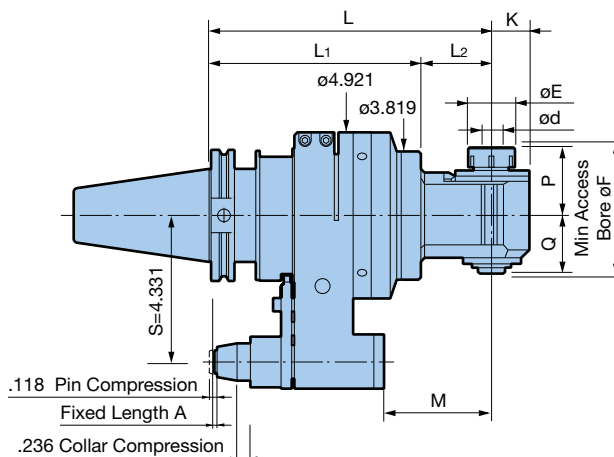
ACCESSORIES



ANGLE HEAD—AG90 NBS TYPE BIG-PLUS® BCV50



CLAMPING RANGE: ϕ .010"-.787"



MAX
6,000
RPM



Catalog Number	ϕd	ϕE	G	K	L	L ₁	L ₂	M	P	Q	ϕF	Collet	Max RPM	Weight (lbs.)
BCV50-AG90/NBS6-215	.010-.236	.787	.827	.669	8.47	6.30	2.17	3.23	1.30	1.14	2.638	NBC6-□	6,000	27.8
-245					9.65		3.35	4.41						28.2
-275					10.83		4.53	5.59						28.7
-305					12.01		5.71	6.77						30.4
-AG90/NBS10-215	.059-.394	1.181	1.181	.984	8.47	6.30	2.17	3.23	1.77	1.69	3.583	NBC10-□	6,000	28.7
-245					9.65		3.35	4.41						29.5
-275					10.83		4.53	5.59						30.2
-AG90/NBS13-215	.098-.512	1.378	1.220	1.102	8.47	6.30	2.17	3.23	2.05	1.77	3.976	NBC13-□	6,000	28.9
-245					9.65		3.35	4.41						29.8
-275					10.83		4.53	5.59						30.4
-AG90/NBS20-230	.098-.787	1.811	1.378	1.378	9.06	6.30	2.76	3.82	2.56	2.44	5.197	NBC20-□	3,000	31.3

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Nut and wrench are included, collet must be ordered separately
- For greater rigidity High Rigidity S-Type with a steel housing and a stronger locating pin assembly is also available, please add "S" after each model number when ordering High Rigidity Type
- New Baby Collet for End Mill model NBC□-□EAA cannot be used

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES

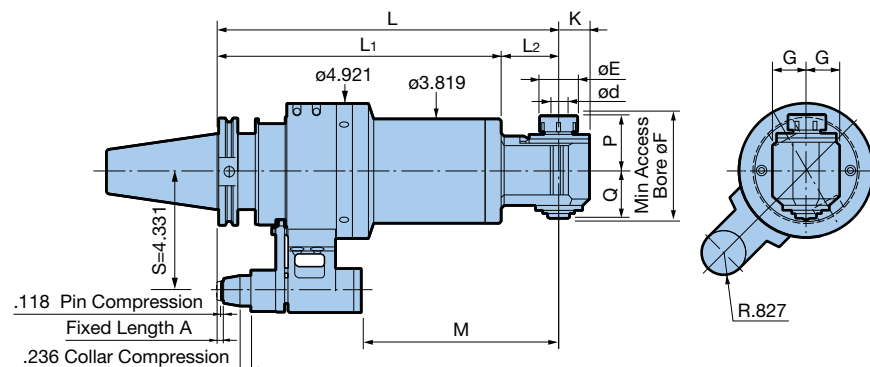


ANGLE HEAD—AG90 NBS EXTRA LONG TYPE BIG-PLUS® BCV50

CLAMPING RANGE: ϕ .010"-.787"

MAX
6,000
RPM

BCV



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ϕd	ϕE	G	K	L	L ₁	L ₂	M	P	Q	ϕF	Collet	Max RPM	Weight (lbs.)
BCV50-AG90-NBS-6-315LS	.010-.236	.787	.827	.669	12.40	10.24	2.17	7.17	1.30	1.14	2.638	NBC 6-□	6,000	41.6
-345LS					13.58		3.35	8.35						41.6
-375LS					14.76		4.53	9.53						42.0
-405LS					15.95		5.71	10.71						42.5
-AG90/NBS10-315LS	.059-.394	1.181	1.181	.984	12.40	10.24	2.17	7.17	1.77	1.69	3.583	NBC10-□	6,000	42.9
-345LS					13.58		3.35	8.35						42.5
-375LS					14.76		4.53	9.53						43.3
-AG90/NBS13-315LS	.098-.511	1.378	1.220	1.102	12.40	10.24	2.17	7.17	2.05	1.77	3.976	NBC13-□	6,000	44.0
-345LS					13.58		3.35	8.35						42.7
-375LS					14.76		4.53	9.53						43.6
-AG90/NBS20-330LS	.098-.787	1.811	1.378	1.378	12.99	10.24	2.76	7.76	2.56	2.44	5.197	NBC20-□	3,000	44.2
-AG90-NBS-6-415LS	.010-.236	.787	.827	.669	16.34	14.17	2.17	11.10	1.30	1.14	2.638	NBC 6-□	6,000	44.2
-445LS					17.52		3.35	12.28						51.3
-475LS					18.70		4.53	13.47						51.7
-505LS					19.88		5.71	14.65						52.1
-AG90/NBS10-415LS	.059-.394	1.181	1.181	.984	16.34	14.17	2.17	11.10	1.77	1.69	3.583	NBC10-□	6,000	52.6
-445LS					17.52		3.35	12.28						52.1
-475LS					18.70		4.53	13.47						53.0
-AG90/NBS13-415LS	.098-.512	1.378	1.220	1.102	16.34	14.17	2.17	11.10	2.05	1.77	3.976	NBC13-□	6,000	53.7
-445LS					17.52		3.35	12.28						52.4
-475LS					18.70		4.53	13.47						53.2
-AG90/NBS20-430LS	.098-.787	1.811	1.378	1.378	16.93	14.17	2.76	11.69	2.56	2.44	5.197	NBC20-□	3,000	53.9

ANGLE HEAD—AG90 NBS EXTRA LONG TYPE BIG-PLUS® BCV50



BCV

Catalog Number	ød	øE	G	K	L	L ₁	L ₂	M	P	Q	øF	Collet	Speed Ratio	Weight (lbs.)
BCV50-AG90-NBS-6-515LS	.010-.236	.787	.827	.669	20.28	18.11	2.17	15.04	1.30	1.14	2.638	NBC6-□	1:1	60.9
-545LS					21.46		3.35	16.22						61.4
-575LS					22.64		4.53	17.40						61.8
-605LS					23.82		5.71	18.58						62.3
-AG90/NBS10-515LS	.059-.394	1.181	1.181	.984	20.28	18.11	2.17	15.04	1.77	1.69	3.583	NBC10-□		61.8
-545LS					21.46		3.35	16.22						62.7
-575LS					22.64		4.53	17.40						63.4
-AG90/NBS13-515LS	.098-.512	1.378	1.220	1.102	20.28	18.11	2.17	15.04	2.05	1.77	3.976	NBC13-□		62.0
-545LS					21.46		3.35	16.22						62.9
-575LS					22.64		4.53	17.40						63.6
-AG90/NBS20-530LS	.098-.787	1.811	1.378	1.378	20.87	18.11	2.76	15.63	2.56	2.44	5.197	NBC20-□		64.5

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Nut and wrench are included, collet must be ordered separately
- New Baby Collet for End Mill model NBC□-□EAA cannot be used

CAUTION ⚠

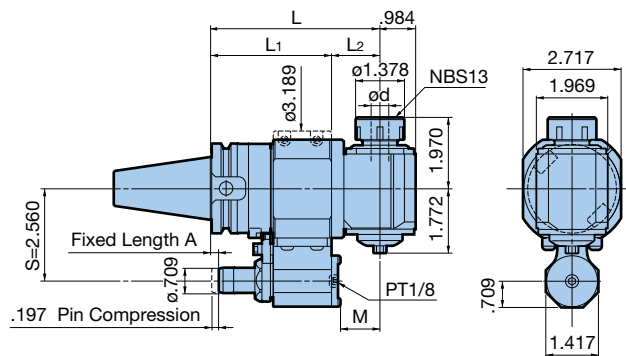
A Stop Block is required.
The rotation of the cutting tool is in reverse
direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



ANGLE HEAD—AG90 COMPACT TYPE BIG-PLUS® BCV40

CLAMPING RANGE: ϕ .098"-.512" — For Drilling Only, Ideal Size for Small Machining Centers



**MAX
5,000
RPM**



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ϕd	L	L1	L2	M	Collet	Max RPM	Weight (lbs.)
BCV40-AG90-13-120	.098-.512	4.72	3.39	1.34	1.10	NBS13-□	5,000	10.0

- Nut and wrench are included, collet must be ordered separately
- End mill collet cannot be used
- Stop Block is necessary to mount the Angle Head on the machine, please order separately
- ATC may not be utilized on some CV machining centers, consult engineering for specifications

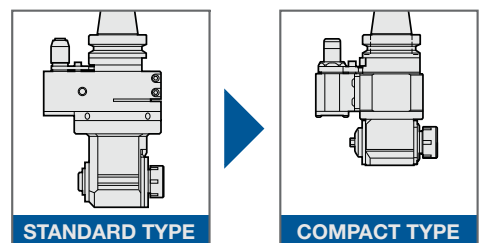
CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



Case & Head Sizes are Substantially Reduced.



Features:

- High precision New Baby Collet
- Spiral bevel gears and angular contact bearings
- Advanced non-contact sealing structure

APPLICATION EXAMPLE

Stable machining is obtained due to high rigidity and good runout.



DRILLING	
Cutter	ϕ .472" (12mm) carbide drill
Workpiece	1050 Steel
Cutting Speed	230 SFM
Cutting Feed	14.6 IPM
	.008 IPR
Spindle Speed	1,860 RPM

ANGLE HEAD—AG90 SLENDER DRIVE BIG-PLUS® BCV40/50



CLAMPING RANGE: ϕ .018"-.236" — For Angular Operations Within a ϕ 1.181 Inch Bore

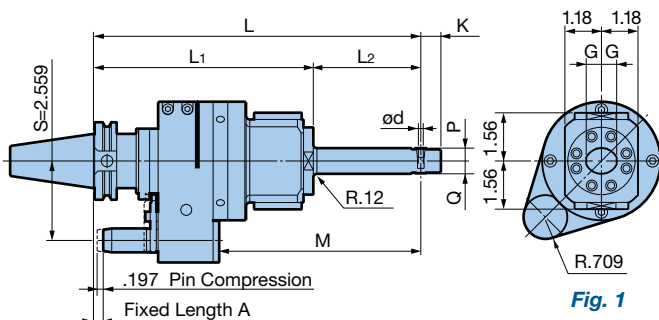


Fig. 1

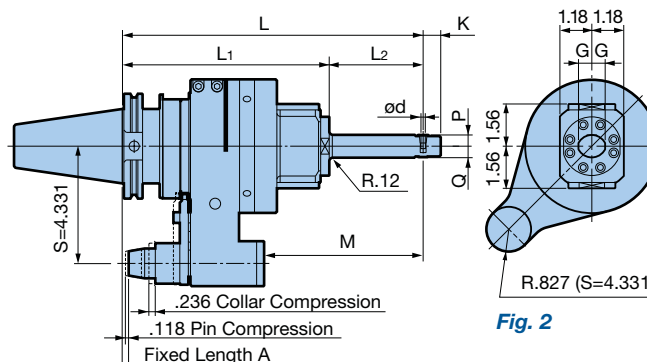


Fig. 2

Base	Head	Fig.	ϕ d	G	K	L	L ₁	L ₂	M	P	Q	Speed Ratio	Weight (lbs.)
BCV40-AGB-172	AG90-CA4SGM-64	1	.118-.157	.492	.650	9.29	7.09	2.21	5.24	.41	.41	1:1.06 (Increase)	12.6
	-96					10.55		3.47	6.50				12.8
	-128					11.81		4.72	7.76				13.0
	AG90-CA6SGM-45	1	.118-.236	.591	.787	8.54	7.09	1.46	4.49	.49	.63	1:0.77 (Decrease)	12.8
	-89					10.28		3.19	6.22				13.2
	-133					12.01		4.92	7.95				13.7
BCV50-AGB-186	AG90-CA4SGM-64	2	.118-.157	.492	.650	10.24	8.03	2.21	4.61	.41	.41	1:1.06 (Increase)	26.3
	-96					11.50		3.47	5.87				26.5
	-128					12.76		4.72	7.13				26.7
	AG90-CA6SGM-45	2	.118-.236	.591	.787	9.49	8.03	1.46	3.86	.49	.63	1:0.77 (Decrease)	26.5
	-89					11.22		3.19	5.59				26.9
	-133					12.95		4.92	7.32				27.4

- The standard fixed length A: 40 taper= .315, 50 taper= .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Coolant cannot be supplied through the Locating Pin
- Exclusive collets must be ordered separately
- S= 3.150 type is available for #50 taper models upon request

CAUTION

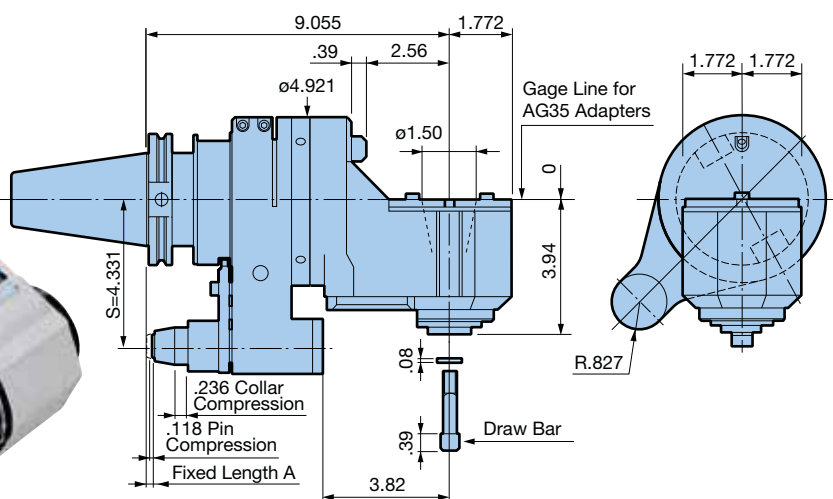
A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

ACCESSORIES



ANGLE HEAD—AG90 BUILD-UP TYPE BIG-PLUS® BCV50

For All Kinds of Machinery Applications



Catalog Number	Weight (lbs.)
BCV50-AG90/AGH35-230	33.1

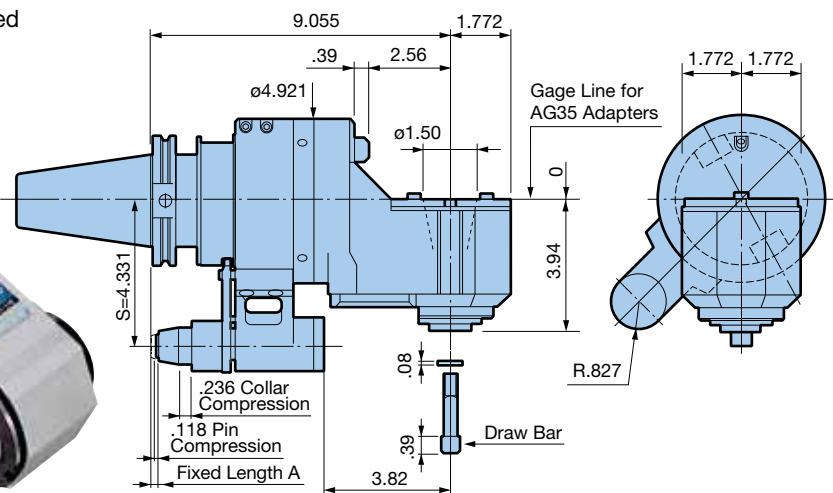


CAUTION

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

For Application Where Increased Rigidity is Required



Catalog Number	Weight (lbs.)
BCV50-AG90/AGH35-230S	35.9



CAUTION

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

ACCESSORIES



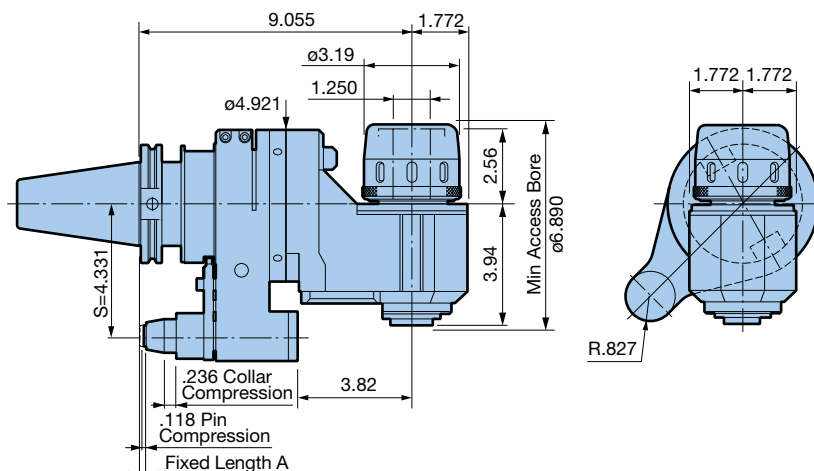
ANGLE HEAD—AG90 HMC TYPE BIG-PLUS® BCV50



For Heavy Duty End Milling



MAX
3,000
RPM



Catalog Number	Weight (lbs.)
BCV50-AG90/HMC1.250-230	37.0



CAUTION

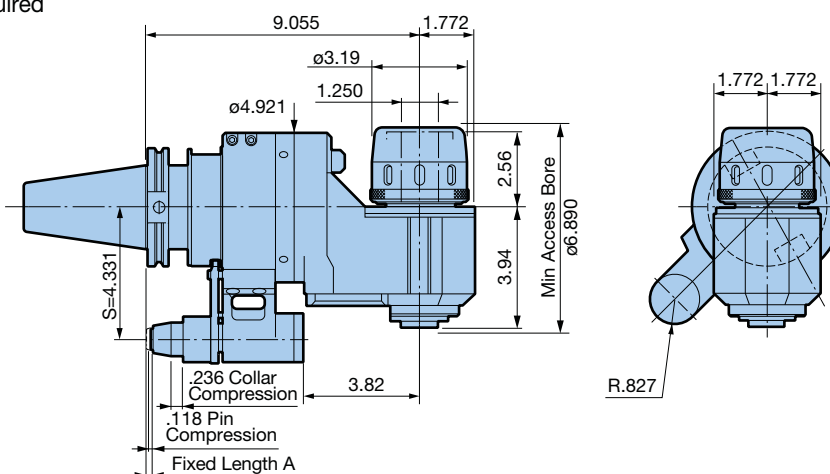
A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

For Applications Where Increased Rigidity is Required



MAX
3,000
RPM



Catalog Number	Weight (lbs.)
BCV50-AG90/HMC1.250-230S	39.9



CAUTION

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

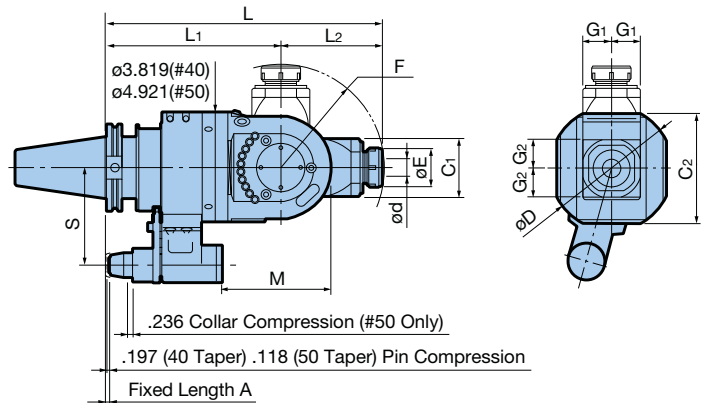
ACCESSORIES



ANGLE HEAD—AGU UNIVERSAL TYPE BIG-PLUS® BCV40/50

CLAMPING RANGE: ϕ .098"-.787"

MAX
6,000
RPM



Catalog Number	ϕ d	ϕ E	ϕ D	C ₁	C ₂	G ₁	G ₂	L	L ₁	L ₂	M	F	S	Collet	Max RPM	Weight (lbs.)
BCV40-AGU/NBS13-280	.098-.512	1.378	4.53	2.00	3.82	1.024	1.014	11.02	7.09	3.94	4.88	4.02	2.559	NBC13-□	6,000	21.4
BCV50-AGU/NBS20-315	.098-.787	1.811	5.51	2.56	4.92	1.299	1.280	12.40	7.87	4.53	4.92	4.65	4.331	NBC20-□	4,000	44.1

- The standard fixed length A: 40 taper= .315, 50 taper= .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Clamping nut & wrench included, collet must be ordered separately

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



Easily Adjustable Spindle Angle From 0° to 90°



Precise Angle Adjustment

Unique setting mechanism enables the spindle angle to be precisely set at 1° increments.

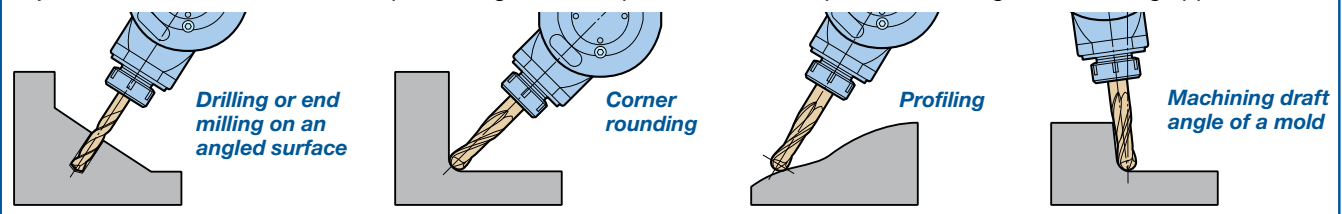


Exclusive Clamping Bolts and Nuts

Specially selected materials and special design for clamping the head guarantees rigidity even for end milling applications.

APPLICATION EXAMPLE

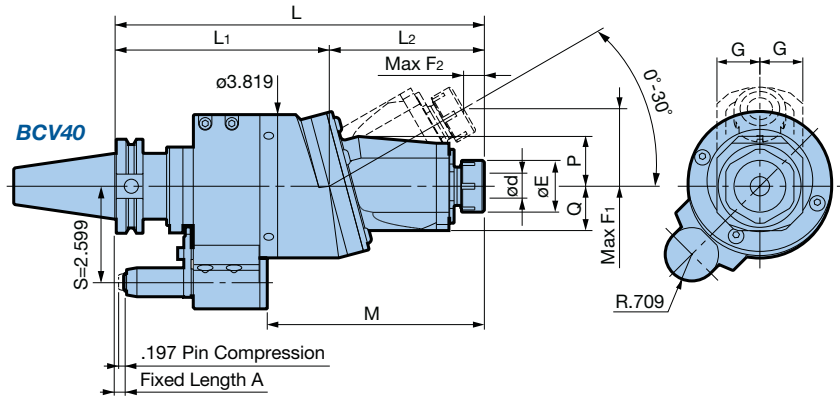
Adjustable AGU Universal Series expands Angle Head capabilities to accomplish various angular machining applications.



ANGLE HEAD—AGU30 TYPE BIG-PLUS® BCV40/50

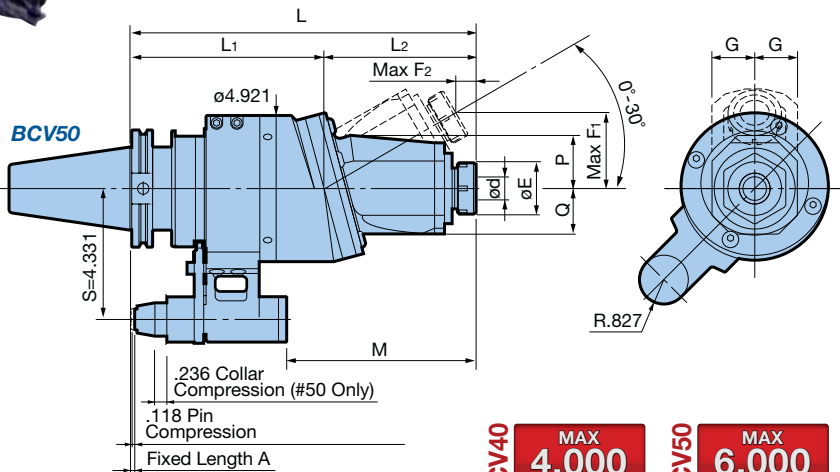
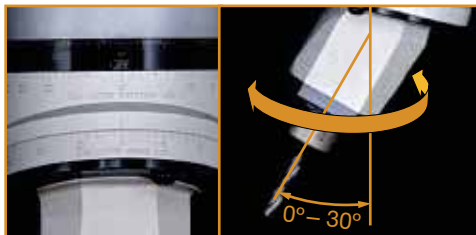


CLAMPING RANGE: $\phi.098$ "-.787"



Angle Adjustment by Aligning Divisions

Spindle angle is easily adjustable from 0° to 30° using the scale indication on the body.



BCV40

MAX
4,000
RPM

BCV50

MAX
6,000
RPM

Catalog Number	ϕd	ϕE	G	L	L1	L2	M	P	Q	F1	F2	Collet	Max RPM	Weight (lbs.)
BCV40-AGU30/NBS13-250	.098-.512	1.378	1.142	9.84	5.71	4.13	5.79	1.34	1.18	2.07	.55	NBC13-□	6,000	15.3
BCV50-AGU30/NBS20-295	.098-.787	1.811	1.437	11.61	6.50	5.12	6.38	1.77	1.54	2.56	.67	NBC20-□	4,000	35.8

- The standard fixed length A: 40 taper= .315, 50 taper= .236, other lengths are available upon request
- Clamping nut and wrench are included
- Collet must be ordered separately
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

CAUTION

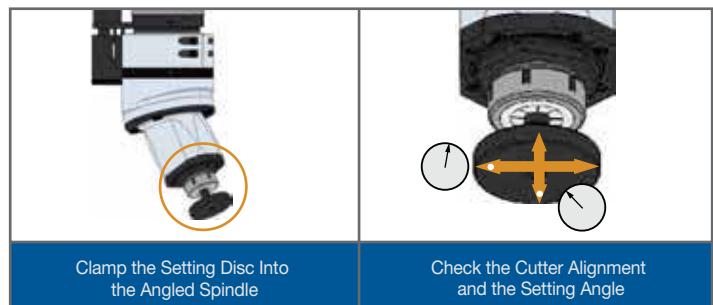
A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



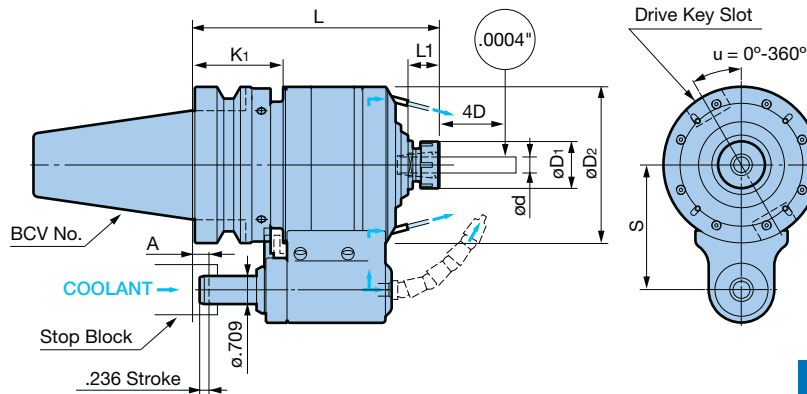
Setting Disc (Included)

For the precise adjustment of spindle angle or direction.





CLAMPING RANGE: ϕ .059"-.630" — For Higher Spindle Speeds



**MAX
6,000
RPM**

BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ϕd	L	L1	$\phi D1$	$\phi D2$	K1	S	A	Speed Ratio	Max RPM	Weight (lbs.)
BCV40-GTG5-10-155-65	.059-.394	6.10	.79	1.181	3.150	2.28	2.559	-.354 +.236	4.67	20,000	11.0
BCV50-GTG6-10-163-80	.059-.394	6.42	.79	1.181	3.937	2.48	3.150	-.157 +.433	5.67	20,000	19.8
-GTG4-16-182-80	.098-.630	7.17	1.00	1.654	4.331	2.48	3.150	-.157 +.433	3.80	15,000	23.8

- 1 pc. of maximum size collet is included as standard accessory (GTG5/6= NBC10-10AA, GTG4= NBC16-16AA)
- u (angle of locating pin to drive key groove) is adjustable to any degree from 0° - 360°
- Special air purge oil mist lubrication style is available upon request for machining graphite, ceramic, tungsten and other composite materials
- Please be aware of the risk of fire when using an oil based coolant

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



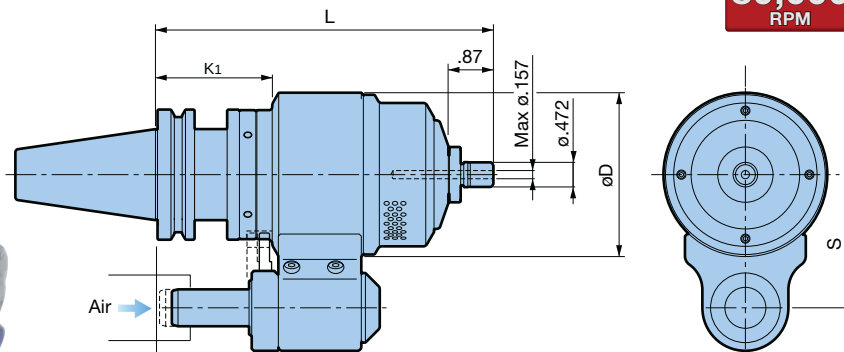
APPLICATION EXAMPLE

	GTG5	GTG6	GTG6	GTG4
Cutter	Solid carbide end mill ϕ .315"/ 2 flutes	Solid carbide end mill ϕ .236"/ 2 flutes	Solid carbide drill ϕ .079"	Solid carbide end mill ϕ .630"
Workpiece	Duralumin (A-2017)	1055	Duralumin (A-2017)	Duralumin (A-2017)
Spindle Speed	20,000 RPM	16,000 RPM	20,000 RPM	15,000 RPM
Cutting Feed	118.1 IPM	137.8 IPM	78.7 IPM	39.4 IPM
Results	High metal removal rate 5.5 cu.in./min.	High metal removal rate 137.8 IPM	Extended tool life 1,200 holes by 1 drill	Surface roughness RMS max. .00008"

- Results will vary depending on workpiece, cutting tool, machine model and other conditions
- The rigidity and concentricity are often affected by the projection length of a cutting tool, it is recommended to keep the projection as short as possible

AIR POWER SPINDLE—RBX5 & RBX7 BIG-PLUS® BCV40/50

For High Speed Micro Machining with Automatic Tool Change



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

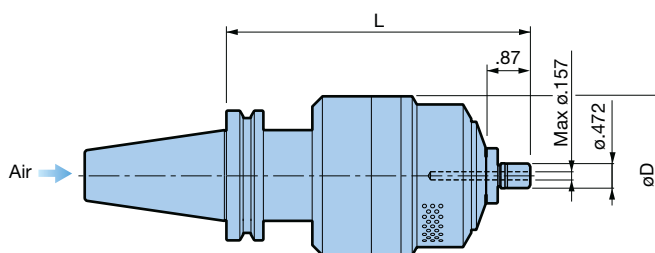
Catalog Number	Practical Spindle Speed (RPM)	Cutting Diameter	L	øD	K ₁	K ₂	S	Weight (lbs.)
BCV40-RBX7-4S-165-65	60,000-80,000	ø.039 or smaller	6.50	3.150	2.24	1.85	2.559	8.8
-RBX5-4S-165-65	40,000-50,000	ø.059 or smaller		3.780				11.0
BCV50-RBX7-4S-170-80	60,000-80,000	ø.039 or smaller	6.69	3.937	2.44	2.05	3.150	19.1
-RBX5-4S-170-80	40,000-50,000	ø.059 or smaller						21.3

- Nut and wrench are included, collet must be ordered separately
- XF1-NPT (Air Unit) must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

For High Speed Micro Machining with Compressed Air Through the Machine Spindle



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	Practical Spindle Speed (RPM)	Cutting Diameter	L	øD	K	Weight (lbs.)
BCV40-RBX7C-4S-150	60,000-80,000	ø.039 or smaller	5.91	3.150	1.69	6.8
-RBX5C-4S-150	40,000-50,000	ø.059 or smaller		3.780		9.0
BCV50-RBX7C-4S-145	60,000-80,000	ø.039 or smaller	5.71	3.150	1.50	12.8
-RBX5C-4S-145	40,000-50,000	ø.059 or smaller		3.780		15.0

- Nut and wrench are included, collet must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

ACCESSORIES

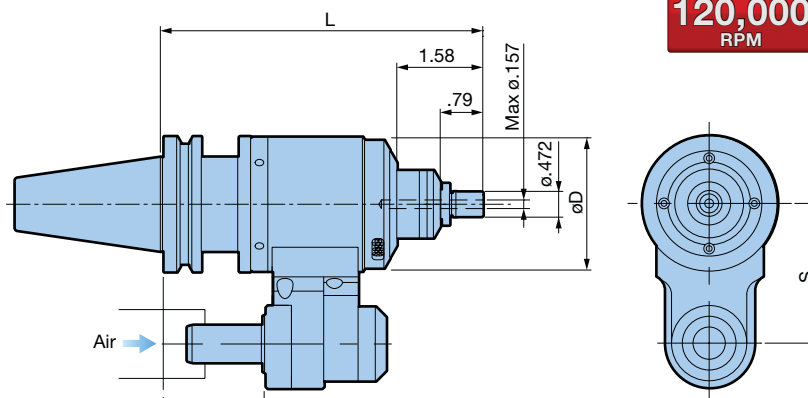


AIR POWER SPINDLE—RBX12

BIG-PLUS® BCV40



For High Speed Micro Machining with Small Cutter



MAX
120,000
RPM

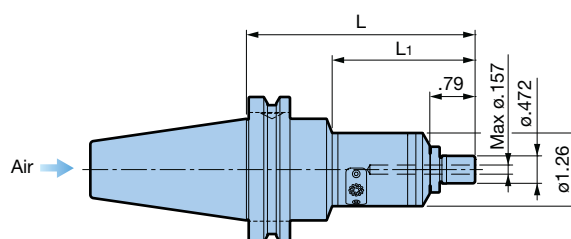


Catalog Number	Practical Spindle Speed (RPM)	Cutting Tool Size	L	øD	K	S	Nut	Collet	Weight (lbs.)
BCV40-RBX12-4S-135-65	100,000-120,000	ø.024 or smaller	5.32	2.480	1.23	2.559	MGN4S-HG	NBC4S-□	6.6

- Nut and wrench are included, collet must be ordered separately
- XF1-NPT (Air Unit) must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.



MAX
120,000
RPM



Catalog Number	Practical Spindle Speed (RPM)	Cutting Tool Size	L	L1	Nut	Collet	Weight (lbs.)
BCV40-RBX12C-4S-95	100,000-120,000	ø.024 or Smaller	3.74	2.56	MGN4S-HG	NBC4S-□	2.9

- Nut and wrench are included, collet must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

APPLICATION EXAMPLE

PREHARDENED STEEL NAK55 SHOULDER CUTTING			PREHARDENED STEEL NAK55 GROOVING		
RBX12	Cutter	ø.6mm Carbide End Mill (ø.024")	RBX12	Cutter	ø.6mm Carbide End Mill (ø.024")
	Spindle Speed	120,000 RPM ⇄ 116,000 RPM		Spindle Speed	120,000 RPM ⇄ 116,000 RPM
	Feed	520 mm/min (20.5 IPM)		Feed	260 mm/min (10.2 IPM)
	D.O.C.	Ad .035" Rd .001"		D.O.C.	Ad .002"

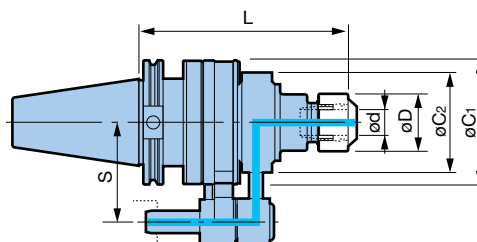
ACCESSORIES



Hi-JET HOLDER—NBS & KAB TYPE CV40/50

CLAMPING RANGE: $\phi.118"$ -.787"

MAX
10,000
RPM



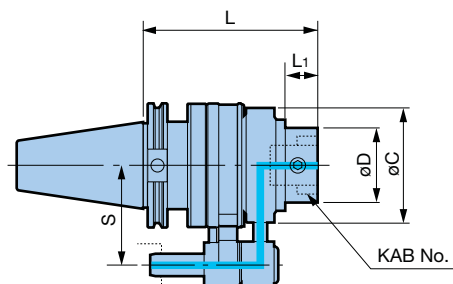
Catalog Number	ϕd	ϕD	L	$\phi C1$	$\phi C2$	S	Max RPM	Merit Set (2 pcs. of Merit Ring) (2 pcs. of Merit Plate)	Weight (lbs.)
CV40-ONBS13N-165	.118-.512	1.378	6.61	3.213	2.87	2.559	10,000	MES-40	8.8
-ONBS20N-165	.118-.787	1.811			3.15		8,000	MES-50	9.5
CV50-ONBS13N-165	.118-.512	1.378	6.61	3.921	3.15	3.150	8,000	MES-50	16.1
-ONBS20N-165	.118-.787	1.811			3.15		8,000	MES-50	16.5

- Collet, adjusting screw and wrench sold separately
- Max coolant pressure is 284 PSI
- Clamping nut is sold separately, please order Baby Perfect Seal (BPS) for your application

CAUTION ⚠

A Stop Block is required.

ACCESSORIES



MAX
5,000
RPM

Catalog Number	Adapter Size	ϕD	L	L ₁	ϕC	S	Max RPM	Merit Set (2 pcs. of Merit Ring) (2 pcs. of Merit Plate)	Weight (lbs.)
CV40-OCK6N-144	KAB6	2.520	5.67	1.102	3.92	2.559	5,000	MES-65	13.4
CV50-OCK6N-142	KAB6	2.520	5.59	1.063	3.92	3.150	5,000	MES-65	15.9
-OCK7N-165	KAB7	3.543	6.50	1.358	5.10	3.150	4,000	MES-90	27.0

- Max coolant pressure is 284 PSI

CAUTION ⚠

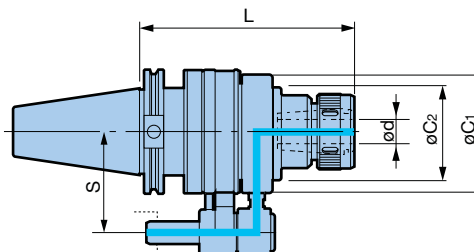
A Stop Block is required.

ACCESSORIES



CLAMPING RANGE: ϕ .093"-1.000" — For TG100 Single Angle Style Collets

**MAX
8,000
RPM**



Catalog Number	Collet Series	ϕd	L	$\phi C1$	$\phi C2$	S	Max RPM	Merit Set (2 pcs. of Merit Ring) (2 pcs. of Merit Plate)	Weight (lbs.)
CV40-OHC1.000N-175	TG100	.093-1.000	6.89	3.213	3.15	2.559	8,000	MES-50	11.1
CV50-OHC1.000N-172			6.77	3.921	3.86	3.150	6,000	MES-65	16.5

- Max coolant pressure is 284 PSI
- Collets not available from BIG Kaiser

CAUTION ⚠

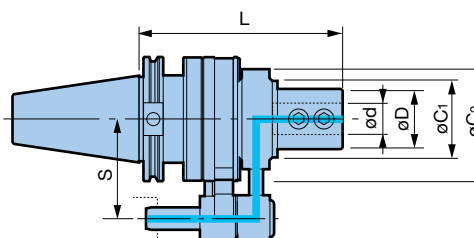
A Stop Block is required.

ACCESSORIES



CLAMPING RANGE: ϕ .750"-2.000" — For Straight Shanks with Flat

**MAX
8,000
RPM**



Catalog Number	ød	øD	L	øC1	øC2	S	Max RPM	Merit Set (2 pcs. of Merit Ring) (2 pcs. of Merit Plate)	Weight (lbs.)
CV40-OSL1.000N-165	1.000	1.890	6.50	3.213	3.15	2.559	8,000	MES-50	9.7
-OSL1.250N-160	1.250	2.283	6.30	3.921	3.86		6,000	MES-65	12.6
CV50-OSL.750N-150	.750	1.890	5.91		3.15	3.150	8,000	MES-50	16.3
-OSL1.000N-165	1.000		6.50				3.86	6,000	MES-65
-OSL1.250N-165	1.250	17.4							
-OSL1.500N-165	1.500	2.500			17.6				
-OSL2.000N-180	2.000	3.307	7.09	5.079	4.76		3.150	4,000	MES-90

- Max coolant pressure is 284 PSI

CAUTION ⚠

A Stop Block is required.

ACCESSORIES





ACCESSORIES



Pullstud Bolts BBT30/40	Pg. 74
Dyna Test BBT30/40/50	Pg. 75
ATC Alignment Tool BBT30/40/50	Pg. 75
BIG-PLUS® Cleaner BBT30/40/50	Pg. 75

MEGA CHUCKS



Mega S—Mega Micro BBT30/40	Pg. 76-77
Clamping Range: $\phi.018"$ -.317" ($\phi.45$ -8.05mm)	
Mega N—Mega New Baby BBT30/40/50	Pg. 78-80
Clamping Range: $\phi.010"$ -.787" ($\phi.25$ -20mm)	
Mega ER Grip BBT30	Pg. 81
Clamping Range: $\phi.075"$ -.787" ($\phi1.9$ -20mm)	
Mega E BBT30/40/50	Pg. 82-83
Clamping Range: $\phi.125"$ -.500" ($\phi3$ -12mm)	
Mega DS—Mega Double Power BBT30/40/50	Pg. 84-85
Clamping Range: .625"-1.500" ($\phi16$ -50mm)	

NEW Hi-POWER MILLING CHUCKS



BBT30/40/50	Pg. 86-87
Clamping Range: $\phi.750"$ -1.250" ($\phi16$ -42mm)	

HYDRAULIC CHUCKS



BBT30/40/50	Pg. 88-92
Clamping Range: $\phi.250"$ -1.250" (6mm-32mm)	

SMART DAMPER



BBT50	Pg. 93
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BASIC ARBORS



Shell Mill Holder BBT30/40	Pg. 94
End Mill Holder BBT30/40	Pg. 95
Clamping Range: $\phi.250"$ -1.250" ($\phi6$ -50mm)	
Shrink Fit Holder BBT40	Pg. 96-97
Clamping Range: $\phi.250"$ -1.250" ($\phi6$ -20mm)	

MODULAR HOLDERS



KAISER KAB/CKN, BIG Komet ABS & BIG CAPTO BBT30/40/50	Pg. 98-101
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MEGA SYNCHRO



BBT30/40/50	Pg. 102-103
Tapping Range: No.0-API (ANSI) M1-M36 (JIS/DIN/ISO)	

TURNING TOOLS



45° Type S & 90° Type F Basic Holder BBT40M/50M	Pg. 104
Square Tool Holder 180° & 45° BBT40M/50M	Pg. 105
Boring Bar Holder BBT40M/50M	Pg. 106
Clamping Range: $\phi6$ mm-50mm	

PROFIT MAKER TOOLS



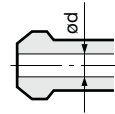
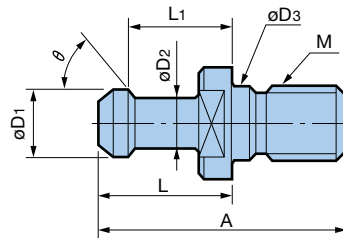
Angle Head—AG90 NBS Type BBT40/50	Pg. 108-109
Clamping Range: $\phi.010"$ -.787" ($\phi.25$ -20mm)	
Angle Head—AG90 NBS Extra Long Type BBT40/50	Pg. 110-111
Clamping Range: $\phi.098"$ -.512" ($\phi2.5$ -13mm)	
Angle Head—AG90 Compact Type BBT40/50	Pg. 112
Clamping Range: $\phi.098"$ -.512" ($\phi2.5$ -13mm)	
Angle Head—AG90 Slender Drive Type BBT40/50	Pg. 113
Clamping Range: $\phi.118"$ -.236" ($\phi3$ -6mm)	
Angle Head—AG90 Build-Up Type BBT	Pg. 114
Angle Head—AG90 HMC Type BBT50	Pg. 115
Angle Head—AG90 Universal Type BBT40/50	Pg. 116
Clamping Range: $\phi.098"$ -.787" ($\phi2.5$ -20mm)	
Angle Head—AGU30 Type BBT40/50	Pg. 117
Clamping Range: $\phi.098"$ -.787" ($\phi2.5$ -20mm)	
High Spindle BBT40/50	Pg. 119
Clamping Range: $\phi.059"$ -.630" ($\phi1.5$ -16mm)	
Air Power Spindle—RBX5/7/12 BBT30/40/50	Pg. 120-121
Hi-Jet Holder BBT40/50	Pg. 122-123

PULLSTUD BOLTS

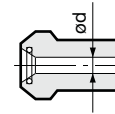
BT30/40

Before Ordering

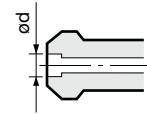
Be sure to check the dimensions of the required pullstud bolt by referring to the specification sheet of the machine tool. In the case of machines with coolant-through spindle capability, provide us a copy of the pullstud bolt drawing, as the sealing method may vary even among machines with the same model number.



Hole Type 1



Hole Type 2



Hole Type 3

Spindle Type	Catalog Number	Standard	øD ₁	øD ₂	L	L ₁	θ	ød	ød ₁	Hole Type	d
30 (M12)	30PMG	JIS	.472	.31	.92	.724	75	None	—	—	JIS BT30
	30PMGH							.16	—	1	JIS BT30 With Hole
	30PMGH2							.10	.22	3	YASDA
	P30T-1MG	MAS-I	.433	.28	.91	.709	45	None	—	—	MAS-1 BT30
	P30T-1MGH							.10	—	1	MAS-1 BT30 With Hole
	P30T-2MG	MAS-II					60	None	—	—	MAS-2 BT30
	P30T-2MGH							.10	—	1	MAS-2 BT30 With Hole
	30P-1MGH	Original	.433	.31	.91	.709	45	.10	—	1	FANUC
	P30T-2MGH3		.433	.30	.91	.709	60	.16	—	1	BROTHER
	PMO30MG		.433	.28	.91	.709	45	.10	.26	3	MORI
40 (M16)	40PMG	JIS	.748	.55	1.14	.906	75	None	—	—	JIS BT40
	40PMGH							.28	—	1	JIS BT40 With Hole
	40PMGH2							.28	—	1	MAKINO (Ground Face)
	40PMGH7							.16	.20	2	OKUMA (Ground Face)
	40PMGH4A							.28	—	1	YASDA ø3 Side Hole
	40PMGH11							.28	.39	3	YASDA
	40PH12							.20	—	1	MITSUI
	P40T-1MG	MAS-I	.591	.39	1.38	1.102	45	None	—	—	MAS-1 BT40
	P40T-1MGHA							.12	—	1	MAS-1 BT40 With Hole
	P40T-1MGH4							.12	.28	3	OKUMA
	P40T-1MGH7	MAS-II	.591	.39	1.38	1.102	60	.16	—	1	MAKINO (Ground Face)
	P40T-2MG							None	—	—	MAS-2 BT40
	P40T-2MGHA							.12	—	1	MAS-2 BT40 With Hole
	P40T-2MGH8							.14	.22	2	
	P40T-2MGH1							.12	.28	3	OKUMA
	PVD40MG	DIN	.748	.55	1.02	.787	75	.28	—	1	DIN 69872 from A
	MP40MG	Original	.591	.39	.98	.709	90	None		—	—
	POM40MG		.591	.39	1.38	1.102	90	None	—	—	MORI w/o Hole
	POM40F										MORI From B w/ O-Ring
	PMO40MG		.748	.55	1.14	.906	75	.28	.39	3	MORI With Hole
	PYN40MG		.740	.57	.75	.552	45	.28	—	1	MAZAK

- Machine tool builders have used many various shapes and sizes of retention knobs
- The use of the incorrect knob may result in injury or property damage for your machining center

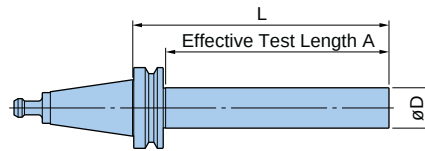


Mega Pullstud Bolt

MG in the model numbers stand for Mega Pullstud Bolt. Tensile strength is improved by utilizing tool steel. Especially recommended for BIG-PLUS® dual contact applications.

Dyna Test

Helps identify potential problems, and can reduce downtime and costly repairs of the machine tool spindle.



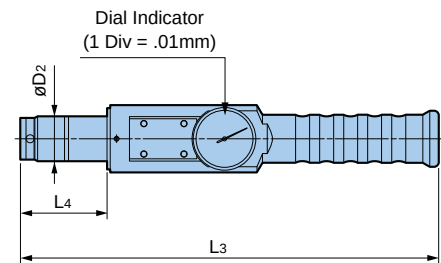
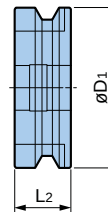
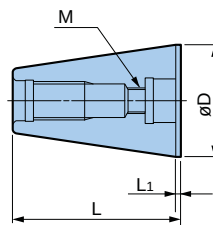
Catalog Number	L	A	øD
BBT30-32-L150	5.906	4.921	32mm
-32-L235	9.252	8.268	
BBT40-50-L200	7.874	6.693	50mm
-50-L350	13.780	12.598	
BBT50-50-L200	7.784	6.260	
-50-L360	14.173	12.559	



BBT

ATC Alignment Tool

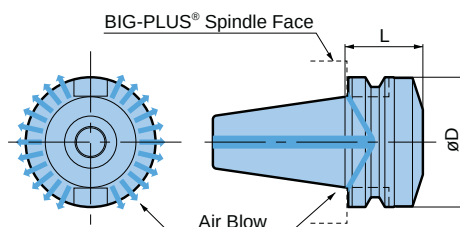
For re-aligning the center between the machine tool spindle and ATC gripper. It can also be used for re-aligning the ATC gripper and tool magazine pots.



Catalog Number	øD	øD1	øD2	L	L1	L2	L3	L4	M
BT30-ATC18	31.75mm	46mm	18mm	50.4mm	2mm	20mm	251mm	44mm	12mm
BT40-ATC20	44.45mm	63mm	20mm	67.4mm	2mm	25mm	251mm	44mm	12mm
BT50-ATC28	69.85mm	100mm	28mm	104.8mm	3mm	35mm	261mm	54mm	16mm

BIG-PLUS® Cleaner

Blowing air cleans the BIG-PLUS® machine spindle face of all debris.



Catalog Number	L	øD
SBT30-ASC-30T	1.181	1.811
SBT40-ASC-40T	1.575	2.480
SBT50-ASC-60T	2.362	3.937

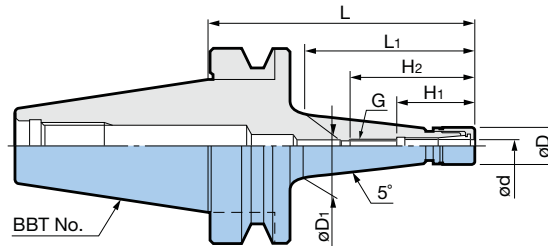
• When the cleaner is clamped into a BIG-PLUS® machine spindle, faces have 1mm (.039") clearance

MEGA MICRO CHUCK BIG-PLUS® BBT30/40

CLAMPING RANGE: .018"-.317" (ø.45-8.05mm) — For Micro Drill & End Mill Applications

**HIGHER
RIGIDITY**

**MAX
40,000
RPM**



Catalog Number	ød	øD	D1	L	L1	H1	H2	G	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BBT30-MEGA3S-45T	.018-.128	.394	.45	1.77	.79	.87	1.50	M4 P0.70	NBC3S-□	MGN3S	MGR10	40,000	.8
-75T			.62	2.95	1.89							40,000	.9
-90T			.72	3.54	2.48							35,000	1.0
-105T			.83	4.13	3.07							30,000	1.1
-MEGA4S-60T	.018-.159	.472	.58	2.36	1.30	1.04	1.85	M5 P0.80	NBC4S-□	MGN4S	MGR12	40,000	.9
-75T			.69	2.95	1.89							40,000	1.0
-90T			.79	3.54	2.48							35,000	1.0
-105T			.89	4.13	1.89							30,000	1.1
-120T			1.00	4.72	3.66							25,000	1.2
-MEGA6S-60T	.018-.238	.551	.64	2.36	1.30	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	40,000	.9
-75T			.74	2.95	1.89							40,000	1.0
-90T			.85	3.54	2.48							35,000	1.0
-105T			.95	4.13	3.07							30,000	1.2
-120T			1.06	4.72	3.66							25,000	1.3
-MEGA8S-75T	.116-.317	.709	.89	2.95	1.89	1.22	1.99	M9 P0.75	NBC8S-□	MGN8S	MGR18	40,000	1.1
-105T			1.10	4.13	3.07							30,000	1.3
BBT40-MEGA3S-60T	.018-.128	.394	.48	2.36	1.10	.87	1.50	M4 P0.70	NBC3S-□	MGN3S	MGR10	35,000	2.2
-90T			.69	3.54	2.28							28,000	2.3
-120T			.89	4.72	3.46							22,000	2.5
-MEGA4S-60T	.018-.159	.472	.55	2.36	1.10	1.04	1.85	M5 P0.80	NBC4S-□	MGN4S	MGR12	35,000	2.2
-75T			.65	2.95	1.69							32,000	2.3
-90T			.75	3.54	2.28							28,000	2.3
-105T			.86	4.13	2.87							25,000	2.4
-120T			.96	4.72	3.46							22,000	2.5
-135T			1.06	5.31	4.06							20,000	2.7
-MEGA6S-60T	.018-.238	.551	.61	2.36	1.10	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	35,000	2.2
-75T			.71	2.95	1.69							32,000	2.3
-90T			.81	3.54	2.28							28,000	2.3
-105T			.92	4.13	2.87							25,000	2.4
-120T			1.02	4.72	3.46							22,000	2.5
-135T			1.13	5.31	4.06							20,000	2.7
-MEGA8S-90T	.116-.317	.709	.96	3.54	2.28	1.22	1.99	M9 P0.75	NBC8S-□	MGN8S	MGR18	28,000	2.5
-120T			1.17	4.72	3.46							22,000	2.6

- Mega Micro Nut is included
- Collet and wrench must be ordered separately
- Weight does not include collet
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable

ACCESSORIES

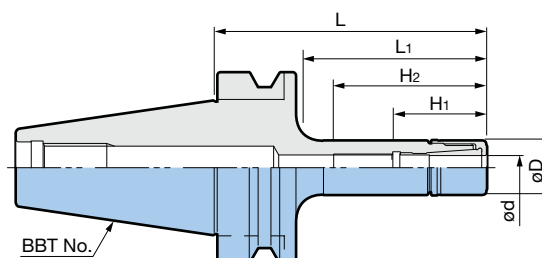


MEGA MICRO CHUCK BIG-PLUS® BBT30/40



CLAMPING RANGE: ϕ .018"-.317" — For Micro Drill & End Mill Applications

**MAX
40,000
RPM**



Catalog Number	ϕ d	ϕ D	L	L ₁	H ₁	H ₂	G	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BBT30-MEGA4S-60	.018-.159	.472	2.36	1.26	1.04	1.85	M5 P.08	NBC4S-□	MGN4S	MGR12	40,000	.9
-90			3.54	2.44							40,000	.9
-MEGA6S-60	.018-.238	.551	2.36	1.26	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	40,000	.9
-90			3.54	2.44							40,000	1.0
-105			4.13	2.87							40,000	1.0
-MEGA8S-90	.116-.317	.709	3.54	2.36	1.22	1.99	M9 P0.75	NBC8S-□	MGN8S	MGR18	35,000	1.1
BBT40-MEGA4S-60	.018-.159	.472	2.36	1.06	1.04	1.85	M5 P0.8	NBC4S-□	MGN4S	MGR12	35,000	2.2
-90			3.54	2.09							35,000	2.2
-MEGA6S-60	.018-.238	.551	2.36	1.06	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	35,000	2.2
-90			3.54	2.09							35,000	2.2
-MEGA8S-90	.116-.317	.709	3.54	2.17	1.22	1.99	M9 P0.75	NBC8S-□	MGN8S	MGR18	35,000	2.4

- Mega Micro Nut is included
- Collet and wrench must be ordered separately
- Weight does not include collet
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable

ACCESSORIES

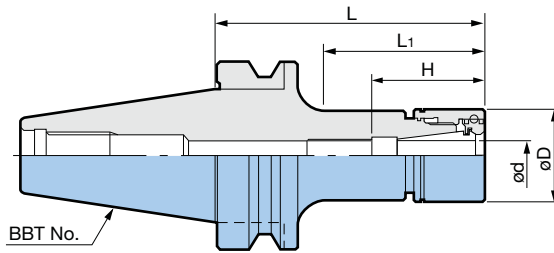
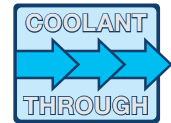


MEGA NEW BABY CHUCK BIG-PLUS® BBT30/40

CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm)

For Drills, Reamers, Taps & Finishing End Mills

**MAX
40,000
RPM**



Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BBT30-MEGA6N-60	.010-.236	.787	2.36	1.26	.91-1.69	NBC6-□	MGN6	MGR20	40,000	1.0
-75			2.95	1.85					35,000	1.1
-90			3.54	2.44					30,000	1.2
-105			4.13	3.03					20,000	1.2
-120			4.72	3.54					18,000	1.3
-MEGA8N-60	.020-.315	.984	2.36	1.34	1.02-1.77	NBC8-□	MGN8	MGR25	40,000	1.1
-75			2.95	1.93					35,000	1.2
-90			3.54	2.52					30,000	1.4
-105			4.13	3.11					20,000	1.5
-120			4.72	3.70					18,000	1.6
-MEGA10N-60	.059-.394	1.181	2.36	1.34	1.50-1.89	NBC10-□	MGN10	MGR30	40,000	1.2
-75			2.95	1.93					30,000	1.4
-90			3.54	2.52					25,000	1.5
-105			4.13	3.11					18,000	1.7
-120			4.72	3.62					15,000	1.8
-MEGA13N-60	.098-.512	1.378	2.36	1.34	1.73-2.48	NBC13-□	MGN13	MGR35	40,000	1.2
-75			2.95	1.93					30,000	1.4
-90			3.54	2.52					25,000	1.6
-105			4.13	3.11					18,000	1.8
-120			4.72	3.70					15,000	2.0
-MEGA16N-60	.098-.630	1.654	2.36	1.46	1.89-2.48	NBC16-□	MGN16	MGR42L	35,000	1.5
-75			2.95	2.05	1.89-2.68				25,000	1.8
-90			3.54	2.64					20,000	2.1
-105			4.13	3.23					18,000	2.4
-MEGA20N-60	.098-.787	1.811	2.36	—	2.01	NBC20-□	MGN20	MGR46L	30,000	1.6
-75			2.95	—	2.01-2.68				20,000	1.9
-90			3.54	—					15,000	2.2
-105			4.13	—					13,000	2.5
BBT40-MEGA6N-60	.010-.236	.787	2.36	1.06	1.91-1.69	NBC6-□	MGN6	MGR20	35,000	2.2
-75			2.95	1.50					35,000	2.3
-90			3.54	2.09					35,000	2.4
-105			4.13	2.68					20,000	2.5
-120			4.72	3.27					20,000	2.6
-MEGA6N-135	.010-.236	.787	5.31	3.86	1.91-1.69	NBC6-□	MGN6	MGR20	20,000	2.7
-165			6.50	5.04					14,000	2.7
-200			7.87	6.42					9,000	2.9

Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BBT40-MEGA8N-60	.020-.315	.984	2.36	1.06	1.02-1.77	NBC8-□	MGN8	MGR25	35,000	2.2
-75			2.95	1.50					35,000	2.3
-90			3.54	2.09					35,000	2.4
-105			4.13	2.68					20,000	2.5
-120			4.72	3.27					20,000	2.6
-135			5.31	3.86					20,000	2.9
-165			6.50	5.04					14,000	2.9
-200			7.87	6.42					9,000	3.1
-MEGA10N-60	.059-.394	1.181	2.36	1.02	1.50-1.89	NBC10-□	MGN10	MGR30	35,000	2.4
-75			2.95	1.50					35,000	2.5
-90			3.54	2.09					35,000	2.7
-105			4.13	2.68					20,000	2.8
-120			4.72	3.27					20,000	3.0
-135			5.31	3.86					20,000	3.1
-165			6.50	5.04					15,000	3.3
-200			7.87	6.50					10,000	3.8
-MEGA13N-60	.098-.512	1.378	2.36	1.22	1.73-2.48	NBC13-□	MGN13	MGR35	35,000	2.4
-75			2.95	1.57					35,000	2.7
-90			3.54	2.17					35,000	2.9
-105			4.13	2.76					20,000	3.1
-120			4.72	3.35					20,000	3.3
-135			5.31	3.94					20,000	3.5
-165			6.50	5.12					15,000	4.0
-200			7.87	6.50					10,000	4.4
-MEGA16N-60	.098-.630	1.654	2.36	1.22	1.89-2.68	NBC16-□	MGN16	MGR42L	30,000	2.7
-75			2.95	1.57					30,000	2.9
-90			3.54	2.17					30,000	3.1
-105			4.13	2.76					20,000	3.5
-120			4.72	3.35					20,000	3.8
-135			5.31	3.94					20,000	4.0
-165			6.50	5.12					15,000	4.4
-200			7.87	6.50					10,000	5.1
-MEGA20N-60	.098-.787	1.811	2.36	1.22	2.01-2.68	NBC20-□	MGN20	MGR46L	30,000	2.4
-75			2.95	1.65					30,000	2.8
-90			3.54	2.24					30,000	3.1
-105			4.13	2.83					20,000	3.5
-120			4.72	3.43					20,000	4.0
-135			5.31	4.02					20,000	4.2
-165			6.50	5.20					15,000	4.6
-200			7.87	6.57					10,000	5.5

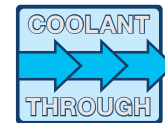
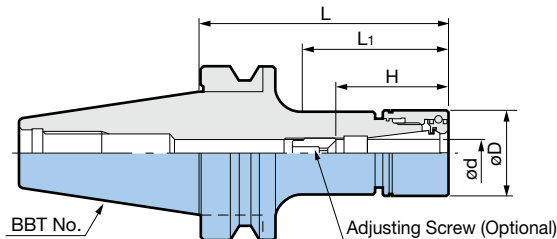
- Mega New Baby Nut is included
- Collet and wrench must be ordered separately
- Weight does not include collet
- Designed to be capable of supplying coolant through spindle
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable

ACCESSORIES

 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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MEGA NEW BABY CHUCK BIG-PLUS® BBT50

CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm) — For Drills, Reamers, Taps & Finishing End Mills



**MAX
20,000
RPM**



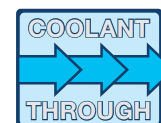
Catalog Number	ϕd	ϕD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
BBT50-MEGA6N-90	.010-.236	.787	3.54	1.06	.91-1.69	NBC6-□	MGN6	MGR20	20,000	3.7
-120			4.72	1.50					20,000	3.8
-165			6.50	2.09					14,000	3.9
-200			7.87	2.68					9,000	4.0
-MEGA8N-90	.020-.315	.984	3.54	1.06	1.02-1.77	NBC8-□	MGN8	MGR25	20,000	3.8
-120			4.72	1.50					20,000	3.9
-165			6.50	2.09					16,000	4.1
-200			7.87	2.68					11,000	4.2
-MEGA10N-90	.059-.394	1.181	3.54	1.02	1.50-1.89	NBC10-□	MGN10	MGR30	20,000	3.9
-120			4.72	1.50					20,000	4.0
-165			6.50	2.09					16,000	4.3
-200			7.87	2.68					13,000	4.7
-250			9.84	3.27					8,000	4.7
-300			11.81	3.86					5,500	4.9
-MEGA13N-90	.098-.512	1.378	3.54	1.22	1.73-2.48	NBC13-□	MGN13	MGR35	18,000	4.0
-120			4.72	1.57					18,000	4.2
-165			6.50	2.17					16,000	4.5
-200			7.87	2.76					12,000	4.7
-250			9.84	3.35					8,000	5.0
-300			11.81	3.94					5,500	5.3
-MEGA16N-75	.098-.630	1.654	2.95	1.22	1.89-2.68	NBC16-□	MGN16	MGR42L	17,000	4.0
-90			3.54	1.57					17,000	4.2
-120			4.72	2.17					17,000	4.4
-165			6.50	2.76					16,000	4.8
-200			7.87	3.35					13,000	5.1
-250			9.84	3.94					10,000	5.5
-MEGA20N-75	.098-.787	1.811	2.95	1.22	2.01-2.68	NBC20-□	MGN20	MGR46L	16,000	4.1
-90			3.54	1.65					16,000	4.2
-120			4.72	2.24					16,000	4.5
-165			6.50	2.83					15,000	4.9
-200			7.87	3.43					13,000	5.3
-250			9.84	4.02					10,000	5.7

- Mega New Baby Nut is included
- "H" indicates the adjustment length with an Adjusting Screw

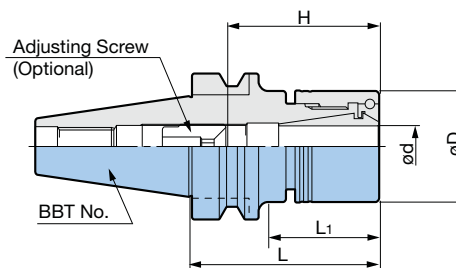
ACCESSORIES

 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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CLAMPING RANGE: ϕ .075"-.787" (ϕ 1.9-20mm) — For Drills, Reamers, Taps & Finishing End Mills



**MAX
40,000
RPM**



Catalog Number	ϕd	ϕD	L	L ₁	H	Collet	Nut (NOT Included)	Wrench	Max RPM	Weight (lbs.)
BBT30-MEGAER16-60	.075-.394	1.181	2.36	1.38	1.38-1.85	ERC16-□	MERN16*	MGR30L	40,000	1.3
-MEGAER20-60	.108-.512	1.378	2.36	1.38	1.65-2.36	ERC20-□	MERN20*	MGR35L	40,000	1.5
-MEGAER25-60	.108-.630	1.654	2.36	1.46	1.73-2.24	ERC25-□	MERN25*	MGR42L	35,000	1.8
-MEGAER32-60 ※	.108-.787	1.969	2.36	—	1.97	ERC32-□	MERN32*	MGR50L	30,000	2.0

*Nut, adjusting screw, balance screws, collet and wrench are not included

- "H" indicates the adjustment length with an adjusting screw
- Adjusting screws cannot be used with models marked ※
- Mega ER Grip is not able to use DIN6499 Form-A collets and ESX collets
- Weight does not include collet

ACCESSORIES

COLLET PG. 240	MEGA NUT* PG. 255	PERFECT SEAL PG. 256	SOLID NUT PG. 255	MEGA WRENCH PG. 259	SCREW PG. 262
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*Mega Nut is the recommended nut to achieve high accuracy and clamping force

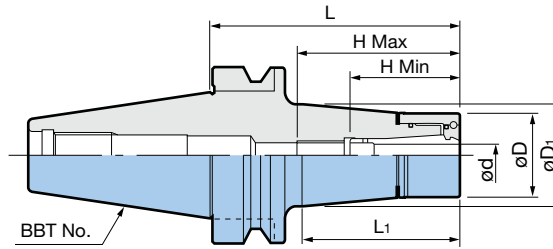
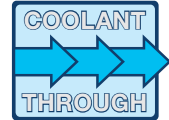


MEGA E CHUCK BIG-PLUS® BBT30/40

CLAMPING RANGE: ϕ .125"-.500" (ϕ 3mm- ϕ 12mm)

Exclusively for High Speed Finish End Milling

MAX
40,000
RPM



Catalog Number	ϕd	ϕD	ϕD_1	L	L ₁	H		Collet Model	Nut Model	Wrench	Max RPM	Weight (lbs.)
						Min	Max					
BBT30-MEGA6E-50	.125-.250 (3mm-6mm)	.984	1.01	1.97	.98	1.46	1.77	MEC6-□	MGN6	MGR25	40,000	1.2
-75			1.18	2.95	1.97						35,000	1.4
-90			1.28	3.54	2.56						25,000	1.6
-105			1.38	4.13	3.15						25,000	1.8
-MEGA8E-50	.125-.250 (3mm-8mm)	1.181	1.20	1.97	.98	1.65	2.01	MEC8-□	MGN8	MGR30	40,000	1.2
-75			1.36	2.95	1.97						35,000	1.6
-90			1.47	3.54	2.60						25,000	1.8
-105			1.58	4.13	3.19						25,000	2.1
-MEGA10E-50	.125-.375 (3mm-10mm)	1.378	1.39	1.97	.98	1.89	2.28	MEC10-□	MGN10	MGR35	39,000	1.3
-75			1.56	2.95	2.01						35,000	1.8
-90			1.61	3.54	2.62						25,000	2.1
-105			1.62	4.13	3.23						25,000	2.3
-MEGA13E-50	.125-.500 (3mm-12mm)	1.654	1.67	1.97	1.06	1.97	2.36	MEC13-□	MGN13	MGR42L	38,000	1.4
-75			1.65	2.95	2.05						34,000	2.0
-90			1.65	3.54	2.64						25,000	2.3
-105			1.65	4.13	3.23						25,000	2.7
BBT40-MEGA6E-60	.125-.250 (3mm-6mm)	.984	1.03	2.36	1.10	1.46	1.77	MEC6-□	MGN6	MGR25	30,000	2.4
-75			1.13	2.95	1.69						30,000	2.5
-90			1.23	3.54	2.28						30,000	2.7
-105			1.33	4.13	2.87						29,000	2.9
-120			1.44	4.72	3.46						29,000	3.1
-135			1.54	5.31	4.06						27,000	3.4
-165			1.75	6.50	5.24						20,000	4.1
-200			2.00	7.87	6.65						15,000	5.1
-MEGA8E-60	.125-.250 (3mm-8mm)	1.181	1.22	2.36	1.10	1.65	2.01	MEC8-□	MGN8	MGR30	30,000	2.5
-75			1.31	2.95	1.69						30,000	2.7
-90			1.42	3.54	2.28						30,000	2.9
-105			1.52	4.13	2.87						29,000	3.2
-120			1.63	4.72	3.46						29,000	3.6
-135			1.73	5.31	4.06						27,000	3.9
-165			1.93	6.50	5.24						20,000	4.6
-200			2.20	7.87	6.73						15,000	5.6

Catalog Number	ød	øD	øD ₁	L	L ₁	H		Collet Model	Nut Model	Wrench	Max RPM	Weight (lbs.)
						Min	Max					
BBT40-MEGA10E-60	.125-.375 (3mm-10mm)	1.378	1.42	2.36	1.14	1.89	2.28	MEC10-□	MEN10	MGR35	30,000	2.7
-75			1.51	2.95	1.69						30,000	3.0
-90			1.61	3.54	2.28						30,000	3.2
-105			1.72	4.13	2.87						29,000	3.6
-120			1.82	4.72	3.46						29,000	3.9
-135			1.92	5.31	4.06						27,000	4.4
-165			2.14	6.50	5.31						22,000	5.2
-200			2.19	7.87	6.73						16,000	6.8
-MEGA13E-60	.125-.500 (3mm-12mm)	1.654	1.68	2.36	1.14	1.97	2.36	MEC13-□	MEN13	MGR42L	30,000	2.9
-75			1.77	2.95	1.69						30,000	3.2
-90			1.89	3.54	2.32						30,000	3.6
-105			1.99	4.13	2.95						29,000	4.1
-120			2.10	4.72	3.58						29,000	4.6
-135			2.20	5.31	4.17						26,000	5.2
-165			2.26	6.50	5.39						22,000	6.2
-200			2.46	7.87	6.77						16,000	8.0
BBT50-MEGA6E-90	.125-.250 (3mm-6mm)	.984	1.20	3.54	1.85	1.46	1.77	MEC6-□	MEN6	MGR25	20,000	8.4
-120			1.40	4.72	3.03						20,000	8.8
-165			1.71	6.50	4.80						14,000	9.7
-200			1.95	7.87	6.18						9,000	10.8
-MEGA8E-90	.125-.250 (3mm-8mm)	1.181	1.38	3.54	1.85	1.65	2.01	MEC8-□	MEN8	MGR30	20,000	5.6
-120			1.59	4.72	3.03						20,000	9.0
-165			1.90	6.50	4.80						16,000	10.1
-200			2.14	7.87	6.18						11,000	11.4
-MEGA10E-90	.125-.375 (3mm-10mm)	1.378	1.57	3.54	1.85	1.89	2.28	MEC10-□	MEN10	MGR35	20,000	8.8
-120			1.79	4.72	3.03						20,000	9.2
-165			2.09	6.50	4.76						16,000	10.8
-200			2.33	7.87	6.14						13,000	12.1
-MEGA13E-90	.125-.500 (3mm-12mm)	1.654	1.83	3.54	1.85	1.97	2.36	MEC13-□	MEN13	MGR42L	18,000	8.8
-120			2.05	4.72	3.03						18,000	9.7
-165			2.32	6.50	4.76						16,000	11.4
-200			2.55	7.87	6.14						12,000	13.2

- Mega E Nut is included
- Collet and wrench must be ordered separately
- Weight does not include collet
- Designed to be capable of supplying coolant through spindle
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable

ACCESSORIES

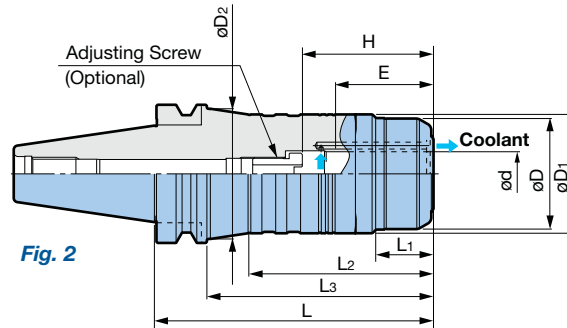
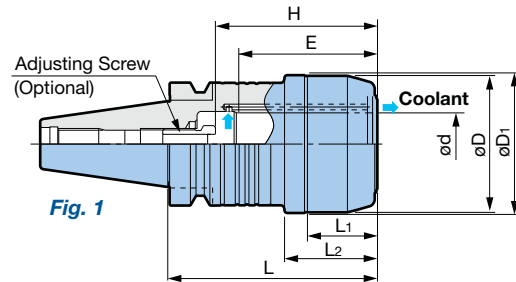
 COLLET PG. 243	 MEGA NUT PG. 248	 PERFECT SEAL PG. 254	 MEGA WRENCH PG. 259	 SCREW PG. 262
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MEGA DOUBLE POWER CHUCK BIG-PLUS® BBT30/40

CLAMPING RANGE: ϕ .625"-1.500" (ϕ 16-50mm)

For Heavy Duty End Milling

**MAX
30,000
RPM**



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	Fig.	ϕd	ϕD	ϕD_1	ϕD_2	L	L ₁	L ₂	L ₃	H	Min Clamping Length E	Wrench	Max RPM	Weight (lbs.)
BBT30-MEGA.750DS-2.5	2	.750	1.969	1.99	—	2.50	1.30	1.48	—	2.39	2.05	MGR50L	30,000	2.0
-MEGA16DS-60	1	16mm	1.811	1.84		2.36	1.10	1.28		2.44		MGR46L	30,000	1.8
-MEGA20DS-65		20mm	1.969	2.00		2.56	1.30	1.48		2.36		MGR50L	25,000	2.0
BBT40-MEGA.625DS-3A	2	.625	1.654	2.07	2.40	3.00	.83	1.59	1.94	2.87	2.24	MGR42L	30,000	3.5
-5A						5.00			3.94				25,000	6.2
-MEGA.750DS-3A	2	.750	2.165	2.90	2.40	3.00	1.40	1.85	1.94	2.80-3.19	2.28	MGR55L	30,000	3.8
-5A				2.19		5.00			3.94				25,000	6.0
-MEGA1.000DS-3.5A	1	1.000	2.441	2.47	—	3.50	1.59	1.85	—	2.87-3.27	2.32	MGR62L	27,000	4.4
-5A						5.00							24,000	6.6
-MEGA1.250DS-3.5A	1	1.250	2.756	2.78	—	3.50	1.42		—	3.19-3.58	2.64	MGR70L	26,000	4.6
-5A						5.00							22,000	6.8
-MEGA16DS-75A	2	16mm	1.654	2.07	2.36	3.03	.83	1.59	1.97	2.87	2.24	MGR42L	30,000	3.3
-105A						4.21			3.15				30,000	4.6
-135A					2.40	5.39			4.33				25,000	5.9
-165A						6.57			5.51				22,000	7.3
-200A						7.95			6.89				20,000	9.0
-MEGA20DS-75	2	20mm	2.165	2.19	2.36	3.05	1.40	1.85	1.99	2.80-3.19 2.95-3.35	2.28	MGR55L	30,000	3.7
-105						4.23			3.17				30,000	4.6
-120					2.40	4.82			3.76				27,000	5.3
-135						5.41			4.35				25,000	5.9
-165						6.59			5.53				22,000	7.3
-200						7.97			6.91				20,000	9.2
-MEGA25DS-75A						3.03							27,000	4.4
-105A	1	25mm	2.441	2.47	—	4.21	1.59	1.85	—	2.87-3.27	2.32	MGR62L	26,000	5.1
-135A						5.39							24,000	6.6
-165A						6.57							21,000	8.1
-200A						7.95							18,000	10.3

MEGA DOUBLE POWER CHUCK

BIG-PLUS® BBT40/50



BBT

Catalog Number	Fig.	ød	øD	øD ₁	øD ₂	L	L ₁	L ₂	L ₃	H	Min Clamping Length E	Wrench	Max RPM	Weight (lbs.)		
BBT40-MEGA32DS-90	1	32mm	2.756	2.78	—	3.64	1.42	1.87	—	2.87-3.27	2.64	MGR70L	26,000	4.6		
-105						4.23				26,000			5.3			
-135						5.41				22,000			6.8			
-165						6.59				20,000			8.1			
-200						7.97				16,000			9.9			
BBT50-MEGA.750DS-4	2	.750	2.362	2.72	2.91	4.00	1.10	1.52	2.50	2.78-3.19	2.28	MGR60L	20,000	10.0		
-MEGA1.000DS-4		1.000	2.756	3.03	3.35	4.00	1.34	1.87	2.50	3.07-3.46	2.64	MGR70L	20,000	10.6		
-MEGA1.250DS-4		1.250	3.150	3.39	3.74	4.00	1.65	2.24	2.50	3.15-3.82	2.87	MGR80L	20,000	11.3		
-MEGA1.500DS-4.5	1	1.500	3.898	3.93	—	4.50	1.65	—	—	3.54-4.21	2.87	MGR99L	15,000	14.6		
-MEGA16DS-105	2	16mm	1.811	2.17	2.48	4.23	1.02	1.42	2.74	2.87	2.05	MGR46L	21,000	10.1		
-135						5.41							21,000	11.4		
-165						6.59							19,000	12.5		
-200						7.97							15,000	14.5		
-250						9.94							13,000	15.4		
-MEGA20DS-105	2	20mm	2.362	2.72	2.91	4.23	1.10	1.52	2.74	2.78-3.19	2.28	MGR60L	20,000	11.2		
-135						5.41							3.92	19,000	13.2	
-165						6.59							5.10	17,000	15.0	
-200						7.97							4.57	6.48	14,000	16.9
-250					3.03	9.94	5.69	8.44	12,000				20.0			
-MEGA25DS-105	2	25mm	2.756	3.03	3.35	4.23	1.34	1.87	2.74	3.07-3.46	2.64	MGR70L	20,000	11.9		
-135						5.41							3.92	19,000	14.3	
-165						6.59							5.10	17,000	16.7	
-200						7.97							4.92	6.48	12,000	19.6
-250					3.35	9.94	5.71	8.44	10,000				23.8			
-MEGA32DS-90	2	32mm	3.150	3.39	3.74	—	3.72	1.65	2.24	2.23	3.15-3.82	2.87	MGR80L	20,000	10.6	
-105														4.23	20,000	11.9
-135														5.41	18,000	15.4
-165														6.59	15,000	18.7
-200														7.97	12,000	21.8
-250														9.94	10,000	26.6
-300														11.91	5,000	31.5
-MEGA42DS-105	1	42mm	3.898	3.93	—	4.21	—	—	—	3.54-4.21	2.87	MGR99L	15,000	13.2		
-135						5.39							15,000	17.2		
-165						6.57							14,000	21.1		
-MEGA50DS-120	1	50mm	4.134	4.61	—	4.80	1.93	2.81	—	3.78-4.41	3.03	MGR105L	13,000	16.1		

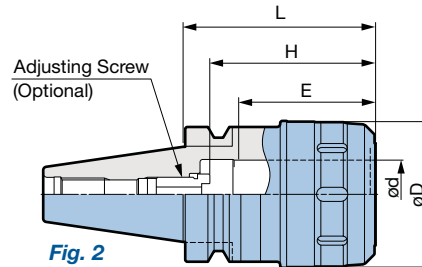
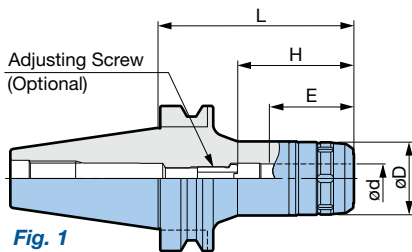
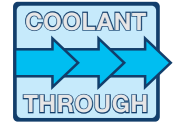
- Wrench must be ordered separately
- The "Max" allowable spindle speed listed in the table is directly influenced by the rigidity of the machine and balance of the cutting tool, therefore, the "Max" allowable speed may not always be achievable
- Tools with flats should not be used in Mega Double Power Chucks

ACCESSORIES



NEW Hi-POWER MILLING CHUCK BIG-PLUS® BBT30/40

CLAMPING RANGE: ϕ .750"-1.250" (ϕ 16-42mm) — For Heavy Duty End Milling



Catalog Number	Fig.	ød	øD	L	H	Min Clamping Length E	Wrench	Weight (lbs.)
BBT30-HMC.750S-3	2	.750	1.969	3.00	2.79	2.05	FK45-50L	2.1
-HMC16S-70	1	16mm	1.693	2.76	2.80	2.17	FK45-50L	1.5
-HMC20S-75	2	20mm	1.969	2.95	2.16-2.60	2.20		2.0
-HMC25S-90		25mm	2.165	3.54	2.52-2.91	2.24	FK52-55	2.6
-HMC32S-105		32mm	2.441	4.13	2.75-3.15	2.28	FK58-62L	3.3
BBT40-HMC.750S-3.5	2	.750	1.969	3.50	3.34	2.21	FK45-50L	4.1
-HMC1.000S-3.5		1.000	2.323	4.00	3.42	2.24	FK52-55	4.7
-HMC1.250-4		1.250	2.677	2.95	3.54	2.52	FK58-62L	5.9
-HMC16S-75	1	16m	1.693	2.95	2.80	2.17	FK45-50L	2.9
-120				4.72				4.0
-HMC20S-75	1	20mm	1.969	2.95	2.72-3.11	2.21		3.1
-105				4.13				4.2
-120				4.72				4.6
-HMC25S-75	1	25mm	2.323	2.95	2.87-3.27	2.24	FK58-62L	3.3
-105				4.13				4.6
-135				5.31				6.2
-HMC32S-90	2	32mm	2.677	3.54	2.80-3.19	2.52	FK68-75L	4.4
-105				4.13	3.11-3.50			5.1
-135				5.31				6.6

NEW Hi-POWER MILLING CHUCK BIG-PLUS® BBT50



Catalog Number	Fig.	ød	øD	L	H	Min Clamping Length E	Wrench	Weight (lbs.)
BBT50-HMC.750-4	1	.750	2.360	4.00	3.34	2.21	FK58-62	10.5
-HMC1.000-4		1.000	2.440	4.00	3.42	2.24	FK58-62	10.7
-HMC1.250-4		1.250	3.150	4.00	4.13	2.83	FK80-90	12.4
-HMC16S-105	1	16mm	1.693	4.13	2.80	2.17	FK45-50L	9.3
-135				5.31				10.1
-165				6.50				11.0
-200				7.87				12.8
-HMC20S-105	1	20mm	1.969	4.13	2.72-3.11	2.21	FK45-50L	9.5
-135				5.31				10.6
-165				6.50				11.9
-200				7.87				13.2
-300				11.81				18.3
-HMC25S-105	1	25mm	2.323	4.13	2.99-3.39	2.24	FK58-62L	9.9
-135				5.31				11.5
-165				6.50				13.0
-200				7.87				16.5
-HMC32S-105	1	32mm	2.677	4.13	3.46-3.86	2.83	FK68-75L	10.1
-135				5.31				11.9
-165				6.50				14.1
-200				7.87				16.3
-300				11.81				25.4
-HMC42S-105	1	42mm	3.346	4.13	3.66-4.13	2.87	FK80-90L	11.5
-135				5.31				13.7
-165				6.50				16.3
-200				7.87				21.2
-300				11.81				31.1

• Wrench and axial length adjusting screw must be ordered separately

ACCESSORIES

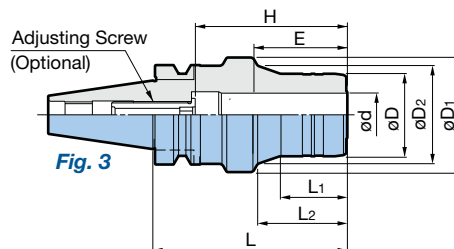
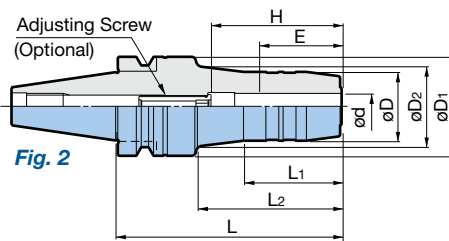
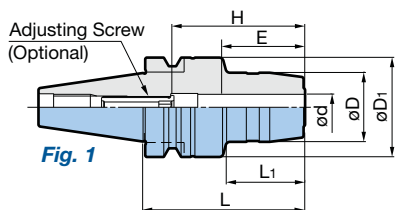
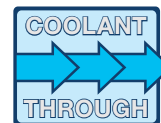
 COLLET PG. 246	 PERFECT SEAL/ JET COLLET PG. 244	 WRENCH PG. 261	 SCREW PG. 262
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HYDRAULIC CHUCK BIG-PLUS® BBT30

CLAMPING RANGE: ϕ .250"-1.000" (ϕ 6-32mm)

For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools

**MAX
40,000
RPM**



Catalog Number	Fig.	ød	øD	øD ₁	øD ₂	L	L ₁	L ₂	H	Min Clamping Length E	Adjusting Screw	Weight (lbs.)			
BBT30-HDC.250-2.5	1	.250	1.024	1.79	—	2.50	1.14	—	1.10-1.97	1.10	HDA6-05032	1.3			
-4	2				1.18	4.00	1.69	2.70				1.8			
-HDC.375-2.5	1	.375	1.181	1.81	—	2.50	.96	—	1.77-2.17	1.30	HDA10-08015	1.6			
-4	2				1.34	4.00	1.77	2.48			1.30-2.17	HDA10-08032	2.0		
-HDC.500-2.5	1	.500	1.299	1.81	—	2.50	.98	—	1.57-2.36	1.50	HDA12-10025	1.6			
-4	2				1.46	4.00	1.77	2.52			1.50-2.36	HDA12-10032	2.0		
-HDC.625-2.5	1	.625	1.496	1.81	—	2.50	.94	—	2.83	1.69	—	1.8			
-4	2			1.81	1.81	4.00	1.85	2.52			1.69-2.76	HDA16-12037	2.4		
-HDC.750-2.5	3	.750	1.496	2.09	—	2.50	.55	—	1.69-2.24	1.69	HDA16-12030	2.0			
-4					1.77	4.00	1.22	2.09			1.69-2.95	HDA16-12037	2.4		
-HDC1.000-4	3	1.000	2.165	2.48	2.48	4.00	1.61	1.73	2.05-3.15	2.05	HDA25-16039	3.8			
-HDC6-45	1	6mm	1.181	1.81	-	1.77	.28	-	1.38-1.97	1.10	HDA6-05020	1.5			
-75	2		1.024	1.79		1.22	2.95		1.57		1.10-1.97	HDA6-05032	1.8		
-90	3				3.54		1.69	2.24	2.0						
-105					4.13			2.83							
-HDC8-45	1	8mm	1.260	1.81	-	1.77	.28	-	1.38-1.97	1.10	HDA8-06020	1.5			
-75	2		1.102	1.79		1.30	2.95		1.61		1.10-1.97	HDA8-06032	1.8		
-90	3				3.54		1.73	2.24	2.0						
-105					4.13			2.83							
-HDC10-45	1	10mm	1.339	1.81	-	1.77	.28	-	1.77-2.17	1.30	HDA10-08015	1.5			
-75	2		1.181			1.30	3.54		1.42		1.77	1.30-2.17	HDA10-08032	2.0	
-90	3				1.30			4.13							2.01
-105					1.42			4.13						2.60	

Catalog Number	Fig.	ød	øD	øD ₁	øD ₂	L	L ₁	L ₂	H	Min Clamping Length E	Adjusting Screw	Weight (lbs.)			
BBT30-HDC12-45	1	12mm	1.417	1.81	—	1.77	.28	—	2.17-2.36	1.50	HDA12-10010●	1.5			
-75	2		1.260			2.95	1.42		1.50-2.36		HDA12-10032	1.8			
-90	3		1.50			3.54	1.77	2.01				2.0			
-105						4.13		2.64				2.2			
-HDC14-90	3	14mm	1.339	1.81	1.46	3.54	1.81	2.05	1.50-2.36	1.50	HDA12-10032	2.0			
-HDC16-45▲	1	16mm	1.654	1.81	—	1.77	.28	—	2.76	1.69	—	1.5			
-75	2		1.496			2.95	1.38		1.69-2.76		HDA16-12030	2.0			
-90	3					3.54	1.85				HDA16-12037	2.2			
-HDC20-60	4	20mm	1.496	2.09	—	2.36	—	.55	1.69-2.13	1.69	HDA16-12030	2.0			
-75					1.81			2.95	.63		1.02	1.81-2.76	HDA16-12037	2.4	
-90								3.54	1.22		1.61	1.69-2.76			
-HDC25-105	4	25mm	2.165	2.48	—	4.13	1.73	—	2.05-3.15	2.05	HDA25-16039	3.8			
-HDC32-105	4	32mm	2.362	2.95	—	4.13	1.54	—	2.20-3.15	2.20	HDA25-16039	4.0			

- Adjustable cutter length H is the adjustment length using an optional adjusting screw, if a specific model number does not have a value for H, the inner bore is larger than the clamping diameter and use of adjustment screw is not available
- Add the letter "W" to adjusting screw model number for hexagon sockets on both sides (ex: HDA6-05020W), adjusting screw with ● indication is not available in W type
- Model with ▲ indication cannot use an adjusting screw

CAUTION ⚠

Use only cutting tools that have a shank tolerance of h6 (see table Pg. 16).
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Roughing end mills are not recommended for use with Hydraulic Chucks.
Do not tighten the clamping screw without first inserting a cutting tool into the tool holder.
Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E".

ACCESSORIES

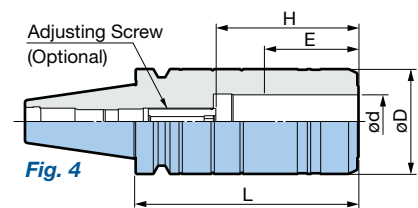
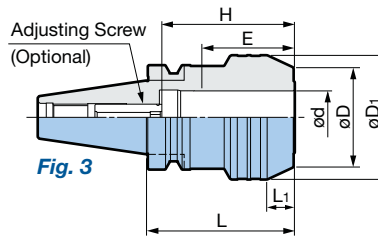
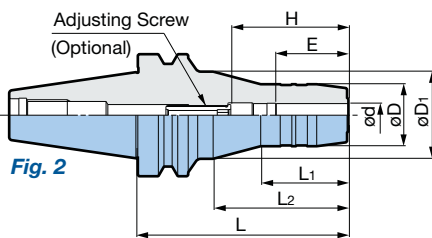
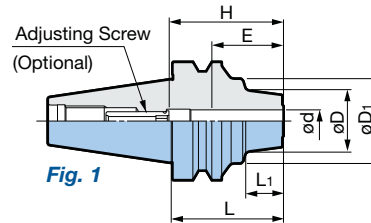
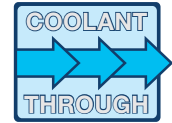


HYDRAULIC CHUCK BIG-PLUS® BBT40

CLAMPING RANGE: ϕ .250"-1.250" (ϕ 6-32mm)

For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools

**MAX
40,000
RPM**



Catalog Number	Fig.	ød	øD	øD ₁	L	L ₁	L ₂	H	Min Clamping Length E	Adjusting Screw	Weight (lbs.)
BBT40-HDC.250-2.5	1	.250	1.024	1.77	2.50	.91	—	1.10-1.97	1.10	HDA6-05032	2.7
-4	2				4.00	1.73	2.44				3.3
-5.5					5.50		3.94				4.0
-HDC.375-2.5	1	.375	1.260	1.77	2.50	.94	—	1.30-2.17	1.30	HDA10-08032	2.9
-4	2		1.181		4.00	1.77	2.44				3.3
-5.5					5.50		3.94				4.2
-HDC.500-2.5	1	.500	1.299	1.77	2.50	.71	—	1.50-2.36	1.50	HDA12-10032	2.9
-4	2				4.00	1.81	2.44				3.6
-5.5					5.50		3.94				4.2
-HDC.625-3	1	.625	1.496	1.77	3.00	1.42	—	1.69-2.76	1.69	HDA16-12037	3.1
-4	2				4.00	1.85	2.40				3.6
-5.5					5.50		3.90				4.2
-HDC.750-3	2	.750	1.654	2.09	3.00	1.34	—	1.69-2.76	1.69	HDA16-12037	3.3
-4				1.97	4.00	1.85	2.44				3.8
-5.5					5.50		3.94				4.7
-HDC1.000-3	2	1.000	2.165	2.48	3.00	.98	1.10	2.05-3.15	2.05	HDA25-16033	4.2
-5						5.00					HDA25-16039
-HDC1.250-3.5	3	1.250	2.953	—	3.50	.63	—	2.20-3.15	2.20	HDA25-16039	5.1
-5	4		2.480		5.00	—					6.2
-HDC6-60	1	6mm	1.063	1.77	2.36	.75	—	1.10-1.97	1.10	HDA6-05032	2.7
-90	2		1.024		3.54	1.73	1.97				3.0
-110					4.33		2.76				3.3
-135					5.31		3.74				3.6
-165					6.50		4.69				4.2

Catalog Number	Fig.	ød	øD	øD ₁	L	L ₁	L ₂	H	Min Clamping Length E	Adjusting Screw	Weight (lbs.)
BBT40-HDC8-60	1	8mm	1.142	1.77	2.36	.75	—	1.10-1.97	1.10	HDA8-06032	2.7
-90	2		1.102		3.54	1.73	1.97				3.0
-110					4.33		2.76				3.3
-135					5.31		3.74				3.8
-165					6.50		4.69				4.3
-HDC10-60	1	10mm	1.220	1.77	2.36	.79	—	1.30-2.17	1.30	HDA10-08032	2.7
-90	2		1.181		3.54	1.77	1.97				3.0
-110					4.33		2.76				3.3
-135					5.31		3.74				3.8
-165					6.50		4.69				4.3
-HDC12-60	1	12mm	1.299	1.77	2.36	.79	—	1.50-2.36	1.50	HDA12-10032	2.7
-90	2		1.260		3.54	1.77	1.93				3.0
-110					4.33		2.72				3.4
-135					5.31		3.70				3.9
-165					6.50		4.69				4.3
-HDC14-90	2	14mm	1.339	1.77	3.54	1.81	1.93	1.50-2.36	1.50	HDA12-10032	3.0
-110					4.33		2.72				3.4
-135					5.31		3.70				3.9
-HDC16-75	2	16mm	1.496	1.77	2.95	1.85	1.42	1.70-2.76	1.70	HDA16-16037	2.9
-90					3.54		1.93				3.1
-110					4.33		2.72				3.5
-135					5.31		3.70				4.1
-165				1.97	6.50		4.69				5.1
-HDC18-90	2	18mm	1.575	1.77	3.54	1.89	1.93	1.70-2.76	1.70	HDA16-12037	3.2
-110					4.33		2.72				3.5
-135					5.31		3.70				4.1
-HDC20-90	2	20mm	1.654	1.77	3.54	1.89	1.97	1.70-2.76	1.70	HDA16-12037	3.1
-110				1.97	4.33		2.76				3.8
-135					5.31		3.74				4.3
-165					6.50		4.69				5.2
-HDC20E-75	1	20mm	1.929	—	2.95	1.77	—	1.70-2.76	1.70	HDA16-12037	3.1
-HDC25E-75	2	25mm	2.165	2.48	2.95	.98	—	2.05-3.15	2.05	HDA25-16033	4.0
-110					4.33					HDA25-16039	5.2
-135					5.31						6.5
-165					6.50						7.8
-HDC32E-90	3	32mm	2.362	2.95	3.54	.63	—	2.20-3.17	2.20	HDA25-16039	4.8
-110	4		2.480	—	4.33			2.20-3.35			5.6
-135					5.31	—	2.20-3.35				6.2
-165					2		6.50	2.20-3.35			7.1

- Adjustable cutter length H is the adjustment length using an optional adjusting screw, if a specific model number does not have a value for H, the inner bore is larger than the clamping diameter and use of adjustment screw is not available
- Add the letter "W" to adjusting screw model number for hexagon sockets on both sides (ex: HDA6-05032W)

CAUTION

Use only cutting tools that have a shank tolerance of h6 (see table Pg. 16).
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Roughing end mills are not recommended for use with Hydraulic Chucks.
Do not tighten the clamping screw without first inserting a cutting tool into the tool holder.
Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E".

ACCESSORIES



HYDRAULIC CHUCK SUPER SLIM BIG-PLUS® BBT30/40/50

CLAMPING RANGE: $\phi 6$ -12mm

For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools

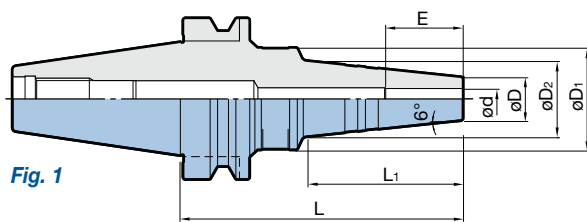
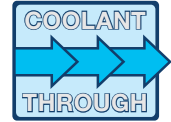


Fig. 1

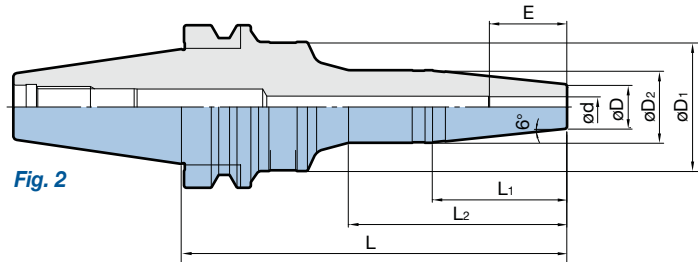


Fig. 2



Catalog Number	Fig.	ød	øD	øD2	øD1	L	L1	L2	E Min	Weight (lbs.)	
BBT30-HDC6S-90	1	6mm	.551	.98	1.65	3.54	1.97	—	.98	1.5	
-HDC8S-90		8mm	.669	1.10				—	1.18	1.5	
-HDC10S-90		10mm	.748	1.18				1.73	—	1.26	1.5
-HDC12S-90		12mm	.827	1.26				1.81	—	1.38	1.8
BBT40-HDC6S-110	1	6mm	.551	1.06	1.50	4.33	2.36	—	.98	2.9	
-150	2			1.02	1.89	5.91	2.24	3.35		3.5	
-HDC8S-110	1	8mm	.669	1.18	1.57	4.33	2.36	—	1.18	3.1	
-150	2			1.10	1.97	5.91	2.05	3.35		3.8	
-HDC10S-110	1	10mm	.748	1.26	1.65	4.33	2.36	—	1.26	3.1	
-150	2			1.18	1.97	5.91	2.05	3.35		3.8	
-HDC12S-110	1	12mm	.827	1.34	1.73	4.33	2.36	—	1.38	3.1	
-150	2			1.26	1.97	5.91	2.05	3.35		4.0	
BBT50-HDC6S-150	2	6mm	.551	1.02	2.05	5.91	2.24	3.27	.98	9.3	
-HDC8S-150		8mm	.669	1.10	2.12		2.05		1.18	9.5	
-HDC10S-150		10mm	.748	1.18	2.20				1.26	9.5	
-HDC12S-150		12mm	.827	1.26	2.28				1.38	9.7	

• Adjusting Screw cannot be used

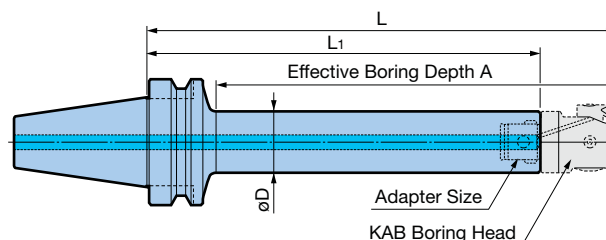
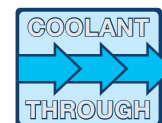
CAUTION

Roughing end mills are not recommended for use with Hydraulic Chucks.
Use only cutting tools that have a shank tolerance of h6.
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Do not tighten the clamping screw without first inserting a cutting tool into the Hydraulic Chuck.
Always insert the cutting tool into the Hydraulic Chuck beyond minimum clamping length E.

ACCESSORIES

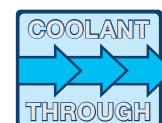
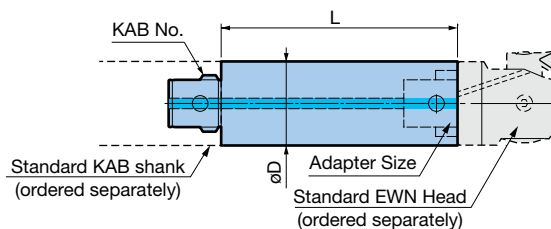


For Deep Hole Finish Boring



Catalog Number	Model	Adapter Size	øD	L	L1	A	Weight (lbs.)
11.368.346	BBT50xKA4DPxD9.7	KAB4	1.535	11.77	9.921	9.70	12.6
11.368.357	xKA5DPxD12.5	KAB5	1.968	14.61	12.362	12.50	20.7
11.368.368	xKA6DPxD16.0	KAB6	2.520	17.76	14.960	16.00	26.7

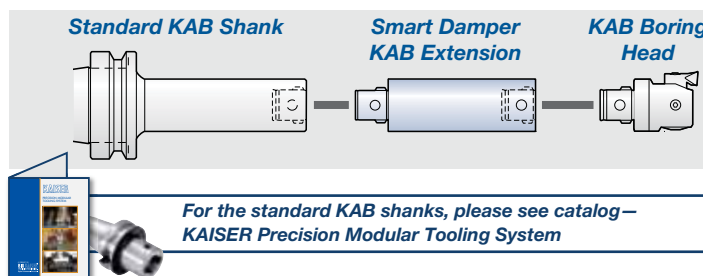
- Dimensions L & A are length when assembled with respective EWN head
- Insert is aligned with drive keys for tool orientation
- Boring head, inserts, etc. are sold separately



KAISER Extension

Catalog Number	Adapter Size	øD	L	Weight (lbs.)
CK44DP-120	KAB4	1.535	4.724	2.9
CK55DP-150	KAB5	1.968	5.906	5.7
CK66DP-180	KAB6	2.520	7.087	12.3

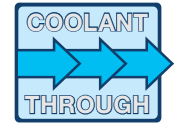
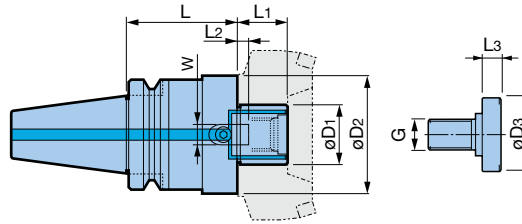
- Center-through hole is applied and can be used in center-through application
- Additional reduction creates chattering and cannot be used



CAUTION

Damping function may become less effective over time due to the break-down of special elastomers used in the damping mechanism. If excessive vibration occurs after 1 year of continued use, it is recommended to return Smart Damper bars for overhaul. Please contact BIG Kaiser for details of repair.

SHELL MILL HOLDER BIG-PLUS® BBT30/40



BBT

Catalog Number	øD1	øD2	øD3	L	L1	L2	L3	W	G	Weight (lbs.)
BBT30-SMC.750-2	.750	1.689	.88	2.00	.69	.16	.16	.313	3/8"-24	1.6
-SMC1.000-2	1.000	2.189	1.12		.69	.22	.22	.375	1/2"-20	2.0
BBT30-FMH16-37-35	16mm	1.457	—	1.38	.63	.20	—	.315	M8	1.2
-FMH22-47-45	22mm	1.850	—	1.77	.71	.20		.394	M10	1.6
-FMH27-60-45	27mm	2.362	—		.79	.24		.472	M12	2.0
BBT40-SMC.750-2	.750	1.689	.88	2.00	.69	.16	.16	.313	3/8"-24	2.9
-SMC1.000-2	1.000	2.189	1.12		.69	.22	.22	.375	1/2"-20	3.3
-SMC1.250-2	1.250	2.752	1.50		.69	.28	.28	.500	5/8"-18	4.0
-SMC1.500-2	1.500	3.626	1.88		.93	.38	.38	.625	3/4"-16	5.3
BBT40-FMH22.225-47-45	22.225mm	1.850	—	1.77	.67	.14	—	.315	M10	2.9
-60				2.36						3.3
-90				3.54						4.2
-150				5.91						5.9
-FMH22.225-60-45	22.225mm	2.362	—	1.77	.67	.14	—	.315	M10	3.3
-60				2.36						4.0
-90				3.54						5.5
-FMH25.4-70-60	25.4mm	2.756	—	2.36	.87	.20	—	.374	M12	4.4
-90				3.54						5.9
-105				4.13						6.8
-FMH31.75-76-60	31.75mm	2.992	—	2.36	1.18	.28	—	.500	M16	4.8
-90				3.54						6.4
-FMH31.75-96-60	31.75mm	3.780	—	2.36	1.18	.28	—	.500	M16	5.5
-FMH16-37-40	16mm	1.457	—	1.57	.63	.20	—	.315	M8	2.4
-FMH22-47-45	22mm	1.850	—	1.77	.71	.20	—	.394	M10	2.9
-60				2.36						3.3
-90				3.54						4.2
-150				5.91						5.9
-FMH22-60-45	22mm	2.362	—	1.77	.71	.20	—	.394	M10	3.3
-60				2.36						4.0
-90				3.54						5.5
-FMH27-60-45	27mm	2.480	—	1.77	.79	.24	—	.472	M12	3.3
-60				2.36						4.0
-90				3.54						5.5
-FMH27-76-60	27mm	2.992	—	2.36	.79	.24	—	.472	M12	4.6
-90				3.54						6.2
-FMH32-96-60	32mm	3.780	—	2.36	.87	.28	—	.551	M16	5.3

• For high speed applications, Shell Mill Holders should be balanced together with the cutters

ACCESSORIES



CLAMPING RANGE: ϕ .250"-1.250" (ϕ 6-32mm)

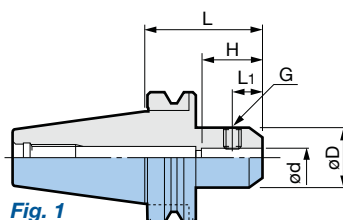


Fig. 1

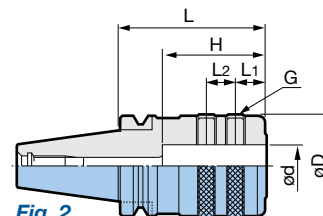


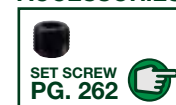
Fig. 2



Catalog Number	Fig.	ød	øD	L	L ₁	L ₂	H	G	Weight (lbs.)
BBT30-EM.250-2.5	1	.250	.88	2.50	.44	—	1.10	1/4"-28	1.3
-EM.375-2.5		.375	1.00		.75		1.77	3/8"-24	1.5
-EM.500-2.5		.500	1.38		.87		3.00	7/16"-20	1.8
-EM.625-2.5		.625	1.63		.94		2.69	9/16"-18	1.8
-EM.750-3		.750	1.75	3.00	1.00		2.75	5/8"-18	1.8
BBT30-ISL6-60	1	6mm	.98	2.36	.71	—	3.35	M6	1.3
-ISL8-60		8mm	1.10					M8	1.3
-ISL10-60		10mm	1.38		.79		1.77	M10	1.5
-ISL12-60		12mm	1.65		.89		1.89	M12	1.8
-ISL16-60		16mm	1.89		.94		2.09	M14	1.8
BBT40-EM.500-3	1	.500	1.38	3.00	.87	—	3.00	7/16"-20	2.8
-EM.625-3		.625	1.63		.94		3.50	9/16"-18	2.9
-EM.750-4		.750	1.75	4.00	1.00		3.88	5/8"-18	3.6
-EM1.000-4	2	1.000	1.25		1.13	1.00	3.13	3/4"-16	4.5
-EM1.250-4		1.250	2.75		1.13				5.6
BBT40-ISL12-75	1	12mm	1.65	2.95	.89	—	4.33	M12	3.3
-ISL16-75		16mm	1.89		.94		2.09	M14	3.3
-ISL20-75		20mm	2.05		.98		2.17	M16	3.5
-ISL25-90	2	25mm	2.50	3.54	.94	.98	2.36	M18 P2.0	4.6
-ISL32-105		32mm	2.83	4.13	.94	1.10	3.23	M20 P2.0	6.4

• For high speed applications, Mega Double Power Chucks are recommended instead of End Mill Holders

ACCESSORIES



SHRINK FIT HOLDER BIG-PLUS® BBT30/40

CLAMPING RANGE: ϕ .250"-1.000" (ϕ 4-20mm)

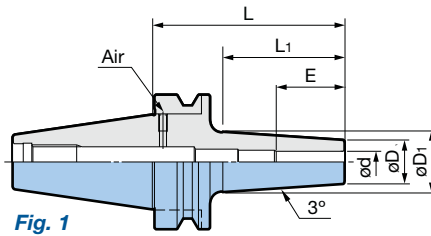


Fig. 1

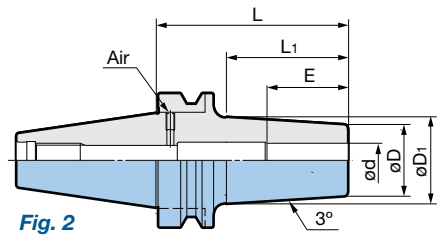
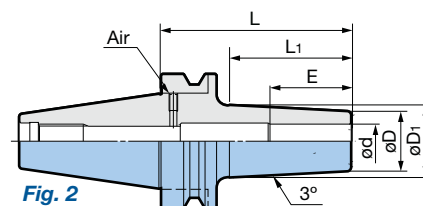
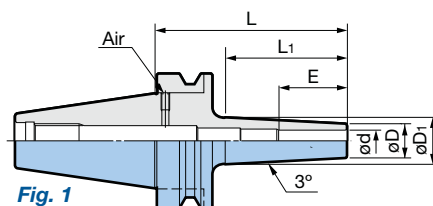


Fig. 2

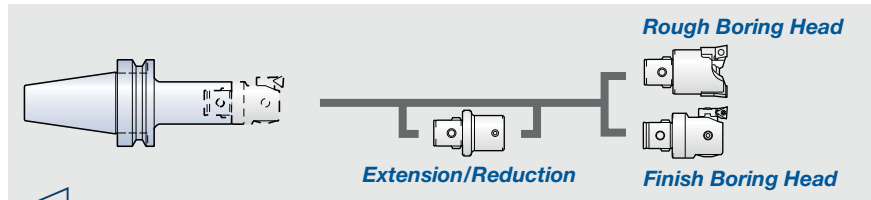
Catalog Number	Fig.	ϕd	ϕD	ϕD_1	L	L ₁	E	Weight (lbs.)
BBT30-SRC4-75	2	4mm	.394	.57	2.95	1.73	.63	1.0
-SRC6-75	1	6mm	.551	.75		1.85	1.02	1.0
-SRC8-75		8mm	.709	.91				1.1
-SRC10-75	2	10mm	.866	1.06			1.26	1.2
-SRC12-75		12mm	.945	1.14			1.42	1.3
-SRC16-75		16mm	1.102	1.30		1.89	1.50	1.4
BBT40-SF.250-3.5	1	.250	.787	1.06	3.50	2.40	.87	2.6
-SF.375-3.5		.375	.945	1.26			1.22	2.7
-SF.500-3.5		.500	.945	1.26			1.42	2.7
-SF.625-3.5		.625	1.063	1.34			1.54	2.8
-SF.750-4	2	.750	1.299	1.65	4.00	2.90	1.85	3.2
-SF1.000-4		1.000	1.732	2.09				4.0
BBT40-SRC4-90	2	4mm	—	.61	3.54	2.05	.63	2.3
-SRC6-90	1	6mm	.551	.79		2.24	1.02	2.4
-150				1.02	5.91	4.49		2.8
-SRC8-90		8mm	.709	.94	3.54	2.24		2.5
-150				1.18	5.91	4.49		3.0
-SRC10-90		10mm	.866	1.10	3.54	2.24	1.26	2.6
-150				1.34	5.91	4.57		3.3
-SRC12-90		12mm	.945	1.18	3.54	2.24	1.42	2.6
-150				1.42	5.91	4.57		3.4
-SRC16-90	2	16mm	1.102	1.34	3.54	2.24	1.50	2.8
-165				1.65	6.50	5.20		4.0
-SRC20-90		20mm	1.339	1.57	3.54	2.24	1.65	3.0
-165				1.89	6.50	5.20		4.6

CLAMPING RANGE: $\phi 6$ -12mm

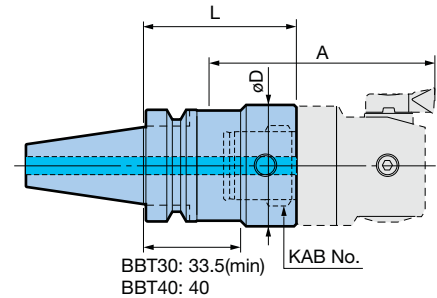
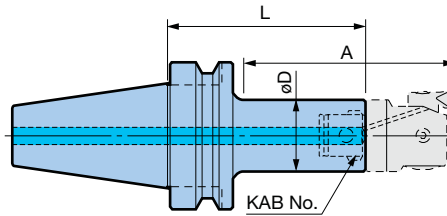
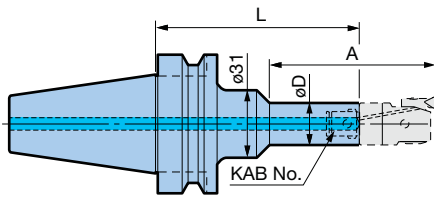


Catalog Number	Fig.	ϕd	ϕD	ϕD_1	L	L ₁	E	Weight (lbs.)
BBT30-SRC6S-105	1	6mm	.394	.71	4.13	3.03	1.02	1.1
-SRC8S-105		8mm	.512	.83				1.1
-SRC10S-105	2	10mm	.630	.94			1.26	1.2
-SRC12S-105		12mm	.748	1.06			1.42	1.3
BBT40-SRC6S-120	1	6mm	.394	.75	4.72	3.39	1.02	2.4
-165				.93	6.50	5.00		2.7
-SRC8S-120				.87	4.72	3.39		2.5
-165		8mm	.512	1.04	6.50	5.08	1.26	2.8
-SRC10S-120				.98	4.72	3.39		2.6
-165				1.16	6.50	5.08		3.0
-SRC12S-120		12mm	.748	1.10	4.72	3.43	1.42	2.7
-165				1.30	6.50	5.16		3.2

KAISER KAB BIG-PLUS® BBT30/40/50



For entire KAISER Boring System,
please see catalog—
KAISER Precision Modular Tooling System

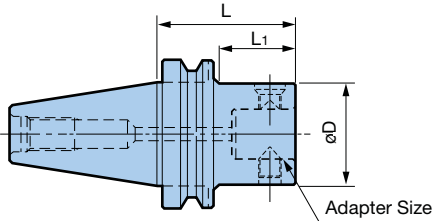


BIG	KAISER	Type	KAB No.	ϕD	L	A	Weight (lbs)
BBT30-CK1-105		1	KAB1	.748	2.835	2.87	1.1
-CK2-75		2	KAB2	.945	1.476	1.89	0.7
-120					3.248	3.66	1.3
-CK3-85			KAB3	1.220	1.535	2.09	1.0
-120					3.110	3.66	1.5
-CK4-85			KAB4	1.535	1.496	2.28	1.0
-120					2.874	3.66	1.7
-CK5-120		3	KAB5	1.969	2.480	—	1.8
-CK6-135			KAB6	2.520	2.520	2.87	2.9
BBT40-CK1-105		2	KAB1	.748	2.835	1.89	2.4
-CK2-80			KAB2	.945	1.673	3.46	2.2
-120					3.248	2.09	2.6
-CK3-85			KAB3	1.220	1.732	4.06	2.4
-135					3.701	5.24	2.9
-165					4.882	2.28	3.3
-CK4-90			KAB4	1.535	1.693	4.06	2.6
-135					3.465	5.24	3.3
-165					4.646	6.42	4.0
-195					5.827	2.87	4.6
-CK5-105			KAB5	1.969	1.890	4.06	2.6
-135					3.071	5.24	3.5
-165					4.252	6.42	4.6
-195					5.433	3.35	5.5

BIG	KAISER	Type	KAB No.	øD	L	A	Weight (lbs)
	10.326.160	3	KAB6	2.500	1.811	3.35	2.2
	10.323.731				2.402	3.94	2.9
	10.323.831				2.402	3.94	2.9
BBT30-CK6-135				2.520	2.520	4.06	3.5
-165					3.701	5.24	5.1
-195					4.882	6.42	2.2
	10.323.832N		CKN6	2.500	1.811	3.35	2.2
	10.323.731N				2.402	3.94	2.9
	10.323.831N				2.402	3.94	2.9
BBT50-CK1-135		1	KAB1	.748	4.016	2.87	8.8
-CK2-90		2	KAB2	.945	2.067	1.85	8.4
-150					4.429	4.21	8.8
-CK3-95			KAB3	1.220	2.126	2.05	8.6
-165					4.882	4.80	9.5
-CK4-105			KAB4	1.535	2.283	2.44	9.5
-165					4.646	4.80	9.9
-225					7.008	7.17	10.8
-255					8.189	8.35	11.2
-CK5-120			KAB5	1.969	2.480	3.03	8.8
-165					4.252	4.80	10.4
-240					7.205	7.76	13.0
-285					8.976	9.53	14.3
-320					10.354	10.91	15.4
	10.323.870		KAB6	2.500	2.835	3.94	8.7
-CK6-165				2.520	3.701	4.80	10.6
-240					6.654	7.76	14.8
-300					9.016	10.12	18.1
-360					11.378	12.48	21.4
	10.323.871		KAB7	3.543	3.386	6.30	9.9
-CK7-210				3.543	3.661	6.77	11.0
	10.323.875				5.354	8.27	16.3
-300					7.205	10.31	20.7
-360					9.567	12.68	27.3
	10.323.874N		CKN6	2.500	2.835	3.94	16.3
	10.323.871N		CKN7	3.543	3.386	6.30	9.9

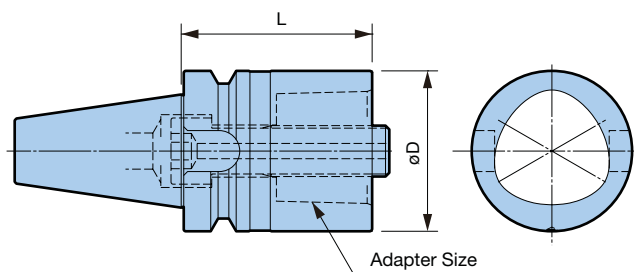
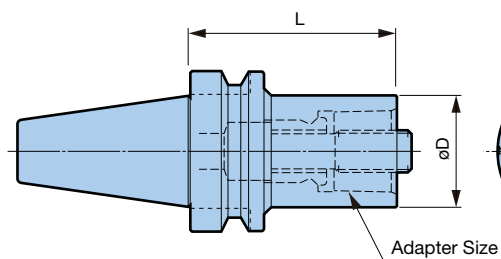
BIG KOMET ABS

BIG-PLUS® BBT40/50



Catalog Number	Adapter Size	øD	L	L1	Weight (lbs.)
BBT40-ABS50-60	ABS50	1.969	2.362	1.22	3.1
-ABS63-70	ABS63	2.480	2.756	1.69	4.0
BBT50-ABS80-100	ABS80	3.150	3.937	2.36	12.5
-ABS100-110	ABS100	3.937	4.331	2.84	15.4

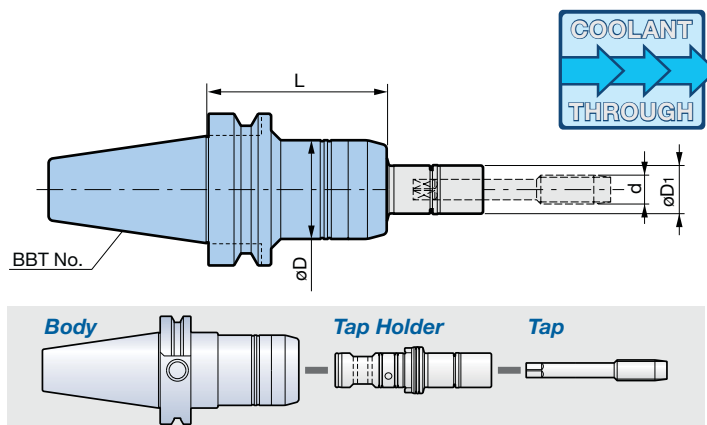
BBT



Catalog Number	Adapter Size	øD	L	Weight (lbs.)
BBT40-C5-50	C5	1.969	1.969	2.2
-C6-75	C6	2.480	2.953	3.6
BBT50-C5-40	C5	1.969	1.575	8.0
-C6-50	C6	2.480	1.969	7.3
-C8-70	C8	3.150	2.756	8.2

MEGA SYNCHRO BIG-PLUS® BBT30/40/50

Tapping Range: No.2-AU3/4 (M2-M20)



Catalog Number	Tapping Range d*	øD	øD1	L	Weight (lbs.)
BBT30-MGT6-70	No.2–No.12	1.42	.63	2.76	1.5
-MGT12-70	AU1/4–AU7/16	1.61	.79	2.76	1.8
-MGT20-110	AU1/2–AU3/4 AP1/8–AP1/4	2.13	1.18	4.33	3.3
BBT40-MGT6-75	No.2–No.12	1.42	.63	2.95	2.9
-MGT12-75	AU1/4–AU7/16	1.61	.79	2.95	3.1
-MGT20-95	AU1/2–AU3/4 AP1/8–AP1/4	2.13	1.18	3.74	4.0
BBT50-MGT6-90	No.2–No.12	1.42	.63	3.54	8.6
-MGT12-90	AU1/4–AU7/16	1.61	.79	3.54	8.8
-MGT20-105	AU1/2–AU3/4 AP1/8–AP1/4	2.13	1.18	4.13	9.7

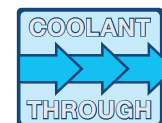
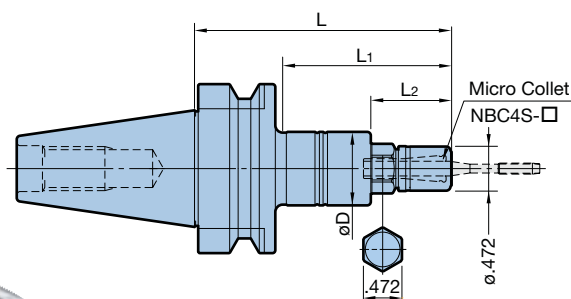
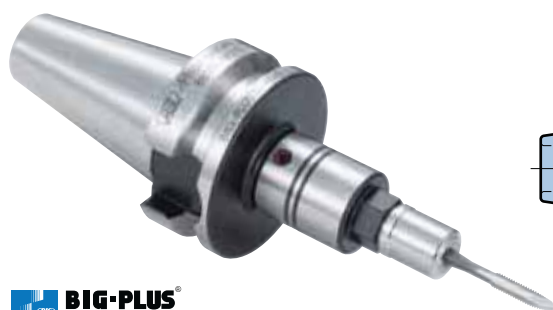
*AU3/8 is included in the MGT20 series

- Tap Holder and wrench must be ordered separately
- Rigid tapping function is required on the machine tool
- Designed to be capable of supplying coolant through spindle

ACCESSORIES

 TAP HOLDER PG. 268	 MEGA NUT PG. 276	 SYNCHRO ADJUSTER PG. 276	 O-RING PG. 276	 MEGA WRENCH PG. 259	 SCREW PG. 276
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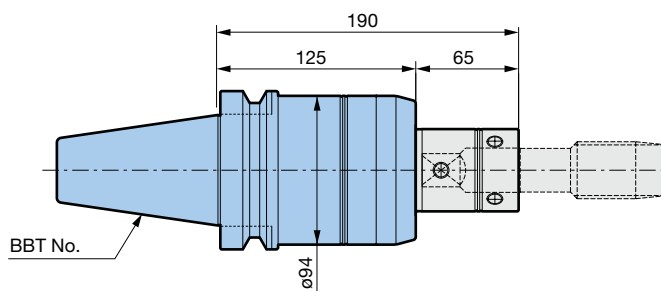
Tapping Range: No.0-No.6 (M1-M3)



Catalog Number	Tapping Range d	øD	L	L ₁	L ₂	Weight (lbs.)
BBT30-MGT3-70	No.0-No.6	.787	2.76	1.81	.87	1.5

- Nut is included
- Collet and wrench must be ordered separately
- 12mm common spanner is also required to clamp/unclamp the tap
- Rigid tapping function is required on the machine tool
- Not capable of supplying coolant through the holder body

Tapping Range: AU13/16-AU1-3/8 (M20-M36)



Catalog Number	Tapping Range d	øD	L	Weight (lbs.)
BBT50-MGT36-125	AU13/16-AU1-3/8 AP3/8-AP1	3.70	4.92	15.8

- MGT Set Screw and Adjust Screw are included, Tap Holder and wrench must be ordered separately
- Designed to be capable of supplying coolant through spindle
- Rigid tapping function is required on the machine tool

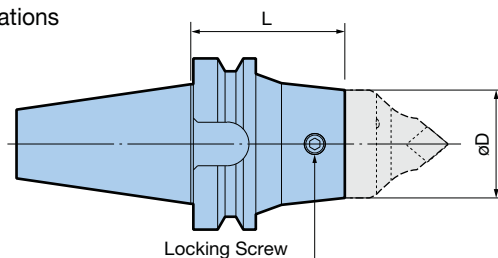
ACCESSORIES

 TAP HOLDER PG. 268	 MEGA NUT PG. 276	 SYNCHRO ADJUSTER PG. 276	 O-RING PG. 276	 MEGA WRENCH PG. 259	 SCREW PG. 276
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TURNING TOOLS—BASIC HOLDER

BIG-PLUS® BBT40M/50M

Modular Tooling System for Turning Applications



Catalog Number	Type	øD	L	Locking Screw
BBT40M-S50-75	S50	1.969	2.953	10.690.435
-S63-65	S63	2.480	2.559	10.690.436
BBT50M-S50-120	S50	1.969	4.724	10.690.435
-S63-110	S63	2.480	4.331	10.690.436

- Basic holders include a locking screw

ACCESSORIES

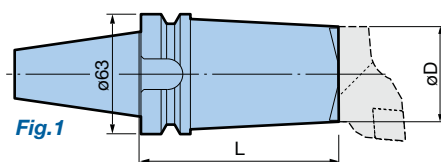


Fig.1

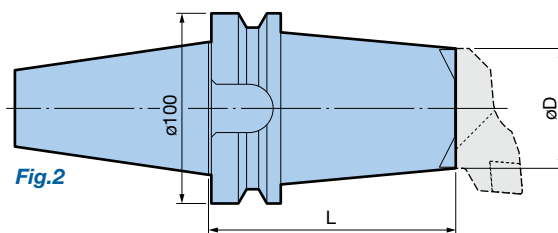


Fig.2



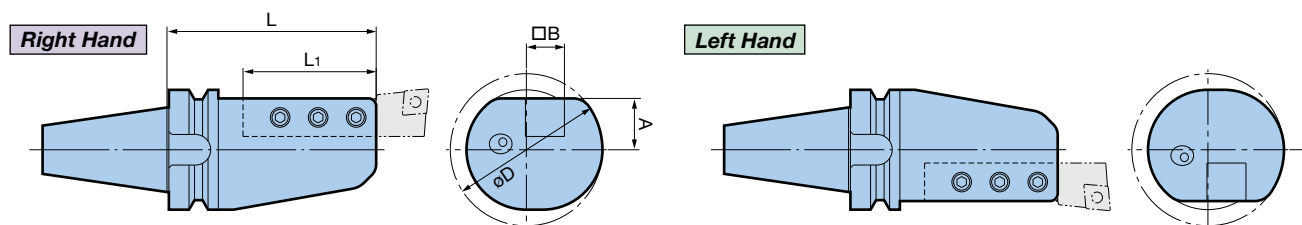
Catalog Number	Type	Fig.	øD	L
BBT40M-F50-75	F50	1	1.969	2.953
-105				4.134
BBT50M-F63-70	F63	2	2.480	2.756
-130				5.118

- Basic holders include M10x22L and M10x25L screws for clamping cartridges
- Wrench is not included

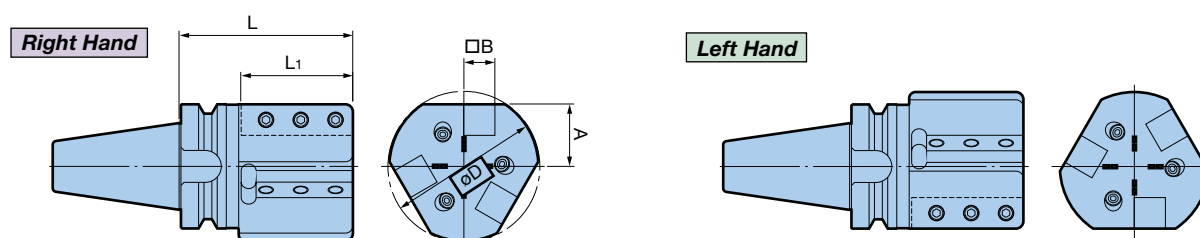
ACCESSORIES



For Square Holder Turning Applications



Catalog Number	Hand	B	L	L ₁	A	øD
BBT40M-180-BH20R-110	R	20mm	4.33	2.76	1.06	3.15
-BH20L-110	L					
-BH25R-130	R	25mm	5.12	3.54	1.24	3.54
-BH25L-130	L					
BBT50M-180-BH25R-140	R	25mm	5.51	3.54	1.97	4.72
-BH25L-140	L					



Catalog Number	Hand	B	L	L ₁	A	øD
BBT40M-180-3BH20R-110	R	20mm	4.33	2.76	1.38	3.54
-3BH20L-110	L					
BBT50M-180-3BH25R-140	R	25mm	5.51	3.54	1.97	4.72
-3BH25L-140	L					

CAUTION

60 degree indexing is required to the machine tool spindle.

TURNING TOOLS—BORING BAR HOLDER

BIG-PLUS® BBT40M/50M

CLAMPING RANGE: $\varnothing 6$ - $\varnothing 50$ mm

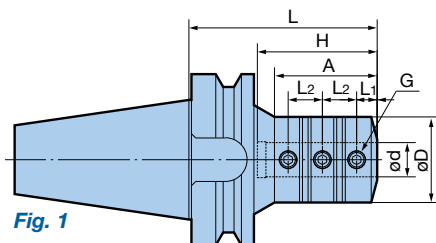


Fig. 1

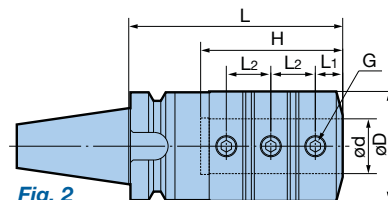


Fig. 2



Catalog Number	Fig.	$\varnothing d$	$\varnothing D$	L	L ₁	L ₂	H	A	G
BBT40M-BSL6-60	1	6mm	.906	1.97	.197	.315	1.18	.98	M5 P0.8
-BSL8-75		8mm	.984	2.95	.236	.394	1.57	1.57	M6 P1.0
-BSL10-80		10mm	1.142	3.15	.315	.472	1.97	1.77	M8 P1.0
-BSL12-90		12mm	1.339	3.54	.315	.630	2.17	2.09	M8 P1.0
-BSL16-100		16mm	1.575	3.94	.394	.827	2.68	2.56	M10 P1.25
-BSL20-100		20mm	1.969	3.94	.472	.787	2.76	2.64	M10 P1.25
-BSL25-110		25mm	2.165	4.33	.551	.906	2.91	3.27	M12 P1.5
-BSL32-125		32mm	2.520	4.92	.630	1.024	3.27	—	M12 P1.5
-BSL40-150	2	40mm	3.150	5.91	.709	1.260	3.86	—	M16 P1.5
BBT50M-BSL6-80	1	6mm	.906	3.15	.197	.315	1.18	1.26	M5 P0.8
-BSL8-85		8mm	.984	3.35	.236	.394	1.57	1.50	M6 P1.0
-BSL10-90		10mm	1.142	3.54	.315	.472	1.97	1.69	M8 P1.0
-BSL12-100		12mm	1.339	3.94	.315	.630	2.17	2.09	M8 P1.0
-BSL16-105		16mm	1.575	4.13	.394	.827	2.68	2.40	M10 P1.25
-BSL20-110		20mm	1.969	4.33	.472	.787	2.76	2.36	M10 P1.25
-BSL25-120		25mm	2.165	4.72	.551	.906	2.91	2.76	M12 P1.5
-BSL32-125		32mm	2.520	4.92	.630	1.417	3.27	3.15	M12 P1.5
-BSL40-135		40mm	3.150	5.31	.709	1.260	3.86	3.58	M16 P1.5
-BSL50-145		50mm	3.543	5.71	.709	1.417	4.53	4.02	M16 P1.5

- Interchangeable between center-through and side-through coolant supply by using plugs
- Plug A (1 pc.) and Plug B (2 pcs.) are included as standard



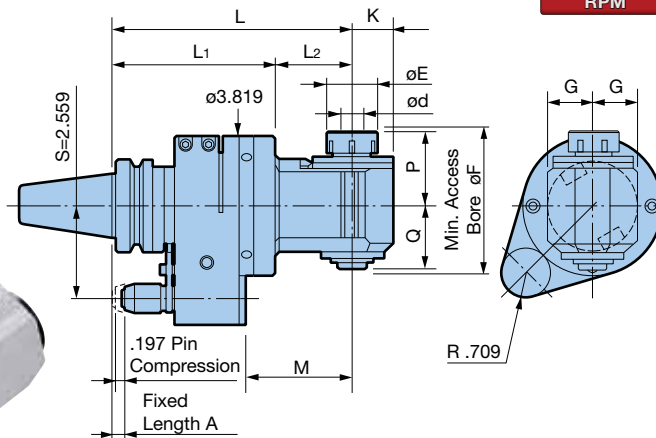
Catalog Number	Plug A	Plug B
BSL6	M5 P0.8	M4 P0.7
BSL8	M6 P1.0	
BSL10		M5 P0.8
BSL12		M6 P1.0
BSL16		
BSL20		
BSL25	※ M8 P1.25	
BSL32		
BSL40		

- Both plugs are included as standard
- * Bottom-head bolt



ANGLE HEAD—AG90 NBS TYPE BIG-PLUS® BBT40

CLAMPING RANGE: ϕ .010"-.787"



MAX
6,000
RPM

BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ϕd	ϕE	G	K	L	L ₁	L ₂	M	P	Q	ϕF	Collet	Max RPM	Weight (lbs.)
BBT40-AG90/NBS6-170	.010-.236	.787	.827	.669	6.69	4.53	2.17	3.03	1.30	1.14	2.638	NBC 6	6,000	11.2
-200					7.87		3.35	4.21						11.7
-230					9.06		4.53	5.39						12.1
-260					10.24		5.71	6.58						12.5
-AG90/NBS10-170	.059-.394	1.181	1.181	.984	6.69	4.53	2.17	3.03	1.77	1.69	3.583	NBC10	6,000	12.1
-200					7.87		3.35	4.21						13.0
-230					9.06		4.53	5.39						13.7
-AG90/NBS13-170	.098-.512	1.378	1.220	1.102	6.69	4.53	2.17	3.03	2.05	1.77	3.976	NBC13	6,000	12.3
-200					7.87		3.35	4.21						13.2
-230					9.06		4.53	5.39						13.9
-AG90/NBS20S-165S	.098-.787	1.811	1.378	1.299	6.50	4.41	2.09	2.84	2.56	2.44	5.197	NBC20	3,000	17.6

- The standard fixed length A is .315, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Nut and wrench are included
- Collet must be ordered separately
- For greater rigidity High Rigidity S-Type with a steel housing and a stronger locating pin assembly is also available, please add "S" after each model number when ordering High Rigidity Type

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse
direction of the machine spindle (Speed Ratio 1:1).

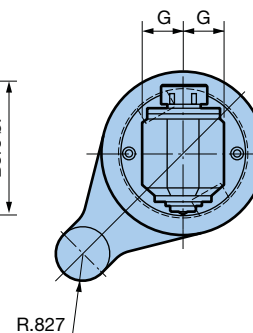
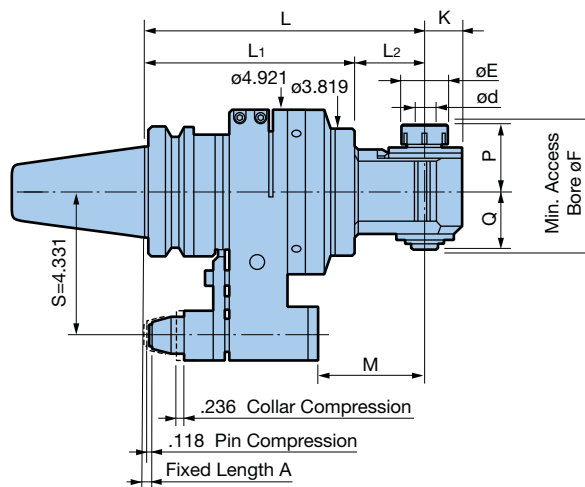
ACCESSORIES



ANGLE HEAD—AG90 NBS TYPE BIG-PLUS® BBT50



CLAMPING RANGE: ϕ .010"-.787"



MAX
6,000
RPM



Catalog Number	ϕd	ϕE	G	K	L	L ₁	L ₂	M	P	Q	ϕF	Collet	Max RPM	Weight (lbs.)
BBT50-AG90/NBS6-215	.010-.236	.787	.827	.669	8.47	6.30	2.17	3.23	1.30	1.14	2.638	NBC 6	6,000	27.8
-245					9.65		3.35	4.41						28.2
-275					10.83		4.53	5.59						28.7
-305					12.01		5.71	6.77						29.0
-AG90/NBS10-215	.059-.394	1.181	1.181	.984	8.47	6.30	2.17	3.23	1.77	1.69	3.583	NBC10	6,000	28.7
-245					9.45		3.35	4.41						29.5
-275					10.83		4.53	5.59						30.2
-AG90/NBS13-215	.098-.512	1.378	1.220	1.102	8.47	6.30	2.17	3.23	2.05	1.77	3.976	NBC13	6,000	28.9
-245					9.45		3.35	4.41						29.8
-275					10.83		4.53	5.59						30.4
-AG90/NBS20-230	.098-.787	1.811	1.378	1.378	9.06	6.30	2.76	3.82	2.56	2.44	5.197	NBC20	3,000	31.3

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Nut and wrench are included
- Collet must be ordered separately
- For greater rigidity High Rigidity S-Type with a steel housing and a stronger locating pin assembly is also available, please add "S" after each model number when ordering High Rigidity Type

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES

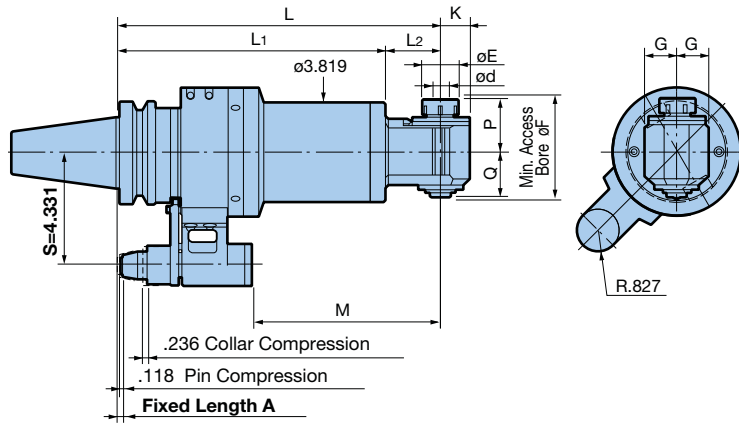


BBT

ANGLE HEAD—AG90 NBS EXTRA LONG TYPE BIG-PLUS® BBT50

CLAMPING RANGE: ϕ .010"-.787" — For Drilling & Key Slotting in Deep Holes of Large Workpieces

**MAX
6,000
RPM**



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ød	øE	G	K	L	L ₁	L ₂	M	P	Q	øF	Collet	Max RPM	Weight (lbs.)
BBT50-AG90-NBS-6-315LS	.010-.236	.787	.827	.669	12.40	10.24	2.17	7.17	1.30	1.14	2.638	NBC 6	6,000	41.7
-345LS					13.58		3.35	8.35						42.1
-375LS					14.76		4.53	9.53						42.5
-405LS					15.94		5.71	10.71						43.0
-AG90/NBS10-315LS	.059-.394	1.181	1.181	.984	12.40	10.24	2.17	7.17	1.77	1.69	3.583	NBC 10		42.5
-345LS					13.58		3.35	8.35						43.4
-375LS					14.76		4.53	9.53						44.1
-AG90/NBS13-315LS	.098-.512	1.378	1.220	1.102	12.40	10.24	2.17	7.17	2.05	1.77	3.976	NBC 13		42.8
-345LS					13.58		3.35	8.35						43.7
-375LS					14.76		6.10	9.53						44.3
-AG90/NBS20-330LS	.098-.787	1.811	1.378	1.378	12.99	10.24	2.76	7.76	2.56	2.44	5.197	NBC 20	3,000	45.2
-AG90-NBS-6-415LS	.009-.236	.787	.827	.669	16.34	14.17	2.17	11.10	1.30	1.14	2.638	NBC 6	6,000	51.4
-445LS					17.52		3.35	12.28						51.8
-475LS					18.70		4.53	13.46						52.2
-505LS					19.88		5.71	14.65						52.7
-AG90/NBS10-415LS	.059-.394	1.181	1.181	.984	16.34	14.17	2.17	11.10	1.77	1.69	3.583	NBC 10		52.2
-445LS					17.52		3.35	12.28						53.1
-475LS					18.70		4.53	13.46						53.8
-AG90/NBS13-415LS	.098-.511	1.378	1.220	1.102	16.34	14.17	2.17	11.10	2.05	1.77	3.976	NBC 13		52.5
-445LS					17.52		3.35	12.28						53.4
-475LS					18.70		6.10	13.46						54.0
-AG90/NBS20-430LS	.098-.787	1.811	1.378	1.378	16.93	14.17	2.76	11.69	2.56	2.44	5.197	NBC 20	3,000	54.9

ANGLE HEAD—AG90 NBS EXTRA LONG TYPE BIG-PLUS® BBT50

Catalog Number	ød	øE	G	K	L	L ₁	L ₂	M	P	Q	øF	Collet	Max RPM	Weight (lbs.)
BBT50-AG90-NBS-6-515LS	.010-.236	0.787	0.827	.669	20.28	18.11	2.17	15.04	1.30	1.30	2.638	NBC 6	6,000	61.1
-545LS					21.46		3.35	16.22						61.5
-575LS					22.64		4.53	17.40						61.9
-605LS					23.82		5.71	18.58						62.4
-AG90/NBS10-515LS	.059-.394	1.181	1.181	.984	20.28	18.11	2.17	15.04	1.77	1.77	3.583	NBC 10		61.9
-545LS					21.46		3.35	16.22						62.8
-575LS					22.64		4.53	17.40						63.5
-AG90/NBS13-515LS	.098-.512	1.378	1.220	1.102	20.28	18.11	2.17	15.04	2.05	2.05	3.976	NBC 13		62.2
-545LS					21.46		3.35	16.22						63.1
-575LS					22.64		6.10	17.40						63.7
-AG90/NBS20-530LS	.098-.787	1.811	1.378	1.378	20.87	18.11	2.76	15.63	2.56	2.56	5.197	NBC 20	3,000	64.6

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Nut and wrench are included
- Collet must be ordered separately
- For greater rigidity High Rigidity S-Type with a steel housing and a stronger locating pin assembly is also available, please add "S" after each model number when ordering High Rigidity Type
- New Baby Collet for End Mill model NBC□-□EAA cannot be used

CAUTION

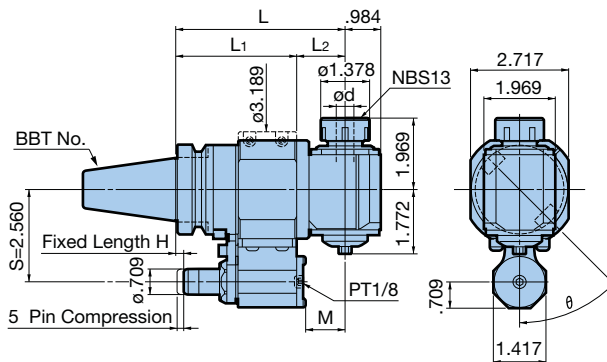
A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



ANGLE HEAD—AG90 BIG-PLUS® BBT40

CLAMPING RANGE: ϕ .098"-.512" — For Drilling Only & Ideal Size for Small Machining Centers



**MAX
5,000
RPM**



Catalog Number	Fig.	ϕ d	L	L1	L2	M	Collet	Speed Ratio	Weight (lbs.)
BBT40-AG90-13-120	1	.098-.512	4.72	3.39	1.34	1.10	NBS13	1:1	10.0

- Nut and wrench are included
- Collet must be ordered separately
- End mill collet cannot be used
- Stop Block is necessary to mount the Angle Head on the machine, please order separately

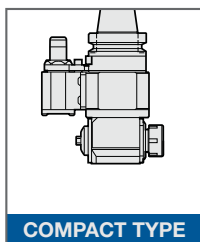
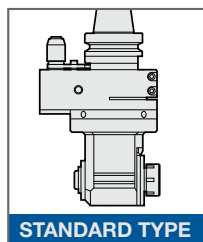
CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



Case & Head Sizes are Substantially Reduced.



Features:

- High precision New Baby Collet
- Spiral bevel gears and angular contact bearings
- Advanced non-contact sealing structure

APPLICATION EXAMPLE

Stable machining is obtained due to high rigidity and good runout.



DRILLING	
Cutter	ϕ .472" (12mm) carbide drill
Workpiece	1050 Steel
Cutting Speed	230 SFM
Cutting Feed	14.6 IPM .008 IPR
Spindle Speed	1,860 RPM

ANGLE HEAD—AG90 SLENDER DRIVE BIG-PLUS® BBT40/50



CLAMPING RANGE: ϕ .118"-.236" — For Angular Operations Within a ϕ 1.181 Inch Bore



**MAX
2,000
RPM**

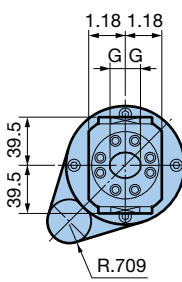
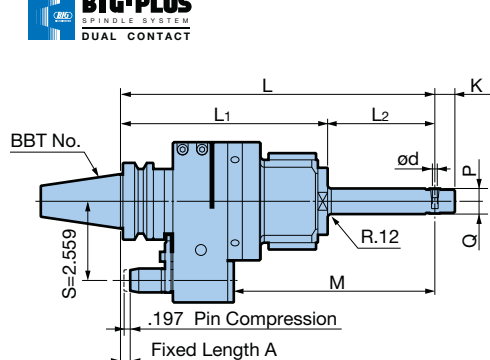
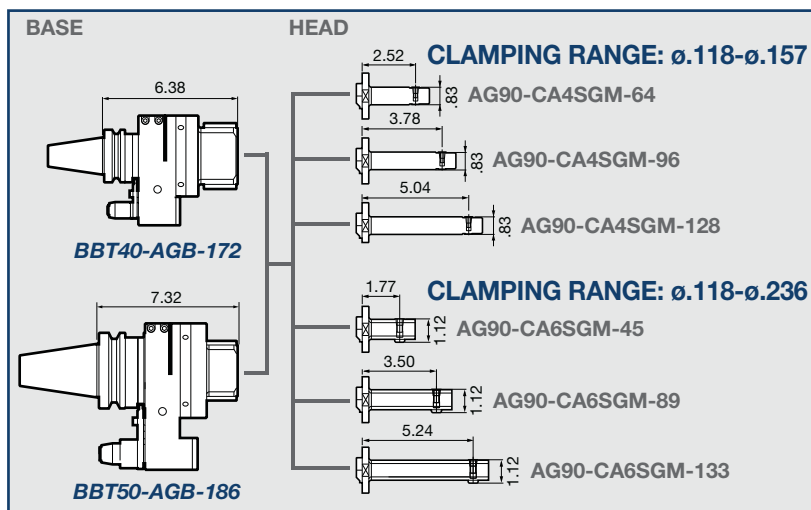


Fig. 1

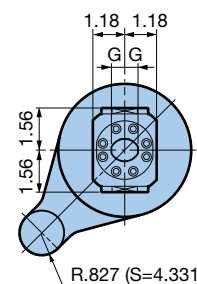
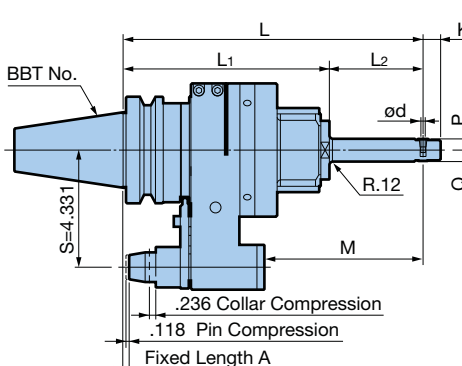


Fig. 2

Base	Head	Fig.	ϕd	G	K	L	L1	L2	M	P	Q	Speed Ratio	Weight (lbs.)
BBT40-AGB-162	AG90-CA4SGM-64	1	.118-.157	.492	.650	8.90	6.69	2.20	5.24	.41	.41	1:1.06 (Increase)	12.3
	-96					10.16		3.46	6.50				12.5
	-128					11.42		4.72	7.76				12.8
	AG90-CA6SGM-45	1	.118-.236	.591	.787	8.15	6.69	1.46	4.49	.49	.63	1:0.77 (Decrease)	12.5
	-89					9.88		3.19	6.22				13.0
	-133					11.61		4.92	7.95				13.4
BBT50-AGB-186	AG90-CA4SGM-64	2	.118-.157	.492	.650	9.84	7.64	2.20	4.61	.41	.41	1:1.06 (Increase)	26.2
	-96					11.10		3.46	5.87				26.4
	-128					12.36		4.72	7.13				26.6
	AG90-CA6SGM-45	2	.118-.236	.591	.787	9.09	7.64	1.46	3.86	.49	.63	1:0.77 (Decrease)	26.4
	-89					10.83		3.19	5.59				26.8
	-133					12.56		4.92	7.32				27.3

- The standard fixed length A: 40 taper= .315, 50 taper= .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Coolant cannot be supplied through the Locating Pin
- Exclusive collets must be ordered separately
- S= 3.150 type is available for #50 taper models upon request

CAUTION

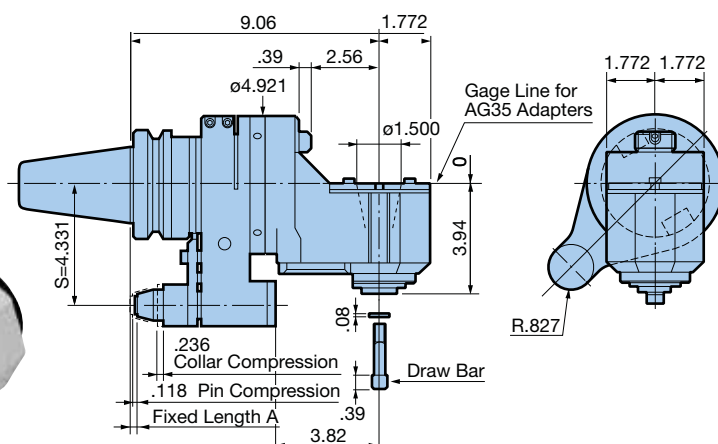
A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

ACCESSORIES



ANGLE HEAD—AG90 BUILD-UP TYPE BIG-PLUS® BBT50

For all Kinds of Machining Applications



Catalog Number	Weight (lbs.)
BBT050-AG90/AGH35-230	33.1

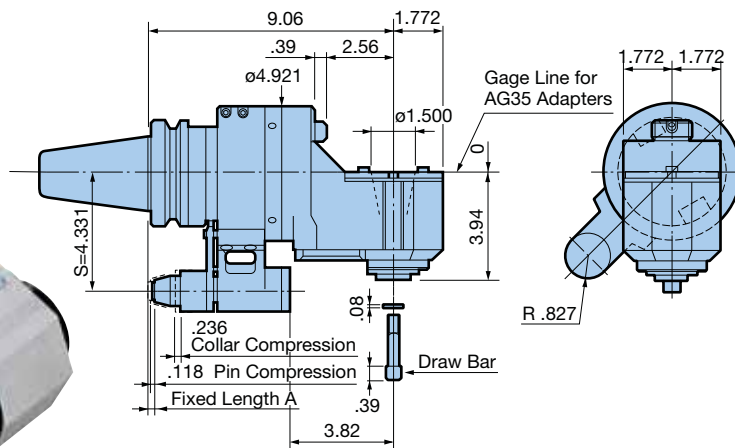


CAUTION

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

For Applications Where Increased Rigidity is Required



Catalog Number	Weight (lbs.)
BBT50-AG90/AGH35-230S	35.9



CAUTION

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

ACCESSORIES



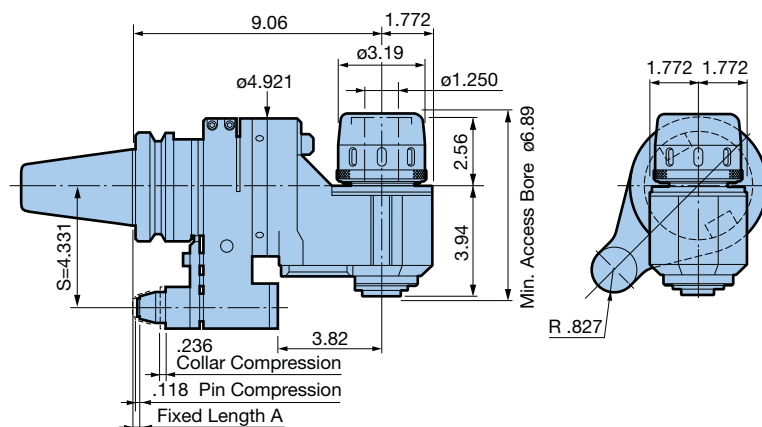
ANGLE HEAD—AG90 HMC TYPE BIG-PLUS® BBT50



For Heavy Duty End Milling



MAX
3,000
RPM



Catalog Number	Weight (lbs.)
BBT50-AG90/HMC1.250-230	37.0



CAUTION

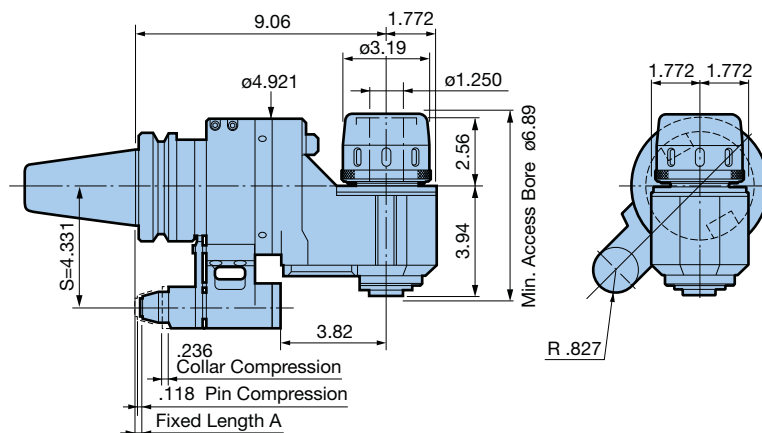
A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

For Applications Where Increased Rigidity is Required



MAX
3,000
RPM



Catalog Number	Weight (lbs.)
BBT50-AG90/HMC1.250-230S	39.9



CAUTION

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

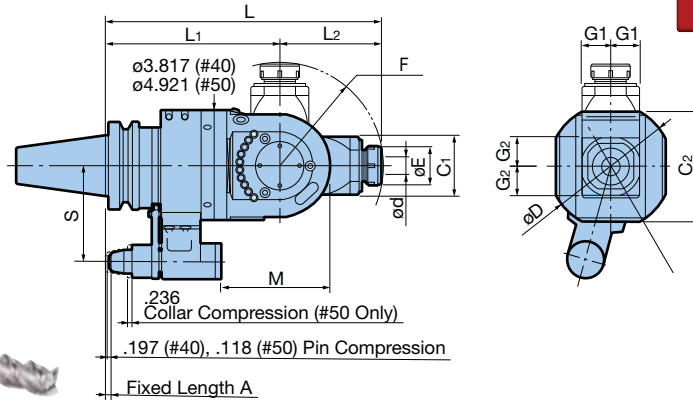
ACCESSORIES



ANGLE HEAD—AGU UNIVERSAL TYPE BIG-PLUS® BBT40/50

CLAMPING RANGE: ϕ .098"-.787" — For Angular Operations

**MAX
6,000
RPM**



Catalog Number	ϕ d	ϕ E	ϕ D	C ₁	C ₂	G ₁	G ₂	L	L ₁	L ₂	M	F	S	Collet	Max RPM	Weight (lbs.)
BBT40-AGU/NBS13-270	.098-.512	1.378	4.53	2.00	3.82	1.024	1.014	10.63	6.70	3.94	4.88	4.02	2.559	NBC13	6,000	21.4
BBT50-AGU/NBS20-315	.098-.787	1.811	5.51	2.56	4.92	1.299	1.280	12.40	7.87	4.53	4.92	4.65	4.331	NBC20	4,000	44.1

- The standard fixed length A: 40 taper= .315, 50 taper= .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Clamping nut & wrench included
- Collet must be ordered separately

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse
direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



**Easily Adjustable Spindle
Angle From 0° to 90°**



Precise Angle Adjustment

Unique setting mechanism enables the spindle angle to be precisely set at 1° increments.

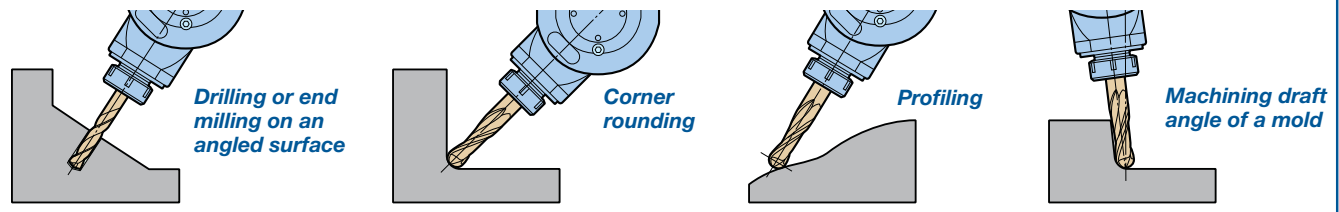


Exclusive Clamping Bolts and Nuts

Specially selected materials and special design for clamping the head guarantees rigidity even for end milling applications.

APPLICATION EXAMPLE

Adjustable AGU Universal Series expands Angle Head capabilities to accomplish various angular machining applications.



ANGLE HEAD—AGU30 TYPE BIG-PLUS® BBT40



CLAMPING RANGE: ϕ .098"-.787" — For Angular Operations

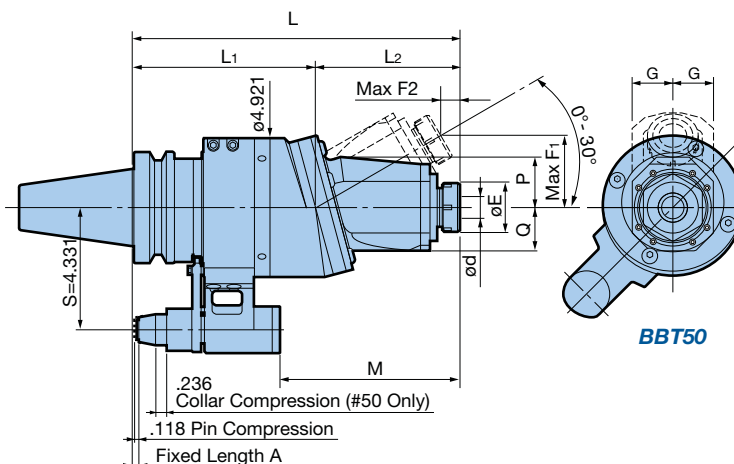
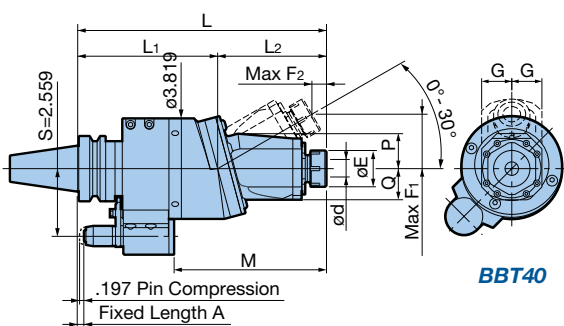
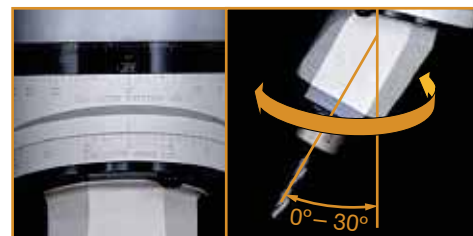
BBT40
MAX
4,000
RPM

BBT50
MAX
6,000
RPM



Angle Adjustment by Aligning Divisions

Spindle angle is easily adjustable from 0° to 30° using the scale indication on the body.



Catalog Number	ϕd	ϕE	G	L	L ₁	L ₂	M	P	Q	F ₁	F ₂	Collet	Speed Ratio	Weight (lbs.)
BBT40-AGU30/NBS13-240	.098-.512	1.378	1.142	9.45	5.32	4.12	5.79	1.34	1.18	2.07	.55	NBC13	1 : 1	15.3
BBT50-AGU30/NBS20-295	.098-.787	1.811	1.437	11.61	6.50	5.12	6.38	1.77	1.54	2.56	.67	NBC20	1 : 1	35.8

- The standard fixed length A: 40 taper= .315, 50 taper= .236, other lengths are available upon request
- Clamping nut and wrench are included
- Collet must be ordered separately
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°

CAUTION

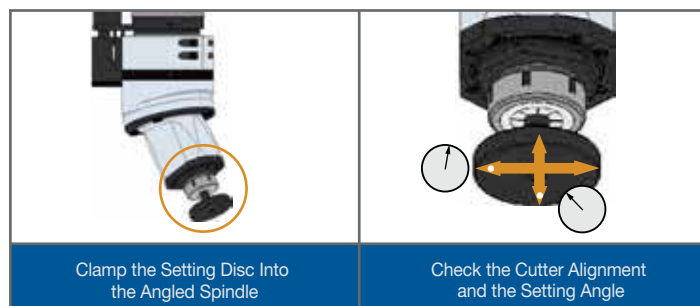
A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



Setting Disc (Included)

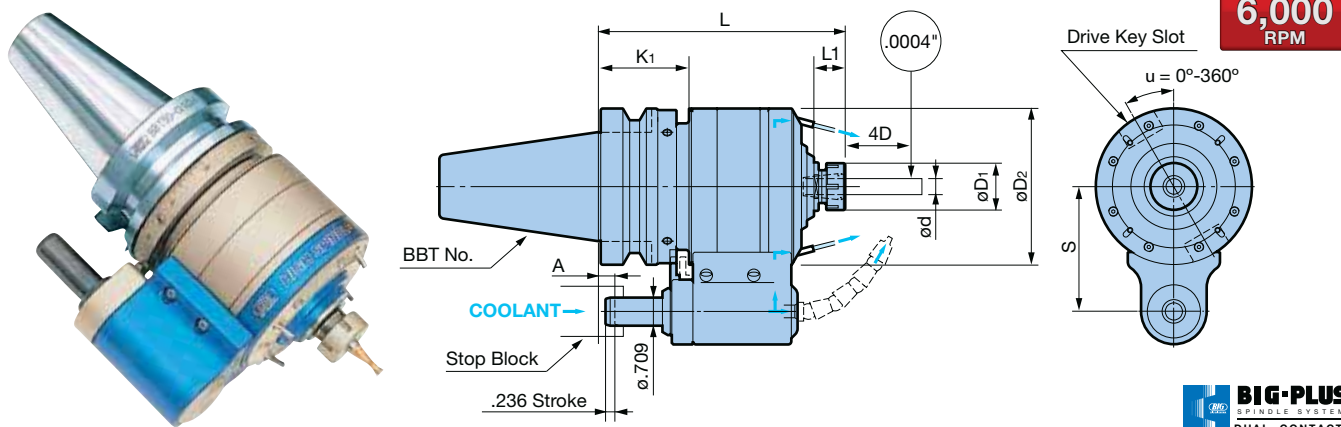
For the precise adjustment of spindle angle or direction.



BBT



CLAMPING RANGE: ϕ .059"-.630" — For Higher Spindle Speeds



Catalog Number	ϕd	L	L1	ϕD_1	ϕD_2	K1	S	A	Speed Ratio	Max RPM	Weight (lbs.)
BBT40-GTG5-10-140-65	.059-.394	5.51	.79	1.181	3.150	1.69	2.559	-.354 +.236	4.67	20,000	10.6
BBT50-GTG6-10-158-80	.059-.394	6.22	.79	1.181	3.937	2.28	3.150	-.354 +.236	5.67	20,000	19.4
-GTG4-16-177-80	.098-.630	6.97	1.00	1.654	4.331	2.28	3.150	-.354 +.236	3.80	15,000	23.4

- 1 pc. of maximum size collet is included as standard accessory (GTG5/6= NBC10-10AA, GTG4= NBC16-16AA)
- u (angle of locating pin to drive key groove) is adjustable to any degree from 0° - 360°
- Special air purge oil mist lubrication style is available upon request for machining graphite, ceramic, tungsten and other composite materials
- Please be aware of the risk of fire when using an oil based coolant

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



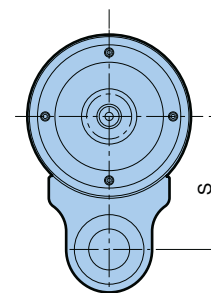
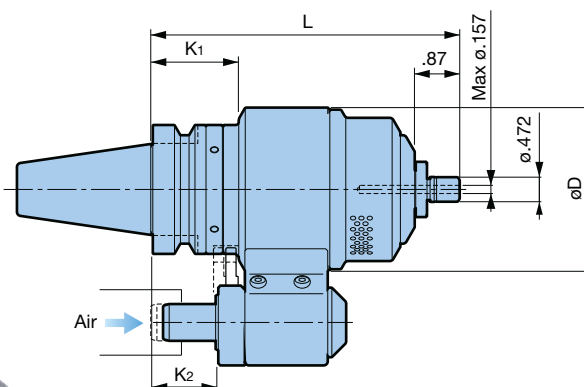
APPLICATION EXAMPLE

	GTG5	GTG6	GTG6	GTG4
Cutter	Solid carbide end mill ϕ .315" / 2 flutes	Solid carbide end mill ϕ .236" / 2 flutes	Solid carbide drill ϕ .079"	Solid carbide end mill ϕ .630"
Workpiece	Duralumin (A-2017)	1055	Duralumin (A-2017)	Duralumin (A-2017)
Spindle Speed	20,000 RPM	16,000 RPM	20,000 RPM	15,000 RPM
Cutting Feed	118.1 IPM	137.8 IPM	78.7 IPM	39.4 IPM
Results	High metal removal rate 5.5 cu.in./min.	High metal removal rate 137.8 IPM	Extended tool life 1,200 holes by 1 drill	Surface roughness RMS max. .00008"

- Results will vary depending on workpiece, cutting tool, machine model and other conditions
- The rigidity and concentricity are often affected by the projection length of a cutting tool, it is recommended to keep the projection as short as possible

AIR POWER SPINDLE—RBX5 & RBX7 BIG-PLUS® BBT30/40/50

For High Speed Micro Machining with Automatic Tool Change



MAX
80,000
RPM

BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

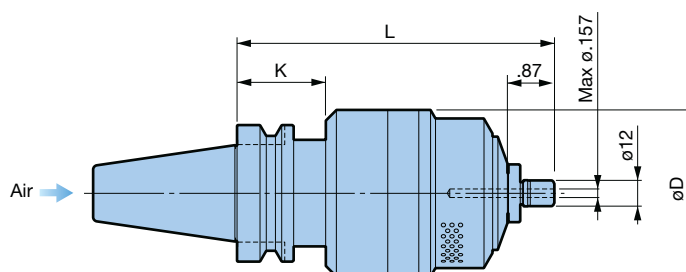
Catalog Number	Practical Spindle Speed (RPM)	Cutting Diameter	L	øD	K1	K2	S	Weight (lbs.)
BBT30-RBX7-4S-152-55	60,000 - 80,000	ø.039 or smaller	5.98	3.150	1.10	1.30	2.165	6.0
BBT40-RBX7-4S-151-65	60,000 - 80,000	ø.039 or smaller	5.95	3.150	1.69	1.30	2.559	8.8
-RBX5-4S-151-65	40,000 - 50,000	ø.059 or smaller		3.780				11.0
BBT50-RBX7-4S-166-80	60,000 - 80,000	ø.039 or smaller	6.54	3.937	2.28	1.89	3.150	19.2
-RBX5-4S-166-80	40,000 - 50,000	ø.059 or smaller						21.4

- Nut and wrench are included
- Collet must be ordered separately
- XF1-NPT (Air Unit) must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

For High Speed Micro Machining with Compressed Air Through the Machine Spindle



MAX
80,000
RPM

BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	Practical Spindle Speed (RPM)	Cutting Diameter	L	øD	K	Weight (lbs.)
BBT40-RBX7C-4S-150	60,000 - 80,000	ø.039 or smaller	5.91	3.071	1.69	6.8
-RBX5C-4S-150	40,000 - 50,000	ø.059 or smaller		3.780		9.0
BBT50-RBX7C-4S-160	60,000 - 80,000	ø.039 or smaller	6.30	3.071	2.09	13.9
-RBX5C-4S-160	40,000 - 50,000	ø.059 or smaller		3.780		16.1

- Nut and wrench are included
- Collet must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

ACCESSORIES

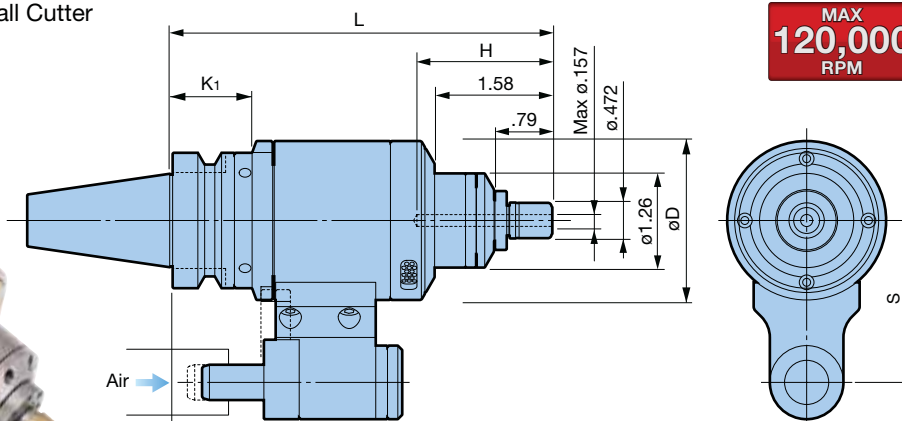
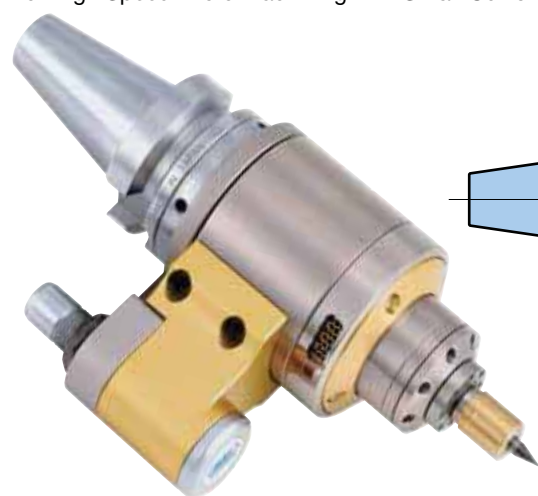


AIR POWER SPINDLE—RBX12

BIG-PLUS® BBT30/40



For High Speed Micro Machining with Small Cutter



MAX
120,000
RPM

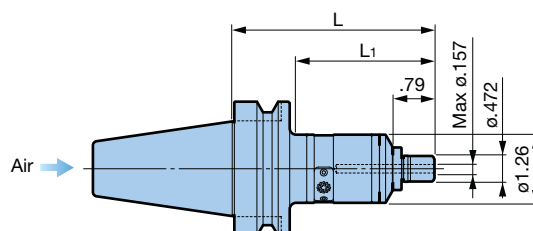


Catalog Number	Practical Spindle Speed (RPM)	Cutting Diameter	L	øD	K ₁	K ₂	S	Nut	Collet	Weight (lbs.)
BBT30-RBX12-4S-130-55	100,000-120,000	.024 or smaller	5.12	2.13	1.10	1.26	2.165	MGN4S-HG	NBC4S-d	1.5
BBT40-RBX12-4S-135-65			5.32	2.48	—	1.30	2.559			2.9

- Nut and wrench are included
- Collet must be ordered separately
- XF1-NPT (Air Unit) must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.



MAX
120,000
RPM



Catalog Number	Practical Spindle Speed (RPM)	Cutting Diameter	L	L ₁	Nut	Collet	Weight (lbs.)
BBT30-RBX12C-4S-95	100,000-120,000	.024 or smaller	3.74	2.76	MGN4S-HG	NBC4S-d	1.5
BBT40-RBX12C-4S-95			3.74	2.56			2.9

- Nut and wrench are included
- Collet must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

APPLICATION EXAMPLE

PREHARDENED STEEL NAK55 SHOULDER CUTTING			PREHARDENED STEEL NAK55 GROOVING		
RBX12	Cutter	ø.6mm Carbide End Mill (ø.024")	RBX12	Cutter	ø.6mm Carbide End Mill (ø.024")
	Spindle Speed	120,000 RPM ⇄ 116,000 RPM		Spindle Speed	120,000 RPM ⇄ 116,000 RPM
	Feed	520 mm/min (20.5 IPM)		Feed	260 mm/min (10.2 IPM)
	D.O.C.	Ad .035" Rd .001"		D.O.C.	Ad .002"

ACCESSORIES

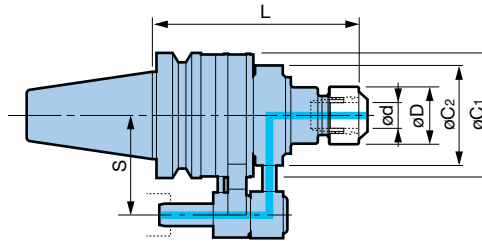


BBT

Hi-JET HOLDER NBS & KAB TYPE BIG-PLUS® BBT40/50

CLAMPING RANGE: ϕ .118"-.787" — For Small Diameter Drills, Gun Drills & End Mills

**MAX
8,000
RPM**



BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ϕd	ϕD	L	ϕC_1	ϕC_2	S	Max RPM	Merit Set (2 pcs. of Merit Ring) (2 pcs. of Merit Plate)	Weight (lbs.)
BBT40-ONBS13N-165	.118-.512	1.378	6.61	3.213	2.87	2.559	10,000	MES-40	8.8
-ONBS20N-165	.118-.787	1.811			3.15		8,000	MES-50	9.5
BBT50-ONBS13N-165	.118-.512	1.378	6.61	3.921	3.15	3.150	8,000	MES-50	16.1
-ONBS20N-165	.118-.787	1.811			3.15		8,000	MES-50	16.5

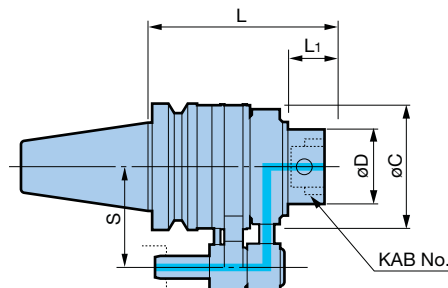
- Collet, adjusting screw and wrench are sold separately
- Max coolant pressure is 284 PSI
- Clamping nut is sold separately, please order Baby Perfect Seal (BPS) for your application

CAUTION ⚠

A Stop Block is required.

ACCESSORIES

 COLLET PG. 236	 PERFECT SEAL PG. 252	 WRENCH PG. 261	 STOP BLOCK PG. 284
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**MAX
5,000
RPM**

BIG-PLUS®
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ϕd	ϕD	L	L ₁	ϕC	S	Max RPM	Merit Set (2 pcs. of Merit Ring) (2 pcs. of Merit Plate)	Weight (lbs.)
BBT40-OCK6N-149	KAB6	2.520	5.87	1.102	3.92	2.559	5,000	MES-65	13.4
BBT50-OCK6N-139	KAB6	2.520	5.47	1.063	3.92	3.150	5,000	MES-65	15.9
-OCK7N-165	KAB7	3.543	6.50	1.358	5.10	3.150	4,000	MES-90	27.0

- Max coolant pressure is 284 PSI

CAUTION ⚠

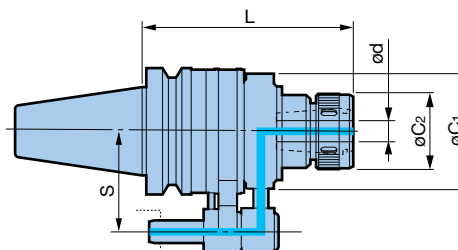
A Stop Block is required.

ACCESSORIES

 COLLET PG. 236	 PERFECT SEAL PG. 252	 WRENCH PG. 261	 STOP BLOCK PG. 284
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CLAMPING RANGE: ϕ .093"-1.000" — For TG100 Single Angle Style Collets

**MAX
8,000
RPM**



Catalog Number	ϕd	Collet Series	L	ϕC_1	ϕC_2	S	Max RPM	Merit Set (2 pcs. of Merit Ring) (2 pcs. of Merit Plate)	Weight (lbs.)
BT40-OHC1.000N-175	.093-1.000	TG100	6.89	3.213	3.15	2.559	8,000	MES-50	11.1

- Max. coolant pressure is 284 PSI
- Collet and clamping nut are optional items

CAUTION

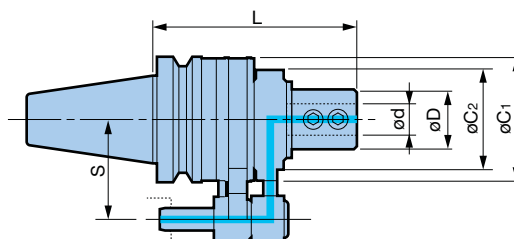
A Stop Block is required.

ACCESSORIES



CLAMPING RANGE: ϕ .750"-1.500" — For Straight Shanks with Flat

**MAX
8,000
RPM**



Catalog Number	ød	øD	L	øC ₁	øC ₂	S	Max RPM	Merit Set (2 pcs. of Merit Ring) (2 pcs. of Merit Plate)	Weight (lbs.)
BT40-OSL1.000N-165	1.000	1.890	6.50	3.213	3.15	2.559	8,000	MES-50	9.7
-OSL1.250N-165	1.250	2.283		3.921	3.86		6,000	MES-65	12.6
BT50-OSL.750N-150	.750	1.890	5.91		3.15	3.150	8,000	MES-50	16.3
-OSL1.000N-165	1.000		6.50				3.86	6,000	MES-65
-OSL1.250N-165	1.250	2.283			17.6				
-OSL1.500N-165	1.500	2.500							

- Max coolant pressure is 284 PSI

CAUTION

A Stop Block is required.

ACCESSORIES





ACCESSORIES



Coolant Pipes.....	Pg. 126
Dyna Test	
HSK-A/E/F	Pg. 127

MEGA CHUCKS



Mega S—Mega Micro	
Type T & S, HSK-A40/A50/A63	Pg. 128-129
Type T & S, HSK-E20/E32/E40/E50	Pg. 130-131
Type T & S, HSK-F63	Pg. 132
Clamping Range: $\phi.018"$ -.317" ($\phi.45$ -8.05mm)	
Mega N—Mega New Baby	
HSK-A40/A50/A63/A100	Pg. 133-136
HSK-E25/E32/E40/E50	Pg. 137-138
HSK-F63	Pg. 139
Clamping Range: $\phi.010"$ -.787" ($\phi.25$ -20mm)	
Mega ER Grip	
HSK-A63/A100/A125	Pg. 140-141
Clamping Range: $\phi.075"$ -.787" ($\phi 1.9$ -20mm)	
Mega E	
HSK-A40/A50/A63/A100	Pg. 142-143
HSK-F63	Pg. 144
Clamping Range: $\phi.125"$ -.500" ($\phi 3$ -12mm)	
Mega D—Mega Double Power	
HSK-A63/A100	Pg. 145
Clamping Range: $\phi.625"$ -1.500" ($\phi 16$ -50mm)	

NEW Hi-POWER MILLING CHUCKS



HSK-A63/A100/A125	Pg. 147
Clamping Range: $\phi.750"$ -2.000" ($\phi 20$ -32mm)	

HYDRAULIC CHUCKS



HSK-A40/A50/A63/A100	Pg. 148-150
Clamping Range: .750"-1.250" ($\phi 6$ -32mm)	

SMART DAMPER



HSK-A100	Pg. 151
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BASIC ARBORS



Shell Mill Holder	
Type H, HSK-A63/A100/A125	Pg. 152-153
Type A & C, HSK-A40/A50/A63/A100	Pg. 154
End Mill Holder	
Type A & C, HSK-A40/A50/A63/A125	Pg. 155
Clamping Range: $\phi.750"$ -2.000" ($\phi 3$ -16mm)	
Shrink Fit Holder	
HSK-A40/A50/A63/A100	Pg. 156-159
Clamping Range: $\phi 4$ mm-20mm	

MODULAR HOLDERS



KAISER KAB	
HSK-A63/A100/A125	Pg. 160-161
HSK-E40/E50 & HSK-F63	Pg. 162

MEGA SYNCHRO



HSK-A40/A50/A63/A100/A125	Pg. 163-164
Tapping Range: No.2-AP1 (ANSI)	
M2-M36 (JIS/DIN/ISO)	

TURNING TOOLS



45° Type S & 90° Type S & F Basic Holder	
HSK-T63/T100	Pg. 165
Square Tool Holder 45°, 90° & 180°	
HSK-T63/T100	Pg. 166
Boring Bar Holder	
HSK-T63/T100	Pg. 167
Clamping Range: $\phi 6$ mm-40mm	

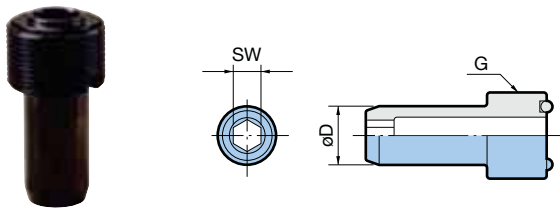
PROFIT MAKER TOOLS



Angle Head—AG90 NBS Type	
HSK-A63/A100/A125	Pg. 168-169
Clamping Range: $\phi.010"$ -.787" ($\phi.25$ -20mm)	
Angle Head—AG90 NBS Extra Long Type	
HSK-A100	Pg. 170-171
Clamping Range: $\phi.010"$ -.787" ($\phi.25$ -20mm)	
Angle Head—AG90 Compact Type	
HSK-A63/A100	Pg. 172
Clamping Range: $\phi.098"$ -.512" ($\phi 2.5$ -13mm)	
Angle Head—AG90 Slender Drive	
HSK-A63/A100	Pg. 173
Clamping Range: $\phi.118"$ -.236" ($\phi 3$ -6mm)	
Angle Head—AG90 Build-Up Type	
HSK-A100/A125	Pg. 174
Angle Head—AG90 HMC Type	
HSK-A100	Pg. 175
Angle Head—AG90 Universal Type	
HSK-A63/A100	Pg. 176
Angle Head—AGU30 Type	
HSK-A63/A100	Pg. 177
Air Power Spindle— RBX5/7/12	
HSK-A63/A100/F63/E32	Pg. 178-179

COOLANT PIPE

For Form A and Form E



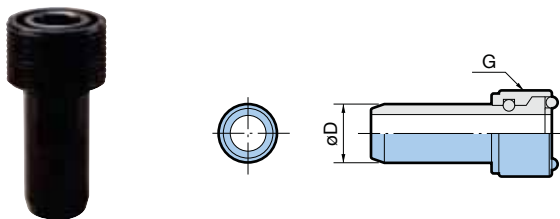
Mono Block Type

Catalog Number	øD	G	SW (mm)	
HSK25-CP	5mm	M8 P1	2.5mm	
HSK32-CP	6mm	M10 P1	3mm	
HSK40-CP	8mm	M12 P1	4mm	
HSK50-CP	10mm	M16 P1	5mm	
HSK63-CP	12mm	M18 P1	6mm	
HSK80-CP	14mm	M20 P1.5	8mm	
HSK100-CP	16mm	M24 P1.5	8mm	

CAUTION

Some machine tool builders may recommend the mono block type. Contact your machine builder and verify the proper style of coolant pipe to be selected.
For machines capable of supplying coolant through the spindle, the Coolant Pipe should be fitted to all HSK holders to protect against accidental selection of coolant.

For Form A and Form E



1° Swing Type

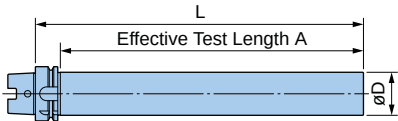
Catalog Number	øD	G	Wrench (Optional)	
HSK40-CPM	8mm	M12 P1	CPW40	
HSK50-CPM	10mm	M16 P1	CPW50	
HSK63-CPM	12mm	M18 P1	CPW63	
HSK80-CPM	14mm	M20 P1.5	CPW80	
HSK100-CPM	16mm	M24 P1.5	CPW100	

CAUTION

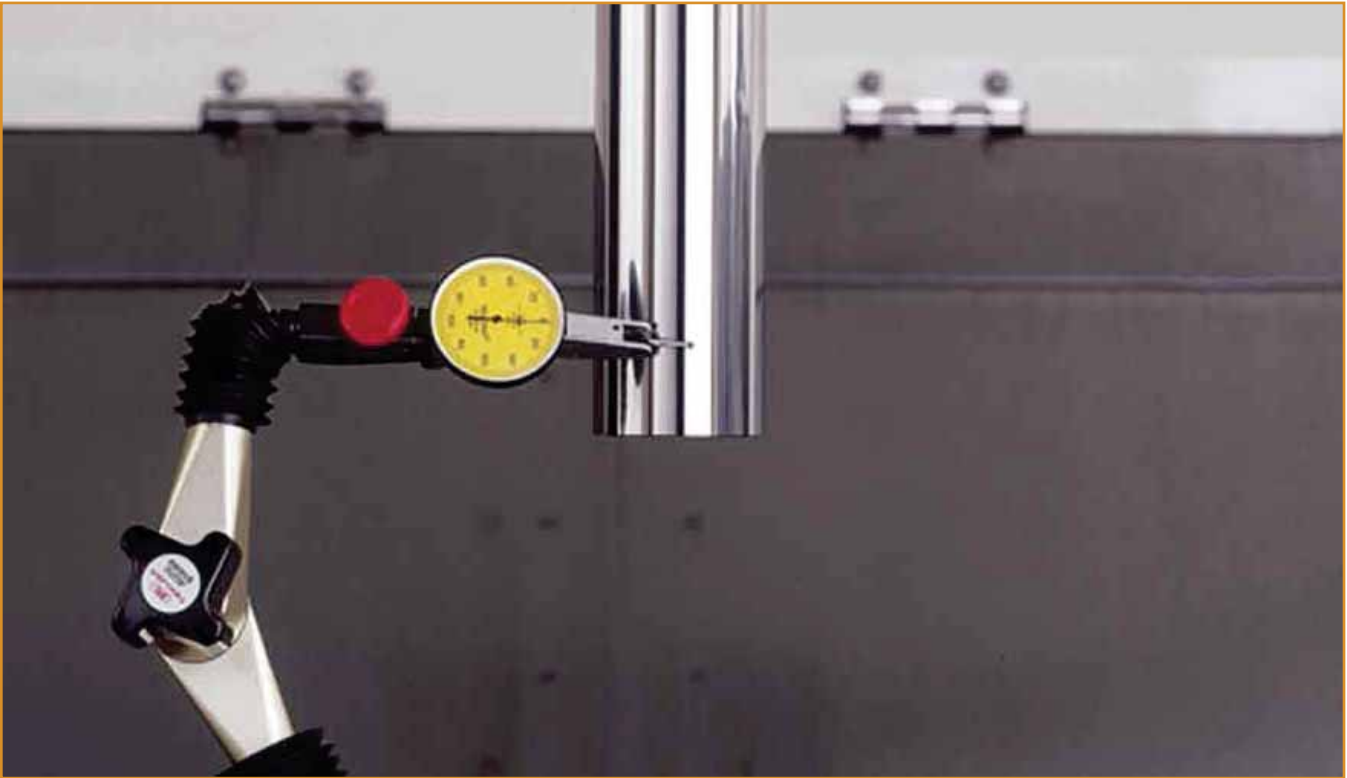
DIN standard specifies ± 1 degree of float. For proper installation, the special wrench is necessary.
For machines capable of supplying coolant through the spindle, the Coolant Pipe should be fitted to all HSK holders to protect against accidental selection of coolant.

Dyna Test

Helps identify potential problems, and can reduce downtime and costly repairs of the machine tool spindle.



HSK Form	Catalog Number	L	A	øD
A	HSK-A40-32-L180SD	7.087	6.181	32mm
	HSK-A50-32-L240SD	9.449	8.307	
	HSK-A63-50-L200SD	7.874	6.732	50mm
	-50-L350SD	13.780	12.638	
	HSK-A100-50-L200SD	7.784	6.614	
	-50-L350SD	13.780	12.520	
E	HSK-E25-20-L175	6.890	6.417	20mm
	HSK-E32-20-L180	7.087	6.220	32mm
	HSK-E40-32-L180		6.181	
	HSK-E50-32-L240	9.449	8.307	32mm
F	HSK-F63-50-L200	7.874	6.732	50mm
	-50-L350	13.780	12.638	

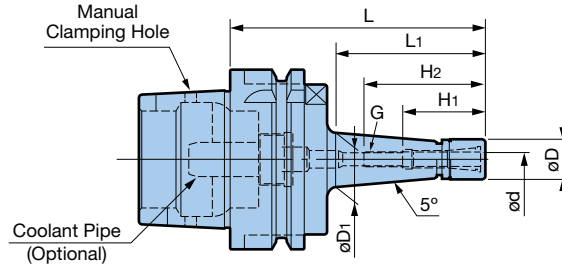


MEGA MICRO CHUCK HSK-A40/A50/A63—TYPE T

CLAMPING RANGE: ϕ .018"-.317" (ϕ .45-8.05mm) — For Micro Drill & End Mill Applications

**HIGHER
RIGIDITY**

**MAX
35,000
RPM**



Catalog Number	ød	øD	D ₁	L	L ₁	H ₁	H ₂	G	Collet	Wrench	Max RPM	Weight (lbs.)
HSK-A40-MEGA3S-75T	.018-.128	.394	.57	2.95	1.57	.87	1.50	M4 P0.7	NBC3S-□	MGR10	32,000	.6
-90T			.68	3.54	2.20						28,000	.7
-MEGA4S-60T	.018-.159	.472	.55	2.36	1.02	1.04	1.73	M5 P0.8	NBC4S-□	MGR12	35,000	.6
-75T			.66	2.95	1.65		1.85				32,000	.7
-90T			.76	3.54	2.28						28,000	.7
-105T			.87	4.13	2.87						25,000	.8
-MEGA6S-60T※			.61	2.36	1.06						1.12	1.57
-75T	.72	2.95	1.69	1.93	32,000	.7						
-90T	.83	3.54	2.32		28,000	.8						
-105T	.94	4.13	2.91		25,000	.9						
HSK-A50-MEGA3S-105T	.018-.128	.394	.74	4.13	2.56	.87	1.50	M4 P0.7	NBC3S-□	MGR10	28,000	1.2
-MEGA4S-105T	.018-.159	.472	.81	4.13	2.56	1.04	1.85	M5 P0.8	NBC4S-□	MGR12	25,000	1.3
-MEGA6S-105T	.018-.238	.551	.87	4.13	2.56	1.12	1.93	M7 P0.75	NBC6S-□	MGR14	25,000	1.3
HSK-A63-MEGA3S-75T	.018-.128	.394	.54	2.95	1.38	.87	1.50	M4 P0.7	NBC3S-□	MGR10	32,000	1.8
-90T			.64	3.54	1.97						28,000	1.8
-120T			.85	4.72	3.15						25,000	2.0
-MEGA4S-60T	.018-.159	.472	.51	2.36	.91	1.04	1.46	M5 P0.8	NBC4S-□	MGR12	35,000	1.8
-75T			.61	2.95	1.38		1.85				32,000	1.8
-90T			.71	3.54	1.97						28,000	1.9
-105T			.81	4.13	2.56						25,000	2.0
-120T			.92	4.72	3.15						22,000	2.1
-135T			1.02	5.31	3.74						20,000	2.2
-MEGA6S-60T			.018-.238	.551	.61						2.36	.91
-75T	.67	2.95			1.38	1.89	32,000	1.8				
-90T	.77	3.54			1.97	1.93	28,000	1.9				
-105T	.87	4.13			2.56		25,000	2.0				
-120T	.98	4.72			3.15		22,000	2.1				
-135T	1.08	5.31			3.74		20,000	2.2				
-MEGA8S-90T	.116-.317	.709			.92		3.54	2.01	1.22	1.99	M9 P0.75	NBC8S-□
-120T			1.12	4.72	3.19	23,000	2.3					

- Mega Micro Nut is included
- Collet and wrench must be ordered separately
- Coolant Pipe must be ordered separately
- For models marked ※, there is no internal thread, the dimension H2 in () shows how deep a tool can be inserted
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet

ACCESSORIES

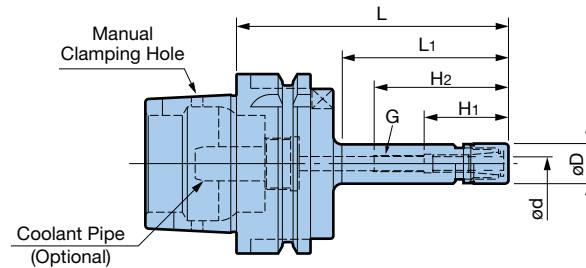


MEGA MICRO CHUCK HSK-A40/A50/A63—TYPE S



CLAMPING RANGE: ϕ .018"-.317" — For Micro Drill & End Mill Applications

MAX
30,000
RPM



Catalog Number	ϕd	ϕD	L	L ₁	H ₁	H ₂	G	Collet	Wrench	Max RPM	Weight (lbs.)
HSK-A40-MEGA3S-60	.018-.128	.394	2.36	.98	.87	1.54	M4 P0.7	NBC3S-□	MGR10	30,000	.6
-MEGA4S-60	.018-.159	.472	2.36	.98	1.04	1.73	M5 P0.8	NBC4S-□	MGR12	30,000	.6
-90			3.54	2.17		1.85				25,000	.6
-MEGA6S-60※	.018-.238	.551	2.36	1.02	1.12	(1.57)	M7 P0.75	NBC6S-□	MGR14	30,000	.6
-90			3.54	2.20		1.93				25,000	.7
HSK-A50-MEGA3S-75	.018-.128	.394	2.95	1.38	.87	1.50	M4 P0.7	NBC3S-□	MGR10	30,000	1.1
-MEGA4S-75	.018-.159	.472	2.95	1.38	1.04	1.85	M5 P0.8	NBC4S-□	MGR12	30,000	1.1
-MEGA6S-75	.018-.238	.551	2.95	1.38	1.12	1.93	M7 P0.75	NBC6S-□	MGR14	30,000	1.1
HSK-A63-MEGA3S-60	.018-.128	.394	2.36	.87	.87	1.38	M4 P0.7	NBC3S-□	MGR10	30,000	1.8
-MEGA4S-75	.018-.159	.472	2.95	1.38	1.04	1.89	M5 P0.8	NBC4S-□	MGR12	30,000	1.8
-105			4.13	2.36		1.85				25,000	1.8
-MEGA6S-75	.018-.238	.551	2.95	1.38	1.12	1.89	M7 P0.75	NBC6S-□	MGR14	30,000	1.8
-105			4.13	2.36		1.93				25,000	1.9
-MEGA8S-90	.116-.317	.709	3.54	1.89	1.22	1.99	M9 P0.75	NBC8S-□	MGR18	30,000	2.0

- Mega Micro Nut is included
- Collet and wrench must be ordered separately
- Coolant Pipe must be ordered separately
- For models marked ※, there is no internal thread, the dimension H₂ in () shows how deep a tool can be inserted
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet

ACCESSORIES

COLLET PG. 234	MEGA NUT PG. 248	PERFECT SEAL PG. 249	MEGA WRENCH PG. 259
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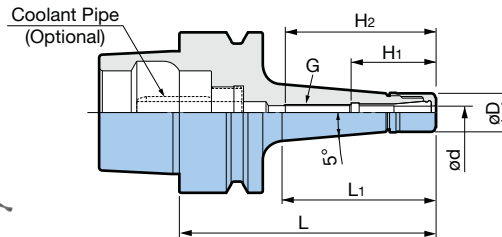
HSK

MEGA MICRO CHUCK HSK-E25/E32/E40/E50—TYPE T

CLAMPING RANGE: ϕ .018"-.317" (ϕ .45-8.05mm) — For Micro Drill & End Mill Applications

**HIGHER
RIGIDITY**

**MAX
50,000
RPM**



Catalog Number	ød	øD	L	L ₁	H ₁	H ₂	G	Collet	Nut	Wrench	Max RPM	Weight (lbs.)			
HSK-E25-MEGA3S-45T ※	.018-.128	.394	1.77	1.26	.87	(1.26)	—	NBC3S-□	MGN3S	MGR10	50,000	.1			
-60T			2.36	1.89		1.50	M4 P0.7				40,000	.2			
-MEGA4S-45T ※	.018-.159	.472	1.77	1.26	1.04	(1.26)	—	NBC4S-□	MGN4S	MGR12	50,000	.2			
-60T			2.36	1.89		1.61	M5 P0.8				40,000	.2			
-MEGA6S-45T ※	.018-.238	.551	1.77	1.26	1.12	(1.22)	—	NBC6S-□	MGN6S	MGR14	50,000	.2			
-60T			2.36	1.89		1.57	M7 P0.75				40,000	.2			
HSK-E32-MEGA3S-60T	.018-.128	.394	2.36	1.34	.87	1.50	M4 P0.7	NBC3S-□	MGN3S	MGR10	40,000	.3			
-75T			2.95	1.93									40,000	.4	
-MEGA4S-45T ※	.018-.159	.472	1.77	.91	1.04	(1.02)	—	NBC4S-□	MGN4S	MGR12	50,000	.3			
-60T			2.36	1.34		1.81	M5 P0.8				40,000	.4			
-MEGA6S-45T ※	.018-.238	.551	1.77	.91	1.12	(1.10)	—	NBC6S-□	MGN6S	MGR14	50,000	.3			
-60T			2.36	1.38		1.50	M7 P0.75				40,000	.4			
-MEGA8S-60T	.116-.317	.709	3.54	1.89			M9 P0.75	NBC8S-□	MGN8S	MGR18	30,000	1.9			
HSK-E40-MEGA3S-60T	.018-.128	.394	2.36	1.34	.87	1.54	M4 P0.7	NBC3S-□	MGN3S	MGR10	40,000	.5			
-75T			2.95	1.93		1.50						40,000	.6		
-MEGA4S-60T	.018-.159	.472	2.36	1.34	1.04	1.73	M5 P0.8	NBC4S-□	MGN4S	MGR12	40,000	.5			
-75T			2.95	1.93		1.85						40,000	.6		
-MEGA6S-60T ※	.018-.238	.551	2.36	1.34	1.12	(1.10)	—	NBC6S-□	MGN6S	MGR14	40,000	.5			
-75T			2.95	1.93		1.93	M7 P0.75					.6			
-90T			3.54	2.52									.7		
HSK-E50-MEGA3S-80T	.018-.128	.394	3.15	1.89	.87	1.50	M4 P0.7	NBC3S-□	MGN3S	MGR10	40,000	1.0			
-MEGA4S-80T	.018-.159	.472	3.15	1.89	1.04	1.85	M5 P0.8	NBC4S-□	MGN4S	MGR12	40,000	1.0			
-MEGA6S-80T	.018-.238	.551	3.15	1.89	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	40,000	1.1			

- Mega Micro Nut is included
- Collet and wrench must be ordered separately
- For models marked ※, there is no internal thread, the dimension H₂ in () shows how deep a tool can be inserted
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Coolant Pipe must be ordered separately
- Weight does not include collet

ACCESSORIES

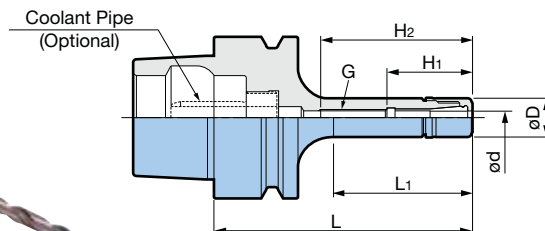
 COLLET PG. 234	 MEGA NUT PG. 248	 PERFECT SEAL PG. 249	 MEGA WRENCH PG. 259
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MEGA MICRO CHUCK HSK-E25/E32/E40/E50—TYPE S



CLAMPING RANGE: ϕ .018"-.238" — For Micro Drill & End Mill Applications

**MAX
50,000
RPM**



Catalog Number	ϕd	ϕD	L	L ₁	H ₁	H ₂	G	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-E25-MEGA4S-35	.018-.159	.472	1.38	.87	1.02	(1.02)	M5 P0.8	NBC4S-□	MGN4S	MGR12	50,000	.1
-45※			1.77	1.18	1.04	(1.26)	—					.1
-60※			2.36	1.77		1.85	—				40,000	.2
-MEGA6S-45	.018-.238	.551	1.77	1.26	1.10	(1.22)	M7 P0.75	NBC6S-□	MGN6S	MGR14	50,000	.2
-60※			2.36	1.81	1.12	1.61	—				40,000	.2
HSK-E32-MEGA3S-45	.018-.128	.394	1.77	.87	.87	(1.22)	M4 P0.7	NBC3S-□	MGN3S	MGR10	50,000	.3
-MEGA4S-45※	.018-.159	.472	1.77	.87	1.04	1.22	—	NBC4S-□	MGN4S	MGR12	50,000	.3
-60			2.36	1.30		1.81	M5 P0.8				40,000	.3
-MEGA6S-45	.018-.238	.551	1.77	.87	1.12	(1.10)	—	NBC6S-□	MGN6S	MGR14	50,000	.3
-60※			2.36	1.34		1.50	M7 P0.75				40,000	.3
HSK-E40-MEGA3S-40	.018-.128	.394	1.57	.75	.87	(.94)	M4 P0.7	NBC3S-□	MGN3S	MGR10	50,000	.5
-MEGA4S-40※	.018-.159	.472	1.57	.75	1.04	1.06	—	NBC4S-□	MGN4S	MGR12	50,000	.5
-60			2.36	1.30		1.73	M5 P0.8				40,000	.5
-MEGA6S-45	.018-.238	.551	1.77	.91	1.12	(1.06)	M7 P0.75	NBC6S-□	MGN6S	MGR14	50,000	.5
-60※			2.36	1.34		1.10	—				40,000	.5
HSK-E50-MEGA3S-50	.018-.128	.394	1.97	.79	.87	(1.38)	M4 P0.7	NBC3S-□	MGN3S	MGR10	45,000	.9
-MEGA4S-50※	.018-.159	.472	1.97	.83	1.04	(1.18)	—	NBC4S-□	MGN4S	MGR12	45,000	1.0
-80※			3.15	1.69		1.85	—				40,000	1.0
-MEGA6S-55	.018-.238	.551	2.17	1.02	1.12	(1.38)	M7 P0.75	NBC6S-□	MGN6S	MGR14	45,000	1.0
-80※			3.15	1.69		1.93	—				40,000	1.0

- Mega Micro Nut is included
- Collet and wrench must be ordered separately
- For models marked ※, there is no internal thread, the dimension H₂ in () shows how deep a tool can be inserted
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Coolant Pipe must be ordered separately
- Coolant pipe cannot be used with models marked ●
- Weight does not include collet

ACCESSORIES

 COLLET PG. 234	 MEGA NUT PG. 248	 PERFECT SEAL PG. 249	 MEGA WRENCH PG. 259
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HSK

MEGA MICRO CHUCK HSK-F63

CLAMPING RANGE: ϕ .018"-.238" (ϕ .45-6.05mm) — For Micro Drill & End Mill Applications

**HIGHER
RIGIDITY**

**MAX
32,000
RPM**

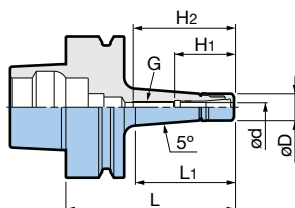


Fig. 1 — Type T

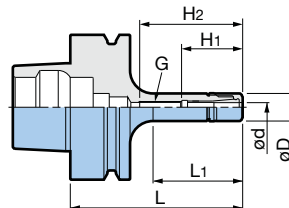


Fig. 2 — Type S

Catalog Number	Fig.	ϕ d	ϕ D	L	L ₁	H ₁	H ₂	G	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-F63-MEGA4S-75T	1	.018-.159	.472	2.95	1.69	1.04	1.61	M5 P0.8	NBC4S-□	MGN4S	MGR12	32,000	1.5
-MEGA6S-75T		.018-.238	.551	2.95	1.69	1.12	1.61	M7 P0.75	NBC6S-□	MGN6S	MGR14	32,000	1.5
-MEGA4S-75	2	.018-.159	.472	2.95	1.50	1.04	1.61	M5 P0.8	NBC4S-□	MGN4S	MGR12	30,000	1.5
-105				4.13	2.68	1.12	1.85					25,000	1.5
-MEGA6S-75		.018-.238	.551	2.95	1.50	1.04	1.61	M7 P0.75	NBC6S-□	MGN6S	MGR14	30,000	1.5
-90				3.54	2.13	1.12	1.93					27,000	1.6
-105				4.13	2.68	1.12	1.93					25,000	1.7

- Mega Micro Nut is included
- Collet and wrench must be ordered separately
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet
- Models ending in T designates Taper Type

ACCESSORIES

 COLLET PG. 234	 MEGA NUT PG. 248	 PERFECT SEAL PG. 249	 MEGA WRENCH PG. 259
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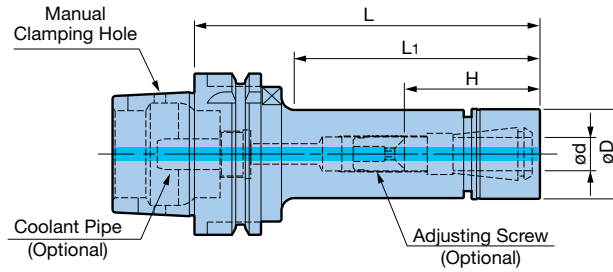


MEGA NEW BABY CHUCK HSK-A40/A50



CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm) — For Drills, Reamers, Taps & Finishing End Mills

**MAX
35,000
RPM**



Catalog Number	ϕd	ϕD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-A40-MEGA6N-60 ※	.010-.236	.787	2.36	1.18	1.30	NBC6-□	MGN6	MGR20	35,000	.7
-75			2.95	1.77	.91-1.50				30,000	.8
-90			3.54	2.36	.91-1.69					.8
-MEGA8N-60 ※	.020-.315	.984	2.36	1.18	1.61	NBC8-□	MGN8	MGR25	35,000	.8
-75			2.95	1.77	1.02-1.50				30,000	.9
-90			3.54	2.36	1.02-1.73					1.0
-MEGA10N-60 ※	.059-.394	1.181	2.36	1.02	1.57	NBC10-□	MGN10	MGR30	35,000	.9
-75 ※			2.95	1.54	2.17				30,000	1.1
-90			3.54	2.13	1.50-1.89					1.2
-MEGA13N-75 ※	.098-.512	1.378	2.95	2.17	2.17	NBC13-□	MGN13	MGR35	25,000	1.2
-90			3.54	2.76	2.52					1.4
-MEGA16N-75	.098-.630	1.654	2.95	2.17	2.09	NBC16-□	MGN16	MGR42L	20,000	1.4
-90 ※			3.54	2.76	2.48				15,000	1.7
-MEGA20N-90 ※	.098-.787	1.811	3.54	2.76	2.60	NBC20-□	MGN20	MGR46L	15,000	1.9
HSK-A50-MEGA6N-60 ※	.010-.236	.787	2.36	1.02	1.38	NBC6-□	MGN6	MGR20	35,000	1.1
-75			2.95	1.34					30,000	1.3
-100			3.94	2.32					25,000	1.3
-120			4.72	3.11	.91-1.69				23,000	1.5
-135			5.31	3.70					20,000	1.5
-165			6.50	4.80					15,000	1.8
-MEGA8N-60 ※			2.36	1.02	1.34				35,000	1.1
-75	.020-.315	.984	2.95	1.46	1.02-1.46	NBC8-□	MGN8	MGR25	30,000	1.3
-100			3.94	2.32					28,000	1.5
-120			4.72	3.11	1.02-1.77				25,000	1.8
-135			5.31	3.70					20,000	1.8
-165			6.50	4.88					15,000	2.0

- Mega New Baby Nut is included
- Adjusting screw, collet and wrench must be ordered separately
- Coolant Pipe must be ordered separately
- Adjusting screws cannot be used with models marked ※
- H Max is the maximum tool shank length that can be inserted into the holder
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet

ACCESSORIES

 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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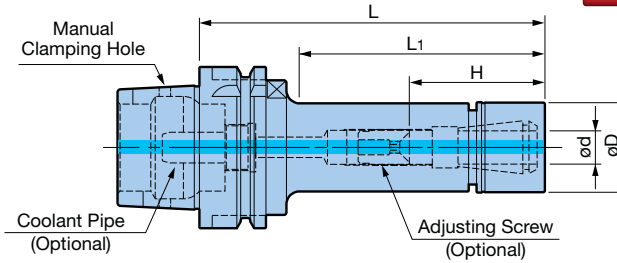
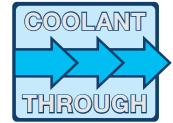
HSK

MEGA NEW BABY CHUCK HSK-A50/A63

CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm)

For Drills, Reamers, Taps & Finishing End Mills

MAX
35,000
RPM



Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-A50-MEGA10N-60 ※	.059-.394	1.181	2.36	1.02	1.38	NBC10-□	MGN10	MGR30	35,000	1.3
-75 ※			2.95	1.42	1.81				33,000	1.5
-100			3.94	2.40	1.50-1.89				25,000	1.8
-120			4.72	3.19					20,000	2.0
-135			5.31	3.78					15,000	2.2
-165			6.50	4.96					15,000	2.4
-MEGA13N-65 ※			.098-.512	1.378					2.56	1.17
-75 ※	2.95	1.50			1.81	28,000	1.5			
-100	3.94	2.48			1.73-2.20	25,000	2.0			
-120	4.72	3.27			1.73-2.87	20,000	2.2			
-135	5.31	3.86				18,000	2.4			
-165	6.50	5.04				15,000	3.1			
-MEGA16N-75 ※	.098-.630	1.654			2.95	1.93	1.89-2.17	NBC16-□	MGN16	MGR42L
-100			3.94	2.83	1.89-2.68	20,000	2.4			
-120			4.72	3.62		20,000	2.9			
-135			5.31	4.29		15,000	3.1			
-165			6.50	5.39	2.72	10,000	3.7			
-MEGA20N-75 ※	.098-.787	1.811	2.95	1.93	2.01-2.68	NBC20-□	MGN20	MGR46L	20,000	2.0
-100			3.94	2.91					15,000	2.9
-120			4.72	3.70					13,000	3.5
-135			5.31	4.29					10,000	4.0
-165			6.50	5.47					8,000	4.9
HSK-A63-MEGA6N-75			.010-.236	.787					2.95	1.38
-90	3.54	2.01			.91-1.69	30,000	2.0			
-105	4.13	2.60				25,000	2.0			
-120	4.72	3.19				20,000	2.2			
-135	5.31	3.78				20,000	2.2			
-165	6.50	4.96				15,000	2.2			
-MEGA8N-75	.020-.315	.984	2.95	1.50	1.02-1.50	NBC8-□	MGN8	MGR25	35,000	2.0
-90			3.54	2.01	1.02-1.77				30,000	2.2
-105			4.13	2.60					25,000	2.2
-120			4.72	3.19					25,000	2.4
-135			5.31	3.78					20,000	2.4
-165			6.50	4.96					15,000	2.6

Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-A63-MEGA10N-75※	.059-.394	1.181	2.95	1.50	1.97	NBC10-□	MGN10	MGR30	33,000	2.2
-90			3.54	2.01	1.50-1.77					2.2
-105			4.13	2.60	1.50-1.89				25,000	2.4
-120			4.72	3.19						2.6
-135			5.31	3.78					20,000	2.9
-165			6.50	4.70					15,000	3.1
-MEGA13N-75※			.098-.512	1.378	2.95				1.54	1.93
-90※	3.54	2.01			2.52	2.4				
-105	4.13	2.60			1.73-2.20	25,000	2.6			
-120	4.72	3.19			1.73-2.48		20,000	2.9		
-135	5.31	3.78				3.1				
-165	6.50	4.96				15,000	3.7			
-MEGA16N-75※	.098-.630	1.654			2.95	1.54	1.89	NBC16-□	MGN16	MGR42L
-90※			3.54	2.09	2.48	25,000	2.9			
-105			4.13	2.68	1.89-2.13	20,000	3.1			
-120			4.72	3.27	1.89-2.68	15,000	3.3			
-135			5.31	3.86			3.7			
-165			6.50	5.04		10,000	4.4			
-200			7.87	6.42		8,000	5.3			
-MEGA20N-75※	.098-.787	1.811	2.95	1.54	2.01	NBC20-□	MGN20	MGR46L	30,000	2.6
-90※			3.54	2.09	2.40				25,000	3.1
-105			4.13	2.68	2.01-2.13				20,000	3.3
-120			4.72	3.27	2.01-2.68				15,000	3.7
-135			5.31	3.86						4.0
-165			6.50	5.04					10,000	5.1
-200			7.87	6.42					8,000	6.0

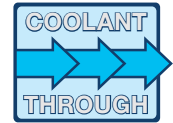
- Mega New Baby Nut is included
- Adjusting screw, collet and wrench must be ordered separately
- Coolant Pipe must be ordered separately
- Adjusting screws cannot be used with models marked ※
- H Max is the maximum tool shank length that can be inserted into the holder
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet

ACCESSORIES

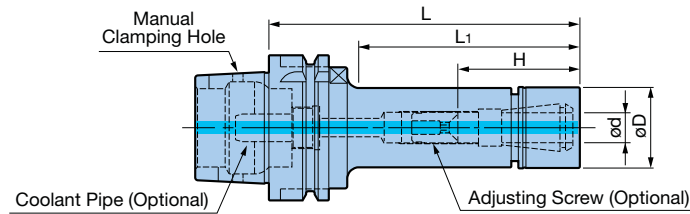
 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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MEGA NEW BABY CHUCK HSK-A100

CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm) — For Drills, Reamers, Taps & Finishing End Mills



**MAX
20,000
RPM**



Catalog Number	ϕd	ϕD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-A100-MEGA6N-90	.010-.236	.787	3.54	1.89	.91-1.69	NBC6-□	MGN6	MGR20	20,000	5.5
-105			4.13	2.48					18,000	5.5
-120			4.72	3.07					14,000	5.5
-135			5.31	3.66					12,000	5.5
-165			6.50	4.84					12,000	5.7
-MEGA8N-90	.020-.315	.984	3.54	1.89	1.02-1.77	NBC8-□	MGN8	MGR25	20,000	5.5
-105			4.13	2.48					18,000	5.7
-120			4.72	3.07					14,000	5.7
-135			5.31	3.66					14,000	6.0
-165			6.50	4.84					14,000	6.0
-MEGA10N-90	.059-.394	1.181	3.54	1.89	1.50-1.77	NBC10-□	MGN10	MGR30	20,000	5.7
-105			4.13	2.48					18,000	6.0
-120			4.72	3.07					14,000	6.0
-135			5.31	3.66					14,000	6.2
-165			6.50	4.84					14,000	6.6
-MEGA13N-90※	.098-.512	1.378	3.54	1.89	2.17	NBC13-□	MGN13	MGR35	18,000	6.0
-105※			4.13	2.48					16,000	6.2
-120			4.72	3.07					14,000	6.4
-135			5.31	3.66					14,000	6.6
-165			6.50	4.84					10,000	7.1
-200			7.87	6.22					10,000	7.7
-MEGA16N-90※	.098-.630	1.654	3.54	1.89	2.17	NBC16-□	MGN16	MGR42L	15,000	6.2
-105※			4.13	2.48					14,000	6.4
-120			4.72	3.07					14,000	6.8
-135			5.31	3.66					13,000	7.1
-165			6.50	4.84					10,000	7.9
-200			7.87	6.22					10,000	8.8
-MEGA20N-90※	.098-.787	1.811	3.54	1.89	2.17	NBC20-□	MGN20	MGR46L	15,000	6.4
-105※			4.13	2.48					14,000	6.6
-120			4.72	3.07					13,000	7.1
-135			5.31	3.66					13,000	7.3
-165			6.50	4.84					10,000	8.4
-200			7.87	6.22					10,000	9.5

- Mega New Baby Nut is included
- Adjusting screw, collet and wrench must be ordered separately
- Coolant Pipe must be ordered separately
- Adjusting screws cannot be used with models marked ※

- H Max is the maximum tool shank length that can be inserted into the holder
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet

ACCESSORIES

 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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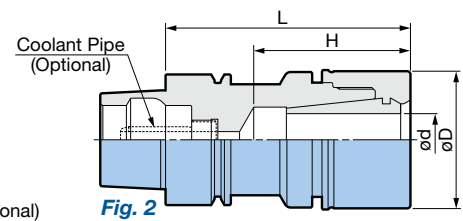
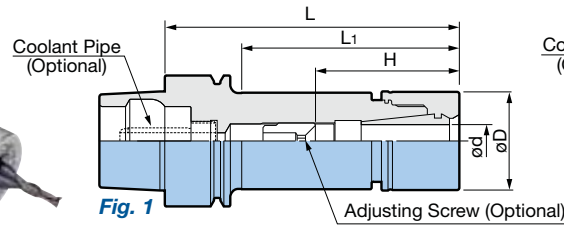
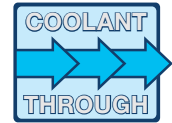
MEGA NEW BABY CHUCK HSK-E25/E32/E40



CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm)

For Drills, Reamers, Taps & Finishing End Mills

**MAX
40,000
RPM**



Catalog Number	Fig.	ϕd	ϕD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-E25-MEGA6N-40 ※	1	.010-.236	.787	1.57	1.10	1.10	NBC6-□	MGN6	MGR20	30,000	.2
-MEGA8N-45 ※	2	.020-.315	.984	1.77	—	1.26	NBC8-□	MGN8	MGR25	25,000	.3
-MEGA10N-60 ※		.059-.394	1.181	2.36	—	1.38	NBC10-□	MGN10	MGR30	20,000	.4
HSK-E32-MEGA6N-45 ※	1	.010-.236	.787	1.77	.94	1.18	NBC6-□	MGN6	MGR20	40,000	.4
-60				2.36	1.42	.91-1.18				35,000	.4
-MEGA8N-50 ※	1	.020-.315	.984	1.97	1.14	1.46	NBC8-□	MGN8	MGR25	40,000	.5
-65				2.56	1.69	1.02-1.38				35,000	.6
-MEGA10N-65 ※	2	.059-.394	1.181	2.56	1.77	1.97	NBC10-□	MGN10	MGR30	30,000	.6
-MEGA13N-70 ※	2	.098-.512	1.378	2.76	1.77	1.73	NBC13-□	MGN13	MGR35	25,000	.7
HSK-E40-MEGA6N-50 ※	1	.010-.236	.787	1.97	1.02	1.38	NBC6-□	MGN6	MGR20	40,000	.6
-60				2.36	1.30	.91-1.30				35,000	.6
-75				2.95	1.89	.91-1.62				30,000	.7
-90				3.54	2.48	.91-1.69				28,000	.8
-120				4.72	3.66					25,000	.9
-MEGA8N-55 ※	1	.020-.315	.984	2.17	1.22	1.57	NBC8-□	MGN8	MGR25	40,000	.7
-75				2.95	1.97	1.02-1.77				30,000	.8
-90				3.54	2.56					28,000	1.0
-MEGA10N-60 ※	1	.059-.394	1.181	2.36	1.42	1.77	NBC10-□	MGN10	MGR30	35,000	.9
-75 ※				2.95	2.01	2.24				30,000	1.0
-90				3.54	2.60	1.50-1.89				28,000	1.2
-MEGA13N-65 ※	1	.098-.512	1.378	2.56	1.69	1.73	NBC13-□	MGN13	MGR35	30,000	1.0
-75 ※				2.95	2.09	2.28				25,000	1.2
-90				3.54	2.68	1.73-2.09				20,000	1.8
-120				4.72	3.86	1.73-2.48				15,000	2.2
-150				5.91	5.04						
-MEGA16N-65	2	.098-.630	1.654	2.56	—	1.81	NBC16-□	MGN16	MGR42L	25,000	1.0
-75				2.95	—	1.89				20,000	1.3

- Mega New Baby is included
- Adjusting screw, collet and wrench must be ordered separately
- Adjusting screws cannot be used with models marked ※
- H Max is the maximum tool shank length that can be inserted into the holder
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Coolant Pipe must be ordered separately
- Weight does not include collet

ACCESSORIES

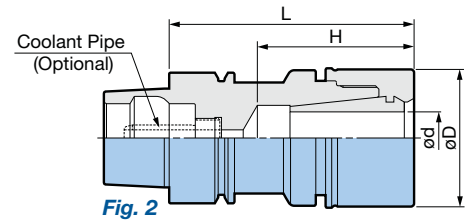
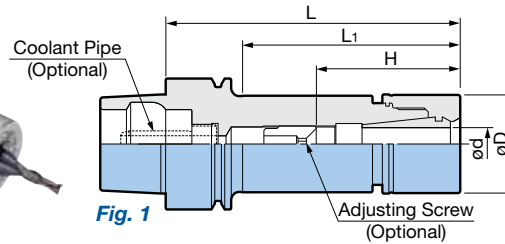
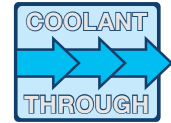


MEGA NEW BABY CHUCK HSK-E50

CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm)

For Drills, Reamers, Taps & Finishing End Mills

MAX
40,000
RPM



Catalog Number	Fig.	ϕd	ϕD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-E50-MEGA6N-55 ※	1	.010-.236	.787	2.17	1.06	1.38	NBC6-□	MGN6	MGR20	40,000	1.0
-70				2.76	1.46	.91-1.54				30,000	1.1
-100				3.94	2.48	.91-1.69				25,000	1.2
-130				5.12	3.66					20,000	1.4
-MEGA8N-60 ※	1	.020-.315	.984	2.36	1.18	1.47	NBC8-□	MGN8	MGR25	40,000	1.2
-90				3.54	2.17	1.02-1.69				30,000	1.4
-MEGA10N-60 ※	1	.059-.394	1.181	2.36	1.18	1.38	NBC10-□	MGN10	MGR30	35,000	1.2
-90				3.54	2.24	1.50-1.89				30,000	1.5
-MEGA13N-60 ※ ●	1	.098-.512	1.378	2.36	1.22	1.73	NBC13-□	MGN13	MGR35	30,000	1.3
-70 ※				2.76	1.57	1.77				28,000	1.5
-90				3.54	2.32	1.73-2.64				25,000	1.8
-120				4.72	3.50	1.73-2.48				20,000	2.2
-150				5.91	4.69					15,000	2.7
-MEGA16N-65 ※ ●	1	.098-.630	1.654	2.56	1.54	1.89	NBC16-□	MGN16	MGR42L	30,000	1.6
-75 ※				2.95	1.89	2.05				28,000	1.9
-90 ※				3.54	2.44	2.56				25,000	2.2
-MEGA20N-75 ※	2	.098-.787	1.811	2.95	—	1.93	NBC20-□	MGN20	MGR46L	25,000	1.8
-100				3.94		2.01-2.13				20,000	2.4
-130				5.12		2.01-2.68				18,000	3.3
-160				6.30						15,000	4.0

- Mega New Baby Nut is included, adjusting screw
- Collet and wrench must be ordered separately
- Adjusting screws cannot be used with models marked ※
- H Max is the maximum tool shank length that can be inserted into the holder
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Coolant Pipe must be ordered separately
- Coolant Pipe cannot be used with models marked ●
- Weight does not include collet

ACCESSORIES

 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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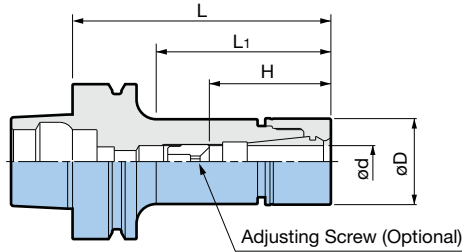
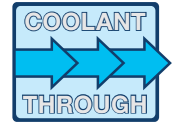
MEGA NEW BABY CHUCK HSK-F63



CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm)

For Drills, Reamers, Taps & Finishing End Mills

MAX
35,000
RPM



Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-F63-MEGA6N-75	.010-.236	.787	2.95	1.65	.91-1.22	NBC6-□	MGN6	MGR20	35,000	1.5
-90			3.54	2.09	.91-1.69				30,000	1.8
-105			4.13	2.68					25,000	1.8
-135			5.31	3.86					20,000	2.0
-MEGA8N-75	.020-.315	.984	2.95	1.65	1.02-1.50	NBC8-□	MGN8	MGR25	32,000	1.8
-90			3.54	2.09	1.02-1.77				30,000	2.0
-105			4.13	2.68						2.0
-120			4.72	3.27					25,000	2.0
-135			5.31	3.86					20,000	2.2
-165			6.50	5.04					15,000	2.4
-MEGA10N-75 ※			2.95	1.65	1.89				NBC10-□	MGN10
-90	3.54	2.09	1.50-1.69	30,000	2.0					
-105	4.13	2.68		25,000	2.2					
-120	4.72	3.27		2.4						
-MEGA13N-75 ※	.098-.512	1.378	2.95	1.65	1.85	NBC13-□	MGN13	MGR35	30,000	2.0
-90 ※			3.54	2.17	2.40					2.2
-105			4.13	2.76	1.73-2.09				25,000	2.4
-120			4.72	3.35	1.73-2.48				20,000	2.6
-65			6.50	5.12					15,000	3.5
-MEGA16N-75 ※	.098-.630	1.654	2.95	1.65	1.89	NBC16-□	MGN16	MGR42L	30,000	2.2
-90 ※			3.54	2.24	2.40				25,000	2.6
-105			4.13	2.83	1.89-2.20				20,000	2.9
-MEGA20N-75 ※	.098-.787	1.811	2.95	1.73	2.01	NBC20-□	MGN20	MGR46L	30,000	2.4
-90 ※			3.54	2.32	2.40				25,000	2.9
-105			4.13	2.91	2.01-2.28				20,000	3.1

- Mega New Baby Nut is included
- Adjusting screw, collet and wrench must be ordered separately
- Adjusting screws cannot be used with models marked ※
- H Max is the maximum tool shank length that can be inserted into the holder
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet

ACCESSORIES

COLLET PG. 236	MEGA NUT PG. 248	PERFECT SEAL PG. 250	MEGA WRENCH PG. 259	SCREW PG. 262
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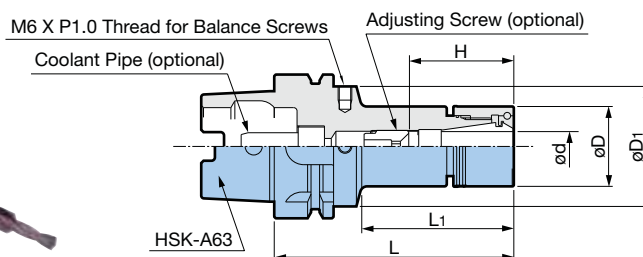
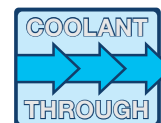
HSK

MEGA ER GRIP HSK-A63/A100

CLAMPING RANGE: ϕ .075"-.787" (ϕ .19-20mm)

For Drills, Reamers, Taps & Finishing End Mills

MAX
33,000
RPM



Catalog Number	ød	øD	øD ₁	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-A63-MEGAER16-70※	.075-.394	1.181	2.07	2.76	1.26	1.77	ERC16-□	MERN16	MGR30L	33,000	2.2
-90				3.54	1.93	1.38-1.85				33,000	2.4
-105				4.13	2.52					25,000	2.4
-135				5.32	3.70					20,000	2.9
-165				6.50	4.88					15,000	3.1
-MEGAER20-70※	.108-.512	1.378	2.07	2.76	1.26	1.77	ERC20-□	MERN20	MGR35L	30,000	2.2
-90※				2.54	1.93	2.48				30,000	2.4
-105				4.13	2.52	1.65-2.13				25,000	2.6
-135				5.32	3.70	1.65-2.44				20,000	3.1
-165				6.50	4.88					15,000	3.5
-MEGAER25-70※	.108-.630	1.654	2.07	2.76	1.26	1.77	ERC25-□	MERN25	MGR35L	30,000	2.4
-90※				3.54	1.97	2.44				25,000	2.6
-105				4.13	2.56	1.7.3-2.17				20,000	3.1
-135				5.32	3.74	1.73-2.65				15,000	3.7
-165				6.50	4.92					10,000	4.2
-MEGAER32-75※	.108-.787	1.969	2.07	2.95	1.30	1.97	ERC32-□	MERN32	MGR50L	30,000	2.9
-90※				3.54	1.85	2.40				25,000	3.3
-105				4.13	2.44	1.97-2.13				20,000	3.7
-135				5.32	3.62	1.97-2.68				15,000	4.4
-165				6.50	4.80					10,000	5.3
HSK-A100-MEGAER16-75※	.075-.394	1.181	3.35	2.95	1.22	1.83	ERC16-□	MERN16	MGR30L	20,000	7.3
-105				4.13	2.32	1.38-1.85				18,000	7.5
-135				5.32	3.50					14,000	7.9
-165				6.50	4.69					14,000	8.1
-MEGAER20-75※	.108-.512	1.378	3.35	2.95	1.22	1.77	ERC20-□	MERN20	MGR35L	18,000	7.5
-105				4.13	2.32	1.65-2.13				16,000	7.7
-135				5.32	3.50	1.65-2.44				14,000	8.1
-165				6.50	4.69					14,000	8.6
-MEGAER25-75※	.108-.630	1.654	3.35	2.95	1.26	1.73	ERC25-□	MERN25	MGR35L	15,000	7.5
-105				4.13	2.32	1.73-1.97				14,000	8.1
-135				5.32	3.50	1.73-2.65				13,000	8.8
-165				6.50	4.69					13,000	9.2
-MEGAER32-80※	.108-.787	1.969	3.35	3.15	1.42	1.93	ERC32-□	MERN32	MGR50L	15,000	7.9
-105※				4.13	2.32	2.79				14,000	8.6
-135				5.32	3.50	1.97-2.68				13,000	9.5
-165				6.50	4.69					13,000	10.3

Catalog Number	ød	øD	øD ₁	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
HSK-A125-MEGAER16-100	.075-.394	1.181	4.13	3.94	2.16	1.38-1.85	ERC16-□	MERN16*	MGR30L	15,000	9.7
-160				6.30	4.52					12,000	10.3
-MEGAER32-100	.108-.787	1.969		3.94	2.16	1.97-2.68	ERC32-□	MERN32*	MGR50L	14,000	10.6
-160				6.30	4.52					12,000	12.3

- Mega ER Nut is Included
- Adjusting screw, balance screws, collet, coolant pipe and wrench must be ordered separately
- "H" indicates the adjustment length with an adjusting screw
- Adjusting screws cannot be used with models marked ※
- Balance screws are not included
- Mega ER Grip is not able to use DIN6499 Form-A collets and ESX collets
- Weight does not include collet

ACCESSORIES

 COLLET PG. 240 	 MEGA NUT* PG. 255 	 PERFECT SEAL PG. 256 	 SOLID NUT PG. 255 	 MEGA WRENCH PG. 259 	 SCREW PG. 262 
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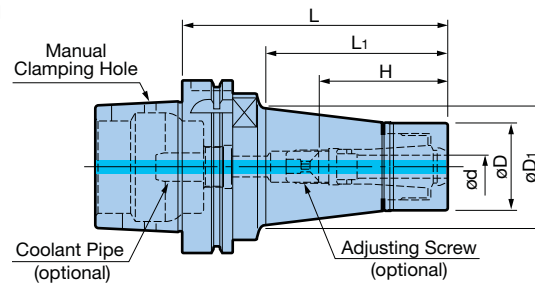
*Mega Nut is the recommended nut to achieve high accuracy and clamping force



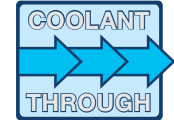
MEGA E CHUCK HSK-A40/A50/A63

CLAMPING RANGE: $\varnothing$.125"-.500" ($\varnothing$ 3- $\varnothing$ 12mm)

Exclusively for High Speed Finish End Milling



**MAX
35,000
RPM**



Catalog Number	ød	øD	øD ₁	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)		
HSK-A40-MEGA6E-60 ※	.125-.250 (3mm-6mm)	.984	1.01	2.36	.94	1.61	MEC6-□	MEN6	MGR25	35,000	.9		
-75 ※			1.11	2.95	1.54	2.17					1.0		
-90			1.11	3.54	2.13	1.46-1.77					25,000	1.2	
-MEGA8E-65 ※	.125-.250 (3mm-8mm)	1.181	1.32	2.56	1.18	1.73	MEC8-□	MEN8	MGR30	35,000	1.0		
-75 ※				2.95	1.57	2.13					30,000	1.1	
-90				3.54	2.17	1.65-2.01					25,000	1.3	
-MEGA10E-70 ※	.125-.375 (3mm-10mm)	1.378	1.38	2.76	1.38	1.89	MEC10-□	MEN10	MGR35	30,000	1.2		
-90				3.54	2.17	1.89-2.05				25,000	1.5		
-MEGA13E-70 ※	.125-.500 (3mm-12mm)	1.654	1.65	2.76	1.38	1.97	MEC13-□	MEN13	MGR42L	30,000	1.4		
-90 ※				3.54	2.17	2.64				25,000	1.8		
HSK-A50-MEGA6E-75	.125-.250 (3mm-6mm)	.984	1.12	2.95	1.38	1.46-1.69	MEC6-□	MEN6	MGR25	30,000	1.3		
-100			1.29	3.94	2.48	1.46-1.77				28,000	1.8		
-MEGA8E-75 ※	.125-.250 (3mm-8mm)	1.181	1.31	2.95	1.50	1.65	MEC8-□	MEN8	MGR30	30,000	1.5		
-100			1.43	3.94	2.20	1.65-2.01				28,000	2.0		
-MEGA10E-75 ※	.125-.375 (3mm-10mm)	1.378	1.50	2.95	1.56	1.89	MEC10-□	MEN10	MGR35	30,000	1.8		
-100			1.57	3.94	2.20	1.89-2.28				25,000	2.0		
-MEGA13E-75 ※	.125-.500 (3mm-12mm)	1.654	—	2.95	1.93	1.97	MEC13-□	MEN13	MGR42L	30,000	2.0		
-100			—	3.94	2.91	1.97-2.17				25,000	2.4		
HSK-A63-MEGA6E-65 ※	.125-.250 (3mm-6mm)	.984	1.03	2.56	1.10	1.77	MEC6-□	MEN6	MGR25	30,000	2.0		
-90			1.18	3.54	1.97	1.46-1.77					2.2		
-105			1.28	4.13	2.56						29,000	2.4	
-120			1.39	4.72	3.15							27,000	2.6
-135			1.49	5.31	3.74								3.1
-MEGA8E-67 ※	.125-.250 (3mm-8mm)	1.181	1.23	2.64	1.18	1.77	MEC8-□	MEN8	MGR30	30,000		2.0	
-90			1.37	3.54	1.97	1.46-1.77					2.4		
-105			1.48	4.13	2.60	1.65-2.01					29,000	2.6	
-120			1.59	4.72	3.23						28,000	3.1	
-135			1.70	5.31	3.86						27,000	3.5	
-MEGA10E-75	.125-.375 (3mm-10mm)	1.378	1.47	2.95	1.46	1.89	MEC10-□	MEN10	MGR35	30,000	2.4		
-90			1.58	3.54	2.05	2.52					2.6		
-105			1.69	4.13	2.68	1.89-2.28					29,000	3.1	
-120			1.71	4.72	3.27						28,000	3.3	
-135			1.69	5.31	3.86						27,000	3.7	
-MEGA13E-75	.125-.500 (3mm-12mm)	1.654	1.69	2.95	1.22	1.93	MEC13-□	MEN13	MGR42L	30,000	2.6		
-90			1.76	3.54	1.77	2.52					3.1		
-105			1.80	4.13	2.36	1.97-2.24					29,000	3.5	
-120			1.86	4.72	2.99						28,000	4.0	
-135			1.84	5.31	3.58						26,000	4.2	

Catalog Number	ød	øD	øD ₁	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)			
HSK-A100-MEGA6E-75 ※	.125-.250 (3mm-6mm)	1.984	.08	2.95	1.30	1.81	MEC6-□	MEN6	MGR25	24,000	5.5			
-90			1.16	3.54	1.89	1.46-1.77					6.0			
-105			1.26	4.13	2.48					18,000		6.2		
-120			1.37	4.72	3.07								6.4	
-135			1.47	5.31	3.66									
-165			1.68	6.50	4.80					14,000		7.1		
-MEGA8E-75 ※			.125-.250 (3mm-8mm)	1.181	1.26	2.95				1.30	1.81	MEC8-□	MEN8	MGR30
-90	1.35	3.54			1.89	1.65-2.01	6.2							
-105	1.45	4.13			2.48			18,000	6.4					
-120	1.56	4.72			3.07					6.8				
-135	1.66	5.31			3.66									
-165	1.87	6.50			4.84			16,000	7.5					
-MEGA10E-80 ※	.125-.375 (3mm-10mm)	1.378			1.47	3.15	1.50	2.01	MEC10-□	MEN10	MGR35			
-90 ※			1.54	3.54	1.89	2.40	1.89-2.28	6.4						
-105			1.65	4.13	2.48	18,000						7.3		
-120			1.75	4.72	3.07								16,000	8.2
-135			1.85	5.31	3.66									
-165			2.06	6.50	4.84									
-MEGA13E-82 ※			.125-.500 (3mm-12mm)	1.654	1.75	3.23	1.57	2.09				MEC13-□	MEN13	MGR42L
-90 ※	1.80	3.54			1.89	2.40	1.97-2.68	6.8						
-105	1.91	4.13			2.48	16,000			7.9					
-120	2.01	4.72			3.07									
-135	2.11	5.31			3.66									
-165	2.32	6.50			4.84									

- Mega E Nut is included
- Adjusting screw, collet and wrench must be ordered separately
- Coolant Pipe must be ordered separately
- Adjusting screws cannot be used with models marked ※
- H Max is the maximum tool shank length that can be inserted into the holder
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet

ACCESSORIES

 COLLET PG. 243	 MEGA NUT PG. 248	 PERFECT SEAL PG. 254	 MEGA WRENCH PG. 259	 SCREW PG. 262
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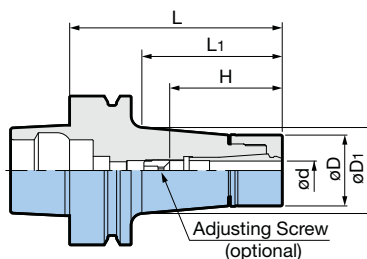
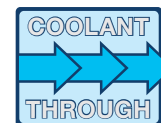


MEGA E CHUCK HSK-F63

CLAMPING RANGE: ϕ .125"-.500" (ϕ 3- ϕ 12mm)

Exclusively for High Speed Finish End Milling

MAX
30,000
RPM



Catalog Number	ød	øD	øD ₁	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)	
HSK-F63-MEGA6E-65 ※	.125-.250 (3mm-6mm)	.984	1.11	2.56	1.34	1.54	MEC6-□	MEN6	MGR25	30,000	1.8	
-90			1.23	3.54	2.24	1.46-1.77					2.0	
-MEGA8E-65 ※	.125-.250 (3mm-8mm)	1.181	1.29	2.56	1.34	1.61	MEC8-□	MEN8	MGR30	30,000	1.8	
-90			1.43	3.54	2.28	1.65-1.81					2.2	
-MEGA10E-75 ※	.125-.375 (3mm-10mm)	1.378	1.51	2.95	1.69	1.89	MEC10-□	MEN10	MGR35	30,000	2.2	
-90 ※			1.62	3.54	2.28	2.64					2.6	
-105			1.73	4.13	2.91	1.89-2.28				29,000	2.9	
-120			1.84	4.72	3.54						3.5	
-135			1.93	5.31	4.06						27,000	4.0
-MEGA13E-75 ※			1.80	2.95	1.81						1.97	30,000
-90 ※	.125-.500 (3mm-12mm)	1.654	1.90	3.54	2.40	2.52	MEC13-□	MEN13	MGR42L	3.1		
-105			2.01	4.13	3.03	1.97-2.28				29,000	3.5	
-135			2.04	5.31	4.13	1.97-2.36				26,000	4.4	

- Mega E Nut is included
- Adjusting screw, collet and wrench must be ordered separately
- Adjusting screws cannot be used with models marked ※
- H Max is the maximum tool shank length that can be inserted into the holder
- Maximum operating speeds are directly influenced by the rigidity of the machine, therefore, when determining the optimum cutting conditions, increase the cutting parameters gradually
- Weight does not include collet

ACCESSORIES

COLLET PG. 243	MEGA NUT PG. 248	PERFECT SEAL PG. 254	MEGA WRENCH PG. 259	SCREW PG. 262
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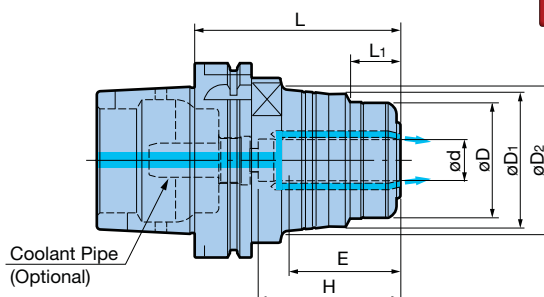
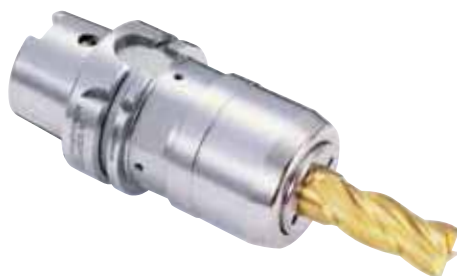
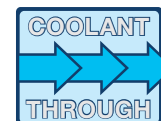
MEGA DOUBLE POWER CHUCK HSK-A40/A50/A63/A100



CLAMPING RANGE: ϕ .625"-1.250" (ϕ 16- ϕ 42mm)

For Heavy Duty End Milling

MAX
28,000
RPM



Catalog Number	ød	øD	øD1	øD2	L	L1	H Max	Wrench	Min Clamping Length E	Max RPM	Weight (lbs.)
HSK-A40-MEGA16DS-80	16mm	1.811	—	—	3.25	1.10	2.48	MGR46L	2.05	12,000	1.7
HSK-A50-MEGA16DS-85	16mm	1.811	—	—	3.44	1.10	2.52	MGR46L	2.05	25,000	2.2
-MEGA20DS-85	20mm	1.969	—	—	3.48	1.30	2.56	MGR50L	2.09	20,000	2.3
HSK-A63-MEGA.625DS-3.5A	.625	1.650	2.07	—	3.58	1.06	2.59	MGR42L	2.10	28,000	3.4
-MEGA.750DS-3.5	.750	2.170	2.19	—	3.59	1.40	2.61	MGR55L	2.30	28,000	3.7
-5				—	5.09		3.44			25,000	4.8
-MEGA1.000DS-4A	1.000	2.440	2.47	—	4.08	1.61	3.09	MGR62L	2.30	24,000	4.4
-MEGA1.250DS-4.5	1.250	2.760	2.75	—	4.59	1.42	3.61	MGR70L	2.70	24,000	4.9
-MEGA16DS-80A	16mm	1.654	2.08	—	.83	3.24	2.24	MGR42L	2.05	25,000	2.9
-MEGA20DS-90	20mm	2.165	2.19	—	1.46	3.64	2.64	MGR55L	2.28	25,000	3.7
-120						4.82	3.43			23,000	4.8
-MEGA25DS-100A	25mm	2.441	2.47	—	1.59	4.03	3.03	MGR62L	2.32	22,000	4.4
-MEGA32DS-105	32mm	2.756	2.78	—	1.47	4.23	3.23	MGR70L	2.64	22,000	4.8
HSK-A100-MEGA.750DS-4	.750	2.362	2.72	2.91	4.09	1.10	2.85	MGR60L	2.30	18,000	9.0
-MEGA1.000DS-4	1.000	2.756	3.03	3.35	4.09	1.34	2.87	MGR70L	2.40	18,000	10.0
-MEGA1.250DS-4.5	1.250	3.150	3.39	3.35	4.59	1.65	3.35	MGR80L	2.90	13,000	11.0
-MEGA16DS-105	16mm	1.811	2.17	2.48	4.23	1.02	2.87	MGR46L	2.05	18,000	7.7
-MEGA16DS-135					5.41					16,000	9.0
-MEGA20DS-105	20mm	2.362	2.72	2.91	4.23	1.10	2.95	MGR60L	2.28	18,000	9.0
-135					5.41		3.43			16,000	11.0
-165					6.59					15,000	13.0
-MEGA25DS-105	25mm	2.756	3.03	3.35	.41	1.35	2.95	MGR70L	2.64	18,000	9.9
-135					5.41		3.62			16,000	12.3
-165					6.59					15,000	15.0
-MEGA32DS-115	32mm	3.150	3.39	3.35	4.62	1.65	3.35	MGR80L	2.87	18,000	11.0
-135					5.41		4.13			16,000	12.8
-165					6.59		4.21			14,000	15.6
-MEGA42DS-115	42mm	3.898	3.93	3.93	4.61	1.65	3.39	MGR99L	3.15	14,000	12.1

• Wrench & coolant pipe must be ordered separately

ACCESSORIES



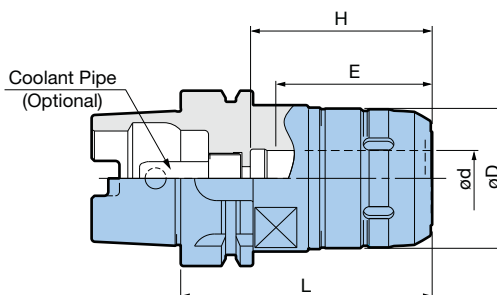
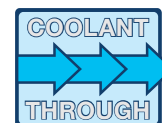
HSK



NEW Hi-POWER MILLING CHUCK HSK-A40/A50/A63/A100/A125



CLAMPING RANGE: ϕ .750"-2.000" (ϕ 20-42mm) — For Heavy Duty End Milling



Catalog Number	ød	øD	L	H	Min Clamping Length E	Wrench	Weight (lbs.)
HSK-A40-HMC20S-85	20mm	1.969	3.35	2.60	2.20	FK45-50L	2.0
HSK-A50-HMC20S-90	20mm	1.969	3.54	2.60	2.20	FK45-50L	2.6
HSK-A63-HMC20S-90	20mm	1.969	3.54	2.56	2.20	FK-50L	3.3
-120			4.72	3.35			4.2
-HMC25S-100	25mm	2.323	3.94	2.95	2.56	FK58-62L	4.2
-135			5.31	3.15			5.5
-HMC32S-110	32mm	2.677	4.33	3.35	2.52	FK68-75L	5.1
-135			5.31	3.54			5.7
-165			6.50				7.1
HSK-A100-HMC20S-105	20mm	1.969	4.13	2.87	2.20	FK45-50L	6.6
-135			5.31	3.35			7.7
-165			6.50				9.0
-HMC25S-105	25mm	2.323	4.13	2.87	2.24	FK58-62L	7.3
-135			5.31	3.54			8.6
-165			6.50				10.6
-HMC32S-115	32mm	2.677	4.53	3.27	2.83	FK68-75L	8.6
-135			5.31	4.06			9.7
-165			6.50	4.13			11.0
-200			7.87				14.1
-300			11.81				20.5
-HMC42S-115	42mm	3.346	4.53	3.27	2.87	FK80-90L	10.8
-135			5.31	4.06			12.1
-165			6.50	4.21			15.0
HSK-A125-HMC.750J-4	.750	2.36	4.09	2.64	2.28	FK58-62	12.3
-HMC1.000J-5	1.000	2.44	5.09	3.63	2.64	FK80-90	12.7
-HMC1.250J-5	1.250	3.15			2.87	FK92-100	15.0
-HMC1.500J-5	1.500	3.90					17.9
-HMC2.000J-6	2.000	4.13	6.09	4.54	3.03	FK110-115	20.5

• Wrench & Coolant Pipe must be ordered separately

ACCESSORIES



HSK

HYDRAULIC CHUCK HSK-A40/A50/A63

CLAMPING RANGE: ϕ .750"-1.250" (ϕ 6-25mm)

For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools

MAX
17,000
RPM

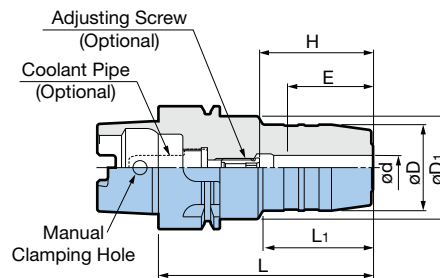
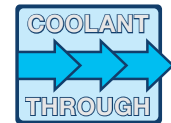


Fig. 1

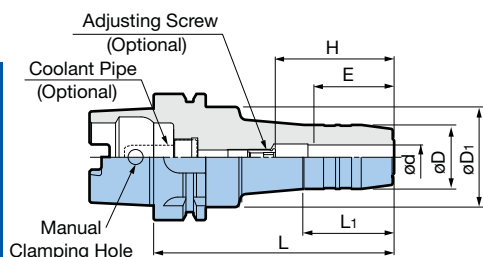


Fig. 2

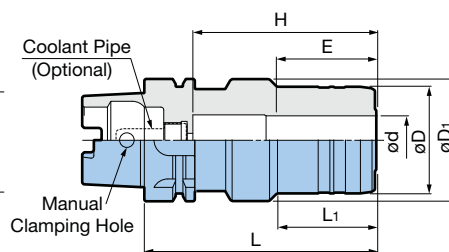


Fig. 3

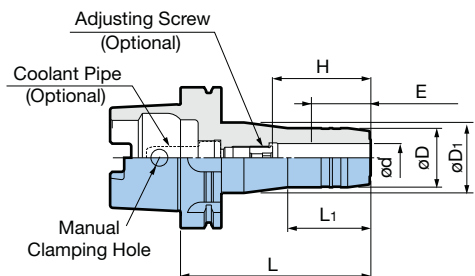


Fig. 4

Catalog Number	Fig.	ød	øD	øD ₁	L	L ₁	H	Min Clamping Length E	Adjusting Screw	Max RPM	Weight (lbs.)	
HSK-A40-HDC6-70	1	6mm	1.020	1.32	2.76	1.42	1.10-1.42	1.10	HDA6-05013	17,000	1.0	
-HDC8-70		8mm	1.100						HDA8-06013		15,000	1.1
-HDC10-75		10mm	1.180									1.1
-HDC12-80		12mm	1.260									1.2
HSK-A50-HDC6-75	1	6mm	1.020	1.64	2.95	1.56	1.10-1.46	1.10	HDA6-05013	17,000	1.5	
-HDC8-75		8mm	1.100						HDA8-06013		15,000	1.5
-HDC10-80		10mm	1.180						HDA10-08015			1.5
-HDC12-85		12mm	1.260									1.8
-HDC16-90		16mm	1.500	13,000	2.0							
-HDC20-90 ▲		20mm	1.650		2.0							
-HDC25-90 ※		25mm	2.170		2.9							
				2.48								
HSK-A63-HDC.750-4	2	.750	1.654	—	4.00	2.00	1.69-2.76	1.69	HDA16-12037	13,000	3.5	
-HDC1.000-4	3	1.000	2.165	—	4.00	1.25	2.05-3.15	2.05	HDA25-16039	13,000	4.6	
-HDC1.250-4.5	3	1.250	2.677	—	4.00	1.25	2.20-3.15	2.20	HDA25-16039	12,000	5.3	
-HDC6-70 ※	2	6mm	1.020	1.97	2.76	.99	1.81	1.10	—	17,000	2.2	
-120					4.72	1.73	1.10-1.89		HDA6-05032		2.6	
-150					5.90	1.73	1.10-1.89		—		3.1	
-HDC8-70 ※		8mm	1.100		2.76	.94	1.81		—	15,000	2.2	
-120					4.72	1.73	1.10-1.89		HDA8-06032		2.9	
-150					5.90	1.73	1.10-1.89		—		1.1	
-HDC10-80 ※		10mm	1.180		3.15	1.38	2.17	1.30	—	15,000	2.4	
-120					4.72	1.77	1.30-2.09		HDA10-08032		2.9	
-150					5.90	1.77	1.30-2.09		—		3.5	
-HDC12-85 ※		12mm	1.260		3.35	1.57	2.36	1.50	—	15,000	2.4	
-120					4.72	1.77	1.50-2.28		HDA12-10025		3.1	
-150					5.90	1.77	1.50-2.28		—		3.5	

Catalog Number	Fig.	ød	øD	øD ₁	L	L ₁	H	Min Clamping Length E	Adjusting Screw	Max RPM	Weight (lbs.)	
HSK-A63-HDC14-85※	2	14mm	1.340	1.97	3.35	1.57	2.36	1.50	HDA12-10032	15,000	2.6	
-120					4.72	1.77	1.50-2.28		HDA12-10025		3.1	
-150					5.90						3.7	
-HDC16-90※		16mm	1.500		3.54	1.81	2.56	1.69	HDA16-16037	13,000	2.9	
-120					4.72		2.28-3.66		HDA16-12015		3.3	
-150					5.90		1.69-2.66		HDA16-12037		4.2	
-HDC18-90※		18mm	1.570		3.54	1.81	2.56		HDA16-12037		2.9	
-120					4.72		2.38-3.68		HDA20-16015		3.5	
-150					5.90		1.69-2.68		HDA25-16039		4.4	
-HDC20-90※▲		20mm	1.650		3.54	1.89	2.56		HDA16-12037		2.9	
-120					4.72		2.38-3.66				HDA20-16015	3.5
-150					5.90		1.69-2.68				HDA25-16039	4.4
-HDC25-120※	3	25mm	2.170	2.48	4.72	2.00	3.74	2.05	HDA16-12037	12,000	4.6	
-HDC32-125※		32mm	2.360	2.95	4.92	2.00	3.94	2.20			5.3	
HSK-A100-HDC.750-4	2	.750	1.654	—	4.00	2.00	1.69-2.76	1.69	HDA16-12037	13,000	6.0	
-HDC1.000-4	3	1.000	2.480	—	4.00	3.54	2.05-3.15	2.05	HDA25-16039	13,000	7.3	
-HDC1.250-4.5	3	1.250	2.717	—	4.50	3.58	2.20-3.15	2.20	HDA25-16039	12,000	8.2	
-HDC6-75※	4	6mm	1.020	1.97	2.95	1.02	1.81	1.10	HDA12-10032	17,000	5.3	
-120					4.72	1.73	1.10-1.89		HDA6-05032		5.7	
-165					6.50						6.4	
-HDC8-75※		8mm	1.100		2.95	1.02	1.81		HDA12-10032	5.3		
-120					4.72	1.73	1.10-1.89			HDA8-06032	5.7	
-165					6.50						6.6	
-HDC10-90※		10mm	1.188		3.54	1.65	2.40	1.30	HDA12-10032	15,000	5.5	
-120					4.72	1.77	1.30-2.09		HDA10-08032		6.0	
-165					6.50						6.8	
-HDC12-95※		12mm	1.260		3.74	1.85	2.48	1.50	HDA16-12037		5.5	
-120					4.72		1.50-2.26		HDA12-10025		6.0	
-165					6.50				HDA12-10032		6.8	
-HDC16-100※		16mm	1.500		3.94	2.09	2.68	1.69	HDA16-12037		13,000	5.7
-135					5.31		1.69-2.68		HDA16-12030			6.6
-165					6.50				HDA16-12037			7.3
-HDC20-105※		20mm	1.650		4.13	2.32	2.87		HDA16-12037	6.0		
-135					5.31		2.28-2.68		HDA20-16015	6.8		
-165					6.50		1.69-2.66		HDA25-16039	7.9		
-HDC25-110※		25mm	2.240	2.48	4.33	2.44	3.07	2.05	HDA16-12037	12,000		7.3
-HDC32-110※		32mm	2.520	2.95				2.20				8.2

- Adjustable cutter length H is the adjustment length when using an optional adjusting screw, adjusting screw cannot be used in hydraulic chuck with ※ mark, H length is equal to the Max insertion length
- Do not attempt to balance before first consulting BIG Kaiser
- Straight collet cannot be used in HSK-A50-HDC20-90 & HSK-A63-HDC20-90 with ▲ mark
- In some cases, machine rigidity and cutting tool balance may largely influence the Max RPM indicated, gradually increase the RPM from a safe speed until the appropriate speed is reached
- Coolant Pipe is not included
- In case the projection length needs to be adjusted from the shank side, use the adjusting screw with "W" which has hexagon sockets on both sides (ex: HDA6-05013W)

CAUTION

Use only cutting tools that have a shank tolerance of h6 (see table Pg. 16).
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Roughing end mills are not recommended for use with Hydraulic Chucks.
Do not tighten the clamping screw without first inserting a cutting tool into the tool holder.
Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E".

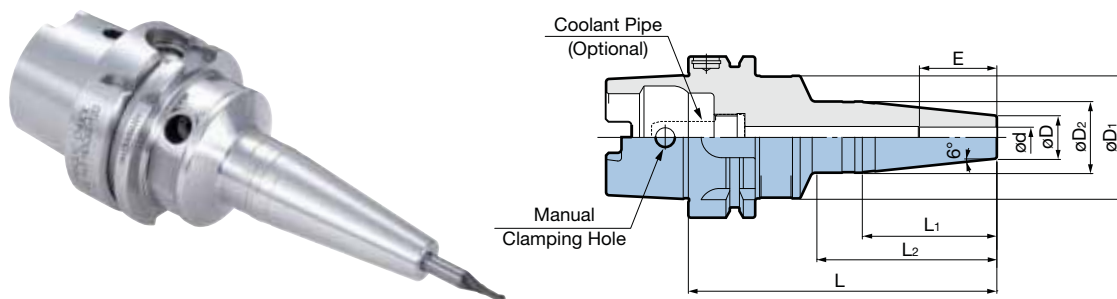
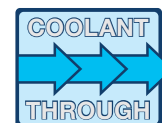
ACCESSORIES



HYDRAULIC CHUCK SUPER SLIM HSK-A63

CLAMPING RANGE: $\phi 6$ -12mm

For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools



Catalog Number	ød	øD	øD ₁	øD ₂	L	L ₁	L ₂	E Min	Weight (lbs.)
HSK-A63-HDC6S-120	6mm	.551	1.89	1.024	4.72	2.24	2.76	.98	2.4
-HDC8S-120	8mm	.669		1.102		2.05		1.18	2.7
-HDC10S-120	10mm	.748		1.181				1.26	2.7
-HDC12S-120	12mm	.827		1.260				1.38	2.7

- Adjusting Screw cannot be used

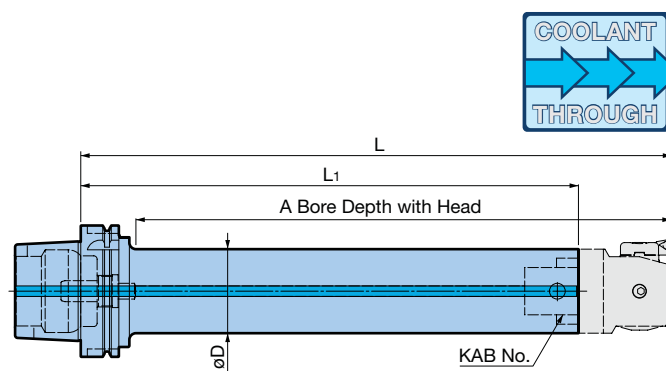
CAUTION

Roughing end mills are not recommended for use with Hydraulic Chucks.
Use only cutting tools that have a shank tolerance of h6.
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Do not tighten the clamping screw without first inserting a cutting tool into the Hydraulic Chuck.
Always insert the cutting tool into the Hydraulic Chuck beyond minimum clamping length E.

ACCESSORIES

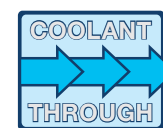
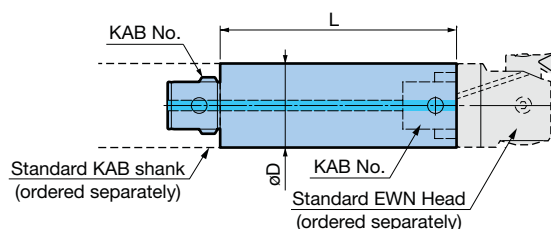


For Deep Hole Finish Boring



Catalog Number	Adapter Size	ϕD	L	L ₁	A	Weight (lbs.)
HSK-A100-CK4DP-241	KAB4	1.535	11.34	9.49	9.69	9.5
-CK5DP-303	KAB5	1.968	14.17	11.93	12.52	14.3
-CK6DP-379	KAB6	2.520	17.72	14.92	16.06	24.6

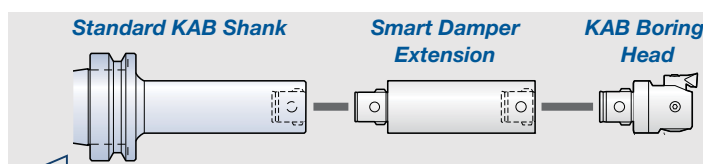
- Dimensions L & A are length when assembled with respective EWN head
- Insert is aligned with drive keys for tool orientation
- Boring head, inserts, etc. are sold separately



KAISER Extension

Catalog Number	Adapter Size	ϕD	L	Weight (lbs.)
CK44DP-120	KAB4	1.535	4.724	2.9
CK55DP-150	KAB5	1.968	5.906	5.7
CK66DP-180	KAB6	2.520	7.087	11.7

- Center-through hole is applied and can be used in center-through application
- Additional reduction make the chattering and cannot be used together



For the standard KAB shanks, please see catalog –
KAISER Precision Modular Tooling System

CAUTION

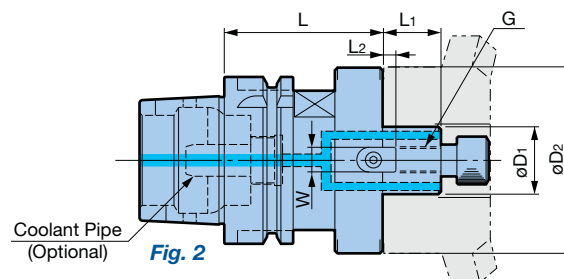
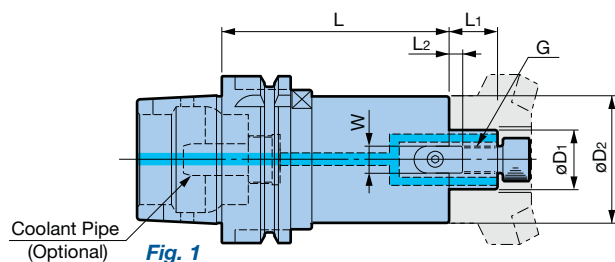
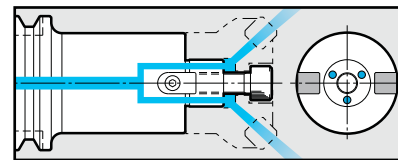
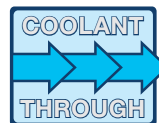
Damping function may become less effective over time due to the break-down of special elastomers used in the damping mechanism. If excessive vibration occurs after 1 year of continued use, it is recommended to return Smart Damper bars for overhaul. Please contact BIG Kaiser for details of repair.

SHELL MILL HOLDER

HSK-A63/A100—TYPE FMH

CLAMPING RANGE: $\varnothing 16\text{--}40\text{mm}$

For Cutters that Require a Coolant Hole Through the Pilot



Catalog Number	Fig.	$\varnothing D_1$	$\varnothing D_2$	L	L ₁	Drive Keys		G	Weight (lbs.)
						L ₂	W		
HSK-A63-FMH16-37-45	1	16mm	1.457	1.77	.63	.16	.31	M8	2.2
-FMH22-47-45		22mm	1.850	2.36	.71	.20	.39	M10	2.4
-60				3.54					2.9
-90				5.91					3.7
-150				2.36					5.5
-FMH27-60-60	2	27mm	2.362	2.36	.79	.24	.47	M12	3.5
-90				3.54					5.1
-FMH22.225-47-45	1	22.225mm	1.850	1.77	.71	.14	.31	M10	2.4
-60				2.36					2.9
-90				3.54					3.7
-150				5.91					5.5
-FMH25.4-70-60	2	25mm	2.756	2.36	.87	.20	.37	M12	4.0
-90				3.54					5.5
-150				5.91					9.0
-FMH31.75-76-60	2	31.75mm	2.992	2.36	1.18	.28	.50	M16	4.4
-90				3.54					6.0
HSK-A100-FMH22-47-105	1	22mm	1.850	4.13	.71	.20	.39	M10	7.5
-150				5.91					8.8
-200				7.87					10.4
-250				9.84					11.9
-FMH22-60-60	1	22mm	2.362	2.36	.71	.20	.39	M10	6.4
-105				4.13					8.6
-150				5.91					11.9
-200				7.87					13.4
-250				9.84					15.9
-FMH27-60-60	1	27mm	2.362	2.36	.79	.24	.47	M12	6.4
-90				3.54					8.2
-150				5.91					11.0

Catalog Number	Fig.	øD ₁	øD ₂	L	L ₁	Drive Keys		G	Weight (lbs.)
						L ₂	W		
HSK-A100-FMH27-76-60	1	27mm	2.992	2.36	.79	.24	.47	M12	7.1
-90				3.54					9.5
-150				5.91					14.3
-FMH32-96-60	2	32mm	3.780	2.36	.87	.28	.55	M16	8.4
-90				3.54					12.1
-150				5.91					19.6
-FMH40-100-75	2	40mm	3.937	2.95	1.02	.33	.63	M20 (MBA-M20)	10.8
-105				4.13					15.0
-FMH22.225-47-105	1	22.225mm	1.850	4.13	.67	.14	.31	M10	7.5
-150				5.91					8.8
-200				7.87					10.4
-250				9.84					11.7
-FMH22.225-60-60	1	22.225mm	2.362	2.36	.67	.14	.31	M10	6.4
-105				4.13					8.6
-150				5.91					10.8
-200				7.87					13.4
-250				9.84					15.9
-FMH25.4-70-60	1	25.4mm	2.756	2.36	.87	.20	.37	M12	7.1
-90				3.54					9.0
-150				5.91					13.0
-200				7.87					16.3
-FMH31.75-76-60	1	31.75mm	2.992	2.36	1.18	.28	.50	M16	7.9
-90				3.54					9.9
-105				4.13					11.0
-150				5.91					14.5
-200				7.87					18.5
-FMH31.75-96-60	2	31.75mm	3.780	2.36	1.18	.28	.50	M16	8.6
-90				3.54					12.1
-105				4.13					14.1
-150				5.91					19.8
-200				7.87					26.0
-FMH38.1-100-60	2	38.1mm	3.937	2.36	1.34	.35	.63	M20 (MBA-M20)	9.0
-90				3.54					13.0
-105				4.13					15.0
-150				5.91					21.2
HSK-A125-FMH22-47-50	1	22mm	1.850	1.97	.71	.20	.39	M10	9.5
-FMH32-78-60	1	32mm	2.362	2.36	.87	.28	.55	M16	11.2
-FMH32-96-105	1	32mm	3.780	4.13					17.9
-SMC1.000-4	1	1.000	2.189	4.00	.69	.20	.37	1/2"-20	12.5
-SMC1.250-4	1	1.250	2.752	4.00		.28	.49	5/8"-18	13.6
-SMC1.500-4	1	1.500	3.626	4.00	.94	.35	.62	3/4"-16	17.3

- By utilizing a clamping bolt with a hole through, coolant is supplied through the bolt
- Hexagon Socket Head Cap Screw is included
- Coolant Pipe is ordered separately

ACCESSORIES

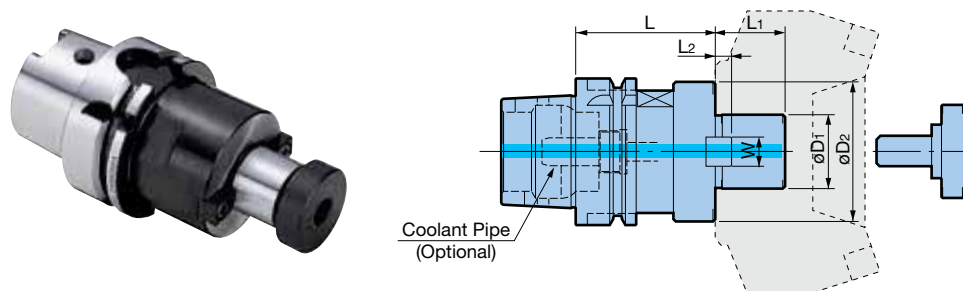
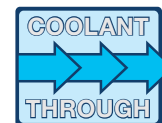


SHELL MILL HOLDER

HSK-A40/A50/A63/A100—TYPE A & C

CLAMPING RANGE: $\varnothing 16$ -40mm

For Cutters that Require a Coolant Hole Through the Pilot



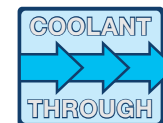
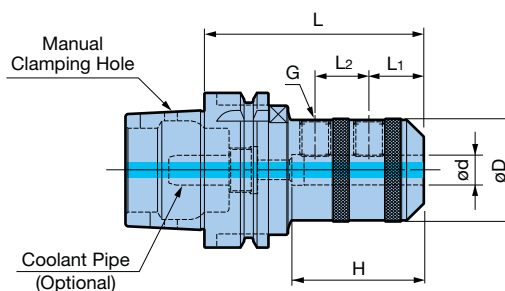
Catalog Number	$\varnothing D_1$	$\varnothing D_2$	L	L ₁	L ₂	W	Clamp Bolt	Weight (lbs.)
HSK-A40-FMA25.4-50	25.4mm	1.969	1.97	.87	.20	.37	M12	1.3
HSK-A50-FMA25.4-60	25.4mm	1.969	2.36	.87	.20	.37	M12	2.2
-FMA31.75-60	31.75mm	2.362		1.18	.28	.50	M16	2.6
HSK-A63-FMA25.4-60	25.4mm	1.969	2.36	.87	.20	.37	M12	2.9
-90			3.54					3.7
-FMA31.75-60	31.75mm	2.362	2.36	1.18	.28	.50	M16	3.3
HSK-A100-FMA25.4-105	25.4mm	1.969	4.13	.87	.20	.37	M12	9.9
-135			5.31					11.7
-195			7.68					15.6
-FMA31.75-105			4.13	1.18	.28	.37	M16	10.6
-135	31.75mm	2.362	5.31					12.3
-195			7.68					15.4
-FMA38.1-90	38.1mm	3.150	3.54	1.34	.35	.63	M20	10.8
-FMA50.8-75	50.8mm	3.937	2.95	1.42	.39	.75	M24	11.7
HSK-A50-FMC22-60	22mm	1.772	2.36	.71	.20	.39	M10-30L※	2.0

- Standard Clamp Bolt (MBA-M□□) is included
- To supply coolant through the arbor, clamping bolt with a hole through (TMBA-M□□) is required
- ※ M10-30L is a cap screw
- Coolant Pipe is ordered separately

ACCESSORIES



CLAMPING RANGE: $\varnothing 12-50\text{mm}$



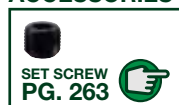
Catalog Number	$\varnothing d$	$\varnothing D$	L	L ₁	L ₂	H	G	Weight (lbs.)
HSK-A63-ISL12-80	12mm	1.654	3.15	.89	—	1.97	M12	2.6
-ISL16-80	16mm	1.890		.94		2.05	M14	3.1
-ISL20-80	20mm	2.047		.98		2.13	M16	3.3
-ISL25-105	25mm	2.559	4.13	.94	.98	2.36	M18	5.1
-ISL32-115	32mm	2.835	4.53		1.10	2.52	M20	6.0
HSK-A100-ISL16-90	16mm	1.890	3.54	.94	—	2.05	M14	7.5
-135			5.31					8.6
-195			7.68					10.4
-ISL20-90	20mm	2.047	3.54	.98	—	2.13	M16	7.5
-135			5.31					9.0
-195			7.68					11.0
-ISL25-105	25mm	2.559	4.13	.94	.98	2.36	M18	9.5
-135			5.31					11.0
-135			5.31					14.1
-ISL32-125	32mm	2.835	4.92	.94	1.10	2.52	M20	10.8
-165			6.50					13.9
-195			7.68					15.9
-ISL40-125	40mm	3.543	4.92	1.18	1.26	2.91	M20	12.8
-165			6.50					17.9
-210			8.27					22.5
-ISL50-135	50mm	3.917	5.31	1.38	1.38	3.31	M24	14.8
-165			6.50					18.7
-210			8.27					24.2
HSK-A125-EM.750-4	.750	1.750	4.00	1.00	—	3.88	5/8"-18	10.4
-EM1.000-5	1.000	2.252	5.00	1.13	1.00	3.13	3/4"-16	12.2
-EM1.250-5	1.250	2.750						13.6
-EM1.500-5	1.500	2.750						13.1
-EM2.000-6	2.000	3.500	6.00	1.38	1.38	4.33	1"-14	17.1

- H dimension without values in the above table indicates that those models have a larger diameter hole behind the bore
- Coolant Pipe is ordered separately

CAUTION

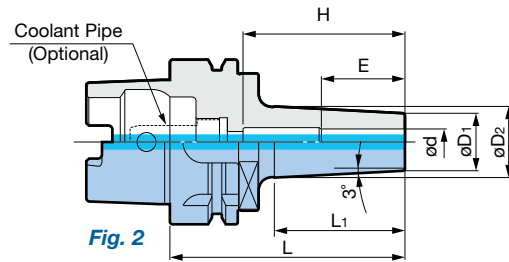
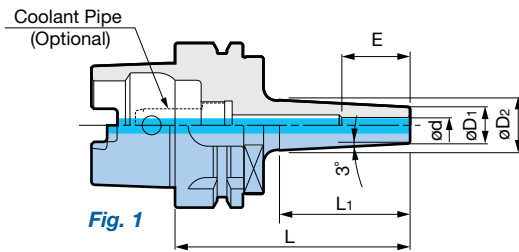
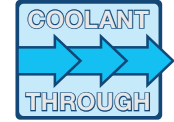
BIG genuine side lock screws must be used as they are made to an exclusive design and different from other screws on the market.

ACCESSORIES



SHRINK FIT HOLDER HSK-A40/A50/A63

CLAMPING RANGE: $\phi 4$ -20mm



Catalog Number	Fig.	ød	øD ₁	øD ₂	L	L ₁	Min Clamping Length E	Max Insertion Length H	Weight (lbs.)
HSK-A40-SRC4-60 ※	2	4mm	.394	.50	2.36	1.04	.63	1.73	.6
-70 ※				.54	2.76	1.44		2.13	.6
-SRC6-75		6mm	.551	.73	2.95	1.67	1.02	2.05	.7
-SRC8-75						.89			1.75
-SRC10-75		10mm	.866	1.02		1.46	1.26	2.20	.9
-SRC12-75						.945	1.10		1.50
HSK-A50-SRC4-75 ※	2	4mm	.394	.53	2.95	1.26	.63	2.17	1.1
-SRC6-75	1	6mm	.551	.69		1.38	1.02	—	1.3
-SRC8-75	2	8mm	.709	.85				2.05	1.4
-SRC10-75		10mm	.866	1.00		1.5			
-SRC12-75		12mm	.945	1.10		1.5			
-SRC16-75		16mm	1.102	1.26		1.6			
HSK-A63-SRC4-90 ※	2	4mm	.394	.58	3.54	1.77	.63	2.68	1.9
-SRC6-90	1	6mm	.551	.75		1.97	1.02	—	2.0
-150				.98	5.91	4.21		2.3	
-SRC8-90	2	8mm	.709	.91	3.54	1.97	1.02	2.05	2.0
-150				1.14	5.91	4.29			2.5
-SRC10-90		10mm	.866	1.06	3.54	1.97	1.26	2.44	2.2
-150				1.32	5.91	4.33			2.8
-SRC12-90		12mm	.945	1.14	3.54	1.97	1.42	2.56	2.2
-150				1.42	5.91	4.37		2.9	
-SRC16-90		16mm	1.102	1.30	3.54	1.97	1.50	2.56	2.2
-165				1.59	6.50	4.65		3.15	3.7
-SRC20-90		20mm	.945	1.56	3.54	2.05	1.65	2.56	2.4
-165				1.83	6.50	4.76		3.94	4.2

Catalog Number	Fig.	ød	øD ₁	øD ₂	L	L ₁	Min Clamping Length E	Max Insertion Length H	Weight (lbs.)
HSK-A100-SRC6-105	1	6mm	.551	.79	4.13	2.24	1.02	—	5.5
-165				1.04	6.50	4.61			6.0
-SRC8-105		8mm	.709	.94	4.13	2.24			5.5
-165				1.20	6.50	4.61			6.2
-SRC10-105		10mm	.866	1.10	4.13	2.24	1.26		5.7
-165				1.36	6.50	4.61			6.4
-SRC12-105	2	12mm	.945	1.18	4.13	2.24	1.42	2.83	5.7
-165				1.44	6.50	4.61			6.6
-SRC16-105		16mm	1.102	1.34	4.13	2.24	1.50		6.0
-165				1.57	6.50	4.61		3.15	6.8
-SRC20-105		20mm	1.339	1.57	4.13	2.24	1.65	2.83	6.2
-165				1.83	6.50	4.61		3.94	7.5

- Use carbide cutter within a tolerance of h6
- ※ Use carbide cutter within a tolerance of h5
- Coolant Pipe is ordered separately

CAUTION

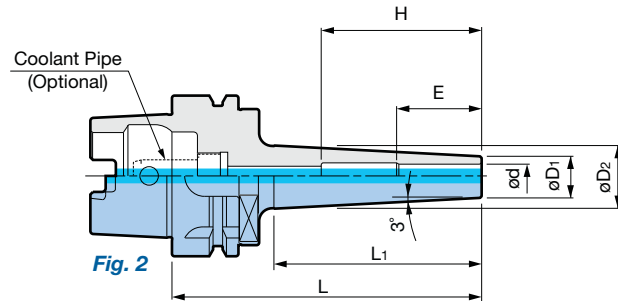
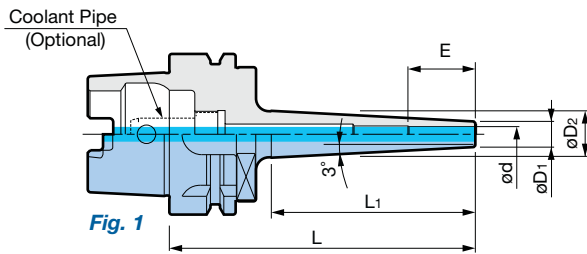
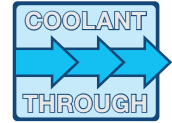
Please refer to the operation manual of heating/cooling equipment, as some equipments may not be compatible.





SHRINK FIT HOLDER SLIM TYPE HSK-A40/A50/A63

CLAMPING RANGE: $\phi 6$ -12mm



Form A (DIN 69893-1) (ISO 12164)

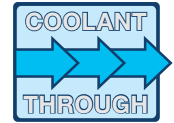
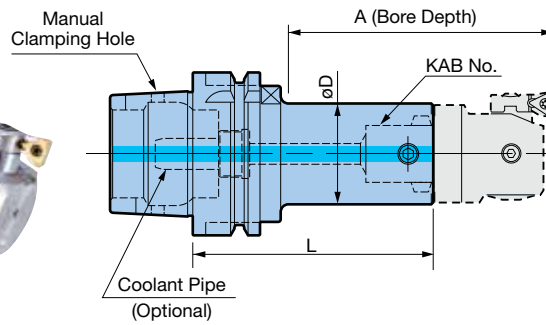
Catalog Number	Fig.	ϕd	ϕD_1	ϕD_2	L	L ₁	Min Clamping Length E	Max Insertion Length H	Weight (lbs.)
HSK-A40-SRC6S-105	2	6mm	.394	.69	4.13	2.81	1.02	2.05	.7
-SRC8S-105		8mm	.512	.83		2.89		2.05	.8
-SRC10S-105		10mm	.630	.94		2.93		2.44	.9
-SRC12S-105		12mm	.748	1.02		2.64		2.95	1.0
HSK-A50-SRC6S-105	1	6mm	.394	.67	4.13	2.56	1.02	—	1.4
-SRC8S-105	2	8mm	.512	.79				2.05	1.4
-SRC10S-105		10mm	.630	.91				2.44	1.5
-SRC12S-105		12mm	.748	1.02				2.83	1.6
HSK-A63-SRC6S-120	1	6mm	.394	.73	4.72	3.15	1.02	—	2.0
-165	2	8mm	.512	.89	6.50	4.72		2.05	2.2
-SRC8S-120				.85	4.72	3.15			2.0
-165				1.02	6.50	4.80			2.4
-SRC10S-120		10mm	.630	.96	4.72	3.15	1.26	2.44	2.2
-165				1.14	6.50	4.80			2.4
-SRC12S-120				1.08	4.72	3.15	1.42	2.83	2.2
-165		12mm	.748	1.26	6.50	4.88			2.6

- Use carbide cutter within a tolerance of h6
- Coolant Pipe is ordered separately

CAUTION

Please refer to the operation manual of heating/cooling equipment, as some equipments may not be compatible.

KAISER KAB HSK-A63/A100



For entire KAISER Boring System, please see catalog—KAISER Precision Modular Tooling System

HSK

Catalog Number		HSK Form	KAB No.	øD	L	A	Weight (lbs.)
BIG	KAISER						
HSK-A40-CK1-73	10.324.112F	A40	KAB1	.748	1.240	1.575	.4
					2.854	2.874	.8
	-CK2-40		KAB2	.945	1.555	1.732	.6
	-85				3.327	3.504	.9
	10.324.132F		KAB3	1.220	1.575	2.165	.6
	-CK3-45				1.772	2.244	.7
	-80				3.150	3.622	1.1
	10.324.142F		KAB4	1.535	1.969	2.835	.7
	-CK4-53				2.087	—	.9
	-73				2.874	—	1.3
HSK-A50-CK1-73		A50	KAB1	.748	2.854	2.559	1.1
-CK2-85			KAB2	.945	3.327	3.150	1.3
10.324.232F			KAB3	1.220	1.732	2.087	1.0
-CK3-80					3.150	3.228	1.5
10.324.242F			KAB4	1.535	1.890	2.520	1.1
-CK4-73					2.874	2.992	1.8
10.324.252F			KAB5	1.969	2.402	3.425	1.5
-CK5-83					3.268	—	2.2
HSK-A63-CK1-78		A63	KAB1	.748	3.051	2.874	2.0
10.324.312F					3.091	3.150	1.6
10.324.322F			KAB2	.945	2.972	3.937	1.8
-CK2-90					3.524	3.465	2.2
10.324.331			KAB3	1.220	2.795	3.150	1.9
10.324.331F					2.795	3.150	1.9
-CK3-100					3.937	4.055	2.2
10.324.332					4.764	5.118	2.5
-130					5.118	5.236	2.9
-CK4-93			KAB4	1.535	3.661	4.055	2.6
10.324.341					3.701	4.331	2.5
10.324.341F					3.701	4.331	2.5
10.324.342					4.488	5.118	2.9
-123					4.843	5.236	3.3

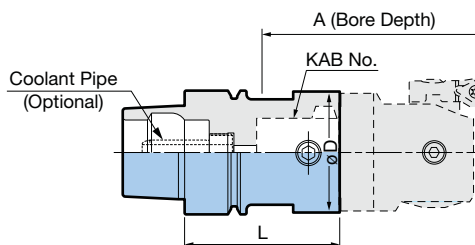
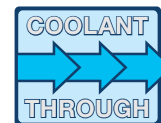
Catalog Number		HSK Form	KAB No.	øD	L	A	Weight (lbs.)
BIG	KAISER						
	10.324.352	A63	KAB5	1.969	2.323	3.346	2.1
	10.324.352F				2.323	3.346	2.1
HSK-A63-CK5-83					3.268	4.134	2.9
	10.324.353				3.504	4.528	2.9
-113					4.449	5.315	4.0
	10.324.354				5.276	6.299	4.3
	10.324.361		KAB6	2.500	2.756	4.331	2.8
	10.324.361F				2.756	4.331	2.8
-CK6-79					3.110	—	3.3
	10.324.362				3.937	5.512	4.0
-109					4.291	—	5.1
	10.324.361N				2.756	4.331	2.8
	10.324.367N		CKN6		6.299	7.874	7.0
	10.324.461	A80	KAB6	2.500	2.953	4.528	4.3
HSK-A100-CK1-103		A100	KAB1	0.748	4.035	2.874	5.5
-CK2-115			KAB2	0.945	4.508	4.213	5.7
-CK3-125			KAB3	1.220	4.921	4.803	6.2
	10.324.531				3.701	5.118	5.4
-CK4-118			KAB4	1.535	4.646	4.803	6.6
	10.324.541				3.425	6.299	6.4
-178					7.008	7.165	7.7
-CK5-108			KAB5	1.969	4.252	4.803	7.3
	10.324.551				4.213	5.118	6.4
-183					7.205	7.756	9.7
	10.324.552				6.969	7.874	8.5
-228					8.976	9.528	11.0
	10.324.561		KAB6	2.500	3.071	4.528	6.4
-CK6-94					3.701	4.803	7.5
	10.324.563				4.252	5.709	7.6
-169					6.654	7.756	11.7
-229					9.016	10.118	14.7
	10.327.571		KAB7	3.543	3.425	6.693	8.9
-CK7-123					4.843	7.126	12.8
	10.324.572				5.000	8.268	12.8
-273					10.748	13.031	29.0
	10.324.561N		CKN6	2.500	3.071	4.528	6.4
	10.324.563N				4.252	5.709	7.6
	10.324.566N				8.780	10.236	13.2
	10.324.571N		CKN7	3.543	3.425	6.693	8.9
	10.324.572N				5.000	8.268	12.8
	10.324.575N				10.512	12.598	26.2
HSK-A125-CK6-94		A125	KAB6	2.500	3.701	4.803	11.4
-CK7-123			KAB7	3.543	4.843	7.126	17.2

- Dimension "D" with boring head length included
- Coolant Pipe must be ordered separately

KAISER KAB HSK-E40/E50 & HSK-F63



For entire KAISER Boring System,
please see catalog—
KAISER Precision Modular Tooling System

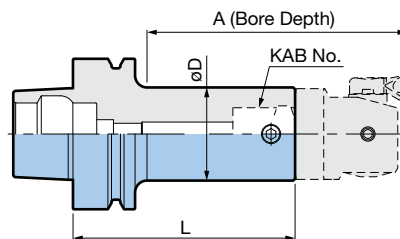
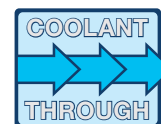


Catalog Number	HSK Form	Adapter Size	øD	L	A	Weight (lbs.)
10.324.111F	E40	KAB1	.748	1.240	1.575	.5
10.324.121F	E50	KAB2	.945	1.378	1.772	.4
10.324.131F		KAB3	1.220	1.575	2.165	.6
10.324.141F		KAB4	1.535	1.969	2.835	.8
10.324.231F		KAB3	1.220	1.732	2.087	1.0
10.324.241F		KAB4	1.535	1.890	2.520	1.2
10.325.251F		KAB5	1.969	2.402	3.425	1.6

- Dimension "D" with boring head length included
- Coolant pipe must be ordered separately



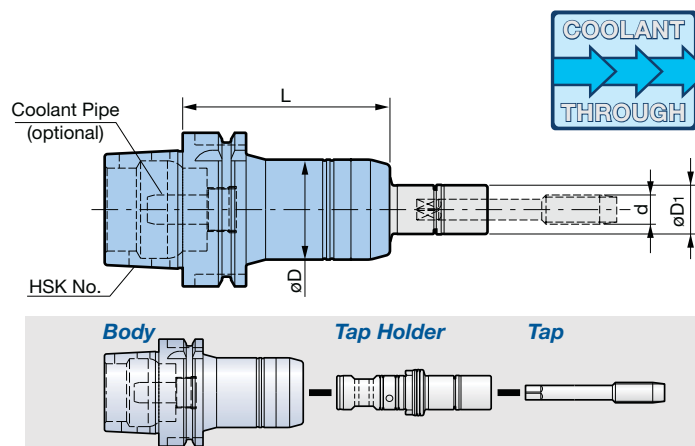
For entire KAISER Boring System,
please see catalog—
KAISER Precision Modular Tooling System



Catalog Number	HSK Form	Adapter Size	øD	L	A	Weight (lbs.)
HSK-F63-CK1-78	F63	KAB1	.748	3.051	2.874	1.8
-CK2-90		KAB2	.945	3.524	3.701	1.8
-CK3-100		KAB3	1.220	3.937	4.252	2.2
-CK4-93		KAB4	1.535	3.661	4.252	2.6
-CK5-83		KAB5	1.969	3.268	4.488	2.9

- Dimension "D" with boring head length included

Tapping Range: No.6-Au3/4 (M2-M20)



Catalog Number	Tapping Range d*	øD	øD ₁	L	Weight (lbs.)
HSK-A40-MGT6-80	No.2-No.12	1.42	3.150	.63	1.3
-MGT12-85	AU1/4-AU7/16	1.61	3.346	.79	1.5
HSK-A50-MGT6-85	No.2-No.12	1.42	3.346	.63	1.8
-MGT12-85	AU1/4-AU7/16	1.61	3.346	.79	2.0
-MGT20-125	AU1/2-AU3/4 AP1/8-AP1/4	2.13	4.921	1.18	3.5
HSK-A63-MGT6-85	No.2-No.12	1.42	3.346	.63	2.4
-MGT12-85	AU1/4-AU7/16	1.61	3.346	.79	2.6
-MGT20-110	AU1/2-AU3/4 AP1/8-AP1/4	2.13	4.331	1.18	4.0
HSK-A100-MGT6-95	No.2-No.12	1.42	3.740	.63	5.7
-MGT12-95	AU1/4-AU7/16	1.61	3.740	.79	5.9
-MGT20-115	AU1/2-AU3/4 AP1/8-AP1/4	2.13	4.528	1.18	7.3
HSK-A125-MGT12-105	AU1/4-AU7/16	1.61	3.740	4.13	9.4
-MGT20-120	AU1/2-AU3/4 AP1/8-AP1/4	2.13	4.528	4.72	10.6

*AU3/8 is included in the MGT20 series

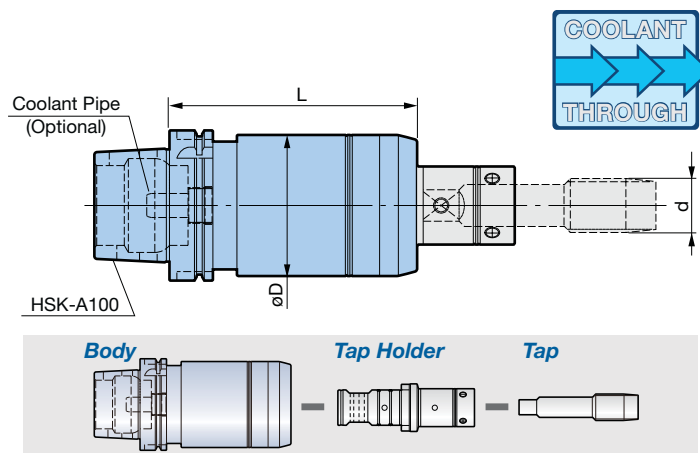
- Tap Holder and wrench must be ordered separately
- Rigid tapping function is required on the machine tool
- Coolant Pipe must be ordered separately

ACCESSORIES



MEGA SYNCHRO HSK-A100/A125

Tapping Range: AU13/16-AU1-3/8 (M20-M36)



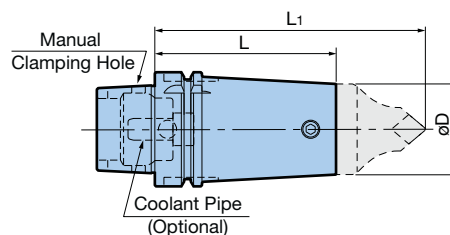
Catalog Number	Tapping Range d*	øD	L	Weight (lbs.)
HSK-A100-MGT36-165	AU13/16-AU1-3/8 AP3/8-AP1	3.70	6.50	18.0
HSK-A125-MGT36-170		3.71	6.69	22.4

- MGT Set Screw and Adjust Screw are included
- Tap Holder and wrench must be ordered separately
- Coolant Pipe must be ordered separately
- Rigid tapping function is required on the machine tool

ACCESSORIES



Modular Tooling System for Turning Applications

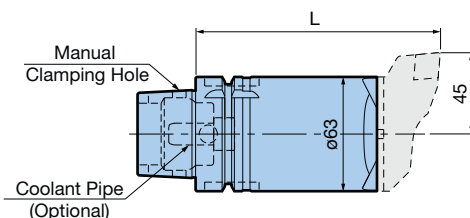


Catalog Number	Type	øD	L	Locking Screw
HSK-T63-S50-60	S50	1.969	2.362	10.690.435
-75			2.953	
-100			3.937	
-S63-70	S63	2.480	2.756	10.690.436
-90			3.543	
HSK-T100-S50-115	S50	1.969	4.528	10.690.435
-S63-105	S63	2.480	4.134	10.690.436

ACCESSORIES



HSK



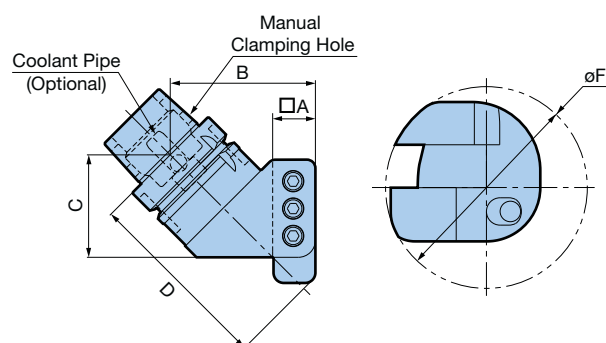
Catalog Number	Type	øD	L	L1	F
HSK-T63-F63-50	F63	2.480	1.969	3.35	1.772
-75			2.953	4.33	
-100			3.937	5.31	
-130			5.118	6.50	
-170			6.693	8.07	
HSK-T100-F63-100	F63	2.480	3.937	5.31	1.772
-150			5.906	7.28	

ACCESSORIES



TURNING TOOLS—SQUARE HOLDER HSK-T63/T100

For Turning Applications



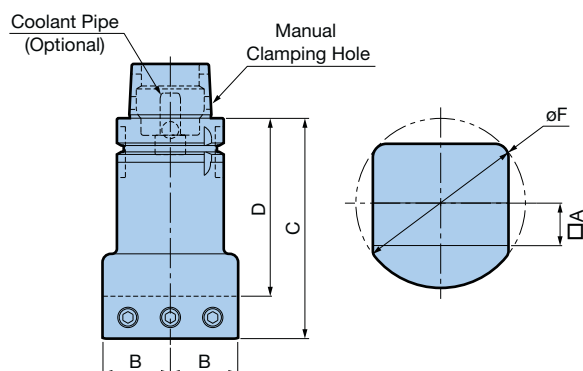
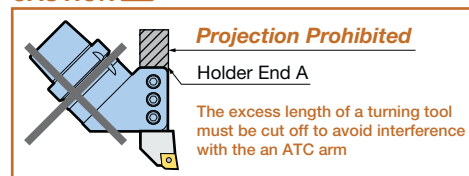
45° (ISO 12164-3)

Right Hand

Left Hand

Hand	Catalog Number	A	B	C	D	F
R	HSK-T63-45-BH25R-110	25mm	3.35	2.36	4.33	4.65
L	-BH25L-110					

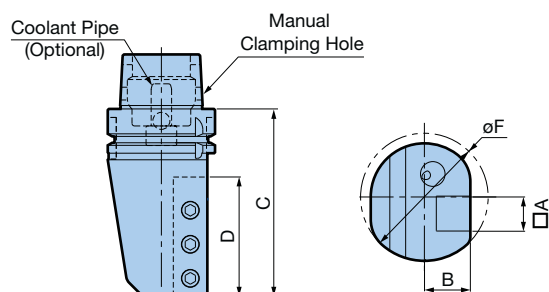
CAUTION



90° (ISO 12164-3)

Neutral

Hand	Catalog Number	A	B	C	D	F
N	HSK-T63-90-BH20N-80	20mm	1.26	3.15	2.36	3.15
	-BH25N-100	25mm	1.57	3.94	2.95	3.94
	-BH25N-130		5.12	4.13		
	HSK-T100-90-BH25N-150		2.17	5.91	4.92	5.04



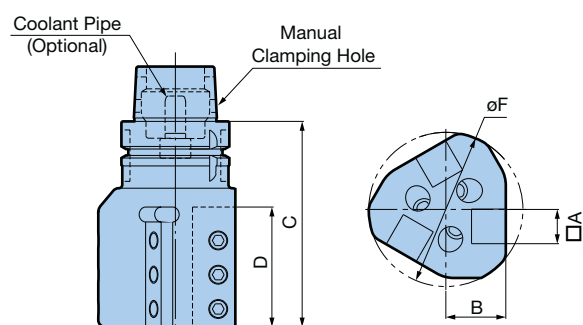
180° (ISO 12164-3)

Right Hand

Left Hand

Hand	Catalog Number	A	B	C	D	F
R	HSK-T63-180-BH20R-110	20mm	1.06	4.33	2.76	2.95
L	-BH20L-110					
R	-BH25R-115		1.16	4.53	3.15	3.54
L	-BH25L-115					
R	HSK-T100-180-BH25R-140	25mm	1.97	5.51	3.54	4.72
L	-BH25L-140					
R	-BH25R-180		7.09	4.53		
L	-BH25L-180					

By assembling 3 square holders, ATC time can be reduced.



180° Mult Type (ISO 12164-3)

Right Hand

Left Hand

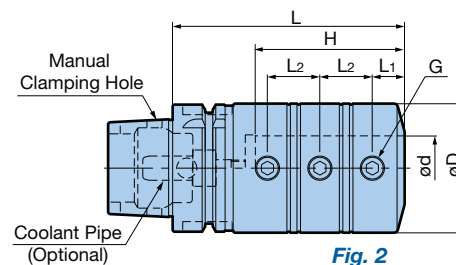
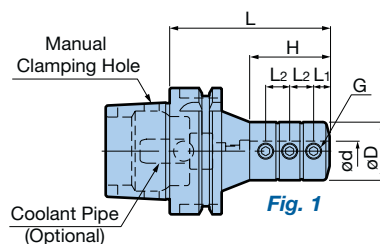
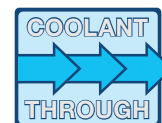
Hand	Catalog Number	A	B	C	D	F
R	HSK-T63-180-3BH20R-120	20mm	1.38	4.72	2.76	3.54
L	-3BH20L-120					
R	-3BH25R-120	25mm	1.77	4.72	3.15	4.33
L	-3BH25L-120					

CAUTION

Please check if your spindle can do the 60° indexing.

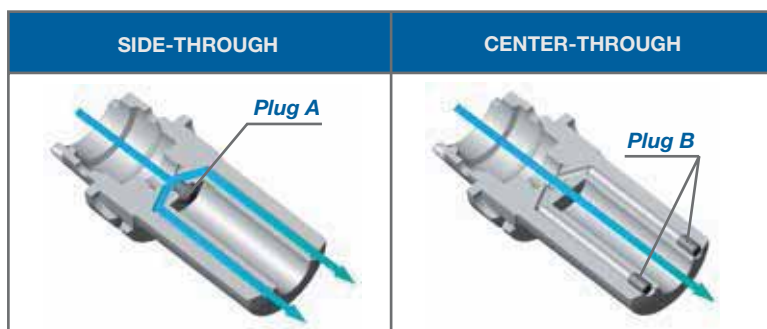
TURNING TOOLS—BORING BAR HOLDER HSK-T63/T100

CLAMPING RANGE: $\varnothing 6$ - $\varnothing 40$ mm



Catalog Number	Fig.	$\varnothing d$	$\varnothing D$	L	L ₁	L ₂	H	G
HSK-T63-BSL6-70	1	6mm	.906	2.76	.197	.315	.95	M5 P0.8
-BSL8-75		8mm	.984	2.95	.236	.394	1.26	M6 P1.0
-BSL10-80		10mm	1.142	3.15	.315	.472	1.58	M8 P1.0
-BSL12-85		12mm	1.339	3.35	.315	.630	1.77	M8 P1.0
-BSL16-100		16mm	1.575	3.94	.394	.827	2.36	M10 P1.25
-BSL20-100	2	20mm	1.969	3.94	.472	.787	2.36	M10 P1.25
-BSL25-105		25mm	2.165	4.13	.551	.906	2.64	M12 P1.5
-BSL32-115		32mm	2.520	4.53	.630	1.024	2.91	M12 P1.5
-BSL40-135		40mm	3.150	5.32	.709	1.260	3.58	M12 P1.5
HSK-T100-BSL16-105	1	16mm	1.575	4.12	.394	.827	2.36	M10 P1.25
-BSL20-110		20mm	1.969	4.33	.472	.787	2.36	M10 P1.25
-BSL25-120		25mm	2.165	4.72	.551	.906	2.64	M12 P1.5
-BSL32-125		32mm	2.520	4.92	.630	1.024	2.91	M12 P1.5
-BSL40-135		40mm	3.150	5.32	.709	1.260	3.54	M16 P1.5

- Interchangeable between center-through and side-through coolant supply by using plugs
- Plug A (1 pc.) and Plug B (2 pcs.) are included as standard



Adjustment for Either Right Hand or Left Hand is Also Possible

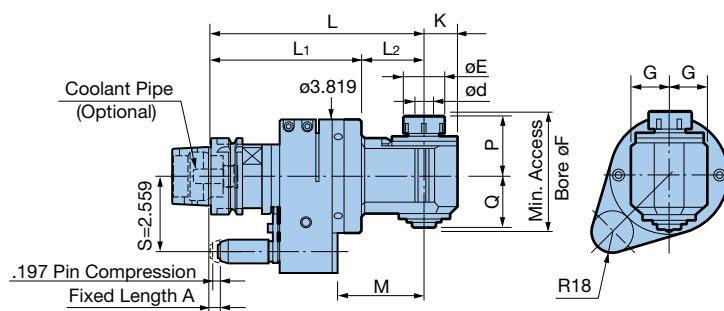
Catalog Number	Plug A	Plug B
BSL6	M5 P0.8	M4 P0.7
BSL8	M6 P1.0	
BSL10		M5 P0.8
BSL12		M6 P1.0
BSL16		
BSL20	※ M6 P1.0	
BSL25	M6 P1.0	
BSL32		※ M8 P1.25
BSL40		

- Both plugs are included as standard
- * Bottom-head bolt

ANGLE HEAD—AG90 NBS TYPE HSK-A63

CLAMPING RANGE: ϕ .010"-.787"

MAX
6,000
RPM



Catalog Number	ϕd	ϕE	G	K	L	L1	L2	M	P	Q	ϕF	Collet	Max RPM	Weight (lbs.)
HSK-A63-AG90/NBS6-185	.010-.236	.787	.827	.669	7.28	5.12	2.17	4.21	1.30	1.14	2.638	NBC 6	6,000	11.0
-215					8.46		3.35	5.39						11.5
-245					9.65		4.53	4.21						11.9
-275					10.83		5.71	5.39						12.3
-AG90/NBS10-185	.059-.394	1.181	1.181	.984	7.28	5.12	2.17	4.21	1.77	1.69	3.583	NBC10	6,000	11.9
-215					8.46		3.35	5.39						12.8
-245					9.65		4.53	6.57						13.4
-AG90/NBS13-185	.098-.472	1.378	1.220	1.102	7.28	5.12	2.17	3.03	2.05	1.77	3.976	NBC13	6,000	12.1
-215					8.46		3.35	3.03						13.0
-245					9.65		4.53	3.03						13.7
-AG90/NBS20S-180S	.098-.787	1.811	1.378	1.299	7.09	5.00	2.09	2.83	2.56	2.44	5.197	NBC20	3,000	17.4

- The standard Fixed Length A is .315", other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Clamping nut and wrench are included, collet must be ordered separately
- New Baby Collet for endmill model NBC□-□ EAA cannot be used
- Coolant Pipe is ordered separately (coolant is supplied through the Locating Pin, not the Coolant Pipe)

CAUTION

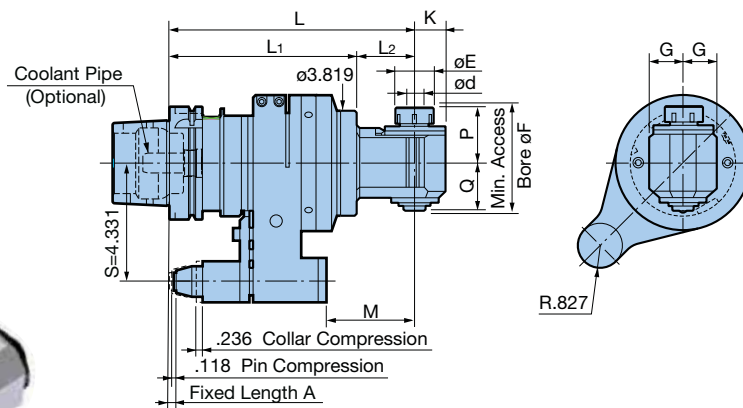
A Stop Block is required.
The rotation of the cutting tool is in reverse
direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



ANGLE HEAD—AG90 NBS TYPE HSK-A100

CLAMPING RANGE: ϕ .010"-.787"



MAX
6,000
RPM

Catalog Number	ϕ d	ϕ E	G	K	L	L ₁	L ₂	M	P	Q	ϕ F	Collet	Max RPM	Weight (lbs.)
HSK-A100-AG90/NBS6-225	.010-.236	.787	.827	.669	8.86	6.69	2.17	3.23	1.30	1.14	2.638	NBC 6	6,000	11.8
-255					10.04		3.35	4.41						12.0
-285					11.22		4.53	5.59						12.2
-315					12.40		5.71	6.77						12.4
-AG90/NBS10-225	.059-.394	1.181	1.181	.984	8.86	6.69	2.17	3.23	1.77	1.69	3.583	NBC10	6,000	12.2
-255					10.04		3.35	4.41						12.6
-285					11.22		4.53	5.59						12.9
-AG90/NBS13-225	.098-.512	1.378	1.220	1.102	8.86	6.69	2.17	3.23	2.05	1.77	3.976	NBC13	6,000	12.3
-255					10.04		3.35	4.41						12.7
-285					11.22		4.53	5.59						13.0
-AG90/NBS20-240	.098-.787	1.811	1.378	1.378	9.45	6.69	2.76	3.82	2.44	2.44	5.197	NBC20	3,000	13.4

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Nut and wrench are included, collet must be ordered separately
- For greater rigidity High Rigidity S-Type with a steel housing and a stronger locating pin assembly is also available, please add "S" after each model number when ordering High Rigidity Type

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

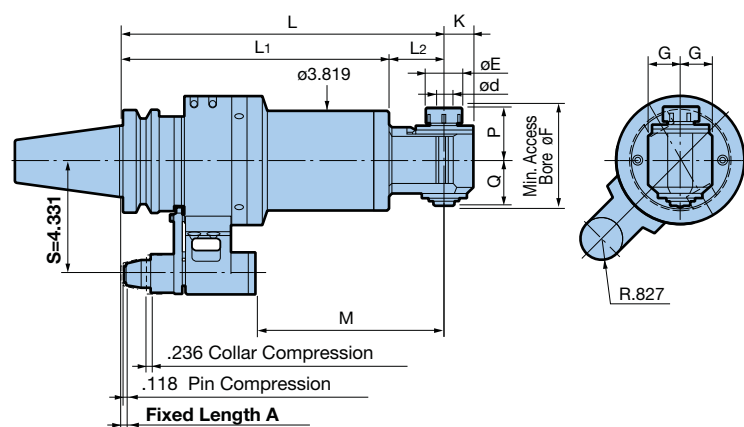
ACCESSORIES



ANGLE HEAD—AG90 NBS EXTRA LONG TYPE HSK-A100

CLAMPING RANGE: ϕ .010"-.787"

MAX
6,000
RPM



BIG-PLUS
SPINDLE SYSTEM
DUAL CONTACT

Catalog Number	ϕd	ϕE	G	K	L	L ₁	L ₂	M	P	Q	ϕF	Collet	Max RPM	Weight (lbs.)
HSK-A100-AG90-NBS-6-325LS	.010-.236	.787	.827	.669	12.80	10.63	2.17	7.17	1.30	1.14	2.638	NBC 6	6,000	39.9
-355LS					13.98		3.35	8.35						40.3
-385LS					15.16		4.53	9.53						40.8
-415LS					16.34		5.71	10.71						41.2
-AG90/NBS10-325LS	.059-.394	1.181	1.181	.984	12.80	10.63	2.17	7.17	1.77	1.69	3.583	NBC 10	6,000	40.8
-355LS					13.98		3.35	8.35						41.7
-385LS					15.16		4.53	9.53						42.3
-AG90/NBS13-325LS	.098-.512	1.378	1.220	1.102	12.80	10.63	2.17	7.17	2.05	1.77	3.976	NBC 13	6,000	41.0
-355LS					13.98		3.35	8.35						41.9
-385LS					15.16		6.10	9.53						42.5
-AG90/NBS20-340LS	.098-.787	1.811	1.378	1.378	13.39	10.3	2.76	7.76	2.56	2.44	5.197	NBC 20	3,000	43.4
-AG90-NBS-6-425LS	.010-.236	.787	.827	.669	16.73	14.57	2.17	11.10	1.30	1.14	2.638	NBC 6	6,000	49.6
-455LS					17.91		3.35	12.28						50.0
-485LS					19.09		4.53	13.46						50.5
-515LS					20.28		5.71	14.65						50.9
-AG90/NBS10-425LS	.059-.394	1.181	1.181	.984	16.73	14.57	2.17	11.10	1.77	1.69	3.583	NBC 10	6,000	50.5
-455LS					17.91		3.35	12.28						51.4
-485LS					19.09		4.53	13.46						52.0
-AG90/NBS13-425LS	.098-.512	1.378	1.220	1.102	16.73	14.57	2.17	11.10	2.05	1.77	3.976	NBC 13	6,000	50.7
-455LS					17.91		3.35	12.28						51.6
-485LS					19.09		6.10	13.46						52.2
-AG90/NBS20-440LS	.098-.787	1.811	1.378	1.378	17.32	14.57	2.76	11.69	2.56	2.44	5.197	NBC 20	3,000	53.1

ANGLE HEAD—AG90 NBS EXTRA LONG TYPE HSK-A100

Catalog Number	ød	øE	G	K	L	L ₁	L ₂	M	P	Q	øF	Collet	Max RPM	Weight (lbs.)
HSK-A100-AG90-NBS-6-525LS	.010-.236	.787	.827	.669	20.67	18.50	2.17	15.04	1.30	1.14	2.638	NBC 6	6,000	59.3
-555LS					21.85		3.35	16.22						59.7
-585LS					23.03		4.53	17.40						60.2
-615LS					20.28		5.71	18.58						60.6
-AG90/NBS10-525LS	.059-.394	1.181	1.181	.984	20.67	18.50	2.17	15.04	1.77	1.69	3.583	NBC 10		60.2
-555LS					21.85		3.35	16.22						61.1
-585LS					23.03		4.53	17.40						61.7
-AG90/NBS13-525LS	.098-.512	1.378	1.220	1.102	20.67	18.50	2.17	15.04	2.05	1.77	3.976	NBC 13		60.4
-555LS					21.85		3.35	16.22						61.3
-585LS					23.03		6.10	17.40						61.9
-AG90/NBS20-540LS	.098-.787	1.811	1.378	1.378	21.26	18.50	2.76	15.63	2.56	2.44	5.197	NBC 20	3,000	62.8

- The standard fixed length A is .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Nut and wrench are included, collet must be ordered separately
- For greater rigidity High Rigidity S-Type with a steel housing and a stronger locating pin assembly is also available, please add "S" after each model number when ordering High Rigidity Type
- New Baby Collet for End Mill model NBC□-□EAA cannot be used

CAUTION

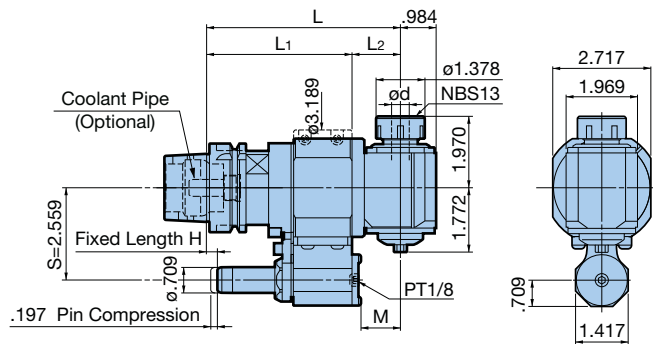
A Stop Block is required.
The rotation of the cutting tool is in reverse
direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



ANGLE HEAD—AG90 COMPACT TYPE HSK-A63

CLAMPING RANGE: ϕ .098"-.512" — For Drilling Only & Ideal Size for Small Machining Centers



**MAX
5,000
RPM**



Catalog Number	ϕd	L	L1	L2	M	Collet	Speed Ratio	Weight (lbs.)
HSK-A63-AG90-13-135	.098-.512	5.32	3.98	1.34	1.10	NBC13	1:1	9.7

- Nut and wrench are included, collet must be ordered separately
- End mill collet cannot be used
- Stop Block is necessary to mount the Angle Head on the machine, please order separately
- ATC may not be utilized on some CV machining centers, consult engineering for specifications

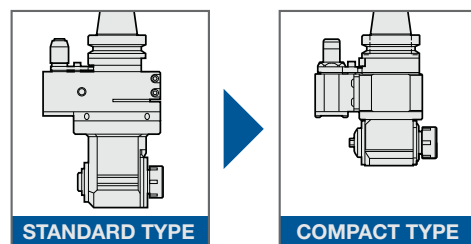
CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



Case & Head Sizes are Substantially Reduced.



Features:

- High precision New Baby Collet
- Spiral bevel gears and angular contact bearings
- Advanced non-contact sealing structure

APPLICATION EXAMPLE

Stable machining is obtained due to high rigidity and good runout.



DRILLING	
Cutter	ϕ .472" (12mm) carbide drill
Workpiece	1050 Steel
Cutting Speed	230 SFM
Cutting Feed	14.6 IPM
	.008 IPR
Spindle Speed	1,860 RPM

ANGLE HEAD—AG90 SLENDER DRIVE HSK-A63/A100

CLAMPING RANGE: ϕ .018"-.236" — For Angular Operations Within a ϕ 1.181 Inch Bore



**MAX
2,000
RPM**

BIG-PLUS
SPINDLE SYSTEM
DUAL CONTACT

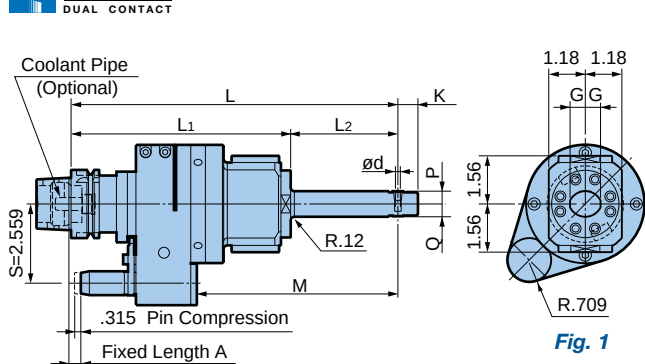
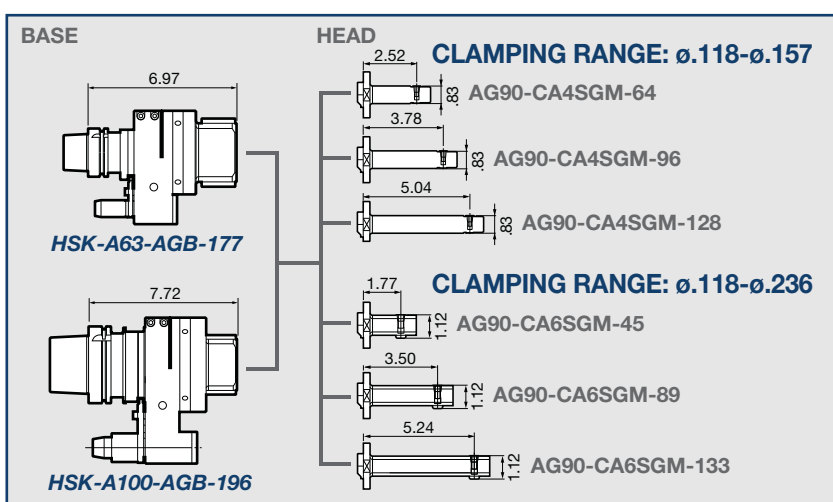


Fig. 1

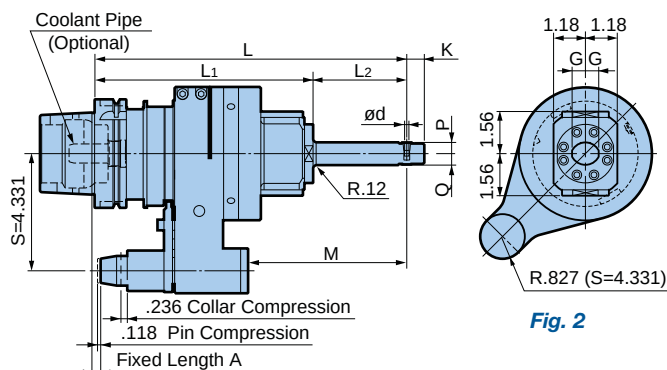


Fig. 2

Base	Head	Fig.	ϕd	G	K	L	L ₁	L ₂	M	P	Q	Speed Ratio	Weight (lbs.)
HSK-A63-AGB-177	AG90-CA4SGM-64	1	.118-.157	.492	.650	9.49	7.28	2.20	5.24	.41	.41	1:1.06 (Increase)	12.1
	-96					10.75		3.46	6.50				12.3
	-128					12.01		4.72	7.76				12.6
	AG90-CA6SGM-45	1	.118-.236	.591	.787	8.74	7.28	1.46	4.49	.49	.63	1:0.77 (Decrease)	12.3
	-89					10.47		3.19	6.22				12.8
	-133					12.20		4.92	7.95				13.2
HSK-A100-AGB-196	AG90-CA4SGM-64	2	.118-.157	.492	.650	10.24	8.03	2.20	4.61	.41	.41	1:1.06 (Increase)	24.5
	-96					11.50		3.46	5.87				24.7
	-128					12.76		4.72	7.13				24.9
	AG90-CA6SGM-45	2	.118-.236	.591	.787	9.49	8.03	1.46	3.86	.49	.63	1:0.77 (Decrease)	24.7
	-89					11.22		3.19	5.59				25.1
	-133					12.95		4.92	7.32				25.6

- The standard fixed length A: 40 taper= .315, 50 taper= .236, other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Coolant cannot be supplied through the Locating Pin
- Exclusive collets must be ordered separately
- S= 3.150 type is available for #50 taper models upon request

CAUTION

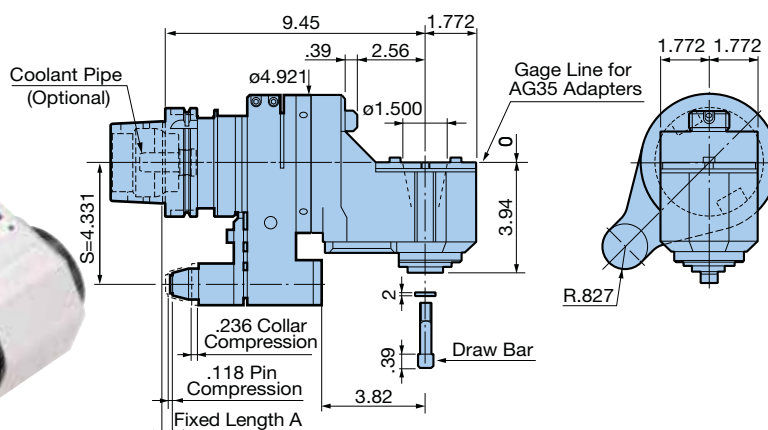
A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

ACCESSORIES



HSK

For all Kinds of Machining Applications



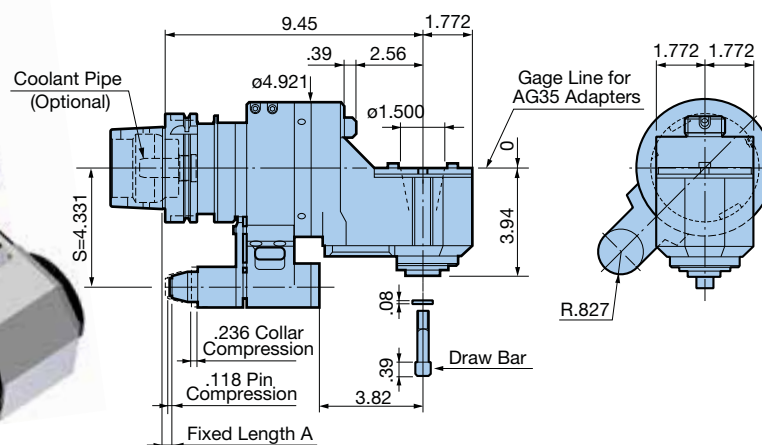
Catalog Number	Weight (lbs.)
HSK-A100-AG90/AGH35-240	31.2

CAUTION 

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard Fixed Length A is .236", other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Coolant Pipe is ordered separately (Coolant is supplied through the Locating Pin, not the Coolant Pipe)

For Applications Where Increased Rigidity is Required



Catalog Number	Weight (lbs.)
HSK-A100-AG90/AGH35-240S	34.1

CAUTION 

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard Fixed Length A is .236", other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Coolant Pipe is ordered separately (Coolant is supplied through the Locating Pin, not the Coolant Pipe)
- S=3.150" type is available upon request

ACCESSORIES

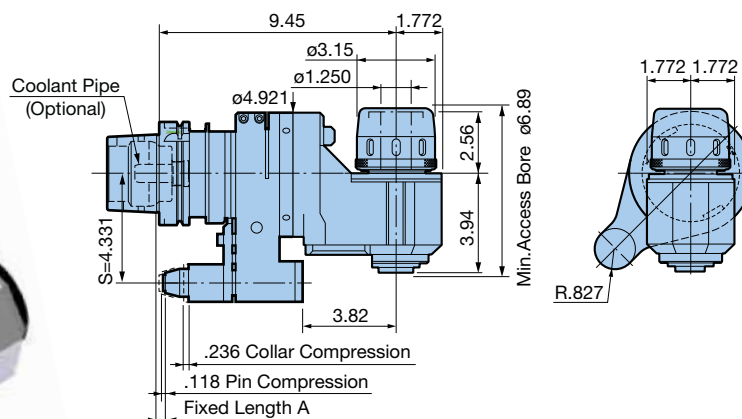


ANGLE HEAD—AG90 HMC TYPE HSK-A100

For Heavy Duty End Milling



MAX
3,000
RPM



Catalog Number	Weight (lbs.)
HSK-A100-AG90/HMC1.250-240	35.2

CAUTION

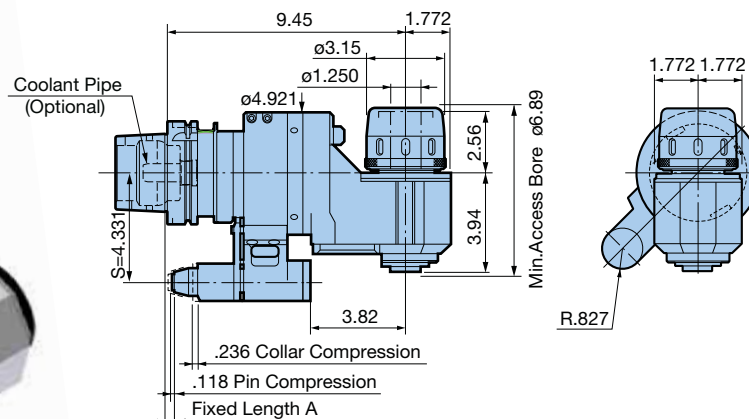
A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

- The standard Fixed Length A is .236", other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Wrench (FK80-90) is included
- Coolant Pipe is ordered separately (Coolant is supplied through the Locating Pin, not the Coolant Pipe)

For Applications Where Increased Rigidity is Required



MAX
3,000
RPM



Catalog Number	Weight (lbs.)
HSK-A100-AG90/HMC1.250-240S	38.1

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in same direction of the machine spindle.

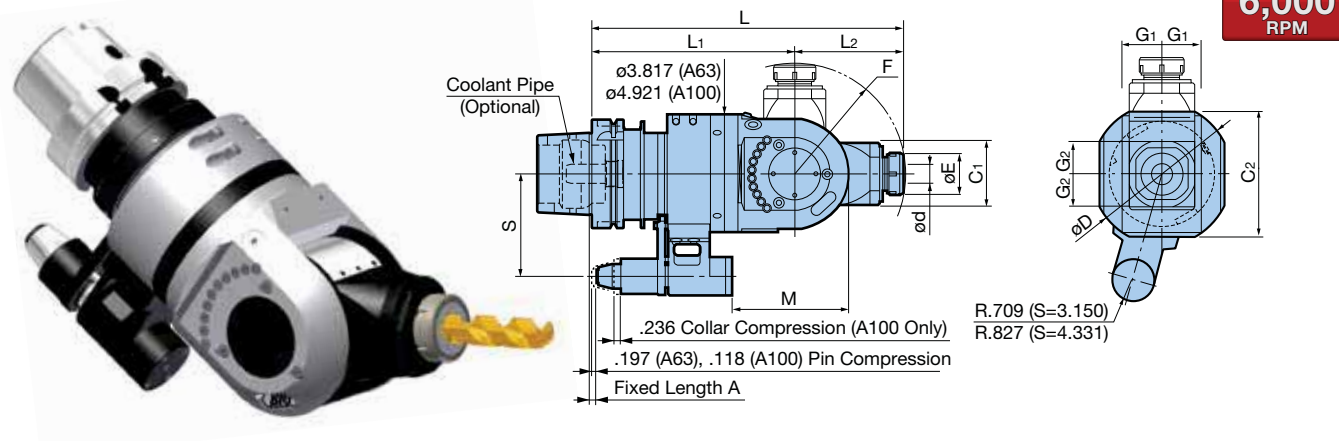
- The standard Fixed Length A is .236", other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Wrench (FK80-90) is included
- Coolant Pipe is ordered separately (Coolant is supplied through the Locating Pin, not the Coolant Pipe)
- S=3.150" type is available upon request

ACCESSORIES



ANGLE HEAD—AGU UNIVERSAL TYPE HSK-A63/A100

CLAMPING RANGE: $\varnothing.098"$ – $.787"$ — For Angular Operations



Catalog Number	Fig.	$\varnothing d$	$\varnothing E$	$\varnothing D$	C_1	C_2	G_1	G_2	L	L_1	L_2	M	F	S	Collet	Max RPM	Weight (lbs.)
HSK-A63-AGU/NBS13-285	1	.098-.512	1.378	4.53	2.00	3.82	1.024	1.014	11.22	7.28	3.94	4.88	4.02	2.56	NBC13	6,000	21.2
HSK-A100-AGU/NBS20-325	2	.098-.787	1.811	5.51	2.56	4.92	1.299	1.280	12.80	7.87	4.53	4.92	4.65	4.33	NBC20	4,000	44.1

- The standard fixed length A: A63=.315", A100=.236", other lengths are available upon request
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- Clamping nut and wrench are included
- Collet must be ordered separately
- Coolant Pipe is ordered separately (coolant is supplied through the Locating Pin, not the Coolant Pipe)

CAUTION

A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



Easily Adjustable Spindle Angle From 0° to 90°



Precise Angle Adjustment

Unique setting mechanism enables the spindle angle to be precisely set at 1° increments.

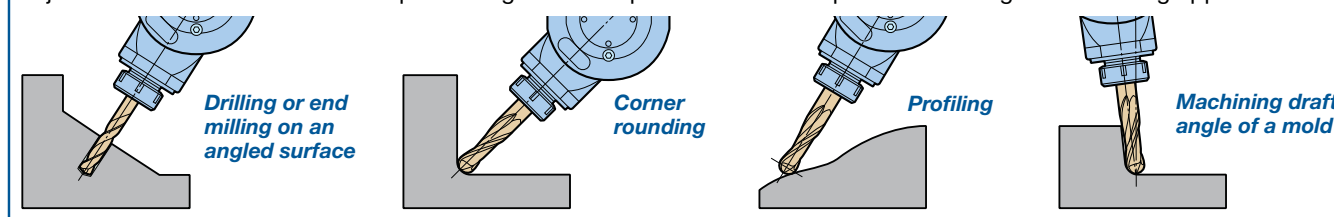


Exclusive Clamping Bolts and Nuts

Specially selected materials and special design for clamping the head guarantees rigidity even for end milling applications.

APPLICATION EXAMPLE

Adjustable AGU Universal Series expands Angle Head capabilities to accomplish various angular machining applications.



ANGLE HEAD—AGU30 TYPE HSK-A63/A100



CLAMPING RANGE: $\phi.098''$ -.787" — For Angular Operations

HSK-A63

**MAX
4,000
RPM**

HSK-A100

**MAX
6,000
RPM**



Angle Adjustment by Aligning Divisions

Spindle angle is easily adjustable from 0° to 30° using the scale indication on the body.

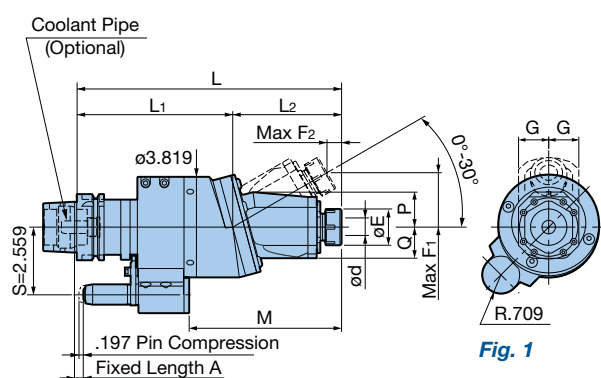
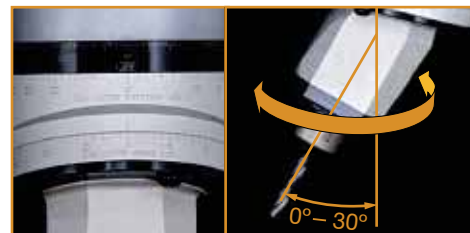


Fig. 1

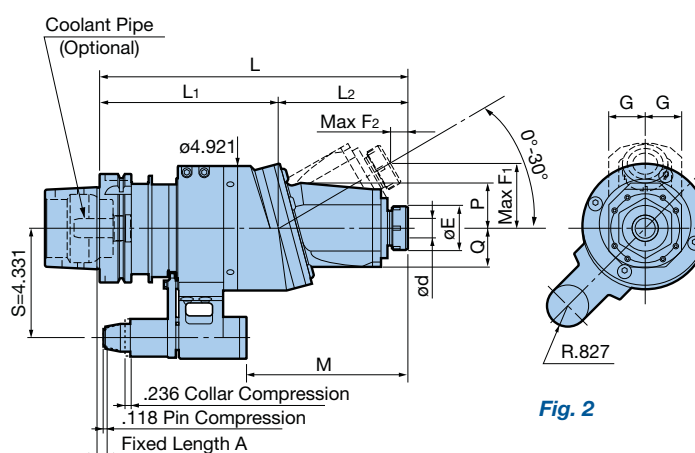


Fig. 2

Catalog Number	Fig.	ϕd	ϕE	G	L	L1	L2	M	P	Q	F1	F2	Collet	Max RPM	Weight (lbs.)
HSK-A63-AGU30/NBS13-255	1	.098-.512	1.378	1.142	11.22	7.28	3.94	4.92	1.34	1.18	2.07	.55	NBC13	6,000	21.2
HSK-A100-AGU30/NBS20-305	2	.098-.787	1.811	1.437	12.80	7.87	4.53	4.88	1.77	1.54	2.56	.67	NBC20	4,000	44.1

- The standard fixed length A: A63=.315", A100=.236", other lengths are available upon request
- Clamping nut and wrench are included, collet must be ordered separately
- The angles of positioning pin to drive key groove and direction of cutting edge are adjustable from 0° to 360°
- coolant Pipe is ordered separately (coolant is supplied through the Locating Pin, not the Coolant Pipe)

CAUTION

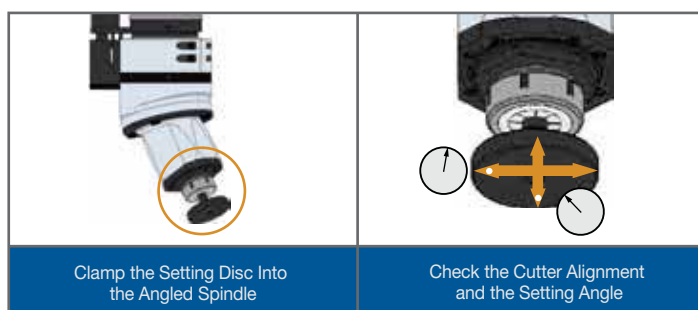
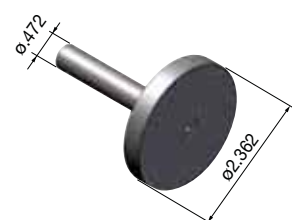
A Stop Block is required.
The rotation of the cutting tool is in reverse direction of the machine spindle (Speed Ratio 1:1).

ACCESSORIES



Setting Disc (Included)

For the precise adjustment of spindle angle or direction.



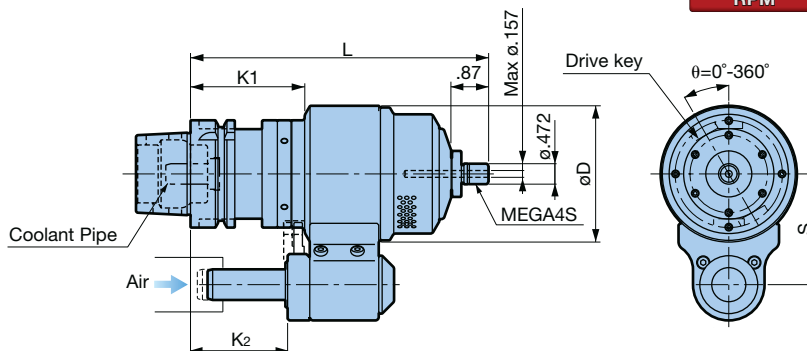
Clamp the Setting Disc Into the Angled Spindle

Check the Cutter Alignment and the Setting Angle

HSK

AIR POWER SPINDLE—RBX5 & RBX7 HSK-A63/A100

For High Speed Micro Machining with Automatic Tool Change



MAX
80,000
RPM

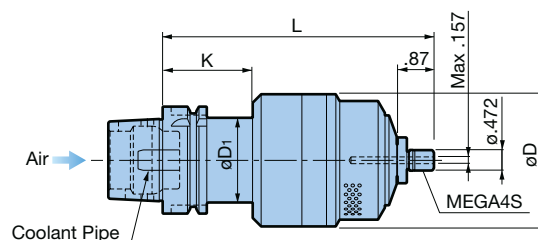
Catalog Number	Operating spindle speed (min ⁻¹)	Tool Diameter	L	ϕD	K1	K2	S	Weight (lbs.)
HSK-A63-RBX7-4S-175-65	60,000-80,000	$\phi .039$ or smaller	6.89	3.150	2.64	2.24	2.559	8.4
-RBX5-4S-175-65	40,000-50,000	$\phi .059$ or smaller		3.780				10.6
HSK-A100-RBX7-4S-180-80	60,000-80,000	$\phi .039$ or smaller	7.09	3.937	2.83	2.44	3.150	18.5
-RBX5-4S-180-80	40,000-50,000	$\phi .059$ or smaller						20.7

- Nut and wrench are included, collet must be ordered separately
- XF1-NPT (Air Unit) must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

For High Speed Micro Machining with Compressed Air Through the Machine Spindle



MAX
80,000
RPM



**For Automatic
Tool Change**

Catalog Number	Operating spindle speed (min ⁻¹)	Tool diameter	L	ϕD	ϕD_1	K	Weight (lbs.)
HSK-A63-RBX7C-4S-160	60,000-80,000	$\phi .039$ or smaller	6.30	3.071	1.97	2.09	6.4
-RBX5C-4S-160	40,000-50,000	$\phi .059$ or smaller		3.780			8.6
HSK-A100-RBX7C-4S-165	60,000-80,000	$\phi .039$ or smaller	6.50	3.071	2.68	2.28	10.8
-RBX5C-4S-165	40,000-50,000	$\phi .059$ or smaller		3.780			13.0

- Nut and wrench are included, collet must be ordered separately
- XF1-NPT (Air Unit) must be ordered separately
- Coolant Pipe is included

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

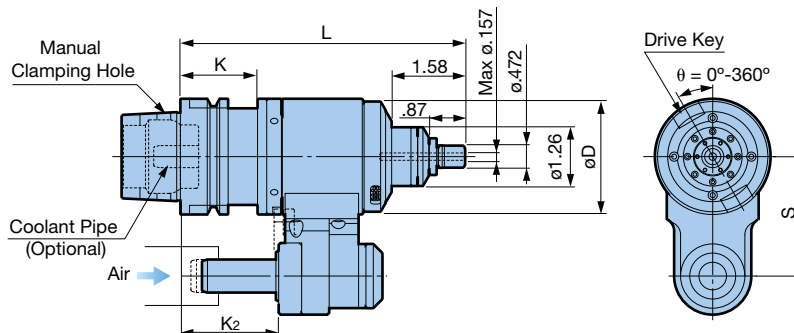
ACCESSORIES



AIR POWER SPINDLE—RBX12 HSK-A63

For High Speed Micro Machining with Small Cutter

MAX
120,000
RPM



Catalog Number	Operating Spindle Speed (RPM)	Cutting Tool Size	L	øD	K	K ₂	S	Nut	Collet	Weight (lbs.)
HSK-A63-RBX12-4S-155-65	100,000-120,000	ø.024 or smaller	6.10	2.480	—	2.09	2.559	MGN4S-HG	NBC4S-d	6.6

- Nut and wrench are included, collet must be ordered separately
- XF1-NPT (Air Unit) must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.



MAX
120,000
RPM

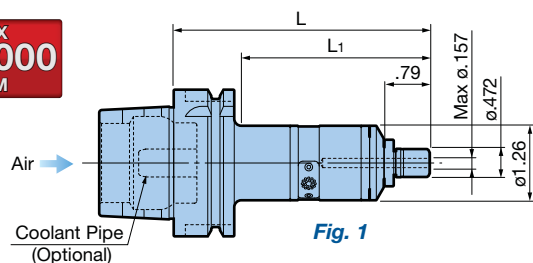


Fig. 1

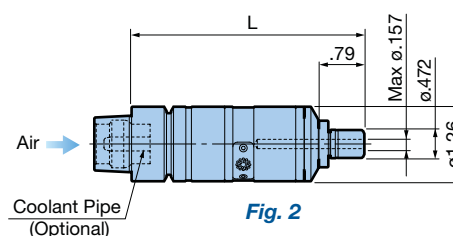


Fig. 2

Catalog Number	Operating Spindle Speed (RPM)	Fig.	L	L ₁	Nut	Collet	Weight (lbs.)
HSK-A63-RBX12C-4S-110	100,000-120,000	1	110	3.19	MGN4S-HG	NBC4S-d	2.2
HSK-F63-RBX12C-4S-110		2	3.94	—			1.0
HSK-E32-RBX12C-4S-100							

- Nut and wrench are included, collet must be ordered separately
- XF1-NPT (Air Unit) must be ordered separately

CAUTION

Compressed air to drive the Air Power Spindle must be clean.
Coolant should not be supplied through the spindle on the machine that uses the Air Power Spindle.

APPLICATION EXAMPLE

PREHARDENED STEEL NAK55 SHOULDER CUTTING			PREHARDENED STEEL NAK55 GROOVING		
RBX12	Cutter	ø.6mm Carbide End Mill (ø.024")	RBX12	Cutter	ø.6mm Carbide End Mill (ø.024")
	Spindle Speed	120,000 RPM ⇄ 116,000 RPM		Spindle Speed	120,000 RPM ⇄ 116,000 RPM
	Feed	520 mm/min (20.5 IPM)		Feed	260 mm/min (10.2 IPM)
	D.O.C.	Ad .035" Rd .001"		D.O.C.	Ad .002"

ACCESSORIES





MEGA CHUCKS



Mega ER Grip
KAB4/5/6.....Pg. 182
Clamping Range: ϕ .075"-.787" (ϕ 1.9-20mm)

NEW HI-POWER MILLING CHUCKS



KAB6/7.....Pg. 182
Clamping Range: ϕ .750"-1.25" (ϕ 20-32mm)

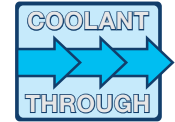
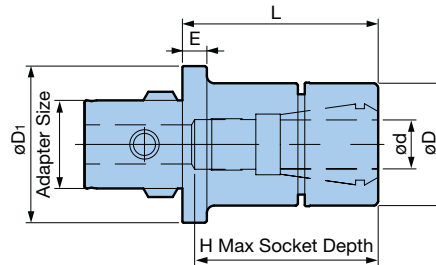
MEGA SYNCHRO



KAB4/5/7.....Pg. 183
Tapping Range: No.2-API (ANSI)
M2-M36 (JIS/DIN/ISO)

MEGA ER GRIP & NEW Hi-POWER MILLING CHUCK CK4/5/6

CLAMPING RANGE: ϕ .075"-.787" (ϕ 1.9-20mm) — For Drills, Reamers, Taps & Finishing End Mills



Catalog Number	Adapter Size	ϕd	ϕD	ϕD_1	L	E	H	Collet	Nut	Wrench	Weight (lbs.)
CK4-MEGAER16-60	KAB4	.075-.394	1.181	1.535	2.36	.39	2.36	ERC16-□	MERN16	MGR30L	1.7
CK4-MEGAER20-70	KAB4	.108-.512	1.378	1.535	2.76	.39	2.56	ERC20-□	MERN20	MGR35L	2.2
CK5-MEGAER25-80	KAB5	.108-.630	1.654	1.969	3.15	.39	2.76	ERC25-□	MERN25	MGR42L	3.8
CK5-MEGAER32-80	KAB5	.108-.787	1.969	1.969	3.15	—	2.76	ERC32-□	MERN32	MGR50L	4.7
CK6-MEGAER32-80	KAB6	.108-.787	1.969	2.520	3.54	.39	2.95				5.8

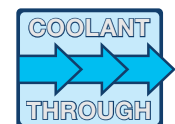
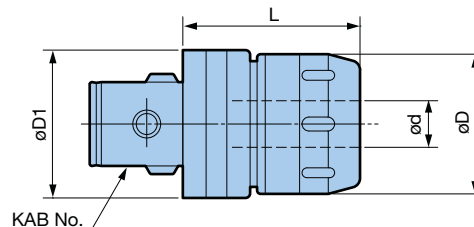
- Mega ER Nut is included
- Adjusting screw, collet and wrench must be ordered separately
- "H" indicates the adjustment length with an adjusting screw
- Adjusting screws cannot be used with models marked ※
- Mega ER Grip is not able to use DIN6499 Form-A collets and ESX collets
- Weight does not include collet

ACCESSORIES

COLLET PG. 240	MEGA NUT* PG. 255	PERFECT SEAL PG. 256	SOLID NUT PG. 255	MEGA WRENCH PG. 259	SCREW PG. 262
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*Mega Nut is the recommended nut to achieve high accuracy and clamping force

CLAMPING RANGE: ϕ .750"-1.250" (ϕ 20-32mm) — For Heavy Duty End Milling



Catalog Number	Type	Adapter Size	ϕd	ϕD	ϕD_1	L	Wrench	Weight (lbs.)
11.335.067	HMC.750	KAB6	.750	2.36	2.520	2.95	FK58-62	4.7
11.335.078	HMC1.250	KAB7	1.250	3.15	3.543	4.13	FK80-90	9.2

Catalog Number	Type	Adapter Size	ϕd	ϕD	ϕD_1	L	Wrench	Weight (lbs.)
10.335.066	HMC20	KAB6	20mm	2.36	2.520	2.95	FK58-62	4.4
10.335.077	HMC32	KAB7	32mm	3.15	3.543	4.13	FK80-90	10.5

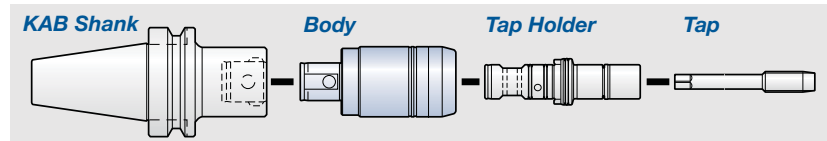
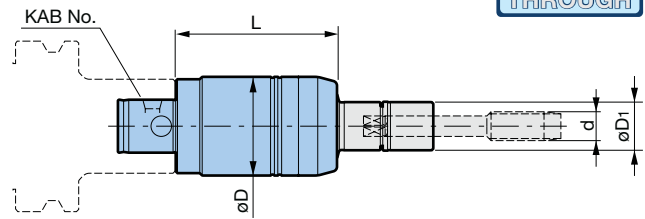
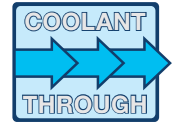
ACCESSORIES

COLLET PG. 246	PERFECT SEAL/ JET COLLET PG. 244	WRENCH PG. 261	SCREW PG. 262
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TAPPING RANGE: No.6-AU3/4 (M2-M20)



For entire KAISER Boring System,
please see catalog –
KAISER Precision Modular Tooling System

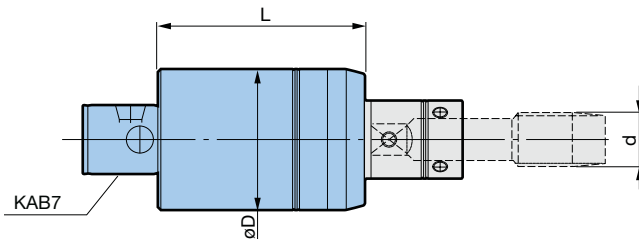
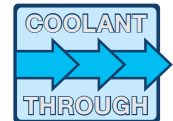


Catalog Number	Adapter Size	Tapping Range d*	øD	øD ₁	L	Weight (lbs.)
CK4-MGT6-62	KAB4	No.2–No.12	1.42	.63	2.44	1.1
-MGT12-67		AU1/4–AU7/16	1.61	.79	2.64	1.3
CK5-MGT20-87	KAB5	AU1/2–AU3/4 AP1/8–AP1/4	2.13	1.18	3.43	2.6

*AU3/8 is included in the MGT20 series

- Tap Holder and wrench must be ordered separately
- Rigid tapping function is required on the machine tool

TAPPING RANGE: AU13/16-AU1-3/8 (M20-M36)



Catalog Number	Adapter Size	Tapping Range d*	øD	L	Weight (lbs.)
CK7-MGT36-137	KAB7	AU13/16-AU1-3/8 AP3/8-AP1	3.70	5.39	15.0

- MGT Set Screw and Adjust Screw are included
- Tap Holder and wrench must be ordered separately
- Rigid tapping function is required on the machine tool

ACCESSORIES

TAP HOLDER PG. 268	MEGA NUT PG. 276	SYNCHRO ADJUSTER PG. 276	O-RING PG. 276	MEGA WRENCH PG. 259	SCREW PG. 276
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ACCESSORIES



Dyna Test C5/6/8	Pg. 186
Extensions & Reductions C6/8	Pg. 187

MEGA CHUCKS



Mega S—Mega Micro Type T, C5/C6	Pg. 189
Type S, C5/C6	Pg. 189
Clamping Range: ϕ .018"–.238" (ϕ .45–6.05mm)	
Mega N—Mega New Baby C5/C6/ C8	Pg. 190-193
Clamping Range: ϕ .010"–.787" (ϕ .25–20mm)	
Mega ER Grip C4/C5/C6/C8	Pg. 194-195
Clamping Range: ϕ .075"–.787" (ϕ 1.9–20mm)	
Mega E C5/C6/C8	Pg. 196-198
Clamping Range: ϕ .125"–.500" (ϕ 3–12mm)	
Mega D—Mega Double Power C6/C8	Pg. 199-200
Clamping Range: ϕ .625"–1.250" (ϕ 16–32mm)	

NEW Hi-POWER MILLING CHUCKS



C5/C6/C8	Pg. 201
Clamping Range: ϕ 16–32mm	

HYDRAULIC CHUCKS



C5/C6	Pg. 202-203
Clamping Range: ϕ 6–32mm	

BASIC ARBORS



Shell Mill Holder C4/C5/C6/C8	Pg. 204-205
End Mill Holder C6/C8	Pg. 207
Clamping Range: ϕ 12–50mm	
Shrink Fit Holder C5/C6/C8	Pg. 208-209
Clamping Range: ϕ 6–20mm	

MODULAR HOLDERS



KAISER KAB & ABS Shank C5/C6/C8	Pg. 210-211
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MEGA SYNCHRO



C5/C6/C8	Pg. 212
Tapping Range: No.2-AU3/4 (ANSI) M2-M20 (JIS/DIN/ISO)	

TURNING TOOLS

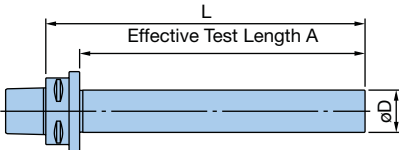


45° Type S & 90° Type S Basic Holder C5/C6/C8	Pg. 213-215
Square Tool Holder 45°, 90° & 180° C5/C6/C8	Pg. 216-217
Boring Bar Holder C6	Pg. 218-219
Clamping Range: ϕ .625"–1.500" (ϕ 6–40mm)	

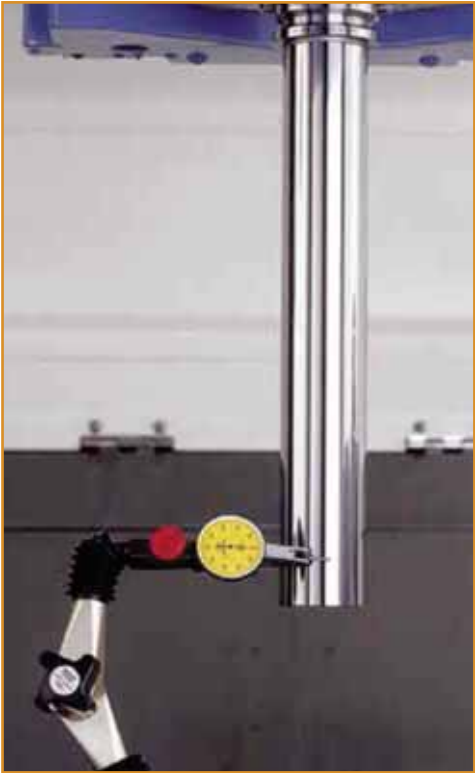
DYNA TEST

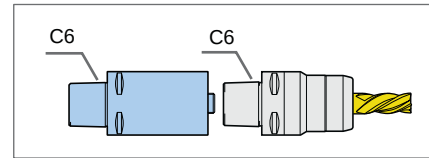
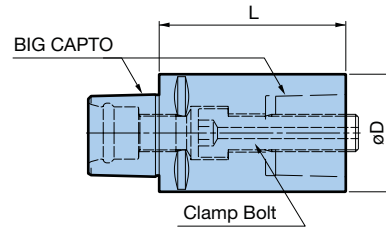
BIG CAPTO C5/6/8

Dyna Test
 Helps identify potential problems, and can reduce downtime and costly repairs of the machine tool spindle.



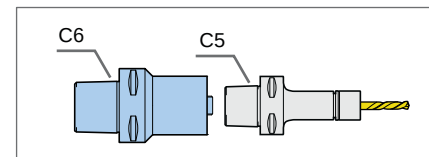
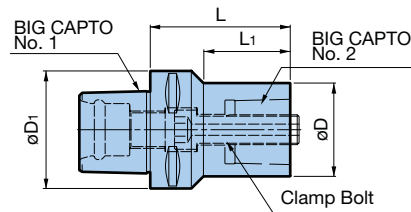
Catalog Number	L	A	øD
C5-32-150	7.087	5.906	32mm
-32-215	9.646	8.465	
-32-250	11.024	9.843	
C6-40-150	7.165	5.906	40mm
-40-200	9.134	7.874	
-40-320	13.858	12.598	
C8-40-200	9.449	7.874	
-40-320	14.173	12.598	





Catalog Number	BIG Capto	øD	L	Clamp Bolt			Weight (lbs.)
				Thread Size	Hex.	Tightening Torque	
C6-C6-100	C6	2.480	3.94	M20xP2	12mm	125 ft-lbs.	2.6
C8-C8-100	C8	3.150	3.94				3.7

• A clamp bolt is included



Catalog Number	BIG CAPTO No. 1	BIG CAPTO No. 2	øD	øD1	L	L1	Clamp Bolt			Weight (kg)
							Thread Size	Hex.	Tightening Torque	
C6-C5-75	C6	C5	50	63	75	46	M16xP1.5	12mm	95N·m	0.5
C8-C6-85	C8	C6	63	80	85	50	M20xP2		170N·m	0.8

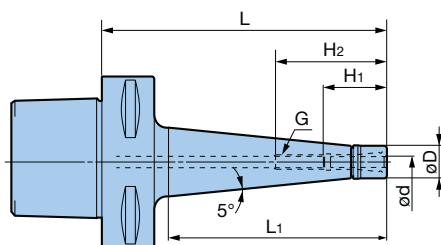
• A clamp bolt is included

MEGA MICRO CHUCK BIG CAPTO C4/C5/C6

CLAMPING RANGE: ϕ .018"-.238" (ϕ .45-6.05mm) — For Micro Drill & End Mill Applications

**HIGHER
RIGIDITY**

**MAX
30,000
RPM**



Catalog Number	ϕd	ϕD	L	L ₁	H ₁	H ₂	G	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C4-MEGA3S-60T	.018-.125	.394	2.36	1.38	.87	1.50	M4 P0.7	NBC3S-□	MGN3S	MGR10	35,000	.7
-MEGA6S-60T	.018-.238	.551	2.36	1.38	1.10	1.85	M7 P0.75	MNC6S-□	MGN6S	MGR14	30,000	.7
-MEGA6S-90T				2.56		1.93					22,000	.9
C5-MEGA3S-105T	.018-.128	.394	4.13	3.11	.89	1.52	M4 P0.7	NBC3S-□	MGN3S	MGR10	30,000	1.1
-MEGA4S-105T	.018-.159	.472	4.13	3.11	1.04	1.85	M5 P0.8	NBC4S-□	MGN4S	MGR12	25,000	1.1
-120T			4.72	3.70							20,000	1.3
-MEGA6S-105T	.018-.238	.551	4.13	3.11	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	25,000	1.3
-120T			4.72	3.70							20,000	1.3
C6-MEGA3S-120T	.018-.128	.394	4.72	3.62	.89	1.52	M4 P0.7	NBC3S-□	MGN3S	MGR10	25,000	2.9
-MEGA4S-120T	.018-.159	.472	4.72	3.62	1.04	1.85	M5 P0.8	NBC4S-□	MGN4S	MGR12	22,000	2.9
-135T			5.31	4.21							20,000	3.1
-MEGA6S-120T	.018-.238	.551	4.72	3.62	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	22,000	2.9
-135T			5.31	4.21							20,000	3.1

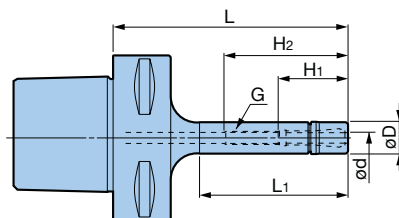
- Mega Nut is included
- Collet and wrench must be ordered separately

ACCESSORIES

 COLLET PG. 234	 MEGA NUT PG. 248	 PERFECT SEAL PG. 249	 MEGA WRENCH PG. 259
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CLAMPING RANGE: .018"-.238" (ø.45-6.05mm) — For Micro Drill & End Mill Applications

MAX
25,000
RPM



Catalog Number	ød	øD	L	L ₁	H ₁	H ₂	G	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C5-MEGA3S-75	.018-.128	.394	2.95	1.93	.89	1.50	M4 P0.7	NBC3S-□	MGN3S	MGR10	25,000	.9
-MEGA4S-75	.018-.159	.472		1.97	1.04	1.85	M5 P0.8	NBC4S-□	MGN4S	MGR12	25,000	.9
-MEGA6S-75	.018-.238	.551		1.97	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	25,000	.9
C6-MEGA3S-90	.018-.128	.394	3.54	1.97	.89	1.50	M4 P0.7	NBC3S-□	MGN3S	MGR10	25,000	2.4
-MEGA4S-90	.018-.159	.472		2.28	1.04	1.85	M5 P0.8	NBC4S-□	MGN4S	MGR12	25,000	2.6
-MEGA6S-90	.018-.238	.551		2.28	1.12	1.93	M7 P0.75	NBC6S-□	MGN6S	MGR14	25,000	2.6

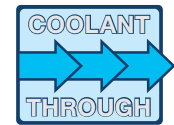
- Mega Nut is included
- Collet and wrench must be ordered separately

ACCESSORIES

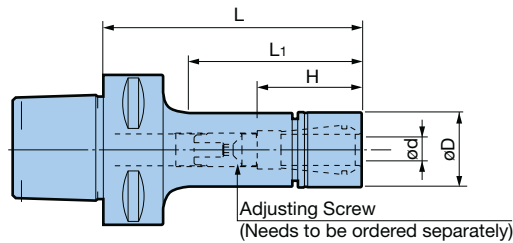
 COLLET PG. 234	 MEGA NUT PG. 248	 PERFECT SEAL PG. 249	 MEGA WRENCH PG. 259
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MEGA NEW BABY CHUCK BIG CAPTO C4/C5

CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm) — For Drills, Reamers, Taps & Finishing End Mills



**MAX
35,000
RPM**



Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C4-MEGA6N-75	.010-.236	.787	2.95	1.89	.91-1.69	NBC6-□	MGN6	MGR20	30,000	.9
-MEGA8N-75	.020-.315	.984	2.95	1.93	1.02-1.77	NBC8-□	MGN8	MGR25	30,000	1.1
-MEGA10N-50 ※	.059-.394	1.181	1.97	1.10	1.73	NBC10-□	MGN10	MGR30	33,000	1.1
-75			2.95	2.05	1.50-1.89				30,000	1.3
-MEGA13N-50 ※	.098-.512	1.378	1.97	1.14	1.73	NBC13-□	MGN13	MGR35	30,000	1.1
-75			2.95	2.13	2.52				28,000	1.5
-MEGA16N-55 ※	.098-.630	1.654	2.17	—	1.89	NBC16-□	MGN16	MGR42L	30,000	1.5
-MEGA20N-60 ※	.098-.787	1.811	2.36	—	2.09	NBC20-□	MGN20	MGR46L	25,000	1.8
C5-MEGA6N-60	.010-.236	.787	2.36	1.34	.91-1.42	NBC6-□	MGN6	MGR20	35,000	1.1
-75			2.95	1.93	.91-1.69				30,000	1.1
-90			3.54	2.44					30,000	1.1
-105			4.13	3.03					25,000	1.3
-120			4.72	3.54					23,000	1.3
-MEGA8N-60			2.36	1.30					1.02-1.42	NBC8-□
-75	2.95	1.93	1.02-1.77	30,000	1.3					
-90	3.54	2.52		30,000	1.3					
-105	4.13	3.03		27,000	1.5					
-120	4.72	3.62		25,000	1.5					
-MEGA10N-55 ※	2.17	1.22		1.89	NBC10-□	MGN10	MGR30	35,000	1.1	
-75	2.95	1.93	1.50-1.89	33,000				1.3		
-90	3.54	2.52		30,000				1.5		
-105	4.13	3.11		27,000				1.8		
-120	4.72	3.62		25,000				2.0		
-MEGA13N-55 ※	2.17	1.22		1.89				NBC13-□	MGN13	MGR35
-75	2.95	1.93	1.73-1.89	28,000	1.5					
-90	3.54	2.52	1.73-2.48	25,000	1.8					
-105	4.13	3.11		22,000	2.0					
-120	4.72	3.70		20,000	2.2					
-MEGA16N-60 ※	2.36	1.50		2.68	NBC16-□	MGN16	MGR42L			
-75 ※	2.95	2.09	1.89-2.48	28,000				2.0		
-90	3.54	2.72	1.89-2.68	23,000				2.2		
-105	4.13	3.31		20,000				2.4		
-120	4.72	3.90		15,000				2.9		
-MEGA20N-60 ※	2.36	1.54		2.01				NBC20-□	MGN20	MGR46L
-75 ※	2.95	2.13	2.60	20,000	2.2					
-90	3.54	2.72	2.01-2.36	17,000	2.4					
-105	4.13	3.31	2.01-2.68	15,000	2.9					
-120	4.72	3.90		13,000	3.1					

Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C6-MEGA6N-60 ※	.010-.236	.787	2.36	1.18	.91-1.30	NBC6-□	MGN6	MGR20	35,000	2.6
-75 ※			2.95	1.69	.91-1.69				35,000	2.6
-90			3.54	2.28					30,000	2.6
-105			4.13	2.87					30,000	2.9
-120			4.72	3.46					25,000	2.9
-135			5.31	4.06					20,000	2.9
-165			6.50	5.04					15,000	3.1
-200			7.87	6.42					10,000	3.3
-MEGA8N-60			.020-.315	.984					2.36	1.14
-75	2.95	1.69			1.02-1.77	35,000	2.9			
-90	3.54	2.28				30,000	2.9			
-105	4.13	2.87				30,000	3.1			
-120	4.72	3.46				25,000	3.1			
-135	5.31	4.06				20,000	3.3			
-165	6.50	5.24				15,000	3.5			
-200	7.87	6.42				10,000	3.7			
-MEGA10N-60 ※	.059-.394	1.181				2.36	1.26	2.01	NBC10-□	MGN10
-75			2.95	1.69	1.50-1.77	33,000	3.1			
-90			3.54	2.28	1.50-1.89	30,000	3.1			
-105			4.13	2.87		25,000	3.3			
-120			4.72	3.46		25,000	3.5			
-135			5.31	4.06		20,000	3.5			
-165			6.50	5.24		15,000	4.0			
-200			7.87	6.61		12,000	4.4			
-MEGA13N-60 ※			.098-.512	1.378		2.36	1.26	2.01		
-75 ※	2.95	1.77			2.60	32,000	3.1			
-90	3.54	2.36			1.77-2.17	30,000	3.3			
-105	4.13	2.87			1.73-2.48	25,000	3.5			
-120	4.72	3.54				20,000	3.7			
-135	5.31	4.06				20,000	4.0			
-165	6.50	5.24				15,000	4.4			
-200	7.87	6.61				12,000	4.8			

- Mega New Baby Nut is included
- Collet and wrench must be ordered separately
- Designed to be capable of supplying coolant through spindle
- For tools marked ※, adjusting screw cannot be used, H is the maximum tool insertion length

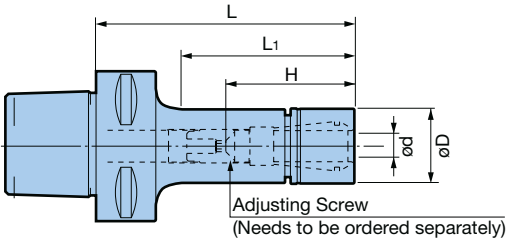
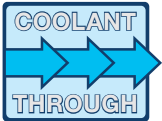
ACCESSORIES

 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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MEGA NEW BABY CHUCK BIG CAPTO C6

CLAMPING RANGE: $\varnothing$.098"-.787"
For Drills, Reamers, Taps & Finishing End Mills

MAX
35,000
RPM



Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C6-MEGA16N-65 ✱	.098-.630	1.654	2.56	1.46	2.20	NBC16-□	MGN16	MGR42L	32,000	3.3
-75 ✱			2.95	1.85	2.60				30,000	3.5
-90			3.54	2.36	1.89-2.24				25,000	3.7
-105			4.13	2.95	1.89-2.68				20,000	4.0
-120			4.72	3.54					15,000	4.4
-135			5.31	4.13					15,000	4.6
-165			6.50	5.31					10,000	5.3
-200			7.87	6.69					8,000	5.9
-MEGA20N-65 ✱			.098-.787	1.811	2.56				1.46	2.01
-75 ✱	2.95	1.85			2.56	30,000	3.5			
-90	3.54	2.44			2.01-2.20	25,000	4.0			
-105	4.13	3.03			2.01-2.68	20,000	4.4			
-120	4.72	3.62				15,000	4.6			
-135	5.31	4.21				15,000	5.1			
-165	6.50	5.39				10,000	5.7			
-200	7.87	6.77				8,000	6.4			



BIG CAPTO

Catalog Number	ød	øD	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C8-MEGA6N-90	.010-.236	.787	3.54	1.77	.91-1.69	NBC6-□	MGN6	MGR20	20,000	5.3
-120			4.72	2.95					17,000	5.7
-165			6.50	4.72					12,000	5.9
-MEGA8N-90	.020-.315	.984	3.54	1.81	1.02-1.77	NBC8-□	MGN8	MGR25	20,000	5.7
-120			4.72	2.95					17,000	5.9
-165			6.50	4.72					13,000	6.2
-MEGA10N-70	.059-.394	1.181	2.76	1.18	1.50-1.81	NBC10-□	MGN10	MGR30	22,000	5.7
-90			3.54	1.77					20,000	5.9
-105			4.13	2.36					18,000	5.9
-120			4.72	2.95					17,000	6.2
-135			5.31	3.54					15,000	6.4
-165			6.50	4.72					13,000	6.6
-200			7.87	6.10					12,000	7.0
-MEGA13N-90	.098-.512	1.378	3.54	1.97	2.76	NBC13-□	MGN13	MGR35	18,000	6.2
-120			4.72	3.15					15,000	6.4
-165			6.50	4.72					12,000	7.0
-MEGA16N-90	.098-.630	1.654	3.54	1.97	1.89-2.60	NBC16-□	MGN16	MGR42L	15,000	6.4
-120			4.72	3.15					14,000	7.0
-165			6.50	4.92					13,000	7.9
-MEGA20N-90	.098-.787	1.811	3.54	1.97	2.01-2.68	NBC20-□	MGN20	MGR46L	15,000	6.6
-120			4.72	3.15					14,000	7.3
-165			6.50	4.92					13,000	8.4
-200			7.87	6.30					10,000	9.0

- Mega New Baby Nut is included
- Collet and wrench must be ordered separately
- Designed to be capable of supplying coolant through spindle
- For tools marked ※, adjusting screw cannot be used, H is the Max tool insertion length

ACCESSORIES

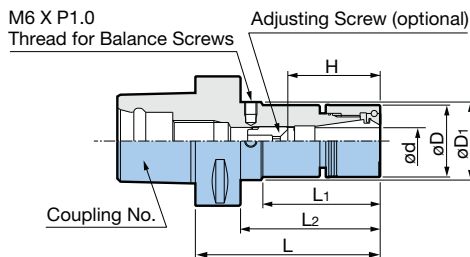
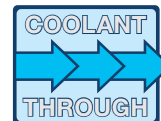
 COLLET PG. 236	 MEGA NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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MEGA ER GRIP BIG CAPTO C4/C5

CLAMPING RANGE: ϕ .075"-.787" (ϕ .19-20mm)

For Drills, Reamers, Taps & Finishing End Mills

MAX
33,000
RPM



Catalog Number	ød	øD	øD ₁	L	L ₁	L ₂	H	Collet	Nut	Wrench	Weight (lbs.)
C5-MEGAER16-60	.075-.394	1.181	1.378	2.36	1.10	1.58	2.09	ERC16-□	MERN16	MGR30L	1.5
-90※				3.54	2.22	2.76	1.38-1.85				2.0
-105				4.13	2.82	3.35					2.2
-135				5.32	4.00	4.53					2.6
-MEGAER20-60	.108-.512	1.378	1.496	2.36	1.61	1.58	2.09	ERC20-□	MERN20	MGR35L	1.8
-90※				3.54	2.28	2.76	1.65-2.44				2.0
-105				4.13	2.84	3.35					2.2
-135				5.32	4.02	4.53					2.9
-MEGAER25-65	.108-.630	1.654	—	2.56	—	1.77	2.28	ERC25-□	MERN25	MGR42L	2.0
-90※				3.54		2.68	1.73-2.28				2.4
-105				4.13		3.35	1.73-2.64				2.6
-135				5.32		4.53					3.3
-MEGAER32-70	.108-.787	1.969	—	2.76	—	1.97	2.48	ERC32-□	MERN32	MGR50L	2.2
-90※				3.54		2.76	1.97-2.32				2.6
-105				4.13		3.35	1.97-2.68				3.1
-135				5.32		4.53					4.0

- Mega ER Nut is included
- Adjusting screw, collet and wrench must be ordered separately
- "H" indicates the adjustment length with an adjusting screw
- Adjusting screws cannot be used with models marked ※
- Balance screws are not included
- Mega ER Grip is not able to use DIN6499 Form-A collets and ESX collets
- Weight does not include collet

ACCESSORIES

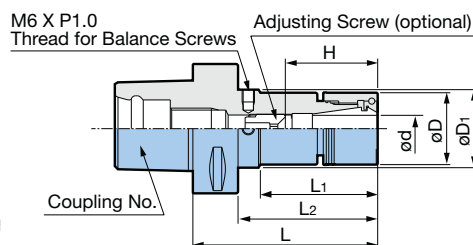
COLLET PG. 240	MEGA NUT* PG. 255	PERFECT SEAL PG. 256	SOLID NUT PG. 255	MEGA WRENCH PG. 259	SCREW PG. 262
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*Mega Nut is the recommended nut to achieve high accuracy and clamping force

CLAMPING RANGE: $\phi.075$ "-.787" ($\phi.19$ -20mm)

For Drills, Reamers, Taps & Finishing End Mills

MAX
33,000
RPM



Catalog Number	ød	øD	øD1	L	L1	L2	H	Collet	Nut	Wrench	Weight (lbs.)
C6-MEGAER16-60 ※	.075-.394	1.181	1.378	2.36	1.10	1.50	2.01	ERC16-□	MERN16	MGR30L	2.9
-90				3.54	2.15	2.68	1.38-1.85				3.1
-105				4.13	2.74	3.27					3.3
-135				5.32	3.92	4.45					3.5
-MEGAER20-65 ※	.108-.512	1.378	1.496	2.56	1.16	1.69	2.20	ERC20-□	MERN20	MGR35L	2.9
-90				3.54	2.17	2.68	1.65-2.28				3.3
-105				4.13	2.76	3.27	1.65-2.44				3.5
-135				5.32	3.94	4.45					3.7
-165				6.50	5.12	5.63					4.2
-MEGAER25-65 ※	.108-.630	1.654	—	2.56	—	1.69	2.20	ERC25-□	MERN25	MGR42L	3.1
-90				3.54		2.68	1.73-2.32				3.5
-105				4.13		3.27	1.73-2.64				3.7
-135				5.32		4.45					4.4
-165				6.50		5.63					4.8
-MEGAER32-70 ※	.108-.787	1.969	—	2.76	—	1.89	2.52	ERC32-□	MERN32	MGR50L	3.3
-90				3.54		2.68	1.97-2.32				4.0
-105				4.13		3.27	1.97-2.68				4.2
-135				5.32		4.45					5.1
-165				6.50		5.63					5.7

- Mega ER Nut is included, adjusting screw
- Collet, wrench and balance screws must be ordered separately
- "H" indicates the adjustment length with an adjusting screw
- Adjusting screws cannot be used with models marked ※
- Mega ER Grip is not able to use DIN6499 Form-A collets and ESX collets
- Weight does not include collet

ACCESSORIES

COLLET PG. 240	MEGA NUT* PG. 255	PERFECT SEAL PG. 256	SOLID NUT PG. 255	MEGA WRENCH PG. 259	SCREW PG. 262
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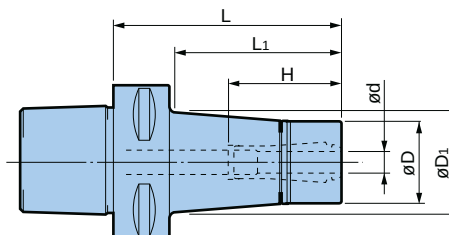
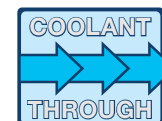
*Mega Nut is the recommended nut to achieve high accuracy and clamping force

MEGA E CHUCK BIG CAPTO C4/C5

CLAMPING RANGE: ϕ .125"-.500" (ϕ 3- ϕ 12mm)

Exclusively for High Speed Finish End Milling

MAX
35,000
RPM



Catalog Number	ød	øD	øD ₁	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C4-MEGA6E-50 ※	.125-.250 (3mm-6mm)	.984	1.02	1.97	.98	1.73	MEC6-□	MEN6	MGR25	35,000	.9
-MEGA8E-50 ※	.125-.250 (3mm-8mm)	1.181	1.22	1.97	1.10	1.73	MEC8-□	MEN8	MGR30	35,000	1.1
-MEGA10E-55 ※	.125-.375 (3mm-10mm)	1.378	1.46	2.17	1.34	1.93	MEC10-□	MEN10	MGR35	30,000	1.1
-MEGA13E-60 ※	.125-.500 (3mm-12mm)	1.654	—	2.36	—	2.13	MEC13-□	MEN13	MGR42L	25,000	1.3
C5-MEGA6E-55 ※	.125-.250 (3mm-6mm)	.984	1.04	2.17	1.14	1.89	MEC6-□	MEN6	MGR25	35,000	1.1
-90			1.27	3.54	2.52	1.46-1.77				25,000	1.5
-105			1.39	4.13	3.19					22,000	1.8
-120			1.49	4.72	3.82					20,000	2.0
-135			1.61	5.31	4.45					18,000	2.4
-MEGA8E-55 ※			.125-.250 (3mm-8mm)	1.181	1.23	2.17				1.22	1.89
-90	1.47	3.54			2.64	1.65-2.01	25,000	1.8			
-105	1.58	4.13			3.23		22,000	2.2			
-120	1.69	4.72			3.86		20,000	2.4			
-MEGA10E-60 ※	.125-.375 (3mm-10mm)	1.378			1.47	2.36	1.46	2.09	MEC10-□	MEN10	MGR35
-90			1.68	3.54	2.72	1.89-2.28	25,000	2.0			
-105			1.78	4.13	3.31		20,000	2.4			
-120			1.78	4.72	3.90		18,000	2.9			
-MEGA13E-60 ※			.125-.500 (3mm-12mm)	1.654	1.75	2.36	1.54	1.97			
-90	1.76	3.54			2.72	1.97-2.36	25,000	2.4			
-105	1.81	4.13			3.31		20,000	2.9			
-120	1.80	4.72			3.90		16,000	3.1			



Catalog Number	ød	øD	øD ₁	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C6-MEGA6E-60 ※	.125-.250 (3mm-6mm)	.984	1.10	2.36	1.30	2.01	MEC6-□	MEN6	MGR20	35,000	2.6
-75			1.16	2.95	1.89	1.46-1.77				30,000	2.9
-90			1.26	3.54	2.48					30,000	3.1
-105			1.37	4.13	3.07					28,000	3.3
-120			1.47	4.72	3.66					25,000	3.5
-135			1.57	5.31	4.25					22,000	4.0
-165			1.78	6.50	5.43					18,000	4.6
-MEGA8E-60 ※			.125-.250 (3mm-8mm)	1.181	1.29	2.36				1.30	2.01
-75	1.35	2.95			1.89	1.65-1.81	30,000	3.1			
-90	1.44	3.54			2.48	1.65-2.01	30,000	3.3			
-105	1.56	4.13			3.07		28,000	3.7			
-120	1.66	4.72			3.66		25,000	4.0			
-135	1.76	5.31			4.25		23,000	4.2			
-165	1.98	6.50			5.51		20,000	5.3			
-MEGA10E-65 ※	.125-.375 (3mm-10mm)	1.339			1.51		2.56	1.50	2.20	MEC10-□	MEN10
-75 ※			1.54	2.95	1.89	2.60	30,000	3.3			
-90			1.64	3.54	2.48	1.89-2.28	30,000	3.5			
-105			1.75	4.13	3.07		27,000	4.0			
-120			1.85	4.72	3.66		23,000	4.4			
-135			1.97	5.31	4.33		20,000	4.8			
-165			2.18	6.50	5.55		17,000	5.9			
-MEGA13E-65 ※			.125-.500 (3mm-12mm)	1.654	1.78		2.56	1.54	2.20		
-75 ※	1.81	2.95			1.93	2.60	30,000	3.5			
-90	1.93	3.54			2.60	1.97-2.17	28,000	4.0			
-105	2.02	4.13			3.15		25,000	4.6			
-120	2.13	4.72			3.78	1.97-2.36	22,000	5.1			
-135	2.24	5.31			4.41		18,000	5.7			
-165	2.45	6.50			5.55		15,000	7.0			

- Mega E Nut is included
- Collet and wrench must be ordered separately
- "H" indicates the adjustment length with an adjusting screw
- Adjusting screws cannot be used with models marked ※
- Weight does not include collet

ACCESSORIES

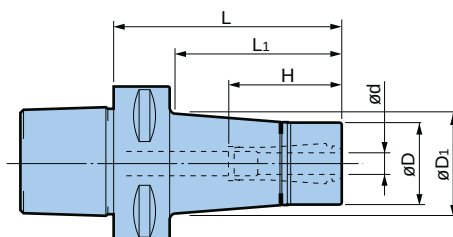
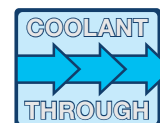
 COLLET PG. 243	 MEGA NUT PG. 248	 PERFECT SEAL PG. 254	 MEGA WRENCH PG. 259	 SCREW PG. 262
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MEGA E CHUCK BIG CAPTO C8

CLAMPING RANGE: ϕ .125"-.500" (ϕ 3- ϕ 12mm)

Exclusively for High Speed Finish End Milling

MAX
35,000
RPM



Catalog Number	ϕd	ϕD	ϕD_1	L	L ₁	H	Collet	Nut	Wrench	Max RPM	Weight (lbs.)
C8-MEGA6E-90	.125-.250 (3mm-6mm)	.984	1.21	3.54	2.17	1.46-1.77	MEC6-□	MEN6	MGR25	20,000	5.7
-135			1.52	5.31	3.94					14,000	6.6
-MEGA8E-90	.125-.250 (3mm-8mm)	1.181	1.39	3.54	2.17	1.65-2.01	MEC8-□	MEN8	MGR30	20,000	5.9
-135			1.70	5.31	3.94					16,000	7.0
-MEGA10E-90	.125-.375 (3mm-10mm)	1.378	1.59	3.54	2.17	1.89-2.28	MEC10-□	MEN10	MGR35	20,000	6.2
-135			1.90	5.31	3.94					16,000	7.5
-MEGA13E-90	.125-.500 (3mm-12mm)	1.654	1.85	3.54	2.17	1.94-2.36	MEC13-□	MEN13	MGR42L	18,000	6.6
-135			2.16	5.31	3.94					14,000	8.1

• Mega E Nut is included, collet and wrench must be ordered separately

ACCESSORIES

COLLET PG. 243	MEGA NUT PG. 248	PERFECT SEAL PG. 254	MEGA WRENCH PG. 259	SCREW PG. 262
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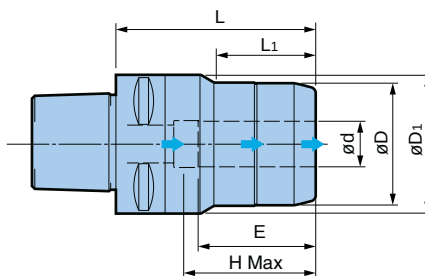
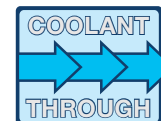
MEGA DOUBLE POWER CHUCK BIG CAPTO C5/C6



CLAMPING RANGE: ϕ .625"-1.250" (ϕ 16- ϕ 32mm)

For Heavy Duty End Milling

MAX
30,000
RPM



Catalog Number	ød	øD	øD1	L	L1	H Max	Min Clamping Length E	Wrench	Max RPM	Weight (lbs.)
C5-MEGA16DS-65	16mm	1.811	2.193	2.65	1.02	2.36	2.05	MGR46L	30,000	2.0
-90				3.64		2.87			28,000	3.1
-105				4.23					25,000	4.0
-MEGA20DS-75	20mm	2.165	2.193	3.05	1.42	2.76	2.28	MGR55L	30,000	2.6
-90				3.64		3.35			28,000	3.3
-MEGA25DS-75	25mm	2.441	2.469	3.05	1.42	2.76	2.28	MGR62L	25,000	3.1
-90				3.64		3.43			22,000	3.7
C6-MEGA.625DS-3A	.625	1.654	2.193	3.09	1.02	2.48	2.05	MGR42L	30,000	3.7
-MEGA.750DS-3A	.750	2.165	2.193	3.09	1.42	2.68	2.28	MGR50L	30,000	4.4
-MEGA1.000DS-3A	1.000	2.441	2.469	3.09	1.42	2.68	2.28	MGR62L	28,000	4.6
-MEGA1.250DS-3.5	1.250	2.756	2.783	3.59	1.46	3.27	2.64	MGR70L	25,000	5.5
-MEGA16DS-70	16mm	1.811	2.193	2.85	1.02	2.48	2.05	MGR46L	30,000	3.7
-90				3.64		3.27			28,000	4.6
-105				4.23		2.87			25,000	5.3
-135				5.41					22,000	6.6
-MEGA20DS-75	20mm	2.165	2.193	3.05	1.42	2.68	2.28	MGR55L	30,000	4.4
-90				3.64		3.27			28,000	4.8
-105				4.23		3.43			25,000	5.5
-135				5.41					22,000	6.8
-MEGA25DS-75	25mm	2.441	2.469	3.05	1.42	2.68	2.28	MGR62L	28,000	4.6
-90				3.64		3.27			25,000	5.3
-105				4.23		3.43			23,000	6.2
-135				5.41					20,000	7.3
-MEGA32DS-90	32mm	2.756	2.783	3.64	1.46	3.27	2.64	MGR70L	25,000	5.5
-105				4.23		3.62			22,000	6.4
-135				5.41					18,000	7.5

• Wrench must be ordered separately

ACCESSORIES



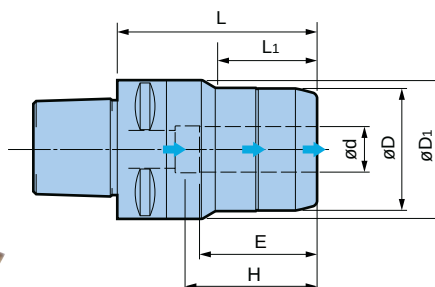
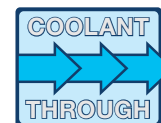
BIG CAPTO

MEGA DOUBLE POWER CHUCK BIG CAPTO C8

CLAMPING RANGE: $\varnothing 1.250"$ ($\varnothing 16$ - $\varnothing 32$ mm)

For Heavy Duty End Milling

**MAX
30,000
RPM**



Catalog Number	$\varnothing d$	$\varnothing D$	$\varnothing D1$	L	L1	H Max	Min Clamping Length E	Wrench	Max RPM	Weight (lbs.)
C8-MEGA1.250DS-3.5	1.250	3.150	3.386	3.59	1.65	3.62	2.80	MGR80L	20,000	9.5
-MEGA16DS-70	16mm	1.811	2.193	2.85	.98	2.87	2.05	MGR46L	25,000	6.2
-135				5.41					18,000	9.0
-MEGA20DS-75	20mm	2.362	2.717	3.05	1.10	3.03	2.28	MGR60L	25,000	7.3
-135				5.41		3.43			18,000	11.0
-165				6.59					15,000	13.0
-MEGA25DS-75	25mm	2.756	3.031	7.97	1.34	3.03	2.64	MGR70L	21,000	7.5
-135				5.41		3.62			15,000	11.9
-165				6.59					12,000	14.1
-MEGA32DS-105	32mm	3.150	3.386	4.23	1.65	4.02	2.87	MGR80L	17,000	10.6
-135				5.41		4.21			15,000	13.2
-165				6.59					12,000	16.1

• Wrench must be ordered separately

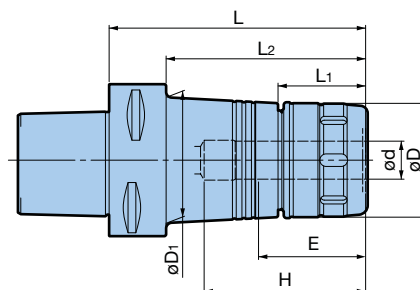
ACCESSORIES

 COLLET PG. 246	 PERFECT SEAL/ JET COLLET PG. 244	 MEGA WRENCH PG. 259	 SCREW PG. 262
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NEW Hi-POWER MILLING CHUCK BIG CAPTO C5/C6/C8



CLAMPING RANGE: $\varnothing 16$ -32mm — For Heavy Duty End Milling



Catalog Number	$\varnothing d$	$\varnothing D$	$\varnothing d_1$	L	L ₁	L ₂	H Max	Min Clamping Length E	Wrench	Weight (lbs.)
C5-HMC16S-65	16mm	1.693	—	2.56	1.73	1.77	2.28	2.17	NBK20	1.8
-HMC20S-75	20mm	1.969	—	2.95	1.73	—	2.68	2.20	FK45-50L	2.2
-105			—	4.13		—	3.35			3.1
-HMC25S-75	25mm	2.165	—	2.95	1.85	—	2.68	2.24	FK52-22	2.9
-105			—	4.13		—	3.43			3.7
-HMC32S-85	32mm	2.441	—	3.35	2.20	—	3.07	2.28	FK68-75L	3.5
C6-HMC16S-70	16mm	1.693	—	2.76	1.73	1.89	2.40	2.17	NBK20	3.3
-HMC20S-70	20mm	1.969	—	2.95	1.73	2.09	2.60	2.20	FK45-50L	3.7
-105			—	4.13		3.27	3.35			5.1
-120			—	4.72		3.86	3.39			5.5
-HMC25S-75	25mm	2.323	—	2.95	1.77	2.09	3.43	2.24	FK58-62L	4.4
-105			—	4.13		3.27	3.19			5.5
-135			—	5.31		4.45	3.54			6.8
-HMC32S-90	32mm	2.677	—	3.54	2.13	—	3.15	2.52	FK68-75L	5.3
-105			—	4.13		—	3.35			6.0
-135			—	5.31		—	3.35			7.3
C8-HMC20-80	20mm	2.362	—	3.15	1.81	1.97	3.15	2.20	FK58-62	7.3
-135			2.60	5.31		4.13	3.35			10.4
-HMC25-85	25mm	2.441	—	3.35	2.17	—	3.35	2.56	FK58-62	7.7
-135			2.64	5.31		4.13	3.54			10.4
-HMC32-95	32mm	3.150	—	3.74	2.48	—	3.74	2.80	FK80-90	9.9
-135			—	5.31		—	4.13			12.8

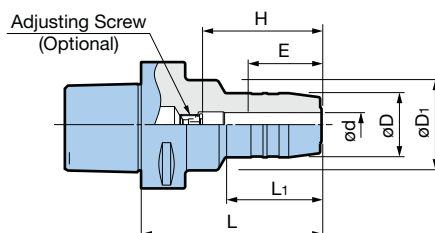
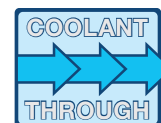
• C-Spanner is ordered separately

ACCESSORIES

COLLET PG. 246	PERFECT SEAL/ JET COLLET PG. 244	WRENCH PG. 261	SCREW PG. 262
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HYDRAULIC CHUCK BIG CAPTO C5

CLAMPING RANGE: $\phi 6-32\text{mm}$ — For Drills, Reamers, Ball Mills, End Mills, Diamond Reamers & Grinding Tools



Catalog Number	ϕd	ϕD	$\phi D1$	L	L ₁	E Min	H	Adjusting Screw	Weight (lbs.)
C5-HDC6-55 ※	6mm	1.024	1.772	2.17	.71	1.10	1.89	—	1.8
-90				3.54	1.77		1.30-1.97	HDA6-05020	2.2
-HDC8-55 ※	8mm	1.102	1.772	2.17	.71	1.10	1.89	—	1.8
-90				3.54	1.77		1.30-1.97	HDA8-06020	2.4
-HDC10-60 ※	10mm	1.181	1.772	2.36	.94	1.30	2.09	—	2.0
-90				3.54	1.77		1.69-2.17	HDA10-08015	2.4
-HDC12-60 ※	12mm	1.260	1.811	2.36	.94	1.50	2.09	—	2.0
-90			1.772	3.54	1.89		2.09-2.36	HDA12-10010 ●	2.4
-HDC16-75 ※	16mm	1.496	1.969	2.95	1.38	1.69	2.68	—	2.4
-90 ※			1.890	3.54	1.89		3.27	—	2.7
-HDC20-75 ※	20mm	1.654	2.047	2.95	1.38	1.69	2.68	—	2.4
-90 ※			1.969	3.54	1.89		3.27	—	2.7
-HDC25-90 ※	25mm	2.165	2.480	3.54	1.89	2.05	3.27	—	3.8

BIG CAPTO



Catalog Number	ød	øD	øD1	L	L ₁	E Min	H	Adjusting Screw	Weight (lbs.)
C6-HDC6-60 ※	6mm	1.024	1.772	2.36	1.71	1.10	2.01	HDA16-05032	3.1
-90				3.54	1.89		1.30-1.97	HDA6-05020	3.3
-120				4.72	1.77		1.10-1.97	HDA6-05032	4.0
-HDC8-60 ※	8mm	1.102	1.772	2.36	1.71	1.10	2.01	HDA16-05032	3.1
-90				3.54	1.89		1.30-1.97	HDA8-06020	3.5
-120				4.72	1.77		1.10-1.97	HDA8-06032	4.0
-HDC10-60 ※	10mm	1.181	1.772	2.56	1.95	1.30	2.20	HDA16-12037	3.1
-90				3.54	1.89		1.69-2.17	HDA10-08015	3.5
-120				4.72	1.77		1.30-2.13	HDA10-08032	4.0
-HDC12-65 ※	12mm	1.260	1.811	2.56	1.95	1.50	2.20	HDA16-12037	3.3
-90			1.772	3.54	1.89		1.89-2.36	HDA10-08015	3.5
-120				4.72			1.50-2.36	HDA10-08032	4.0
-HDC16-75 ※	16mm	1.496	1.969	2.95	1.38	1.69	2.60	HDA25-16039	3.5
-90 ※			1.850	3.54	1.89		3.19		3.8
-120			1.890	4.72			1.69-2.76	HDA16-12037	4.4
-HDC20-75 ※	20mm	1.654	2.087	2.95	1.30	1.69	2.60	HDA25-16039	3.8
-90 ※			1.969	3.54	1.89		2.83		4.0
-120				4.72			1.69-2.76	HDA16-12037	4.6
-HDC25-90 ※	25mm	2.165	2.480	3.54	1.81	2.05	3.15	HDA25-16039	4.9
-120				4.72	2.01		2.64-3.11	HDA20-16015	6.2
-HDC32-90 ※	32mm	2.953	2.480	3.54	1.69	2.20	3.19	HDA25-16039	6.2
-120		2.480	—	4.72	—		2.60-3.07	HDA20-160315	6.6

- Adjustable cutter length H is the adjustment length when using an optional adjusting screw
- Adjusting screw cannot be used in Hydraulic Chuck with ※ mark
- H length is equal to the Max insertion length
- In case the projection length needs to be adjusted from the shank side, use the adjusting screw with "W" which has hexagon sockets on both sides, (ex: HDA6-05020W) adjusting screw with ● indication is not available in W type

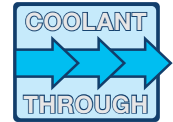
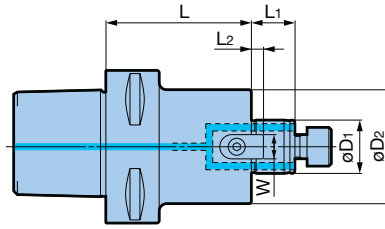
CAUTION

Use only cutting tools that have a shank tolerance of h6 (see table Pg. 16).
Do not use with cutting tools made with a flat on the shank (ie: Weldon type shank).
Roughing end mills are not recommended for use with Hydraulic Chucks.
Do not tighten the clamping screw without first inserting a cutting tool into the tool holder.
Always insert the cutting tool into the hydraulic tool holder beyond min. clamping length "E".

ACCESSORIES



SHELL MILL HOLDER BIG CAPTO C5/C6/C8

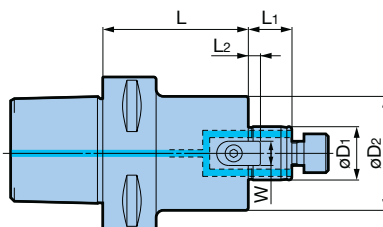


Catalog Number	ϕD_1	ϕD_2	L	L ₁	L ₂	W	G	Weight (lbs.)
C5-FMH22-47-60	22mm	1.850	2.36	.71	.20	.394	M10	1.3
-90			3.54					3.1
-FMH22-60-60	22mm	2.362	2.36	.71	.20	.394	M10	2.4
-FMH27-60-60	27mm	2.362	2.36	.79	.24	.472	M12	2.4
C6-SMC.750-2	.750	1.689	2.00	.69	.16	.313	3/8"-24	3.0
-SMC1.000-2	1.000	2.189	2.00	.69	.22	.375	1/2"-20	4.5
-SMC1.250-2	1.250	2.750	2.00	.69	.28	.500	5/8"-18	4.8
-SMC1.500-2	1.500	3.626	2.00	.94	.38	.625	3/4"-16	5.0
-FMH22-47-45	22mm	1.850	1.77	.71	.20	.394	M10	3.1
-60			2.36					3.5
-90			3.54					4.4
-150			5.91					6.2
-FMH22-60-45	22mm	2.362	1.77	.71	.20	.394	M10	3.5
-60			2.36					4.4
-90			3.54					5.7
-FMH27-60-45	27mm	2.362	1.77	.79	.24	.472	M12	3.7
-60			2.36					4.4
-90			3.54					6.0
-150			5.91					8.6
C8-FMH22-47-60	22mm	1.850	2.36	.71	.20	.394	M10	6.2
-105			4.13					7.5
-150			5.91					8.8
-200			7.87					10.4
-FMH22-60-60	22mm	2.362	2.36	.71	.20	.394	M10	6.8
-105			4.13					8.8
-150			5.91					11.0
-FMH27-60-60	27mm	2.362	2.36	.79	.24	.472	M12	6.8
-105			4.13					9.0
-150			5.91					11.0
-200			7.87					13.4
-FMH32-96-75	32mm	3.780	2.95	.87	.28	.551	M16	10.1
-105			4.13					15.0
-150			5.91					16.5

ACCESSORIES



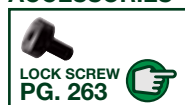
SHELL MILL HOLDER BIG CAPTO C5/C6/C8



Catalog Number	øD ₁	øD ₂	L	L ₁	L ₂	W	G	Weight (lbs.)
C5-FMA25.4-40	25.4mm	1.969	1.57	.87	.20	.375	M12	2.0
-75			2.95					2.6
C6-FMA25.4-40	25.4mm	1.969	1.57	.87	.20	.375	M12	3.1
-60			2.36					4.0
-90			3.54					5.3
-FMA31.75-40	31.75mm	2.362	1.57	1.18	.28	.500	M16	3.5
-90			3.54					5.7
-FMA38.1-45	38.1mm	3.150	1.77	1.34	.35	.625	M20	4.8
C8-FMA25.4-40	25.4mm	1.969	1.57	.87	.20	.374	M12	6.0
-75			2.95					7.1
-105			4.13					8.4
-FMA31.75-40	31.75mm	2.362	1.57	1.18	.28	.500	M16	6.0
-90			3.54					8.8
-FMA38.1-45	38.1mm	3.150	1.77	1.34	.35	.625	M20	7.1

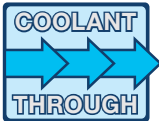
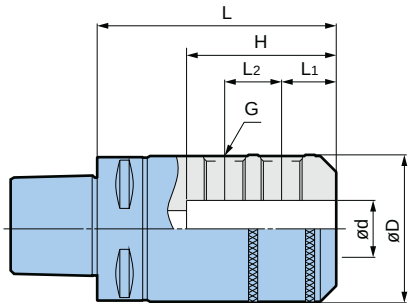
Catalog Number	øD ₁	øD ₂	L	L ₁	L ₂	W	G	Weight (lbs.)
C6-FMC16-40	16mm	1.260	1.57	.63	.20	.315	M8	2.9
-FMC22-40	22mm	1.772	1.57	.71	.20	.394	M10	3.1

ACCESSORIES





CLAMPING RANGE: $\varnothing 16$ - $\varnothing 32$ mm



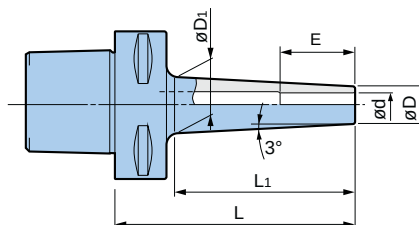
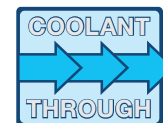
Catalog Number	$\varnothing d$	$\varnothing D_1$	L	L ₁	L ₂	H	G	Weight (lbs.)
C6-ISL16-80	16mm	1.890	3.15	.94	-	2.05	M14	4.0
-ISL20-80	20mm	2.047	3.15	.98		2.17	M16	4.2
-ISL25-105	25mm	2.500	4.13	.94		2.36	M18x2	6.4
-ISL32-115	32mm	2.835	4.53	.94	.98	3.54	M20x2	7.7

ACCESSORIES



SHRINK FIT HOLDER BIG CAPTO C6

CLAMPING RANGE: $\varnothing 6$ -20mm



Catalog Number	$\varnothing d$	$\varnothing D$	$\varnothing D_1$	L	L_1	Min Clamping Length E	Weight (lbs.)
C6-SRC6-90	6mm	.551	.807	3.54	2.48	1.02	2.6
-SRC8-90	8mm	.709	.965			1.02	2.9
-SRC10-90	10mm	.866	1.122			1.26	2.9
-SRC12-90	12mm	.945	1.201			1.42	3.1
-SRC16-90	16mm	1.102	1.358	6.50	5.43	1.50	3.1
-165		1.102	1.669				4.6
-SRC20-90	20mm	1.339	1.594	2.36	2.48	1.65	3.3
-165		1.339	1.906	6.50	5.43		5.5

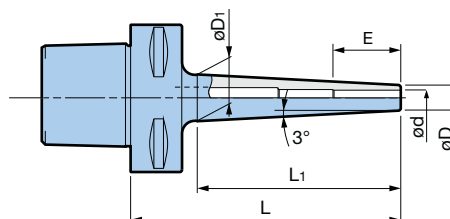
- Use carbide cutter within a tolerance of h6

CAUTION

Please refer to the operation manual of heating/cooling equipment, as some equipments may not be compatible.

SHRINK FIT HOLDER SLIM TYPE BIG CAPTO C6

CLAMPING RANGE: $\phi 6$ -12mm



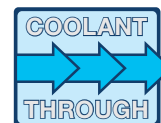
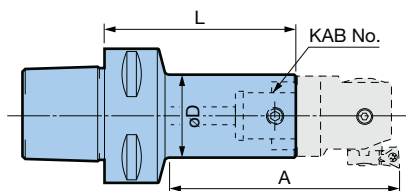
Catalog Number	ϕd	ϕD	ϕD_1	L	L ₁	Min Clamping Length E	Weight (lbs.)
C6-SRC6S-120	6mm	.394	.77	4.72	3.62	1.02	2.6
-165			.94	6.50	5.24		3.1
-SRC8S-120	8mm	.512	.89	4.72	3.62	1.02	2.9
-165			1.06	6.50	5.24		3.3
-SRC10S-105	10mm	.630	1.00	4.72	3.62	1.26	2.9
-165			1.20	6.50	5.31		3.3
-SRC12S-120	12mm	.748	1.12	4.72	3.62	1.42	3.1
-165			1.30	6.50	5.31		3.5

- Use carbide cutter within a tolerance of h6

CAUTION

Please refer to the operation manual of heating/cooling equipment, as some equipments may not be compatible.

KAISER KAB BIG CAPTO C4/C5/C6/C8



For entire KAISER Boring System,
please see catalog —
KAISER Precision Modular Tooling System

Catalog Number	Adapter Size	øD	L	A	Weight (lbs.)
C4-CKB1-48	KAB1	.748	3.150	2.17	.9
-CKB2-45	KAB2	.945	3.150	2.17	.9
-CKB3-40	KAB3	1.220	3.150	2.24	1.1
-CKB4-33	KAB4	1.535	3.150	2.44	1.1
C5-CKB1-73	KAB1	.748	4.154	3.15	1.1
-CKB2-85	KAB2	.945	4.744	3.78	1.3
-CKB3-55	KAB3	1.220	3.740	2.76	1.3
-CKB4-48	KAB4	1.535	3.740	2.76	1.3
-CKB5-50	KAB5	1.969	4.724	3.74	1.5
-CKB6-50	KAB6	2.520	4.764	3.98	2.2
C6-CKB1-78	KAB1	.748	4.350	3.27	2.6
-CKB2-90	KAB2	.945	4.941	3.86	2.9
-CKB3-65	KAB3	1.220	4.134	3.07	2.9
-100			5.512	4.45	3.3
-CKB4-58	KAB4	1.535	4.134	3.07	2.9
-93			5.512	4.45	3.7
-CKB5-48	KAB5	1.969	4.134	3.11	2.9
-83			5.512	4.49	3.7
-CKB6-59	KAB6	2.520	5.118	4.25	3.5
-94			6.496	5.63	5.1
C8-CKB4-118	KAB4	1.535	6.496	5.12	6.8
-178			8.858	7.48	8.1
-CKB5-108	KAB5	1.969	6.496	5.12	7.7
-183			9.449	8.07	10.1
-CKB6-74	KAB6	2.520	5.709	4.33	7.0
-169			9.449	8.11	12.8
-CKB7-73	KAB7	3.543	6.299	5.12	11.0
-123			8.268	7.09	18.5

- Can be used for coolant through applications
- Dimensions L & A in drawing are length when it is combined with EWN head
- Other sizes can be produced upon request

INTERGRAL VERSIONS AVAILABLE



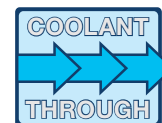
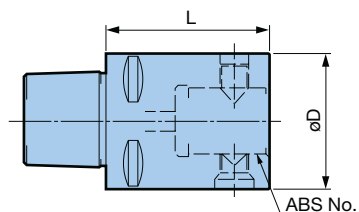
KAISER EWN 2-50XL Finish Boring Head
Boring Range: ø.78"-ø2.125"

Compact, statically balanced design permits high cutting speeds, minimal projection and optimal performance.



KAISER EWN Finish Boring Head
Boring Range: ø1.260"-ø8.000"

Multifunctional and balance optimized for highest efficiency.

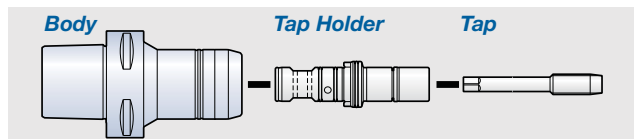
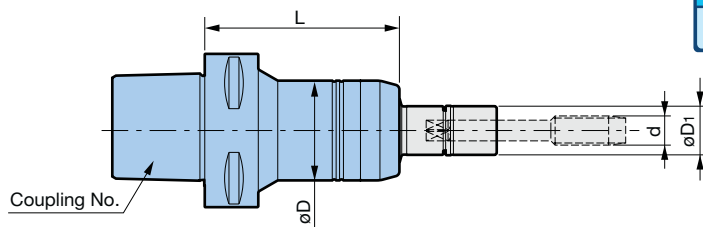


Catalog Number	ABS No.	øD	L	Weight (lbs.)
C5-ABS50-50	50	1.969	1.969	.3
C6-ABS50-50	50	1.969	1.969	.6
-ABS63-60	63	2.480	2.362	.8
C8-ABS50-50	50	1.969	1.969	1.2
-ABS63-60	63	2.480	2.362	1.3
-ABS80-80	80	3.150	3.150	1.7



MEGA SYNCHRO BIG CAPTO C5/C6/C8

TAPPING RANGE: No.2-AU3/4 (M2-M20)



Catalog Number	Tapping Range d^*	ϕD	ϕD_1	L	Wrench	Weight (lbs.)
C5-MGT6-75	No.2-No.12	1.42	.63	2.95	MGR16	1.8
-MGT12-75	AU1/4-AU7/16	1.61	.79	2.95	MGR20L	2.0
-MGT20-100	AU1/2-AU3/4 AP1/8-AP1/4	2.13	1.18	3.94	MGR30L	3.1
C6-MGT6-80	No.2-No.12	1.42	.63	3.15	MGR16	2.4
-MGT12-80	AU1/4-AU7/16	1.61	.79	3.15	MGR20L	2.6
-MGT20-100	AU1/2-AU3/4 AP1/8-AP1/4	2.13	1.18	3.94	MGR30L	4.0
C8-MGT6-80	No.2-No.12	1.42	.63	3.15	MGR16	4.6
-MGT12-80	AU1/4-AU7/16	1.61	.79	3.15	MGR20L	4.8
-MGT20-95	AU1/2-AU3/4 AP1/8-AP1/4	2.13	1.18	3.74	MGR30L	5.7

*AU3/8 is included in the MGT20 series

- Tap Holder and wrench must be ordered separately
- Rigid tapping function is required on the machine tool

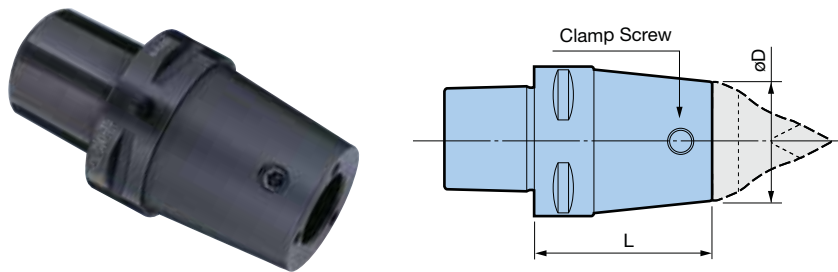
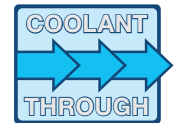
ACCESSORIES

TAP HOLDER PG. 268	MEGA NUT PG. 276	SYNCHRO ADJUSTER PG. 276	O-RING PG. 276	MEGA WRENCH PG. 259	SCREW PG. 276
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TURNING TOOLS—BASIC HOLDER

BIG CAPTO C5/C6/C8

Modular Tooling System for Turning Applications



Catalog Number	ϕD	L	Clamp Screw
C5-S50-40	1.969	1.575	10.690.435
-55		2.165	
-75		2.953	
C6-S50-45	1.969	1.772	10.690.435
-75		2.953	
-100		3.937	
-S63-90	2.480	3.543	10.690.436
C8-S50-135	1.969	5.315	10.690.435
-S63-125	2.480	4.921	10.690.436

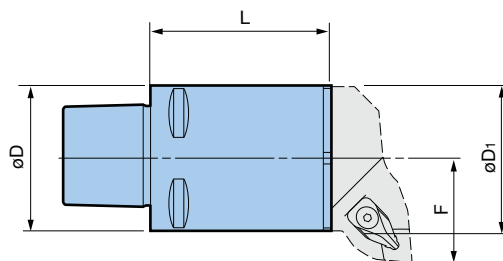
ACCESSORIES



TURNING TOOLS—BASIC HOLDER

BIG CAPTO C5/C6/C8

Modular Tooling System for Turning Applications



Catalog Number	øD	øD1	L	F
C5-F50-25	1.969	1.969	.984	1.378
-50			1.969	
-85			3.345	
-125			4.921	
C6-F63-30	2.480	2.480	1.181	1.772
-75			2.953	
-100			3.937	
-130			5.118	
-170			6.693	
C8-F63-45	3.150	2.480	1.772	1.772
-100			3.937	
-130			5.118	
-170			6.693	

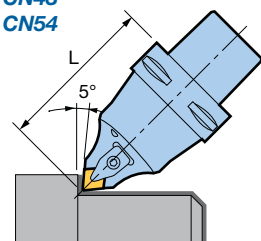
- Basic holders include M10x22L and M10x25L screws for clamping cartridges
- Wrenches must be ordered separately

ACCESSORIES

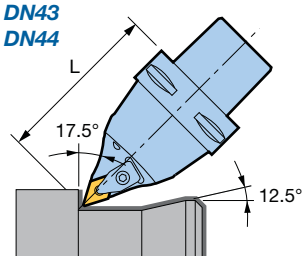


For Turning Applications

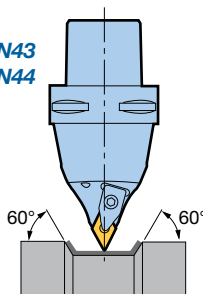
CN43
CN54



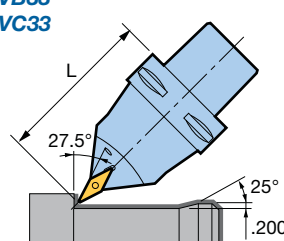
DN43
DN44



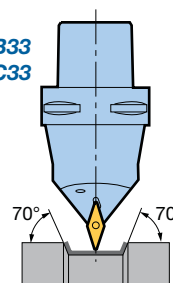
DN43
DN44



VB33
VC33



VB33
VC33



Neutral

Hand	Catalog Number	Insert	L	Clamp Piece
N	C5-DCLNN-00105-12	CN43 Rombic 80°	4.134	CP2
	-DCLNN-00105-16	CN54 Rombic 80°		CP3
	-DDHNN-00090-15	* DN43/DN44 Rombic 55°		CP2
	-SVQBN-00105-16	VB33/VC33 Rombic 35°		**M3.5
N	C6-DCLNN-00115-12	CN43 Rombic 80°	4.528	CP2
	-DCLNN-00115-16	CN54 Rombic 80°		CP3
	-DDHNN-00115-15	* DN43/DN44 Rombic 55°		CP2
	-SVQBN-00115-16	VB33/VC33 Rombic 35°		**M3.5
N	C8-DCLNN-00150-12	CN43 Rombic 80°	5.906	CP2
	-DCLNN-00150-16	CN54 Rombic 80°		CP3

*DN43 (3/16" thickness) carbide shim is included as standard, in case of DN44 insert (1/4" thickness), please replace the standard carbide shim with DNS1506 (option)

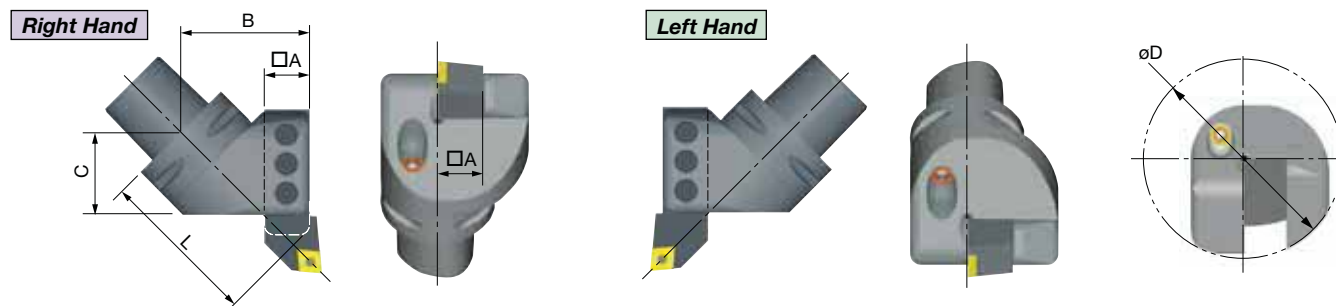
**M3.5 is screw-on type

- Wrenches must be ordered separately
- Inserts must be ordered separately, accepts standard ISO inserts

TURNING TOOLS—SQUARE HOLDER

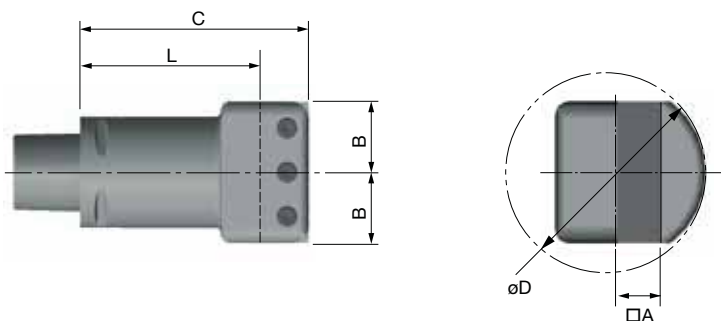
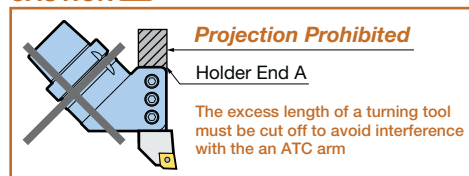
BIG CAPTO C5/C6/C8

For Square Holder Turning Applications



Catalog Number	Hand	A	B	C	L	øD	Weight (lbs.)
C5-45-BH20R-5838	R	20mm	2.28	1.50	2.87	3.70	2.6
-BH20L-5838	L						
C6-45-BH1.000R-3.25	R	1.000	2.80	1.81	4.33	4.65	5.5
-BH1.000L-3.25	L						
-BH25R-7752	R	25mm	3.03	2.05	3.94	4.65	5.5
-BH25L-7752	L						
-BH32R-85109	R	32mm	3.35	4.29	5.71	5.31	17.0
-BH32L-85109	L						

CAUTION



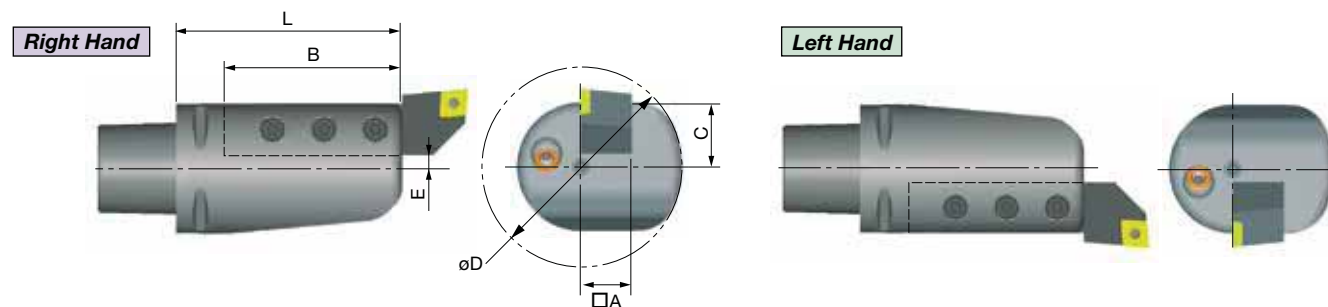
Catalog Number	Hand	A	B	C	L	øD	Weight (lbs.)
C5-90-BH20N-32105	N	20mm	1.26	4.13	2.56	3.15	4.9
C6-90-BH1.000N-5.125	N	1.000	1.58	5.12	4.12	3.94	9.3
-90-BH25N-40130	N	25mm	1.57	5.12	4.13	3.94	9.3
C8-90-BH32N-51085	N	32mm	2.01	2.56	2.09	5.04	13.2
-51165				6.50	5.24		19.2

TURNING TOOLS—SQUARE HOLDER

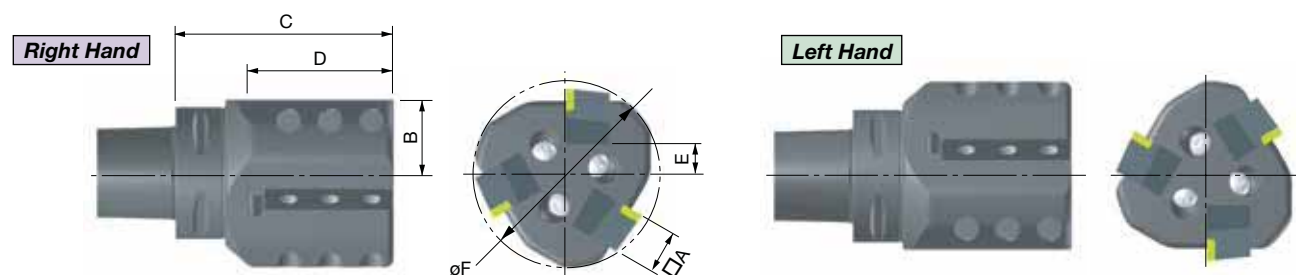
BIG CAPTO C5/C6/C8



For Turning Applications



Catalog Number	Hand	□A	C	L	B	E	øD	Weight (lbs.)
C5-180-BH20R-2590	R	20mm	.98	3.54	2.56	.20	3.15	3.5
-BH20L-2590	L							
C6-180-BH1.000R-4.375	R	1.000	1.16	4.33	3.15	.24	3.94	6.8
-BH1.000L-4.375	L	1.000						
C6-180-BH25R-32120S	R	25mm	1.16	4.72	3.15	.18	3.54	6.8
-BH25L-32120S	L							
C8-180-BH32R-40125	R	32mm	1.57	4.92	3.35	.24	5.04	13.2
-BH32L-40125	L							



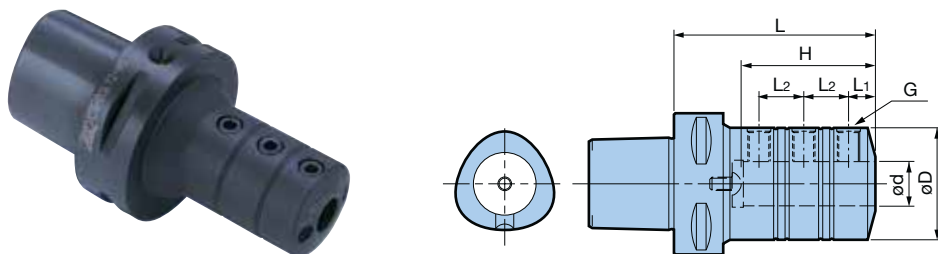
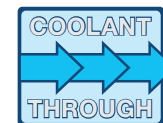
Catalog Number	Hand	□A	B	C	D	E	øF	Weight (lbs.)
C5-180-3BH20R-100	R	20mm	1.38	3.94	2.76	.59	3.54	5.7
-3BH20L-100	L							
C6-180-3BH20R-105	R	20mm	1.38	4.13	2.76	.59	3.54	7.1
-3BH20L-105	L							
-3BH25R-110	R	25mm	1.77	4.33	3.15	.79	4.33	10.1
-3BH25L-110	L							
C8-180-3BH25R-130	R	25mm	1.77	5.12	3.54	.79	4.33	13.4
-3BH25L-130	L							

BIG CAPTO

TURNING TOOLS—BORING BAR HOLDER

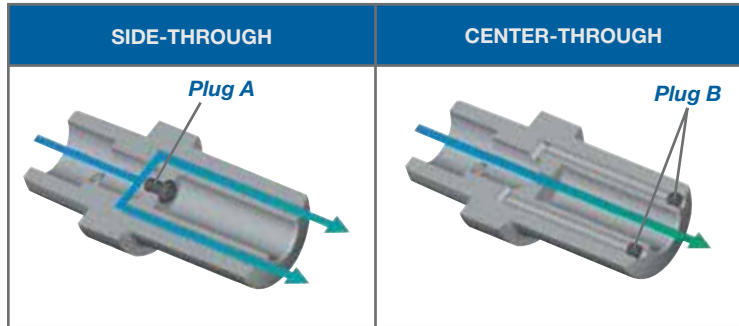
BIG CAPTO C5/C6/C8

CLAMPING RANGE: $\varnothing 6$ - $\varnothing 50$ mm



Catalog Number	$\varnothing d$	$\varnothing D$	L	L ₁	L ₂	Bore Depth H	G	Weight (lbs.)
C5-BSL6-70	6mm	.906	2.76	.20	.31	1.61	M5xP0.8	1.3
-BSL8-70	8mm	.984		.24	.39		M6xP1.0	1.3
-BSL10-70	10mm	1.142		.31	.47	1.65	M8xP1.0	1.3
-BSL12-80	12mm	1.339	3.15	.31	.63	2.09		1.8
-BSL16-90	16mm	1.575	3.54	.39	.83	2.56	M10xP1.25	2.2
-BSL20-90	20mm	1.969		.47	.79	2.36		2.9
-BSL25-100	25mm	2.165	3.94	.55	.91	2.76	M12xP1.5	3.5
-BSL32-110	32mm	2.520	4.33	.63	1.02	3.07		4.6
-BSL40-130	40mm	3.150	5.12	.71	1.26	3.66	M16xP1.5	8.1
C6-BSL.625-3.5	.625	1.575	3.50	.39	.83	2.56	M10xP1.25	3.7
-BSL.750-3.5	.750	1.969		.47	.79	2.36		4.4
-BSL1.000-4	1.000	2.165	4.00	.55	.91	2.76	M12xP1.5	5.1
-BSL1.250-4.5	1.250	2.520	4.50	.63	1.02	3.07		6.2
-BSL1.500-5	1.500	3.150	5.00	.71	1.26	3.66	M16xP1.5	9.5
C6-BSL6-70	6mm	.906	2.76	.20	.31	1.61	M5xP0.8	3.1
-BSL8-70	8mm	.984	2.76	.24	.39		M6xP1.0	2.9
-BSL10-70	10mm	1.142	2.76	.31	.47	1.65	M8xP1.0	2.9
-BSL12-80	12mm	1.339	3.15		.63	2.09		3.3
-BSL16-90	16mm	1.575	3.54	.39	.83	2.56	M10xP1.25	3.7
-BSL20-90	20mm	1.969		.47	.87	2.36		4.4
-BSL25-100	25mm	2.165	3.94	.55	1.02	2.76	M12xP1.5	5.1
-BSL32-110	32mm	2.520	4.33	.63	1.18	3.07		6.2
-BSL40-130	40mm	3.150	5.12	.71	1.26	3.66	M16xP1.5	9.5
C8-BSL16-90	16mm	1.575	3.54	.39	.83	2.56	M10xP1.25	6.4
-BSL20-100	20mm	1.969	3.94	.47	.87	2.76		7.3
-BSL25-110	25mm	2.165	4.33	.55	1.02	3.15	M12xP1.5	7.9
-BSL32-120	32mm	2.520	4.72	.63	1.18	3.46		9.0
-BSL40-130	40mm	3.150	5.12	.71	1.26	3.66	M16xP1.5	12.1

- Interchangeable between center-through and side-through coolant supply by using plugs
- Plug A (1 pc.) and Plug B (2 pcs.) are included as standard



Catalog Number	Plug A	Plug B
BSL.625	M18xP1.5	M6xP1.0
BSL.750	M6xP1.0	
BSL.1000		
BSL1.250	M8xP1.25	
BSL1.500		
BSL6	M8xP1.25	M4xP0.7
BSL8	M10xP1.0	M4xP0.7
BSL10	M12xP1.5	M5xP0.8
BSL12	M14xP1.5	M6xP1.0
BSL16	M18xP1.5 (C5: M6xP1.0)	
BSL20	M6xP1.0	
BSL25		
BSL32	M8xP1.25	
BSL40		





STRAIGHT SHANK & N/C LATHE TOOLING

STRAIGHT SHANKS

MEGA CHUCKS



Mega S—Mega Micro
 ST.375/.500/.625 (10/12/14/16mm).....Pg. 222
 Clamping Range: ϕ .018"-.317" (ϕ .45-8.05mm)
 Mega N—Mega New Baby
 ST20/25/32.....Pg. 223
 Clamping Range: ϕ .010"-.787" (ϕ .25-20mm)

MEGA SYNCHRO



MGT3/6/12/20.....Pg. 224
 Tapping Range: No.2-AU3/4 (ANSI)
 M2-M20 (JIS/DIN/ISO)

N/C LATHE TOOLING

MEGA CHUCKS



Mega S—Mega MicroPg. 225
 Clamping Range: ϕ .018"-.236" (ϕ .45-6.05mm)
 Mega N—Mega New BabyPg. 226-229
 Clamping Range: ϕ .010"-.787" (ϕ .25-20mm)
 Mega ER GripPg. 230
 Clamping Range: ϕ .075"-.787" (ϕ 1.9-20mm)

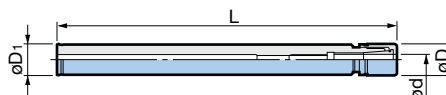
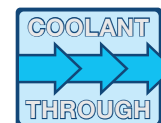
MEGA SYNCHRO



MGT3Pg. 231
 Tapping Range: No.0-No.6 (M1-M3)

MEGA MICRO CHUCK STRAIGHT SHANK

CLAMPING RANGE: ϕ .018"-.317" (ϕ .45-8.05mm) — For Micro Drill & End Mill Applications



Catalog Number	ϕd	ϕD	ϕD_1	L	Collet	Nut	Wrench	Weight (lbs.)
ST.375-MEGA3S-120	.018-.128	.394	.375	4.72	NBC3S-□	MGN3S	MGR10	.1
ST.500-MEGA4S-130	.018-.159	.472	.500	5.12	NBC4S-□	MGN4S	MGR12	.2
-160				6.30				.3
ST.625-MEGA6S-160	.018-.238	.551	.625	6.30	NBC6S-□	MGN6S	MGR14	.4
-200				7.87				.5
ST10-MEGA3S-120	.018-.128	.394	10mm	4.72	NBC3S-□	MGN3S	MGR10	.1
ST12-MEGA4S-130	.018-.159	.472	12mm	5.12	NBC4S-□	MGN4S	MGR12	.2
-160				6.30				.3
ST14-MEGA6S-160	.018-.238	.551	14mm	6.30	NBC6S-□	MGN6S	MGR14	.4
-200				7.87				.5
ST16-MEGA8S-160	.116-.317	.709	16mm	6.30	NBC8S-□	MGN8S	MGR18	.5

ACCESSORIES

 COLLET PG. 234	 MEGA NUT PG. 248	 PERFECT SEAL PG. 249	 MEGA WRENCH PG. 259
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MEGA NEW BABY CHUCK STRAIGHT SHANK



CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm)

For Drills, Reamers, Taps & Finishing End Mills

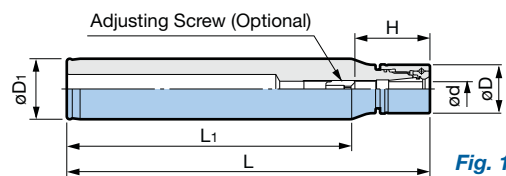


Fig. 1

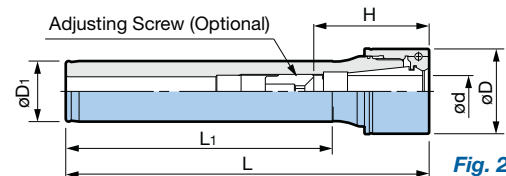
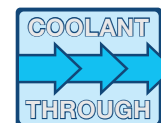


Fig. 2



Catalog Number	Fig.	ød	øD	øD ₁	L	L ₁	H	Weight (lbs.)	
ST20-MEGA6N-100	1	.010-.236	.787	20mm	3.94	2.99	.91-1.69	.4	
-150					5.91	4.96		.7	
-250					9.84	8.90		1.1	
-MEGA8N-100	2	.020-.315	.984		4.33	2.56	1.02-1.77	.7	
-150					5.91	4.53		.9	
-250					9.84	8.46		1.3	
-MEGA10N-100		.059-.394	1.181		3.94	2.36	1.50-1.89	.7	
-150					5.91	4.33		.9	
-250					9.84	8.27		1.3	
ST25-MEGA6N-150	1	.010-.236	.787	25mm	5.91	.63	.91-1.69	1.1	
-MEGA8N-150		.020-.315	.98		5.91	4.84	1.02-1.77	1.1	
-200					7.87	6.81	1.5		
-MEGA10N-150	2	.059-.394	1.181		5.91	4.84	1.50-1.89	1.1	
-200					7.87	6.81	1.5		
-MEGA13N-150		.098-.512	1.378		5.91	4.33	1.73-2.48	1.3	
-200					7.87	6.30	1.5		
ST32-MEGA6N-150	1	.010-.236	.787	32mm	5.91	4.45	.91-1.69	1.8	
-MEGA8N-150		.020-.315	.984		5.91	4.37	1.02-1.77	2.0	
-MEGA10N-150					.059-.394	1.181	5.91	4.84	1.50-1.89
-200	.098-.512	1.378	7.87		6.81	1.73-2.48	2.4		
-MEGA13N-150			5.91		4.72		2.0		
-200			7.87		6.69		2.4		
-300			11.81		10.63	3.5			
-MEGA16N-150			.098-.630		1.654	5.91	4.33	1.89-2.68	2.2
-200						7.87	6.30		2.6
-300	11.81	10.24				3.7			
-MEGA20N-150	2	.098-.787	1.811		5.91	4.13	2.01-2.68	2.2	
-200					7.87	6.10		2.9	
-300					11.81	10.04		4.2	

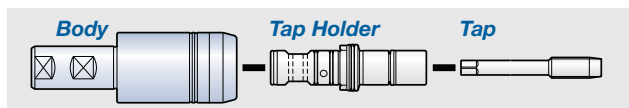
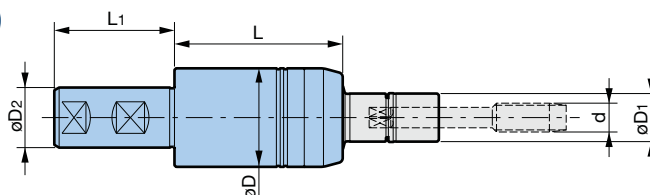
ACCESSORIES



SS/NC

MEGA SYNCHRO STRAIGHT SHANK

TAPPING RANGE: No.2-AU3/4 (M2-M20)



Catalog Number	Tapping Range d*	øD	øD1	øD2	L	L1	Weight (lbs.)
SL1.000-MGT6-2.5	No.2-No.12	1.42	.63	1.000	2.50	2.28	1.1
-MGT12-2.75	AU1/4-AU7/16 AU1/2-AU3/4	1.61	.79	1.000	2.75	2.28	1.8
SL1.250-MGT20-3.5	AP1/8-AP1/4	2.13	1.18	1.250	3.50	2.28	3.3
ST20-MGT6-65	No.2-No.12	1.42	.63	20mm	2.56	1.57	1.1
ST25-MGT12-70	AU1/4-AU7/16 AU1/2-AU3/4	1.61	.79	25mm	2.76	1.97	1.8
ST32-MGT20-90	AP1/8-AP1/4	2.13	1.18	32mm	3.54	2.17	3.3

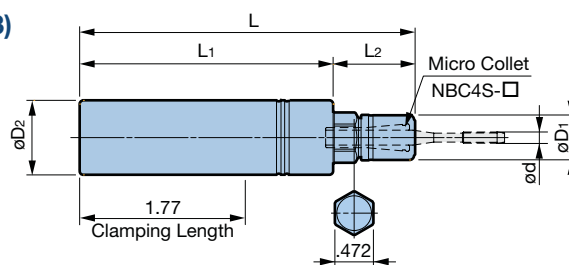
*AU3/8 is included in the MGT20 series

- Tap Holder and wrench must be ordered separately
- Rigid tapping function is required on the machine tool

ACCESSORIES



TAPPING RANGE: No.0-No.6 (M1-M3)



Catalog Number	Tapping Range d	øD1	øD2	L	L1	L2	Weight (lbs.)
ST20-MGT3-90	No.0-No.6	.472	20mm	3.54	2.68	.87	.4

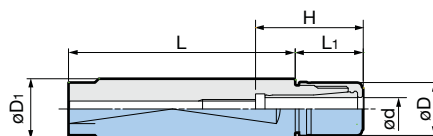
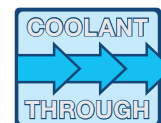
- Nut is included
- Wrench and collet must be ordered separately
- 12mm common spanner is also required to clamp/unclamp the tap

- Rigid tapping function is required on the machine tool
- Not capable of supplying coolant through the holder body

ACCESSORIES



CLAMPING RANGE: ϕ .018"-.238" (ϕ .45-6.05mm)



Catalog Number	ϕd	ϕD	ϕD_1	L	L ₁	H	Collet	Nut	Wrench
SL16-MEGA6S-60	.018-.238	.551	16mm	2.36	.71	1.12-1.93	NBC6S-□	MGN6S	MGR14
SL20-MEGA6S-40		.551	20mm	1.57					
-80				3.15					
SL15.875-MEGA6S-60		.551	.625	2.36					

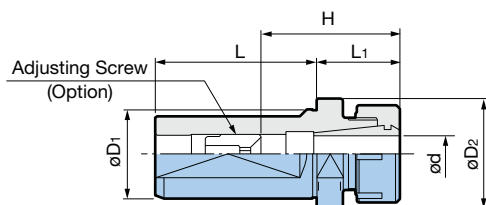
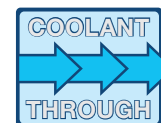
- Mega Micro Nut is included
- Designed to be capable of supplying coolant through the body

ACCESSORIES

 COLLET PG. 234	 MEGA NUT PG. 248	 PERFECT SEAL PG. 249	 MEGA WRENCH PG. 259
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CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm) — For Drills, Reamers, Taps & Small Tool Bits



Stopper Type:
Flange as a stopper enables presetting of the tool away from machine and minimizes downtime.

Catalog Number	ϕd	ϕD	ϕD_1	ϕD_2	L	L ₁	H	Collet	Nut	Wrench
SLS25-NBS13-30	.098-.512	1.378	25mm	1.25	2.12	1.18	1.61-2.36	NBC13-□	NBN13	NBK13
-60						2.36				
SLS32-NBS13-30	.098-.512	1.378	32mm	1.55	2.28	1.18	1.61-2.36	NBC13-□	NBN13	NBK13
-60						2.36				
-100						3.94				
-NBS20-30	.098-.787	1.811	32mm	1.79	2.28	1.18	1.88-2.55	NBC20-□	NBN20	NBK20
-60						2.36				
-100						3.94				
SLS40-NBS13-30	.098-.787	1.378	40mm	1.94	2.67	1.18	1.61-2.36	NBC13-□	NBN13	NBK13
-60						2.36				
-100						3.94				
-NBS20-30	.098-.787	1.811	40mm	1.94	2.67	1.18	1.88-2.55	NBC20-□	NBN20	NBK20
-60						2.36				
-100						3.94				

- New Baby Nut is included
- Designed to be capable of supplying coolant through the body
- "H" indicates the adjustment length with an Adjusting Screw

ACCESSORIES

COLLET PG. 236	MEGA NUT PG. 248	PERFECT SEAL PG. 250	MEGA WRENCH PG. 259	SCREW PG. 262
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NEW BABY CHUCK N/C LATHE

CLAMPING RANGE: ϕ .010"-.787" (ϕ .25-20mm) — For Drills, Reamers, Taps & Small Tool Bits

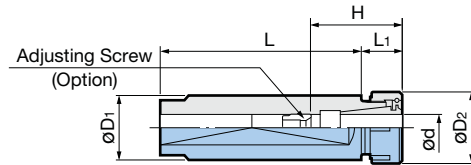
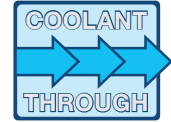


Fig. 1

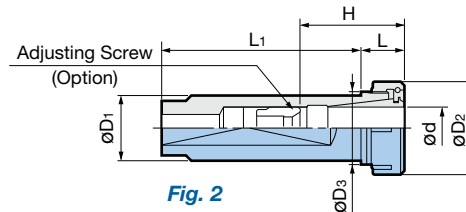


Fig. 2

Catalog Number	Fig.	ϕd	ϕD_1	ϕD_2	ϕD_3	L	L ₁	H	Collet	Nut	Wrench
SL16-NBS6-40	1	.010-.236	16mm	.787	—	1.57	.59	.79-1.57	NBC6-□	NBN6	NBK6
-80						3.15					
-NBS8-40		.020-.315		.987		1.57	.65	.91-1.65	NBC8-□	NBN8	NBK8
-80						3.15					
-NBS10-40	2	.059-.394		1.181	.83	1.57	1.46	1.38-1.77	NBC10-□	NBN10	NBK10
-80						3.15					
SL20-NBS6-40	1	.010-.236	20mm	.787	—	1.57	.59	.79-1.57	NBC6-□	NBN6	NBK6
-80						3.15					
-NBS8-40		.020-.315		.987		1.57	.65	.91-1.65	NBC8-□	NBN8	NBK8
-80						3.15					
-NBS10-40	2	.059-.394		1.181	.83	1.57	.71	1.38-1.77	NBC10-□	NBN10	NBK10
-80						3.15					
-NBS13-40		.098-.512		1.377		1.57	1.69	1.61-2.36	NBC13-□	NBN13	NBK13
-80						3.15					
SL22-NBS6-40	1	.010-.236	22mm	.787	—	1.57	.59	.79-1.57	NBC6-□	NBN6	NBK6
-80						3.15					
-NBS8-40		.020-.315		.987		1.57	.65	.91-1.65	NBC8-□	NBN8	NBK8
-80						3.15					
-NBS10-40	2	.059-.394		1.181	.83	1.57	.71	1.38-1.77	NBC10-□	NBN10	NBK10
-80						3.15					
-NBS13-40		.098-.512		1.377		1.57	.85	1.61-1.85	NBC13-□	NBN13	NBK13
-80						3.15					
SL25-NBS6-80	1	.010-.236	25mm	.787	—	3.15	.59	1.61-2.36	NBC6-□	NBN6	NBK6
-120						4.72					
-NBS8-80		.020-.315		.987		3.15	.65	.79-1.57	NBC8-□	NBN8	NBK8
-120						4.72					
-NBS10-80	2	.059-.394		1.181	.83	3.15	.71	.91-1.65	NBC10-□	NBN10	NBK10
-120						4.72					
-NBS13-80		.098-.512		1.377		3.15	.85	1.38-1.77	NBC13-□	NBN13	NBK13
-120						4.72					
-NBS16-80		.098-.630		1.653	1.26	3.15	1.89	1.61-2.36	NBC16-□	NBN16	NBK16
-120						4.72					

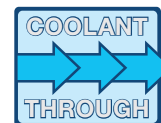
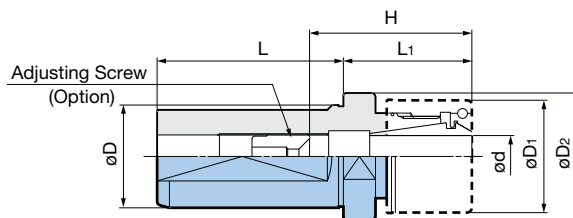
Catalog Number	Fig.	ød	øD ₁	øD ₂	øD ₃	L	L ₁	H	Collet	Nut	Wrench
SL25.4-NBS6-80	1	.010-.236	1.000	.787	—	3.15	.59	.79-1.57	NBC6-□	NBN6	NBK6
-120						4.72					
-NBS8-80		.020-.315		.987		3.15	.65	.91-1.65	NBC8-□	NBN8	NBK8
-120						4.72					
-NBS10-80		.059-.394		1.181		3.15	.71	1.38-1.77	NBC10-□	NBN10	NBK10
-120						4.72					
-NBS13-80	2	.098-.512		1.377	1.02	3.15	.85	1.61-1.97	NBC13-□	NBN13	NBK13
-120						4.72					
-NBS16-80		.098-.630		1.653	1.26	3.15	1.89	1.77-2.56	NBC16-□	NBN16	NBK16
-120						4.72					
SL32-NBS13-100	1	.098-.512	32mm	1.377	—	3.94	.85	1.61-2.36	NBC13-□	NBN13	NBK13
-150						5.91					
-NBS16-100		.098-.630		1.653		3.94		1.77-2.56	NBC16-□	NBN16	NBK16
-150						5.91					
-NBS20-100	2	.098-.787		1.811	1.42	3.94	1.89-2.56	NBC20-□	NBN20	NBK20	
-150						5.91					

- New Baby Nut is included
- Designed to be capable of supplying coolant through the body
- "H" indicates the adjustment length with an Adjusting Screw

ACCESSORIES

 COLLET PG. 236	 NUT PG. 248	 PERFECT SEAL PG. 250	 MEGA WRENCH PG. 259	 SCREW PG. 262
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CLAMPING RANGE: ϕ .108"-.787" (ϕ 2.5-20mm) — For Drills, Reamers, Taps & Finishing End Mills

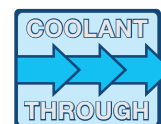
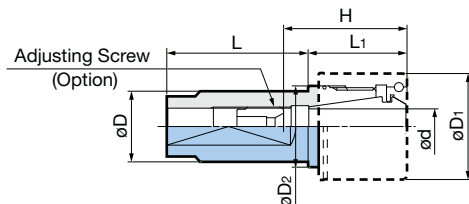


Stopper Type:
Flange as a stopper enables presetting of the tool away from machine and minimizes downtime.

Catalog Number	ϕd	ϕD	ϕD_1	ϕD_2	L	L ₁	H	Collet	Nut	Wrench
SLS25-MEGAER20-45/NL	.108-.512	20mm	1.378	1.26	2.13	1.77	1.65-2.44	ERC20-□	MERN20	MGR35L
-75/NL						2.95				
SLS32-MEGAER20-45/NL	.108-.512	32mm	1.378	1.56	2.28	1.77	1.65-2.44	ERC20-□	MERN20	MGR35L
-75/NL						2.95				
-MEGAER32-45/NL	.108-.787	32mm	1.969	1.97	2.28	1.77	1.85-2.68	ERC32-□	MERN32	MGR50L
-75/NL						2.95				
SLS40-MEGAER20-45/NL	.108-.512	40mm	1.378	1.95	2.68	1.77	1.65-2.44	ERC20-□	MERN20	MGR35L
-75/NL						2.95				
-MEGAER32-45/NL	.108-.787	40mm	1.969	1.97	2.68	1.77	1.97-2.68	ERC32-□	MERN32	MGR50L
-75/NL						2.95				

- Nut is not included, refer to Pg. 255 and select the suitable nut according to applications
- Designed to be capable of supplying coolant through the body
- "H" indicates the adjustment length with an Adjusting Screw

CLAMPING RANGE: ϕ .075"-.630" (ϕ 1.9-16mm) — For Drills, Reamers, Taps & Small Tool Bits



Catalog Number	ϕd	ϕD	ϕD_1	ϕD_2	L	L ₁	H	Collet	Nut	Wrench
SL20-MEGAER16-40/NL	.075-.394	20mm	1.181	.91	1.10	1.57	1.38-1.85	ERC16-□	MERN16	MGR30L
-80/NL						3.15				
SL25-MEGAER16-60/NL	.075-.394	25mm	1.181	—	1.10	2.36	1.38-1.85	ERC16-□	MERN16	MGR30L
-100/NL						3.94				
-MEGAER20-60/NL	.108-.512	25mm	1.378	1.06	1.18	2.36	1.65-2.44	ERC20-□	MERN20	MGR35L
-100/NL						3.94				
-MEGAER25-60/NL	.108-.630	25mm	1.654	1.32	1.89	2.36	1.73-2.64	ERC25-□	MERN25	MGR42L
-100/NL						3.94				
SL19.05-MEGAER16-40/NL	.075-.394	.750	1.181	.91	1.10	1.57	1.38-1.85	ERC16-□	MERN16	MGR30L
- 80/NL						3.15				

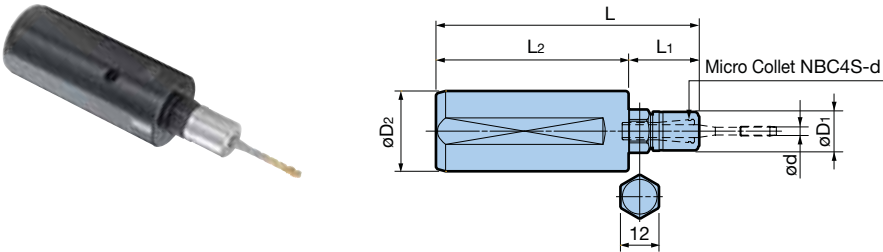
- Nut is not included, refer to Pg. 255 and select the suitable nut according to applications
- Designed to be capable of supplying coolant through the body
- "H" indicates the adjustment length with an Adjusting Screw

ACCESSORIES

COLLET PG. 240	MEGA NUT* PG. 255	PERFECT SEAL PG. 256	SOLID NUT PG. 255	MEGA WRENCH PG. 259	SCREW PG. 262
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*Mega Nut is the recommended nut to achieve high accuracy and clamping force

TAPPING RANGE: No.0-No.6 (M1-M3)



Catalog Number	Tapping Range d	øD1	øD2	L	L1	L2	Weight (lbs.)
SLS25-MGT3-22	No.0-No.6	.472	20mm	3.23	2.36	.87	.4

- Mega Nut is included
- Collet must be ordered separately
- Mega Wrench and common spanner (12mm) are required to clamp/unclamp the tap

CAUTION ⚠

Rigid tapping function is required on the machine tool.

ACCESSORIES





COLLETS



Mega S—Mega Micro.....	Pg. 234-235
Clamping Range: ϕ .018"-.317" (.45mm-8.05mm)	
Mega N—New Baby	Pg. 236-237
Clamping Range: ϕ .010"-.787" (.25mm-20mm)	
Mega N—New Baby For End Mills	Pg. 238
Clamping Range: ϕ .125"-.750" (3mm-20mm)	
Collet Sets & Collet Boxes	Pg. 239
ERC—Mega ER Grip	Pg. 240-241
Clamping Range: ϕ .075"-.787" (1.9mm-20mm)	
ERC For End Mills—Mega ER Grip	Pg. 242
Clamping Range: ϕ .125"-.750" (3mm-20mm)	
Mega E	Pg. 243
Clamping Range: ϕ .125"-.500" (3mm-12mm)	
Perfect Seal—PSC.....	Pg. 244
Clamping Range: ϕ .125"-1.000" (3mm-25mm)	
Perfect Jet—PJC.....	Pg. 245
Clamping Range: ϕ .125"-1.000" (3mm-25mm)	
Straight	Pg. 246-247
Clamping Range: ϕ .118"-1.000" (6mm-25mm)	

NUTS, SEALS & RINGS



Nuts.....	Pg. 248
Mega Micro Perfect Seal.....	Pg. 249
Mega Perfect Seal	Pg. 250-251
Baby Perfect Seal.....	Pg. 252-253
Mega E Perfect Seal.....	Pg. 254
Mega ER Nuts	Pg. 255
Mega ER Perfect Seal.....	Pg. 256-257
O Ring Set	Pg. 258

WRENCHES



Mega Wrench.....	Pg. 259
Mega Digital Torque Wrench	Pg. 260
Spanner Wrench	Pg. 261

SCREWS, BACK STOPS & BOLTS



Screws	
NBA, NBAM, HMA, MBA, TMBA,	
Lock Screw & Set Screw	Pg. 262-263



Collet Ejector	Pg. 264
α Taper Cleaner	Pg. 265
TK Cleaner	Pg. 266
α Wiper Cleaner	Pg. 267

TAP HOLDERS



ANSI Standard.....	Pg. 268-269
JIS Standard.....	Pg. 270-271
DIN & ISO Standard	Pg. 272-274
ANSI & JIS Standard	
for Large Taps.....	Pg. 275
Mega Synchro—Spare Parts.....	Pg. 276-277

MTC CARTRIDGES



45° Type S (ISO 12164-3)	Pg. 278
90° Type F (ISO 1216-3).....	Pg. 279
MTC—Spare Parts.....	Pg. 280-281

ANGLE HEAD ADAPTERS



AG35 Adapters	Pg. 283
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PROFIT MAKER ACCESSORIES



Stop Blocks.....	Pg. 284-285
Locating Pin.....	Pg. 286
Air Filter Regulator.....	Pg. 287

TOOLING & SPINDLE CLEANERS



Tooling & Cleaners	Pg. 288
Spindle Cleaners	Pg. 289

TOOL ASSEMBLY DEVICES



Tool Pro.....	Pg. 290
Tooling Mate	Pg. 291
Kombi Grip & ST Lock	Pg. 293

DYNA FORCE



Dyna Force	Pg. 294
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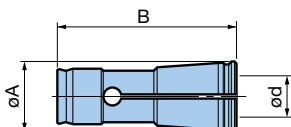
T-SLOT CLEAN



T-Slot Clean	Pg. 295
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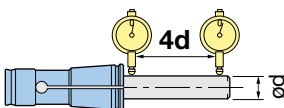
COLLETS MEGA MICRO

Available in .004" (0.1mm) diameter increments to suit all cutting tool shank sizes with maximum accuracy. Despite their compact size, high clamping force and accuracy are achieved.



Guaranteed Max Runout

.00004" .00012"



All BIG Collets are AA Grade and inspected twice for accuracy

MEGA 3S

Catalog Number	Clamping Range ød
NBC3S-0.5AA	.018-.022
-0.6AA	.022-.026
-0.7AA	.026-.030
-0.8AA	.030-.033
-0.9AA	.033-.037
-1.0AA	.037-.041
-1.1AA	.041-.045
-1.2AA	.045-.049
-1.3AA	.049-.053
-1.4AA	.053-.057
-1.5AA	.057-.061
-1.6AA	.061-.065
-1.7AA	.065-.069
-1.8AA	.069-.073
-1.9AA	.073-.077
-2.0AA	.077-.081
-2.1AA	.081-.085
-2.2AA	.085-.089
-2.3AA	.089-.093
-2.4AA	.093-.096
-2.5AA	.096-.100
-2.6AA	.100-.104
-2.7AA	.104-.108
-2.8AA	.108-.112
-2.9AA	.112-.116
-3.0AA	.116-.120
-3.1AA	.120-.124
-3.175AA	.123-.127
-3.2AA	.124-.128

øA=.24" (6.06mm) B=.75" (18.8mm)

MEGA 4S

Catalog Number	Clamping Range ød
NBC4S-0.5AA	.018-.022
-0.6AA	.022-.026
-0.7AA	.026-.030
-0.8AA	.030-.033
-0.9AA	.033-.037
-1.0AA	.037-.041
-1.1AA	.041-.045
-1.2AA	.045-.049
-1.3AA	.049-.053
-1.4AA	.053-.057
-1.5AA	.057-.061
-1.6AA	.061-.065
-1.7AA	.065-.069
-1.8AA	.069-.073
-1.9AA	.073-.077
-2.0AA	.077-.081
-2.1AA	.081-.085
-2.2AA	.085-.089
-2.3AA	.089-.093
-2.4AA	.093-.096
-2.5AA	.096-.100
-2.6AA	.100-.104
-2.7AA	.104-.108
-2.8AA	.108-.112
-2.9AA	.112-.116
-3.0AA	.116-.120
-3.1AA	.120-.124
-3.175AA	.123-.127
-3.2AA	.124-.128
-3.3AA	.128-.132
-3.4AA	.132-.136
-3.5AA	.136-.140
-3.6AA	.140-.144
-3.7AA	.144-.148
-3.8AA	.148-.152
-3.9AA	.152-.156
-4.0AA	.156-.159

øA=.29" (7.4mm) B=.89" (22.5mm)

MEGA 6S

Catalog Number	Clamping Range ød
NBC6S-0.5AA	.018-.022
-0.6AA	.022-.026
-0.7AA	.026-.030
-0.8AA	.030-.033
-0.9AA	.033-.037
-1.0AA	.037-.041
-1.1AA	.041-.045
-1.2AA	.045-.049
-1.3AA	.049-.053
-1.4AA	.053-.057
-1.5AA	.057-.061
-1.6AA	.061-.065
-1.7AA	.065-.069
-1.8AA	.069-.073
-1.9AA	.073-.077
-2.0AA	.077-.081
-2.1AA	.081-.085
-2.2AA	.085-.089
-2.3AA	.089-.093
-2.4AA	.093-.096
-2.5AA	.096-.100
-2.6AA	.100-.104
-2.7AA	.104-.108
-2.8AA	.108-.112
-2.9AA	.112-.116
-3.0AA	.116-.120
-3.1AA	.120-.124
-3.175AA	.123-.127
-3.2AA	.124-.128
-3.3AA	.128-.132
-3.4AA	.132-.136
-3.5AA	.136-.140
-3.6AA	.140-.144
-3.7AA	.144-.148
-3.8AA	.148-.152
-3.9AA	.152-.156
-4.0AA	.156-.159

Catalog Number	Clamping Range ød
NBC6S-4.1AA	.159-.163
-4.2AA	.163-.167
-4.3AA	.167-.171
-4.4AA	.171-.175
-4.5AA	.175-.179
-4.6AA	.179-.183
-4.7AA	.183-.187
-4.7625AA	.186-.189
-4.8AA	.187-.191
-4.9AA	.191-.195
-5.0AA	.195-.199
-5.1AA	.199-.203
-5.2AA	.203-.207
-5.3AA	.207-.211
-5.4AA	.211-.215
-5.5AA	.215-.219
-5.6AA	.219-.222
-5.7AA	.222-.226
-5.8AA	.226-.230
-5.9AA	.230-.234
-6.0AA	.234-.238

øA=.37" (9.4mm) B=.96" (24.5mm)

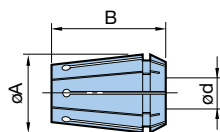
MEGA 8S

Catalog Number	Clamping Range ød	Catalog Number	Clamping Range ød
NBC8S-3.0AA	.116-.120	NBC8S-7.3AA	.285-.289
-3.1AA	.120-.124	-7.4AA	.289-.293
-3.2AA	.124-.128	-7.5AA	.293-.297
-3.3AA	.128-.132	-7.6AA	.297-.301
-3.4AA	.132-.136	-7.7AA	.301-.305
-3.5AA	.136-.140	-7.8AA	.305-.309
-3.6AA	.140-.144	-7.9AA	.309-.313
-3.7AA	.144-.148	-8.0AA	.313-.317
-3.8AA	.148-.152	$\phi A = .47''$ (12mm) $B = 1.06''$ (27mm)	
-3.9AA	.152-.156		
-4.0AA	.156-.159		
-4.1AA	.159-.163		
-4.2AA	.163-.167		
-4.3AA	.167-.171		
-4.4AA	.171-.175		
-4.5AA	.175-.179		
-4.6AA	.179-.183		
-4.7AA	.183-.187		
-4.8AA	.187-.191		
-4.9AA	.191-.195		
-5.0AA	.195-.199		
-5.1AA	.199-.203		
-5.2AA	.203-.207		
-5.3AA	.207-.211		
-5.4AA	.211-.215		
-5.5AA	.215-.219		
-5.6AA	.219-.222		
-5.7AA	.222-.226		
-5.8AA	.226-.230		
-5.9AA	.230-.234		
-6.0AA	.234-.238		
-6.1AA	.238-.242		
-6.2AA	.242-.246		
-6.3AA	.246-.250		
-6.4AA	.250-.254		
-6.5AA	.254-.258		
-6.6AA	.258-.262		
-6.7AA	.262-.266		
-6.8AA	.266-.270		
-6.9AA	.270-.274		
-7.0AA	.274-.278		
-7.1AA	.278-.281		
-7.2AA	.281-.285		

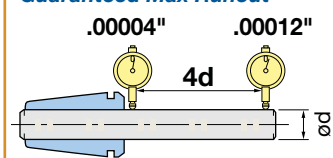


COLLETS NEW BABY

The New Baby Collet is world renowned for its unmatched accuracy and precision. It offers runout accuracy of .00004" (.001mm) T.I.R. at the collet nose.



Guaranteed Max Runout



All BIG Collets are AA Grade and inspected twice for accuracy

MEGA 6N

Catalog Number	Clamping Range ød
NBC6-0.5AA	.010-.020
-0.75AA	.020-.030
-1AA	.030-.039
-1.25AA	.039-.049
-1.5AA	.049-.059
-1.75AA	.059-.069
-2AA	.069-.079
-2.25AA	.079-.089
-2.5AA	.089-.098
-2.75AA	.098-.108
-3AA	.108-.118
-3.175AA	.115-.125
-3.25AA	.118-.128
-3.5AA	.128-.138
-3.75AA	.138-.148
-4AA	.148-.157
-4.25AA	.157-.167
-4.5AA	.167-.177
-4.75AA	.177-.187
-5AA	.187-.197
-5.25AA	.197-.207
-5.5AA	.207-.217
-5.75AA	.217-.226
-6AA	.226-.236

øA=.37" (9.5mm) B=.55" (14mm)

MEGA 8N

Catalog Number	Clamping Range ød
NBC8-0.75AA	.020-.030
-1AA	.030-.039
-1.25AA	.039-.049
-1.5AA	.049-.059
-1.75AA	.059-.069
-2AA	.069-.079
-2.25AA	.079-.089
-2.5AA	.089-.098
-2.75AA	.098-.108
-3AA	.108-.118
-3.175AA	.115-.125
-3.5AA	.118-.138
-4AA	.138-.157
-4.5AA	.157-.177
-5AA	.177-.197
-5.25AA	.187-.207
-5.5AA	.197-.217
-5.75AA	.207-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315

øA=.49" (12.5mm) B=.71" (18mm)

MEGA 10N

Catalog Number	Clamping Range ød
NBC10-1.75AA	.059-.069
-2AA	.069-.079
-2.25AA	.079-.089
-2.5AA	.089-.098
-2.75AA	.098-.108
-3AA	.108-.118
-3.175AA	.115-.125
-3.5AA	.118-.138
-4AA	.138-.157
-4.5AA	.157-.177
-5AA	.177-.197
-5.25AA	.187-.207
-5.5AA	.197-.217
-5.75AA	.207-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315
-8.5AA	.315-.335
-9AA	.335-.354
-9.5AA	.354-.375
-10AA	.376-.394

øA=.65" (16.5mm) B=1.06" (27mm)

MEGA 13N

Catalog Number	Clamping Range ϕd
NBC13-3AA	.098-.118
-3.175AA	.115-.125
-3.5AA	.118-.138
-4AA	.138-.157
-4.5AA	.157-.177
-5AA	.177-.197
-5.25AA	.187-.207
-5.5AA	.197-.217
-5.75AA	.207-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315
-8.5AA	.315-.335
-9AA	.335-.354
-9.5AA	.354-.375
-10AA	.376-.394
-10.5AA	.394-.413
-11AA	.413-.433
-11.5AA	.433-.453
-12AA	.453-.472
-12.5AA	.472-.492
-13AA	.492-.512

 $\phi A = .81"$ (20.5mm) $B = 1.22"$ (31mm)

MEGA 16N

Catalog Number	Clamping Range ϕd
NBC16-3AA	.098-.118
-3.5AA	.118-.138
-4AA	.138-.157
-4.5AA	.157-.177
-5AA	.177-.197
-5.25AA	.187-.207
-5.5AA	.197-.217
-5.75AA	.207-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315
-8.5AA	.315-.335
-9AA	.335-.354
-9.5AA	.354-.375
-10AA	.376-.394
-10.5AA	.394-.413
-11AA	.413-.433
-11.5AA	.433-.453
-12AA	.453-.472
-12.5AA	.472-.492
-13AA	.492-.512
-13.5AA	.512-.531
-14AA	.531-.551
-14.5AA	.551-.571
-15AA	.571-.591
-15.5AA	.591-.610
-16AA	.610-.630

 $\phi A = 1.00"$ (25.5mm) $B = 1.38"$ (35mm)

MEGA 20N

Catalog Number	Clamping Range ϕd
NBC20-3AA	.098-.118
-3.5AA	.118-.138
-4AA	.138-.157
-4.5AA	.157-.177
-5AA	.177-.197
-5.25AA	.187-.207
-5.5AA	.197-.217
-5.75AA	.207-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315
-8.5AA	.315-.335
-9AA	.335-.354
-9.5AA	.354-.375
-10AA	.376-.394
-10.5AA	.394-.413
-11AA	.413-.433
-11.5AA	.433-.453
-12AA	.453-.472
-12.5AA	.472-.492
-13AA	.492-.512
-13.5AA	.512-.531
-14AA	.531-.551
-14.5AA	.551-.571
-15AA	.571-.591
-15.5AA	.591-.610
-16AA	.610-.630
-16.5AA	.630-.650
-17AA	.650-.669
-17.5AA	.669-.689
-18AA	.689-.709
-18.5AA	.709-.728
-19AA	.728-.750
-19.5AA	.751-.768
-20AA	.768-.787

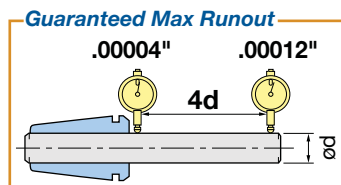
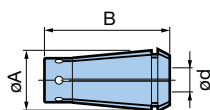
 $\phi A = 1.12"$ (28.5mm) $B = 1.50"$ (38mm)

CAUTION

Collapsibility is .010" (.25mm) for NBC6 and .020" (.5mm) for NBC8-NBC20.
For best performance, cutting tool shanks should be cylindrical without flats and be as long as the clamping section of the collet bore.

COLLETS

NEW BABY FOR END MILLS



All BIG Collets are AA Grade and inspected twice for accuracy

MEGA6N

Catalog Number	Clamping Size ød
NBC6-1/8EAA	.125
-3/16EAA	.187
NBC6-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm

øA=.36 (9.2mm) B=.67" (17mm)

MEGA8N

Catalog Number	Clamping Size ød
NBC8-1/8EAA	.125
-3/16EAA	.187
-1/4EAA	.250
NBC8-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-8EAA	8.0mm

øA=.47" (12mm) B=.79" (20mm)

MEGA10N

Catalog Number	Clamping Size ød
NBC10-1/8EAA	.125
-3/16EAA	.187
-1/4EAA	.250
-3/8EAA	.375
NBC10-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-8EAA	8.0mm
-10EAA	10.0mm

øA=.63" (16mm) B= 1.26" (32mm)

MEGA13N

Catalog Number	Clamping Size ød
NBC13-1/8EAA	.125
-3/16EAA	.187
-1/4EAA	.250
-3/8EAA	.375
-1/2EAA	.500
NBC13-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-8EAA	8.0mm
-10EAA	10.0mm
-12EAA	12.0mm

øA=.79" (20mm) B=1.50" (38mm)

MEGA16N

Catalog Number	Clamping Size ød
NBC16-1/8EAA	.125
-3/16EAA	.187
-1/4EAA	.250
-3/8EAA	.375
-1/2EAA	.500
-5/8EAA	.625
NBC16-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-8EAA	8.0mm
-10EAA	10.0mm
-12EAA	12.0mm
-14EAA	14.0mm
-16EAA	16.0mm

øA=.98" (25mm) B=1.65" (42mm)

MEGA20N

Catalog Number	Clamping Size ød
NBC20-1/8EAA	.125
-3/16EAA	.187
-1/4EAA	.250
-3/8EAA	.375
-1/2EAA	.500
-5/8EAA	.625
-3/4EAA	.750
NBC20-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-8EAA	8.0mm
-10EAA	10.0mm
-12EAA	12.0mm
-14EAA	14.0mm
-16EAA	16.0mm
-20EAA	20.0mm

øA=1.10" (28mm) B=1.77" (45mm)

CAUTION

This collet is not compatible with Profit Maker Tools.
The tolerance of the cutting tool shank must be within h7.

The New Baby Collet Set contains all the major collet models to cover entire clamping range.



New Baby Collet Set

Catalog Number	Capacity	Number of Collet	Case Size (Width x Length)	Corresponding Chuck Model
SNBC6AA-22	.010-.236	22	3.1 x 7.3	MEGA6N / NBS6
SNBC8AA-20	.020-.315	20		MEGA8N / NBS8
SNBC10AA-20	.059-.394	20	4.5 x 10.6	MEGA10N / NBS10
SNBC13AA-21	.098-.512	21		MEGA13N / NBS13
SNBC16AA-27	.098-.630	27	7.5 x 14.6	MEGA16N / NBS16
SNBC20AA-35	.098-.787	35		MEGA20N / NBS20

- SNBC6AA New Baby Collet Set does not include NBC6-0.5 and 3.175 collets
- SNBC8AA, 10AA, 13AA New Baby Collet Set does not include NBC-3.175 Collet
- Exclusive storage box for the SNBC16AA-27 is made of wood
- Provided in an exclusive storage box

Exclusive case to protect and maintain the high precision collets.



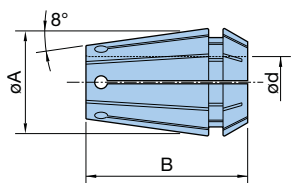
New Baby Collet Storage Box

Catalog Number	Number of Holes	Case Size (Width x Length)	Corresponding Collet Model
NBB6	24	3.1 x 7.3	NBC6 / FONBC6
NBB8	24		NBC8 / FONBC8
NBB10	24	4.5 x 10.6	NBC10 / FONBC10
NBB13	24		NBC13 / FONBC13
NBB16	36	7.5 x 14.6	NBC16 / FONBC16
NBB20	36		NBC20 / FONBC20

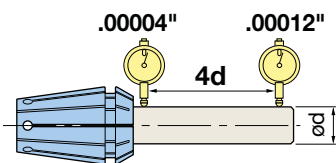
- The Mega New Baby Collet Storage Box cannot be used for End Mill type
- Exclusive storage box for the NBB16 is made of wood

COLLETS ERC

Each ERC collet is inspected twice (0° and 180°) at 4 times diameter to guarantee the runout accuracy. The "AA grade" is marked on only those collets that pass the inspection process for accuracy.



Guaranteed Max Runout



All BIG Collets are AA Grade and inspected twice for accuracy

Conforms to DIN6499 and ISO15488

MEGA ER11

Catalog Number	Clamping Range ϕd
ERC11-3AA	.108-.118
-3.25AA	.118-.128
-3.5AA	.128-.138
-3.75AA	.138-.148
-4AA	.148-.157
-4.25AA	.157-.167
-4.5AA	.167-.177
-4.75AA	.177-.187
-5AA	.187-.197
-5.25AA	.197-.207
-5.5AA	.207-.217
-5.75AA	.217-.226
-6AA	.217-.236

$\phi A = .43"$ (11mm) $B = .71"$ (18mm)

MEGA ER16

Catalog Number	Clamping Range ϕd
ERC16-2AA	.075-.079
-2.1AA	.079-.083
-2.2AA	.083-.087
-2.3AA	.087-.091
-2.4AA	.091-.094
-2.5AA	.094-.098
-2.6AA	.098-.102
-2.7AA	.102-.106
-2.8AA	.106-.110
-2.9AA	.110-.114
-3AA	.108-.118
-3.25AA	.118-.128
-3.5AA	.128-.138
-3.75AA	.138-.148
-4AA	.148-.157
-4.25AA	.157-.167
-4.5AA	.167-.177
-4.75AA	.177-.187
-5AA	.187-.197
-5.25AA	.197-.207
-5.5AA	.207-.217
-5.75AA	.217-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315
-8.5AA	.315-.335
-9AA	.335-.354
-9.5AA	.354-.375
-10AA	.376-.394

$\phi A = .63"$ (16mm) $B = 1.08"$ (27.5mm)

MEGA ER20

Catalog Number	Clamping Range ϕd
ERC20-3AA	.108-.118
-3.25AA	.118-.128
-3.5AA	.128-.138
-3.75AA	.138-.148
-4AA	.148-.157
-4.25AA	.157-.167
-4.5AA	.167-.177
-4.75AA	.177-.187
-5AA	.187-.197
-5.25AA	.197-.207
-5.5AA	.207-.217
-5.75AA	.217-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315
-8.5AA	.315-.335
-9AA	.335-.354
-9.5AA	.354-.375
-10AA	.376-.394
-10.5AA	.394-.413
-11AA	.413-.433
-11.5AA	.433-.453
-12AA	.453-.472
-12.5AA	.472-.492
-13AA	.492-.512

$\phi A = .79"$ (20mm) $B = 1.24"$ (31.5mm)

MEGA ER25

Catalog Number	Clamping Range ød
ERC20-3AA	.108-.118
-3.25AA	.118-.128
-3.5AA	.128-.138
-3.75AA	.138-.148
-4AA	.148-.157
-4.25AA	.157-.167
-4.5AA	.167-.177
-4.75AA	.177-.187
-5AA	.187-.197
-5.25AA	.197-.207
-5.5AA	.207-.217
-5.75AA	.217-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315
-8.5AA	.315-.335
-9AA	.335-.354
-9.5AA	.354-.375
-10AA	.376-.394
-10.5AA	.394-.413
-11AA	.413-.433
-11.5AA	.433-.453
-12AA	.453-.472
-12.5AA	.472-.492
-13AA	.492-.512
-13.5AA	.512-.531
-14AA	.531-.551
-14.5AA	.551-.571
-15AA	.571-.591
-15.5AA	.591-.610
-16AA	.610-.630

øA=.98" (25mm) B=1.34" (24mm)

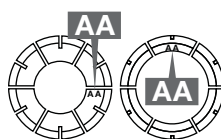
MEGA ER32

Catalog Number	Clamping Range ød
ERC32-3AA	.108-.118
-3.25AA	.118-.128
-3.5AA	.128-.138
-3.75AA	.138-.148
-4AA	.148-.157
-4.25AA	.157-.167
-4.5AA	.167-.177
-4.75AA	.177-.187
-5AA	.187-.197
-5.25AA	.197-.207
-5.5AA	.207-.217
-5.75AA	.217-.226
-6AA	.217-.236
-6.5AA	.236-.256
-7AA	.256-.276
-7.5AA	.276-.295
-8AA	.295-.315
-8.5AA	.315-.335
-9AA	.335-.354
-9.5AA	.354-.375

Catalog Number	Clamping Range ød
ERC32-10AA	.376-.394
-10.5AA	.394-.413
-11AA	.413-.433
-11.5AA	.433-.453
-12AA	.453-.472
-12.5AA	.472-.492
-13AA	.492-.512
-13.5AA	.512-.531
-14AA	.531-.551
-14.5AA	.551-.571
-15AA	.571-.591
-15.5AA	.591-.610
-16AA	.610-.630
-16.5AA	.630-.650
-17AA	.650-.670
-17.5AA	.670-.690
-18AA	.690-.709
-18.5AA	.709-.728
-19AA	.728-.749
-19.5AA	.750-.768
-20AA	.768-.787

øA=1.26" (32mm) B=1.58" (40mm)

World's First



In 1987, BIG was the first company in the world to laser mark the collet grade on every collet

- BIG's ERC collets have a maximum clamping capacity of .020"/ø (.5mm/ø)
- To obtain the best runout accuracy and rigidity, ERC collets for smaller tools have a reduced clamping range
- For best results, users should avoid clamping tools with shank diameters less than the recommended clamping range

CAUTION

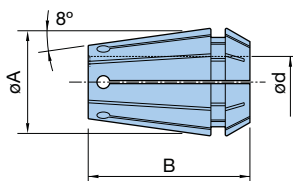
Conventional DIN collets have a clamping range of 1mm/ø.
Never use ERC collets for more than .020"/ø (.5mm/ø) below nominal size.
To maintain the accuracy of the tool assembly, do not use collets and nuts manufactured by another company with the chuck body of BIG's Mega ER Grip.
We cannot guarantee the accuracy statement for our collets if they are assembled on the chuck body of another manufacturer.

COLLETS ERC FOR END MILLS

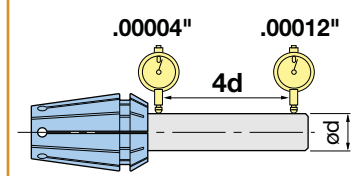
"Just fit" collet for end mills. Nominal sizes of collets for the most popular end mill shanks reduces the unsupported overhang of the collet when clamped into the chuck body. This increases the rigidity of the tool assembly in the horizontal direction which is very important to end milling operations. Available in both metric and inch sizes.



All BIG Collets are AA Grade and inspected twice for accuracy



Guaranteed Max Runout



Conforms to DIN6499 and ISO15488

MEGA ER16

Catalog Number	Clamping Size ød
ERC16-1/8EAA	.125
-3/16EAA	.188
-1/4EAA	.250
-5/16EAA	.312
-3/8EAA	.375
ERC16-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-7EAA	7.0mm
-8EAA	8.0mm
-9EAA	9.0mm
-10EAA	10.0mm

øA=.63" (16mm) B=1.08" (27.5mm)

MEGA ER20

Catalog Number	Clamping Size ød
ERC20-1/8EAA	.125
-3/16EAA	.188
-1/4EAA	.250
-5/16EAA	.312
-3/8EAA	.375
-7/16EAA	.438
-1/2EAA	.500
ERC20-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-7EAA	7.0mm
-8EAA	8.0mm
-9EAA	9.0mm
-10EAA	10.0mm
-11EAA	11.0mm
-12EAA	12.0mm

øA=.79" (20mm) B=1.24" (31.5mm)

MEGA ER25

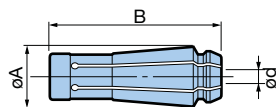
Catalog Number	Clamping Size ød
ERC25-1/8EAA	.125
-3/16EAA	.188
-1/4EAA	.250
-5/16EAA	.312
-3/8EAA	.375
-7/16EAA	.438
-1/2EAA	.500
-9/16EAA	.563
-5/8EAA	.625
ERC25-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-7EAA	7.0mm
-8EAA	8.0mm
-9EAA	9.0mm
-10EAA	10.0mm
-11EAA	11.0mm
-12EAA	12.0mm
-13EAA	13.0mm
-14EAA	14.0mm
-15EAA	15.0mm
-16EAA	16.0mm

øA=.98" (25mm) B=1.34" (24mm)

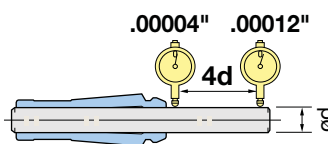
MEGA ER32

Catalog Number	Clamping Size ød
ERC32-1/8EAA	.125
-3/16EAA	.188
-1/4EAA	.250
-5/16EAA	.312
-3/8EAA	.375
-7/16EAA	.438
-1/2EAA	.500
-9/16EAA	.563
-5/8EAA	.625
-3/4EAA	.750
ERC32-3EAA	3.0mm
-4EAA	4.0mm
-5EAA	5.0mm
-6EAA	6.0mm
-7EAA	7.0mm
-8EAA	8.0mm
-9EAA	9.0mm
-10EAA	10.0mm
-11EAA	11.0mm
-12EAA	12.0mm
-13EAA	13.0mm
-14EAA	14.0mm
-15EAA	15.0mm
-16EAA	16.0mm
-18EAA	18.0mm
-20EAA	20.0mm

øA=1.26" (32mm) B=1.58" (40mm)



Guaranteed Max Runout



All BIG Collets are AA Grade and inspected twice for accuracy

MEGA 6E

Catalog Number	Clamping Range ϕd
MEC6-1/8AA	.125
-3/16AA	.187
-1/4AA	.250
MEC6-3AA	3.0mm
-4AA	4.0mm
-5AA	5.0mm
-6AA	6.0mm

$\phi A = .44"$ (11.3mm) $B = 1.37"$ (34.9mm)

MEGA 8E

Catalog Number	Clamping Range ϕd
MEC8-1/8AA	.125
-3/16AA	.187
-1/4AA	.250
MEC8-3AA	3.0mm
-4AA	4.0mm
-5AA	5.0mm
-6AA	6.0mm
-7AA	7.0mm
-8AA	8.0mm

$\phi A = .56"$ (14.1mm) $B = 1.55"$ (39.4mm)

MEGA 10E

Catalog Number	Clamping Range ϕd
MEC10-1/8AA	.125
-3/16AA	.187
-1/4AA	.250
-5/16AA	.312
-3/8AA	.375
MEC10-3AA	3.0mm
-4AA	4.0mm
-5AA	5.0mm
-6AA	6.0mm
-7AA	7.0mm
-8AA	8.0mm
-9AA	9.0mm
-10AA	10.0mm

$\phi A = .67"$ (17.1mm) $B = 1.80"$ (45.7mm)

MEGA 13E

Catalog Number	Clamping Range ϕd
MEC13-1/8AA	.125
-3/16AA	.187
-1/4AA	.250
-5/16AA	.312
-3/8AA	.375
-7/16AA	.437
-1/2AA	.500
MEC13-3AA	3.0mm
-4AA	4.0mm
-5AA	5.0mm
-6AA	6.0mm
-7AA	7.0mm
-8AA	8.0mm
-9AA	9.0mm
-10AA	10.0mm
-12AA	12.0mm

$\phi A = .81"$ (20.6mm) $B = 1.89"$ (47.9mm)

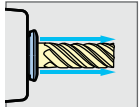
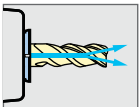
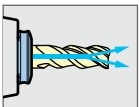
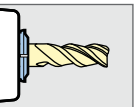
CAUTION

Use only a cutting tool shank with exactly the same diameter as collet bore diameter.
The tolerance of the cutting tool shank must be within h7.

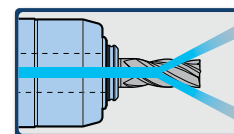
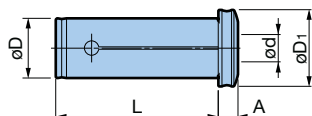
COLLETS

PERFECT SEAL—PSC

STRAIGHT COLLET SELECTION GUIDE

	PJC COLLET	OCA COLLET	PSC COLLET	AC COLLET
				
MEGA DOUBLE POWER CHUCK MEGA-D	○	○		○
MEGA DOUBLE POWER CHUCK MEGA-DS	○			○
NEW HI-POWER MILLING CHUCK HMC	○	○		○
HYDRAULIC CHUCK HDC	○		○	

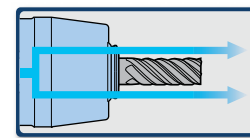
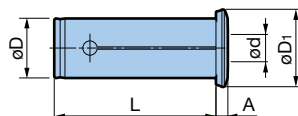
Reduction sleeve for small diameter cutters used in Hi-Power Milling Chucks, Mega Double Power Milling Chucks & Hydraulic Chucks.



For Coolant-Through Tools

Catalog Number	Clamping Size ød	øD	L	A	D ₁
PSC.750-1/4	.250	.750	2.40	.30	1.06
-3/8	.375			.32	
-1/2	.500			.34	
-5/8	.625				1.10
PSC1.250-1/2	.500	1.250	2.91	.34	1.50
-5/8	.625				
-3/4	.750			.36	
-7/8	.875			.37	
-1	1.000				
PSC20-3	3.0mm	20mm	61mm	7.7mm	27mm
-4	4.0mm			7.5mm	
-6	6.0mm				
-8	8.0mm			8.2mm	
-10	10.0mm				
-12	12.0mm				
-14	14.0mm			8.7mm	28mm
-16	16.0mm				
PSC32-6	6.0mm	32mm	74mm	7.5mm	38mm
-8	8.0mm				
-10	10.0mm			8.2mm	
-12	12.0mm				
-14	14.0mm			8.7mm	
-16	16.0mm				
-18	18.0mm				
-20	20.0mm			9.2mm	
-25	25.0mm			9.5mm	

Reduction sleeve for small diameter cutters used in Hi-Power Milling Chucks, Mega Double Power Milling Chucks & Hydraulic Chucks.

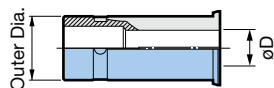


For Coolant To Cutting Tool Periphery

Catalog Number	Clamping Size ød	øD	L	A	D ₁
PJC.750-1/4	.250	.750	2.40	.21	1.06
-3/8	.375			.22	
-1/2	.500			.27	
-5/8	.625			.29	
PJC1.000-1/4	.250	1.000	2.68	.20	1.28
-3/8	.375				
-1/2	.500				
-5/8	.625			.21	
-3/4	.750			.26	
PJC1.250-1/2	.500	1.250	2.91	.20	1.54
-5/8	.625				
-3/4	.750				
-7/8	.875				
-1	1.000			.21	
PJC16-6	6.0mm	16mm	54mm	6.0mm	23mm
-8	8.0mm				
-10	10.0mm			6.3mm	
-12	12.0mm				
PJC20-3	3.0mm	20mm	61mm	5.2mm	32.5mm
-4	4.0mm				
-6	6.0mm				
-8	8.0mm			5.7mm	
-10	10.0mm				
-12	12.0mm			6.4mm	
-14	14.0mm				
-16	16.0mm			7.3mm	
PJC25-6	6.0mm	25mm	68mm	5.0mm	32.5mm
-8	8.0mm				
-10	10.0mm				
-12	12.0mm				
-16	16.0mm			5.4mm	
-20	20.0mm			6.5mm	
PJC32-6	6.0mm	32mm	74mm	5.0mm	39mm
-8	8.0mm				
-10	10.0mm				
-12	12.0mm				
-14	14.0mm				
-16	16.0mm				
-18	18.0mm				
-20	20.0mm				
-25	25.0mm			5.4mm	

COLLETS STRAIGHT

Reduction sleeve for smaller diameter cutters used in Hi-Power Milling Chucks and Mega Double Power Milling Chucks.



Reduction Collets

Catalog Number	Clamping Size ød	øD
C.750-1/4	.250	.750
-5/16	.312	
-3/8	.375	
-7/16	.437	
-1/2	.500	
-9/16	.562	
-5/8	.625	
C1.000-1/4	.250	1.000
-3/8	.375	
-1/2	.500	
-5/8	.625	
-3/4	.750	
C1.250-1/4	.250	1.250
-5/16	.312	
-3/8	.375	
-7/16	.437	
-1/2	.500	
-9/16	.562	
-5/8	.625	
-11/16	.687	
-3/4	.750	
-13/16	.812	
-7/8	.875	
-15/16	.937	
-1	1.000	

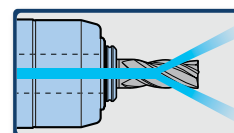
Reduction Collets

Catalog Number	Clamping Size ød	øD
AC16-6	6mm	16mm
-8	8mm	
-10	10mm	
-12	12mm	
AC20-6	6mm	20mm
-8	8mm	
-10	10mm	
-12	12mm	
AC25-6	6mm	25mm
-8	8mm	
-10	10mm	
-12	12mm	
-16	16mm	32mm
-20	20mm	
AC32-6	6mm	
-8	8mm	
-10	10mm	42mm
-12	12mm	
-16	16mm	
-20	20mm	
-25	25mm	42mm
AC42-6	6mm	
-8	8mm	
-10	10mm	
-12	12mm	42mm
-16	16mm	
-20	20mm	
-25	25mm	
-32	32mm	42mm

Metallic Sealed Coolant Collets

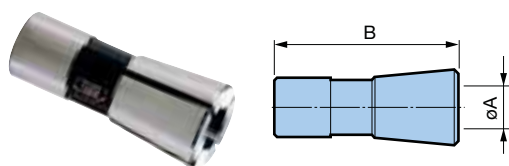
Catalog Number	Clamping Size ød	øD
OCA20-6	6mm	20mm
-8	8mm	
-10	10mm	
-12	12mm	
-16	16mm	25mm
OCA25-16	16mm	
-20	20mm	32mm
OCA32-6	6mm	
-8	8mm	
-10	10mm	
-12	12mm	
-13	13mm	
-14	14mm	
-15	15mm	
-16	16mm	
-17	17mm	
-18	18mm	
-19	19mm	
-20	20mm	
-21	21mm	42mm
-22	22mm	
-23	23mm	
-24	24mm	
-25	25mm	
OCA42-6	6mm	
-8	8mm	
-10	10mm	
-12	12mm	
-16	16mm	
-19	19mm	
-20	20mm	
-24	24mm	
-25	25mm	
-31	31mm	
-32	32mm	

• Recommended Only for HMC(S) Type Holders



For Coolant-Through Tools

Exclusive Collet for Angle Head AG90 Slender Drive

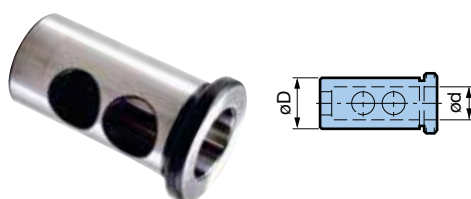


Catalog Number	øA	B
CA4-3	3.0mm	16.5mm
-3.5	3.5mm	
-4	4.0mm	
CA6-3	3.0mm	22mm
-4	4.0mm	
-5	5.0mm	
-6	6.0mm	

- Use only a cutting tool shank with exactly the same diameter as the collet bore diameter
- Tolerance of the cutting tool shank must be within h7



Exclusive Collet for Hi-Jet Holder

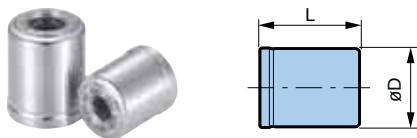


OSL Reduction Collet

Catalog Number	ød	øD
OSL.125-.7500	.750	1.250
-1.00	1.000	
OSL1.500-1.000	1.000	1.500
-1.250	1.250	

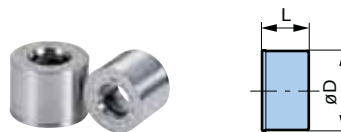


NUTS



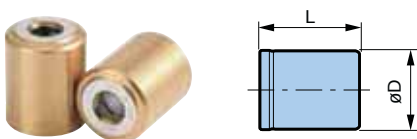
For Mega Micro Chucks

Catalog Number	øD	L	Body Type
MGN3S	.39 (10mm)	.51 (13mm)	MEGA3S
MGN4S	.47 (12mm)	.57 (14.5mm)	MEGA4S
MGN6S	.55 (14mm)	.67 (17mm)	MEGA6S
MGN8S	.71 (18mm)	.73 (18.5mm)	MEGA8S



For Mega New Baby Chucks

Catalog Number	øD	L	Body Type
MGN6	.79 (20mm)	.81 (20.5mm)	MEGA6N
MGN8	.98 (25mm)	.91 (23mm)	MEGA8N
MGN10	1.18 (30mm)	.94 (24mm)	MEGA10N
MGN13	1.38 (35mm)	1.06 (27mm)	MEGA13N
MGN16	1.65 (42mm)		MEGA16N
MGN20	1.81 (46mm)		MEGA20N



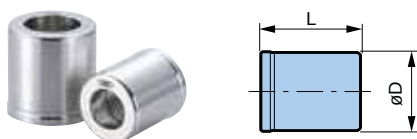
For Air Power Spindle—RBX12

Catalog Number	øD	L	Tap Holder
MGN4S-HG	.63 (16mm)	.75 (19mm)	MGT6



For New Baby Chucks

Catalog Number	øD	L	Body Type
NBN6	.79 (20mm)	.81 (20.5mm)	MEGA6N
NBN8	.98 (25mm)	.91 (23mm)	MEGA8N
NBN10	1.18 (30mm)	.94 (24mm)	MEGA10N
NBN13	1.38 (35mm)	1.06 (27mm)	MEGA13N
NBN16	1.65 (42mm)		MEGA16N
NBN20	1.81 (46mm)		MEGA20N



For Mega Synchro Tapping Holders

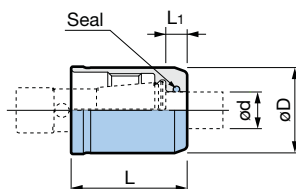
Catalog Number	øD	L	Tap Holder
MGN6T	.63 (16mm)	.75 (19mm)	MGT6
MGN12T	.79 (20mm)	.83 (21mm)	MGT12
MGN20T	1.18 (30mm)	.94 (24mm)	MGT20



For Mega E Chucks

Catalog Number	øD	L	Body Type
MEN6	.98 (25mm)	.81 (20.5mm)	MEGA6E
MEN8	1.18 (30mm)	.87 (22mm)	MEGA8E
MEN10	1.38 (35mm)	.89 (22.5mm)	MEGA10E
MEN13	1.65 (42mm)	.96 (24.3mm)	MEGA13E

CLAMPING RANGE: $\varnothing 3\text{mm}-8\text{mm}$



MEGA 6S

Catalog Number	$\varnothing d$	$\varnothing D$	L	L ₁
MGN6S-PS3	3.0	14	19	3.5
-PS4	4.0			
-PS5	5.0			
-PS6	6.0			

MEGA 8S

Catalog Number	$\varnothing d$	$\varnothing D$	L	L ₁
MGN8S-PS3	3.0	18	20.2	3.5
-PS4	4.0			
-PS5	5.0			
-PS6	6.0			
-PS7	7.0			
-PS8	8.0			

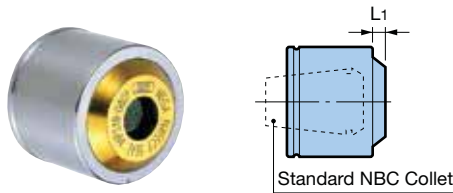


MEGA PERFECT SEAL

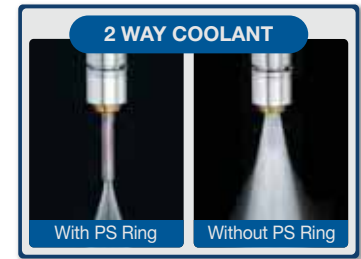
CLAMPING RANGE: ϕ .118"- ϕ .787"

Standard NBC Collet can be used!

Unique design increases sealing performance with higher coolant pressure to create a perfect seal.



**MAX COOLANT
PRESSURE
1,000
PSI**



*Reliable Coolant Supply
to the Tool Tip!*

NBC6

Catalog Number	L ₁	Cutter Shank ϕ	Collet Model
MPS6-03035	.091	.118-.138	NBC6-3-3.75
-0304		.118-.157	-3-4.25
-04045		.157-.177	-4-4.75
-0405		.157-.197	-4-5.25
-05055		.197-.217	-5-5.75
-0506		.197-.236	-5-6

• 1 pc. of PS Ring is included

NBC8

Catalog Number	L ₁	Cutter Shank ϕ	Collet Model
MPS8-03035	.154	.118-.138	NBC8-3-4
-0304		.118-.157	-3-4.5
-04045		.157-.177	-4-5
-0405		.157-.197	-4-5.5
-05055		.197-.217	-5-6
-0506		.197-.236	-5-6.5
-06065	.134	.236-.256	-6-7
-0607		.236-.276	-6-7.5
-07075		.276-.295	-7-8
-0708		.276-.315	-7-8

• 1 pc. of PS Ring is included

NBC10

Catalog Number	L ₁	Cutter Shank ϕ	Collet Model
MPS10-03035	.154	.118-.138	NBC10-3-4
-0304		.118-.157	-3-4.5
-04045		.157-.177	-4-5
-0405		.157-.197	-4-5.5
-05055		.197-.217	-5-6
-0506		.197-.236	-5-6.5
-06065	.169	.236-.256	-6-7
-0607		.236-.276	-6-7.5
-07075		.276-.295	-7-8
-0708		.276-.315	-7-8.5
-08085	.138	.315-.335	-8-9
-0809		.315-.354	-8-9.5
-09095		.354-.375	-9-10
-0910		.354-.394	-9-10

• 1 pc. of PS Ring is included

NBC13

Catalog Number	L ₁	Cutter Shank ϕ	Collet Model
MPS13-03035	.169	.118-.138	NBC13-3-4
-0304		.118-.157	-3-4.5
-04045		.157-.177	-4-5
-0405		.157-.197	-4-5.5
-05055		.197-.217	-5-6
-0506		.197-.236	-5-6.5
-06065	.181	.236-.256	-6-7
-0607		.236-.276	-6-7.5
-07075		.276-.295	-7-8
-0708		.276-.315	-7-8.5
-08085	.193	.315-.335	-8-9
-0809		.315-.354	-8-9.5
-09095		.354-.375	-9-10
-0910		.354-.394	-9-10.5
-10105	.165	.394-.413	-10-11
-1011		.394-.433	-10-11.5
-11115		.433-.453	-11-12
-1112		.433-.472	-11-12.5
-12125		.472-.492	-12-13
-1213		.472-.512	-12-13

• 1 pc. of PS Ring is included

NBC16

Catalog Number	L ₁	Cutter Shank ø	Collet Model
MPS16-03035	.157	.118-.138	NBC16-3-4
-0304		.118-.157	-3-4.5
-04045		.157-.177	-4-5
-0405		.157-.197	-4-5.5
-05055		.197-.217	-5-6
-0506		.197-.236	-5-6.5
-06065	.169	.236-.256	-6-7
-0607		.236-.276	-6-7.5
-07075		.276-.295	-7-8
-0708		.276-.315	-7-8.5
-08085	.181	.315-.335	-8-9
-0809		.315-.354	-8-9.5
-09095		.354-.375	-9-10
-0910	.201	.354-.394	-9-10.5
-10105		.394-.413	-10-11
-1011		.394-.433	-10-11.5
-11115		.433-.453	-11-12
-1112	.161	.433-.472	-11-12.5
-12125		.472-.492	-12-13
-1213		.472-.512	-12-13.5
-1314		.512-.551	-13-14.5
-1415		.551-.591	-14-15.5
-1516		.591-.630	-15-16

• 1 pc. of PS Ring is included

NBC20

Catalog Number	L ₁	Cutter Shank ø	Collet Model
MPS20-03035	.157	.118-.138	NBC20-3-4
-0304		.118-.157	-3-4.5
-04045		.157-.177	-4-5
-0405		.157-.197	-4-5.5
-05055		.197-.217	-5-6
-0506		.197-.236	-5-6.5
-06065	.169	.236-.256	-6-7
-0607		.236-.276	-6-7.5
-07075		.276-.295	-7-8
-0708		.276-.315	-7-8.5
-08085	.181	.315-.335	-8-9
-0809		.315-.354	-8-9.5
-09095		.354-.375	-9-10
-0910	.201	.354-.394	-9-10.5
-10105		.394-.413	-10-11
-1011		.394-.433	-10-11.5
-11115		.433-.453	-11-12
-1112	.205	.433-.472	-11-12.5
-12125		.472-.492	-12-13
-1213		.472-.512	-12-13.5
-1314		.512-.551	-13-14.5
-1415		.551-.591	-14-15.5
-1516		.591-.630	-15-16.5
-1617	.181	.630-.669	-16-17.5
-1718		.669-.709	-17-18.5
-1819		.709-.750	-18-19.5
-1920		.751-.787	-19-20

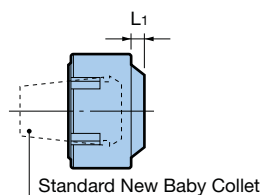
• 1 pc. of PS Ring is included

BABY PERFECT SEAL

CLAMPING RANGE: ϕ .118"-.787"

Reliable Coolant Supply To the Tool Tip!

Unique design increases sealing performance with higher coolant pressure to create a perfect seal.



MAX COOLANT
PRESSURE
1,000
PSI



*Reliable Coolant Supply
to the Tool Tip!*

NBC6

Catalog Number	Cutter Shank Dia.	L ₁	Collet Model
BPS6-03035	.118-.138	.091	NBC6-3-3.75
-0304	.118-.157		-3-4.25
-04045	.157-.177		-4-4.75
-0405	.157-.197		-4-5.25
-05055	.197-.217		-5-5.75
-0506	.197-.236		-5-6

• 1 pc. of PS Ring is included

NBC10

Catalog Number	Cutter Shank Dia.	L ₁	Collet Model
BPS10-03035	.118-.138	.154	NBC10-3-4
-0304	.118-.157		-3-4.5
-04045	.157-.177		-4-5
-0405	.157-.197		-4-5.5
-05055	.197-.217		-5-6
-0506	.197-.236		-5-6.5
-06065	.236-.256	.169	-6-7
-0607	.236-.276		-6-7.5
-07075	.276-.295		-7-8
-0708	.276-.315		-7-8.5
-08085	.315-.335		-8-9
-0809	.315-.354	.138	-8-9.5
-09095	.354-.375		-9-10
-0910	.354-.394		-9-10

• 1 pc. of PS Ring is included

NBC8

Catalog Number	Cutter Shank Dia.	L ₁	Collet Model
BPS8-03035	.118-.138	.154	NBC8-3-4
-0304	.118-.157		-3-4.5
-04045	.157-.177		-4-5
-0405	.157-.197		-4-5.5
-05055	.197-.217		-5-6
-0506	.197-.236		-5-6.5
-06065	.236-.256	.134	-6-7
-0607	.236-.276		-6-7.5
-07075	.276-.295		-7-8
-0708	.276-.315		-7-8

• 1 pc. of PS Ring is included

NBC13

Catalog Number	Cutter Shank Dia.	L ₁	Collet Model
BPS13-03035	.118-.138	.169	NBC13-3-4
-0304	.118-.157		-3-4.5
-04045	.157-.177		-4-5
-0405	.157-.197		-4-5.5
-05055	.197-.217		-5-6
-0506	.197-.236		-5-6.5
-06065	.236-.256	.181	-6-7
-0607	.236-.276		-6-7.5
-07075	.276-.295		-7-8
-0708	.276-.315		-7-8.5
-08085	.315-.335		-8-9
-0809	.315-.354	.193	-8-9.5
-09095	.354-.375		-9-10
-0910	.354-.394		-9-10.5
-10105	.394-.413	.165	-10-11
-1011	.394-.433		-10-11.5
-11115	.433-.453		-11-12
-1112	.433-.472		-11-12.5
-12125	.472-.492		-12-13
-1213	.472-.512		-12-13

• 1 pc. of PS Ring is included

NBC16

Catalog Number	Cutter Shank Dia.	L ₁	Collet Model
BPS16-03035	.118-.138	.157	NBC16-3-4
-0304	.118-.157		-3-4.5
-04045	.157-.177		-4-5
-0405	.157-.197		-4-5.5
-05055	.197-.217		-5-6
-0506	.197-.236		-5-6.5
-06065	.236-.256	.169	-6-7
-0607	.236-.276		-6-7.5
-07075	.276-.295		-7-8
-0708	.276-.315		-7-8.5
-08085	.315-.335	.181	-8-9
-0809	.315-.354		-8-9.5
-09095	.354-.375		-9-10
-0910	.354-.394		-9-10.5
-10105	.394-.413	.201	-10-11
-1011	.394-.433		-10-11.5
-11115	.433-.453		-11-12
-1112	.433-.472		-11-12.5
-12125	.472-.492	.161	-12-13
-1213	.472-.512		-12-13.5
-1314	.512-.551		-13-14.5
-1415	.551-.591		-14-15.5
-1516	.591-.630		-15-16

• 1 pc. of PS Ring is included

NBC20

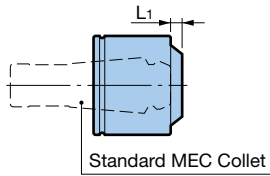
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BPS20-03035	.118-.138	.157	NBC20-3-4
-0304	.118-.157		-3-4.5
-04045	.157-.177		-4-5
-0405	.157-.197		-4-5.5
-05055	.197-.217		-5-6
-0506	.197-.236		-5-6.5
-06065	.236-.256	.169	-6-7
-0607	.236-.276		-6-7.5
-07075	.276-.295		-7-8
-0708	.276-.315		-7-8.5
-08085	.315-.335	.181	-8-9
-0809	.315-.354		-8-9.5
-09095	.354-.375		-9-10
-0910	.354-.394		-9-10.5
-10105	.394-.413	.201	-10-11
-1011	.394-.433		-10-11.5
-11115	.433-.453		-11-12
-1112	.433-.472		-11-12.5
-12125	.472-.492	.205	-12-13
-1213	.472-.512		-12-13.5
-1314	.512-.551		-13-14.5
-1415	.551-.591		-14-15.5
-1516	.591-.630		-15-16.5
-1617	.630-.669	.181	-16-17.5
-1718	.669-.709		-17-18.5
-1819	.709-.750		-18-19.5
-1920	.751-.787		-19-20

• 1 pc. of PS Ring is included

MEGA E PERFECT SEAL

CLAMPING RANGE: $\varnothing.118"$ -.472"

Unique design increases sealing performance with higher coolant pressure to create a "perfect seal".



MAX COOLANT
PRESSURE
1,000
PSI

THROUGH TOOLS



Optimum coolant supply to the cutting edge of burnishing drills and reamers with long clamping lengths.

MEC6

Catalog Number	L ₁	Cutter Shank $\varnothing$	Collet Model
EPS6-03	.220	.118	MEC6-3
-04	.205	.157	-4
-05		.197	-5
-06		.236	-6

- 1 pc. of PS Ring is included
- For use with metric collets only, consult BIG Kaiser engineering for use with inch collets

MEC10

Catalog Number	L ₁	Cutter Shank $\varnothing$	Collet Model
EPS10-03	.252	.118	MEC10-3
-04	.236	.157	-4
-05		.197	-5
-06		.236	-6
-07	.248	.276	-7
-08	.224	.315	-8
-09		.354	-9
-10		.394	-10

- 1 pc. of PS Ring is included
- For use with metric collets only, consult BIG Kaiser engineering for use with inch collets

MEC8

Catalog Number	L ₁	Cutter Shank $\varnothing$	Collet Model
EPS8-03	.252	.118	MEC8-3
-04	.236	.157	-4
-05		.197	-5
-06		.236	-6
-07	.220	.276	-7
-08		.315	-8

- 1 pc. of PS Ring is included
- For use with metric collets only, consult BIG Kaiser engineering for use with inch collets

MEC13

Catalog Number	L ₁	Cutter Shank $\varnothing$	Collet Model
EPS13-03	.252	.118	MEC13-3
-04	.236	.157	-4
-05		.197	-5
-06		.236	-6
-07	.248	.276	-7
-08	.256	.315	-8
-09		.354	-9
-10		.394	-10
-11	.244	.433	-11
-12		.472	-12

- 1 pc. of PS Ring is included
- For use with metric collets only, consult BIG Kaiser engineering for use with inch collets

For Mega ER Chucks a Variety of Nuts are Available



**Mega ER
Perfect Seal**



Mega Wrench

Capable of sealing high pressure coolant up to 7Mpa. For applications with coolant supplied through the tools. Mega Wrench is used for tightening.



Mega ER Nut



Mega Wrench

High accuracy and clamping force are provided with thrust ball bearings. Ideal for solid carbide drills and reamers. Slot-free outer diameter increases rigidity of the nut itself. The one-way clutch of the Mega Wrench tightens the nut securely and easily by ratchet function.



**Mega ER
Solid Nut**



Mega Wrench

High performance solid nut with surface treatment for friction reduction. Slot-free outer diameter increases rigidity of the nut itself. The one-way clutch of the Mega Wrench tightens the nut securely and easily by ratchet function.

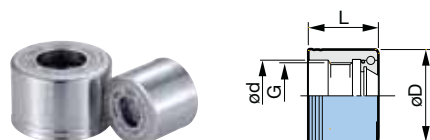


ER Nut

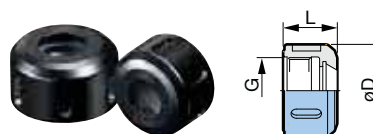


C-Spanner

Basic nut with surface treatment for friction reduction. C-Spanner is used for tightening.



Catalog Number	øD	L	G	ød	Wrench Type	Body Type
MERN16	1.181	.984	M22×P1.5	.906	MGR30L	MEGAER16
MERN20	1.378	1.043	M25×P1.5	1.063	MGR35L	MEGAER20
MERN25	1.654	1.083	M32×P1.5	1.319	MGR42L	MEGAER25
MERN32	1.969	1.189	M40×P1.5	1.614	MGR50L	MEGAER32



Catalog Number	øD	L	G	C-Spanner Type	Body Type
ERN11	.748	.484	M14×P0.75	NBK 6	ER11
ERN16	1.181	.748	M22×P1.5	NBK10	ER16
ERN20	1.378	.807	M25×P1.5	NBK13	ER20
ERN25	1.654	.846	M32×P1.5	NBK16	ER25
ERN32	1.969	.945	M40×P1.5	F45-50L	ER32



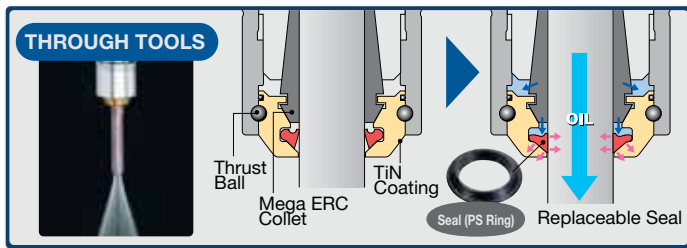
Catalog Number	øD	L	G	ød	Wrench Type	Body Type
MER16SN	1.181	.984	M22×P1.5	.906	MGR30L	MEGAER16
MER20SN	1.378	1.043	M25×P1.5	1.063	MGR35L	MEGAER20
MER25SN	1.654	1.083	M32×P1.5	1.319	MGR42L	MEGAER25
MER32SN	1.969	1.189	M40×P1.5	1.614	MGR50L	MEGAER32



MEGA ER PERFECT SEAL

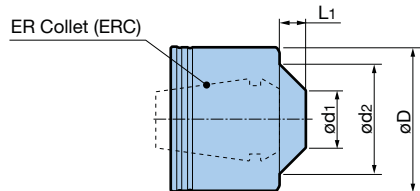
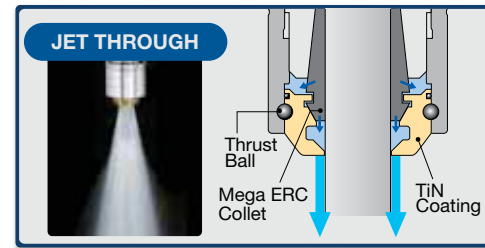
Mega ER Perfect Seal

Sealed collet nut for coolant-through tools.



Mega ER Perfect Jet

Nut for coolant delivery around cutter shank periphery.



MAX COOLANT
PRESSURE
1,000
PSI

Mega ER Perfect Seal Model	Mega ER Perfect Jet Model	øD	ød1	ød2	L1	Cutter Shank Dia.	Collet Model (Inch)	Collet Model (Metric)
MERPS16-030035	MERPSL16-030035	1.181	.472	.882	.252	.118-.138	ERC16-1/8E	ERC16-3-3.75
-035040	-035040					.138-.157	—	-3.5-4.25
-040045	-040045		.512			.157-.177	—	-4-4.75
-045050	-045050					.177-.197	-3/16E	-4.5-5.25
-050055	-050055		.551			.197-.217	—	-5-6
-055060	-055060					.217-.236	—	-5.5-6.5
-060065	-060065		.591		.268	.236-.256	-1/4E	-6-7
-065070	-065070					.256-.276	—	-6.5-7.5
-070075	-070075		.630			.276-.295	—	-7-8
-075080	-075080					.295-.315	-5/16E	-7.5-8.5
-080085	-080085		.669		.240	.315-.335	—	-8-9
-085090	-085090					.335-.354	—	-8.5-9.5
-090095	-090095		.709			.354-.375	-3/8E	-9-10
-095100	-095100					.374-.394	—	-9.5-10
MERPS20-030035	MERPSL20-030035	1.378	.472	1.055	.252	.118-.138	ERC20-1/8E	ERC20-3-3.75
-035040	-035040					.138-.157	—	-3.5-4.25
-040045	-040045		.512			.157-.177	—	-4-4.75
-045050	-045050					.177-.197	-3/16E	-4.5-5.25
-050055	-050055		.551			.197-.217	—	-5-6
-055060	-055060					.217-.236	—	-5.5-6.5
-060065	-060065		.591		.268	.236-.256	-1/4E	-6-7
-065070	-065070					.256-.276	—	-6.5-7.5
-070075	-070075		.630			.276-.295	—	-7-8
-075080	-075080					.295-.315	-5/16E	-7.5-8.5
-080085	-080085		.669		.272	.315-.335	—	-8-9
-085090	-085090					.335-.354	—	-8.5-9.5
-090095	-090095		.709			.354-.375	-3/8E	-9-10
-095100	-095100					.374-.394	—	-9.5-10.5
-100105	-100105		.748		.260	.394-.413	—	-10-11
-105110	-105110					.413-.433	—	-10.5-11.5
-110115	-110115		.787			.433-.453	-7/16E	-11-12
-115120	-115120					.453-.472	—	-11.5-12.5
-120125	-120125		.827			.472-.492	—	-12-13
-125130	-125130					.492-.512	-1/2E	-12.5-13
MERPS25-030035	MERPSL25-030035	1.654	.472	1.319	.248	.118-.138	ERC25-1/8E	ERC25-3-3.75
-035040	-035040					.138-.157	—	-3.5-4.25

Mega ER Perfect Seal Model	Mega ER Perfect Jet Model	øD	ød ₁	ød ₂	L ₁	Cutter Shank Dia.	Collet Model (Inch)	Collet Model (Metric)	
MERPS25-040045	MERPSL25-040045	1.654	.512	1.319	.248	.157-.177	—	ERC25-4-4.75	
-045050	-045050					.177-.197	ERC25-3/16E	-3-4.5-5.25	
-050055	-050055					.551	.197-.217	—	-5-6
-055060	-055060						.217-.236	—	-5.5-6.5
-060065	-060065		.591		.236-.256		-1/4E	-6-7	
-065070	-065070				.256-.276		—	-6.5-7.5	
-070075	-070075				.276-.295	—	-7-8		
-075080	-075080				.295-.315	-5/16E	-7.5-8.5		
-080085	-080085		.630		.264	.315-.335	—	-8-9	
-085090	-085090					.335-.354	—	-8.5-9.5	
-090095	-090095					.354-.375	-3/8E	-9-10	
-095100	-095100					.374-.394	—	-9.5-10.5	
-100105	-100105		.669		.268	.394-.413	—	-10-11	
-105110	-105110					.413-.433	—	-10.5-11.5	
-110115	-110115					.433-.453	-7/16E	-11-12	
-115120	-115120					.453-.472	—	-11.5-12.5	
-120125	-120125		.748		.287	.472-.492	—	-12-13	
-125130	-125130					.492-.512	-1/2E	-12.5-13	
-130140	—					.512-.551	—	-13-14.5	
-140150	—					.551-.591	-9/16E	-14-15.5	
-150160	—		.945		.260	.591-.630	-5/8E	-15-16	
			.984						
MERPS32-030035	MERPSL32-030035	1.969	.472	1.618	.244	.118-.138	ERC32-1/8E	ERC32-3-3.75	
-035040	-035040		.512			.138-.157	—	-3.5-4.25	
-040045	-040045					.157-.177	—	-4-4.75	
-045050	-045050					.177-.197	-3/16E	-4.5-5.25	
-050055	-050055				.551	.197-.217	—	-5-6	
-055060	-055060		.217-.236			—	-5.5-6.5		
-060065	-060065		.591			.236-.256	-1/4E	-6-7	
-065070	-065070					.256-.276	—	-6.5-7.5	
-070075	-070075				.276-.295	—	-7-8		
-075080	-075080				.295-.315	-5/16E	-7.5-8.5		
-080085	-080085		.630		.260	.315-.335	—	-8-9	
-085090	-085090					.335-.354	—	-8.5-9.5	
-090095	-090095					.354-.375	-3/8E	-9-10	
-095100	-095100					.374-.394	—	-9.5-10.5	
-100105	-100105		.669		.264	.394-.413	—	-10-11	
-105110	-105110					.413-.433	—	-10.5-11.5	
-110115	-110115					.433-.453	-7/16E	-11-12	
-115120	-115120					.453-.472	—	-11.5-12.5	
-120125	-120125		.748		.283	.472-.492	—	-12-13	
-125130	-125130					.492-.512	-1/2E	-12.5-13.5	
-130140	—					.512-.551	—	-13-14.5	
-140150	—					.551-.591	-9/16E	-14-15.5	
-150160	—		.945		.287	.591-.630	-5/8E	-15-16.5	
-160170	—		.984			.307	.630-.669	—	-16-17.5
-170180	—		1.024				.669-.709	—	-17-18.5
-180190	—		1.063				.709-.748	—	-18-19.5
-190200	—		1.102		.748-.787		-3/4E	-19-20	

For Mega ER Perfect Seal (MERPS)

- 1 pc. of PS Ring is included, Pg. 258

For Mega ER Perfect Jet (MERPSL)

- Back up screws cannot be used in conjunction with jet through coolant
- To select the best size of Mega ER Perfect Jet nuts with jet through coolant, the desired pressure and/or flow rate of coolant supply around the periphery of the cutter shank should be considered
- For higher pressure, select the Mega ER Perfect Jet that accepts the largest applicable cutter shank diameter
- For higher flow rate or volume, a larger gap between the cutter shank diameter and Mega ER Perfect Jet should be selected within the applicable range of collet size, so please choose the size considering the rate of coolant flow desired

ACCESSORIES



PS RING

Replaceable Seals



For Mega Perfect Seal

Catalog Number	MPS Model
PS-0304	MPS□-03035, 0304
-0405	-04045, 0405
-0506	-05055, 0506
-0607	-06065, 0607
-0708	-07075, 0708

Catalog Number	MPS Model
PS-0809	MPS□-08085, 0809
-0910	-09095, 0910
-1011	-10105, 1011
-1112	-11115, 1112
-1213	-12125, 1213

Catalog Number	MPS Model
PS-1314	MPS□-1314
-1415	-1415
-1516	-1516
-1617	-1617
-1718	-1718
-1819	-1819
-1920	-1920

- Spare seal is recommended when coolant leaks due to damage of PS Ring
- 1 package contains 5 pcs. (1 size)

For Mega ER Perfect Seal

Catalog Number	MERPS Model
PS-0304	MERPS□-030035, 035040
-0405	-040045, 045050
-0506	-050055, 055060
-0607	-060065, 065070
-0708	-070075, 075080

Catalog Number	MERPS Model
PS-0809	MERPS□-080085, 085090
-0910	-090095, 095100
-1011	-100105, 105110
-1112	-110115, 115120
-1213	-120125, 125130

Catalog Number	MERPS Model
PS-1314	MERPS□-130140
-1415	-140150
-1516	-150160
-1617	-160170
-1718	-170180
-1819	-180190
-1920	-190200

- Spare seal is recommended when coolant leaks due to damage of PS Ring
- 1 package contains 5 pcs. (1 size)

For Mega E Perfect Seal

Catalog Number	EPS Model
PS-0304	EPS□-03
	-04
-0405	-05
-0506	-06
-0607	-07

Catalog Number	EPS Model
PS-0708	EPS□-08
-0809	-09
-0910	-10
-1011	-11
-1112	-12

- Spare seal is recommended when coolant leaks due to damage of PS Ring
- 1 package contains 5 pcs. (1 size)

For New Baby Perfect Seal

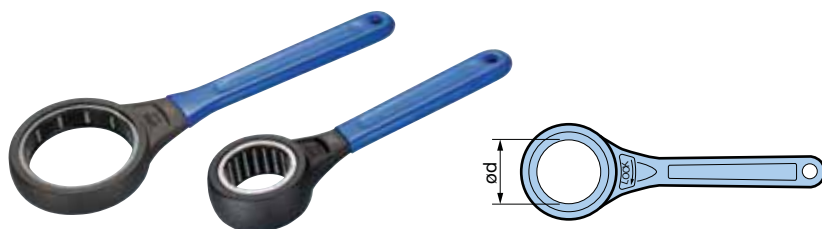
Catalog Number	BPS Model
PS-0304	BPS□-03035, 0304
-0405	-04045, 0405
-0506	-05055, 0506
-0607	-06065, 0607
-0708	-07075, 0708

Catalog Number	BPS Model
PS-0809	BPS□-08085, 0809
-0910	-09095, 0910
-1011	-10105, 1011
-1112	-11115, 1112
-1213	-12125, 1213

Catalog Number	BPS Model
PS-1314	BPS□-1314
-1415	-1415
-1516	-1516
-1617	-1617
-1718	-1718
-1819	-1819
-1920	-1920

- Spare seal is recommended when coolant leaks due to damage of PS Ring
- 1 package contains 5 pcs. (1 size)

Firm & easy tightening by one-way clutch system with a roller bearing and ratchet function.

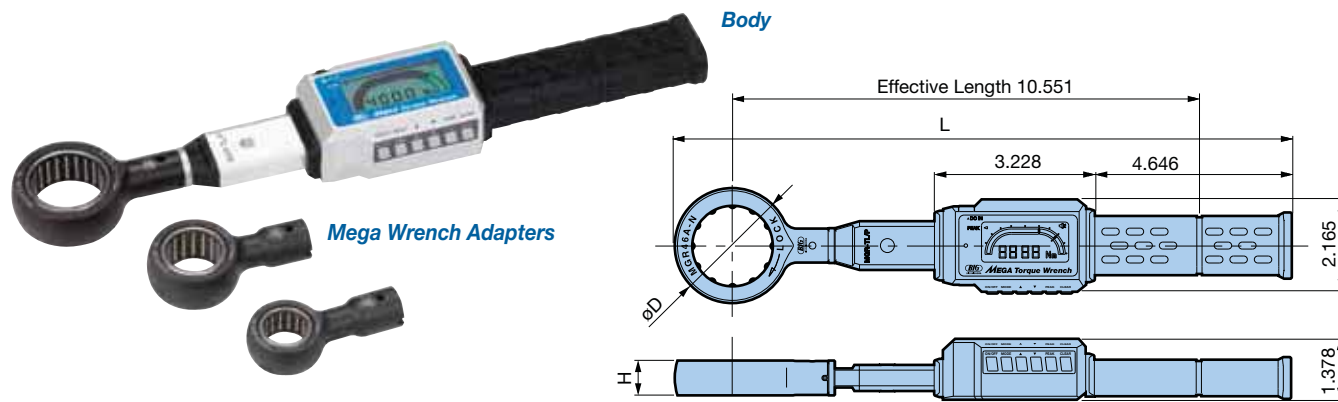


Catalog Number	ød	MEGA S	MEGA N	MEGA E	MEGA ER
MGR10	.39 (10mm)	MEGA3S	—	—	—
MGR12	.47 (12mm)	MEGA4S	—	—	—
MGR14	.55 (14mm)	MEGA6S	—	—	—
MGR18	.71 (18mm)	MEGA8S	—	—	—
MGR20	.79 (20mm)	—	MEGA6N	—	—
MGR25	.98 (25mm)	—	MEGA8N	MEGA6E	—
MGR30	1.18 (30mm)	—	MEGA10N	MEGA8E	—
MGR30L	1.18 (30mm)	—	—	—	MEGAER16
MGR35	1.38 (35mm)	—	MEGA13N	MEGA10E	—
MGR35L	1.38 (35mm)	—	—	—	MEGAER20
MGR42L	1.65 (42mm)	—	MEGA16N	MEGA13E	MEGAER25
MGR46L	1.81 (46mm)	—	MEGA20N	—	—
MGR50L	1.97 (50mm)	—	—	—	MEGAER32

Catalog Number	ød	MEGA S	MEGA N	MEGA E
MGR10TL	.39 (10mm)	MEGA3S	—	—
MGR12TL/MGR12TLS*	.47 (12mm)	MEGA4S	—	—
MGR14TL/MGR14TLS*	.55 (14mm)	MEGA6S	—	—
MGR20TL/MGR20TLS*	.79 (20mm)	—	MEGA6N	—
MGR25TL/MGR25TLS*	.98 (25mm)	—	MEGA8N	MEGA6E
MGR30TL	1.18 (30mm)	—	MEGA10N	MEGA8E
MGR35TL	1.38 (35mm)	—	MEGA13N	MEGA10E
MGR42TL	1.65 (42mm)	—	MEGA16N	MEGA13E
MGR46TL	1.81 (46mm)	—	MEGA20N	—

Catalog Number	ød	Holder Types
MGR42L	1.65 (42mm)	MEGA D(DS), HMC(S)
MGR46L	1.81 (46mm)	
MGR50L	1.97 (50mm)	
MGR55L	2.17 (55mm)	
MGR60L	2.36 (60mm)	
MGR62L	2.44 (62mm)	
MGR70L	2.76 (70mm)	
MGR80L	3.15 (80mm)	
MGR99L	3.9 (99mm)	
MGR105L	4.13 (105mm)	

DIGITAL MEGA TORQUE WRENCHES



Mega Torque Wrench Body



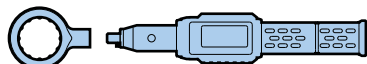
Catalog Number	MGR-TL / P
Torque Range	10-50 Nm
Minimum Read (Digit)	.01 Nm
Display	7 LCD segments → 4 digits, numerical display 20 LCD segments → bar graph
Basic Function	Peak hold Tightening completion signal → beep emission & vibration Auto power-off (5 minutes)
Power Supply	Built-in lithium battery (Approx. 500 recharges)
Operations Per Charge	4,000 tightening operations per full charge
Recharging Time	Approx. 3 hours (Using the exclusive AC adapter)
Operating Temperature	32° F - 104° F (Without dew condensing)
Weight	.64 lbs (Torque Wrench Body, excluding Mega Wrench Adapter and AC Adapter)

Mega Torque Wrench Adapter (Optional)



Catalog Number	Overall Length L	øD	H	Weight (lbs)	Suitable Collet Chuck	
					Mega New Baby Chuck	Mega E Chuck
MGR20A-N	13.976	1.417	.630	.29	MEGA6N	—
MGR25A-N	14.134	1.732	.787	.40	MEGA8N	MEGA6E
MGR30A-N	14.252	1.969	.787	.49	MEGA10N	MEGA8E
MGR35A-N	13.350	2.165	.787	.51	MEGA13N	MEGA10E
MGR42A-N	14.488	2.441	.787	.55	MEGA16N	MEGA13E
MGR46A-N	14.567	2.598	.787	.60	MEGA20N	—

Set



Catalog Number	Set Contents
SMGR-TL / P	1x Body 6x Mega Wrench Adapters (MGR20A-N through MGR46A-N)

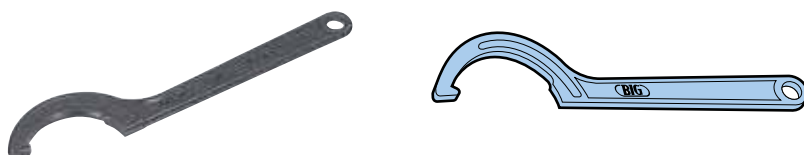


Exclusive Storage Case

Easy to carry and safely store the equipment. Molds for (1) Body and (6) Mega Wrench Adapters. Standard accessory for the body (MGR-TL/P) and set (SMGR-TL/P) models.



Catalog Number	Nut Diameter	NBS	BPS	ERN
NBK6	.79 (20mm)	NBS6	BPS6	ERN11
NBK8	.98 (25mm)	NBS8	BPS8	—
NBK10	1.18 (30mm)	NBS10	BPS10	ERN16
NBK13	1.38 (35mm)	NBS13	BPS13	ERN20
NBK16	1.65 (42mm)	NBS16	BPS16	ERN25
NBK20	1.81 (46mm)	NBS20	BPS20	—
FK45-50L	1.97 (50mm)	—	—	ERN32



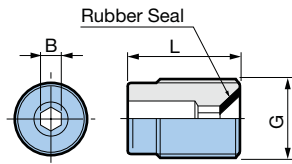
Catalog Number	Nut Diameter	Holder Type
NBK20	1.81 (46mm)	HMC(S)
FK45-50L	1.69-1.97 (43-50mm)	
FK52-55	2.05-2.17 (52-55mm)	
FK58-62L	2.28-2.44 (58-62mm)	
FK68-75L	2.68-2.95 (68-75mm)	
FK80-90L	3.15-3.54 (80-90mm)	
FK92-100	3.62-3.94 (92-100mm)	
FK110-115	4.33-4.53 (110-115mm)	

CAUTION

This wrench is available only for HMC chucks produced since April 1995.

SCREWS & BACK STOP

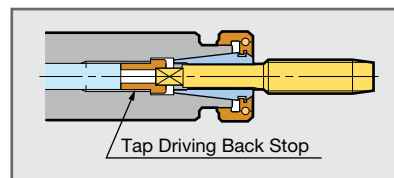
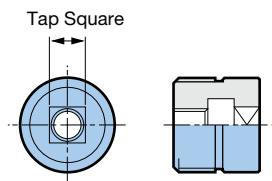
NBA, NBAM & SET SCREW



Adjusting Screw

Catalog Number	G	L	B
NBA6B	M7	.47	2.0mm
NBA8B	M9	.51	2.5mm
NBA10B	M11	.63	3.0mm

Catalog Number	G	L	B
NBA13B	M14	.79	4.0mm
NBA16B	M18	.79	4.0mm
NBA20B	M21	.79	4.0mm



The square of the tap is positively located by fitting the Tap Driving Back Stop

Tap Driving Back Stop

Tap Size	Standard	Tap Square	Chuck Model			
			NBS10	NBS13	NBS16	NBS20
M8	DIN 371	6.2mm	—	NBA13-M8DD	—	—
	JIS	5.0mm	NBA10-M8	NBA13-M8	—	—
M10	DIN 371	8.0mm	—	NBA13-M14M10DD	NBA16-M14M10DD	—
	JIS	5.5mm	NBA10-M10	NBA13-M10	NBA16-M10	—
M12	DIN 376	7.0mm	—	NBA13-M12D	NBA16-M12D	NBA20-M12D
	JIS	6.5mm	—	NBA13-M12	NBA16-M12	NBA20-M12
M14	DIN 376	9.0mm	—	—	NBA16-M14DM16D	NBA20-M14DM16D
	JIS	8.0mm	—	NBA13-M14M10DD	NBA16-M14M10DD	NBA20-M14
M16	DIN 376	9.0mm	—	—	NBA16-M14DM16D	NBA20-M14DM16D
	JIS	10.0mm	—	—	NBA16-M16	NBA20-M16
M20	DIN 376	12.0mm	—	—	—	NBA20-M20
	JIS	12.0mm	—	—	—	

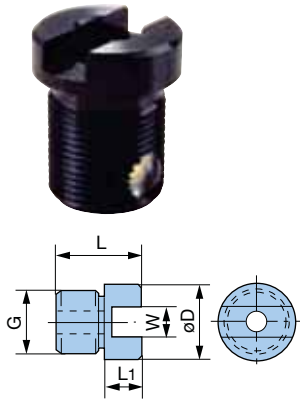
- Rigid tapping function is required on the machine tool.



Set Screw

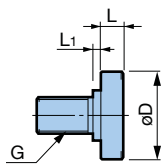
Catalog Number	Holder	Thread Size
11.690.517	EM.250	1/4"-28
11.690.518	EM.375	3/8"-24
11.690.519	EM.500	7/16"-20
11.690.520	EM.625	9/16"-18
11.690.521	EM.750	5/8"-18

Catalog Number	Holder	Thread Size
11.690.522	EM1.000	3/4"-16
11.690.522	EM1.250	3/4"-16
11.690.522	EM1.500	3/4"-16
11.690.524	EM2.000	1"-14



Adjusting Screw

Catalog Number	øD	L	L ₁	G	W	Mega DS Chuck Model	HMC
HMA-M16	.75	1.06	.24	M16 P1.5	.31	MEGA.750DS	HMC.750S
						MEGA1.000DS	HMC1.000S
						MEGA20D(DS)	HMC20(S)
						MEGA25D(DS)	HMC25(S)
HMA-M16S	.75	1.06	.24	M16 P1.5	.39	MEGA1.250DS (BCV40)	HMC32S
						MEGA32D(DS) (BBT30/40)	—
HMA-M24	1.185	1.42	.37	M24 P1.5	.39	MEGA1.250DS	—
						MEGA1.500DS	HMC32
						MEGA32D(DS)	HMC42(S)
						MEGA42D(DS)	—
						MEGA50D(DS)	—



Clamp Bolt

Clamp Bolt Type	Oil Hole w/ Clamp Bolt Type	øD	L	L ₁	G
MBA-M12	TMBA-M12	33	10	2	12
-M12H	—			—	
-M16	-M16	40	10	6	16
-M16H	—			—	
-M20	-M20	50	14	6	20
-M20H	—			—	
-M24	-M24	65		10	24



Lock Screw

Catalog Number	Adapter	Thread Size
11.690.710	SMC.750	3/8"-24
11.690.711	SMC1.000	1/2"-20
11.690.712	SMC1.250	5/8"-18
11.690.713	SMC1.500	3/4"-16
11.690.714	SMC2.000	1"-14
11.690.715	SMC2.500	1"-14

ASSEMBLY ACCESSORIES

COLLET EJECTOR & REMOVER

Collet Ejector can easily and quickly insert/remove small sizes of New Baby Collets from Mega Nuts & New Baby Nuts.



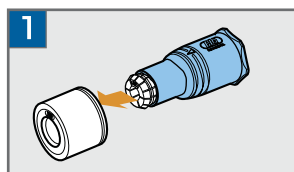
Morse Taper

Catalog Number	Description	Taper No.
NBC6-CE	MGN6, NBN6	NBC6
NBC8-CE	MGN8, NBN8	NBC8
NBC10-CE	MGN10, NBN10	NBC10
NBC13-CE	MGN13, NBN13	NBC13

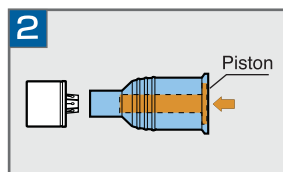
Morse Taper

Catalog Number	Description	Taper No.
NBC6E-CE	MGN6, NBN6	NBC6E
NBC8E-CE	MGN8, NBN8	NBC8E
NBC10E-CE	MGN10, NBN10	NBC10E
NBC13E-CE	MGN13, NBN13	NBC13E

How to Insert a Collet

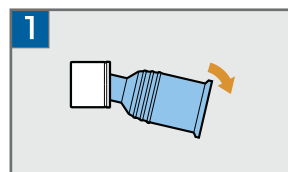


Insert the collet into the Collet Ejector.
Then insert it into the nut.

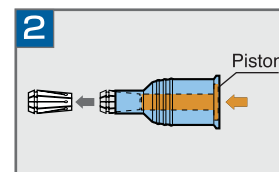


Depress the piston and
remove the Collet Ejector.

How to Remove a Collet



Tilt the Collet Ejector as shown
in the picture to remove the
collet from the nut.

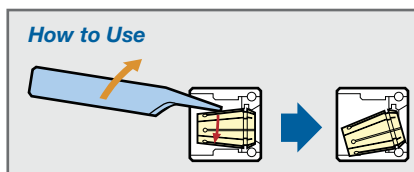


Depress the piston and the
collet will be removed.

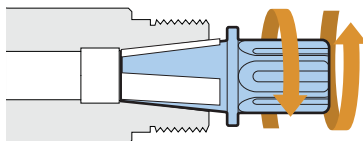
Collet Remover eases removal of the collet from the nut. Especially helpful for small collet series (MEGA6N to 13N).



Catalog Number
NBJ



Maintain the accuracy of high precision collet chucks by cleaning the internal collet taper.



α Taper Cleaner For Mega Micro Chucks

Catalog Number	Chuck Body
SC-NBC3S	MEGA3S
SC-NBC4S	MEGA4S
SC-NBC6S	MEGA6S

For Mega New Baby Chucks

Catalog Number	Chuck Body
SC-NBC6	MEGA6N, NBS6
SC-NBC8	MEGA8N, NBS8
SC-NBC10	MEGA10N, NBS10
SC-NBC13	MEGA13N, NBS13
SC-NBC16	MEGA16N, NBS16
SC-NBC20	MEGA20N, NBS20

For Mega E Chucks

Catalog Number	Chuck Body
SC-MEC6	MEGA6E
SC-MEC8	MEGA8E
SC-MEC10	MEGA10E
SC-MEC13	MEGA13E



For ER Collet Chucks

Catalog Number	Chuck Body
SC-MER11	ER11
SC-MER16	ER16
SC-MER20	ER20
SC-MER25	ER25
SC-MER32	ER32

CLEANING ACCESSORIES

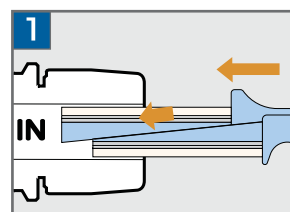
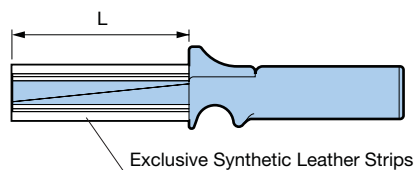
TK CLEANER

It is very difficult to remove oil and chips stuck to clamping bores, even with a wiping cloth or air spray. TK Cleaner perfectly cleans the clamping bore of a tool holder in a very simple manner to maintain the high performance of tool holders. Perfect for hydraulic chucks, milling chucks and shrink fit holders.

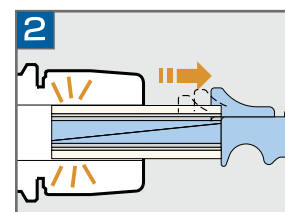


TK Cleaner

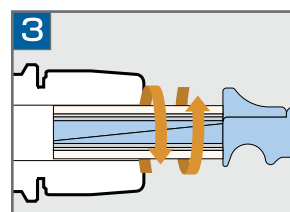
Catalog Number	Bore ø	Bore ø	Cleaning Length L	Leather Strip Qty.
TKC13	13mm	.500	2.36	2
TKC14	14mm	—		
TKC15	15mm	—		
TKC16	16mm	.625	2.76	
TKC18	18mm	—		
TKC20	20mm	.750		
TKC25	25mm	1.000	3.15	3
TKC32	32mm	1.250	3.94	4
TKC40	40mm	—	4.13	
TKC42	42mm	—		



Slide the upper section forward to reduce diameter and insert in the clamping bore.



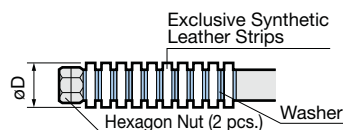
Spring action draws back the sliding section when released so the cleaning strips contact the bore surface.



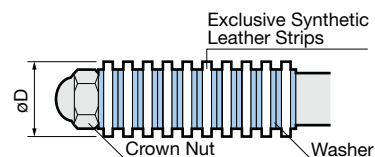
Rotate and remove the TK Cleaner to clear oil and particles.



Easy cleaning of smaller cylindrical bores by simply inserting and removing before cutting tool insertion. Perfect for hydraulic chucks and shrink fit holders.



AWC1/4
AWC6



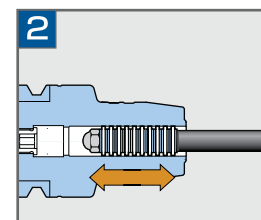
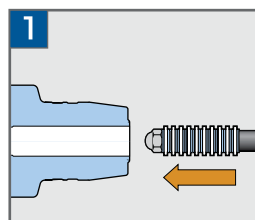
AWC5/16 - AWC 9/16
AWC7-12

Inch Style

Catalog Number	øD
AWC1/4	.250
AWC5/16	.312
AWC3/8	.375
AWC7/16	.437
AWC1/2	.500
AWC9/16	.562

Metric Style

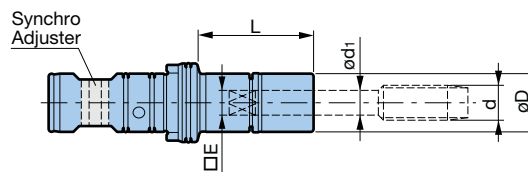
Catalog Number	øD
AWC6	6mm
AWC7	7mm
AWC8	8mm
AWC9	9mm
AWC10	10mm
AWC11	11mm
AWC12	12mm



TAP HOLDERS ANSI STANDARD



AVAILABLE IN
SHORT - EXTRA LONG
1.25", 3", 4", 6" & 8"



MGT6 – Inch Style (øD=.63", 16mm)

Catalog Number	Tapping Range d	ød ₁	□E	L
MGT6-No.6-1.25	No.2-6	.141	.110	1.25
-3				3.00
-4				4.00
-6				6.00
-No.8-1.25	No.8	.168	.131	1.25
-3				3.00
-4				4.00
-6				6.00
-No.10-1.25	No.10	.194	.152	1.25
-3				3.00
-4				4.00
-6				6.00
-8				8.00
-No.12-1.25	No.12	.220	.165	1.25
-3				3.00
-4				4.00
-6				6.00
-8				8.00

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in inches

ACCESSORIES



MGT12 – Inch Style (øD=.79", 20mm)

Catalog Number	Tapping Range d	ød ₁	□E	L
MGT12-AU1/4-1.25	AU1/4	.255	.191	1.25
-3				3.00
-4				4.00
-6				6.00
-8				8.00
-AU5/16-1.25	AU5/16	.318	.238	1.25
-3				3.00
-4				4.00
-6				6.00
-8				8.00
-AU7/16-1.25	AU7/16	.323	.242	1.25
-3				3.00
-4				4.00
-6				6.00
-8				8.00

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in inches

ACCESSORIES



MGT20 – Inch Style (øD=1.18", 30mm)

Catalog Number	Tapping Range d	ød ₁	□E	L
MGT20-AU1/2-1.5	AU1/2	.367	.275	1.50
-3.5				3.50
-4.5				4.50
-6				6.00
-AU3/8-1.5	AU3/8	.381	.286	1.50
-3.5				3.50
-4.5				4.50
-6				6.00
-AU9/16-1.5	AU9/16	.429	.322	1.50
-3.5				3.50
-4.5				4.50
-6				6.00
-AU5/8-1.5	AU5/8	.480	.360	1.50
-3.5				3.50
-4.5				4.50
-6				6.00
-AU11/16-1.5	AU11/16	.542	.406	1.50
-3.5				3.50
-4.5				4.50
-6				6.00
-AU3/4-1.5	AU3/4	.590	.442	1.50
-3.5				3.50
-4.5				4.50
-6				6.00
-AP1/8-1.5	AP1/8	.4375	.328	1.50
-3.5				3.50
-4.5				4.50
-6				6.00
-AP1/4-1.5	AP1/4	.5625	.421	1.50
-3.5				3.50
-4.5				4.50
-6				6.00

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in inches

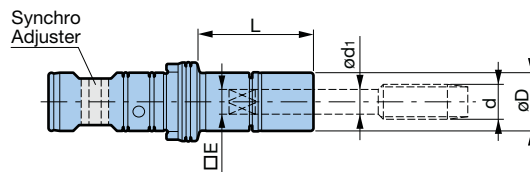
ACCESSORIES



TAP HOLDERS JIS STANDARD



AVAILABLE IN
SHORT - EXTRA LONG
30mm, 70mm, 100mm,
150mm & 200mm



MGT6 — Metric Style (øD=16mm)

Catalog Number	Tapping Range d			ød ₁	□E	L
	Metric	Pipe	Unify			
MGT6-M2-30	M2	—	JIS No.3	3.0	2.5	30
-70						70
-100						100
-150						150
-M3-30	M3	—	JIS No.5	4.0	3.2	30
-70						70
-100						100
-150						150
-M4-30	M4	—	JIS No.6	5.0	4.0	30
-70						70
-100						100
-150						150
-M5-30	M5	—	JIS No.8	5.5	4.5	30
-70						70
-100						100
-150						150
-M6,U1/4-30	M6	—	JIS No.10	6.0	4.5	30
-70						70
-100						100
-150						150
-200	M6	—	JIS U1/4	6.0	4.5	200
-70						70
-100						100
-150						150

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in millimeters

ACCESSORIES



MGT12 — Metric Style (øD=20mm)

Catalog Number	Tapping Range d			ød ₁	□E	L
	Metric	Pipe	Unify			
MGT12-M6,U1/4-30	M6	—	JIS U1/4	6.0	4.5	30
-70						70
-100						100
-150						150
-200	M6	—	JIS U5/16	6.1	5.0	200
-M6,U5/16-30						30
-70						70
-100						100
-150	M8	—	JIS U5/16	6.2	5.0	150
-200						200
-M8-30						30
-70						70
-100	M8	—	JIS U5/16	6.2	5.0	100
-150						150
-200						200
-M10,U3/8-30	M10	—	JIS U3/8	7.0	5.5	30
-70						70
-100						100
-150						150
-200	M10	—	JIS U3/8	7.0	5.5	200
-M10,U7/16,P1/8-30						30
-70						70
-100						100
-150	M12	—	JIS U7/16	8.0	6.0	150
-200						200
-M12-30						30
-70						70
-100	M12	—	JIS U7/16	8.5	6.5	100
-150						150
-200						200

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in millimeters

ACCESSORIES



MGT20 – Metric Style (øD=30mm)

Catalog Number	Tapping Range d			ød ₁	□E	L
	Metric	Pipe	Unify			
MGT20-M12-35	M12	—	—	8.5	6.5	35
-85						85
-115						115
-150						150
-M12, -U1/2-35	—	—	JIS U1/2	9.0	7.0	35
-85						85
-115						115
-150						150
-M14,U9/16-35	M14	—	JIS U9/16	10.5	8.0	35
-85						85
-115						115
-150						150
-M14,P1/4-35	—	JIS P1/4	—	11.0	9.0	35
-85						85
-115						115
-150						150
-M14,U5/8-35	—	—	JIS U5/8	12.0	9.0	35
-85						85
-115						115
-150						150
-M16-35	M16	—	—	12.5	10.0	35
-85						85
-115						115
-150						150
-M14,U3/4-35	—	—	JIS U3/4	14.0	11.0	35
-85						85
-115						115
-150						150
-M14,P3/8-35	M18	JIS P3/8	—	14.0	11.0	35
-85						85
-115						115
-150						150
-M14,M20-35	M20	—	—	15.0	12.0	35
-85						85
-115						115
-150						150

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in millimeters

ACCESSORIES

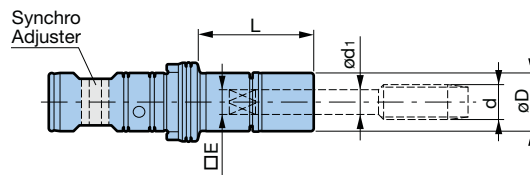


TAP HOLDERS

DIN & ISO STANDARD



AVAILABLE IN
SHORT - EXTRA LONG
35mm, 85mm, 115mm & 150mm



MGT6 – Metric Style (øD=16mm)

Catalog Number	Tapping Range d					ød ₁	□E	L
	DIN371	DIN376	DIN353	ISO529	ISO2284			
MGT6-031025-30								30
-70								70
-100	—	—	—	M3	—	3.15	2.5	100
-150								150
-035027-30								30
-70								70
-100	M3	M5	—	—	—	3.5	2.7	100
-150								150
-040032-30								30
-70								70
-100	—	—	—	M3	—	4.0	3.15	100
-150								150
-045034-30								30
-70								70
-100	M4	M6	—	—	—	4.5	3.4	100
-150								150
-050040-30								30
-70								70
-100	—	—	—	M5	—	5.0	4.0	100
-150								150
-200								200
-060049-30								30
-70								70
-100	M5 M6	M8	—	—	—	6.0	4.9	100
-150								150
-200								200

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in millimeters

ACCESSORIES



MGT12 – Metric Style (øD=20mm)

Catalog Number	Tapping Range d					ød ₁	□E	L
	DIN371	DIN376	DIN353	ISO529	ISO2284			
MGT12-060049-30	M5 M6	M8	—	—	—	6.0	4.9	30
-70								70
-100								100
-150								150
-200								200
-063050-30	—	—	—	M6	—	6.3	5.0	30
-70								70
-100								100
-150								150
-200								200
-070055-30	—	M10	1/8	—	—	7.0	5.5	30
-70								70
-100								100
-150								150
-200								200
-080063-30	M8	—	—	M8	1/8	8.0	6.3	30
-70								70
-100								100
-150								150
-200								200
-090071-30	—	M12	—	M12	—	9.0	7.1	30
-70								70
-100								100
-150								150
-200								200

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in millimeters

ACCESSORIES

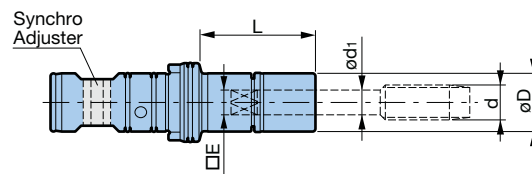


TAP HOLDERS

DIN & ISO STANDARD



AVAILABLE IN
SHORT 4", LONG 6" &
EXTRA LONG 8"



MGT20 – Metric Style (øD=30mm)

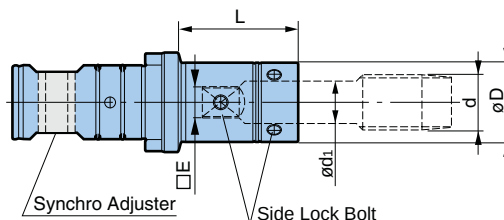
Catalog Number	Tapping Range d					ød ₁	□E	L
	DIN371	DIN376	DIN353	ISO529	ISO2284			
MGT20-090071-35								35
-85								85
-115	—	M12	—	M12	—	9.0	7.1	115
-150								150
-100080-35								35
-85								85
-115	M10	—	—	M10	1/4	10.0	8.0	115
-150								150
-110090-35								35
-85								85
-115	—	M14	1/4	—	—	11.0	9.0	115
-150								150
-112090-35								35
-85								85
-115	—	—	—	M14	—	11.2	9.0	115
-150								150
-120090-35								35
-85								85
-115	—	M16	3/8	—	—	12.0	9.0	115
-150								150
-125100-35								35
-85								85
-115	—	—	—	M16	3/8	12.5	10.0	115
-150								150
-140110-35								35
-85								85
-115	—	M18	—	—	—	14.0	11.0	115
-150								150
-140112-35								35
-85								85
-115	—	—	—	M18 M20	—	14.0	11.2	115
-150								150

- Nut is included
- Wrench must be ordered separately
- All dimensions shown in millimeters

ACCESSORIES



TAP HOLDERS FOR LARGE TAPS ANSI & JIS STANDARD



MGT36 – For Large Taps, Inch Style ANSI Standard

Catalog Number	Tapping Range d	ϕd_1	$\square E$	ϕD	L
MGT36-AU7/8-2.5	AU7/8	.697	.523	1.34	2.50
-AU1-2.5	AU1	.800	.600	1.62	
-AU1.1/8-2.5	AU1-1/8	.896	.672	1.69	
-AU1.1/4-2.5	AU1-1/4	1.021	.766	1.97	
-AU1.3/8-2.5	AU1-3/8	1.108	.831	2.09	
-AP3/8-2.5	AP3/8	.700	.531	1.34	
-AP1/2-2.5	AP1/2	.688	.515	1.34	
-AP3/4-2.5	AP3/4	.906	.679	1.69	
-AP1-2.5	AP1	1.125	.843	2.09	

• All dimensions shown in inches

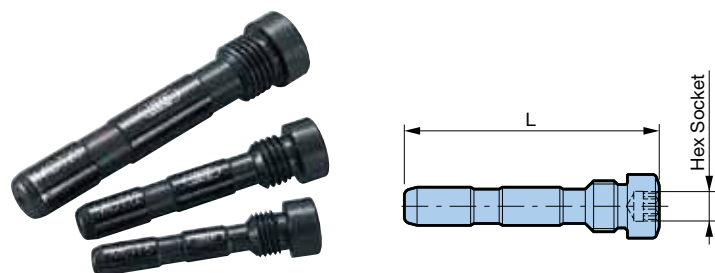
MGT36 – For Large Taps, Metric Style JIS Standard

Catalog Number	Tapping Range d	ϕd_1	$\square E$	ϕD	L
MGT36-M20-65	M20	15	12	32	65
-M22-65	M22	17	13	34	
-M24-65	M24	19	15	39	
-M27-65	M27	20	15	40	
-M30-65	M30	23	17	43	
-M33-65	M33	25	19	49	
-M36-65	M36	28	21	52	
-P1/2-65	P1/2	18	14	35	
-P3/4-65	P3/4	23	17	43	
-P1-65	P1	26	21	50	

• All dimensions shown in millimeters

SPARE PARTS MGT6/12/20

Secures the Tap Holder Into the Body

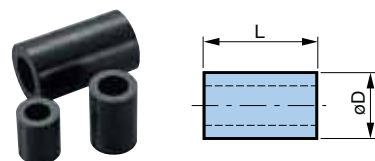


MGT Set Screw

Catalog Number	Hex Socket Size	L	Body
MGT6SS	4mm	35mm	MGT6
MGT12SS	4mm	40mm	MGT12
MGT20SS	5mm	53mm	MGT20



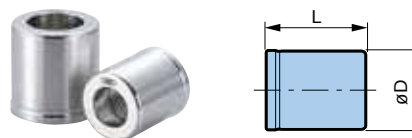
Replaceable Bushing in the Tap Holder



Synchro Adjuster

Catalog Number	øD	L	Body
MGT6SA	9mm	11mm	MGT6
MGT12SA	10mm	15mm	MGT12
MGT20SA	14mm	24mm	MGT20

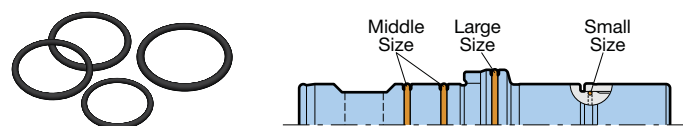
• Sold in packages of 5 pcs.



Nut

Catalog Number	øD	L	Tap Holder
MGN6T	16mm	19mm	MGT6-d-□
MGN12T	20mm	21mm	MGT12-d-□
MGN20T	30mm	24mm	MGT20-d-□

O Ring - For Mega Synchro Tapping Holder



Catalog Number	Tap Holder
MGT6OR	MGT6-d-□
MGT12OR	MGT12-d-□
MGT20OR	MGT20-d-□

• Set includes 1 small, 1 large & 2 middle sizes

Aids Easy Adjustment of Tap Projection Length

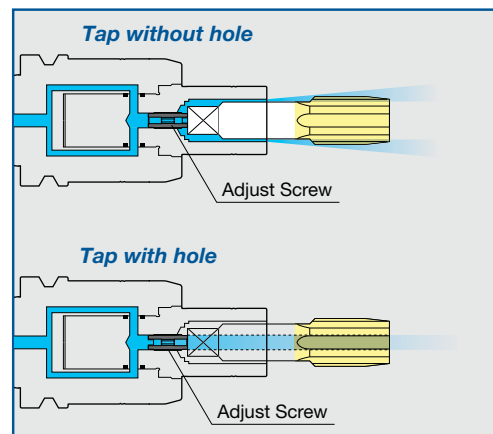
Functions:

- Adjustment of tap projection length (adjustable amount: 3mm)
- Coolant supply adjustable in 2 ways by reversing the Adjust Screw

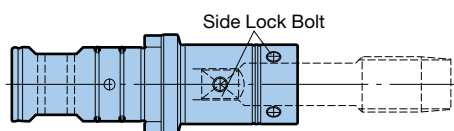


Adjust Screw

Catalog Number	Tap Holder
MGT36AJ	MGT36



Spare Locking Screw to Clamp a Tap



Side Lock Bolt Set

Catalog Number	ANSI Tap Holder Model	JIS Tap Holder Model	Bolt Size
MGT36SL6	MGT36-AU7/8-2.5	MGT36-M20-65	M6x8L (x4) + M6x10L (x2)
	MGT36-AP3/8-2.5	MGT36-M22-65	
	MGT36-AP1/2-2.5	MGT36-P1/2-65	
MGT36SL8	MGT36-AU1-2.5	MGT36-M24-65	M8x10L (x4) + M8x12L (x2)
	MGT36-AU1.1/8-2.5	MGT36-M27-65	
	MGT36-AP3/4-2.5	MGT36-M30-65	
MGT36SL10	MGT36-AU1.1/4-2.5	MGT36-P3/4-65	M10x12L (x4) + M10x14L (x2)
	MGT36-AU1.3/8-2.5	MGT36-M33-65	
	MGT36-AP1-2.5	MGT36-M36-65	
	—	MGT36-P1-65	



Set Screw

Catalog Number	Tap Holder
MGT36SS	MGT36



Synchro Adjuster

Catalog Number	Tap Holder
MGT36SA	MGT36

- Sold in packages of 5 pcs.

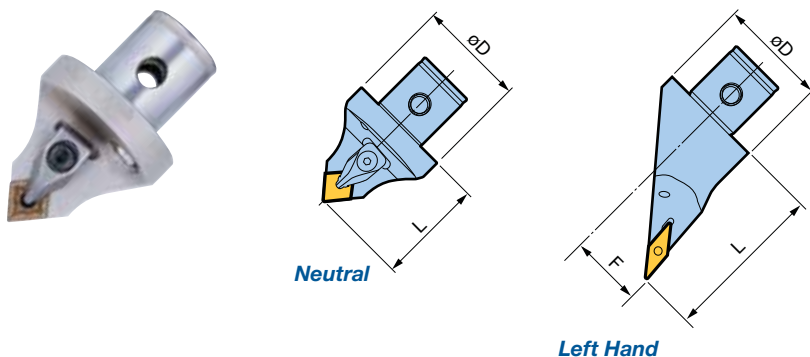


O-Ring Set

Catalog Number	Tap Holder
MGT36OR	MGT36

MTC CARTRIDGES

45° TYPE S



45° Type S (ISO 12164-3)

Right Hand

Left Hand

Neutral

Lead Angle	Type	Hand	Catalog Number	Insert	L	F	øD	Clamp Piece		
5°	S50	N	S50-DCLNN-00050-12	CN43 Rhombic 80°	1.97	0	1.97	CP2		
	S63		S63-DCLNN-00060-16	CN54 Rhombic 80°	2.36		2.48	CP3		
			S63-DCLNN-00060-19	CN64 Rhombic 80°				CP5		
3°	S50	R	S50-DTJNR-00050-16	TN33 Triangle 60°	1.97	0	1.97	CP1		
		L	-DTJNL-00050-16					TN43 Triangle 60°	CP2	
		R	-DTJNR-00050-22	TN54 Triangle 60°					2.36	2.48
		L	-DTJNL-00050-22							
	S63	R	S63-DTJNR-00060-27	TN54 Triangle 60°	2.36		2.48	CP3		
		L	-DTJNL-00060-27							
3°	S50	R	S50-DDJNR-00050-15	* DN43 DN44 Rhombic 55°	1.97	0	1.97	CP2		
		L	-DDJNL-00050-15		2.95	1.30				
		R	-DDJNR-33075-15						1.97	0
		L	-DDJNL-33075-15							
17.5°	S50	N	S50-DDHNN-00050-15		1.97	0				
5°	S50	R	S50-SVLBR-33075-16	VB33 VC33 Rhombic 35°	2.95	1.30	1.97	** M3.5		
		L	-SVLBL-33075-16		1.97	0				
27.5°	S50	N	S50-SVQBN-00050-16							1.97

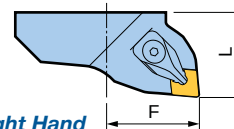
*DN43 (3/16" thickness) carbide shim is included as standard, in case of DN44 insert (1/4" thickness), please replace the standard carbide shim with DNS1506 (option)

**M3.5 is screw-on type

- Wrenches are not included with the cartridges, please order separately
- Inserts are not included, accepts ISO standard inserts

ACCESSORIES

 CLAMP PIECE PG. 280	 SCREW PG. 280	 SPRING PG. 280	 LEVER PIN PG. 281
 BOLT PG. 281	 CLAMP SCREW SET PG. 281	 INSERT CLAMPING SCREW SET PG. 281	



90° Type F (ISO 12164-3)

Right Hand

Left Hand

Right Hand

Lead Angle	Type	Hand	Catalog Number	Insert	L	F	Clamp Piece
5°	F50	R	F50-DCLNR-35035-12	CN43 Rhombic 80°	1.38	1.38	CP2
	F63	R	F63-DCLNR-45035-12			1.77	
	F50	L	F50-DCLNL-35035-12			1.38	
	F63	L	F63-DCLNL-45035-12			1.77	
	F50	R	F50-DCLNR-35035-16	CN54 Rhombic 80°	1.38	1.38	CP3
	F63	R	F63-DCLNR-45035-16			1.77	
	F50	L	F50-DCLNL-35035-16			1.38	
	F63	L	F63-DCLNL-45035-16			1.77	
	F63	R	F63-PCLNR-45045-19	CN64 Rhombic 80°	1.77	1.77	Lever Lock
	F63	L	F63-PCLNL-45045-19			1.77	
3°	F50	R	F50-DTJNR-35035-16	TN33 Triangle 60°	1.38	1.38	CP1
	F63	R	F63-DTJNR-45035-16			1.77	
	F50	L	F50-DTJNL-35035-16			1.38	
	F63	L	F63-DTJNL-45035-16			1.77	
	F63	R	F63-DTJNR-45035-22	TN43 Triangle 60°	1.38	1.77	CP2
	F63	L	F63-DTJNL-45035-22			1.77	
5°	F63	R	F63-DWLNR-45045-08	WN43 Hexagon	1.77	1.77	CP2
	F63	L	F63-DWLNL-45045-08			1.77	
3°	F50	R	F50-DDJNR-35035-15	* DN43 DN44 Rhombic 55°	1.38	1.38	CP2
	F63	R	F63-DDJNR-45035-15			1.77	
	F50	L	F50-DDJNL-35035-15			1.38	
	F63	L	F63-DDJNL-45035-15			1.77	
	F50	R	F50-DDJNR-35050-15		1.97	1.38	CP2
	F63	R	F63-DDJNR-45055-15		2.17	1.77	
	F50	L	F50-DDJNL-35050-15		1.97	1.38	
	F63	L	F63-DDJNL-45055-15		2.17	1.77	
17.5°	F63	R	F63-DDHNR-45040-15		1.58	1.77	CP2
	F63	L	F63-DDHNL-45040-15			1.77	
32°	F63	R	F63-DDUNR-45035-15		1.38	1.77	CP2
	F63	L	F63-DDUNL-45035-15			1.77	
27.5°	F50	R	F50-SVQBR-35035-16	VB33 VC33 Rhombic 35°	1.38	1.38	** M3.5
	F63	R	F63-SVQBR-45035-16			1.77	
	F50	L	F50-SVQBL-35035-16			1.38	
	F63	L	F63-SVQBL-45035-16			1.77	
3°	F63	R	F63-SVJBR-45055-16		2.17	1.77	
	F63	L	F63-SVJBL-45055-16			1.77	

*DN43 (3/16" thickness) carbide shim is included as standard, in case of DN44 insert (1/4" thickness), please replace the standard carbide shim with DNS1506 (option)

**M3.5 is screw-on type

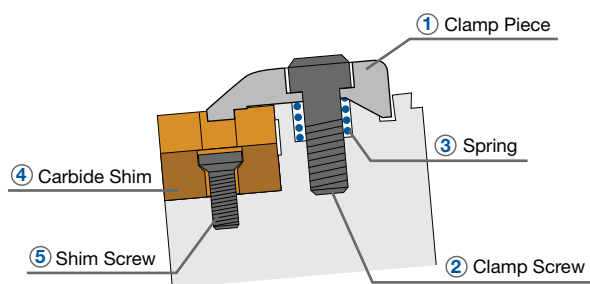
- Wrenches are not included with the cartridges, please order separately
- Inserts are not included, accepts ISO standard inserts

ACCESSORIES

CLAMP PIECE PG. 280	SCREW PG. 280	SPRING PG. 280	LEVER PIN PG. 281
BOLT PG. 281	CLAMP SCREW SET PG. 281	INSERT CLAMPING SCREW SET PG. 281	

MTC SPARE PARTS CLAMP & SHIM SET

Double Clamp Type



Catalog Number	 ① Clamp Piece	 ② Screw	 ③ Spring	Insert
SCP1	CP1	M5x20	ø8x10	TN33
SCP2	CP2			CN43, TN43 WN43, DN43, DN44
SCP3	CP3			CN54, TN54
SCP5	CP5			CN64

- A set contains one clamp piece, screw and spring
- A wrench is not included, but available as an optional accessory (Model: T-4)

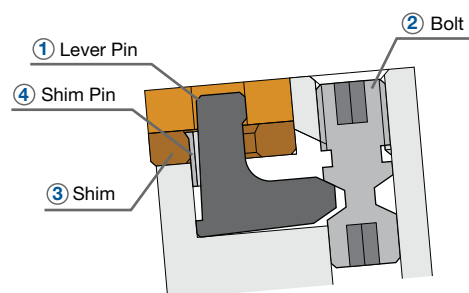
Carbide Shim Set

Catalog Number	④ Carbide Shim	 ⑤ Screw	Torx Size	Insert
STNS1604	TNS1604	M3x7	T10	TN33
STNS2204	TNS2204	M4x8	T15	TN43
STNS2706	TNS2706	M5x12	T20	TN54
SDNS1504	DNS1504	M4x8	T15	DN43
SDNS1506	DNS1506	M4x8	T15	DN44
SCNS1204	CNS1204	M4x8	T15	CN43
SCNS1606	CNS1606	M5x12	T20	CN54
SCNS1906	CNS1906	M5x12	T20	CN64
SWNS0804	WNS0804	M4x8	T15	WN43

- A set contains one carbide shim and screw
- A wrench is not included, please order separately (Model: DA-T10, DA-T15, DA-T20)

Lever Lock Type

For F63-PCLNR(L)450



Lever Lock Set

Catalog Number	① Lever Pin	② Bolt	Spanner Size
SLCL6	LCL6	LCS6	4mm

Carbide Shim Set

Catalog Number	③ Shim	④ Shim Pin
SLSC63	LSC63	LSC6

For Type S Basic Holder



Clamp Screw Set

Catalog Number	Type	Screw Size	Wrench Model
10.690.435	S50	M10x1.0	10.690.816
10.690.436	S63	M12x1.0	10.690.817

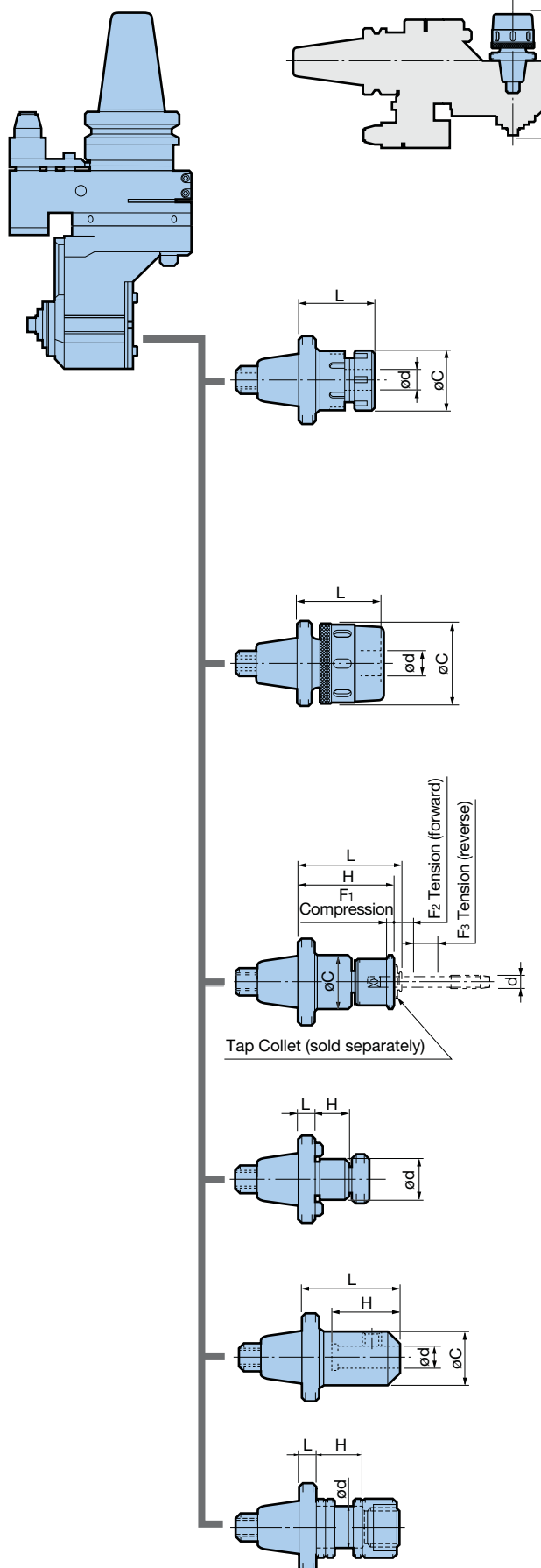
For VB33/VC33 Inserts



Insert Clamping Screw Set

Catalog Number	Contents
S3508DS	M3.5 screws10 pcs. WrenchDA-T15 1 pc.





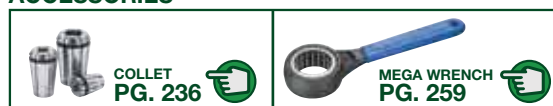
Min. Access
Bore øF

øF=Minimum bore size that an AG35 adapter can fit into, excluding the cutting tool

New Baby Chuck

Catalog Number	ød	L	øC	øF	Weight (lbs.)
AG35-NBS10	.059-.394	1.850	1.181	6.378	1.3
-NBS13	.098-.512	2.126	1.378	6.614	1.5
-NBS16	.098-.630		1.654	6.693	1.8
-NBS20	.098-.787		1.811	6.693	2.0

ACCESSORIES



New Hi-Power Milling Chuck

Catalog Number	ød	L	øC	øF	Weight (lbs.)
AG35-HMC.750	.750	2.362	2.079	7.008	3.3

ACCESSORIES



Auto Tapper Type B

Catalog Number	ød	L	øC	H	F ₁	F ₂	F ₃	Weight (lbs.)
AG35-ATB12E	No.6-U1/2	3.150	1.594	2.835	.020	.197	.157	2.2
-ATB20E	U3/8-U3/4	4.528	2.264	4.035		.256	.197	3.7

• Tap collets with torque control or positive drive available upon request

Shell Mill Adapter

Catalog Number	ød	L	H	Weight (lbs.)
AG35-SM1.000-20	1.000	.787	.689	2.2

End Mill Adapter

Catalog Number	ød	L	øC	H	øF	Weight (lbs.)
AG35-EM.750	.750	3.248	1.750	3.880	7.756	3.0

Stub Arbor

Catalog Number	ød	L	H	Weight (lbs.)
AG35-SA1.000	1.000	.394	1.181	2.8

PROFIT MAKER ACCESSORIES

STOP BLOCKS

Set Up Information For Angle Head

Preparing the Stop Block

The Angle Head utilizes a Locating Pin that engages with the Stop Block, which is mounted to the machine spindle to prevent radial movement of the Angle Head during operation. Therefore, it is necessary to use a Stop Block with the proper dimensions to match the Locating Pin of the Angle Head. Please contact a BIG Kaiser agent if using an existing Stop Block.



1. Standard Setup of the Locating Pin

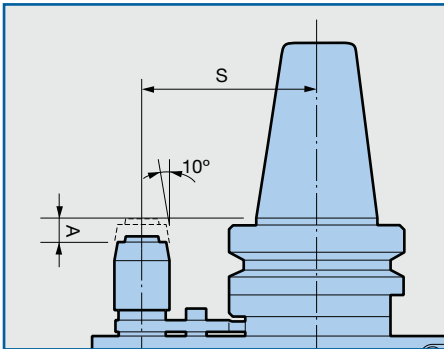
Please note that the “S” dimension and Fixed Length “A” are not adjustable by the user. If the standard dimensional values shown below are not suitable for your machine, please contact a BIG Kaiser agent.

“S” Dimension

The distance from the centerline of the Angle Head spindle to the centerline of the Locating Pin.

Fixed Length “A”

The axial distance from the gage line to the top of the Locating Pin, when the Locating Pin is properly engaged in the Stop Block.



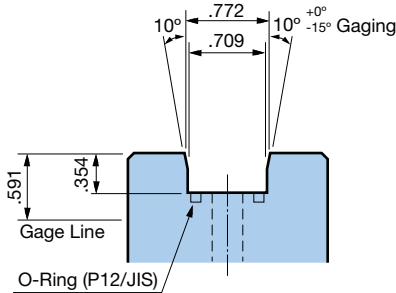
Catalog Number	Dimension S	Fixed Length A
BCV/BBT40	2.559	.315
BCV/BBT50	4.331	.236

2. Stop Block Dimensions

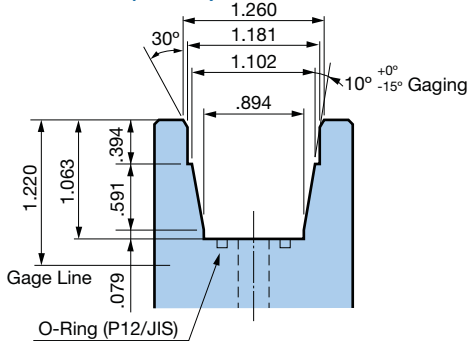
Please order a Stop Block from the machine tool builder. Refer to the following diagrams for the proper Stop Block groove dimensions and configurations for use with a Angle Head.



S=2.559" (65mm)
S=3.150" (80mm)



S=4.331" (110mm)

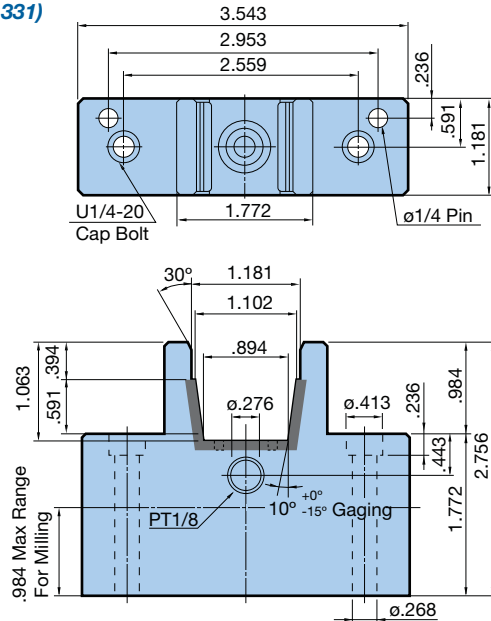


CAUTION

For a BCV50/BBT50 unit with an 3.150 "S" dimension, please use the Stop Block dimensions for BCV40/BBT40, as the Locating Pin dimension differs from that of a standard unit with a 4.331 "S" dimension.

If a pre-made Stop Block is unobtainable from the machine tool builder, a semi-finished Stop Block can be used. Please consult with the machine tool builder for selection, machining, and mounting of the semi-finished Stop Block.

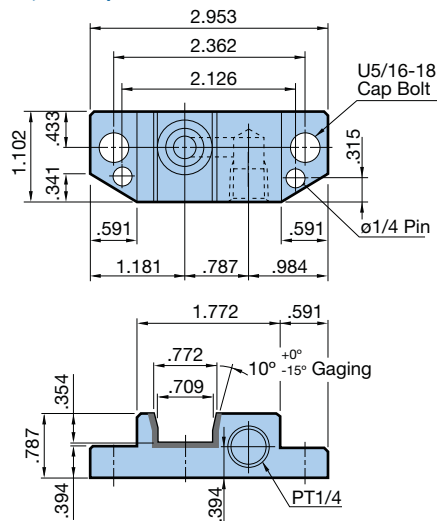
Catalog Number
SB-G/E



■ Indicates heat treatment (HRC45-50), all other surfaces can be milled

- Adjustment to the required height by milling the base
- Fix the stop block by inserting two dowel pins (ø1/4)

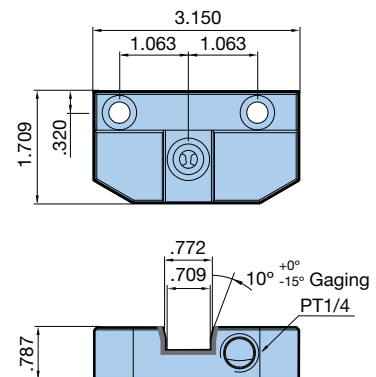
Catalog Number
SB-F



Indicates heat treatment (HRC45-50), all other surfaces can be milled

- Fix the stop block by inserting two dowel pins ($\phi 1/4$)
- Stop Block SB-F is not height-adjustable)

Catalog Number
SB-H40



Indicates heat treatment (HRC45-50), all other surfaces can be milled

- For use with most Haas 40 taper machines

PROFIT MAKER ACCESSORIES

LOCATING PIN

Set Up Information For Air Power Spindle, High Spindle & Hi-Jet Holder

Preparing the Locating Pin and Stop Block

The Air Power Spindle, High Spindle and Hi-Jet Holder utilize a Locating Pin that engages with the Stop Block, which is mounted to the machine spindle. Please refer to the following instructions to select/adjust the Locating Pin, and to prepare it for the Stop Block.

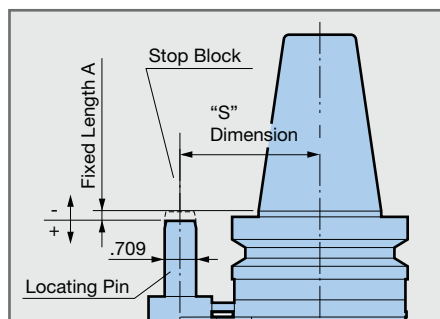
1. Standard Setup of the Locating Pin

"S" Dimension

The distance from the centerline of the holder to the centerline of the Locating Pin. Please note that this dimension is not adjustable by the user.

Fixed Length "A"

The axial distance from the gage line of the spindle to the bottom of the groove on the Stop Block. This dimension is adjustable by the user. Three (3) Locating Pin models are available: LP-A, LP-B, and LP-C. Each Locating Pin is adjustable to provide a different range of Fixed Length "A", as shown in the tables below. Please specify the required Fixed Length "A" when ordering. Otherwise, it will be delivered set at the standard, .236.



Catalog Number	"S" Dimension
BCV/CV/BBT40	2.559
BCV/CV/BBT50	3.150

High Spindle/Air Power Spindle

Catalog Number	BCV40	BCV50	BBT40	BBT50
LP-A	-.354 / +.236	-.157 / +.433	-.945 / -.354	-.354 / +.236
LP-B	+.236 / +.827	+.433 / +.1.024	-.354 / +.236	+.236 / +.827
LP-C	+.827 / +1.417	+1.024 / +1.614	+.236 / +.827	+.827 / +1.417

 Indicates adjustable range of the standard setup

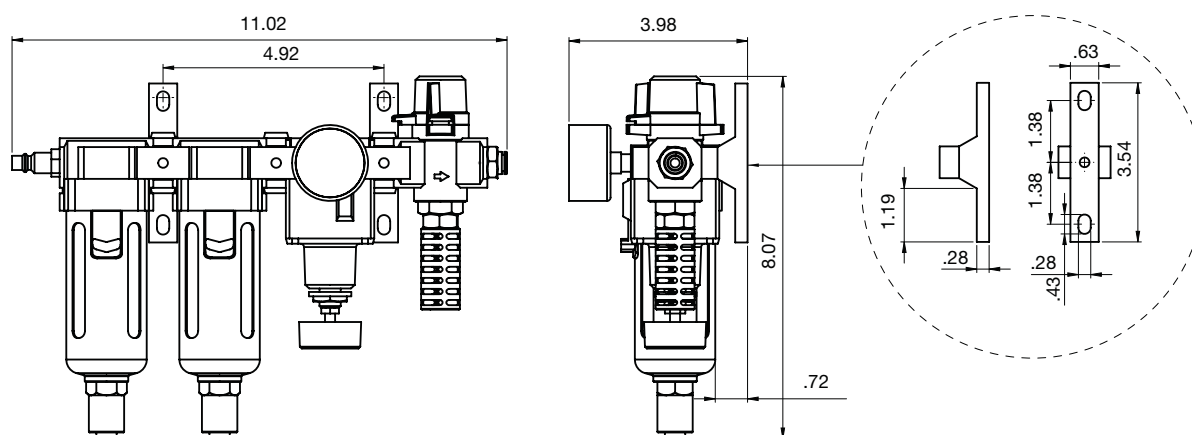
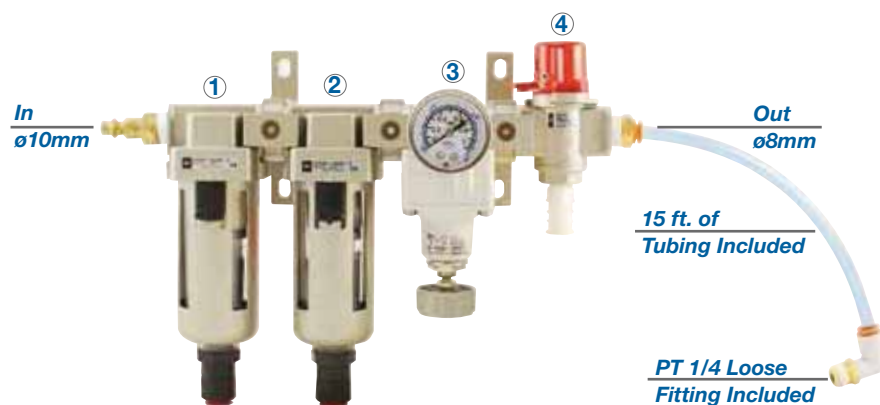
Hi-Jet Holder

Catalog Number	CV/BT40	CV/BT50	CV40-OSL1.250	CV50-OSL2.000	BT50-OSL2.000
LP-A	-.236 / +.354	-.354 / +.236	-.197 / +.394	-.079 / +.512	+.118 / +.709
LP-B	+.354 / +.945	+.236 / +.827	+.394 / +.984	+.512 / +1.102	+.709 / +.1.299
LP-C	+.945 / +1.535	+.827 / +1.417	+.984 / +1.575	+1.102 / +1.535	+1.299 / +1.535

 Indicates adjustable range of the standard setup

Air Filtering for Turbine Drive

1. Mist separator (filtration: .012")
2. Micro mist separator (filtration: .0004")
3. Precision regulator
4. Three port valves for extracting pressurization (non-grease type)

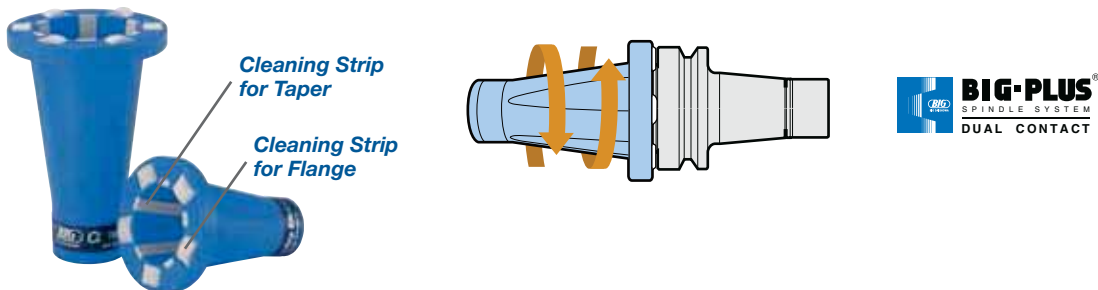


Catalog
Number

XF1-NPT

α TOOLING & HSK EXTERNAL TAPER CLEANER

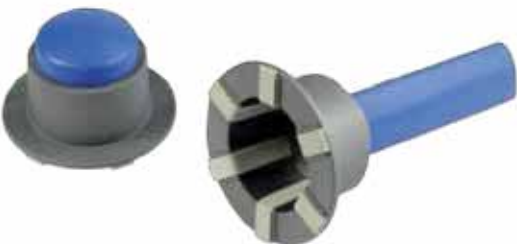
For the cleaning of both mating surfaces of BIG-PLUS® tool holders, which require absolute cleanliness for optimum performance. Oil and particles on both the taper and flange of 7/24 taper shanks are easily removed.



α Tooling Cleaner

Catalog Number	Taper No.
SCE-30	30
SCE-40	40

Reliable and indispensable taper cleaners for the efficient cleaning of HSK tool holder shanks. Cleaning strips positioned at well spaced intervals will remove even large residual particles. Sturdy construction with high oil and grease resistance.



HSK External Taper Cleaner

Catalog Number	Description	Taper No.
20.580.041	Taper Cleaner w/ Handy Cap	HSK-A/C/E40
20.580.042	Taper Cleaner w/ Cylindrical Handle	
20.580.051	Taper Cleaner w/ Handy Cap	HSK-A/C/E50
20.580.052	Taper Cleaner w/ Cylindrical Handle	
20.580.064	Taper Cleaner w/ Handy Cap	HSK-A/C/E63
20.580.065	Taper Cleaner w/ Cylindrical Handle	
20.580.081	Taper Cleaner w/ Handy Cap	HSK-A/C/E80
20.580.082	Taper Cleaner w/ Cylindrical Handle	
20.580.101	Taper Cleaner w/ Handy Cap	HSK-A/C/E100
20.580.102	Taper Cleaner w/ Cylindrical Handle	



The unbeatable tool to ensure absolute cleanliness of tapered spindles, which maintains the precision and prolongs the life of your expensive machine tools, cutting tools and tool holders.

- Robust construction with high oil and grease resistance
- Plastic injection molded core with fluted locations for cleaning strips ensures accurate sizing and cleaning efficiency
- Cleaning strips will maintain adhesion to the taper core due to inset location even under scrubbing action
- Cleaning strips positioned at well spaced intervals to remove even large residual particles
- A quality control product



ISO Taper (With Pull Stud Recess)

Catalog Number	Description	Taper No.
20.580.220	ISO20 Spindle Cleaner	ISO20
20.580.230	ISO30 Spindle Cleaner	ISO30
20.580.240	ISO40 Spindle Cleaner	ISO40
20.580.245	ISO45 Spindle Cleaner	ISO45
20.580.250	ISO50 Spindle Cleaner	ISO50



Morse Taper

Catalog Number	Description	Taper No.
20.580.001	Morse Taper #1 Spindle Cleaner	MT1
20.580.002	Morse Taper #2 Spindle Cleaner	MT2
20.580.003	Morse Taper #3 Spindle Cleaner	MT3
20.580.004	Morse Taper #4 Spindle Cleaner	MT4
20.580.005	Morse Taper #5 Spindle Cleaner	MT5
20.580.006	Morse Taper #6 Spindle Cleaner	MT6



HSK Form A Taper

Catalog Number	Description	Taper No.
20.580.025	HSK25 Spindle Cleaner	HSK-A/C/E25
20.580.032	HSK32 Spindle Cleaner	HSK-A/C/E32
20.580.040	HSK40 Spindle Cleaner	HSK-A/C/E40
20.580.050	HSK50 Spindle Cleaner	HSK-A/C/E50
20.580.063	HSK63 Spindle Cleaner	HSK-A/C/E63
20.580.080	HSK80 Spindle Cleaner	HSK-A/C/E80
20.580.100	HSK100 Spindle Cleaner	HSK-A/C/E100
20.580.125	HSK125 Spindle Cleaner	HSK-A/C/E125



BIG CAPTO Taper

Catalog Number	Description	Taper No.
SC-C3	Polygon Taper C3 Spindle Cleaner	C3
SC-C4	Polygon Taper C4 Spindle Cleaner	C4
SC-C5	Polygon Taper C5 Spindle Cleaner	C5
SC-C6	Polygon Taper C6 Spindle Cleaner	C6
SC-C8	Polygon Taper C8 Spindle Cleaner	C8

TOOL ASSEMBLY DEVICES

TOOL PRO

The Tool Pro is a unique tool holding device for the assembly and disassembly of tapered V-flange tooling and modular tooling systems. Depressing the large gold button permits the adapter to rotate 360° and lock in 45° increments, allowing convenient access for all operations in one set-up. Tightening torque for tool clamping can be applied in a downward motion, rather than horizontally, allowing the Tool Pro to be installed on tool carts. Tools are simply lowered into the tool pot and automatically clamped into place with a spring loaded pin that locates precisely into the V-groove of the tool holder. With the Tool Pro, you reduce damage to your expensive tool holders, shanks and machine spindles while providing a safe working environment for your tool assembly operators—advantages which pay off very quickly!

Standard



Steep Taper

Catalog Number	Size
31.300.001	30
31.300.000	35
31.300.002	40
31.300.003	45
31.300.004	50
31.300.020	60

HSK Taper

Catalog Number	Size
31.300.017	32A
31.300.015	40A
31.300.008	50A
31.300.006	63A
31.300.005	100A
31.300.029	125A

• HSK Type E/F, VDI and Polygon Taper also available

Quick-change system uses one permanently mounted base unit and multiple adapters for different types and sizes of tool shanks.

Vario



Steep Taper

Catalog Number	Size
31.300.110	30
31.300.111	35
31.300.112	40
31.300.113	45
31.300.114	50

HSK Taper

Catalog Number	Size
31.300.130	32A
31.300.131	40A
31.300.132	50A
31.300.133	63A
31.300.134	80A
31.300.135	100A

Polygon Taper

Catalog Number	Size
31.300.153	C3
31.300.154	C4
31.300.155	C5
31.300.156	C6
31.300.158	C8

• Base unit must be ordered separately (Catalog Number 31.300.100)
• HSK Type E/F and VDI also available

Full 360° radial tool rotation, while clamped, permits easy access to large diameter tools making it ideal for changing inserts on large face mills without removing the tool from the drive keys. Tools can be locked at increments of 30° by engaging an index pin. The adapter can also be rotated 360° and locked into any position in increments of 45° to further improve ergonomic handling of any size and length of tool.

Spin



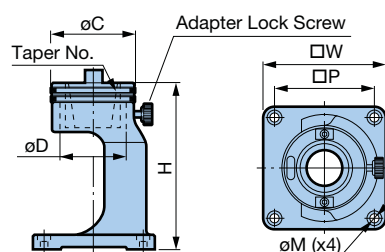
Steep Taper

Catalog Number	Size
31.300.202	40
31.300.204	50
31.300.206	60

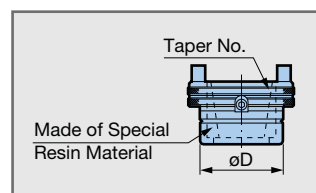
HSK Taper

Catalog Number	Size
31.300.214	63A
31.300.216	100A
31.300.217	125A

• Polygon Taper also available



Replaceable Adapter



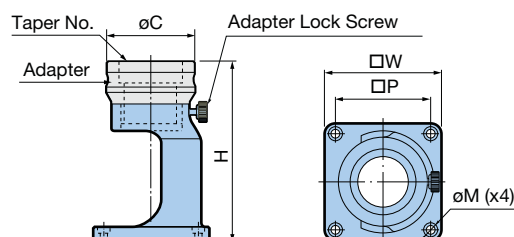
For CV & BT Tapers

Catalog Number	CV/BT No.	ϕC	ϕD	H	$\square W$	$\square P$	ϕM	Adapter Model
TMS40-30	30	2.99	2.36	5.91	4.33	3.54	M6 or UNC 1/4	TMA40-30
TMS40-40	40							TMA40-40
TMS50-40	40	4.13	3.47	7.48	6.30	5.12	M8 or UNC 5/16	TMA50-40
TMS50-50	50							TMA40-50

- 1 adapter is included
- Adapters can be ordered individually
- Adapter Lock Screw is available as a spare part (Model: RTM0615)
- Mounting bolts (4 pcs.) are not included

CAUTION

Tooling Mate must be securely fixed to a bench with 4 mounting bolts.



For HSK and BIG CAPTO Tapers

Catalog Number	HSK No.	Polygon Coupling No.	ϕC	H	$\square W$	$\square P$	ϕM	Adapter Model
TMS40-32R	32	C3	2.99	6.50	4.33	3.54	M6 or UNC 1/4	TMA40-32R
TMS40-40R	40	C4						TMA40-40R
TMS40-50R	50	C5						TMA40-50R
TMS40-63R	63	C6	3.43	6.77	6.30	5.12	M8 or UNC 5/16	TMA40-63R
TMS50-80R	80	C8	4.49	8.47				TMA50-80R
TMS50-100R	100	—	4.88	8.62				TMA50-100R

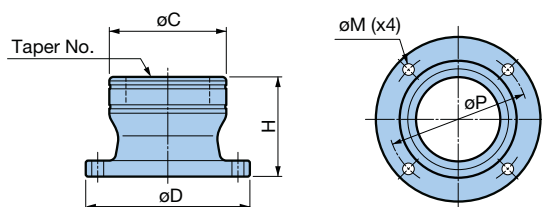
- 1 adapter is included
- Adapters can be ordered individually
- Adapter Lock Screw is available as a spare part (Model: RTM0615)
- Mounting bolts (4 pcs.) are not included

CAUTION

Tooling Mate must be securely fixed to a bench with 4 mounting bolts.



Innovative two-way clutch and needle roller clamping system assures secure clamping at the tool flange periphery. Safe design eliminates any possibility of damage to the shank taper during the tightening process.



Kombi Grip

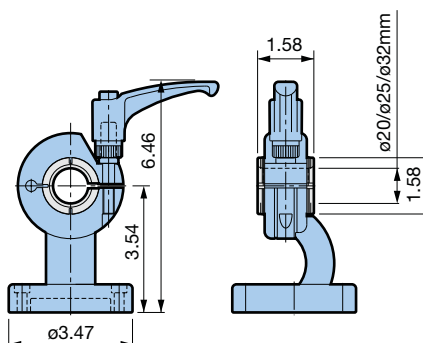
Catalog Number	HSK No. (Form A/E/F)	Polygon Coupling No.	øC	øD	H	øP	øM
KG25R	25	—	1.89	3.11	2.56	2.44	M6 or UNC 1/4
KG32R	32	C3	2.17	3.35		2.72	
KG40R	40	C4	2.48	3.66	2.76	3.03	
KG50R	50	C5	2.95	4.13		3.50	
KG63R	63	C6	3.47	4.86	2.95	4.15	M8 or UNC 5/16
KG80R	80	C8	4.21	5.59	3.54	4.88	
KG100R	100	—	5.00	6.38	3.94	5.67	

- Mounting bolts (4 pcs.) are not included

CAUTION

Kombi Grip must be securely fixed to a bench with 4 mounting bolts.

Ideal fixture for the setup of cylindrical shank tool holders. Clamps ø20, 25 & 32mm shanks by replacing the sleeve.



ST Lock

Catalog Number
STL40

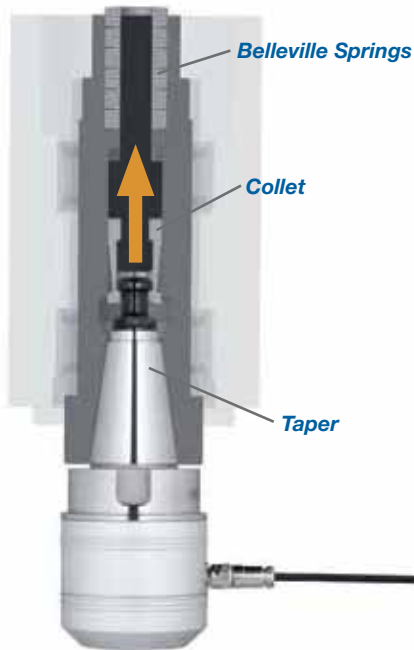
- 1 pc. each of ø20, 25 & 32mm sleeves are included
- Mounting bolts (4 pcs.) must be ordered separately

CAUTION

ST Lock must be securely fixed to a bench with 4 mounting bolts.

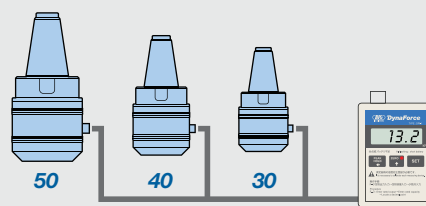
DYNA FORCE

Machine tool maintenance is a necessity. Periodical measurement of the spindle retention force avoids unknown reduced rigidity, which leads to vibrations, loss of machining quality and shortened tool life. A full length taper stabilizes the value of measurements.



Included:

Dyna Force, Plastic Storage Case, Display & Cable



Only one display for all taper sizes

One common display can be used for all taper sizes.

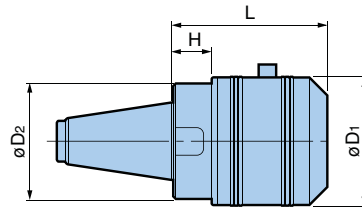


Fig. 1

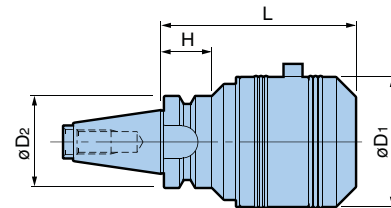


Fig. 2

MGT20 – Metric Style ($\phi D=30mm$)

Catalog Number	Contents of Set				Taper No.	Rated Capacity	ϕD_1	ϕD_2	L	H	Weight (lbs.)
	Measuring Device	Fig.	Display	Cable							
SNT30-DF10	NT30-DF10	1	DFA-1 (AA battery x2)	DFC-1 (1m)	30	10 kN (980 kgf)	2.56	2.28	3.15	.79	3.3
SBT30-DF10	BT30-DF10	2			40	30 kN (2,940 kgf)	2.87	1.81	2.86	1.02	3.5
SNT40-DF30	NT40-DF30	1			50	50 kN (4,900 kgf)	3.78	2.96	3.54	.95	5.5
SNT50-DF50	NT50-DF50	1				30 kN (2,940 kgf)	2.87	3.54	4.33	1.30	13.2
SNT50-DF30●	NT50-DF30	1					2.76	2.76	3.39	.79	8.6

- Each component is also available separately
- SBT30-DF10 is designed exclusively for machines not capable of automatic tool change
- SBT30-DF10 is suitable for BT/BBT30 machines only
- Pull stud bolt must be ordered separately, and for DIN, ISO, ANSI & CAT standard machines, an exclusive pull stud bolt for Dyna Force is required
- SNT50-DF30 marked ● indicates light-weight model
- Certificate of calibration and diagram of traceability system are available for a charge in order to maintain the reliability of the device

Pull Stud Bolts for Dyna Force

An exclusive Pullstud Bolt is needed for machine spindles with DIN, ANSI or CAT tapers. Pullstud Bolts in MAS and JIS standards can be used.

Standard No.		Taper No.		
		30	40	50
DIN 69872		DF-PDV30	DF-PDV40A	DF-PDV50A
ISO 7388	Type A	—		
	Type B		DF-PAV40	DF-PAV50
ANSI B5.50		DF-PAV30		
ASME B5.50		DF-PCV30	DF-PCV40	DF-PCV50

Improve your work safety environment and efficiency of table cleaning. Save the time required to clean T-slots packed with chips. Coolant quickly removes heated swarf and helps to prevent thermal displacement of the machine.

- Quick removal of chips from a machine
- Faster table cleaning → A reduction of clean-up time
- Volume control of heated chips → Better machining precision
- Three sizes of T-slot widths are available to fit your machine table



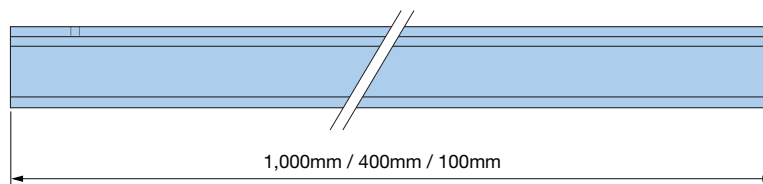
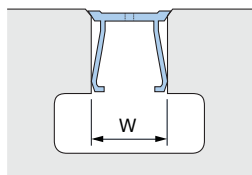
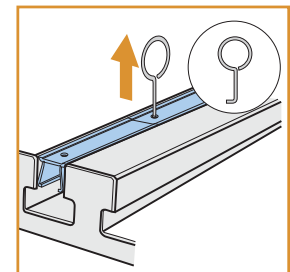
T-slots packed with difficult to remove chips



T-slots protected & clear by T-Slot Clean



Removal pin for easy removal



Standard Set — Metric Type

Catalog Number	W	Contents
TS14-S	14mm	400mm x 4 pcs. 100mm x 4 pcs.
TS18-S	18mm	
TS22-S	22mm	

Cost Saving Set — Metric Type

Catalog Number	W	Contents
TS14-10S	14mm	TS14-S x 10 sets
TS18-10S	18mm	TS18-S x 10 sets
TS22-10S	22mm	TS22-S x 10 sets

Long Set — Metric Type

Catalog Number	W	Contents
TS18-400L-100P	18mm	400mm x 100 pcs.
TS22-400L-100P	22mm	

Extra Long Set — Metric Type

Catalog Number	W	Contents
TS18-1000L-10P	18mm	1,000mm x 10 pcs.
TS22-1000L-10P	22mm	

BIG Kaiser Precision Tooling Inc. is not just tool holders. We're boring tools, cutting tools, tool presetters, zero-point workholding, accessories and so much more. We're BIG-PLUS®, CAT, BT, HSK and BIG CAPTO. We're tightening tolerances, reducing setup and cycle times, increasing tool life, and enhancing performance while driving down cost. We're delivering high-performance tooling products and ingenuity for shops that demand results.



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