

SHRINK FIT TOOLHOLDERS



STUB, BORING, BLANK

RETENTION STUDS

HSK TOOLING

BALANCEABLE TOOLHOLDERS

SHRINK FIT TOOLHOLDERS

ACCESSORIES

R8/5C/3J/16C

TECHNICAL SECTION

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Shrinker is a registered trademark of Tooling Innovations, Dana Point, CA.



SHRINK FIT TOOLHOLDERS

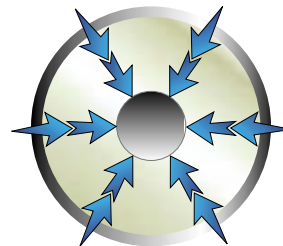
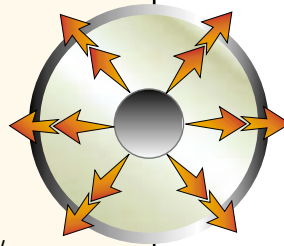
The Shrink Fit System

Lyndex introduces the most efficient, accurate and effective toolholder ever.

While end mill holders and collet chucks are the most predominant toolholders in the industry, they sometimes lack the accuracy or rigidity required for high-speed or high-precision machining. Milling chucks, also popular toolholders, are suitable for rigid, precise machining; however, they are bulky and contain moving parts that are subject to wear, breakdown and fluctuating weight distribution during tool loading. Hydraulic chucks are ideal for precise machining and finishing work; but, lack the rigidity needed for certain applications. The new Lyndex Shrink Fit system is precise, rigid, and free of moving parts. Offering complete concentric gripping and superior stiffness, the Shrink Fit assembly performs like an integral unit.

The Shrink Fit toolholder's inside diameter is designed to be slightly smaller than the shank diameter of the cutting tool. When placed into the separate induction heating system, the inside diameter of the clamping end is heated and expands. The tool shank can then slip easily into the holder. As the holder cools, the resulting thermal contraction exerts a tremendous, uniform pressure around the entire surface of the tool shank. To remove the tool, the process is reversed.

Benefits
<ul style="list-style-type: none"> High precision and repeatability. High rigidity and gripping power. High balancing capability. Simple one-piece, symmetrical design. Easy tool assembling and disassembling. Short tool-changing time. Low maintenance cost and efforts. Increased cutting tool and spindle life. Increased chip removal rate and parts accuracy.



Because of the extreme heat involved with the Shrink Fit process, it is highly recommended that the operator wear heat-resistant gloves at all times.



SHRINK FIT TOOLHOLDERS

Applications

- High-speed machining applications.
- High-power machining applications.
- High-precision machining applications.
- Complex, contour, hard-to-reach applications.
- All rotary tooling applications.
- All practical machining applications.

Features

Accuracy

- Maximum T.I.R. of 0.0002" with a test arbor at 4 times the cutting tool diameter from the toolholder nose.
- Maximum stability of radial and axial accuracy during machining.

Gripping Power

- Uniform gripping around the tool shank provides even pressure around the tool.
- Superior gripping power provides the best torque and force capability compared to any other types of tool/toolholder interface structures.

Rigidity

- Superior radial and axial stiffness - with performance similar to that of an integral shank tool.
- Even gripping force provides uniform rigidity around the cutting tool shank.

Structure

- Wide variety of configurations available (including slim or wide diameters, short or long gage lengths) for difficult applications.

Pre-Balanced

- Solid construction offers minimal variations of unbalance when changing cutting tools.
- All Shrink Fit holders are designed to be symmetrical.
- All Shrink Fit holders are pre-balanced:
 - to G2.5 at 25,000 rpm on all HSK32E/40E holders.
 - to G2.5 at 20,000 rpm on all #40 taper/HSK63 holders.
 - to G2.5 at 15,000 rpm on all #50 taper/HSK100 holders.

Balanceable

- Higher-grade and higher-speed balancing are available upon request, based on customers' requirements.
- HSBalance™ Shrink Fit holders utilize the patented Lyndex balancing system to achieve super-fine balancing.



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Features (cont.)

Repeatability

- The Shrink Fit system's highly repeatable chucking provides a concentric cutting tool/toolholder interface. This means higher repeatability than other toolholder assemblies on accuracy, rigidity and balancing.

Assembling

- Short tool-changing time.
- Easy tool holding without extra clamping devices and/or efforts.

Induction Heating Machine

- Changing tools is quick and easy with the high-efficiency heating unit.
- High flexibility allows simple conversion to alternate Shrink Fit shank sizes, gage lengths and nose diameters.

Productivity

- The Shrink Fit system increases cutting tool life, chip removal rate, workpiece accuracy and spindle life while reducing tooling preparation time. This means productivity can be dramatically increased, and production costs can be reduced significantly.



- All Shrink Fit holders are symmetrically designed and pre-balanced. Balanceable holders are also available to achieve the perfect balance.
- Solid one-piece construction provides superior rigidity.

Precision ground AT3 or better taper accuracy.

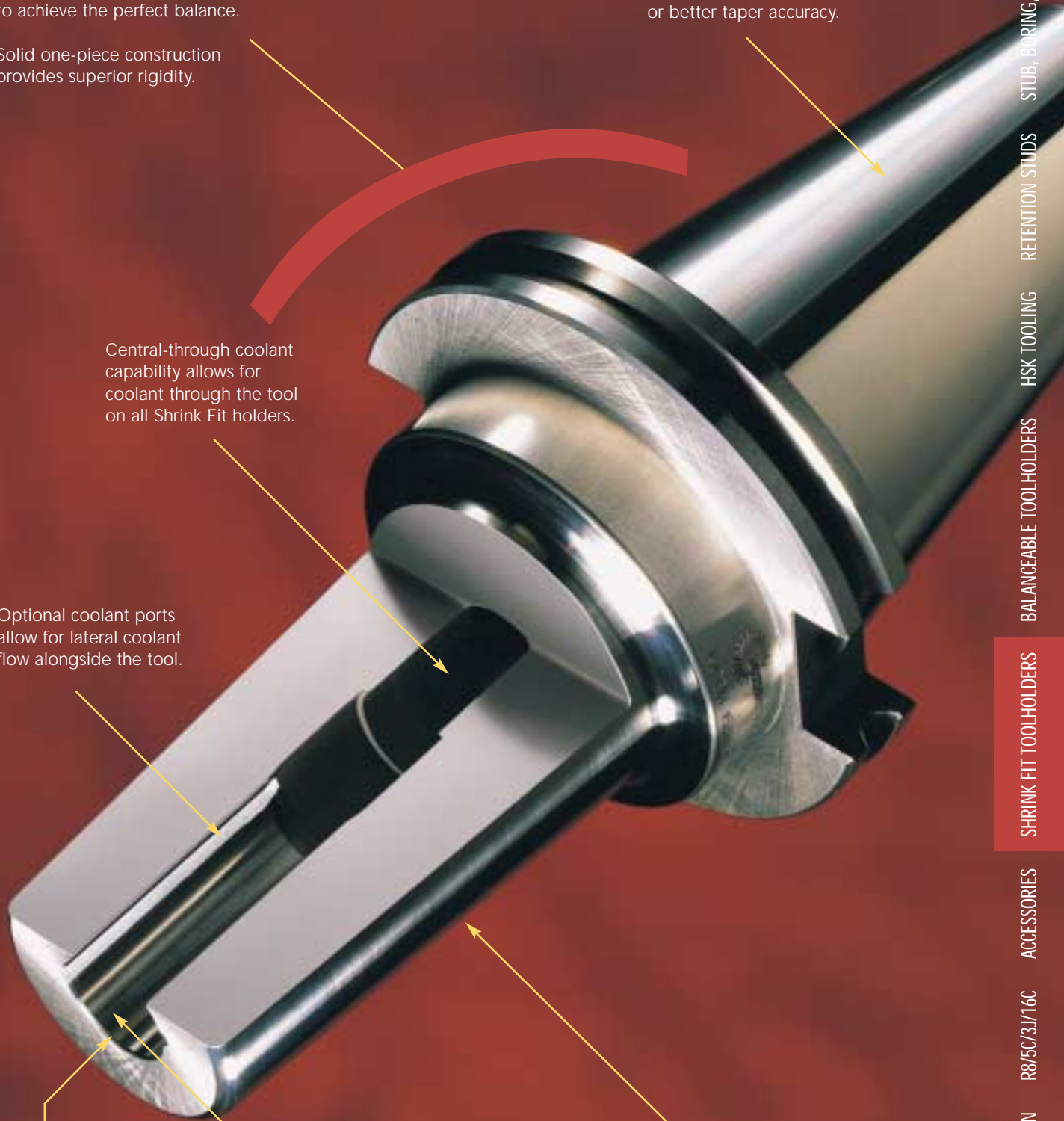
Central-through coolant capability allows for coolant through the tool on all Shrink Fit holders.

Optional coolant ports allow for lateral coolant flow alongside the tool.

Maximum TIR of .0001" or better give Shrink Fit holders superb accuracy.

As the Shrink Fit holder I.D. contracts, it envelops the tool shank completely, providing excellent gripping power.

Tapered design is slim at the nose for hard-to-reach applications.



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INDUCTION TOOL CHANGING SYSTEM



Our new compact induction shrink fit machine is easy to adjust and features an interchangeable pneumatic clamping fixture (30, 40, and 50 taper fixtures included). Using our system, the operator places a Shrink Fit toolholder in the fixture, sets the length of time needed to expand a particular toolholder and starts the heating process. Within a few seconds, the toolholder expands and a tool may be inserted. The toolholder is then cooled, and with the tool securely in place, it is ready-to-go. The standard cycle time for a tool change is 20-30 seconds.

- Easy to Use
- Safe Operation (CE Approved)
- Low Maintenance
- Quick Change Coils (3 sizes included)
- Pneumatic Toolholding System (3 sizes included)

The induction system features a variable time setting, up to 2 minutes, providing a convenient method of controlling the output of power. If the outer diameter of the toolholder is relatively close in diameter to the inside diameter of the coil, the efficiency of the coil is enhanced. If the outer diameter of the toolholder is relatively small in relationship to the inside diameter of the coil, the machine will not function, avoiding use of the inappropriate coil. The efficiency of the coil effects the cycle length and shrinking function. Small diameter tooling requires less Shrink Fit interference, therefore allowing for minimal adjustments of the machine to operate on most tooling.

Technical Features

• Installed power	2.9Kav
• Singlephase driving tension 60Hz	220 V/110 V
• Nominal work frequency	100 KHz
• Pneumatic supply	6 bar
• Total absorption	15 A max

Dimensions

• Work plane height	850mm
• Width	600mm
• Depth	600mm
• Total Height	1100mm
• Weight	65kg

Model	Toolholder Position	Machine Voltage
LYN-SM110	Horizontal	110V
LYN-SM220	Horizontal	220V

Note: Because of the extreme heat involved with the Shrink Fit process, it is highly recommended that the operator wear heat-resistant gloves at all times.



SHRINK FIT TOOLHOLDERS

COOLING DEVICES

Optional cooling devices and units are recommended to accurately expedite the cooling process. To dissipate heat, we offer an aluminum cooling unit adapter. Its interior diameter is tapered to match the O.D. taper of the toolholder. The cylinder can either be immersed in water or coolant between tool changes. Another option is the Air-Chilled Cooling Station which holds 6 or more toolholders customized to the user's specifications, which dramatically reduces cooling time.



COOLING UNIT ADAPTERS

Cooling unit adapters are individual aluminum tapered units which dissipate heat and cool the holder. They have no cooling device (such as air or coolant).

Number	Description
ACU-3-***	Aluminum Cooling Unit for 3" Gage Length
ACU-4-***	Aluminum Cooling Unit for 4" Gage Length
ACU-6-***	Aluminum Cooling Unit for 6" Gage Length
ACU-8-***	Aluminum Cooling Unit for 8" Gage Length

*** Please specify size of holder when ordering. For example, the correct cooling unit for a C50SF-0500-3.00 (1/2" Shrink Fit holder) is ACU-3-0500.



COOLING STATIONS

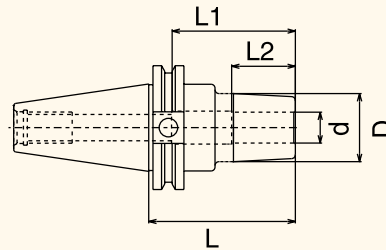
The aluminum cooling station air-cools 6 or more individual Shrink Fit holders at one time.

Number	Description
COOLSTATION-40	40 Taper (HSK63) 8 position Shrink Fit Cooling Station
COOLSTATION-50	50 Taper (HSK100) 6 position Shrink Fit Cooling Station



SHRINK FIT TOOLHOLDERS

CT40 SHRINK FIT HOLDERS



Part Number	Taper	d	L	L1	L2	D
C40SF-0250-3.00	CT40	1/4"	3.00"	1.75"	1.00"	1.00"
C40SF-0250-6.00	CT40	1/4"	6.00"	1.75"	1.00"	1.00"
C40SF-0375-3.00	CT40	3/8"	3.00"	1.75"	1.00"	1.13"
C40SF-0375-6.00	CT40	3/8"	6.00"	1.75"	1.00"	1.13"
C40SF-0500-3.00	CT40	1/2"	3.00"	2.50"	1.00"	1.25"
C40SF-0500-6.00	CT40	1/2"	6.00"	2.50"	1.00"	1.25"
C40SF-0625-3.00	CT40	5/8"	3.00"	2.50"	1.25"	1.38"
C40SF-0625-6.00	CT40	5/8"	6.00"	2.50"	1.25"	1.38"
C40SF-0750-3.00	CT40	3/4"	3.00"	2.50"	1.50"	1.50"
C40SF-0750-6.00	CT40	3/4"	6.00"	2.50"	1.50"	1.50"
C40SF-1000-3.00	CT40	1"	3.00"	2.50"	1.75"	1.75"
C40SF-1000-6.00	CT40	1"	6.00"	2.50"	1.75"	1.75"
C40SF-1250-4.00	CT40	1-1/4"	4.00"	2.50"	2.00"	2.00"
C40SF-1250-6.00	CT40	1-1/4"	6.00"	2.50"	2.00"	2.00"

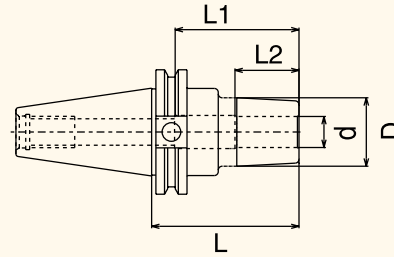
Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

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CT40 SHRINK FIT HOLDERS (METRIC)



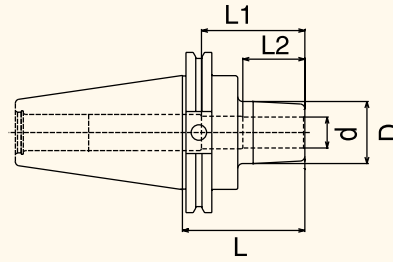
Part Number	Taper	d	L	L1	L2	D
C40SF-6-80	CT40	6mm	80mm	25mm	25mm	25mm
C40SF-6-150	CT40	6mm	150mm	25mm	25mm	25mm
C40SF-8-80	CT40	8mm	80mm	36mm	25mm	27mm
C40SF-8-150	CT40	8mm	150mm	36mm	25mm	27mm
C40SF-10-80	CT40	10mm	80mm	40mm	25mm	29mm
C40SF-10-150	CT40	10mm	150mm	40mm	25mm	29mm
C40SF-12-80	CT40	12mm	80mm	45mm	25mm	31mm
C40SF-12-150	CT40	12mm	150mm	45mm	25mm	31mm
C40SF-16-80	CT40	16mm	80mm	48mm	25mm	35mm
C40SF-16-150	CT40	16mm	150mm	48mm	25mm	35mm
C40SF-20-105	CT40	20mm	105mm	50mm	32mm	39mm
C40SF-20-150	CT40	20mm	150mm	50mm	32mm	39mm
C40SF-25-105	CT40	25mm	105mm	56mm	32mm	45mm
C40SF-25-150	CT40	25mm	150mm	56mm	32mm	45mm
C40SF-32-105	CT40	32mm	105mm	60mm	38mm	51mm
C40SF-32-150	CT40	32mm	150mm	60mm	38mm	51mm

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

CT50 SHRINK FIT HOLDERS



Part Number	Taper	d	L	L1	L2	D
C50SF-0250-3.00	CT50	1/4"	3.00"	1.71"	1.00"	1.00"
C50SF-0250-6.00	CT50	1/4"	6.00"	1.71"	1.00"	1.00"
C50SF-0250-8.00	CT50	1/4"	8.00"	1.71"	1.00"	1.00"
C50SF-0375-3.00	CT50	3/8"	3.00"	1.75"	1.00"	1.13"
C50SF-0375-6.00	CT50	3/8"	6.00"	1.75"	1.00"	1.13"
C50SF-0375-8.00	CT50	3/8"	8.00"	1.75"	1.00"	1.13"
C50SF-0500-3.00	CT50	1/2"	3.00"	2.50"	1.50"	1.25"
C50SF-0500-6.00	CT50	1/2"	6.00"	2.50"	1.50"	1.25"
C50SF-0500-8.00	CT50	1/2"	8.00"	2.50"	1.50"	1.25"
C50SF-0625-3.00	CT50	5/8"	3.00"	2.50"	1.25"	1.38"
C50SF-0625-6.00	CT50	5/8"	6.00"	2.50"	1.50"	1.38"
C50SF-0625-8.00	CT50	5/8"	8.00"	4.00"	1.25"	1.38"
C50SF-0750-3.00	CT50	3/4"	3.00"	2.50"	1.50"	1.50"
C50SF-0750-6.00	CT50	3/4"	6.00"	2.50"	1.50"	1.50"
C50SF-0750-8.00	CT50	3/4"	8.00"	4.00"	1.50"	1.50"
C50SF-1000-4.00	CT50	1"	4.00"	2.50"	2.00"	1.75"
C50SF-1000-6.00	CT50	1"	6.00"	2.50"	2.00"	1.75"
C50SF-1000-8.00	CT50	1"	8.00"	4.00"	2.00"	1.75"
C50SF-1250-4.00	CT50	1-1/4"	4.00"	3.00"	2.50"	2.00"
C50SF-1250-6.00	CT50	1-1/4"	6.00"	3.00"	2.50"	2.00"
C50SF-1250-8.00	CT50	1-1/4"	8.00"	4.00"	2.50"	2.00"
C50SF-1500-4.00	CT50	1-1/2"	4.00"	2.50"	2.25"	2.25"
C50SF-1500-6.00	CT50	1-1/2"	6.00"	2.50"	2.25"	2.25"
C50SF-1500-8.00	CT50	1-1/2"	8.00"	4.00"	2.25"	2.25"
C50SF-2000-4.00	CT50	2"	4.00"	3.50"	3.00"	2.75"
C50SF-2000-6.00	CT50	2"	6.00"	3.50"	3.00"	2.75"
C50SF-2000-8.00	CT50	2"	8.00"	3.50"	3.00"	2.75"

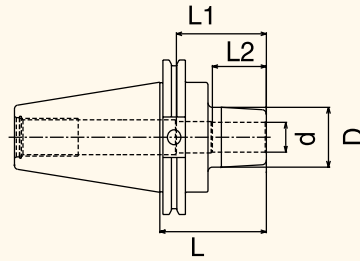
Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



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SHRINK FIT TOOLHOLDERS

CT50 SHRINK FIT HOLDERS (METRIC)



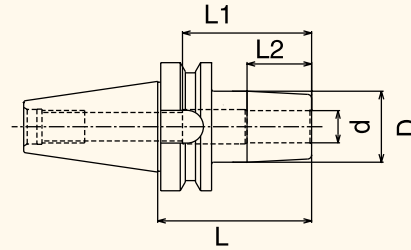
Part Number	Taper	d	L	L1	L2	D
C50SF-6-100	CT50	6mm	100mm	25mm	25mm	25mm
C50SF-8-100	CT50	8mm	100mm	25mm	25mm	27mm
C50SF-10-100	CT50	10mm	100mm	25mm	25mm	29mm
C50SF-10-150	CT50	10mm	150mm	25mm	25mm	29mm
C50SF-12-100	CT50	12mm	100mm	45mm	25mm	31mm
C50SF-12-150	CT50	12mm	150mm	45mm	25mm	31mm
C50SF-16-100	CT50	16mm	100mm	48mm	25mm	35mm
C50SF-16-150	CT50	16mm	150mm	48mm	25mm	35mm
C50SF-20-110	CT50	20mm	110mm	50mm	32mm	39mm
C50SF-20-150	CT50	20mm	150mm	50mm	32mm	39mm
C50SF-25-110	CT50	25mm	110mm	56mm	32mm	44mm
C50SF-25-150	CT50	25mm	150mm	56mm	32mm	44mm
C50SF-32-110	CT50	32mm	110mm	60mm	38mm	51mm
C50SF-32-150	CT50	32mm	150mm	60mm	38mm	51mm
C50SF-40-110	CT50	40mm	110mm	70mm	45mm	59mm
C50SF-40-150	CT50	40mm	150mm	70mm	45mm	59mm

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

BT40 SHRINK FIT HOLDERS

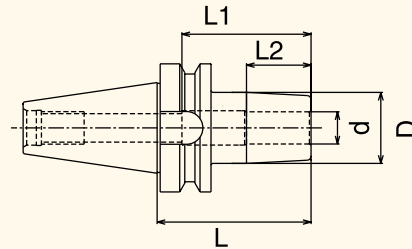


Part Number	Taper	d	L	L1	L2	D
B40SF-0250-3.00	BT40	1/4"	3.00"	1.75"	1.00"	1.00"
B40SF-0250-6.00	BT40	1/4"	6.00"	1.75"	1.00"	1.00"
B40SF-0375-3.00	BT40	3/8"	3.00"	1.75"	1.00"	1.13"
B40SF-0375-6.00	BT40	3/8"	6.00"	1.75"	1.00"	1.13"
B40SF-0500-3.00	BT40	1/2"	3.00"	2.50"	1.00"	1.25"
B40SF-0500-6.00	BT40	1/2"	6.00"	2.50"	1.00"	1.25"
B40SF-0625-3.00	BT40	5/8"	3.00"	2.50"	1.25"	1.38"
B40SF-0625-6.00	BT40	5/8"	6.00"	2.50"	1.25"	1.38"
B40SF-0750-3.00	BT40	3/4"	3.00"	2.50"	1.50"	1.50"
B40SF-0750-6.00	BT40	3/4"	6.00"	2.50"	1.50"	1.50"
B40SF-1000-3.00	BT40	1"	3.00"	2.50"	1.75"	1.75"
B40SF-1000-6.00	BT40	1"	6.00"	2.50"	1.75"	1.75"
B40SF-1250-4.00	BT40	1-1/4"	4.00"	2.50"	2.00"	2.00"
B40SF-1250-6.00	BT40	1-1/4"	6.00"	2.50"	2.00"	2.00"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

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BT40 SHRINK FIT HOLDERS (METRIC)



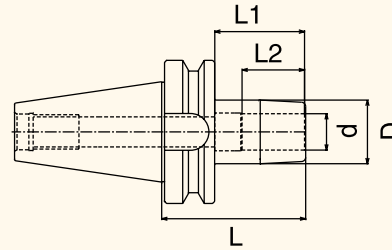
Part Number	Taper	d	L	L1	L2	D
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B40SF-6-150	BT40	6mm	150mm	25mm	25mm	25mm
B40SF-8-80	BT40	8mm	80mm	25mm	25mm	27mm
B40SF-8-150	BT40	8mm	150mm	36mm	25mm	27mm
B40SF-10-80	BT40	10mm	80mm	25mm	25mm	29mm
B40SF-10-150	BT40	10mm	150mm	40mm	25mm	29mm
B40SF-12-80	BT40	12mm	80mm	45mm	25mm	31mm
B40SF-12-150	BT40	12mm	150mm	45mm	25mm	31mm
B40SF-16-80	BT40	16mm	80mm	48mm	25mm	35mm
B40SF-16-150	BT40	16mm	150mm	48mm	25mm	35mm
B40SF-20-105	BT40	20mm	105mm	50mm	32mm	39mm
B40SF-20-150	BT40	20mm	150mm	50mm	32mm	39mm
B40SF-25-105	BT40	25mm	105mm	56mm	32mm	44mm
B40SF-25-150	BT40	25mm	150mm	56mm	32mm	44mm
B40SF-32-105	BT40	32mm	105mm	60mm	38mm	51mm
B40SF-32-150	BT40	32mm	150mm	60mm	38mm	51mm

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

BT50 SHRINK FIT HOLDERS



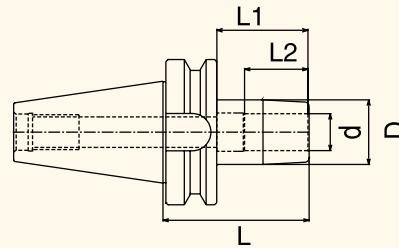
Part Number	Taper	d	L	L1	L2	D
B50SF-0250-3.00	BT50	1/4"	3.00"	1.75"	1.00"	1.00"
B50SF-0250-6.00	BT50	1/4"	6.00"	1.75"	1.00"	1.00"
B50SF-0375-3.00	BT50	3/8"	3.00"	1.75"	1.00"	1.13"
B50SF-0375-6.00	BT50	3/8"	6.00"	1.75"	1.00"	1.13"
B50SF-0500-3.00	BT50	1/2"	3.00"	2.50"	1.00"	1.25"
B50SF-0500-6.00	BT50	1/2"	6.00"	2.50"	1.00"	1.25"
B50SF-0625-3.00	BT50	5/8"	3.00"	2.50"	1.25"	1.38"
B50SF-0625-6.00	BT50	5/8"	6.00"	2.50"	1.25"	1.38"
B50SF-0750-3.00	BT50	3/4"	3.00"	2.50"	1.25"	1.50"
B50SF-0750-6.00	BT50	3/4"	6.00"	2.50"	1.25"	1.50"
B50SF-1000-4.00	BT50	1"	4.00"	2.50"	1.75"	1.75"
B50SF-1000-6.00	BT50	1"	6.00"	2.50"	1.75"	1.75"
B50SF-1250-4.00	BT50	1-1/4"	4.00"	2.50"	2.00"	2.00"
B50SF-1250-6.00	BT50	1-1/4"	6.00"	2.50"	2.00"	2.00"
B50SF-1500-4.00	BT50	1-1/2"	4.00"	2.50"	2.25"	2.25"
B50SF-1500-6.00	BT50	1-1/2"	6.00"	2.50"	2.25"	2.25"
B50SF-2000-4.00	BT50	2"	4.00"	2.95"	2.40"	2.75"
B50SF-2000-6.00	BT50	2"	6.00"	2.95"	2.40"	2.75"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

BT50 SHRINK FIT HOLDERS (METRIC)



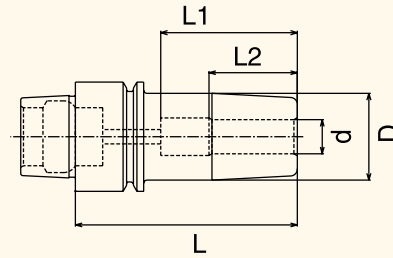
Part Number	Taper	d	L	L1	L2	D
B50SF-6-80	BT50	6mm	80mm	25mm	25mm	25mm
B50SF-6-150	BT50	6mm	150mm	25mm	25mm	25mm
B50SF-8-80	BT50	8mm	80mm	25mm	25mm	27mm
B50SF-8-150	BT50	8mm	150mm	25mm	25mm	27mm
B50SF-10-100	BT50	10mm	100mm	40mm	25mm	29mm
B50SF-10-150	BT50	10mm	150mm	40mm	25mm	29mm
B50SF-12-100	BT50	12mm	100mm	45mm	25mm	31mm
B50SF-12-150	BT50	12mm	150mm	45mm	25mm	31mm
B50SF-16-100	BT50	16mm	100mm	48mm	25mm	35mm
B50SF-16-150	BT50	16mm	150mm	48mm	25mm	35mm
B50SF-20-110	BT50	20mm	110mm	50mm	32mm	39mm
B50SF-20-150	BT50	20mm	150mm	50mm	32mm	39mm
B50SF-25-110	BT50	25mm	110mm	56mm	32mm	44mm
B50SF-25-150	BT50	25mm	150mm	56mm	32mm	44mm
B50SF-32-110	BT50	32mm	110mm	60mm	38mm	51mm
B50SF-32-150	BT50	32mm	150mm	60mm	38mm	51mm
B50SF-40-110	BT50	40mm	110mm	70mm	45mm	59mm
B50SF-40-150	BT50	40mm	150mm	70mm	45mm	59mm

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



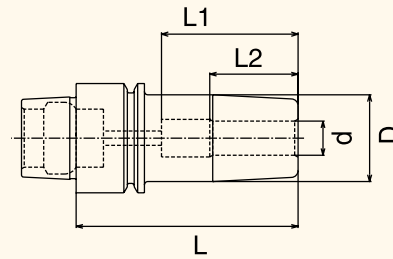
SHRINK FIT TOOLHOLDERS

HSK32E SHRINK FIT HOLDERS



Part Number	Taper	d	L	L1	L2	D
HSK32E-SF0187-3.00	HSK32E	3/16"	3.00"	1.75"	1.00"	0.94"
HSK32E-SF0187-4.00	HSK32E	3/16"	4.00"	1.75"	1.00"	0.94"
HSK32E-SF0250-3.00	HSK32E	1/4"	3.00"	1.75"	1.00"	1.02"
HSK32E-SF0250-4.00	HSK32E	1/4"	4.00"	1.75"	1.00"	1.02"
HSK32E-SF0375-3.00	HSK32E	3/8"	3.00"	1.75"	1.00"	1.02"
HSK32E-SF0375-4.00	HSK32E	3/8"	4.00"	1.75"	1.00"	1.02"

HSK32E SHRINK FIT HOLDERS (METRIC)

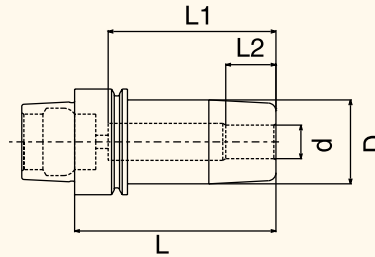


Part Number	Taper	d	L	L1	L2	D
HSK32E-SF6-65	HSK32E	6mm	65mm	36mm	25mm	26mm
HSK32E-SF6-85	HSK32E	6mm	85mm	36mm	25mm	26mm
HSK32E-SF8-65	HSK32E	8mm	65mm	36mm	25mm	26mm
HSK32E-SF8-85	HSK32E	8mm	85mm	36mm	25mm	26mm
HSK32E-SF10-65	HSK32E	10mm	65mm	40mm	25mm	26mm
HSK32E-SF10-85	HSK32E	10mm	85mm	40mm	25mm	26mm

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

SHRINK FIT TOOLHOLDERS

HSK40E SHRINK FIT HOLDERS



Part Number	Taper	d	L	L1	L2	D
HSK40E-SF0187-3.00	HSK40E	3/16"	3.00"	1.75"	1.00"	0.94"
HSK40E-SF0187-4.00	HSK40E	3/16"	4.00"	1.75"	1.00"	0.94"
HSK40E-SF0250-3.00	HSK40E	1/4"	3.00"	1.75"	1.00"	1.00"
HSK40E-SF0250-4.00	HSK40E	1/4"	4.00"	1.75"	1.00"	1.00"
HSK40E-SF0375-3.00	HSK40E	3/8"	3.00"	1.75"	1.00"	1.13"
HSK40E-SF0375-4.00	HSK40E	3/8"	4.00"	1.75"	1.00"	1.13"
HSK40E-SF0500-3.00	HSK40E	1/2"	3.00"	2.50"	1.00"	1.25"
HSK40E-SF0500-4.00	HSK40E	1/2"	4.00"	2.50"	1.00"	1.25"
HSK40E-SF0625-3.00	HSK40E	5/8"	3.00"	2.50"	1.25"	1.34"
HSK40E-SF0625-4.00	HSK40E	5/8"	4.00"	2.50"	1.25"	1.34"

HSK40E SHRINK FIT HOLDERS (METRIC)

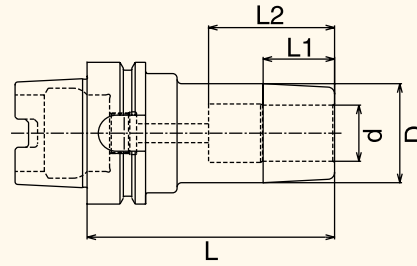
Part Number	Taper	d	L	L1	L2	D
HSK40E-SF6-75	HSK40E	6mm	75mm	25mm	25mm	25mm
HSK40E-SF6-100	HSK40E	6mm	100mm	25mm	25mm	25mm
HSK40E-SF8-75	HSK40E	8mm	75mm	36mm	25mm	27mm
HSK40E-SF8-100	HSK40E	8mm	100mm	36mm	25mm	27mm
HSK40E-SF10-75	HSK40E	10mm	75mm	40mm	25mm	29mm
HSK40E-SF10-100	HSK40E	10mm	100mm	40mm	25mm	29mm
HSK40E-SF12-75	HSK40E	12mm	75mm	45mm	25mm	31mm
HSK40E-SF12-100	HSK40E	12mm	100mm	45mm	25mm	31mm
HSK40E-SF16-75	HSK40E	16mm	75mm	48mm	25mm	34mm
HSK40E-SF16-100	HSK40E	16mm	100mm	48mm	25mm	34mm

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

HSK63A SHRINK FIT HOLDERS

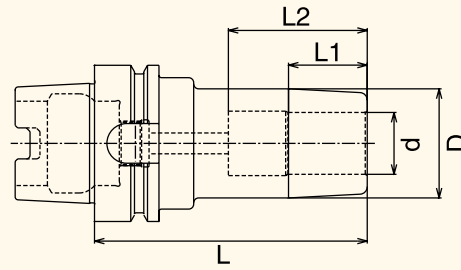


Part Number	Taper	d	L	L1	L2	D
HSK63A-SF0250-3.00	HSK63A	1/4"	3.00"	1.75"	1.00"	1.00"
HSK63A-SF0250-6.00	HSK63A	1/4"	6.00"	1.75"	1.00"	1.00"
HSK63A-SF0375-3.00	HSK63A	3/8"	3.00"	1.75"	1.00"	1.13"
HSK63A-SF0375-6.00	HSK63A	3/8"	6.00"	1.75"	1.00"	1.13"
HSK63A-SF0500-3.00	HSK63A	1/2"	3.00"	2.04"	1.00"	1.25"
HSK63A-SF0500-6.00	HSK63A	1/2"	6.00"	2.04"	1.00"	1.25"
HSK63A-SF0625-3.00	HSK63A	5/8"	3.00"	2.04"	1.25"	1.38"
HSK63A-SF0625-6.00	HSK63A	5/8"	6.00"	2.04"	1.25"	1.38"
HSK63A-SF0750-3.50	HSK63A	3/4"	3.50"	2.50"	1.50"	1.50"
HSK63A-SF0750-6.00	HSK63A	3/4"	6.00"	2.50"	1.50"	1.50"
HSK63A-SF1000-4.00	HSK63A	1"	4.00"	2.50"	1.75"	1.75"
HSK63A-SF1000-6.00	HSK63A	1"	6.00"	2.50"	1.75"	1.75"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

SHRINK FIT TOOLHOLDERS

HSK63A SHRINK FIT HOLDERS (METRIC)

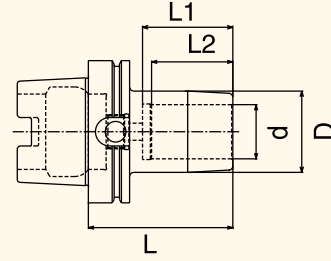


Part Number	Taper	d	L	L1	L2	D
HSK63A-SF6-80	HSK63A	6mm	80mm	25mm	25mm	25mm
HSK63A-SF6-150	HSK63A	6mm	150mm	25mm	25mm	25mm
HSK63A-SF8-80	HSK63A	8mm	80mm	25mm	25mm	27mm
HSK63A-SF8-150	HSK63A	8mm	150mm	25mm	25mm	27mm
HSK63A-SF10-80	HSK63A	10mm	80mm	40mm	25mm	29mm
HSK63A-SF10-150	HSK63A	10mm	150mm	40mm	25mm	29mm
HSK63A-SF12-100	HSK63A	12mm	100mm	45mm	25mm	31mm
HSK63A-SF12-150	HSK63A	12mm	150mm	45mm	25mm	31mm
HSK63A-SF16-100	HSK63A	16mm	100mm	48mm	32mm	35mm
HSK63A-SF16-150	HSK63A	16mm	150mm	80mm	32mm	35mm
HSK63A-SF20-100	HSK63A	20mm	100mm	50mm	32mm	39mm
HSK63A-SF20-150	HSK63A	20mm	150mm	80mm	32mm	39mm
HSK63A-SF25-110	HSK63A	25mm	110mm	56mm	32mm	44mm
HSK63A-SF25-150	HSK63A	25mm	150mm	85mm	32mm	44mm
HSK63A-SF32-110	HSK63A	32mm	110mm	60mm	32mm	51mm
HSK63A-SF32-150	HSK63A	32mm	150mm	60mm	38mm	51mm

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

SHRINK FIT TOOLHOLDERS

HSK100A SHRINK FIT HOLDERS

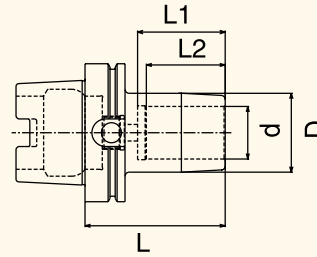


Part Number	Taper	d	L	L1	L2	D
HSK100A-SF0375-4.00	HSK100A	3/8"	4.00"	1.75"	1.00"	1.13"
HSK100A-SF0375-6.00	HSK100A	3/8"	6.00"	1.75"	1.00"	1.13"
HSK100A-SF0500-4.00	HSK100A	1/2"	4.00"	2.50"	1.00"	1.25"
HSK100A-SF0500-6.00	HSK100A	1/2"	6.00"	2.50"	1.00"	1.25"
HSK100A-SF0625-4.00	HSK100A	5/8"	4.00"	2.50"	1.25"	1.38"
HSK100A-SF0625-6.00	HSK100A	5/8"	6.00"	2.50"	1.25"	1.38"
HSK100A-SF0750-4.00	HSK100A	3/4"	4.00"	2.50"	1.25"	1.50"
HSK100A-SF0750-6.00	HSK100A	3/4"	6.00"	2.50"	1.25"	1.50"
HSK100A-SF1000-4.00	HSK100A	1"	4.00"	2.50"	1.25"	1.75"
HSK100A-SF1000-6.00	HSK100A	1"	6.00"	2.50"	1.25"	1.75"
HSK100A-SF1250-4.00	HSK100A	1-1/4"	4.00"	2.50"	1.25"	2.00"
HSK100A-SF1250-6.00	HSK100A	1-1/4"	6.00"	2.50"	1.25"	2.00"
HSK100A-SF1500-4.00	HSK100A	1-1/2"	4.00"	2.50"	1.25"	2.25"
HSK100A-SF1500-6.00	HSK100A	1-1/2"	6.00"	2.50"	1.25"	2.25"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

SHRINK FIT TOOLHOLDERS

HSK100A SHRINK FIT HOLDERS (METRIC)



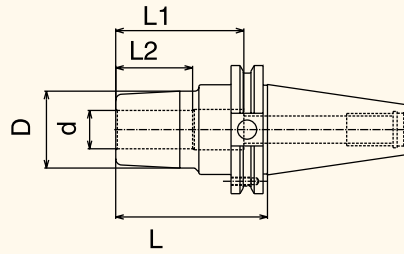
Part Number	Taper	d	L	L1	L2	D
HSK100A-SF6-110	HSK100A	6mm	110mm	25mm	25mm	25mm
HSK100A-SF6-165	HSK100A	6mm	165mm	25mm	25mm	25mm
HSK100A-SF8-110	HSK100A	8mm	110mm	25mm	25mm	27mm
HSK100A-SF8-165	HSK100A	8mm	165mm	36mm	25mm	27mm
HSK100A-SF10-110	HSK100A	10mm	110mm	40mm	25mm	29mm
HSK100A-SF10-165	HSK100A	10mm	165mm	40mm	25mm	29mm
HSK100A-SF12-110	HSK100A	12mm	110mm	45mm	25mm	31mm
HSK100A-SF12-165	HSK100A	12mm	165mm	45mm	25mm	31mm
HSK100A-SF16-110	HSK100A	16mm	110mm	48mm	25mm	35mm
HSK100A-SF16-165	HSK100A	16mm	165mm	48mm	25mm	35mm
HSK100A-SF20-110	HSK100A	20mm	110mm	50mm	32mm	39mm
HSK100A-SF20-165	HSK100A	20mm	165mm	50mm	32mm	39mm
HSK100A-SF25-120	HSK100A	25mm	120mm	56mm	32mm	44mm
HSK100A-SF25-165	HSK100A	25mm	165mm	56mm	32mm	44mm
HSK100A-SF32-120	HSK100A	32mm	120mm	60mm	32mm	51mm
HSK100A-SF32-165	HSK100A	32mm	165mm	60mm	32mm	51mm
HSK100A-SF40-120	HSK100A	40mm	120mm	70mm	32mm	59mm
HSK100A-SF40-165	HSK100A	40mm	165mm	70mm	32mm	59mm

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

CT40 BALANCEABLE SHRINK FIT HOLDERS



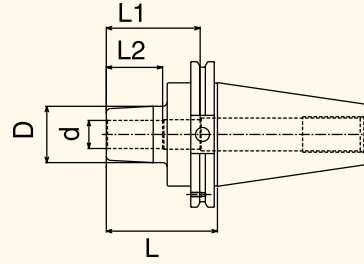
Part Number	Taper	d	L	L1	L2	D
C40SF-0250-3.00B	CT40	1/4"	3.00"	1.75"	1.00"	1.00"
C40SF-0250-6.00B	CT40	1/4"	6.00"	1.75"	1.00"	1.00"
C40SF-0375-3.00B	CT40	3/8"	3.00"	1.75"	1.00"	1.13"
C40SF-0375-6.00B	CT40	3/8"	6.00"	1.75"	1.00"	1.13"
C40SF-0500-3.00B	CT40	1/2"	3.00"	2.50"	1.00"	1.25"
C40SF-0500-6.00B	CT40	1/2"	6.00"	2.50"	1.00"	1.25"
C40SF-0625-3.00B	CT40	5/8"	3.00"	2.50"	1.25"	1.38"
C40SF-0625-6.00B	CT40	5/8"	6.00"	2.50"	1.25"	1.38"
C40SF-0750-3.00B	CT40	3/4"	3.00"	2.50"	1.25"	1.50"
C40SF-0750-6.00B	CT40	3/4"	6.00"	2.50"	1.25"	1.50"
C40SF-1000-4.00B	CT40	1"	4.00"	2.50"	1.25"	1.75"
C40SF-1000-6.00B	CT40	1"	6.00"	2.50"	1.25"	1.75"
C40SF-1250-4.00B	CT40	1-1/4"	4.00"	2.50"	1.25"	2.00"
C40SF-1250-6.00B	CT40	1-1/4"	6.00"	2.50"	1.25"	2.00"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

CT50 BALANCEABLE SHRINK FIT HOLDERS



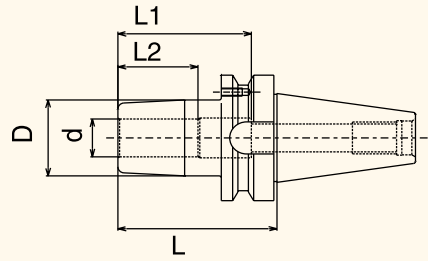
Part Number	Taper	d	L	L1	L2	D
C50SF-0250-3.00B	CT50	1/4"	3.00"	1.71"	1.00"	1.00"
C50SF-0250-6.00B	CT50	1/4"	6.00"	1.71"	1.00"	1.00"
C50SF-0250-8.00B	CT50	1/4"	8.00"	1.71"	1.00"	1.00"
C50SF-0375-3.00B	CT50	3/8"	3.00"	1.75"	1.00"	1.13"
C50SF-0375-6.00B	CT50	3/8"	6.00"	1.75"	1.00"	1.13"
C50SF-0375-8.00B	CT50	3/8"	8.00"	1.75"	1.00"	1.13"
C50SF-0500-3.00B	CT50	1/2"	3.00"	2.50"	1.00"	1.25"
C50SF-0500-6.00B	CT50	1/2"	6.00"	2.00"	1.00"	1.25"
C50SF-0500-8.00B	CT50	1/2"	8.00"	2.00"	1.00"	1.25"
C50SF-0625-3.00B	CT50	5/8"	3.00"	2.50"	1.25"	1.38"
C50SF-0625-6.00B	CT50	5/8"	6.00"	2.00"	1.00"	1.38"
C50SF-0625-8.00B	CT50	5/8"	8.00"	2.00"	1.00"	1.38"
C50SF-0750-3.00B	CT50	3/4"	3.00"	2.50"	1.25"	1.50"
C50SF-0750-6.00B	CT50	3/4"	6.00"	2.00"	1.25"	1.50"
C50SF-0750-8.00B	CT50	3/4"	8.00"	4.00"	1.25"	1.50"
C50SF-1000-4.00B	CT50	1"	4.00"	2.50"	1.25"	1.75"
C50SF-1000-6.00B	CT50	1"	6.00"	2.50"	1.25"	1.75"
C50SF-1000-8.00B	CT50	1"	8.00"	2.50"	1.25"	1.75"
C50SF-1250-4.00B	CT50	1-1/4"	4.00"	2.50"	1.50"	2.00"
C50SF-1250-6.00B	CT50	1-1/4"	6.00"	3.00"	1.50"	2.00"
C50SF-1250-8.00B	CT50	1-1/4"	8.00"	3.00"	1.50"	2.00"
C50SF-1500-4.00B	CT50	1-1/2"	4.00"	2.50"	1.75"	2.25"
C50SF-1500-6.00B	CT50	1-1/2"	6.00"	2.50"	1.25"	2.25"
C50SF-1500-8.00B	CT50	1-1/2"	8.00"	4.00"	1.25"	2.25"
C50SF-2000-4.00B	CT50	2"	4.00"	2.95"	2.00"	2.75"
C50SF-2000-6.00B	CT50	2"	6.00"	3.50"	2.00"	2.75"
C50SF-2000-8.00B	CT50	2"	8.00"	3.50"	2.00"	2.75"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

BT40 BALANCEABLE SHRINK FIT HOLDERS

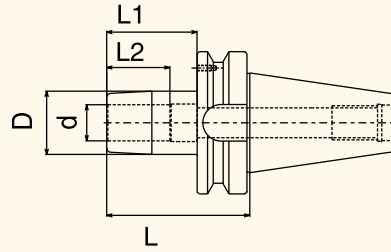


Part Number	Taper	d	L	L1	L2	D
B40SF-0250-3.00B	BT40	1/4"	3.00"	1.75"	1.00"	1.00"
B40SF-0250-6.00B	BT40	1/4"	6.00"	1.75"	1.00"	1.00"
B40SF-0375-3.00B	BT40	3/8"	3.00"	1.75"	1.00"	1.13"
B40SF-0375-6.00B	BT40	3/8"	6.00"	1.75"	1.00"	1.13"
B40SF-0500-3.00B	BT40	1/2"	3.00"	2.50"	1.00"	1.25"
B40SF-0500-6.00B	BT40	1/2"	6.00"	2.50"	1.00"	1.25"
B40SF-0625-3.00B	BT40	5/8"	3.00"	2.50"	1.25"	1.38"
B40SF-0625-6.00B	BT40	5/8"	6.00"	2.50"	1.25"	1.38"
B40SF-0750-3.00B	BT40	3/4"	3.00"	2.50"	1.25"	1.50"
B40SF-0750-6.00B	BT40	3/4"	6.00"	2.50"	1.25"	1.50"
B40SF-1000-4.00B	BT40	1"	4.00"	2.50"	1.25"	1.75"
B40SF-1000-6.00B	BT40	1"	6.00"	2.50"	1.25"	1.75"
B40SF-1250-4.00B	BT40	1-1/4"	4.00"	2.50"	1.25"	2.00"
B40SF-1250-6.00B	BT40	1-1/4"	6.00"	2.50"	1.25"	2.00"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

SHRINK FIT TOOLHOLDERS

BT50 BALANCEABLE SHRINK FIT HOLDERS



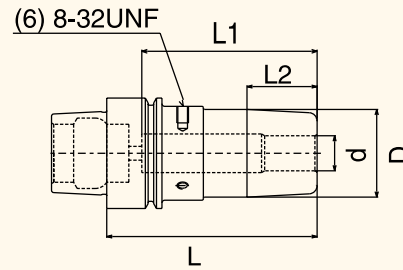
Part Number	Taper	d	L	$L1$	$L2$	D
B50SF-0250-3.00B	BT50	1/4"	3.00"	1.75"	1.00"	1.00"
B50SF-0250-6.00B	BT50	1/4"	6.00"	1.75"	1.00"	1.00"
B50SF-0375-3.00B	BT50	3/8"	3.00"	1.75"	1.00"	1.13"
B50SF-0375-6.00B	BT50	3/8"	6.00"	1.75"	1.00"	1.13"
B50SF-0500-3.00B	BT50	1/2"	3.00"	2.50"	1.00"	1.25"
B50SF-0500-6.00B	BT50	1/2"	6.00"	2.50"	1.00"	1.25"
B50SF-0625-3.00B	BT50	5/8"	3.00"	2.50"	1.25"	1.38"
B50SF-0625-6.00B	BT50	5/8"	6.00"	2.50"	1.25"	1.38"
B50SF-0750-3.00B	BT50	3/4"	3.00"	2.50"	1.25"	1.50"
B50SF-0750-6.00B	BT50	3/4"	6.00"	2.50"	1.25"	1.50"
B50SF-1000-4.00B	BT50	1"	4.00"	2.50"	1.25"	1.75"
B50SF-1000-6.00B	BT50	1"	6.00"	2.50"	1.25"	1.75"
B50SF-1250-4.00B	BT50	1-1/4"	4.00"	2.50"	1.25"	2.00"
B50SF-1250-6.00B	BT50	1-1/4"	6.00"	2.50"	1.25"	2.00"
B50SF-1500-4.00B	BT50	1-1/2"	4.00"	2.50"	1.25"	2.25"
B50SF-1500-6.00B	BT50	1-1/2"	6.00"	2.50"	1.25"	2.25"
B50SF-2000-4.50B	BT50	2"	4.50"	2.95"	1.25"	2.75"
B50SF-2000-6.00B	BT50	2"	6.00"	2.95"	1.25"	2.75"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

HSK32E BALANCEABLE SHRINK FIT HOLDERS

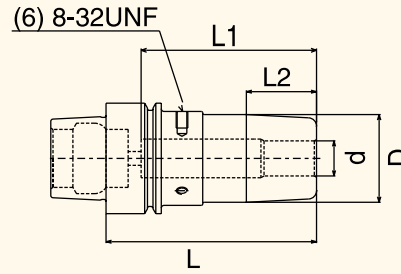


Part Number	Taper	<i>d</i>	<i>L</i>	<i>L1</i>	<i>L2</i>	<i>D</i>
B/HSK32E-SF0187-3.00	HSK32E	3/16"	3.00"	1.75"	1.00"	0.94"
B/HSK32E-SF0187-4.00	HSK32E	3/16"	4.00"	1.75"	1.00"	0.94"
B/HSK32E-SF0250-3.00	HSK32E	1/4"	3.00"	1.75"	1.00"	1.03"
B/HSK32E-SF0250-4.00	HSK32E	1/4"	4.00"	1.75"	1.00"	1.03"
B/HSK32E-SF0375-3.00	HSK32E	3/8"	3.00"	1.75"	1.00"	1.03"
B/HSK32E-SF0375-4.00	HSK32E	3/8"	4.00"	1.75"	1.00"	1.03"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

SHRINK FIT TOOLHOLDERS

HSK40E BALANCEABLE SHRINK FIT HOLDERS



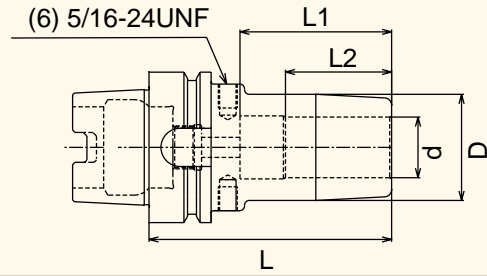
Part Number	Taper	d	L	L1	L2	D
B/HSK40E-SF0187-3.00	HSK40E	3/16"	3.00"	1.75"	1.00"	0.936"
B/HSK40E-SF0187-4.00	HSK40E	3/16"	4.00"	1.75"	1.00"	0.936"
B/HSK40E-SF0250-3.00	HSK40E	1/4"	3.00"	1.75"	1.00"	1.00"
B/HSK40E-SF0250-4.00	HSK40E	1/4"	4.00"	1.75"	1.00"	1.00"
B/HSK40E-SF0375-3.00	HSK40E	3/8"	3.00"	1.75"	1.00"	1.13"
B/HSK40E-SF0375-4.00	HSK40E	3/8"	4.00"	1.75"	1.00"	1.13"
B/HSK40E-SF0500-3.00	HSK40E	1/2"	3.00"	2.50"	1.00"	1.25"
B/HSK40E-SF0500-4.00	HSK40E	1/2"	4.00"	2.50"	1.00"	1.25"
B/HSK40E-SF0625-3.00	HSK40E	5/8"	3.00"	2.50"	1.25"	1.34"
B/HSK40E-SF0625-4.00	HSK40E	5/8"	4.00"	2.50"	1.25"	1.34"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

HSK63A BALANCEABLE SHRINK FIT HOLDERS

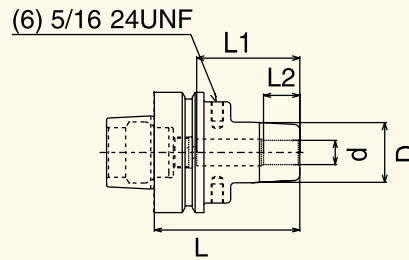


Part Number	Taper	d	L	L1	L2	D
B/HSK63A-SF0250-3.00	HSK63A	1/4"	3.00"	1.75"	1.00"	1.00"
B/HSK63A-SF0250-6.00	HSK63A	1/4"	6.00"	1.75"	1.00"	1.00"
B/HSK63A-SF0375-3.00	HSK63A	3/8"	3.00"	1.75"	1.00"	1.13"
B/HSK63A-SF0375-6.00	HSK63A	3/8"	6.00"	1.75"	1.00"	1.13"
B/HSK63A-SF0500-3.00	HSK63A	1/2"	3.00"	2.04"	1.00"	1.25"
B/HSK63A-SF0500-6.00	HSK63A	1/2"	6.00"	2.50"	1.00"	1.25"
B/HSK63A-SF0625-3.00	HSK63A	5/8"	3.00"	2.04"	1.25"	1.38"
B/HSK63A-SF0625-6.00	HSK63A	5/8"	6.00"	2.04"	1.25"	1.38"
B/HSK63A-SF0750-3.50	HSK63A	3/4"	3.50"	2.50"	1.25"	1.50"
B/HSK63A-SF0750-6.00	HSK63A	3/4"	6.00"	2.50"	1.25"	1.50"
B/HSK63A-SF1000-4.00	HSK63A	1"	4.00"	2.50"	1.25"	1.75"
B/HSK63A-SF1000-6.00	HSK63A	1"	6.00"	2.50"	1.25"	1.25"

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.

SHRINK FIT TOOLHOLDERS

HSK63F BALANCEABLE SHRINK FIT HOLDERS



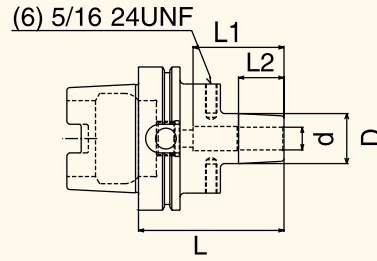
Part Number	Taper	d	L	L1	L2	D
B/HSK63F-SF0250-3.00	HSK63F	1/4"	3.00"	1.00"	1.00"	1.00"
B/HSK63F-SF0250-6.00	HSK63F	1/4"	6.00"	1.00"	1.00"	1.00"
B/HSK63F-SF0375-3.00	HSK63F	3/8"	3.00"	2.12"	1.00"	1.13"
B/HSK63F-SF0375-6.00	HSK63F	3/8"	6.00"	2.12"	1.00"	1.13"
B/HSK63F-SF0500-3.00	HSK63F	1/2"	3.00"	2.12"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

Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

HSK100A BALANCEABLE SHRINK FIT HOLDERS



Part Number	Taper	d	L	L1	L2	D
B/HSK100A-SF0375-4.00	HSK100A	3/8"	4.00"	1.75"	1.00"	1.13"
B/HSK100A-SF0375-6.00	HSK100A	3/8"	6.00"	1.75"	1.00"	1.13"
B/HSK100A-SF0500-4.00	HSK100A	1/2"	4.00"	2.50"	1.00"	1.25"
B/HSK100A-SF0500-6.00	HSK100A	1/2"	6.00"	2.50"	1.00"	1.25"
B/HSK100A-SF0625-4.00	HSK100A	5/8"	4.00"	2.50"	1.25"	1.38"
B/HSK100A-SF0625-6.00	HSK100A	5/8"	6.00"	2.50"	1.25"	1.38"
B/HSK100A-SF0750-4.00	HSK100A	3/4"	4.00"	2.50"	1.25"	1.50"
B/HSK100A-SF0750-6.00	HSK100A	3/4"	6.00"	2.50"	1.25"	1.50"
B/HSK100A-SF1000-4.00	HSK100A	1"	4.00"	2.50"	1.25"	1.75"
B/HSK100A-SF1000-6.00	HSK100A	1"	6.00"	2.50"	1.25"	1.75"
B/HSK100A-SF1250-4.00	HSK100A	1-1/4"	4.00"	2.50"	1.25"	2.00"
B/HSK100A-SF1250-6.00	HSK100A	1-1/4"	6.00"	2.50"	1.25"	2.00"
B/HSK100A-SF1500-4.00	HSK100A	1-1/2"	4.00"	2.50"	1.25"	2.25"
B/HSK100A-SF1500-6.00	HSK100A	1-1/2"	6.00"	2.50"	1.25"	2.25"

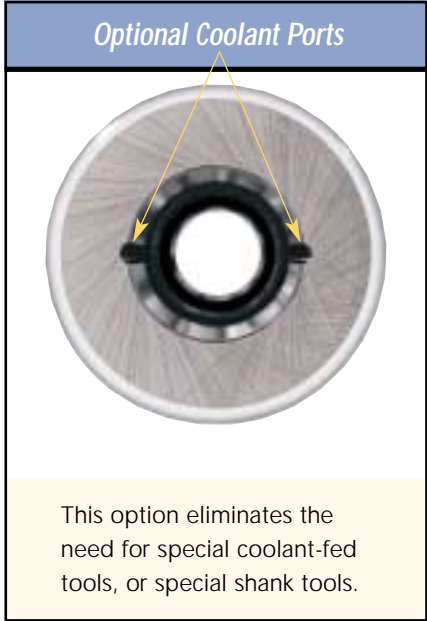
Note: For lateral coolant port option, see page 273. For pre-balanced specifications, see page 245.



SHRINK FIT TOOLHOLDERS

Lateral Coolant Port Option

The Shrink Fit connection creates a sealed interface for coolant-fed tools. As an option, lateral coolant ports can be added to the bore to direct coolant down the flutes of the cutting tool and onto the cutting edge. This system eliminates the need for special coolant-fed tools and the need to alter the tool shank for coolant delivery.



SHRINK FIT TOOLHOLDERS

Accessories



DEPTH SETTING RINGS

Depth setting rings easily and precisely pre-set the projection length of the cutting tool in the Shrink Fit assembly.

Number	Description
DS-1	Depth Setting Ring for 1/4" ~ 1/2" and 6 mm ~ 12 mm I.D.
DS-2	Depth Setting Ring for 1/2" ~ 1" and 12 mm ~ 25 mm I.D.
DS-3	Depth Setting Ring for 1" ~ 2" and 32 mm ~ 40 mm I.D.



REPLACEMENT HEAT-RESISTANT GLOVES

Because of the extreme heat involved with the Shrink Fit process, it is highly recommended that the operator wear heat-resistant gloves at all times.

Number	Description
SF-Gloves	Pair of Heat-Resistant Gloves

SHRINK FIT TOOLHOLDERS

Accessories

HSK COOLANT TUBE WRENCHES

Coolant tube wrenches are needed to remove or install coolant tubes in HSK toolholders.	
Number	Description
HSK32-Wrench	Wrench for HSK32 Coolant Tubes
HSK40-Wrench	Wrench for HSK40 Coolant Tubes
HSK63-Wrench	Wrench for HSK63 Coolant Tubes
HSK100-Wrench	Wrench for HSK100 Coolant Tubes



COOLANT TUBES

HSK Shrink Fit holders do not come equipped with coolant tubes. Coolant tubes are available from stock.	
Number	Description
HSK32-TUBE	Coolant Tube for HSK32 Taper Toolholders
HSK40-TUBE	Coolant Tube for HSK40 Taper Toolholders
HSK63-TUBE	Coolant Tube for HSK63 Taper Toolholders
HSK100-TUBE	Coolant Tube for HSK100 Taper Toolholders



BALANCING KITS

When re-balancing balanceable type Shrink Fit holders, additional screws and/or weights may be required.	
Number	Description
BAL-KIT(M3)	M3 Balancing Kit for 40 Taper Shrink Fit
BAL-KIT(M4)	M4 Balancing Kit for 50 Taper Shrink Fit



SHRINK FIT TOOLHOLDERS

Induction Coils/Fixtures

REPLACEMENT INDUCTION COILS

Each induction heating machine comes equipped with 3 induction coils. Additional size induction coils may be needed to accommodate the various nose diameters of Shrink Fit holders.

Number	Description
COIL-S	Induction Coil for Shrink Fit Machine — Small (ø.500" max.)
COIL-M	Induction Coil for Shrink Fit Machine — Medium (ø1.25" max.)
COIL-L	Induction Coil for Shrink Fit Machine — Large (ø2.00" max.)



REPLACEMENT CLAMPING FIXTURES

Each induction heating machine comes equipped with 3 clamping fixtures.

Number	Description
30-IMF	30 taper (HSK32, 40, 50) Induction Machine Fixture
40-IMF	40 taper (HSK63, 80) Induction Machine Fixture
50-IMF	50 taper (HSK100) Induction Machine Fixture

