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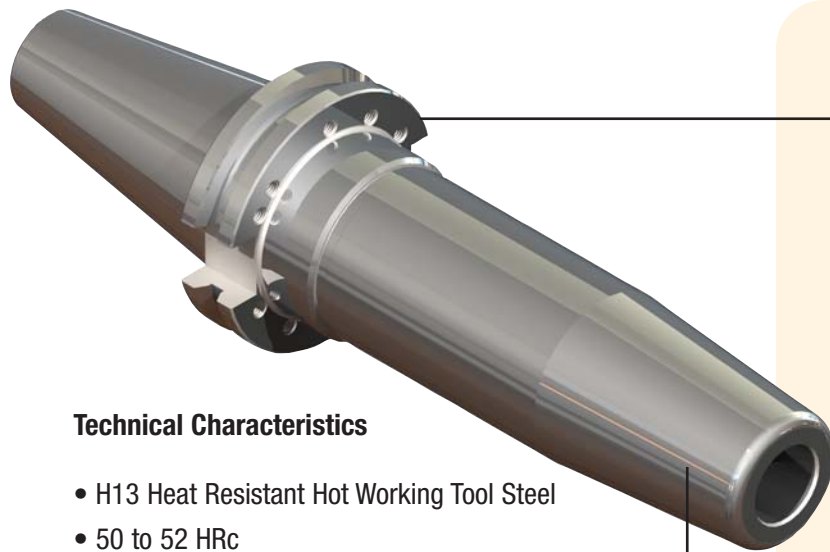
Featured Video

Shrink Fit Holder Features

The Industry's Highest Quality Shrink Fit Line

Our new Shrink Fit holders offer optimal balance and maximum grip characteristics. All our Shrink Fit Holders are made in Japan with the highest quality tool steel ensuring longevity for many heating and shrinking cycles. Symmetrical by design, balanced according to our patented balancing method, our Shrink Fit holders have become ubiquitous for all high precision shrink fit applications. Standard holders do not include balanceable set screw holes

Our complete line of Shrink Fit holders includes CAT40, CAT50, HSK32E, HSK63A, HSK80F, BT30, 40 and 50, available in different lengths, both inch and metric sizes.

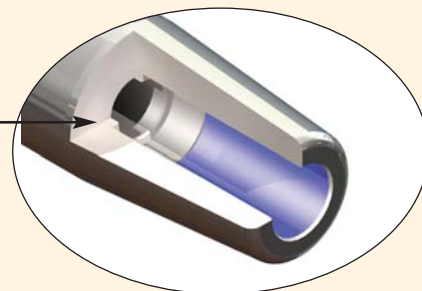


Technical Characteristics

- H13 Heat Resistant Hot Working Tool Steel
- 50 to 52 HRC
- Works excellent on both HSS and Solid Carbide tools
- Pre-balanced and balanceable up to 40,000 RPM

Optional Balancing Screws

- Large tapped balancing set screw PCD gives more set screw location to counterbalance non symmetrical or unbalanced cutters.
- Tapped balancing set screw holes are parallel to the centerline of the holder, ensuring that the set screws will never be ejected from vibration and centrifugal force during high RPM milling applications.



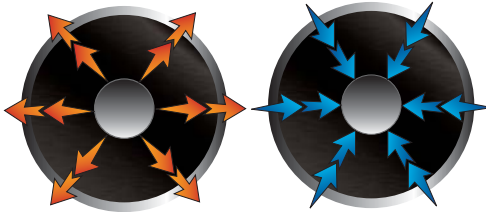
Bore Grind

- Bore grind is 10% longer than other manufacturers shrink fit holders, providing more surface area of contact. This results in stronger gripping strength and better TIR.

Taper Type	G-Grade RPM	Taper Type	G-Grade RPM
CAT40	G2.5	HSK32E	G6.3
	24,000RPM		42,000RPM
CAT50	G2.5	HSK40E	G6.3
	15,000RPM		42,000RPM
BT30	G2.5	HSK63A	G2.5
	24,000RPM		24,000RPM
BT40	G2.5	HSK100A	G2.5
	24,000RPM		15,000RPM
BT50	G2.5	HSK63F	G2.5
	15,000RPM		33,000RPM
		HSK80F	G2.5
			33,000RPM

Shrink Fit Holder Features

Long Term Reliability



Our shrink Fit System gives consistent and highly repeatable results. This repeatability allows for extreme accuracy, rigidity and balance. Our uniform and superior gripping on the tool shank provides the best torque and force capability compared to other manufacturers.



Coolant Options

Our toolholders offer different coolant-thru options which provide coolant directly to the cutting edge. This will extend cutting tool life and increase hole accuracy. Lateral coolant ports can be added to the bore to direct coolant down the flutes of the cutting tool and onto the cutting edge.

Straight Shank Shrink Fit Holder



Patented Balancing Method (Optional)

Lyndex-Nikken HSBalance toolholders employ a series of tapped holes surrounding the holder's centerline. Small set screws and weights are used to achieve balance. The holes are drilled parallel (not perpendicular) to the holder's centerline so the inserted set screws are not depth sensitive. A deeper setting will not affect the weight distribution.



Parallel holes offer an additional advantage: set screws cannot become unscrewed and back out during high-speed operations, so they need not be affixed semi-permanently.



CAT40 Shrink Fit Holders

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced and optionally balanceable for up to 40,000RPM
- Featuring the latest Japanese shrink fit technology
- Increase cutting tool life, removal rate and workpiece accuracy

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



TIR: 0.0002 or better



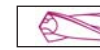
Speed: up to 40,000 rpm



Set-up: quick and easy to operate



Coolant-thru: jet slots (optional)



Drilling
★☆☆☆☆



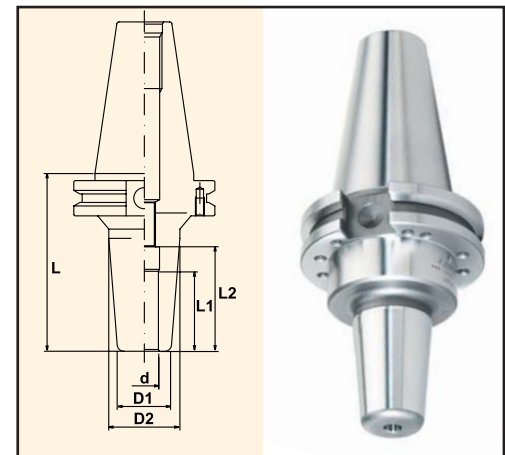
Milling
★★★★★



Reaming
★☆☆☆☆

Inch

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
C40SF-0125-3.15	1/8"	3.15"	0.35"	-	0.39"	0.63"	-
C40SF-0125-6.30	1/8"	6.30"	0.35"	-	0.39"	0.75"	-
C40SF-0187-3.15	3/16"	3.15"	0.47"	-	0.39"	0.63"	-
C40SF-0187-6.30	3/16"	6.30"	0.47"	-	0.39"	0.75"	-
C40SF-0250-3.15	1/4"	3.15"	0.87"	1.42"	0.83"	1.06"	M5
C40SF-0250-5.12	1/4"	5.12"	0.87"	1.42"	0.83"	1.06"	M5
C40SF-0250-6.30	1/4"	6.30"	0.87"	1.42"	0.83"	1.06"	M5
C40SF-0375-3.15	3/8"	3.15"	1.22"	1.65"	0.94"	1.26"	M8
C40SF-0375-5.12	3/8"	5.12"	1.22"	1.65"	0.94"	1.26"	M8
C40SF-0375-6.30	3/8"	6.30"	1.22"	1.65"	0.94"	1.26"	M8
C40SF-0500-3.15	1/2"	3.15"	1.42"	1.85"	0.94"	1.26"	M10
C40SF-0500-5.12	1/2"	5.12"	1.42"	1.85"	0.94"	1.26"	M10
C40SF-0500-6.30	1/2"	6.30"	1.42"	1.85"	0.94"	1.26"	M10
C40SF-0625-3.15	5/8"	3.15"	1.54"	1.97"	1.06"	1.34"	M12
C40SF-0625-5.12	5/8"	5.12"	1.54"	1.97"	1.06"	1.34"	M12
C40SF-0625-6.30	5/8"	6.30"	1.54"	1.97"	1.06"	1.34"	M12
C40SF-0750-3.15	3/4"	3.15"	1.61"	2.05"	1.30"	1.65"	M16
C40SF-0750-5.12	3/4"	5.12"	1.61"	2.05"	1.30"	1.65"	M16
C40SF-0750-6.30	3/4"	6.30"	1.61"	2.05"	1.30"	1.65"	M16
C40SF-1000-3.94	1"	3.94"	1.85"	2.28"	1.73"	2.09"	M16
C40SF-1000-5.12	1"	5.12"	1.85"	2.28"	1.73"	2.09"	M16
C40SF-1000-6.30	1"	6.30"	1.85"	2.28"	1.73"	2.09"	M16
C40SF-1250-3.94	1.1/4"	3.94"	2.01"	2.44"	1.73"	2.09"	M16
C40SF-1250-5.12	1.1/4"	5.12"	2.01"	2.44"	1.73"	2.09"	M16
C40SF-1250-6.30	1.1/4"	6.30"	2.01"	2.44"	1.73"	2.09"	M16



Shown with optional balanceable set screw.
All nose angles are 4.5°.

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100

Metric

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
C40SF-3-80	3mm	80mm	9mm	-	10mm	16mm	-
C40SF-3-160	3mm	160mm	9mm	-	10mm	19mm	-
C40SF-6-80	6mm	80mm	22mm	36mm	21mm	27mm	M5
C40SF-6-160	6mm	160mm	22mm	36mm	21mm	27mm	M5
C40SF-8-80	8mm	80mm	26mm	36mm	21mm	27mm	M6
C40SF-8-160	8mm	160mm	26mm	36mm	21mm	27mm	M6
C40SF-10-80	10mm	80mm	31mm	42mm	24mm	32mm	M8
C40SF-10-160	10mm	160mm	31mm	42mm	24mm	32mm	M8
C40SF-12-80	12mm	80mm	36mm	47mm	24mm	32mm	M10
C40SF-12-160	12mm	160mm	36mm	47mm	24mm	32mm	M10
C40SF-16-80	16mm	80mm	39mm	50mm	27mm	34mm	M12
C40SF-16-160	16mm	160mm	39mm	50mm	27mm	34mm	M12
C40SF-20-80	20mm	80mm	41mm	52mm	33mm	42mm	M16
C40SF-20-160	20mm	160mm	41mm	52mm	33mm	42mm	M16
C40SF-25-100	25mm	100mm	47mm	58mm	44mm	52mm	M16
C40SF-25-160	25mm	160mm	47mm	58mm	44mm	53mm	M16
C40SF-32-100	32mm	100mm	51mm	62mm	44mm	52mm	M16
C40SF-32-160	32mm	160mm	51mm	62mm	44mm	53mm	M16

Note: Balancing screw for CT40 is M4. CAT40 Shrink Fit Holders are balanced to G2.5 at 24,000RPM. Standard holders do not include balanceable set screw holes. Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).

Accessories:

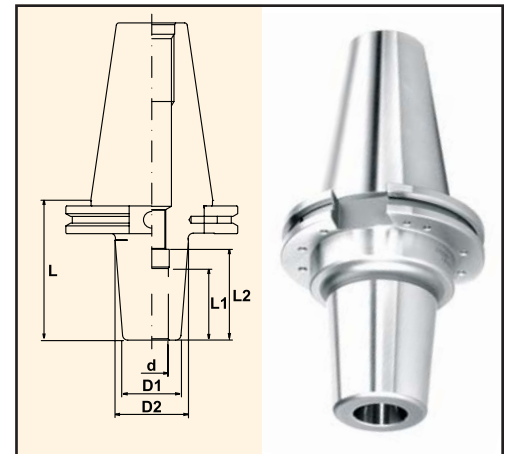


Shrink Fit Unit and Accessories
Page 174

CAT50 Shrink Fit Holders

Inch

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
C50SF-0125-3.15	1/8"	3.15"	0.35"	-	0.39"	0.77"	-
C50SF-0125-6.30	1/8"	6.30"	0.35"	-	0.39"	1.17"	-
C50SF-0250-3.15	1/4"	3.15"	0.87"	1.42"	0.83"	1.06"	M5
C50SF-0250-5.12	1/4"	5.12"	0.87"	1.42"	0.83"	1.06"	M5
C50SF-0250-6.30	1/4"	6.30"	0.87"	1.42"	0.83"	1.06"	M5
C50SF-0375-3.15	3/8"	3.15"	1.22"	1.65"	0.94"	1.26"	M8
C50SF-0375-5.12	3/8"	5.12"	1.22"	1.65"	0.94"	1.26"	M8
C50SF-0375-6.30	3/8"	6.30"	1.22"	1.65"	0.94"	1.26"	M8
C50SF-0500-3.15	1/2"	3.15"	1.42"	1.85"	0.94"	1.26"	M10
C50SF-0500-5.12	1/2"	5.12"	1.42"	1.85"	0.94"	1.26"	M10
C50SF-0500-6.30	1/2"	6.30"	1.42"	1.85"	0.94"	1.26"	M10
C50SF-0625-3.15	5/8"	3.15"	1.54"	1.97"	1.06"	1.34"	M12
C50SF-0625-5.12	5/8"	5.12"	1.54"	1.97"	1.06"	1.34"	M12
C50SF-0625-6.30	5/8"	6.30"	1.54"	1.97"	1.06"	1.34"	M12
C50SF-0750-3.15	3/4"	3.15"	1.61"	2.05"	1.30"	1.65"	M16
C50SF-0750-5.12	3/4"	5.12"	1.61"	2.05"	1.30"	1.65"	M16
C50SF-0750-6.30	3/4"	6.30"	1.61"	2.05"	1.30"	1.65"	M16
C50SF-1000-3.94	1"	3.94"	1.85"	2.28"	1.73"	2.09"	M16
C50SF-1000-5.12	1"	5.12"	1.85"	2.28"	1.73"	2.09"	M16
C50SF-1000-6.30	1"	6.30"	1.85"	2.28"	1.73"	2.09"	M16
C50SF-1250-3.94	1.1/4"	3.94"	2.01"	2.44"	1.73"	2.09"	M16
C50SF-1250-5.12	1.1/4"	5.12"	2.01"	2.44"	1.73"	2.09"	M16
C50SF-1250-6.30	1.1/4"	6.30"	2.01"	2.44"	1.73"	2.09"	M16



Shown with optional balanceable set screw.
All nose angles are 4.5°.

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100

Metric

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
C50SF-3-80	3mm	80mm	9mm	-	10mm	20mm	-
C50SF-3-160	3mm	160mm	9mm	-	10mm	30mm	-
C50SF-6-80	6mm	80mm	22mm	36mm	21mm	27mm	M5
C50SF-8-80	8mm	80mm	26mm	36mm	21mm	27mm	M6
C50SF-8-160	8mm	160mm	26mm	36mm	21mm	38mm	M6
C50SF-10-80	10mm	80mm	31mm	42mm	24mm	32mm	M8
C50SF-10-160	10mm	160mm	31mm	42mm	24mm	32mm	M8
C50SF-12-80	12mm	80mm	36mm	47mm	24mm	32mm	M10
C50SF-12-160	12mm	160mm	36mm	47mm	24mm	32mm	M10
C50SF-16-80	16mm	80mm	39mm	50mm	27mm	34mm	M12
C50SF-16-160	16mm	160mm	39mm	50mm	27mm	34mm	M12
C50SF-20-80	20mm	80mm	41mm	52mm	33mm	42mm	M16
C50SF-20-160	20mm	160mm	41mm	52mm	33mm	42mm	M16
C50SF-25-100	25mm	100mm	47mm	58mm	44mm	53mm	M16
C50SF-25-160	25mm	160mm	47mm	58mm	44mm	53mm	M16
C50SF-32-100	32mm	100mm	51mm	62mm	44mm	53mm	M16
C50SF-32-160	32mm	160mm	51mm	62mm	44mm	53mm	M16

Note: CAT50 Shrink Fit Holders are balanced to G2.5 at 15,000RPM.
Standard holders do not include balanceable set screw holes.
Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).

Accessories:



BT30/40 Shrink Fit Holders

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced and optionally balanceable for up to 40,000RPM
- Featuring the latest Japanese shrink fit technology
- Increase cutting tool life, removal rate and workpiece accuracy

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



TIR: 0.0002 or better



Speed: up to 40,000 rpm



Set-up: quick and easy to operate



Coolant-thru: jet slots (optional)



Drilling
★☆☆☆☆



Milling
★☆☆☆☆



Reaming
★☆☆☆☆

BT30 - Inch

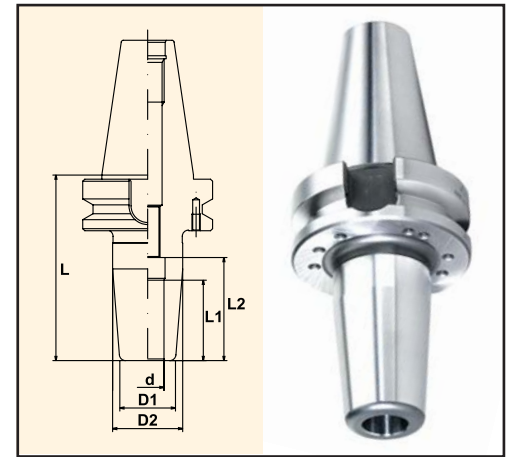
Part Number	d	L	L1	L2	D1	D2	Back-up Screw
B30SF-0125-3.15	1/8"	3.15"	0.35"	-	0.39"	0.71"	-
B30SF-0250-3.15	1/4"	3.15"	0.87"	1.42"	0.83"	1.06"	M5
B30SF-0375-3.15	3/8"	3.15"	1.22"	1.65"	0.94"	1.22"	M8
B30SF-0500-3.15	1/2"	3.15"	1.42"	1.85"	0.94"	1.22"	M10
B30SF-0625-3.15	5/8"	3.15"	1.54"	1.97"	1.06"	1.34"	M12
B30SF-0750-3.15	3/4"	3.15"	1.61"	2.05"	1.30"	1.54"	M16

Note: Balancing screw for BT30 is M3.

BT30 Shrink Fit Holders are balanced to G2.5 at 24,000RPM.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).



Shown with optional balanceable set screw.
All nose angles are 4.5°.

BT40 - Inch

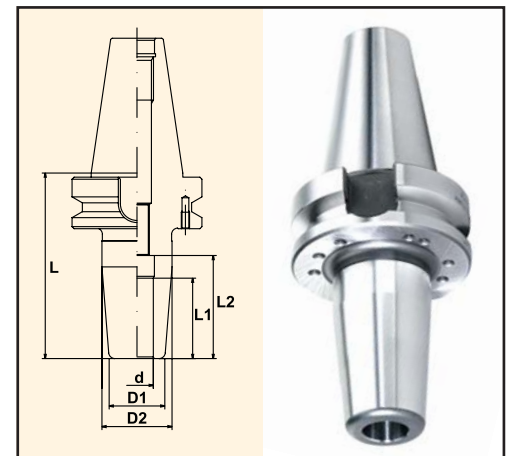
Part Number	d	L	L1	L2	D1	D2	Back-up Screw
B40SF-0125-3.54	1/8"	3.54"	0.35"	-	0.39"	0.71"	-
B40SF-0125-6.30	1/8"	6.30"	0.35"	-	0.39"	0.71"	-
B40SF-0250-3.54	1/4"	3.54"	0.87"	1.42"	0.83"	1.06"	M5
B40SF-0250-6.30	1/4"	6.30"	0.87"	1.42"	0.83"	1.06"	M5
B40SF-0375-3.54	3/8"	3.54"	1.22"	1.65"	0.94"	1.26"	M8
B40SF-0375-6.30	3/8"	6.30"	1.22"	1.65"	0.94"	1.26"	M8
B40SF-0500-3.54	1/2"	3.54"	1.42"	1.85"	0.94"	1.26"	M10
B40SF-0500-6.30	1/2"	6.30"	1.42"	1.85"	0.94"	1.26"	M10
B40SF-0625-3.54	5/8"	3.54"	1.54"	1.97"	1.06"	1.34"	M12
B40SF-0625-6.30	5/8"	6.30"	1.54"	1.97"	1.06"	1.34"	M12
B40SF-0750-3.54	3/4"	3.54"	1.61"	2.05"	1.30"	1.61"	M16
B40SF-0750-6.30	3/4"	6.30"	1.61"	2.05"	1.30"	1.61"	M16
B40SF-1000-3.94	1"	3.94"	1.85"	2.28"	1.73"	2.05"	M16
B40SF-1000-6.30	1"	6.30"	1.85"	2.28"	1.73"	2.09"	M16
B40SF-1250-3.94	1.1/4"	3.94"	2.01"	2.44"	1.73"	2.05"	M16
B40SF-1250-6.30	1.1/4"	6.30"	2.01"	2.44"	1.73"	2.09"	M16

Note: Balancing screw for BT40 is M4.

BT40 Shrink Fit Holders are balanced to G2.5 at 24,000RPM.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).



Shown with optional balanceable set screw.
All nose angles are 4.5°.

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100

Accessories:



**Shrink Fit Unit
and Accessories**
Page 174

BT40/50 Shrink Fit Holders

BT40 - Metric

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
B40SF-6-90	6mm	90mm	22mm	36mm	21mm	27mm	M5
B40SF-6-160	6mm	160mm	22mm	36mm	21mm	27mm	M5
B40SF-8-90	8mm	90mm	26mm	36mm	21mm	27mm	M6
B40SF-8-160	8mm	160mm	26mm	36mm	21mm	27mm	M6
B40SF-10-90	10mm	90mm	31mm	42mm	24mm	32mm	M8
B40SF-10-160	10mm	160mm	31mm	42mm	24mm	32mm	M8
B40SF-12-90	12mm	90mm	36mm	47mm	24mm	32mm	M10
B40SF-12-160	12mm	160mm	36mm	47mm	24mm	32mm	M10
B40SF-16-90	16mm	90mm	39mm	50mm	27mm	34mm	M12
B40SF-16-160	16mm	160mm	39mm	50mm	27mm	34mm	M12
B40SF-20-90	20mm	90mm	41mm	52mm	33mm	41mm	M16
B40SF-20-160	20mm	160mm	41mm	52mm	33mm	41mm	M16
B40SF-25-100	25mm	100mm	47mm	58mm	44mm	52mm	M16
B40SF-25-160	25mm	160mm	47mm	58mm	44mm	53mm	M16
B40SF-32-100	32mm	100mm	51mm	62mm	44mm	52mm	M16
B40SF-32-160	32mm	160mm	51mm	62mm	44mm	53mm	M16

Note: Balancing screw for BT40 is M4.

BT40 Shrink Fit Holders are balanced to G2.5 at 24,000RPM.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).

BT50 - Inch

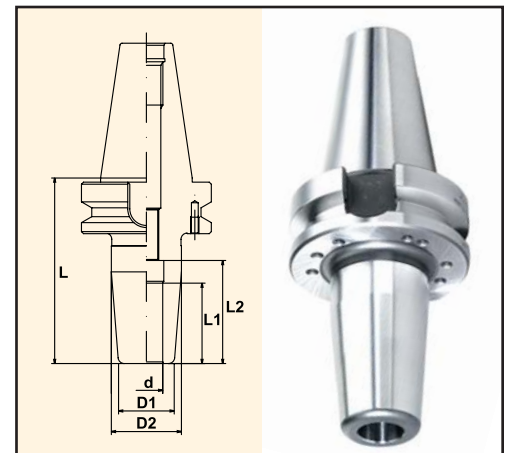
Part Number	d	L	L1	L2	D1	D2	Back-up Screw
B50SF-0125-3.94	1/8"	3.94"	0.35"	-	0.39"	0.78"	-
B50SF-0125-6.30	1/8"	6.30"	0.35"	-	0.39"	1.15"	-
B50SF-0250-3.94	1/4"	3.94"	0.87"	1.42"	0.83"	1.06"	M5
B50SF-0250-6.30	1/4"	6.30"	0.87"	1.42"	0.83"	1.06"	M5
B50SF-0375-3.94	3/8"	3.94"	1.22"	1.65"	0.94"	1.26"	M8
B50SF-0375-6.30	3/8"	6.30"	1.22"	1.65"	0.94"	1.26"	M8
B50SF-0500-3.94	1/2"	3.94"	1.42"	1.85"	0.94"	1.26"	M10
B50SF-0500-6.30	1/2"	6.30"	1.42"	1.85"	0.94"	1.26"	M10
B50SF-0625-3.94	5/8"	3.94"	1.54"	1.97"	1.06"	1.34"	M12
B50SF-0625-6.30	5/8"	6.30"	1.54"	1.97"	1.06"	1.34"	M12
B50SF-0750-3.94	3/4"	3.94"	1.61"	2.05"	1.30"	1.61"	M16
B50SF-0750-6.30	3/4"	6.30"	1.61"	2.05"	1.30"	1.65"	M16
B50SF-1000-3.94	1"	3.94"	1.85"	2.28"	1.73"	2.05"	M16
B50SF-1000-6.30	1"	6.30"	1.85"	2.28"	1.73"	2.09"	M16
B50SF-1250-3.94	1.1/4"	3.94"	2.01"	2.44"	1.73"	2.05"	M16
B50SF-1250-6.30	1.1/4"	6.30"	2.01"	2.44"	1.73"	2.09"	M16

Note: Balancing screw for BT50 is M4.

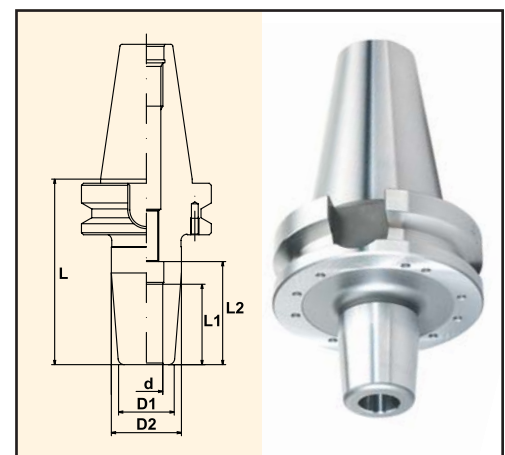
BT50 Shrink Fit Holders are balanced to G2.5 at 15,000RPM.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).



Shown with optional balanceable set screw. All nose angles are 4.5°.



Shown with optional balanceable set screw. All nose angles are 4.5°.

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100

Accessories:



Shrink Fit Unit
and Accessories
Page 174

BT50 Shrink Fit Holders

BT50 - Metric

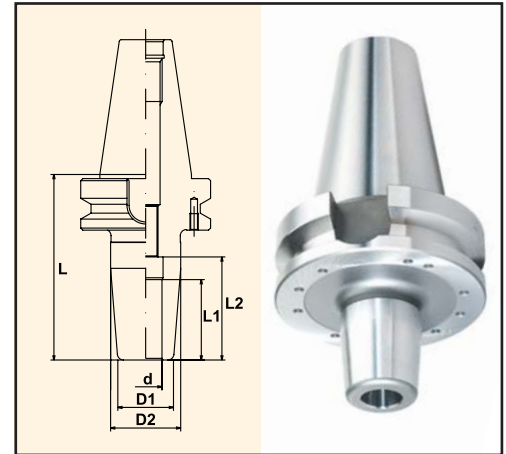
Part Number	d	L	L1	L2	D1	D2	Back-up Screw
B50SF-3-100	3mm	100mm	9mm	-	10mm	20mm	-
B50SF-3-160	3mm	160mm	9mm	-	10mm	30mm	-
B50SF-6-100	6mm	100mm	22mm	36mm	21mm	27mm	M5
B50SF-6-160	6mm	160mm	22mm	36mm	21mm	27mm	M5
B50SF-8-100	8mm	100mm	26mm	36mm	21mm	27mm	M6
B50SF-8-160	8mm	160mm	26mm	36mm	21mm	27mm	M6
B50SF-10-100	10mm	100mm	31mm	42mm	24mm	32mm	M8
B50SF-10-160	10mm	160mm	31mm	42mm	24mm	32mm	M8
B50SF-12-100	12mm	100mm	36mm	47mm	24mm	32mm	M10
B50SF-12-160	12mm	160mm	36mm	47mm	24mm	32mm	M10
B50SF-16-100	16mm	100mm	39mm	50mm	27mm	34mm	M12
B50SF-16-160	16mm	160mm	39mm	50mm	27mm	34mm	M12
B50SF-20-100	20mm	100mm	41mm	52mm	33mm	41mm	M16
B50SF-20-160	20mm	160mm	41mm	52mm	33mm	42mm	M16
B50SF-25-100	25mm	100mm	47mm	58mm	44mm	52mm	M16
B50SF-25-160	25mm	160mm	47mm	58mm	44mm	53mm	M16
B50SF-32-100	32mm	100mm	51mm	62mm	44mm	52mm	M16
B50SF-32-160	32mm	160mm	51mm	62mm	44mm	53mm	M16

Note: Balancing screw for BT50 is M4.

BT50 Shrink Fit Holders are balanced to G2.5 at 15,000RPM.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).



Shown with optional balanceable set screw.

All nose angles are 4.5°.

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100

Accessories:



Shrink Fit Unit
and Accessories
Page 174

HSK63A Shrink Fit Holders

- Excellent surface finish, extreme gripping and ideal for high-speed applications
- Pre-balanced and optionally balanceable for up to 40,000RPM
- Featuring the latest Japanese shrink fit technology
- Increase cutting tool life, removal rate and workpiece accuracy

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



TIR: 0.0002 or better



Speed: up to 40,000 rpm



Set-up: quick and easy to operate



Coolant-thru: jet slots (optional)



Drilling
★☆☆☆☆



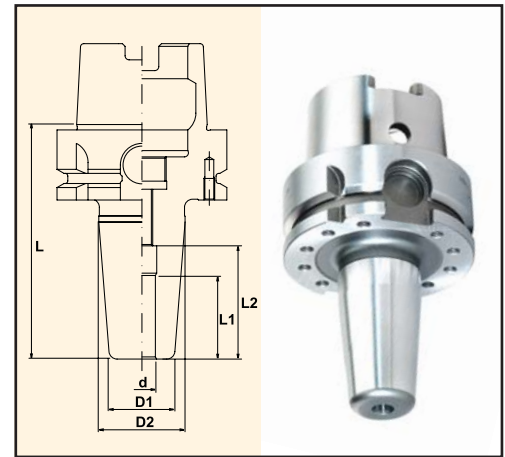
Milling
★★★★☆



Reaming
★☆☆☆☆

Inch

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK63A-SF0125-3.15	1/8"	3.15"	0.35"	-	0.39"	0.63"	-
HSK63A-SF0125-6.30	1/8"	6.30"	0.35"	-	0.39"	0.75"	-
HSK63A-SF0250-3.15	1/4"	3.15"	0.87"	1.42"	0.83"	1.06"	M5
HSK63A-SF0250-6.30	1/4"	6.30"	0.87"	1.42"	0.83"	1.06"	M5
HSK63A-SF0375-3.35	3/8"	3.35"	1.22"	1.65"	0.94"	1.26"	M8
HSK63A-SF0375-6.30	3/8"	6.30"	1.22"	1.65"	0.94"	1.26"	M8
HSK63A-SF0500-3.54	1/2"	3.54"	1.42"	1.85"	0.94"	1.26"	M10
HSK63A-SF0500-6.30	1/2"	6.30"	1.42"	1.85"	0.94"	1.26"	M10
HSK63A-SF0625-3.74	5/8"	3.74"	1.54"	1.97"	1.06"	1.34"	M12
HSK63A-SF0625-6.30	5/8"	6.30"	1.54"	1.97"	1.06"	1.34"	M12
HSK63A-SF0750-3.94	3/4"	3.94"	1.61"	2.05"	1.30"	1.65"	M16
HSK63A-SF0750-6.30	3/4"	6.30"	1.61"	2.05"	1.30"	1.65"	M16
HSK63A-SF1000-4.53	1"	4.53"	1.85"	2.28"	1.73"	2.09"	M16
HSK63A-SF1000-6.30	1"	6.30"	1.85"	2.28"	1.73"	2.09"	M16



Shown with optional balanceable set screw.
All nose angles are 4.5°.

Metric

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK63A-SF3-80	3mm	80mm	9mm	-	10mm	16mm	-
HSK63A-SF3-160	3mm	160mm	9mm	-	10mm	19mm	-
HSK63A-SF6-80	6mm	80mm	22mm	36mm	21mm	27mm	M5
HSK63A-SF6-160	6mm	160mm	22mm	36mm	21mm	27mm	M5
HSK63A-SF8-80	8mm	80mm	26mm	36mm	21mm	27mm	M6
HSK63A-SF8-160	8mm	160mm	26mm	36mm	21mm	27mm	M6
HSK63A-SF10-85	10mm	85mm	31mm	42mm	24mm	32mm	M8
HSK63A-SF10-160	10mm	160mm	31mm	42mm	24mm	32mm	M8
HSK63A-SF12-90	12mm	90mm	36mm	47mm	24mm	32mm	M10
HSK63A-SF12-160	12mm	160mm	36mm	47mm	24mm	32mm	M10
HSK63A-SF16-95	16mm	95mm	39mm	50mm	27mm	34mm	M12
HSK63A-SF16-160	16mm	160mm	39mm	50mm	27mm	34mm	M12
HSK63A-SF20-100	20mm	100mm	41mm	52mm	33mm	42mm	M16
HSK63A-SF20-160	20mm	160mm	41mm	52mm	33mm	42mm	M16
HSK63A-SF25-115	25mm	115mm	47mm	58mm	44mm	53mm	M16
HSK63A-SF25-160	25mm	160mm	47mm	58mm	44mm	53mm	M16
HSK63A-SF32-120	32mm	120mm	51mm	62mm	44mm	53mm	M16

Note: Balancing screw for HSK63A is M4.

HSK63A Shrink Fit Holders are balanced to G2.5 at 24,000RPM.

Coolant tube and coolant tube wrench are sold separately. See details on page 159.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100

Accessories:

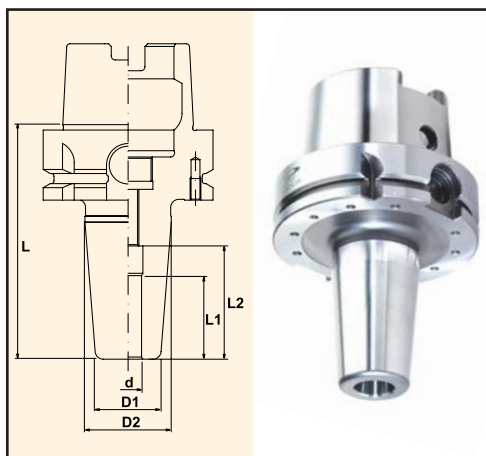


**Shrink Fit Unit
and Accessories**
Page 174

HSK100A Shrink Fit Holders

Inch

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK100A-SF0250-3.54	1/4"	3.54"	0.87"	1.42"	0.83"	1.14"	M5
HSK100A-SF0250-6.30	1/4"	6.30"	0.87"	1.42"	0.83"	1.06"	M5
SK100A-SF0375-3.54	3/8"	3.54"	1.22"	1.65"	0.94"	1.26"	M8
HSK100A-SF0375-6.30	3/8"	6.30"	1.22"	1.65"	0.94"	1.26"	M8
HSK100A-SF0500-3.74	1/2"	3.74"	1.42"	1.85"	0.94"	1.26"	M10
HSK100A-SF0500-6.30	1/2"	6.30"	1.42"	1.85"	0.94"	1.26"	M10
HSK100A-SF0625-3.94	5/8"	3.94"	1.54"	1.97"	1.06"	1.34"	M12
HSK100A-SF0625-6.30	5/8"	6.30"	1.54"	1.97"	1.06"	1.34"	M12
HSK100A-SF0750-4.13	3/4"	4.13"	1.61"	2.05"	1.30"	1.65"	M16
HSK100A-SF0750-6.30	3/4"	6.30"	1.61"	2.05"	1.30"	1.65"	M16
HSK100A-SF1000-4.53	1"	4.53"	1.85"	2.28"	1.73"	2.09"	M16
HSK100A-SF1000-6.30	1"	6.30"	1.85"	2.28"	1.73"	2.09"	M16
HSK100A-SF1250-4.72	1.1/4"	4.72"	2.01"	2.44"	1.73"	2.09"	M16
HSK100A-SF1250-6.30	1.1/4"	6.30"	2.01"	2.44"	1.73"	2.09"	M16



Shown with optional balanceable set screw.
All nose angles are 4.5°.

Metric

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK100A-SF6-85	6mm	85mm	22mm	36mm	21mm	27mm	M5
HSK100A-SF6-160	6mm	160mm	22mm	36mm	21mm	27mm	M5
HSK100A-SF8-85	8mm	85mm	26mm	36mm	21mm	27mm	M6
HSK100A-SF8-160	8mm	160mm	26mm	36mm	21mm	27mm	M6
HSK100A-SF10-90	10mm	90mm	31mm	42mm	24mm	32mm	M8
HSK100A-SF10-160	10mm	160mm	31mm	42mm	24mm	32mm	M8
HSK100A-SF12-95	12mm	95mm	36mm	47mm	24mm	32mm	M10
HSK100A-SF12-160	12mm	160mm	36mm	47mm	24mm	32mm	M10
HSK100A-SF16-100	16mm	100mm	39mm	50mm	27mm	34mm	M12
HSK100A-SF16-160	16mm	160mm	39mm	50mm	27mm	34mm	M12
HSK100A-SF20-105	20mm	105mm	41mm	52mm	33mm	42mm	M16
HSK100A-SF20-160	20mm	160mm	41mm	52mm	33mm	42mm	M16
HSK100A-SF25-115	25mm	115mm	47mm	58mm	44mm	53mm	M16
HSK100A-SF25-160	25mm	160mm	47mm	58mm	44mm	53mm	M16
HSK100A-SF32-120	32mm	120mm	51mm	62mm	44mm	53mm	M16
HSK100A-SF32-160	32mm	160mm	51mm	62mm	44mm	53mm	M16

Note: Balancing screw for HSK100A is M4.

HSK63A Shrink Fit Holders are balanced to G2.5 at 15,000RPM.

Coolant tube and coolant tube wrench are sold separately. See details on page 159.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end SF-START2-COOL-FAN40

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100

Accessories:



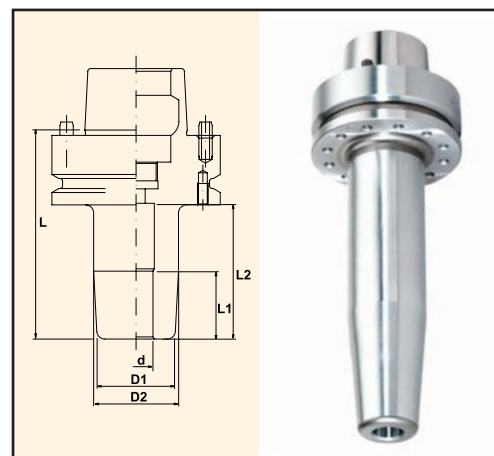
**Shrink Fit Unit
and Accessories**
Page 174

HSK63F/80F Shrink Fit Holders

HSK63F - Inch

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK63F-SF0125-3.00	1/8"	3.00"	0.35"	-	0.39"	0.67"	-
HSK63F-SF0125-6.00	1/8"	6.00"	0.35"	-	0.39"	0.75"	-
HSK63F-SF0250-3.00	1/4"	3.00"	0.87"	1.42"	0.83"	1.06"	M5
HSK63F-SF0250-6.00	1/4"	6.00"	0.87"	1.42"	0.83"	1.06"	M5
HSK63F-SF0375-3.00	3/8"	3.00"	1.22"	1.65"	0.94"	1.18"	-
HSK63F-SF0375-6.00	3/8"	6.00"	1.22"	1.65"	0.94"	1.26"	M8
HSK63F-SF0500-3.00	1/2"	3.00"	1.42"	1.85"	0.94"	1.18"	-
HSK63F-SF0500-6.00	1/2"	6.00"	1.42"	1.85"	0.94"	1.26"	M10
HSK63F-SF0625-3.00	5/8"	3.00"	1.54"	1.97"	1.06"	1.30"	-
HSK63F-SF0625-6.00	5/8"	6.00"	1.54"	1.97"	1.06"	1.34"	M12
HSK63F-SF0750-3.00	3/4"	3.00"	1.61"	2.05"	1.30"	1.61"	-
HSK63F-SF0750-6.00	3/4"	6.00"	1.61"	2.05"	1.30"	1.65"	-
HSK63F-SF1000-3.00	1"	3.00"	1.85"	2.28"	1.73"	2.01"	M16
HSK63F-SF1000-6.00	1"	6.00"	1.85"	2.28"	1.73"	2.09"	M16

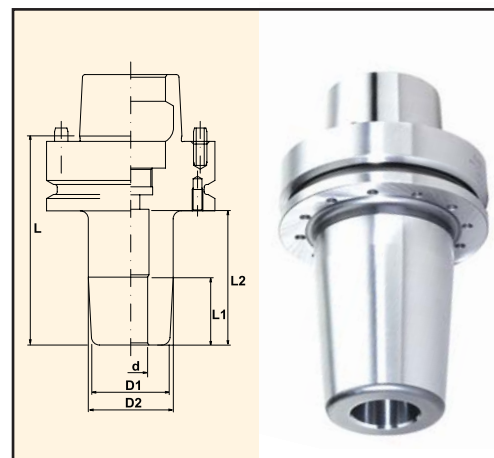
Note: Balancing screw for HSK63F is M3. HSK63F Shrink Fit Holders are balanced to G2.5 at 33,000RPM. Coolant tube and coolant wrench are sold separately. See details on page 159. Standard holders do not include balanceable set screw holes. Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).



Shown with optional balanceable set screw. All nose angles are 4.5°.

HSK80F - Inch

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK80F-SF0125-3.00	1/8"	3.00"	0.35"	-	0.39"	0.63"	-
HSK80F-SF0125-6.00	1/8"	6.00"	0.35"	-	0.39"	0.75"	-
HSK80F-SF0250-3.00	1/4"	3.00"	0.87"	1.42"	0.83"	1.06"	M5
HSK80F-SF0250-6.00	1/4"	6.00"	0.87"	1.42"	0.83"	1.06"	M5
HSK80F-SF0375-3.00	3/8"	3.00"	1.22"	1.65"	0.94"	1.18"	M8
HSK80F-SF0375-6.00	3/8"	6.00"	1.22"	1.65"	0.94"	1.26"	M8
HSK80F-SF0500-3.00	1/2"	3.00"	1.42"	1.85"	0.94"	1.18"	M10
HSK80F-SF0500-6.00	1/2"	6.00"	1.42"	1.85"	0.94"	1.26"	M10
HSK80F-SF0625-3.00	5/8"	3.00"	1.54"	1.97"	1.06"	1.30"	M12
HSK80F-SF0625-6.00	5/8"	6.00"	1.54"	1.97"	1.06"	1.34"	M12
HSK80F-SF0750-3.50	3/4"	3.50"	1.61"	2.05"	1.30"	1.61"	M16
HSK80F-SF0750-6.00	3/4"	6.00"	1.61"	2.05"	1.30"	1.65"	M16
HSK80F-SF1000-4.00	1"	4.00"	1.85"	2.28"	1.73"	2.09"	M16
HSK80F-SF1000-6.00	1"	6.00"	1.85"	2.28"	1.73"	2.09"	M16



Shown with optional balanceable set screw. All nose angles are 4.5°.

Custom Sizes

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK80F-SF0250-2.36	1/4"	2.36	0.87"	-	0.83"	0.98	No Back-up Screw
HSK80F-SF0375-2.56	3/8"	2.56	1.22"	1.57	0.94"	1.14	
HSK80F-SF0500-2.96	1/2"	2.96	1.42"	1.85	0.94"	1.18	
HSK80F-SF0625-3.15	5/8"	3.15	1.54"	1.97	1.06"	1.34	
HSK80F-SF0750-3.15	3/4"	3.15	1.61"	2.05	1.30"	1.57	
HSK80F-SF1000-2.75	1"	2.75	1.85"	1.69	1.73"	1.97	

Note: Balancing screw for HSK80F is M4. HSK80F Shrink Fit Holders are balanced to G2.5 at 33,000RPM. Coolant tube and coolant wrench are sold separately. See details on page 159. Standard holders do not include balanceable set screw holes. Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100

Accessories:



Shrink Fit Unit and Accessories
Page 174

HSK32E/40E Shrink Fit Holders

HSK32E - Metric

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK32E-SF3-60	3mm	60mm	9mm	-	10mm	-	-
HSK32E-SF4-60	4mm	60mm	12mm	-	10mm	-	-
HSK32E-SF6-100	6mm	100mm	22mm	36mm	21mm	26mm	M5
HSK32E-SF8-100	8mm	100mm	26mm	36mm	21mm	26mm	M6
HSK32E-SF10-80	10mm	80mm	31mm	42mm	24mm	30mm	M8

Note: Balancing screw for HSK32E is M3.

HSK32E Shrink Fit Holders are balanced to G6.3 at 42,000RPM.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).

HSK40E - Inch

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK40E-SF0125-2.36	1/8"	2.36"	0.35"	-	0.39"	-	-
HSK40E-SF0187-2.36	3/16"	2.36"	0.47"	-	0.39"	-	-
HSK40E-SF0250-3.15	1/4"	3.15"	0.87"	1.42"	0.83"	1.06"	M5
HSK40E-SF0250-5.12	1/4"	5.12"	0.87"	1.42"	0.83"	1.06"	M5
HSK40E-SF0375-3.15	3/8"	3.15"	1.22"	1.65"	0.94"	1.22"	M8
HSK40E-SF0375-5.12	3/8"	5.12"	1.22"	1.65"	0.94"	1.26"	M8
HSK40E-SF0500-3.54	1/2"	3.54"	1.42"	1.85"	0.94"	1.26"	M10
HSK40E-SF0500-5.12	1/2"	5.12"	1.42"	1.85"	0.94"	1.26"	M10
HSK40E-SF0625-3.54	5/8"	3.54"	1.54"	1.97"	1.06"	1.34"	M12
HSK40E-SF0625-5.12	5/8"	5.12"	1.54"	1.97"	1.06"	1.34"	M12

HSK40E - Metric

Part Number	d	L	L1	L2	D1	D2	Back-up Screw
HSK40E-SF3-60	3mm	60mm	9mm	-	10mm	-	-
HSK40E-SF4-60	4mm	60mm	12mm	-	10mm	-	-
HSK40E-SF6-80	6mm	80mm	22mm	36mm	21mm	27mm	M5
HSK40E-SF6-130	6mm	130mm	22mm	36mm	21mm	27mm	M5
HSK40E-SF8-80	8mm	80mm	26mm	36mm	21mm	27mm	M6
HSK40E-SF8-130	8mm	130mm	26mm	36mm	21mm	27mm	M6
HSK40E-SF10-80	10mm	80mm	31mm	42mm	24mm	31mm	M8
HSK40E-SF10-130	10mm	130mm	31mm	42mm	24mm	32mm	M8
HSK40E-SF12-90	12mm	90mm	36mm	47mm	24mm	32mm	M10
HSK40E-SF12-130	12mm	130mm	36mm	47mm	24mm	32mm	M10
HSK40E-SF16-90	16mm	90mm	39mm	50mm	27mm	34mm	M12
HSK40E-SF16-130	16mm	130mm	39mm	50mm	27mm	34mm	M12

Note: Balancing screw for HSK40E is M3.

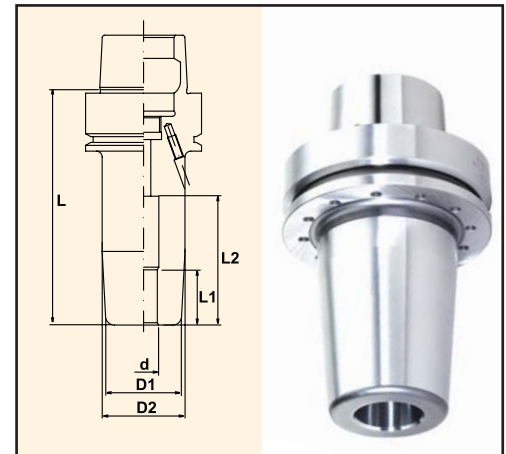
HSK40E Shrink Fit Holders are balanced to G6.3 at 42,000RPM.

Coolant tube and coolant tube wrench are sold separately. See details on page 159.

Standard holders do not include balanceable set screw holes.

Balanceable Part Numbers are identical to standard Shrink Fit Holders except that there is a "B" at the end (Ex. C40SF-0250-3.15B).

Accessories:



Shown with optional balanceable set screw.

All nose angles are 4.5°.

Balancing Kits

(for optional balanceable shrink fit toolholders only)

Part Number	Taper Size
BAL-KIT(M3)-200-SET	BT30, HSK40, HSK32E
BAL-KIT(M4)-200-SET	BT40, BT50, CAT40, CAT50, HSK63, HSK80F, HSK100



Straight Shank Shrink Fit Holders

- Straight shank tooling may be used to extend tooling reach for extended length operations
- Reduced OD allows milling applications within large holes or whenever tight clearances are encountered
- Ideal for small diameter cutting

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



TIR: 0.0002 or better



Speed: up to 40,000 rpm



Set-up: quick and easy to operate



Coolant-thru: jet slots (optional)



Drilling

★☆☆☆☆



Milling

★★★★☆

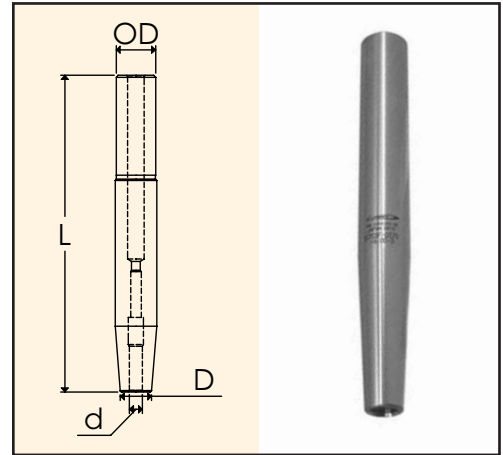


Reaming

★★★★☆

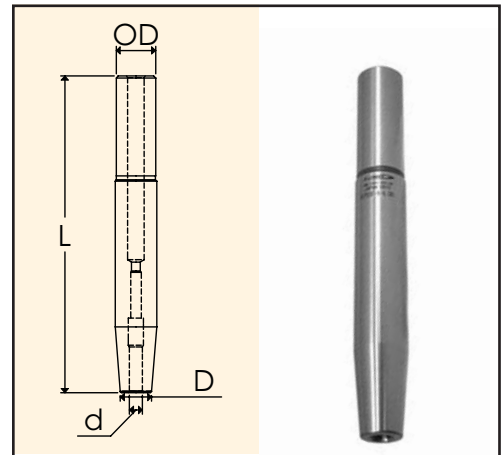
3° Slim Style (light duty)

Part Number	d	L	OD	D
S62SF-0187-4.00-3	3/16"	4"	5/8"	8mm
S62SF-0250-4.00-3	1/4"	4"	5/8"	9mm
S75SF-0250-6.00-3	1/4"	6"	3/4"	9mm
S75SF-0375-6.00-3	3/8"	6"	3/4"	13mm
S10SF-0375-6.00-3	3/8"	6"	1"	13mm
S10SF-0500-6.00-3	1/2"	6"	1"	15mm
S62SF-4-4.00-3	4mm	4"	5/8"	7mm
S62SF-5-4.00-3	5mm	4"	5/8"	8mm
S62SF-6-4.00-3	6mm	4"	5/8"	9mm
S75SF-6-6.00-3	6mm	6"	3/4"	9mm
S75SF-8-6.00-3	8mm	6"	3/4"	11mm
S10SF-10-6.00-3	10mm	6"	1"	13mm
S10SF-12-6.00-3	12mm	6"	1"	15mm



4.5° Standard Style

Part Number	d	L	OD	D
S75SF-0250-6.00	1/4"	6"	3/4"	15mm
S75SF-0375-6.00	3/8"	6"	3/4"	20mm
S10SF-0375-6.00	3/8"	6"	1"	20mm
S10SF-0500-6.00	1/2"	6"	1"	20mm
S75SF-6-6.00	6mm	6"	3/4"	15mm
S75SF-8-6.00	8mm	6"	3/4"	15mm
S75SF-10-6.00	10mm	6"	3/4"	20mm
S10SF-10-6.00	10mm	6"	1"	20mm
S10SF-12-6.00	12mm	6"	1"	20mm



Accessories:



**Shrink Fit Unit
and Accessories**
Page 174

Shrink Fit Unit and Accessories



Shrink Fit Unit (with 200-240V Power Supply)

Part Number (Unit only)	Dimensions
SF-START2-UNIT	H: 30", W: 10", L:19"

Shrink Fit Unit Set (with 200-240V Power Supply)

Part Number	Taper Size
SF-START2-SET-#40	Shrink Fit unit for 40 taper
SF-START2-SET-#50	Shrink Fit unit for 50 taper
SF-START2-SET-HSK32	Shrink Fit unit for HSK32A/C/E
SF-START2-SET-HSK40	Shrink Fit unit for HSK40A/C/E
SF-START2-SET-HSK50	Shrink Fit unit for HSK50A/C/E-HSK63B/D/F
SF-START2-SET-HSK63	Shrink Fit unit for HSK63A/C/E-HSK80B/D/F
SF-START2-SET-HSK80	Shrink Fit unit for HSK80A/C/E-HSK100B/D/F
SF-START2-SET-HSK100	Shrink Fit unit for HSK100A/C/E

Set includes 1 taper pot and the following accessories denoted with an X.

Accessories

Shrink Fit Cabinet



Part Number
SF-CABINET

Cooling Brackets



Part Number	Included in set	Size
SF-COOL-BRACKET2-6	X	2~5mm
SF-COOL-BRACKET6-14	X	6~13mm
SF-COOL-BRACKET14-25	X	14~24mm
SF-COOL-BRACKET25-33	X	25~32mm
SF-COOL-BRACKET33-41	X	33~40mm

Features

- Shrink and unshrink of any type of tools and cutters (HSS, Carbide, Tool-inserts, etc.)
- Compatible with all holders with different geometries
- Quick, Safe and Easy to Use
- Shrinking time cycle: from 2 to 7 seconds
- Shrinking 2-40mm with the same inductor
- 220V power allows for mobility. Plug-in & Go
- Removable electronic pack allows service within 24 hours
- Inductor rotates 180° to allow easy removal of broken tool shanks and small diameter tools
- Auto detect eliminates the need for setting of cutter shank
- Compact table top with big range (2-40mm X 370mm height)
- 14.68"(373mm) of travel

Cooling Fan



Part Number	Included in set
SF-START2-COOL-FAN40	X

Flux Concentrator - Heat Ring (Split Ring)



Part Number	Included in set	Size
SF-HEAT-RING-2-5	X	2~5mm
SF-HEAT-RING-6-13	X	6~13mm
SF-HEAT-RING-14-24	X	14~24mm
SF-HEAT-RING-25-32	X	25~32mm
SF-HEAT-RING-33-40	X	33~40mm
SF-HEAT-RING-2-5(SP)		2~5mm
SF-HEAT-RING-6-13(SP)		6~13mm
SF-HEAT-RING-14-24(SP)		14~24mm
SF-HEAT-RING-25-32(SP)		25~32mm
SF-HEAT-RING-33-40(SP)		33~40mm

Pot/Chuck Holder



Part Number	Taper Size
SF-POT-#40	#40
SF-POT-#50	#50
SF-POT-HSK32	HSK32A/C/E
SF-POT-HSK40	HSK40A/C/E
SF-POT-HSK50	HSK50A/C/E - HSK63B/D/F
SF-POT-HSK63	HSK63A/C/E - HSK80B/D/F
SF-POT-HSK80	HSK80A/C/E - HSK100B/D/F
SF-POT-HSK100	HSK100A/C/E

Set includes 1 taper corresponding taper pot.
(For example, SF-START2-SET#40 includes SF-POT-#40)