



CATALOGUE 2024

IMI MACHINE TOOLS PVT. LTD.

THE ART OF  
PRECISION ENGINEERING



[www.imitoolsindia.com](http://www.imitoolsindia.com)

# TABLE OF CONTENTS

No.	DESCRIPTION	PAGE NO.
1	APPLICATION	4-7
2	QUICK CHANGE TAPPING CHUCK -QCLK (SK & BT)	8
3	QUICK CHANGE TAPPING CHUCK -QCLK (HSK & PTI)	9
4	QUICK CHANGE TAPPING CHUCK -QCLK (ST.DIA & MT)	10
5	QUICK CHANGE TAPPING CHUCK - QCFLX (Tr)	11
6	QUICK CHANGE TAPPING CHUCK - QCF (Tr)	12
7	QUICK CHANGE TAPPING CHUCK- QCF (MT)	13
8	QUICK CHANGE TAPPING CHUCK -QCK / IK (HSK & PTI)	14
9	QUICK CHANGE TAPPING CHUCK -QCLC / IK (HSK & PTI)	15
10	QUICK CHANGE TAP ADAPTORS - QA-QASB	16
11	SYNCRONAS TAPPING CHUCK - STC (ST. DIA., BT, HSK & PTI)	17-18
12	COLLET CHUCK - CHE (HSK-A)	19
13	COLLET CHUCK - CHE (HSK-T)	20
14	SHELL MILL HOLDER - SMH (HSK-A)	21
15	SHELL MILL HOLDER - SMH (HSK-T)	22
16	END MILL HOLDER -EMH (HSK-A)	23
17	END MILL HOLDER -EMH (HSK-T)	24
18	MORSE TAPER HOLDER - MTA (HSK-A)	25
19	MORSE TAPER HOLDER - MTA (HSK-T)	26
20	COLLET CHUCK - CHE (PTI)	27-28
21	SHELL MILL HOLDER - SMH (PTI)	29
22	END MILL HOLDER - EMH (PTI)	30
23	FACE CONTACT COLLET CHUCK - CHE (BTP)	31
24	FACE CONTACT SHELL MILL HOLDER - SMH (BTP)	32
25	FACE CONTACT END MILL HOLDER - EMH (BTP)	33
26	FACE CONTACT MORSE TAPER HOLDER - MTA (BTP)	34
27	TOOL ALIGNMENT JIG (BT / HSK / PTI)	35
28	SHRINK FIT TECHNOLOGY OFFERING	36-38
29	SHRINK FIT HOLDER -STANDARD DIN LENGTH (BT)	39
30	SHRINK FIT HOLDER -STANDARD LONG DIN LENGTH (BT)	40
31	SHRINK FIT HOLDER -STANDARD X-LONG DIN LENGTH (BT)	41
32	FACE CONTACT SHRINK FIT HOLDER -STANDARD DIN LENGTH (BTP)	42
33	FACE CONTACT SHRINK FIT HOLDER -STANDARD LONG DIN LENGTH (BTP)	43

No.	DESCRIPTION	PAGE NO.
34	FACE CONTACT SHRINK FIT HOLDER - STANDARD X-LONG DIN LENGTH (BTP)	44
35	SHRINK FIT HOLDER -STANDARD DIN LENGTH (HSK-A)	45
36	SHRINK FIT HOLDER -STANDARD DIN LENGTH (HSK-T)	46
37	SHRINK FIT HOLDER -STANDARD LONG DIN LENGTH (HSK-A)	47
38	SHRINK FIT HOLDER -STANDARD LONG DIN LENGTH (HSK-T)	48
39	SHRINK FIT HOLDER -STANDARD X-LONG DIN LENGTH (HSK-A)	49
40	SHRINK FIT HOLDER -STANDARD X-LONG DIN LENGTH (HSK-T)	50
41	SHRINK FIT HOLDER -STANDARD DIN LENGTH (PTI)	51-52
42	SHRINK FIT HOLDER -STANDARD LONG DIN LENGTH (PTI)	53
43	SHRINK FIT HOLDER -STANDARD X-LONG DIN LENGTH (PTI)	54
44	SHRINK FIT EXTENSION STRAIGHT SHANK (SSH)	55
45	MODULAR SLIM HOLDER (SFSEH)	56
46	MODULAR SLIM EXTENSION (SFS)	57
47	BLANKS (PTI)	58
48	BLANKS (HSK-A)	59
49	REDUCTION ADAPTOR & EXTENSION ADAPTOR (PTI / PTI)	60
50	EXTENSION & REDUCTION ADAPTER (BT/PTI) (BTP / PTI)	61
51	FRONT CLAMPING EXTENSION ADAPTOR (BT/PTI) EXTENSION ADAPTER (BTP / PTI)	62
52	EXTENSION ADAPTOR (HSK / PTI)	63
53	TEST MANDREL (CAT, BT, HSK, PTI, CATP & BTP)	64-65
54	TAPPING SYSTEM ACCESSORIES	66
55	HARDWARE - ACCESSORIES	67
56	IS TAP SHANK DIMENSION	68
57	DIN TAP SHANK DIMENSION	69
58	TORQUE SETTING VALUES	70

## APPLICATIONS

### Quick Change Tapping Chucks

For use on CNC machining center, CNC turning center, center lathe, drilling machine, length compensation acting on compression and expansion to compensate for differences between spindle feed and pitch of thread. The chuck is equipped with pressure point mechanism to increase the cutting pressure to ensure positive start when tapping cycle commences.

### Tap Adaptors

Quick Change Tap Adaptors for Tapping and Thread Forming

By using quality combination of IMI tap adaptors and IMI tap chucks, Tools changing time can be minimized. The adaptors are designed for optimum efficiency. Removal and replacement in the chuck is rapid and location and locking of the tap in the adaptor is simple and effective. In all cases the tap drive is through the square. The highly popular adjustable safety clutch adaptor, Facilitates the avoidance of tap breakage. In all cases a different adaptors is required for each size tap shank.

### CNC Tool Holder

Accurate tool holders in HSK (DIN - 69893) and POLYGON TAPER (ISO - 26623) ensures high quality tool holding and precise machining capabilities with increase tool life.

IMI modular tooling in PTI (ISO - 26623) POLYGON TAPERS for flexibility in tooling systems. IMI PTI EXTENSIONS are available in various shank like BT, SK, ISO, HSK etc.

WE are also manufacturing extensions as per customer requirement.

Shank like CAT. ANSI / DIN / ISO are available.



### IMI™ Steep-Taper Face-Contact Technical Data



Taper and face contact result in greater tool holder stiffness

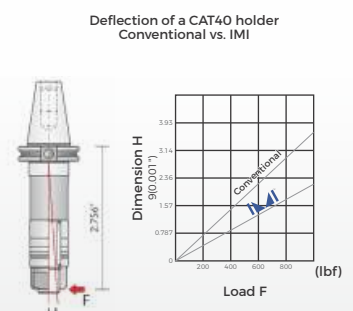
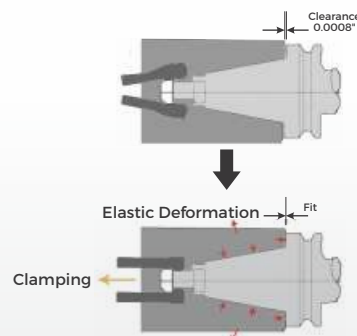
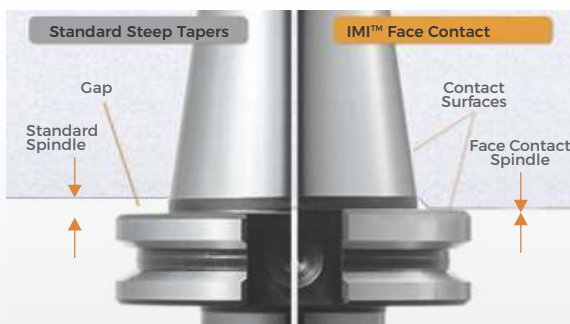


Compatible with BIG-PLUS © spindles and standard spindles



### Primary Applications

- Face-Contact tapers provide additional radial load capabilities due to the large spindle contact surface compared with standard ANSI B5.50 or MAS BT 403 tapers.
- Excellent for long-reach axial cutting tools where cutting tool tip TIR is critical for part dimension achievement and machined surface location/
- With the wide face-contact longer axial cutting tools with high radial loads will have less “bending” or improved dynamic stiffness and rigidity. The vibration dampening of these holders reduces spindle wear and extends cutting tool life.
- Designed for use in CNC Machining Centers with Face Contact spindles and automatic tool changers



## TOOL HOLDER SELECTION GUIDE

### Principle Behind Face-Contact Technology

- Prior to spindle clamping, the tool taper and spindle are in contact with each other to establish good taper interface and once clamped, face contact is made because the elastic deformation of the spindle clamping system provides the proper face clamping force between spindle face and tool holder flange face.
- This simultaneous fit provides a strong spindle/tool shank connection for more accurate machining process and increased tool life due to improved tool assembly (spindle-toolholder-cutting tool)
- Face Contact holders are universally suitable for Drilling, Face milling, End mill with radial loads, Reaming, and even grinding is machine control is capable. The vibration dampening of this face contact system reduces spindle wear and extends cutting tool life."



"Important Note about IMI™ and other face contact steep taper tools: If machine has standard face contact spindle design and face contact holders are to be used, ALL tool holders should be face contact style. Do not inter-mix standard steep taper holders with face contact holders for use in same machine spindle. Face contact holders must maintain contact with spindle face surface to maintain accuracy and proper toolholder shank/machine tool spindle taper interface. Using standard steep taper tools will allow chips, swarf, and residue to collect on the face when face contact is not being maintained thus using a face contact tool holder after using a standard steep taper tool could allow the face of the spindle to have contamination between spindle face and face contact of tool holder causing damage to spindle face and/or face contact holder. Start with IMI™ and face contact and stay with it for ALL tool holder style in that machine."

(Note: Not all "Dual Contact" shank holders conform to BigPlus Patented dimensions)

The following table summarized how various tool holder clamping systems compare against each other:

	END MILL HOLDER	ER COLLET CHUCK	HIGH PRECISION COLLECT CHUCK	MILLING CHUCK	HYDRAULIC CHUCK	SHRINK FIT HOLDER
TIR ACCURACY						
VERSATILITY						
RIGIDITY						
EASE OF USE						
PRECISION RELIABILITY						
BALANCE						
COST						

POOR   
 FAIR   
 AVERAGE   
 GOOD   
 GREAT

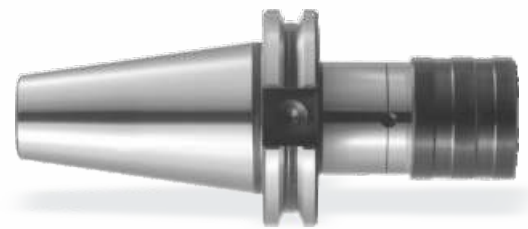
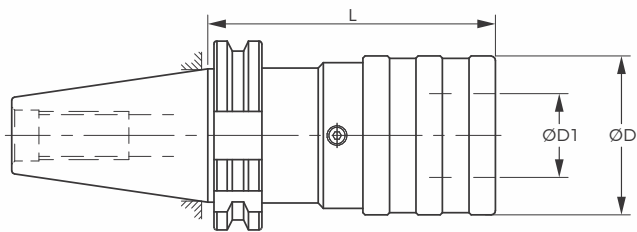
For more details when selecting a Tool Clamping System, please refer to our Tool Selection Guide at the back of the catalog.

# QUICK CHANGE TAPPING CHUCKS

with length compensation on compression and expansion

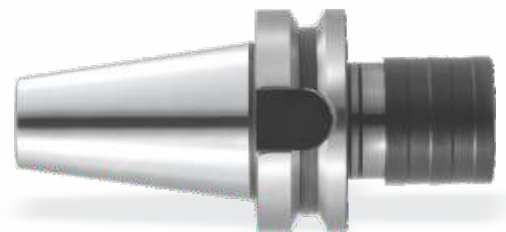
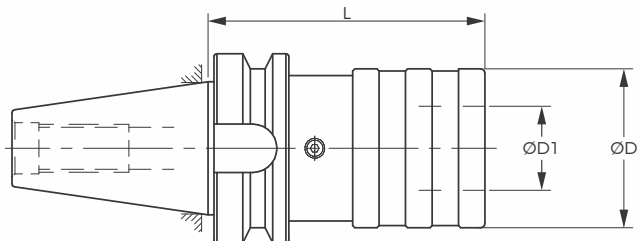
## MODEL QCLK

MODEL : QCLK / SK (DIN-69871)



Model	for Taps	Suitable Adaptors Size	Length Compensation		ØD	ØD1	Ordering Number & L Taper DIN 69871			
			Comp.	Exp.			SK 30	SK 40	SK 45	SK 50
QCLK 1	M 3-M12	1	7,5	7,5	36	19	20,231,000 L-60	20,231,020 L-60	20,231,030 L-60	20,231,040 L-74
QCLK 2	M 8-M20	2	12,5	12,5	53	31	-	20,232,020 L-98	20,232,030 L-84	20,232,040 L-84
QCLK 3	M14-M33	3	20	20	78	48	-	20,233,020 L-150	20,233,030 L-146	20,233,040 L-139
QCLK 4	M22-M48	4	22,5	22,5	96	60	-	20,234,020 L-166	20,234,030 L-161	20,234,040 L-153

MODEL : QCLK / BT (MAS 403)



Model	for Taps	Suitable Adaptors Size	Length Compensation		ØD	ØD1	Ordering Number & L Taper DIN 69871			
			Comp.	Exp.			BT 30	BT 40	BT 45	BT 50
QCLK 1	M 3-M12	1	7,5	7,5	36	19	20,211,000 L-67,5	20,211,020 L-67,5	20,211,030 L-73,5	20,211,040 L-78,5
QCLK 2	M 8-M20	2	12,5	12,5	53	31	-	20,212,020 L-94,5	20,212,030 L-97,5	20,212,040 L-102,5
QCLK 3	M14-M33	3	20	20	78	48	-	20,213,020 L-164	20,213,030 L-154,5	20,213,040 L-142
QCLK 4	M22-M48	4	22,5	22,5	96	60	-	20,214,020 L-167,5	20,214,030 L-172,5	20,214,040 L-165,5



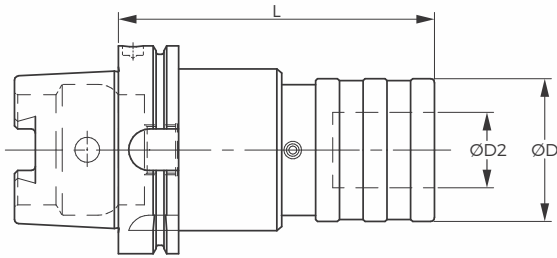
# QUICK CHANGE TAPPING CHUCKS

with length compensation on compression and expansion

## MODEL QCLK

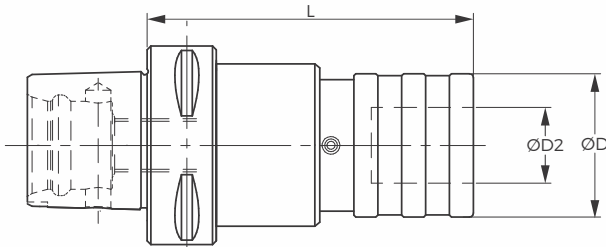


MODEL : QCLK / HSK (DIN-69893 A+C)



Model	for Taps	Suitable Adaptors Size	Length Compensation		ØD	ØD2	Ordering Number & L Taper DIN 69893 A+C				
			Comp.	Exp.			HSK-40/A	HSK-50/A	HSK-63/A	HSK-80/A	HSK-100/A
QCLK 1	M 3-M12	1	7.50	7.50	36	19	26, 161, 020 L-105.00	26, 161, 030 L-104.00	26, 161, 040 L-105.75	26, 161, 050 L-110.50	26, 161, 060 L-112.50
QCLK 2	M 8-M20	2	12.50	12.50	53	31		26, 162, 030 L-140.00	26, 162, 040 L-141.70	26, 162, 050 L-146.50	26, 162, 060 L-148.50
QCLK 3	M14-M33	3	20.00	20.00	78	48				26, 163, 050 L-213.00	26, 163, 060 L-215.00

MODEL : QCLK / PTI (ISO-26623-1)



Model	for Taps	Suitable Adaptors Size	Length Compensation		ØD	ØD2	Ordering Number & L Taper ISO-26623				
			Comp.	Exp.			PTI-32	PTI-40	PTI-50	PTI-63	PTI-80
QCLK 1	M 3-M12	1	7.50	7.50	36	19	20,171,660 L-90.50	20,171,670 L-90.50	20,171,680 L-90.50	20,171,690 L-100.00	20,171,700 L-110.00
QCLK 2	M 8-M20	2	12.50	12.50	53	31		20,172,670 L-120.00	20,172,680 L-130.00	20,172,690 L-135.00	20,172,700 L-145.00
QCLK 3	M14-M33	3	20.00	20.00	78	48				20,173,690 L-170.00	20,173,700 L-160.00

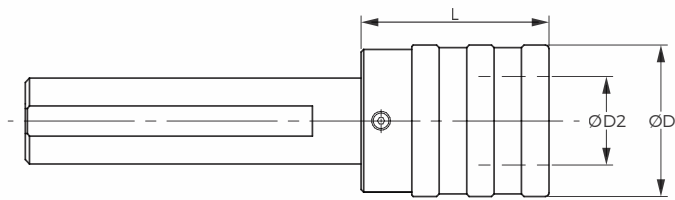
Coolant tubes on page 67

# QUICK CHANGE TAPPING CHUCKS

with length compensation on compression and expansion

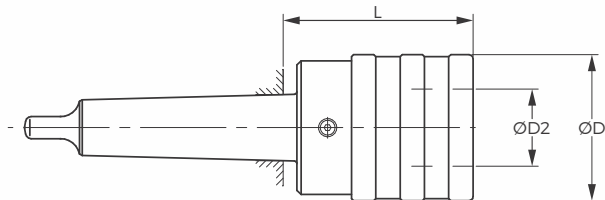
## MODEL QCLK

MODEL : QCLK / ST.



Model	for Taps	Suitable Adaptors Size	Length Compensation		ØD	ØD2	Ordering Number & L Straight Shank				
			Comp.	Exp.			Ø25	Ø30	Ø32	Ø40	Ø50
QCLK 1/St	M 3-M12	1	7,5	7,5	36	19	20,321,100 L-40	20,321,130 L-40	20,321,140 L-40	20,321,180 L-40	20,321,220 L-40
QCLK 2/St	M 8-M20	2	12,5	12,5	53	31	20,322,100 L-64	20,322,130 L-64	20,322,140 L-64	20,322,180 L-64	20,322,220 L-64
QCLK 3/St	M14-M33	3	20	20	78	48		20,323,130 L-97	20,323,140 L-97	20,323,180 L-97	20,323,220 L-97
QCLK 4/St	M22-M48	4	22,5	22,5	96	60				20,324,180 L-108	20,324,220 L-108

MODEL : QCLK / MT (DIN 228 B/IS 1715)



Model	for Taps	Suitable Adaptors Size	Length Compensation		ØD	ØD2	Ordering Number & L Mores Taper DIN 228 B/IS 1715				
			Comp.	Exp.			MT 2	MT 3	MT 4	MT 5	MT 6
QCLK 0	M 1-M10	0	6,5	6,5	26	13	20,100,020 L-45				
QCLK 1	M 3-M12	1	7,5	7,5	36	19	20,101,020 L-47	20,101,030 L-47			
QCLK 2	M 8-M20	2	12,5	12,5	53	31		20,102,030 L-71	20,102,040 L-72		
QCLK 3	M14-M33	3	20	20	78	48			20,103,040 L-105	20,103,050 L-105,5	
QCLK 4	M22-M48	4	22,5	22,5	96	60				20,104,050 L-116,5	20,104,060 L-118,5

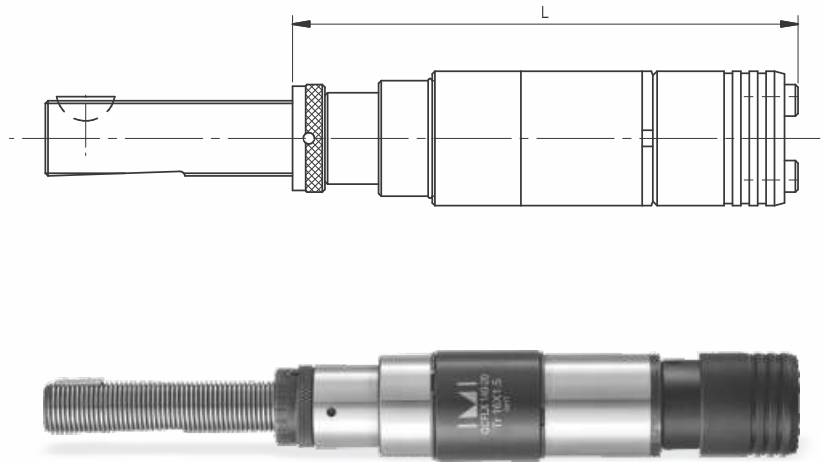
# QUICK CHANGE TAPPING CHUCKS

with length compensation on compression and expansion radial parallel float

## MODEL QCFLX



MODEL : QCFLX / Tr (DIN 6327)



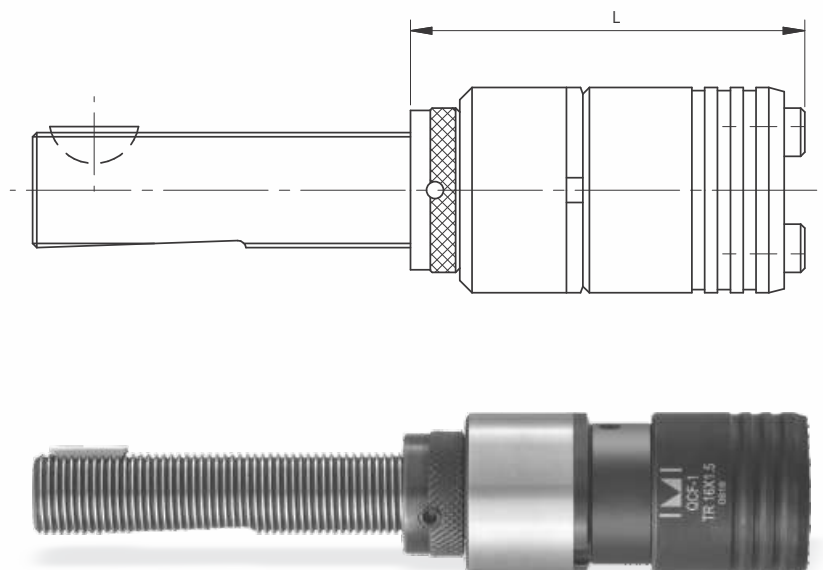
Model	for Taps	Max Ø	Length Compensation		Suitable Adaptors Size	Ordering Number & L Trapezoidal Shank DIN 6327				
			Comp.	Exp.		Tr 16 x 1.50	Tr 20 x 2	Tr 28 x 2	Tr 36 x 2	Tr 48 x 2
QCFLX-030-15	M1-M10	23	15	15	0	18,300.051 L-136.00	18,300.081 L-136.00			
QCFLX-140-20	M3-M12	32	20	20	1	18,301.051 L-162.00	18,301.081 L-162.00	18,301.131 L-162.00		
QCFLX-240-20	M8-M20	50	20	20	2		18,302.081 L-188.00	18,302.031 L-188.00	18,302.161 L-190.00	
QCFLX-340-20	M14-M33	72	20	20	3			18,303.131 L-244.00	18,303.161 L-246.00	
QCFLX-460-30	M22-M48	95	30	30	4				18,304.161 L-312.00	18,304.201 L-316.00

# QUICK CHANGE TAPPING CHUCKS

with radial parallel float

## MODEL QCF

MODEL : QCF/Tr (DIN 6327)



Model	for Taps	Max Ø	Float	Suitable Adaptors Size	Ordering Number & L Trapezoidal Shank DIN 6327				
					Tr 16 x 1.50	Tr 20 x 2	Tr 28 x 2	Tr 36 x 2	Tr 48 x 2
QCF 0	M1-M10	23	0.25	0	14,300,050 L-67.00	14,300,080 L-67.00			
QCF 1	M3-M12	32	0.50	1	14,301,050 L-78.00	14,301,080 L-78.00	14,301,130 L-78.00		
QCF 2	M8-M20	50	1.00	2		14,302,080 L-96.00	14,302,130 L-96.00	14,302,160 L-98.00	
QCF 3	M14-M33	72	1.50	3			14,303,130 L-136.00	14,303,160 L-138.00	14,303,200 L-142.00
QCF 4	M22-M48	95	2.00	4				14,304,160 L-167.00	14,304,200 L-171.00
QCF 40	M6-M18	40	0.75	40		14,307,080 L-89.00	14,307,130 L-89.00		

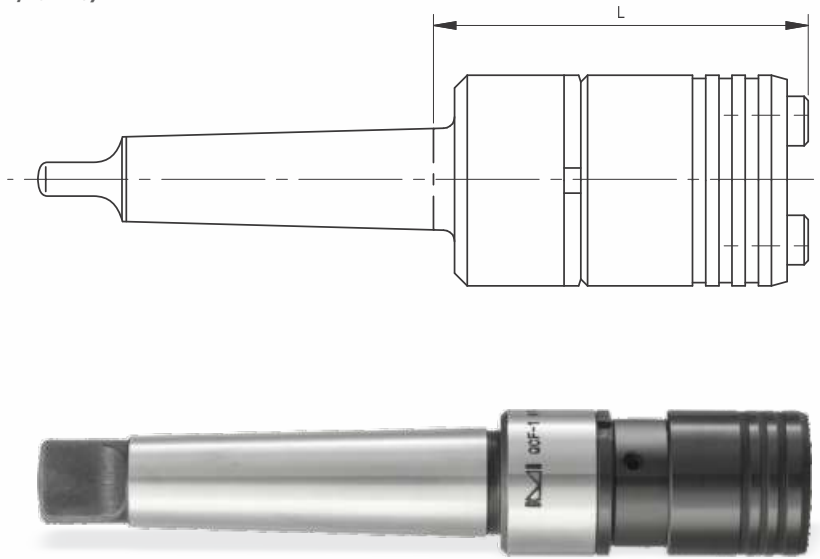
# QUICK CHANGE TAPPING CHUCKS

with radial parallel float

MODEL QCF



MODEL : QCF / MT (DIN 228B / IS 1715)



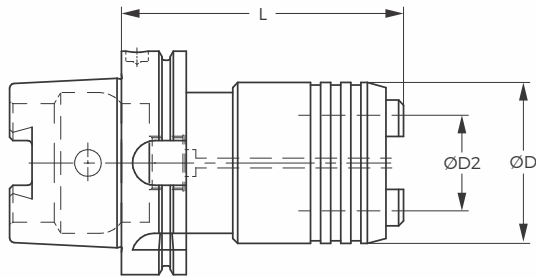
Model	for Taps	Max Ø	Float	Suitable Adaptors Size	Ordering Number & L Morse Taper DIN 228B / IS 1715				
					MT-1	MT-2	MT-3	MT-4	MT-5
QCF 0	M1-M10	23	0.25	0	14,100,010 L-61.00	14,100,020 L-62.00			
QCF 1	M3-M12	32	0.50	1	14,101,010 L-72.00	14,101,020 L-73.00	14,101,030 L-73.00		
QCF 2	M8-M20	50	1.00	2		14,102,020 L-91.00	14,102,030 L-91.00	14,102,040 L-92.00	
QCF 3	M14-M33	72	1.50	3			14,103,030 L-131.00	14,103,040 L-132.00	14,103,050 L-133.00
QCF 4	M22-M48	95	2.00	4				14,104,040 L-161.00	14,104,050 L-162.00
QCF 40	M6-M18	40	0.75	40		14,107,020 L-84.00	14,107,030 L-84.00		

# QUICK CHANGE TAPPING CHUCKS

for rigid tapping cycle

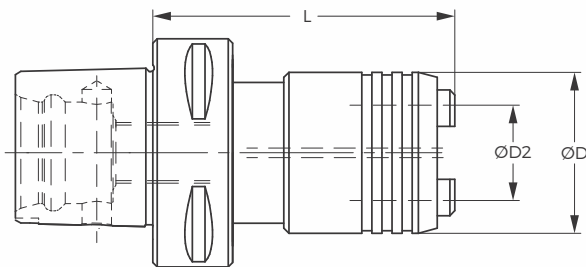
## MODEL QCK - IK

MODEL : QCK - IK / HSK (DIN 69893, A+C)  
(THRU. COOLANT)



Model	Ordering No.	For Taps	ØD	ØD2	Suitable Adaptor	L
HSK-50	QCK-1-1K	M 3-M12	32	19	1	80
	QCK-2-1K	M 8-M20	50	31	2	100
HSK-63	QCK-1-1K	M 3-M12	32	19	1	85
	QCK-2-1K	M 8-M20	50	31	2	100
HSK-100	QCK-1-1K	M 3-M12	32	19	1	90
	QCK-2-1K	M 8-M20	50	31	2	110
	QCK-3-1K	M14-M33	72	48	3	150

MODEL QCK / IK / PTI (ISO-26623-1)  
(THRU. COOLANT)



Model	Ordering No.	For Taps	ØD	ØD2	Suitable Adaptor	L
PTI-50	QCK-1-1K	M 3-M12	32	19	1	80
	QCK-2-1K	M 8-M20	50	31	2	100
PTI-63	QCK-1-1K	M 3-M12	32	19	1	85
	QCK-2-1K	M 8-M20	50	31	2	100
PTI-80	QCK-1-1K	M 3-M12	32	19	1	90
	QCK-2-1K	M 8-M20	50	31	2	110
	QCK-3-1K	M14-M33	72	48	3	150

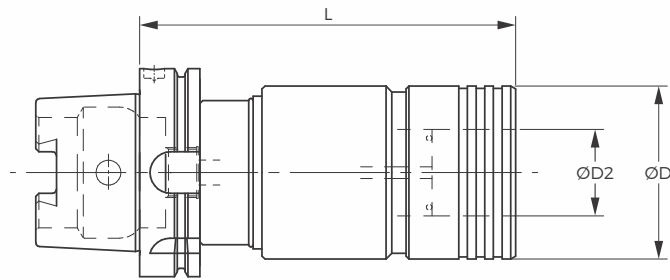
# QUICK CHANGE TAPPING CHUCKS

with length compensation on compression and expansion

## MODEL QCLC - IK

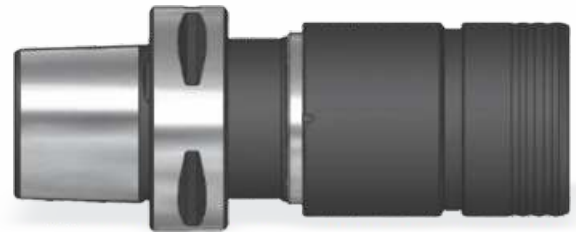
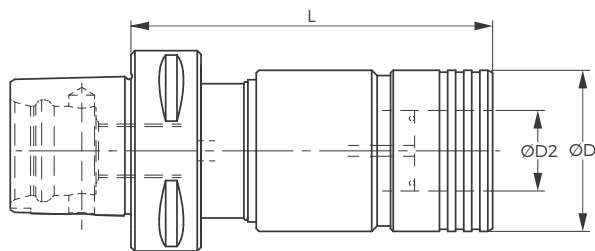


MODEL : QCLC - IK / HSK (DIN 69893 A+C)  
50 BAR PRESSURE



Model	for Taps	Suitable Adaptors Size	Length Compensation		ØD	ØD2	Ordering Number & L Taper DIN 69893 A+C			
			Comp.	Exp.			HSK-50/A	HSK-63/A	HSK-80/A	HSK-100/A
QCLC 115-IK	M3-M12	1	7.50	7.50	39	19	C26,161,030 L-103.00	C26,161,040 L-105.00	C26,161,050 L-110.00	C26,161,060 L-112.00
QCLC 220-IK	M8-M20	2	10.00	10.00	60	31	C26,162,030 L-140.00	C26,162,040 L-140.00	C26,162,050 L-142.00	C26,162,060 L-144.00
QCLC 335-IK	M14-M33	3	17.50	17.50	86	48			C26,163,050 L-208.00	C26,163,060 L-210.00

MODEL : QCLC - IK / PTI (ISO-26623-1)  
50 BAR PRESSURE



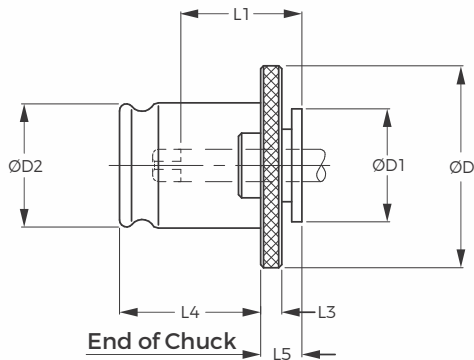
Model	for Taps	Suitable Adaptors Size	Length Compensation		ØD	ØD2	Ordering Number & L Taper DIN 69893 A			
			Comp.	Exp.			PTI-50	PTI-63	PTI-80	PTI-80X
QCLC 115-IK	M3 - M12	1	7.50	7.50	39	19	C26,161,680 L-103.00	C26,161,690 L-105.00	C26,161,700 L-110.00	C26,161,570 L-112.00
QCLC 220-IK	M8 - M20	2	10.00	10.00	60	31	C26,162,680 L-140.00	C26,162,690 L-140.00	C26,162,700 L-142.00	C26,162,570 L-144.00
QCLC 335-IK	M14 - M33	3	17.50	17.50	86	48		C26,163,690 L-203.00	C26,163,700 L-208.00	C26,163,570 L-210.00

Coolant tubes on page 67

# QUICK CHANGE TAPPING CHUCKS

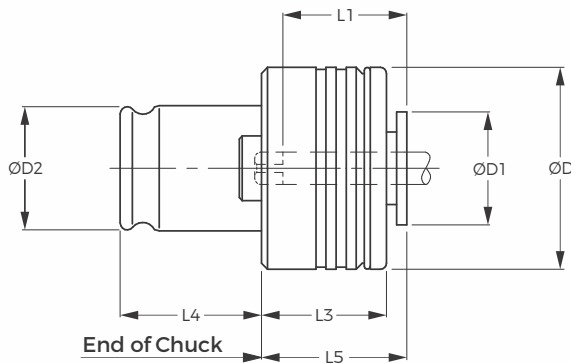
## MODEL QA / QASB

MODEL : QA  
without safety clutch



Model	Ordering Number	for Taps		Suitable for Chuck Size	ØD	ØD1	ØD2	L1	L3	L4	L5
		Thread Ø	Shank Ø								
QA 0	40.000....	M1-M10	2.5-7.2	0	22	13	13	15	4	19.50	7
QA 1	40.100....	M3-M12	3.5-11.3	1 and 32	30	19	19	17	4	21.50	7
QA 2	40.200....	M8-M20	7-18	2	48	30	31	30	5	35	11
QA 3	40.300....	M14-M33	11-28	3	70	48	48	44	6	55.50	14
QA 4	40.400....	M22-M48	18-36	4	92	60	60	71	13	63	42
QA 5	40.500....	M33-M52	25-42	5	114	70	78	95	13	92	44
QA 5a	40.500....	M56-M68	>42-56	5	114	90	78	95	13	92	108
QA 40	40.700....	M6-M18	6-14	40	40	25	26	30	5	32	13

MODEL : QASB  
with safety clutch



Model	Ordering Number	for Taps		Suitable for Chuck Size	ØD	ØD1	ØD2	L1	L3	L4	L5
		Thread Ø	Shank Ø								
QASB 0	41.000....	M1-M10	2.5-7.2	0	23	13	13	15	20	19.50	21
QASB 1	41.100....	M3-M12	3.5-11.3	1	32	19	19	17	25	21.50	25
QASB 2	41.200....	M8-M20	7-18	2	50	30	31	30	31	35	34
QASB 3	41.300....	M14-M33	11-28	3	72	48	48	44	41	55.50	45
QASB 4	41.400....	M22-M48	18-36	4	95	60	60	71	61	63	68
QASB 5	41.500....	M33-M68	25-56	5	130	90	78	95	107	92	122
QASB 40	41.700....	M6-M18	6-14	40	40	25	26	30	27	32	30

\*\*\* In Ordering No. mention last three digits for Shank dia. and Square size from page no. 68 & 69  
Also inform tap size for Torque Control Adaptor with ordering no.

Coolant tubes on page 67



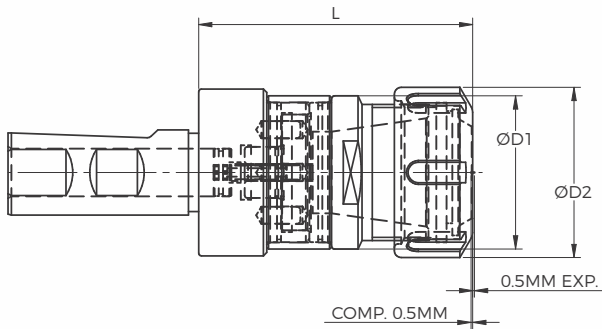
# CYLINDRICAL SHANK SYNCRONAS TAPPING CHUCK

T.I.R. < 10µm



## MODEL STC

MODEL : STC / ST. DIA.

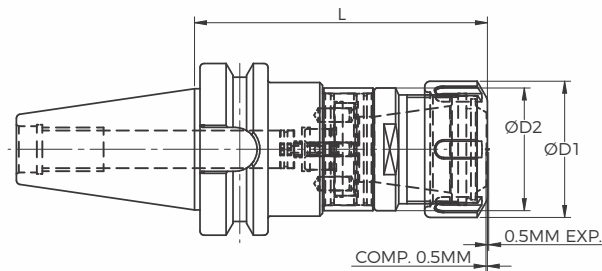


Model	Catalog Number	Description	Suitable ER Collet Size	Capacity	Clamping Range	ØD1	ØD2	L	Comp.	Exp.
ST. DIA 20	876461M12	ST.DIA 20 STC 16M-60	ER 16M	M3-M12	03 - 10	22.00	34.00	60.00	0.5	0.5
	87646112	ST.DIA 20 STC 16-60	ER 16	M3-M12	03 - 10	32.00	34.00	60.00	0.5	0.5
ST. DIA 25	876501M12	ST.DIA 25 STC 16M-60	ER 16M	M3-M12	03 - 10	22.00	34.00	60.00	0.5	0.5
	87650112	ST.DIA 25 STC 16-60	ER 16	M3-M12	03 - 10	32.00	34.00	60.00	0.5	0.5
	87650212	ST.DIA 25 STC 20-60	ER 20	M3-M16	03 - 13	35.00	34.00	60.00	0.5	0.5
	87650313	ST.DIA 25 STC 25-65	ER 25	M3-M20	03 - 16	42.00	34.00	65.00	0.5	0.5
	87650418	ST.DIA 25 STC 32-90	ER 32	M4-M27	03 - 20	50.00	45.00	90.00	0.5	0.5
ST. DIA 32	87655518	ST.DIA 32 STC 40-90	ER 40	M6-M33	04 - 26	63.00	62.00	90.00	0.5	0.5

## BT SYNCRONAS TAPPING CHUCK (MAS 403)

### MODEL STC

MODEL : STC / BT



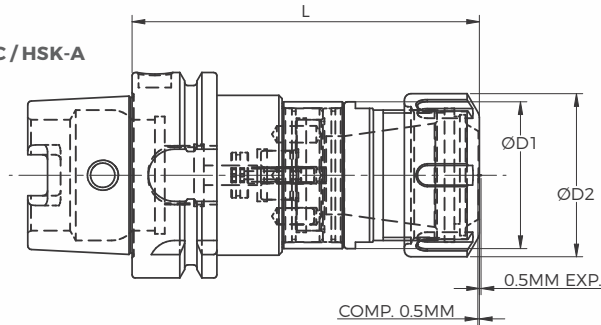
Model	Catalog Number	Description	Suitable ER Collet Size	Capacity	Clamping Range	ØD1	ØD2	L	Comp.	Exp.
BT 30	87610116	BT 30 STC 16-80	ER 16	M3-M12	03 - 10	32.00	34.00	80.00	0.5	0.5
	87610216	BT 30 STC 20-80	ER 20	M3-M16	03 - 13	35.00	34.00	80.00	0.5	0.5
BT 40	87612116	BT 40 STC 16-80	ER 16	M3-M12	03 - 10	32.00	34.00	80.00	0.5	0.5
	87612217	BT 40 STC 20-85	ER 20	M3-M16	03 - 13	35.00	34.00	85.00	0.5	0.5
	87612318	BT 40 STC 25-90	ER 25	M3-M20	03 - 16	42.00	34.00	90.00	0.5	0.5
	87612422	BT 40 STC 32-110	ER 32	M4-M27	03 - 20	50.00	45.00	110.00	0.5	0.5
	87612523	BT 40 STC 40-115	ER 40	M6-M33	04 - 26	63.00	62.00	115.00	0.5	0.5
BT 50	87614119	BT 50 STC 16-95	ER 16	M3-M12	03 - 10	32.00	34.00	95.00	0.5	0.5
	87614220	BT 50 STC 20-100	ER 20	M3-M16	03 - 13	35.00	34.00	100.00	.5	0.5
	87614322	BT 50 STC 25-110	ER 25	M3-M20	03 - 16	42.00	34.00	110.00	0.5	0.5
	87614424	BT 50 STC 32-120	ER 32	M4-M27	03 - 20	50.00	45.00	120.00	0.5	0.5
	87614524	BT 50 STC 40-120	ER 40	M6-M33	04 - 26	63.00	62.00	120.00	0.5	0.5

# HSK-A SYNCRONAS TAPPING CHUCK (DIN 69893-1)

· T.I.R. < 10µm

## MODEL STC

MODEL : STC / HSK-A

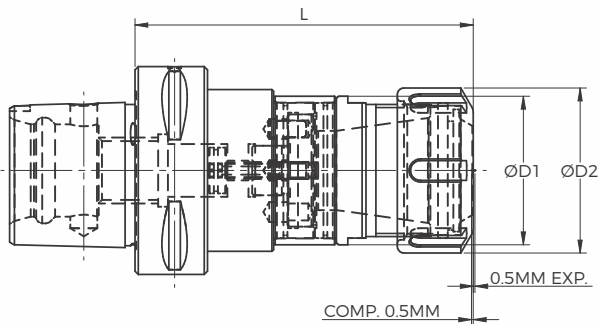


Model	Catalog Number	Description	Suitable ER Collet Size	Capacity	Clamping Range	ØD1	ØD2	L	Comp.	Exp.
HSK 63-A	87674A1M18	HSK63A STC 16M-90	ER 16M	M3-M12	03-10	32.00	34.00	90.00	0.5	0.5
	87674A118	HSK63A STC 16-90	ER 16	M3-M12	03-10	32.00	34.00	90.00	0.5	0.5
	87674A218	HSK63A STC 20-90	ER 20	M3-M16	03-13	35.00	34.00	90.00	0.5	0.5
	87674A319	HSK63A STC 25-95	ER 25	M3-M20	03-16	42.00	34.00	95.00	0.5	0.5
	87674A421	HSK63A STC 32-105	ER 32	M4-M27	03-20	50.00	45.00	105.00	0.5	0.5
	87674A527	HSK63A STC 40-135	ER 40	M6-M33	04-26	63.00	62.00	135.00	0.5	0.5
HSK 100-A	87676A1M20	HSK100A STC 16M-100	ER 16M	M3-M12	03-10	32.00	34.00	100.00	0.5	0.5
	87676A120	HSK100A STC 16-100	ER 16	M3-M12	03-10	32.00	34.00	100.00	0.5	0.5
	87676A220	HSK100A STC 20-100	ER 20	M3-M16	03-13	35.00	34.00	100.00	0.5	0.5
	87676A321	HSK100A STC 25-105	ER 25	M3-M20	03-16	42.00	34.00	105.00	0.5	0.5
	87676A422	HSK100A STC 32-110	ER 32	M4-M27	03-20	50.00	45.00	110.00	0.5	0.5
	87676A527	HSK100A STC 40-135	ER 40	M6-M33	04-26	63.00	62.00	135.00	0.5	0.5

# PTI SYNCRONAS TAPPING CHUCK (ISO 26623-1)

## MODEL STC

MODEL : STC / PTI



Model	Catalog Number	Description	Suitable ER Collet Size	Capacity	Clamping Range	ØD1	ØD2	L	Comp.	Exp.
PTI 63	876691M18	PTI 63 STC 16M-90	ER 16M	M3-M12	03 - 10	32.00	34.00	90.00	0.5	0.5
	87669118	PTI 63 STC 16-90	ER 16	M3-M12	03 - 10	32.00	34.00	90.00	0.5	0.5
	87669218	PTI 63 STC 20-90	ER 20	M3-M16	03 - 13	35.00	34.00	90.00	0.5	0.5
	87669319	PTI 63 STC 25-95	ER 25	M3-M20	03 - 16	42.00	34.00	95.00	0.5	0.5
	87669421	PTI 63 STC 32-105	ER 32	M4-M27	03 - 20	50.00	45.00	105.00	0.5	0.5
	87669527	PTI 63 STC 40-135	ER 40	M6-M33	04 - 26	63.00	62.00	135.00	0.5	0.5
PTI 80	876701M20	PTI 80 STC 16M-100	ER 16M	M3-M12	03 - 10	32.00	34.00	100.00	0.5	0.5
	87670120	PTI 80 STC 16-100	ER 16	M3-M12	03 - 10	32.00	34.00	100.00	0.5	0.5
	87670220	PTI 80 STC 20-100	ER 20	M3-M16	03 - 13	35.00	34.00	100.00	.5	0.5
	87670321	PTI 80 STC 25-105	ER 25	M3-M20	03 - 16	42.00	34.00	105.00	0.5	0.5
	87670422	PTI 80 STC 32-110	ER 32	M4-M27	03 - 20	50.00	45.00	110.00	0.5	0.5
	87670527	PTI 80 STC 40-135	ER 40	M6-M33	04 - 26	63.00	62.00	135.00	0.5	0.5

Coolant tubes on page 67

www.imitoolsindia.com

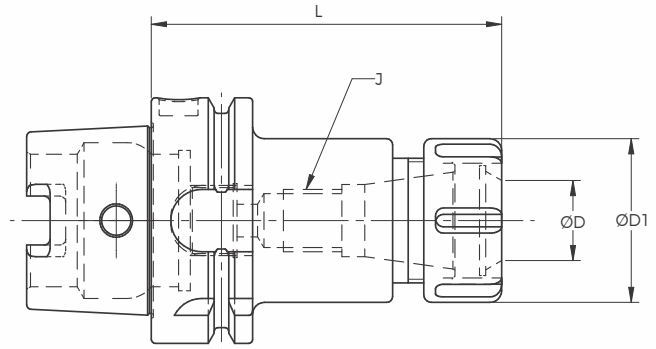
# HSK-A ER COLLET HOLDER (DIN 6499)

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- AD coolant thru the spindle
- Balanced ER Collet Nuts



## MODEL CHE

MODEL : CHE / HSK (DIN 69893 A+C)



Model	Catalog Number	Description	Suitable ER Collet Size	Ød Range	J	ØD	L	Coolant Style
HSK-32/A	87271A013	HSK 32/A CHE 11-65	ER 11	03-7.	M6x1.00	19	65	AD Thru
	87271A113	HSK 32/A CHE 16-65	ER 16	03-10.	M10x1.50	28	65	AD Thru
	87271A216	HSK 32/A CHE 20-80	ER 20	03-13.	M12x1.75	34	80	AD Thru
	87271A314	HSK 32/A CHE 25-70	ER 25	03-16.	M16x2.0	42	70	AD Thru
HSK-40/A	87272A013	HSK 40/A CHE 11-65	ER 11	03-7.	M6x1.00	19	65	AD Thru
	87272A113	HSK 40/A CHE 16-65	ER 16	03-10.	M10x1.50	28	65	AD Thru
	87272A216	HSK 40/A CHE 20-80	ER 20	03-13.	M12x1.75	34	80	AD Thru
	87272A314	HSK 40/A CHE 25-70	ER 25	03-16.	M16x2.0	42	70	AD Thru
	87272A420	HSK 40/A CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
HSK-50/A	87273A020	HSK 50/A CHE 11-100	ER 11	03-10.	M8x1.25	19	100	AD Thru
	87273A116	HSK 50/A CHE 16-80	ER 16	03-10.	M10x1.50	28	80	AD Thru
	87273A216	HSK 50/A CHE 20-80	ER 20	03-13.	M12x1.75	34	80	AD Thru
	87273A316	HSK 50/A CHE 25-80	ER 25	03-16.	M16x2.0	42	80	AD Thru
	87273A420	HSK 50/A CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87273A520	HSK 50/A CHE 40-100	ER 40	04-26.	M22x1.50	63	100	AD Thru
	87273A725	HSK 50/A CHE 50-125	ER 50	10-34.	M22x1.50	78	125	AD Thru
HSK-63/A	87274A020	HSK 63/A CHE 11-70	ER 11	03-7.	M8x1.25	19	70	AD Thru
	87274A116	HSK 63/A CHE 16-80	ER 16	03-10.	M10x1.50	28	80	AD Thru
	87274A218	HSK 63/A CHE 20-90	ER 20	03-13.	M12x1.75	34	90	AD Thru
	87274A318	HSK 63/A CHE 25-90	ER 25	03-16.	M16x2.0	42	90	AD Thru
	87274A420	HSK 63/A CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87274A520	HSK 63/A CHE 40-100	ER 40	04-26.	M22x1.50	63	100	AD Thru
	87274A725	HSK 63/A CHE 50-125	ER 50	10-34.	M22x1.50	78	125	AD Thru
HSK-100/A	87276A020	HSK 100/A CHE 11-70	ER 11	03-7.	M8x1.25	19	70	AD Thru
	87276A118	HSK 100/A CHE 16-90	ER 16	03-10.	M10x1.50	28	90	AD Thru
	87276A220	HSK 100/A CHE 20-100	ER 20	03-13.	M12x1.75	34	100	AD Thru
	87276A318	HSK 100/A CHE 25-90	ER 25	03-16.	M16x2.0	42	90	AD Thru
	87276A420	HSK 100/A CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87276A520	HSK 100/A CHE 40-100	ER 40	04-26.	M22x1.50	63	100	AD Thru
	87276A725	HSK 100/A CHE 50-125	ER 50	10-34.	M22x1.50	78	125	AD Thru

Shanks like HSK, C, E & F are also available on request.

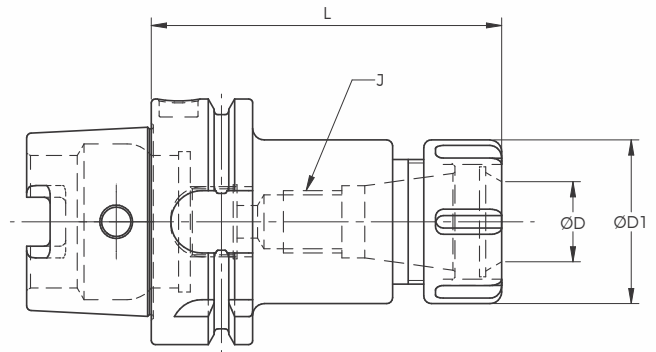
Coolant tubes on page 67

# HSK-T ER COLLET HOLDER (ISO 12164-3)

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- AD coolant thru the spindle
- Balanced ER Collet Nuts

## MODEL CHE

MODEL : CHE (DIN 6499)/ HSK-T



Model	Catalog Number	Description	Suitable ER Collet Size	Ød Range	J	ØD	L	Coolant Style
HSK-32/T	87271T013	HSK 32/T CHE 11-65	ER 11	03-7.	M6x1.00	19	65	AD Thru
	87271T113	HSK 32/T CHE 16-65	ER 16	03-10.	M10x1.50	28	65	AD Thru
	87271T216	HSK 32/T CHE 20-80	ER 20	03-13.	M12x1.75	34	80	AD Thru
	87271T314	HSK 32/T CHE 25-70	ER 25	03-16.	M16x2.0	42	70	AD Thru
HSK-40/T	87272T013	HSK 40/T CHE 11-65	ER 11	03-7.	M6x1.00	19	65	AD Thru
	87272T113	HSK 40/T CHE 16-65	ER 16	03-10.	M10x1.50	28	65	AD Thru
	87272T216	HSK 40/T CHE 20-80	ER 20	03-13.	M12x1.75	34	80	AD Thru
	87272T314	HSK 40/T CHE 25-70	ER 25	03-16.	M16x2.0	42	70	AD Thru
	87272T420	HSK 40/T CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
HSK-50/T	87273T020	HSK 50/T CHE 11-100	ER 11	03-7.	M6x1.00	19	100	AD Thru
	87273T116	HSK 50/T CHE 16-80	ER 16	03-10.	M10x1.50	28	80	AD Thru
	87273T216	HSK 50/T CHE 20-80	ER 20	03-13.	M12x1.75	34	80	AD Thru
	87273T316	HSK 50/T CHE 25-80	ER 25	03-16.	M16x2.0	42	80	AD Thru
	87273T420	HSK 50/T CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87273T520	HSK 50/T CHE 40-100	ER 40	04-26.	M22x1.50	63	100	AD Thru
	87273T725	HSK 50/T CHE 50-125	ER 50	10-34.	M22x1.50	78	125	AD Thru
HSK-63/T	87274T020	HSK 63/T CHE 11-70	ER 11	03-7.	M6x1.00	19	70	AD Thru
	87274T116	HSK 63/T CHE 16-80	ER 16	03-10.	M10x1.50	28	80	AD Thru
	87274T218	HSK 63/T CHE 20-90	ER 20	03-13.	M12x1.75	34	90	AD Thru
	87274T318	HSK 63/T CHE 25-90	ER 25	03-16.	M16x2.0	42	90	AD Thru
	87274T420	HSK 63/T CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87274T520	HSK 63/T CHE 40-100	ER 40	04-26.	M22x1.50	63	100	AD Thru
	87274T725	HSK 63/T CHE 50-125	ER 50	10-34.	M22x1.50	78	125	AD Thru
HSK-100/T	87276T020	HSK 100/T CHE 11-70	ER 11	03-7.	M6x1.00	19	70	AD Thru
	87276T118	HSK 100/T CHE 16-90	ER 16	03-10.	M10x1.50	28	90	AD Thru
	87276T220	HSK 100/T CHE 20-100	ER 20	03-13.	M12x1.75	34	100	AD Thru
	87276T318	HSK 100/T CHE 25-90	ER 25	03-16.	M16x2.0	42	90	AD Thru
	87276T420	HSK 100/T CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87276T520	HSK 100/T CHE 40-100	ER 40	04-26.	M22x1.50	63	100	AD Thru
	87276T725	HSK 100/T CHE 50-125	ER 50	10-34.	M22x1.50	78	125	AD Thru

Shanks like HSK, C, E & F are also available on request.

Coolant tubes **on page 67**

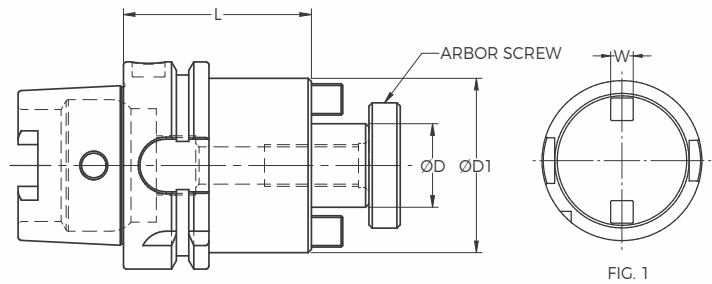
# HSK-A SHELL MILL HOLDER

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 7µm
- Coolant thru the center of the body



## MODEL SMH

MODEL : SMH / HSK (DIN 69893 A+C)



Model	Catalog Number	Description	Pilot Size ØD	L	ØD1	H	W	K	Coolant Style
HSK-32/A	8171A1611	HSK 32/A SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	8171A2211	HSK 32/A SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	8171A2713	HSK 32/A SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
HSK-40/A	8172A1611	HSK 40/A SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	8172A2211	HSK 40/A SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	8172A2713	HSK 40/A SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
	8172A3213	HSK 40/A SMH 32-65	32	65.00	78.00	24	14	7	AD Thru
HSK-50/A	8173A1611	HSK 50/A SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	8173A2211	HSK 50/A SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	8173A2713	HSK 50/A SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
	8173A3213	HSK 50/A SMH 32-65	32	65.00	78.00	24	14	7	AD Thru
HSK-63/A	8174A1609	HSK 63/A SMH 16-45	16	45.00	36.00	17	8	5	AD Thru
	8174A2210	HSK 63/A SMH 22-50	22	50.00	48.00	19	10	5.6	AD Thru
	8174A2712	HSK 63/A SMH 27-60	27	60.00	60.00	21	12	6.3	AD Thru
	8174A3212	HSK 63/A SMH 32-60	32	60.00	78.00	24	14	7	AD Thru
	8174A3414	HSK 63/A SMH 40-70	40	70.00	78.00	24	16	8	AD Thru
HSK-100/A	8176A1609	HSK 100/A SMH 16-45	16	45.00	36.00	17	8	5	AD Thru
	8176A2210	HSK 100/A SMH 22-50	22	50.00	48.00	19	10	5.6	AD Thru
	8176A2712	HSK 100/A SMH 27-60	27	60.00	60.00	21	12	6.3	AD Thru
	8176A3212	HSK 100/A SMH 32-60	32	60.00	78.00	24	14	7	AD Thru
	8176A3412	HSK 100/A SMH 40-60	40	60.00	85.00	24	16	8	AD Thru

Shanks like HSK, C, E & F are also available on request.

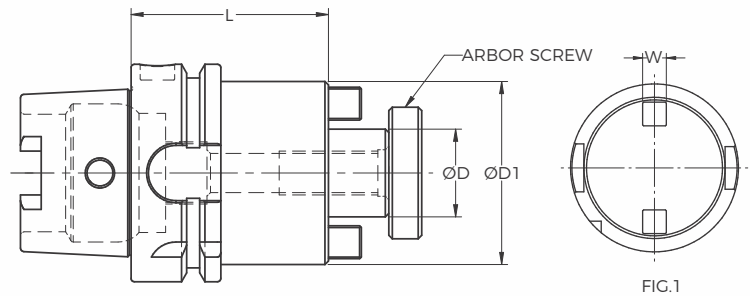
Coolant tubes **on page 67**

# HSK-T SHELL MILL HOLDER

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 7µm
- Coolant thru the center of the body

## MODEL SMH

MODEL : SMH / HSK-T (ISO 12164-3)



Model	Catalog Number	Description	Pilot Size ØD	L	ØD1	H	W	K	Coolant Style
HSK-32/T	8171T1611	HSK 32/T SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	8171T2211	HSK 32/T SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	8171T2713	HSK 32/T SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
HSK-40/T	8172T1611	HSK 40/T SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	8172T2211	HSK 40/T SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	8172T2713	HSK 40/T SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
	8172T3213	HSK 40/T SMH 32-65	32	65.00	78.00	24	14	7	AD Thru
HSK-50/T	8173T1611	HSK 50/T SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	8173T2211	HSK 50/T SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	8173T2713	HSK 50/T SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
	8173T3213	HSK 50/T SMH 32-65	32	65.00	78.00	24	14	7	AD Thru
HSK-63/T	8174T1609	HSK 63/T SMH 16-45	16	45.00	36.00	17	8	5	AD Thru
	8174T2210	HSK 63/T SMH 22-50	22	50.00	48.00	19	10	5.6	AD Thru
	8174T2712	HSK 63/T SMH 27-60	27	60.00	60.00	21	12	6.3	AD Thru
	8174T3212	HSK 63/T SMH 32-60	32	60.00	78.00	24	14	7	AD Thru
	8174T3414	HSK 63/T SMH 40-70	40	70.00	78.00	27	16	8	AD Thru
HSK-100/T	8176T1609	HSK 100/T SMH 16-45	16	45.00	36.00	17	8	5	AD Thru
	8176T2210	HSK 100/T SMH 22-50	22	50.00	48.00	19	10	5.6	AD Thru
	8176T2712	HSK 100/T SMH 27-60	27	60.00	60.00	21	12	6.3	AD Thru
	8176T3212	HSK 100/T SMH 32-60	32	60.00	78.00	24	14	7	AD Thru
	8176T3412	HSK 100/T SMH 40-60	40	60.00	85.00	27	16	8	AD Thru

Shanks like HSK, C, E & F are also available on request.

Coolant tubes on page 67

# HSK-A END MILL HOLDER (DIN 1835-B)

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 7µm
- Bore tolerance: H6

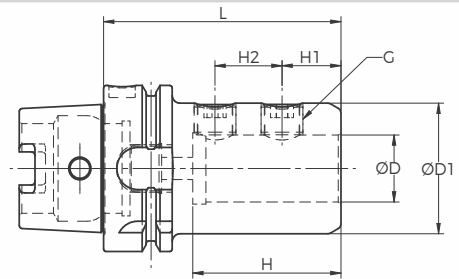


## MODEL EMH

MODEL : EMH / HSK (DIN 69893 A+C)



MODEL-SL/HSK  
(DIN-69893 A+C  
(THRU. COOLANT))



Model	Catalog Number	Description	ØD	L	ØD1	H	H1	H2	G	Coolant Style
HSK-32/A	8471A0612	HSK 32/A EMH 06-60	6	60.00	25.00	36	18	-	M6	AD Thru
	8471A0812	HSK 32/A EMH 08-60	8	60.00	28.00	36	18	-	M8	AD Thru
	8471A1013	HSK 32/A EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	8471A1214	HSK 32/A EMH 12-70	12	70.00	42.00	45	22.5	-	M12	AD Thru
	8471A1415	HSK 32/A EMH 14-75	14	75.00	44.00	45	22.5	-	M12	AD Thru
	8471A1615	HSK 32/A EMH 16-75	16	75.00	48.00	48	24	-	M14	AD Thru
	8471A2018	HSK 32/A EMH 20-90	20	65.00	52.00	50	25	-	M16	AD Thru
HSK-40/A	8472A0612	HSK 40/A EMH 06-60	6	60.00	25.00	36	18	-	M6	AD Thru
	8472A0812	HSK 40/A EMH 08-60	8	60.00	28.00	36	18	-	M8	AD Thru
	8472A1013	HSK 40/A EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	8472A1214	HSK 40/A EMH 12-70	12	70.00	42.00	45	22.5	-	M12	AD Thru
	8472A1415	HSK 40/A EMH 14-75	14	75.00	44.00	45	22.5	-	M12	AD Thru
	8472A1615	HSK 40/A EMH 16-75	16	75.00	48.00	48	24	-	M14	AD Thru
	8472A1817	HSK 40/A EMH 18-85	18	85.00	48.00	50	24	-	M14	AD Thru
	8472A2017	HSK 40/A EMH 20-85	20	85.00	52.00	50	25	-	M16	AD Thru
	8472A2520	HSK 40/A EMH 25-100	25	100.00	65.00	56	24	25	M18	AD Thru
	8472A3221	HSK 40/A EMH 32-105	32	105.00	72.00	60	24	28	M20	AD Thru
HSK-50/A	8473A0613	HSK 50/A EMH 06-65	6	65.00	25.00	36	18	-	M6	AD Thru
	8473A0813	HSK 50/A EMH 08-65	8	65.00	28.00	36	18	-	M8	AD Thru
	8473A1013	HSK 50/A EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	8473A1216	HSK 50/A EMH 12-80	12	80.00	42.00	45	22.5	-	M12	AD Thru
	8473A1416	HSK 50/A EMH 14-80	14	80.00	44.00	45	22.5	-	M12	AD Thru
	8473A1616	HSK 50/A EMH 16-80	16	80.00	48.00	48	24	-	M14	AD Thru
	8473A1816	HSK 50/A EMH 18-80	18	80.00	48.00	50	24	-	M14	AD Thru
	8473A2016	HSK 50/A EMH 20-80	20	80.00	52.00	50	25	-	M16	AD Thru
	8473A2522	HSK 50/A EMH 25-110	25	110.00	65.00	56	24	25	M18	AD Thru
	8473A3222	HSK 50/A EMH 32-110	32	110.00	72.00	60	24	28	M20	AD Thru
HSK-63/A	8474A0613	HSK 63/A EMH 06-65	6	65.00	25.00	36	18	-	M6	AD Thru
	8474A0813	HSK 63/A EMH 08-65	8	65.00	28.00	36	18	-	M8	AD Thru
	8474A1013	HSK 63/A EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	8474A1216	HSK 63/A EMH 12-80	12	80.00	42.00	45	22.5	-	M12	AD Thru
	8474A1416	HSK 63/A EMH 14-80	14	80.00	44.00	45	22.5	-	M12	AD Thru
	8474A1616	HSK 63/A EMH 16-80	16	80.00	48.00	48	24	-	M14	AD Thru
	8474A1816	HSK 63/A EMH 18-80	18	80.00	48.00	50	24	-	M14	AD Thru
	8474A2016	HSK 63/A EMH 20-80	20	80.00	52.00	50	25	-	M16	AD Thru
	8474A2522	HSK 63/A EMH 25-110	25	110.00	65.00	56	24	25	M18	AD Thru
	8474A3222	HSK 63/A EMH 32-110	32	110.00	72.00	60	24	28	M20	AD Thru
HSK-100/A	8474A3425	HSK 63/A EMH 40-125	40	125.00	80.00	65	30	32	M20	AD Thru
	8476A0618	HSK 100/A EMH 06-90	6	90.00	25.00	36	18	-	M6	AD Thru
	8476A0818	HSK 100/A EMH 08-90	8	90.00	28.00	36	18	-	M8	AD Thru
	8476A1018	HSK 100/A EMH 10-90	10	90.00	35.00	40	20	-	M10	AD Thru
	8476A1220	HSK 100/A EMH 12-100	12	100.00	42.00	45	22.5	-	M12	AD Thru
	8476A1420	HSK 100/A EMH 14-100	14	100.00	44.00	45	22.5	-	M12	AD Thru
	8476A1620	HSK 100/A EMH 16-100	16	100.00	48.00	48	24	-	M14	AD Thru
	8476A1820	HSK 100/A EMH 18-100	18	100.00	48.00	50	24	-	M14	AD Thru
	8476A2022	HSK 100/A EMH 20-110	20	110.00	52.00	50	25	-	M16	AD Thru
	8476A2524	HSK 100/A EMH 25-120	25	120.00	65.00	56	24	25	M18	AD Thru
8476A3224	HSK 100/A EMH 32-120	32	120.00	72.00	60	24	28	M20	AD Thru	
8476A3424	HSK 100/A EMH 40-120	40	120.00	80.00	65	30	32	M20	AD Thru	

Shanks like HSK, C, E & F are also available on request.  
www.imitoolsindia.com

Coolant tubes on page 67

# HSK-T END MILL HOLDER (DIN 1835-B)

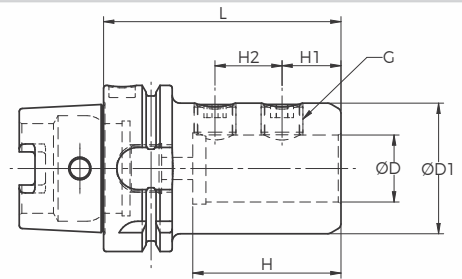
- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 7µm
- Bore tolerance: H6

## MODEL EMH

MODEL : EMH / HSK (ISO 12164-3)



MODEL-SL/HSK  
(DIN-69893 A+C  
(THRU. COOLANT))



Model	Catalog Number	Description	ØD	L	ØD1	H	H1	H2	G	Coolant Style
HSK-32/T	8471T0612	HSK 32/T EMH 06-60	6	60.00	25.00	36	18	-	M6	AD Thru
	8471T0812	HSK 32/T EMH 08-60	8	60.00	28.00	36	18	-	M8	AD Thru
	8471T1013	HSK 32/T EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	8471T1214	HSK 32/T EMH 12-70	12	70.00	42.00	45	22.5	-	M12	AD Thru
	8471T1415	HSK 32/T EMH 14-75	14	75.00	44.00	45	22.5	-	M12	AD Thru
	8471T1615	HSK 32/T EMH 16-75	16	75.00	48.00	48	24	-	M14	AD Thru
	8471T2018	HSK 32/T EMH 20-90	20	65.00	52.00	50	25	-	M16	AD Thru
HSK-40/T	8472T0612	HSK 40/T EMH 06-60	6	60.00	25.00	36	18	-	M6	AD Thru
	8472T0812	HSK 40/T EMH 08-60	8	60.00	28.00	36	18	-	M8	AD Thru
	8472T1013	HSK 40/T EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	8472T1214	HSK 40/T EMH 12-70	12	70.00	42.00	45	22.5	-	M12	AD Thru
	8472T1415	HSK 40/T EMH 14-75	14	75.00	44.00	45	22.5	-	M12	AD Thru
	8472T1615	HSK 40/T EMH 16-75	16	75.00	48.00	48	24	-	M14	AD Thru
	8472T1817	HSK 40/T EMH 18-85	18	85.00	48.00	50	24	-	M14	AD Thru
	8472T2017	HSK 40/T EMH 20-85	20	85.00	52.00	50	25	-	M16	AD Thru
	8472T2520	HSK 40/T EMH 25-100	25	100.00	65.00	56	24	25	M18	AD Thru
	8472T3221	HSK 40/T EMH 32-105	32	105.00	72.00	60	24	28	M20	AD Thru
HSK-50/T	8473T0613	HSK 50/T EMH 06-65	6	65.00	25.00	36	18	-	M6	AD Thru
	8473T0813	HSK 50/T EMH 08-65	8	65.00	28.00	36	18	-	M8	AD Thru
	8473T1013	HSK 50/T EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	8473T1216	HSK 50/T EMH 12-80	12	80.00	42.00	45	22.5	-	M12	AD Thru
	8473T1416	HSK 50/T EMH 14-80	14	80.00	44.00	45	22.5	-	M12	AD Thru
	8473T1616	HSK 50/T EMH 16-80	16	80.00	48.00	48	24	-	M14	AD Thru
	8473T1816	HSK 50/T EMH 18-80	18	80.00	48.00	50	24	-	M14	AD Thru
	8473T2016	HSK 50/T EMH 20-80	20	80.00	52.00	50	25	-	M16	AD Thru
	8473T2522	HSK 50/T EMH 25-110	25	110.00	65.00	56	24	25	M18	AD Thru
	8473T3222	HSK 50/T EMH 32-110	32	110.00	72.00	60	24	28	M20	AD Thru
HSK-63/T	8474T0613	HSK 63/T EMH 06-65	6	65.00	25.00	36	18	-	M6	AD Thru
	8474T0813	HSK 63/T EMH 08-65	8	65.00	28.00	36	18	-	M8	AD Thru
	8474T1013	HSK 63/T EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	8474T1216	HSK 63/T EMH 12-80	12	80.00	42.00	45	22.5	-	M12	AD Thru
	8474T1416	HSK 63/T EMH 14-80	14	80.00	44.00	45	22.5	-	M12	AD Thru
	8474T1616	HSK 63/T EMH 16-80	16	80.00	48.00	48	24	-	M14	AD Thru
	8474T1816	HSK 63/T EMH 18-80	18	80.00	48.00	50	24	-	M14	AD Thru
	8474T2016	HSK 63/T EMH 20-80	20	80.00	52.00	50	25	-	M16	AD Thru
	8474T2522	HSK 63/T EMH 25-110	25	110.00	65.00	56	24	25	M18	AD Thru
	8474T3222	HSK 63/T EMH 32-110	32	110.00	72.00	60	24	28	M20	AD Thru
HSK-100/T	8474T3425	HSK 63/T EMH 40-125	40	125.00	80.00	65	30	32	M20	AD Thru
	8476T0618	HSK 100/T EMH 06-90	6	90.00	25.00	36	18	-	M6	AD Thru
	8476T0818	HSK 100/T EMH 08-90	8	90.00	28.00	36	18	-	M8	AD Thru
	8476T1018	HSK 100/T EMH 10-90	10	90.00	35.00	40	20	-	M10	AD Thru
	8476T1220	HSK 100/T EMH 12-100	12	100.00	42.00	45	22.5	-	M12	AD Thru
	8476T1420	HSK 100/T EMH 14-100	14	100.00	44.00	45	22.5	-	M12	AD Thru
	8476T1620	HSK 100/T EMH 16-100	16	100.00	48.00	48	24	-	M14	AD Thru
	8476T1820	HSK 100/T EMH 18-100	18	100.00	48.00	50	24	-	M14	AD Thru
	8476T2022	HSK 100/T EMH 20-110	20	110.00	52.00	50	25	-	M16	AD Thru
	8476T2524	HSK 100/T EMH 25-120	25	120.00	65.00	56	24	25	M18	AD Thru
8476T3224	HSK 100/T EMH 32-120	32	120.00	72.00	60	24	28	M20	AD Thru	
8476T3424	HSK 100/T EMH 40-120	40	120.00	80.00	65	30	32	M20	AD Thru	

Shanks like HSK, C, E & F are also available on request.

Coolant tubes on page 67



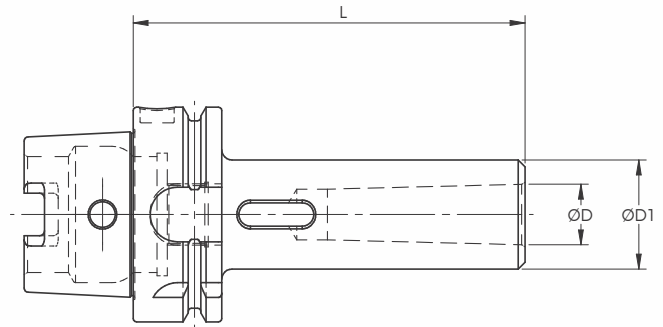
# HSK-A MORSE TAPER HOLDERS

· T.I.R. < 7µm



## MODEL MTA

MODEL : MTA / HSK



Model	Catalog Number	Description	MT Socket	ØD	L	ØD1	Coolant Style
HSK-40/A	88072A119	HSK40A-MTA 1-95	1	12.065	95.00	25.00	N/A
	88072A221	HSK40A-MTA 2-110	2	17.780	110.00	32.00	N/A
	88072A327	HSK40A-MTA 3-135	3	23.825	135.00	40.00	N/A
HSK-50/A	88073A119	HSK50A-MTA 1-95	1	12.065	95.00	25.00	N/A
	88073A223	HSK50A-MTA 2-115	2	17.780	115.00	32.00	N/A
	88073A327	HSK50A-MTA 3-135	3	23.825	135.00	40.00	N/A
HSK-63/A	88074A119	HSK63A-MTA 1-100	1	12.065	100.00	25.00	N/A
	88074A223	HSK63A-MTA 2-115	2	17.780	115.00	32.00	N/A
	88074A327	HSK63A-MTA 3-135	3	23.825	135.00	40.00	N/A
	88074A432	HSK63A-MTA 4-160	4	31.267	160.00	50.00	N/A
HSK-100/A	88076A224	HSK 100A-MTA 1-110	2	12.065	110.00	25.00	N/A
	88076A224	HSK 100A-MTA 2-120	2	17.780	120.00	32.00	N/A
	88076A330	HSK 100A-MTA 3-150	3	23.825	150.00	40.00	N/A
	88076A434	HSK 100A-MTA 4-170	4	31.267	170.00	50.00	N/A
	88076A540	HSK 100A-MTA 5-200	5	44.399	200.00	63.00	N/A

Shanks like HSK, C, E & F are also available on request.

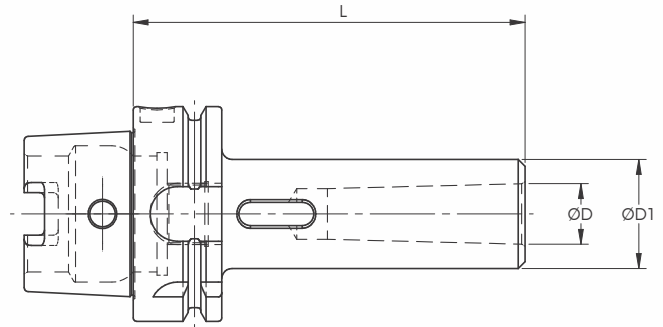
Coolant tubes **on page 67**

# HSK-T MORSE TAPER HOLDERS

· T.I.R. < 7µm

## MODEL MTA

MODEL : MTA / HSK



Model	Catalog Number	Description	MT Socket	ØD	L	ØD1	Coolant Style
HSK-40/T	88072T119	HSK40T-MTA 1-95	1	12.065	95.00	25.00	N/A
	88072T221	HSK40T-MTA 2-110	2	17.780	110.00	32.00	N/A
	88072T327	HSK40T-MTA 3-135	3	23.825	135.00	40.00	N/A
HSK-50/T	88073A119	HSK50T-MTA 1-95	1	12.065	95.00	25.00	N/A
	88073T223	HSK50T-MTA 2-115	2	17.780	115.00	32.00	N/A
	88073T327	HSK50T-MTA 3-135	3	23.825	135.00	40.00	N/A
HSK-63/T	88074T119	HSK63T-MTA 1-100	1	12.065	100.00	25.00	N/A
	88074T223	HSK63T-MTA 2-115	2	17.780	115.00	32.00	N/A
	88074T327	HSK63T-MTA 3-135	3	23.825	135.00	40.00	N/A
	88074T432	HSK63T-MTA 4-160	4	31.267	160.00	50.00	N/A
HSK-100/T	88076T224	HSK 100T-MTA 1-110	2	12.065	110.00	25.00	N/A
	88076T224	HSK 100T-MTA 2-120	2	17.780	120.00	32.00	N/A
	88076T330	HSK 100T-MTA 3-150	3	23.825	150.00	40.00	N/A
	88076T434	HSK 100T-MTA 4-170	4	31.267	170.00	50.00	N/A
	88076T540	HSK 100T-MTA 5-200	5	44.399	200.00	63.00	N/A

Shanks like HSK, C, E & F are also available on request.

Coolant tubes **on page 67**

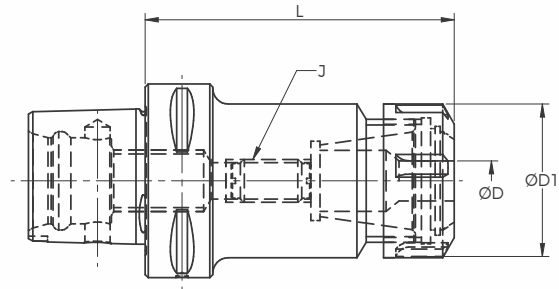
# PTI ER COLLET HOLDER (DIN 6499)

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- Balanced ER Collet Nuts



## MODEL CHE

MODEL : CHE / PTI (ISO 26623-1)



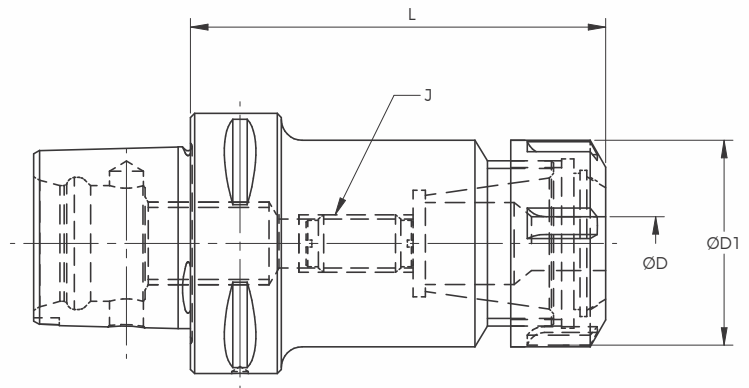
Model	Catalog Number	Description	Suitable ER Collet Size	ØD Range	J	ØD1	L	Coolant Style
PTI-32	87266010	PTI 32 CHE 11-50	ER 11	03-7.	-	19	50	AD Thru
	87266110	PTI 32 CHE 16-50	ER 16	03-10.	-	28	50	AD Thru
	87266210	PTI 32 CHE 20-50	ER 20	03-13.	-	34	50	AD Thru
	87266310	PTI 32 CHE 25-50	ER 25	03-16.	-	42	50	AD Thru
	87266412	PTI 32 CHE 32-60	ER 32	03-20.	-	50	60	AD Thru
PTI-40	87267010	PTI 40 CHE 11-50	ER 11	03-10.	-	19	50	AD Thru
	87267114	PTI 40 CHE 16-70	ER 16	03-10.	M10x1.50	28	70	AD Thru
	87267210	PTI 40 CHE 20-50	ER 20	03-13.	-	34	50	AD Thru
	87267310	PTI 40 CHE 25-50	ER 25	03-16.	-	42	50	AD Thru
	87267411	PTI 40 CHE 32-55	ER 32	03-20.	-	50	55	AD Thru
PTI-50	87268012	PTI 50 CHE 11-60	ER 11	03-10.	M6x1.00	19	60	AD Thru
	87268112	PTI 50 CHE 16-60	ER 16	03-10.	M10x1.50	28	60	AD Thru
	87268114	PTI 50 CHE 16-70	ER 16	03-10.	M10x1.50	28	70	AD Thru
	87268120	PTI 50 CHE 16-100	ER 16	03-10.	M10x1.50	28	100	AD Thru
	87268124	PTI 50 CHE 16-120	ER 16	03-10.	M10x1.50	28	120	AD Thru
	87268212	PTI 50 CHE 20-60	ER 20	03-13.	M12x1.75	34	60	AD Thru
	87268214	PTI 50 CHE 20-70	ER 20	03-13.	M12x1.75	34	70	AD Thru
	87268220	PTI 50 CHE 20-100	ER 20	03-13.	M12x1.75	34	100	AD Thru
	87268224	PTI 50 CHE 20-120	ER 20	03-13.	M12x1.75	34	120	AD Thru
	87268226	PTI 50 CHE 20-130	ER 20	03-13.	M12x1.75	34	130	AD Thru
	87268227	PTI 50 CHE 20-135	ER 20	03-13.	M12x1.75	34	135	AD Thru
	87268311	PTI 50 CHE 25-55	ER 25	03-16.	-	42	55	AD Thru
	87268318	PTI 50 CHE 25-90	ER 25	03-16.	M16x2.0	42	90	AD Thru
	87268412	PTI 50 CHE 32-60	ER 32	03-20.	-	50	60	AD Thru
	87268420	PTI 50 CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
87268516	PTI 50 CHE 40-80	ER 40	04-26.	M22x1.50	63	80	AD Thru	
PTI-63	87269012	PTI 63 CHE 11-60	ER 11	03-10.	M6x1.00	19	60	AD Thru
	87269014	PTI 63 CHE 11-70	ER 11	03-10.	M6x1.00	19	70	AD Thru
	87269020	PTI 63 CHE 11-100	ER 11	03-10.	M6x1.00	19	100	AD Thru
	87269024	PTI 63 CHE 11-120	ER 11	03-10.	M6x1.00	19	120	AD Thru
	87269112	PTI 63 CHE 16-60	ER 16	03-10.	M10x1.50	28	60	AD Thru
	87269114	PTI 63 CHE 16-70	ER 16	03-10.	M10x1.50	28	70	AD Thru
	87269120	PTI 63 CHE 16-100	ER 16	03-10.	M10x1.50	28	100	AD Thru
	87269124	PTI 63 CHE 16-120	ER 16	03-10.	M10x1.50	28	120	AD Thru
	87269212	PTI 63 CHE 20-60	ER 20	03-13.	M12x1.75	34	60	AD Thru
	87269214	PTI 63 CHE 20-70	ER 20	03-13.	M12x1.75	34	70	AD Thru
	87269220	PTI 63 CHE 20-100	ER 20	03-13.	M12x1.75	34	100	AD Thru
	87269224	PTI 63 CHE 20-120	ER 20	03-13.	M12x1.75	34	120	AD Thru
	87269227	PTI 63 CHE 20-135	ER 20	03-13.	M12x1.75	34	135	AD Thru

# PTI ER COLLET HOLDER (DIN 6499)

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- Balanced ER Collet Nuts

## MODEL CHE

MODEL : CHE / PTI (ISO 26623-1)



Model	Catalog Number	Description	Suitable ER Collet Size	ØD Range	J	ØD1	L	Coolant Style
PTI-63	87269312	PTI 63 CHE 25-60	ER 25	03-16.	-	42	60	AD Thru
	87269318	PTI 63 CHE 25-90	ER 25	03-16.	M16x2.0	42	90	AD Thru
	87269320	PTI 63 CHE 25-100	ER 25	03-16.	M16x2.0	42	100	AD Thru
	87269326	PTI 63 CHE 25-130	ER 25	03-16.	M16x2.0	42	130	AD Thru
	87269332	PTI 63 CHE 25-160	ER 25	03-16.	M16x2.0	42	160	AD Thru
	87269420	PTI 63 CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87269420	PTI 63 CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87269513	PTI 63 CHE 40-65	ER 40	04-26.	-	63	65	AD Thru
	87269516	PTI 63 CHE 40-80	ER 40	04-26.	M22x1.50	63	80	AD Thru
	87269526	PTI 63 CHE 40-130	ER 40	04-26.	M22x1.50	63	130	AD Thru
PTI-80	87270013	PTI 80 CHE 11-65	ER 11	03-10.	M6x1.00	19	65	AD Thru
	87270113	PTI 80 CHE 16-65	ER 16	03-10.	M10x1.50	28	65	AD Thru
	87270314	PTI 80 CHE 25-70	ER 25	03-16.	M16x2.0	42	70	AD Thru
	87270414	PTI 80 CHE 32-70	ER 32	03-20.	M18x1.50	50	70	AD Thru
	87270420	PTI 80 CHE 32-100	ER 32	03-20.	M18x1.50	50	100	AD Thru
	87270432	PTI 80 CHE 32-160	ER 32	03-20.	M18x1.50	50	160	AD Thru
	87270446	PTI 80 CHE 32-230	ER 32	03-20.	M18x1.50	50	230	AD Thru
	87270466	PTI 80 CHE 32-330	ER 32	03-20.	M18x1.50	50	330	AD Thru
	87270514	PTI 80 CHE 40-70	ER 40	04-26.	M18x1.50	63	70	AD Thru
	87270520	PTI 80 CHE 40-100	ER 40	04-26.	M18x1.50	63	100	AD Thru
	87270524	PTI 80 CHE 40-120	ER 40	04-26.	M18x1.50	63	120	AD Thru
	87270532	PTI 80 CHE 40-160	ER 40	04-26.	M18x1.50	63	160	AD Thru

Coolant tubes **on page 67**

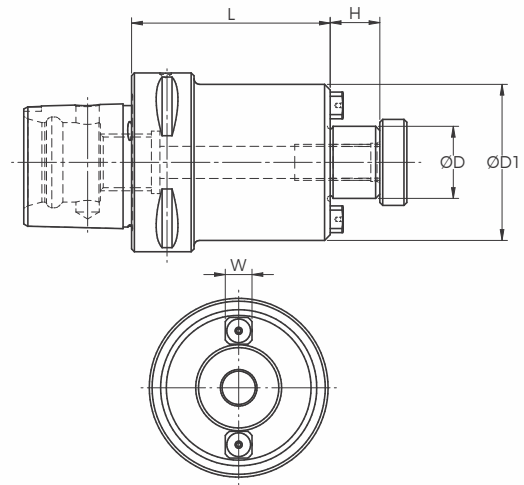
# PTI SHELL MILL HOLDER

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 7µm
- Coolant Thru the Body



## MODEL SMH

MODEL : SMH / PTI (ISO 26623-1)



Model	Catalog Number	Description	Pilot Size ØD	L	ØD1	H	W	K	Coolant Style
PTI-32	81661611	PTI 32 SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	81662211	PTI 32 SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	81662713	PTI 32 SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
PTI-40	81671611	PTI 40 SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	81672211	PTI 40 SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	81672713	PTI 40 SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
	81673213	PTI 40 SMH 32-65	32	65.00	78.00	24	14	7	AD Thru
PTI-50	81681611	PTI 50 SMH 16-55	16	55.00	36.00	17	8	5	AD Thru
	81682211	PTI 50 SMH 22-55	22	55.00	48.00	19	10	5.6	AD Thru
	81682713	PTI 50 SMH 27-65	27	65.00	60.00	21	12	6.3	AD Thru
	81683213	PTI 50 SMH 32-65	32	65.00	78.00	24	14	7	AD Thru
PTI-63	81691609	PTI 63 SMH 16-45	16	45.00	36.00	17	8	5	AD Thru
	81692210	PTI 63 SMH 22-50	22	50.00	48.00	19	10	5.6	AD Thru
	81692712	PTI 63 SMH 27-60	27	60.00	60.00	21	12	6.3	AD Thru
	81693212	PTI 63 SMH 32-60	32	60.00	78.00	24	14	7	AD Thru
	81693414	PTI 63 SMH 40-70	40	70.00	78.00	27	16	8	AD Thru
PTI-80	81701609	PTI 80 SMH 16-45	16	45.00	36.00	17	8	5	AD Thru
	81702210	PTI 80 SMH 22-50	22	50.00	48.00	19	10	5.6	AD Thru
	81702712	PTI 80 SMH 27-60	27	60.00	60.00	21	12	6.3	AD Thru
	81703212	PTI 80 SMH 32-60	32	60.00	78.00	24	14	7	AD Thru
	81703412	PTI 80 SMH 40-60	40	60.00	85.00	27	16	8	AD Thru

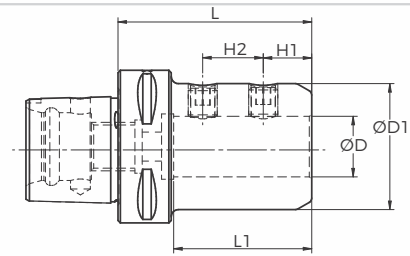
Coolant tubes on page 67

# PTI END MILL HOLDER (DIN 1835-B)

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- Bore tolerance: H6

## MODEL EMH

MODEL : EMH / PTI (ISO 26623-1)



Model	Catalog Number	Description	ØD	L	ØD1	H	H1	H2	G	Coolant Style
PTI-32	84660612	PTI 32 EMH 06-60	6	60.00	25.00	36	18	-	M6	AD Thru
	84660812	PTI 32 EMH 08-60	8	60.00	28.00	36	18	-	M8	AD Thru
	84661016	PTI 32 EMH 10-80	10	80.00	35.00	40	20	-	M10	AD Thru
	84661216	PTI 32 EMH 12-80	12	80.00	42.00	45	22.5	-	M12	AD Thru
	84661416	PTI 32 EMH 14-80	14	80.00	44.00	45	22.5	-	M12	AD Thru
	84661616	PTI 32 EMH 16-80	16	80.00	48.00	48	24	-	M14	AD Thru
	84661816	PTI 32 EMH 18-80	18	80.00	48.00	50	24	-	M14	AD Thru
	84662016	PTI 32 EMH 20-80	20	80.00	52.00	50	25	-	M16	AD Thru
PTI-40	84670612	PTI 40 EMH 06-60	6	60.00	25.00	36	18	-	M6	AD Thru
	84670812	PTI 40 EMH 08-60	8	60.00	28.00	36	18	-	M8	AD Thru
	84671016	PTI 40EMH 10-80	10	80.00	35.00	40	20	-	M10	AD Thru
	84671216	PTI 40 EMH 12-80	12	80.00	42.00	45	22.5	-	M12	AD Thru
	84671416	PTI 40 EMH 14-80	14	80.00	44.00	45	22.5	-	M12	AD Thru
	84671616	PTI 40 EMH 16-80	16	80.00	48.00	48	24	-	M14	AD Thru
	84671816	PTI 40 EMH 18-80	18	80.00	48.00	50	24	-	M14	AD Thru
	84672016	PTI 40 EMH 20-80	20	80.00	52.00	50	25	-	M16	AD Thru
	84672518	PTI 40 EMH 25-90	25	90.00	65.00	56	24	25	M18	AD Thru
	84673218	PTI 40 EMH 32-90	32	90.00	72.00	60	24	28	M20	AD Thru
PTI-50	84680613	PTI 50 EMH 06-65	6	65.00	25.00	36	18	-	M6	AD Thru
	84680813	PTI 50 EMH 08-65	8	65.00	28.00	36	18	-	M8	AD Thru
	84681016	PTI 50 EMH 10-80	10	80.00	35.00	40	20	-	M10	AD Thru
	84681216	PTI 50 EMH 12-80	12	80.00	42.00	45	22.5	-	M12	AD Thru
	84681416	PTI 50 EMH 14-80	14	80.00	44.00	45	22.5	-	M12	AD Thru
	84681616	PTI 50 EMH 16-80	16	80.00	48.00	48	24	-	M14	AD Thru
	84681817	PTI 50 EMH 18-85	18	85.00	48.00	50	24	-	M14	AD Thru
	84682017	PTI 50 EMH 20-85	20	85.00	52.00	50	25	-	M16	AD Thru
	84682518	PTI 50 EMH 25-90	25	90.00	65.00	56	24	25	M18	AD Thru
	84683218	PTI 50 EMH 32-90	32	90.00	72.00	60	24	28	M20	AD Thru
PTI-63	84690613	PTI 63 EMH 06-65	6	65.00	25.00	36	18	-	M6	AD Thru
	84690813	PTI 63 EMH 08-65	8	65.00	28.00	36	18	-	M8	AD Thru
	84691013	PTI 63 EMH 10-65	10	65.00	35.00	40	20	-	M10	AD Thru
	84691213	PTI 63 EMH 12-65	12	65.00	42.00	45	22.5	-	M12	AD Thru
	84691413	PTI 63 EMH 14-65	14	65.00	44.00	45	22.5	-	M12	AD Thru
	84691616	PTI 63 EMH 16-80	16	80.00	48.00	48	24	-	M14	AD Thru
	84691816	PTI 63 EMH 18-80	18	80.00	48.00	50	24	-	M14	AD Thru
	84692016	PTI 63 EMH 20-80	20	80.00	52.00	50	25	-	M16	AD Thru
	84692520	PTI 63 EMH 25-100	25	100.00	65.00	56	24	25	M18	AD Thru
	84693220	PTI 63 EMH 32-100	32	100.00	72.00	60	24	28	M20	AD Thru
84693224	PTI 63 EMH 40-120	40	120.00	80.00	65	30	32	M20	AD Thru	
PTI-100	84700614	PTI 80 EMH 06-70	6	70.00	25.00	36	18	-	M6	AD Thru
	84700814	PTI 80 EMH 08-70	8	70.00	28.00	36	18	-	M8	AD Thru
	84701014	PTI 80 EMH 10-70	10	70.00	35.00	40	20	-	M10	AD Thru
	84701214	PTI 80 EMH 12-70	12	70.00	42.00	45	22.5	-	M12	AD Thru
	84701414	PTI 80 EMH 14-70	14	70.00	44.00	45	22.5	-	M12	AD Thru
	84701614	PTI 80 EMH 16-70	16	70.00	48.00	48	24	-	M14	AD Thru
	84701820	PTI 80 EMH 18-100	18	100.00	48.00	50	24	-	M14	AD Thru
	84702022	PTI 80 EMH 20-110	20	110.00	52.00	50	25	-	M16	AD Thru
	84702524	PTI 80 EMH 25-120	25	120.00	65.00	56	24	25	M18	AD Thru
	84703224	PTI 80 EMH 32-120	32	120.00	72.00	60	24	28	M20	AD Thru
	84704024	PTI 80 EMH 40-120	40	120.00	80.00	65	30	32	M20	AD Thru

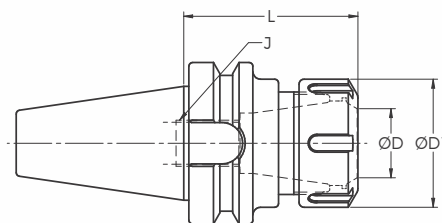
# BTP ER COLLET HOLDER (DIN 6499)

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- Balanced ER Collet Nuts
- Taper shank ground to AT3 accuracy (or better)



## MODEL CHE

MODEL : CHE / BTP



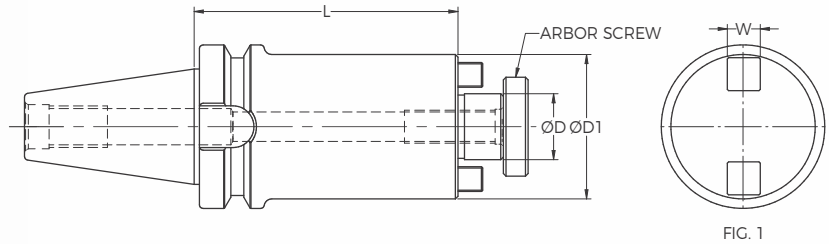
Model	Catalog Number	Description	Collet Size	D Range	D1	L	J	Coolant Style
BTP-30	875106014	BTP30-CHE 11-70	ER11	3 - 7	19	70	M6X1	AD Thru
	872106020	BTP30-CHE 11-100	ER11	3 - 7	19	100	M6X1	AD Thru
	872106024	BTP30-CHE 11-120	ER11	3 - 7	19	120	M6X1	AD Thru
	872106114	BTP30-CHE 16-70	ER16	3 - 10	28	70	M10X1.5	AD Thru
	872106120	BTP30-CHE 16-100	ER16	3 - 10	28	100	M10X1.5	AD Thru
	872106124	BTP30-CHE 16-120	ER16	3 - 10	28	120	M10X1.5	AD Thru
	872106214	BTP30-CHE 20-70	ER20	3 - 13	34	70	M12X1.75	AD Thru
	872106227	BTP30-CHE 20-135	ER20	3 - 13	34	135	M12X1.75	AD Thru
	872106314	BTP30-CHE 25-70	ER25	3 - 16	42	70	M16X2.0	AD Thru
	872106327	BTP30-CHE 25-135	ER25	3 - 16	42	135	M16X2.0	AD Thru
	872106414	BTP30-CHE 32-70	ER32	3 - 20	50	70	M18X1.5	AD Thru
BTP-40	872108014	BTP40-CHE 11-70	ER11	3 - 7	19	70	M6X1	AD Thru
	872108020	BTP40-CHE 11-100	ER11	3 - 7	19	100	M6X1	AD Thru
	872108026	BTP40-CHE 11-130	ER11	3 - 7	19	130	M6X1	AD Thru
	872108114	BTP40-CHE 16-70	ER16	3 - 10	28	70	M10X1.5	AD Thru
	872108120	BTP40-CHE 16-100	ER16	3 - 10	28	100	M10X1.5	AD Thru
	872108126	BTP40-CHE 16-130	ER16	3 - 10	28	130	M10X1.5	AD Thru
	872108214	BTP40-CHE 20-70	ER20	3 - 13	34	70	M12X1.75	AD Thru
	872108220	BTP40-CHE 20-100	ER20	3 - 13	34	100	M12X1.75	AD Thru
	872108230	BTP40-CHE 20-150	ER20	3 - 13	34	150	M16X2.0	AD Thru
	872108314	BTP40-CHE 25-70	ER25	3 - 16	42	135	M16X2.0	AD Thru
	872108320	BTP40-CHE 25-100	ER25	3 - 16	42	100	M16X2.0	AD Thru
	872108414	BTP40-CHE 32-70	ER32	3 - 20	50	70	M18X1.5	AD Thru
	872108420	BTP40-CHE 32-100	ER32	3 - 20	50	100	M18X1.5	AD Thru
	872108430	BTP40-CHE 32-150	ER32	3 - 20	50	150	M18X1.5	AD Thru
872108516	BTP40-CHE 40-80	ER40	4 - 26	63	80	M22X1.5	AD Thru	
872108524	BTP40-CHE 40-120	ER40	4 - 26	63	120	M22X1.5	AD Thru	
BTP-50	872110121	BTP50-CHE 16-105	ER16	3 - 10	28	105	M10X1.5	AD Thru
	872110130	BTP50-CHE 16-150	ER16	3 - 10	28	150	M10X1.5	AD Thru
	872110221	BTP50-CHE 20-105	ER20	3 - 13	34	105	M12X1.75	AD Thru
	872110230	BTP50-CHE 20-150	ER20	3 - 13	34	150	M12X1.75	AD Thru
	872110240	BTP50-CHE 20-200	ER20	3 - 13	34	200	M16X2.0	AD Thru
	872110321	BTP50-CHE 25-105	ER25	3 - 16	42	105	M16X2.0	AD Thru
	872110330	BTP50-CHE 25-150	ER25	3 - 16	42	150	M16X2.0	AD Thru
	872110340	BTP50-CHE 25-200	ER25	3 - 16	42	200	M16X2.0	AD Thru
	872110421	BTP50-CHE 32-105	ER32	3 - 20	50	105	M18X1.5	AD Thru
	872110430	BTP50-CHE 32-150	ER32	3 - 20	50	150	M18X1.5	AD Thru
	872110440	BTP50-CHE 32-200	ER32	3 - 20	50	200	M18X1.5	AD Thru
	872110521	BTP50-CHE 40-105	ER40	4 - 26	63	105	M22X1.5	AD Thru
	872110530	BTP50-CHE 40-150	ER40	4 - 26	63	150	M22X1.5	AD Thru
	872110540	BTP50-CHE 40-200	ER40	4 - 26	63	200	M22X1.5	AD Thru

# BTP SHELL MILL HOLDER

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm"
- Taper shank ground to AT3 accuracy (or better)
- Coolant through the center of the body

## MODEL SMH

### MODEL : SMH / BTP



Model	Catalog Number	Description	Fig. No.	Pilot Size ØD	L	ØD1	H	W	K	P.C.D. Holes	Coolant Style
BTP-30	811061611	BTP 30 SMH 16-30	1	16	30.00	36.00	17	8	5	-	AD Thru
	811062211	BTP 30 SMH 22-45	1	22	45.00	48.00	19	10	5.6	-	AD Thru
BTP-40	811081612	BTP 40 SMH 16-60	1	16	60.00	36.00	17	8	5	-	AD Thru
	811082209	BTP 40 SMH 22-45	1	22	45.00	48.00	19	10	5.6	-	AD Thru
	811082218	BTP 40 SMH 22-90	1	22	90.00	48.00	19	10	5.6	-	AD Thru
	811082712	BTP 40 SMH 27-60	1	27	60.00	60.00	21	12	6.3	-	AD Thru
	811082718	BTP 40 SMH 27-90	1	27	90.00	60.00	21	12	6.3	-	AD Thru
	811083212	BTP 40 SMH 32-60	1	32	60.00	85.00	24	14	7	-	AD Thru
	811083215	BTP 40 SMH 32-75	1	32	75.00	85.00	24	14	7	-	AD Thru
	811083412	BTP 40 SMH 40-60	1	40	60.00	85.00	27	16	8	-	AD Thru
	811083418	BTP 40 SMH 40-90	1	40	90.00	85.00	27	16	8	-	AD Thru
	8110840F15	BTP 40 FMH 40F-75	2	40	75.00	102.00	27	16	8	66.7	AD Thru
8110840F21	BTP 40 FMH 40F-105	2	40	105.00	102.00	27	16	8	66.7	AD Thru	
BTP-50	811102212	BTP 50 SMH 22-60	1	22	60.00	48.00	19	10	5.6	-	AD Thru
	811102221	BTP 50 SMH 22-105	1	22	105.00	48.00	19	10	5.6	-	AD Thru
	811102221	BTP 50 SMH 22-150	1	22	150.00	48.00	19	10	5.6	-	AD Thru
	811102709	BTP 50 SMH 27-45	1	27	45.00	60.00	21	12	6.3	-	AD Thru
	811102718	BTP 50 SMH 27-90	1	27	90.00	60.00	21	12	6.3	-	AD Thru
	811102730	BTP 50 SMH 27-150	1	27	150.00	60.00	21	12	6.3	-	AD Thru
	811102740	BTP 50 SMH 27-200	1	27	200.00	60.00	21	12	6.3	-	AD Thru
	811103212	BTP 50 SMH 32-60	1	32	60.00	85.00	24	14	7	-	AD Thru
	811103215	BTP 50 SMH 32-75	1	32	75.00	85.00	24	14	7	-	AD Thru
	811103221	BTP 50 SMH 32-105	1	32	105.00	85.00	24	14	7	-	AD Thru
	811103230	BTP 50 SMH 32-150	1	32	150.00	85.00	24	14	7	-	AD Thru
	811103240	BTP 50 SMH 32-200	1	32	200.00	85.00	24	14	7	-	AD Thru
	811103415	BTP 50 SMH 40-75	1	40	75.00	85.00	27	16	8	-	AD Thru
	811103421	BTP 50 SMH 40-105	1	40	90.00	85.00	27	16	8	-	AD Thru
	8111040F15	BTP 50 FMH 40F-75	1	40	75.00	102.00	27	16	8	66.7	AD Thru
	8111040F21	BTP 50 FMH 40F-105	1	40	105.00	102.00	27	16	8	66.7	AD Thru
	8111060F15	BTP 50 FMH 60F-75	2	40	75.00	128.00	27	25.4	12.5	101.6	AD Thru
	8111060F21	BTP 50 FMH 60F-105	2	40	105.00	128.00	27	25.4	12.5	101.6	AD Thru



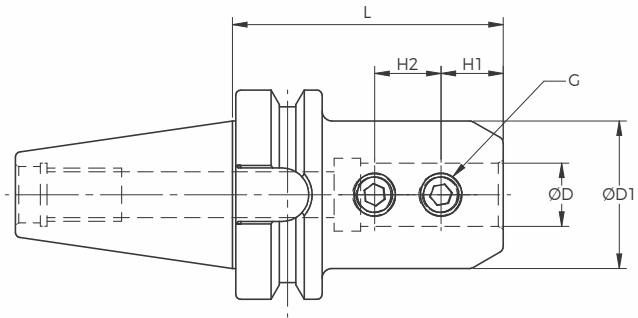
# BTP END MILL HOLDER (DIN 1835-B)

## MODEL EMH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm"
- Bore tolerance: H6
- Taper shank ground to AT3 accuracy (or better)



MODEL : EMH / BTP



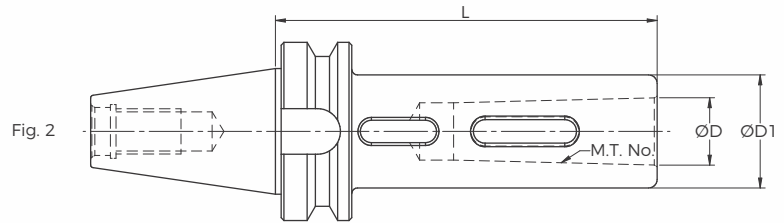
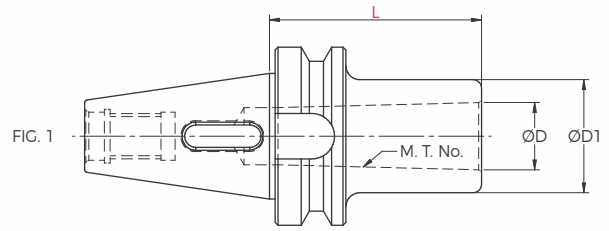
Model	Catalog Number	Description	ØD	L	ØD1	H	H1	H2	G	Coolant Style
BTP-30	841060612	BTP 30 EMH 6-60	6	60.00	25.00	36	18	-	M6	AD Thru
	841060812	BTP 30 EMH 8-60	8	60.00	28.00	36	18	-	M8	AD Thru
	841061012	BTP 30 EMH 10-60	10	60.00	35.00	40	20	-	M10	AD Thru
	841061212	BTP 30 EMH 12-60	12	60.00	42.00	45	22.5	-	M12	AD Thru
	841061418	BTP 30 EMH 14-60	14	60.00	44.00	45	22.5	-	M12	AD Thru
	841061618	BTP 30 EMH 16-60	16	60.00	48.00	48	24	-	M14	AD Thru
	841061818	BTP 30 EMH 18-60	18	60.00	48.00	50	24	-	M14	AD Thru
	841062018	BTP 30 EMH 20-60	20	60.00	52.00	50	25	-	M16	AD Thru
BTP-40	841080612	BTP 40 EMH 6-75	6	75.00	25.00	36	18	-	M6	AD Thru
	841080812	BTP 40 EMH 8-75	8	75.00	28.00	36	18	-	M8	AD Thru
	841081012	BTP 40 EMH 10-75	10	75.00	35.00	40	20	-	M10	AD Thru
	841081212	BTP 40 EMH 12-75	12	75.00	42.00	45	22.5	-	M12	AD Thru
	841081418	BTP 40 EMH 14-75	14	75.00	44.00	45	22.5	-	M12	AD Thru
	841081618	BTP 40 EMH 16-75	16	75.00	48.00	48	24	-	M14	AD Thru
	841081818	BTP 40 EMH 18-75	18	75.00	48.00	50	24	-	M14	AD Thru
	841082018	BTP 40 EMH 20-75	20	75.00	52.00	50	25	-	M16	AD Thru
	841082518	BTP 40 EMH 25-90	25	90.00	65.00	56	24	25	M18	AD Thru
	841083224	BTP 40 EMH 32-120	32	120.00	72.00	60	24	28	M20	AD Thru
841084024	BTP 40 EMH 40-120	40	120.00	90.00	65	30	32	M20	AD Thru	
BTP-50	841101212	BTP 50 EMH 12-90	12	90.00	42.00	45	22.5	-	M12	AD Thru
	841101418	BTP 50 EMH 14-90	14	90.00	44.00	45	22.5	-	M12	AD Thru
	841101618	BTP 50 EMH 16-90	16	90.00	48.00	48	24	-	M14	AD Thru
	841101818	BTP 50 EMH 18-90	18	90.00	48.00	50	24	-	M14	AD Thru
	841102018	BTP 50 EMH 20-90	20	90.00	52.00	50	25	-	M16	AD Thru
	841102518	BTP 50 EMH 25-105	25	105.00	65.00	56	24	25	M18	AD Thru
	841103224	BTP 50 EMH 32-120	32	120.00	72.00	60	24	28	M20	AD Thru
	841104024	BTP 50 EMH 40-120	40	120.00	90.00	65	30	32	M20	AD Thru

# BTP MORSE TAPER HOLDER

- T.I.R. < 5µm
- Taper shank ground to AT3 accuracy (or better)

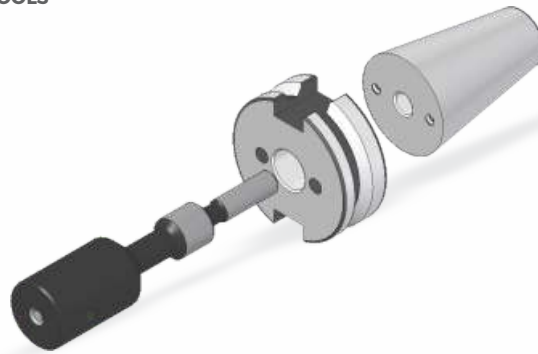
## MODEL MTA

MODEL : MTA / BTP



Model	Catalog Number	Description	Fig. No.	MT Socket	ØD	L	ØD1	Coolant Style
BTP-30	880106109	BTP 30 MTA 1-45	1	1	12.065	45.00	25.00	N/A
	880106212	BTP 30 MTA 2-60	1	2	17.78	60.00	32.00	N/A
	880106315	BTP 30 MTA 3-75	1	3	23.825	75.00	40.00	N/A
BTP-40	880108109	BTP 40 MTA 1-45	1	1	12.065	45.00	25.00	N/A
	880108124	BTP 40 MTA 1-120	2	1	12.065	120.00	25.00	N/A
	880108209	BTP 40 MTA 2-45	1	2	17.78	45.00	32.00	N/A
	880108224	BTP 40 MTA 2-120	2	2	17.78	120.00	32.00	N/A
	880108315	BTP 40 MTA 3-75	1	3	23.825	75.00	40.00	N/A
	880108327	BTP 40 MTA 3-135	2	3	23.825	135.00	40.00	N/A
	880108418	BTP 40 MTA 4-90	1	4	31.267	90.00	50.00	N/A
	880108433	BTP 40 MTA 4-165	2	4	31.267	165.00	50.00	N/A
BTP-50	880110109	BTP 40 MTA 1-45	1	1	12.065	45.00	25.00	N/A
	880110124	BTP 50 MTA 1-120	2	1	12.065	120.00	25.00	N/A
	880110136	BTP 50 MTA 1-180	2	1	12.065	180.00	25.00	N/A
	880110209	BTP 50 MTA 2-45	1	2	17.78	45.00	32.00	N/A
	880110224	BTP 50 MTA 2-120	2	2	17.78	120.00	32.00	N/A
	880110227	BTP 50 MTA 2-135	2	2	17.78	135.00	32.00	N/A
	880110236	BTP 50 MTA 2-180	2	2	17.78	180.00	32.00	N/A
	880110309	BTP 50 MTA 3-45	1	3	23.825	45.00	40.00	N/A
	880110315	BTP 50 MTA 3-75	1	3	23.825	75.00	40.00	N/A
	880110330	BTP 50 MTA 3-150	2	3	23.825	150.00	40.00	N/A
	880110336	BTP 50 MTA 3-180	2	3	23.825	180.00	40.00	N/A
	880110415	BTP 50 MTA 4-75	1	4	31.267	75.00	50.00	N/A
	880110436	BTP 50 MTA 4-180	2	4	31.267	180.00	50.00	N/A
	880110521	BTP 50 MTA 5-105	1	5	44.399	105.00	65.00	N/A
	880110542	BTP 50 MTA 5-210	2	5	44.399	105.00	65.00	N/A

## MODEL : BT TOOLS CHANGER ALIGNMENT TOOLS



Model	Ordering Number
BT30 Tools Changer Alignment Tools	A7,10,000
BT40 Tools Changer Alignment Tools	A7,12,000
BT50 Tools Changer Alignment Tools	A7,14,000

## MODEL : HSK TOOLS CHANGER ALIGNMENT TOOLS



Model	Ordering Number
HSK 40 Tools Changer Alignment Tools	A7,72,000
HSK 50 Tools Changer Alignment Tools	A7,73,000
HSK 63 Tools Changer Alignment Tools	A7,74,000
HSK 80 Tools Changer Alignment Tools	A7,75,000
HSK100 Tools Changer Alignment Tools	A7,76,000

## MODEL : PTI TOOLS CHANGER ALIGNMENT TOOLS



Model	Ordering Number
PTI 40 Tools Changer Alignment Tools	A7,67,000
PTI 50 Tools Changer Alignment Tools	A7,68,000
PTI 63 Tools Changer Alignment Tools	A7,69,000
PTI 80 Tools Changer Alignment Tools	A7,70,000

# SHRINK FIT TECHNOLOGY OFFERING

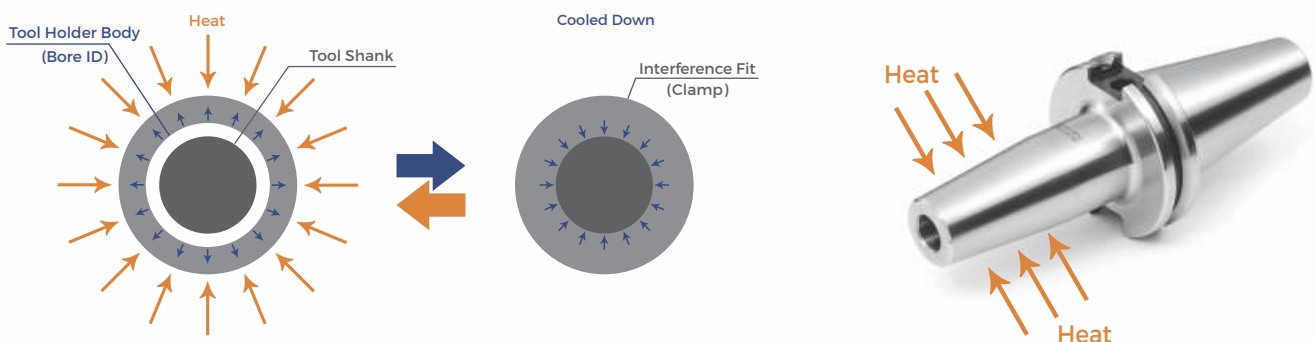
## The Premise of Shrink Fit Technology

Heat shrinking of metal has been around for many decades and is not new to manufacturing processes. In 1992 the beginning of the development of shrink fit technology with regards to metalworking cutting tools was start and then patented several years later. This tool-clamping technology was recently implemented with quick-change tool holders used in everyday machining operations and part processing. It is a cylindrical clamping design using no mechanical clamping systems and relying strictly on physical geometric surface contact to create the accuracy and gripping strength for a very effective high-speed machining system.

The shrink fit process starts by simply applying a heat source (induction heating is most accurate and most controllable) to precisely heat the material of the tool clamping holder to allow the ID bore to open. This bore is slightly smaller (microns) than the shank of the cutting tool. By opening the bore of the tool clamping holder, the plane of the tools shank can slide into the bore replacing the plane of the bore ID surface. This “dimensional interference” between tool shank and tool clamping bore ID creates an extremely tight connection once the tool assembly cools back to room temperature. Gripping force on cutting tool shank after shrink process is completed will exceed 10,000 lbs. of force for excellent tool shank grip and minimize tool slippage.

Once the tool clamping holder shrinks back to its “normal size” - the memory of the steel allows the material to return its original dimensional size (as long as the tool clamping material and area is not over heated causing the metallurgical construction of the steel to change and “lose” its memory). Since the tool shank and the tool clamping bore are in the same dimensional plane, this interference “fit” becomes the physical clamping system, holding the cutting tool shank 360° around the tool shank. This clamping force is equally distributed around the shank and up and down the bore between the tool shank and bore surface.

Since the tool clamping bore surface expands and contracts back to its original dimensional position after the heating and cooling cycle and the heat temperature never exceeds the elastic range of the tool clamping holder material, thousands of “shrink cycles” can be performed without mechanical wear or physical damage being done to the clamping system.



## Shrink Fit Tooling Advantages

- Assembly creates single mono-block tool system that is more accurate in TIR cylindrically than any other tool clamping system known.
- Clamping forces are greater than mechanical systems using collets, hydraulic pressure, or even “press-fit” interference technology.
- Lowest TIR runout of any tool clamping system and allows 360° surface contact between tool shank and tool holder bore.
- Excellent tool clamping system for high-speed machining due to the excellent symmetrical design of the holder and no mechanical parts to change initial balanced weight.
- Slim and short tool holder profiles are achievable since there is no need for moveable parts to clamp the cutting shank.

Shrink fit technology enables machining applications and processes at greater speeds, higher feed rates while providing improved surface finish. Its high balance design and great TIR accuracy allow extended cutting tool life as well as improved machine spindle life.

### Increasing Tool Life

Two main reasons for using a shrink fit tool holder are to increase tool life and to improve circular rotation of a tool. Typical industry observations have been that there is a 10% loss of tool life for every 0.0001" of T.I.R (Total Indicator Runout) in a machining application. In some applications, shrink fit tool holders deliver 4 to 7 times the tool life of other tool holding technologies. Shrink fit tool holders also center the rotating tool more accurately which balances the cutting forces on the tool. This translates into lower machining vibrations with better tool centerline positions often measured in microns.

### Shrink Fit Holders Advantages

Improvements in tool life, cutting ability and surface finish mean less wear and tear on the tool holder (Taper Fretting), and machine spindle bearings. This is due to the tool holder's greater clamping power compared to other tool holding methods and superior overall rigidity. Additionally, these holders have a maximum T.I.R. of 0.0001" (25.4µM), and are balanced to 25,000 RPM.

### Tool holder designs

Slim design usually incorporates a 3° clearance angle on the exterior of the shrink holder body. With a thinner body wall, this tool design is excellent for close work piece machining where tool holder and work piece clearance are critical.

Well balanced design and maintains balance even after insertion of most cutting tools due to no mechanical parts to change balance.

Standard design holders feature a 4.5° tool body angle for most efficient shrink rates and maximum tool shank rigidity for most applications.

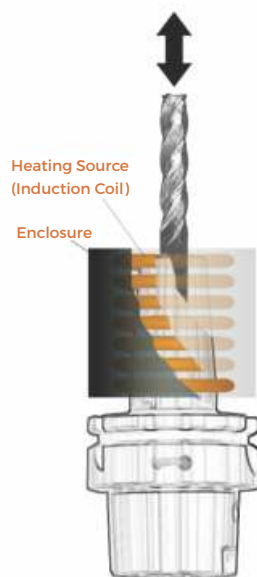
Heavy-duty designs offer a thick tool body wall for maximum tool shank gripping strength and most rigid, vibration dampening effectiveness.

# SHRINK FIT TECHNOLOGY OFFERING

## Shrink Fit Heat-Activated Systems

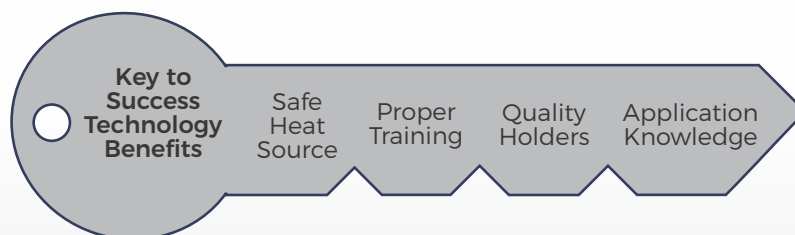
There have been multiple types of heating systems to create the required heat temperature to open the shrink fit bore to allow the cutting tool shank to slide into it. Open flames, hot sand, hot air, and induction coils. When considering a heating and cooling system for your shrink fit tools, operator safety, accurate heat control in temperature and time, and simplicity and efficiency are key concerns. Induction coils and solution cooling are two for the most efficient and most accurate method of heating and cooling shrink fit tool holders.

Induction coil systems offer shorter cycle times, less cooling downtime, and localize heating. Integrated with a cooling system using air or solution make it simple and safe tool clamping system.



### What this means to our customers

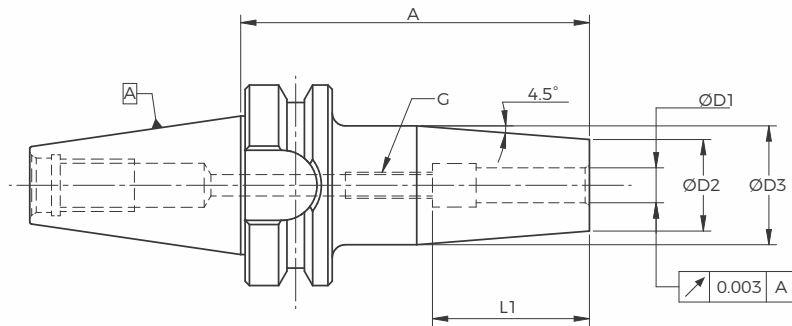
Utilizing shrink fit tool holders in your machining processes, you have a higher confidence in our "lights out" machining processes which translates into predictable tool life, production levels and shorter delivery schedules. You can also produce parts with greater positional machined accuracy.



# BT SHRINK FIT HOLDERS

Standard DIN Length  
MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm
- Taper shank ground to AT3 accuracy (or better)



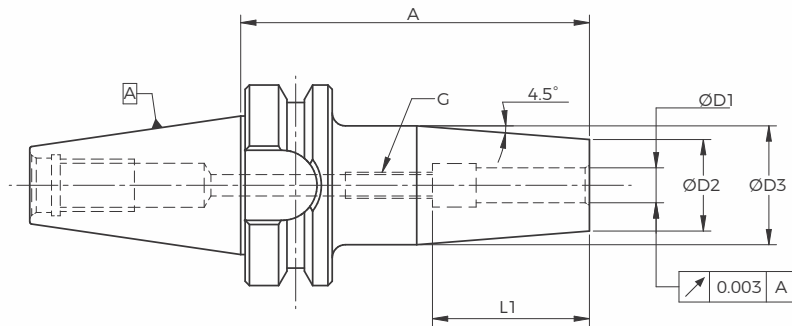
Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
BT30	94100316	BT30-SF 3-80	3	80	10	18	9	-	AD Thru
	94100416	BT30-SF 4-80	4	80	10	18	11	-	AD Thru
	94100516	BT30-SF 5-80	5	80	10	18	15	-	AD Thru
	94100616	BT30-SF 6-80	6	80	21	27	36	M5	AD Thru
	94100816	BT30-SF 8-80	8	80	21	27	36	M6	AD Thru
	94101016	BT30-SF 10-80	10	80	24	32	42	M8X1	AD Thru
	94101216	BT30-SF 12-80	12	80	24	32	47	M10X1	AD Thru
	94101616	BT30-SF 16-80	16	80	27	34	50	M12X1	AD Thru
	94102016	BT30-SF 20-80	20	80	33	42	52	M16X1	AD Thru
BT40	94120318	BT40-SF 3-90	3	90	10	18	9	-	AD Thru
	94120418	BT40-SF 4-90	4	90	10	18	11	-	AD Thru
	94120518	BT40-SF 5-90	5	90	10	18	15	-	AD Thru
	94120618	BT40-SF 6-90	6	90	21	27	36	M5	AD Thru
	94120818	BT40-SF 8-90	8	90	21	27	36	M6	AD Thru
	94121018	BT40-SF 10-90	10	90	24	32	42	M8X1	AD Thru
	94121218	BT40-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	94121618	BT40-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	94122018	BT40-SF 20-90	20	90	33	42	52	M16X1	AD Thru
BT50	94122520	BT40-SF 25-100	25	100	44	53	58	M16X1	AD Thru
	94123220	BT40-SF 32-100	32	100	44	53	62	M16X1	AD Thru
	94140320	BT50-SF 3-90	3	100	10	18	9	-	AD Thru
	94140420	BT50-SF 4-90	4	100	10	18	11	-	AD Thru
	94140520	BT50-SF 5-90	5	100	10	18	15	-	AD Thru
	94140620	BT50-SF 6-90	6	100	21	27	36	M5	AD Thru
	94140820	BT50-SF 8-90	8	100	21	27	36	M6	AD Thru
	94141020	BT50-SF 10-90	10	100	24	32	42	M8X1	AD Thru
	94141220	BT50-SF 12-90	12	100	24	32	47	M10X1	AD Thru
	94141620	BT50-SF 16-90	16	100	27	34	50	M12X1	AD Thru
	94142020	BT50-SF 20-90	20	100	33	42	52	M16X1	AD Thru
	94142520	BT50-SF 25-100	25	100	44	53	58	M16X1	AD Thru
	94143221	BT50-SF 32-100	32	105	44	53	62	M16X1	AD Thru

# BT SHRINK FIT HOLDERS

Standard Long DIN Length

## MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- Taper shank ground to AT3 accuracy (or better)



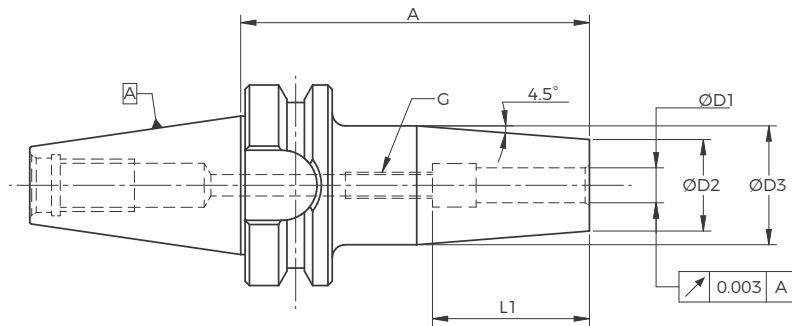
Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
BT30	94100324	BT30-SF 3-120	3	120	10	18	9	-	AD Thru
	94100424	BT30-SF 4-120	4	120	10	18	11	-	AD Thru
	94100524	BT30-SF 5-120	5	120	10	18	15	-	AD Thru
	94100624	BT30-SF 6-120	6	120	21	27	36	M5	AD Thru
	94100824	BT30-SF 8-120	8	120	21	27	36	M6	AD Thru
	94101024	BT30-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	94101224	BT30-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	94101624	BT30-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	94102024	BT30-SF 20-120	20	120	33	42	52	M16X1	AD Thru
BT40	94120324	BT40-SF 3-120	3	120	10	18	9	-	AD Thru
	94120424	BT40-SF 4-120	4	120	10	18	11	-	AD Thru
	94120524	BT40-SF 5-120	5	120	10	18	15	-	AD Thru
	94120624	BT40-SF 6-120	6	120	21	27	36	M5	AD Thru
	94120824	BT40-SF 8-120	8	120	21	27	36	M6	AD Thru
	94121024	BT40-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	94121224	BT40-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	94121624	BT40-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	94122024	BT40-SF 20-120	20	120	33	42	52	M16X1	AD Thru
BT50	94122524	BT40-SF 25-120	25	120	44	53	58	M16X1	AD Thru
	94123224	BT40-SF 32-120	32	120	44	53	62	M16X1	AD Thru
	94140324	BT50-SF 3-120	3	120	10	18	9	-	AD Thru
	94140424	BT50-SF 4-120	4	120	10	18	11	-	AD Thru
	94140524	BT50-SF 5-120	5	120	10	18	15	-	AD Thru
	94140624	BT50-SF 6-120	6	120	21	27	36	M5	AD Thru
	94140824	BT50-SF 8-120	8	120	21	27	36	M6	AD Thru
	94141024	BT50-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	94141224	BT50-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	94141624	BT50-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	94142024	BT50-SF 20-120	20	120	33	42	52	M16X1	AD Thru
	94142524	BT50-SF 25-120	25	120	44	53	58	M16X1	AD Thru
94143224	BT50-SF 32-120	32	120	44	53	62	M16X1	AD Thru	



# BT SHRINK FIT HOLDERS

Standard X-Long DIN Length  
MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- Taper shank ground to AT3 accuracy (or better)

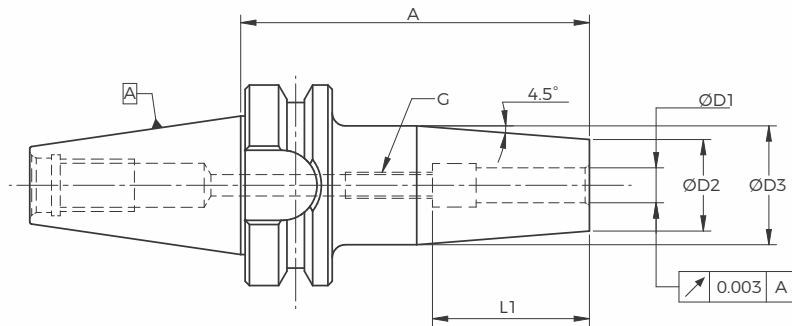


Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
BT30	94100332	BT30-SF 3-160	3	160	10	18	9	-	AD Thru
	94100432	BT30-SF 4-160	4	160	10	18	11	-	AD Thru
	94100532	BT30-SF 5-160	5	160	10	18	15	-	AD Thru
	94100632	BT30-SF 6-120	6	160	21	27	36	M5	AD Thru
	94100832	BT30-SF 8-120	8	160	21	27	36	M6	AD Thru
	94101032	BT30-SF 10-120	10	160	24	32	42	M8X1	AD Thru
	94101232	BT30-SF 12-120	12	160	24	32	47	M10X1	AD Thru
	94101632	BT30-SF 16-120	16	160	27	34	50	M12X1	AD Thru
	94102032	BT30-SF 20-120	20	160	33	42	52	M16X1	AD Thru
BT40	94120332	BT40-SF 3-90	3	160	10	18	9	-	AD Thru
	94120432	BT40-SF 4-90	4	160	10	18	11	-	AD Thru
	94120532	BT40-SF 5-90	5	160	10	18	15	-	AD Thru
	94120632	BT40-SF 6-90	6	160	21	27	36	M5	AD Thru
	94120832	BT40-SF 8-90	8	160	21	27	36	M6	AD Thru
	94121032	BT40-SF 10-90	10	160	24	32	42	M8X1	AD Thru
	94121232	BT40-SF 12-90	12	160	24	32	47	M10X1	AD Thru
	94121632	BT40-SF 16-90	16	160	27	34	50	M12X1	AD Thru
	94122032	BT40-SF 20-90	20	160	33	42	52	M16X1	AD Thru
BT50	94122532	BT40-SF 25-100	25	160	44	53	58	M16X1	AD Thru
	94123232	BT40-SF 32-100	32	160	44	53	62	M16X1	AD Thru
	94140332	BT50-SF 3-90	3	160	10	18	9	-	AD Thru
	94140432	BT50-SF 4-90	4	160	10	18	11	-	AD Thru
	94140532	BT50-SF 5-90	5	160	10	18	15	-	AD Thru
	94140632	BT50-SF 6-90	6	160	21	27	36	M5	AD Thru
	94140832	BT50-SF 8-90	8	160	21	27	36	M6	AD Thru
	94141032	BT50-SF 10-90	10	160	24	32	42	M8X1	AD Thru
	94141232	BT50-SF 12-90	12	160	24	32	47	M10X1	AD Thru
	94141632	BT50-SF 16-90	16	160	27	34	50	M12X1	AD Thru
	94142032	BT50-SF 20-90	20	160	33	42	52	M16X1	AD Thru
	94142532	BT50-SF 25-100	25	160	44	53	58	M16X1	AD Thru
94143232	BT50-SF 32-100	32	160	44	53	62	M16X1	AD Thru	

# BTP SHRINK FIT HOLDERS

Standard DIN Length  
MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm
- Bore Tolerance H6
- Taper shank ground to AT3 accuracy (or better)



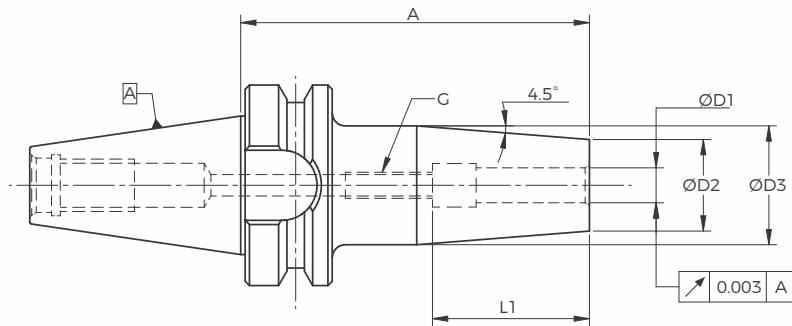
Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
BTP30	941060316	BTP30-SF 3-80	3	80	10	18	9	-	AD Thru
	941060416	BTP30-SF 4-80	4	80	10	18	12	-	AD Thru
	941060516	BTP30-SF 5-80	5	80	10	18	15	-	AD Thru
	941060616	BTP30-SF 6-80	6	80	21	27	36	M5	AD Thru
	941060816	BTP30-SF 8-80	8	80	21	27	36	M6	AD Thru
	941061016	BTP30-SF 10-80	10	80	24	32	42	M8X1	AD Thru
	941061216	BTP30-SF 12-80	12	80	24	32	47	M10X1	AD Thru
	941061616	BTP30-SF 16-80	16	80	27	34	50	M12X1	AD Thru
	941062016	BTP30-SF 20-80	20	80	33	42	52	M16X1	AD Thru
BTP40	941080318	BTP40-SF 3-90	3	90	10	18	9	-	AD Thru
	941080418	BTP40-SF 4-90	4	90	10	18	12	-	AD Thru
	941080518	BTP40-SF 5-90	5	90	10	18	15	-	AD Thru
	941080618	BTP40-SF 6-90	6	90	21	27	36	M5	AD Thru
	941080818	BTP40-SF 8-90	8	90	21	27	36	M6	AD Thru
	941081018	BTP40-SF 10-90	10	90	24	32	42	M8X1	AD Thru
	941081218	BTP40-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	941081618	BTP40-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	941082018	BTP40-SF 20-90	20	90	33	42	52	M16X1	AD Thru
BTP50	941082520	BTP40-SF 25-100	25	100	44	53	58	M16X1	AD Thru
	941083220	BTP40-SF 32-100	32	100	44	53	62	M16X1	AD Thru
	941100320	BTP50-SF 3-90	3	100	10	18	9	-	AD Thru
	941100420	BTP50-SF 4-90	4	100	10	18	12	-	AD Thru
	941100520	BTP50-SF 5-90	5	100	10	18	15	-	AD Thru
	941100620	BTP50-SF 6-90	6	100	21	27	36	M5	AD Thru
	941100820	BTP50-SF 8-90	8	100	21	27	36	M6	AD Thru
	941101020	BTP50-SF 10-90	10	100	24	32	42	M8X1	AD Thru
	941101220	BTP50-SF 12-90	12	100	24	32	47	M10X1	AD Thru
	941101620	BTP50-SF 16-90	16	100	27	34	50	M12X1	AD Thru
	941102020	BTP50-SF 20-90	20	100	33	42	52	M16X1	AD Thru
	941102520	BTP50-SF 25-100	25	100	44	53	58	M16X1	AD Thru
	941103221	BTP50-SF 32-100	32	105	44	53	62	M16X1	AD Thru

# BTP SHRINK FIT HOLDERS

## Standard Long DIN Length

### MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm
- Bore Tolerance H6
- Taper shank ground to AT3 accuracy (or better)



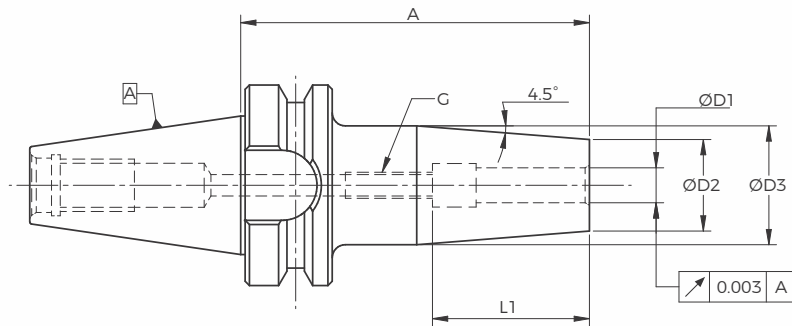
Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
BTP30	941060324	BTP30-SF 3-120	3	120	10	18	9	-	AD Thru
	941060424	BTP30-SF 4-120	4	120	10	18	12	-	AD Thru
	941060524	BTP30-SF 5-120	5	120	10	18	15	-	AD Thru
	941060624	BTP30-SF 6-120	6	120	21	27	36	M5	AD Thru
	941060824	BTP30-SF 8-120	8	120	21	27	36	M6	AD Thru
	941061024	BTP30-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	941061224	BTP30-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	941061624	BTP30-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	941062024	BTP30-SF 20-120	20	120	33	42	52	M16X1	AD Thru
BTP40	941080324	BTP40-SF 3-120	3	120	10	18	9	-	AD Thru
	941080424	BTP40-SF 4-120	4	120	10	18	12	-	AD Thru
	941080524	BTP40-SF 5-120	5	120	10	18	15	-	AD Thru
	941080624	BTP40-SF 6-120	6	120	21	27	36	M5	AD Thru
	941080824	BTP40-SF 8-120	8	120	21	27	36	M6	AD Thru
	941081024	BTP40-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	941081224	BTP40-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	941081624	BTP40-SF 16-120	16	120	27	34	50	M12X1	AD Thru
BTP50	941082024	BTP40-SF 20-120	20	120	33	42	52	M16X1	AD Thru
	941082524	BTP40-SF 25-120	25	120	44	53	58	M16X1	AD Thru
	941083224	BTP40-SF 32-120	32	120	44	53	62	M16X1	AD Thru
	941100324	BTP50-SF 3-120	3	120	10	18	9	-	AD Thru
	941100424	BTP50-SF 4-120	4	120	10	18	12	-	AD Thru
	941100524	BTP50-SF 5-120	5	120	10	18	15	-	AD Thru
	941100624	BTP50-SF 6-120	6	120	21	27	36	M5	AD Thru
	941100824	BTP50-SF 8-120	8	120	21	27	36	M6	AD Thru
	941101024	BTP50-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	941101224	BTP50-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	941101624	BTP50-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	941102024	BTP50-SF 20-120	20	120	33	42	52	M16X1	AD Thru
941102524	BTP50-SF 25-120	25	120	44	53	58	M16X1	AD Thru	
941103224	BTP50-SF 32-120	32	120	44	53	62	M16X1	AD Thru	

# BTP SHRINK FIT HOLDERS

Standard X-Long DIN Length

MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm
- Bore Tolerance H6
- Taper shank ground to AT3 accuracy (or better)



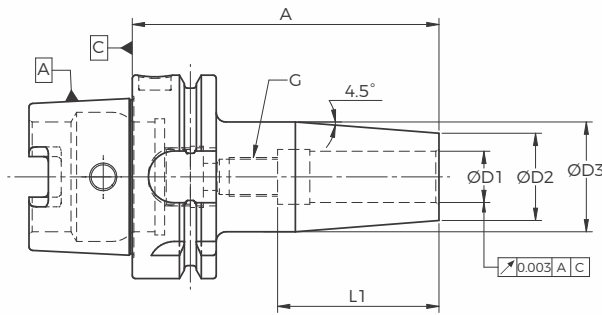
Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
BTP30	941060332	BTP30-SF 3-160	3	160	10	18	9	-	AD Thru
	941060432	BTP30-SF 4-160	4	160	10	18	12	-	AD Thru
	941060532	BTP30-SF 5-160	5	160	10	18	15	-	AD Thru
	941060632	BTP30-SF 6-160	6	160	21	27	36	M5	AD Thru
	941060832	BTP30-SF 8-160	8	160	21	27	36	M6	AD Thru
	941061032	BTP30-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	941061232	BTP30-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	941061632	BTP30-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	941062032	BTP30-SF 20-160	20	160	33	42	52	M16X1	AD Thru
BTP40	941080332	BTP40-SF 3-160	3	160	10	18	9	-	AD Thru
	941080432	BTP40-SF 4-160	4	160	10	18	12	-	AD Thru
	941080532	BTP40-SF 5-160	5	160	10	18	15	-	AD Thru
	941080632	BTP40-SF 6-160	6	160	21	27	36	M5	AD Thru
	941080832	BTP40-SF 8-160	8	160	21	27	36	M6	AD Thru
	941081032	BTP40-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	941081232	BTP40-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	941081632	BTP40-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	941082032	BTP40-SF 20-160	20	160	33	42	52	M16X1	AD Thru
BTP50	941082532	BTP40-SF 25-160	25	160	44	53	58	M16X1	AD Thru
	941083232	BTP40-SF 32-160	32	160	44	53	62	M16X1	AD Thru
	941100332	BTP50-SF 3-160	3	160	10	18	9	-	AD Thru
	941100432	BTP50-SF 4-160	4	160	10	18	12	-	AD Thru
	941100532	BTP50-SF 5-160	5	160	10	18	15	-	AD Thru
	941100632	BTP50-SF 6-160	6	160	21	27	36	M5	AD Thru
	941100832	BTP50-SF 8-160	8	160	21	27	36	M6	AD Thru
	941101032	BTP50-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	941101232	BTP50-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	941101632	BTP50-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	941102032	BTP50-SF 20-160	20	160	33	42	52	M16X1	AD Thru
	941102532	BTP50-SF 25-160	25	160	44	53	58	M16X1	AD Thru
941103232	BTP50-SF 32-160	32	160	44	53	62	M16X1	AD Thru	

# HSK SHRINK FIT HOLDERS

Standard DIN Length

MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm



Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
HSK32/A	9471A0312	HSK 32A-SF 3-60	3	60	10	18	9	-	AD Thru
	9471A0412	HSK 32A-SF 4-60	4	60	10	18	12	-	AD Thru
	9471A0512	HSK 32A-SF 5-60	5	60	10	18	15	-	AD Thru
	9471A0614	HSK 32A-SF 6-70	6	70	21	27	36	M5	AD Thru
	9471A0817	HSK 32A-SF 8-70	8	70	21	27	36	M6	AD Thru
	9471A1014	HSK 32A-SF 10-75	10	75	24	32	42	M8X1	AD Thru
	9471A1216	HSK 32A-SF 12-80	12	80	24	32	47	M10X1	AD Thru
HSK40/A	9472A0312	HSK 40A-SF 3-60	3	60	10	18	9	-	AD Thru
	9472A0412	HSK 40A-SF 4-60	4	60	10	18	11	-	AD Thru
	9472A0512	HSK 40A-SF 5-60	5	60	10	18	15	-	AD Thru
	9472A0616	HSK 40A-SF 6-80	6	80	21	27	36	M5	AD Thru
	9472A0816	HSK 40A-SF 8-80	8	80	21	27	36	M6	AD Thru
	9472A1017	HSK 40A-SF 10-85	10	85	24	32	42	M8X1	AD Thru
	9472A1218	HSK 40A-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	9472A1418	HSK 40A-SF 14-90	14	90	27	34	47	M10X1	AD Thru
	9472A1618	HSK 40A-SF 16-90	16	90	27	34	50	M12X1	AD Thru
HSK50/A	9473A0318	HSK 50A-SF 3-90	3	90	10	18	9	-	AD Thru
	9473A0418	HSK 50A-SF 4-90	4	90	10	18	12	-	AD Thru
	9473A0518	HSK 50A-SF 5-90	5	90	10	18	15	-	AD Thru
	9473A0618	HSK 50A-SF 6-90	6	90	21	27	36	M5	AD Thru
	9473A0818	HSK 50A-SF 8-90	8	90	21	27	36	M6	AD Thru
	9473A1018	HSK 50A-SF 10-90	10	90	24	32	42	M8X1	AD Thru
	9473A1218	HSK 50A-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	9473A1618	HSK 50A-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	9473A2018	HSK 50A-SF 20-90	20	90	33	42	52	M16X1	AD Thru
	9473A2520	HSK 50A-SF 25-100	25	100	44	53	58	M16X1	AD Thru
9473A3220	HSK 50A-SF 32-100	32	100	44	53	62	M16X1	AD Thru	
HSK63/A	9474A0316	HSK 63A-SF 3-80	3	80	10	18	9	-	AD Thru
	9474A0416	HSK 63A-SF 4-80	4	80	10	18	12	-	AD Thru
	9474A0516	HSK 63A-SF 5-80	5	80	10	18	15	-	AD Thru
	9474A0616	HSK 63A-SF 6-80	6	80	21	27	36	M5	AD Thru
	9474A0816	HSK 63A-SF 8-80	8	80	21	27	36	M6	AD Thru
	9474A1017	HSK 63A-SF 10-85	10	85	24	32	42	M8X1	AD Thru
	9474A1218	HSK 63A-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	9474A1418	HSK 63A-SF 14-90	14	90	27	34	47	M10X1	AD Thru
	9474A1618	HSK 63A-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	9474A1819	HSK 63A-SF 18-95	18	95	33	42	50	M16X1	AD Thru
	9474A2020	HSK 63A-SF 20-100	20	100	33	42	52	M16X1	AD Thru
	9474A2524	HSK 63A-SF 25-120	25	120	44	53	58	M16X1	AD Thru
9474A3224	HSK 63A-SF 32-120	32	120	44	53	62	M16X1	AD Thru	
HSK100/A	9476A0617	HSK 100A-SF 6-85	6	85	21	27	36	M5	AD Thru
	9476A0817	HSK 100A-SF 8-85	8	85	21	27	36	M6	AD Thru
	9476A1018	HSK 100A-SF 10-90	10	90	24	32	42	M8X1	AD Thru
	9476A1219	HSK 100A-SF 12-95	12	95	24	32	47	M10X1	AD Thru
	9476A1419	HSK 100A-SF 14-95	14	95	27	34	47	M10X1	AD Thru
	9476A1620	HSK 100A-SF 16-100	16	100	27	34	50	M12X1	AD Thru
	9476A1820	HSK 100A-SF 18-100	18	100	33	42	50	M16X1	AD Thru
	9476A2021	HSK 100A-SF 20-105	20	105	33	42	52	M16X1	AD Thru
	9476A2523	HSK 100A-SF 25-115	25	115	44	53	58	M16X1	AD Thru
9476A3224	HSK 100A-SF 32-120	32	120	44	53	62	M16X1	AD Thru	

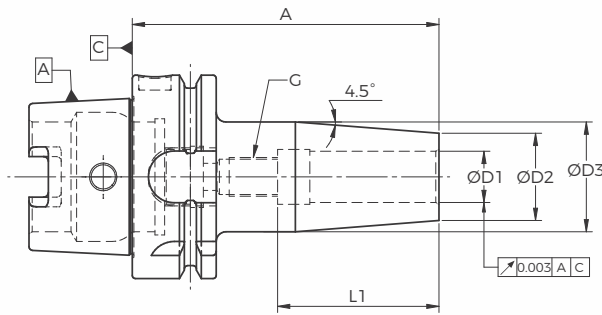
Shanks like HSK, C, E & F are also available on request.

Coolant tubes on page 67

# HSK-T SHRINK FIT HOLDERS

Standard DIN Length  
MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm

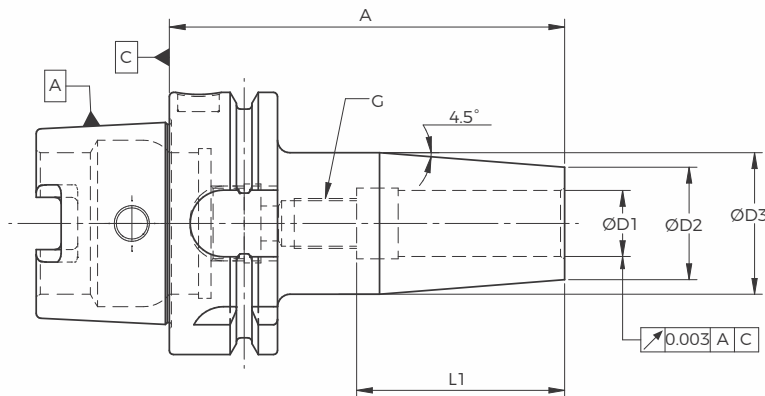


Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
HSK32/T	9471T0312	HSK 32T-SF 3-60	3	60	10	18	9	-	AD Thru
	9471T0412	HSK 32T-SF 4-60	4	60	10	18	12	-	AD Thru
	9471T0512	HSK 32T-SF 5-60	5	60	10	18	15	-	AD Thru
	9471T0614	HSK 32T-SF 6-70	6	70	21	27	36	M5	AD Thru
	9471T0817	HSK 32T-SF 8-70	8	70	21	27	36	M6	AD Thru
	9471T1014	HSK 32T-SF 10-75	10	75	24	32	42	M8X1	AD Thru
	9471T1216	HSK 32T-SF 12-80	12	80	24	32	47	M10X1	AD Thru
HSK40/T	9472T0312	HSK 40T-SF 3-60	3	60	10	18	9	-	AD Thru
	9472T0412	HSK 40T-SF 4-60	4	60	10	18	11	-	AD Thru
	9472T0512	HSK 40T-SF 5-60	5	60	10	18	15	-	AD Thru
	9472T0616	HSK 40T-SF 6-80	6	80	21	27	36	M5	AD Thru
	9472T0816	HSK 40T-SF 8-80	8	80	21	27	36	M6	AD Thru
	9472T1017	HSK 40T-SF 10-85	10	85	24	32	42	M8X1	AD Thru
	9472T1218	HSK 40T-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	9472T1418	HSK 40T-SF 14-90	14	90	27	34	47	M10X1	AD Thru
HSK50/T	9473T0318	HSK 50T-SF 3-90	3	90	10	18	9	-	AD Thru
	9473T0418	HSK 50T-SF 4-90	4	90	10	18	12	-	AD Thru
	9473T0518	HSK 50T-SF 5-90	5	90	10	18	15	-	AD Thru
	9473T0618	HSK 50T-SF 6-90	6	90	21	27	36	M5	AD Thru
	9473T0818	HSK 50T-SF 8-90	8	90	21	27	36	M6	AD Thru
	9473T1018	HSK 50T-SF 10-90	10	90	24	32	42	M8X1	AD Thru
	9473T1218	HSK 50T-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	9473T1618	HSK 50T-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	9473T2018	HSK 50T-SF 20-90	20	90	33	42	52	M16X1	AD Thru
	9473T2520	HSK 50T-SF 25-100	25	100	44	53	58	M16X1	AD Thru
HSK63/T	9474T0316	HSK 63T-SF 3-80	3	80	10	18	9	-	AD Thru
	9474T0416	HSK 63T-SF 4-80	4	80	10	18	12	-	AD Thru
	9474T0516	HSK 63T-SF 5-80	5	80	10	18	15	-	AD Thru
	9474T0616	HSK 63T-SF 6-80	6	80	21	27	36	M5	AD Thru
	9474T0816	HSK 63T-SF 8-80	8	80	21	27	36	M6	AD Thru
	9474T1017	HSK 63T-SF 10-85	10	85	24	32	42	M8X1	AD Thru
	9474T1218	HSK 63T-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	9474T1418	HSK 63T-SF 14-90	14	90	27	34	47	M10X1	AD Thru
	9474T1618	HSK 63T-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	9474T1819	HSK 63T-SF 18-95	18	95	33	42	50	M16X1	AD Thru
	9474T2020	HSK 63T-SF 20-100	20	100	33	42	52	M16X1	AD Thru
	9474T2524	HSK 63T-SF 25-120	25	120	44	53	58	M16X1	AD Thru
HSK100/T	9476T0617	HSK 100T-SF 6-85	6	85	21	27	36	M5	AD Thru
	9476T0817	HSK 100T-SF 8-85	8	85	21	27	36	M6	AD Thru
	9476T1018	HSK 100T-SF 10-90	10	90	24	32	42	M8X1	AD Thru
	9476T1219	HSK 100T-SF 12-95	12	95	24	32	47	M10X1	AD Thru
	9476T1419	HSK 100T-SF 14-95	14	95	27	34	47	M10X1	AD Thru
	9476T1620	HSK 100T-SF 16-100	16	100	27	34	50	M12X1	AD Thru
	9476T1820	HSK 100T-SF 18-100	18	100	33	42	50	M16X1	AD Thru
	9476T2021	HSK 100T-SF 20-105	20	105	33	42	52	M16X1	AD Thru
	9476T2523	HSK 100T-SF 25-115	25	115	44	53	58	M16X1	AD Thru
	9476T3224	HSK 100T-SF 32-120	32	120	44	53	62	M16X1	AD Thru

# HSK-A SHRINK FIT HOLDERS

Standard Long DIN Length  
MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm



Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
HSK50/A	9473A0324	HSK 50A-SF 3-120	3	120	10	18	9	-	AD Thru
	9473A0424	HSK 50A-SF 4-120	4	120	10	18	12	-	AD Thru
	9473A0524	HSK 50A-SF 5-120	5	120	10	18	15	-	AD Thru
	9473A0624	HSK 50A-SF 6-120	6	120	21	27	36	M5	AD Thru
	9473A0824	HSK 50A-SF 8-120	8	120	21	27	36	M6	AD Thru
	9473A1024	HSK 50A-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	9473A1224	HSK 50A-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	9473A1624	HSK 50A-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	9473A2024	HSK 50A-SF 20-120	20	120	33	42	52	M16X1	AD Thru
HSK63/A	9473A2524	HSK 50A-SF 25-120	25	120	44	53	58	M16X1	AD Thru
	9473A3224	HSK 50A-SF 32-120	32	120	44	53	62	M16X1	AD Thru
	9474A0324	HSK 63A-SF 3-12	3	120	10	18	9	-	AD Thru
	9474A0424	HSK 63A-SF 4-120	4	120	10	18	12	-	AD Thru
	9474A0524	HSK 63A-SF 5-120	5	120	10	18	15	-	AD Thru
	9474A0624	HSK 63A-SF 6-120	6	120	21	27	36	M5	AD Thru
	9474A0824	HSK 63A-SF 8-120	8	120	21	27	36	M6	AD Thru
	9474A1024	HSK 63A-SF 10-120	10	120	24	32	42	M8X1	AD Thru
HSK100/A	9474A1224	HSK 63A-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	9474A1424	HSK 63A-SF 14-120	14	120	27	34	47	M10X1	AD Thru
	9474A1624	HSK 63A-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	9474A1824	HSK 63A-SF 18-120	18	120	33	42	50	M16X1	AD Thru
	9474A2024	HSK 63A-SF 20-120	20	120	33	42	52	M16X1	AD Thru
	9476A0624	HSK 100A-SF 6-120	6	120	21	27	36	M5	AD Thru
	9476A0824	HSK 100A-SF 8-120	8	120	21	27	36	M6	AD Thru
	9476A1024	HSK 100A-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	9476A1224	HSK 100A-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	9476A1424	HSK 100A-SF 14-120	14	120	27	34	47	M10X1	AD Thru
	9476A1624	HSK 100A-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	9476A1824	HSK 100A-SF 18-120	18	120	33	42	50	M16X1	AD Thru
9476A2024	HSK 100A-SF 20-120	20	120	33	42	52	M16X1	AD Thru	
9476A2524	HSK 100A-SF 25-120	25	120	44	53	58	M16X1	AD Thru	

Shanks like HSK, C, E & F are also available on request.

Coolant tubes on page 67

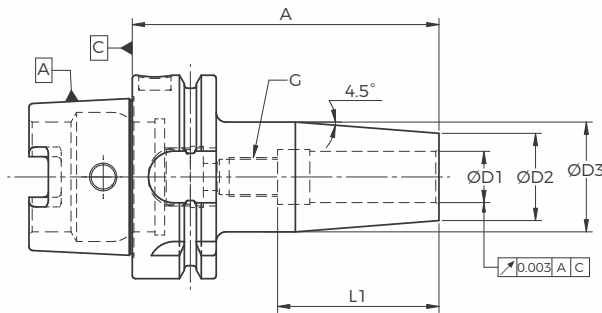
# HSK-T SHRINK FIT HOLDERS

Standard Long DIN Length

MODEL SFH

· Balanced to G2.5 @ 25,000 RPM

· T.I.R. < 3µm



Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
HSK50/T	9473T0324	HSK 50T-SF 3-120	3	120	10	18	9	-	AD Thru
	9473T0424	HSK 50T-SF 4-120	4	120	10	18	12	-	AD Thru
	9473T0524	HSK 50T-SF 5-120	5	120	10	18	15	-	AD Thru
	9473T0624	HSK 50T-SF 6-120	6	120	21	27	36	M5	AD Thru
	9473T0824	HSK 50T-SF 8-120	8	120	21	27	36	M6	AD Thru
	9473T1024	HSK 50T-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	9473T1224	HSK 50T-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	9473T1624	HSK 50T-SF 16-120	16	120	27	34	50	M12X1	AD Thru
HSK63/T	9473T2024	HSK 50T-SF 20-120	20	120	33	42	52	M16X1	AD Thru
	9473T2524	HSK 50T-SF 25-120	25	120	44	53	58	M16X1	AD Thru
	9473T3224	HSK 50T-SF 32-120	32	120	44	53	62	M16X1	AD Thru
	9474T0324	HSK 63T-SF 3-12	3	120	10	18	9	-	AD Thru
	9474T0424	HSK 63T-SF 4-120	4	120	10	18	12	-	AD Thru
	9474T0524	HSK 63T-SF 5-120	5	120	10	18	15	-	AD Thru
	9474T0624	HSK 63T-SF 6-120	6	120	21	27	36	M5	AD Thru
	9474T0824	HSK 63T-SF 8-120	8	120	21	27	36	M6	AD Thru
HSK100/T	9474T1024	HSK 63T-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	9474T1224	HSK 63T-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	9474T1424	HSK 63T-SF 14-120	14	120	27	34	47	M10X1	AD Thru
	9474T1624	HSK 63T-SF 16-120	16	120	27	34	50	M12X1	AD Thru
	9474T1824	HSK 63T-SF 18-120	18	120	33	42	50	M16X1	AD Thru
	9474T2024	HSK 63T-SF 20-120	20	120	33	42	52	M16X1	AD Thru
	9476T0624	HSK 100T-SF 6-120	6	120	21	27	36	M5	AD Thru
	9476T0824	HSK 100T-SF 8-120	8	120	21	27	36	M6	AD Thru
	9476T1024	HSK 100T-SF 10-120	10	120	24	32	42	M8X1	AD Thru
	9476T1224	HSK 100T-SF 12-120	12	120	24	32	47	M10X1	AD Thru
	9476T1424	HSK 100T-SF 14-120	14	120	27	34	47	M10X1	AD Thru
	9476T1624	HSK 100T-SF 16-120	16	120	27	34	50	M12X1	AD Thru
9476T1824	HSK 100T-SF 18-120	18	120	33	42	50	M16X1	AD Thru	
9476T2024	HSK 100T-SF 20-120	20	120	33	42	52	M16X1	AD Thru	
9476T2524	HSK 100T-SF 25-120	25	120	44	53	58	M16X1	AD Thru	

Shanks like HSK, C, E & F are also available on request.

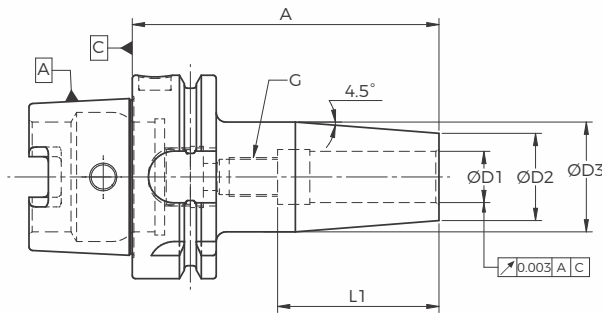
Coolant tubes **on page 67**



# HSK-A SHRINK FIT HOLDERS

Standard X-Long DIN Length  
MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm



Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
HSK50/A	9473A0332	HSK 50A-SF 3-160	3	160	10	18	9	-	AD Thru
	9473A0432	HSK 50A-SF 4-160	4	160	10	18	12	-	AD Thru
	9473A0532	HSK 50A-SF 5-160	5	160	10	18	15	-	AD Thru
	9473A0632	HSK 50A-SF 6-160	6	160	21	27	36	M5	AD Thru
	9473A0832	HSK 50A-SF 8-160	8	160	21	27	36	M6	AD Thru
	9473A1032	HSK 50A-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	9473A1232	HSK 50A-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	9473A1632	HSK 50A-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	9473A2032	HSK 50A-SF 20-160	20	160	33	42	52	M16X1	AD Thru
	9473A2532	HSK 50A-SF 25-160	25	160	44	53	58	M16X1	AD Thru
9473A3232	HSK 50A-SF 32-160	32	160	44	53	62	M16X1	AD Thru	
HSK63/A	9474A0332	HSK 63A-SF 3-160	3	160	10	18	9	-	AD Thru
	9474A0432	HSK 63A-SF 4-160	4	160	10	18	12	-	AD Thru
	9474A0532	HSK 63A-SF 5-160	5	160	10	18	15	-	AD Thru
	9474A0632	HSK 63A-SF 6-160	6	160	21	27	36	M5	AD Thru
	9474A0832	HSK 63A-SF 8-160	8	160	21	27	36	M6	AD Thru
	9474A1032	HSK 63A-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	9474A1232	HSK 63A-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	9474A1432	HSK 63A-SF 14-160	14	160	27	34	47	M10X1	AD Thru
	9474A1632	HSK 63A-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	9474A1832	HSK 63A-SF 18-160	18	160	33	42	50	M16X1	AD Thru
	9474A2032	HSK 63A-SF 20-160	20	160	33	42	52	M16X1	AD Thru
	9474A2532	HSK 63A-SF 25-160	25	160	44	53	58	M16X1	AD Thru
9474A3232	HSK 63A-SF 32-160	32	160	44	53	62	M16X1	AD Thru	
HSK100/A	9476A0632	HSK 100A-SF 6-160	6	160	21	27	36	M5	AD Thru
	9476A0832	HSK 100A-SF 8-160	8	160	21	27	36	M6	AD Thru
	9476A1032	HSK 100A-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	9476A1232	HSK 100A-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	9476A1432	HSK 100A-SF 14-160	14	160	27	34	47	M10X1	AD Thru
	9476A1632	HSK 100A-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	9476A1832	HSK 100A-SF 18-160	18	160	33	42	50	M16X1	AD Thru
	9476A2032	HSK 100A-SF 20-160	20	160	33	42	52	M16X1	AD Thru
	9476A2532	HSK 100A-SF 25-160	25	160	44	53	58	M16X1	AD Thru
9476A3232	HSK 100A-SF 32-160	32	160	44	53	62	M16X1	AD Thru	

Shanks like HSK, C, E & F are also available on request.

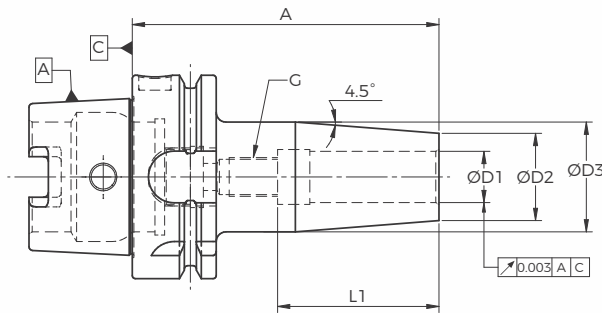
Coolant tubes on page 67

# HSK SHRINK FIT HOLDERS

Standard X-Long DIN Length

MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 5µm



Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
HSK50/T	9473T0332	HSK 50T-SF 3-160	3	160	10	18	9	-	AD Thru
	9473T0432	HSK 50T-SF 4-160	4	160	10	18	12	-	AD Thru
	9473T0532	HSK 50T-SF 5-160	5	160	10	18	15	-	AD Thru
	9473T0632	HSK 50T-SF 6-160	6	160	21	27	36	M5	AD Thru
	9473T0832	HSK 50T-SF 8-160	8	160	21	27	36	M6	AD Thru
	9473T1032	HSK 50T-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	9473T1232	HSK 50T-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	9473T1632	HSK 50T-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	9473T2032	HSK 50T-SF 20-160	20	160	33	42	52	M16X1	AD Thru
	9473T2532	HSK 50T-SF 25-160	25	160	44	53	58	M16X1	AD Thru
	9473T3232	HSK 50T-SF 32-160	32	160	44	53	62	M16X1	AD Thru
HSK63/T	9474T0332	HSK 63T-SF 3-160	3	160	10	18	9	-	AD Thru
	9474T0432	HSK 63T-SF 4-160	4	160	10	18	12	-	AD Thru
	9474T0532	HSK 63T-SF 5-160	5	160	10	18	15	-	AD Thru
	9474T0632	HSK 63T-SF 6-160	6	160	21	27	36	M5	AD Thru
	9474T0832	HSK 63T-SF 8-160	8	160	21	27	36	M6	AD Thru
	9474T1032	HSK 63T-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	9474T1232	HSK 63T-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	9474T1432	HSK 63T-SF 14-160	14	160	27	34	47	M10X1	AD Thru
	9474T1632	HSK 63T-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	9474T1832	HSK 63T-SF 18-160	18	160	33	42	50	M16X1	AD Thru
	9474T2032	HSK 63T-SF 20-160	20	160	33	42	52	M16X1	AD Thru
	9474T2532	HSK 63T-SF 25-160	25	160	44	53	58	M16X1	AD Thru
9474T3232	HSK 63T-SF 32-160	32	160	44	53	62	M16X1	AD Thru	
HSK100/T	9476T0632	HSK 100T-SF 6-160	6	160	21	27	36	M5	AD Thru
	9476T0832	HSK 100T-SF 8-160	8	160	21	27	36	M6	AD Thru
	9476T1032	HSK 100T-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	9476T1232	HSK 100T-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	9476T1432	HSK 100T-SF 14-160	14	160	27	34	47	M10X1	AD Thru
	9476T1632	HSK 100T-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	9476T1832	HSK 100T-SF 18-160	18	160	33	42	50	M16X1	AD Thru
	9476T2032	HSK 100T-SF 20-160	20	160	33	42	52	M16X1	AD Thru
	9476T2532	HSK 100T-SF 25-160	25	160	44	53	58	M16X1	AD Thru
9476T3232	HSK 100T-SF 32-160	32	160	44	53	62	M16X1	AD Thru	

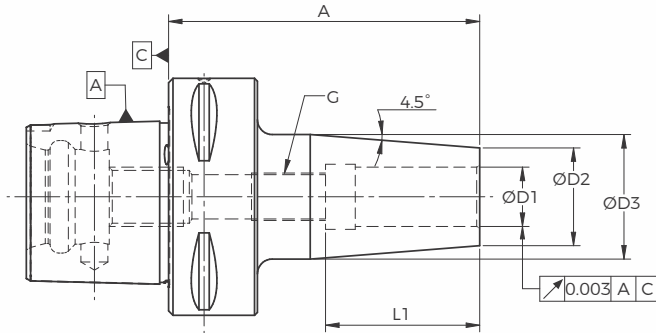
Shanks like HSK, C, E & F are also available on request.

Coolant tubes **on page 67**

# PTI SHRINK FIT HOLDERS

Standard DIN Length  
MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm



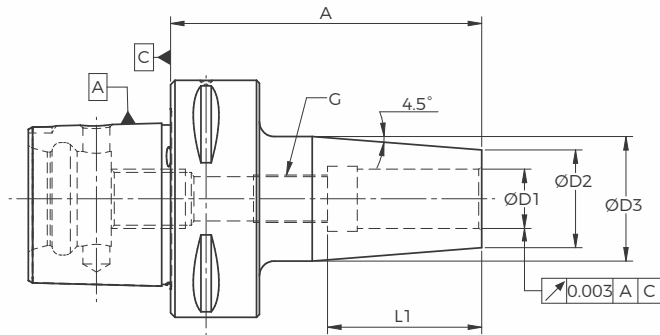
Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
PTI32	94660312	PTI 32-SF 3-60	3	60	10	18	9	-	AD Thru
	94660412	PTI 32-SF 4-60	4	60	10	18	12	-	AD Thru
	94660512	PTI 32-SF 5-60	5	60	10	18	15	-	AD Thru
	94660614	PTI 32-SF 6-70	6	70	21	27	36	M5	AD Thru
	94660817	PTI 32-SF 8-70	8	70	21	27	36	M6	AD Thru
	94661014	PTI 32-SF 10-75	10	75	24	32	42	M8X1	AD Thru
	94661216	PTI 32-SF 12-80	12	80	24	32	47	M10X1	AD Thru
PTI40	94670312	PTI 40-SF 3-60	3	60	10	18	9	-	AD Thru
	94670412	PTI 40-SF 4-60	4	60	10	18	11	-	AD Thru
	94670512	PTI 40-SF 5-60	5	60	10	18	15	-	AD Thru
	94670616	PTI 40-SF 6-80	6	80	21	27	36	M5	AD Thru
	94670816	PTI 40-SF 8-80	8	80	21	27	36	M6	AD Thru
	94671017	PTI 40-SF 10-85	10	85	24	32	42	M8X1	AD Thru
	94671218	PTI 40-SF 12-90	12	90	24	32	47	M10X1	AD Thru
	94671418	PTI 40-SF 14-90	14	90	27	34	47	M10X1	AD Thru
	94671618	PTI 40-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	94671819	PTI 40-SF 18-95	18	95	33	42	50	M12X1	AD Thru
	94672019	PTI 40-SF 20-95	20	95	33	42	52	M16X1	AD Thru
PTI50	94680318	PTI 50-SF 3-75	3	75	10	18	9	-	AD Thru
	94680418	PTI 50-SF 4-75	4	75	10	18	12	-	AD Thru
	94680518	PTI 50-SF 5-75	5	75	10	18	15	-	AD Thru
	94680618	PTI 50-SF 6-75	6	75	21	27	36	M5	AD Thru
	94680818	PTI 50-SF 8-75	8	75	21	27	36	M6	AD Thru
	94681018	PTI 50-SF 10-75	10	75	24	32	42	M8X1	AD Thru
	94681218	PTI 50-SF 12-75	12	75	24	32	47	M10X1	AD Thru
	94681618	PTI 50-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	94681818	PTI 50-SF 18-90	18	90	33	42	52	M12X1	AD Thru
	94682018	PTI 50-SF 20-90	20	90	33	42	52	M16X1	AD Thru
	94682520	PTI 50-SF 25-100	25	100	44	53	58	M16X1	AD Thru

Coolant tubes on page 67

# PTI SHRINK FIT HOLDERS

Standard DIN Length  
MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm



Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
PTI63	94690316	PTI 63-SF 3-80	3	80	10	18	9	-	AD Thru
	94690416	PTI 63-SF 4-80	4	80	10	18	12	-	AD Thru
	94690516	PTI 63-SF 5-80	5	80	10	18	15	-	AD Thru
	94690616	PTI 63-SF 6-80	6	80	21	27	36	M5	AD Thru
	94690816	PTI 63-SF 8-80	8	80	21	27	36	M6	AD Thru
	94691017	PTI 63-SF 10-85	10	85	24	32	42	M8X1	AD Thru
	94691217	PTI 63-SF 12-85	12	85	24	32	47	M10X1	AD Thru
	94691418	PTI 63-SF 14-90	14	90	27	34	47	M10X1	AD Thru
	94691618	PTI 63-SF 16-90	16	90	27	34	50	M12X1	AD Thru
	94691819	PTI 63-SF 18-95	18	95	33	42	50	M12X1	AD Thru
	94692020	PTI 63-SF 20-100	20	100	33	42	52	M16X1	AD Thru
	94692524	PTI 63-SF 25-120	25	120	44	53	58	M16X1	AD Thru
94693224	PTI 63-SF 32-120	32	120	44	53	62	M16X1	AD Thru	
PTI80	94700618	PTI 80-SF 6-90	6	90	21	27	36	M5	AD Thru
	94700818	PTI 80-SF 8-90	8	90	21	27	36	M6	AD Thru
	94701018	PTI 80-SF 10-90	10	90	24	32	42	M8X1	AD Thru
	94701219	PTI 80-SF 12-95	12	95	24	32	47	M10X1	AD Thru
	94701419	PTI 80-SF 14-95	14	95	27	34	47	M10X1	AD Thru
	94701619	PTI 80-SF 16-95	16	95	27	34	50	M12X1	AD Thru
	94701819	PTI 80-SF 18-95	18	95	33	42	50	M12X1	AD Thru
	94702019	PTI 80-SF 20-95	20	95	33	42	52	M16X1	AD Thru
	94702523	PTI 80-SF 25-115	25	115	44	53	58	M16X1	AD Thru
	94703224	PTI 80-SF 32-120	32	120	44	53	62	M16X1	AD Thru

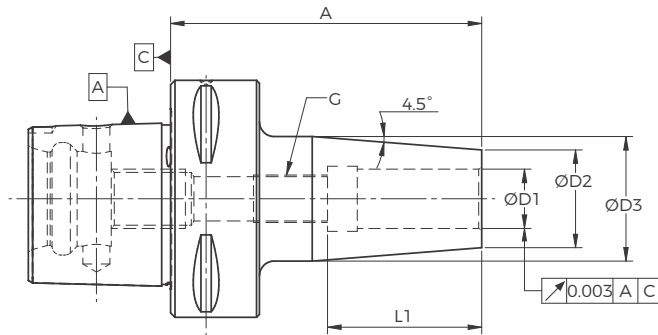
Coolant tubes on page 67

# PTI SHRINK FIT HOLDERS

## Standard Long DIN Length

### MODEL SFH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm



Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
PTI50	94680324	PTI 50-SF 3-120	3	120	10	18	9	-	Ad Thru
	94680424	PTI 50-SF 4-120	4	120	10	18	12	-	Ad Thru
	94680524	PTI 50-SF 5-120	5	120	10	18	15	-	Ad Thru
	94680624	PTI 50-SF 6-120	6	120	21	27	36	M5	Ad Thru
	94680824	PTI 50-SF 8-120	8	120	21	27	36	M6	Ad Thru
	94681024	PTI 50-SF 10-120	10	120	24	32	42	M8X1	Ad Thru
	94681224	PTI 50-SF 12-120	12	120	24	32	47	M10X1	Ad Thru
	94681624	PTI 50-SF 16-120	16	120	27	34	50	M12X1	Ad Thru
	94681824	PTI 50-SF 18-120	18	120	33	42	52	M12X1	Ad Thru
	94682024	PTI 50-SF 20-120	20	120	33	42	52	M16X1	Ad Thru
94682524	PTI 50-SF 25-120	25	120	44	53	58	M16X1	Ad Thru	
PTI63	94690324	PTI 63-SF 3-120	3	120	10	18	9	-	Ad Thru
	94690424	PTI 63-SF 4-120	4	120	10	18	12	-	Ad Thru
	94690524	PTI 63-SF 5-120	5	120	10	18	15	-	Ad Thru
	94690624	PTI 63-SF 6-120	6	120	21	27	36	M5	Ad Thru
	94690824	PTI 63-SF 8-120	8	120	21	27	36	M6	Ad Thru
	94691024	PTI 63-SF 10-120	10	120	24	32	42	M8X1	Ad Thru
	94691224	PTI 63-SF 12-120	12	120	24	32	47	M10X1	Ad Thru
	94691424	PTI 63-SF 14-120	14	120	27	34	47	M10X1	Ad Thru
	94691624	PTI 63-SF 16-120	16	120	27	34	50	M12X1	Ad Thru
	94691824	PTI 63-SF 18-120	18	120	33	42	50	M12X1	Ad Thru
94692024	PTI 63-SF 20-120	20	120	33	42	52	M16X1	Ad Thru	
PTI80	94700624	PTI 80-SF 6-120	6	120	21	27	36	M5	Ad Thru
	94700824	PTI 80-SF 8-120	8	120	21	27	36	M6	Ad Thru
	94701024	PTI 80-SF 10-120	10	120	24	32	42	M8X1	Ad Thru
	94701224	PTI 80-SF 12-120	12	120	24	32	47	M10X1	Ad Thru
	94701424	PTI 80-SF 14-120	14	120	27	34	47	M10X1	Ad Thru
	94701624	PTI 80-SF 16-120	16	120	27	34	50	M12X1	Ad Thru
	94701824	PTI 80-SF 18-120	18	120	33	42	50	M12X1	Ad Thru
	94702024	PTI 80-SF 20-120	20	120	33	42	52	M16X1	Ad Thru
94702524	PTI 80-SF 25-120	25	120	44	53	58	M16X1	Ad Thru	

Coolant tubes on page 67

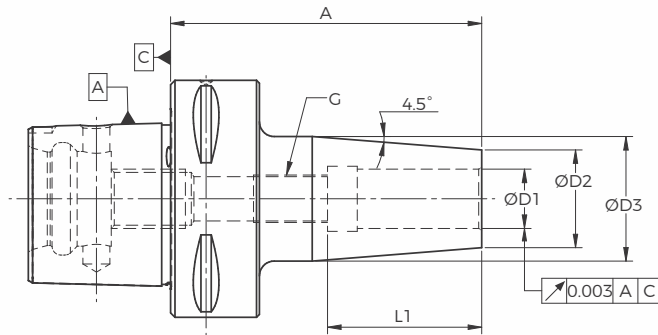
# PTI SHRINK FIT HOLDERS

Standard X-Long DIN Length

MODEL SFH

• Balanced to G2.5 @ 25,000 RPM

• T.I.R. < 5µm



Model	Ordering Number	Description	D1	A	D2	D3	L1	G	Coolant Style
PTI50	94680324	PTI 50-SF 3-160	3	160	10	18	9	-	AD Thru
	94680424	PTI 50-SF 4-160	4	160	10	18	12	-	AD Thru
	94680524	PTI 50-SF 5-160	5	160	10	18	15	-	AD Thru
	94680624	PTI 50-SF 6-160	6	160	21	27	36	M5	AD Thru
	94680824	PTI 50-SF 8-160	8	160	21	27	36	M6	AD Thru
	94681024	PTI 50-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	94681224	PTI 50-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	94681624	PTI 50-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	94681824	PTI 50-SF 18-160	18	160	33	42	52	M12X1	AD Thru
	94682024	PTI 50-SF 20-160	20	160	33	42	52	M16X1	AD Thru
94682524	PTI 50-SF 25-160	25	160	44	53	58	M16X1	AD Thru	
PTI63	94690324	PTI 63-SF 3-160	3	160	10	18	9	-	AD Thru
	94690424	PTI 63-SF 4-160	4	160	10	18	12	-	AD Thru
	94690524	PTI 63-SF 5-160	5	160	10	18	15	-	AD Thru
	94690624	PTI 63-SF 6-160	6	160	21	27	36	M5	AD Thru
	94690824	PTI 63-SF 8-160	8	160	21	27	36	M6	AD Thru
	94691024	PTI 63-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	94691224	PTI 63-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	94691424	PTI 63-SF 14-160	14	160	27	34	47	M10X1	AD Thru
	94691624	PTI 63-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	94691824	PTI 63-SF 18-160	18	160	33	42	50	M12X1	AD Thru
94692024	PTI 63-SF 20-160	20	160	33	42	52	M16X1	AD Thru	
PTI80	94700624	PTI 80-SF 6-160	6	160	21	27	36	M5	AD Thru
	94700824	PTI 80-SF 8-160	8	160	21	27	36	M6	AD Thru
	94701024	PTI 80-SF 10-160	10	160	24	32	42	M8X1	AD Thru
	94701224	PTI 80-SF 12-160	12	160	24	32	47	M10X1	AD Thru
	94701424	PTI 80-SF 14-160	14	160	27	34	47	M10X1	AD Thru
	94701624	PTI 80-SF 16-160	16	160	27	34	50	M12X1	AD Thru
	94701824	PTI 80-SF 18-160	18	160	33	42	50	M12X1	AD Thru
	94702024	PTI 80-SF 20-160	20	160	33	42	52	M16X1	AD Thru
94702524	PTI 80-SF 25-160	25	160	44	53	58	M16X1	AD Thru	

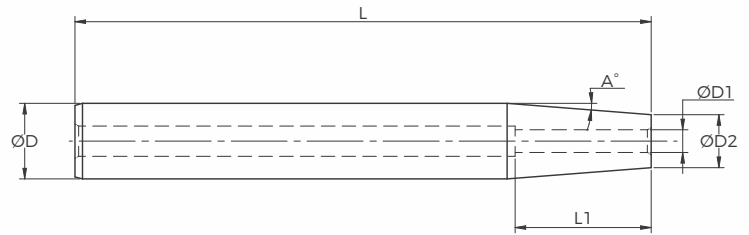
Coolant tubes on page 67

# STRAIGHT SHANK SHRINK FIT EXTENSION

· T.I.R. < 3µm



## MODEL SFH / SSH



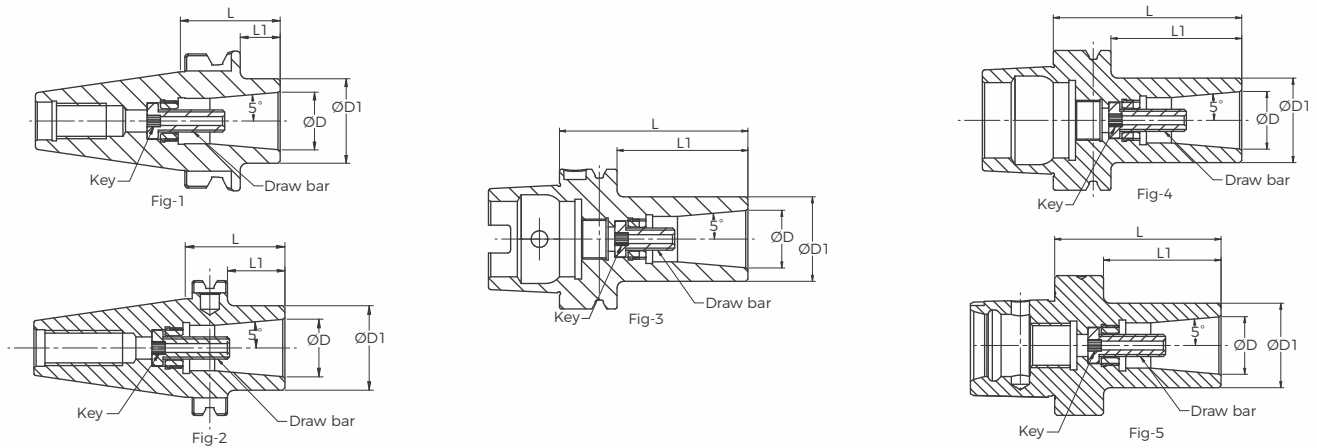
Model	Ordering Number	Description	D	D1	D2	L	L1	A°
STRAIGHT SHANK 16	94460322	SSH 16-SF 03-110	16	3	9	110	20	3
	94460422	SSH 16-SF 04-110	16	4	10	110	20	3
	94460522	SSH 16-SF 05-110	16	5	11	110	25	3
	94460622	SSH 16-SF 06-110	16	6	12	110	36	3
	94460822	SSH 16-SF 08-110	16	8	14	110	36	3
	94461022	SSH 16-SF 10-110	16	10	16	110	42	3
	94461222	SSH 16-SF 12-110	16	12	18	110	47	3
STRAIGHT SHANK 20	94500322	SSH 20-SF 03-110	20	3	9	110	20	3
	94500422	SSH 20-SF 04-110	20	4	10	110	20	3
	94500522	SSH 20-SF 05-110	20	5	11	110	25	3
	94500622	SSH 20-SF 06-110	20	6	12	110	36	3
	94500822	SSH 20-SF 08-110	20	8	14	110	36	3
	94501022	SSH 20-SF 10-110	20	10	16	110	42	3
	94501222	SSH 20-SF 12-110	20	12	18	110	47	3
STRAIGHT SHANK 16	94460340	SSH.16-SF 03-200	16	3	9	200	20	3
	94460440	SSH.16-SF 04-200	16	4	10	200	20	3
	94460540	SSH.16-SF 05-200	16	5	11	200	25	3
	94460640	SSH.16-SF 06-200	16	6	12	200	36	3
	94460840	SSH.16-SF 08-200	16	8	14	200	36	3
	94461040	SSH.16-SF 10-200	16	10	16	200	42	3
	94461240	SSH.16-SF 12-200	16	12	18	200	47	3
STRAIGHT SHANK 20	94500340	SSH 20-SF 03-200	20	3	9	200	20	3
	94500440	SSH 20-SF 04-200	20	4	10	200	20	3
	94500540	SSH 20-SF 05-200	20	5	11	200	25	3
	94500640	SSH 20-SF 06-200	20	6	12	200	36	3
	94500840	SSH 20-SF 08-200	20	8	14	200	36	3
	94501040	SSH 20-SF 10-200	20	10	16	200	42	3
	94501240	SSH 20-SF 12-200	20	12	18	200	47	3

# MODULAR SLIM HOLDER

## Modular Slim Holder

### MODEL SFSEH

- Balanced to G2.5 @ 25,000 RPM
- T.I.R. < 3µm
- Coolant thru the center of the body



Model	Ordering Number	Description	Ext. Size	D	D1	L	L1	Key	Fig. No.	Draw Bar
BT30	891016807	BT30 SFSEH 12 L-35	12	26	38.1	35	13	5	1	DB101.50FS
BT40	891216809	BT40 SFSEH 12 L-45	12	26	38.1	45	18	5	1	DB101.50FS
BT50	891416815	BT50 SFSEH 12 L-75	12	26	38.1	75	37	5	1	DB101.50FS
BTP30	8910616807	BTP30 SFSEH 12 L-35	12	26	38.1	35	13.15	5	1	DB101.50FS
BTP40	8910816809	BTP40 SFSEH 12 L-45	12	26	38.1	45	18	5	1	DB101.50FS
BTP50	8911016815	BTP50 SFSEH 12 L-75	12	26	38.1	75	37	5	1	DB101.50FS
CAT40	892416809	CAT40 SFSEH 12 L-45	12	26	38.1	45	25.95	5	2	DB101.50FS
CAT50	892616815	CAT50 SFSEH 12 L-75	12	26	38.1	75	55.95	5	2	DB101.50FS
CATP40	8913616809	CATP40 SFSEH 12 L-45	12	26	38.1	45	25.95	5	2	DB101.50FS
CATP50	8913816815	CATP50 SFSEH 12 L-75	12	26	38.1	75	55.95	5	2	DB101.50FS
HSK50A	8973A16817	HSK50A SFSEH 12 L-85	12	26	38.1	85	59	5	3	DB101.50FS
HSK63A	8974A16817	HSK63A SFSEH 12 L-85	12	26	38.1	85	49	5	3	DB101.50FS
HSK100A	8976A16819	HSK100A SFSEH 12 L-95	12	26	38.1	95	66	5	3	DB101.50FS
HSK50E	8973E16817	HSK50E SFSEH 12 L-85	12	26	38.1	85	59	5	4	DB101.50FS
HSK63E	8974E16817	HSK63E SFSEH 12 L-85	12	26	38.1	85	59	5	4	DB101.50FS
HSK100E	8976E16819	HSK100E SFSEH 12 L-95	12	26	38.1	95	66	5	4	DB101.50FS
PTI40	896716815	PTI40 SFSEH 12 L-75	12	26	38.1	75	55	5	5	DB101.50FS
PTI50	896816815	PTI50 SFSEH 12 L-75	12	26	38.1	75	55	5	5	DB101.50FS
PTI63	896916815	PTI63 SFSEH 12 L-75	12	26	38.1	75	53	5	5	DB101.50FS
PTI80	897016815	PTI80 SFSEH 12 L-75	12	26	38.1	75	45	5	5	DB101.50FS

\*IMI SFS Shrink Fit Extensions offer excellent TIR accuracy and clearance with extended lengths.

Excellent product use for 5-Axis machining, Die/Mold work, and applications where clearance in piece part is critical.

#### Benefits of the IMI SFS Extnsion System:

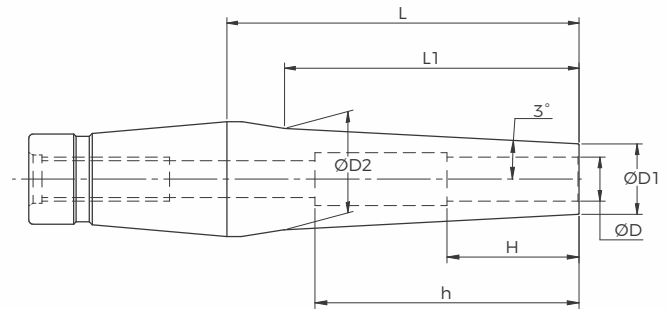
- 1) Made from H13 steel for high rigidity at extended lengths
- 2) Standard DIN Slim ID/OD dimensions so heat cycle is at DIN standard settings in Bilz™ and Haimer™ machines
- 3) Internal drawbar is designed to pull back and hold extension accurately and with maximum holding forces
- 4) interchangeable design allows for application and tooling setup flexibility with multiple ID sizes and Gauge lengths
- 5) TIR accuracy is .0001" from centerline of OD at 3x tool shank diameter
- 6) Coolant through design allows coolant to flow through cutting (if coolant-thru cutting tool design)
- 7) Holders are balanced to G2.5 @ 25,000 RPM
- 8) Excellent design balance between versatility, high accuracy, and easy of use/setup
- 9) Compatible and interchangeable with MST™ SlimLine Product\*



# MODULAR SLIM EXTENSION

Modular Slim Extension  
MODEL SFS

- T.I.R. < 5µm
- Bore tolerance: H6

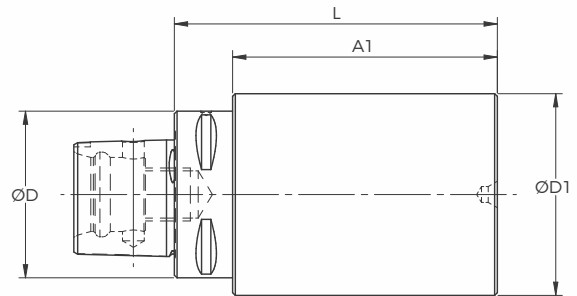


Catalog Number	Description	ØD	ØD1	ØD2	L	L1	H	h	Coolant Style
941,680,311	SFS 12 3.00 L-55.00	3.00	9.00	13.50	55.00	42.00	10.00	60.00	AD Thru
941,680,411	SFS 12 4.00 L-55.00	4.00	10.00	14.50	55.00	42.00	12.00	60.00	AD Thru
941,680,611	SFS 12 6.00 L-55.00	6.00	12.00	16.50	55.00	42.00	18.00	60.00	AD Thru
941,680,811	SFS 12 8.00 L-55.00	8.00	14.00	18.50	55.00	42.00	25.00	60.00	AD Thru
941,681,011	SFS 12 10.00 L-55.00	10.00	16.00	20.50	55.00	42.00	30.00	60.00	AD Thru
941,681,211	SFS 12 12.00 L-55.00	12.00	18.00	22.50	55.00	42.00	30.00	60.00	AD Thru
941,680,316	SFS 12 3.00 L-80.00	3.00	9.00	16.00	80.00	67.00	10.00	80.00	AD Thru
941,680,416	SFS 12 4.00 L-80.00	4.00	10.00	17.00	80.00	67.00	12.00	80.00	AD Thru
941,680,616	SFS 12 6.00 L-80.00	6.00	12.00	19.00	80.00	67.00	18.00	80.00	AD Thru
941,680,816	SFS 12 8.00 L-80.00	8.00	14.00	21.00	80.00	67.00	25.00	80.00	AD Thru
941,681,016	SFS 12 10.00 L-80.00	10.00	16.00	23.00	80.00	67.00	30.00	60.00	AD Thru
941,681,016	SFS 12 12.00 L-80.00	12.00	18.00	25.00	80.00	67.00	30.00	60.00	AD Thru
941,680,322	SFS 12 3.00 L-110.00	3.00	9.00	19.20	110.00	97.00	10.00	105.00	AD Thru
941,680,422	SFS 12 4.00 L-110.00	4.00	10.00	20.20	110.00	97.00	12.00	105.00	AD Thru
941,680,622	SFS 12 6.00 L-110.00	6.00	12.00	22.20	110.00	97.00	18.00	105.00	AD Thru
941,680,822	SFS 12 8.00 L-110.00	8.00	14.00	24.20	110.00	97.00	25.00	105.00	AD Thru
941,681,022	SFS 12 10.00 L-110.00	10.00	16.00	26.20	110.00	97.00	30.00	60.00	AD Thru
941,681,222	SFS 12 12.00 L-110.00	12.00	18.00	28.20	110.00	97.00	30.00	60.00	AD Thru

# BLANKS

- Shank Hardness 54-56 HRC
- Blank Hardness 28-32 HRC

## MODEL PTI BLANKS (ISO 26623-1)



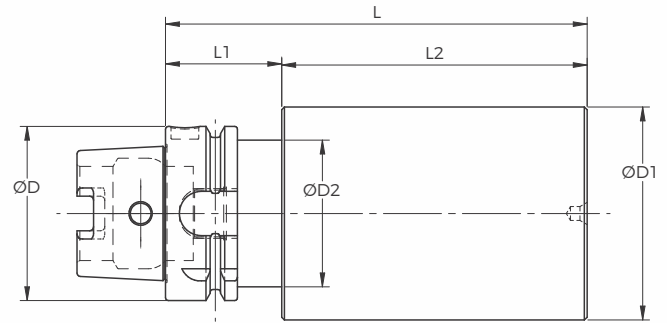
Model	Catalog Number	Description	ØD	ØD1	L	A1
PTI 32	A166032090	PTI32 Blank Dia. 32-90	32.00	32.00	90.00	-
	A166060090	PTI32 Blank Dia. 60-90	32.00	60.00	90.00	75.00
PTI 40	A167040120	PTI40 Blank Dia. 40-120	40.00	40.00	120.00	-
	A167050180	PTI40 Blank Dia. 50-180	40.00	50.00	180.00	160.00
	A167080120	PTI40 Blank Dia. 80-120	40.00	80.00	120.00	100.00
	A167090150	PTI40 Blank Dia. 90-150	40.00	90.00	150.00	130.00
	A167120120	PTI40 Blank Dia. 120-120	40.00	120.00	120.00	100.00
PTI 50	A168050150	PTI50 Blank Dia. 50-150	50.00	50.00	150.00	-
	A168050200	PTI50 Blank Dia. 50-200	50.00	50.00	200.00	-
	A168063180	PTI50 Blank Dia. 63-180	50.00	63.00	180.00	160.00
	A168090180	PTI50 Blank Dia. 90-180	50.00	90.00	180.00	160.00
	A168095150	PTI50 Blank Dia. 95-150	50.00	95.00	150.00	130.00
	A168120200	PTI50 Blank Dia. 120-200	50.00	120.00	200.00	180.00
PTI 63	A168150150	PTI50 Blank Dia. 150-150	50.00	150.00	150.00	130.00
	A169063180	PTI63 Blank Dia. 63-180	63.00	63.00	180.00	-
	A169070200	PTI63 Blank Dia. 70-200	63.00	70.00	200.00	178.00
	A169090200	PTI63 Blank Dia. 90-200	63.00	90.00	200.00	178.00
	A169110120	PTI63 Blank Dia. 110-120	63.00	110.00	120.00	98.00
	A169120150	PTI63 Blank Dia. 120-150	63.00	120.00	150.00	128.00
	A169120180	PTI63 Blank Dia. 120-180	63.00	120.00	180.00	158.00
	A169180120	PTI63 Blank Dia. 180-120	63.00	180.00	120.00	98.00
PTI 80	A169220120	PTI63 Blank Dia. 220-120	63.00	220.00	120.00	98.00
	A170080200	PTI80 Blank Dia. 80-200	80.00	80.00	200.00	-
	A170090200	PTI80 Blank Dia. 90-200	80.00	90.00	200.00	170.00
	A170100200	PTI80 Blank Dia. 100-200	80.00	100.00	200.00	170.00
	A170110250	PTI80 Blank Dia. 110-250	80.00	110.00	250.00	220.00
	A170145200	PTI80 Blank Dia. 145-200	80.00	145.00	200.00	170.00
	A170150200	PTI80 Blank Dia. 150-200	80.00	150.00	200.00	170.00
	A170160120	PTI80 Blank Dia. 160-120	80.00	160.00	120.00	90.00
A170180120	PTI80 Blank Dia. 180-120	80.00	180.00	120.00	90.00	

# BLANKS

- Shank Hardness 54-56 HRC
- Blank Hardness 28-32 HRC



## MODEL HSK BLANKS (DIN 69893-1)



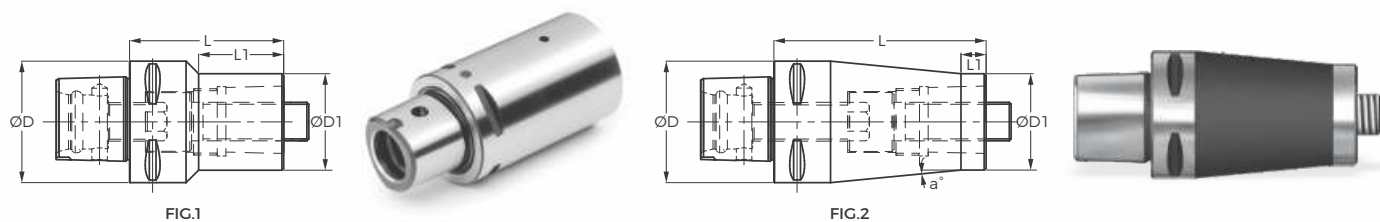
Model	Catalog Number	Description	ØD	ØD1	ØD2	L	L1	L2
HSK 32/A	A171A032090	HSK32A BLANK DIA 32-90	32	32	26	90	35	55
	A171A060090	HSK32A BLANK DIA 60-90	32	60	26	90	35	55
HSK 40/A	A172A040120	HSK40A BLANK DIA 40-120	40	40	34	120	35	85
	A172A040120	HSK40A BLANK DIA 80-120	40	80	34	120	35	85
HSK 50/A	A173A050100	HSK50A BLANK DIA 50-100	50	50	42	100	42	108
	A173A050150	HSK50A BLANK DIA 95-150	50	95	42	150	42	108
HSK 63/A	A174A063180	HSK63A BLANK DIA 63-180	63	63	53	180	42	138
	A174A120180	HSK63A BLANK DIA 120-180	63	120	53	180	42	138
HSK 80/A	A175A080120	HSK80A BLANK DIA 80-120	80	80	68	120	42	158
	A175A145200	HSK80A BLANK DIA 145-200	80	145	68	200	42	158
HSK 100/A	A176A145200	HSK100A BLANK DIA 145-200	100	145	88	200	45	155

# PTI REDUCTION ADAPTOR / EXTENSION ADAPTOR

## MODEL PTI REDUCTION ADAPTOR (DRAWBAR TYPE CLAMPING) (ISO-26623-1/ISO-26623-2)

**Features:**

- T.I.R. < 5µm



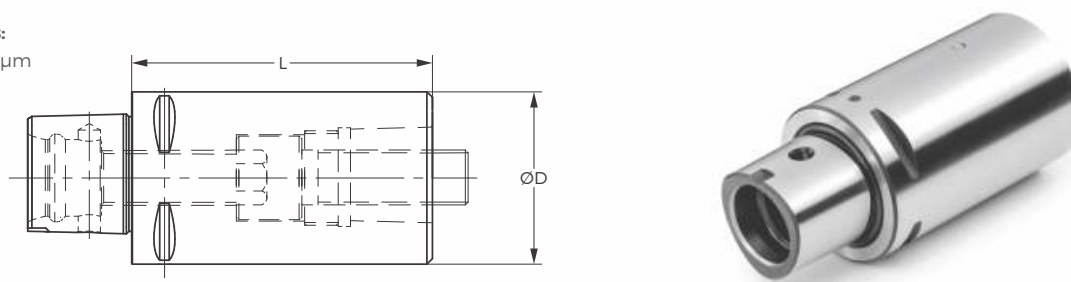
Model	Catalog Number	Description	Fig. No.	Adaptor	ØD	ØD1	L	L1	α°
PTI REDUCTION ADAPTOR	214311	PTI40-PTI32-RA 55	1	PTI32	40	32	55	31	-
	214314	PTI40-PTI32-RA 70	2	PTI32	40	32	70	12	6°
	215312	PTI50-PTI32-RA 60	1	PTI32	50	32	60	35	-
	215413	PTI50-PTI40-RA 65	1	PTI40	50	40	65	40	-
	215417	PTI50-PTI40-RA 85	2	PTI40	50	40	85	12	5.4°
	216314	PTI63-PTI32-RA 70	1	PTI32	63	32	70	39	-
	216416	PTI63-PTI40-RA 80	1	PTI40	63	40	80	51.5	-
	216516	PTI63-PTI50-RA 80	1	PTI50	63	50	80	51.5	-
	216522	PTI63-PTI50-RA 110	2	PTI50	63	50	110	12	4.9°
	218312	PTI80-PTI32-RA 60	1	PTI32	80	32	60	29.5	-
	218414	PTI80-PTI40-RA 70	1	PTI40	80	40	70	36.5	-
	218516	PTI80-PTI50-RA 80	1	PTI50	80	50	80	49.5	-
	218616	PTI80-PTI63-RA 80	1	PTI63	80	63	80	53	-
218624	PTI80-PTI63-RA 120	2	PTI63	80	63	120	12	6.2°	

# PTI REDUCTION ADAPTOR / EXTENSION ADAPTOR

## MODEL PTI REDUCTION ADAPTOR (DRAWBAR TYPE CLAMPING) (ISO-26623-1/ISO-26623-2)

**Features:**

- T.I.R. < 5µm



Model	Catalog Number	Description	Adaptor	ØD	L
PTI EXTENSION ADAPTOR	203312	PTI-32/PTI-32-60	PTI32	32	60
	203316	PTI-32/PTI-32-80	PTI32	32	80
	204412	PTI-40/PTI-40-60	PTI40	40	60
	204416	PTI-40/PTI-40-80	PTI40	40	80
	205516	PTI-50/PTI-50-80	PTI50	50	80
	205520	PTI-50/PTI-50-100	PTI50	50	100
	206620	PTI-63/PTI-63-100	PTI63	63	100
	206628	PTI-63/PTI-63-140	PTI63	63	140
	208820	PTI-80/PTI-80-100	PTI80	80	100
	208825	PTI-80/PTI-80-125	PTI80	80	125
	21101026	PTI-100/PTI-100-130	PTI100	100	130

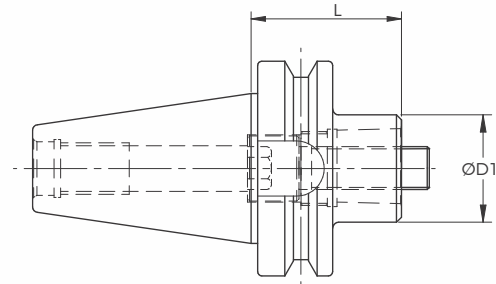
# EXTENSION ADAPTOR



## MODEL MAS BT / PTI EXTENSION ADAPTOR (DRAWBAR TYPE CLAMPING) (ISO-26623-2)

**Features:**

- T.I.R. < 5µm



Model	Catalog Number	Description	Adaptor	ØD	L
<b>BT / PTI EXTENSION ADAPTOR</b>	89106606	BT30-PTI32-30	PTI32	32	30
	89106612	BT30-PTI32-60	PTI32	32	60
	89126606	BT40-PTI32-30	PTI32	32	30
	89126612	BT40-PTI32-60	PTI32	32	60
	89126706	BT40-PTI40-30	PTI40	40	30
	89126712	BT40-PTI40-60	PTI40	40	60
	89126806	BT40-PTI50-30	PTI50	50	30
	89126814	BT40-PTI50-70	PTI50	50	70
	89126915	BT40-PTI63-75	PTI63	63	75
	89146614	BT-50/PTI-32-70	PTI32	32	70
	89146708	BT-50/PTI-40-40	PTI40	40	40
	89146714	BT-50/PTI-40-70	PTI40	40	70
	89146808	BT-50/PTI-50-40	PTI50	50	40
	89146816	BT-50/PTI-50-80	PTI50	50	80
	89146908	BT-50/PTI-63-40	PTI63	63	40
	89146918	BT-50/PTI-63-90	PTI63	63	90
	89147014	BT-50/PTI-80-70	PTI80	80	70
	89147024	BT-50/PTI-80-120	PTI80	80	120

## MODEL MAS BTP / PTI EXTENSION ADAPTOR (DRAWBAR TYPE CLAMPING) (ISO-26623-2)

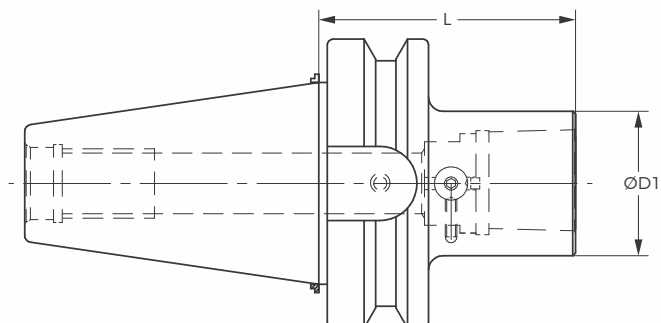
Model	Catalog Number	Description	Adaptor	ØD	L
<b>BTP / PTI EXTENSION ADAPTOR</b>	891066606	BTP30-PTI32-30	PTI32	32	30
	891066612	BTP30-PTI32-60	PTI32	32	60
	891086606	BTP40-PTI32-30	PTI32	32	30
	891086612	BTP40-PTI32-60	PTI32	32	60
	891086706	BTP40-PTI40-30	PTI40	40	30
	891086712	BTP40-PTI40-60	PTI40	40	60
	891086806	BTP40-PTI50-30	PTI50	50	30
	891086814	BTP40-PTI50-70	PTI50	50	70
	891086915	BTP40-PTI63-75	PTI63	63	75
	891106614	BTP-50/PTI-32-70	PTI32	32	70
	891106708	BTP-50/PTI-40-40	PTI40	40	40
	891106714	BTP-50/PTI-40-70	PTI40	40	70
	891106808	BTP-50/PTI-50-40	PTI50	50	40
	891106816	BTP-50/PTI-50-80	PTI50	50	80
	891106908	BTP-50/PTI-63-40	PTI63	63	40
	891106918	BTP-50/PTI-63-90	PTI63	63	90
	891107014	BTP-50/PTI-80-70	PTI80	80	70
	891107024	BTP-50/PTI-80-120	PTI80	80	120

## EXTENSION ADAPTOR

### MODEL MAS BT / PTI EXTENSION ADAPTOR (FRONT CLAMPING) (ISO-26623-2)

**Features:**

- T.I.R. < 5µm



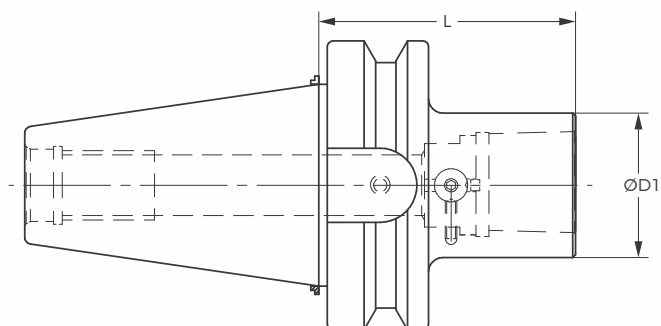
Model	Catalog Number	Description	Adaptor	ØD	L
BT / PTI EXTENSION ADAPTOR	89126818F	BT-40/PTI-50-FC-90	PTI50	50	90
	89146920F	BT-50/PTI-50-FC-100	PTI50	50	100
	89146922F	BT-50/PTI-63-FC-110	PTI63	63	110
	89147025F	BT-50/PTI-80-FC-125	PTI80	80	125

## EXTENSION ADAPTOR

### MODEL MAS BTP / PTI EXTENSION ADAPTOR (FRONT CLAMPING) (ISO-26623-2)

**Features:**

- T.I.R. < 5µm



Model	Catalog Number	Description	Adaptor	ØD	L
BTP / PTI EXTENSION ADAPTOR	891086818F	BTP-40/PTI-50-FC-90	PTI50	50	90
	891106920F	BTP-50/PTI-50-FC-100	PTI50	50	100
	891106922F	BTP-50/PTI-63-FC-110	PTI63	63	110
	891107025F	BTP-50/PTI-80-FC-125	PTI80	80	125

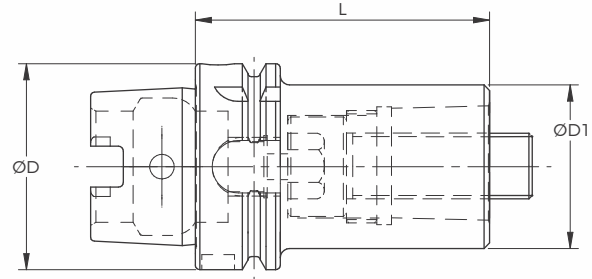
# EXTENSION ADAPTOR



## MODEL HSK (DIN 69893-1) PTI EXTENSION ADAPTOR (DRAWBAR TYPE CLAMPING) (ISO-26623-2)

**Features:**

- T.I.R. < 5µm

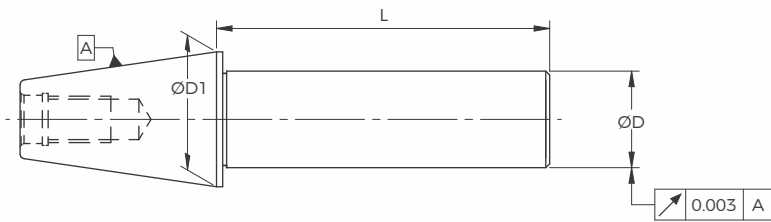


Model	Catalog Number	Description	ØD	ØD1	L	A1
HSK / PTI EXTENSION ADAPTOR	8974A6615	HSK63A-PTI32-75	PTI32	63	32	75
	8976A6616	HSK100A-PTI32-80	PTI40	100	32	80
	8974A6716	HSK63A-PTI40-80	PTI40	63	40	80
	8976A6718	HSK100A-PTI40-90	PTI40	100	40	90
	8974A6818	HSK63A-PTI50-90	PTI50	63	50	90
	8976A6820	HSK100A-PTI50-100	PTI50	100	50	100
	8974A6918	HSK63A-PTI63-90	PTI63	63	63	90
	8976A6922	HSK100A-PTI63-110	PTI63	100	63	110
	8976A7024	HSK100A-PTI80-120	PTI80	100	100	120

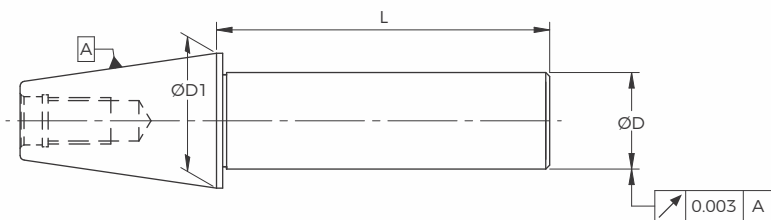
# SPINDLE TEST MANDREL

SPINDLE TEST MANDRELS (3 μm / 0.0001" TIR)

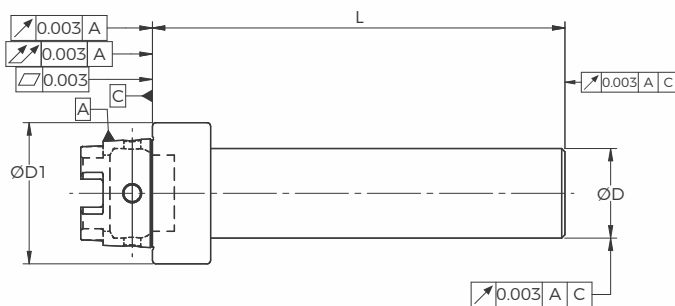
FOR SPINDLE RUN-OUT CHECKING AND SPINDLE AND TABLE ALIGNMENT



Model	Catalog Number	Description	ØD	ØD1	L
CAT SHANK (ANSI / ASME B5.50-1994)	A2244060	CAT40 Test Mandrel Dia. 40-300	44.45	40	300
	A2264070	CAT50 Test Mandrel Dia. 40-350	69.85	40	350



Model	Catalog Number	Description	ØD	ØD1	L
BT SHANK (MAS 403)	A2102540	BT30 Test Mandrel Dia. 25-200	31.75	25	200
	A2112540	BT35 Test Mandrel Dia. 25-200	38.1	25	200
	A2124060	BT40 Test Mandrel Dia. 40-300	44.45	40	300
	A2144070	BT50 Test Mandrel Dia. 40-350	69.85	40	350



Model	Catalog Number	Description	ØD	ØD1	L
HSK SHANK (DIN 69893-1)	A271A2540	HSK32A Test Mandrel Dia. 25-200	32	25	200
	A272A3240	HSK40A Test Mandrel Dia. 32-200	40	32	200
	A273A4050	HSK50A Test Mandrel Dia. 40-250	50	40	250
	A274A4070	HSK63A Test Mandrel Dia. 40-350	63	40	350
	A275A4070	HSK80A Test Mandrel Dia. 40-350	80	40	350
	A276A4076	HSK100A Test Mandrel Dia. 40-380	100	40	380
	A277A5080	HSK125A Test Mandrel Dia. 50-400	125	50	400

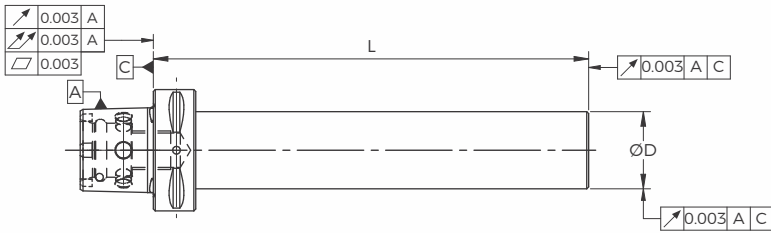


# SPINDLE TEST MANDREL



## PTI SPINDLE TEST MANDRELS (3 μm / 0.0001" TIR)

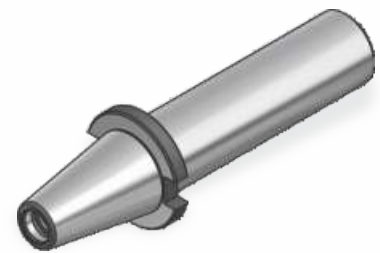
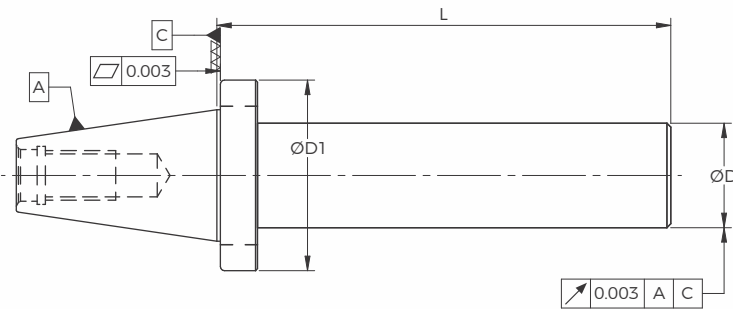
### FOR SPINDLE RUN-OUT CHECKING AND SPINDLE AND TABLE ALIGNMENT



Model	Catalog Number	Description	ØD	ØD1	L
PTI SHANK	A2662536	PTI32 Test Mandrel Dia. 25-180	32	25	180
	A2672536	PTI40 Test Mandrel Dia. 25-180	40	25	180
	A2683251	PTI50 Test Mandrel Dia. 32-255	50	32	255
	A2694065	PTI63 Test Mandrel Dia. 40-325	63	40	325
	A2704066	PTI80 Test Mandrel Dia. 40-330	80	40	330

## STEEP TAPER FACE CONTACT SPINDLE TEST MANDREL (3 μm / 0.0001" TIR)

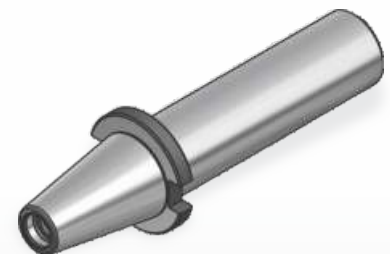
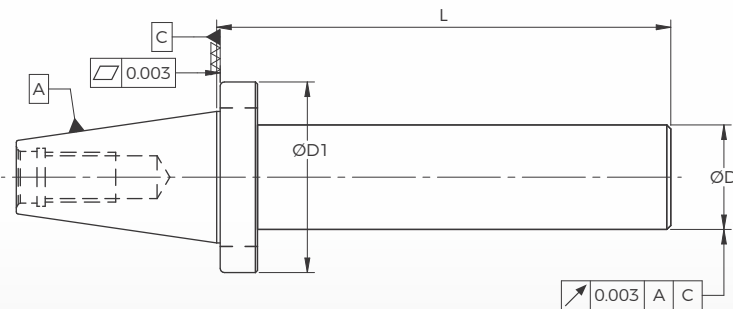
### FOR SPINDLE RUN-OUT CHECKING AND SPINDLE AND TABLE ALIGNMENT



Model	Catalog Number	Description	ØD	ØD1	L
CATP SHANK	A21364060	CATP40 Test Mandrel Dia. 40-300	63.5	40	300
	A21384070	CATP50 Test Mandrel Dia. 40-350	98.43	40	350

## STEEP TAPER FACE CONTACT SPINDLE TEST MANDREL (3 μm / 0.0001" TIR)

### FOR SPINDLE RUN-OUT CHECKING AND SPINDLE AND TABLE ALIGNMENT

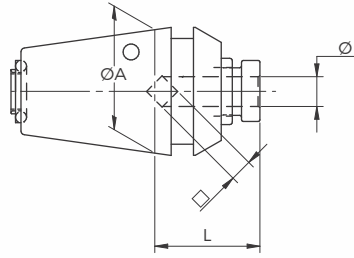


Model	Catalog Number	Description	ØD	ØD1	L
BTP SHANK	A21062540	BTP30 Test Mandrel Dia. 25-200	46	25	200
	A21084060	BTP40 Test Mandrel Dia. 40-300	63	40	300
	A21104070	BTP50 Test Mandrel Dia. 40-350	100	40	350

# TAPPING SYSTEMS AND ACCESSORIES

## ERT / E ER QUICK CHANGE TAP COLLETS

### WITH SQUARE DRIVE AND AXIAL COMPENSATION



Model	Tension	A (mm)	L (mm)
ERT/E-16	7.00mm	16	21
ERT/E-20	7.50mm	20	24
ERT/E-25	8.00mm	25	24
ERT/E-32	10.00mm	32	27.5
ERT/E-40	12.00mm	40	34.5

	Shank (inch)	Square (inch)	Tap Size	ERT/E-16	ERT/E-20	ERT/E-25	ERT/E-32	ERT/E-40
<b>Inch size (ANSI Shanks and Squares)</b>	0.141	0.110	#0-#6	E95510104	E95520104	E95530104	E95540104	E95550104
	0.168	0.131	#8	E95510148	E95520148	E95530148	E95540148	E95550148
	0.194	0.152	#10, 3/16	E95510187	E95520187	E95530187	E95540187	E95550187
	0.220	0.165	#12		E95520212	E95530212	E95540212	E95550212
	0.255	0.191	1/4"		E95520266	E95530266	E95540266	E95550266
	0.318	0.238	5/16"			E95530324	E95540324	E95550324
	0.381	0.286	3/8"			E95530386	E95540386	E95550386
	0.323	0.242	7/16"			E95530330	E95540330	E95550330
	0.367	0.275	1/2"			E95530366	E95540366	E95550366
	0.429	0.322	9/16"				E95540402	E95550402
	0.480	0.360	5/8"				E95540435	E95550435
	0.542	0.406	11/16"				---	E95550460
	0.590	0.442	3/4"				---	E95550481
	0.437	0.328	1/8" NPT			---	E95540412	E95550412
	0.562	0.421	1/4" NPT					E95550476
0.542	0.406	3/8" NPT					E95550460	
	Shank (mm)	Square (mm)	Tap Size	ERT/E-16	ERT/E-20	ERT/E-25	ERT/E-32	ERT/E-40
<b>Metric sizes (DIN Shanks and Squares)</b>	3.50	2.7	M4 DIN 376	E95510038	E95520038	E95530038	E95540038	E95550038
	3.50	2.7	M3 DIN 371	E95510091	E95520091	E95530091	E95540091	E95550091
	4.00	3.0	M3.5 DIN 371	E95510121	E95520121	E95530121	E95540121	E95550121
	6.00	4.9	M5 DIN 371	E95510232	E95520232	E95530232	E95540232	E95550232
	4.50	3.4	M4 DIN 371	E95510151	E95520151	E95530151	E95540151	E95550151
	6.00	4.9	M6 DIN 371	E95510232	E95520232	E95530232	E95540232	E95550232
	6.00	4.9	M8 DIN 376		E95520232	E95530232	E95540232	E95550232
	7.00	5.5	M10 DIN 376		E95520274	E95530274	E95540274	E95550274
	8.00	6.2	M8 DIN 371			E95530310	E95540310	E95550310
	9.00	7.0	M12			E95530348	E95540348	E95550348
	10.00	8.0	M10 DIN 371				E95540389	E95550389
	11.00	9.0	M14				E95540408	E95550408
	12.00	9.0	M16				E95540430	E95550430
	14.00	11.0	M18					E95550465
	16.00	12.0	M20					E95550491

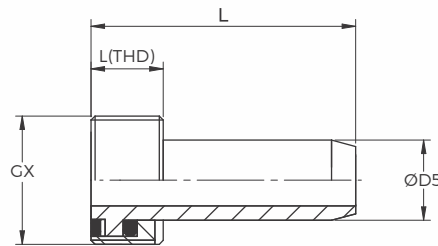
	Catalog Number	Description	Collet Size	Accommodates Tap Size Range
<b>Inch Taps</b>	E9551-SET	ERTE-16 SET (3pcs.)	ER16	#0 - #10
	E9552-SET	ERTE-20 SET (5pcs.)	ER20	#0 - 1/4"
	E9553-SET	ERTE-25 SET (9pcs.)	ER25	#0 - 7/16", 1/8NPT
	E9554-SET	ERTE-32 SET (12pcs.)	ER32	#0-5/8, 1/8NPT-1/4NPT
	E9555-SET	ERTE-40 SET (16pcs.)	ER40	#0-3/4, 1/8NPT-3/8NPT
<b>Metric Taps</b>	E9551M-SET	ERTE-16M SET (5pcs.)	ER16	M3-M6
	E9552M-SET	ERTE-20M SET (7pcs.)	ER20	M3-M10
	E9553M-SET	ERTE-25M SET (9pcs.)	ER25	M3-M12
	E9554M-SET	ERTE-32M SET (12pcs.)	ER32	M3-M16
	E9555M-SET	ERTE-40M SET (14pcs.)	ER40	M3-M20

# HARDWARE AND ACCESSORIES



## HSK COOLANT TUBES

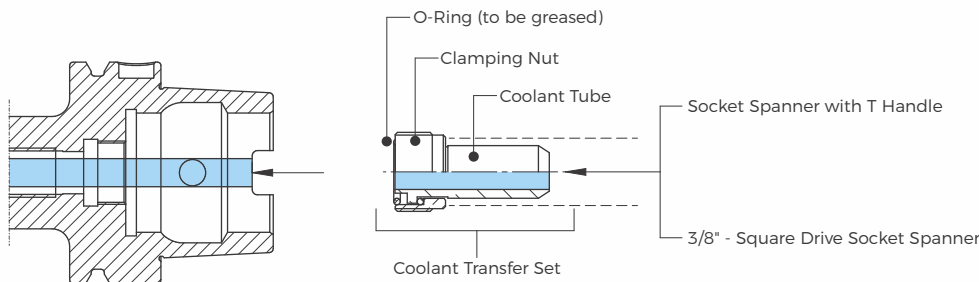
### FOR HSK HOLDERS 32 - 125 TAPERS



Catalog Number	Description	GX (mm)	L (mm)	ØD5 (mm)	Torque for holder Assembly Nm/In Lbs.
9697110CB	HSK32 Tube	M10x1	26.70	6	7Nm/
9697212CB	HSK40 Tube	M12x1	29.5	8	11Nm/
9697316CB	HSK50 Tube	M16x1	33.20	10	15Nm/
9697418CB	HSK63 Tube	M18x1	36.60	12	20Nm/
9697520CB	HSK80 Tube	M20x1.5	40.10	14	25Nm/
9697624CB	HSK100 Tube	M24x1.5	44.2	16	30Nm/
9697730CB	HSK125 Tube	M30X1.5	48.0	18	35Nm/

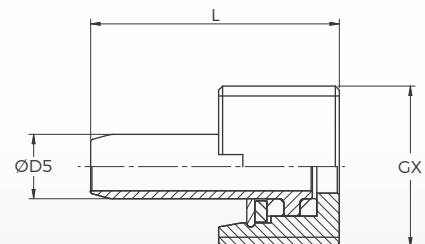
### Assembly instructions for the Coolant Tube internal taper shank of HSK holders

- 1) Shank must be clean of all machining debris
- 2) Add lubricant (light grease) to O-Ring before assembly
- 3) Completely insert the Coolant tube centrally in HSK
- 4) Screw in the coolant tube using the proper installation wrench
- 5) Check the coolant tube for radial movement - should be none
- 6) Check the coolant tube for axial movement - should be none
- 7) Standard coolant tubes are supplied in a brass material. Steel coolant tubes are available in HSK63, HSK80, and HSK100 sizes. Add "S" to end of part number



## PTI Coolant Tubes

For PTI Holders 63 & 80 Tapers



Catalog Number	Description	GX (mm)	L (mm)	ØD5 (mm)
966920C	PTI63 Tube	M20x2.0	31.0	8
967020C	PTI80 Tube	M20x2.0	33.5	10

## IS TAP SHANK DIMENSIONS

Tap Shank No.	Dia x Square (mm)	IS 6175 Part-I	IS 6175 Part-II	IS 6175 Part-III	IS 7821	IS 1988		IS 6172		IS 7796
014	2,24 X 1,80			M 3	M 3					
020	2,50 X 2,00	M 1		M 3,5	M 3,5	M 1				
		M 1,1				M 1,1				
		M 1,2					M 1,2			
		M 1,4					M 1,4			
		M 1,6					M 1,6			
		M 1,8					M 1,8			
		M 2					M 2			
045	2,80 x 2,24	M 2,2				M 2,2				
		M 2,5				M 2,5				
067	3,15 x 2,50		M 3	M 4	M 4	M 3				
096	3,55 x 2,80		M 3,5	M 4,5	M 4,5	M 3,5				
126	4,00 x 3,15		M 4	M 5	M 5	M 4				
159	4,50 x 3,55		M 4,5	M 6	M 6	M 4,5				
195	5,00 x 4,00		M 5			M 5				
215	5,60 x 4,50			M 7	M 7					Rc 1/16"
257	6,30 x 5,00		M 6	M 8	M 8	M 6		G 1/16"	Rp 1/16"	
281	7,10 x 5,60		M 7		M 9	M 7	1/8"			
316	8,00 x 6,30		M 8	M 10	M 10	M 8		G 1/8"	Rp 1/8"	Rc 1/8"
					M 11	M 11				
356	9,00 x 7,10			M 12	M 12	M 9				
389	10,00 x 8,00		M 10			M 10	1/4"	G 1/4"	Rp 1/4"	Rc 1/4"
						M 12				
415	11,20 x 9,00			M 14	M 14	M 14				
439	12,50 x 10,00			M 16	M 16	M 16	3/8"	G 3/8"	Rp 3/8"	Rc 3/8"
470	14,00 x 11,20			M 18	M 18	M 18				
				M 20	M 20	M 20				
495	16,00 x 12,50			M 22	M 22	M 22	1/2"	G 1/2"	Rp 1/2"	Rc 1/2"
524	18,00 x 14,00			M 24	M 24	M 24		G 5/8"		
				M 25						
556	20,00 x 16,00			M 27		M 27	3/4"	G 3/4"	Rp 3/4"	Rc 3/4"
				M 30		M 30				
582	22,40 x 18,00			M 33		M 33		G 7/8"		
615	25,00 x 20,00			M 36		M 36	1"	G 1"	Rp 1"	Rc 1"
654	28,00 x 22,40			M 39		M 39				
				M 42		M 42				
692	31,50 x 25,00			M 45		M 45	1-1/4"	G 1-1/4"	Rp 1-1/4"	Rc 1-1/4"
				M 48		M 48				
725	35,50 x 28,00			M 52		M 52	1-1/2"	G 1-1/2"	Rp 1-1/2"	Rc 1-1/2"
				M 56		M 56	2"	G 1-3/4"		
762	40,00 x 31,50			M 60		M 60		G 2"	Rp 2"	Rc 2"
				M 64		M 64		G 2-1/4"		
797	45,00 x 35,50			M 68		M 68	2-1/2"	G 2-1/2"	Rp 2-1/2"	Rc 2-1/2"
818	50,00 x 40,00						3"	G 3"	Rp 3"	Rc 3"
866	63,00 x 50,00						3-1/2"	G 3-1/2"		Rc 3-1/2"
884	71,00 x 56,00						4"	G 4"	Rp 4"	Rc 4"

The given Torques include a wear factor of 100% for material having a tensile strength  $\leq B$  1000 N/mm = 145,000 Lbs/sq. in. with respect to dia. of pre-drilled holes, cutting fluid, centering of tap etc. When tapping non-ferrous material such as aluminium alloys and brass, the torques can be considerably less than shown in the tables. This rulling is also valid when taping fine-pitch threads. On the other hand, when tapping tougher materials, the torques may be increased by the 50%value and in cold forming threads, the torques may be increased by 40 to 100% value stated in the table.

# DIN TAP SHANK DIMENSIONS



Tap Shank No.	Dia x Square (mm)	DIN 352	DIN 353	DIN 371	DIN 374	DIN 376	DIN 2182	DIN 2183
027	2,50 X 2,10	M 1		M 1		M 3,5	1/16"	
		M 1,1		M 1,1	M 3,5			
		M 1,2		M 1,2				
		M 1,4		M 1,4				
		M 1,6		M 1,6				
		M 1,8		M 1,8				
038	2,80 X 2,10	M 2		M 2	M 4	M 4	3/32"	5/32"
		M 2,2		M 2,2				
		M 2,5		M 2,5				
091	3,50 X 2,70	M 3		M 3	M 5	M 5	1/8"	
121	4,00 X 3,00	M 3,5		M 3,5			7/32"	
151	4,50 X 3,40	M 4		M 4	M 6	M 6	5/32"	1/4"
232	6,00 X 4,90	M 5		M 5				
		M 6		M 6				
		M 8			M 8	M 8		
274	7,00 X 5,50	M 10	G 1/8"		M 10	M 10	1/4"	3/8"
310	8,00 X 6,20			M 8			5/16"	7/16"
348	9,00 X 7,00	M 12			M 12	M 12	3/8"	1/2"
389	10,00 X 8,00			M 10				
408	11,00 X 9,00	M 14	G 1/4"		M 14	M 14		9/16"
430	12,00 X 9,00	M 16	G 3/8"		M 16	M 16		5/8"
465	14,00 X 11,00	M 18			M 18	M 18		11/16"
491	16,00 X 12,00	M 20	G 1/2"		M 20	M 20		13/16"
531	18,00 X 14,50	M 22	G 5/8"		M 22	M 22		7/8"
		M 24			M 24	M 24		15/16"
		M 27	G 3/4"		M 27	M 27		1"
578	22,00 X 18,00	M 30	G 7/8"		M 30	M 30		1-1/8"
615	25,00 X 20,00	M 33	G 1"		M 33	M 33		1-1/4"
645	28,00 X 22,00	M 36	G 1 - 1/8"		M 36	M 36		1-3/8"
698	32,00 X 24,00	M 39	G 1 - 1/4"		M 39	M 39		1-1/2"
		M 42			M 42	M 42		1-5/8"
734	36,00 X 29,00	M 45	G 1 - 3/8"		M 45	M 45		1-3/4"
		M 48	G 1 - 1/2"		M 48	M 48		1-7/8"
			G 1 - 3/4"					
			G 2"					
771	40,00 X 32,00	M 52	G 2 - 1/4"		M 52	M 52		2"
792	45,00 X 35,00	M 56	G 2 - 1/2"			M 56		2-1/4"
		M 60				M 60		
812	50,00 X 39,00	M 64	G 2 - 3/4"			M 64		2-1/2"
			G 3"					
839	56,00 X 44,00	M 68	G 3 - 1/4"			M 68		2-3/4"

The given Torques include a wear factor of 100% for material having a tensile strength  $\leq B$  1000 N/mm = 145,000 Lbs/sq. in. with respect to dia. of pre-drilled holes, cutting fluid, centering of tap etc. When tapping non-ferrous material such as aluminium alloys and brass, the torques can be considerably less than shown in the tables. This rulling is also valid when tapping fine-pitch threads. On the other hand, when tapping tougher materials, the torques may be increased by the 50%value and in cold forming threads, the torques may be increased by 40 to 100% value stated in the table.

# TORQUE SETTING VALUES

For setting the torque on adaptors with safety clutch.

## TORQUE THREAD TYPE

Nm	M	Withwroth BSW	Withwroth G BSP Parallel	BSF	BSP Taper	BA	PG	NPT Taper	UNC	UNF
0.3	M 2					No.9				No.2
0.4	M 2.5					No.8				No.3
0.5	M 3					No.7				
0.6						No.6			No.3	No.4
0.8	M 3.5					No.5			No.4	No.5
1		1/8"							No.5	
1.2						No.4				No.6
1.6	M 4								No.6	No.8
2		5/32"				No.3			No.8	
2.5	M 5			3/16"		No.2				No.10
3										No.12
4		3/16"		7/32"		No.1			No.10	1/4"
5	M 6	7/32"		1/4"		No.0			No.12	
6			G 1/8"	9/32"						5/16"
8		1/4"		5/16"					1/4"	3/8"
10	M 8									
12		5/16"		3/8"			PG 7		5/16"	7/16"
16										1/2"
18	M 10	3/8"	G 1/4"	7/16"	1/8"				3/8"	
20							PG 9	1/8"		
22							PG 11			9/16"
25				1/2"			PG 13.5			5/8"
28	M 12	7/16"	G 3/8"				PG 16		7/16"	
32				9/16"						
36										3/4"
40				5/8"					1/2"	
45	M 14	1/2"		11/16"			PG 21			
50	M 16		G 1/2"		1/4"				9/16"	
56			G 5/8"					1/4"		7/8"
63		5/8"			3/8"		PG 29		5/8"	
70			G 3/4"	3/4"				3/8"		
80	M 18		G 7/8"	13/16"			PG 36			
90	M 20	3/4"		7/8"			PG 42		3/4"	1"
100	M 22						PG 48			1-1/8"
110										1-1/4"
125		7/8"		1"					7/8"	1-3/8"
140			G 1"							1-1/2"
160	M 24		G 1-1/8"		1/2"			1/2"		
180	M 27		G 1-1/4"	1-1/8"						
200		1"	G 1-3/8"	1-1/4"	3/4"			3/4"	1"	
220			G 1-1/2"							
240			G 1-3/4"							
260			G 2"	1-3/8"						
280	M 30	1-1/8"							1-1/8"	
300			G 2-1/4"	1-1/2"						
320	M 33	1-1/4"		1-5/8"					1-1/4"	
340			G 2-1/2"		1"			1"		
360			G 2-3/4"							
400			G 3"							
420	M 36		G 3-1/4"							
450			G 3-1/2"	1-3/4"	1-1/4"			1-1/4"		
480	M 39	1-3/8"	G 3 3/4"						1-3/8"	
500		1-1/2"	G 4"	2"					1-1/2"	
560					1-1/2"			1-1/2"		
630	M 42									
710	M 45			2-1/4"	2"			2"		
800		1-5/8"		2-1/2"						
900	M 48	1-3/4"		2-3/4"					1-3/4"	
1000	M 52				2-1/2"					
1100										
1250	M 56	2"							2"	
1400				3"	3"			2-1/2"		
2000		2-1/4"						3"		
2200		2-1/2"								

The given Torques include a wear factor of 100% for material having a tensile strength  $\leq B$  1000 N/mm = 145,000 Lbs/sq. in. with respect to dia. of pre-drilled holes, cutting fluid, centering of tap etc. When tapping non-ferrous material such as aluminium alloys and brass, the torques can be considerably less than shown in the tables. This rulling is also valid when tapping fine-pitch threads. On the other hand, when tapping tougher materials, the torques may be increased by the 50% value and in cold forming threads, the torques may be increased by 40 to 100% value stated in the table.





## **IMI MACHINE TOOLS PVT. LTD.**

### **WORKS:**

Block # 135/2, Bileshwarpura, P. O. Chhatral - 382 729,  
Dist. : Gandhinagar, North Gujarat, INDIA.  
Tel. : +91 93774 67225, +91 93766 42505  
E-mail : imi@imitoolsindia.com

### **REGD. OFFICE:**

B1, First Floor, 100 Drive-In Complex,  
Opp. Mahatma Gandhi Labour Institute,  
Drive-In Road, Memnagar, Ahmedabad-380 052, Gujarat, INDIA.  
Tel. : +91 98790 00610  
E-mail : imi@imitoolsindia.com

