

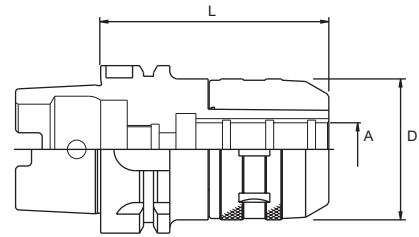
HMC

Milling Chuck

HSK

Feature

- Powerful clamp torque
- Fine run-out
- Balanced type available upon request



taper	order number	A	L	D	Collet	Wrench
HSK-A 63	HSK63A-HMC3/4-95	0.75	3.74	2.09	MC3/4	MCW20
	HSK63A-HMC1.1/4-100	1.25	3.94	2.76	MC1.1/4	MCW32

Note

1. Wrench is not included. 2. Special size is available upon request. 3. See P.5 for MC collets. 4. See P.15 for how-to-use instruction.

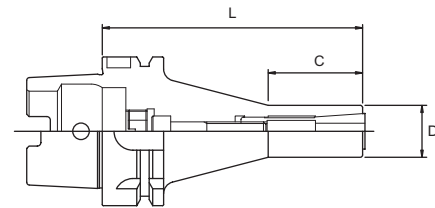
HMX

Super Precision Collet Chuck

HSK

Feature

- Super fine run-out
- Strong gripping torque
- High speed type available upon request



taper	order number	Range	L	D	C	Collet	Wrench
HSK-A 63	HSK63A-HMX 8-100	.118 - .394	3.94	0.87	1.42	VX8	MXW05
	HSK63A-HMX12-110	.157 - .472	4.33	1.18	1.54	VX12	MXW05

Note

1. Wrench is not included. 2. Special length is available upon request. 3. See P.9 for VX collets. 4. See P.15 for how-to-use instruction.

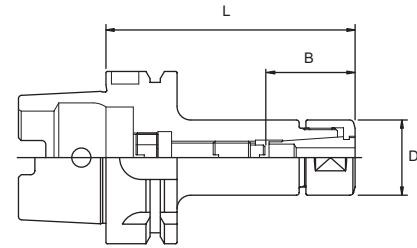
HSX

Hi Precision Collet Chuck

HSK

Feature

- Fine run-out
- Strong gripping torque
- High speed type available upon request



Shank	Order No.	Range	L	D	B	collet	Wrench
HSK-A 63	HSK63A-HSX10-105	.069 - .394	4.13	1.08	2.17	SX10	SXW-10
	HSK63A-HSX16-120	.108 - .630	4.72	1.58	2.17	SX16	SXW-16

Note

1. Wrench is not included. 2. Special length is available upon request. 3. See P.14 for SX collets. 4. See P.15 for how-to-use instruction.

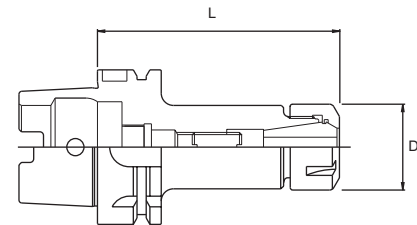
ER

Precision ER Collet Chuck

HSK

Feature

- World standard
DIN 6499 ER system
- Fine run-out and flexibility with wide range collet
- High speed type available upon request



Shank	Order No.	Range	L	D	Collet	Wrench
HSK-A 63	HSK63A-ER16-100	.020 - .394	3.94	1.26	ER16	ERW-16
	HSK63A-ER20-100	.020 - .512	3.94	1.34	ER20	ERW-20
	HSK63A-ER25-100	.020 - .630	3.94	1.65	ER25	ERW-25
	HSK63A-ER32-100	.039 - .787	3.94	1.97	ER32	ERW-32

Note

1. Wrench is not included. 2. Special length is available upon request. 3. See P.20 for ER collets.



www.hpiamerica.com

D3 Dynamic Dual Drive



Model nos.

HMC Milling Chuck
ER Precision Collet Chuck
HFD Shell Mill Arbor

Dual Contact Holder

- Unique Construction of Solid Body and Movable Flange
- Improved Performance
- Long Cutter Life
- Ideal for High Speed
- Fits Any Spindle
- Excellent Rigidity

Improving machining performance and tool life is a constant challenge. The new HPI dual contact holder with movable flange design provides the ultimate solution.

In every spindle centrifugal force and heat combine to degrade the relationship between the holder taper and the spindle taper. The HPI D3 holder with movable flange provides the very best holder taper to spindle taper relationship along with maximum holder flange to spindle face contact.

The new HPI D3 holder is the latest technology the best meets the industry requirements for better machining performance and better tool life performance for steep taper spindles. The solid body ensures rigidity for heavy machining while the movable flange provides perfect flange contact for optimum machining performance at low or high speeds.



D3 Dynamic Dual Drive

FEATURES

Rigid & Solid

- Solid body with movable flange allow the solid taper to mate directly to the spindle.
- Perfect simultaneous taper and flange contact.

Compatibility

- Not only for the flange contact steep taper spindle but can be fitted to the standard CAT/BT spindle.

Improved performance and tool life

- Solid body ensures rigid machining.
- Movable flange absorbs vibration and ensures optimum dual contact.
- Improve finish and cutter life.
- Provide better long-reach capability.

Outstanding hardmilling capability

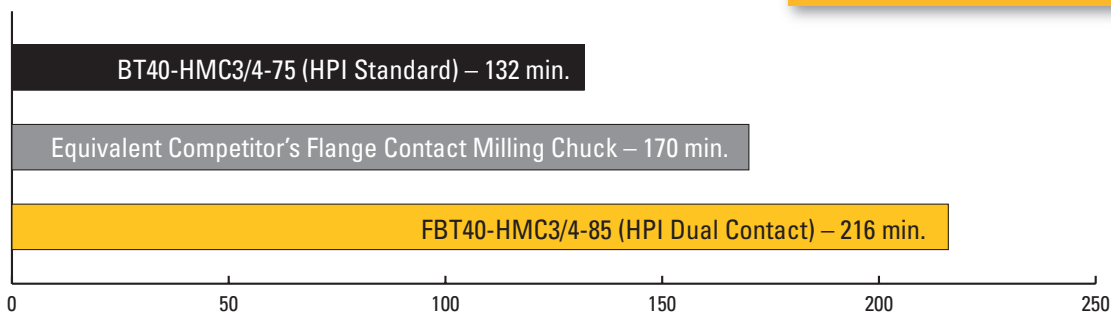
- Excellent run-out and gripping torque.
- Movable flange absorbs vibration and provides better cutter life and surface finish.

Excellent high speed capability

- Maintain better Z-axis length at low and high speed operation.
- Protect the spindle from chatter in both low and high speed operation.

Example

The new HPI D3 holder improved the cutter life by 64% compared to standard HPI holder, and 27% to competitor's flange contact holder.



Cutting Condition

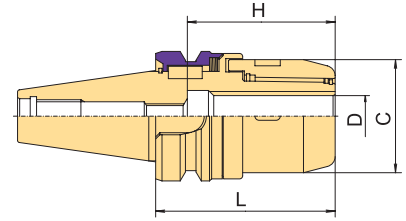
Feed	45 IPM
Step-over	0.020"
Step-down	0.600"
Spindle RPM	3,800
Material	A2 60RC
Endmill	10mm coating carbide
Spindle type	Flange contact BT40

HMC milling chuck

D3 Dynamic Dual Drive



- Excellent run-out capability
- Strong gripping torque
- Best choice for rough and finish operation
- High speed type available upon request



Taper	Order No.	D	L	C	H
BT30	FBT30-HMC3/4-85	0.75	3.35	2.17	2.36
BT40	FBT40-HMC3/4-85	0.75	3.35	2.17	2.76
	FBT40-HMC1.1/4-105	1.25	4.13	2.91	3.15
CAT40	FCAT40-HMC3/4-95	0.75	3.74	2.17	2.76
	FCAT40-HMC1.1/4-110	1.25	4.33	2.91	3.15

Note

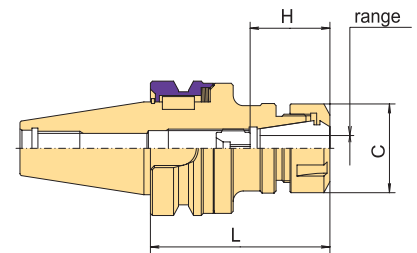
1. Wrench is not included.
2. Special size is available upon request.
3. See P.5 for MC collets.

ER precision collet chuck

D3 Dynamic Dual Drive



- Compatible with DIN 6499 ER system
- Fine T.I.R. and wide gripping range for multiple application
- High speed type available upon request



Taper	Order No.	Range	L	C	H	Collet
BT30	FBT30-ER16-65	0.019 ~ 0.393	2.56	1.10	1.18 ~ 1.77	ER16
	FBT30-ER25-65	0.039 ~ 0.629	2.56	1.65	1.57 ~ 2.57	ER25
BT40	FBT40-ER16-90	0.019 ~ 0.393	3.54	1.10	1.18 ~ 1.77	ER16
	FBT40-ER25-90	0.039 ~ 0.629	3.54	1.65	1.57 ~ 2.56	ER25
CAT40	FCAT40-ER16-90	0.019 ~ 0.393	3.94	1.10	1.18 ~ 1.77	ER16
	FCAT40-ER25-90	0.039 ~ 0.629	3.94	1.65	1.57 ~ 2.56	ER25

Note

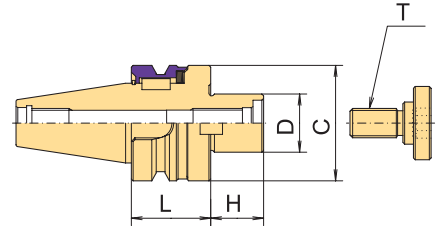
1. Wrench is not included.
2. Special size is available upon request.
3. See P.20 for ER collets.

HFD shell mill arbor

D3 Dynamic Dual Drive



- Strong rigidity
- Excellent surface finish
- High speed type available upon request



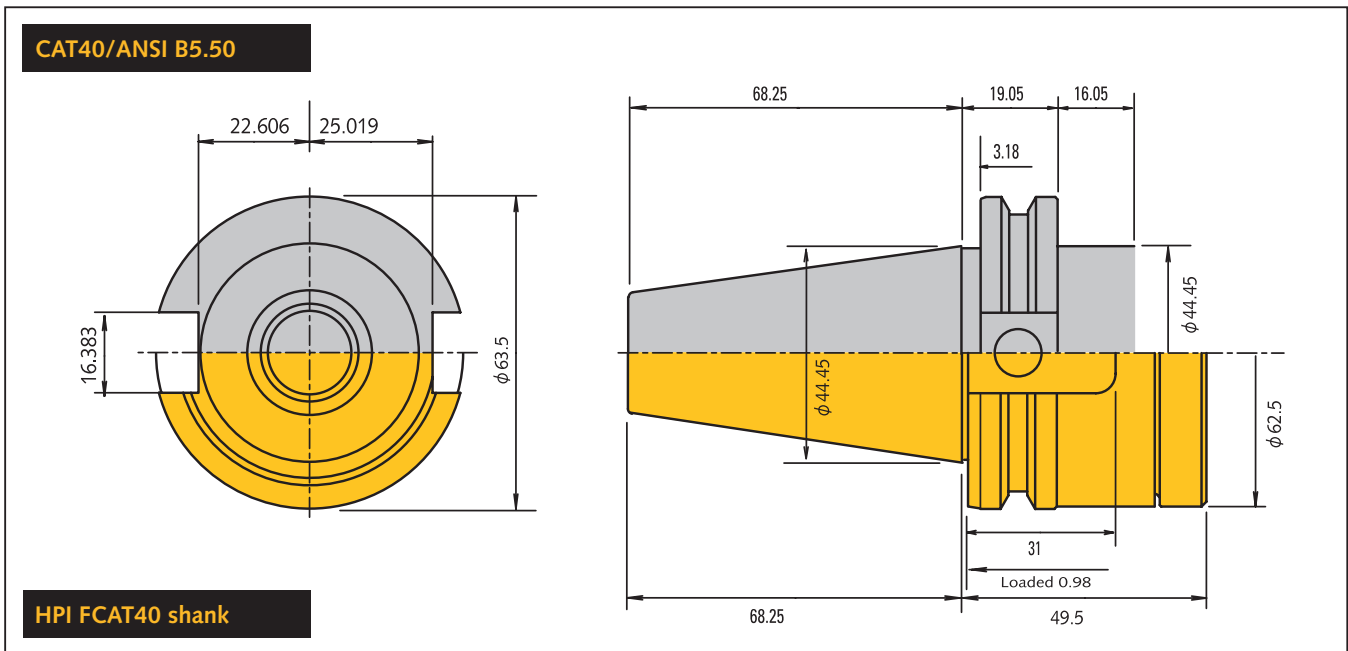
Taper	Order No.	D	L	C	H	T
BT30	FBT30-HFD19.05-40	0.75	1.57	1.77	0.69	3/8-24
	FBT30-HFD25.4-40	1.00	1.57	2.28	0.69	1/2-20
BT40	FBT40-HFD25.4-45	1.00	1.77	2.28	0.69	1/2-20
CAT40	FCAT40-HFD25.4-50	1.00	1.97	2.28	0.69	1/2-20

Note 1. Wrench is not included. 2. Special size is available upon request.

Important Information for FCAT40 users

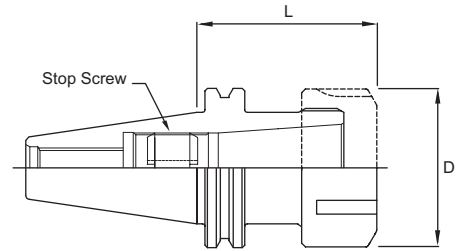
Due to the unique movable flange concept, the new HPI FCAT40 holder ignores the 5/8" relief cut under the flange required by ANSI specification (ANSI B5.50). The added stock strengthens the holder and allows the flange to move slightly up and down the body of the holder under the flange. This design may cause interference with an older style ATC (Automatic Tool Change) System whose finger grip design or drive key may require the 5/8" relief cut under the flange.

In most cases by having extended drive slot HPI has alleviated interference issues with most ATC finger grip scenarios. However, all FCAT40 holder users are liable to check and confirm if interference exists with their ATC finger grips and drive keys before using the holders. Failing to do so may result in serious damage to the machine and the holder.



HTG

TG100 Collet Chuck



Shank	Order No.	Range	L	D	Collet	Wrench
CAT40	CAT40-HTG10- 75	.094 - 1.00	2.95	2.48	TG10	TGW10
CAT50	CAT50-HTG10-105	.094 - 1.00	4.13	2.48	TG10	TGW10
BT40	BT40-HTG10- 75	.094 - 1.00	2.95	2.50	TG10	TGW10

Note

1. Wrench is not included.

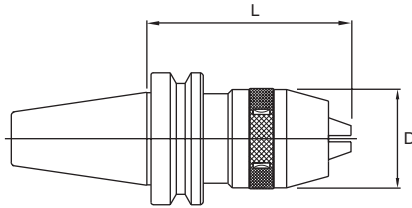
TG Collet

Order No.	I.D.	Order No.	I.D.	Order No.	I.D.
TG10 - 06	3/32	TG10 - 26	13/32	TG10 - 46	23/32
TG10 - 07	7/64	TG10 - 27	27/64	TG10 - 47	47/64
TG10 - 08	1/8	TG10 - 28	7/16	TG10 - 48	3/4
TG10 - 09	9/64	TG10 - 29	29/64	TG10 - 49	49/64
TG10 - 10	5/32	TG10 - 30	15/32	TG10 - 50	25/32
TG10 - 11	11/64	TG10 - 31	31/64	TG10 - 51	51/64
TG10 - 12	3/16	TG10 - 32	1/2	TG10 - 52	13/36
TG10 - 13	13/64	TG10 - 33	33/64	TG10 - 53	53/64
TG10 - 14	7/32	TG10 - 34	17/32	TG10 - 54	27/32
TG10 - 15	15/64	TG10 - 35	35/64	TG10 - 55	55/64
TG10 - 16	1/4	TG10 - 36	9/16	TG10 - 56	7/8
TG10 - 17	17/64	TG10 - 37	37/64	TG10 - 57	57/64
TG10 - 18	9/32	TG10 - 38	19/32	TG10 - 58	29/32
TG10 - 19	19/64	TG10 - 39	39/64	TG10 - 59	59/64
TG10 - 20	5/16	TG10 - 40	5/8	TG10 - 60	15/16
TG10 - 21	21/64	TG10 - 41	41/64	TG10 - 61	61/64
TG10 - 22	11/32	TG10 - 42	21/32	TG10 - 62	31/32
TG10 - 23	23/64	TG10 - 43	43/64	TG10 - 63	63/64
TG10 - 24	3/8	TG10 - 44	11/16	TG10 - 64	1
TG10 - 25	25/64	TG10 - 45	45/64		



NDC

Integral Drill Chuck



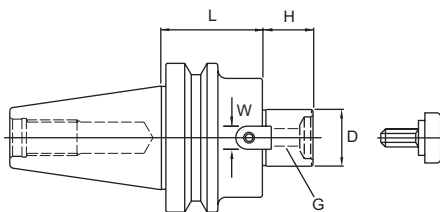
Shank	Order No.	Range	D	L
CAT40	CAT40-NDC13-105	.04 - .50	1.90	4.13
	CAT40-NDC13-130*	.04 - .50	1.90	5.12
CAT50	CAT50-NDC13- 100	.04 - .50	1.90	3.94
	CAT50-NDC13-130	.04 - .50	1.90	5.12
BT30	BT30-NDC13- 95	.04 - .50	1.90	3.74
BT40	BT40-NDC13- 80*	.04 - .50	1.90	3.15
	BT40-NDC13-110	.04 - .50	1.90	4.33
	BT40-NDC13-130*	.04 - .50	1.90	5.12
BT50	BT50-NDC13 - 90*	.04 - .50	1.90	3.54

Note

1. Items with * mark are not regular stock items.
2. Wrench is not included.
3. Special size is available upon request.

HFD

Shell Mill Holder



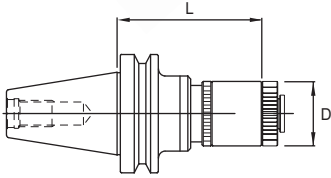
Shank	Order No.	D	L	H	W	G
CAT40	CAT40-HFD19.05- 45	.75	1.77	.67	0.31	3/8-24
	CAT40-HFD19.05- 90	.75	3.54	.67	.31	3/8-24
	CAT40-HFD25.4 - 45	1.00	1.77	.68	.38	1/2-20
	CAT40-HFD25.4 - 90	1.00	3.54	.68	.38	1/2-20
	CAT40-HFD31.75- 45	1.25	1.77	.67	.31	3/8-24
	CAT40-HFD38.1 - 45	1.50	1.77	.94	.62	3/4-16
CAT50	CAT50-HFD19.05- 45	.75	1.77	.67	.31	3/8-24
	CAT50-HFD19.05- 90	.75	3.54	.67	.31	3/8-24
	CAT50-HFD19.05-150*	.75	5.91	.67	.31	3/8-24
	CAT50-HFD25.4 - 45	1.00	1.77	.68	.38	1/2-20
	CAT50-HFD25.4 - 90	1.00	3.54	.68	.38	1/2-20
	CAT50-HFD25.4 -150*	1.00	5.91	.68	.38	1/2-20
	CAT50-HFD31.75- 45	1.25	1.77	.67	.31	3/8-24
	CAT50-HFD31.75- 90*	1.25	3.54	.67	.31	3/8-24
	CAT50-HFD38.1 - 45	1.50	1.77	.94	.62	3/4-16
	CAT50-HFD38.1 - 90*	1.50	3.54	.94	.62	3/4-16
	CAT50-HFD50.8 - 50*	2.00	1.97	.94	.75	1-14
	BT30	BT30-HFD19.05- 30	.75	1.18	.67	0.31
BT30-HFD25.4 - 45		1.00	1.77	.68	0.38	1/2-20
BT40	BT40-HFD19.05- 45	.75	1.77	.67	0.31	3/8-24
	BT40-HFD25.4 - 45	1.00	1.77	.68	0.38	1/2-20
	BT40-HFD31.75- 45	1.25	1.77	.67	0.31	3/8-24
	BT40-HFD38.1 - 45	1.50	1.77	.94	0.62	3/4-16

Note

1. Items with * mark are not regular stock items.
2. Wrench is not included.
3. Special size is available upon request.

HPZ

Rigid Tap Holder



Taper	Order No.	Range	Pipe Tap	L	D	Collet
CAT40	CAT40-HPZ 1	No.6 - 9/16	1/8P	3.31	1.25	PZ1
	CAT40-HPZ 2	5/16 - 7/8	1/4P - 1/2P	4.00	2.00	PZ2
CAT50	CAT50-HPZ 1	No.6 - 9/16	1/8P	5.63	1.25	PZ1
	CAT50-HPZ 2	5/16 - 7/8	1/4P - 1/2P	6.25	2.00	PZ2
BT40	BT40-HPZ 1	No.6 - 9/16	1/8P	3.50	1.25	PZ1
	BT40-HPZ 2	5/16 - 7/8	1/4P - 1/2P	4.13	2.00	PZ2

Note
 1. Tap collet is not included. 2. items with * mark are not regular stock items.

HPZ

Straight Shank

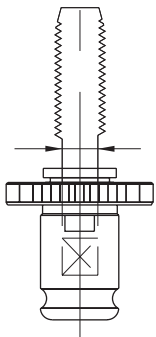


Order No.	Range	Pipe Tap	Shank Dia.	Collet
S1 -HPZ 1*	No.6 - 9/16	1/8P	1	PZ1
S1 -HPZ 2*	5/16 - 7/8	1/4P - 1/2P	1	PZ2

Note
 1. Tap collet is not included. 2. Items with * mark is not regular stock items.

PZ

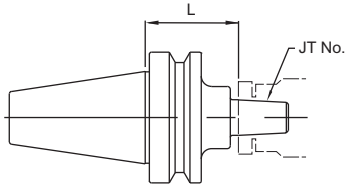
Tap Collet



Order No.	Size	Order No.	Size
PZ1- NO.06	No.6	PZ2- NO.06	No.6
PZ1- NO.08	No.8	PZ2- 3/8	3/8
PZ1- NO.10	No.10	PZ2- 7/16	7/16
PZ1- NO.12	No.12	PZ2- 1/2	1/2
PZ1- 1/4	1/4	PZ2- 9/16	9/16
PZ1- 5/16	5/16	PZ2- 5/8	5/8
PZ1- 3/8	3/8	PZ2- 11/16	11/16
PZ1- 7/16	7/16	PZ2- 3/4	3/4
PZ1- 1/2	1/2	PZ2- 13/16	13/16
PZ1- 9/16	9/16	PZ2- 7/8	7/8
PZ1- 1/8P	1/8 PIPE	PZ2- 1/4P	1/4 PIPE
		PZ2- 3/8P	3/8 PIPE
		PZ2- 1/2P	1/2 PIPE

HJT

Jacobs Tapet Drill Chuck Adapter

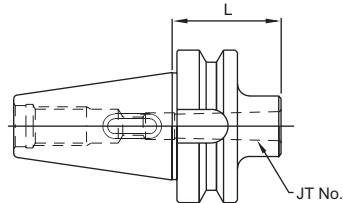


Shank	Order No.	J.T. No.	L
CAT40	CAT40-HJT 2- 45*	2	1.77
	CAT40-HJT 3- 45*	3	1.77
	CAT40-HJT 6- 45*	6	1.77
	CAT40-HJT33- 45*	33	1.77
CAT50	CAT50-HJT 3- 45*	3	1.77
	CAT50-HJT 6- 45*	6	1.77
	CAT50-HJT33- 45*	33	1.77
BT30	BT30-HJT 2- 30*	2	1.18
	BT30-HJT 6- 30*	6	1.18
BT40	BT40-HJT 2- 45*	2	1.77
	BT40-HJT 6- 45*	6	1.77
	BT40-HJT33- 45*	33	1.77

- Note
1. Drill chuck is not included.
 2. Items with * mark are not regular stock items.

HMA

Morse Taper Adapter

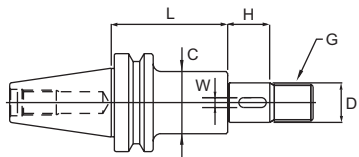


Shank	Order No.	MT No.	L
CAT40	CAT40-HMA2- 60*	2	2.36
	CAT40-HMA3- 75*	3	2.95
	CAT40-HMA4- 95*	4	3.74
CAT50	CAT50-HMA2-135*	2	5.31
	CAT50-HMA3-150*	3	5.91
	CAT50-HMA4- 75*	4	2.95
BT30	BT30-HMA1- 45*	1	1.77
	BT30-HMA2- 60*	2	2.36
BT40	BT40-HMA2- 60*	2	2.36
	BT40-HMA3- 75*	3	2.95
	BT40-HMA4- 95*	4	3.74

- Note
1. Items with * mark are not regular stock items.

HSB

Stub Arbor

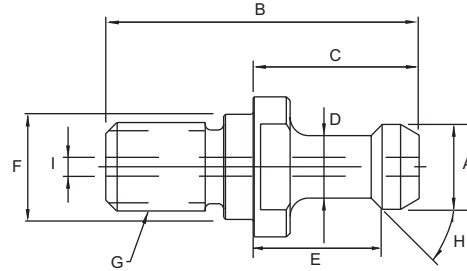


Shank	Order No.	D	L	H	C	W	G
CAT40	CAT40-HSB12.7 - 75*	.50	2.95	4.72	.79	-	M12
	CAT40-HSB25.4 - 75*	1.00	2.95	5.12	1.57	.25	M24
	CAT40-HSB31.75 - 90*	1.25	3.54	5.91	1.81	.31	M30
CAT50	CAT50-HSB25.4 - 90*	1.00	3.54	5.71	1.57	.25	M24
	CAT50-HSB31.75 - 90*	1.25	3.54	5.91	1.81	.31	M30
BT30	BT30-HSB12.7 - 60*	.50	2.36	4.13	.79	-	M12
	BT30-HSB25.4 - 60*	1.00	2.36	4.53	1.57	.25	M24
BT40	BT40-HSB25.4 - 75*	1.00	2.95	5.12	1.57	.25	M24
	BT40-HSB31.75 - 90*	1.25	3.54	5.91	1.81	.31	M30

- Note
1. Cutter is not included.
 2. Items with * mark are not regular stock items.

HPS

Pull Stud



Spindle	Order No.	A	B	C	D	E	F	G	H	I	Note
BT30	HPS- 16	0.433	1.693	0.906	0.276	0.709	0.492	M12	45	-	MAS P30T-1
	HPS- 17	0.433	1.693	0.906	0.276	0.709	0.492	M12	60	-	MAS P30T-2
BT35	HPS-U2	0.539	2.087	1.102	0.350	0.889	0.512	M12	60	-	Matsuura Type
BT40	HPS- 1	0.591	2.362	1.378	0.394	1.102	0.669	M16	45	-	MAS P40T-1
	HPS- 2	0.591	2.362	1.378	0.394	1.102	0.669	M16	60	-	MAS P40T-2
	HPS-806 -1	0.748	2.126	1.142	0.551	0.906	0.669	M16	75	0.236	JIS B6339. Coolant
	HPS-G51	0.740	1.736	0.752	0.490	0.552	0.669	M16	45	0.276	Mazak type. Coolant
	HPS-O 8	0.591	2.362	1.378	0.394	1.102	0.669	M16	90	-	90 degree angle type
BT45	HPS- 4	0.748	2.756	1.575	0.551	1.220	0.827	M20	45	-	MAS P45T-2
BT50	HPS- 5	0.906	3.346	1.772	0.669	1.378	0.984	M24	45	-	MAS P50T-1
	HPS- 6	0.906	3.346	1.772	0.669	1.378	0.984	M24	60	-	MAS P50T-2
CAT40	HPS- 26	0.591	2.252	1.268	0.394	0.992	0.630	5/8-11	60	-	MAS P40T-2 type
	HPS- 72	0.591	2.250	1.266	0.394	0.990	0.641	5/8-11	45	-	MAS P40T-1 type
	HPS-806U-1	0.748	1.882	1.024	0.551	0.787	-	5/8-11	75	0.236	JIS B6339 type. Coolant
	HPS-B64	0.740	1.624	0.640	0.490	0.440	0.641	5/8-11	45	0.157	Okuma type. Coolant
	HPS-D72	0.740	1.500	0.640	0.490	0.440	-	5/8-11	45	0.283	ANSI / ASME B5. 50-1985. Coolant
	HPS-G53	0.740	1.624	0.640	0.490	0.440	0.641	5/8-11	45	0.276	Mazak type. Coolant
	HPS-G60	0.740	1.624	0.640	0.490	0.440	0.641	5/8-11	45	-	Mazak / Okuma type.
	HPS-H30	0.591	2.252	1.268	0.394	0.992	-	5/8-11	45	-	Hitachi Seiki type
	HPS-O14	0.591	2.244	1.260	0.394	0.984	-	5/8-11	90	-	Mori Seiki type
CAT50	HPS- 53	0.906	3.354	1.780	0.669	1.386	1.031	1"-8	45	-	MAS P50T-1 type
	HPS- 54	0.906	3.354	1.780	0.669	1.386	1.031	1"-8	45	-	MAS P50T-1 type. Coolant
	HPS- 63	0.906	3.248	1.772	0.669	1.378	1.024	1"-8	60	-	MAS P50T-2 type
	HPS-B61	0.906	3.248	1.772	0.669	1.378	0.984	1"-8	60	0.236	Okuma type. Coolant
	HPS-D92	1.140	2.300	1.000	0.820	0.700	-	1"-8	45	0.461	ANSI / ASME B5. 50-1985. Coolant
	HPS-G43	1.140	2.303	1.000	0.820	0.700	1.031	1"-8	45	0.394	Mazak type. Coolant
	HPS-O19	0.906	3.346	1.780	0.669	1.386	-	1"-8	90	-	Mori-Seiki 90 degree angle type
	HPS-P14	0.945	2.520	1.220	0.709	0.906	-	1"-8	90	0.315	Mitsui-Seiki type. Coolant

Note

1. Other pull studs and special pull studs are available upon request.
2. Please specify dimension and machine make and model when inquiring pull studs.

Cross Reference Chart By M/C Builder

Machine Builder	BT30	BT40	CAT40	CAT50
BRIDGEPORT	HPS-17	HPS-1	HPS-D72	
BROTHER	HPS-17			
DAEWOO			HPS-72	
ENSHU	HPS-16	HPS-1 / 2	HPS-72	HPS-53
FADAL			HPS-D72	
FANUC	HPS-16			
HAAS			HPS-72	
HITACHI SEIKI	HPS-16	HPS-H28	HPS-H30	HPS-53
HOWA		HPS-1	HPS-72	
HURCO		HPS-1	HPS-D72 / D2	
JOHNFORD		HPS-1		
KIA		HPS-1 / 08	HPS-72 / 014	
KIRA	HPS-16	HPS-1 / 2	HPS-26	
KITAMURA		HPS-1	HPS-72	HPS-53
KIWA	HPS-17	HPS-1		
KURAKI		HPS-1 / 2	HPS-72	HPS-53
LEADWELL		HPS-1	HPS-72	
MAKINO		HPS-806-1	HPS-806U-1	
MATSUURA	HPS-17	HPS-806-1	HPS-806U-1	HPS-63
MAZAK		HPS-G51	HPS-G53	HPS-G43
MIGHTY		HPS-1	HPS-72	
MILLTRONICS			HPS-26	
mitsubishi		HPS-1	HPS-72	HPS-63
MITSUI SEIKI	HPS-P10	HPS-P5	HPS-P53	HPS-P11 / P14
MIYANO	HPS-17	HPS-1	HPS-72	
MORI SEIKI		HPS-O8	HPS-O14	HPS-O19
NIIGATA		HPS-2		HPS-63
NTC		HPS-1	HPS-72	
OKK	HPS-16	HPS-1 / 08	HPS-72 / 014	HPS-53 / 019
OKUMA & HOWA		HPS-1	HPS-72	HPS-63
OKUMA	HPS-17	HPS-1 / 2 / B62-1	HPS-B64 / G60	HPS-B61 / 63B
ROKU-ROKU	HPS-16	HPS-1 / 2	HPS-72	
SHIZUOKA		HPS-O8	HPS-72	HPS-O19
TAKISAWA		HPS-1	HPS-72	HPS-53
TOSHIBA	HPS-16	HPS-1	HPS-72	HPS-53
TOYODA		HPS-1		
YASDA		HPS-806-1	HPS-72	HPS-53
YCI		HPS-1	HPS-72	HPS-53
PARPAS		HPS-1/2		

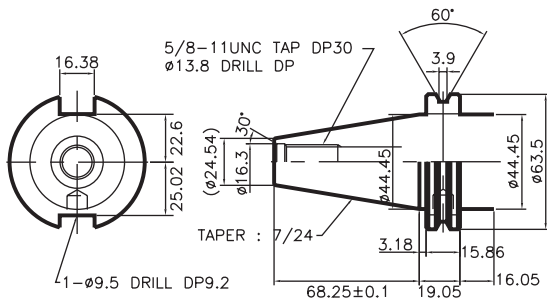
Note

1. This chart is reference only. Please always check dimensions of pull studs when inquiring.

Tool Shank Dimension

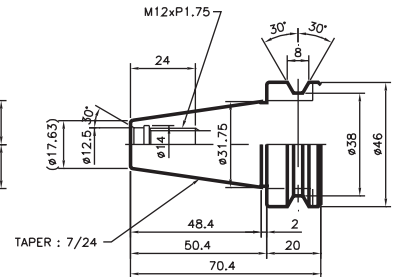
ANSI B5.50

CAT40

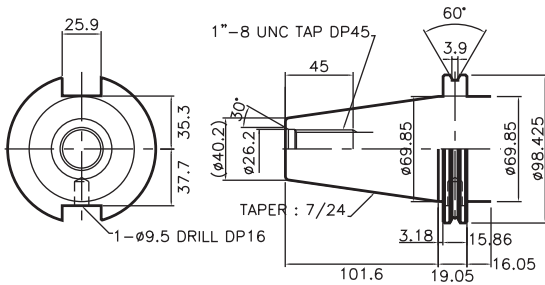


JIS B6339

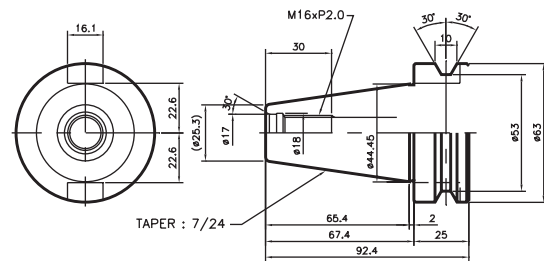
BT30



CAT50

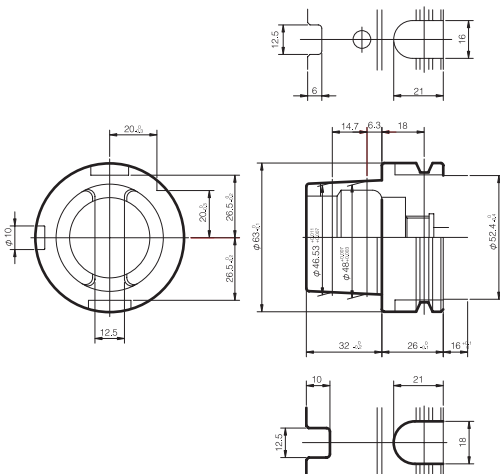


BT40



DIN 69893

HSK63 Form A



BT50

