

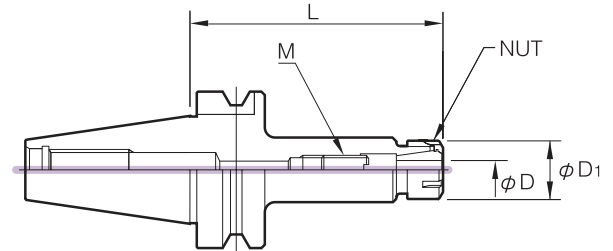


ER collet chuck

BT

Spannzangenfutter ER Type
Mandrins A Pines Type ER
Mandrini Portapinza Tipo ER

- Min. 80% taper fit
- Maximum Taper to Taper TIR 3.0 μ m
- Taper 30 dynamically balanced to G6.3 at 20,000rpm
- "SG" = dynamically balanced to G2.5 at 20,000rpm with balanced nut



Taper	Code No.	ϕD	$\phi D1$	L	M	Nut	Adjust Screw	Collet	
BT30	BT30-ER11H-060	0.5~7.0	19	60	M8	ERN11H	ASC-ER11	ER11	
	BT30-ER11H-100			100		ERN11M			
	BT30-ER11M-060			16		60			
	BT30-ER11M-100					100			
	BT30-ER16-070	0.5~10.0	32	70	7/16"-20	ERN16	ASC-ER16	ER16	
	BT30-ER16-070 SG			ERN16SG					
	BT30-ER16-100			100		ERN16			
	BT30-ER16-100 SG					ERN16SG			
	BT30-ER16M-070			22		70			ERN16M
	BT30-ER16M-100					100			
	BT30-ER20-070	0.5~13.0	35	70	9/16"-18	ERN20	ASC-ER20	ER20	
	BT30-ER20-070 SG			ERN20SG					
	BT30-ER20-100			100		ERN20			
	BT30-ER20-100 SG					ERN20SG			
	BT30-ER25-070	0.5~16.0	42	70	11/16"-16	ERN25	ASC-ER25	ER25	
	BT30-ER25-070 SG			ERN25SG					
	BT30-ER25-100			100		ERN25			
	BT30-ER25-100 SG					ERN25SG			
BT30-ER32-070	1.0~20.0	50	70	15/16"-16	ERN32	ASC-ER32	ER32		
BT30-ER32-070 SG					ERN32SG				

* Order collet & wrench separately.
* "H" = Hex nut.
* "M" = Mini nut.

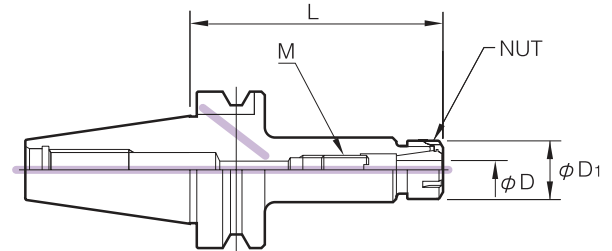


ER collet chuck

BT

Spannzangenfutter ER Type
Mandrins A Pincas Type ER
Mandrini Portapinza Tipo ER

- Min. 80% taper fit
- Maximum Taper to Taper TIR 3 μ m
- DIN AD/B standard
- Taper 50 dynamically balanced to G6.3 at 15,000rpm



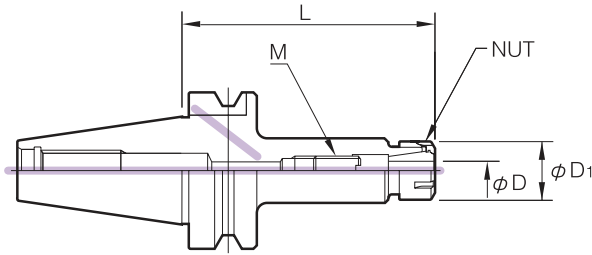
Taper	Code No.	ϕD	$\phi D1$	L	M	Nut	Adjust Screw	Collet
BT50	BT50-ER16-063	0.5~10.0	32	63	7/16"-20	ERN16	ASC-ER16	ER16
	BT50-ER16-100			100				
	BT50-ER16-160			160				
	BT50-ER20-070	0.5~13.0	35	70	9/16"-18	ERN20	ASC-ER20	ER20
	BT50-ER20-105			105				
	BT50-ER20-150			150				
	BT50-ER20-200			200				
	BT50-ER20-250			250				
	BT50-ER20-300			300				
	BT50-ER20-350			350				
	BT50-ER25-070	0.5~16.0	42	70	11/16"-16	ERN25	ASC-ER25	ER25
	BT50-ER25-100			100				
	BT50-ER25-150			150				
	BT50-ER25-200			200				
	BT50-ER25-250			250				
	BT50-ER25-300			300				
	BT50-ER25-350	350						
	BT50-ER32-070	1.0~20.0	50	70	15/16"-16	ERN32	ASC-ER32	ER32
	BT50-ER32-100			100				
	BT50-ER32-150			150				
	BT50-ER32-200			200				
	BT50-ER32-250			250				
	BT50-ER32-300			300				
	BT50-ER32-350	350						
	BT50-ER40-080	2.0~30.0	63	80	1-1/8"-16	ERN40	ASC-ER40	ER40
	BT50-ER40-100			100				
	BT50-ER40-150			150				
	BT50-ER40-200			200				
BT50-ER40-250	250							
BT50-ER40-300	300							
BT50-ER40-350	350							

* Order collet & wrench separately.



ER collet chuck

SK



- Min. 80% taper fit
- Maximum Taper to Taper TIR 3μm
- DIN AD/B standard
- Taper 40 dynamically balanced to G6.3 at 20,000rpm
- Taper 50 dynamically balanced to G6.3 at 15,000rpm
- "SG" = dynamically balanced to G2.5 at 20,000rpm with balanced nut



Taper	Code No.	φD	φD1	L	M	Nut	Adjust Screw	Collet
SK40	SK40-ER11H-060	0.5~7.0	19	60	M8	ERN11H	ASC-ER11	ER11
	SK40-ER11H-100			100				
	SK40-ER16-063	0.5~10.0	32	63	7/16"-20	ERN16	ASC-ER16	ER16
	SK40-ER16-063 SG			ERN16SG				
	SK40-ER16-100			100		ERN16		
	SK40-ER16-100 SG			ERN16SG				
	SK40-ER16-160			160		ERN16		
	SK40-ER16-160 SG			ERN16SG				
	SK40-ER25-060	0.5~16.0	42	60	11/16"-16	ERN25	ASC-ER25	ER25
	SK40-ER25-060 SG			ERN25SG				
	SK40-ER25-100			100		ERN25		
	SK40-ER25-100 SG			ERN25SG				
	SK40-ER25-160			160		ERN25		
	SK40-ER25-160 SG			ERN25SG				
	SK40-ER32-070	1.0~20.0	50	70	15/16"-16	ERN32	ASC-ER32	ER32
	SK40-ER32-070 SG			ERN32SG				
SK40-ER32-100	100			ERN32				
SK40-ER32-100 SG	ERN32SG							
SK40-ER32-160	160			ERN32				
SK40-ER32-160 SG	ERN32SG							
SK40-ER40-080	2.0~30.0	63	80	1-1/8"-16	ERN40	ASC-ER40	ER40	
SK40-ER40-080 SG			ERN40SG					
SK40-ER40-160			160		ERN40			
SK40-ER40-160 SG			ERN40SG					
SK50	SK50-ER16-063	0.5~10.0	32	63	7/16"-20	ERN16	ASC-ER16	ER16
	SK50-ER16-100			100				
	SK50-ER16-160			160				
	SK50-ER25-060	0.5~16.0	42	60	11/16"-16	ERN25	ASC-ER25	ER25
	SK50-ER25-100			100				
	SK50-ER25-160			160				
	SK50-ER32-070	1.0~20.0	50	70	15/16"-16	ERN32	ASC-ER32	ER32
	SK50-ER32-100			100				
	SK50-ER32-160			160				
	SK50-ER40-080	2.0~30.0	63	80	1-1/8"-16	ERN40	ASC-ER40	ER40
SK50-ER40-100	100							
SK50-ER40-160	160							

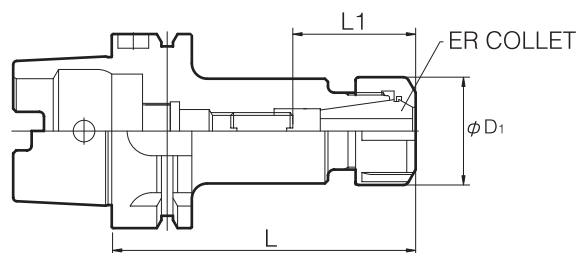
* Order collet & wrench separately.
 * "H" = Hex nut.



ER collet chuck

HSK

● HSK63A dynamically balanced to G6.3 at 20,000rpm



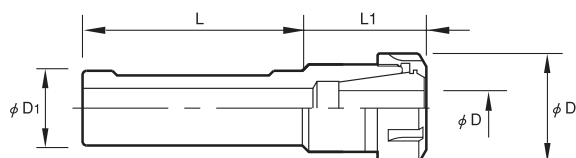
Taper	Code No.	ϕD	$\phi D1$	L	M	Nut	Adjust Screw	Collet
HSK63A	HSK 63A-ER16 -100	0.5~10.0	32	100	7/16"-20	ERN16	ASC-ER16	ER16
	HSK 63A-ER16 -160			160				
	HSK 63A-ER20-100	0.5~13.0	35	100	9/16"-18	ERN20	ASC-ER20	ER20
	HSK 63A-ER20-160			160				
	HSK 63A-ER25-100	0.5~16.0	42	100	11/16"-16	ERN25	ASC-ER25	ER25
	HSK 63A-ER25-160			160				
	HSK 63A-ER32-100	1.0~20.0	50	100	15/16"-16	ERN32	ASC-ER32	ER32
	HSK 63A-ER32-160			160				
HSK 63A-ER40-120	2.0~30.0	63	120	1-1/8"-16	ERN40	ASC-ER40	ER40	
HSK 63A-ER40-160			160					

* Order collet & wrench separately.
 * Please refer to "Parts" for coolant tubes.

ER straight shank

ER Collet Chuck for NC Lathe

● For Drill, Center Drill, Boring Bar
 ● 10 μ m runout at 4XD from chuck nose



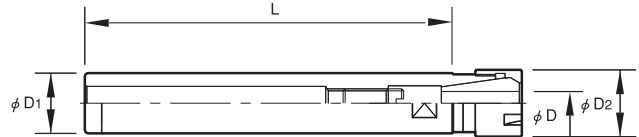
Code No.	ϕD (Range)	$\phi D1$	$\phi D2$	L	L1	Adjust Screw	Collet
SNL20-ER16	0.5~10.0	20	28	60	32	M8	ER16
SNL25-ER16	0.5~10.0	25	28	68.4	28.6	M8	ER16
SNL25-ER25	0.5~16.0	25	42	65	32	M12	ER25
SNL32-ER20	0.5~13.0	32	34	73.5	28.5	M10	ER20
SNL32-ER25	0.5~16.0	32	42	70	32	M12	ER25
SNL32-ER32	1.0~20.0	32	50	68	40	M16	ER32



ER straight shank

- For small dia. drilling and End Milling.
- Can be used with MC Milling chuck.

Slim type ER Collet Chuck with straight shank



Code No.	φD	φD1	φD2	L	Collet	
S12-ER11H-140	0.5~7.0	12	19	140	ER11	
S12-ER11M-140			16	140		
S16-ER11H-140	0.5~7.0	16	19	140	ER11	
S16-ER11M-140			16	140		
S16-ER16-060	0.5~10.0	20	32	60	ER16	
S20-ER16-050				50		
S20-ER16-100				100		
S20-ER16-140				140		
S20-ER16M-140				22		140
S20-ER20-063	0.5~13.0	25	35	63	ER20	
S25-ER20-140				140		
S25-ER25-050	0.5~16.0	25	50	50	ER25	
S25-ER32-050	1.0~20.0			50	50	ER32
S25-ER40-050	2.0~30.0			63	50	ER40
S32-ER32-060	1.0~20.0	32	50	60	ER32	
S32-ER32-140				140		

* Spanner is available as an option.
 * "H" = Hex nut.
 * "M" = Mini nut.

Accessories

Parts

ER	Nut	Nut description	Adjust screw	Wrench	Wrench type
11	ERN11H	ER11Hex nut	ASC-ER11	ERW-11HEX	Hex type
	ERN11M	ER11 Mini nut		ERW-11M	Mini E type
16	ERN16	ER16 nut E type	ASC-ER16	ERW-16E	E type
	ERN16H	ER16 Hex nut		ERW-16HEX	Hex type
	ERN16M	ER16 Mini nut		ERW-16M	Mini E type
20	ERN20	ER20 nut E type	ASC-ER20	ERW-20E	E type
25	ERN25	ER25 nut E type	ASC-ER25	ERW-25E	E type
32	ERN32	ER32 nut E type	ASC-ER32	ERW-32E	E type
40	ERN40	ER40 nut E type	ASC-ER40	ERW-40E	E type

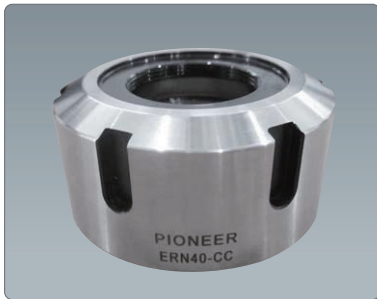


ER Coolant nut with SXC coolant cap

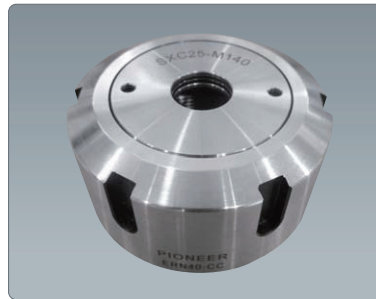
Front threaded seal for air, coolant or keeping chips & swarf from entering the front of the collet.

Features

- O-ring seal for pressure up to 10.3 Mpa
- Prevent chips, dust & swarf from entering holders
- Jet Blast for non-coolant cutting tools available upon request



ER coolant nut



ER coolant nut w / SXC coolant cap

Code No.	description	SXC coolant cap to use
ERN11-CC	ER11 Hex coolant nut	SXC06-ID
ERN16-CC	ER16 Hex coolant nut	SXC10-ID
ERN20-CC	ER20 Hex coolant nut	SXC16-ID
ERN25-CC	ER25 E type coolant nut	SXC16-ID
ERN32-CC	ER32 E type coolant nut	SXC25-ID
ERN40-CC	ER40 E type coolant nut	SXC25-ID

*Please refer to "how to assemble" instruction and the chart for SXC coolant caps on SX super chuck page.



ER collet

ER precision collet.

● DIN6499 Form B.



Range(mm)	ER08	ER11
0.5~1.0	ER08-M010 *	ER11-M010
1.0~1.5	ER08-M015 *	ER11-M015
1.5~2.0	ER08-M020 *	ER11-M020
2.0~2.5	ER08-M025 *	ER11-M025
2.5~3.0	ER08-M030 *	ER11-M030
3.0~3.5	ER08-M035 *	ER11-M035
3.5~4.0	ER08-M040	ER11-M040
4.0~4.5	ER08-M045	ER11-M045
4.5~5.0	ER08-M050	ER11-M050
5.0~5.5		ER11-M055
5.5~6.0		ER11-M060
6.0~6.5		ER11-M065
6.5~7.0		ER11-M070

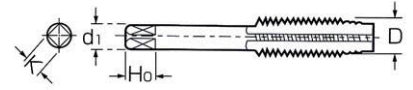
* Not regular stock items.

Range(mm)	ER16	ER20	ER25	ER32	ER40
0.5~1.0	ER16-M010	ER20-M010 *	ER25-M010 *		
1.0~2.0	ER16-M020	ER20-M020	ER25-M020	ER32-M020 *	
2.0~3.0	ER16-M030	ER20-M030	ER25-M030	ER32-M030	
3.0~4.0	ER16-M040	ER20-M040	ER25-M040	ER32-M040	ER40-M040
4.0~5.0	ER16-M050	ER20-M050	ER25-M050	ER32-M050	ER40-M050
5.0~6.0	ER16-M060	ER20-M060	ER25-M060	ER32-M060	ER40-M060
6.0~7.0	ER16-M070	ER20-M070	ER25-M070	ER32-M070	ER40-M070
7.0~8.0	ER16-M080	ER20-M080	ER25-M080	ER32-M080	ER40-M080
8.0~9.0	ER16-M090	ER20-M090	ER25-M090	ER32-M090	ER40-M090
9.0~10.0	ER16-M100	ER20-M100	ER25-M100	ER32-M100	ER40-M100
10.0~11.0		ER20-M110	ER25-M110	ER32-M110	ER40-M110
11.0~12.0		ER20-M120	ER25-M120	ER32-M120	ER40-M120
12.0~13.0		ER20-M130	ER25-M130	ER32-M130	ER40-M130
13.0~14.0			ER25-M140	ER32-M140	ER40-M140
14.0~15.0			ER25-M150	ER32-M150	ER40-M150
15.0~16.0			ER25-M160	ER32-M160	ER40-M160
16.0~17.0				ER32-M170	ER40-M170
17.0~18.0				ER32-M180	ER40-M180
18.0~19.0				ER32-M190	ER40-M190
19.0~20.0				ER32-M200	ER40-M200
20.0~21.0					ER40-M210
21.0~22.0					ER40-M220
22.0~23.0					ER40-M230
23.0~24.0					ER40-M240
24.0~25.0					ER40-M250
25.0~26.0					ER40-M260



ER rigid tapping collet

● JIS, ISO & DIN standard available.



JIS			ϕd_1	K(sq)	TER16	TER20	TER25	TER32	TER40
M6	U 1/4		6.0	4.5	TER16J-060	TER20J-060	TER25J-060	TER32J-060	TER40J-060
M7,M8			6.2	5.0	TER16J-062	TER20J-062	TER25J-062	TER32J-062	TER40J-062
M11	U 7/16	P1/8, P1/16	8.0	6.0	TER16J-080	TER20J-080	TER25J-080	TER32J-080	TER40J-080
M12			8.5	6.5		TER20J-085	TER25J-085	TER32J-085	TER40J-085
M14,M15	U 9/16		10.5	8.0		TER20J-105	TER25J-105	TER32J-105	TER40J-105
M17			13.0	10.0			TER25J-130	TER32J-130	TER40J-130
M20			15.0	12.0			TER25J-150	TER32J-150	TER40J-150
M22	U 7/8		17.0	13.0				TER32J-170	TER40J-170
M24,M25	P 5/8		19.0	15.0				TER32J-190	TER40J-190
M26,M27	U 1		20.0	15.0				TER32J-200	TER40J-200
M28			21.0	17.0					TER40J-210

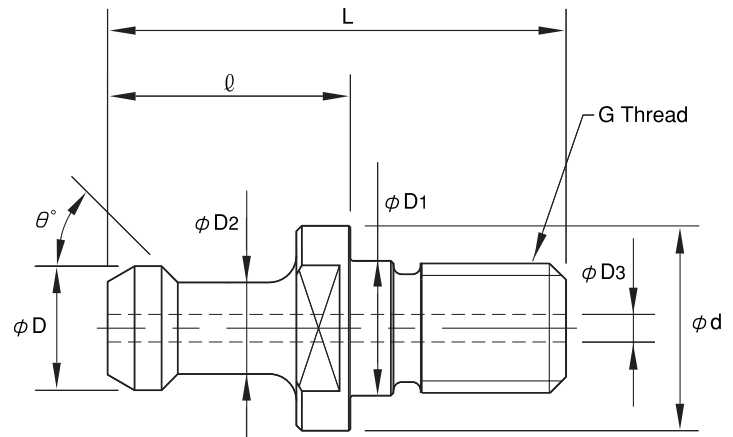
DIN 374 /376	DIN 352 /2181	DIN371	ϕd_1	K(sq)	TER16	TER20	TER25	TER32	TER40
	M1-M1.8	M1-M1.8	2.5	2.1	TER16D-025	TER20D-025	TER25D-025		
	M2-M2.5	M2-M2.5	2.8	2.1	TER16D-028	TER20D-028	TER25D-028		
M5	M3	M3	3.5	2.7	TER16D-035	TER20D-035	TER25D-035	TER32D-035	TER40D-035
M5.5	M3.5	M3.5	4.0	3.0	TER16D-040	TER20D-040	TER25D-040	TER32D-040	TER40D-040
M6	M4	M4	4.5	3.4	TER16D-045	TER20D-045	TER25D-045	TER32D-045	TER40D-045
M7			5.5	4.3	TER16D-055	TER20D-055	TER25D-055	TER32D-055	TER40D-055
M8	M4.5-M8	M4.5-M6	6.0	4.9	TER16D-060	TER20D-060	TER25D-060	TER32D-060	TER40D-060
M9,M10	M9,M10	M7	7.0	5.5	TER16D-070	TER20D-070	TER25D-070	TER32D-070	TER40D-070
M11	M11	M8	8.0	6.2	TER16D-080	TER20D-080	TER25D-080	TER32D-080	TER40D-080
M12	M12	M9	9.0	7.0	TER16D-090	TER20D-090	TER25D-090	TER32D-090	TER40D-090
		M10	10.0	8.0	TER16D-100	TER20D-100	TER25D-100	TER32D-100	TER40D-100
M14	M14		11.0	9.0		TER20D-110	TER25D-110	TER32D-110	TER40D-110
M16	M16		12.0	9.0		TER20D-120	TER25D-120	TER32D-120	TER40D-120
M18	M18		14.0	11.0			TER25D-140	TER32D-140	TER40D-140
M20	M20		16.0	12.0			TER25D-160	TER32D-160	TER40D-160
M22-M24	M22-M24		18.0	14.5				TER32D-180	TER40D-180
M27	M27		20.0	16.0				TER32D-200	TER40D-200
M30	M30		22.0	18.0					TER40D-220
M33	M33		25.0	20.0					TER40D-250
M36	M36		28.0	22.0					
M39-M42	M39-M42		32.0	24.0					

ISO			ϕd_1	K(sq)	TER16	TER20	TER25	TER32	TER40
M3	U No.4	U No.5	3.15	2.50	TER16S-031	TER20S-031	TER25S-031	TER32S-031	TER40S-031
M4	U No.12		4.00	3.15	TER16S-040	TER20S-040	TER25S-040	TER32S-040	TER40S-040
M4.5	U No.8		4.50	3.55	TER16S-045	TER20S-045	TER25S-045	TER32S-045	TER40S-045
M6	U 1/4		6.30	5.00	TER16S-063	TER20S-063	TER25S-063	TER32S-063	TER40S-063
M7	U 3/8		7.10	5.60	TER16S-071	TER20S-071	TER25S-071	TER32S-071	TER40S-071
M8	U 5/16	P 1/8	8.00	6.30	TER16S-080	TER20S-080	TER25S-080	TER32S-080	TER40S-080
M12	U 1/2		9.00	7.10	TER16S-090	TER20S-090	TER25S-090	TER32S-090	TER40S-090
M14	U 9/16		11.20	9.00		TER20S-112	TER25S-112	TER32S-112	TER40S-112
M16	U 5/8	P 3/8	12.50	10.00			TER25S-125	TER32S-125	TER40S-125
M18-M20	U 3/4		14.00	11.20			TER25S-140	TER32S-140	TER40S-140
M22	U 7/8	P 1/2	16.00	12.50			TER25S-160	TER32S-160	TER40S-160
M24	U 1	P 6/8	18.00	14.00					TER40S-180



Pull Studs

Anzugsbolzen
Tirant de Rappel
Codolo di Aggancio



Spindle	Order No.	ϕD	L	l	D2	D1	G	θ°	D3	Note
BT30	HPS-16	11	43	23	7	12.5	M12	45	-	MAS P30T-1
	HPS-16C	11	43	23	7	12.5	M12	45	2.5	HPS-16, Coolant
	HPS-17	11	43	23	7	12.5	M12	60	-	MAS P30T-2
	HPS-17C	11	43	23	7	12.5	M12	60	2.5	HPS-17, Coolant
BT40	HPS- 1	15	60	35	10	17	M16	45	-	MAS P40T-1
	HPS- 2	15	60	35	10	17	M16	60	-	MAS P40T-2
	HPS-806-1	19	54	29	14	17	M16	75	6	JIS B6339. Coolant
	HPS-G51	18.796	44.106	19.106	12.446	17	M16	45	7	Mazak type. Coolant
	HPS-O8	15	60	35	10	17	M16	90	-	90 degree angle type
	HPS-301	15	60	35	11	17	M16	60	-	
	HPS-302	19	54	26	14	17	M16	75	-	DIN69872 without coolant
	HPS-366E-1	19	54	29	14	17	M16	75	7	w/ P-9, S-15 O-ring
	HPS-805	19	54	29	14	17	M16	75	-	JIS B6339-89
	HPS-813-1	19	54	29	14	17	M16	75	6	JIS B6339-89
HPS-B62-1	19	54	29	14	17	M16	75	4	w/ S15 O-ring	
BT50	HPS- 5	23	85	45	17	25	M24	45	-	MAS P50T-1
	HPS- 6	23	85	45	17	25	M24	60	-	MAS P50T-2
	HPS-G41	28.956	65.2	25.2	20.828	25	M24	45	10	
SK30	HPS-122	13	44	24	9	13	M12	75	-	DIN69872 SK30 FORM A
SK40	HPS-302	19	54	26	14	17	M16	75	-	DIN69872 SK40 FORM A
	HPS-309	19	54	26	14	17	M16	75	7	DIN69872 SK40 FORM A Coolant
	HPS-309C	19	54	26	14	17	M16	75	7	DIN69872 SK40 FORM B
	HPS-A1	19	54	26	14	17	M16	75	7	ISO-7388/2-1984-A
	HPS-A4	18.95	44.5	16.4	12.95	17	M16	45	7.35	ISO-7388/2-1984-B
SK50	HPS-581	28	74	34	21	25	M24	75	-	DIN69872 SK50 FORM A
	HPS-512	28	74	34	21	25	M24	75	11.5	DIN69872 SK50 FORM A Coolant
	HPS-512B	28	74	34	21	25	M24	75	11.5	DIN69872 SK50 FORM B
	HPS-A3	28	74	34	21	25	M24	75	11.5	ISO-7388/2-1984-A
	HPS-A6	29.1	65.5	25.55	19.6	25	M24	45	11.55	ISO-7388/2-1984-B

*Other Pull Stud are available upon request.