



SPINDLE TOOLINGS

HSK (DIN 69893) HOLDERS FOR CNC MACHINES



KTA Spindle Toolings

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ACCESSORIES

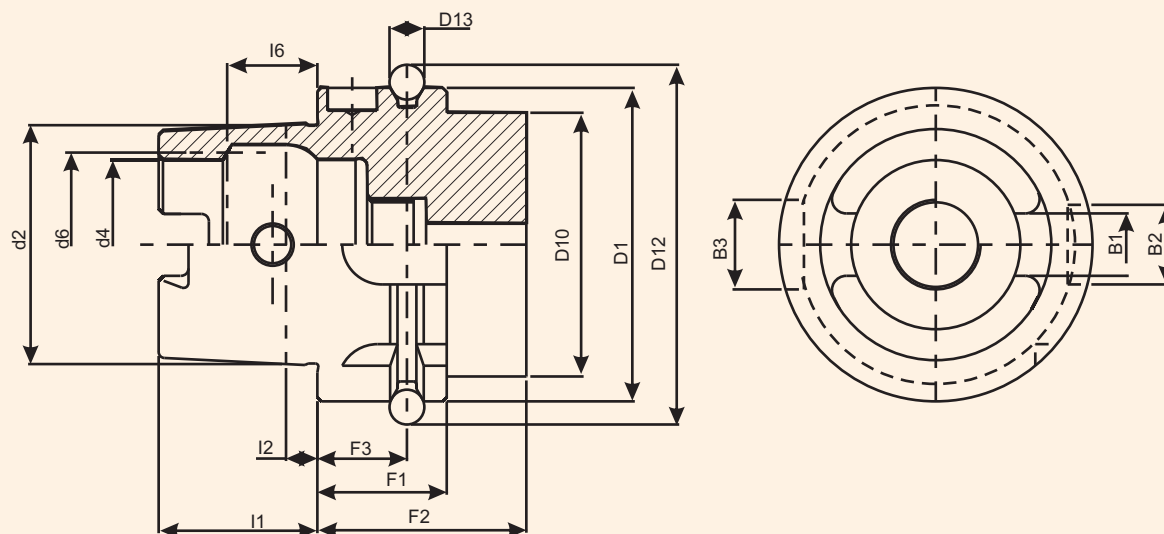
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DEALERS

The information in this catalog is believed to be correct . KTA Spindle Toolings, however, assumes no responsibility for any errors , inaccuracies or omissions that may appear in this catalog.

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HSK TOOL HOLDERS : (DIN - 69893)



	HSK-A 50	HSK-A 63	HSK-A 100
b1	10,54	12,54	20.02
b2	12	16	20
b3	14	18	22
d1	50	63	100
d2	38	48	75
d4	26	34	53
d6	29	37	58
d10	42	53	88
d12	59,3	72,3	109,75
d13	7	7	7
f1	26	26	29
f2	42	42	45
f3	18	18	20
l1	25	32	50
l2	5	6,3	10
l6	14,13	18.13	28.56

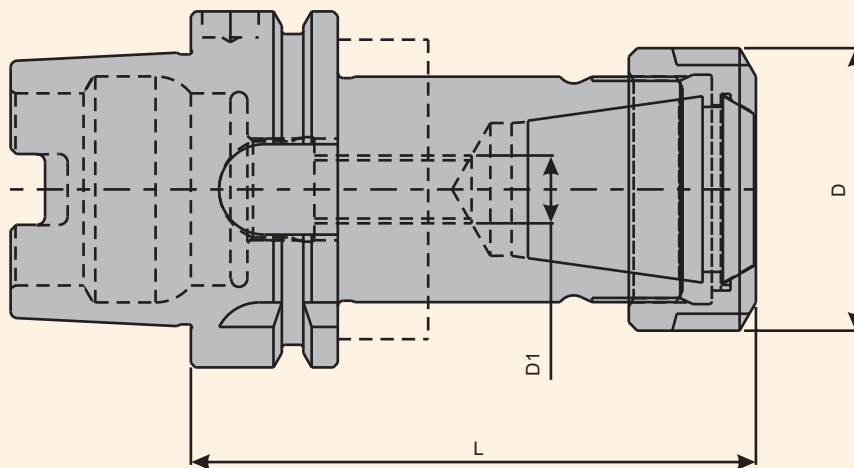
All HSK Tool holders are manufactured according to DIN 69893.
Balanced to G 6.3 - 12,000 RPM.

FORM A

Used on machining centres, milling machines turning machines, special machines with automatic tool change.

- ♦central, axial coolant supply through coolant tube.
 - ♦Torque transmission via two key slots at end of taper.
 - ♦Two slots on collar for tool magazine, location edge.
- Hole for data carrier DIN 69873 in collar.

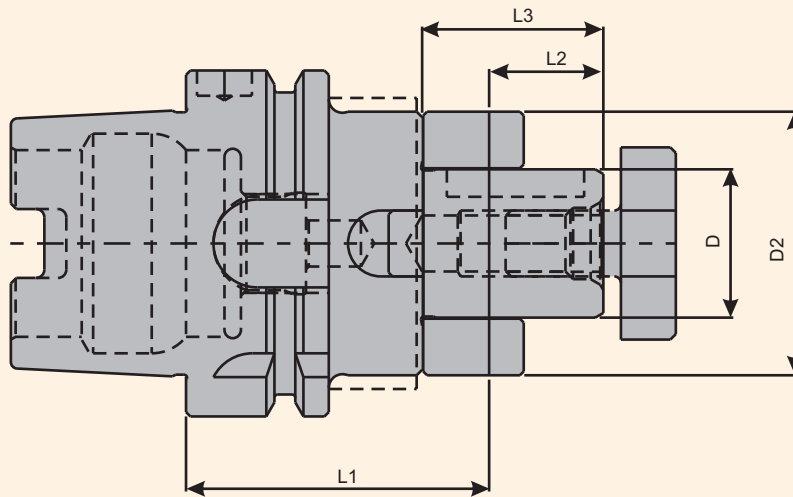
COLLET CHUCK FOR COLLETS ER : DIN 6499



HSK ER COLLET CHUCK	CLAMPING CAPACITY	D	L	D1
HSK-A 50 ER25095	1.0 - 16	42.00	95m	M18x1
HSK-A 50 ER32100	2.0 - 20	50.00	100	M22x1.5
HSK-A 50 ER32160	2.0 - 20	50.00	160	M22x1.5
HSK-A 63 ER16100	0.5 - 10	28.00	100	M10x1
HSK-A 63 ER20100	1.0 - 13	34.00	100	M10x1
HSK-A 63 ER25090	1.0 - 16	42.00	90	M18x1
HSK-A 63 ER32100	2.0 - 20	50.00	100	M22x1.5
HSK-A 63 ER32160	2.0 - 20	50.00	160	M22x1.5
HSK-A 63 ER40120	3.0 - 26	63.00	120	M30x1.5
HSK-A 63 ER40160	3.0 - 26	63.00	160	M30x1.5
HSK-A 100 ER25100	1.0 - 16	42.00	100	M18x1
HSK-A 100 ER25160	1.0 - 16	42.00	160	M18x1
HSK-A 100 ER32100	2.0 - 20	50.00	100	M22x1.5
HSK-A 100 ER32160	2.0 - 20	50.00	160	M22x1.5
HSK-A 100 ER40120	3.0 - 26	63.00	120	M30x1.5
HSK-A 100 ER40160	3.0 - 26	63.00	160	M30x1.5
HSK-A 50 ER16080M	0.5 - 10	22.00	80	M10x1
HSK-A 50 ER16150M	0.5 - 10	22.00	150	M10x1
HSK-A 50 ER25150M	1.0 - 16	35.00	150	M18x1
HSK-A 63 ER1690M	0.5 - 10	22.00	90	M10x1
HSK-A 63 ER16160M	0.5 - 10	22.00	160	M10x1
HSK-A 63 ER25160M	1.0 - 16	35.00	160	M18x1

Ordering Example :-
KTA HSK-A 63 ER16100 / Qty.- 2 Nos.

COMBI SHELL MILL ADAPTOR DIN 6538 (CSMA)

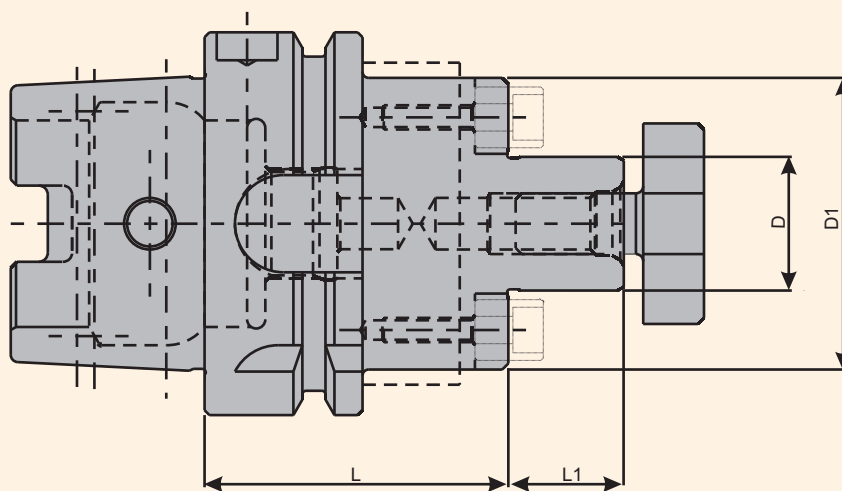
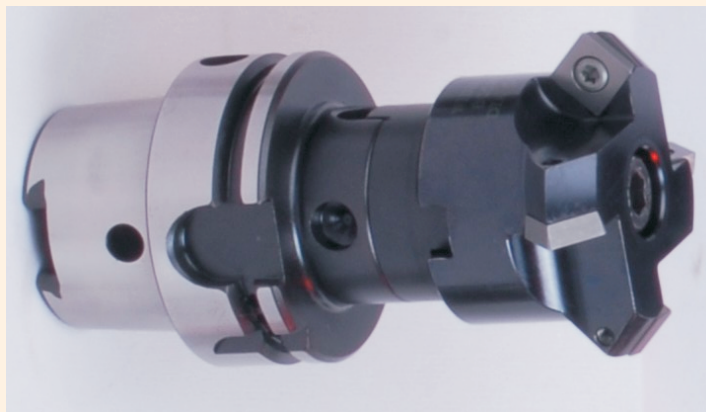


HSK CSMA	D	L1	L2	L3	D2
HSK-A 50 CSMA16050	16	50	17	27	32
HSK-A 50 CSMA22055	22	55	19	31	40
HSK-A 50 CSMA27065	27	65	21	33	48
HSK-A 50 CSMA32065	32	65	24	38	58
HSK-A 63 CSMA16060	16	60	17	27	32
HSK-A 63 CSMA22060	22	60	19	31	40
HSK-A 63 CSMA27060	27	60	21	33	48
HSK-A 63 CSMA32065	32	65	24	38	58
HSK-A 63 CSMA40070	40	70	27	41	70
HSK-A 100 CSMA16055	16	55	17	27	32
HSK-A 100 CSMA22065	22	65	19	31	40
HSK-A 100 CSMA27065	27	65	21	33	48
HSK-A 100 CSMA32070	32	70	24	38	58
HSK-A 100 CSMA40070	40	70	27	41	70

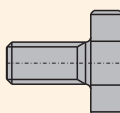
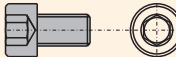
Driver Ring	Screw	Key	D	Driver Ring	Screw	Key W X L
			16	DR16 X 10	SCR16 X M8	KEY 4 X 20
			22	DR22 X 12	SCR22 X M10	KEY 6 X 25
			27	DR27 X 12	SCR27 X M12	KEY 7 X 25
			32	DR32 X 14	SCR32 X M16	KEY 8 X 30

Ordering Example :-
KTA HSK-A 63 CSMA16060 / Qty.- 2 Nos.

FACE MILL HOLDERS DIN 3937 (FMH)

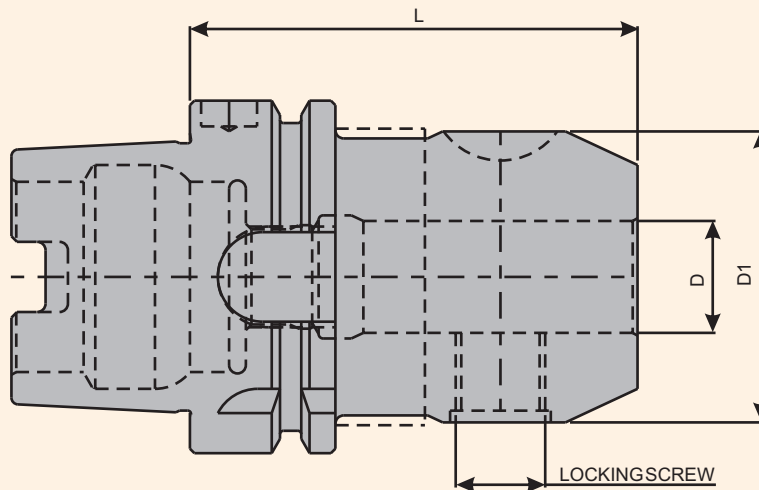


HSK FMH	D	L	D1	L1
HSK-A 50 FMH16045	16	45	38	17
HSK-A 50 FMH22055	22	55	48	19
HSK-A 50 FMH27055	27	55	58	21
HSK-A 50 FMH32060	32	60	78	24
HSK-A 63 FMH16045	16	45	38	17
HSK-A 63 FMH160145	16	145	38	17
HSK-A 63 FMH22050	22	50	48	19
HSK-A 63 FMH220150	22	150	48	19
HSK-A 63 FMH27055	27	55	58	21
HSK-A 63 FMH270155	27	155	58	21
HSK-A 63 FMH32060	32	60	78	24
HSK-A 63 FMH320155	32	155	78	24
HSK-A 63 FMH40065	40	65	82	27
HSK-A 63 FMH400160	40	160	82	27
HSK-A 100 FMH16055	16	55	38	17
HSK-A 100 FMH160155	16	155	38	17
HSK-A 100 FMH22055	22	55	48	19
HSK-A 100 FMH220155	22	155	48	19
HSK-A 100 FMH27055	27	55	58	21
HSK-A 100 FMH270155	27	155	58	21
HSK-A 100 FMH32060	32	60	78	24
HSK-A 100 FMH320155	32	155	78	24
HSK-A 100 FMH40065	40	65	82	27
HSK-A 100 FMH400160	40	160	82	27

Screw	Tenon	Allen Cap Screw	D	Screw	Tenon	Allen Cap Screw
			16	SCR16 X M8	8	M4
			22	SCR22 X M10	10	M5
			27	SCR27 X M12	12	M5
			32	SCR32 X M16	14	M6
			40	SCR40 X M20	16	M6

Ordering Example :-
KTA HSK-A 63 FMH16045 / Qty.- 2 Nos.

WELDON DIN 1835 (FORM B) (WN)



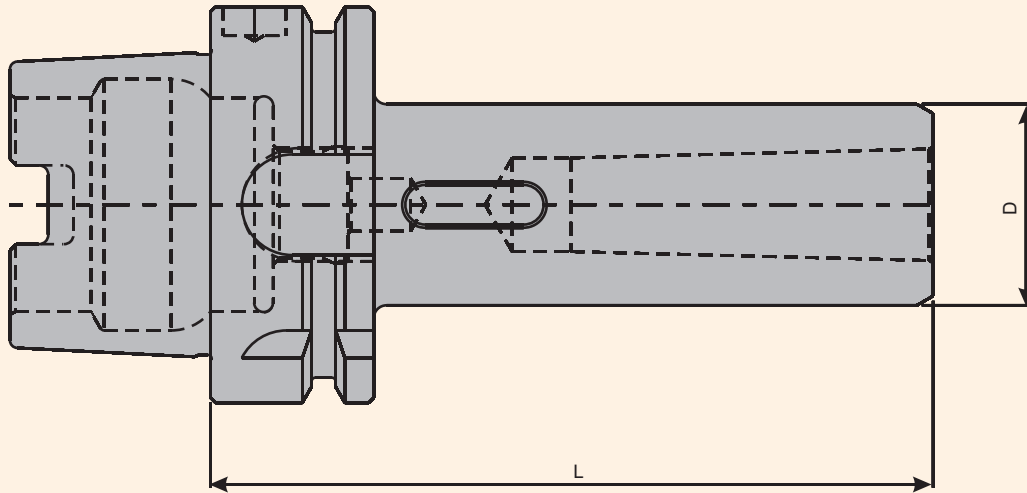
HSK WN	D	L	D1	LOCKING SCREW
HSK-A 50 WN06065	06	65	25	M6
HSK-A 50 WN060100	06	100	25	M6
HSK-A 50 WN060160	06	160	25	M6
HSK-A 50 WN08065	08	65	28	M8
HSK-A 50 WN080100	08	100	28	M8
HSK-A 50 WN080160	08	160	28	M8
HSK-A 50 WN10065	10	65	35	M10
HSK-A 50 WN100100	10	100	35	M10
HSK-A 50 WN100160	10	160	35	M10
HSK-A 50 WN12080	12	80	42	M12
HSK-A 50 WN120100	12	100	42	M12
HSK-A 50 WN120160	12	160	42	M12
HSK-A 50 WN14080	14	80	44	M12
HSK-A 50 WN140100	14	100	44	M12
HSK-A 50 WN140160	14	160	44	M12
HSK-A 50 WN16080	16	80	48	M14
HSK-A 50 WN160100	16	100	48	M14
HSK-A 50 WN160160	16	160	48	M14
HSK-A 50 WN18080	18	80	50	M14
HSK-A 50 WN20080	20	80	52	M16
HSK-A 63 WN25105	25	105	65	M18x2 / 2
HSK-A 63 WN32120	32	120	72	M20x2 / 2
HSK-A 63 WN06065	06	65	25	M6
HSK-A 63 WN060100	06	100	25	M6
HSK-A 63 WN060160	06	160	25	M6
HSK-A 63 WN08065	08	65	28	M8
HSK-A 63 WN080100	08	100	28	M8
HSK-A 63 WN080160	08	160	28	M8
HSK-A 63 WN10065	10	65	35	M10

WELDON DIN 1835 (FORM B)(WN)

HSK WN	D	L	D1	LOCKING SCREW
HSK-A 63 WN100100	10	100	35	M10
HSK-A 63 WN100160	10	160	35	M10
HSK-A 63 WN12080	12	80	42	M12
HSK-A 63 WN120100	12	100	42	M12
HSK-A 63 WN120160	12	160	42	M12
HSK-A 63 WN14080	14	80	44	M12
HSK-A 63 WN140100	14	100	44	M12
HSK-A 63 WN140160	14	160	44	M12
HSK-A 63 WN16080	16	80	48	M14
HSK-A 63 WN160100	16	100	48	M14
HSK-A 63 WN160160	16	160	48	M14
HSK-A 63 WN18080	18	80	50	M14
HSK-A 63 WN180100	18	100	50	M14
HSK-A 63 WN180160	18	160	50	M14
HSK-A 63 WN20080	20	80	52	M16
HSK-A 63 WN200100	20	100	52	M16
HSK-A 63 WN200160	20	160	52	M16
HSK-A 63 WN25110	25	110	65	M18x2 / 2
HSK-A 63 WN32110	32	110	72	M20x2 / 2
HSK-A 63 WN40125	40	125	80	M20x2 / 2
HSK-A 100 WN06090	06	90	25	M6
HSK-A 100 WN060160	06	160	25	M6
HSK-A 100 WN08090	08	90	28	M8
HSK-A 100 WN080160	08	160	28	M8
HSK-A 100 WN10090	10	90	35	M10
HSK-A 100 WN100160	10	160	35	M10
HSK-A 100 WN12100	12	100	42	M12
HSK-A 100 WN12160	12	160	42	M12
HSK-A 100 WN14100	14	100	44	M12
HSK-A 100 WN14160	14	160	44	M12
HSK-A 100 WN16100	16	100	48	M14
HSK-A 100 WN16160	16	160	48	M14
HSK-A 100 WN18100	18	100	50	M14
HSK-A 100 WN18160	18	160	50	M14
HSK-A 100 WN20100	20	100	52	M16
HSK-A 100 WN20160	20	160	52	M16
HSK-A 100 WN25100	25	100	65	M18x2 / 2
HSK-A 100 WN25160	25	160	65	M18x2 / 2
HSK-A 100 WN32120	32	120	72	M20x2 / 2
HSK-A 100 WN40120	40	120	80	M20x2 / 2
HSK-A 100 WN50130	50	130	100	M24x2 / 2

Ordering Example :-
KTA HSK-A 63 WN06065 / Qty.- 2 Nos.

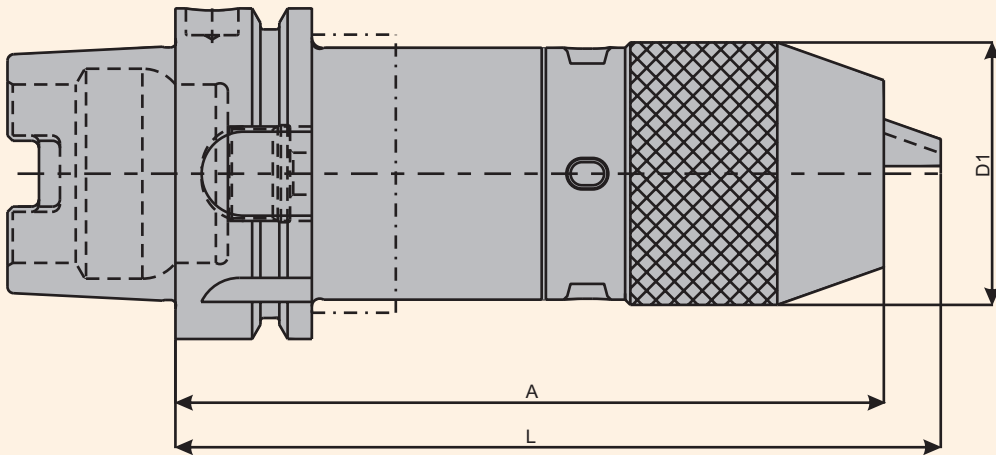
MORSE TAPER ADAPTOR DIN 228-2 FORM D (MTA)



HSK MORSE TAPER	D	L
HSK-A 50 MTA1100	25	100
HSK-A 50 MTA2115	32	115
HSK-A 50 MTA3135	40	135
HSK-A 63 MTA1100	25	100
HSK-A 63 MTA2115	32	115
HSK-A 63 MTA3135	40	135
HSK-A 63 MTA4160	48	160
HSK-A 100 MTA2120	32	120
HSK-A 100 MTA3150	40	150
HSK-A 100 MTA4170	48	170
HSK-A 100 MTA5205	63	205

Ordering Example :-
KTA HSK-A 63 MTA1100 / Qty.- 2 Nos.

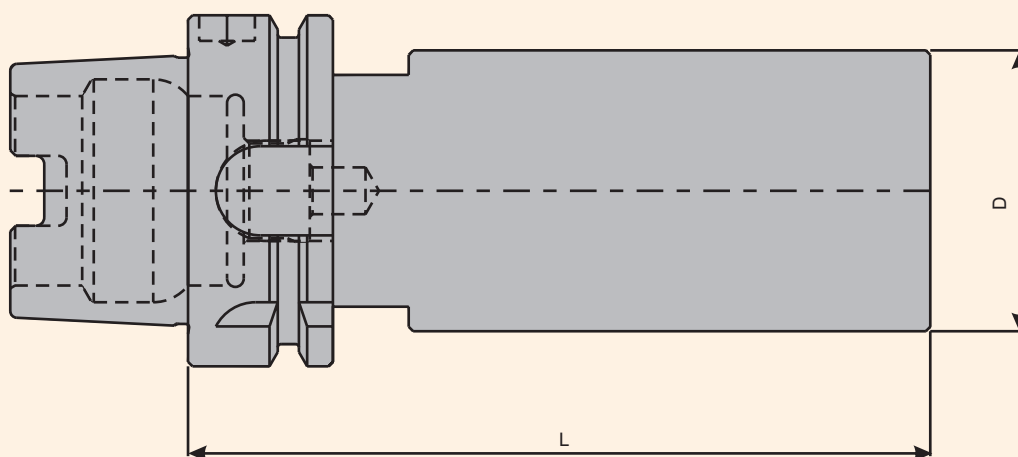
NC DRILL CHUCK (NCDC)



HSK TYPE	CAPACITY	D1	A	L
HSK-A 50 DC113	0.8 TO 13.0	52.0	130	141
HSK-A 63 DC113	0.8 TO 13.0	52.0	135	146
HSK-A 100 DC113	0.8 TO 13.0	52.0	135	146

Ordering Example :-
KTA HSK-A 50 DC113 / Qty.- 2 Nos.

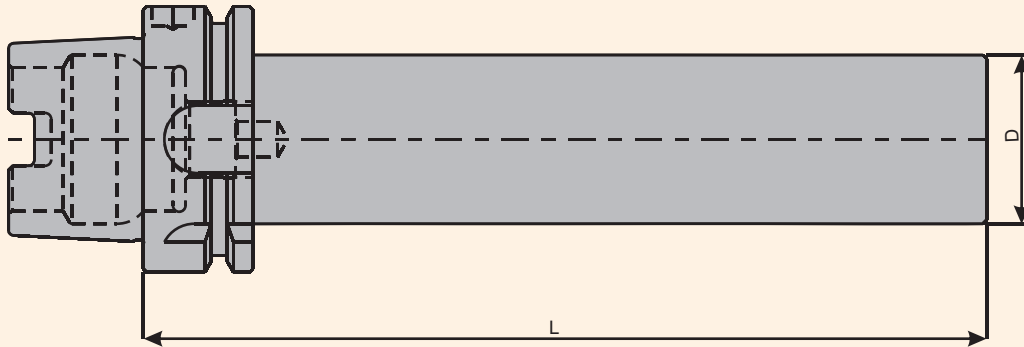
BORING BAR BLANK



DESCRIPTION	D	L
HSK-A 50	52.00	200.00
HSK-A 50	63.00	200.00
HSK-A 63	63.00	160.00
HSK-A 63	80.00	250.00
HSK-A 100	97.00	250.00
HSK-A 100	97.00	300.00

Ordering Example :-
KTA HSK-A 63 63160 / Qty.- 2 Nos.

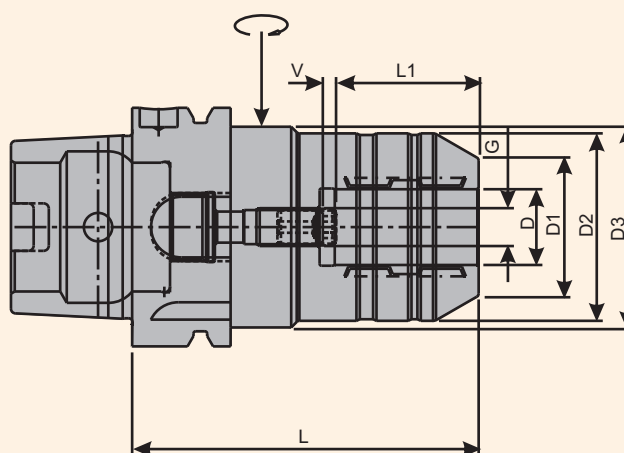
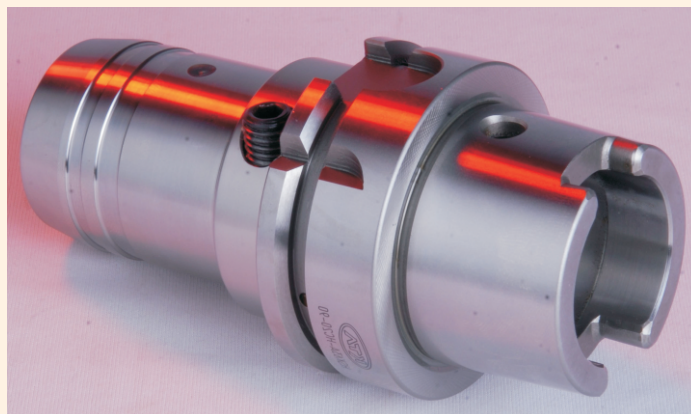
MASTER MANDRELL



HSK	D	L
HSK-A 50	40	300
HSK-A 63	40	300
HSK-A 100	50	300

Ordering Example :-
KTA HSK-A 63 40300 / Qty.- 2 Nos.

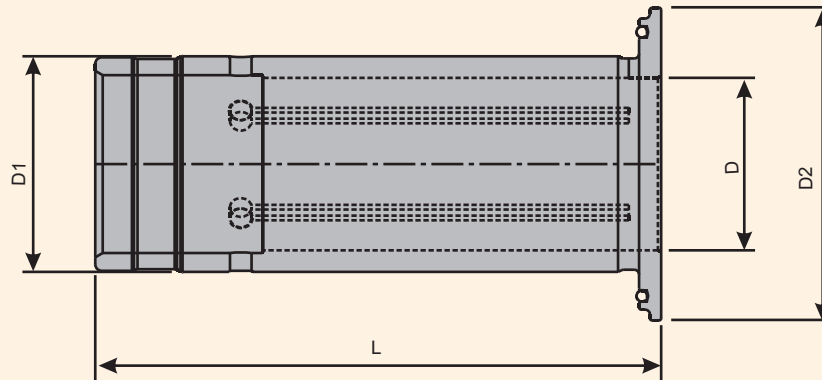
HYDRAULIC CHUCK



CODE NO.	D	D1	D2	D3	L	L1	V	G
HSK-A 50 HC20-90.0	20	38	42	50	90	42.0 Min	10	M16X1
HSK-A 63 HC20-91.5	20	38	42	50	91.5	42.0 Min	10	M16X1
HSK-A 63 HC20-105	20	38	42	50	105	420.0 Min	10	M16X1
HSK-A 100 HC20-105	20	38	42	50	105	420.0 Min	10	M16X1

Ordering Example :-
KTA HSK-A 63 HC20-91.5 / Qty.- 2 Nos.

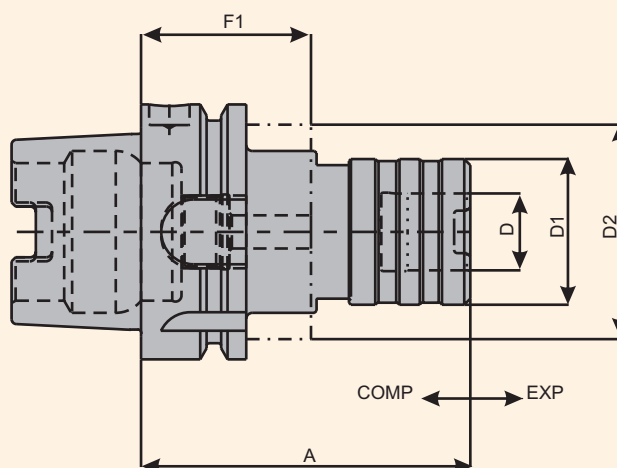
REDUCTION SLEEVE



ARTICAL NO.	D	D1	D2	LOCKING SCREW
RS20X04	4	20	29	52.5
RS20X05	5	20	29	52.5
RS20X06	6	20	29	52.5
RS20X08	8	20	29	52.5
RS20X10	10	20	29	52.5
RS20X12	12	20	29	52.5
RS20X14	14	20	29	52.5
RS20X15	15	20	29	52.5
RS20X16	16	20	29	52.5
RS32X04	4	32	39	63.5
RS32X05	5	32	39	63.5
RS32X06	6	32	39	63.5
RS32X08	8	32	39	63.5
RS32X10	10	32	39	63.5
RS32X12	12	32	39	63.5
RS32X14	14	32	39	63.5
RS32X15	15	32	39	63.5
RS32X16	16	32	39	63.5
RS32X18	18	32	39	63.5
RS32X20	20	32	39	63.5
RS32X22	22	32	39	63.5
RS32X25	25	32	39	63.5

Ordering Example :-
KTA RS32X25 / Qty.- 2 Nos.

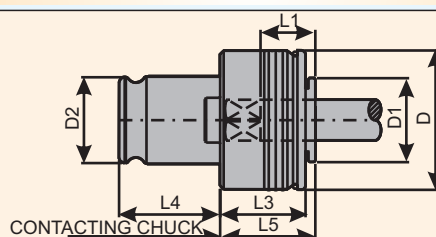
KWFLK : TAPPING CHUCK ACTING ON COMPRESSION & EXPANSION



HSK TYPE	CAPACITY	SUITABLE ADAPTOR	D	D1	D2	A	F1	EXP / COMP
HSK A50 WFLK1	M3 TO M12	KWE1 / KWES1B	19	36	42	76	42	7.5MM / 7.5MM
HSK A50 WFLK2	M5 TO M20	KWE2 / KWES2B	31	53	42	123	42	12.5MM / 12.5MM
HSK A63 WFLK1	M3 TO M12	KWE1 / KWES1B	19	36	53	81	42	7.5MM / 7.5MM
HSK A63 WFLK2	M5 TO M20	KWE2 / KWES2B	31	53	53	119	42	12.5MM / 12.5MM
HSK A63 WFLK3	M14 TO M33	KWE3 / KWES3B	48	78	53	176	42	20.0MM / 20.0MM
HSK A100 WFLK1	M3 TO M12	KWE1 / KWES1B	19	36	88	90	45	7.5MM / 7.5MM
HSK A100 WFLK2	M5 TO M20	KWE2 / KWES2B	31	53	88	138	45	12.5MM / 12.5MM
HSK A100 WFLK3	M14 TO M33	KWE3 / KWES3B	48	78	88	190	45	20.0MM / 20.0MM

Ordering Example :-
KTA HSK A50 WFLK1 / Qty.- 2 Nos.

ADAPTOR TYPE KWES / B WITH SAFELY CHUCK



Chuck Designation Size	For Taps	Shank Ø	Suitable for Chuck Size	D dia.	D1 dia.	D2 dia.	L1	L3	L4	L5
KWES / 1B	M 3 - M 12	3.5 - 11.3	1	32	19	19	17	25	21.5	25
KWES / 2B	M 8 - M 20	7.0 - 18.0	2	50	30	31	30	31	35.0	34
KWES / 3B	M 14 - M 33	11.0 - 28.0	3	72	48	48	44	41	55.5	45

Ordering Example :-
KTA TAP ADAPTOR : KWES/1B M8 Ø 10X8sq. / Qty. - 2 Nos.

TECHNICAL INFORMATION

Tap Shank Dimensions ISO 529 - 1975

Dimension Dia. x Square	Metric		UNC		UNF		BSW		BSF		BA	
		Shank dia. enlarged		Shank dia. enlarged		Shank dia. enlarged		Shank dia. enlarged		Shank dia. enlarged		Shank dia. enlarged
3.15 x 2.5	M4	M3	-	No. 4-40	-	No. 4-48	-	-	-	-	-	No. 5
	-	-	No. 8-32	No. 5-40	No. 8-36	No. 5-44	-	-	-	-	No. 3	-
3.55 x 2.8	M 4.5	M 3.5	No. 10-24	No. 6-32	No. 10-32	No. 6-40	3/16"-24	-	3/16"-32	-	No. 2	No. 4
4 x 3.15	M 5	M 4	No. 12-24	-	No. 12-28	-	-	-	7/32"-28	-	No. 1	-
4.5 x 3.55	M 6	-	1/4"-20	No. 8-32	1/4"-28	No. 3-36	1/4"-20	-	1/4"-26	-	No. 0	No. 3
5 x 4	-	M 5	-	No. 10-24	-	No. 10-32	-	3/16"-24	-	3/16"-32	-	No. 2
5.6 x 4.5	-	-	-	No. 12-24	-	No. 12-28	-	-	9/32"-26	7/32"-28	-	No. 1
6.3 x 5	M 8	M 6	5/16"-18	1/4"-20	5/16"-24	1/4"-28	5/16"-18	1/4"-20	5/16"-22	1/4"-26	-	No. 0
7.1 x 5.6	-	-	3/8"-16	-	3/8"-24	-	3/8"-16	-	3/8"-20	9/32"-36	-	-
8 x 6.3	M 10	M 8	7/16"-14	5/16"-18	7/16"-20	-	7/16"-14	5/16"-18	7/16"-18	5/16"-22	-	-
9 x 7.1	M 12	-	1/2"-13	-	1/2"-20	-	1/2"-12	-	1/2"-12	-	-	-
10 x 8	-	M 10	-	3/8"-16	-	3/8"-24	-	3/8"-16	-	3/8"-20	-	-
11.2 x 9	M 14	-	9/16"-12	-	9/16"-18	-	9/16"-12	-	9/16"-16	-	-	-
12.5 x 10	M 16	-	5/8"-11	-	5/8"-18	-	5/8"-11	-	3/8"-14	-	-	-
14 x 11.2	M 18	-	3/4"-10	-	3/4"-16	-	11/16"-11	-	11/16"-14	-	-	-
	M 20	-	-	-	-	-	3/4"-10	-	3/4"-12	-	-	-
16 x 12.5	M 22	-	7/8"-9	-	7/8"-14	-	7/8"-9	-	7/8"-11	-	-	-
18 x 14	M 24	-	1"-8	-	1"-12	-	1"-8	-	1"-10	-	-	-
20 x 16	M 27	-	1 1/8"-7	-	1 1/8"-12	-	1 1/8"-7	-	1 1/8"-9	-	-	-
	M 30	-	-	-	-	-	-	-	-	-	-	-
22.4 x 18	M 33	-	1 1/4"-4	-	1 1/4"-12	-	1 1/4"-7	-	1 1/4"-9	-	-	-
25 X 20	M 36	-	1 3/8"-6	-	1 3/8"-12	-	-	-	1 3/8"-8	-	-	-
28 x 22.4	M 39	-	1 1/2"-6	-	1 1/2"-12	-	1 1/2"-6	-	1 1/2"-8	-	-	-
	M 42	-	-	-	-	-	-	-	1 5/8"-8	-	-	-
31.5 x 25	M 45	-	1 3/4"-5	-	-	-	1 3/4"-5	-	1 3/4"-7	-	-	-
	M 48	-	-	-	-	-	-	-	-	-	-	-

Tap Shank Dimensions DIN

Dimension Dia. x Square	DIN 352	DIN 353	DIN 371	DIN 374	DIN 376	DIN 2182	DIN 2183
3.5 x 2.7	M 3	-	M 3	M 5	M 5	1/8"	-
4 x 3	M 4	-	M 3.5	-	-	-	-
4.5 x 3.4	M 4	-	M 4	M 6	M 6	5/32"	1/4"
6 x 4.9	M 5	-	M 5	-	-	7/32"	-
	M 6	-	M 6	-	-	-	-
	M 8	-	-	M 8	M 8	-	-
7 x 5.5	M 10	G 1/8"	-	M 10	M 10	1/4"	3/8"
8 x 6.2	-	-	M 8	-	-	5/16"	7/16"
9 x 7	M 12	-	-	M 12	M 12	3/8"	1/2"
10 x 8	-	-	M 10	-	-	-	-
11 x 9	M 14	G 1/4"	-	M 14	M 14	-	9/16"
12 X 9	M 16	G 3/8"	-	M 16	M 16	-	5/8"
14 X 11	M 18	-	-	M 18	M 18	-	11/16"
16 X 12	M 20	G 1/2"	-	M 20	M 20	-	13/16"
18 x 14.5	M 22	G 5/8:	-	M 22	M 22	-	7/8"
	M 24	-	-	M 24	M 24	-	15/16"
20 x 16	M 27	G 3/4"	-	M 27	M 27	-	1"
22 x 18	M 30	G 7/8"	-	M 30	M 30	-	1 1/8"
25 x 20	M 33	G 1"	-	M 33	M 33	-	1 1/4"
28 x 22	M 36	G 1 1/8"	-	M 36	M 36	-	1 3/8"
32 x 24	M 39	G 1 1/8"	-	M 39	M 39	-	1 1/2"
	M 42	-	-	M 42	M 42	-	15/8"
36 x 29	M 45	G 3/8"	-	M 45	M 45	-	13/4"
	M 48	G 1 1/2"	-	M 48	M 48	-	17/8"
	-	G 1 3/4"	-	-	-	-	-
	-	G 2"	-	-	-	-	-

Tap Shank Dimensions ANSI (US Standards)

Tap Shank Dimensions (JIS Standards)

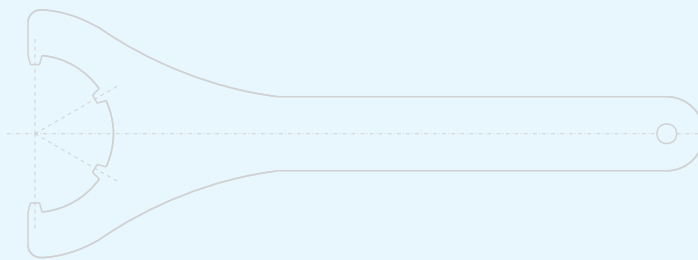
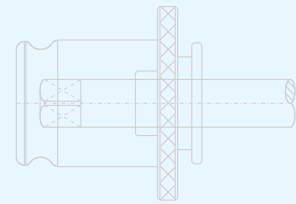
Dimension in Inch. Dia. x Square		Metric Conversions		Tap Size	Dimension in Inch. Dia. x Square		Metric Conversions		Tap Size	Dimension in mm. Dia. x Square		Tap Size
0.141	0.110	3.59	2.80	1/8" No. 6	0.590	0.442	14.99	11.23	3/4"	4.0	3.0	M 3 & M 3.5
0.168	0.131	4.27	3.33	5/32" No. 8	0.652	0.489	16.57	12.43	M 20	5.0	4.0	M 4 & M 4.5
0.194	0.152	4.93	3.87	3/16" No. 10	0.688	0.515	17.47	13.09	1/2" Ps	5.5	4.5	M 5
0.220	0.165	5.59	4.20	No. 12	0.697	0.523	17.71	13.29	7/8"	6.0	4.5	M 6
0.255	0.191	6.48	4.86	1/4" No. 14	0.700	0.531	17.78	13.49	3/8"Ps	6.2	5.0	M 7 & M 8
0.312	0.234	7.94	5.95	1/16"Ps 1/8"Ps	0.760	0.570	19.31	14.48	M 24	7.0	5.5	M 9 & M 10
0.318	0.238	8.08	6.05	5/16" 3/8"	0.800	0.600	20.32	15.24	1"	8.0	6.2	M 11
0.323	0.242	8.21	6.15	5/16" 7/16"	0.896	0.672	22.76	17.07	1 1/8"	8.5	6.5	M 12
0.367	0.275	9.33	6.99	1/2"	0.906	0.679	23.02	17.25	3/4"P	10.5	8.0	M 14
0.381	0.286	9.68	7.27	3/8"	1.021	0.766	25.94	19.46	1 1/4"	12.5	10.0	M 16
0.429	0.322	10.90	8.18	9/16"	1.108	0.833	28.15	21.11	1 3/8"	14.0	11.0	M 18
0.438	0.328	11.12	8.34	1/8"Ps	1.125	0.843	28.58	21.42	1"P	15.0	12.0	M 20
0.480	0.360	12.20	9.15	5/8"	1.233	0.925	31.32	23.50	1 1/2"	17.0	13.0	M 22
0.542	0.406	13.77	10.31	1 1/16"	1.132	0.984	33.34	25.00	1 1/4"P	19.0	15.0	M 24
0.563	0.421	14.29	10.70	1/4"Ps	1.430	1.072	36.33	27.23	1 3/4"	20.0	15.0	M 27
										23.0	17.0	M 30

Recommended Torque Valves For Safety Clutch adjustment For Tapping & Cold Forming (Rolling)

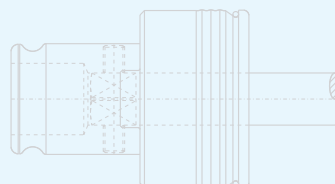
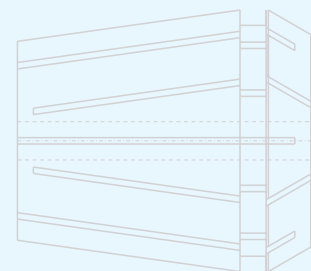
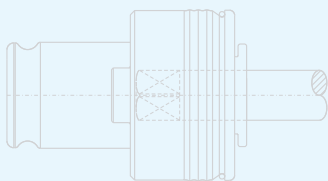
For material upto 1000 N/mm²

Torque Setting Nm	Threads										Torque Setting Nm
	Metric	Whitworth BSW	BSP Whitworth Pipe	BSF	BSP Taper	BA	PG	NPT Taper	UNC	UNF	
0.5	M3	-	-	-	-	No. 7	-	-	-	-	0.5
0.6	-	-	-	-	-	No. 6	-	-	No. 3	No. 4	0.6
0.8	M 3.5	-	-	-	-	No. 5	-	-	No. 4	No. 5	0.8
1.0	-	1/8"	-	-	-	-	-	-	No. 5	-	1.0
1.2	-	-	-	-	-	No. 4	-	-	-	No. 6	1.2
1.6	M4	-	-	-	-	-	-	-	No. 6	No. 8	1.6
2.0	-	5/32"	-	-	-	No. 3	-	-	No. 8	-	2.0
2.5	M5	-	-	3/16"	-	No. 2	-	-	-	No. 10	2.5
3.0	-	-	-	-	-	-	-	-	-	No. 12	3.0
4.0	-	3/16"	-	7/32"	-	No. 1	-	-	No. 10	1/4"	4.0
5.0	M6	7/32"	-	1/4"	-	No. 0	-	-	No. 12	-	5.0
6.0	-	-	G 1/8"	9/32"	-	-	-	-	-	5/16"	6.0
8.0	-	1/4"	-	5/16"	-	-	-	-	1/4"	3/8"	8.0
10	M8	-	-	-	-	-	-	-	-	-	10
12	-	5/16"	-	3/8"	-	-	PG 7	-	5/16"	7/16"	12
16	-	-	-	-	-	-	-	-	-	1/2"	16
18	M10	3/8"	G 1/4"	7/16"	1/8"	-	-	-	3/8"	-	18
20	-	-	-	-	-	-	PG9	1/8"	-	-	20
22	-	-	-	-	-	-	PG11	-	-	9/16"	22
25	-	-	-	1/2"	-	-	PG 13.5	-	-	5/8"	25
28	M 12	7/16"	G 3/8"	-	-	-	PG 16	-	7/16"	-	28
32	-	-	-	9/16"	-	-	-	-	-	-	32
36	-	-	-	-	-	-	-	-	-	3/4"	36
40	-	-	-	5/8"	-	-	-	-	1/2"	-	40
45	M 14	1/2"	-	11/16"	-	-	PG 21	-	-	-	45
50	M 16	-	G 1/2"	-	1/4"	-	-	-	9/16"	-	50
56	-	-	G 5/8"	-	-	-	-	1/4"	-	7/8"	56
63	-	5/8"	-	-	3/8"	-	PG 29	-	5/8"	-	63
70	-	-	G 3/4"	3/4"	-0	-	-	3/8"	-	-	70
80	M 18	-	G 7/8"	13/16"	-	-	PG 36	-	-	-	80
90	M 20	3/4"	-	7/8"	-	-	PG 42	-	3/4"	1"	90
100	M22	-	-	-	-	-	PG 48	-	-	1 1/8"	100
110	-	-	-	-	-	-	-	-	-	1 1/4"	110
125	-	7/8"	-	1"	-	-	-	-	7/8"	1 3/8"	125
140	-	-	G 1"	-	-	-	-	-	-	1 1/2"	140
160	M24	-	G 1 1/8"	-	1/2"	-	-	1/2"	-	-	160
180	M 27	-	G 1 1/4"	1 1/8"	-	-	-	-	-	-	180
200	-	1"	G 1 3/8"	1 1/4"	3/4"	-	-	3/4"	1"	-	200
220	-	-	G 1 1/2"	-	-	-	-	-	-	-	220
240	-	-	G 1 3/4"	-	-	-	-	-	-	-	240
260	-	-	G 2"	1 3/8"	-	-	-	-	-	-	260
280	M 30	1 1/8"	-	-	-	-	-	-	1 1/8"	-	280
300	-	-	G 2 1/4"	1 1/2"	-	-	-	-	-	-	300
320	M 33	1 1/4"	-	1 5/8"	-	-	-	-	1 1/4"	-	320
340	-	-	G 2 1/4"	-	1"	-	-	1"	-	-	340
360	-	-	G 2 3/4"	-	-	-	-	-	-	-	360
400	-	-	G 3"	-	-	-	-	-	-	-	400
420	M 36	-	G 3 1/4"	-	-	-	-	-	-	-	420
450	-	-	G 3 1/2"	1 3/4"	1 1/4"	-	-	1 1/4"	-	-	450
480	M 39	1 3/8"	G 3 3/4"	-	-	-	-	-	1 3/8"	-	480
500	-	1 1/2"	G 4"	2"	-	-	-	-	1 1/2"	-	500
560	-	-	-	-	1 1/2"	-	-	1 1/2"	-	-	560
630	M 42	-	-	-	-	-	-	-	-	-	630
710	M 45	-	-	2 1/4"	2"	-	-	2"	-	-	710
800	-	1 5/8"	-	2 1/2"	-	-	-	-	-	-	800
900	M 48	1 3/4"	-	2 3/4"	-	-	-	-	1 3/4"	-	900

The given torque values are for tapping & cold forming operations. They pertain to material with a tensile strength of 1000 N/mm².
The torque values for tapping include a wear factor of 100%.
If necessary, these values can be increased by up to 20% for tapping & up to 50% for cold forming.

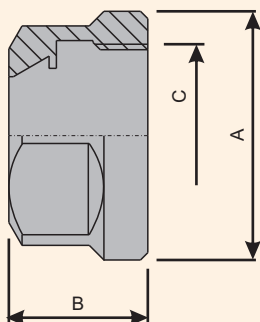


ACCESSORIES



HEXAGONAL NUT FOR 'ER' COLLET CHUCK

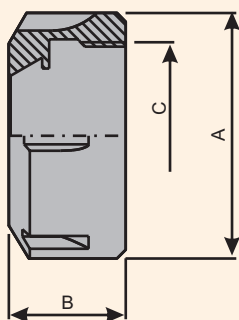
DIN 6499



TYPE	A	B	C	Spanner to be used
UM/ER 11	19.0	11.3	M 14 x 0.75	GS 17
UM/ER 16	28.0	17.50	M 22 x 1.50	GS 25
UM/ER 20	34.0	19.0	M 25 x 1.50	GS 30

SLOTTED NUT FOR 'ER' COLLET CHUCK

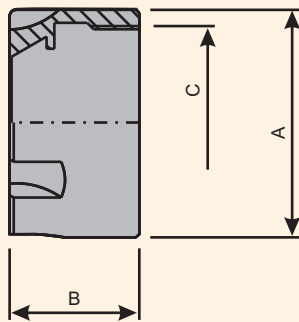
DIN 6499



TYPE	A	B	C	Spanner to be used
UM/ER 20	34.0	19.0	M 25 x 1.50	E 20
UM/ER 25	42.0	20.0	M 32 x 1.50	E 25
UM/ER 32	50.0	22.3	M 40 x 1.50	E 32
UM/ER 40	63.0	25.3	M 50 x 1.50	E 40

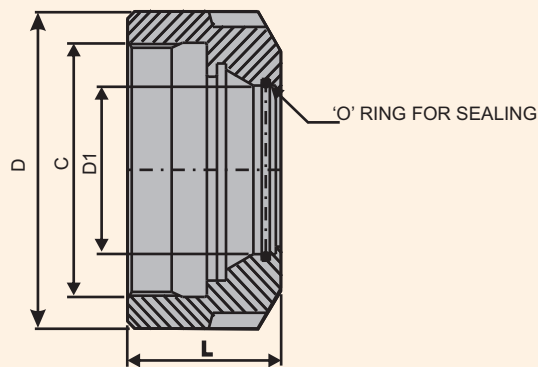
MINI NUT FOR 'ER' COLLET CHUCK

For minimum external diameter.



TYPE	A	B	C	Spanner to be used
UM/ER 8M	12.0	10.8	M 10 x 0.75	E 8M
UM/ER 11M	16.0	11.3	M 13 x 0.75	E 11M
UM/ER 16M	22.0	17.0	M 19 x 1.00	E 16M
UM/ER 20M	28.0	19.0	M 24 x 1.00	E 20M
UM/ER 25M	35.0	20.0	M 30 x 1.00	E 25M

SEALING NUT

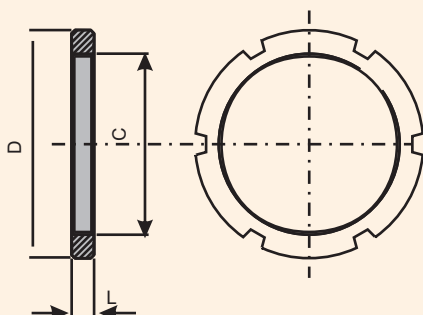


Type	L	D	D1	C
UM/ER 16S	22.50	28.00	13.00	M22X1.5
UM/ER 20S	24.00	34.00	16.00	M25X1.5
UM/ER 25S	25.00	42.00	21.00	M32X1.5
UM/ER 32S	27.50	50.00	27.00	M40X1.5
UM/ER 40S	30.50	63.00	33.50	M50X1.5
UM/ER 50S	42.40	78.00	43.50	M64X2

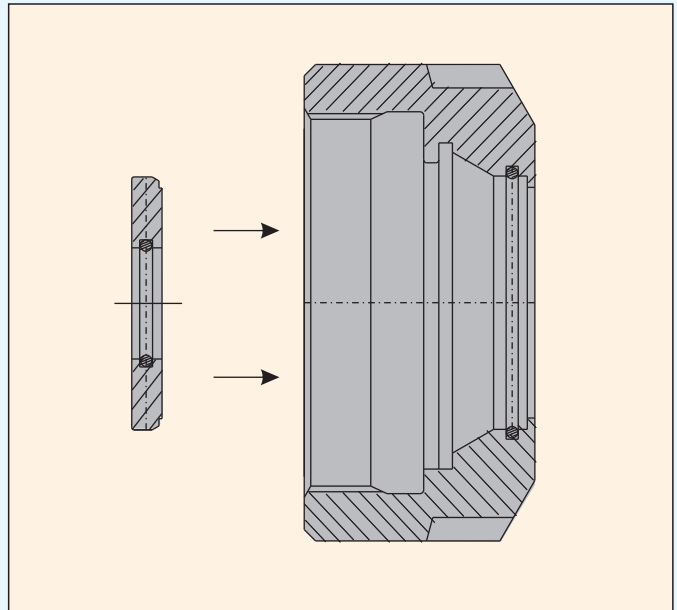
NOTE: Also available in MINI NUT type : ER 'M'

Note: For more information about Sealing Nuts And Sealing Disk refer Page no 21, 22.

LOCK NUT



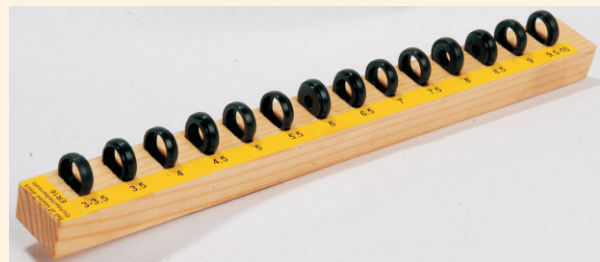
TYPE	L	D	C
UM/ER 16L	5	28	M 22 X 1.5
UM/ER 20L	5	34	M 25 X 1.5
UM/ER 25L	5	42	M 32 X 1.5
UM/ER 32L	5	50	M 40 X 1.5
UM/ER 40L	5	63	M 50 X 1.5

TECHNICAL INFORMATION**TECHNICAL INFORMATION :**

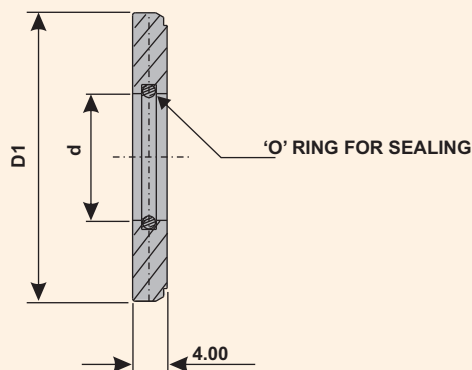
Sealing Nuts along with Sealing Disc has a compact design with very short extension of clamping nuts which gives the following benefits.

- 1) It protects against all kind of dirt and chips entering the slots of the collet.
- 2) Coolant through tools can be used, which gives improved cooling and lubrication of tools and hence increases the tool life.
- 3) Improved chip removal.
- 4) Sealing Disc are available from $\varnothing 3.0$ mm in range of 0.5mm. Hence easy changing of Sealing Disk according to required application.
- 5) No need of expensive sealed collets. Regular collets are best suitable.

SEALING DISK



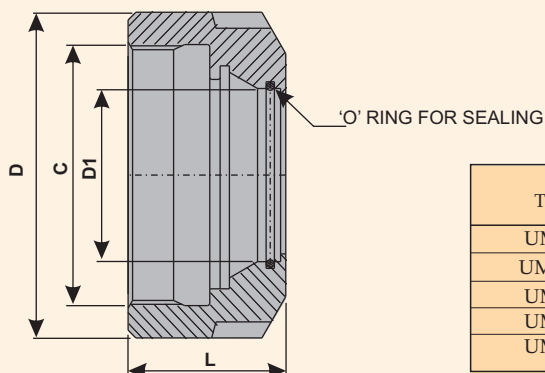
ITEM NAME	PIECES
SET OF SEALING DISK ER16 - (3.5 - 10MM)	14
SET OF SEALING DISK ER20 - (3.5 - 13MM)	20
SET OF SEALING DISK ER25 - (3.5 - 16MM)	26
SET OF SEALING DISK ER32 - (3.5 - 20MM)	34
SET OF SEALING DISK ER40 - (3.5 - 26MM)	46



TYPE	D1	d (Sealing disk holding range in steps of 0.5mm)
ER 16	13.00	3-10
ER 20	16.00	3-13
ER 25	21.00	3-16
ER 32	27.00	3-20
ER 40	33.00	3-26
ER 50	43.50	10-34

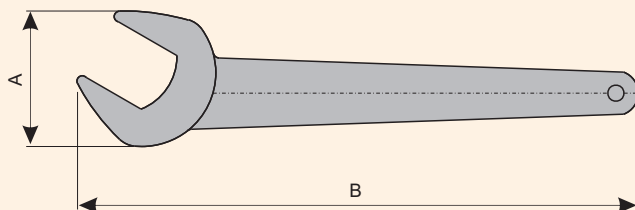
Ordering Example :-
 Sealing Disk ER 16 : 8.0mm =2 Nos
 Sealing Disk ER 25 : 6.50mm =2 Nos

SEALING NUT



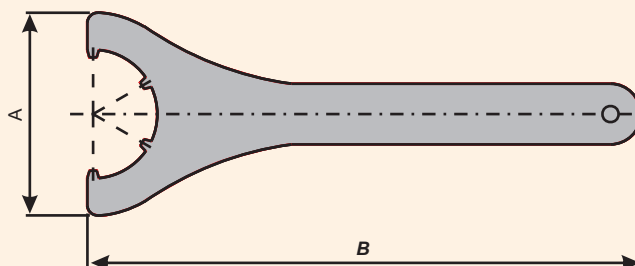
TYPE	L	D	D1	C
UM/ER 16S	22.50	28.00	13.00	M22X1.5
UM/ER 20S	24.00	34.00	16.00	M25X1.5
UM/ER 25S	25.00	42.00	21.00	M32X1.5
UM/ER 32S	27.50	50.00	27.00	M40X1.5
UM/ER 40S	30.50	63.00	33.50	M50X1.5

NOTE: Also available in MINI NUT type : ER 'M'



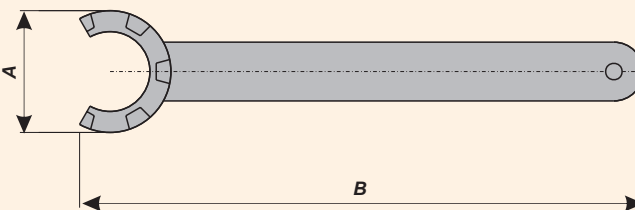
SPANNER TYPE : GS

TYPE	A	B	Suitable for Nut
GS 17	40	155	UM/ER 11
GS 25	53	210	UM/ER 16



SPANNER TYPE : E

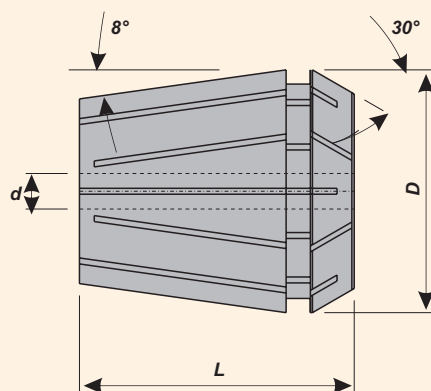
TYPE	A	B	Suitable for Nut
E 20	55	180	UM/ER 20
E 25	65	210	UM/ER 25
E 32	75	250	UM/ER 32
E 40	90	290	UM/ER 40
E 50	110	350	UM/ER 50



SPANNEER TYPE : EM (MINI)

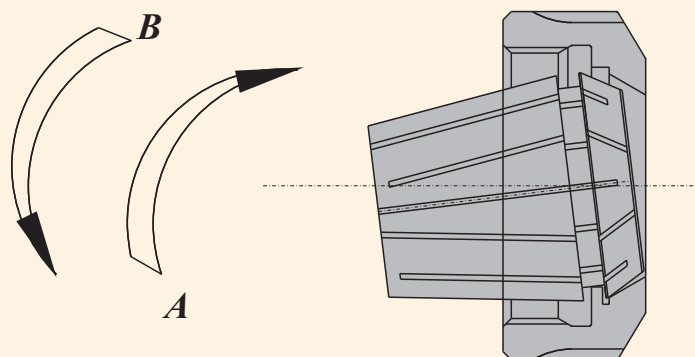
TYPE	A	B	Suitable for Nut
E 8M	12.4	70	ER 8M
E 11M	16.8	90	ER 11M
E 16M	22.5	110	ER 16M
E 20M	29.0	120	ER 20M
E 25M	36.0	130	ER 25M

ER COLLET STANDARD DIN 6499

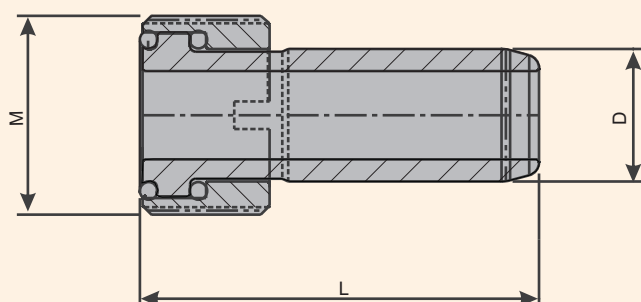


Collet Designation	Bore Range 'd'			Clamping Capacity per set		Each Collet collapse by mm	D mm	L mm
	From mm	To	in steps mm	From mm	To mm			
ER 8	0.5	5	0.5	0.5	5.0	0.5	8.5	13.5
ER 11	0.5	7	0.5	0.5	7.0	0.5	11.5	18.0
ER 16	0.5	10	1.0	0.5	10.0	1.0	17.0	27.0
ER 20	1.0	13	1.0	1.0	13.0	1.0	21.0	31.0
ER 25	1.0	16	1.0	1.0	16.0	1.0	26.0	35.0
ER 32	2.0	20	1.0	2.0	20.0	1.0	33.0	40.0
ER 40	3.0	26	1.0	3.0	26.0	1.0	41.0	46.0
ER 50	10.0	34	2.0	10.0	34.0	2.0	52.0	60.0

The collet must always be inserted into the nut before setting the tool into the collet. The collet is fitted inside the nut by applying slight pressure A. It is removed by applying B to the collet. Never tighten the chuck without a correct size tool shank being present in the collet.



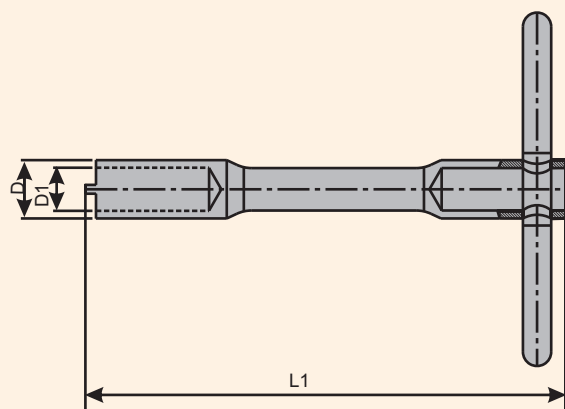
COOLANT TUBE FOR HSK HOLDERS



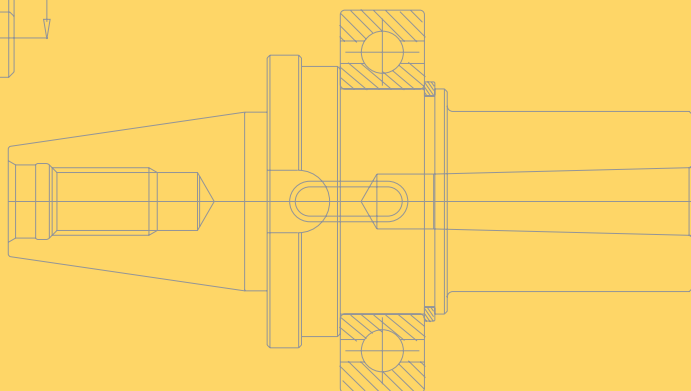
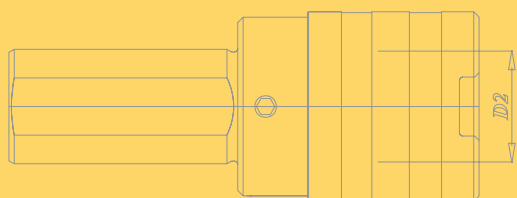
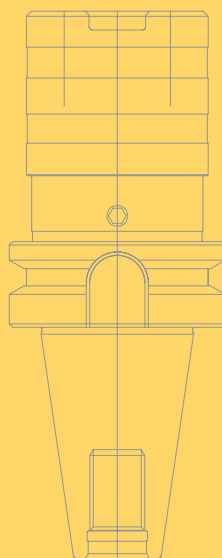
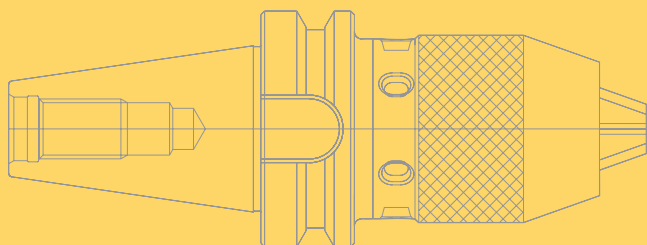
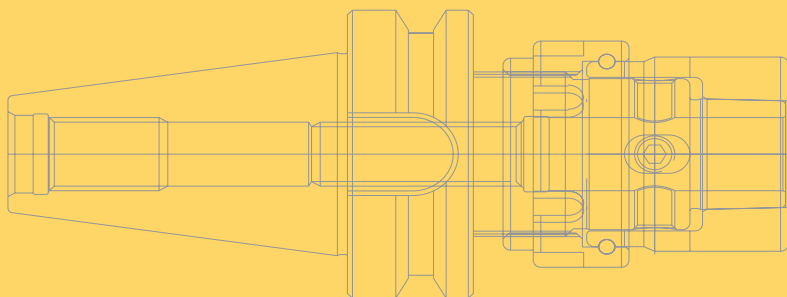
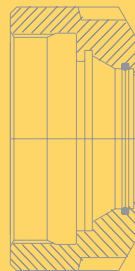
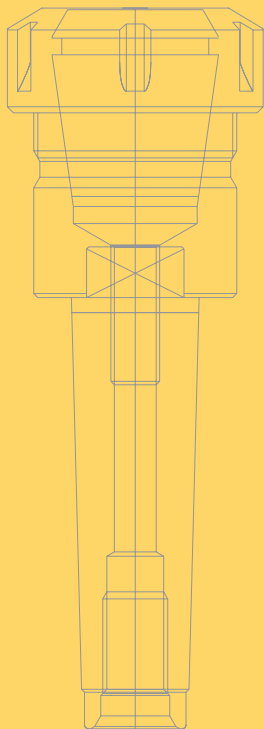
HSK TYPE	M	L	D
HSK-A 50 CT	M16X1	33.0	10.0
HSK-A 63 CT	M18X1	34.0	12.0
HSK-A 100 CT	M24X1.5	44.0	16.0

Ordering Example :-
KTA HSK-A 63 COOLANT TUBE / Qty.- 2 Nos.

SPANNER FOR HSK COOLANT TUBES



HSK TYPE	D1	L	D
HSK-A 50 CTS	10.2	115	14.5
HSK-A 63 CTS	12.2	136.0	16.5
HSK-A 100 CTS	16.2	136.0	22.0



DEALERS: