

刀柄配件

HOLDER ACCESSORIES



刀柄配件系列

HOLDER ACCESSORIES

·直柄热缩延长杆 (4.5°标准型)

STRAIGHT HEAT SHRINKABLE EXTENSION ROD (4.5 STANDARD VERSION)



FIG.1

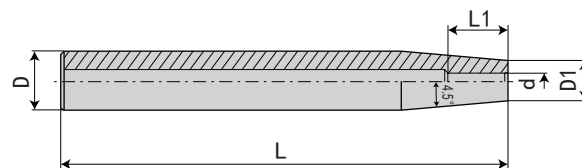
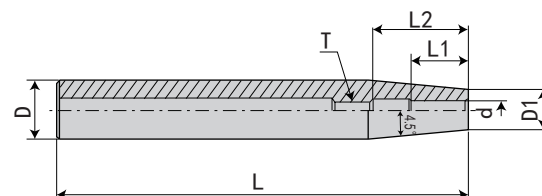


FIG.2



规格 Model	L	L1	L2	D	D1	d	T	FIG	重量 KG
C12-SF03-120	120	12	*	12	8	3	*	1	0.09
-160	160	12	*	12	8	3	*	1	0.13
-200	200	12	*	12	8	3	*	1	0.17
-SF04-120	120	16	*	12	8	4	*	1	0.09
-160	160	16	*	12	8	4	*	1	0.13
-200	200	16	*	12	8	4	*	1	0.17
-SF05-120	120	18	*	12	10	5	*	1	0.09
-160	160	18	*	12	10	5	*	1	0.13
-SF06-120	120	26	36	12	10	6	M5*0.8P	2	0.17
-160	160	26	36	12	10	6	M5*0.8P	2	0.1
-SF08-120	120	26	36	12	12	8	M6*1.0P	2	0.14
-160	160	26	36	12	12	8	M6*1.0P	2	0.18

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·直柄热缩延长杆 (4.5°标准型)

STRAIGHT HEAT SHRINKABLE EXTENSION ROD (4.5 STANDARD VERSION)



FIG.1

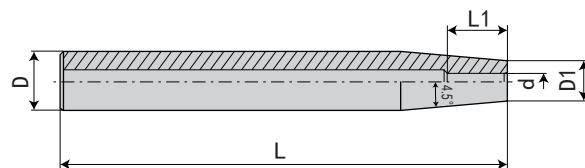
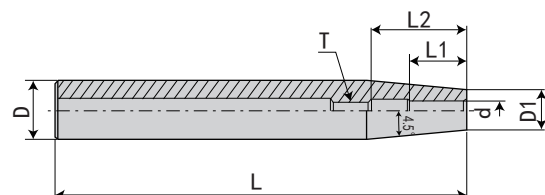


FIG.2



规格 Model	L	L1	L2	D	D1	d	T	FIG	重量 KG
C16-SF03-120	120	12	*	16	10	3	*	1	0.18
-160	160	12	*	16	10	3	*	1	0.21
-200	200	12	*	16	10	3	*	1	0.24
-SF04-120	120	16	*	16	10	4	*	1	0.18
-160	160	16	*	16	10	4	*	1	0.21
-200	200	16	*	16	10	4	*	1	0.24
-SF05-120	120	18	*	16	10	5	*	1	0.18
-160	160	18	*	16	10	5	*	1	0.21
-200	200	18	*	16	10	5	*	1	0.24
-SF06-120	120	26	36	16	10	6	M5*0.8P	2	0.18
-160	160	26	36	16	10	6	M5*0.8P	2	0.21
-200	200	26	36	16	10	6	M5*0.8P	2	0.24
-SF08-120	120	26	36	16	12	8	M6*1.0P	2	0.18
-160	160	26	36	16	12	8	M6*1.0P	2	0.21
-200	200	26	36	16	12	8	M6*1.0P	2	0.24
-SF10-120	120	32	42	16	14	10	M8*1.0P	2	0.18
-160	160	32	42	16	14	10	M8*1.0P	2	0.21
-200	200	32	42	16	14	10	M8*1.0P	2	0.24

·直柄热缩延长杆 (4.5°标准型)

STRAIGHT HEAT SHRINKABLE EXTENSION ROD (4.5° STANDARD VERSION)



FIG.1

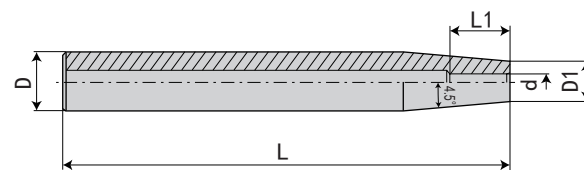
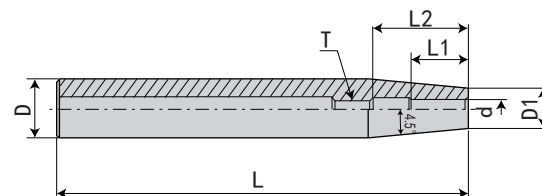


FIG.2



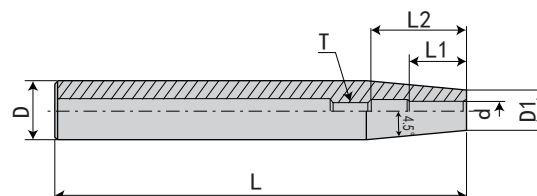
规格 Model	L	L1	L2	D	D1	d	T	FIG	重量 KG
C20-SF03-120	120	12	*	20	10	3	*	1	
-160	160	12	*	20	10	3	*	1	0.35
-200	200	12	*	20	10	3	*	1	
-SF04-120	120	16	*	20	10	4	*	1	
-160	160	16	*	20	10	4	*	1	0.32
-200	200	16	*	20	10	4	*	1	
-SF05-120	120	18	*	20	14	5	*	1	
-160	160	18	*	20	14	5	*	1	0.3
-200	200	18	*	20	14	5	*	1	
-SF06-120	120	26	36	20	14	6	M5*0.8P	2	0.18
-160	160	26	36	20	14	6	M5*0.8P	2	0.31
-200	200	26	36	20	14	6	M5*0.8P	2	0.44
-SF06-250	250	26	36	20	14	6	M5*0.8P	2	0.57
-300	300	26	36	20	14	6	M5*0.8P	2	0.69
-SF08-120	120	26	36	20	14	8	M6*1.0P	2	0.15
-160	160	26	36	20	14	8	M6*1.0P	2	0.28
-200	200	26	36	20	14	8	M6*1.0P	2	0.41
-250	250	26	36	20	14	8	M6*1.0P	2	0.53
-300	300	26	36	20	14	8	M6*1.0P	2	0.66
-SF10-120	120	32	42	20	14	10	M8*1.0P	2	0.13
-160	160	32	42	20	14	10	M8*1.0P	2	0.26
-200	200	32	42	20	14	10	M8*1.0P	2	0.39
-250	250	32	42	20	14	10	M8*1.0P	2	0.51
-300	300	32	42	20	14	10	M8*1.0P	2	0.62
-SF12-120	120	37	47	20	16	12	M10*1.0P	2	0.11
-160	160	37	47	20	16	12	M10*1.0P	2	0.24
-200	200	37	47	20	16	12	M10*1.0P	2	0.37
-250	250	37	47	20	16	12	M10*1.0P	2	0.49
-300	300	37	47	20	16	12	M10*1.0P		0.6

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配件
ACCESSORIES

·直柄热缩延长杆 (4.5°标准型)

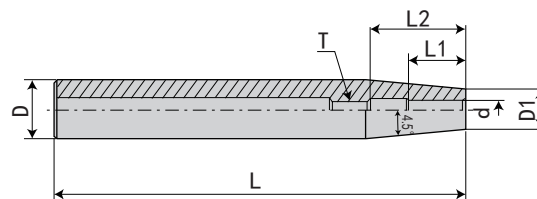
STRAIGHT HEAT SHRINKABLE EXTENSION ROD (4.5 STANDARD VERSION)



规格 Model	L	L1	L2	D	D1	d	T	重量 KG
C25-SF06-160	160	26	36	25	19	6	M5*0.8P	0.51
-200	200	26	36	25	19	6	M5*0.8P	0.68
-250	250	26	36	25	19	6	M5*0.8P	0.85
-300	300	26	36	25	19	6	M5*0.8P	1
-SF08-160	160	26	36	25	19	8	M6*1.0P	0.49
-200	200	26	36	25	19	8	M6*1.0P	0.66
-250	250	26	36	25	19	8	M6*1.0P	0.83
-300	300	26	36	25	19	8	M6*1.0P	0.98
-SF10-160	160	32	42	25	20	10	M8*1.0P	0.45
-200	200	32	42	25	20	10	M8*1.0P	0.62
-250	250	32	42	25	20	10	M8*1.0P	0.79
-300	300	32	42	25	20	10	M8*1.0P	0.94
-SF12-160	160	37	47	25	20	12	M10*1.0P	0.43
-200	200	37	47	25	20	12	M10*1.0P	0.6
-250	250	37	47	25	20	12	M10*1.0P	0.77
-300	300	37	47	25	20	12	M10*1.0P	0.92
-SF14-160	160	37	47	25	20	14	M10*1.0P	0.37
-200	200	37	47	25	20	14	M10*1.0P	0.55
-250	250	37	47	25	20	14	M10*1.0P	0.72
-300	300	37	47	25	20	14	M10*1.0P	0.87
-SF16-160	160	40	50	25	22	16	M12*1.0P	0.37
-200	200	40	50	25	22	16	M12*1.0P	0.55
-250	250	40	50	25	22	16	M12*1.0P	0.72
-300	300	40	50	25	22	16	M12*1.0P	0.87

·直柄热缩延长杆 (4.5°标准型)

STRAIGHT HEAT SHRINKABLE EXTENSION ROD (4.5° STANDARD VERSION)



规格 Model	L	L1	L2	D	D1	d	T	重量 KG
C32-SF10-160	160	32	42	32	24	10	M8*1.0P	0.9
-200	200	32	42	32	24	10	M8*1.0P	1.14
-250	250	32	42	32	24	10	M8*1.0P	1.38
-300	300	32	42	32	24	10	M8*1.0P	1.6
-SF12-160	160	37	47	32	24	12	M10*1.0P	0.76
-200	200	37	47	32	24	12	M10*1.0P	1
-250	250	37	47	32	24	12	M10*1.0P	1.25
-300	300	37	47	32	24	12	M10*1.0P	1.52
-SF14-160	160	37	47	32	27	14	M10*1.0P	0.7
-200	200	37	47	32	27	14	M10*1.0P	0.94
-250	250	37	47	32	27	14	M10*1.0P	1.18
-300	300	37	47	32	27	14	M10*1.0P	1.4
-SF16-160	160	40	50	32	27	16	M12*1.0P	0.67
-200	200	40	50	32	27	16	M12*1.0P	0.9
-250	250	40	50	32	27	16	M12*1.0P	1.13
-300	300	40	50	32	27	16	M12*1.0P	1.34
-SF18-160	160	40	50	32	27	18	M12*1.0P	0.61
-200	200	40	50	32	27	18	M12*1.0P	0.77
-250	250	40	50	32	27	18	M12*1.0P	0.93
-300	300	40	50	32	27	18	M12*1.0P	1.1
-SF20-160	160	42	52	32	27	20	M16*1.0P	0.52
-200	200	42	52	32	27	20	M16*1.0P	0.72
-250	250	42	52	32	27	20	M16*1.0P	0.92
-300	300	42	52	32	27	20	M16*1.0P	1.1

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**配件
ACCESSORIES**

·高精度 ER 弹性筒夹

HIGH-PRECISION ER COLLET



特点:

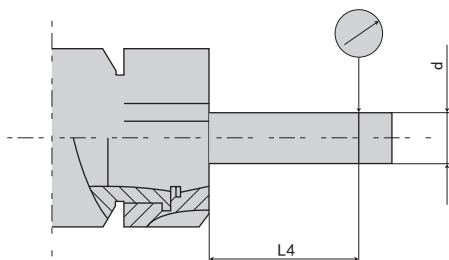
注:

- ◎材质: SUJ2 (高碳轴承钢: 在热处理后, 具有坚韧的硬度与韧性, 更好的耐磨耗性, 且弹性佳使用寿命更长)。
- ◎硬度: HRC44-48
- ◎表面粗糙度 RZ2.5 以内
- ◎ ER8 的夹持范围为 0.5mm; ER11、16、20、25、32、40 的夹持范围为 1mm, 但孔径 2.5mm 以下, 夹持范围为 0.5mm; ER50 的夹持收缩范围 10mm 以下的收缩范围为 1mm, 10mm 以上的收缩范围为 2mm。
- ◎同心度按 DIN 标准规范全数检验。
- ◎用于夹持钻头、螺丝攻、铣刀、铰刀等工具。
- ◎具有弹性伸缩的功能、应用范围广、富变化性。

Features:

- ◎ Material:SUJ2(High-carbon bearing steel:After heat treatment,it has hardness and toughness,better grinding quality,good flexibility,and longer using life span).
- ◎ HRC:HRC44-48
- ◎ Surface roughness:within RZ2.5.
- ◎ Chucking range:ER8=0.5mm;ER11/16/20/25/32/40=1mm.But if the internal hole is less than 2.5mm,the chucking range will be 0.5mm;ER50 clamping contraction range of 10mm or less shrinkage range is 1 mm,the shrinkage of more than 10 mm range of 2mm.
- ◎ The cintricity is totally examined according to DIN norm.
- ◎ It us used for the cutting tools loke drills,taps,mills,and remers,etc.
- ◎ It has flexibility and can be applied widely and variably.
- ◎ Please inform the required precision when ordering.

精度检测 INSPECTION OF ACCURACY



型号 Model No.	L4	d	径向跳动 Run out
ER8	12	3	≤ 0.008
ER11	15	5	≤ 0.008
ER16	24	6	≤ 0.008
ER20	32	8	≤ 0.008
ER25	48	12	≤ 0.008
ER32	64	16	≤ 0.008
ER40	80	20	≤ 0.008
ER50	100	25	≤ 0.008

精湛的加工工艺 SUPER MACHING TECHNOLOGY

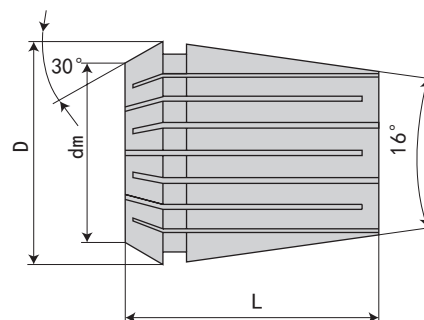
深冷处理:

注:

- ◎ -185℃超长深冷处理, 使接近全部的残余奥氏体转变为马氏体
- ◎析出的纳米级碳化物颗粒, 增加硬度和韧性
- ◎减少残余应力
- ◎耐磨性显著提高
- ◎≥ 100h 超长定型热时效去除磨加工时的残余内应力

Features:

- ◎ -185 °C long cryogenic,nearly of the residual austenite into martensite.
- ◎ Carbide precipitation of Nanoscale particles,increasing the hardness and toughness
- ◎ Reducing residual stresses
- ◎ Wear resistance significantly improved
- ◎ Thermal aging processing
- ◎ ≥ 100h long stereotyped thermal limitation removal of grinding residual stress.

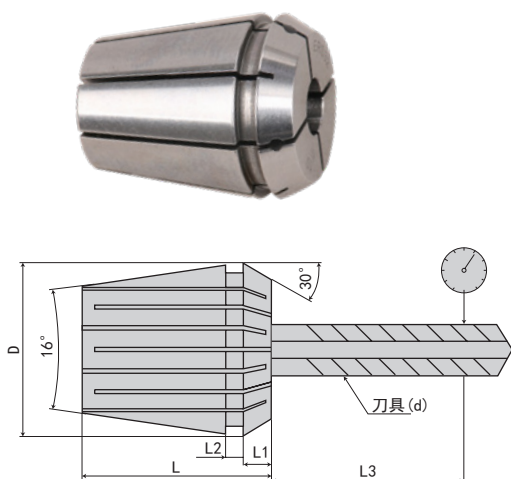
·高精度 ER 弹性筒夹
HIGH-PRECISION ER COLLET


卡簧	ER8	ER11	ER16	ER20	ER25	ER32	ER40	ER50
dm 夹持范围	L/D	L/D	L/D	L/D	L/D	L/D	L/D	L/D
1.0-0.5	ER8-1.0	ER11-1.0	ER16-1.0	ER20-1.0	ER25-1.0	ER32-1.0	ER40-1.0	
1.5-1.0	ER8-1.5	ER11-1.5	ER16-1.5	ER20-1.5	ER25-1.5	ER32-1.5	ER40-1.5	
2.0-1.5	ER8-2.0	ER11-2.0	ER16-2.0	ER20-2.0	ER25-2.0	ER32-2.0	ER40-2.0	
2.5-2.0	ER8-2.5	ER11-2.5	ER16-2.5	ER20-2.5	ER25-2.5	ER32-2.5	ER40-2.5	
3.0-2.5	ER8-3.0	ER11-3.0	ER16-3.0	ER20-3.0	ER25-3.0	ER32-3.0	ER40-3.0	
3.5-3.0	ER8-3.5	ER11-3.5	ER16-3.5	ER20-3.5	ER25-3.5	ER32-3.5	ER40-3.5	
4.0-3.5	ER8-4.0	ER11-4.0	ER16-4.0	ER20-4.0	ER25-4.0	ER32-4.0	ER40-4.0	
4.5-4.0	ER8-4.5	ER11-4.5	ER16-4.5	ER20-4.5	ER25-4.5	ER32-4.5	ER40-4.5	
5.0-4.5	ER8-5.0	ER11-5.0	ER16-5.0	ER20-5.0	ER25-5.0	ER32-5.0	ER40-5.0	ER50-5.0
5.5-5.0		ER11-5.5	ER16-5.5	ER20-5.5	ER25-5.5	ER32-5.5	ER40-5.5	
6.0-5.5		ER11-6.0	ER16-6.0	ER20-6.0	ER25-6.0	ER32-6.0	ER40-6.0	ER50-6.0
6.5-6.0		ER11-6.5	ER16-6.5	ER20-6.5	ER25-6.5	ER32-6.5	ER40-6.5	
7.0-6.5		ER11-7.0	ER16-7.0	ER20-7.0	ER25-7.0	ER32-7.0	ER40-7.0	ER50-7.0
7.5-7.0			ER16-7.5	ER20-7.5	ER25-7.5	ER32-7.5	ER40-7.5	
8.0-7.5			ER16-8.0	ER20-8.0	ER25-8.0	ER32-8.0	ER40-8.0	ER50-8.0
8.5-8.0			ER16-8.5	ER20-8.5	ER25-8.5	ER32-8.5	ER40-8.5	
9.0-8.5			ER16-9.0	ER20-9.0	ER25-9.0	ER32-9.0	ER40-9.0	ER50-9.0
9.5-9.0			ER16-9.5	ER20-9.5	ER25-9.5	ER32-9.5	ER40-9.5	
10.0-9.5			ER16-10.0	ER20-10.0	ER25-10.0	ER32-10.0	ER40-10.0	ER50-10.0
10.5-10.0				ER20-10.5	ER25-10.5	ER32-10.5	ER40-10.5	
11.0-10.5				ER20-11.0	ER25-11.0	ER32-11.0	ER40-11.0	ER50-11.0
11.5-11.0				ER20-11.5	ER25-11.5	ER32-11.5	ER40-11.5	
12.0-11.5				ER20-12.0	ER25-12.0	ER32-12.0	ER40-12.0	ER50-12.0
12.5-12.0				ER20-12.5	ER25-12.5	ER32-12.5	ER40-12.5	
13.0-12.5				ER20-13.0	ER25-13.0	ER32-13.0	ER40-13.0	ER50-13.0
14.0-13.0					ER25-14.0	ER32-14.0	ER40-14.0	ER50-14.0
15.0-14.0					ER25-15.0	ER32-15.0	ER40-15.0	ER50-15.0
16.0-15.0					ER25-16.0	ER32-16.0	ER40-16.0	ER50-16.0
17.0-16.0						ER32-17.0	ER40-17.0	ER50-17.0
18.0-17.0						ER32-18.0	ER40-18.0	ER50-18.0
19.0-18.0						ER32-19.0	ER40-19.0	ER50-19.0
20.0-19.0						ER32-20.0	ER40-20.0	ER50-20.0
21.0-20.0							ER40-21.0	ER50-21.0
22.0-21.0							ER40-22.0	ER50-22.0
23.0-22.0							ER40-23.0	ER50-23.0
24.0-23.0							ER40-24.0	ER50-24.0
25.0-24.0							ER40-25.0	ER50-25.0
26.0-25.0							ER40-26.0	ER50-26.0
27.0-26.0								ER50-27.0
28.0-27.0								ER50-28.0
29.0-28.0								ER50-29.0
30.0-29.0								ER50-30.0
31.0-30.0								ER50-31.0
32.0-31.0								ER50-32.0
33.0-32.0								ER50-33.0
34.0-33.0								ER50-34.0
35.0-34.0								ER50-35.0
36.0-35.0								ER50-36.0

K
**配件
ACCESSORIES**

·ER 止水筒夹

ER COOLANT COLLET



规格 / 型号 Model	d	夹持范围 Range	D	D1	L	L1
ER11S	3-7	0.1	11	11.5	18	3.8
ER16S	3-6	0.1	16	17	27.5	6.26
	6-10	0.5	16	17	27.5	6.26
ER20S	3-6	0.1	20	21	31.5	6.36
	6-13	0.5	20	21	31.5	6.36
ER25S	3-6	0.1	25	26	34	6.66
	6-16	0.5	25	26	34	6.66
ER32S	3-8	0.1	32	33	40	7.16
	8-20	0.5	32	33	40	7.16
ER40S	4-10	0.1	40	41	46	7.66
	10-26	0.5	40	41	46	7.66
ER50S	12-34	0.5	50	52	60	12.6

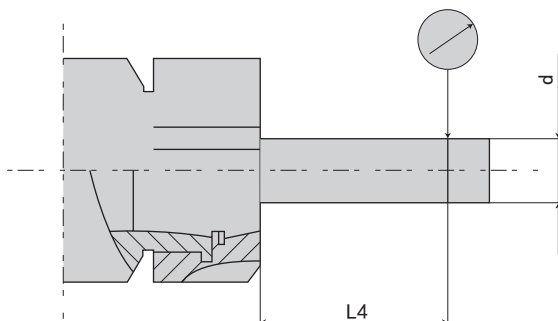
特点:

- ◎材料: SUJ2
- ◎硬度: HRC44-48
- ◎利用沟槽差异, 达到周围止水, 仅中心的功能
- ◎适用于夹持有出水孔的刀具
- ◎可承受水压 7Mpa
- ◎非标准孔可订制

Features:

- ◎ Material:SUJ2
- ◎ Hardness:HRC44-48
- ◎ Differences in the use of grooves to reach around the sealing
- ◎ Central water feature only applies to folders to hold the water hole tool
- ◎ Can withstand water pressure 7Mpa
- ◎ Non-standard holes can be customized

精度检测 INSPECTION OF ACCURACY



L4	d	径向跳动 Run out	
		A 级 A class	AA 级 AA class
16	3.0-6.0	≤ 0.008	≤ 0.005
25	6.0-10.0	≤ 0.008	≤ 0.005
40	10.0-18.0	≤ 0.008	≤ 0.005
50	18.0-27.0	≤ 0.008	≤ 0.005
60	27.0-34.0	≤ 0.015	≤ 0.01

特点:

- ◎利用沟槽的差异, 以及垫圈 (Sealed ring 封环) 的应用, 达到周围止水, 仅中心出水的功用。
- ◎适合于夹持出水孔的刀具
- ◎可承受水压达 21kgf/cm²
- ◎无弹性 (没有弹性夹持范围, 需看最大夹持范围)
- ◎非标准孔径如英制尺寸或是点数规格可接受订制
- ◎此产品 ER 部分依据 DIN6499, 可搭配合适的 (无) 刀杆

Features:

- ◎ Take use of the difference of flute and the use of sealed ring to attain surrounding coolant and provide center as water outlet.
- ◎ Useful to chuck cutting tools with water outlet.
- ◎ Can bear the water pressure up to 21 kgf/cm².
- ◎ No flexibility(NO flexible chucking range.It depends on the biggest chucking range).
- ◎ Non-standard type,such as inch type or decimal type,are welcomed to order.
- ◎ The ER part of the product is according to DIN-6499.It can be used with suitable tool holders.

·ER 止水筒夹

ER COOLANT COLLET

ER11S		ER16S		ER20S		ER25S		ER32S		ER40S		ER50S	
规格 Type	夹持范围 Range	规格 Type	夹持范围 Range	规格 Type	夹持范围 Range	规格 Type	夹持范围 Range	规格 Type	夹持范围 Range	规格 Type	夹持范围 Range	规格 Type	夹持范围 Range
3S	3-2.9	3S	3-2.9	3S	3-2.9	3S	3-2.9	3S	3-2.9	4S	4-3.9	12S	12-11.5
4S	4-3.9	4S	4-3.9	4S	4-3.9	4S	4-3.9	4S	4-3.9	5S	5-4.9	14S	14-13.5
4.5S	4.5-4.4	4.5S	4.5-4.4	5S	5-4.9	5S	5-4.9	5S	5-4.9	6S	6-5.9	16S	16-15.5
5S	5-4.9	5S	5-4.9	5.5S	5.5-5.4	6S	6-5.5	6S	6-5.9	7S	7-6.9	16.5S	16.5-16
5.5S	5.5-5.4	5.5S	5.5-5.4	6S	6-5.5	6.5S	6.5-6	7S	7-6.9	8S	8-7.9	17S	17-16.5
6S	6-5.9	6S	6-5.5	6.5S	6.5-6	7S	7-6.5	8S	8-7.5	9S	9-8.9	17.5S	17.5-17
6.5S	6.5-6.4	6.5S	6.5-6	7S	7-6.5	7.5S	7.5-7	8.5S	8.5-8	10S	10-9.5	18S	18-17.5
7S	7-6.9	7S	7-6.5	7.5S	7.5-7	8S	8-7.5	9S	9-8.5	10.5S	10.5-10	18.5S	18.5-18
		7.5S	7.5-7	8S	8-7.5	8.5S	8.5-8	9.5S	9.5-9	11S	11-10.5	19S	19-18.5
		8S	8-7.5	8.5S	8.5-8	9S	9-8.5	10S	10-9.5	11.5S	11.5-11	19.5S	19.5-19
		8.5S	8.5-8	9S	9-8.5	9.5S	9.5-9	10.5S	10.5-10	12S	12-11.5	20S	20-19.5
		9S	9-8.5	9.5S	9.5-9	10S	10-9.5	11S	11-10.5	12.5S	12.5-12	20.5S	20.5-20
		9.5S	9.5-9	10S	10-9.5	10.5S	10.5-10	11.5S	11.5-11	13S	13-12.5	21S	21-20.5
		10S	10-9.5	10.5S	10.5-10	11S	11-10.5	12S	12-11.5	13.5S	13.5-13	21.5S	21.5-21
				11S	11-10.5	11.5S	11.5-11	12.5S	12.5-12	14S	14-13.5	22S	22-21.5
				11.5S	11.5-11	12S	12-11.5	13S	13-12.5	14.5S	14.5-14	22.5S	22.5-22
				12S	12-11.5	12.5S	12.5-12	13.5S	13.5-13	15S	15-14.5	23S	23-22.5
				12.5S	12.5-12	13S	13-12.5	14S	14-13.5	15.5S	15.5-15	23.5S	23.5-23
				13S	13-12.5	13.5S	13.5-13	14.5S	14.5-14	16S	16-15.5	24S	24-23.5
						14S	14-13.5	15S	15-14.5	16.5S	16.5-116	24.5S	24.5-24
						14.5S	14.5-14	15.5S	15.5-15	17S	17-16.5	25S	25-24.5
						15S	15-14.5	16S	16-15.5	17.5S	17.5-17	25.5S	25.5-25
						15.5S	15.5-15	16.5S	16.5-16	18S	18-17.5	26S	26-25.5
						16S	16-15.5	17S	17-16.5	18.5S	18.5-18	26.5S	26.5-26
								17.5S	17.5-17	19S	19-18.5	27S	27-26.5
								18S	18-17.5	19.5S	19.5-19	27.5S	27.5-27
								18.5S	18.5-18	20S	20-19.5	28S	28-27.5
								19S	19-18.5	20.5S	20.5-20	28.5S	28.5-28
								19.5S	19.5-19	21S	21-20.5	29S	29-28.5
								20S	20-19.5	21.5S	21.5-21	29.5S	29.5-29
										22S	22-21.5	30S	30-29.5
										22.5S	22.5-22	30.5S	30.5-30
										23S	23-22.5	31S	31-30.5
										23.5S	23.5-23	31.5S	31.5-31
										24S	24-23.5	32S	32-31.5
										24.5S	24.5-24	32.5S	32.5-32
										25S	25-24.5	33S	33-32.5
										25.5S	25.5-25	33.5S	33.5-33
										26S	26-25.5	34S	34-33.5

型号 Model No.	夹持能力 Capacity	规格 Type	支 / 套 PCS/SET
ER11S	3-7	3 4 4.5 5 5.5 6 6.5 7	8
ER16S	3-10	3 4 5 6 7 8 9 10	8
ER20S	3-13	3 4 5 6 7 8 9 10 11 12 13	11
ER25S	3-16	3 4 5 6 7 8 9 10 11 12 13 14 15 16	14
ER32S	3-20	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	18
ER40S	4-26	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	23
ER50S	12-34	12 14 16 18 20 22 24 26 28 30 32 34	12

·GSK 高速筒夹系列

GSK HIGH SPEED COLLET SERIES



特点:

注:

- ◎材质: SUJ2
- ◎硬度: HRC44-48
- ◎内孔多次研磨, 可达 Ra0.4, 起到镜面效果
- ◎筒夹锥前面的凸台设计, 工作中可防止粉尘、切屑的进入, 延长了使用寿命
- ◎外圆及端面多次研磨, 可达 Ra0.4, 起到镜面效果
- ◎表面"环保"特殊涂层处理, 提高表面硬度、耐磨性, 提高清洁度, 精度更稳定, 表面更光滑, 防锈、防腐蚀效果更好, 手感更舒适, 外型更美观
- ◎筒夹 4°的半锥角设计, 更具有夹持力, 提高抗震性能

Features:

- ◎ Material:SUJ2.
- ◎ HRC:HRC44-48.
- ◎ Inner hole grinding for many times,so as to reach Ra0.4,has a mirror effect.
- ◎ The design of the convex platform in front of the collet can prevent dust and chip getting into the collet when processing,prolong the tool's life.
- ◎ End and the cylindrical are grinding for many times,can reach Ra0.4,has a mirror effec.
- ◎ Surface"environmental protection",special coating surface treatment,improve the hardness and endurance of the surface,cleaness better,accuracy stable,surface more smooth,antirust,feel comfortable,appearance nice.
- ◎ The desing of 4 ° collet,more clamping force,to improve seismic performance.

精湛的加工工艺 SUPER MACHING TECHNOLOGY

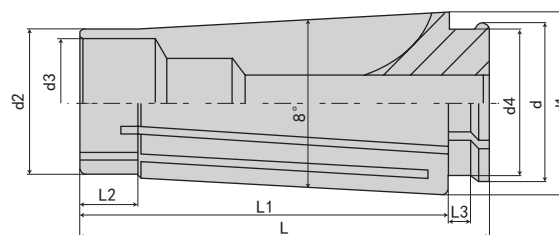
深冷处理:

注:

- ◎ -185℃超长深冷处理, 使接近全部的残余奥氏体转变为马氏体
- ◎析出的纳米级碳化物颗粒, 增加硬度和韧性
- ◎减少残余应力
- ◎耐磨性显著提高
- ◎≥ 100h 超长定型热时效去除磨加工时的残余内应力

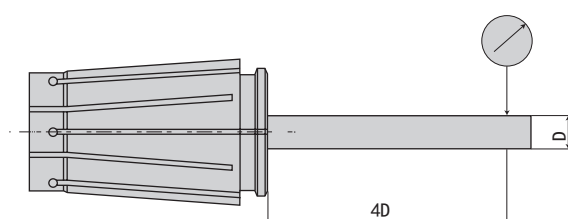
Features:

- ◎ -185 °C long cryogenic,nearly of the residual austenite into martensite.
- ◎ Carbide precipitation of Nanoscale particles,increasing the hardness and toughness
- ◎ Reducing residual stresses
- ◎ Wear resistance significantly improved
- ◎ Thermal aging processing
- ≥ 100h long stereotyped thermal limitation removal of grinding residual stress.

·GSK 高速筒夹系列
GSK HIGH SPEED COLLET SERIES


规格 / 型号 Model	d	d1	d2	d3	d4	L	L1	L2	L3
GSK06	8.9(8.6)	10.4(10.25)	7.5	6	7.6	25	17.4	3.8	2.2
GSK10	13.4(13)	15.45(15.3)	12	9.5	11.8	30.5	21.1	5.1	2.4
GSK13	17.05	19.97	15.5	12.5	15.1	39	27	6.5	2.4
GSK16	20.85	24.52	18.8	15.5	19	45	32.4	7.5	2.5
GSK20	24.95	29.1	22.6	19.5	23	54	40.7	8	2.9
GSK25	31	35.7	28.9	25	28.5	57	43.1	8.4	3

GSK06		GSK10		GSK13		GSK16		GSK20		GSK25	
型号 Model	范围 Range	型号 Model	范围 Range	型号 Model	范围 Range	型号 Model	范围 Range	型号 Model	范围 Range	型号 Model	范围 Range
GSK06-2	2-1.75	GSK10-2	2-1.75	GSK13-3	3-2.75	GSK16-3	3-2.75	GSK20-4	4-3.5	GSK25-6	6-6.5
GSK06-2.5	2.5-2.25	GSK10-2.5	2.5-2.25	GSK13-3.5	3.5-3	GSK16-3.175	3.175-2.7	GSK20-4.5	4.5-4	GSK25-8	8-7.5
GSK06-3	3-2.75	GSK10-3	3-2.75	GSK13-4	4-3.5	GSK16-3.5	3.5-3	GSK20-5	5-5.5	GSK25-10	10-9.5
GSK06-3.5	3.5-3	GSK10-3.175	3.175-2.7	GSK13-4.5	4.5-4	GSK16-4	4-3.5	GSK20-5.5	5.5-5	GSK25-12	12-11.5
GSK06-4	4-3.5	GSK10-3.5	3.5-3	GSK13-5	5-4.5	GSK16-4.5	4.5-4	GSK20-6	6-5.5	GSK25-14	14-13.5
GSK06-4.5	4.5-4	GSK10-4	4-3.5	GSK13-5.5	5.5-5	GSK16-5	5-4.5	GSK20-6.5	6.5-6	GSK25-16	16-15.5
GSK06-5	5-4.5	GSK10-4.5	4.5-4	GSK13-6	6-5.5	GSK16-5.5	5.5-5	GSK20-7	7-6.5	GSK25-16.5	16.5-16
GSK06-5.5	5.5-5	GSK10-5	5-4.5	GSK13-6.5	6.5-6	GSK16-6	6-5.5	GSK20-7.5	7.5-7	GSK25-17	17-16.5
GSK06-6	6-5.5	GSK10-5.5	5.5-5	GSK13-7	7-6.5	GSK16-6.5	6.5-6	GSK20-8	8-7.5	GSK25-17.5	17.5-17
		GSK10-6	6-5.5	GSK13-7.5	7.5-7	GSK16-7	7-6.5	GSK20-8.5	8.5-8	GSK25-18	18-17.5
		GSK10-6.5	6.5-6	GSK13-8	8-7.5	GSK16-7.5	7.5-7	GSK20-9	9-8.5	GSK25-18.5	18.5-18
		GSK10-7	7-6.5	GSK13-8.5	8.5-8	GSK16-8	8-7.5	GSK20-9.5	9.5-9	GSK25-19	19-18.5
		GSK10-7.5	7.5-7	GSK13-9	9-8.5	GSK16-8.5	8.5-8	GSK20-10	10-9.5	GSK25-19.5	19.5-19
		GSK10-8	8-7.5	GSK13-9.5	9.5-9	GSK16-9	9-8.5	GSK20-10.5	10.5-10	GSK25-20	20-19.5
		GSK10-8.5	8.5-8	GSK13-10	10-9.5	GSK16-9.5	9.5-9	GSK20-11	11-10.5	GSK25-20.5	20.5-20
		GSK10-9	9-8.5	GSK13-10.5	10.5-10	GSK16-10	10-9.5	GSK20-11.5	11.5-11	GSK25-21	21-20.5
		GSK10-9.5	9.5-9	GSK13-11	11-10.5	GSK16-10.5	10.5-10	GSK20-12	12-11.5	GSK25-21.5	21.5-21
		GSK10-10	10-9.5	GSK13-11.5	11.5-11	GSK16-11	11-10.5	GSK20-12.5	12.5-12	GSK25-22	22-21.5
				GSK13-12	12-11.5	GSK16-11.5	11.5-11	GSK20-13	13-12.5	GSK25-22.5	22.5-22
				GSK13-12.5	12.5-12	GSK16-12	12-11.5	GSK20-13.5	13.5-13	GSK25-23	23-22.5
				GSK13-13	13-12.5	GSK16-12.5	12.5-12	GSK20-14	14-13.5	GSK25-23.5	23.5-23
						GSK16-13	13-12.5	GSK20-14.5	14.5-14	GSK25-24	24-23.5
						GSK16-13.5	13.5-13	GSK20-15	15-14.5	GSK25-24.5	24.5-24
						GSK16-14	14-13.5	GSK20-15.5	15.5-15	GSK25-25	25-24.5
						GSK16-14.5	14.5-14	GSK20-16	16-15.5		
						GSK16-15	15-14.5	GSK20-16.5	16.5-16		
						GSK16-15.5	15.5-15	GSK20-17	17-16.5		
						GSK16-16	16-15.5	GSK20-17.5	17.5-17		
								GSK20-18	18-17.5		
								GSK20-18.5	18.5-18		
								GSK20-19	19-18.5		
								GSK20-19.5	19.5-19		
								GSK20-20	20-19.5		



L	径向跳动 (Run out)	
	A 级 (A class)	AA 级 (A A class)
4XD	≤ 0.01	≤ 0.008

◎材质: SUJ2

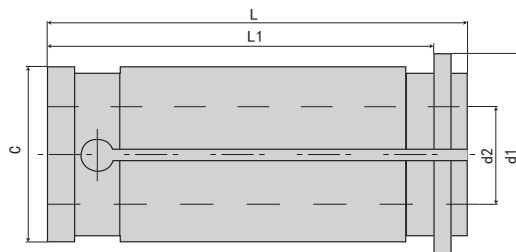
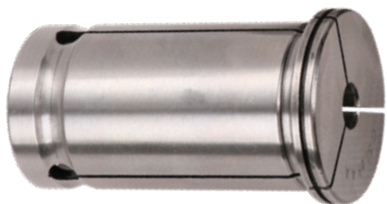
◎ Material: SUJ2

◎热处理硬度: HRC44-48

◎ Hardness: HRC44-48

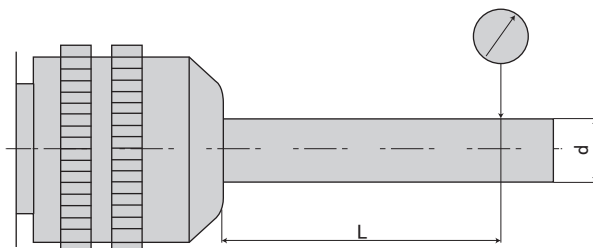
·C 型强力直柄筒夹

C STRAIGHT COLLET



规格 / 型号 Model	夹持范围 d2 Range	C	d1	L	L1
SC16	3/4/5/6/7/8/9/10/11/12	16	25	49	47
SC20	3/4/5/6/7/8/9/10/11/12/13/14/15/16	20	25	52.5	49
SC22	3/4/5/6/7/8/9/10/11/12/13/14/15/16	22	26	55	51.5
SC25	3/4/5/6/7/8/9/10/11/12/13/14/15/16/18/19/20	25	30	60	55
SC32	3/4/5/6/7/8/9/10/11/12/13/14/15/16/18/19/20/21/22/23/24/25/26	32	37.5	65	60
SC42	3/4/5/6/7/8/9/10/11/12/13/14/15/16/18/19/20/21/22/23/24/25/26 27/28/29/30/31/32/33/34/35/36	42	47	75	69
英制规格可定购 Inch size can be ordered					

d	L	径向跳动 Run out(mm)	
		普通级 General level	高精度 High precision
< 10	30	0.015	0.01
≥ 10-20	50	0.015	0.01
> 20	80	0.02	0.01



特点:

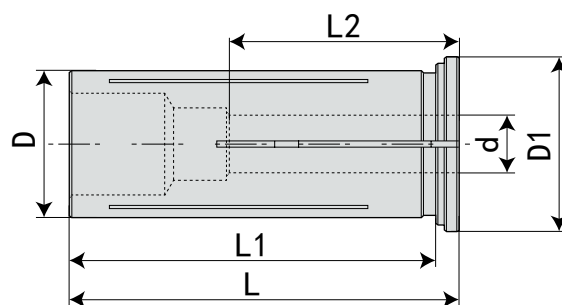
- ◎材质: SUJ-2
- ◎硬度: HRC44-48
- ◎偏摆精度: ≤ 0.01mm
- ◎限定夹持与孔径相同之刀具柄径
- ◎筒夹不具备弹性收缩范围, 强调夹持力
- ◎刀具置入筒夹必须超过内孔有效夹持长度, 以达到有效夹持
- ◎共有两种精度等级: 高精度 0.01 mm 及普通级 0.015mm
- ◎订购时请告知所需精度等级

Features:

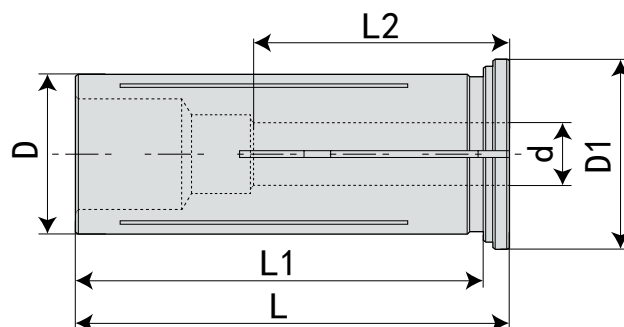
- ◎ Material:SUJ-2.
- ◎ Hardness:HRC44-48
- ◎ Precision: ≤ 0.01mm
- ◎ Definition clamp and aperture same shank of tool diameter.
- ◎ The collet does not have the elastic contraction scope,the emphasis chucking power.
- ◎ In the cutting tool posts the collet to surpass the hole effective clamp length,achieves the effective clamp.
- ◎ There are two dinds of classes for precision:High precision0.01 mm,General level0.015mm.
- ◎ Please inform the required precision when ordering.

·液压筒夹（标准型）

HYDRAULIC COLLET (STANDARD)



规格 Model	L	L1	L2	D1	D	d	重量 KG
HC12-03	48	45.9	16.9	19	12	3	
HC12-1/8	48	45.9	16.9	19	12	3.175	
HC12-04	48	45.9	21	19	12	4	
HC12-05	48	45.9	23	19	12	5	
HC12-06	48	45.9	27	19	12	6	
HC12-08	48	45.9	25.8	19	12	8	
HC12-10	48	45.9	48	19	12	10	



规格 Model	L	L1	L2	D1	D	d	重量 KG
HC20-03	54	51	21	23.9	20	3	
HC20-1/8	54	51	21	23.9	20	3.175	
HC20-04	54	51	21.5	23.9	20	4	
HC20-05	54	51	24	23.9	20	5	
HC20-06	54	51	28.5	23.9	20	6	
HC20-08	54	51	31.6	23.9	20	8	
HC20-10	54	51	39.4	23.9	20	10	
HC20-12	54	51	39.2	23.9	20	12	
HC20-14	54	51	54	23.9	20	14	
HC20-16	54	51	54	23.9	20	16	

特点:

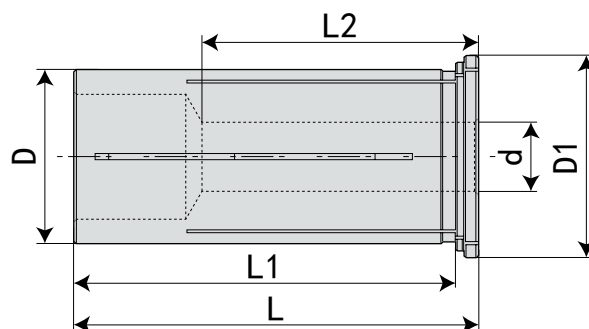
- ◎材质：50CrV
- ◎硬度：HRC 55-58
- ◎偏摆精度：≤ 0.005mm 重复精度佳
- ◎筒夹具备止水功能
- ◎筒夹不具备弹性收缩范围，强调夹持力
- ◎限定夹持与孔径相同之刀具柄径 刀具公差 (h6 或 h7) 必须正确
- ◎刀具置入筒夹必须超过内孔有效夹持长度，以达到有效夹持

Features:

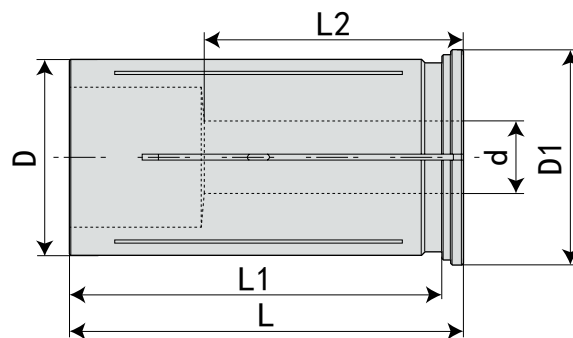
- ◎ Material: 50CrV
- ◎ Hardness: HRC 55-58
- ◎ Swinging accuracy: ≤ 0.005mm Repeatability is good
- ◎ Collet with water sealed function
- ◎ No elastic shrinkage range of the collet, emphasizing the clamping force.
- ◎ Limit clamping to the same shank diameter as the hole diameter Tool tolerance (h6 or h7) must be correct.
- ◎ The tool must be inserted into the collet beyond the effective clamping length of the bore to achieve effective clamping.

·液压筒夹（标准型）

HYDRAULIC COLLET (STANDARD)



规格 Model	L	L1	L2	D1	D	d	重量 KG
HC25-03	58	54.8	25	29	25	3	
HC25-1/8	58	54.8	25	29	25	3.175	
HC25-04	58	54.8	25.8	29	25	4	
HC25-05	58	54.8	25.8	29	25	5	
HC25-06	58	54.8	30.5	29	25	6	
HC25-08	58	54.8	33.6	29	25	8	
HC25-10	58	54.8	39.7	29	25	10	
HC25-12	58	54.8	40.3	29	25	12	
HC25-14	58	54.8	40.8	29	25	14	
HC25-16	58	54.8	40.4	29	25	16	
HC25-18	58	54.8	40.5	29	25	18	
HC25-20	58	54.8	58	29	25	20	



规格 Model	L	L1	L2	D1	D	d	重量 KG
HC32-05	64	60.6	25.5	35.2	32	5	
HC32-06	64	60.6	27.4	35.2	32	6	
HC32-08	64	60.6	31	35.2	32	8	
HC32-10	64	60.6	42.4	35.2	32	10	
HC32-12	64	60.6	42.4	35.2	32	12	
HC32-14	64	60.6	45	35.2	32	14	
HC32-16	64	60.6	51.3	35.2	32	16	
HC32-18	64	60.6	51.3	35.2	32	18	
HC32-20	64	60.6	52.4	35.2	32	20	
HC32-22	64	60.6	52.4	35.2	32	22	
HC32-24	64	60.6	53.6	35.2	32	24	
HC32-25	64	60.6	56.9	35.2	32	25	
HC32-26	64	60.6	57.5	35.2	32	26	

特点:

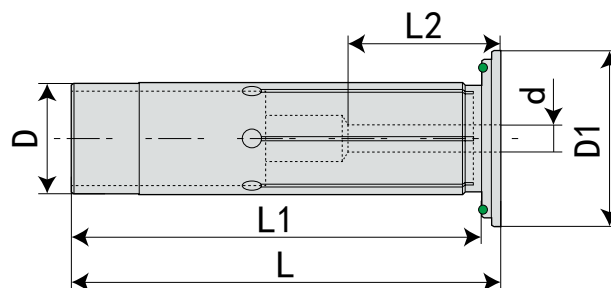
- ◎材质：50CrV
- ◎硬度：HRC 55-58
- ◎偏摆精度：≤ 0.005mm 重复精度佳
- ◎筒夹具备止水功能
- ◎筒夹不具备弹性收缩范围，强调夹持力
- ◎限定夹持与孔径相同之刀具柄径 刀具公差（h6 或 h7）必须正确
- ◎刀具置入筒夹必须超过内孔有效夹持长度，以达到有效夹持

Features:

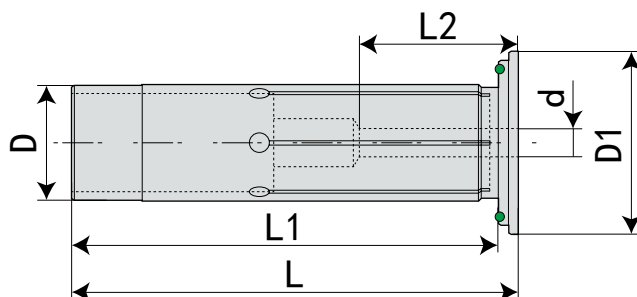
- ◎ Material: 50CrV
- ◎ Hardness: HRC 55-58
- ◎ Swinging accuracy: ≤ 0.005mm Repeatability is good
- ◎ Collet with water sealed function
- ◎ No elastic shrinkage range of the collet, emphasizing the clamping force.
- ◎ Limit clamping to the same shank diameter as the hole diameter Tool tolerance (h6 or h7) must be correct.
- ◎ The tool must be inserted into the collet beyond the effective clamping length of the bore to achieve effective clamping.

·液压筒夹（止水型）

HYDRAULIC COLLET (SEALED)



规格 Model	L	L1	L2	D1	D	d	重量 KG
HDC8-02	37.5	35.5	14.5	12.5	8	2	
HDC8-03	37.5	35.5	16.5	12.5	8	3	
HDC8-1/8	37.5	35.5	16.5	12.5	8	3.175	
HDC8-04	37.5	35.5	16.5	12.5	8	4	
HDC8-05	37.5	35.5	16.5	12.5	8	5	
HDC8-06	37.5	35.5	24	12.5	8	6	
HC12-10	48	45.9	48	19	12	10	



规格 Model	L	L1	L2	D1	D	d	重量 KG
HDC12-02	47.5	45.5	14.5	19	12	2	
HDC12-03	47.5	45.5	16.5	19	12	3	
HDC12-1/8	47.5	45.5	16.5	19	12	3.175	
HDC12-04	47.5	45.5	16.5	19	12	4	
HDC12-05	47.5	45.5	16.5	19	12	5	
HDC12-06	47.5	45.5	24	19	12	6	
HDC12-07	47.5	45.5	24	19	12	7	
HDC12-08	47.5	45.5	25.5	19	12	8	
HDC12-09	47.5	45.5	32.5	19	12	9	
HDC12-10	47.5	45.5	32.5	19	12	10	

特点:

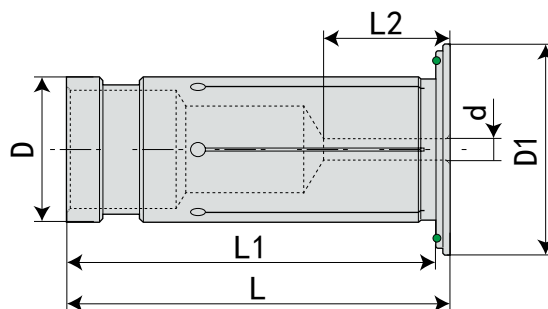
- ◎材质：50CrV
- ◎硬度：HRC 55-58
- ◎偏摆精度：≤ 0.005mm 重复精度佳
- ◎筒夹具备止水功能
- ◎筒夹不具备弹性收缩范围，强调夹持力
- ◎限定夹持与孔径相同之刀具柄径 刀具公差（h6 或 h7）必须正确
- ◎刀具置入筒夹必须超过内孔有效夹持长度，以达到有效夹持

Features:

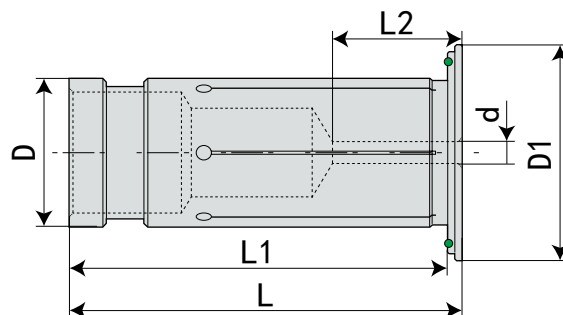
- ◎ Material: 50CrV
- ◎ Hardness: HRC 55-58
- ◎ Swinging accuracy: ≤ 0.005mm Repeatability is good
- ◎ Collet with water sealed function
- ◎ No elastic shrinkage range of the collet, emphasizing the clamping force.
- ◎ Limit clamping to the same shank diameter as the hole diameter Tool tolerance (h6 or h7) must be correct.
- ◎ The tool must be inserted into the collet beyond the effective clamping length of the bore to achieve effective clamping.

·液压筒夹（止水型）

HYDRAULIC COLLET (SEALED)



规格 Model	L	L1	L2	D1	D	d	重量 KG
HDC16-02	49.5	47.5	14.5	23	16	2	
HDC16-03	49.5	47.5	16.5	23	16	3	
HDC16-1/8	49.5	47.5	16.5	23	16	3.175	
HDC16-04	49.5	47.5	16.5	23	16	4	
HDC16-05	49.5	47.5	16.5	23	16	5	
HDC16-06	49.5	47.5	24	23	16	6	
HDC16-07	49.5	47.5	24	23	16	7	
HDC16-08	49.5	47.5	25.5	23	16	8	
HDC16-09	49.5	47.5	32.5	23	16	9	
HDC16-10	49.5	47.5	32.5	23	16	10	
HDC16-11	49.5	47.5	36	23	16	11	
HDC16-12	49.5	47.5	36	23	16	12	



规格 Model	L	L1	L2	D1	D	d	重量 KG
HDC20-02	52.5	50.5	14.5	29	20	2	
HDC20-03	52.5	50.5	17.5	29	20	3	
HDC20-1/8	52.5	50.5	17.5	29	20	3.175	
HDC20-04	52.5	50.5	17.5	29	20	4	
HDC20-05	52.5	50.5	17.5	29	20	5	
HDC20-06	52.5	50.5	25.5	29	20	6	
HDC20-07	52.5	50.5	28	29	20	7	
HDC20-08	52.5	50.5	28	29	20	8	
HDC20-09	52.5	50.5	32.5	29	20	9	
HDC20-10	52.5	50.5	32.5	29	20	10	
HDC20-11	52.5	50.5	36	29	20	11	
HDC20-12	52.5	50.5	36	29	20	12	
HDC20-13	52.5	50.5	36.5	29	20	13	
HDC20-14	52.5	50.5	37	29	20	14	
HDC20-15	52.5	50.5	37	29	20	15	
HDC20-16	52.5	50.5	37.5	29	20	16	

特点:

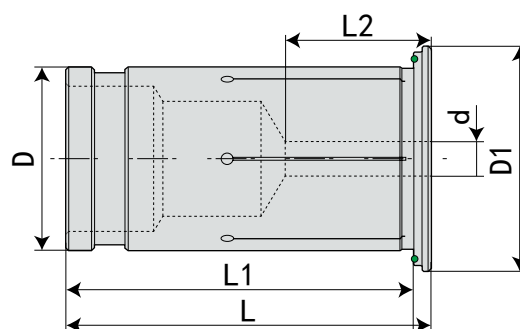
- ◎ 材质：50CrV
- ◎ 硬度：HRC 55-58
- ◎ 偏摆精度：≤ 0.005mm 重复精度佳
- ◎ 筒夹具备止水功能
- ◎ 筒夹不具备弹性收缩范围，强调夹持力
- ◎ 限定夹持与孔径相同之刀具柄径 刀具公差 (h6 或 h7) 必须正确
- ◎ 刀具置入筒夹必须超过内孔有效夹持长度，以达到有效夹持

Features:

- ◎ Material: 50CrV
- ◎ Hardness: HRC 55-58
- ◎ Swinging accuracy: ≤ 0.005mm Repeatability is good
- ◎ Collet with water sealed function
- ◎ No elastic shrinkage range of the collet, emphasizing the clamping force.
- ◎ Limit clamping to the same shank diameter as the hole diameter Tool tolerance (h6 or h7) must be correct.
- ◎ The tool must be inserted into the collet beyond the effective clamping length of the bore to achieve effective clamping.

·液压筒夹（止水型）

HYDRAULIC COLLET (SEALED)



规格 Model	L	L1	L2	D1	D	d	重量 KG
HDC25-02	58.5	55.5	14.5	32	25	2	
HDC25-03	58.5	55.5	17.5	32	25	3	
HDC25-1/8	58.5	55.5	17.5	32	25	3.175	
HDC25-04	58.5	55.5	17.5	32	25	4	
HDC25-05	58.5	55.5	17.5	32	25	5	
HDC25-06	58.5	55.5	25.5	32	25	6	
HDC25-07	58.5	55.5	26.5	32	25	7	
HDC25-08	58.5	55.5	27.5	32	25	8	
HDC25-09	58.5	55.5	28.5	32	25	9	
HDC25-10	58.5	55.5	30.5	32	25	10	
HDC25-11	58.5	55.5	30.5	32	25	11	
HDC25-12	58.5	55.5	30.5	32	25	12	
HDC25-13	58.5	55.5	31.5	32	25	13	
HDC25-14	58.5	55.5	32.5	32	25	14	
HDC25-15	58.5	55.5	36.5	32	25	15	
HDC25-16	58.5	55.5	40.5	32	25	16	
HDC25-17	58.5	55.5	40.5	32	25	17	
HDC25-18	58.5	55.5	40.5	32	25	18	
HDC25-19	58.5	55.5	40.5	32	25	19	
HDC25-20	58.5	55.5	40.5	32	25	20	

特点：

- ◎材质：50CrV
- ◎硬度：HRC 55-58
- ◎偏摆精度：≤ 0.005mm 重复精度佳
- ◎筒夹具备止水功能
- ◎筒夹不具备弹性收缩范围，强调夹持力
- ◎限定夹持与孔径相同之刀具柄径 刀具公差（h6 或 h7）必须正确
- ◎刀具置入筒夹必须超过内孔有效夹持长度，以达到有效夹持

Features:

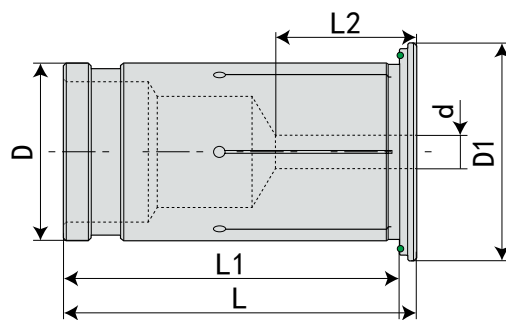
- ◎ Material: 50CrV
- ◎ Hardness: HRC 55-58
- ◎ Swinging accuracy: ≤ 0.005mm Repeatability is good
- ◎ Collet with water sealed function
- ◎ No elastic shrinkage range of the collet, emphasizing the clamping force.
- ◎ Limit clamping to the same shank diameter as the hole diameter Tool tolerance (h6 or h7) must be correct.
- ◎ The tool must be inserted into the collet beyond the effective clamping length of the bore to achieve effective clamping.

K

配件
ACCESSORIES

·液压筒夹（止水型）

HYDRAULIC COLLET (SEALED)



规格 Model	L	L1	L2	D1	D	d	重量 KG
HDC32-04	63.5	60.5	17.5	39	32	4	
HDC32-05	63.5	60.5	17.5	39	32	5	
HDC32-06	63.5	60.5	25.5	39	32	6	
HDC32-07	63.5	60.5	26.5	39	32	7	
HDC32-08	63.5	60.5	27.5	39	32	8	
HDC32-09	63.5	60.5	28.5	39	32	9	
HDC32-10	63.5	60.5	30.5	39	32	10	
HDC32-11	63.5	60.5	30.5	39	32	11	
HDC32-12	63.5	60.5	30.5	39	32	12	
HDC32-13	63.5	60.5	31.5	39	32	13	
HDC32-14	63.5	60.5	32.5	39	32	14	
HDC32-15	63.5	60.5	36.5	39	32	15	
HDC32-16	63.5	60.5	40.5	39	32	16	
HDC32-17	63.5	60.5	40.5	39	32	17	
HDC32-18	63.5	60.5	40.5	39	32	18	
HDC32-19	63.5	60.5	40.5	39	32	19	
HDC32-20	63.5	60.5	40.5	39	32	20	
HDC32-22	63.5	60.5	44.5	39	32	22	
HDC32-24	63.5	60.5	44.5	39	32	24	
HDC32-25	63.5	60.5	48.5	39	32	25	
HDC32-26	63.5	60.5	48.5	39	32	26	

特点:

- ◎材质：50CrV
- ◎硬度：HRC 55-58
- ◎偏摆精度：≤ 0.005mm 重复精度佳
- ◎筒夹具备止水功能
- ◎筒夹不具备弹性收缩范围，强调夹持力
- ◎限定夹持与孔径相同之刀具柄径 刀具公差（h6 或 h7）必须正确
- ◎刀具置入筒夹必须超过内孔有效夹持长度，以达到有效夹持

Features:

- ◎ Material: 50CrV
- ◎ Hardness: HRC 55-58
- ◎ Swinging accuracy: ≤ 0.005mm Repeatability is good
- ◎ Collet with water sealed function
- ◎ No elastic shrinkage range of the collet, emphasizing the clamping force.
- ◎ Limit clamping to the same shank diameter as the hole diameter Tool tolerance (h6 or h7) must be correct.
- ◎ The tool must be inserted into the collet beyond the effective clamping length of the bore to achieve effective clamping.

·日本标准拉钉 MAS 403-1975

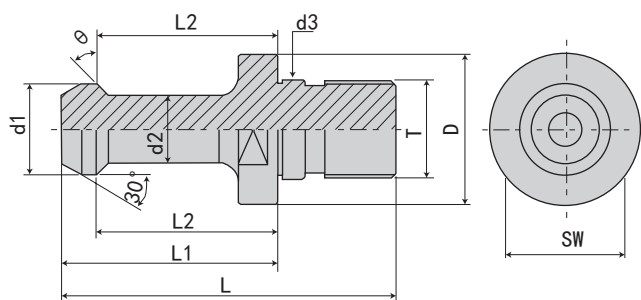
JAPANESE STANDARD PULL STUD MAS ISO 7388/2-1984



全白



白牙



标准型 Standard type

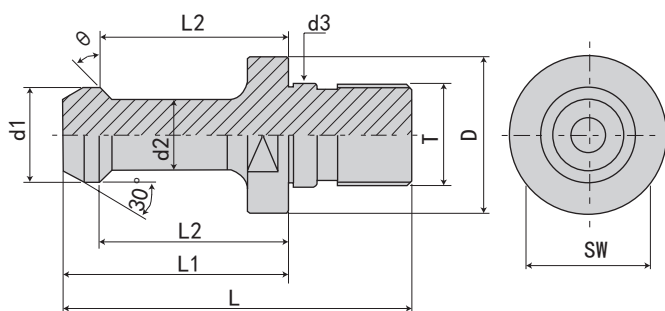
规格 / 型号 Model	D	d1	d2	d3	L	L1	L2	T	重量 KGS
BT30-45°	16.5	11	7	12.5	43	23	18	M12	0.04
BT40-45°	23	15	10	17	60	35	28	M16	0.1
BT50-45°	38	23	17	25	85	45	35	M24	0.3
BT60-45°	56	32	24	31	115	65	53	M30	0.4
BT30-60°	16.5	11	7	12.5	43	23	18	M12	0.04
BT40-60°	23	15	10	17	60	35	28	M16	0.1
BT50-60°	38	23	17	25	85	45	35	M24	0.3
BT60-60°	56	32	24	31	115	65	53	M30	0.4
BT30-90°	16.5	11	7	12.5	43	23	18	M12	0.04
BT40-90°	23	15	10	17	60	35	28	M16	0.1
BT50-90°	38	23	17	25	85	45	35	M24	0.3
BT60-90°	56	32	24	31	115	65	53	M30	0.4



全白



白牙



中心出水 Coolant

规格 / 型号 Model	D	D4	d1	d2	d3	L	L1	L2	T	重量 KGS
BT30-45° W	16.5	3	11	7	12.5	43	23	18	M12	0.04
BT40-45° W	23	4	15	10	17	60	35	28	M16	0.1
BT50-45° W	38	6	23	17	25	85	45	35	M24	0.3
BT60-45° W	56	14	32	24	31	115	65	53	M30	0.4
BT30-60° W	16.5	3	11	7	12.5	43	23	18	M12	0.04
BT40-60° W	23	4	15	10	17	60	35	28	M16	0.1
BT50-60° W	38	6	23	17	25	85	45	35	M24	0.3
BT60-30° W	56	14	32	24	31	115	65	53	M30	0.4
BT30-90° W	16.5	3	11	7	12.5	43	23	18	M12	0.04
BT40-90° W	23	4	15	10	17	60	35	28	M16	0.1
BT50-90° W	38	6	23	17	25	85	45	35	M24	0.3
BT60-90° W	56	14	32	24	31	115	65	53	M30	0.4

特点:

普通级拉钉

◎材质: 40Cr

◎头部硬度: 46-50HRC

◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)

◎精度: 0.02

高精度加硬拉钉

◎材质: 20CrMnTi

◎头部硬度: 55-58HRC

◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)

◎精度: 0.01

◎订购时请告知所需精度等级

Features:

General level Pull stud

◎ Material:40Cr.

◎ Head hardness:46-50HRC.

◎ Thread hardness is a little low;35±5HRC, (Protect shank thread,core hardness can resist hit).

◎ Accuracy:0.02

High-precision Hard Pull stud

◎ Material:20CrMnTi.

◎ Head hardness:55-58HRC.

◎ Thread hardness is a little low;35±5HRC, (Protect shank thread,core hardness can resist hit).

◎ Accuracy:0.01

◎ Please inform the required precision when ordering.

·德国标准拉钉 DIN 69872

GERMAN STANDARD PULL STUD DIN 69872

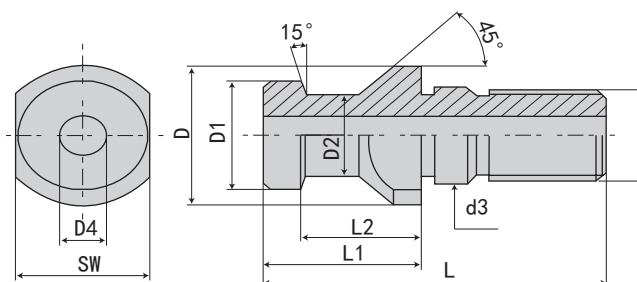


全白带 O 型圈

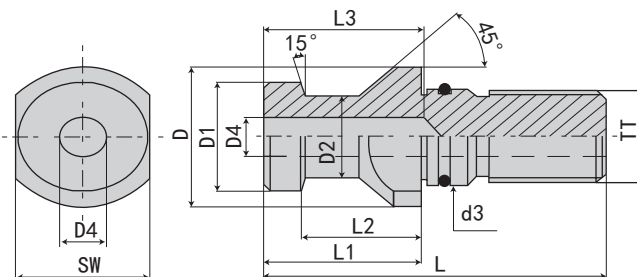


全白

A: 中心出水 Coolant



B: 标准型 Standard type



SK 标准与 JT 标准与 DAT 标准同属于 DIN 69872

SK=JT=DAT=DIN 69872

规格 / 型号 Model	D	D1	D2	d3	D4	L	L1	L2	L3	L4	SW
SK30A	17	13	9	13	-	44	24	19	-	-	14
SK40A	23	19	14	17	7	54	26	20	-	-	19
SK50A	36	28	21	25	11.5	74	34	25	-	-	30
SK60A	52	40	30	32	14	90	40	30	60	-	46
SK30B	17	13	9	13	-	44	24	19	-	2.3	14
SK40B	23	19	14	17	7	54	26	20	27	3	19
SK50B	36	28	21	25	11.5	74	34	25	37	4.5	30
SK60B	52	40	30	32	14	90	40	30	60	-	46

特点:

普通级拉钉

- ◎材质: 40Cr
 - ◎头部硬度: 46-50HRC
 - ◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)
 - ◎精度: 0.02
- 高精度加硬拉钉
- ◎材质: 20CrMnTi
 - ◎头部硬度: 55-58HRC
 - ◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)
 - ◎精度: 0.01
 - ◎订购时请告知所需精度等级

Features:

General level Pull stud

- ◎ Material:40Cr.
- ◎ Head hardness:46-50HRC.
- ◎ Thread hardness is a little low;35±5HRC, (Protect shank thread,core hardness can resist hit).

◎ Accuracy:0.02

High-precision Hard Pull stud

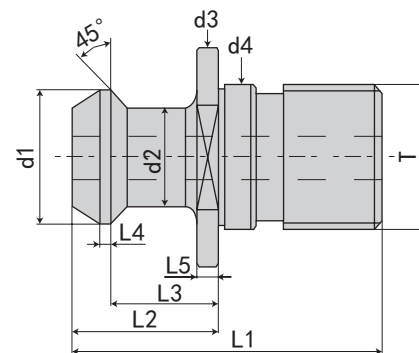
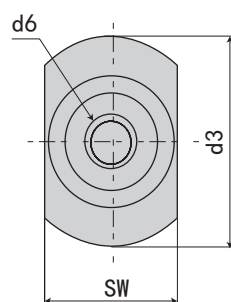
- ◎ Material:20CrMnTi.
- ◎ Head hardness:55-58HRC.
- ◎ Thread hardness is a little low;35±5HRC, (Protect shank thread,core hardness can resist hit).
- ◎ Accuracy:0.01
- ◎ Please inform the required precision when ordering.

·马扎克、三井系列拉钉 MAZAK MITSUI

Mazak Mitsui serial pull studs MAZAK MITSUI



全白



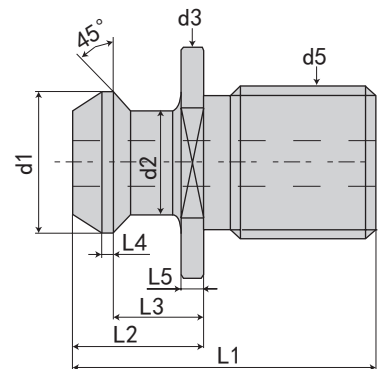
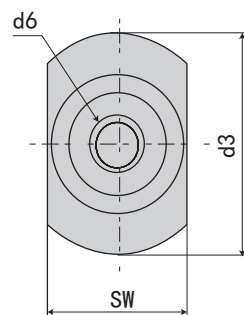
规格 / 型号 Model	d1	d2	d3	d4	T	d6	L1	L2	L3	L4	L5	SW	重量 KGS
MAZAK-BT40	18.8	12.45	22	17	M16	7	44.1	19.1	14.02	2	3	19	0.05
MAZAK-BT50	29	20.83	37	25	M24	10	65.2	25.2	17.7	2.5	5	30	0.18
MAZAK-CAT40	18.8	12.45	22	17	M16	7	41.1	16.1	11	2	3	19	0.05
MITSUI-BT40	15	10	23	17	M16	-	51	25	18	3	6	19	0.06
MITSUI-BT50	24	18	36	25	M24	-	57	31	23	5	10	30	0.19

·美国标准拉钉 ANSI/AMSE B5.50-1994

AMERICAN STANDARD PULL STUD ANSI/AMSE B5.50-1994



全白



规格 / 型号 Model	d1	d2	d3	d5	d6	L1	L2	L3	SW	重量 KGS
CAT40-A45° U	18.8	12.4	23.8	5/8"-11UNC	-	38.1	16.2	11.2	19.05	0.04
CAT40-A45° U/T	18.8	12.4	23.8	5/8"-11UNC	7.1	38.1	16.2	11.2	19.05	0.03
对应英制尺寸 inch	0.74	0.49	0.94		0.281	1.5	0.64	0.44	0.75	
CAT50-A45° U	28.9	20.8	36.5	1"-8UNC	-	58.4	25.4	17.7	31.75	0.17
CAT50-A45° U/T	28.9	20.8	36.5	1"-8UNC	11.9	58.4	25.4	17.7	31.75	0.16
对应英制尺寸 inch	1.14	0.82	1.44		0.468	2.3	1	0.7	1.25	
CAT40-A45°	18.8	12.4	23.8	M16*2.0P	-	38.1	16.2	11.2	19.05	0.04
CAT40-A45° /T	18.8	12.4	23.8	M16*2.0P	7.1	38.1	16.2	11.2	19.05	0.03
对应英制尺寸 inch	0.74	0.49	0.94		0.281	1.5	0.64	0.44	0.75	
CAT50-A45°	28.9	20.8	36.5	M24*3.0P	-	58.4	25.4	17.7	31.75	0.17
CAT50-A45° /T	28.9	20.8	36.5	M24*3.0P	11.9	58.4	25.4	17.7	31.75	0.16
对应英制尺寸 inch	1.14	0.82	1.44		0.468	2.3	1	0.7	1.25	

特点:

普通级拉钉

- ◎材质: 40Cr
 - ◎头部硬度: 46-50HRC
 - ◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)
 - ◎精度: 0.02
- #### 高精度加硬拉钉
- ◎材质: 20CrMnTi
 - ◎头部硬度: 55-58HRC
 - ◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)
 - ◎精度: 0.01
 - ◎订购时请告知所需精度等级

Features:

General level Pull stud

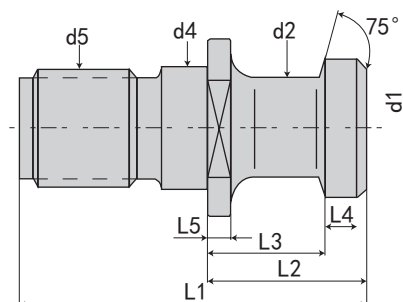
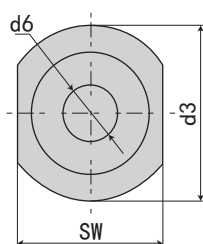
- ◎ Material:40Cr.
- ◎ Head hardness:46-50HRC.
- ◎ Thread hardness is a little low;35±5HRC, (Protect shank thread,core hardness can resist hit).
- ◎ Accuracy:0.02

High-precision Hard Pull stud

- ◎ Material:20CrMnTi.
- ◎ Head hardness:55-58HRC.
- ◎ Thread hardness is a little low;35±5HRC, (Protect shank thread,core hardness can resist hit).
- ◎ Accuracy:0.01
- ◎ Please inform the required precision when ordering.

·国际标准拉钉 A 型 ISO 7388/2-1984

INTERNATIONAL STANDARD PULL STUD A TYPE ISO 7388/2-1984



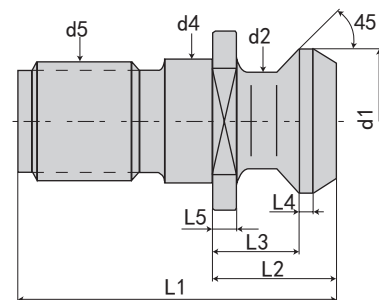
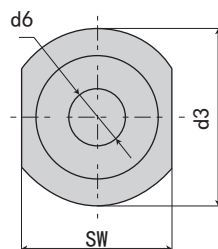
规格 / 型号 Model	d1	d2	d3	d4	d5	d6	L1	L2	L3	L4	L5	SW	重量 KGS
LDA30	12	8	18	13	M12	-	44	24	19	3	4	13	0.04
LDA40	19	14	23	17	M16	-	54	26	20	4	4	19	0.08
LDA40/T	19	14	23	17	M16	7.5	54	26	20	4	4	19	0.06
LDA50	28	21	36	25	M24	-	74	34	25	7	5	30	0.23
LDA50/T	28	21	36	25	M24	11.5	74	34	25	7	5	30	0.2
LDA60	40	30	52	32	M30	-	90	40	30	8	6	46	0.53
LDA60/T	40	30	52	32	M30	14	90	40	30	8	6	46	0.51

·国际标准拉钉 B 型 ISO 7388/2-1984

INTERNATIONAL STANDARD PULL STUD B TYPE ISO 7388/2-1984



全白



规格 / 型号 Model	d1	d2	d3	d4	d5	d6	L1	L2	L3	L4	L5	SW	重量 KGS
LDB30	13.3	9.3	18	13	M12	-	27	11.8	8.15	1.25	2.75	13	0.04
LDB40	18.95	12.95	23	17	M16	-	44.5	16.4	11.15	1.75	3.25	19	0.07
LDB40/T	18.95	12.95	23	17	M16	7.5	44.5	16.4	11.15	1.75	3.25	19	0.053
LDB50	29.1	19.6	36	25	M24	-	65.5	25.55	17.95	2.75	5.25	30	0.24
LDB50/T	29.1	19.6	36	25	M24	11.5	65.5	25.55	17.95	2.75	5.25	30	0.18
LDB60	37.25	25	50	32	M30	-	95	38.15	27.65	3.75	7.75	38	0.55
LDB60/T	37.25	25	50	32	M30	14	95	38.15	27.65	3.75	7.75	38	0.44

特点:

普通级拉钉

- ◎材质: 40Cr
- ◎头部硬度: 46-50HRC
- ◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)
- ◎精度: 0.02

高精度加硬拉钉

- ◎材质: 20CrMnTi
- ◎头部硬度: 55-58HRC
- ◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)
- ◎精度: 0.01
- ◎订购时请告知所需精度等级

Features:

General level Pull stud

- ◎ Material: 40Cr.
- ◎ Head hardness: 46-50HRC.
- ◎ Thread hardness is a little low; 35±5HRC, (Protect shank thread, core hardness can resist hit).
- ◎ Accuracy: 0.02

High-precision Hard Pull stud

- ◎ Material: 20CrMnTi.
- ◎ Head hardness: 55-58HRC.
- ◎ Thread hardness is a little low; 35±5HRC, (Protect shank thread, core hardness can resist hit).
- ◎ Accuracy: 0.01
- ◎ Please inform the required precision when ordering.

·混合标准拉钉 CAT-BT

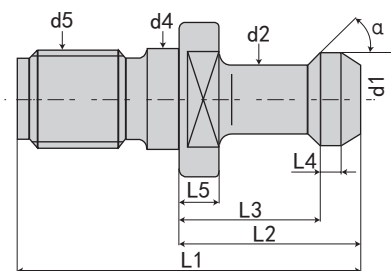
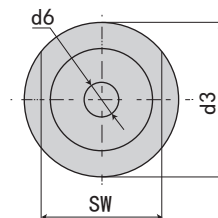
BLENDED STANDARD PULL STUD CAT-BT



全白



白牙



CT 美制螺纹拉钉 CT AMERICAN STANDARD SCREW THREAD PULLSTUD

规格 / 型号 Model	d1	d2	d3	d5	d6	L1	L2	L3	SW	α	重量 KGS
CAT40-45° U	15	10	23	5/8"-11UNC	-	57	32	25	19	45°	0.07
CAT40-45° U/T					4					45°	0.06
CAT40-60° U					-					60°	0.07
CAT40-60° U/T					4					60°	0.06
CAT40-90° U					-					90°	0.07
CAT40-90° U/T					4					90°	0.06
对应英制尺寸 inch	0.59	0.394	0.905		0.157	2.25	1.266	0.99	0.748		
CAT50-45° U	23	17	38	1"-8UNC	-	78.6	45	35	30	45°	0.26
CAT50-45° U/T					8.5					45°	0.22
CAT50-60° U					-					60°	0.26
CAT50-60° U/T					8.5					60°	0.22
CAT50-90° U					-					90°	0.26
CAT50-90° U/T					8.5					90°	0.22
对应英制尺寸 inch	0.906	0.669	1.496		0.334	3.094	1.771	1.378	1.181		

CAT BT 公制螺纹拉钉 CAT-BT METRIC THREAD PULL STUD

规格 / 型号 Model	d1	d2	d3	d4	d5	d6	L1	L2	L3	SW	α	重量 KGS
CAT40*45°	15	10	23	17	M16	-	57	32	25	19	45°	0.07
CAT40*45° / T						4					45°	0.06
CAT40*60°						-					60°	0.07
CAT40*60° / T						4					60°	0.06
CAT40*90°						-					90°	0.07
CAT40*90° / T						4					90°	0.06
对应英制尺寸 inch	0.59	0.394	0.905	0.512		0.157	2.25	1.266	0.99	0.748		

特点:

普通级拉钉

- ◎材质: 40Cr
- ◎头部硬度: 46-50HRC
- ◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)
- ◎精度: 0.02

高精度加硬拉钉

- ◎材质: 20CrMnTi
- ◎头部硬度: 55-58HRC
- ◎螺纹及其它部位硬度较低: 35±5HRC, (保护柄螺纹, 核心硬度可以抵御冲击)
- ◎精度: 0.01
- ◎订购时请告知所需精度等级

Features:

General level Pull stud

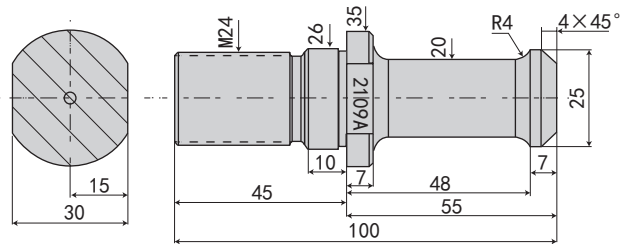
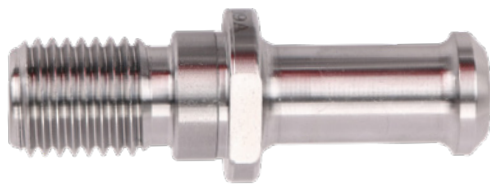
- ◎ Material:40Cr.
- ◎ Head hardness:46-50HRC.
- ◎ Thread hardness is a little low;35±5HRC, (Protect shank thread,core hardness can resist hit).
- ◎ Accuracy:0.02

High-precision Hard Pull stud

- ◎ Material:20CrMnTi.
- ◎ Head hardness:55-58HRC.
- ◎ Thread hardness is a little low;35±5HRC, (Protect shank thread,core hardness can resist hit).
- ◎ Accuracy:0.01
- ◎ Please inform the required precision when ordering.

·昆机镗床专用拉钉 ST50

KUNMING MACHINE BORING MACHINE SPECIAL-PURPOSE PULL STUD ST50



图示 Icon



特点:

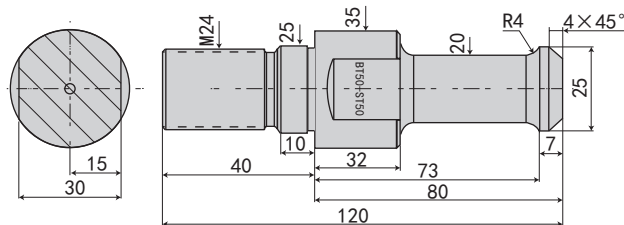
昆机拉钉图号: TX11C-3002-034 T6113A-21092A
适配: 主轴锥孔 ISO50; 刀柄 GB3837 标准
(中国标准 ST50/XT50; 德国标准 NT50)
昆机采用本图拉钉的机床: TX6111D TX6111C/2 TX6111C/3
TX6113A/2

Features:

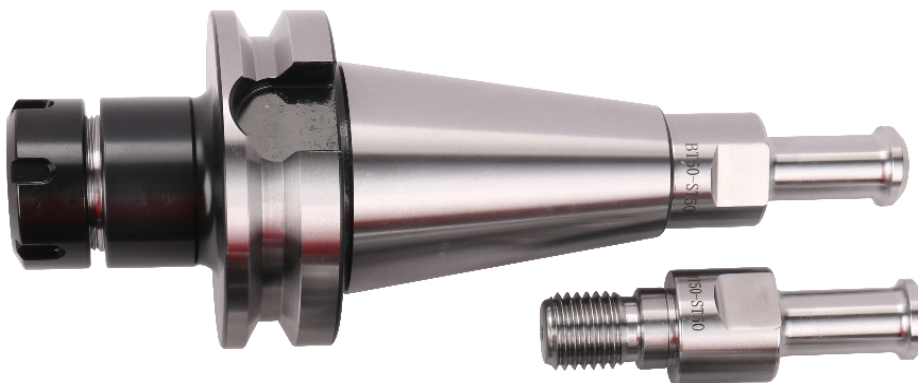
Kunming Machine Pull Stud Model: TX11C-3002-034 T6113A-21092A
Adaptor standard: spindle taper hole-ISO50; skank-GB3837
(Chinese standard-ST50/XT50; German standard-NT50)
Suitable for TX6111D TX6111C/2 TX6111C/3 TX6113A/2

·昆机镗床专用拉钉 BT50-ST50

KUNMING MACHINE BORING MACHINE SPECIAL-PURPOSE PULL STUD BT50-ST50



图示 Icon

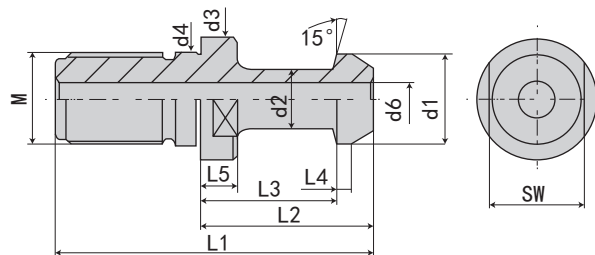


特点:

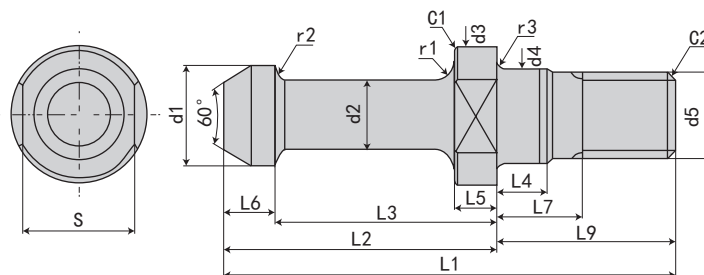
此款拉钉适用于日本标准 BT50; 中国标准 JT50; 德国标准
DIN69872-50 的刀柄, 在以下型号的昆机镗床上使用
昆机采用本图拉钉的机床: TX6111D TX6111C/2 TX6111C/3
TX6113A/2

Features:

This pull stud is suitable for the shank of Japanese standard BT50;
Chineses standard JT50; German standard DIN69872-50. Suitable for the
boring machine of TX6111D TX6111C/2 TX6111C/3 TX6113A/2

·日本 JIS B6339 拉钉
JAPAN JIS B6339 PULL STUD


规格 / 型号 Model	d1	d2	d3	d4	M	d6	L1	L2	L3	L4	L5	SW	重量 KGS
30P	12	8	16.5	12.5C	M12*1.75P	-	43	23.4	18.4	3	5	13	0.03
40P	19	14	23	17	M16*2.0P	7	54	29	23	3	7	19	0.08
50P	28	21	38	25	M24*3.0P	10	74	34	25	5	7	30	0.24

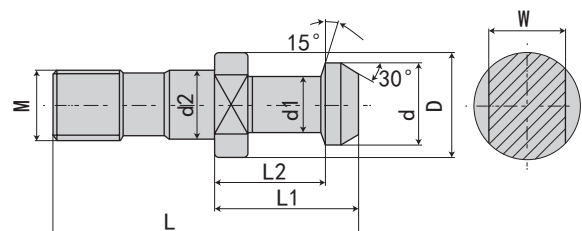
·SR 拉钉
SR PULL STUD


规格 / 型号 Model	L1	d4 h7	d5 6g	C2	r3 (最大)	L4	L7	d3 0 -0.1	r1	L5 0 -0.1	s 0 -0.2	C1
S5R	23.5	5.5	M5	0.5	0.4	3	5	8	1	2.5	7	0.2
S10R	26.5	6.5	M6	0.5	0.4	3	5	10	1.5	3	8	0.3
S15R	32	8.5	M8	1	0.5	4	6	12	1.5	3.5	10	0.4
S20R	34.5	8.5	M8	1	0.5	4	6	14	1.8	4	10	0.5
S25R	40	10.5	M10	1	0.5	4	7	15.5	2	4.5	13	0.5

规格 / 型号 Model	d1 0 -0.1	d2 0 -0.1	L2 0 -0.1	L3 0 -0.1	L6	r2	ϕ		L3-L5	L9	CHUCK
							1 形	2 形			
S5R	5.8	4	13.5	10.5	1.4	0.3	+0.5° 0 15°	+0.5° 0 0°	8	10	S5T
S10R	7	5	15.5	12	1.6	0.3			9	11	S10T
S15R	8.3	6	18	14	1.9	0.4			10.5	14	S15T
S20R	9.5	7	20.5	16	2.1	0.4			12	14	S20T
S25R	10.8	8	23	18	2.3	0.5			13.5	17	S25T

·ISO 雕刻机用拉钉
PULL STUD OF CARVING MACHINE

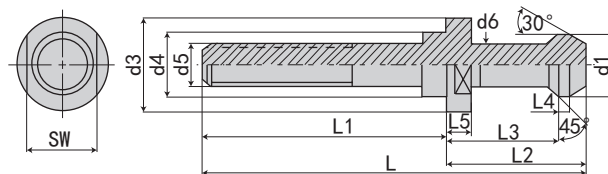

全白



规格 / 型号 Model	D	d	d1	d2	L	L1	L2	W	M
ISO20	11.4	9	6	8.5	26	12	9	10	M8*1.25P
ISO25	12	10	7	9	32	16	11.6	10	M8*1.25P
ISO30	17	13	9	13	45	24	19	14	M12*1.75P

·无扁尾莫氏圆锥孔刀柄加长拉钉

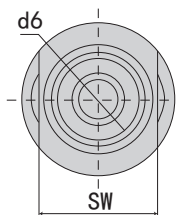
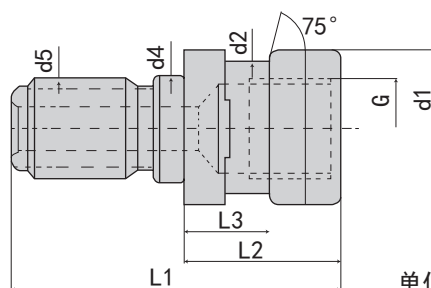
ADAPTOR SLEEVES FOR MORSE TAPER WITHOUT TANG



规格 / 型号 Model	d1	d2	d3	d4	d5	d6	L	L1	L2	L3	L4	L5	SW	重量 KGS
BT30-45° -M10	11	7	16.5	12.5	M10	7	90	67	23	18	2	5	13	0.06
BT30-45° -M12	11	7	16.5	12.5	M12	7	90	67	23	18	2	5	13	0.06
BT40-45° -M10	15	10	23	17	M10	10	115	80	35	28	2.7	6	19	0.1
BT40-45° -M12	15	10	23	17	M12	10	115	80	35	28	2.7	6	19	0.1
BT40-45° -M14	15	10	23	17	M14	10	115	80	35	28	2.7	6	19	0.15
BT40-45° -M16	15	10	23	17	M16	10	115	80	35	28	2.7	6	19	0.15
BT50-45° -M10	23	17	38	25	M10	17	170	125	45	35	5	10	30	0.3
BT50-45° -M12	23	17	38	25	M12	17	170	125	45	35	5	10	30	0.35
BT50-45° -M14	23	17	38	25	M14	17	170	125	45	35	5	10	30	0.35
BT50-45° -M16	23	17	38	25	M16	17	170	125	45	35	5	10	30	0.35
BT50-45° -M20	23	17	38	25	M20	17	170	125	45	35	5	10	30	0.4
BT60-45° -M24	32	24	56	31	M24	24	238	172	65	53	6	14	41	1

·OTT 拉钉

OTT PULL STUD



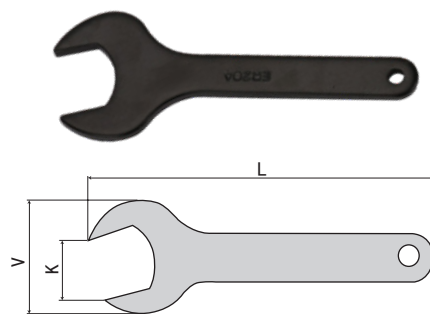
单位 (Unit): 毫米 (mm)

规格 / 型号 Model	d1	d2	d4	d5	d6	L1	L2	L3	G	SW	重量 KGS
OTT40	25.0	21.1	17.0	M16*2.0P	7.0	53.0	25.1	13.6	M16*2.0P	19	0.09
OTT50	39.6	30.2	25.0	M24*3.0P	7.0	65.1	25.1	13.3	M24*3.0P	30	0.17

扳手

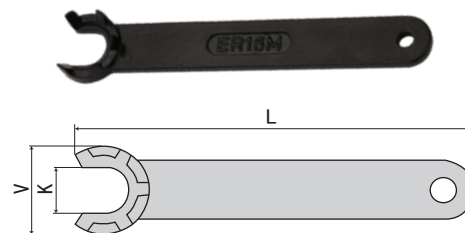
SPANNER

ER-A 型扳手 ER-A SPANNER



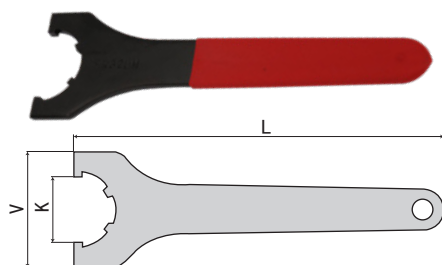
规格 / 型号 Model	螺帽外径 Nut diameter	L	V	K
ER11-A	19	110	40	17
ER16-A	28	120	53	25
ER20-A	34	130	60	30

ER-M 型扳手 ER-M SPANNER



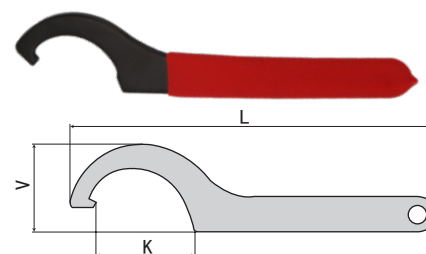
规格 / 型号 Model	螺帽外径 Nut diameter	L	V	K
ER8-M	12	70	12	7.5
ER11-M	16	90	17	11
ER16-M	22	110	23	15
ER20-M	28	120	29	19.5
ER25-M	35	130	36	25

ER-UM 型扳手 ER-A SPANNER



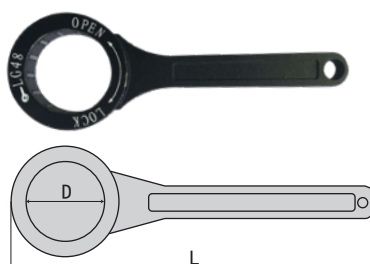
规格 / 型号 Model	螺帽外径 Nut diameter	L	V	K
ER16-UM	32	180	40	26
ER20-UM	35	190	55	30
ER25-UM	42	210	60	35
ER32-UM	50	250	72	45
ER40-UM	63	290	86	58
ER50-UM	78	350	105	73

勾头扳手 HOOK HEAD SPANNER



规格 / 型号 Model	适用刀柄及螺帽 Apple holder and nut	L
18-21	EOC6	90
22-26	EOC8	125
28-32	EOC10	140
34-36	EOC12	154
38-42	EOC16 7316A APU08	168
45-52	EOC20 ER25-UM 7316B APU13	190
55-62	EOC25 ER32-UM APU13 APU16 C20 C22 C25	210
68-72	EOC32 ER40-UM	230
78-85	EOC40 C32 ER50-UM	240
100-110	EOC50 C42 JXT25-50	250

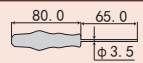
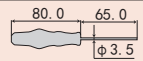
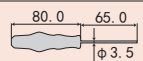
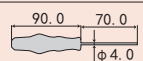
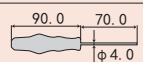
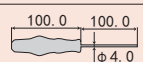
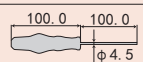
滚珠扳手 BALL SPANNER

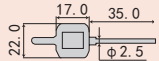
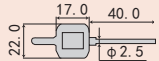
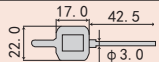
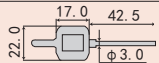
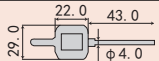
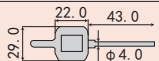
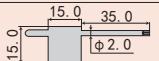
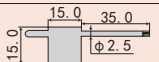
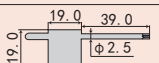
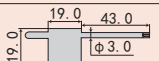
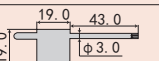


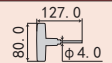
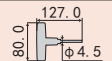
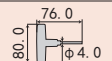
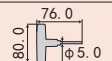
规格 / 型号 Model	规格 Specifications	D	L
WH-GSK06	GSK06	19.5	120
WH-GSK10	GSK10	30	152.5
WH-GSK16	GSK16	40	200
WH-GSK20	GSK20	48	200
WH-GSK25	GSK25	55	210
WH-GER16	GER16	30	150
WH-GER20	GER20	35	160
WH-GER25	GER25	40	181
WH-GER32	GER32	50	200

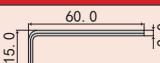
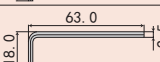
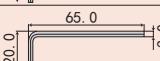
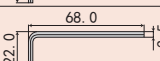
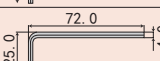
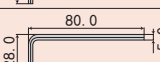
· 扳手

SPANNER

螺丝刀 B o l t driver	形状 Shape	型号 Model	Torx(梅花) 尺寸
		KDT-T06N	T6
		KDT-T07N	T7
		KDT-T08N	T8
		KDT-T09N	T9
		KDT-T10N	T10
		KDT-T15N	T15
		KDT-T20N	T20

旗形扳手	形状 Shape	型号 Model	Torx(梅花) 尺寸
		KWT-T07	T7
		KWT-T08	T8
		KWT-T09	T9
		KWT-T10	T10
		KWT-T15	T15
		KWT-T20	T20
		KFT-T06	T6
		KFT-T07	T7
		KFT-T08	T8
		KFT-T09	T9
		KFT-T10	T10
		KFT-T15	T15
		KFT-T20	T20

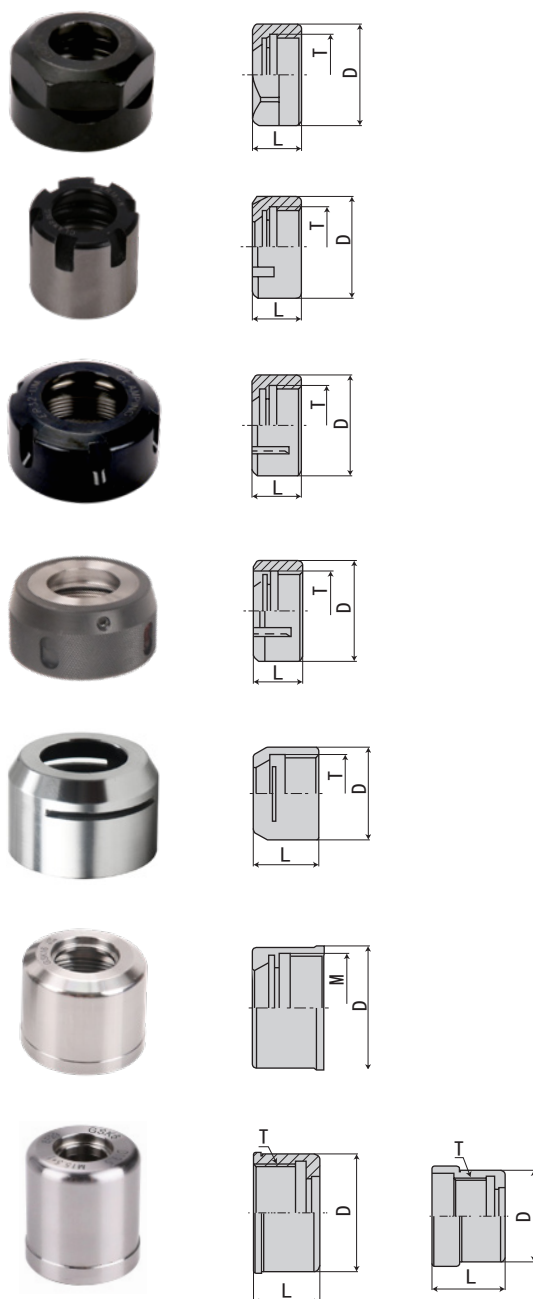
T 形扳手	形状 Shape	型号 Model	Torx(梅花) 尺寸
		KTTL-T15	T15
		KTTL-T20	T20
		KTTS-T20	T20
		KTTS-T25	T25

L 形扳手	形状 Shape	型号 Model	Torx(梅花) 尺寸
		KWH2.0L	H2
		KWH2.5L	H2.5
		KWH3.0L	H3
		KWH3.5L	H3.5
		KWH4.0L	H4
		KWH5.0L	H5



·高精度 ER 螺帽

HIGH PRECISION ER NUT

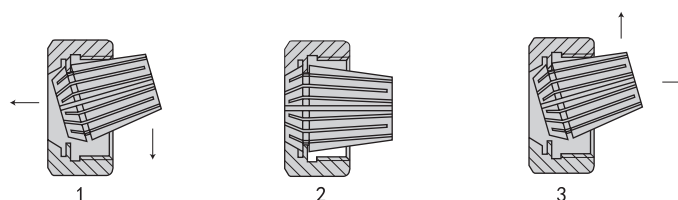


形式 Type	型号 Model No.	D	L	T
A	ER8A	13.5	11	M10*0.75P
	ER11A	19	11.3	M14*0.75P
	ER16A	28	17.5	M22*1.5P
	ER20A	34	19	M25*1.5P
M	ER8M	12	11	M10*0.75P
	ER11M	16	12	M13*0.75P
	ER16M	22	18	M19*1.0P
	ER20M	28	19	M24*1.0P
UM/RD	ER25M	35	20	M30*1.0P
	ER16UM	32	17	M22*1.5P
	ER20UM	35	19	M2.5*1.5P
	ER25UM	42	20	M32*1.5P
KM/RD	ER32UM	50	22.5	M40*1.5P
	ER40UM	63	25.5	M50*1.5P
	ER50UM	78	35.5	M64*2.0P
	ER25KM	42	20	M32*1.5P
MS	ER32KM	50	22.5	M40*1.5P
	ER40KM	63	25.5	M50*1.5P
	ER50KM	78	35.5	M64*2.0P
	ER11MS	16	11.3	M13*0.75P
GER	ER16MS	22	17	M19*1.0P
	ER20MS	28	19	M24*1.0P
	ER25MS	35	23	M30*1.0P
	GER16	30	23	M19*1.0P
GSK	GER20	35	25	M24*1.0P
	GER25	40	26	M30*1.0P
	GER32	50	30	M40*1.5P

形式 Type	型号 Model No.	D	L		T
			Fig1	Fig2	
GSK	GSK6	19.5	15	21	M15.5*1
	GSK10	27.5	17	24	M21.5*1
	GSK16	40	24	31	M32*1.5
	GSK20	48	27	35	M40*1.5
	GSK25	50	30	37	M40*1.5

压帽与卡簧的安装

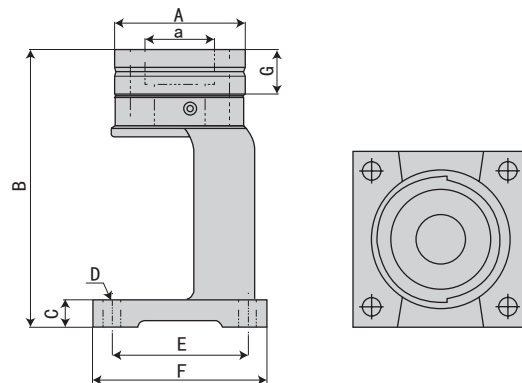
Mounting instructio for ER collets and nuts



- ◎将夹头放入压帽内，轻轻转动卡簧，待压帽偏心部分凹入卡槽内，沿箭头方向均匀用力推动卡簧，即可装入压帽内
- ◎将卡簧和压帽一起安装在夹头体或机床主轴内，把刀具圆柱柄部控净后装入夹持孔内，使用扳手均匀用力紧固压帽直到刀具夹牢为止方可使用。（注意：切忌在未安装刀具状态下紧固压帽，以免损坏夹头）
- ◎换刀时，用扳手松开压帽带出夹头及刀具，卸下刀具，沿箭头方向用力推动卡簧，使其退出，然后根据需要换上其它孔径的卡簧即可
- ◎ Put the collet into the nut,turn the collet slightly.Push it into the nut at the offered direction evenly when the offset flange sinks into the undercut of the collet
- ◎ Fix the nut and the collet on the spindle rotate the nut until the collet is in pressing,wipe the straight shank of cutter,and instert it into the pilot hole.Tighten the nut with a wrench till the cutter is clamped heavily (Caution:never tighten the nut without cutter in it for it will break)
- ◎ When changing the tool.Loosen the nut and it shall bring out the collet and the cutter together.And the draw the cutter out push out slightly the collet in the offered direction,it shall be ready for any change of the cutter.

·HSK 锁刀座

HSK TOOL TIGHTENING FIXTURE

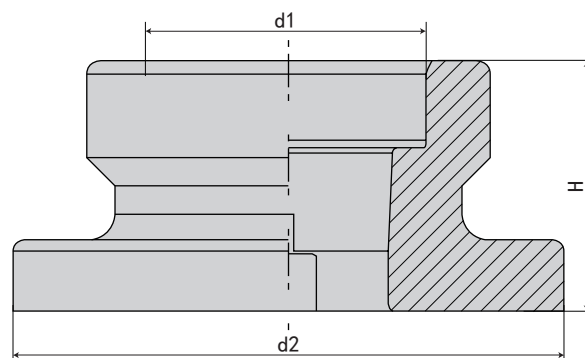


规格 / 型号 Model	a	A	B	C	D	E	F	G	重量
HSK-32	32.5	78	168	16.2	10.5	81	104	25	2.04
HSK-40	40.5	78	168	16.2	10.5	81	104	25	1.94
HSK-50	50.5	78	168	16.2	10.5	81	104	25	1.66
HSK-63	63.5	82.5	168	16.2	10.5	81	104	25	1.38
HSK-100	100.5	128.2	168	18.4	10.5	99.5	135.8	25	5.49
HG BT30	32	76	168	16.2	10.5	81	104	25	1.08
HG BT40	44	76	168	16.2	10.5	81	104	25	0.98

K

·HSK 锁刀座

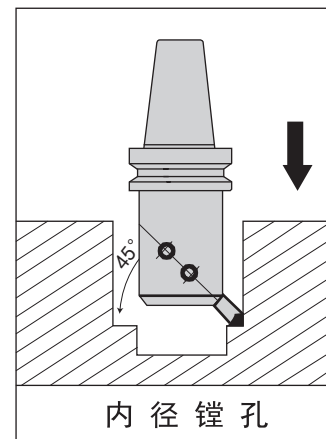
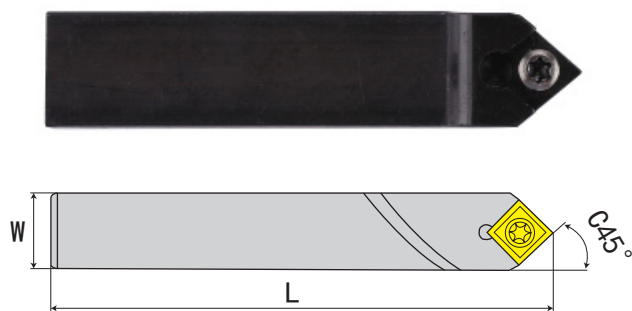
HSK TOOL TIGHTENING FIXTURE



规格 / 型号 Model	d1 (mm)	d2 (mm)	H (mm)	重量
HSK63A	63	130	66	1.2
HSK100A	100	180	85	2.6

· BSA 镗刀头

BSA INTERCHANGEABLE BORING CUTTER



规格 / 型号 Model	刀方 W	长度 L	刀片 Insert	螺丝 Screw	扳手 Wrench	重量 KGS
BSA1	8*8	L35	CCMT060204	M2.5*6.0	T9	0.04
BSA2	10*10	L50	CCMT060204	M2.5*6.0	T9	0.06
BSA3	13*13	L60	CCMT09T308	M4*10.0	T15	0.12
BSA4	16*16	L75	CCMT09T308	M4*10.0	T15	0.27
BSA5	19*19	L95	CCMT120408	M5*12.0	T20	0.41
BSA6	25*25	L110	CCMT120408	M5*12.0	T20	0.75

特点:

注:

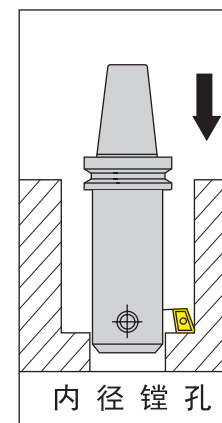
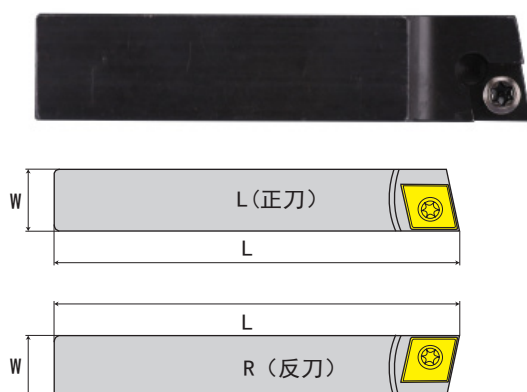
- ◎适用于 BSA 盲孔粗镗刀杆
- ◎ BSA 适合重切削加工

Features:

- ◎ Fit BSA BSB rough boring cutter and ABH precise one.
- ◎ BSA is fit heavy cutting processing.

· BSB 镗刀头

BSB INTERCHANGEABLE BORING CUTTER



规格 / 型号 Model	刀方 W	长度 L	刀片 Insert	螺丝 Screw	扳手 Wrench	重量 KGS
BSB1	8*8	L35	CCMT060204	M2.5*6.0	T9	0.04
BSB2	10*10	L50	CCMT060204	M2.5*6.0	T9	0.06
BSB3	13*13	L60	CCMT09T308	M4*10.0	T15	0.12
BSB4	16*16	L75	CCMT09T308	M4*10.0	T15	0.27
BSB5	19*19	L95	CCMT120408	M5*12.0	T20	0.41
BSB6	25*25	L110	CCMT120408	M5*12.0	T20	0.75

特点:

注:

- ◎适用于 BSB 通孔粗镗刀杆
- ◎ BSB 适合重切削加工

Features:

- ◎ Fit BSB rough boring cutter and ABH precise one.
- ◎ BSB is fit heavy cutting processing.



· CK 等径延长杆

CK EXTENSION CONSTANT DIAMETER

等径镗刀延长杆 (连接在基础柄和镗头之间, 延长加工深度)

中心内冷

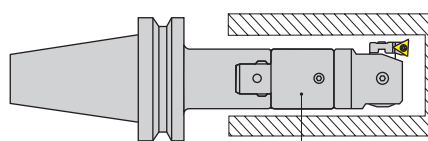
型号说明

CK11

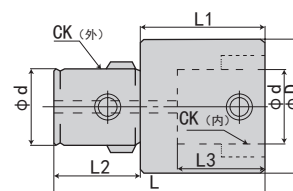
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延长的长度 L

CK1 与 CK1 连接



延长杆



型号	CK (外)	CK (内)	φD	φd	L	L1	L2	L3	连接镗刀头型号 Applicable Boring Heads	侧边螺丝 Screw	质量 (kg)
CK11-20L	1	1	19	11	33	20	13	18	EWN20	M4*0.5P	0.05
CK11-30L	1	1	19	11	43	30	13	18	EWN20	M4*0.5P	0.07
CK22-30L	2	2	24	14	46	30	16	21	EWN25/RW25/ABH25/CBH25	M5*0.5P	0.10
CK22-45L	2	2	24	14	61	45	16	21	EWN25/RW25/ABH25/CBH25	M5*0.5P	0.15
CK33-30L	3	3	31	18	50	30	20	25	EWN32/RW32/ABH32/CBH32	M6*0.75P	0.17
CK33-45L	3	3	31	18	65	45	20	25	EWN32/RW32/ABH32/CBH32	M6*0.75P	0.25
CK44-45L	4	4	39	22	69	45	24	29	EWN41/RW41/ABH40/CBH41	M8*0.75P	0.40
CK44-60L	4	4	39	22	84	60	24	29	EWN41/RW41/ABH40/CBH41	M8*0.75P	0.53
CK55-60L	5	5	50	28	90	60	30	35	EWN53/RW53/ABH50/CBH53	M10*1.0P	0.87
CK55-90L	5	5	50	28	120	90	30	35	EWN53/RW53/ABH50/CBH53	M10*1.0P	1.29
CK66-60L	6	6	64	36	100	60	40	45	EWN68/EWN100/RW68/RW100/ABH63/ABH80/CBH68/CBH100/CBH150	M12*1.0P	1.38
CK66-100L	6	6	64	36	140	100	40	45	EWN68/EWN100/RW68/RW100/ABH63/ABH80/CBH68/CBH100/CBH150	M12*1.0P	2.31
CK77-105L	7	7	90	-	-	105	-	-	EWN100	-	5.26

· CK 异径延长杆 (大接小)

CK EXTENSION REDUCING

异径镗刀延长杆 (减小基础柄的外径, 安装较小镗头时使用)

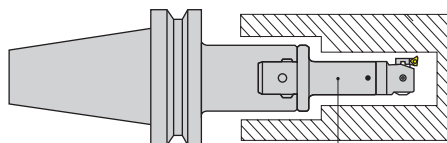
型号说明

CK21

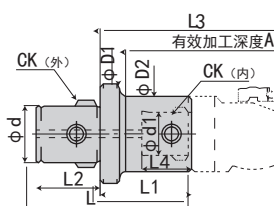
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有效加工深度 A

从 CK2 减为 CK1



减径杆

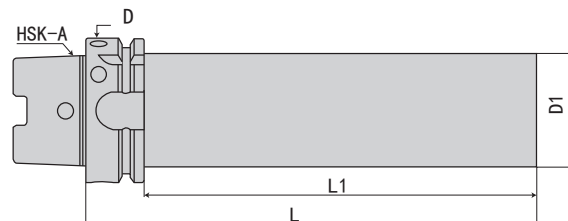


型号	CK (外)	CK (内)	φD1	φD2	φd	φd1	L	L1	L2	L3	L4	A	连接镗刀头型号 Applicable Boring Heads	侧边螺丝 Screw	质量 (kg)
CK21-55L	2	1	24	19	14	11	52	36	16	68.5	18	55	EWN20	M4*0.5P	0.10
CK31-60L	3	1	31	19	18	11	60.5	40.5	20	73	18	60	EWN20	M4*0.5P	0.14
CK32-60L	3	2	31	24	18	14	54.5	34.5	20	70	21	60	EWN25/RW25/ABH25/CBH25	M5*0.5P	0.16
CK41-75L	4	1	39	29	22	11	81.5	57.5	24	90	18	75	EWN20	M4*0.5P	0.25
CK42-75L	4	2	39	24	22	14	75.5	51.5	24	87	21	75	EWN25/RW25/ABH25/CBH25	M5*0.5P	0.28
CK43-75L	4	3	39	31	22	18	71	47	24	87	25	75	EWN32/RW32/ABH32/CBH32	M6*0.75P	0.32
CK51-70L	5	1	50	19	28	11	87.5	57.5	30	90	18	70	EWN20	M4*0.5P	0.38
CK52-70L	5	2	50	24	28	14	81.5	51.5	30	87	21	70	EWN25/RW25/ABH25/CBH25	M5*0.5P	0.40
CK52-100L	5	2	50	24	28	14	121.5	81.5	30	117	21	100	EWN25/RW25/ABH25/CBH25	M5*0.5P	0.51
CK53-70L	5	3	50	31	28	18	77	47	30	87	25	70	EWN32/RW32/ABH32/CBH32	M6*0.75P	0.54
CK53-100L	5	3	50	31	28	18	107	77	30	117	25	100	EWN32/RW32/ABH32/CBH32	M6*0.75P	0.64
CK54-70L	5	4	50	39	28	22	70	40	30	87	29	70	EWN41/RW41/ABH40/CBH41	M8*0.75P	0.47
CK54-100L	5	4	50	39	28	22	100	70	30	117	29	100	EWN41/RW41/ABH40/CBH41	M8*0.75P	0.82
CK61-65L	6	1	64	19	36	11	106.5	66.5	40	99	18	65	EWN20	M4*0.5P	0.84
CK62-80L	6	2	64	24	36	14	100.5	60.5	40	96	21	80	EWN25/RW25/ABH25/CBH25	M5*0.5P	0.69
CK62-115L	6	2	64	24	36	14	135.5	95.5	40	131	21	115	EWN25/RW25/ABH25/CBH25	M5*0.5P	0.98
CK63-80L	6	3	64	31	36	18	96	56	40	96	25	80	EWN32/RW32/ABH32/CBH32	M6*0.75P	0.75
CK63-115L	6	3	64	31	36	18	131	91	40	131	25	115	EWN32/RW32/ABH32/CBH32	M6*0.75P	1.12
CK64-80L	6	4	64	39	36	22	139	49	40	96	29	80	EWN41/RW41/ABH40/CBH41	M8*0.75P	0.80
CK64-115L	6	4	64	39	36	22	124	84	40	131	29	115	EWN41/RW41/ABH40/CBH41	M8*0.75P	1.28
CK65-80L	6	5	64	50	36	28	79	39	40	96	35	80	EWN53/RW53/ABH50/CBH53	M10*1.0P	0.92
CK65-115L	6	5	64	50	36	28	114	74	40	131	35	115	EWN53/RW53/ABH50/CBH53	M10*1.0P	1.33
CK76-160L	7	6	90	64	-	36	-	106	-	177	45	160	EWN68/EWN100/RW68/RW100/ABH63/ABH80/CBH68/CBH100/CBH150	M12*1.0P	3.1



·HSK-A 主轴检验棒【DB】

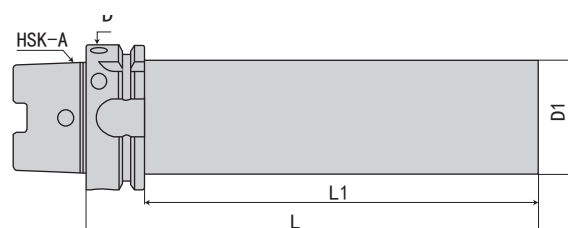
HSK-A TEST BAR (DB)



规格 / 型号 Model	L	L1	D	D1
HSK32A-D24-180L-DB	180	160	32	24
HSK40A-D24-180L-DB	180	160	40	24
HSK50A-D32-236L-DB	236	210	50	32
HSK63A-D40-346L-DB	346	320	63	40
HSK80A-D40-346L-DB	346	320	80	40
HSK100A-D40-349L-DB	349	320	100	40

·HSK-A 主轴检验棒

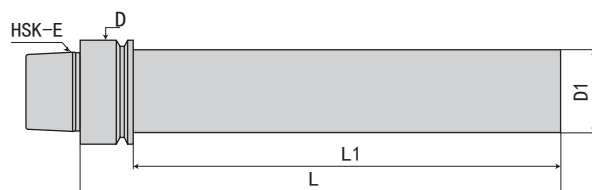
HSK-A TEST BAR



规格 / 型号 Model	L	L1	D	D1
HSK40A-D32-180	180	160	40	32
HSK50A-D32-240	240	214	50	32
HSK63A-D50-200	200	174	63	50
HSK63A-D50-350	350	324	63	50
HSK80A-D50-300	300	274	80	50
HSK80A-D50-350	350	324	80	50
HSK100A-D50-200	200	171	100	50
HSK100A-D50-350	350	321	100	50

·HSK-E 主轴检验棒

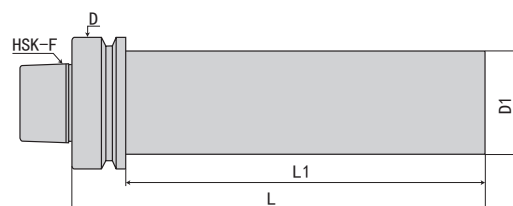
HSK-E TEST BAR



规格 / 型号 Model	L	L1	D	D1
HSK25E-D20-175	175	165	25	20
HSK32E-D20-180	180	160	32	20
HSK40E-D32-180	180	160	40	32
HSK50E-D32-240	240	214	50	32

·HSK-63F 主轴检验棒

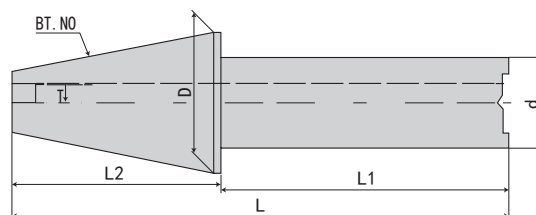
HSK-63F TEST BAR



规格 / 型号 Model	L	L1	D	D1
HSK63F-D50-200	200	174	63	50
HSK63F-D50-350	350	324	63	50

·BT 机床主轴检验棒

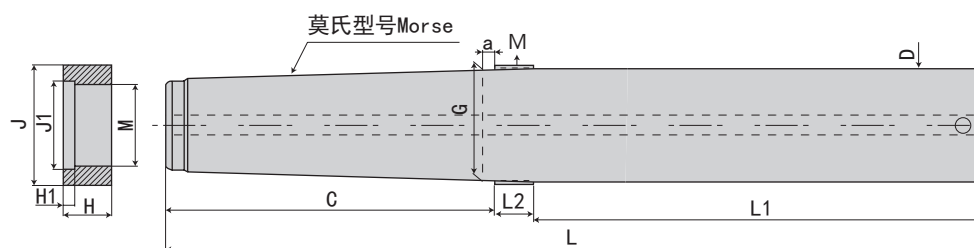
BT TEST BAR



规格 / 型号 Model	BT.NO	D	L	L1	L2	d	T	精度 Accuracy
BT30-D32-250	BT30	31.75	305	250	55	32	M12×1.75P	0.003
BT40-D40-250	BT40	44.45	322	250	72	40	M16×2.0P	0.003
BT40-D40-300	BT40	44.45	372	300	72	40	M16×2.0P	0.003
BT50-D40-250	BT50	69.85	357	250	107	40	M24×3.0P	0.003
BT50-D40-300	BT50	69.85	407	300	107	40	M24×3.0P	0.003
BT60-D60-400	BT60	107.95	570	400	170	60	M30×3.5P	0.003
规格 / 型号 Model	SK.NO	D	L	L1	L2	d	T	精度 Accuracy
SK30-D32-250	SK30	31.75	305	250	55	32	M12×1.75P	0.003
SK40-D40-250	SK40	44.45	322	250	72	40	M16×2.0P	0.003
SK40-D40-300	SK40	44.45	372	300	72	40	M16×2.0P	0.003
SK50-D40-250	SK50	69.85	357	250	107	40	M24×3.0P	0.003
SK50-D40-300	SK50	69.85	407	300	107	40	M24×3.0P	0.003
SK50-D50-350	SK50	69.85	457	350	107	50	M24×3.0P	0.003
SK60-D60-400	SK60	107.95	570	400	170	60	M30×3.5P	0.003
规格 / 型号 Model	CAT.NO	D	L	L1	L2	d	T	精度 Accuracy
CAT30-D32-250	SK30	31.75	305	250	55	32	M12×1.75P	0.003
CAT40-D40-250	SK40	44.45	322	250	72	40	M16×2.0P	0.003
CAT40-D40-300	SK40	44.45	372	300	72	40	M16×2.0P	0.003
CAT50-D40-250	SK50	69.85	357	250	107	40	M24×3.0P	0.003
CAT50-D40-300	SK50	69.85	407	300	107	40	M24×3.0P	0.003
CAT60-D60-400	SK60	107.95	570	400	170	60	M30×3.5P	0.003

·MT 机床莫式主轴检验棒

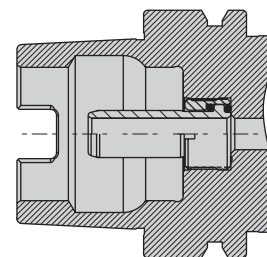
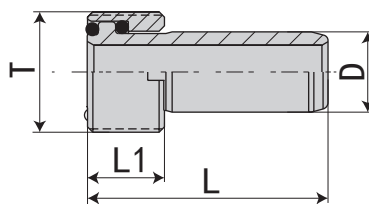
MT MORSE TAPER TEST BAR



规格 / 型号 Model	莫氏型号 Morse	C	L	L1	L2	G	a	D	M	J	J1	H	H1
MT3-D25-200	MT3	86	311	200	25	23.825	5	25	M30*1.5P	48	31	32	6
MT4-D30-250	MT4	109	384	250	25	31.267	6.5	30	M36*2P	54	38	25	7
MT5-D40-300	MT5	136	466	300	30	44.399	6.5	40	M47*2.0P	63	49	30	7
MT6-D60-400	MT6	190	620	400	30	63.348	8	60	M68*2.0P	88	70	30	7
公制 80-D60-400	公制 80-1:20	204	634	400	30	80.00	8	60	M84*2.0P	118	86	30	10

·HSK 内冷管

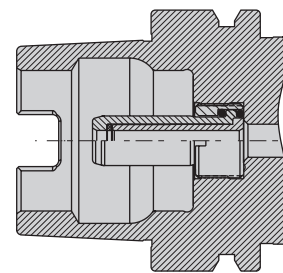
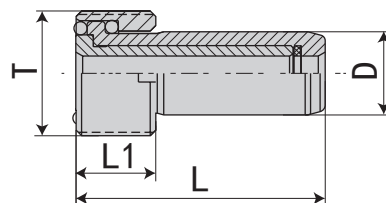
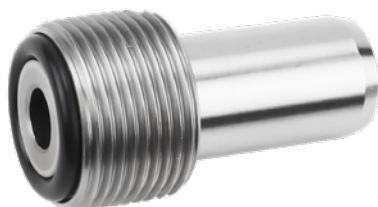
HSK COOLANT PIPE



规格 / 型号 Model	L	L1	D	T	重量 KGS
HSK32-CP	26	5.5	6	M10*1.0P	0.01
HSK40-CP	29.3	7.5	8	M12*1.0P	0.01
HSK50-CP	33	9.5	10	M16*1.0P	0.02
HSK63-CP	36.6	11.5	12	M18*1.0P	0.02
HSK100-CP	44	15.5	16	M24*1.5P	0.06

·HSK 内冷管（不锈钢过滤网）

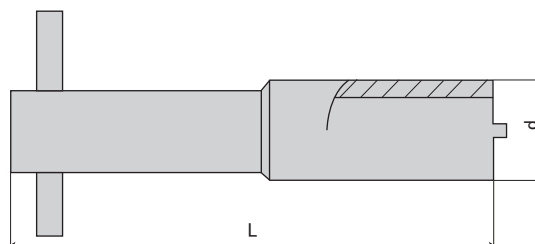
HSK COLLANT PIPE (STAINLESS STEEL STRAINER)



规格 / 型号 Model	L	L1	D	T	重量 KGS
HSK63-CP	36.6	11.5	12	M18*1.0P	0.02
HSK100-CP	44	15.5	16	M24*1.5P	0.06

·HSK 内冷管专用扳手

HSK COOLANT WRENCH



HSK 内冷管锁紧扳手

规格 / 型号 Model	L	d	重量 KGS
HSK32-CPW	90	13.5	0.10
HSK40-CPW	90	13.5	0.12
HSK50-CPW	95	15.5	0.14
HSK63-CPW	100	18	0.14
HSK100-CPW	125	24	0.32

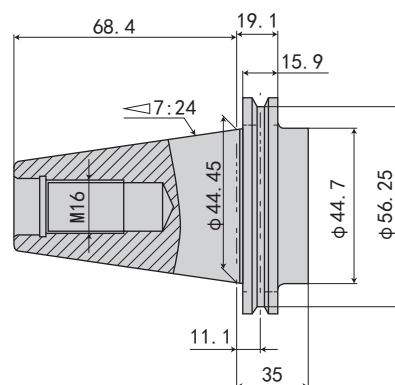
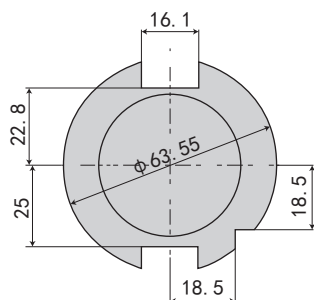
·SK/DAT 技术资料

SK/DAT TECHNICAL INFORMATION

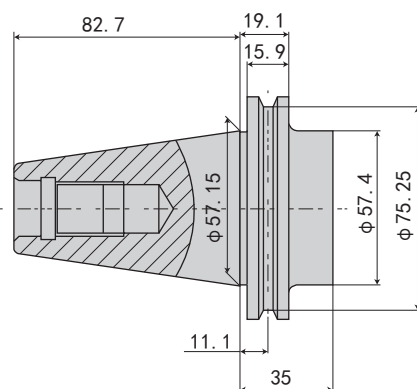
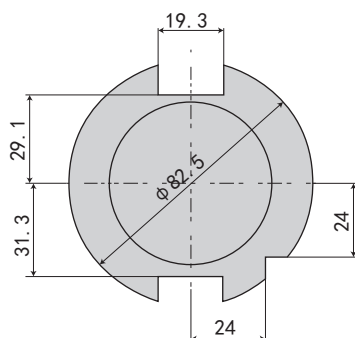
锥柄形式

国际 7388/1-A
德国 DIN69871-A
中国 GB10944

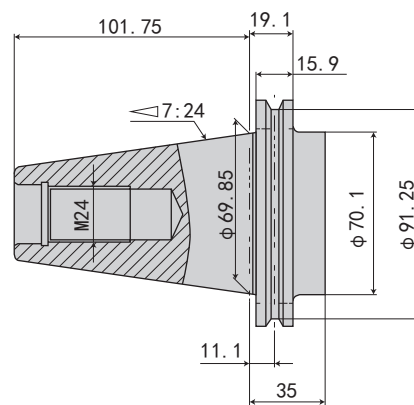
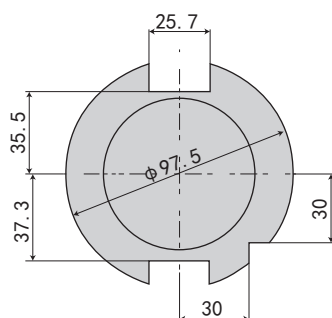
SK/DAT40
40 柄



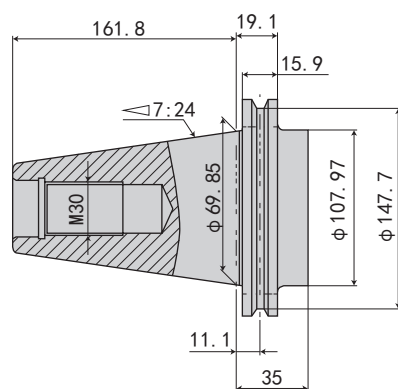
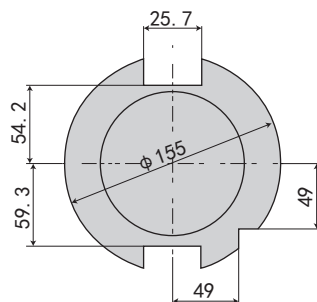
SK/DAT45
45 柄

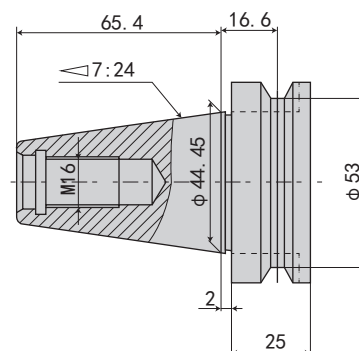
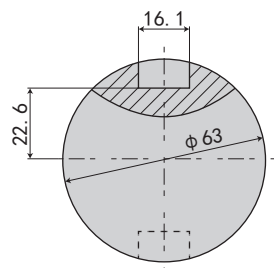
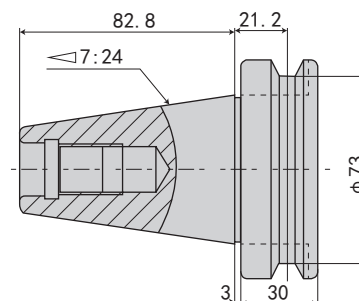
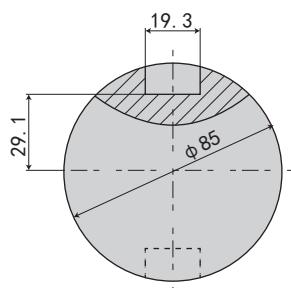
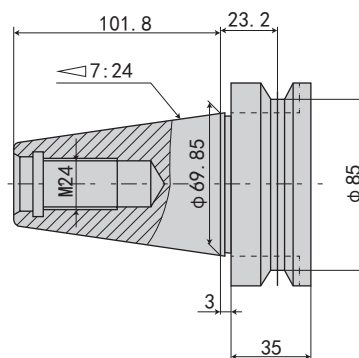
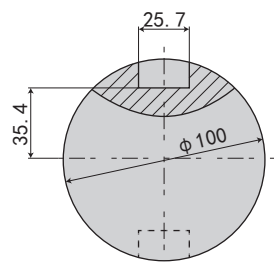
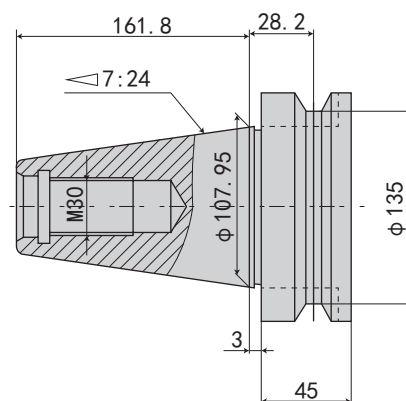
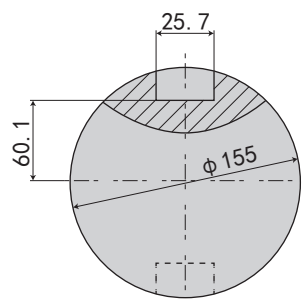


SK/DAT50
50 柄



SK/DAT60
60 柄



·BT 技术资料
BT TECHNICAL INFORMATION
锥柄形式
日本 MAS 403 BT
**BT40
40 柄**

**BT45
45 柄**

**BT50
50 柄**

**BT60
60 柄**


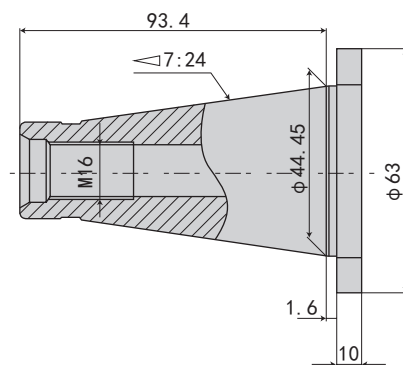
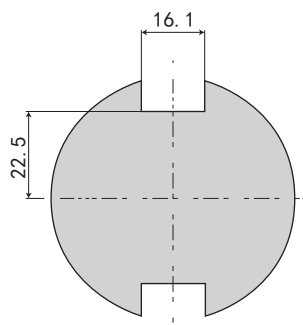
·NT/ST 技术资料

NT/ST TECHNICAL INFORMATION

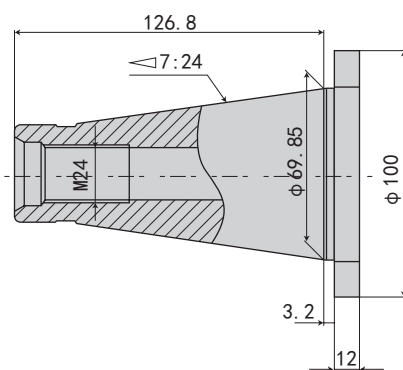
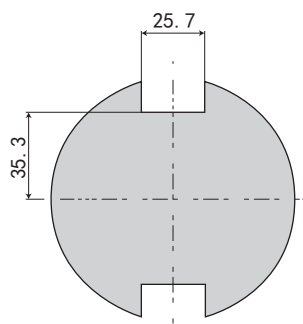
锥柄形式

中国 GB3837
德国 DIN2080

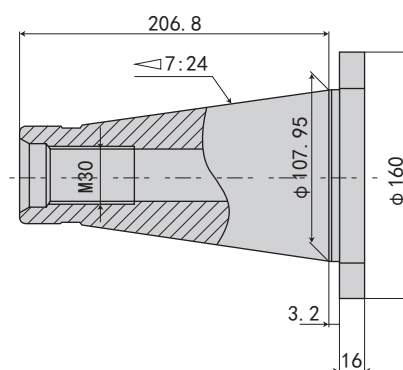
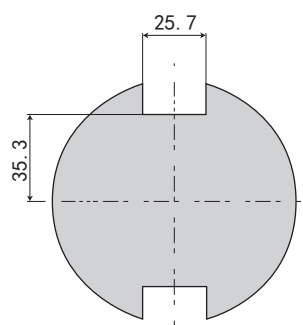
NT/ST40
40 柄

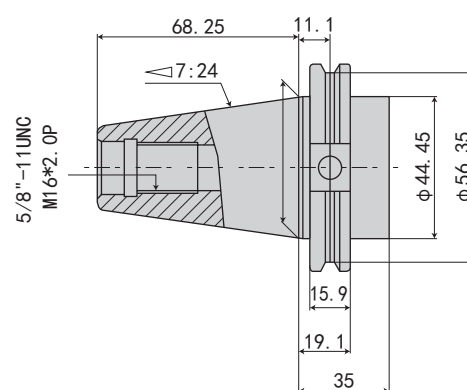
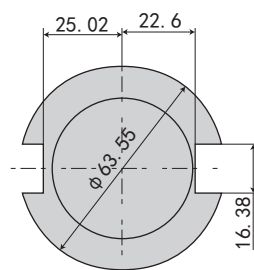
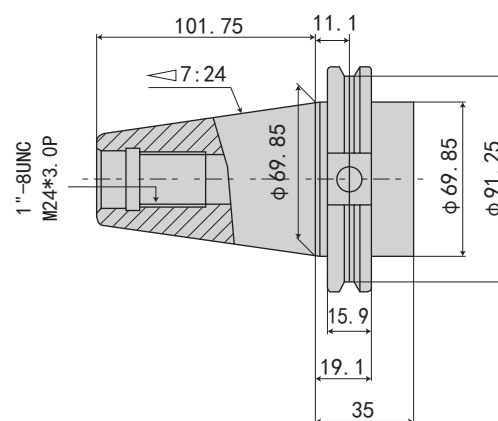
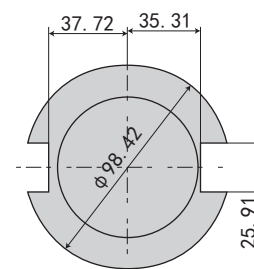
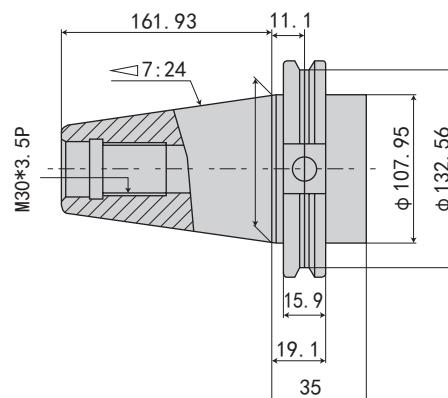
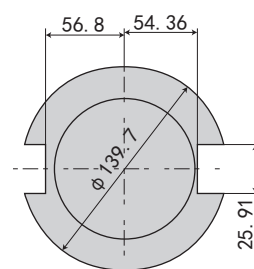


NT/ST50
50 柄



NT/ST60
60 柄

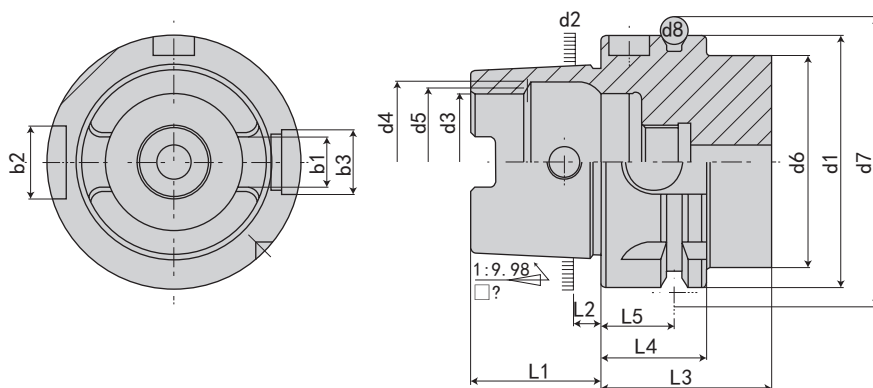


·CAT 技术资料
CAT TECHNICAL INFORMATION
锥柄形式
美国 ANSI B5.59CAT
**CAT40
40 柄**

**CAT50
50 柄**

**CAT60
60 柄**


·HSK-A (DIN69893-5) 技术资料

HSK-A (DIN69893-5) TECHNICAL INFORMATION

DIN 69893A

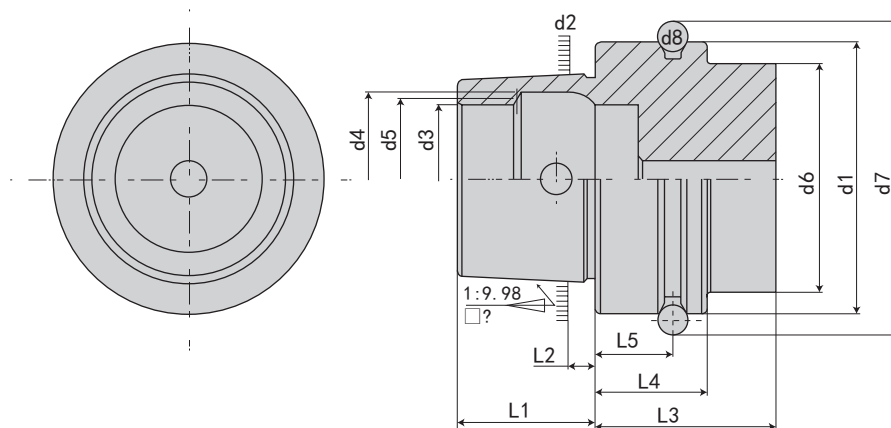


规格 / 型号 Model	d1 h10	d2	d3 H10	d4 H11	d5	d6 Max.	d7 0 -0.1	d8	L1 0 -0.2	L2	L3 Min.	L4 0 -0.1	L5 ±0.1	b1 ±0.04	b2 H10	b3 H10
HSK32A	32	24.007	17	20.5	19	26	37	4	16	3.2	35	20	16	7.05	7	9
HSK40A	40	30.007	21	25.5	23	34	45	4	20	4	35	20	16	8.05	9	9
HSK50A	50	38.009	26	32	29	42	59.3	7	25	5	42	26	18	10.54	12	12
HSK63A	63	48.010	34	40	37	53	72.3	7	32	6.3	42	26	18	12.54	16	16
HSK100A	100	75.013	53	63	58	88	109.75	7	50	10	45	29	20	20.02	20	20

·HSK-E (DIN69893-5) 技术资料

HSK-E (DIN69893-5) TECHNICAL INFORMATION

DIN 69893E

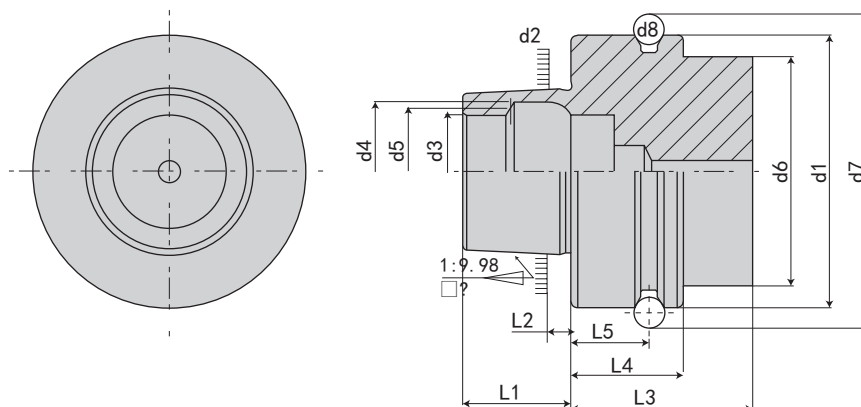


规格 / 型号 Model	d1 h10	d2	d3 H10	d4 H11	d5	d6 Max.	d7 0 -0.1	d8	L1 0 -0.2	L2	L3 Min.	L4 0 -0.1	L5 ±0.1
HSK25E	25	19	14	16.4	15	20	28.5	2	13	2.5	20	10	4.5
HSK32E	32	24	17	21	19	26	37	3	16	3.2	35	20	16
HSK40E	40	30	21	25.5	23	34	45	4	20	4	35	20	16
HSK50E	50	38	26	32	29	42	59.3	7	25	5	42	26	18
HSK63E	63	48	34	40	37	53	72.3	7	32	6.3	42	26	18

·HSK-F (DIN69893-6) 技术资料

HSK-F (DIN69893-6) TECHNICAL INFORMATION

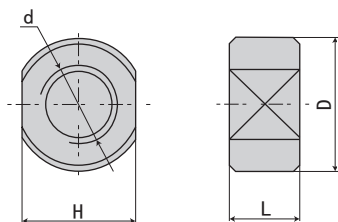
DIN 69893F



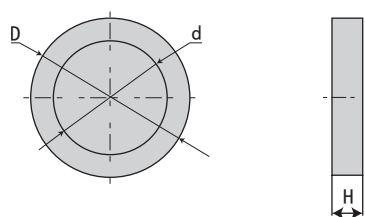
规格 / 型号 Model	d1 h10	d2	d3 H10	d4 H11	d5	d6 Max.	d7 0 -0.1	d8	L1 0 -0.2	L2	L3 Min.	L4 0 -0.1	L5 ±0.1
HSK50F	50	30.007	21	25.5	23	42	59.3	7	20	4	42	26	18
HSK63F	63	38.009	26	32	29	53	72.3	7	25	5	42	26	18

·三面刃铣刀刀柄附件

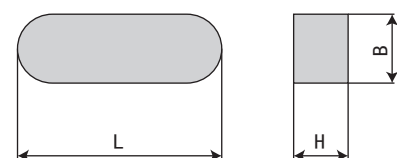
SIDE CUTTER ADAPTET PARTS



规格 / 型号 Model	d	D	L	H
XN14	M14	26	12	23
XN20	M20	34	18	29
XN24	M24	40	21	32
XN30	M30	46	26	41
XN36	M36	55	32	46



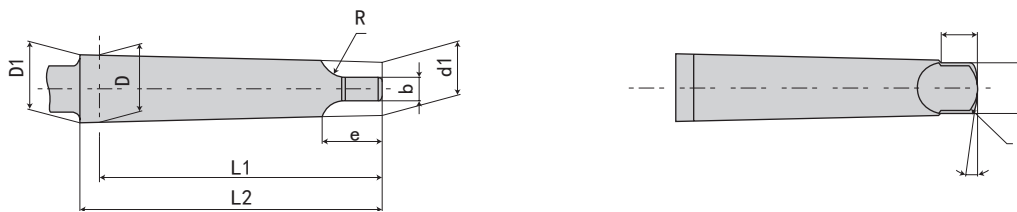
规格 / 型号 Model	d	D	H
XD16	19	26	3/5/7/8/10/12
XD22	25	34	
XD27	31	40	
XD32	37	46	
XD40	45	55	



规格 / 型号 Model	B	H	L
XJ04020	4	4	20
XJ06020	6	6	20
XJ07022	7	7	22
XJ08022	8	7	22
XJ10025	10	8	25

·MTA 有扁尾莫氏锥柄 (DIN228-A)

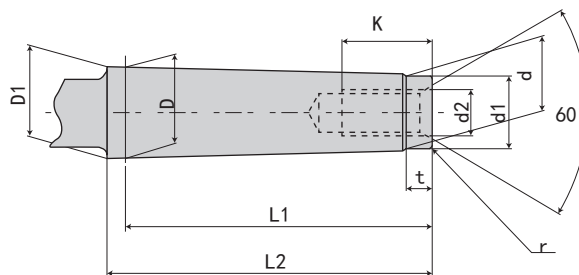
MTA MORSE TAPER SHANK DIMENSIONS(TONGUE TYPE)



锥度号 MTA.NO	D	D1	d1	d2	L1	L2	b	c	e	R	r	对应钻头直径
MTA0	9.045	9.201	6.104	6	56.5	59.5	3.9	6.5	10.5	4	1	-
MTA1	12.065	12.240	8.972	8.7	62.0	65.5	5.2	8.5	13.5	5	1.2	3.00-14.00
MTA2	17.780	18.030	14.034	13.5	75.0	80.0	6.3	10.0	16.0	6	1.6	14.00-23.00
MTA3	23.825	24.076	19.107	18.5	94.0	99.0	7.9	13.0	20.0	7	2	23.00-32.00
MTA4	31.267	31.605	25.164	24.5	117.5	124.0	11.9	16.0	24.0	8	2.5	32.00-50.00
MTA5	44.399	44.741	36.531	35.7	149.5	156.0	15.9	19.0	29.0	10	3	50.00-75.00
MTA6	63.348	63.765	52.399	51.0	210.0	218.0	19.0	27.0	40.0	13	4	75.00-100.00
MTA7	83.058	83.578	68.185	66.8	286.0	296.0	28.6	35.0	54.0	19	5	-

·MTB 后拉式莫氏锥柄 (DIN228-B)

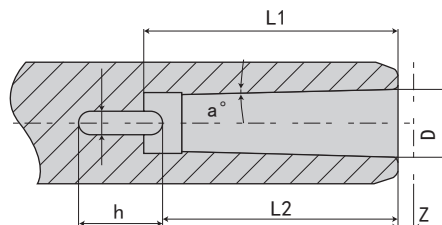
MTB MORSE TAPER SHANK DIMENSIONS(DRAWING THREAD TYPE)



锥度号 MTB.NO	D	D1	d	d1	L1	L2	t	r	d2	k	对应铣刀直径范围 (mm)
MT0	9.045	9.201	6.442	6	50	53	4	0.2	-	-	-
MT1	12.065	12.240	9.396	9	53.5	57	5	0.2	M6	16	6.00-12.00
MT2	17.780	18.030	14.583	14	64	69	5	0.2	M10	24	14.00-20.00
MT3	23.825	24.076	19.759	19	81	86	7	0.6	M12	28	22.00-36.00
MT4	31.267	31.605	25.943	25	102.5	109	9	1.0	M16	32	32.00-56.00
MT5	44.399	44.741	37.584	25.7	129.5	136	9	2.5	M20	40	40.00-63.00
MT6	63.348	63.765	53.859	51	182	190	12	4.0	M24	50	-
MT7	83.058	83.578	70.052	65	250	260	18.5	5.0	M33	60	-

·扁尾型莫氏锥柄连接尺寸 (DIN228-D)

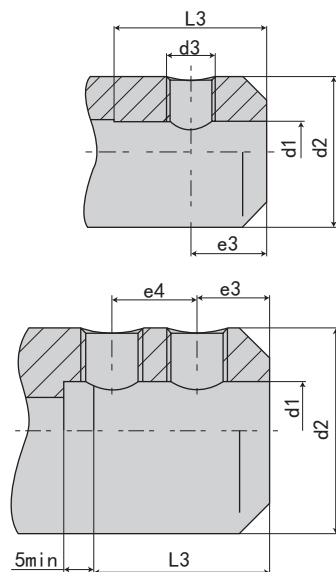
TECHNICAL INFORMATION OF MT.SHANK DIN 228 A & B



锥度号	MT.NO	锥度	锥角 (a°)	D	L1(min)	L2	g	h	z	对应钻头直径范围 (mm)	
	MT0	1/19.212	0.05205	1° 29' 27"	9.045	52	49	4.1	15	1	-
	MT1	1/20.047	0.04988	1° 25' 43"	12.065	56	52	5.4	19	1	3.00-14.00
	MT2	1/20.020	0.04995	1° 25' 50"	17.780	67	62	6.6	22	1	14.00-23.00
	MT3	1/19.922	0.05020	1° 26' 16"	23.825	84	78	8.2	27	1	23.00-32.00
	MT4	1/19.254	0.05194	1° 29' 15"	31.267	107	98	12.2	32	1.5	32.00-50.00
	MT5	1/19.002	0.05263	1° 30' 26"	44.399	135	125	16.2	38	1.5	50.00-75.00
	MT6	1/19.180	0.05214	1° 29' 36"	63.348	188	177	19.3	47	2	75.00-100.00
	MT7	1/19.231	0.05200	1° 29' 22"	83.058	258	241	28.8	69	2	-

·削平型刀具接口形式 (DIN1835-B)

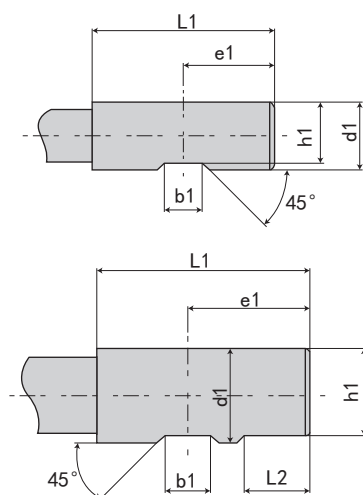
INTERFACE OF LATERAL SHANK TOOLS



d1(H5)	d2(0-1)	d3(6H)	e3(0-1)	e4(±0.5)	L3(±1)
6	25	M6	18	-	35
8	28	M8	18	-	35
10	35	M10	20	-	39
12	42	M12	22.5	-	44
14	44	M12	22.5	-	44
16	48	M14	24	-	47
18	50	M14	24	-	47
20	52	M16	25	-	49
25	65	M18*2	24	25	54
32	72	M18*2	24	28	58

·削平型刀具形式 (DIN1835-B)

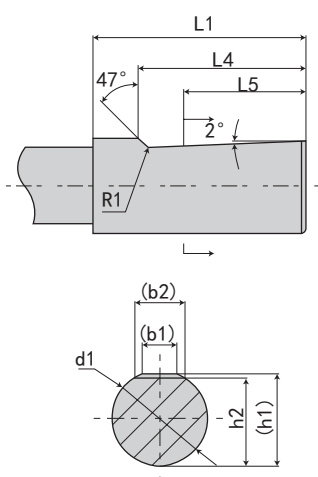
INTERFACE OF LATERAL SHANK TOOLS



d1(h6)	L1(+2 0)	b1(+0.05 0)	L2(+1 0)	e1(0-1)	h1(h11)
6	36	4.2	-	18.0	5.1
8	36	5.5	-	18.0	6.9
10	40	7.0	-	20.0	8.5
12	45	8.0	-	22.5	10.4
14	45	8.0	-	22.5	12.7
16	48	10.0	-	24.0	14.2
18	48	10.0	-	24.0	16.2
20	50	11.0	-	25.0	18.2
25	56	12.0	17	32.0	23.0
32	60	14.0	19	35.0	30.0

·斜削平型刀具形式 (DIN1835-E)

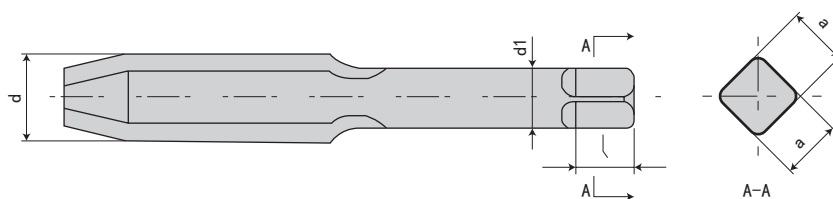
INTERFACE OF LATERAL SHANK TOOLS(INCLINED)



d1(h6)	(b1) ≈	(b2)	(h1)	h2 (h13)	L1(+2 0)	L4(0 -1)	L5	R1 min
6	3.5	4.8	5.4	4.8	36	25	18	1.2
8	4.7	6.1	7.2	6.6	36	25	18	1.2
10	5.7	7.3	9.1	8.4	40	28	20	1.2
12	6.0	8.2	11.2	10.4	45	33	22.5	1.2
16	7.6	10.1	15.0	14.2	48	36	24	1.6
20	8.4	11.5	19.1	18.2	50	38	25	1.6
25	9.3	13.6	24.1	23.0	56	44	32	1.6
32	9.9	15.5	31.2	30.0	60	48	35	1.6

· 丝锥标准形式

TAP SCREW BLANK SYSTEM



公制	美制	英制	JIS		ISO		DIN371		DIN376		英制工作 直径 d1
			直径 d1	四角 axa	直径 d1	四角 axa	直径 d1	四角 axa	直径 d1	四角 axa	
M3		W1/8	4	3.2	3.15	2.5	3.5	2.7	2.2		3.18
M4/M4.5		W5/32	5	4	4	3.15	4.5	3.4	2.8	2.1	3.97
M5/M5.5		W3/16	5.5	4.5	5	4	6	4.9	3.5	2.7	4.76
M6	U1/4	W1/4	6	4.5	6.3	5	6	4.9	4.5	3.4	6.35
	U5/16	W5/16	6.1	5.5							7.94
M8/M7			6.2	5	6.3	5	8	6.2	6	4.9	
M10/M9	U3/8	W3/8	7	5.5	8	6.3		8	7	5.5	9.52
M11	U7/16	W7/16	8	6							11.11
M12			8.5	6.5	9	7.1			9	7	
	U1/2	W1/2	9	7							12.7
M14/M15	U9/16	W9/16	10.5	8	11.2	9			11	9	14.28
	U5/8	W5/8	12	9							15.88
M16			12.5	10	12.5	10			12	9	
M17			13	10							
M18	U3/4	W3/4	14	11	14	11.2			14	11	19.05
M20			15	12	14	11.2			16	12	
M22	U7/8	W7/8	17	13	16	12.5			18	14.5	22.22
M24/M25			19	15	18	14			18	14.5	
M25/M26	U1	W1	20	15							25.4
M27			20	15	20	16			20	16	
M28			21	17							
	U1 1/8	W1 1/8	22	17							28.58
M30			23	17	20	16			22	18	
M32	U1 1/4	W1 1/4	24	19							31.75
M33			25	19	22.4	18					
M34/M35	U1 3/8	W1 3/8	26	21							34.93
M36			28	21	25	20					
M39/M40	U1 1/2	W1 1/2	30	23							38.1
M42		W1 5/8	32	26	28	22.4					41.28
M45	U1 3/4	W1 3/4	35	26							44.45
M48		W1 7/8	38	29	31.5	25					47.63

·根据螺纹尺寸推荐的钻头直径

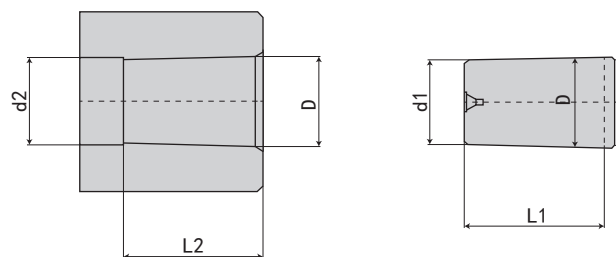
DRILL DIAMETERS FOR TAPPING

螺纹直径	钻头直径 mm	螺距 mm	螺纹直径	钻头直径 mm	螺距 TPI*	螺纹直径	钻头直径 mm	螺距 TPI*
M 公制粗牙螺纹			UNF 美制统一细牙螺纹			Rc 英制圆锥管螺纹		
M4*0.7P	3.30	0.7	UNF NO.6	3.00	40	Rc 1/8"	8.40	28
M4.5*0.75P	3.70	0.75	UNF NO.8	3.50	36	Rc 1/4"	11.20	19
M5*0.8P	4.20	0.8	UNF NO.10	4.10	32	Rc 3/8"	14.75	19
M6*1P	5.00	1	UNF NO.12	4.65	28	Rc 1/2"	18.25	14
M7*1P	6.00	1	UNF 1/4"	5.50	28	Rc 3/4"	23.75	14
M8*1.25P	6.80	1.25	UNF 5/16"	6.90	24	Rc 1"	30.00	11
M9*1.25P	7.80	1.25	UNF 3/8"	8.50	24	G 英制圆柱管螺纹		
M10*1.5P	8.50	1.5	UNF 7/16"	9.90	20	G 1/8"	8.80	28
M11*1.5P	9.50	1.5	UNF 1/2"	11.50	20	G 1/4"	11.80	19
M12*1.75P	10.20	1.75	UNF 9/16"	12.90	18	G 3/8"	15.25	19
M14*2P	12.00	2	UNF 5/8"	14.50	18	G 1/2"	19.00	14
M16*2P	14.00	2	UNF 3/4"	17.50	16	G 5/8"	21.00	14
M18*2.5P	15.50	2.5	UNF 7/8"	20.50	14	G 3/4"	24.50	14
M20*2.5P	17.50	2.5	UNF 1"	23.25	12	G 7/8"	28.25	14
M22*2.5P	19.50	2.5	UNF 1 1/8"	26.50	12	G 1"	30.75	11
M24*3P	21.00	3	UNF 1 1/4"	29.75	12	G 1 1/4"	39.50	11
M27*3P	24.00	3	UNF 1 3/8"	33.00	12	G 1 1/2"	45.50	11
M30*3.5P	26.50	3.5	UNF 1 1/2"	36.00	12	G 1 3/4"	51.40	11
M33*3.5P	29.50	3.5				G 2"	57.20	11
M36*4P	32.00	4	UNC 美制统一粗牙螺纹			NPT60°全牙形锥管螺纹		
M39*4P	35.00	4	UNF NO.6	2.85	32	NPT 1/16"	6.10	27
M42*4.5P	37.50	4.5	UNF NO.8	3.50	32	NPT 1/8"	8.50	27
M45*4.5P	40.50	4.5	UNF NO.10	3.90	24	NPT 1/4"	11.00	18
M48*5P	43.00	5	UNF NO.12	4.50	24	NPT 3/8"	14.50	18
M52*5P	47.00	5	UNF 1/4"	5.20	20	NPT 1/2"	17.80	14
			UNF 5/16"	6.60	18	NPT 3/4"	23.00	14
M 公制挤压螺纹			UNF 3/8"	8.00	16	NPT 1"	29.00	11 1/2
M4*0.7P	3.70	0.7	UNF 7/16"	9.40	14	NPT 1 1/4"	37.50	11 1/2
M5*0.8P	4.63	0.8	UNF 1/2"	10.75	13	NPT 1 1/2"	44.00	11 1/2
M6*1P	5.50	1	UNF 9/16"	12.25	12	NPT 2"	56.00	11 1/2
M7*1P	6.51	1	UNF 5/8"	13.50	11	NPTF60°全牙形锥管螺纹		
M8*1.25P	7.40	1.25	UNF 3/4"	16.50	10	NPTF 1/16"	6.00	27
M10*1.5P	9.25	1.5	UNF 7/8"	19.50	9	NPTF 1/8"	8.40	27
M12*1.75P	11.12	1.75	UNF 1"	22.25	8	NPTF 1/4"	10.90	18
M14*2P	13.00	2	UNF 1 1/8"	25.00	7	NPTF 3/8"	14.25	18
M16*2P	15.00	2	UNF 1 1/4"	28.25	7	NPTF 1/2"	17.75	14
			UNF 1 3/8"	31.00	6	NPTF 3/4"	23.00	14
			UNF 1 1/2"	34.00	6	NPTF 1"	29.00	11 1/2
M 公制细牙螺纹			UNF 1 3/4"	39.50	5	NPTF 1 1/4"	37.75	11 1/2
钻头直径 = 丝锥直径 - 螺距			UNF 2"	45.25	4 1/2	NPTF 1 1/2"	43.75	11 1/2
						NPTF 2"	55.75	11 1/2

*TPI= 每英寸螺纹扣数

·直柄钻头夹头规格

TECHNICAL INFORMATION OF J.T. SHANK ISO R239-1961



斜度 NO.	斜度	D	d1	L1	d2	L2
JT0	0.04932	6.350	5.802	11.112	5.802	11.112
JT1	0.07709	9.754	8.469	16.669	8.469	16.669
JT2short	0.08157	13.940	12.386	19.050	12.386	19.050
JT2	0.08157	14.199	12.386	22.225	12.386	22.225
JT33	0.06350	15.850	14.237	25.400	14.237	25.400
JT6	0.05189	17.170	15.852	25.400	15.852	25.400
JT3	0.05324	20.5000	18.951	30.956	18.951	30.956

TYPE	/2TAPER	D	d1	L1
B12	1° 25 ' 43 "	12.065	11.1	18.5
B16	1° 25 ' 50 "	15.733	14.5	24.0
B18	1° 25 ' 50 "	17.780	16.2	32.0

· 螺纹底孔尺寸表

DRILL DIAMETERS FOR TAPPING

公制粗牙螺丝 Metric coarse screw thread

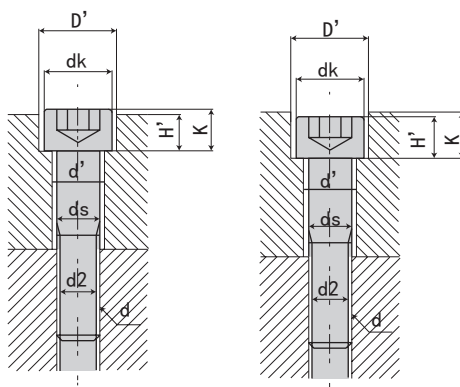
螺丝尺寸 Nominal	钻直径 Drilldiameter	螺丝尺寸 Nominal	钻直径 Drilldiameter	螺丝尺寸 Nominal	钻直径 Drilldiameter	螺丝尺寸 Nominal	钻直径 Drilldiameter
M1×0.25	0.75	M2.5×0.45	2.10	M9×1.25	7.80	M27×3	24.0
M1.1×0.25	0.85	M2.6×0.45	2.20	M10×1.5	8.50	M30×3.5	26.5
M1.2×0.25	0.95	M3×0.5	2.50	M11×1.5	9.50	M33×3.5	29.5
M1.4×0.3	1.10	M3.5×0.6	2.90	M12×1.75	10.3	M36×4	32.0
M1.6×0.35	1.25	M4×0.7	3.30	M14×2	12.0	M39×4	35.0
M1.7×0.35	1.35	M4.5×0.75	3.80	M16×2	14.0	M42×4.5	37.5
M1.8×0.35	1.45	M5×0.8	4.20	M18×2.5	15.5	M45×4.5	40.5
M2×0.4	1.60	M6×1.0	5.00	M20×2.5	17.5	M48×5	43.0
M2.2×0.45	1.75	M7×1.0	6.00	M22×2.5	19.5		
M2.3×0.4	1.90	M8×1.25	6.80	M24×3	21.0		

公制细牙螺丝 Metric fine screw thread

螺丝尺寸 Nominal	钻直径 Drilldiameter	螺丝尺寸 Nominal	钻直径 Drilldiameter	螺丝尺寸 Nominal	钻直径 Drilldiameter	螺丝尺寸 Nominal	钻直径 Drilldiameter
M1×0.2	0.80	M11×0.75	10.3	M25×1.5	23.5	M39×1.5	37.5
M1.1×0.2	0.90	M12×1.5	10.5	M25×1.0	24.0	M40×3.0	37.0
M1.2×0.2	1.00	M12×1.25	10.8	M26×1.5	24.5	M40×2.0	38.0
M1.4×0.2	1.20	M12×1.0	11.0	M27×2.0	25.0	M40×1.5	38.5
M1.6×0.2	1.40	M14×1.5	12.5	M27×1.5	25.5	M42×4.0	38.0
M1.8×0.2	1.60	M14×1.0	13.0	M27×1.0	26.0	M42×3.0	39.0
M2×0.25	1.75	M15×1.5	13.5	M28×2.0	26.0	M42×2.0	40.0
M2.2×0.25	1.95	M15×1.0	14.0	M28×1.5	26.5	M42×1.5	40.5
M2.5×0.35	2.20	M16×1.5	14.5	M28×1.0	27.0	M45×4.0	41.0
M3×0.35	2.70	M16×1.0	15.0	M30×3.0	27.0	M45×3.0	42.0
M3.5×0.35	3.20	M17×1.5	15.5	M30×2.0	28.0	M45×2.0	43.0
M4×0.5	3.50	M17×1.0	16.0	M30×1.5	28.5	M45×1.5	43.5
M4.5×0.5	4.00	M18×2.0	16.0	M30×1.0	29.0	M48×4.0	44.0
M5×0.5	4.50	M18×1.5	16.5	M32×2.0	30.0	M48×3.0	45.0
M5.5×0.5	5.00	M18×1.0	17.0	M32×1.5	30.5	M48×2.0	46.0
M6×0.75	5.30	M20×2.0	18.0	M33×3.0	30.0	M48×1.5	46.5
M7×0.75	6.30	M20×1.5	18.5	M33×2.0	31.0	M50×3.0	47.0
M8×1.0	7.00	M20×1.0	19.0	M33×1.5	31.5	M50×2.0	48.0
M8×0.75	7.30	M22×2.0	20.0	M35×1.5	33.5	M50×1.5	48.5
M9×1.0	8.00	M22×1.5	20.5	M36×3.0	33.0		
M9×0.75	8.30	M22×1.0	21.0	M36×2.0	34.0		
M10×1.25	8.80	M24×2.0	22.0	M36×1.5	34.5		
M10×1.0	9.00	M24×1.5	22.5	M38×1.5	36.5		
M10×0.75	9.30	M24×1.0	23.0	M39×3.0	36.0		
M11×1.0	10.0	M25×2.0	23.0	M39×2.0	37.0		

· 对六角孔铰孔·螺栓孔尺寸表

DIMENSIONS OF COUNTERBORING FOR HEXAGON SOCKET HEAD CAP SCREW AND BOLT HOLE



螺丝尺寸 (d) Nominal dimensions of thread	ds	d'	dk	D'	k	H'	H''	d2
M3	3	3.4	5.5	6.5	3	2.7	3.3	2.6
M4	4	4.5	7	8	4	3.6	4.4	3.4
M5	5	5.5	8.5	9.5	5	4.6	5.4	4.3
M6	6	6.6	10	11	6	5.5	6.5	5.1
M8	8	9	13	14	8	7.4	8.6	6.9
M10	10	11	16	17.5	10	9.2	10.8	8.6
M12	12	14	18	20	12	11	13	10.4
M14	14	16	21	23	14	12.8	15.2	12.2
M16	16	18	24	26	16	14.5	17.5	14.2
M18	18	20	27	29	18	16.5	19.5	15.7
M20	20	22	30	32	20	18.5	21.5	17.7
M22	22	24	33	35	22	20.5	23.5	19.7
M24	24	26	36	39	24	22.5	25.5	21.2
M27	27	30	40	43	27	25	29	24.2
M30	30	33	45	48	30	28	32	26.7

·常用嵌入轴的尺寸公差

DIMENSIONAL TOLERANCE FOR SHAFTS IN COMMON FITS

基本尺寸的区分 (mm) classification of standard dimensions (mm)		轴公差范围的级别 Class of geometrical tolerance zone of shafts													
以上 Above	以下 Below	b9	c9	d8	d9	e7	e8	e9	f6	f7	f8	g5	g6	h5	h6
-	3	-140 -165	-60 -85	-20 -34	-20 -45	-14 -24	-14 -28	-14 -39	-6 -12	-6 -16	-6 -20	-2 -6	-2 -8	0 -4	0 -6
3	6	-140 -170	-70 -100	-30 -48	-30 -60	-20 -32	-20 -38	-20 -50	-10 -18	-10 -22	-10 -28	-4 -9	-4 -12	0 -5	0 -8
6	10	-150 -186	-80 -116	-40 -62	-40 -76	-25 -40	-25 -47	-25 -61	-13 -22	-13 -28	-13 -35	-5 -11	-5 -14	0 -6	0 -9
10	14	-150 -193	-95 -138	-50 -77	-50 -93	-32 -50	-32 -59	-32 -75	-16 -27	-16 -34	-16 -43	-6 -14	-6 -17	0 -8	0 -11
14	18														
18	24	-160 -212	-110 -162	-65 -98	-65 -117	-40 -61	-40 -73	-40 -92	-20 -33	-20 -41	-20 -53	-7 -16	-7 -20	0 -9	0 -13
24	30														
30	40	-170 -232	-120 -182	-80 -119	-80 -142	-50 -75	-50 -89	-50 -112	-25 -41	-25 -50	-25 -64	-9 20	-9 25	0 -11	0 -16
40	50	-180 -242	-130 -192												
50	65	-190 -264	-140 -210	-100 -146	-100 -174	-60 -90	-60 -106	-60 -134	-30 -49	-30 -60	-30 -76	-10 -23	-10 -29	0 -13	0 -19
65	80	-200 -274	-150 -224												
80	100	-220 -307	-170 -257	-120 -174	-120 -207	-72 -107	-72 -126	-72 -159	-36 -58	-36 -71	-36 -90	-12 -27	-12 -34	0 -15	0 -22
100	120	-240 -327	-180 -267												
120	140	-260 -360	-200 -300												
140	160	-280 -380	-210 -310	-145 -208	-145 -245	-85 -125	-85 -148	-85 -185	-43 -68	-43 -83	-43 -106	-14 -32	-14 -39	0 -18	0 -25
160	180	-310 -410	-230 -330												
180	200	-340 -455	-240 -355												
200	225	-380 -495	-260 -375	-170 -242	-170 -285	-100 -172	-100 -215	-50 -79	-50 -96	-50 -122	-15 -35	-15 -35	-15 -44	0 -20	0 -29
225	250	-420 -535	-280 -395												
250	280	-480 -610	-300 -410	-190 -271	-190 -320	-110 -162	-110 -191	-110 -240	-56 -88	-56 -108	-56 -137	-17 -40	-17 -49	0 -23	0 -32
280	315	-540 -670	-330 -460												
315	355	-600 -740	-360 -500	-210 -299	-210 -350	-125 -182	-125 -214	-125 -265	-62 -98	-62 -119	-62 -151	-18 -43	-18 -54	0 -25	0 -36
355	400	-680 -820	-400 -540												
400	450	-760 -915	-440 -595	-230 -327	-230 -385	-135 -198	-135 -232	-135 -290	-68 -108	-68 -131	-68 -165	-20 -47	-20 -60	0 -27	0 -40
450	500	-840 -995	-480 -635												

注：表中的数值的上段为正误差允许范围，下段为负误差允许范围

NOTE: Values shown in the upper portion of respective lines are upper dimensional tolerance, while values shown in the lower portion of respective lines are lower dimensional tolerance.

·常用嵌入轴的尺寸公差

DIMENSIONAL TOLERANCE FOR SHAFTS IN COMMON FITS

基本尺寸的区分 (mm) classification of standard dimensions (mm)		轴公差范围的级别 Classification of geometrical tolerance zone of shafts																
以上 Above	以下 Below	h7	h8	h9	js5	js6	js7	k5	k6	m5	m6	n6	p6	r6	s6	t6	u6	x6
-	3	0 -10	0 -14	0 -25	±2	±3	±5	+4 0	+6 0	+6 +2	+8 +2	+10 +4	+12 +6	+16 +10	+20 +14	-	+24 +18	+26 +20
3	6	0 -12	0 -18	0 -30	±2.5	±4	±6	+6 +1	+9 +1	+9 +4	+12 +4	+16 +8	+20 +12	+23 +15	+27 +19		+31 +23	+36 +28
6	10	0 -15	0 -22	0 -36	±3	±4.5	±7	+7 +1	+10 +1	+12 +6	+15 +6	+19 +10	+24 +15	+28 +19	+32 +23		+37 +28	+43 +34
10	14	0 -18	0 -27	0 -43	±4	±5.5	±9	+9 +1	+12 +1	+15 +7	+18 +7	+2 +12	+29 +18	+34 +23	+39 +28	-	+44 +33	+51 +40
14	18																	+56 +45
18	24	0 -21	0 -33	0 -52	±4.5	±6.5	±10	+11 +2	+15 +2	+17 +8	+21 +8	+28 +15	+35 +22	+41 +28	+48 +35	-	+54 +41	+67 +54
24	30																	+77 +64
30	40	0 -25	0 -39	0 -62	±5.5	±8	±12	+13 +2	+18 +2	+20 +9	+25 +9	+33 +17	+42 +26	+50 +34	+59 +43	-	+76 +60	-
40	50																	
50	65	0 -30	0 -46	0 -74	±6.5	±9.5	±15	+15 +2	+21 +2	+24 +11	+30 +11	+39 +20	+51 +32	+60 +41	+72 +53	-	+85 +66	+106 +87
65	80													+62 +43	+78 +59		+94 +75	+121 +102
80	100	0 -35	0 -54	0 -87	±7.5	±11	±17	+18 +3	+25 +3	+28 +13	+35 +13	+45 +23	+59 +37	+73 +51	+93 +71	-	+113 +91	+146 +124
100	120													+76 +54	+101 +79		+126 +104	+166 +144
120	140	0 -40	0 -63	0 -100	±9	±12.5	±20	+21 +3	+28 +3	+33 +15	+40 +15	+52 +27	+68 +43	+88 +63	+117 +92	-	+	-
140	160													+90 +65	+125 +100			
160	180													+93 +68	+133 +108			
180	200	0 -46	0 -72	0 -115	±10	±14.5	±23	+24 +4	+33 +4	+37 +17	+46 +17	+60 +31	+79 +50	+106 +77	+151 +122	-	-	-
200	225													+109 +80	+159 +130			
225	250													+113 +84	+169 +140			
250	280	0 -52	0 -81	0 -130	±11.5	±16	±26	+27 +4	+36 +4	+43 +20	+52 +20	+66 +34	+88 +56	+126 +94	-	-	-	-
280	315													+130 +98				
315	355	0 -57	0 -89	0 -140	±12.5	±18	±28	+29 +4	+40 +4	+46 +21	+57 +21	+73 +37	+98 +62	+144 +108	-	-	-	-
355	400													+150 +114				
400	450	0 -63	0 -97	0 -155	±13.5	±20	±31	+32 +5	+45 +5	+50 +23	+63 +23	+80 +40	+108 +68	+166 +126	-	-	-	-
450	500													+172 +132				

注：表中的数值的上段为正误差允许范围，下段为负误差允许范围

NOTE: Values shown in the upper portion of respective lines are upper dimensional tolerance, while values shown in the lower portion of respective lines are lower dimensional tolerance.

·常用嵌入孔的尺寸公差

DIMENSIONAL TOLERANCE FOR HOLES IN COMMON FITS

基本尺寸的区分 (mm) classification of standard dimensions (mm)		孔的公差带的级别 Class of geometrical tolerance zone of shafts															
以上 Above	以下 Below	B10	C9	C10	D8	D9	D10	E7	E8	E9	F6	F7	F8	G6	G7	H6	H7
-	3	+180 +140	+85 +60	+100 +60	+34 +20	+45 +20	+60 +20	+24 +14	+28 +14	+39 +14	+12 +6	+16 +6	+20 +6	+8 +2	+12 +2	+6 0	+10 0
3	6	+188 +140	+100 +70	+118 +70	+48 +30	+60 +30	+78 +30	+32 +20	+38 +20	+50 +20	+18 +10	+22 +10	+28 +10	+12 +4	+16 +4	+8 0	+12 0
6	10	+208 +150	+116 +80	+138 +80	+62 +40	+76 +40	+98 +40	+40 +25	+47 +25	+61 +25	+22 +13	+28 +13	+35 +13	+14 +5	+20 +5	+9 0	+15 0
10	14	+220 +150	+138 +95	+165 +95	+77 +50	+93 +50	+120 +50	+50 +32	+59 +32	+75 +32	+27 +16	+34 +16	+43 +16	+17 +6	+24 +6	+11 0	+18 0
14	18																
18	24	+244 +160	+162 +110	+194 +110	+98 +65	+117 +65	+149 +65	+61 +40	+73 +40	+92 +40	+33 +20	+41 +20	+53 +20	+20 +7	+28 +7	+13 +0	+21 0
24	30																
30	40	+270 +170	+182 +120	+220 +120	+119 +80	+142 +80	+180 +80	+75 +50	+89 +50	+112 +50	+41 +25	+50 +25	+64 +25	+25 +9	+34 +9	+16 0	+25 0
40	50	+280 +180	+192 +130	+230 +130													
50	65	+310 +190	+214 +140	+260 +140	+146 +100	+174 +100	+220 +100	+90 +60	+106 +60	+134 +60	+49 +30	+60 +30	+76 +30	+29 +10	+40 +10	+19 0	+30 0
65	80	+320 +200	+224 150	+270 +150													
80	100	+360 +220	+257 +170	+310 +170	+174 +120	+207 +120	+260 +120	+107 +72	+126 +72	+159 +72	+58 +36	+71 +36	+90 +36	+34 +12	+47 +12	+22 0	+35 0
100	120	+380 +240	+267 +180	+320 +180													
120	140	+420 +260	+300 +200	+360 +200	+208 +145	+245 +145	+305 +145	+125 +85	+148 +85	+185 +85	+68 +43	+83 +43	+106 +43	+39 +14	+54 +14	+25 0	+40 0
140	160	+440 +280	+310 +210	+370 +210													
160	180	+470 +310	+330 +230	+390 +230													
180	200	+525 +340	+355 +240	+425 +240	+242 +170	+285 +170	+355 +170	+146 +100	+172 +100	+215 +100	+79 +50	+96 +50	+122 +50	+44 +15	+61 +15	+29 0	+46 0
200	225	+565 +380	+375 +260	+445 +260													
225	250	+605 +420	+395 +280	+465 +280													
250	280	+690 +480	+430 +300	+510 +300	+271 +190	+320 +190	+400 +190	+162 +110	+191 +110	+240 +110	+88 +56	+108 +56	+137 +56	+49 +17	+69 +17	+32 0	+52 0
280	315	+750 +540	+460 +330	+540 +330													
315	355	+830 +600	+500 +360	+590 +360													
355	400	+910 +680	+540 +400	+630 +400	+299 +210	+350 +210	+440 +210	+182 +125	+214 +125	+265 +125	+98 +62	+119 +62	+151 +62	+54 +18	+75 +18	+36 0	+57 0
400	450	+1010 +760	+595 +440	+690 +440													
450	500	+1090 +840	+635 +480	+730 +480													

注：表中的数值的上段为正误差允许范围，下段为负误差允许范围

NOTE: Values shown in the upper portion of respective lines are upper dimensional tolerance, while values shown in the lower portion of respective lines are lower dimensional tolerance.

·常用嵌入孔的尺寸公差

DIMENSIONAL TOLERANCE FOR HOLES IN COMMON FITS

基本尺寸的区分 (mm) classification of standard dimensions (mm)		孔的公差带的级别 Class of geometrical tolerance zone of shafts																	
以上 Above	以下 Below	H8	H9	H10	JS6	JS7	K6	K7	M6	M7	N6	N7	P6	P7	R7	S7	T7	U7	X7
-	3	+14 0	+25 +0	+40 0	±3	±5	0 -6	0 -10	-2 -8	-2 -12	-4 -14	-6 -12	-6 -16	-10 -20	-10 -20	-14 -24	-	-18 -28	-20 -30
3	6	+18 0	+30 0	+48 0	±4	±6	+2 -6	+3 -9	-1 -9	0 -12	-4 -16	-9 -17	-9 -17	-11 -23	-11 -23	-15 -27	-	-19 -31	-24 -36
6	10	+22 0	+36 0	+58 0	±4.5	±7	+2 -7	+5 -10	-3 -12	0 -15	-4 -19	-12 -21	-12 -21	-13 -28	-13 -28	-17 -32	-	-22 +37	-28 -43
10	14	+27 0	+43 0	+70 0	±5.5	±9	+2 -9	+6 -12	-4 -15	0 -18	-9 -20	-5 -23	-15 -26	-11 -29	-16 -34	-21 -39	-	-26 -44	-33 -51
14	18																		
18	24	+33 0	+52 0	+84 0	±6.5	±10	+2 -11	+6 -15	-4 -17	0 -21	-11 -24	-7 -28	-18 -31	-14 -35	-20 -41	-27 -48	-	-33 -54	-46 -67
24	30																		
30	40	+39 0	+62 0	+100 0	±8	±12	+3 -13	+7 -18	-4 -20	0 -25	-12 -28	-8 -33	-21 -37	-17 -42	-25 -50	-34 -59	-	-39 -64	-51 -76
40	50																		
50	65	+46 0	+74 0	+120 0	±9.5	±15	+4 -15	-9 -21	-5 -24	0 -30	-14 -33	-9 -39	-26 -45	-21 -51	-30 -60	-42 -72	-	-55 -85	-76 -106
65	80																		
80	100	+54 0	+87 0	+140 0	±11	±17	+4 -18	+10 -25	-6 -28	0 -35	-16 -38	-10 -45	-30 -52	-24 -59	-38 -73	-58 -93	-	-78 -113	-111 -146
100	120																		
120	140	+63 0	+100 0	+160 0	±12.5	±20	+4 -21	+12 -28	-8 -33	0 -40	-20 -45	-12 -52	-36 -61	-28 -68	-48 -88	-77 -117	-	-107 -147	-
140	160																		
160	180																		
180	200	+72 0	+115 0	+185 0	±14.5	±23	+5 -24	+13 -33	-8 -37	0 -46	-22 -51	-14 -60	-41 -70	-33 -79	-60 -106	-105 -151	-	-119 -159	-
200	225																		
225	250																		
250	280	+81 0	+130 0	+210 0	±16	±26	+5 -27	+16 -36	-9 -41	0 -52	-25 -57	-14 -66	-47 -79	-36 -88	-74 -126	-	-	-	-
280	315																		
315	355	+89 0	+140 0	+230 0	±18	±28	+7 -29	+17 -40	-10 -46	0 -57	-26 -62	-16 -73	-51 -87	-41 -98	-87 -144	-	-	-	-
355	400																		
400	450	+97 0	+155 0	+250 0	±20	±31	+8 -32	+18 -45	-10 -50	0 -63	-27 -67	-17 -80	-55 -95	-45 -108	-103 -166	-	-	-	-
450	500																		

注：表中的数值的上段为正误差允许范围，下段为负误差允许范围

NOTE: Values shown in the upper portion of respective lines are upper dimensional tolerance, while values shown in the lower portion of respective lines are lower dimensional tolerance.