

# KELCH

## 2023

### 精密刀柄

PRECISION HOLDERS



德国凯狮有限责任公司  
KELCH GMBH GERMANY

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# 说明

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	<p><b>规范</b> 刀柄及其接口都应符合这一规范。</p>	<p><b>Norm</b> Tool holders and interface correspond to this Norm</p>
	<p><b>规格</b> 同规格符合一致性；A型及相应A型HSK柄部应符合标准E.g ISO 12164-1.</p>	<p><b>Type</b> Type belongs to the corresponding Norm; E.g. ISO 12164-1 type A corresponds to HSK type A</p>
	<p><b>规格</b> 适用SK柄部的切削液</p>	<p><b>Type</b> Coolant supply for SK</p>
	<p><b>动平衡性</b> 符合G2.5级动平衡标准，25,000 min<sup>-1</sup>条件下小于1g mm</p>	<p><b>Balance quality</b> G2.5 25,000 min<sup>-1</sup> corresponds to &lt; 1g mm</p>
	<p><b>径向跳动</b> 接触面半径相对于柄部定位孔和中心轴的同轴度</p>	<p><b>Concentricity</b> Radial run-out from the interface to the tool holder location hole/ centering pivot</p>
	<p><b>轴向跳动 (端面跳动)</b> 接触面相对于柄部基准的跳动</p>	<p><b>Axial run-out</b> Axial run-out from the interface to the contact face</p>

	<p>规范 刀柄及其接口都应符合这一规范。</p>	<p>Length compensation Compensation on compression and tension for quick change tapping chucks</p>
	<p>内部冷却功能 1.带冷却功能 2.不带冷却功能</p>	<p>Coolant supply 1. Cool Stream bores include 2. Cool Stream bores possible as post-work</p>
	<p>冷却液供给 1.冷却孔包括在内 2.冷却孔尽可能保证高速切削性能</p>	<p>CoolStream 1. Cool Stream bores include 2. Cool Stream bores possible as post-work</p>
	<p>CAD数据 CAD数据按实际需要变更。</p>	<p>CAD data CAD data available on request</p>
	<p>数据接口 适用于直柄部</p>	<p>VDI Tool Holders for Straight Shanks</p>

# 1.0 SK-Steep Taper

**SK 精密刀柄**

**SK-Steep Taper**

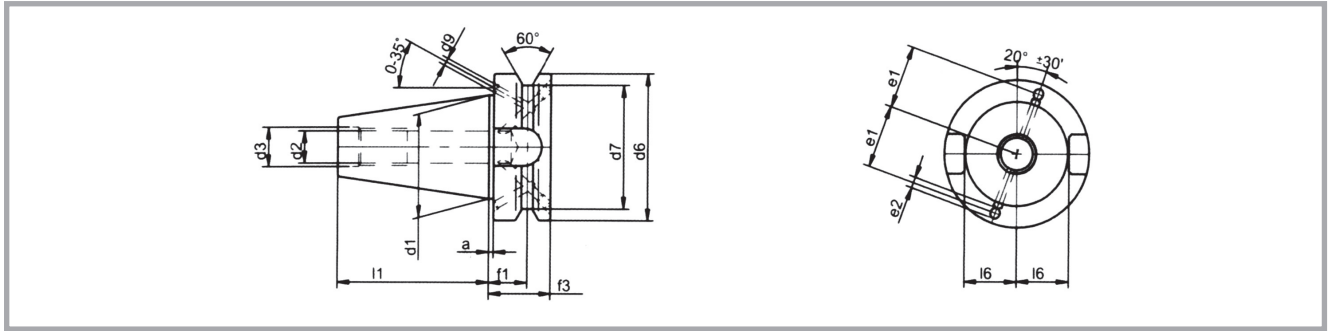


	JIS B 6339型SK精密刀柄 ( BT )	SK Tool Holders according to JIS B 6339 ( BT )
1.04-1.07	i-tec® 热装夹头刀柄	i-tec® Shrink-fit Chucks
1.08	丝锥快换夹头刀柄	Quick Change Tapping Chucks
1.09-1.11	削平型直柄立铣刀刀柄	Reduction Sleeves for Straight Shanks
1.12-1.13	液压夹头刀柄	Hydraulic Expansion Chucks
1.14-1.18	弹簧夹头刀柄	Collet Chucks
1.19	套式铣刀刀柄 ( 带平键和传动环 )	Shell End Mill Arbors
1.20-1.23	端铣刀柄	Shell End Mill Arbors with enlarged contact diameter
1.24	KFS模块式铣刀柄	Holders
1.25-1.26	莫氏圆锥孔刀柄	Reduction Sleeves
1.27	三面刃铣刀柄	Side milling Cutter Arbor
1.28	套式立铣刀柄	Shell End Mill Arbors
1.29	钻夹头刀柄	Drill Chuck Arbors
1.30-1.31	强力铣夹头刀柄	Strong Chuck Holder for Boring and Milling
1.32-1.33	毛坯刀柄	Tool Blanks

	DIN 69871型SK精密刀柄 ( JT )	SK Tool Holders according to DIN 69871 ( JT )
1.36-1.40	i-tec® 热装夹头刀柄	i-tec® Shrink-fit Chucks
1.41	丝锥快换夹头刀柄	Quick Change Tapping Chucks
1.42-1.44	削平型直柄立铣刀刀柄	Reduction Sleeves for Straight Shanks
1.45	液压夹头刀柄	Hydraulic Expansion Chucks
1.46-1.50	弹簧夹头刀柄	Collet Chucks
1.51	套式铣刀刀柄 ( 带平键和传动环 )	Shell End Mill Arbors
1.52-1.55	端铣刀柄	Shell End Mill Arbors with enlarged contact diameter
1.56	KFS模块式铣刀柄	Holders
1.57-1.58	莫氏圆锥孔刀柄	Reduction Sleeves
1.59	三面刃铣刀柄	Side milling Cutter Arbor
1.60	套式立铣刀柄	Shell End Mill Arbors
1.61	钻夹头刀柄	Drill Chuck Arbors
1.62-1.63	强力铣夹头刀柄	Strong Chuck Holder for Boring and Milling
1.64-1.65	毛坯刀柄	Tool Blanks

	BT-FC双面定位精密锥柄	Double-sided positioning precision tool
1.67-1.68	i-tec® 热装夹头刀柄	i-tec® Shrink-fit Chucks
1.69	削平型直柄立铣刀刀柄	Reduction Sleeves for Straight Shanks
1.70-1.72	弹簧夹头刀柄	Collet Chucks
1.73-1.74	端铣刀柄	Shell End Mill Arbors with enlarged contact diameter

## 日本标准锥柄 (BT) AD/B Tool Holders JIS B 6339 AD/B



JIS  
B6339  
MAS 403 BT

Form  
AD/B

SK	d1	d2	d3 H8	d6 h8	d7	d9	l1 ± 0.15	l6 -0.2
40	44.45	M16	17	63	53	4	65.4	22.6
50	69.85	M24	25	100	85	6	101.8	35.4

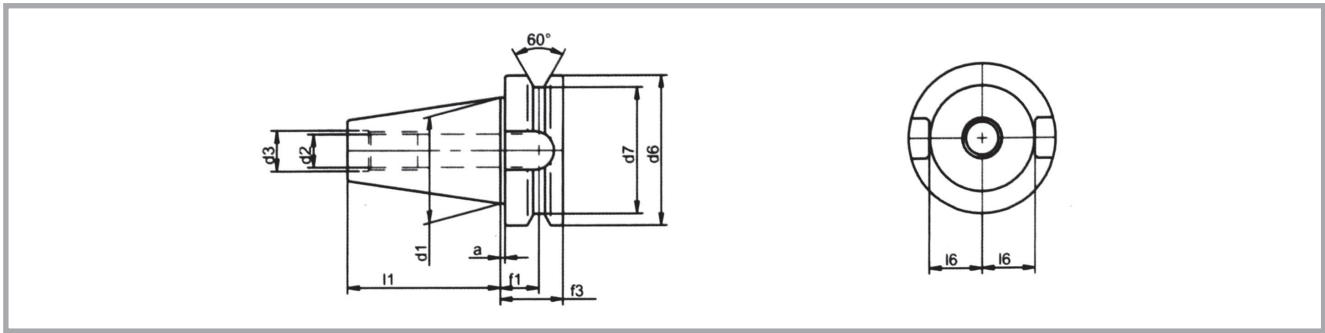
SK	e1 ± 0.1	e2	a	f1	f3
40	27	5	2	16.6	27
50	42	7	3	23.2	38

符合JIS B 6339 AD/B型，并且通过法兰进行内冷却和外冷却的锥柄。  
其中B型冷却孔是由螺栓封堵的，按实际需要也可以拆卸。

JIS B 6339 Type AD/B for, central coolant supply and lateral coolant supply via the tool flange according to DIN 69871-1 Type AD/B Coolant bores for type B are closed with threaded pins on delivery  
If required ,unscrew the threaded pins.



日本标准锥柄 (BT) AD  
Tool Holders JIS B 6339 AD



JIS B6339 MAS 403 BT  
Form AD

SK	d1	d2	d3 H8	d6 h8	d7	l1 ± 0.15	l6 -0.2
30	31.75	M12	12.5	46	38	48.4	16.3
40	44.45	M16	17	63	53	65.4	22.6
50	69.85	M24	25	100	85	101.8	35.4
60	107.95	M30	31	155	135	161.8	60.1

SK	a	f1	f3
30	2	13.6	22
40	2	16.6	27
50	3	23.2	38
60	3	28.2	48

内冷却符合 JIS B 6339 AD型

Central coolant supply according to JIS B 6339 Type AD

设计：硬度应满足较低的变形量，维氏度在 HV670±40 (近似于HRC 58±2)，淬硬（渗碳）层在0.5mm以上。锥度公差在AT3符合DIN 2080-1。

Design : Hardened by means of a special low-distortion hardening process. Vickers hardness 670±40HV30 (HRC58±2). Hardness depth Eht=min0.5mm Taper angle tolerance quality AT 3 according to DIN 2080-1. For details of concentricity of steep taper to tool holder, refer to appropriate page of catalogue.

材料：一般要求：符合硬度要求的合金钢材料并且能承受扭矩980N/MM<sup>2</sup>

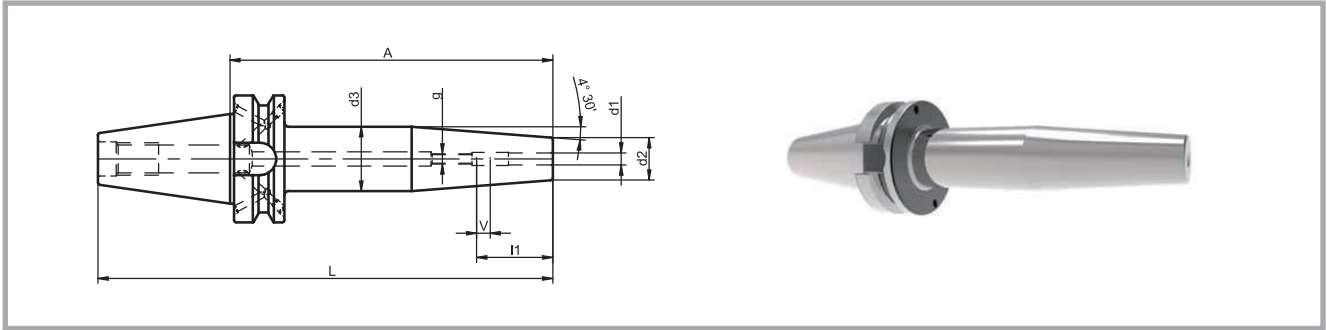
Material: If there is no other specification :Case-hardened alloy steel with a core tensile strength after case hardening of min.980N/MM<sup>2</sup>.

说明：价格和交付情况如有变化会在详单上实时变更。制造商保留对技术修改的权力。单位以mm。

Standard Specification: Prices and delivery conditions are shown in the corresponding price list valid at the time in question. Manufacturer reserves the right to make technical modifications. All dimensions in mm.

## 热装夹头刀柄 (标准型)

i-tec® Shrink-fit Chucks standard version



No	GB Model	SK	d1	A	d2	d3	l1	g	L	v	kg
311.6111.285	BT30-RZ3-80	30	3	80	12	17	-	-	128.4	-	0.5
311.6113.285	BT30-RZ4-80	30	4	80	12	17	-	-	128.4	-	0.5
311.6115.285	BT30-RZ5-80	30	5	80	12	17	-	-	128.4	-	0.5
311.6101.285	BT30-RZ6-80	30	6	80	21	32	36	M5	128.4	10	0.7
311.6151.285	BT30-RZ6-120	30	6	120	21	32	36	M5	168.4	10	0.9
311.6102.285	BT30-RZ8-80	30	8	80	21	32	36	M6	128.4	10	0.7
311.6152.285	BT30-RZ8-120	30	8	120	21	32	36	M6	168.4	10	0.9
311.6103.285	BT30-RZ10-80	30	10	80	24	34	41	M8 x 1	128.4	10	0.8
311.6153.285	BT30-RZ10-120	30	10	120	24	34	41	M8 x 1	168.4	10	1.0
311.6104.285	BT30-RZ12-80	30	12	80	24	34	47	M10 x 1	128.4	10	0.8
311.6154.285	BT30-RZ12-120	30	12	120	24	34	47	M10 x 1	168.4	10	1.0
311.6105.285	BT30-RZ14-80	30	14	80	27	36	47	M10 x 1	128.4	10	0.8
311.6155.285	BT30-RZ14-120	30	14	120	27	36	47	M10 x 1	168.4	10	1.1
311.6106.285	BT30-RZ16-80	30	16	80	27	36	50	M12 x 1	128.4	10	0.8
311.6156.285	BT30-RZ16-120	30	16	120	27	36	50	M12 x 1	168.4	10	1.1
311.6107.285	BT30-RZ18-80	30	18	80	33	43	50	M12 x 1	128.4	10	1.0
311.6157.285	BT30-RZ18-120	30	18	120	33	43	50	M12 x 1	168.4	10	1.4
311.6108.285	BT30-RZ20-80	30	20	80	33	43	52	M16 x 1	128.4	10	1.0
311.6158.285	BT30-RZ20-120	30	20	120	33	43	52	M16 x 1	168.4	10	1.4
311.0111.265	BT40-RZ3-80	40	3	80	12	17	-	-	145.4	-	1.1
311.0113.265	BT40-RZ4-80	40	4	80	12	17	-	-	145.4	-	1.1
311.0115.265	BT40-RZ5-80	40	5	80	12	17	-	-	145.4	-	1.1
311.0101.265	BT40-RZ6-90	40	6	90	21	31	36	M5	155.4	-	1.3
311.0151.265	BT40-RZ6-160	40	6	160	21	32	36	M5	225.4	-	1.7
311.0102.265	BT40-RZ8-90	40	8	90	21	31	36	M6	155.4	-	1.3
311.0152.265	BT40-RZ8-160	40	8	160	21	32	36	M6	225.4	10	1.7
311.0103.265	BT40-RZ10-90	40	10	90	24	34	41	M8 x 1	155.4	10	1.4
311.0153.265	BT40-RZ10-160	40	10	160	24	34	41	M8 x 1	225.4	10	1.8
311.0104.265	BT40-RZ12-90	40	12	90	24	34	47	M10 x 1	155.4	10	1.4
311.0154.265	BT40-RZ12-160	40	12	160	24	34	47	M10 x 1	225.4	10	1.8
311.0105.265	BT40-RZ14-90	40	14	90	27	36	47	M10 x 1	155.4	10	1.4
311.0155.265	BT40-RZ14-160	40	14	160	27	36	47	M10 x 1	225.4	10	1.9
311.0106.265	BT40-RZ16-90	40	16	90	27	37	50	M12 x 1	155.4	10	1.4
311.0156.265	BT40-RZ16-160	40	16	160	27	37	50	M12 x 1	225.4	10	2.0
311.0107.265	BT40-RZ18-90	40	18	90	33	43	50	M12 x 1	155.4	10	1.6
311.0157.265	BT40-RZ18-160	40	18	160	33	43	50	M12 x 1	225.4	10	2.3
311.0108.265	BT40-RZ20-90	40	20	90	33	43	52	M16 x 1	155.4	10	1.6
311.0158.265	BT40-RZ20-160	40	20	160	33	43	52	M16 x 1	225.4	10	2.3
311.0109.265	BT40-RZ25-100	40	25	100	44	48	58	M16 x 1	165.4	10	1.9
311.0159.265	BT40-RZ25-160	40	25	160	44	53	58	M16 x 1	225.4	10	3.0

No	GB Model	SK	d1	A	d2	d3	l1	g	L	v	kg
311.6111.225	BT50-RZ3-100	50	3	100	12	17	-	-	201.8	-	3.7
311.6113.225	BT50-RZ4-100	50	4	100	12	17	-	-	201.8	-	3.7
311.6115.225	BT50-RZ5-100	50	5	100	12	17	-	-	201.8	-	3.7
311.0101.225	BT50-RZ6-100	50	6	100	21	31	36	M5	201.8	10	3.9
311.0151.225	BT50-RZ6-160	50	6	160	21	32	36	M5	261.8	10	4.3
311.6051.225	BT50-RZ6-200	50	6	200	21	32	36	M5	301.8	10	4.5
311.0102.225	BT50-RZ8-100	50	8	100	21	31	36	M6	201.8	10	3.9
311.0152.225	BT50-RZ8-160	50	8	160	21	32	36	M6	261.8	10	4.3
311.6052.225	BT50-RZ8-200	50	8	200	21	32	36	M6	301.8	10	4.5
311.0103.225	BT50-RZ10-100	50	10	100	24	34	41	M8×1	201.8	10	4.0
311.0153.225	BT50-RZ10-160	50	10	160	24	34	41	M8×1	261.8	10	4.4
311.6053.225	BT50-RZ10-200	50	10	200	24	34	41	M8×1	301.8	10	4.6
311.0104.225	BT50-RZ12-100	50	12	100	24	34	47	M10×1	201.8	10	4.0
311.0154.225	BT50-RZ12-160	50	12	160	24	34	47	M10×1	261.8	10	4.4
311.6054.225	BT50-RZ12-200	50	12	200	24	34	47	M10×1	301.8	10	4.6
311.0105.225	BT50-RZ14-100	50	14	100	27	37	47	M10×1	201.8	10	4.1
311.0155.225	BT50-RZ14-160	50	14	160	27	36	47	M10×1	261.8	10	4.5
311.6055.225	BT50-RZ14-200	50	14	200	27	36	47	M10×1	301.8	10	4.8
311.0106.225	BT50-RZ16-100	50	16	100	27	37	50	M12×1	201.8	10	4.1
311.0156.225	BT50-RZ16-160	50	16	160	27	36	50	M12×1	261.8	10	4.5
311.6056.225	BT50-RZ16-200	50	16	200	27	36	50	M12×1	301.8	10	4.8
311.0107.225	BT50-RZ18-100	50	18	100	33	43	50	M12×1	201.8	10	4.2
311.0157.225	BT50-RZ18-160	50	18	160	33	44	50	M12×1	261.8	10	4.9
311.6057.225	BT50-RZ18-200	50	18	200	33	44	50	M12×1	301.8	10	5.3
311.0108.225	BT50-RZ20-100	50	20	100	33	43	52	M16×1	201.8	10	4.2
311.0158.225	BT50-RZ20-160	50	20	160	33	44	52	M16×1	261.8	10	4.9
311.6058.225	BT50-RZ20-200	50	20	200	33	44	52	M16×1	301.8	10	5.3
311.0109.225	BT50-RZ25-120	50	25	120	44	57	58	M16×1	221.8	10	4.7
311.0159.225	BT50-RZ25-160	50	25	160	44	53	58	M16×1	261.8	10	5.5
311.6059.225	BT50-RZ25-200	50	25	200	44	53	58	M16×1	301.8	10	6.1
311.0110.225	BT50-RZ32-120	50	32	120	44	57	61	M16×1	221.8	10	4.7
311.0160.225	BT50-RZ32-160	50	32	160	44	53	61	M16×1	261.8	10	5.5
311.6060.225	BT50-RZ32-200	50	32	200	44	53	61	M16×1	301.8	10	6.1

设计：请使用柄部直径公差h6级的硬质合金刀具。

Design:The clamping diameter is designed for a cemented carbide shank tolerance of h6.

说明：不包括调整长度的调整螺钉。

Standard Specification:Adjusting screw for length adjustment is not included.

备注：1、其他型号和尺寸可按订货要求制作。

Note: 1.Other designs and sizes are available on request.

2、装夹刀具的刀柄夹紧长度必须保证1~v尺寸，否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。

2.Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder , tool couldn't be dismantled or toolholder damage and so on.

3、建议使用专用热装机装卸刀具。

3.Special shrinking devices are recommended for tool mounting and dismantling.

## ACCESSORIES

配件



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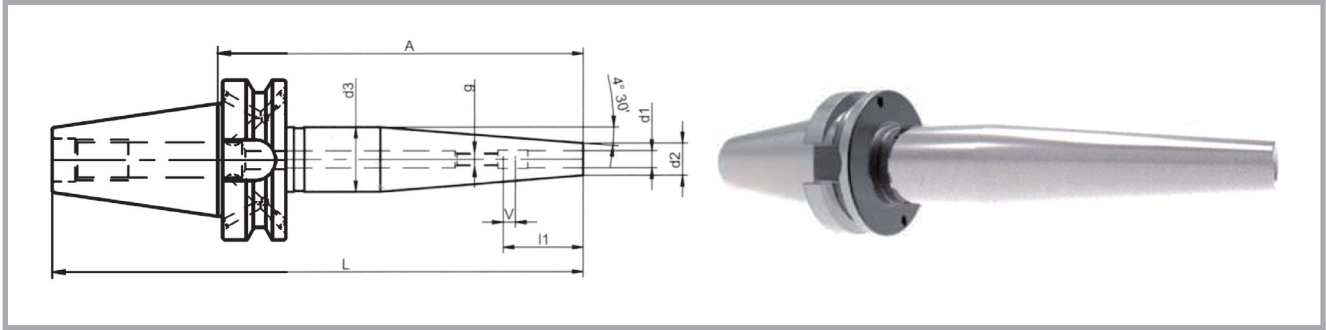


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## 热装夹头刀柄 (细长型)

i-tec® Shrink-fit Chucks slim version



JIS B6339 MAS 403 BT
Form AD/B
Surface finish: Ra = 0,003
G2.5 25,000 min<sup>-1</sup> <1g mm
möglich
CAD

No	GB Model	SK	d1	A	d2	d3	l1	g	L	v	Kg
311.6700.285	BT30-RZ3-120	30	3	120	9	25	-	-	168.4	-	0.7
311.6701.285	BT30-RZ4-120	30	4	120	9	25	-	-	168.4	-	0.7
311.6702.285	BT30-RZ5-120	30	5	120	9	25	-	-	168.4	-	0.7
311.6703.285	BT30-RZ6-120	30	6	120	15	30	36	M5	168.4	10	0.9
311.6704.285	BT30-RZ8-120	30	8	120	15	30	36	M6	168.4	10	0.9
311.6705.285	BT30-RZ10-120	30	10	120	18	32	41	M8 x 1	168.4	10	0.9
311.6706.285	BT30-RZ12-120	30	12	120	18	32	47	M10 x 1	168.4	10	0.9
311.0700.265	BT40-RZ3-120	40	3	120	9	24	-	-	185.4	-	1.3
311.0710.265	BT40-RZ3-160	40	3	160	9	25	-	-	225.4	-	1.4
311.0701.265	BT40-RZ4-120	40	4	120	9	24	-	-	185.4	-	1.3
311.0711.265	BT40-RZ4-160	40	4	160	9	25	-	-	225.4	-	1.4
311.0702.265	BT40-RZ5-120	40	5	120	9	24	-	-	185.4	-	1.3
311.0712.265	BT40-RZ5-160	40	5	160	9	25	-	-	225.4	-	1.4
311.0703.265	BT40-RZ6-120	40	6	120	15	30	36	M5	185.4	10	1.4
311.0713.265	BT40-RZ6-160	40	6	160	15	30	36	M5	225.4	10	1.6
311.0704.265	BT40-RZ8-120	40	8	120	15	30	36	M6	185.4	10	1.4
311.0714.265	BT40-RZ8-160	40	8	160	15	30	36	M6	225.4	10	1.6
311.0705.265	BT40-RZ10-120	40	10	120	18	33	41	M8 x 1	185.4	10	1.5
311.0715.265	BT40-RZ10-160	40	10	160	18	32	41	M8 x 1	225.4	10	1.7
311.0706.265	BT40-RZ12-120	40	12	120	18	34	47	M10 x 1	185.4	10	1.6
311.0716.265	BT40-RZ12-160	40	12	160	18	32	47	M10 x 1	225.4	10	1.7
311.0700.225	BT50-RZ3-120	50	3	120	9	22	-	-	221.8	-	3.8
311.0710.225	BT50-RZ3-160	50	3	160	9	25	-	-	261.8	-	4.0
311.0701.225	BT50-RZ4-120	50	4	120	9	22	-	-	221.8	-	3.8
311.0711.225	BT50-RZ4-160	50	4	160	9	25	-	-	261.8	-	4.0
311.0702.225	BT50-RZ5-120	50	5	120	9	22	-	-	221.8	-	3.8
311.0712.225	BT50-RZ5-160	50	5	160	9	25	-	-	261.8	-	4.0
311.0703.225	BT50-RZ6-120	50	6	120	15	31	36	M5	221.8	10	4.0
311.0713.225	BT50-RZ6-160	50	6	160	15	30	36	M5	261.8	10	4.2
311.0704.225	BT50-RZ8-120	50	8	120	15	31	36	M6	221.8	10	4.0
311.0714.225	BT50-RZ8-160	50	8	160	15	30	36	M6	261.8	10	4.2
311.0705.225	BT50-RZ10-120	50	10	120	18	34	41	M8 x 1	221.8	10	4.1
311.0715.225	BT50-RZ10-160	50	10	160	18	32	41	M8 x 1	261.8	10	4.3
311.0706.225	BT50-RZ12-120	50	12	120	18	34	47	M10 x 1	221.8	10	4.1
311.0716.225	BT50-RZ12-160	50	12	160	18	32	47	M10 x 1	261.8	10	4.3

设计：请使用柄部直径公差h6级的硬质合金刀具。

说明：不包括调整长度的调整螺钉。

备注：1、其他型号和尺寸可按订货要求制作。

- 2、装夹刀具的刀柄夹紧长度必须保证L1-V尺寸，否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。
- 3、建议使用专用热装机装卸刀具。

Design:The clamping diameter is designed for a cemented carbide shank tolerance of h6.

Standard Specification:Adjusting screw for length adjustment is not included.

Note: 1.Other designs and sizes are available on request.

2.Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder , tool couldn't be dismounted or toolholder damage and so on.

3.Special shrinking devices are recommended for tool mounting and dismounting.

## ACCESSORIES

配件



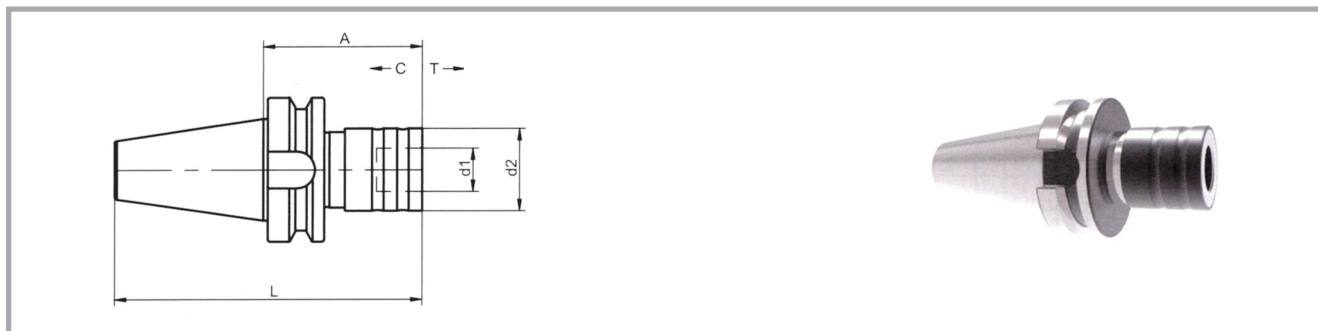
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## 丝锥快换夹头刀柄 Quick Change Tapping Chucks



No	GB Model	SK	M	A	d1	d2	L	C	T	kg
440.0160.161	BT30-G3-66.5	30	M3-M14	66.5	19	36	114.9	6.5	7.5	0.7
440.0161.161	BT30-G3-120	30	M3-M14	120	19	36	168.4	6.5	7.5	1.1
440.0001.265	BT40-G3-66.5	40	M3-M14	66.5	19	36	131.9	6.5	7.5	1.3
440.0109.161	BT40-G3-120	40	M3-M14	120	19	36	185.4	6.5	7.5	1.6
440.0002.265	BT40-G8-93.5	40	M4.5-M24	93.5	31	53	158.9	8.5	15	2.0
440.0111.161	BT40-G8-150	40	M4.5-M24	150	31	53	215.4	8.5	15	2.9
440.0003.225	BT50-G3-82	50	M3-M14	82	19	36	183.8	6.5	7.5	3.9
440.0001.225	BT50-G8-101.5	50	M4.5-M24	101.5	31	53	203.3	8.5	15	4.6
440.0113.161	BT50-G8-180	50	M4.5-M24	180	31	53	281.8	8.5	15	5.8
440.0114.161	BT50-G14-140	50	M14-M33	140	48	78	241.8	15	23	7.0
440.0115.161	BT50-G14-200	50	M14-M33	200	48	78	301.8	15	23	9.1

使用: 用于夹持带或不带安全机构的快换丝锥夹套。

Use: For holding quick change inserts with or without safety clutch.

设计: 长度补偿在收缩和拉伸方向取决于进给和螺距的不同。压缩时能够保证当轴向力达到允许值时立即脱离攻丝状态, 拉力释放时能够保证快换丝锥夹套免于过大轴向拉力造成的损害。

Design: Length compensation on compression and tension to compensate the difference between feed and tap pitch. The pressure point mechanism guarantees that the tap immediately cuts the thread as soon as the permissible axial force is reached. The tension lock protects the tapping chuck against damage as a result of high axial tensile load.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

### ACCESSORIES

配件

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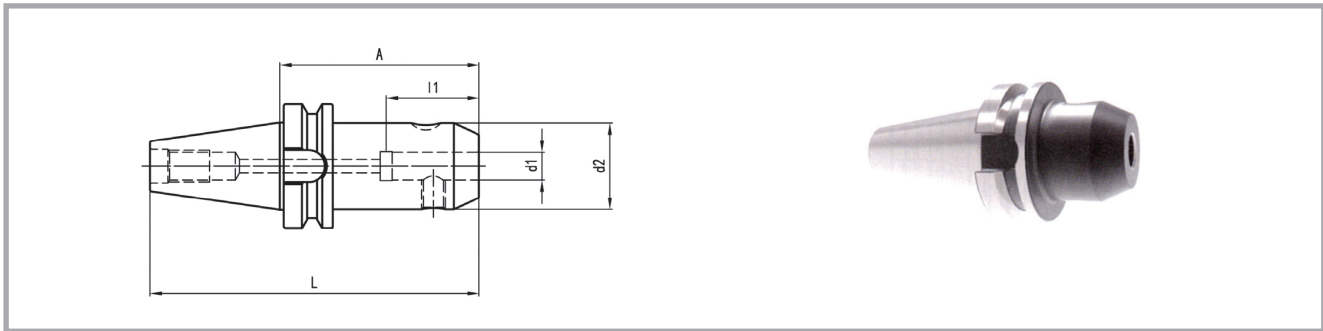
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削平型直柄立铣刀刀柄(威尔顿型)

Reduction Sleeves for Straight Shanks with lateral driving surface (Weldon)



No	GB Model	SK	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
440.0360.009	BT30-XP6-50	30	6	50	25	35	98.4	+0.005	M6X10	0.5
440.0361.009	BT30-XP8-50	30	8	50	28	35	98.4	+0.005	M8X10	0.5
440.0362.009	BT30-XP10-63	30	10	63	35	39	111.4	+0.005	M10X12	0.7
440.0363.009	BT30-XP12-63	30	12	63	42	44	111.4	+0.005	M12X16	0.8
440.0364.009	BT30-XP16-63	30	16	63	48	47	111.4	+0.005	M14X16	0.9
440.0365.009	BT30-XP20-63	30	20	63	52	49	111.4	+0.007	M16X16	1.0
420.0011.265	BT40-XP6-50	40	6	50	25	35	115.4	+0.005	M6X10	1.0
420.0012.265	BT40-XP8-50	40	8	50	28	35	115.4	+0.005	M8X10	1.1
420.0003.265	BT40-XP10-63	40	10	63	35	39	128.4	+0.005	M10X12	1.2
420.0004.265	BT40-XP12-63	40	12	63	42	44	128.4	+0.005	M12X16	1.3
420.0044.265	BT40-XP14-63	40	14	63	44	44	128.4	+0.005	M12X16	1.4
420.0005.265	BT40-XP16-63	40	16	63	48	47	128.4	+0.005	M14X16	1.4
420.0048.265	BT40-XP18-63	40	18	63	50	47	128.4	+0.005	M14X16	1.5
420.0006.265	BT40-XP20-63	40	20	63	52	49	128.4	+0.007	M16X16	1.5
420.0007.265	BT40-XP25-90	40	25	90	65	54	155.4	+0.007	M18X2X20	2.4
420.0008.265	BT40-XP32-100	40	32	100	72	58	165.4	+0.007	M20X2X20	3.1
420.0011.225	BT50-XP6-63	50	6	63	25	35	164.8	+0.005	M6X10	3.7
420.0012.225	BT50-XP8-63	50	8	63	28	35	164.8	+0.005	M8X10	3.7
420.0013.225	BT50-XP10-63	50	10	63	35	39	164.8	+0.005	M10X12	3.8
420.0004.225	BT50-XP12-80	50	12	80	42	44	181.8	+0.005	M12X16	4.0
420.0044.225	BT50-XP14-80	50	14	80	44	44	181.8	+0.005	M12X16	4.0
420.0005.225	BT50-XP16-80	50	16	80	48	47	181.8	+0.005	M14X16	4.1
420.0048.225	BT50-XP18-80	50	18	80	50	47	181.8	+0.005	M14X16	4.2
420.0006.225	BT50-XP20-80	50	20	80	52	49	181.8	+0.007	M16X16	4.2
420.0007.225	BT50-XP25-100	50	25	100	65	54	201.8	+0.007	M18X2X20	5.0
420.0018.225	BT50-XP32-105	50	32	105	72	58	206.8	+0.007	M20X2X20	5.5
440.0044.009	BT50-XP40-125	50	40	125	80	75	226.8	+0.007	M20X2X20	6.7
440.0045.009	BT50-XP50-125	50	50	125	90	88	226.8	+0.007	M24X2X20	7.5
440.0047.009	BT60-XP25-110	60	25	110	65	54	271.8	+0.007	M18X2X20	14.4
440.0048.009	BT60-XP32-125	60	32	125	72	58	286.8	+0.007	M20X2X20	15.2
440.0049.009	BT60-XP40-125	60	40	125	80	75	286.8	+0.007	M20X2X20	15.7
440.0050.009	BT60-XP50-150	60	50	150	90	88	311.8	+0.007	M24X2X20	17.5
440.0051.009	BT60-XP63-180	60	63	180	120	98	341.8	+0.007	M24X2X20	23.5

使用：按DIN 1835 B型（威尔顿型）和DIN 6535 HB型夹持直柄铣刀：

Use: For holding shank tools with lateral driving surface, DIN 1835 type B and DIN 6535 type HB.

说明：包括配好的夹紧螺钉，从d1=25mm的孔起提供2个紧固螺钉。

Standard Specification : With clamping screw. From location hole d1 = 25mm 2 clamping screws are included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



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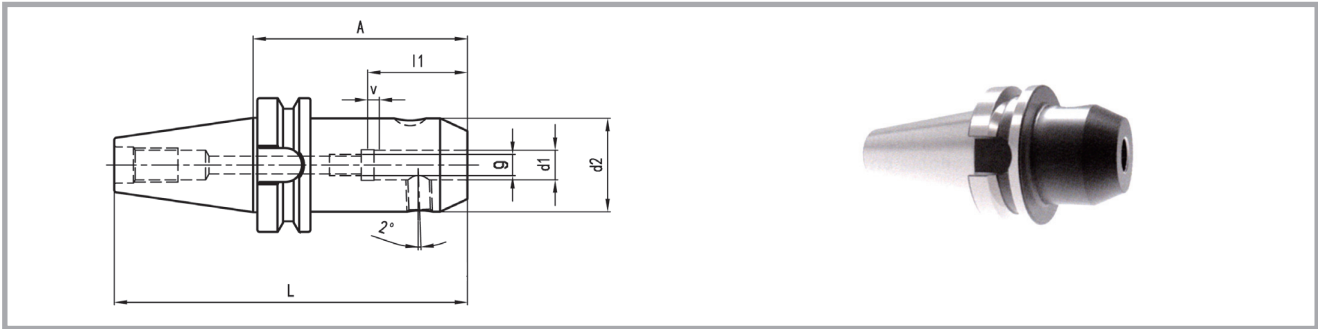
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带2° 斜削平型直柄立铣刀刀柄(威斯尔凹口型)

Reduction Sleeves for Straight Shanks with inclined clamping surface (Whistle Notch)



No	GB Model	SK	d1	A	d2	l1	g	L	Tol./d1	配用螺钉	kg
420.0506.265	BT40-XPD6-50	40	6	50	25	38	M5	115.4	+0.005	M6X10	1.0
420.0508.265	BT40-XPD8-50	40	8	50	28	38	M6	115.4	+0.005	M8X10	1.1
420.0510.265	BT40-XPD10-63	40	10	63	35	41	M8	128.4	+0.005	M10X12	1.2
420.0512.265	BT40-XPD12-63	40	12	63	42	47	M10	128.4	+0.005	M12X16	1.3
420.0514.265	BT40-XPD14-63	40	14	63	44	47	M10	128.4	+0.005	M12X16	1.4
420.0516.265	BT40-XPD16-63	40	16	63	48	50	M12	128.4	+0.005	M14X16	1.4
420.0518.265	BT40-XPD18-63	40	18	63	50	50	M12	128.4	+0.005	M14X16	1.5
420.0520.265	BT40-XPD20-63	40	20	63	52	52	M16	128.4	+0.007	M16X16	1.5
420.0525.265	BT40-XPD25-90	40	25	90	65	58	M20	155.4	+0.007	M18X2X20	2.4
420.0532.265	BT40-XPD32-100	40	32	100	72	61	M20	165.4	+0.007	M20X2X20	3.1
420.0606.225	BT50-XPD6-63	50	6	63	25	38	M5	164.8	+0.005	M6X10	3.7
420.0608.225	BT50-XPD8-63	50	8	63	28	38	M6	164.8	+0.005	M8X10	3.7
420.0610.225	BT50-XPD10-63	50	10	63	35	41	M8	164.8	+0.005	M10X12	3.8
420.0612.225	BT50-XPD12-80	50	12	80	42	47	M10	181.8	+0.005	M12X16	4.0
420.0614.225	BT50-XPD14-80	50	14	80	44	47	M10	181.8	+0.005	M12X16	4.0
420.0616.225	BT50-XPD16-80	50	16	80	48	50	M12	181.8	+0.005	M14X16	4.1
420.0618.225	BT50-XPD18-80	50	18	80	50	50	M12	181.8	+0.005	M14X16	4.2
420.0620.225	BT50-XPD20-80	50	20	80	52	52	M16	181.8	+0.007	M16X16	4.2
420.0625.225	BT50-XPD25-100	50	25	100	65	58	M20	201.8	+0.007	M18X2X20	5.0
420.0632.225	BT50-XPD32-105	50	32	105	72	61	M20	206.8	+0.007	M20X2X20	5.5

使用: 用于夹持带角度驱动面 (2°) 的直柄铣刀, DIN1835标准中的E型和DIN6535 HE型。

Use: For holding shank tools with inclined clamping surface (2°), DIN 1835 type E and DIN 6535 type HE.

说明: 包括配好的夹紧螺钉和限位螺钉, 从d1=25 mm的孔起提供2个紧固螺钉。

Standard Specification: Clamping screw and adjusting screw included. From location hole d1 = 25mm 2 clamping screws are included.

备注: 带孔的止动螺钉用于内冷却, 其他型号和尺寸可按订货要求制作。配件及页数。

Note: Bored through adjusting screw for coolant. Other designs and sizes are available on request.

ACCESSORIES

配件



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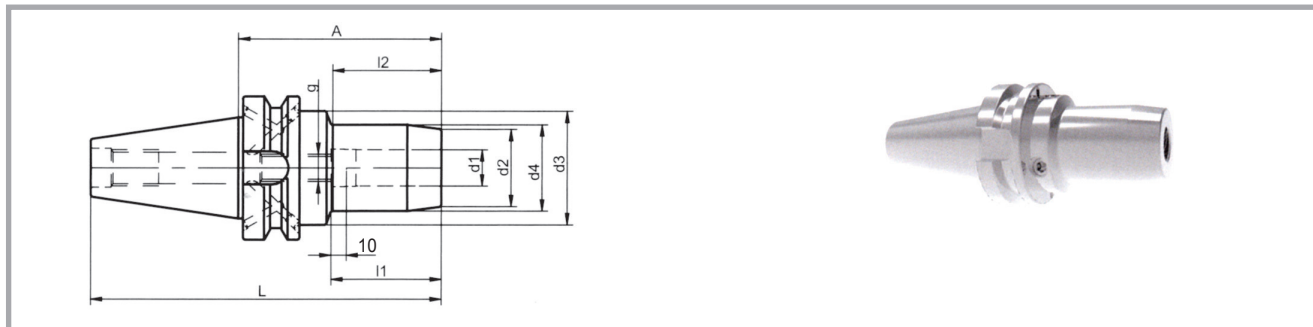


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## 液压夹头刀柄

### Hydraulic Expansion Chucks



No	GB Model	SK	d1	A	d2	d3	d4	l1	l2	g	L	kg
702.0001.285	BT30-HD6-75	30	6	75	22	45.5	26	37	30	M5	123.4	0.8
702.0002.285	BT30-HD8-75	30	8	75	24	45.5	28	37	30	M6	123.4	0.8
702.0003.285	BT30-HD10-85	30	10	85	26	45.5	30	41	40	M8	133.4	0.9
702.0004.285	BT30-HD12-90	30	12	90	28	45.5	32	46	46	M8	138.4	0.9
702.0006.285	BT30-HD16-90	30	16	90	34	45.5	38	49	47	M8	138.4	1.0
702.0008.285	BT30-HD20-90	30	20	90	38	45.5	42	51	48	M8	138.4	1.1
702.0001.265	BT40-HD6-90	40	6	90	22	50	26	37	40	M5	155.4	1.5
702.0002.265	BT40-HD8-90	40	8	90	24	50	28	37	40	M6	155.4	1.5
702.0003.265	BT40-HD10-90	40	10	90	26	50	30	41	40	M8	155.4	1.5
702.0004.265	BT40-HD12-90	40	12	90	28	50	32	46	40	M10	155.4	1.5
702.0005.265	BT40-HD14-90	40	14	90	30	50	34	46	40	M10	155.4	1.6
702.0006.265	BT40-HD16-90	40	16	90	34	50	38	49	46	M12	155.4	1.6
702.0007.265	BT40-HD18-90	40	18	90	36	50	40	49	46	M12	155.4	1.6
702.0008.265	BT40-HD20-90	40	20	90	38	50	42	51	46	M16	155.4	1.6
702.0009.265	BT40-HD25-100	40	25	100	45	55	50	57	55	M16	165.4	2.0
702.0010.265	BT40-HD32-110	40	32	110	56	63	63	61	80	M16	175.4	2.6
702.0001.225	BT50-HD6-110	50	6	110	22	50	26	37	40	M5	211.8	4.2
702.0002.225	BT50-HD8-110	50	8	110	24	50	28	37	40	M6	211.8	4.2
702.0003.225	BT50-HD10-110	50	10	110	26	50	30	41	40	M8	211.8	4.3
702.0004.225	BT50-HD12-110	50	12	110	28	50	32	46	40	M10	211.8	4.3
702.0005.225	BT50-HD14-110	50	14	110	30	50	34	46	40	M10	211.8	4.3
702.0006.225	BT50-HD16-110	50	16	110	34	50	38	49	46	M12	211.8	4.3
702.0007.225	BT50-HD18-110	50	18	110	36	50	40	49	46	M12	211.8	4.4
702.0008.225	BT50-HD20-110	50	20	110	38	50	42	51	46	M16	211.8	4.4
702.0009.225	BT50-HD25-110	50	25	110	45	55	50	57	55	M16	211.8	4.6
702.0010.225	BT50-HD32-115	50	32	115	56	70	63	61	55	M16	216.8	5.3

使用: 用于夹持按DIN1835A、B型或DIN 6535 HA或HB型直柄刀具, DIN1835 C、DE型和DIN 6535 HE型刀柄, 仅能与变径套共用。夹持精度h6级, 粗糙度最小为Ra0.3, 对于Φ25和Φ32只有DIN 1835 A型和DIN 6535HA型可用。

Use: For shank tools according to DIN1835 type A and B and DIN 6535 type HE are only applicable with reduction bushes. Shank quality h6, Ra min.=0.3 For Φ25 and Φ32 only type A or HA can be used.

说明: 带内置的限位螺钉。

Standard Specification: Bored through adjusting screw included.

备注: 其他型号和尺寸可按订货要求制作。刀具的刀柄夹紧长度必须保证1~v尺寸, 否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。

Note: Other designs and sizes are available on request. Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.

ACCESSORIES

配件



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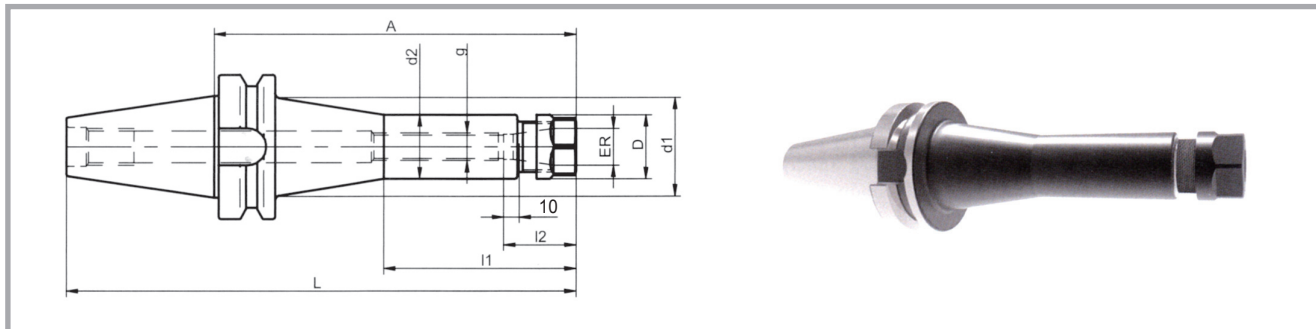


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## ER/ESX ER-11/16弹簧夹头刀柄 (带调整螺钉孔)

Collet Chucks ER/ESX 11/16 with internal thread



No	GB Model	SK	夹持范围	A	d1	d2	D	l1	l2	g	L	kg
640.0270.040	BT30-ER11-50	30	ER11(0.5-7)	50	-	19	19	-	18	M6	98.4	0.4
640.0260.040	BT30-ER11-70	30	ER11(0.5-7)	70	-	19	19	-	18	M6	118.4	0.5
640.0261.040	BT30-ER11-100	30	ER11(0.5-7)	100	-	19	19	-	18	M6	148.4	0.5
640.0271.040	BT30-ER16-50	30	ER16(0.5-10)	50	-	28	28	-	27	M12	98.4	0.5
640.0262.040	BT30-ER16-80	30	ER16(0.5-10)	80	-	28	28	-	27	M12	128.4	0.6
640.0263.040	BT30-ER16-100	30	ER16(0.5-10)	100	-	28	28	-	27	M12	148.4	0.7
698.0001.265	BT40-ER16-63	40	ER16(0.5-10)	63	-	28	28	-	27	M12	128.4	1.1
698.0002.265	BT40-ER16-100	40	ER16(0.5-10)	100	-	28	28	-	27	M12	165.4	1.3
698.0003.265	BT40-ER16-160	40	ER16(0.5-10)	160	46	28	28	85	27	M12	225.4	1.5
640.0263.040	BT40-ER16-200	40	ER16(0.5-10)	200	46	28	28	85	27	M12	265.4	1.7
698.0001.225	BT50-ER16-100	50	ER16(0.5-10)	100	-	28	28	-	27	M12	201.8	3.9
698.0002.225	BT50-ER16-160	50	ER16(0.5-10)	160	78	28	28	85	27	M12	261.8	4.1
640.0263.040	BT50-ER16-200	50	ER16(0.5-10)	200	78	28	28	85	27	M12	301.8	4.3

使用: 用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HBHE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明: 夹头包括夹紧螺母。

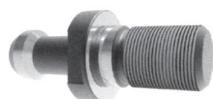
Standard Specification: Collet chuck including clamping nut.

备注: 弹簧夹头配有标准调整螺钉便于调节; 其他型号和尺寸可按订货要求制作。

Note: Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

### ACCESSORIES

配件



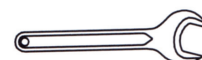
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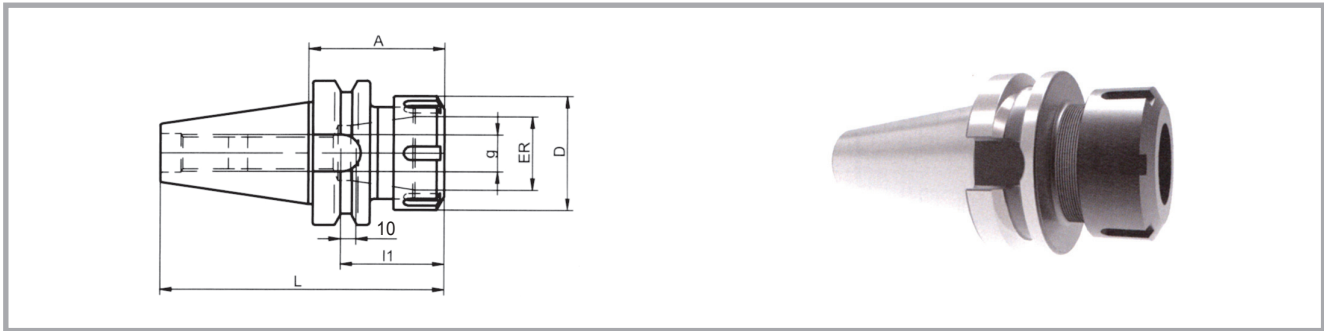
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ER/ESX ER-20/25/32/40弹簧夹头刀柄 (带调整螺钉孔)

Collet Chucks ER/ESX 20/25/32/40 with internal thread



JIS B6339 MAS 403 BT    Form AD       Ra=0,003    G2,5 20000min<sup>-1</sup>    CAD

No	GB Model	SK	ER	A	D	l1	g	L	kg
640.0272.040	BT30-ER20-50	30	ER20(1-13)	50	34	40	M12	98.4	0.6
640.0264.040	BT30-ER20-70	30	ER20(1-13)	70	34	40	M12	118.4	0.7
640.0265.040	BT30-ER20-100	30	ER20(1-13)	100	34	40	M12	148.4	0.9
640.0266.040	BT30-ER25-60	30	ER25(1-16)	60	42	43	M12	108.4	0.8
640.0273.040	BT30-ER25-80	30	ER25(1-16)	80	42	43	M12	128.4	1.0
640.0267.040	BT30-ER25-100	30	ER25(1-16)	100	42	43	M12	148.4	1.2
640.0275.040	BT30-ER32-70	30	ER32(2-20)	70	50	47	M12	118.4	1.1
640.0269.040	BT30-ER32-100	30	ER32(2-20)	100	50	47	M12	148.4	1.5
640.0123.040	BT40-ER20-70	40	ER20(1-13)	70	34	40	M12	135.4	1.2
640.0240.040	BT40-ER20-100	40	ER20(1-13)	100	34	40	M12	165.4	1.4
640.0241.040	BT40-ER20-160	40	ER20(1-13)	160	34	40	M12	225.4	1.8
640.0407.040	BT40-ER20-200	40	ER20(1-13)	200	34	40	M12	265.4	2.1
640.0125.040	BT40-ER25-70	40	ER25(1-16)	70	42	43	M16	135.4	1.4
697.0033.265	BT40-ER25-100	40	ER25(1-16)	100	42	43	M16	165.4	1.7
697.0043.265	BT40-ER25-160	40	ER25(1-16)	160	42	43	M16	225.4	2.3
640.0408.040	BT40-ER25-200	40	ER25(1-16)	200	42	43	M16	265.4	2.7
640.0127.040	BT40-ER32-70	40	ER32(2-20)	70	50	47	M16	135.4	1.6
697.0031.265	BT40-ER32-100	40	ER32(2-20)	100	50	47	M16	165.4	2.0
697.0041.265	BT40-ER32-160	40	ER32(2-20)	160	50	47	M16	225.4	2.8
640.0409.040	BT40-ER32-200	40	ER32(2-20)	200	50	47	M16	265.4	3.4
697.0002.265	BT40-ER40-80	40	ER40(3-26)	80	63	53	M16	145.4	2.1
697.0032.265	BT40-ER40-120	40	ER40(3-26)	120	63	53	M16	185.4	3.0
697.0042.265	BT40-ER40-160	40	ER40(3-26)	160	63	53	M16	225.4	3.9
640.0410.040	BT40-ER40-200	40	ER40(3-26)	200	63	53	M16	265.4	4.8
640.0244.040	BT50-ER20-70	50	ER20(1-13)	70	34	40	M12	171.8	3.8
640.0133.040	BT50-ER20-100	50	ER20(1-13)	100	34	40	M12	201.8	4.0
640.0245.040	BT50-ER20-160	50	ER20(1-13)	160	34	40	M12	261.8	4.4
640.0411.040	BT50-ER20-200	50	ER20(1-13)	200	34	40	M12	301.8	4.6
640.0246.040	BT50-ER25-70	50	ER25(1-16)	70	42	43	M16	171.8	3.9
640.0135.040	BT50-ER25-100	50	ER25(1-16)	100	42	43	M16	201.8	4.2
640.0247.040	BT50-ER25-160	50	ER25(1-16)	160	42	43	M16	261.8	4.8
640.0412.040	BT50-ER25-200	50	ER25(1-16)	200	42	43	M16	301.8	5.2
697.0001.225	BT50-ER32-70	50	ER32(2-20)	70	50	47	M16	171.8	4.0
640.0137.040	BT50-ER32-100	50	ER32(2-20)	100	50	47	M16	201.8	4.5
640.0248.040	BT50-ER32-160	50	ER32(2-20)	160	50	47	M16	261.8	5.3
640.0413.040	BT50-ER32-200	50	ER32(2-20)	200	50	47	M16	301.8	5.8
697.0002.225	BT50-ER40-80	50	ER40(3-26)	80	63	53	M16	181.8	4.5
640.0249.040	BT50-ER40-120	50	ER40(3-26)	120	63	53	M16	221.8	5.4
640.0250.040	BT50-ER40-160	50	ER40(3-26)	160	63	53	M16	261.8	6.3
640.0414.040	BT50-ER40-200	50	ER40(3-26)	200	63	53	M16	301.8	7.2
640.0251.040	BT60-ER25-100	60	ER25(1-16)	100	42	43	M16	261.8	13.5
640.0252.040	BT60-ER25-160	60	ER25(1-16)	160	42	43	M16	321.8	14.1
640.0415.040	BT60-ER25-200	60	ER25(1-16)	200	42	43	M16	361.8	14.4
640.0253.040	BT60-ER32-100	60	ER32(2-20)	100	50	47	M16	261.8	13.7
640.0254.040	BT60-ER32-160	60	ER32(2-20)	160	50	47	M16	321.8	14.5
640.0416.040	BT60-ER32-200	60	ER32(2-20)	200	50	47	M16	361.8	15.1
640.0255.040	BT60-ER40-100	60	ER40(3-26)	100	63	53	M16	261.8	14.1
640.0256.040	BT60-ER40-160	60	ER40(3-26)	160	63	53	M16	321.8	15.4
640.0417.040	BT60-ER40-200	60	ER40(3-26)	200	63	53	M16	361.8	16.3

使用: 用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型的直柄刀具。

说明: 夹头包括夹紧螺母。

备注: 弹簧夹头配有标准调整螺钉便于调节; 其他型号和尺寸可按订货要求制作。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

Standard Specification: Collet chuck including clamping nut.

Note: Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

## ACCESSORIES 配件

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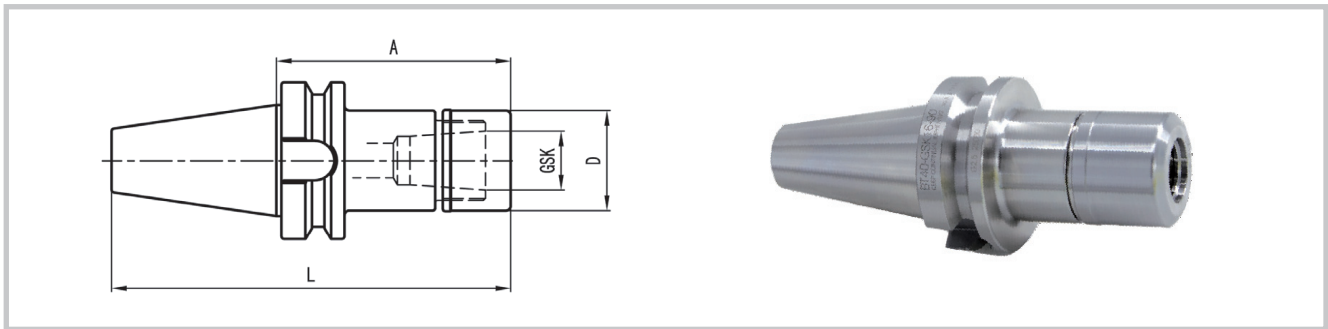


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GSK高精度弹簧夹头刀柄  
Collet Chucks GSK6/10/16/20/25



JIS B6339 MAS 403 BT    Form AD     $R_a = 0.003$     G2.5 20000mir<sup>-1</sup>    CAD

No	GB Model	SK	GSK	A	D	L	Kg
440.0210.042	BT30-GSK6-60	30	GSK6 ( 3-6 )	60	19.5	108.4	0.5
440.0211.042	BT30-GSK6-90	30	GSK6 ( 3-6 )	90	19.5	138.4	0.5
440.0212.042	BT30-GSK10-60	30	GSK10 ( 2-10 )	60	27.5	108.4	0.5
440.0213.042	BT30-GSK10-90	30	GSK10 ( 2-10 )	90	27.5	138.4	0.7
440.0214.042	BT30-GSK10-120	30	GSK10 ( 2-10 )	120	27.5	168.4	0.8
440.0215.042	BT30-GSK13-70	30	GSK13 ( 3-13 )	70	35	118.4	0.7
440.0216.042	BT30-GSK13-90	30	GSK13 ( 3-13 )	90	35	138.4	0.9
440.0217.042	BT30-GSK13-120	30	GSK13 ( 3-13 )	120	35	168.4	1.1
440.0218.042	BT30-GSK16-70	30	GSK16 ( 3-16 )	70	40	118.4	0.8
440.0219.042	BT30-GSK16-90	30	GSK16 ( 3-16 )	90	40	138.4	1.0
440.0220.042	BT30-GSK16-120	30	GSK16 ( 3-16 )	120	40	168.4	1.3
440.0221.042	BT30-GSK20-70	30	GSK20 ( 4-20 )	70	48	118.4	1.0
440.0222.042	BT30-GSK20-90	30	GSK20 ( 4-20 )	90	48	138.4	1.3
440.0223.042	BT30-GSK20-120	30	GSK20 ( 4-20 )	120	48	168.4	1.6
440.0224.042	BT30-GSK25-80	30	GSK25 ( 3-25 )	80	55	128.4	1.4
440.0225.042	BT30-GSK25-100	30	GSK25 ( 3-25 )	100	55	148.4	1.7
440.0226.042	BT30-GSK25-120	30	GSK25 ( 3-25 )	120	55	168.4	2.0
440.0025.042	BT40-GSK6-63	40	GSK6 ( 3-6 )	63	19.5	128.4	1.0
440.0026.042	BT40-GSK6-100	40	GSK6 ( 3-6 )	100	19.5	165.4	1.1
440.0027.042	BT40-GSK10-63	40	GSK10 ( 2-10 )	63	27.5	128.4	1.1
440.0028.042	BT40-GSK10-100	40	GSK10 ( 2-10 )	100	27.5	165.4	1.3
440.0029.042	BT40-GSK10-160	40	GSK10 ( 2-10 )	160	27.5	225.4	1.5
440.0176.042	BT40-GSK13-70	40	GSK13 ( 3-13 )	70	35	135.4	1.3
440.0177.042	BT40-GSK13-100	40	GSK13 ( 3-13 )	100	35	165.4	1.5
440.0178.042	BT40-GSK13-160	40	GSK13 ( 3-13 )	160	35	225.4	1.9
440.0030.042	BT40-GSK16-70	40	GSK16 ( 3-16 )	70	40	135.4	1.4
440.0031.042	BT40-GSK16-100	40	GSK16 ( 3-16 )	100	40	165.4	1.6
440.0032.042	BT40-GSK16-160	40	GSK16 ( 3-16 )	160	40	225.4	2.2
440.0033.042	BT40-GSK20-70	40	GSK20 ( 4-20 )	70	48	135.4	1.5
440.0034.042	BT40-GSK20-100	40	GSK20 ( 4-20 )	100	48	165.4	1.9
440.0035.042	BT40-GSK20-160	40	GSK20 ( 4-20 )	160	48	225.4	2.7
440.0036.042	BT40-GSK25-80	40	GSK25 ( 3-25 )	80	55	145.4	1.9
440.0037.042	BT40-GSK25-120	40	GSK25 ( 3-25 )	120	55	185.4	2.5
440.0038.042	BT40-GSK25-160	40	GSK25 ( 3-25 )	160	55	225.4	3.2

No	GB Model	SK	GSK	A	D	L	Kg
440.0039.042	BT50-GSK10-100	50	GSK10 ( 2-10 )	100	27.5	201.8	3.9
440.0040.042	BT50-GSK10-160	50	GSK10 ( 2-10 )	160	27.5	261.8	4.1
440.0180.042	BT50-GSK13-100	50	GSK13 ( 3-13 )	100	35	201.8	4.0
440.0181.042	BT50-GSK13-160	50	GSK13 ( 3-13 )	160	35	261.8	4.4
440.0042.042	BT50-GSK16-100	50	GSK16 ( 3-16 )	100	40	201.8	4.1
440.0043.042	BT50-GSK16-160	50	GSK16 ( 3-16 )	160	40	261.8	4.7
440.0045.042	BT50-GSK20-100	50	GSK20 ( 4-20 )	100	48	201.8	4.4
440.0046.042	BT50-GSK20-160	50	GSK20 ( 4-20 )	160	48	261.8	5.2
440.0048.042	BT50-GSK25-120	50	GSK25 ( 3-25 )	120	55	221.8	5.0
440.0049.042	BT50-GSK25-160	50	GSK25 ( 3-25 )	160	55	261.8	5.6

使用: 用于夹持按DIN 1835 A型、B型、E型以及DIN 6535 HA型、HB型和HE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明: 夹头包括夹紧螺母, 标准配置夹紧螺母为国产配件, 如需进口配件需客户另外订购

Standard Specification: Collet chuck including clamping nut.

备注: 其他型号和尺寸可按订货要求制作。  
括号中数字仅表示夹持刀具柄部尺寸范围, 不体现在产品型号中。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



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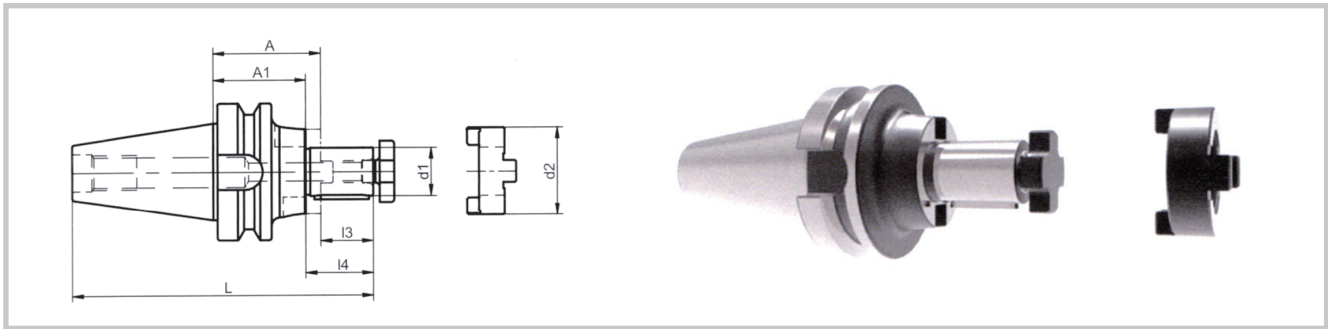
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套式铣刀刀柄（带平键和传动环）

Shell End Mill Arbors for milling cutters with longitudinal slot or tenon drive



No	GB Model	SK	d1	A	A1	d2	l3	l4	L	kg
489.6011.285	BT30-XM16-55	30	16	55	45	32	17	27	120.4	0.6
489.6012.285	BT30-XM22-55	30	22	55	43	40	19	31	122.4	0.7
489.6013.285	BT30-XM27-55	30	27	55	43	48	21	33	124.4	0.8
489.0011.265	BT40-XM16-55	40	16	55	45	32	17	27	137.4	1.1
489.0012.265	BT40-XM22-55	40	22	55	43	40	19	31	139.4	1.2
489.0013.265	BT40-XM27-55	40	27	55	43	48	21	33	141.4	1.3
489.0004.265	BT40-XM32-60	40	32	60	46	58	24	38	149.4	1.6
489.0005.265	BT40-XM40-60	40	40	60	46	70	27	41	152.4	1.9
489.0011.225	BT50-XM16-70	50	16	70	60	32	17	27	188.8	3.8
489.0012.225	BT50-XM22-70	50	22	70	58	40	19	31	190.8	3.9
489.0013.225	BT50-XM27-70	50	27	70	58	48	21	33	192.8	4.0
489.0014.225	BT50-XM32-70	50	32	70	56	58	24	38	195.8	4.2
489.0015.225	BT50-XM40-70	50	40	70	56	70	27	41	198.8	4.5
489.0016.225	BT50-XM50-70	50	50	70	54	90	30	46	201.8	5.1

使用：用于夹持轴向平键或端面键驱动的面铣刀。

Use: For clamping shell end mills and milling cutters with longitudinal slot or tenon drive.

设计：带有中心冷却功能，传动环符合DIN 138。

Design: Central boring for coolant supply. Cutter drive according to DIN 138.

说明：包括紧固螺钉、带有螺孔的平键和传动环

Standard Specification: Cutter retaining screw, feather key with withdrawal thread and drive ring included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



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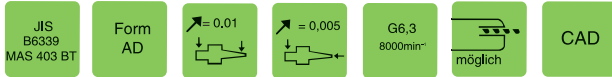
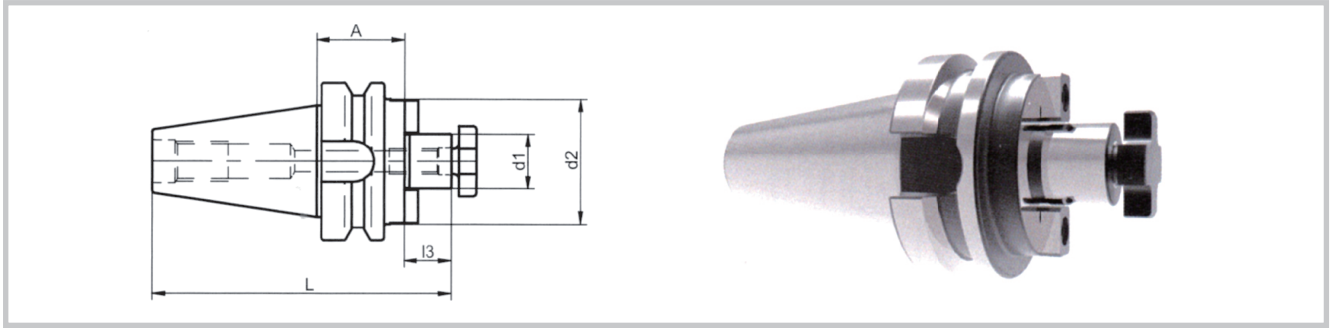


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## 端铣刀柄

### Shell End Mill Arbors with enlarged contact diameter



No	GB Model	SK	d1	A	d2	l3	L	W	夹刀螺钉	十字形扳手	kg
540.0108.004	BT30-XD16-45	30	16	45	40	17	110.4	8	M8	BS-16	0.6
540.0101.004	BT30-XD22-45	30	22	45	50	19	112.4	10	M10	BS-22	0.8
540.0102.004	BT30-XD22-90	30	22	90	50	19	157.4	10	M10	BS-22	1.5
540.0103.004	BT30-XD27-45	30	27	45	60	21	114.4	12	M12	BS-27	1.0
540.0104.004	BT30-XD27-90	30	27	90	60	21	159.4	12	M12	BS-27	2.0
540.0109.004	BT40-XD16-35	40	16	35	40	17	117.4	8	M8	BS-16	1.1
579.0001.265	BT40-XD22-35	40	22	35	50	19	119.4	10	M10	BS-22	1.2
540.0002.004	BT40-XD22-90	40	22	90	50	19	174.4	10	M10	BS-22	2.0
579.0002.265	BT40-XD27-35	40	27	35	60	21	121.4	12	M12	BS-27	1.2
540.0004.004	BT40-XD27-90	40	27	90	60	21	176.4	12	M12	BS-27	2.5
579.0003.265	BT40-XD32-50	40	32	50	80	24	139.4	14	M16	BS-32	2.0
540.0006.004	BT40-XD32-90	40	32	90	80	24	179.4	14	M16	BS-32	3.6
579.0001.225	BT50-XD22-50	50	22	50	50	19	170.8	10	M10	BS-22	3.8
540.0088.004	BT50-XD22-90	50	22	90	50	19	210.8	10	M10	BS-22	4.4
540.0010.004	BT50-XD22-150	50	22	150	50	19	270.8	10	M10	BS-22	5.4
579.0002.225	BT50-XD27-50	50	27	50	60	21	172.8	12	M12	BS-27	4.0
540.0012.004	BT50-XD27-90	50	27	90	60	21	212.8	12	M12	BS-27	4.8
540.0013.004	BT50-XD27-150	50	27	150	60	21	272.8	12	M12	BS-27	6.2
579.0003.225	BT50-XD32-50	50	32	50	80	24	175.8	14	M16	BS-32	4.2
540.0015.004	BT50-XD32-120	50	32	120	80	24	245.8	14	M16	BS-32	7.0

使用: 用于夹持带有端面键槽的面铣刀。

Use For: clamping shell end mills and milling cutters with tenon drive.

设计: 带有中心冷却功能, 刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping  $\phi$  40 and 60 with 4 threaded holes for holding cutters with tool holding according to DIN 2079.

说明: 包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



4.17



4.22

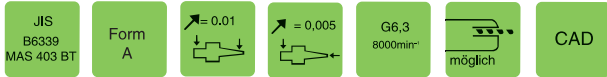
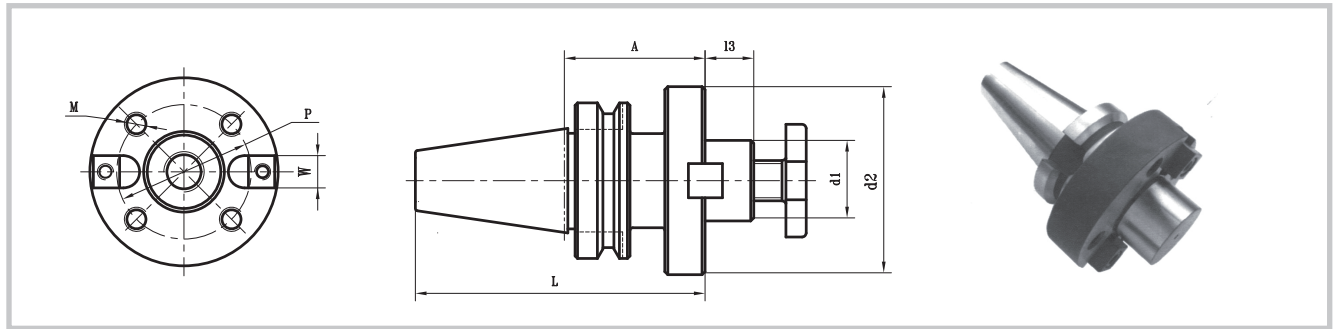


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页数

端铣刀柄

Shell End Mill Arbors with enlarged contact diameter



No	GB Model	SK	d1	A	d2	I3	L	P	M	W	夹刀螺钉	十字形扳手	kg
540.0007.004	BT40-XD40-60P	40	40	60P	90	27	152.4	66.7	M12	16	M20	BS-40	2.9
540.0016.004	BT50-XD40-75P	50	40	75P	90	27	203.8	66.7	M12	16	M20	BS-40	5.7
540.0017.004	BT50-XD40-75P	50	40	75P	90	27	203.8	66.7	M12	16	M20	BS-40	5.7
540.0018.004	BT50-XD60-75P	50	60	75P	140	40	216.8	101.6	M16	25.4	—	—	9.0
540.0019.004	BT60-XD40-75P	60	40	75P	90	27	263.8	66.7	M12	16	M20	BS-40	14.6
540.0020.004	BT60-XD60-75P	60	60	75P	140	40	276.8	101.6	M16	25.4	—	—	17.1
540.0021.004	BT60-XD60-75S	60	60	75S	220	40	276.8	101.6+177.8	M16+M20	25.4	—	—	21.9

使用：用于夹持带有端面键槽的面铣刀。

Use: For clamping shell end mills and milling cutters with tenon drive.

设计：带有中心冷却功能，Φ40和Φ60两种规格需要4个或8个螺钉夹紧，刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping Φ40 and 60 with 4 or 8 threaded holes for holding cutters with tool holding according to DIN 2079.

说明：包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES  
配件

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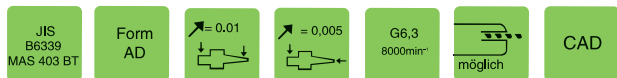
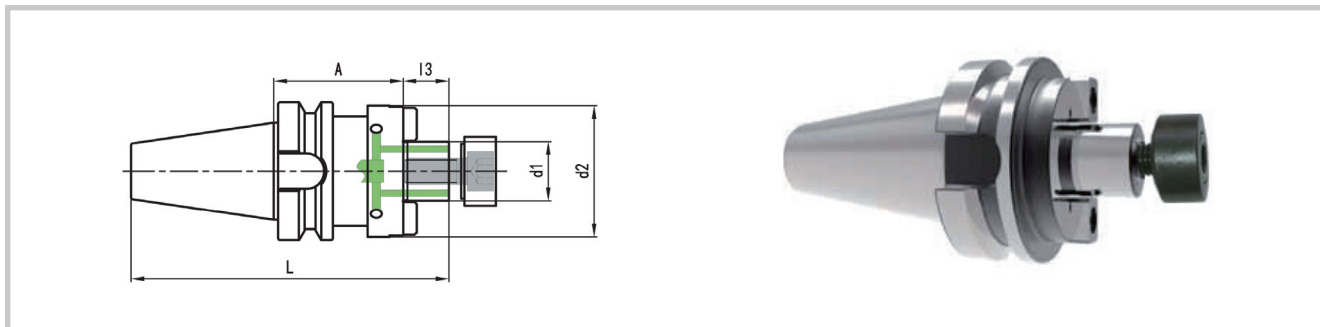
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4.21

## 端铣刀柄 (带内冷)

### Shell End Mill Arbors with enlarged contact diameter



No	GB Model	SK	d1	A	d2	I3	L	W	夹刀螺钉 GB/T70.1	垫片	kg
540.0105.004	BT30-XD16-45	30	16	45	40	17	110.4	8	M8(SW6)	—	0.6
540.0106.004	BT30-XD22-45	30	22	45	50	19	112.4	10	M10(SW8)	—	0.8
540.0107.004	BT30-XD27-45	30	27	45	60	21	114.4	12	M12(SW10)	DQ-D27	1.0
579.4005.265	BT40-XD16-35	40	16	35	40	17	117.4	8	M8(SW6)	—	1.1
579.4001.265	BT40-XD22-35	40	22	35	50	19	119.4	10	M10(SW8)	—	1.2
579.4002.265	BT40-XD27-35	40	27	35	60	21	121.4	12	M12(SW10)	DQ-D27	1.2
579.4003.265	BT40-XD32-50	40	32	50	80	24	139.4	14	M16(SW14)	DQ-D32	2.0
579.7001.225	BT50-XD22-50	50	22	50	50	19	170.8	10	M10(SW8)	—	3.8
579.7002.225	BT50-XD27-50	50	27	50	60	21	172.8	12	M12(SW10)	DQ-D27	4.0
579.7003.225	BT50-XD32-50	50	32	50	80	24	175.8	14	M16(SW14)	DQ-D32	4.2

使用: 用于夹持带有端面键槽的面铣刀

Use For: clamping shell end mills and milling cutters with tenon drive.

设计: 带有中心冷却功能, 刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping  $\phi 40$  and 60 with 4 threaded holes for holding cutters with tool holding according to DIN 2079.

说明: 包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included

备注: 按订单生产。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



4.17

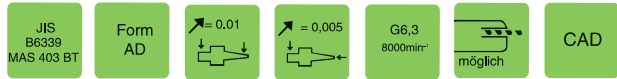
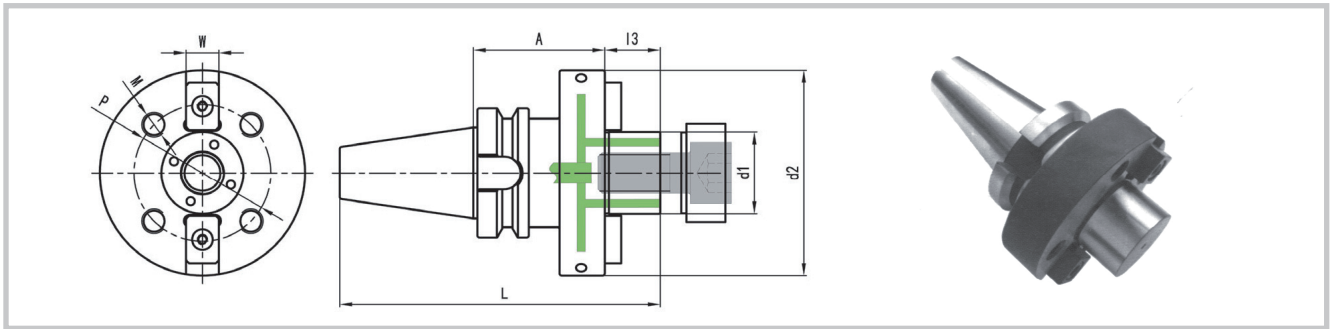


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端铣刀柄 (带内冷)

Shell End Mill Arbors with enlarged contact diameter



No	GB Model	SK	d1	A	d2	I3	L	P	M	W	夹刀螺钉 GB/T70.1	垫片	kg
579.4004.265	BT40-XD40-75P	40	40	75P	89	27	167.4	66.7	M12	16	M20(SW17)	DQ-D40	3.6
540.7016.004	BT50-XD40-75P	50	40	75P	90	27	203.8	66.7	M12	16	M20(SW17)	DQ-D40	5.7

使用: 用于夹持带有端面键槽的面铣刀

Use: For clamping shell end mills and milling cutters with tenon drive.

设计: 带有中心冷却功能,  $\Phi 40$ 和 $\Phi 60$ 两种规格需要4个或8个螺钉夹紧, 刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping  $\Phi 40$  and  $\Phi 60$  with 4 or 8 threaded holes for holding cutters with tool holding according to DIN 2079.

说明: 包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included.

备注: 按订单生产。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件

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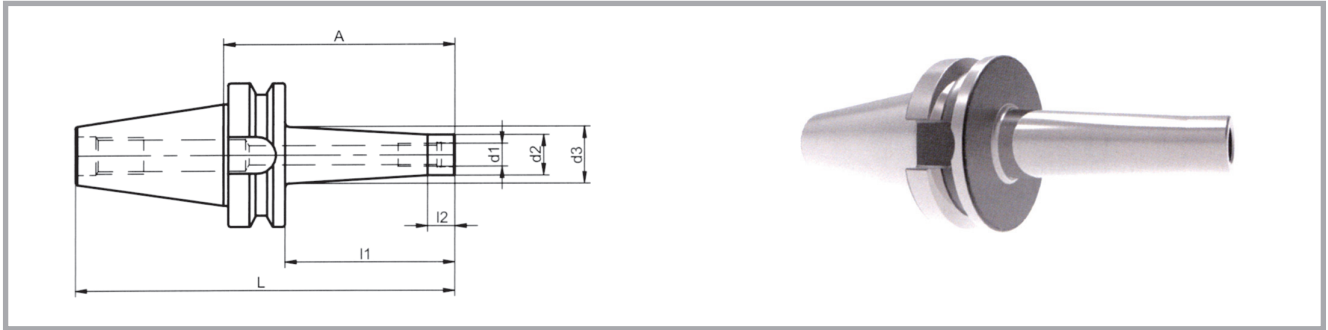
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## KFS模块式铣刀柄

Holders for screw-in milling cutters



No	GB Model	SK	d1	A	d2	d3	l1	l2	L	kg
571.0001.265	BT40-KFS8-52	40	M8	52	12.8	15	25.0	12	117.4	1.0
571.0011.265	BT40-KFS8-77	40	M8	77	12.8	23	50.0	12	142.4	1.0
571.0021.265	BT40-KFS8-102	40	M8	102	12.8	23	75.0	12	167.4	1.0
571.0002.265	BT40-KFS10-52	40	M10	52	17.8	20	25.0	12	117.4	1.0
571.0012.265	BT40-KFS10-77	40	M10	77	17.8	25	50.0	12	142.4	1.1
571.0022.265	BT40-KFS10-102	40	M10	102	17.8	25	75.0	12	167.4	1.1
571.0032.265	BT40-KFS10-127	40	M10	127	17.8	32	100.0	12	192.4	1.2
571.0042.265	BT40-KFS10-177	40	M10	177	17.8	35	150.0	12	242.4	1.3
571.0003.265	BT40-KFS12-52	40	M12	52	20.8	24	25.0	12	117.4	1.0
571.0013.265	BT40-KFS12-77	40	M12	77	20.8	28	50.0	12	142.4	1.1
571.0023.265	BT40-KFS12-102	40	M12	102	20.8	31	75.0	12	167.4	1.2
571.0033.265	BT40-KFS12-127	40	M12	127	20.8	33	100.0	12	192.4	1.2
571.0043.265	BT40-KFS12-177	40	M12	177	20.8	40	150.0	12	242.4	1.4
571.0004.265	BT40-KFS16-52	40	M16	52	28.8	-	25.0	-	117.4	1.1
571.0014.265	BT40-KFS16-77	40	M16	77	28.8	34	50.0	12	142.4	1.2
571.0024.265	BT40-KFS16-102	40	M16	102	28.8	34	75.0	12	167.4	1.4
571.0034.265	BT40-KFS16-127	40	M16	127	28.8	36	100.0	12	192.4	1.5
571.0044.265	BT40-KFS16-177	40	M16	177	28.8	42	150.0	12	242.4	1.7
571.0011.225	BT50-KFS8-88	50	M8	88	12.8	23	50.0	12	189.8	3.6
571.0012.225	BT50-KFS10-88	50	M10	88	17.8	25	50.0	12	189.8	3.7
571.0022.225	BT50-KFS10-113	50	M10	113	17.8	25	75.0	12	214.8	3.7
571.0032.225	BT50-KFS10-138	50	M10	138	17.8	32	100.0	12	239.8	3.8
571.0042.225	BT50-KFS10-188	50	M10	188	17.8	35	150.0	12	289.8	3.9
571.0013.225	BT50-KFS12-88	50	M12	88	20.8	28	50.0	12	189.8	3.7
571.0023.225	BT50-KFS12-113	50	M12	113	20.8	31	75.0	12	214.8	3.8
571.0033.225	BT50-KFS12-138	50	M12	138	20.8	33	100.0	12	239.8	3.9
571.0043.225	BT50-KFS12-188	50	M12	188	20.8	40	150.0	12	289.8	4.0
571.0014.225	BT50-KFS16-88	50	M16	88	28.8	34	50.0	12	189.8	3.8
571.0024.225	BT50-KFS16-113	50	M16	113	28.8	34	75.0	12	214.8	4.0
571.0034.225	BT50-KFS16-138	50	M16	138	28.8	36	100.0	12	239.8	4.1
571.0044.225	BT50-KFS16-188	50	M16	188	28.8	42	150.0	12	289.8	4.4

使用: 用于夹紧以螺纹连接的铣刀。  
备注: 其他型号和尺寸可按订货要求制作。

Use: For clamping screw-in milling cutters with thread.  
Note: Other designs and sizes are available on request.

### ACCESSORIES

配件



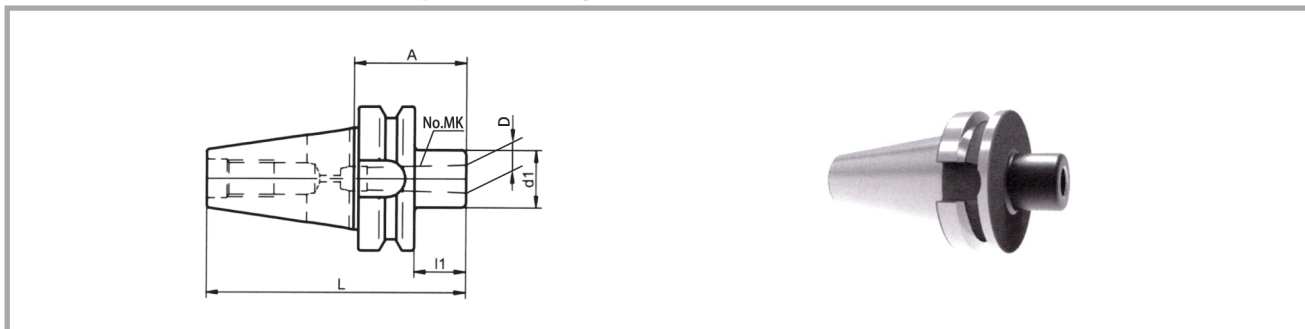
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带扁尾莫氏圆锥孔刀柄

Reduction Sleeves for morse taper with tang

1.0  
BT



JIS B6339 MAS 403 BT  
Form AD  
Ra = 0,008  
G6,3 8000mm<sup>3</sup>  
CAD

No	GB Model	SK	MK	D	A	d1	L	kg
440.0060.050	BT30-MK1-50	30	1	12.065	50	25	98.4	0.5
440.0061.050	BT30-MK1-100	30	1	12.065	100	25	148.4	0.7
440.0062.050	BT30-MK2-60	30	2	17.78	60	32	108.4	0.6
440.0063.050	BT30-MK2-110	30	2	17.78	110	32	158.4	0.9
440.0064.050	BT30-MK3-80	30	3	23.825	80	40	128.4	0.9
454.0001.265	BT40-MK1-50	40	1	12.065	50	25	115.4	1.0
440.0028.050	BT40-MK1-120	40	1	12.065	120	25	185.4	1.3
454.0012.265	BT40-MK2-50	40	2	17.78	50	32	115.4	1.1
440.0030.050	BT40-MK2-120	40	2	17.78	120	32	185.4	1.5
454.0013.265	BT40-MK3-70	40	3	23.825	70	40	135.4	1.4
440.0032.050	BT40-MK3-135	40	3	23.825	135	40	200.4	1.9
454.0014.265	BT40-MK4-95	40	4	31.267	95	63	160.4	2.5
440.0034.050	BT40-MK4-165	40	4	31.267	165	63	230.4	4.0
454.0011.225	BT50-MK1-45	50	1	12.065	45	25	146.8	3.6
440.0036.050	BT50-MK1-120	50	1	12.065	120	25	221.8	3.9
454.0002.225	BT50-MK2-60	50	2	17.78	60	32	161.8	3.7
440.0038.050	BT50-MK2-135	50	2	17.78	135	32	236.8	4.1
454.0013.225	BT50-MK3-65	50	3	23.825	65	40	166.8	3.8
440.0040.050	BT50-MK3-150	50	3	23.825	150	40	251.8	4.6
454.0014.225	BT50-MK4-95	50	4	31.267	95	48	196.8	4.3
440.0042.050	BT50-MK4-180	50	4	31.267	180	48	281.8	5.4
454.0005.225	BT50-MK5-105	50	5	44.399	105	63	206.8	5.1
440.0044.050	BT50-MK5-210	50	5	44.399	210	63	311.8	7.4
440.0045.050	BT60-MK3-190	60	3	23.825	190	40	351.8	14.2
440.0046.050	BT60-MK3-250	60	3	23.825	250	40	411.8	14.8
440.0047.050	BT60-MK4-210	60	4	31.267	210	50	371.8	15.2
440.0048.050	BT60-MK4-270	60	4	31.267	270	50	431.8	16.0
440.0049.050	BT60-MK5-240	60	5	44.399	240	63	401.8	17.2
440.0050.050	BT60-MK5-300	60	5	44.399	300	63	461.8	18.5
440.0051.050	BT60-MK6-170	60	6	63.348	170	90	331.8	18.4
440.0052.050	BT60-MK6-310	60	6	63.348	310	90	471.8	24.7

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



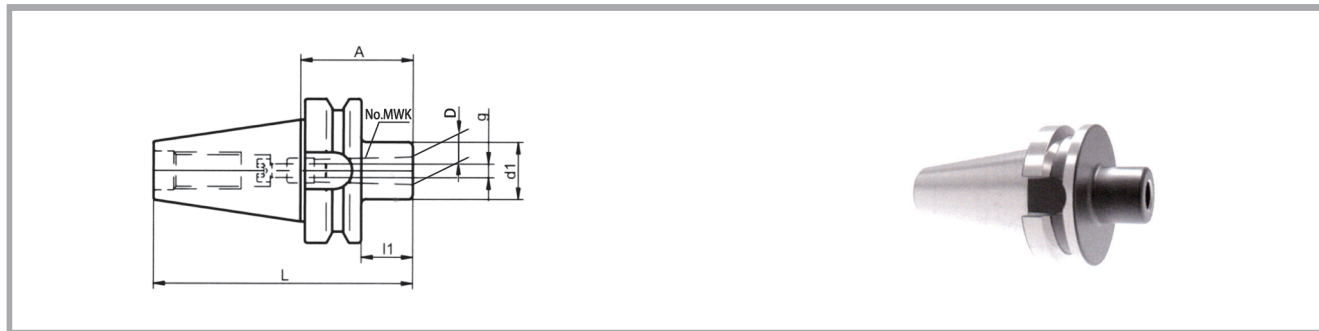
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## 无扁尾莫氏圆锥孔刀柄

### Reduction Sleeves for morse taper with thread



No	GB Model	SK	MWK	D	A	d1	L	g	kg
458.0001.265	BT40-MWK1-50	40	1	12.065	50	25	M6	115.4	1.0
458.0012.265	BT40-MWK2-50	40	2	17.78	50	32	M10	115.4	1.1
458.0013.265	BT40-MWK3-70	40	3	23.825	70	40	M12	135.4	1.4
440.0024.055	BT40-MWK4-95	40	4	31.267	95	63	M16	160.4	2.5
458.0011.225	BT50-MWK1-45	50	1	12.065	45	25	M6	146.8	3.6
458.0022.225	BT50-MWK2-60	50	2	17.78	60	32	M10	161.8	3.7
458.0023.225	BT50-MWK3-65	50	3	23.825	65	40	M12	166.8	3.8
440.0030.055	BT50-MWK4-70	50	4	31.267	70	63	M16	171.8	4.3
440.0028.055	BT50-MWK4-100	50	4	31.267	100	63	M16	201.8	5.0
440.0031.055	BT50-MWK5-100	50	5	44.399	100	78	M20	201.8	5.7
440.0029.055	BT50-MWK5-130	50	5	44.399	130	78	M20	231.8	6.7
440.0032.055	BT60-MWK3-100	60	3	23.825	100	40	M12	261.8	13.4
440.0033.055	BT60-MWK4-100	60	4	31.267	100	63	M16	261.8	14.1
440.0034.055	BT60-MWK5-100	60	5	44.399	100	78	M20	261.8	14.7
440.0035.055	BT60-MWK6-150	60	6	63.348	150	90	M24	311.8	17.5

说明：包括紧固螺钉和螺纹挡环。

Standard Specification: Retaining screw and threaded ring included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件

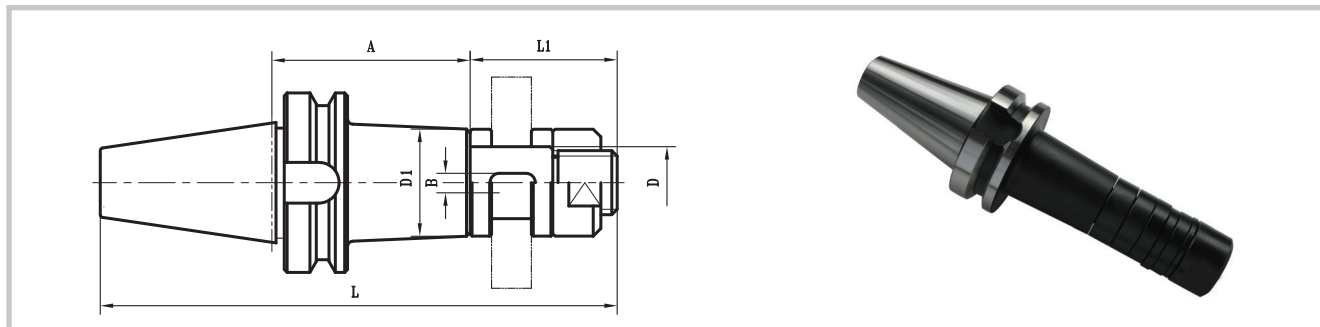


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三面刃铣刀柄  
Side milling Cutter Arbor



JIS  
B6339  
MAS 403 BT

Form  
A

0,006

0,005

CAD

No	GB Model	SK	D	D1	A	L1	L	B	垫圈	三面刃铣刀直径	kg
440.0021.000	BT40-XS16-75	40	16	26	75	46	186.4	4	3J1-310-16	φ 50	1.3
440.0022.000	BT40-XS16-105	40	16	26	105	46	216.4	4	3J1-310-16	φ 50	1.4
440.0023.000	BT40-XS22-75	40	22	34	75	51	191.4	6	3J1-310-22	φ 63	1.6
440.0024.000	BT40-XS22-120	40	22	34	120	51	236.4	6	3J1-310-22	φ 63	1.9
440.0025.000	BT40-XS27-75	40	27	40	75	55	195.4	7	3J1-310-27	φ 80	1.9
440.0026.000	BT40-XS27-120	40	27	40	120	55	240.4	7	3J1-310-27	φ 80	2.3
440.0027.000	BT40-XS32-90	40	32	46	90	60	215.4	8	3J1-310-32	φ 100、φ 125	2.4
440.0028.000	BT50-XS16-90	50	16	26	90	46	237.8	4	3J1-310-16	φ 50	4.0
440.0029.000	BT50-XS16-120	50	16	26	120	46	267.8	4	3J1-310-16	φ 50	4.1
440.0030.000	BT50-XS22-90	50	22	34	90	51	242.8	6	3J1-310-22	φ 63	4.3
440.0031.000	BT50-XS22-135	50	22	34	135	51	287.8	6	3J1-310-22	φ 63	4.5
440.0032.000	BT50-XS27-90	50	27	40	90	55	246.8	7	3J1-310-27	φ 80	4.5
440.0033.000	BT50-XS27-135	50	27	40	135	55	291.8	7	3J1-310-27	φ 80	4.9
440.0034.000	BT50-XS32-90	50	32	46	90	60	251.8	8	3J1-310-32	φ 100、φ 125	4.9
440.0035.000	BT50-XS32-135	50	32	46	135	60	296.8	8	3J1-310-32	φ 100、φ 125	5.4
440.0036.000	BT50-XS40-90	50	40	55	90	66	257.8	10	3J1-310-40	φ 160、φ 200	5.6
440.0037.000	BT50-XS40-135	50	40	55	135	66	302.8	10	3J1-310-40	φ 160、φ 200	6.3
440.0092.000	BT50-XS50-90	50	50	68	90	85	276.8	12	3J1-310-50	φ 200、φ 250	7.1
440.0093.000	BT50-XS50-135	50	50	68	135	85	321.8	12	3J1-310-50	φ 200、φ 250	8.3
440.0038.000	BT60-XS40-135	60	40	55	135	66	362.8	10	3J1-310-40	φ 160、φ 200	15.5
440.0039.000	BT60-XS50-135	60	50	68	135	85	381.8	12	3J1-310-50	φ 200、φ 250	17.4
440.0040.000	BT60-XS60-135	60	60	84	135	105	401.8	14	3J1-310-60	φ 250、φ 315	20.5

注：垫圈单独订货时：成组供货，每组6个，芯轴直径为φ16~φ40的刀柄，垫圈厚度分别为3、5、7、8、10、12，  
芯轴直径为φ50~φ60的刀柄，垫圈厚度分别为4、6、8、10、12、15。

ACCESSORIES  
配件

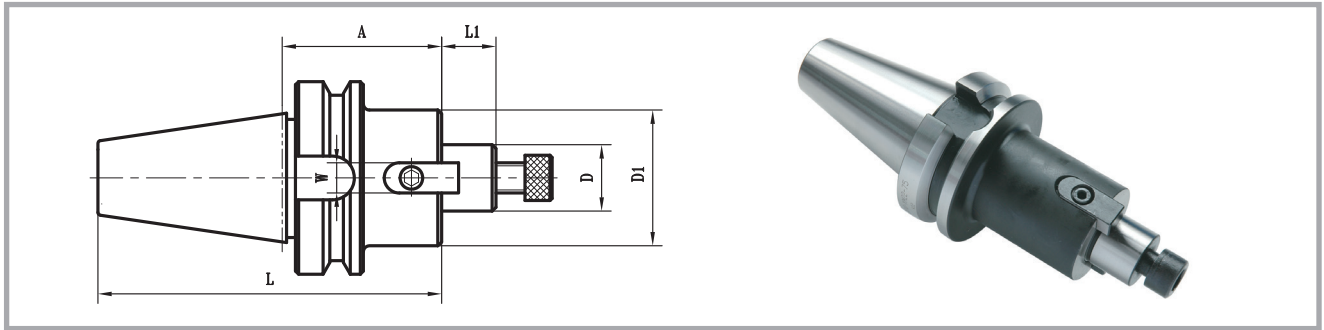


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## 套式立铣刀柄

### Shell End Mill Arbors



No	GB Model	SK	D	D1	A	L1	L	W	紧固螺钉	套式立铣刀直径	kg
440.0020.001	BT40-XM16-75	40	16	32	75	17	157.4	8	M8	φ 40	1.3
440.0021.001	BT40-XM16-120	40	16	32	120	17	202.4	8	M8	φ 40	1.6
440.0022.001	BT40-XM22-75	40	22	40	75	19	159.4	10	M10	φ 50	1.5
440.0023.001	BT40-XM22-120	40	22	40	120	19	204.4	10	M10	φ 50	1.9
440.0024.001	BT40-XM27-75	40	27	48	75	21	161.4	12	M12	φ 63, φ 80	1.7
440.0025.001	BT40-XM27-105	40	27	48	105	21	191.4	12	M12	φ 63, φ 80	2.2
440.0026.001	BT40-XM32-75	40	32	58	75	24	164.4	14	M16	φ 100	2.1
440.0027.001	BT50-XM16-75	50	16	32	75	17	193.8	8	M8	φ 40	3.9
440.0028.001	BT50-XM16-120	50	16	32	120	17	238.8	8	M8	φ 40	4.1
440.0029.001	BT50-XM22-75	50	22	40	75	19	195.8	10	M10	φ 50	4.0
440.0030.001	BT50-XM22-120	50	22	40	120	19	240.8	10	M10	φ 50	4.5
440.0031.001	BT50-XM27-75	50	27	48	75	21	197.8	12	M12	φ 63, φ 80	4.2
440.0032.001	BT50-XM27-105	50	27	48	105	21	227.8	12	M12	φ 63, φ 80	4.6
440.0033.001	BT50-XM32-75	50	32	58	75	24	200.8	14	M16	φ 100	4.5
440.0034.001	BT50-XM40-75	50	40	70	75	27	203.8	16	M20	φ 125	5.0
440.0035.001	BT50-XM50-75	50	50	90	75	30	206.8	18	M24	φ 160	5.9
440.0036.001	BT60-XM32-105	60	32	58	105	24	290.8	14	M16	φ 100	14.3
440.0037.001	BT60-XM40-105	60	40	70	105	27	293.8	16	M20	φ 125	14.9
440.0038.001	BT60-XM50-120	60	50	90	120	30	311.8	18	M24	φ 160	17.0

## ACCESSORIES

配件

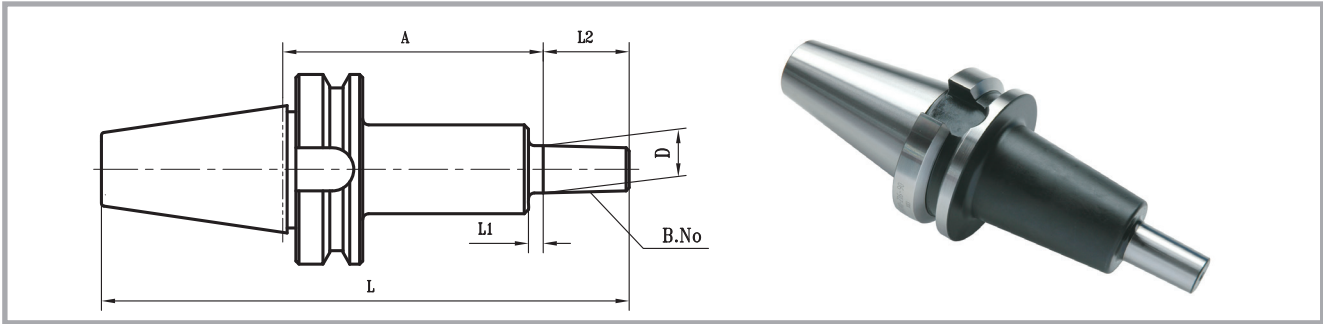


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钻夹头刀柄  
Drill Chuck Arbors



JIS  
B6339  
MAS 403 BT

Form  
A

±0.01

CAD

No	GB Model	SK	B.No	A	L1	L2	L	D	kg
440.0019.071	BT40-B10-45	40	B10	45	3.5	14.5	124.9	10.094	1.0
440.0020.071	BT40-B10-90	40	B10	90	3.5	14.5	169.9	10.094	1.0
440.0021.071	BT40-B12-45	40	B12	45	3.5	18.5	128.9	12.065	1.0
440.0022.071	BT40-B12-90	40	B12	90	3.5	18.5	173.9	12.065	1.0
440.0023.071	BT40-B16-45	40	B16	45	5	24	134.4	15.733	1.0
440.0024.071	BT40-B16-90	40	B16	90	5	24	179.4	15.733	1.1
440.0025.071	BT40-B18-45	40	B18	45	5	32	142.4	17.78	1.0
440.0026.071	BT40-B18-90	40	B18	90	5	32	187.4	17.78	1.1
440.0027.071	BT50-B10-45	50	B10	45	3.5	14.5	161.3	10.094	3.6
440.0028.071	BT50-B10-105	50	B10	105	3.5	14.5	221.3	10.094	3.6
440.0029.071	BT50-B12-45	50	B12	45	3.5	18.5	165.3	12.065	3.6
440.0030.071	BT50-B12-105	50	B12	105	3.5	18.5	225.3	12.065	3.7
440.0031.071	BT50-B16-45	50	B16	45	5	24	170.8	15.733	3.6
440.0032.071	BT50-B16-105	50	B16	105	5	24	230.8	15.733	3.7
440.0033.071	BT50-B18-45	50	B18	45	5	32	178.8	17.78	3.6
440.0034.071	BT50-B18-105	50	B18	105	5	32	238.8	17.78	3.7
440.0035.071	BT60-B16-105	60	B16	105	5	24	290.8	15.733	13.0
440.0036.071	BT60-B18-105	60	B18	105	5	32	298.8	17.78	13.1

ACCESSORIES

配件



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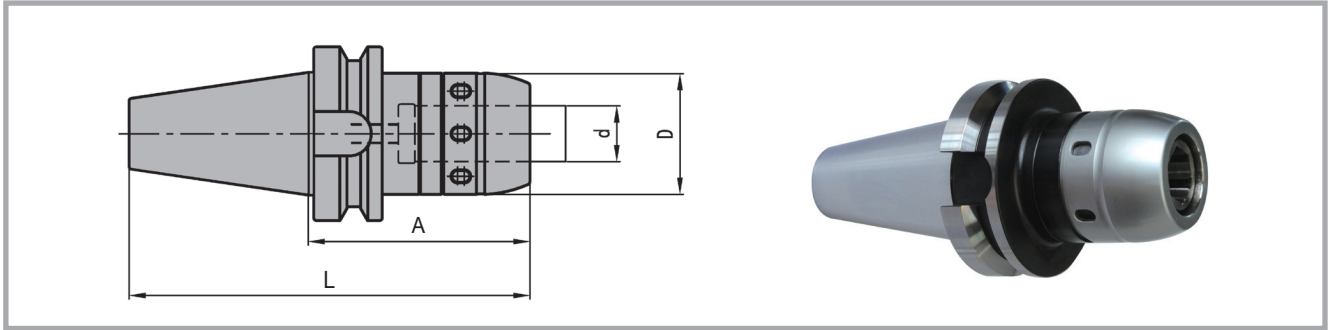


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## 强力铣夹头刀柄

### Strong Chuck Holder for Boring and Milling



No	GB Model	SK	d	A	L	D	配用扳手 GB4625	kg
740.0219.111	BT30-XJT20-90	30	20	90	138.4	58	55-62	1.8
740.0220.111	BT30-XJT20-110	30	20	110	158.4	58	55-62	2.2
740.0218.111	BT30-XJT25-105	30	25	105	153.4	65	68-72	2.6
740.0221.111	BT40-XJT20-110	40	20	110	175.4	58	55-62	2.7
740.0222.111	BT40-XJT20-160	40	20	160	225.4	58	55-62	3.7
740.0223.111	BT40-XJT20-200	40	20	200	265.4	58	55-62	4.6
740.0224.111	BT40-XJT25-110	40	25	110	175.4	65	68-72	3.1
740.0225.111	BT40-XJT25-160	40	25	160	225.4	65	68-72	4.4
740.0226.111	BT40-XJT25-200	40	25	200	265.4	65	68-72	5.5
740.0227.111	BT40-XJT32-110	40	32	110	175.4	73	68-72	3.7
740.0228.111	BT40-XJT32-160	40	32	160	225.4	73	68-72	5.3
740.0229.111	BT40-XJT32-200	40	32	200	265.4	73	68-72	6.7
740.0230.111	BT50-XJT20-110	50	20	110	211.8	58	55-62	5.1
740.0231.111	BT50-XJT20-160	50	20	160	261.8	58	55-62	6.1
740.0232.111	BT50-XJT20-200	50	20	200	301.8	58	55-62	7.0
740.0233.111	BT50-XJT25-110	50	25	110	211.8	65	68-72	5.5
740.0234.111	BT50-XJT25-160	50	25	160	261.8	65	68-72	6.8
740.0235.111	BT50-XJT25-200	50	25	200	301.8	65	68-72	7.8
740.0236.111	BT50-XJT32-110	50	32	110	211.8	73	68-72	6.0
740.0245.111	BT50-XJT32-140	50	32	140	241.8	73	68-72	6.9
740.0237.111	BT50-XJT32-160	50	32	160	261.8	73	68-72	7.6
740.0238.111	BT50-XJT32-200	50	32	200	301.8	73	68-72	8.9
740.0239.111	BT50-XJT40-120	50	40	120	221.8	88	78-85	7.5
740.0240.111	BT50-XJT40-160	50	40	160	261.8	88	78-85	9.4
740.0241.111	BT50-XJT40-200	50	40	200	301.8	88	78-85	11.3
740.0242.111	BT50-XJT50-140	50	50	140	241.8	105	100-110	10.5
740.0243.111	BT50-XJT50-160	50	50	160	261.8	105	100-110	11.9
740.0244.111	BT50-XJT50-200	50	50	200	301.8	105	100-110	14.6

No	GB Model	SK	d	A	L	D	配用扳手 GB4625	kg
740.0261.111	BT60-XJT20-130	60	20	130	291.8	58	55-62	14.7
740.0262.111	BT60-XJT20-160	60	20	160	321.8	58	55-62	15.3
740.0263.111	BT60-XJT20-200	60	20	200	361.8	58	55-62	16.1
740.0264.111	BT60-XJT25-130	60	25	130	291.8	65	68-72	15.1
740.0265.111	BT60-XJT25-160	60	25	160	321.8	65	68-72	15.9
740.0266.111	BT60-XJT25-200	60	25	200	361.8	65	68-72	16.9
740.0267.111	BT60-XJT32-130	60	32	130	291.8	73	68-72	15.7
740.0268.111	BT60-XJT32-160	60	32	160	321.8	73	68-72	16.6
740.0269.111	BT60-XJT32-200	60	32	200	361.8	73	68-72	18.0
740.0270.111	BT60-XJT40-130	60	40	130	291.8	88	78-85	16.9
740.0271.111	BT60-XJT40-160	60	40	160	321.8	88	78-85	18.3
740.0272.111	BT60-XJT40-200	60	40	200	361.8	88	78-85	20.2
740.0273.111	BT60-XJT50-140	60	50	140	301.8	105	100-110	19.2
740.0274.111	BT60-XJT50-160	60	50	160	321.8	105	100-110	20.6
740.0275.111	BT60-XJT50-200	60	50	200	361.8	105	100-110	23.3

注：配用扳手需要单独订货；

被夹持直柄刀具的柄部公差为h6；

使用配用扳手夹紧直柄刀具时，不允许使用套管等辅助工具；

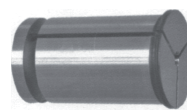
3倍直径处径向跳动精度 $\leq 0.007\text{mm}$ 。

## ACCESSORIES

配件



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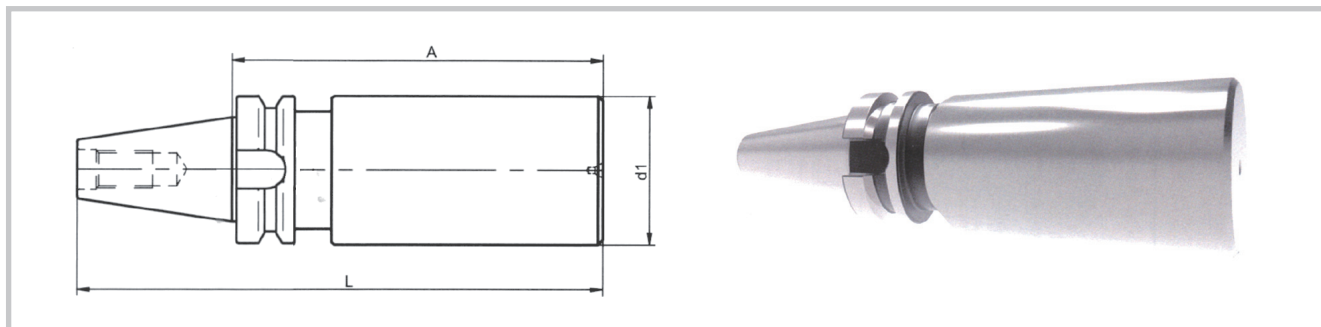


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## 毛坯刀柄

### Tool Blanks



JIS  
B6339  
MAS 403 BT

Form  
A

No	GB Model	SK	d1	A	L	kg
517.5001.285	BT30-MP45-150	30	45	150	198.4	2.0
517.5001.265	BT40-MP63-150	40	63	150	215.4	4.0
517.5002.265	BT40-MP63-250	40	63	250	315.4	6.4
517.5001.225	BT50-MP95-180	50	95	180	281.8	11.5
517.5002.225	BT50-MP95-315	50	95	315	416.8	19.0

设计: 锥柄为磨制成品, 尺寸符合柄部标准, 维氏硬度  
HV670±40 (近似于HRC58±2), 淬硬层在  
0.5mm以上。  
刀具端硬度HRC36-44。

材料: 合金钢

备注: 其他型号和尺寸可按订货要求制作。

Use: For own manufacture of special tools.

Design: The taper is finished with grinding, the dimensions are in accordance with the standard of the handle, HV670±40 (approximately HRC58±2), the hardened layer is above 0.5mm. Tool part is HRC36-44.

Material: Alloy steel.

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件

PAGE

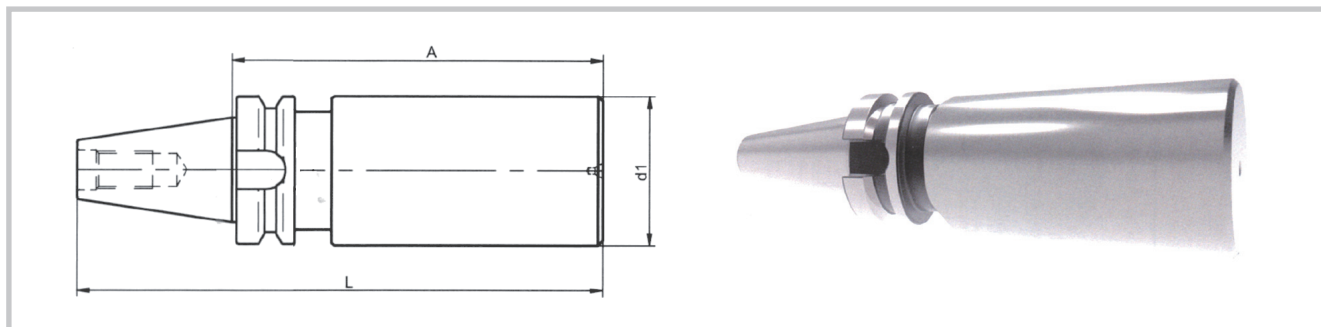
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## 毛坯刀柄

## Tool Blanks



JIS  
B6339  
MAS 403 BT

Form  
A

No	GB Model	SK	d1	A	L	kg
517.5002.285	BT30-MP45-150	30	45	150	198.4	2.0
517.5003.265	BT40-MP63-150	40	63	150	215.4	4.0
517.5004.265	BT40-MP63-250	40	63	250	315.4	6.4
517.5003.225	BT50-MP95-180	50	95	180	281.8	11.5
517.5004.225	BT50-MP95-315	50	95	315	416.8	19.0

使用: 用于制造工具系统产品。

设计: 锥柄为磨制成品, 尺寸符合柄部标准, 维氏硬度

HV670±40 (近似于HRC58±2)。

刀具端表面抛光, 未做淬硬处理, 为原材料本身硬度。

材料: 渗碳钢

备注: 其他型号和尺寸可按订货要求制作。

Use: For own manufacture of special tools.

Design: Taper including flange hardened. Vickers hardness min. HV 670kp/mm<sup>2</sup> (min. HRC 58). Taper ground, shank not ground, prepared to be finished, unhardened.

Material: Alloyed case-hardened steel.

Note: Other designs and sizes are available on request.

## ACCESSORIES

## 配件

## PAGE

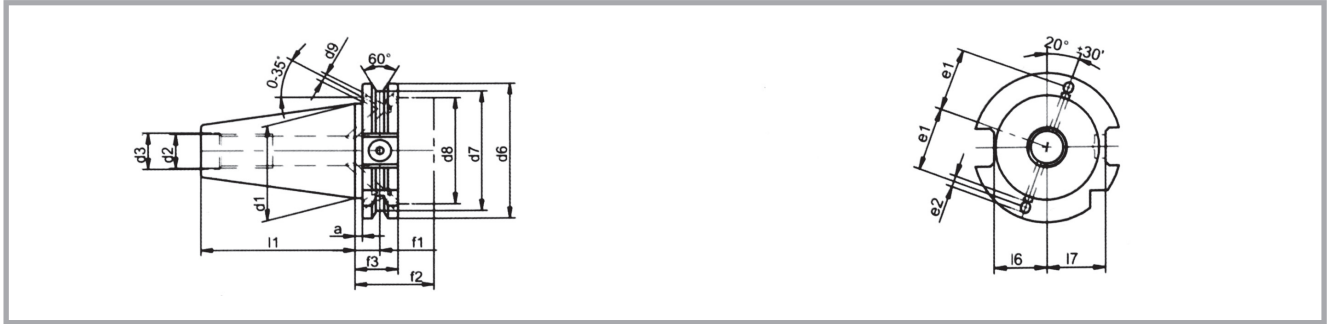
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## 德国标准锥柄 (JT) AD/B

### Tool Holders DIN 69871-1 AD/B



DIN 69871 Form AD/B

SK	d1	d2	d3 H7	d6 -0.1	d7 -0.5	d8	d9	l1 -0.3
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40	44.45	M16	17	63.55	56.25	50	4	68.4
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50	69.85	M24	25	97.5	91.25	80	6	101.75
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SK	l6 -0.4	l7 -0.4	e1 ± 0.1	e2	a	f1	f2	f3
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40	22.8	25	27	5	3.2	11.1	35	19.1
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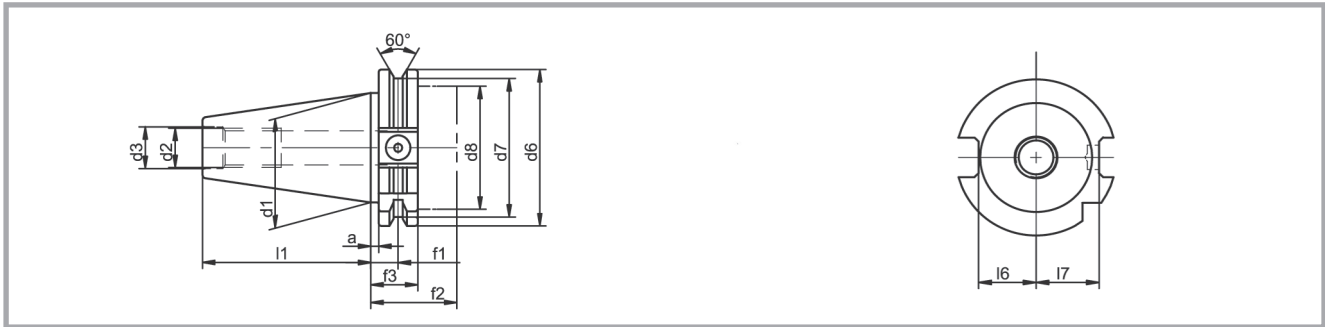
50	35.5	37.7	42	7	3.2	11.1	35	19.1
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符合DIN 69871-1 AD/B型，并通过法兰把外冷却转换成内冷却的锥柄。其中B型冷却孔是由螺栓封堵的，按实际需要也可以拆卸。

DIN 69871-1 type AD/B for central coolant supply and for lateral coolant supply via the tool flange. Coolant bores for type B are closed with threaded pins on delivery. If required, unscrew the threaded pins.



德国标准锥柄 (JT) AD  
Tool Holders DIN 69871-1 AD



DIN 69871

Form AD

SK	d1	d2	d3 H7	d6 -0.1	d7 -0.5	d8	l1 -0.3
30	31.75	M12	13	50	44.3	45	47.8
40	44.45	M16	17	63.55	56.25	50	68.4
50	69.85	M24	25	97.5	91.25	80	101.75
60	107.95	M30	32	155	147.7	130	161.8

SK	l6 -0.4	l7 -0.4	a	f1	f2	f3
30	16.4	19	3.2	11.1	35	19.1
40	22.8	25	3.2	11.1	35	19.1
50	35.5	37.7	3.2	11.1	35	19.1
60	54.5	59.3	3.2	11.1	35	19.1

内冷却符合DIN 69871-1 AD.

DIN 69871-1 type AD for central coolant supply.

设计: 数据孔参数符合DIN 69873。硬度应满足较低的变形量, 维氏硬度在HV670 ± 40 (近似于HRC58 ± 2), 淬硬(渗碳)层在0.5mm以上。锥度公差数在AT3符合DIN2080-1。对于柄部其他参数参见于上表。

Design: Steep taper with bore for identification chip according to DIN 69873. Hardened by means of a special low-distortion hardening process. Vickers hardness 670 ± 40HV30(HRC58 ± 2). Hardness depth Eht=min 0.5mm Taper angle tolerance quality AT3 according to DIN 2080-1. For details of concentricity of steep taper to tool holder, refer to appropriate page of catalogue.

材料: 一般要求: 符合硬度要求的合金钢材料, 并且能承受扭矩980N/mm<sup>2</sup>。

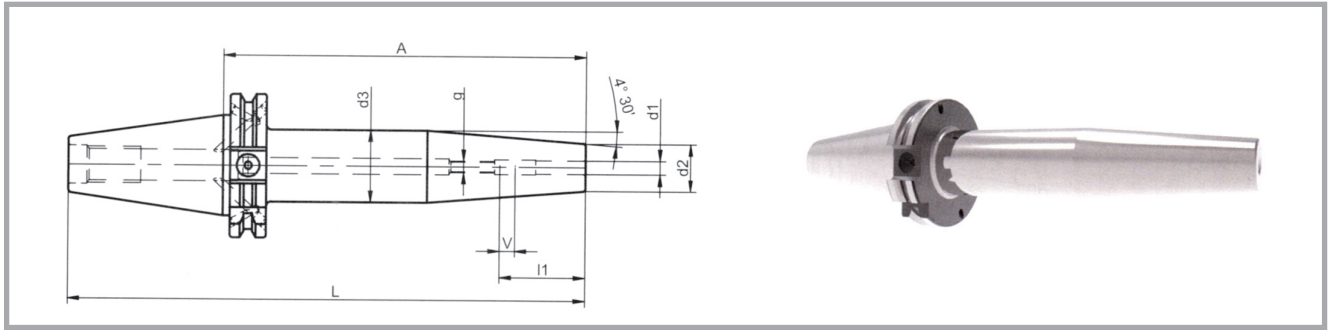
Material: If not otherwise specified: Case-hardened alloy steel with a core tensile strength after case hardening of min.980N/mm<sup>2</sup>.

说明: 价格和交付情况如有变化会在详单上实时变更。制造商保留对技术修改的权力。单位以mm。

Standard Specification: Prices and delivery conditions are shown in the corresponding price list valid at the time in question. Manufacturer reserves the right to make technical modifications. All dimensions in mm.

## 热装夹头刀柄 (标准型)

i-tec® Shrink-fit Chucks standard version



DIN 69871
Form AD/B

 Ra = 0,003
G2.5 25,000 min<sup>-1</sup> <1g mm
 möglich
CAD

No	GB Model	SK	d1	A	d2	d3	l1	g	L	v	kg
311.0011.292	JT40-RZ3-70	40	3	70	12	17	-	-	138.4	-	0.9
311.0012.292	JT40-RZ3-120	40	3	120	12	17	-	-	188.4	-	1.0
311.0013.292	JT40-RZ4-70	40	4	70	12	17	-	-	138.4	-	0.9
311.0014.292	JT40-RZ4-120	40	4	120	12	17	-	-	188.4	-	1.0
311.0015.292	JT40-RZ5-70	40	5	70	12	17	-	-	138.4	-	0.9
311.0016.292	JT40-RZ5-120	40	5	120	12	17	-	-	188.4	-	1.0
311.0001.292	JT40-RZ6-80	40	6	80	21	31	36	M5	148.4	10	1.1
311.0031.292	JT40-RZ6-120	40	6	120	21	32	36	M5	188.4	10	1.4
311.0041.292	JT40-RZ6-160	40	6	160	21	32	36	M5	228.4	10	1.6
311.0002.292	JT40-RZ8-80	40	8	80	21	31	36	M6	148.4	10	1.1
311.0032.292	JT40-RZ8-120	40	8	120	21	32	36	M6	188.4	10	1.4
311.0042.292	JT40-RZ8-160	40	8	160	21	32	36	M6	228.4	10	1.6
311.0003.292	JT40-RZ10-80	40	10	80	24	34	41	M8 x 1	148.4	10	1.2
311.0033.292	JT40-RZ10-120	40	10	120	24	34	41	M8 x 1	188.4	10	1.5
311.0043.292	JT40-RZ10-160	40	10	160	24	34	41	M8 x 1	228.4	10	1.7
311.0004.292	JT40-RZ12-80	40	12	80	24	34	47	M10 x 1	148.4	10	1.2
311.0034.292	JT40-RZ12-120	40	12	120	24	34	47	M10 x 1	188.4	10	1.5
311.0044.292	JT40-RZ12-160	40	12	160	24	34	47	M10 x 1	228.4	10	1.7
311.0005.292	JT40-RZ14-80	40	14	80	27	37	47	M10 x 1	148.4	10	1.3
311.0045.292	JT40-RZ14-160	40	14	160	27	36	47	M10 x 1	228.4	10	1.8
311.0006.292	JT40-RZ16-80	40	16	80	27	37	50	M12 x 1	148.4	10	1.3
311.0036.292	JT40-RZ16-120	40	16	120	27	36	50	M12 x 1	188.4	10	1.5
311.0046.292	JT40-RZ16-160	40	16	160	27	36	50	M12 x 1	228.4	10	1.8
311.0007.292	JT40-RZ18-80	40	18	80	33	43	50	M12 x 1	148.4	10	1.4
311.0047.292	JT40-RZ18-160	40	18	160	33	44	50	M12 x 1	228.4	10	2.3
311.0008.292	JT40-RZ20-80	40	20	80	33	43	52	M16 x 1	148.4	10	1.4
311.0038.292	JT40-RZ20-120	40	20	120	33	44	52	M16 x 1	188.4	10	1.9
311.0048.292	JT40-RZ20-160	40	20	160	33	44	52	M16 x 1	228.4	10	2.3
311.0009.292	JT40-RZ25-100	40	25	100	44	50	58	M16 x 1	168.4	10	1.9
311.0049.292	JT40-RZ25-160	40	25	160	44	50	58	M16 x 1	228.4	10	2.8
311.0001.291	JT50-RZ6-80	50	6	80	21	31	36	M5	181.7	10	2.9
311.0041.291	JT50-RZ6-160	50	6	160	21	32	36	M5	261.7	10	3.4
311.0051.291	JT50-RZ6-200	50	6	200	21	27	36	M5	301.7	10	3.3
311.0002.291	JT50-RZ8-80	50	8	80	21	31	36	M6	181.7	10	2.9
311.0042.291	JT50-RZ8-160	50	8	160	21	32	36	M6	261.7	10	3.4
311.0052.291	JT50-RZ8-200	50	8	200	21	27	36	M6	301.7	10	3.3
311.0003.291	JT50-RZ10-80	50	10	80	24	34	41	M8 x 1	181.7	10	3.0
311.0043.291	JT50-RZ10-160	50	10	160	24	34	41	M8 x 1	261.7	10	3.5
311.0053.291	JT50-RZ10-200	50	10	200	24	34	41	M8 x 1	301.7	10	3.8

No	GB Model	SK	d1	A	d2	d3	l1	g	L	v	kg
311.0004.291	JT50-RZ12-80	50	12	80	24	34	47	M10×1	181.7	10	3.0
311.0044.291	JT50-RZ12-160	50	12	160	24	34	47	M10×1	261.7	10	3.5
311.0054.291	JT50-RZ12-200	50	12	200	24	34	47	M10×1	301.7	10	3.8
311.0005.291	JT50-RZ14-80	50	14	80	27	37	47	M10×1	181.7	10	3.1
311.0045.291	JT50-RZ14-160	50	14	160	27	36	47	M10×1	261.7	10	3.6
311.0055.291	JT50-RZ14-200	50	14	200	27	36	47	M10×1	301.7	10	3.9
311.0006.291	JT50-RZ16-80	50	16	80	27	37	50	M12×1	181.7	10	3.1
311.0046.291	JT50-RZ16-160	50	16	160	27	36	50	M12×1	261.7	10	3.6
311.0056.291	JT50-RZ16-200	50	16	200	27	36	50	M12×1	301.7	10	3.9
311.0007.291	JT50-RZ18-80	50	18	80	33	43	50	M12×1	181.7	10	3.2
311.0047.291	JT50-RZ18-160	50	18	160	33	44	50	M12×1	261.7	10	4.1
311.0057.291	JT50-RZ18-200	50	18	200	33	44	50	M12×1	301.7	10	4.5
311.0008.291	JT50-RZ20-80	50	20	80	33	43	52	M16×1	181.7	10	3.2
311.0048.291	JT50-RZ20-160	50	20	160	33	44	52	M16×1	261.7	10	4.1
311.0058.291	JT50-RZ20-200	50	20	200	33	44	52	M16×1	301.7	10	4.5
311.0009.291	JT50-RZ25-100	50	25	100	44	53	58	M16×1	201.7	10	3.9
311.0049.291	JT50-RZ25-160	50	25	160	44	53	58	M16×1	261.7	10	4.8
311.0059.291	JT50-RZ25-200	50	25	200	44	53	58	M16×1	301.7	10	5.4
311.0010.291	JT50-RZ32-100	50	32	100	44	57	61	M16×1	201.7	10	4.1
311.0050.291	JT50-RZ32-160	50	32	160	44	56	61	M16×1	261.7	10	5.1
311.0060.291	JT50-RZ32-200	50	32	200	44	53	61	M16×1	301.7	10	5.4

设计：请使用柄部直径公差h6级的硬质合金刀具。

说明：不包括调整长度的调整螺钉。

备注：1、其他型号和尺寸可按订货要求制作。

- 2、装夹刀具的刀柄夹紧长度必须保证L1-v尺寸，否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。
- 3、建议使用专用热装机装卸刀具。

Design:The clamping diameter is designed for a cemented carbide shank tolerance of h6.

Standard Specification:Adjusting screw for length adjustment is not included.

Note: 1.Other designs and sizes are available on request.

2.Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder , tool couldn't be dismantled or toolholder damage and so on.

3.Special shrinking devices are recommended for tool mounting and dismantling.

## ACCESSORIES

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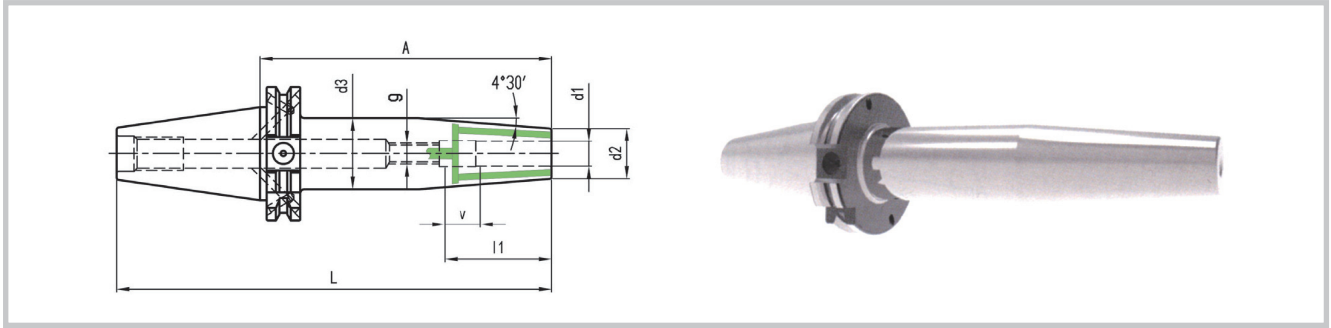


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## 热装夹头刀柄 (带内冷转端面外冷) i-tec® Shrink-fit Chucks standard version



No	GB Model	SK	d1	A	d2	d3	l1	g	L	v	Kg
311.4401.292	JT40-RZ6-80	40	6	80	21	31	36	M5	148.4	10	1.1
311.4471.292	JT40-RZ6-130	40	6	130	21	32	36	M5	198.4	10	1.5
311.4402.292	JT40-RZ8-80	40	8	80	21	31	36	M6	148.4	10	1.1
311.4472.292	JT40-RZ8-130	40	8	130	21	32	36	M6	198.4	10	1.5
311.4403.292	JT40-RZ10-80	40	10	80	24	34	41	M8 x 1	148.4	10	1.2
311.4473.292	JT40-RZ10-130	40	10	130	24	34	41	M8 x 1	198.4	10	1.5
311.4404.292	JT40-RZ12-80	40	12	80	24	34	47	M10 x 1	148.4	10	1.2
311.4474.292	JT40-RZ12-130	40	12	130	24	34	47	M10 x 1	198.4	10	1.5
311.4405.292	JT40-RZ14-80	40	14	80	27	37	47	M10 x 1	148.4	10	1.3
311.4475.292	JT40-RZ14-130	40	14	130	27	36	47	M10 x 1	198.4	10	1.6
311.4406.292	JT40-RZ16-80	40	16	80	27	37	50	M12 x 1	148.4	10	1.3
311.4476.292	JT40-RZ16-130	40	16	130	27	36	50	M12 x 1	198.4	10	1.6
311.4407.292	JT40-RZ18-80	40	18	80	33	43	50	M12 x 1	148.4	10	1.4
311.4477.292	JT40-RZ18-130	40	18	130	33	44	50	M12 x 1	198.4	10	2.0
311.4408.292	JT40-RZ20-80	40	20	80	33	43	52	M16 x 1	148.4	10	1.4
311.4478.292	JT40-RZ20-130	40	20	130	33	44	52	M16 x 1	198.4	10	2.0
311.4409.292	JT40-RZ25-100	40	25	100	44	50	58	M16 x 1	168.4	10	1.9
311.4479.292	JT40-RZ25-130	40	25	130	44	50	58	M16 x 1	198.4	10	2.4

设计: 请使用柄部直径公差h6级的硬质合金刀具,  
带有中心冷却功能。

说明: 不包括调整长度的调整螺钉。

备注: 1、其他型号和尺寸可按订货要求制作。

- 2、装夹刀具的刀柄夹紧长度必须保证1-v尺寸, 否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。
- 3、建议使用专用热装机装卸刀具。

Design: The clamping diameter is designed for a cemented carbide shank tolerance of h6, with closable cool stream bores.

Standard Specification: Adjusting screw for length adjustment is not included. Note: 1. Other designs and sizes are available on request.

2. Toolholder clamping length must be same to size L1-v. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.

3. Special shrinking devices are recommended for tool mounting and dismantling.

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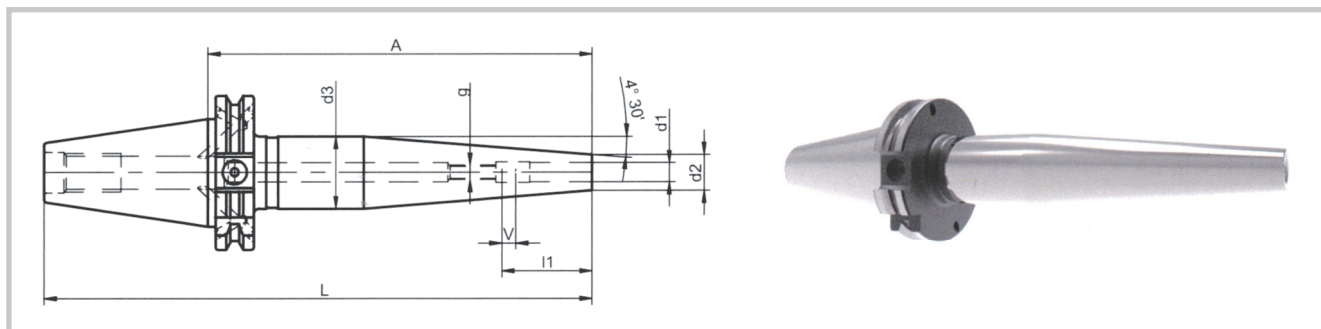


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热装夹头刀柄（细长型）  
i-tec® Shrink-fit Chucks slim version



DIN 69871
Form AD/B
Surface finish: Ra = 0,003
G2.5 25,000 min<sup>-1</sup> <1g mm
möglich
CAD

No	GB Model	SK	d1	A	d2	d3	l1	g	L	v	Kg
311.0700.292	JT40-RZ3-120	40	3	120	9	25	-	-	188.4	-	1.2
311.0710.292	JT40-RZ3-160	40	3	160	9	25	-	-	228.4	-	1.3
311.0701.292	JT40-RZ4-120	40	4	120	9	25	-	-	188.4	-	1.2
311.0711.292	JT40-RZ4-160	40	4	160	9	25	-	-	228.4	-	1.3
311.0702.292	JT40-RZ5-120	40	5	120	9	25	-	-	188.4	-	1.2
311.0712.292	JT40-RZ5-160	40	5	160	9	25	-	-	228.4	-	1.3
311.0703.292	JT40-RZ6-120	40	6	120	15	31	36	M5	188.4	10	1.4
311.0713.292	JT40-RZ6-160	40	6	160	15	30	36	M5	228.4	10	1.5
311.0704.292	JT40-RZ8-120	40	8	120	15	31	36	M6	188.4	10	1.4
311.0714.292	JT40-RZ8-160	40	8	160	15	30	36	M6	228.4	10	1.5
311.0705.292	JT40-RZ10-120	40	10	120	18	34	41	M8 x 1	188.4	10	1.5
311.0715.292	JT40-RZ10-160	40	10	160	18	32	41	M8 x 1	228.4	10	1.6
311.0706.292	JT40-RZ12-120	40	12	120	18	34	47	M10 x 1	188.4	10	1.5
311.0716.292	JT40-RZ12-160	40	12	160	18	32	47	M10 x 1	228.4	10	1.6
311.0700.291	JT50-RZ3-120	50	3	120	9	25	-	-	221.7	-	3.0
311.0710.291	JT50-RZ3-160	50	3	160	9	25	-	-	261.7	-	3.1
311.0701.291	JT50-RZ4-120	50	4	120	9	25	-	-	221.7	-	3.0
311.0711.291	JT50-RZ4-160	50	4	160	9	25	-	-	261.7	-	3.1
311.0702.291	JT50-RZ5-120	50	5	120	9	25	-	-	221.7	-	3.0
311.0712.291	JT50-RZ5-160	50	5	160	9	25	-	-	261.7	-	3.1
311.0703.291	JT50-RZ6-120	50	6	120	15	31	36	M5	221.7	10	3.1
311.0713.291	JT50-RZ6-160	50	6	160	15	30	36	M5	261.7	10	3.3
311.0704.291	JT50-RZ8-120	50	8	120	15	31	36	M6	221.7	10	3.1
311.0714.291	JT50-RZ8-160	50	8	160	15	30	36	M6	261.7	10	3.3
311.0705.291	JT50-RZ10-120	50	10	120	18	34	41	M8 x 1	221.7	10	3.2
311.0715.291	JT50-RZ10-160	50	10	160	18	32	41	M8 x 1	261.7	10	3.4
311.0706.291	JT50-RZ12-120	50	12	120	18	34	47	M10 x 1	221.7	10	3.2
311.0716.291	JT50-RZ12-160	50	12	160	18	32	47	M10 x 1	261.7	10	3.4

设计：请使用柄部直径公差h6级的硬质合金刀具。

说明：不包括调整长度的调整螺钉。

备注：1、其他型号和尺寸可按订货要求制作。

- 2、装夹刀具的刀柄夹紧长度必须保证l1-v尺寸，否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。
- 3、建议使用专用热装机装卸刀具。

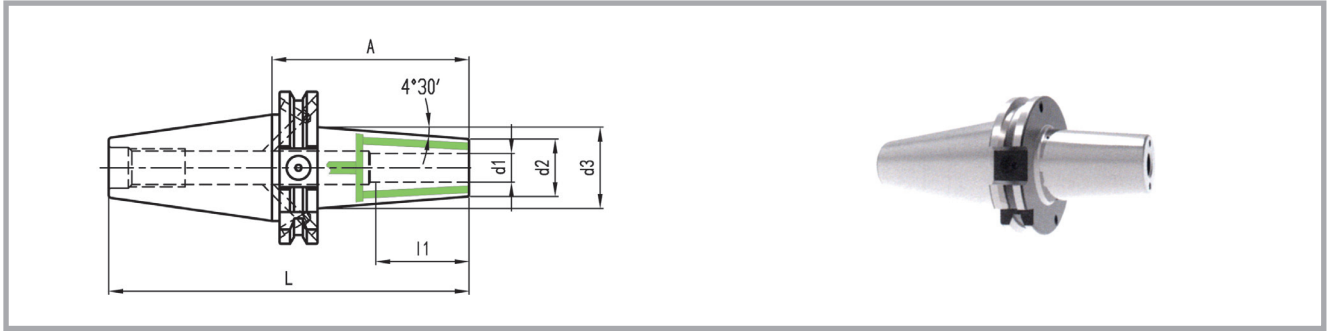
Design: The clamping diameter is designed for a cemented carbide shank tolerance of h6.

Standard Specification: Adjusting screw for length adjustment is not included.

Note: 1. Other designs and sizes are available on request.

2. Toolholder clamping length must be same to size l1-v. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.
3. Special shrinking devices are recommended for tool mounting and dismantling.

## 热装夹头刀柄 (超短型-带内冷转端面外冷) i-tec® Shrink-fit Chucks ultra short version



DIN 69871	Form AD/B		$\lambda = 0,003$	G2,5 25,000 min <sup>-1</sup> <1g mm		CAD
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No	GB Model	SK	d1	A	d2	d3	l1	L	Kg
311.4353.292	JT40-RZ10-65	40	10	65	26	33	41	133.4	1.1
311.4354.292	JT40-RZ12-65	40	12	65	26	33	45	133.4	1.1
311.4356.292	JT40-RZ16-65	40	16	65	29	36	52	133.4	1.2
311.4358.292	JT40-RZ20-65	40	20	65	35	42	54	133.4	1.3
311.4359.292	JT40-RZ25-75	40	25	75	45	50	59	143.4	1.6

设计: 请使用柄部直径公差h6级的硬质合金刀具。  
带有中心冷却功能。

- 备注: 1、其他型号和尺寸可按订货要求制作。  
2、装夹刀具的刀柄夹紧长度必须保证l1-v尺寸, 否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。  
3、建议使用专用热装机装卸刀具。

Design: The clamping diameter is designed for a cemented carbide shank tolerance of h6.with closable cool stream bores.

- Note: 1.Other designs and sizes are available on request.  
2.Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder , tool couldn't be dismantled or toolholder damage and so on.  
3.Special shrinking devices are recommended for tool mounting and dismantling.

### ACCESSORIES

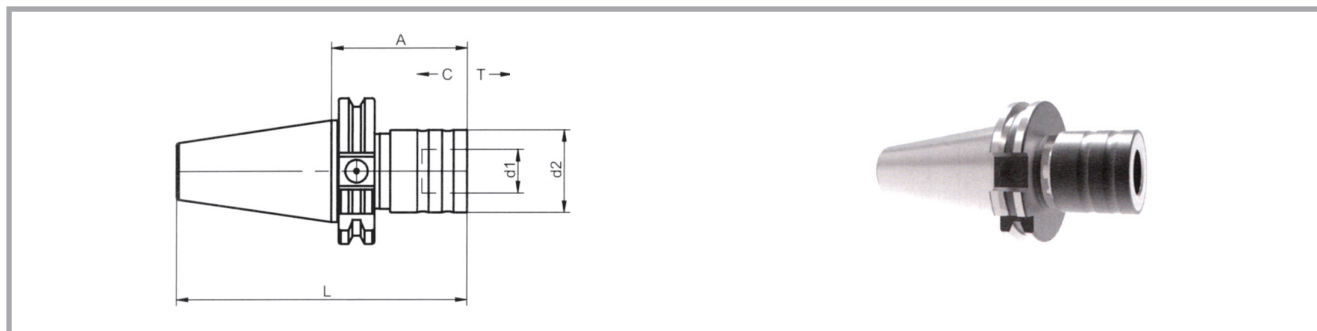
配件



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丝锥快换夹头刀柄  
Quick Change Tapping Chucks



No	GB Model	SK	M	A	d1	d2	L	C	T	kg
440.0001.292	JT40-G3-60	40	M3-M14	60	19	36	128.4	6.5	7.5	1.1
440.0101.161	JT40-G3-120	40	M3-M14	120	19	36	188.4	6.5	7.5	1.5
440.0002.292	JT40-G8-98	40	M4.5-M24	98	31	53	166.4	8.5	15	2.1
440.0103.161	JT40-G8-150	40	M4.5-M24	150	31	53	218.4	8.5	15	2.9
440.0001.291	JT50-G3-60	50	M3-M14	60	19	36	161.8	6.5	7.5	2.9
440.0002.291	JT50-G8-98	50	M4.5-M24	98	31	53	199.8	8.5	15	3.8
440.0105.161	JT50-G8-150	50	M4.5-M24	150	31	53	251.8	8.5	15	4.6
440.0106.161	JT50-G14-139	50	M14-M33	139	48	78	240.8	15	23	6.7
440.0107.161	JT50-G14-200	50	M14-M33	200	48	78	301.8	15	23	8.7

使用: 用于夹持带或不带安全机构的快换丝锥夹套。

Use: For holding quick change inserts with or without safety clutch.

设计: 长度补偿在收缩和拉伸方向取决于进给和螺距的不同。压缩时能够保证当轴向力达到允许值时立即脱离攻丝状态, 拉力释放时能够保证快换丝锥夹套免于过大轴向拉力造成的损害。

Design: Length compensation on compression and tension to compensate the difference between feed and tap pitch. The pressure point mechanism guarantees that the tap immediately cuts the thread as soon as the permissible axial force is reached. The tension lock protects the tapping chuck against damage as a result of high axial tensile load.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES  
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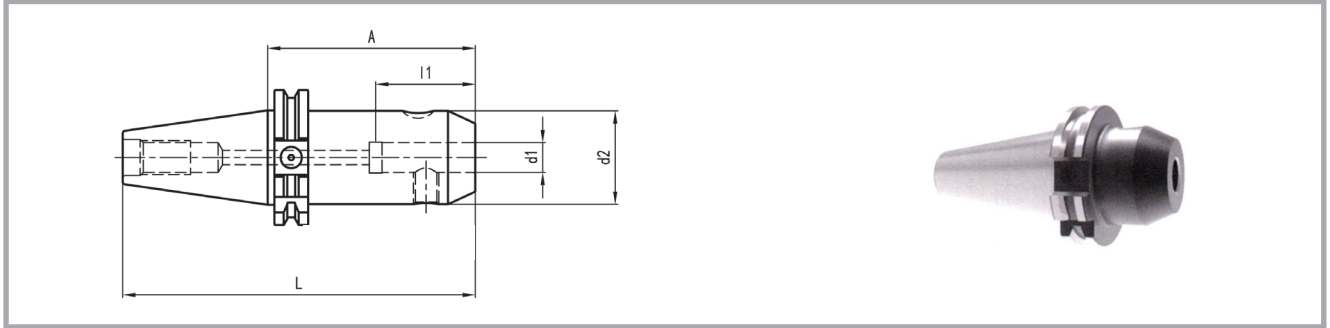
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## 削平型直柄立铣刀刀柄(威尔顿型)

### Reduction Sleeves for Straight Shanks with lateral driving surface (Weldon)



No	GB Model	SK	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
420.0251.292	JT40-XP6-50	40	6	50	25	35	118.4	+0.005	M6X10	0.9
420.0260.292	JT40-XP6-100	40	6	100	25	35	168.4	+0.005	M6X10	1.1
420.0252.292	JT40-XP8-50	40	8	50	28	35	118.4	+0.005	M8X10	1.0
420.0261.292	JT40-XP8-100	40	8	100	28	35	168.4	+0.005	M8X10	1.2
420.0253.292	JT40-XP10-50	40	10	50	35	39	118.4	+0.005	M10X12	1.0
420.0262.292	JT40-XP10-100	40	10	100	35	39	168.4	+0.005	M10X12	1.4
420.0254.292	JT40-XP12-50	40	12	50	42	44	118.4	+0.005	M12X16	1.1
420.0263.292	JT40-XP12-100	40	12	100	42	44	168.4	+0.005	M12X16	1.6
420.0258.292	JT40-XP14-50	40	14	50	44	44	118.4	+0.005	M12X16	1.2
420.0264.292	JT40-XP14-100	40	14	100	44	44	168.4	+0.005	M12X16	1.7
420.0255.292	JT40-XP16-63	40	16	63	48	47	131.4	+0.005	M14X16	1.4
420.0265.292	JT40-XP16-100	40	16	100	48	47	168.4	+0.005	M14X16	1.9
420.0259.292	JT40-XP18-63	40	18	63	50	47	131.4	+0.005	M14X16	1.4
420.0266.292	JT40-XP18-100	40	18	100	50	47	168.4	+0.005	M14X16	1.9
420.0256.292	JT40-XP20-63	40	20	63	52	49	131.4	+0.007	M16X16	1.5
420.0267.292	JT40-XP20-100	40	20	100	52	49	168.4	+0.007	M16X16	2.0
420.0257.292	JT40-XP25-100	40	25	100	65	54	168.4	+0.007	M18X2X20	2.7
420.0268.292	JT40-XP32-100	40	32	100	72	54	168.4	+0.007	M20X2X20	3.1
420.0251.291	JT50-XP6-63	50	6	63	25	35	164.65	+0.005	M6X10	2.8
420.0271.291	JT50-XP6-100	50	6	100	25	35	201.65	+0.005	M6X10	2.9
420.0252.291	JT50-XP8-63	50	8	63	28	35	164.65	+0.005	M8X10	2.8
420.0272.291	JT50-XP8-100	50	8	100	28	35	201.65	+0.005	M8X10	3.0
420.0253.291	JT50-XP10-63	50	10	63	35	39	164.65	+0.005	M10X12	2.9
420.0273.291	JT50-XP10-100	50	10	100	35	39	201.65	+0.005	M10X12	3.2
420.0254.291	JT50-XP12-63	50	12	63	42	44	164.65	+0.005	M12X16	3.0
420.0274.291	JT50-XP12-100	50	12	100	42	44	201.65	+0.005	M12X16	3.4
420.0264.291	JT50-XP14-63	50	14	63	44	44	164.65	+0.005	M12X16	3.1
420.0275.291	JT50-XP14-100	50	14	100	44	44	201.65	+0.005	M12X16	3.5
420.0255.291	JT50-XP16-63	50	16	63	48	47	164.65	+0.005	M14X16	3.2
420.0276.291	JT50-XP16-100	50	16	100	48	47	201.65	+0.005	M14X16	3.6
420.0268.291	JT50-XP18-63	50	18	63	50	47	164.65	+0.005	M14X16	3.2
420.0277.291	JT50-XP18-100	50	18	100	50	47	201.65	+0.005	M14X16	3.7
420.0256.291	JT50-XP20-63	50	20	63	52	49	164.65	+0.007	M16X16	3.3
420.0278.291	JT50-XP20-100	50	20	100	52	49	201.65	+0.007	M16X16	3.8
420.0257.291	JT50-XP25-80	50	25	80	65	54	181.65	+0.007	M18X2X20	4.0
420.0279.291	JT50-XP25-100	50	25	100	65	54	201.65	+0.007	M18X2X20	4.5
420.0258.291	JT50-XP32-100	50	32	100	72	58	201.65	+0.007	M20X2X20	4.9
420.0259.291	JT50-XP40-100	50	40	100	80	75	201.65	+0.007	M20X2X20	5.5
440.0020.009	JT50-XP50-125	50	50	125	90	88	226.65	+0.007	M24X2X20	7.4



No	GB Model	SK	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
440.0022.009	JT60-XP25-100	60	25	100	65	54	261.8	+0.007	M18X2X20	11.1
440.0023.009	JT60-XP32-100	60	32	100	72	58	261.8	+0.007	M20X2X20	11.6
440.0024.009	JT60-XP40-115	60	40	115	80	75	276.8	+0.007	M20X2X20	12.7
440.0025.009	JT60-XP50-125	60	50	125	90	88	286.8	+0.007	M24X2X20	14.0
440.0026.009	JT60-XP63-150	60	63	150	120	98	311.8	+0.007	M24X2X20	19.7

使用: 按DIN 1835 B型(威尔顿型)和DIN 6535 HB型夹持直柄铣刀。

Use: For holding shank tools with lateral driving surface, DIN 1835 type B and DIN 6535 type HB.

说明: 包括夹紧螺钉, 从d1=25mm的孔起提供2个紧固螺钉。

Standard Specification: With clamping screw. From location hole d1 = 25mm 2 clamping screws are included.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



4.16

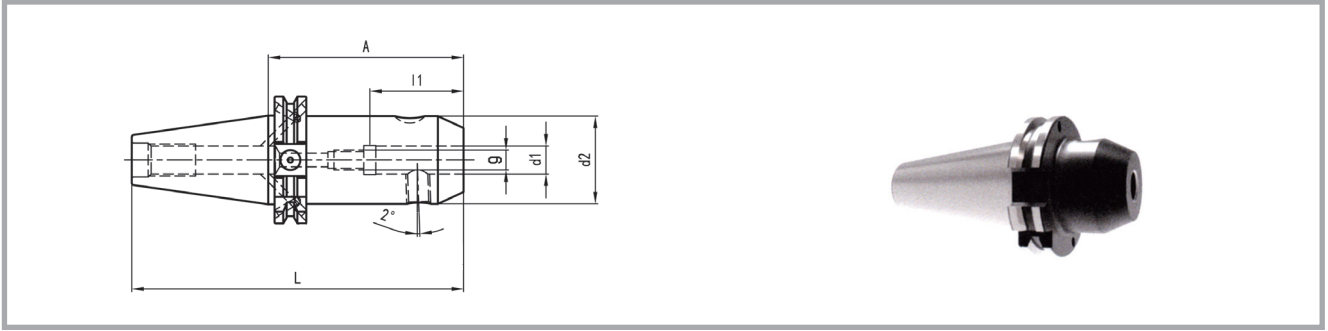


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## 带2° 斜削平型直柄立铣刀刀柄(威斯尔凹口型)

### Reduction Sleeves for Straight Shanks with inclined clamping surface (Whistle Notch)



No	GB Model	SK	d1	A	d2	l1	g	L	Tol./d1	配用螺钉	kg
420.0151.292	JT40-XPД6-50	40	6	50	25	35	M5	118.4	+0.005	M6X10	0.9
420.0152.292	JT40-XPД8-50	40	8	50	28	35	M6	118.4	+0.005	M8X10	1.0
420.0153.292	JT40-XPД10-50	40	10	50	35	39	M8	118.4	+0.005	M10X12	1.0
420.0154.292	JT40-XPД12-50	40	12	50	42	44	M10	118.4	+0.005	M12X16	1.1
420.0164.292	JT40-XPД14-50	40	14	50	44	44	M10	118.4	+0.005	M12X16	1.2
420.0155.292	JT40-XPД16-63	40	16	63	48	47	M12	131.4	+0.005	M14X16	1.4
420.0168.292	JT40-XPД18-63	40	18	63	50	47	M12	131.4	+0.005	M14X16	1.4
420.0156.292	JT40-XPД20-63	40	20	63	52	49	M16	131.4	+0.007	M16X16	1.5
420.0157.292	JT40-XPД25-100	40	25	100	65	54	M20	168.4	+0.007	M18X2X20	2.7
420.0158.292	JT40-XPД32-100	40	32	100	72	58	M20	168.4	+0.007	M20X2X20	3.1
420.0151.291	JT50-XPД6-63	50	6	63	25	35	M5	164.65	+0.005	M6X10	2.8
420.0152.291	JT50-XPД8-63	50	8	63	28	35	M6	164.65	+0.005	M8X10	2.8
420.0153.291	JT50-XPД10-63	50	10	63	35	39	M8	164.65	+0.005	M10X12	2.9
420.0154.291	JT50-XPД12-63	50	12	63	42	44	M10	164.65	+0.005	M12X16	3.0
420.0164.291	JT50-XPД14-63	50	14	63	44	44	M10	164.65	+0.005	M12X16	3.1
420.0155.291	JT50-XPД16-63	50	16	63	48	47	M12	164.65	+0.005	M14X16	3.2
420.0168.291	JT50-XPД18-63	50	18	63	50	47	M12	164.65	+0.005	M14X16	3.2
420.0156.291	JT50-XPД20-63	50	20	63	52	49	M16	164.65	+0.007	M16X16	3.3
420.0157.291	JT50-XPД25-80	50	25	80	65	54	M20	181.65	+0.007	M18X2X20	4.0
420.0158.291	JT50-XPД32-100	50	32	100	72	58	M20	201.65	+0.007	M20X2X20	4.9
420.0159.291	JT50-XPД40-100	50	40	100	80	75	M20	201.65	+0.007	M20X2X20	5.5

使用: 用于夹持带角度驱动面 (2°) 的直柄铣刀, DIN 1835 标准中的E

说明: 包括配好的夹紧螺钉和限位螺钉, 从d1=25mm的孔起提供2个紧固螺钉。

备注: 带孔的止动螺钉用于内冷却。其他型号和尺寸可按订货要求制作。

Use: For holding shank tools with inclined clamping surface (2°), DIN 1835 type E and DIN 6535 type HE.

Standard Specification: Clamping screw and adjusting screw included. From location hole d1 = 25mm 2 clamping screws are included.

Note: Bored through adjusting screw for coolant. Other designs and sizes are available on request.

### ACCESSORIES

配件

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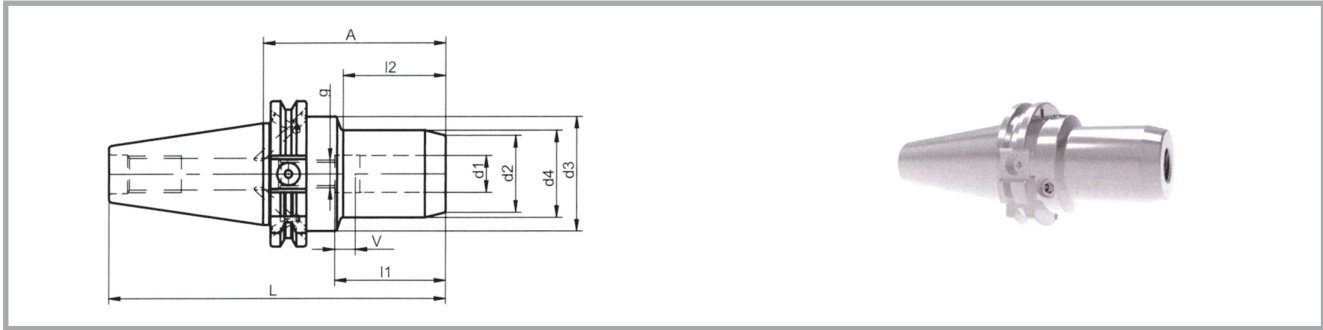


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液压夹头刀柄  
Hydraulic Expansion Chucks



No	GB Model	SK	d1	A	d2	d3	d4	l1	l2	g	L	kg
702.0001.292	JT40-HD6-80	40	6	80	22	50	26	37	40	M5	148.4	1.3
702.0002.292	JT40-HD8-80	40	8	80	24	50	28	37	40	M6	148.4	1.3
702.0003.292	JT40-HD10-80	40	10	80	26	50	30	41	40	M8	148.4	1.3
702.0004.292	JT40-HD12-80	40	12	80	28	50	32	46	40	M10	148.4	1.3
702.0005.292	JT40-HD14-80	40	14	80	30	50	34	46	40	M10	148.4	1.4
702.0006.292	JT40-HD16-85	40	16	85	34	50	38	49	46	M12	153.4	1.5
702.0007.292	JT40-HD18-85	40	18	85	36	50	40	49	46	M12	153.4	1.5
702.0008.292	JT40-HD20-85	40	20	85	38	50	42	51	46	M16	153.4	1.5
702.0009.292	JT40-HD25-105	40	25	105	45	55	50	57	55	M16	173.4	2.1
702.0010.292	JT40-HD32-115	40	32	115	56	63	63	61	79.5	M16	183.4	2.8
702.0001.291	JT50-HD6-80	50	6	80	22	50	26	37	40	M5	181.65	3.1
702.0002.291	JT50-HD8-80	50	8	80	24	50	28	37	40	M6	181.65	3.1
702.0003.291	JT50-HD10-80	50	10	80	26	50	30	41	40	M8	181.65	3.1
702.0004.291	JT50-HD12-80	50	12	80	28	50	32	46	40	M10	181.65	3.1
702.0005.291	JT50-HD14-80	50	14	80	30	50	34	46	40	M10	181.65	3.2
702.0006.291	JT50-HD16-85	50	16	85	34	50	38	49	46	M12	186.65	3.2
702.0007.291	JT50-HD18-85	50	18	85	36	50	40	49	46	M12	186.65	3.3
702.0008.291	JT50-HD20-85	50	20	85	38	50	42	51	46	M16	186.65	3.3
702.0009.291	JT50-HD25-100	50	25	100	45	55	50	57	55	M16	201.65	3.8
702.0010.291	JT50-HD32-100	50	32	100	56	70	63	61	55	M16	201.65	4.5

使用: 用于夹持按DIN1835A、B型或DIN 6535 HA或HB型直柄刀具, DIN1835 C、DE型和DIN 6535 HE型刀柄, 仅能与变径套共用。夹持精度h6级, 粗糙度最小为Ra0.3, 对于Φ25和Φ32只有DIN 1835 A型和DIN 6535HA型可用。

Use: For shank tools according to DIN1835 type A and B and DIN 6535 type HE are only applicable with reduction bushes. Shank quality h6, Ra min.=0.3 For Φ25 and Φ32 only type A or HA can be used.

说明: 带内置的限位螺钉。

Standard Specification: Bored through adjusting screw included.

备注: 其他型号和尺寸可按订货要求制作。刀具的刀柄夹紧长度必须保证l1-v尺寸, 否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。

Note: Other designs and sizes are available on request.

Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.

ACCESSORIES

配件



4.16

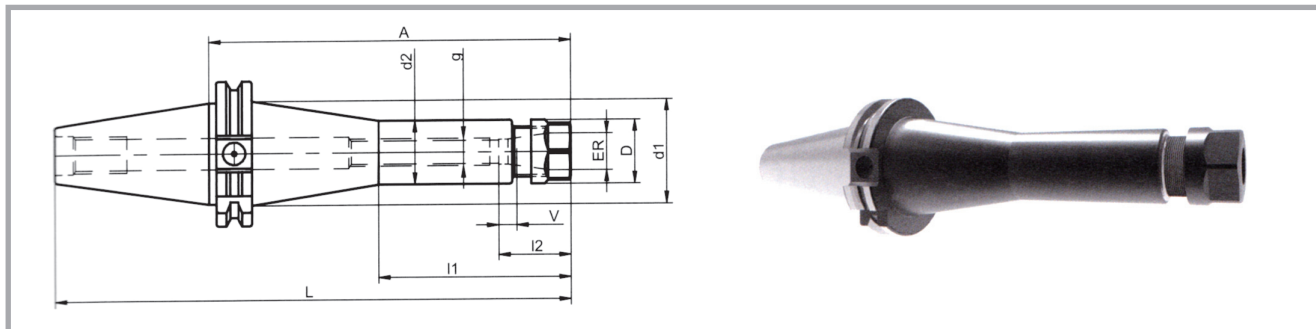


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## ER/ESX ER-11/16弹簧夹头刀柄 (带调整螺钉孔)

Collet Chucks ER/ESX 11/16 with internal thread



No	GB Model	SK	ER	A	d1	d2	D	l1	l2	g	L	kg
698.0261.292	JT40-ER11-63	40	ER11(0.5-7)	63	-	18.5	19	-	18	M6	131.4	0.9
698.0262.292	JT40-ER11-100	40	ER11(0.5-7)	100	-	18.5	19	-	18	M6	168.4	1.0
640.0418.040	JT40-ER11-200	40	ER11(0.5-7)	200	-	18.5	19	-	18	M6	268.4	1.2
698.0251.292	JT40-ER16-63	40	ER16(0.5-10)	63	-	28	28	-	27	M12	131.4	1.0
698.0252.292	JT40-ER16-100	40	ER16(0.5-10)	100	-	28	28	-	27	M12	168.4	1.2
698.0253.292	JT40-ER16-160	40	ER16(0.5-10)	160	46	28	28	85	27	M12	228.4	1.4
640.0419.040	JT40-ER16-200	40	ER16(0.5-10)	200	46	28	28	85	27	M12	268.4	1.6
698.0251.291	JT50-ER16-100	50	ER16(0.5-10)	100	-	28	28	-	27	M12	201.65	3.0
698.0252.291	JT50-ER16-160	50	ER16(0.5-10)	160	78	28	28	85	27	M12	261.65	3.2
640.0420.040	JT50-ER16-200	50	ER16(0.5-10)	200	78	28	28	85	27	M12	301.65	3.4

使用: 用于夹持按DIN 1835 A型、B型、E型以及DIN 6535 HA型、HB型和HE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明: 夹头包括夹紧螺母, 标准配置夹紧螺母为国产配件, 如需进口配件需客户另外订购

Standard Specification: Collet chuck including clamping nut.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

### ACCESSORIES

配件



4.16



4.19



4.02



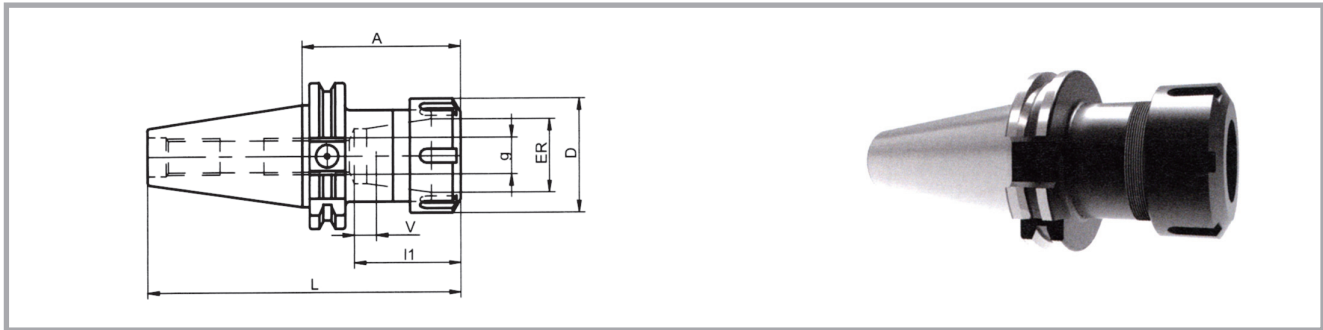
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ER/ESX ER-20/25/32/40弹簧夹头刀柄 (带调整螺钉孔)

Collet Chucks ER/ESX 20/25/32/40 with internal thread



DIN 69871
Form AD

 $R_a = 0,003$   
20000min<sup>-1</sup>
G2,5
20000min<sup>-1</sup>
CAD

No	GB Model	SK	ER	A	D	l1	g	L	kg
640.0103.040	JT40-ER20-70	40	ER20(1-13)	70	34	40	M12	138.4	1.1
640.0186.040	JT40-ER20-100	40	ER20(1-13)	100	34	40	M12	168.4	1.3
640.0187.040	JT40-ER20-160	40	ER20(1-13)	160	34	40	M12	228.4	1.7
640.0421.040	JT40-ER20-200	40	ER20(1-13)	200	34	40	M12	268.4	2.0
697.0250.292	JT40-ER25-70	40	ER25(1-16)	70	42	43	M16	138.4	1.3
697.0255.292	JT40-ER25-100	40	ER25(1-16)	100	42	43	M16	168.4	1.6
640.0188.040	JT40-ER25-160	40	ER25(1-16)	160	42	43	M16	228.4	2.2
640.0422.040	JT40-ER25-200	40	ER25(1-16)	200	42	43	M16	268.4	2.6
697.0251.292	JT40-ER32-70	40	ER32(2-20)	70	50	47	M16	138.4	1.5
697.0253.292	JT40-ER32-100	40	ER32(2-20)	100	50	47	M16	168.4	1.9
640.0189.040	JT40-ER32-160	40	ER32(2-20)	160	50	47	M16	228.4	2.8
640.0423.040	JT40-ER32-200	40	ER32(2-20)	200	50	47	M16	268.4	3.3
697.0252.292	JT40-ER40-80	40	ER40(3-26)	80	63	53	M16	148.4	2.2
697.0254.292	JT40-ER40-120	40	ER40(3-26)	120	63	53	M16	188.4	3.0
640.0190.040	JT40-ER40-160	40	ER40(3-26)	160	63	53	M16	228.4	3.9
640.0424.040	JT40-ER40-200	40	ER40(3-26)	200	63	53	M16	268.4	4.8
640.0191.040	JT50-ER20-70	50	ER20(1-13)	70	34	40	M12	171.65	2.9
640.0113.040	JT50-ER20-100	50	ER20(1-13)	100	34	40	M12	201.65	3.1
640.0193.040	JT50-ER20-160	50	ER20(1-13)	160	34	40	M12	261.65	3.5
640.0425.040	JT50-ER20-200	50	ER20(1-13)	200	34	40	M12	301.65	3.8
640.0194.040	JT50-ER25-70	50	ER25(1-16)	70	42	43	M16	171.65	3.1
640.0115.040	JT50-ER25-100	50	ER25(1-16)	100	42	43	M16	201.65	3.4
640.0196.040	JT50-ER25-160	50	ER25(1-16)	160	42	43	M16	261.65	4.0
640.0426.040	JT50-ER25-200	50	ER25(1-16)	200	42	43	M16	301.65	4.4
640.0197.040	JT50-ER32-70	50	ER32(2-20)	70	50	47	M16	171.65	3.3
640.0117.040	JT50-ER32-100	50	ER32(2-20)	100	50	47	M16	201.65	3.7
640.0199.040	JT50-ER32-160	50	ER32(2-20)	160	50	47	M16	261.65	4.6
640.0427.040	JT50-ER32-200	50	ER32(2-20)	200	50	47	M16	301.65	5.1
697.0252.291	JT50-ER40-80	50	ER40(3-26)	80	63	53	M16	181.65	3.9
697.0253.291	JT50-ER40-120	50	ER40(3-26)	120	63	53	M16	221.65	4.8
640.0200.040	JT50-ER40-160	50	ER40(3-26)	160	63	53	M16	261.65	5.7
640.0428.040	JT50-ER40-200	50	ER40(3-26)	200	63	53	M16	301.65	6.6
640.0234.040	JT60-ER25-100	60	ER25(1-16)	100	42	43	M16	261.8	10.0
640.0235.040	JT60-ER25-160	60	ER25(1-16)	160	42	43	M16	321.8	10.6
640.0429.040	JT60-ER25-200	60	ER25(1-16)	200	42	43	M16	361.8	11.0
640.0212.040	JT60-ER32-100	60	ER32(2-20)	100	50	47	M16	261.8	10.4
640.0237.040	JT60-ER32-160	60	ER32(2-20)	160	50	47	M16	321.8	11.2
640.0430.040	JT60-ER32-200	60	ER32(2-20)	200	50	47	M16	361.8	11.8
640.0238.040	JT60-ER40-100	60	ER40(3-26)	100	63	53	M16	261.8	11.0
640.0239.040	JT60-ER40-160	60	ER40(3-26)	160	63	53	M16	321.8	12.4
640.0431.040	JT60-ER40-200	60	ER40(3-26)	200	63	53	M16	361.8	13.2

**使用:** 用于夹持按DIN 1835 A型、B型、E型以及DIN 6535 HA型、HB型和HE型的直柄刀具。

**Use:** For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

**说明:** 夹头包括夹紧螺母，标准配置夹紧螺母为国产配件，如需进口配件需客户另外订购

**Standard Specification:** Collet chuck including clamping nut.

**备注:** 其他型号和尺寸可按订货要求制作。

**Note:** Other designs and sizes are available on request.

ACCESSORIES  
配件

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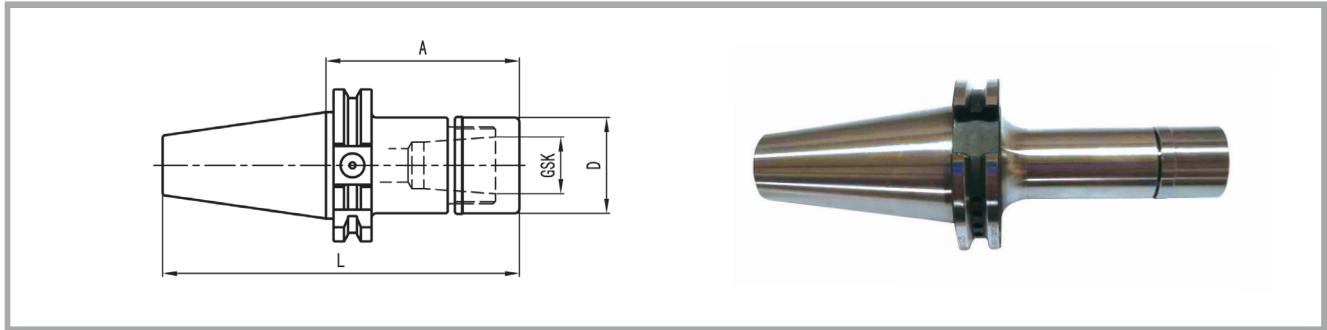


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4.06

GSK高精度弹簧夹头刀柄  
Collet Chucks GSK6/10/16/20/25



DIN 69871
Form AD
Surface finish icons
Surface texture:  $R_a = 0,003$ 
G2,5 20000min<sup>-1</sup>
CAD

No	GB Model	SK	GSK	A	D	L	Kg
440.0001.042	JT40-GSK6-63	40	GSK6 (3-6)	63	19.5	131.4	0.9
440.0002.042	JT40-GSK6-100	40	GSK6 (3-6)	100	19.5	168.4	1.0
440.0003.042	JT40-GSK10-63	40	GSK10 (2-10)	63	27.5	131.4	1.0
440.0004.042	JT40-GSK10-100	40	GSK10 (2-10)	100	27.5	168.4	1.2
440.0005.042	JT40-GSK10-160	40	GSK10 (2-10)	160	27.5	228.4	1.4
440.0170.042	JT40-GSK13-63	40	GSK13 (3-13)	63	35	131.4	1.1
440.0171.042	JT40-GSK13-100	40	GSK13 (3-13)	100	35	168.4	1.4
440.0172.042	JT40-GSK13-160	40	GSK13 (3-13)	160	35	228.4	1.8
440.0129.042	JT40-GSK16-70	40	GSK16 (3-16)	70	40	138.4	1.3
440.0006.042	JT40-GSK16-100	40	GSK16 (3-16)	100	40	168.4	1.5
440.0007.042	JT40-GSK16-160	40	GSK16 (3-16)	160	40	228.4	2.1
440.0008.042	JT40-GSK20-70	40	GSK20 (4-20)	70	48	138.4	1.5
440.0009.042	JT40-GSK20-100	40	GSK20 (4-20)	100	48	168.4	1.9
440.0010.042	JT40-GSK20-160	40	GSK20 (4-20)	160	48	228.4	2.6
440.0011.042	JT40-GSK25-80	40	GSK25 (3-25)	80	55	148.4	1.8
440.0012.042	JT40-GSK25-120	40	GSK25 (3-25)	120	55	188.4	2.5
440.0013.042	JT40-GSK25-160	40	GSK25 (3-25)	160	55	228.4	3.2
440.0014.042	JT50-GSK10-100	50	GSK10 (2-10)	100	27.5	201.65	2.9
440.0015.042	JT50-GSK10-160	50	GSK10 (2-10)	160	27.5	261.65	3.2
440.0173.042	JT50-GSK13-70	50	GSK13 (3-13)	70	35	171.65	2.9
440.0174.042	JT50-GSK13-100	50	GSK13 (3-13)	100	35	201.65	3.2
440.0175.042	JT50-GSK13-160	50	GSK13 (3-13)	160	35	261.65	3.6
440.0016.042	JT50-GSK16-70	50	GSK16 (3-16)	70	40	171.65	3.1
440.0017.042	JT50-GSK16-100	50	GSK16 (3-16)	100	40	201.65	3.3
440.0018.042	JT50-GSK16-160	50	GSK16 (3-16)	160	40	261.65	3.9
440.0019.042	JT50-GSK20-70	50	GSK20 (4-20)	70	48	171.65	3.3
440.0020.042	JT50-GSK20-100	50	GSK20 (4-20)	100	48	201.65	3.6
440.0021.042	JT50-GSK20-160	50	GSK20 (4-20)	160	48	261.65	4.4
440.0022.042	JT50-GSK25-80	50	GSK25 (3-25)	80	55	181.65	3.6
440.0023.042	JT50-GSK25-120	50	GSK25 (3-25)	120	55	221.65	4.3
440.0024.042	JT50-GSK25-160	50	GSK25 (3-25)	160	55	261.65	5.0

**使用:** 用于夹持按DIN 1835 A型、B型、E型以及DIN 6535 HA型、HB型和HE型的直柄刀具。

**Use:** For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

**说明:** 夹头包括夹紧螺母，标准配置夹紧螺母为国产配件，如需进口配件需客户另外订购

**Standard Specification:** Collet chuck including clamping nut.

**备注:** 其他型号和尺寸可按订货要求制作。  
括号中数字仅表示夹持刀具柄部尺寸范围，不体现在产品型号中。

**Note:** Other designs and sizes are available on request.

## ACCESSORIES

配件



4.16



4.10



4.12

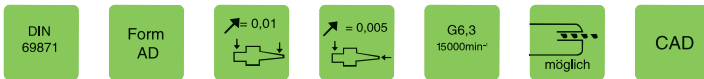
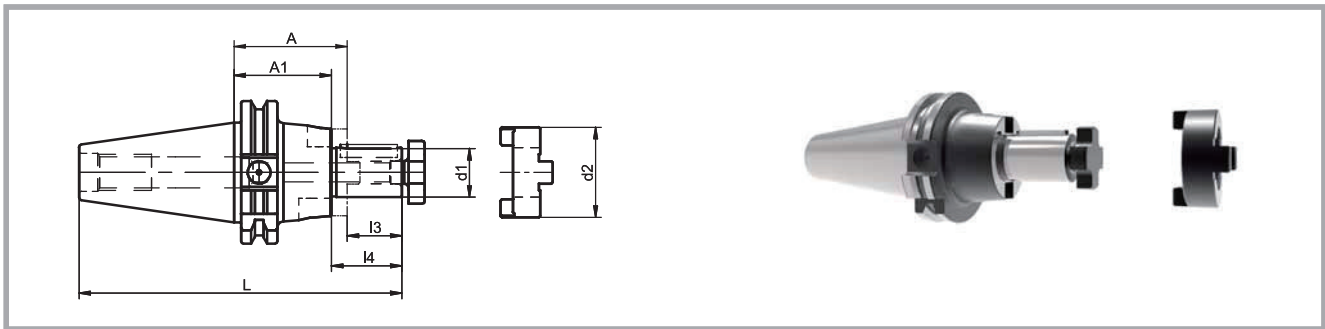
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套式铣刀刀柄 (带平键和传动环)

Shell End Mill Arbors for milling cutters with longitudinal slot or tenon drive



No	GB Model	SK	d1	A	A1	d2	l3	l4	L	kg
489.0211.292	JT40-XM16-55	40	16	55	45	32	17	27	140.4	1.0
489.0231.292	JT40-XM16-100	40	16	100	90	32	17	27	185.4	1.3
489.0212.292	JT40-XM22-55	40	22	55	43	40	19	31	142.4	1.1
489.0232.292	JT40-XM22-100	40	22	100	88	40	19	31	187.4	1.6
489.0213.292	JT40-XM27-55	40	27	55	43	48	21	33	144.4	1.3
489.0233.292	JT40-XM27-100	40	27	100	88	48	21	33	189.4	1.9
489.0204.292	JT40-XM32-60	40	32	60	46	58	24	38	152.4	1.6
489.0234.292	JT40-XM32-100	40	32	100	86	58	24	38	192.4	2.4
489.0205.292	JT40-XM40-60	40	40	60	46	70	27	41	155.4	2.0
489.0201.291	JT50-XM16-55	50	16	55	45	32	17	27	173.65	2.8
489.0202.291	JT50-XM22-55	50	22	55	43	40	19	31	175.65	2.9
489.0232.291	JT50-XM22-100	50	22	100	88	40	19	31	220.65	3.4
489.0203.291	JT50-XM27-55	50	27	55	43	48	21	33	177.65	3.1
489.0233.291	JT50-XM27-100	50	27	100	88	48	21	33	222.65	3.7
489.0204.291	JT50-XM32-55	50	32	55	41	58	24	38	180.65	3.3
489.0234.291	JT50-XM32-100	50	32	100	86	58	24	38	225.65	4.2
489.0205.291	JT50-XM40-55	50	40	55	41	70	27	41	183.65	3.7
489.0235.291	JT50-XM40-100	50	40	100	86	70	27	41	228.65	5.0
489.0206.291	JT50-XM50-70	50	50	70	54	90	30	46	201.65	5.1

使用: 用于夹持轴向平键或端面键驱动的面铣刀。

Use: For clamping shell end mills and milling cutters with longitudinal slot or tenon drive.

设计: 带有中心冷却功能, 传动环符合DIN 138。

Design: Central boring for coolant supply. Cutter drive according to DIN 138.

说明: 包括紧固螺钉、带有螺孔的平键和传动环。

Standard Specification: Cutter retaining screw, feather key with withdrawal thread and drive ring included.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



4.16



4.21

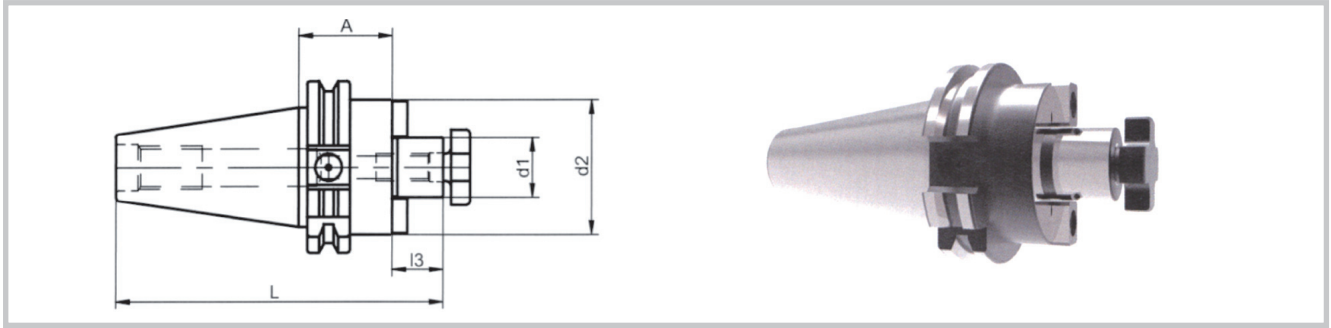


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## 端铣刀柄

### Shell End Mill Arbors with enlarged contact diameter



No	GB Model	SK	d1	A	d2	l3	L	W	夹刀螺钉	十字形扳手	kg
579.0205.292	JT40-XD16-35	40	16	35	40	17	120.4	8	M8	BS-16	1.0
579.0201.292	JT40-XD22-35	40	22	35	50	19	122.4	10	M10	BS-22	1.1
540.0023.004	JT40-XD22-90	40	22	90	50	19	177.4	10	M10	BS-22	2.0
579.0202.292	JT40-XD27-35	40	27	35	60	21	124.4	12	M12	BS-27	1.3
540.0025.004	JT40-XD27-90	40	27	90	60	21	179.4	12	M12	BS-27	2.5
579.0203.292	JT40-XD32-50	40	32	50	80	24	142.4	14	M16	BS-32	2.2
540.0027.004	JT40-XD32-90	40	32	90	80	24	182.4	14	M16	BS-32	3.8
579.0201.291	JT50-XD22-35	50	22	35	50	19	155.65	10	M10	BS-22	2.9
540.0089.004	JT50-XD22-90	50	22	90	50	19	210.65	10	M10	BS-22	3.8
540.0031.004	JT50-XD22-150	50	22	150	50	19	270.65	10	M10	BS-22	4.7
579.0202.291	JT50-XD27-40	50	27	40	60	21	162.65	12	M12	BS-27	3.2
540.0033.004	JT50-XD27-90	50	27	90	60	21	212.65	12	M12	BS-27	4.3
540.0034.004	JT50-XD27-150	50	27	150	60	21	272.65	12	M12	BS-27	5.6
579.0203.291	JT50-XD32-50	50	32	50	80	24	175.65	14	M16	BS-32	4.0
540.0036.004	JT50-XD32-120	50	32	120	80	24	245.65	14	M16	BS-32	6.7

使用: 用于夹持带有端面键槽的面铣刀。

Use For: clamping shell end mills and milling cutters with tenon drive.

设计: 带有中心冷却功能, 刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping  $\phi$  40 and 60 with 4 threaded holes for holding cutters with tool holding according to DIN 2079.

说明: 包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



4.16



4.21

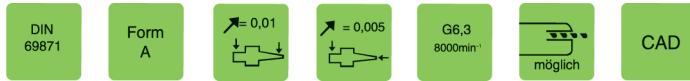
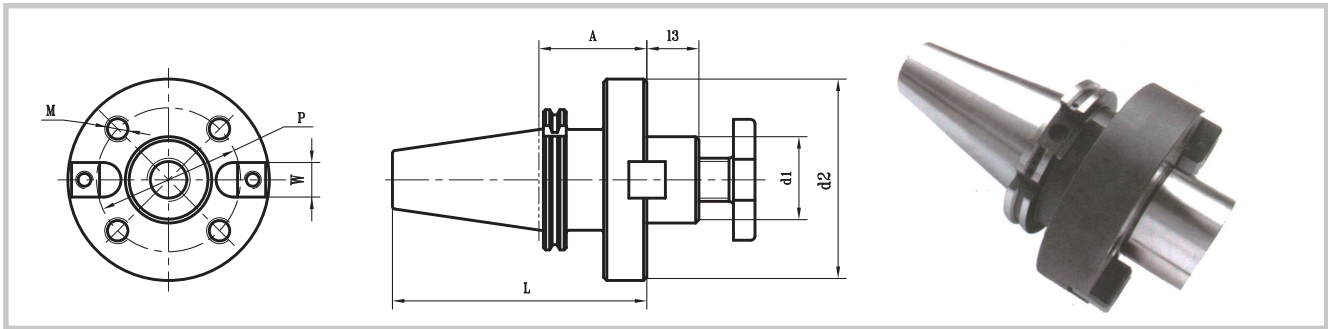


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端铣刀柄

Shell End Mill Arbors with enlarged contact diameter



No	GB Model	SK	d1	A	d2	l3	L	P	M	W	夹刀螺钉	十字形扳手	kg
540.0028.004	JT40-XD40-60P	40	40	60P	90	27	155.4	66.7	M12	16	M20	BS-40	3.1
540.0037.004	JT50-XD40-75P	50	40	75P	90	27	203.65	66.7	M12	16	M20	BS-40	5.7
540.0038.004	JT50-XD40-105P	50	40	105P	90	27	233.65	66.7	M12	16	M20	BS-40	7.2
540.0039.004	JT50-XD60-75P	50	60	75P	140	40	216.65	101.6	M16	25.4	—	—	10.2
540.0040.004	JT60-XD40-75P	60	40	75P	90	27	263.8	66.7	M12	16	M20	BS-40	12.3
540.0041.004	JT60-XD60-75P	60	60	75P	140	40	276.8	101.6	M16	25.4	—	—	16.9
540.0042.004	JT60-XD60-75S	60	60	75S	220	40	276.8	101.6+177.8	M16+M20	25.4	—	—	26.8

使用：用于夹持带有端面键槽的面铣刀。

Use: For clamping shell end mills and milling cutters with tenon drive.

设计：带有中心冷却功能，Φ40和Φ60两种规格需要4个或8个螺钉夹紧，刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping Φ40 and 60 with 4 or 8 threaded holes for holding cutters with tool holding according to DIN 2079.

说明：包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



4.16



4.21

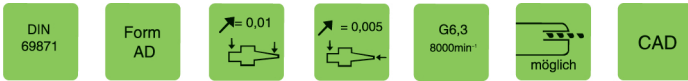
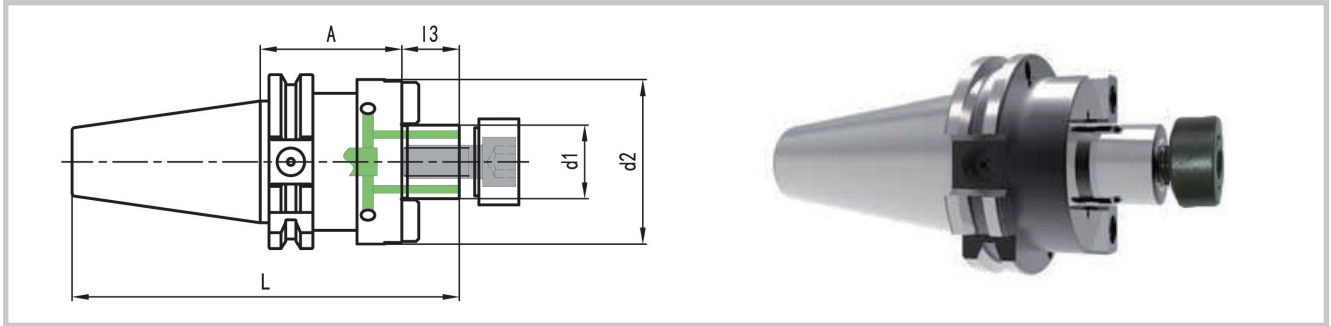


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## 端铣刀柄 (带内冷)

### Shell End Mill Arbors with enlarged contact diameter



No	GB Model	SK	d1	A	d2	l3	L	W	夹刀螺钉 GB/T70.1	垫片	kg
579.4205.292	JT40-XD16-35	40	16	35	40	17	120.4	8	M8(SW6)	—	1.0
579.4201.292	JT40-XD22-35	40	22	35	50	19	122.4	10	M10(SW8)	—	1.1
579.4202.292	JT40-XD27-35	40	27	35	60	21	124.4	12	M12(SW10)	DQ-D27	1.3
579.4203.292	JT40-XD32-50	40	32	50	80	24	142.4	14	M16(SW14)	DQ-D32	2.2
579.7201.291	JT50-XD22-35	50	22	35	50	19	155.65	10	M10(SW8)	—	2.9
579.7202.291	JT50-XD27-40	50	27	40	60	21	162.65	12	M12(SW10)	DQ-D27	3.2
579.7203.291	JT50-XD32-50	50	32	50	80	24	175.65	14	M16(SW14)	DQ-D32	4.0

使用: 用于夹持带有端面键槽的面铣刀。

Use For: clamping shell end mills and milling cutters with tenon drive.

设计: 带有中心冷却功能, 刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping  $\phi$  40 and 60 with 4 threaded holes for holding cutters with tool holding according to DIN 2079.

说明: 包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件

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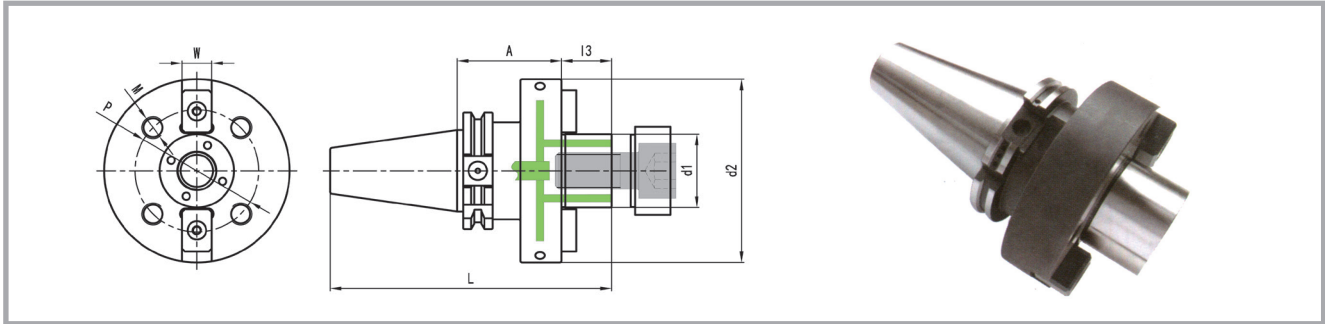
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端铣刀柄 (带内冷)

Shell End Mill Arbors with enlarged contact diameter



DIN 69871
Form A
 $\nabla = 0,01$ 
 $\nabla = 0,005$ 
G6,3 8000min<sup>-1</sup>
möglich
CAD

No	GB Model	SK	d1	A	d2	I3	L	P	M	W	夹刀螺钉 GB/T70.1	垫片	kg
579.4204.292	JT40-XD40-50P	40	40	50P	89	27	145.4	66.7	M12	16	M20(SW17)	DQ-D40	2.6
540.7037.004	JT50-XD40-75P	50	40	75P	90	27	203.65	66.7	M12	16	M20(SW17)	DQ-D40	5.7

使用: 用于夹持带有端面键槽的面铣刀。

Use: For clamping shell end mills and milling cutters with tenon drive.

设计: 带有中心冷却功能,  $\Phi 40$ 和 $\Phi 60$ 两种规格需要4个或8个螺钉夹紧, 刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping  $\Phi 40$  and  $\Phi 60$  with 4 or 8 threaded holes for holding cutters with tool holding according to DIN 2079.

说明: 包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件

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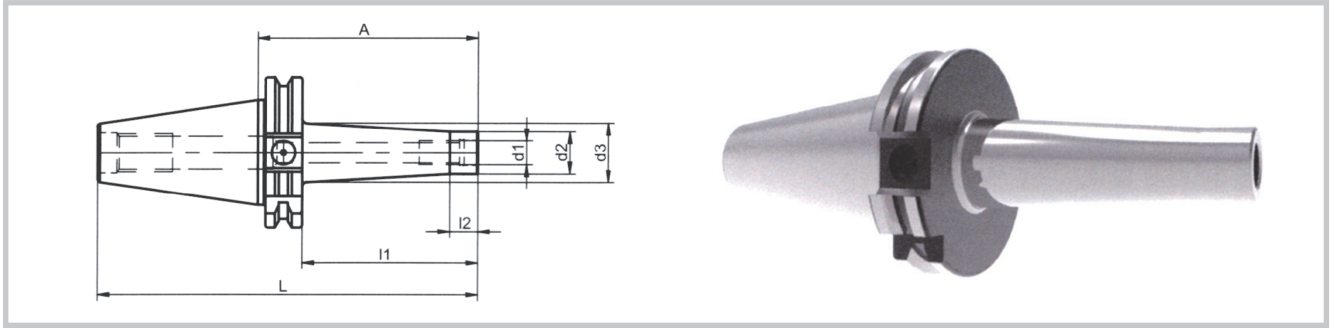
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## KFS模块式铣刀柄

Holders for screw-in milling cutters



No	GB Model	SK	d1	A	d2	d3	l1	l2	L	kg
571.0001.292	JT40-KFS8-44	40	M8	44	12.8	15	25.0	12	112.4	0.8
571.0011.292	JT40-KFS8-69	40	M8	69	12.8	23	50.0	12	137.4	0.9
571.0021.292	JT40-KFS8-94	40	M8	94	12.8	23	75.0	12	162.4	0.9
571.0002.292	JT40-KFS10-44	40	M10	44	17.8	20	25.0	12	112.4	0.9
571.0012.292	JT40-KFS10-69	40	M10	69	17.8	25	50.0	12	137.4	0.9
571.0022.292	JT40-KFS10-94	40	M10	94	17.8	25	75.0	12	162.4	1.0
571.0032.292	JT40-KFS10-119	40	M10	119	17.8	32	100.0	12	187.4	1.0
571.0042.292	JT40-KFS10-169	40	M10	169	17.8	35	150.0	12	237.4	1.1
571.0003.292	JT40-KFS12-44	40	M12	44	20.8	24	25.0	12	112.4	0.9
571.0013.292	JT40-KFS12-69	40	M12	69	20.8	28	50.0	12	137.4	1.0
571.0023.292	JT40-KFS12-94	40	M12	94	20.8	31	75.0	12	162.4	1.0
571.0033.292	JT40-KFS12-119	40	M12	119	20.8	33	100.0	12	187.4	1.1
571.0043.292	JT40-KFS12-169	40	M12	169	20.8	40	150.0	12	237.4	1.2
571.0004.292	JT40-KFS16-44	40	M16	44	28.8	-	25.0	-	112.4	0.9
571.0014.292	JT40-KFS16-69	40	M16	69	28.8	34	50.0	12	137.4	1.1
571.0024.292	JT40-KFS16-94	40	M16	94	28.8	34	75.0	12	162.4	1.2
571.0034.292	JT40-KFS16-119	40	M16	119	28.8	36	100.0	12	187.4	1.3
571.0044.292	JT40-KFS16-169	40	M16	169	28.8	42	150.0	12	237.4	1.6
571.0011.291	JT50-KFS8-69	50	M8	69	12.8	23	50.0	12	170.7	2.7
571.0012.291	JT50-KFS10-69	50	M10	69	17.8	25	50.0	12	170.7	2.7
571.0022.291	JT50-KFS10-94	50	M10	94	17.8	25	75.0	12	195.7	2.7
571.0032.291	JT50-KFS10-119	50	M10	119	17.8	32	100.0	12	220.7	2.8
571.0042.291	JT50-KFS10-169	50	M10	169	17.8	35	150.0	12	270.7	2.9
571.0013.291	JT50-KFS12-69	50	M12	69	20.8	28	50.0	12	170.7	2.7
571.0023.291	JT50-KFS12-94	50	M12	94	20.8	31	75.0	12	195.7	2.8
571.0033.291	JT50-KFS12-119	50	M12	119	20.8	33	100.0	12	220.7	2.9
571.0043.291	JT50-KFS12-169	50	M12	169	20.8	40	150.0	12	270.7	3.0
571.0014.291	JT50-KFS16-69	50	M16	69	28.8	34	50.0	12	170.7	2.9
571.0024.291	JT50-KFS16-94	50	M16	94	28.8	34	75.0	12	195.7	3.0
571.0034.291	JT50-KFS16-119	50	M16	119	28.8	36	100.0	12	220.7	3.1
571.0044.291	JT50-KFS16-169	50	M16	169	28.8	42	150.0	12	270.7	3.4

使用: 用于夹紧以螺纹连接的铣刀。  
备注: 其他型号和尺寸可按订货要求制作。

Use: For clamping screw-in milling cutters with thread.  
Note: Other designs and sizes are available on request.

### ACCESSORIES

配件



4.16

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带扁尾莫氏圆锥孔刀柄

Reduction Sleeves for morse taper with tang



DIN 69871
Form A
 $\nabla = 0,008$ 
G6,3 8000min<sup>-1</sup>
CAD

No	GB Model	SK	MK	D	A	d1	L	kg
454.0001.292	JT40-MK1-50	40	1	12.065	50	25	118.4	0.9
440.0002.050	JT40-MK1-120	40	1	12.065	120	25	188.4	1.2
454.0002.292	JT40-MK2-50	40	2	17.78	50	32	118.4	1.0
440.0004.050	JT40-MK2-120	40	2	17.78	120	32	188.4	1.4
454.0003.292	JT40-MK3-70	40	3	23.825	70	40	138.4	1.3
440.0006.050	JT40-MK3-135	40	3	23.825	135	40	203.4	1.8
454.0004.292	JT40-MK4-95	40	4	31.267	95	63	163.4	2.5
440.0008.050	JT40-MK4-165	40	4	31.267	165	63	233.4	4.0
454.0001.291	JT50-MK1-45	50	1	12.065	45	25	146.7	2.7
440.0010.050	JT50-MK1-120	50	1	12.065	120	25	221.7	3.0
454.0002.291	JT50-MK2-60	50	2	17.78	60	32	161.7	2.8
440.0012.050	JT50-MK2-135	50	2	17.78	135	32	236.7	3.3
454.0003.291	JT50-MK3-65	50	3	23.825	65	40	166.7	3.0
440.0014.050	JT50-MK3-150	50	3	23.825	150	40	251.7	3.8
454.0004.291	JT50-MK4-95	50	4	31.267	95	48	196.7	3.6
440.0016.050	JT50-MK4-180	50	4	31.267	180	48	281.7	4.7
454.0005.291	JT50-MK5-105	50	5	44.399	105	63	206.7	4.5
440.0018.050	JT50-MK5-210	50	5	44.399	210	63	311.7	6.8
440.0027.050	JT60-MK2-190	60	2	17.78	190	32	351.8	10.2
440.0019.050	JT60-MK3-190	60	3	23.825	190	40	351.8	10.8
440.0020.050	JT60-MK3-250	60	3	23.825	250	40	411.8	11.3
440.0021.050	JT60-MK4-210	60	4	31.267	210	50	371.8	11.9
440.0022.050	JT60-MK4-270	60	4	31.267	270	50	431.8	12.7
440.0023.050	JT60-MK5-240	60	5	44.399	240	63	401.8	14.1
440.0024.050	JT60-MK5-300	60	5	44.399	300	63	461.8	15.4
440.0025.050	JT60-MK6-170	60	6	63.348	170	90	331.8	16.0
440.0026.050	JT60-MK6-310	60	6	63.348	310	90	471.8	22.3

备注：其它型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES  
配件

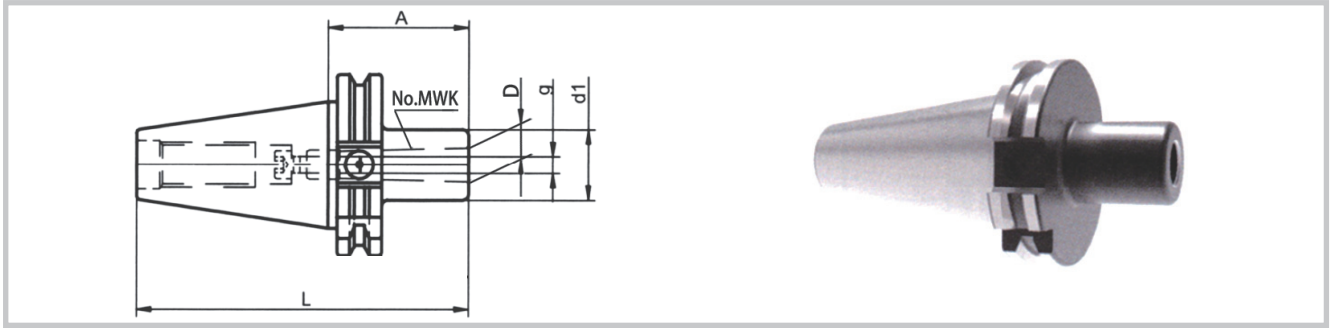


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## 无扁尾莫氏圆锥孔刀柄

### Reduction Sleeves for morse taper with thread



No	GB Model	SK	MWK	D	A	d1	L	g	kg
458.0001.292	JT40-MWK1-50	40	1	12.065	50	25	M6	118.4	0.9
458.0002.292	JT40-MWK2-50	40	2	17.78	50	32	M10	118.4	1.0
458.0003.292	JT40-MWK3-70	40	3	23.825	70	40	M12	138.4	1.3
440.0004.055	JT40-MWK4-95	40	4	31.267	95	63	M16	163.4	2.5
458.0001.291	JT50-MWK1-45	50	1	12.065	45	25	M6	146.65	2.7
458.0002.291	JT50-MWK2-60	50	2	17.78	60	32	M10	161.65	2.8
458.0003.291	JT50-MWK3-65	50	3	23.825	65	40	M12	166.65	3.0
440.0010.055	JT50-MWK4-70	50	4	31.267	70	63	M16	171.65	3.7
440.0008.055	JT50-MWK4-100	50	4	31.267	100	63	M16	201.65	4.4
440.0011.055	JT50-MWK5-100	50	5	44.399	100	78	M20	201.65	5.3
440.0009.055	JT50-MWK5-130	50	5	44.399	130	78	M20	231.65	6.3
440.0016.055	JT60-MWK2-100	60	2	17.78	100	32	M10	261.8	9.7
440.0012.055	JT60-MWK3-100	60	3	23.825	100	40	M12	261.8	10.0
440.0013.055	JT60-MWK4-100	60	4	31.267	100	63	M16	261.8	11.0
440.0014.055	JT60-MWK5-100	60	5	44.399	100	78	M20	261.8	12.0
440.0015.055	JT60-MWK6-150	60	6	63.348	150	90	M24	311.8	15.1

说明：包括紧固螺钉和螺纹挡环。

Standard Specification: Retaining screw and threaded ring included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



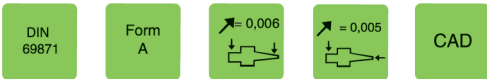
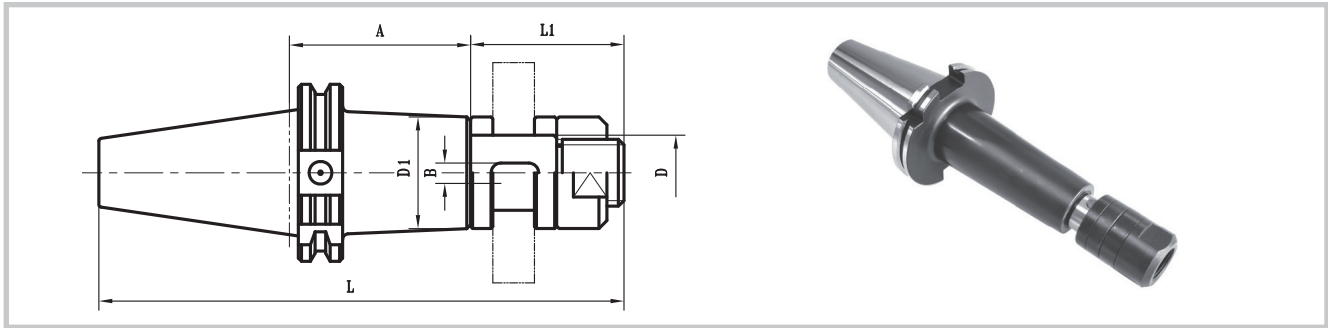
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三面刃铣刀柄  
Side milling Cutter Arbor



No	GB Model	SK	D	D1	A	L1	L	B	垫圈	三面刃铣刀直径	kg
440.0001.000	JT40-XS16-75	40	16	26	75	46	189.4	4	3J1-310-16	φ 50	1.2
440.0002.000	JT40-XS16-105	40	16	26	105	46	219.4	4	3J1-310-16	φ 50	1.3
440.0003.000	JT40-XS22-75	40	22	34	75	51	194.4	6	3J1-310-22	φ 63	1.5
440.0004.000	JT40-XS22-120	40	22	34	120	51	239.4	6	3J1-310-22	φ 63	1.8
440.0005.000	JT40-XS27-75	40	27	40	75	55	198.4	7	3J1-310-27	φ 80	1.8
440.0006.000	JT40-XS27-120	40	27	40	120	55	243.4	7	3J1-310-27	φ 80	2.2
440.0007.000	JT40-XS32-90	40	32	46	90	60	218.4	8	3J1-310-32	φ 100、φ 125	2.4
440.0008.000	JT50-XS16-90	50	16	26	90	46	237.65	4	3J1-310-16	φ 50	3.0
440.0009.000	JT50-XS16-120	50	16	26	120	46	267.65	4	3J1-310-16	φ 50	3.2
440.0010.000	JT50-XS22-90	50	22	34	90	51	242.65	6	3J1-310-22	φ 63	3.4
440.0011.000	JT50-XS22-135	50	22	34	135	51	287.65	6	3J1-310-22	φ 63	3.7
440.0012.000	JT50-XS27-90	50	27	40	90	55	246.65	7	3J1-310-27	φ 80	3.7
440.0013.000	JT50-XS27-135	50	27	40	135	55	291.65	7	3J1-310-27	φ 80	4.1
440.0014.000	JT50-XS32-90	50	32	46	90	60	251.65	8	3J1-310-32	φ 100、φ 125	4.1
440.0015.000	JT50-XS32-135	50	32	46	135	60	296.65	8	3J1-310-32	φ 100、φ 125	4.7
440.0016.000	JT50-XS40-90	50	40	55	90	66	257.65	10	3J1-310-40	φ 160、φ 200	4.9
440.0017.000	JT50-XS40-135	50	40	55	135	66	302.65	10	3J1-310-40	φ 160、φ 200	5.7
440.0090.000	JT50-XS50-90	50	50	68	90	85	276.65	12	3J1-310-50	φ 200、φ 250	6.6
440.0091.000	JT50-XS50-135	50	50	68	135	85	321.65	12	3J1-310-50	φ 200、φ 250	7.8
440.0018.000	JT60-XS40-135	60	40	55	135	66	362.8	10	3J1-310-40	φ 160、φ 200	12.3
440.0019.000	JT60-XS50-135	60	50	68	135	85	381.8	12	3J1-310-50	φ 200、φ 250	14.4
440.0020.000	JT60-XS60-135	60	60	84	135	105	401.8	14	3J1-310-60	φ 250、φ 315	17.9

注：垫圈单独订货时：成组供货，每组6个，芯轴直径为φ16~φ40的刀柄，垫圈厚度分别为3、5、7、8、10、12，  
芯轴直径为φ50~φ60的刀柄，垫圈厚度分别为4、6、8、10、12、15。

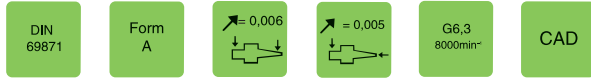
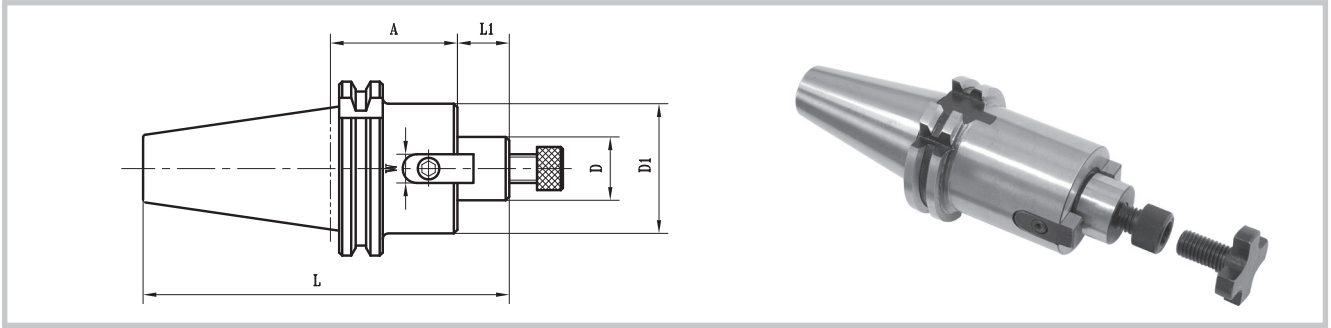
ACCESSORIES  
配件



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## 套式立铣刀柄 Shell End Mill Arbors



No	GB Model	SK	D	D1	A	L1	L	W	紧固螺钉	套式立铣刀直径	kg
440.0001.001	JT40-XM16-75	40	16	32	75	17	160.4	8	M8	φ 40	1.2
440.0002.001	JT40-XM16-120	40	16	32	120	17	205.4	8	M8	φ 40	1.5
440.0003.001	JT40-XM22-75	40	22	40	75	19	162.4	10	M10	φ 50	1.4
440.0004.001	JT40-XM22-120	40	22	40	120	19	207.4	10	M10	φ 50	1.9
440.0005.001	JT40-XM27-75	40	27	48	75	21	164.4	12	M12	φ 63, φ 80	1.7
440.0006.001	JT40-XM27-105	40	27	48	105	21	194.4	12	M12	φ 63, φ 80	2.1
440.0007.001	JT40-XM32-75	40	32	58	75	24	167.4	14	M16	φ 100	2.1
440.0008.001	JT50-XM16-75	50	16	32	75	17	193.65	8	M8	φ 40	3.0
440.0009.001	JT50-XM16-120	50	16	32	120	17	238.65	8	M8	φ 40	3.3
440.0010.001	JT50-XM22-75	50	22	40	75	19	195.65	10	M10	φ 50	3.2
440.0011.001	JT50-XM22-120	50	22	40	120	19	240.65	10	M10	φ 50	3.7
440.0012.001	JT50-XM27-75	50	27	48	75	21	197.65	12	M12	φ 63, φ 80	3.5
440.0013.001	JT50-XM27-105	50	27	48	105	21	227.65	12	M12	φ 63, φ 80	3.9
440.0014.001	JT50-XM32-75	50	32	58	75	24	200.65	14	M16	φ 100	3.9
440.0015.001	JT50-XM40-75	50	40	70	75	27	203.65	16	M20	φ 125	4.6
440.0016.001	JT50-XM50-75	50	50	90	75	30	206.65	18	M24	φ 160	5.9
440.0017.001	JT60-XM32-75	60	32	58	75	24	260.8	14	M16	φ 100	10.6
440.0018.001	JT60-XM40-90	60	40	70	90	27	278.8	16	M20	φ 125	11.7
440.0019.001	JT60-XM50-120	60	50	90	120	30	311.8	18	M24	φ 160	14.8

### ACCESSORIES

配件



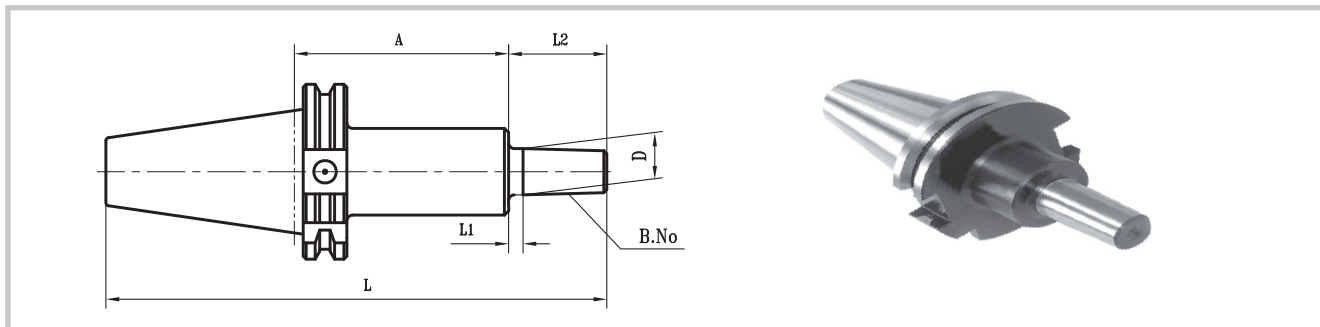
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钻夹头刀柄  
Drill Chuck Arbors

1.0  
JT



No	GB Model	SK	B.No	A	L1	L2	L	D	kg
440.0001.071	JT40-B10-45	40	B10	45	3.5	14.5	127.9	10.094	0.8
440.0002.071	JT40-B10-90	40	B10	90	3.5	14.5	172.9	10.094	0.9
440.0003.071	JT40-B12-45	40	B12	45	3.5	18.5	131.9	12.065	0.8
440.0004.071	JT40-B12-90	40	B12	90	3.5	18.5	176.9	12.065	0.9
440.0005.071	JT40-B16-45	40	B16	45	5	24	137.4	15.733	0.9
440.0006.071	JT40-B16-90	40	B16	90	5	24	182.4	15.733	0.9
440.0007.071	JT40-B18-45	40	B18	45	5	32	145.4	17.78	0.9
440.0008.071	JT40-B18-90	40	B18	90	5	32	190.4	17.78	1.0
440.0009.071	JT50-B10-45	50	B10	45	3.5	14.5	161.2	10.094	2.6
440.0010.071	JT50-B10-105	50	B10	105	3.5	14.5	221.2	10.094	2.7
440.0011.071	JT50-B12-45	50	B12	45	3.5	18.5	165.2	12.065	2.6
440.0012.071	JT50-B12-105	50	B12	105	3.5	18.5	225.2	12.065	2.7
440.0013.071	JT50-B16-45	50	B16	45	5	24	170.7	15.733	2.6
440.0014.071	JT50-B16-105	50	B16	105	5	24	230.7	15.733	2.7
440.0015.071	JT50-B18-45	50	B18	45	5	32	178.7	17.78	2.7
440.0016.071	JT50-B18-105	50	B18	105	5	32	238.7	17.78	2.8
440.0017.071	JT60-B16-105	60	B16	105	5	24	290.8	15.733	9.4
440.0018.071	JT60-B18-105	60	B18	105	5	32	298.8	17.78	9.4

ACCESSORIES  
配件

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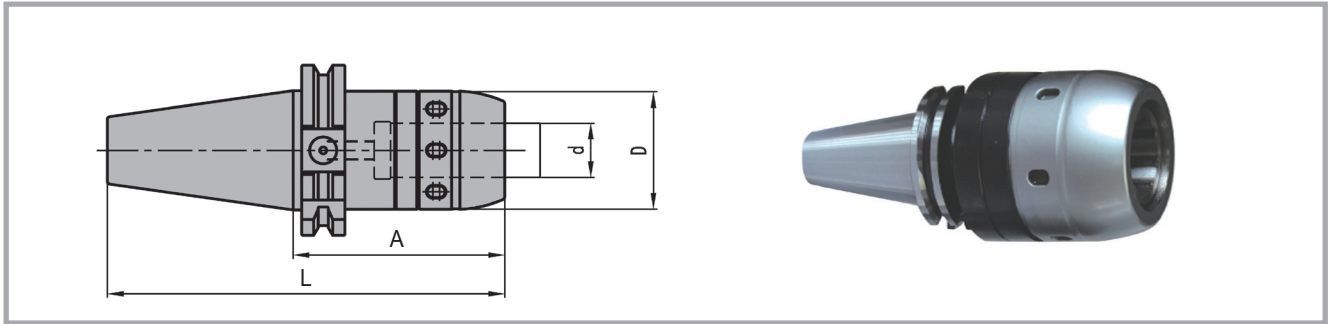
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4.14

## 强力铣夹头刀柄

### Strong Chuck Holder for Boring and Milling



No	GB Model	SK	d	A	L	D	配用扳手 GB4625	kg
740.0321.111	JT40-XJT20-110	40	20	110	178.4	58	55-62	2.7
740.0322.111	JT40-XJT20-160	40	20	160	228.4	58	55-62	3.7
740.0323.111	JT40-XJT20-200	40	20	200	268.4	58	55-62	4.6
740.0324.111	JT40-XJT25-110	40	25	110	178.4	65	68-72	3.2
740.0325.111	JT40-XJT25-160	40	25	160	228.4	65	68-72	4.5
740.0326.111	JT40-XJT25-200	40	25	200	268.4	65	68-72	5.5
740.0327.111	JT40-XJT32-110	40	32	110	178.4	73	68-72	3.8
740.0328.111	JT40-XJT32-160	40	32	160	228.4	73	68-72	5.5
740.0329.111	JT40-XJT32-200	40	32	200	268.4	73	68-72	6.8
740.0330.111	JT50-XJT20-110	50	20	110	211.7	58	55-62	4.5
740.0331.111	JT50-XJT20-160	50	20	160	261.7	58	55-62	5.5
740.0332.111	JT50-XJT20-200	50	20	200	301.7	58	55-62	6.4
740.0333.111	JT50-XJT25-110	50	25	110	211.7	65	68-72	5.0
740.0334.111	JT50-XJT25-160	50	25	160	261.7	65	68-72	6.3
740.0335.111	JT50-XJT25-200	50	25	200	301.7	65	68-72	7.3
740.0336.111	JT50-XJT32-110	50	32	110	211.7	73	68-72	5.6
740.0337.111	JT50-XJT32-160	50	32	160	261.7	73	68-72	7.2
740.0338.111	JT50-XJT32-200	50	32	200	301.7	73	68-72	8.5
740.0339.111	JT50-XJT40-120	50	40	120	221.7	88	78-85	7.4
740.0340.111	JT50-XJT40-160	50	40	160	261.7	88	78-85	9.3
740.0341.111	JT50-XJT40-200	50	40	200	301.7	88	78-85	11.2
740.0285.111	JT50-XJT50-120	50	50	120	221.7	105	100-110	9.5
740.0342.111	JT50-XJT50-140	50	50	140	241.7	105	100-110	10.8
740.0343.111	JT50-XJT50-160	50	50	160	261.7	105	100-110	12.2
740.0344.111	JT50-XJT50-200	50	50	200	301.7	105	100-110	14.9
740.0345.111	JT60-XJT20-130	60	20	130	291.8	58	55-62	11.6
740.0346.111	JT60-XJT20-160	60	20	160	321.8	58	55-62	12.2
740.0347.111	JT60-XJT20-200	60	20	200	361.8	58	55-62	13.0
740.0348.111	JT60-XJT25-130	60	25	130	291.8	65	68-72	12.1
740.0349.111	JT60-XJT25-160	60	25	160	321.8	65	68-72	12.9
740.0350.111	JT60-XJT25-200	60	25	200	361.8	65	68-72	14.0
740.0351.111	JT60-XJT32-130	60	32	130	291.8	73	68-72	12.9
740.0352.111	JT60-XJT32-160	60	32	160	321.8	73	68-72	13.9
740.0353.111	JT60-XJT32-200	60	32	200	361.8	73	68-72	15.2
740.0354.111	JT60-XJT40-130	60	40	130	291.8	88	78-85	14.5
740.0355.111	JT60-XJT40-160	60	40	160	321.8	88	78-85	16.0
740.0356.111	JT60-XJT40-200	60	40	200	361.8	88	78-85	17.9
740.0357.111	JT60-XJT50-140	60	50	140	301.8	105	100-110	17.5
740.0358.111	JT60-XJT50-160	60	50	160	321.8	105	100-110	18.8
740.0359.111	JT60-XJT50-200	60	50	200	361.8	105	100-110	21.6

注：配用扳手需要单独订货；

被夹持直柄刀具的柄部公差为h6；

使用配用扳手夹紧直柄刀具时，不允许使用套管等辅助工具；

3倍直径处径向跳动精度 $\leq 0.007\text{mm}$ 。

## ACCESSORIES

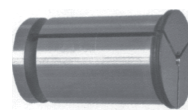
配件

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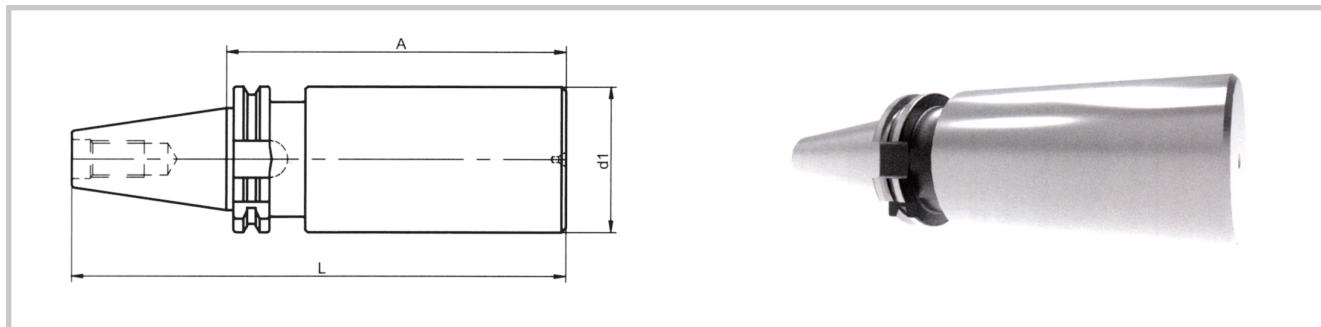


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4.14

## 毛坯刀柄 Tool Blanks



DIN  
69871

Form  
A

No	GB Model	SK	d1	A	L	kg
517.5001.292	JT40-MP63-150	40	63	150	218.4	4.0
517.6002.292	JT40-MP63-250	40	63	250	318.4	6.5
517.6002.291	JT50-MP63-315	50	63	315	416.65	9.8
517.5001.291	JT50-MP95-180	50	95	180	281.65	11.6
517.5002.291	JT50-MP95-315	50	95	315	416.65	19.1

使用: 用于制造特殊刀具刀体及工具系统产品。

设计: 锥柄为磨制成品, 尺寸符合柄部标准, 维氏硬度  
HV670±40 (近似于HRC58±2), 淬硬层在  
0.5mm以上。  
刀具端硬度HRC36-44。

材料: 合金钢

备注: 其他型号和尺寸可按订货要求制作。

Use: For own manufacture of special tools.

Design: The taper is finished with grinding, the dimensions are in accordance with the standard of the handle, HV670±40 (approximately HRC58±2), the hardened layer is above 0.5mm. Tool part is HRC40-46.

Material: Alloy steel.

Note: Other designs and sizes are available on request.

### ACCESSORIES 配件

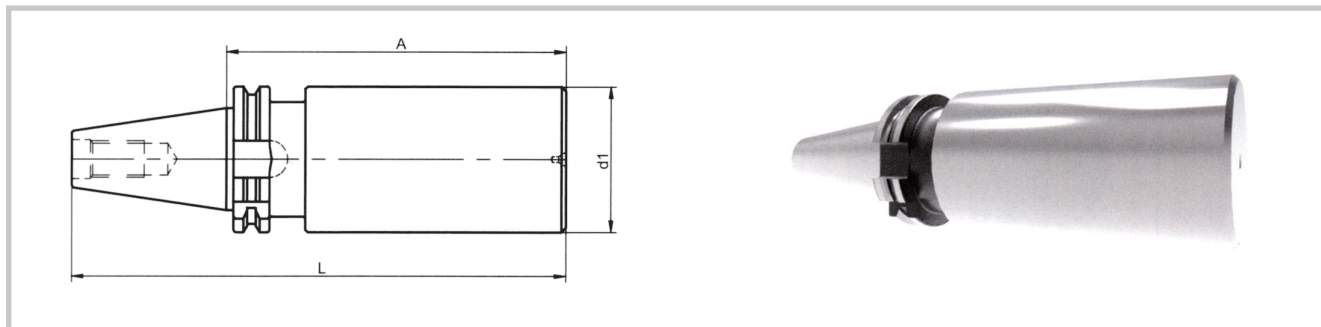
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## 毛坯刀柄

## Tool Blanks

DIN  
69871Form  
A

No	GB Model	SK	d1	A	L	kg
517.0002.292	JT40-MP63-250	40	63	250	318.4	6.5
517.0002.291	JT50-MP63-315	50	63	315	416.65	9.8

使用：用于制造工具系统产品。

设计：锥柄为磨制成品，尺寸符合柄部标准，维氏硬度

HV670±40（近似于HRC58±2）。

刀具端面抛光，未做淬硬处理，为原材料本身硬度。

材料：渗碳钢

备注：其他型号和尺寸可按订货要求制作。

Use: For own manufacture of special tools.

Design: Taper including flange hardened. Vickers hardness min. HV 670kp/mm<sup>2</sup> (min. HRC 58). Taper ground, shank not ground, prepared to be finished, unhardened.

Material: Alloyed case-hardened steel.

Note: Other designs and sizes are available on request.

## ACCESSORIES

## 配件

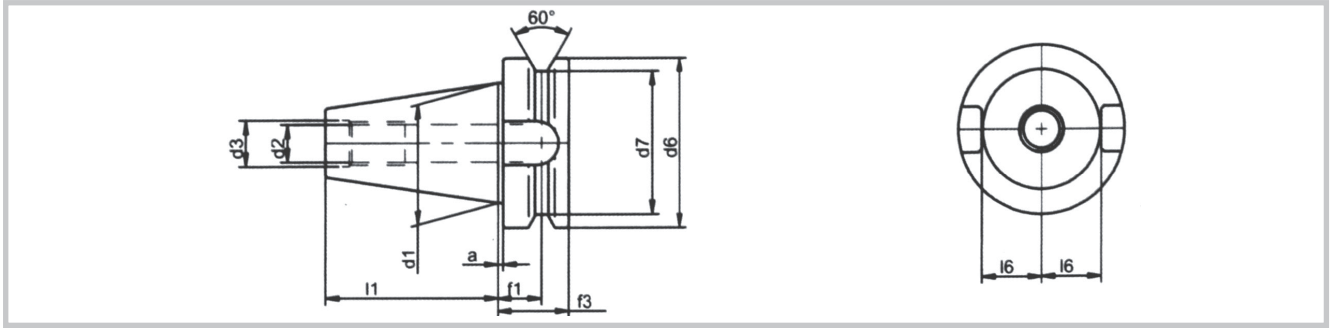


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## BT-FC双面定位精密锥柄

Double-sided positioning precision tool



Form AD

BT-FC	d1	d2	d3 H8	d6 h8	d7	l1 ± 0.15	l6 -0.2
30	31.75	M12	12.5	46	38	48.4	16.3
40	44.45	M16	17	63	53	65.4	22.6
50	69.85	M24	25	100	85	101.8	35.4

BT-FC	a	f1	f3
30	1	13.6	22
40	1	16.6	27
50	1.5	23.2	38

设计：硬度应满足较低的变形量，维氏度在 HV670±40 (近似于HRC 58±2)，淬硬（渗碳）层在0.5mm以上。锥度公差在AT3符合DIN 2080-1。

材料：一般要求：符合硬度要求的合金钢材料并且能承受扭矩980N/MM<sup>2</sup>

说明：价格和交付情况如有变化会在详单上实时变更。制造商保留对技术修改的权力。单位以mm。

Design : Hardened by means of a special low-distortion hardening process. Vickers hardness 670±40HV30 (HRC58±2). Hardness depth Eht=min0.5mm Taper angle tolerance quality AT 3 according to DIN 2080-1. For details of concentricity of steep taper to tool holder, refer to appropriate page of catalogue.

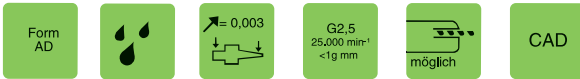
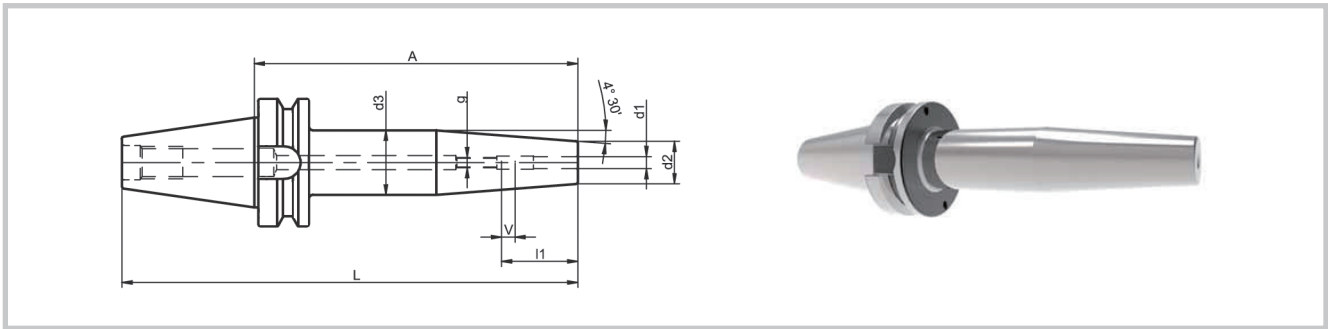
Material: If there is no other specification :Case-hardened alloy steel with a core tensile strength after case hardening of min.980N/MM<sup>2</sup>.

Standard Specification: Prices and delivery conditions are shown in the corresponding price list valid at the time in question. Manufacturer reserves the right to make technical modifications. All dimensions in mm.



热装夹头刀柄 (标准型)

i-tec® Shrink-fit Chucks standard version



No	GB Model	BT-FC	d1	A	d2	d3	l1	g	L	v	Kg
311.6101.307	BT-FC 40-RZ6-90	40	6	90	21	31	36	M5	155.4	10	1.3
311.6151.307	BT-FC 40-RZ6-160	40	6	160	21	32	36	M5	225.4	10	1.7
311.6102.307	BT-FC 40-RZ8-90	40	8	90	21	31	36	M6	155.4	10	1.3
311.6152.307	BT-FC 40-RZ8-160	40	8	160	21	32	36	M6	225.4	10	1.7
311.6103.307	BT-FC 40-RZ10-90	40	10	90	24	34	41	M8 x 1	155.4	10	1.4
311.6153.307	BT-FC 40-RZ10-160	40	10	160	24	34	41	M8 x 1	225.4	10	1.8
311.6104.307	BT-FC 40-RZ12-90	40	12	90	24	34	47	M10 x 1	155.4	10	1.4
311.6154.307	BT-FC 40-RZ12-160	40	12	160	24	34	47	M10 x 1	225.4	10	1.8
311.6105.307	BT-FC 40-RZ14-90	40	14	90	27	36	47	M10 x 1	155.4	10	1.4
311.6155.307	BT-FC 40-RZ14-160	40	14	160	27	36	47	M10 x 1	225.4	10	1.9
311.6106.307	BT-FC 40-RZ16-90	40	16	90	27	36	50	M12 x 1	155.4	10	1.4
311.6156.307	BT-FC 40-RZ16-160	40	16	160	27	36	50	M12 x 1	225.4	10	1.9
311.6107.307	BT-FC 40-RZ18-90	40	18	90	33	43	50	M12 x 1	155.4	10	1.6
311.6157.307	BT-FC 40-RZ18-160	40	18	160	33	43	50	M12 x 1	225.4	10	2.3
311.6108.307	BT-FC 40-RZ20-90	40	20	90	33	43	52	M16 x 1	155.4	10	1.6
311.6158.307	BT-FC 40-RZ20-160	40	20	160	33	43	52	M16 x 1	225.4	10	2.3
311.6109.307	BT-FC 40-RZ25-100	40	25	100	44	48	58	M16 x 1	165.4	10	1.9
311.6159.307	BT-FC 40-RZ25-160	40	25	160	44	53	58	M16 x 1	225.4	10	3.0
311.6101.308	BT-FC 50-RZ6-100	50	6	100	21	31	36	M5	201.8	10	3.9
311.6151.308	BT-FC 50-RZ6-160	50	6	160	21	32	36	M5	261.8	10	4.3
311.6102.308	BT-FC 50-RZ8-100	50	8	100	21	31	36	M6	201.8	10	3.9
311.6152.308	BT-FC 50-RZ8-160	50	8	160	21	32	36	M6	261.8	10	4.3
311.6103.308	BT-FC 50-RZ10-100	50	10	100	24	34	41	M8 x 1	201.8	10	4.0
311.6153.308	BT-FC 50-RZ10-160	50	10	160	24	34	41	M8 x 1	261.8	10	4.4
311.6104.308	BT-FC 50-RZ12-100	50	12	100	24	34	47	M10 x 1	201.8	10	4.0
311.6154.308	BT-FC 50-RZ12-160	50	12	160	24	34	47	M10 x 1	261.8	10	4.4
311.6105.308	BT-FC 50-RZ14-100	50	14	100	27	37	47	M10 x 1	201.8	10	4.1
311.6155.308	BT-FC 50-RZ14-160	50	14	160	27	36	47	M10 x 1	261.8	10	4.5
311.6106.308	BT-FC 50-RZ16-100	50	16	100	27	37	50	M12 x 1	201.8	10	4.1
311.6156.308	BT-FC 50-RZ16-160	50	16	160	27	36	50	M12 x 1	261.8	10	4.5
311.6107.308	BT-FC 50-RZ18-100	50	18	100	33	43	50	M12 x 1	201.8	10	4.2
311.6157.308	BT-FC 50-RZ18-160	50	18	160	33	44	50	M12 x 1	261.8	10	4.9
311.6108.308	BT-FC 50-RZ20-100	50	20	100	33	43	52	M16 x 1	201.8	10	4.2
311.6158.308	BT-FC 50-RZ20-160	50	20	160	33	44	52	M16 x 1	261.8	10	4.9
311.6109.308	BT-FC 50-RZ25-120	50	25	120	44	57	58	M16 x 1	221.8	10	5.1
311.6159.308	BT-FC 50-RZ25-160	50	25	160	44	53	58	M16 x 1	261.8	10	5.5
311.6110.308	BT-FC 50-RZ32-120	50	32	120	44	57	61	M16 x 1	221.8	10	5.1
311.6160.308	BT-FC 50-RZ32-160	50	32	160	44	53	61	M16 x 1	261.8	10	5.5

设计：请使用柄部直径公差h6级的硬质合金刀具。

Design: The clamping diameter is designed for a cemented carbide shank tolerance of h6.

说明：不包括调整长度的调整螺钉。

Standard Specification: Adjusting screw for length adjustment is not included.

备注：1、其他型号和尺寸可按订货要求制作。

Note: 1. Other designs and sizes are available on request.

2、装夹刀具的刀柄夹紧长度必须保证1~v尺寸，否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。

2. Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.

3、建议使用专用热装机装卸刀具。

3. Special shrinking devices are recommended for tool mounting and dismantling.

## ACCESSORIES

配件



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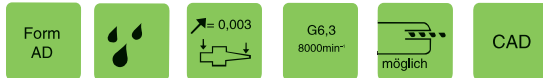
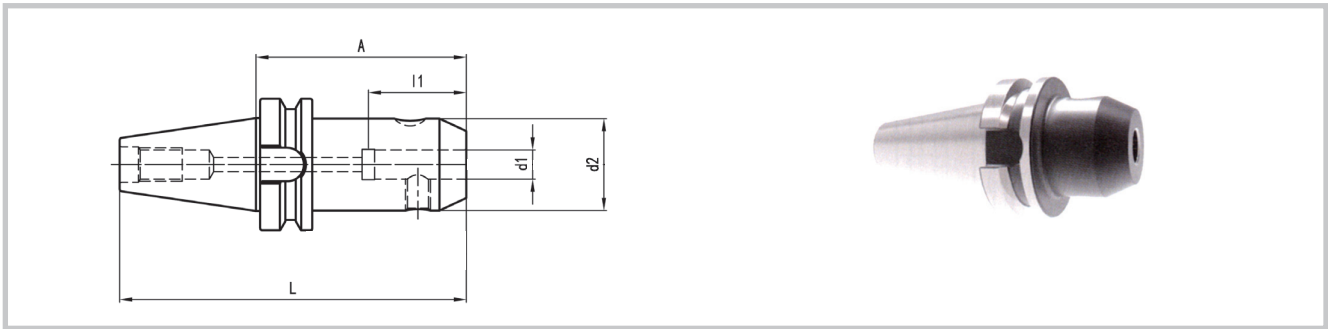


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削平型直柄立铣刀刀柄 (威尔顿型)

Reduction Sleeves for Straight Shanks with lateral driving surface (Weldon)



No	GB Model	BT-FC	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
420.0011.307	BT-FC 40-XP6-50	40	6	50	25	35	115.4	+0.005	M6X10	1.0
420.0012.307	BT-FC 40-XP8-50	40	8	50	28	35	115.4	+0.005	M8X10	1.1
420.0003.307	BT-FC 40-XP10-63	40	10	63	35	39	128.4	+0.005	M10X12	1.2
420.0004.307	BT-FC 40-XP12-63	40	12	63	42	44	128.4	+0.005	M12X16	1.3
420.0005.307	BT-FC 40-XP16-63	40	16	63	48	47	128.4	+0.005	M14X16	1.4
420.0006.307	BT-FC 40-XP20-63	40	20	63	52	49	128.4	+0.007	M16X16	1.5
420.0007.307	BT-FC 40-XP25-90	40	25	90	65	54	155.4	+0.007	M18X2X20	2.4
420.0008.307	BT-FC 40-XP32-100	40	32	100	72	58	165.4	+0.007	M20X2X20	3.1
420.0011.308	BT-FC 50-XP6-63	50	6	63	25	35	164.8	+0.005	M6X10	3.7
420.0012.308	BT-FC 50-XP8-63	50	8	63	28	35	164.8	+0.005	M8X10	3.7
420.0013.308	BT-FC 50-XP10-63	50	10	63	35	39	164.8	+0.005	M10X12	3.8
420.0004.308	BT-FC 50-XP12-80	50	12	80	42	44	181.8	+0.005	M12X16	4.0
420.0005.308	BT-FC 50-XP16-80	50	16	80	48	47	181.8	+0.005	M14X16	4.1
420.0006.308	BT-FC 50-XP20-80	50	20	80	52	49	181.8	+0.007	M16X16	4.2
420.0007.308	BT-FC 50-XP25-100	50	25	100	65	54	201.8	+0.007	M18X2X20	5.0
420.0018.308	BT-FC 50-XP32-105	50	32	105	72	58	206.8	+0.007	M20X2X20	5.5

使用: 按DIN 1835 B型 (威尔顿型) 和DIN 6535 HB型夹持直柄铣刀:

Use: For holding shank tools with lateral driving surface, DIN 1835 type B and DIN 6535 type HB.

说明: 包括配好的夹紧螺钉, 从d1=25mm的孔起提供2个紧固螺钉。

Standard Specification: With clamping screw. From location hole d1 = 25mm 2 clamping screws are included.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

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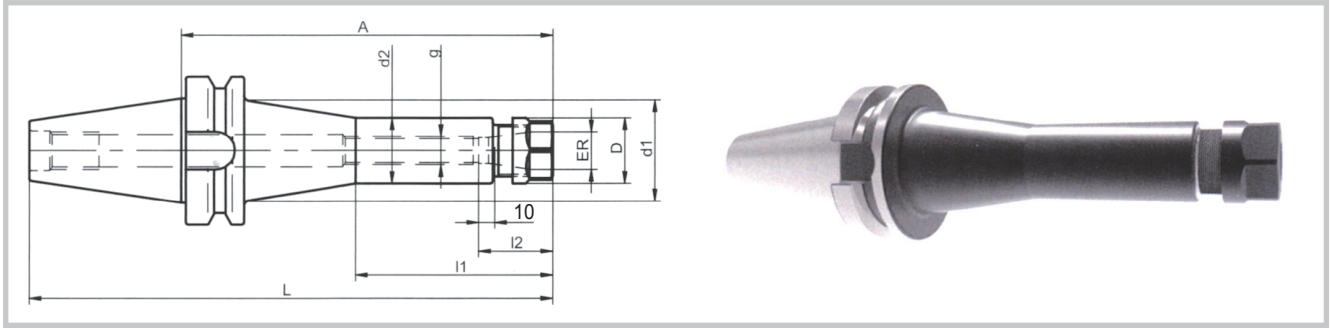


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## ER/ESX ER-16弹簧夹头刀柄 (带调整螺钉孔) Collet Chucks ER/ESX 16 with internal thread



No	GB Model	BT-FC	ER	A	d1	d2	D	l1	l2	g	L	kg
698.0001.307	BT-FC 40-ER16-63	40	ER16(0.5-10)	63	-	28	28	-	27	M12	128.4	1.1
698.6002.307	BT-FC 40-ER16-100	40	ER16(0.5-10)	100	-	28	28	-	27	M12	165.4	1.3
698.6003.307	BT-FC 40-ER16-160	40	ER16(0.5-10)	160	46	28	28	85	27	M12	225.4	1.5
698.0001.308	BT-FC 50-ER16-100	50	ER16(0.5-10)	100	-	28	28	-	27	M12	201.8	3.9
698.6002.308	BT-FC 50-ER16-160	50	ER16(0.5-10)	160	78	28	28	85	27	M12	261.8	4.1

使用：用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HBHE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明：夹头包括夹紧螺母。

Standard Specification: Collet chuck including clamping nut.

备注：弹簧夹头配有标准调整螺钉便于调节；其他型号和尺寸可按订货要求制作。

Note: Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

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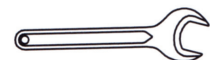
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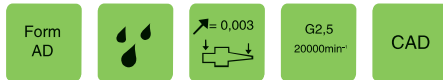
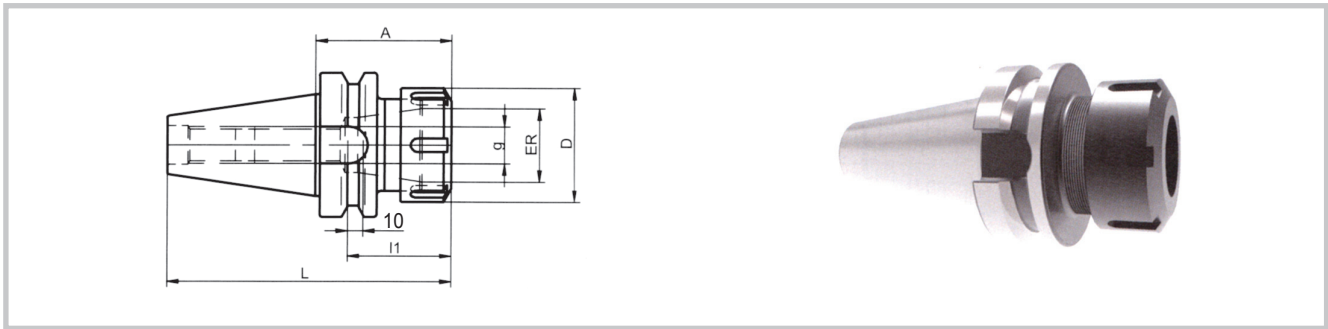


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ER/ESX ER-25/32弹簧夹头刀柄 (带调整螺钉孔)  
Collet Chucks ER/ESX 25/32 with internal thread



No	GB Model	BT-FC	ER	A	D	l1	g	L	kg
697.0003.307	BT-FC 40-ER25-60	40	ER25(1-16)	60	42	43	M16	135.4	1.4
697.6033.307	BT-FC 40-ER25-100	40	ER25(1-16)	100	42	43	M16	165.4	1.7
697.6043.307	BT-FC 40-ER25-160	40	ER25(1-16)	160	42	43	M16	225.4	2.3
697.0001.307	BT-FC 40-ER32-60	40	ER32(2-20)	60	50	47	M16	135.4	1.6
697.6031.307	BT-FC 40-ER32-100	40	ER32(2-20)	100	50	47	M16	165.4	2.0
697.6041.307	BT-FC 40-ER32-160	40	ER32(2-20)	160	50	47	M16	225.4	2.8
697.0003.308	BT-FC 50-ER25-70	50	ER25(1-16)	70	42	43	M16	171.8	3.9
640.0361.040	BT-FC 50-ER25-100	50	ER25(1-16)	100	42	43	M16	201.8	4.2
640.0363.040	BT-FC 50-ER25-160	50	ER25(1-16)	160	42	43	M16	261.8	4.8
697.0001.308	BT-FC 50-ER32-70	50	ER32(2-20)	70	50	47	M16	171.8	4.0
640.0362.040	BT-FC 50-ER32-100	50	ER32(2-20)	100	50	47	M16	201.8	4.5
640.0364.040	BT-FC 50-ER32-160	50	ER32(2-20)	160	50	47	M16	261.8	5.3

使用: 用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型的直柄刀具。

说明: 夹头包括夹紧螺母。

备注: 弹簧夹头配有标准调整螺钉便于调节; 其他型号和尺寸可按订货要求制作。

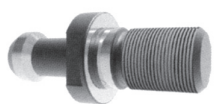
Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

Standard Specification: Collet chuck including clamping nut.

Note: Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

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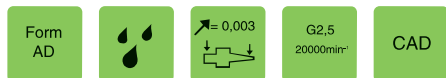
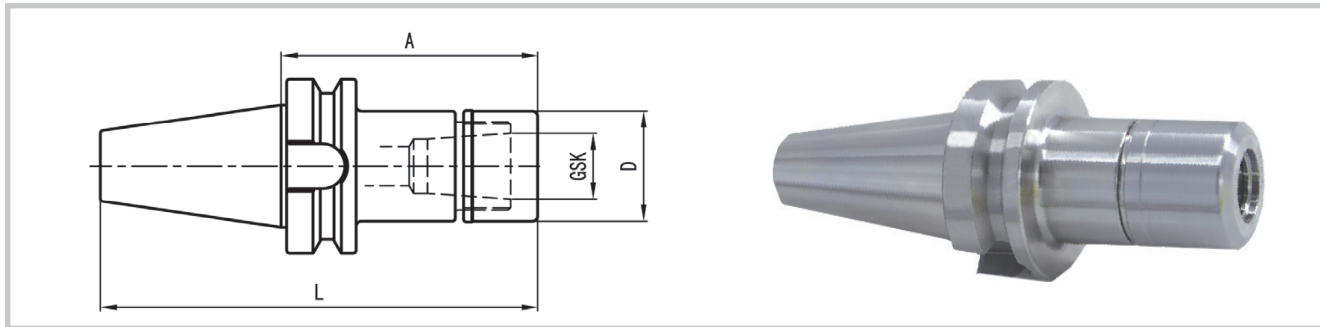


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## GSK高精度弹簧夹头刀柄 Collet Chucks GSK6/10/16/20/25



No	GB Model	BT-FC	GSK	A	D	L	Kg
440.0104.042	BT-FC 40-GSK6-63	40	GSK6 ( 3-6 )	63	19.5	128.4	1.0
440.0105.042	BT-FC 40-GSK6-100	40	GSK6 ( 3-6 )	100	19.5	165.4	1.1
440.0106.042	BT-FC 40-GSK10-63	40	GSK10 ( 2-10 )	63	27.5	128.4	1.1
440.0107.042	BT-FC 40-GSK10-100	40	GSK10 ( 2-10 )	100	27.5	165.4	1.3
440.0108.042	BT-FC 40-GSK10-160	40	GSK10 ( 2-10 )	160	27.5	225.4	1.5
440.0182.042	BT-FC 40-GSK13-70	40	GSK13 ( 3-13 )	70	35	135.4	1.3
440.0183.042	BT-FC 40-GSK13-100	40	GSK13 ( 3-13 )	100	35	165.4	1.5
440.0184.042	BT-FC 40-GSK13-160	40	GSK13 ( 3-13 )	160	35	225.4	1.9
440.0109.042	BT-FC 40-GSK16-70	40	GSK16 ( 3-16 )	70	40	135.4	1.4
440.0110.042	BT-FC 40-GSK16-100	40	GSK16 ( 3-16 )	100	40	165.4	1.6
440.0111.042	BT-FC 40-GSK16-160	40	GSK16 ( 3-16 )	160	40	225.4	2.2
440.0112.042	BT-FC 40-GSK20-70	40	GSK20 ( 4-20 )	70	48	135.4	1.5
440.0113.042	BT-FC 40-GSK20-100	40	GSK20 ( 4-20 )	100	48	165.4	1.9
440.0114.042	BT-FC 40-GSK20-160	40	GSK20 ( 4-20 )	160	48	225.4	2.7
440.0115.042	BT-FC 40-GSK25-80	40	GSK25 ( 3-25 )	80	55	145.4	1.9
440.0116.042	BT-FC 40-GSK25-100	40	GSK25 ( 3-25 )	100	55	165.4	2.2
440.0117.042	BT-FC 40-GSK25-160	40	GSK25 ( 3-25 )	160	55	225.4	3.2
440.0118.042	BT-FC 50-GSK10-100	50	GSK10 ( 2-10 )	100	27.5	201.8	3.9
440.0119.042	BT-FC 50-GSK10-160	50	GSK10 ( 2-10 )	160	27.5	261.8	4.1
440.0185.042	BT-FC 50-GSK13-70	50	GSK13 ( 3-13 )	70	35	171.8	3.8
440.0186.042	BT-FC 50-GSK13-100	50	GSK13 ( 3-13 )	100	35	201.8	4.0
440.0187.042	BT-FC 50-GSK13-160	50	GSK13 ( 3-13 )	160	35	261.8	4.4
440.0120.042	BT-FC 50-GSK16-70	50	GSK16 ( 3-16 )	70	40	171.8	3.9
440.0121.042	BT-FC 50-GSK16-100	50	GSK16 ( 3-16 )	100	40	201.8	4.1
440.0122.042	BT-FC 50-GSK16-160	50	GSK16 ( 3-16 )	160	40	261.8	4.7
440.0123.042	BT-FC 50-GSK20-70	50	GSK20 ( 4-20 )	70	48	171.8	4.0
440.0124.042	BT-FC 50-GSK20-100	50	GSK20 ( 4-20 )	100	48	201.8	4.4
440.0125.042	BT-FC 50-GSK20-160	50	GSK20 ( 4-20 )	160	48	261.8	5.2
440.0126.042	BT-FC 50-GSK25-80	50	GSK25 ( 3-25 )	80	55	181.8	4.3
440.0127.042	BT-FC 50-GSK25-100	50	GSK25 ( 3-25 )	100	55	201.8	4.6
440.0128.042	BT-FC 50-GSK25-160	50	GSK25 ( 3-25 )	160	55	261.8	5.6

使用: 用于夹持按DIN 1835 A型、B型、E型以及DIN 6535 HA型、HB型和HE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明: 夹头包括夹紧螺母, 标准配置夹紧螺母为国产配件, 如需进口配件需客户另外订购

Standard Specification: Collet chuck including clamping nut.

备注: 其他型号和尺寸可按订货要求制作。括号中数字仅表示夹持刀具柄部尺寸范围, 不体现在产品型号中。

Note: Other designs and sizes are available on request.

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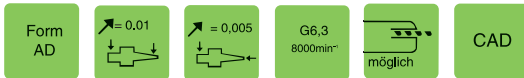
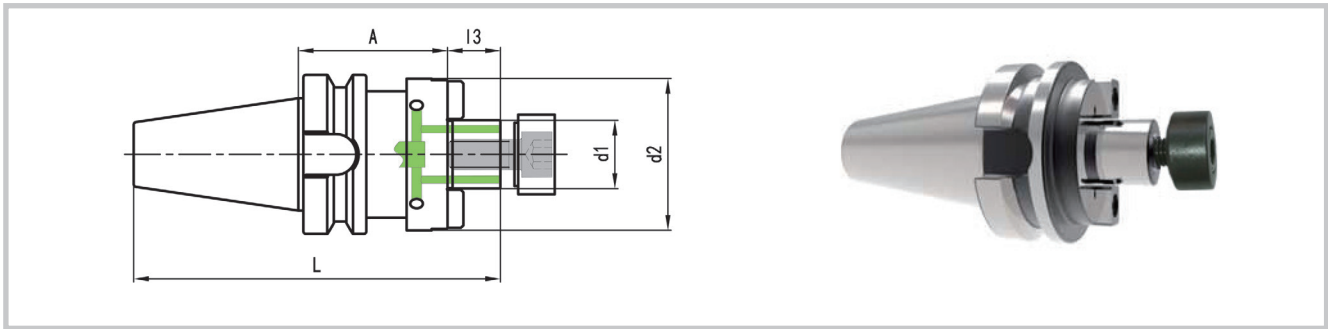
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4.12

端铣刀柄 (带内冷)

Shell End Mill Arbors with enlarged contact diameter



No	GB Model	BT-FC	d1	A	d2	I3	L	W	夹刀螺钉 GB/T70.1	垫片	kg
579.4005.307	BT-FC 40-XD16-35	40	16	35	40	17	117.4	8	M8(SW6)	—	1.1
579.4001.307	BT-FC 40-XD22-35	40	22	35	50	19	119.4	10	M10(SW8)	—	1.2
579.4002.307	BT-FC 40-XD27-35	40	27	35	60	21	121.4	12	M12(SW10)	DQ-D27	1.2
579.4003.307	BT-FC 40-XD32-50	40	32	50	80	24	139.4	14	M16(SW14)	DQ-D32	2.0
579.4001.308	BT-FC 50-XD22-50	50	22	50	50	19	170.8	10	M10(SW8)	—	3.8
579.4002.308	BT-FC 50-XD27-50	50	27	50	60	21	172.8	12	M12(SW10)	DQ-D27	4.0
579.4003.308	BT-FC 50-XD32-50	50	32	50	80	24	175.8	14	M16(SW14)	DQ-D32	4.2

使用: 用于夹持带有端面键槽的面铣刀

Use For: clamping shell end mills and milling cutters with tenon drive.

设计: 带有中心冷却功能, 刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping  $\phi$  40 and 60 with 4 threaded holes for holding cutters with tool holding according to DIN 2079.

说明: 包括紧固螺钉和传动键。

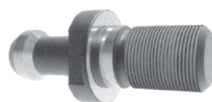
Standard Specification: Cutter retaining screw and tightened drive keys included

备注: 按订单生产。

Note: Other designs and sizes are available on request.

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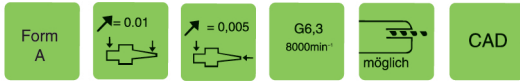
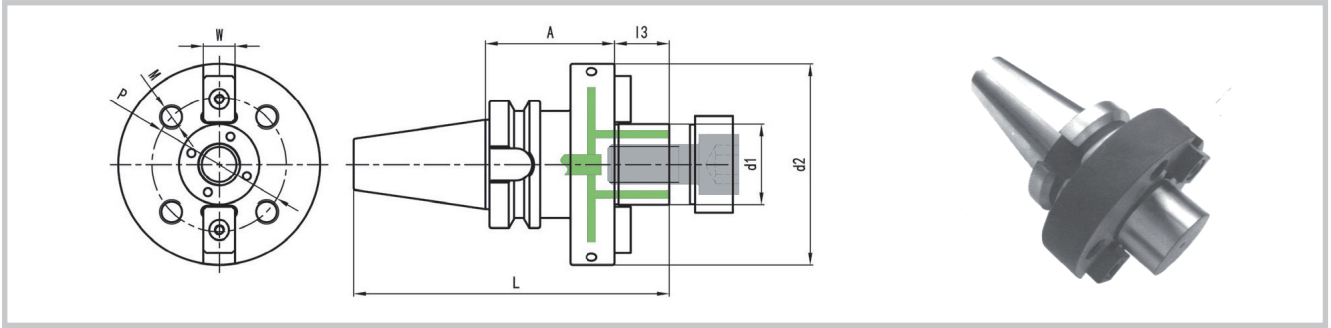
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## 端铣刀柄（带内冷）

### Shell End Mill Arbors with enlarged contact diameter



No	GB Model	BT-FC	d1	A	d2	I3	L	P	M	W	夹刀螺钉 GB/T70.1	垫片	kg
579.4004.307	BT-FC 40-XD40-50P	40	40	50P	89	27	142.4	66.7	M12	16	M20(SW17)	DQ-D40	2.4
579.4004.308	BT-FC 50-XD40-55P	50	40	55P	90	27	183.8	66.7	M12	16	M20(SW17)	DQ-D40	4.7

使用：用于夹持带有端面键槽的面铣刀。

Use: For clamping shell end mills and milling cutters with tenon drive.

设计：带有中心冷却功能，Φ40和Φ60两种规格需要4个或8个螺钉夹紧，刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping Φ40 and 60 with 4 or 8 threaded holes for holding cutters with tool holding according to DIN 2079.

说明：包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

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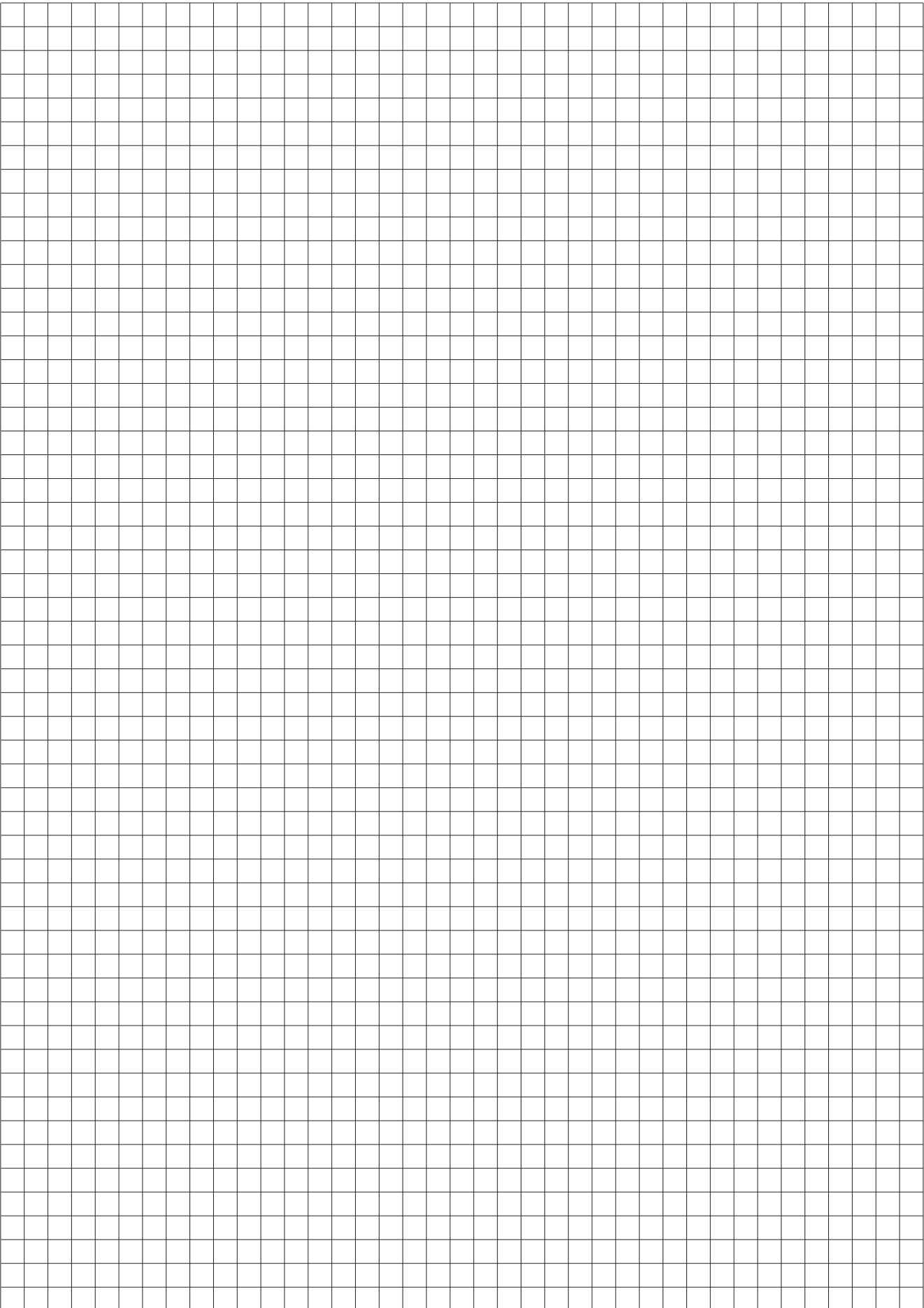


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4.21





## 2.0 HSK-Hollow Taper Shanks

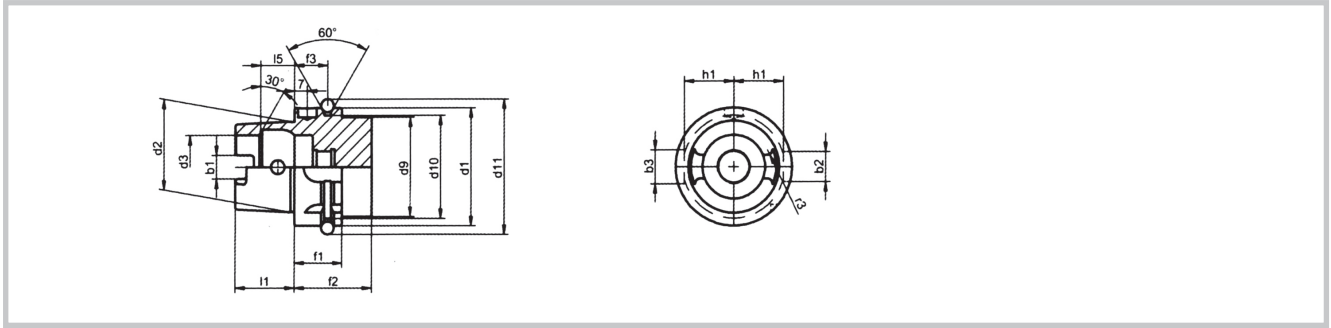
**HSK 精密刀柄**

**HSK-Hollow Taper Shanks**



	HSK-A型精密刀柄	HSK-Hollow Taper Shanks to ISO 12164-1
2.03-2.08	i-tec® 热装夹头刀柄	i-tec® Shrink-fit Chucks
2.09	丝锥快换夹头刀柄	Quick Change Tapping Chucks
2.10-2.15	削平型直柄立铣刀刀柄	Reduction Sleeves for Straight Shanks
2.16	削平型浅孔钻头刀柄	Indexable Drill Holders
2.17-2.18	液压夹头刀柄	Hydraulic Expansion Chucks
2.19-2.24	弹簧夹头刀柄	Collet Chucks
2.25-2.26	套式铣刀刀柄 (带平键和传动环)	Shell End Mill Arbors
2.27-2.29	端铣刀柄	Shell End Mill Arbors with enlarged contact diameter
2.30	KFS模块式铣刀柄	Holdings
2.31	带扁尾莫氏圆锥孔刀柄	Reduction Sleeves for morse taper with tang
2.32	无扁尾莫氏圆锥孔刀柄	Reduction Sleeves for morse taper with thread
2.33-2.34	毛坯刀柄	Tool Blanks

## HSK-A型锥柄 HSK-A Tool Holders



ISO  
12164-1

DIN  
69893-1

Form  
A

HSK-A	b1 ± 0.04	b2 H10	b3 H10	d1 h10	d2	d3 H10	d9 max.	d10 -0.1
32	7.05	7	9	32	24	17	26	26.5
40	8.05	9	11	40	30	21	34	34.8
50	10.54	12	14	50	38	26	42	43
63	12.54	16	18	63	48	34	53	55
80	16.04	18	20	80	60	42	67	70
100	20.02	20	22	100	75	53	85	92

HSK-A	d11 -0.1	f1 -0.1	f2 min.	f3 ± 0.1	h1 -0.2	l1 -0.2	l5 JS10	r3 ± 0.05
32	37	20	35	16	13	16	8.92	1.38
40	45	20	35	16	17	20	11.42	1.88
50	59.3	26	42	18	21	25	14.13	2.38
63	72.3	26	42	18	26.5	32	18.13	2.88
80	88.8	26	42	18	34	40	22.85	3.88
100	109.75	29	45	20	44	50	28.56	4.88

设计: HSK 锥柄符合ISO 12164-1 和 DIN 69893-1, 其中A型带有数据孔。一般要求: 硬度应满足较低的变形量, 维氏硬度在HV670 ± 40(近似于HRC58 ± 2), 淬硬(渗碳)层0.3-0.6mm。对于HSK柄部同轴度等参数参见于上表。

材料: 一般要求: 符合硬度要求的合金钢材料, 并且能承受扭矩980N/mm<sup>2</sup>。

说明: 价格和交付情况如有变化会在详单上实时变更。制造商保留对技术修改的权力。单位以mm。柄部冷却管需另行定制。

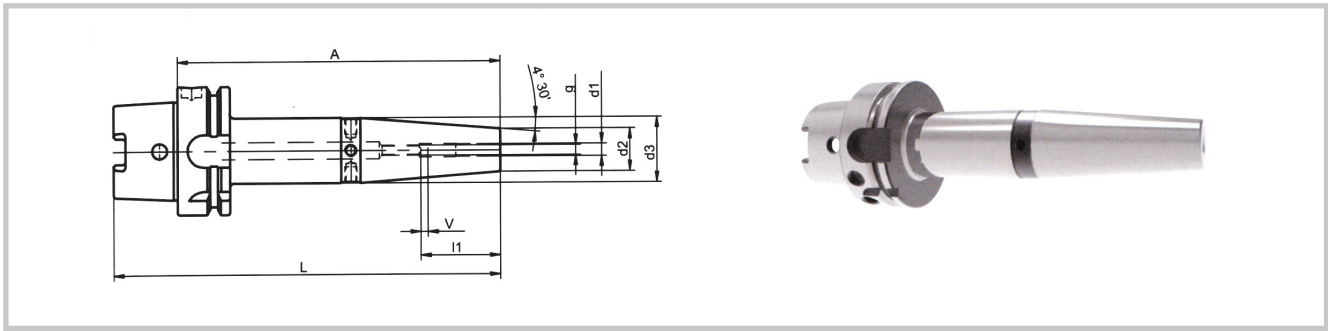
Design: Hollow taper shank acc.To ISO 12164-1 DIN 69893-1 type A with bore for identification chip.If not otherwise specified :Hardened by means of a special low-distortion hardening process Vickers hardness 670 ± 40 HV30(HRC58 ± 2).Hardness depth Eht=min.0.5mm.

Material: If not otherwise specified:Case-hardened alloy steel with a core tensile strength after case hardening of min.980N/mm<sup>2</sup>.

Standard Specification: Prices and delivery conditions are shown in the corresponding price list valid at the time in question.Manufacturer reserves the right to make technical modifications.All dimensions in mm.Coolant tube for tool holders has to be ordered separately

热装夹头刀柄 (标准型)

i-tec® Shrink-fit Chucks standard version



DIN 69882-8
Form G
 $\mu = 0,003$ 
G2.5 25.000 min<sup>2</sup> < 1g mm
möglich
CAD

No	GB Model	HSK-A	d1	A	d2	d3	l1	g	L	v	Kg
311.0011.320	HSK-A40-RZ3-65	40	3	65	12	17	-	-	85	-	0.3
311.0012.320	HSK-A40-RZ4-65	40	4	65	12	17	-	-	85	-	0.3
311.0013.320	HSK-A40-RZ5-65	40	5	65	12	17	-	-	85	-	0.3
311.0001.320	HSK-A40-RZ6-80	40	6	80	21	30	36	M5	100	10	0.5
311.0002.320	HSK-A40-RZ8-80	40	8	80	21	30	36	M6	100	10	0.5
311.0003.320	HSK-A40-RZ10-80	40	10	80	24	33	41	M8 x 1	100	10	0.6
311.0004.320	HSK-A40-RZ12-90	40	12	90	24	35	47	M10 x 1	110	10	0.6
311.0005.320	HSK-A40-RZ14-90	40	14	90	27	34	47	M10 x 1	110	10	0.6
311.0006.320	HSK-A40-RZ16-90	40	16	90	27	34	50	M12 x 1	110	10	0.6
311.0011.321	HSK-A50-RZ3-65	50	3	65	12	17	-	-	90	-	0.4
311.0012.321	HSK-A50-RZ4-65	50	4	65	12	17	-	-	90	-	0.4
311.0013.321	HSK-A50-RZ5-65	50	5	65	12	17	-	-	90	-	0.4
311.0001.321	HSK-A50-RZ6-80	50	6	80	21	30	36	M5	105	10	0.6
311.0002.321	HSK-A50-RZ8-80	50	8	80	21	30	36	M6	105	10	0.6
311.0003.321	HSK-A50-RZ10-85	50	10	85	24	33	41	M8 x 1	110	10	0.7
311.0004.321	HSK-A50-RZ12-90	50	12	90	24	34	47	M10 x 1	115	10	0.8
311.0005.321	HSK-A50-RZ14-90	50	14	90	27	37	47	M10 x 1	115	10	0.9
311.0006.321	HSK-A50-RZ16-95	50	16	95	27	38	50	M12 x 1	120	10	0.9
311.0007.321	HSK-A50-RZ18-95	50	18	95	33	42	50	M12 x 1	120	10	1.1
311.0008.321	HSK-A50-RZ20-100	50	20	100	33	42	52	M16 x 1	125	10	1.1
311.0011.322	HSK-A63-RZ3-80	63	3	80	12	17	-	-	112	-	0.7
311.0012.322	HSK-A63-RZ3-120	63	3	120	12	17	-	-	152	-	0.8
311.0013.322	HSK-A63-RZ3-160	63	3	160	12	17	-	-	192	-	0.8
311.0014.322	HSK-A63-RZ4-80	63	4	80	12	17	-	-	112	-	0.7
311.0015.322	HSK-A63-RZ4-120	63	4	120	12	17	-	-	152	-	0.8
311.0016.322	HSK-A63-RZ4-160	63	4	160	12	17	-	-	192	-	0.8
311.0017.322	HSK-A63-RZ5-80	63	5	80	12	17	-	-	112	-	0.7
311.0018.322	HSK-A63-RZ5-120	63	5	120	12	17	-	-	152	-	0.8
311.0019.322	HSK-A63-RZ5-160	63	5	160	12	17	-	-	192	-	0.8
311.0001.322	HSK-A63-RZ6-80	63	6	80	21	30	36	M5	112	10	0.9
311.0031.322	HSK-A63-RZ6-120	63	6	120	21	32	36	M5	152	10	1.2
311.0041.322	HSK-A63-RZ6-160	63	6	160	21	32	36	M5	192	10	1.4
311.0021.322	HSK-A63-RZ6-200	63	6	200	21	32	36	M5	232	10	1.6
311.0002.322	HSK-A63-RZ8-80	63	8	80	21	30	36	M6	112	10	0.9
311.0032.322	HSK-A63-RZ8-120	63	8	120	21	32	36	M6	152	10	1.2
311.0042.322	HSK-A63-RZ8-160	63	8	160	21	32	36	M6	192	10	1.4
311.0022.322	HSK-A63-RZ8-200	63	8	200	21	32	36	M6	232	10	1.6

No	GB Model	HSK-A	d1	A	d2	d3	l1	g	L	v	Kg
311.0003.322	HSK-A63-RZ10-85	63	10	85	24	33	41	M8 x 1	117	10	1.0
311.0033.322	HSK-A63-RZ10-120	63	10	120	24	34	41	M8 x 1	152	10	1.2
311.0043.322	HSK-A63-RZ10-160	63	10	160	24	34	41	M8 x 1	192	10	1.5
311.0023.322	HSK-A63-RZ10-200	63	10	200	24	34	41	M8 x 1	232	10	1.7
311.0004.322	HSK-A63-RZ12-90	63	12	90	24	34	47	M10 x 1	122	10	1.0
311.0034.322	HSK-A63-RZ12-120	63	12	120	24	34	47	M10 x 1	152	10	1.2
311.0044.322	HSK-A63-RZ12-160	63	12	160	24	34	47	M10 x 1	192	10	1.5
311.0024.322	HSK-A63-RZ12-200	63	12	200	24	34	47	M10 x 1	232	10	1.7
311.0005.322	HSK-A63-RZ14-90	63	14	90	27	37	47	M10 x 1	122	10	1.1
311.0035.322	HSK-A63-RZ14-120	63	14	120	27	36	47	M10 x 1	152	10	1.3
311.0045.322	HSK-A63-RZ14-160	63	14	160	27	36	47	M10 x 1	192	10	1.6
311.0025.322	HSK-A63-RZ14-200	63	14	200	27	36	47	M10 x 1	232	10	1.9
311.0006.322	HSK-A63-RZ16-95	63	16	95	27	38	50	M12 x 1	127	10	1.2
311.0036.322	HSK-A63-RZ16-120	63	16	120	27	36	50	M12 x 1	152	10	1.3
311.0046.322	HSK-A63-RZ16-160	63	16	160	27	36	50	M12 x 1	192	10	1.6
311.0026.322	HSK-A63-RZ16-200	63	16	200	27	36	50	M12 x 1	232	10	1.9
311.0007.322	HSK-A63-RZ18-95	63	18	95	33	44	50	M12 x 1	127	10	1.4
311.0047.322	HSK-A63-RZ18-160	63	18	160	33	44	50	M12 x 1	192	10	2.1
311.0097.322	HSK-A63-RZ18-200	63	18	200	33	44	50	M12 x 1	232	10	2.5
311.0008.322	HSK-A63-RZ20-100	63	20	100	33	45	52	M16 x 1	132	10	1.5
311.0048.322	HSK-A63-RZ20-160	63	20	160	33	44	52	M16 x 1	192	10	2.1
311.0098.322	HSK-A63-RZ20-200	63	20	200	33	44	52	M16 x 1	232	10	2.5
311.0009.322	HSK-A63-RZ25-115	63	25	115	44	53	58	M16 x 1	147	10	2.0
311.0049.322	HSK-A63-RZ25-160	63	25	160	44	53	58	M16 x 1	192	10	2.7
311.0099.322	HSK-A63-RZ25-200	63	25	200	44	53	58	M16 x 1	232	10	3.3
311.0010.322	HSK-A63-RZ32-120	63	32	120	44	53	61	M16 x 1	152	10	2.1
311.0050.322	HSK-A63-RZ32-160	63	32	160	44	53	61	M16 x 1	192	10	2.7
311.0100.322	HSK-A63-RZ32-200	63	32	200	44	53	61	M16 x 1	232	10	3.3
311.0001.323	HSK-A80-RZ6-85	80	6	85	21	30	36	M5	125	10	1.4
311.0002.323	HSK-A80-RZ8-85	80	8	85	21	30	36	M6	125	10	1.4
311.0003.323	HSK-A80-RZ10-90	80	10	90	24	34	41	M8 x 1	130	10	1.5
311.0004.323	HSK-A80-RZ12-95	80	12	95	24	35	47	M10 x 1	135	10	1.5
311.0005.323	HSK-A80-RZ14-95	80	14	95	27	38	47	M10 x 1	135	10	1.6
311.0006.323	HSK-A80-RZ16-100	80	16	100	27	39	50	M12 x 1	140	10	1.7
311.0007.323	HSK-A80-RZ18-100	80	18	100	33	45	50	M12 x 1	140	10	1.9
311.0008.323	HSK-A80-RZ20-105	80	20	105	33	45	52	M16 x 1	145	10	2.0
311.0009.323	HSK-A80-RZ25-115	80	25	115	44	53	58	M16 x 1	155	10	2.5
311.0010.323	HSK-A80-RZ32-120	80	32	120	44	56	61	M16 x 1	160	10	2.7
311.0001.324	HSK-A100-RZ6-85	100	6	85	21	30	36	M5	135	10	2.2
311.0031.324	HSK-A100-RZ6-120	100	6	120	21	32	36	M5	170	10	2.5
311.0041.324	HSK-A100-RZ6-160	100	6	160	21	32	36	M5	210	10	2.7
311.0021.324	HSK-A100-RZ6-200	100	6	200	21	32	36	M5	250	10	2.9
311.0002.324	HSK-A100-RZ8-85	100	8	85	21	30	36	M6	135	10	2.2
311.0032.324	HSK-A100-RZ8-120	100	8	120	21	32	36	M6	170	10	2.5
311.0042.324	HSK-A100-RZ8-160	100	8	160	21	32	36	M6	210	10	2.7
311.0022.324	HSK-A100-RZ8-200	100	8	200	21	32	36	M6	250	10	2.9
311.0003.324	HSK-A100-RZ10-90	100	10	90	24	34	41	M8 x 1	140	10	2.4
311.0033.324	HSK-A100-RZ10-120	100	10	120	24	34	41	M8 x 1	170	10	2.6
311.0043.324	HSK-A100-RZ10-160	100	10	160	24	34	41	M8 x 1	210	10	2.8
311.0023.324	HSK-A100-RZ10-200	100	10	200	24	34	41	M8 x 1	250	10	3.1

No	GB Model	HSK-A	d1	A	d2	d3	l1	g	L	v	Kg
311.0004.324	HSK-A100-RZ12-95	100	12	95	24	35	47	M10×1	145	10	2.4
311.0034.324	HSK-A100-RZ12-120	100	12	120	24	34	47	M10×1	170	10	2.6
311.0044.324	HSK-A100-RZ12-160	100	12	160	24	34	47	M10×1	210	10	2.8
311.0024.324	HSK-A100-RZ12-200	100	12	200	24	34	47	M10×1	250	10	3.1
311.0005.324	HSK-A100-RZ14-95	100	14	95	27	38	47	M10×1	145	10	2.5
311.0035.324	HSK-A100-RZ14-120	100	14	120	27	36	47	M10×1	170	10	2.6
311.0045.324	HSK-A100-RZ14-160	100	14	160	27	36	47	M10×1	210	10	2.9
311.0025.324	HSK-A100-RZ14-200	100	14	200	27	36	47	M10×1	250	10	3.2
311.0006.324	HSK-A100-RZ16-100	100	16	100	27	39	50	M12×1	150	10	2.6
311.0036.324	HSK-A100-RZ16-160	100	16	160	27	36	50	M12×1	210	10	2.9
311.0026.324	HSK-A100-RZ16-200	100	16	200	27	36	50	M12×1	250	10	3.2
311.0007.324	HSK-A100-RZ18-100	100	18	100	33	45	50	M12×1	150	10	2.8
311.0037.324	HSK-A100-RZ18-160	100	18	160	33	44	50	M12×1	210	10	3.4
311.0027.324	HSK-A100-RZ18-200	100	18	200	33	44	50	M12×1	250	10	3.8
311.0008.324	HSK-A100-RZ20-105	100	20	105	33	45	52	M16×1	155	10	2.8
311.0038.324	HSK-A100-RZ20-160	100	20	160	33	44	52	M16×1	210	10	3.4
311.0028.324	HSK-A100-RZ20-200	100	20	200	33	44	52	M16×1	250	10	3.8
311.0009.324	HSK-A100-RZ25-115	100	25	115	44	53	58	M16×1	165	10	3.3
311.0049.324	HSK-A100-RZ25-160	100	25	160	44	53	58	M16×1	210	10	4.0
311.0099.324	HSK-A100-RZ25-200	100	25	200	44	53	58	M16×1	250	10	4.6
311.0010.324	HSK-A100-RZ32-120	100	32	120	44	59	61	M16×1	170	10	3.7
311.0050.324	HSK-A100-RZ32-160	100	32	160	44	53	61	M16×1	210	10	4.0
311.0100.324	HSK-A100-RZ32-200	100	32	200	44	53	61	M16×1	250	10	4.6

设计：请使用柄部直径公差h6级的硬质合金刀具。

说明：不包括调整长度的调整螺钉。

备注：1、其他型号和尺寸可按订货要求制作。

- 2、装夹刀具的刀柄夹紧长度必须保证1-v尺寸，否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。
- 3、建议使用专用热装机装卸刀具。

Design:The clamping diameter is designed for a cemented carbide shank tolerance of h6.

Standard Specification:Adjusting screw for length adjustment is not included.

Note: 1.Other designs and sizes are available on request.

2.Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder , tool couldn't be dismounted or toolholder damage and so on.

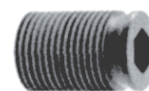
3.Special shrinking devices are recommended for tool mounting and dismounting.

## ACCESSORIES

配件



4.15

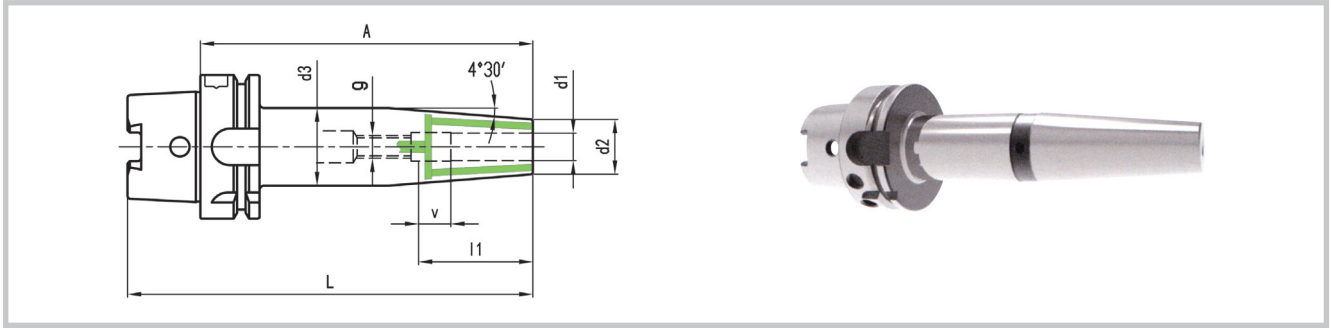


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## 热装夹头刀柄 (带内冷转端面外冷)

i-tec® Shrink-fit Chucks standard version



No	GB Model	HSK-A	d1	A	d2	d3	l1	g	L	v	kg
311.4401.322	HSK-A63-RZ6-80	63	6	80	21	30	36	M5	112	10	0.9
311.4471.322	HSK-A63-RZ6-130	63	6	130	21	32	36	M5	162	10	1.2
311.4402.322	HSK-A63-RZ8-80	63	8	80	21	30	36	M6	112	10	0.9
311.4472.322	HSK-A63-RZ8-130	63	8	130	21	32	36	M6	162	10	1.2
311.4403.322	HSK-A63-RZ10-85	63	10	85	24	34	41	M8 × 1	117	10	1.0
311.4473.322	HSK-A63-RZ10-130	63	10	130	24	34	41	M8 × 1	162	10	1.3
311.4404.322	HSK-A63-RZ12-90	63	12	90	24	34	47	M10 × 1	122	10	1.0
311.4474.322	HSK-A63-RZ12-130	63	12	130	24	34	47	M10 × 1	162	10	1.3
311.4405.322	HSK-A63-RZ14-90	63	14	90	27	37	47	M10 × 1	122	10	1.1
311.4475.322	HSK-A63-RZ14-130	63	14	130	27	36	47	M10 × 1	162	10	1.4
311.4406.322	HSK-A63-RZ16-95	63	16	95	27	37	50	M12 × 1	127	10	1.2
311.4476.322	HSK-A63-RZ16-130	63	16	130	27	36	50	M12 × 1	162	10	1.4
311.4407.322	HSK-A63-RZ18-95	63	18	95	33	44	50	M12 × 1	127	10	1.4
311.4477.322	HSK-A63-RZ18-130	63	18	130	33	44	50	M12 × 1	162	10	1.7
311.4408.322	HSK-A63-RZ20-100	63	20	100	33	45	52	M16 × 1	132	10	1.5
311.4478.322	HSK-A63-RZ20-130	63	20	130	33	44	52	M16 × 1	162	10	1.7
311.4409.322	HSK-A63-RZ25-115	63	25	115	44	53	58	M16 × 1	147	10	2.0
311.4479.322	HSK-A63-RZ25-130	63	25	130	44	53	58	M16 × 1	162	10	2.3

设计: 请使用柄部直径公差h6级的硬质合金刀具。

带有中心冷却功能。

说明: 不包括调整长度的调整螺钉。

备注: 1、其他型号和尺寸可按订货要求制作。

2、装夹刀具的刀柄夹紧长度必须保证 $l_1-v$ 尺寸, 否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。

3、建议使用专用热装机装卸刀具。

Design: The clamping diameter is designed for a cemented carbide shank tolerance of h6, with closable cool stream bores.

Standard Specification: Adjusting screw for length adjustment is not included.

Note: 1. Other designs and sizes are available on request.

2. Toolholder clamping length must be same to size  $l_1-v$ . if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.

3. Special shrinking devices are recommended for tool mounting and dismantling.

### ACCESSORIES

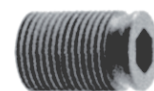
配件

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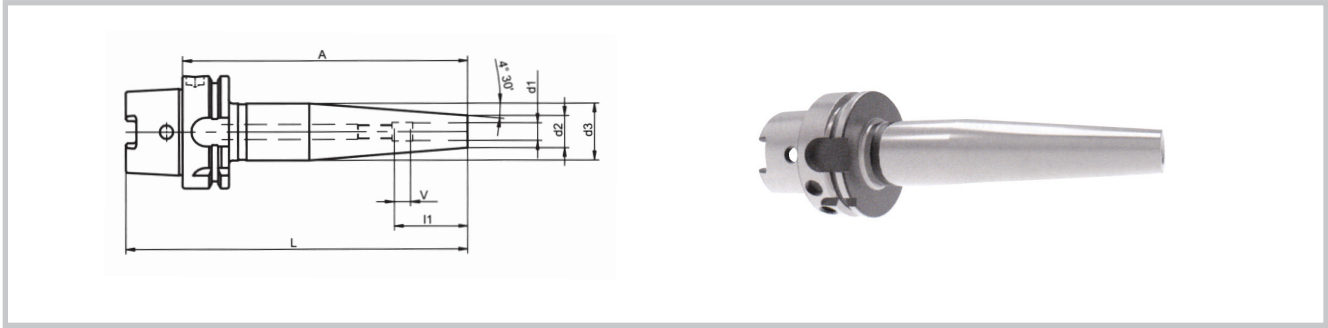


4.18



热装夹头刀柄（细长型）

i-tec® Shrink-fit Chucks slim version



DIN 69882-8
Form G
 $\alpha = 0,003$ 
G2.5 25,000 min<sup>-1</sup> <1g mm
möglich
CAD

No	GB Model	HSK-A	d1	A	d2	d3	l1	g	L	v	Kg
311.0703.322	HSK-A63-RZ6-120	63	6	120	15	30	36	M5	152	10	1.1
311.0713.322	HSK-A63-RZ6-160	63	6	160	15	30	36	M5	192	10	1.3
311.0791.322	HSK-A63-RZ6-200	63	6	200	15	30	36	M5	232	10	1.5
311.0704.322	HSK-A63-RZ8-120	63	8	120	15	30	36	M6	152	10	1.1
311.0714.322	HSK-A63-RZ8-160	63	8	160	15	30	36	M6	192	10	1.3
311.0792.322	HSK-A63-RZ8-200	63	8	200	15	30	36	M6	232	10	1.5
311.0705.322	HSK-A63-RZ10-120	63	10	120	18	33	41	M8 x 1	152	10	1.2
311.0715.322	HSK-A63-RZ10-160	63	10	160	18	32	41	M8 x 1	192	10	1.4
311.0793.322	HSK-A63-RZ10-200	63	10	200	18	32	41	M8 x 1	232	10	1.6
311.0706.322	HSK-A63-RZ12-120	63	12	120	18	33	47	M10 x 1	152	10	1.2
311.0716.322	HSK-A63-RZ12-160	63	12	160	18	32	47	M10 x 1	192	10	1.4
311.0794.322	HSK-A63-RZ12-200	63	12	200	18	32	47	M10 x 1	232	10	1.6
311.0703.324	HSK-A100-RZ6-120	100	6	120	15	30	36	M5	170	10	2.4
311.0713.324	HSK-A100-RZ6-160	100	6	160	15	30	36	M5	210	10	2.6
311.0791.324	HSK-A100-RZ6-200	100	6	200	15	30	36	M5	250	10	2.8
311.0704.324	HSK-A100-RZ8-120	100	8	120	15	30	36	M6	170	10	2.4
311.0714.324	HSK-A100-RZ8-160	100	8	160	15	30	36	M6	210	10	2.6
311.0792.324	HSK-A100-RZ8-200	100	8	200	15	30	36	M6	250	10	2.8
311.0705.324	HSK-A100-RZ10-120	100	10	120	18	33	41	M8 x 1	170	10	2.5
311.0715.324	HSK-A100-RZ10-160	100	10	160	18	32	41	M8 x 1	210	10	2.7
311.0793.324	HSK-A100-RZ10-200	100	10	200	18	32	41	M8 x 1	250	10	2.9
311.0706.324	HSK-A100-RZ12-120	100	12	120	18	33	47	M10 x 1	170	10	2.5
311.0716.324	HSK-A100-RZ12-160	100	12	160	18	32	47	M10 x 1	210	10	2.7
311.0794.324	HSK-A100-RZ12-200	100	12	200	18	32	47	M10 x 1	250	10	2.9

设计：请使用柄部直径公差h6级的硬质合金刀具。

说明：不包括调整长度的调整螺钉。

备注：1、其他型号和尺寸可按订货要求制作。

- 2、装夹刀具的刀柄夹紧长度必须保证L1-v尺寸，否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。
- 3、建议使用专用热装机装卸刀具。

Design: The clamping diameter is designed for a cemented carbide shank tolerance of h6.

Standard Specification: Adjusting screw for length adjustment is not included.

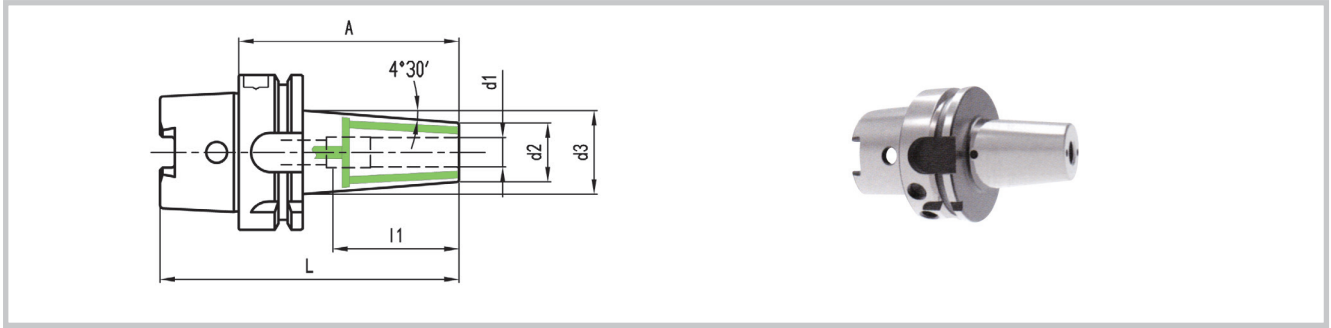
Note: 1. Other designs and sizes are available on request.

2. Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.

3. Special shrinking devices are recommended for tool mounting and dismantling.

## 热装夹头刀柄 (超短型)

i-tec® Shrink-fit Chucks ultra short version



No	GB Model	HSK-A	d1	A	d2	d3	l1	L	Kg
311.4353.322	HSK-A63-RZ10-70	63	10	70	26	33	41	102	0.9
311.4354.322	HSK-A63-RZ12-70	63	12	70	26	33	45	102	0.9
311.4356.322	HSK-A63-RZ16-75	63	16	75	29	37	50	107	1.0
311.4358.322	HSK-A63-RZ20-75	63	20	75	35	43	50	107	1.1
311.4359.322	HSK-A63-RZ25-85	63	25	85	45	53	59	117	1.6

设计: 请使用柄部直径公差h6级的硬质合金刀具。  
带有中心冷却功能。

说明: 不包括调整长度的调整螺钉。

备注: 1、其他型号和尺寸可按订货要求制作。

- 2、装夹刀具的刀柄夹紧长度必须保证l1-v尺寸, 否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。
- 3、建议使用专用热装机装卸刀具。

Design: The clamping diameter is designed for a cemented carbide shank tolerance of h6. with closable cool stream bores.

Standard Specification: Adjusting screw for length adjustment is not included.

Note: 1. Other designs and sizes are available on request.

2. Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismounted or toolholder damage and so on.

3. Special shrinking devices are recommended for tool mounting and dismounting.

### ACCESSORIES

配件



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丝锥快换夹头刀柄

Quick Change Tapping Chucks



No	GB Model	HSK-A	M	A	d1	d2	L	C	T	kg
440.0011.320	HSK-A40-G3-73	40	M3-M14	73	19	36	93	6.5	7.5	0.6
440.0011.321	HSK-A50-G3-77	50	M3-M14	77	19	36	102	6.5	7.5	0.7
440.0011.322	HSK-A63-G3-79	63	M3-M14	79	19	36	111	6.5	7.5	1.0
440.0012.322	HSK-A63-G8-113	63	M4.5-M24	113	31	53	145	8.5	15	2.0
440.0011.323	HSK-A80-G3-83.5	80	M3-M14	83.5	19	36	123.5	6.5	7.5	1.5
440.0012.323	HSK-A80-G8-117.5	80	M4.5-M24	117.5	31	53	157.5	8.5	15	2.5
440.0158.161	HSK-A100-G3-100	100	M3-M14	100	19	36	149.9	6.5	7.5	2.4
440.0011.324	HSK-A100-G8-119.5	100	M4.5-M24	119.5	31	53	169.5	8.5	15	3.4
440.0159.161	HSK-A100-G14-200	100	M14-M33	200	48	78	249.9	15	23	4.0

使用：用于夹持带或不带安全机构的快换丝锥夹套。

Use: For holding quick change inserts with or without safety clutch.

设计：长度补偿在收缩和拉伸方向取决于进给和螺距的不同。压缩时能够保证当轴向力达到允许值时立即脱离攻丝状态，拉力释放时能够保证快换丝锥夹套免于过大轴向拉力造成的损害。

Design: Length compensation on compression and tension to compensate the difference between feed and tap pitch. The pressure point mechanism guarantees that the tap immediately cuts the thread as soon as the permissible axial force is reached. The tension lock protects the tapping chuck against damage as a result of high axial tensile load.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES  
配件

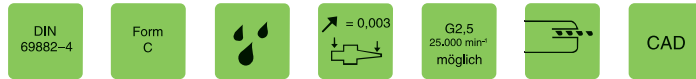
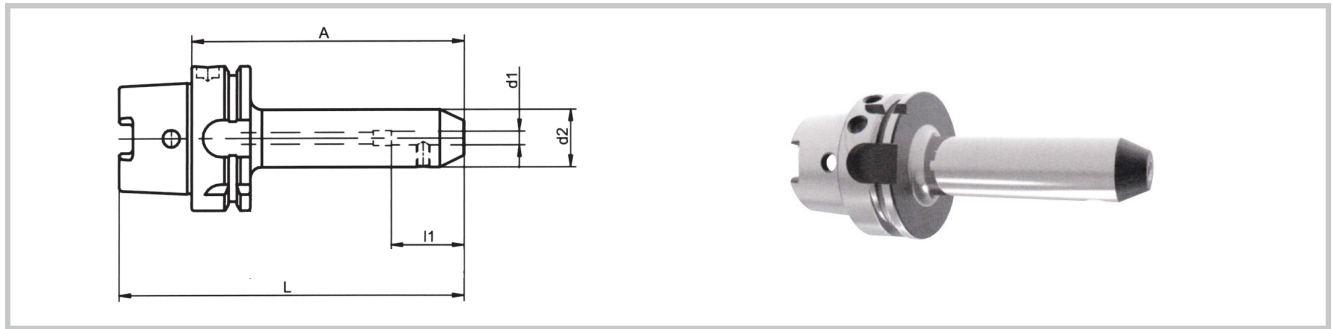
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## 削平型直柄立铣刀刀柄(威尔顿型)

### Reduction Sleeves for Straight Shanks with lateral driving surface (Weldon)



No	GB Model	HSK-A	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
420.0001.320	HSK-A40-XP6-60	40	6	60	25	35	80	+0.005	M6X10	0.3
420.0002.320	HSK-A40-XP8-60	40	8	60	28	35	80	+0.005	M8X10	0.4
420.0003.320	HSK-A40-XP10-60	40	10	60	35	39	80	+0.005	M10X12	0.5
420.0004.320	HSK-A40-XP12-70	40	12	70	42	44	90	+0.005	M12X16	0.7
420.0005.320	HSK-A40-XP14-75	40	14	75	44	44	95	+0.005	M12X16	0.8
420.0006.320	HSK-A40-XP16-75	40	16	75	48	47	95	+0.005	M14X16	0.9
420.0001.321	HSK-A50-XP6-65	50	6	65	25	35	90	+0.005	M6X10	0.5
420.0002.321	HSK-A50-XP8-65	50	8	65	28	35	90	+0.005	M8X10	0.5
420.0003.321	HSK-A50-XP10-65	50	10	65	35	39	90	+0.005	M10X12	0.6
420.0004.321	HSK-A50-XP12-80	50	12	80	42	44	105	+0.005	M12X16	0.9
420.0005.321	HSK-A50-XP14-80	50	14	80	44	44	105	+0.005	M12X16	1.0
420.0006.321	HSK-A50-XP16-80	50	16	80	48	47	105	+0.005	M14X16	1.1
420.0007.321	HSK-A50-XP18-80	50	18	80	50	47	105	+0.005	M14X16	1.1
420.0008.321	HSK-A50-XP20-80	50	20	80	52	49	105	+0.007	M16X16	1.2
420.0001.322	HSK-A63-XP6-65	63	6	65	25	35	97	+0.005	M6X10	0.8
420.0031.322	HSK-A63-XP6-120	63	6	120	25	35	152	+0.005	M6X10	1.0
420.0002.322	HSK-A63-XP8-65	63	8	65	28	35	97	+0.005	M8X10	0.8
420.0032.322	HSK-A63-XP8-120	63	8	120	28	35	152	+0.005	M8X10	1.0
420.0003.322	HSK-A63-XP10-65	63	10	65	35	39	97	+0.005	M10X12	0.9
420.0033.322	HSK-A63-XP10-120	63	10	120	35	39	152	+0.005	M10X12	1.3
420.0004.322	HSK-A63-XP12-80	63	12	80	42	44	112	+0.005	M12X16	1.2
420.0034.322	HSK-A63-XP12-120	63	12	120	42	44	152	+0.005	M12X16	1.6
420.0005.322	HSK-A63-XP14-80	63	14	80	44	44	112	+0.005	M12X16	1.2
420.0035.322	HSK-A63-XP14-120	63	14	120	44	44	152	+0.005	M12X16	1.6
420.0006.322	HSK-A63-XP16-80	63	16	80	48	47	112	+0.005	M14X16	1.3
420.0036.322	HSK-A63-XP16-120	63	16	120	48	47	152	+0.005	M14X16	1.8
420.0007.322	HSK-A63-XP18-80	63	18	80	50	47	112	+0.005	M14X16	1.4
420.0037.322	HSK-A63-XP18-120	63	18	120	50	47	152	+0.005	M14X16	1.9
420.0008.322	HSK-A63-XP20-80	63	20	80	52	49	112	+0.007	M16X16	1.4
420.0038.322	HSK-A63-XP20-120	63	20	120	52	49	152	+0.007	M16X16	2.0
420.0009.322	HSK-A63-XP25-110	63	25	110	65	54	142	+0.007	M18X2X20	2.6
420.0010.322	HSK-A63-XP32-110	63	32	110	72	58	142	+0.007	M20X2X20	3.0

No	GB Model	HSK-A	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
420.0001.323	HSK-A80-XP6-80	80	6	80	25	35	120	+0.005	M6X10	1.3
420.0002.323	HSK-A80-XP8-80	80	8	80	28	35	120	+0.005	M8X10	1.3
420.0003.323	HSK-A80-XP10-80	80	10	80	35	39	120	+0.005	M10X12	1.4
420.0004.323	HSK-A80-XP12-80	80	12	80	42	44	120	+0.005	M12X16	1.6
420.0005.323	HSK-A80-XP14-80	80	14	80	44	44	120	+0.005	M12X16	1.7
420.0006.323	HSK-A80-XP16-100	80	16	100	48	47	140	+0.005	M14X16	2.0
420.0007.323	HSK-A80-XP18-100	80	18	100	50	47	140	+0.005	M14X16	2.1
420.0008.323	HSK-A80-XP20-100	80	20	100	52	49	140	+0.007	M16X16	2.2
420.0009.323	HSK-A80-XP25-100	80	25	100	65	54	140	+0.007	M18X2X20	2.8
420.0010.323	HSK-A80-XP32-110	80	32	110	72	58	150	+0.007	M20X2X20	3.5
420.0001.324	HSK-A100-XP6-80	100	6	80	25	35	130	+0.005	M6X10	2.1
420.0041.324	HSK-A100-XP6-160	100	6	160	25	35	210	+0.005	M6X10	2.4
420.0002.324	HSK-A100-XP8-80	100	8	80	28	35	130	+0.005	M8X10	2.2
420.0042.324	HSK-A100-XP8-160	100	8	160	28	35	210	+0.005	M8X10	2.5
420.0003.324	HSK-A100-XP10-80	100	10	80	35	39	130	+0.005	M10X12	2.3
420.0043.324	HSK-A100-XP10-160	100	10	160	35	39	210	+0.005	M10X12	2.9
420.0004.324	HSK-A100-XP12-80	100	12	80	42	44	130	+0.005	M12X16	2.5
420.0044.324	HSK-A100-XP12-160	100	12	160	42	44	210	+0.005	M12X16	3.3
420.0005.324	HSK-A100-XP14-80	100	14	80	44	44	130	+0.005	M12X16	2.5
420.0045.324	HSK-A100-XP14-160	100	14	160	44	44	210	+0.005	M12X16	3.4
420.0006.324	HSK-A100-XP16-100	100	16	100	48	47	150	+0.005	M14X16	2.9
420.0046.324	HSK-A100-XP16-160	100	16	160	48	47	210	+0.005	M14X16	3.6
420.0007.324	HSK-A100-XP18-100	100	18	100	50	47	150	+0.005	M14X16	3.0
420.0047.324	HSK-A100-XP18-160	100	18	160	50	47	210	+0.005	M14X16	3.8
420.0008.324	HSK-A100-XP20-100	100	20	100	52	49	150	+0.007	M16X16	3.0
420.0048.324	HSK-A100-XP20-160	100	20	160	52	49	210	+0.007	M16X16	3.9
420.0009.324	HSK-A100-XP25-100	100	25	100	65	54	150	+0.007	M18X2X20	3.6
420.0049.324	HSK-A100-XP25-160	100	25	160	65	54	210	+0.007	M18X2X20	5.0
420.0010.324	HSK-A100-XP32-100	100	32	100	72	58	150	+0.007	M20X2X20	4.0
420.0050.324	HSK-A100-XP32-160	100	32	160	72	58	210	+0.007	M20X2X20	5.7
420.0011.324	HSK-A100-XP40-120	100	40	120	80	75	170	+0.007	M20X2X20	5.2

使用：按DIN 1835 B型（威尔顿型）和DIN 6535 HB型夹持直柄铣刀。

Use: For holding shank tools with lateral driving surface, DIN 1835 type B and DIN 6535 type HB.

说明：包括配好的夹紧螺钉，对于大于25mm的孔，提供2个紧固螺钉。

Standard Specification: Clamping screw included. From location hole d1 = 25mm 2 clamping screws are included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



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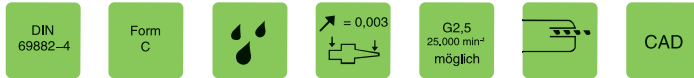
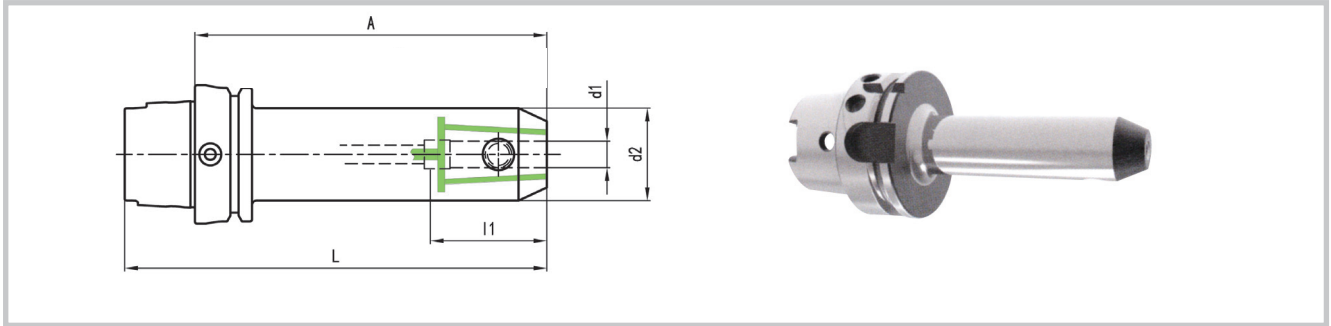


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## 削平型直柄立铣刀刀柄 (带内冷转端面外冷)

### Reduction Sleeves for Straight Shanks



No	GB Model	HSK-A	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
420.4401.322	HSK-A63-XP6-65	63	6	65	25	35	97	+0.005	M6X10	0.8
420.4402.322	HSK-A63-XP8-65	63	8	65	28	35	97	+0.005	M8X10	0.8
420.4403.322	HSK-A63-XP10-65	63	10	65	35	39	97	+0.005	M10X12	0.9
420.4404.322	HSK-A63-XP12-80	63	12	80	42	44	112	+0.005	M12X16	1.2
420.4406.322	HSK-A63-XP16-80	63	16	80	48	47	112	+0.005	M14X16	1.3
420.4408.322	HSK-A63-XP20-80	63	20	80	52	49	112	+0.007	M16X16	1.4
420.4409.322	HSK-A63-XP25-110	63	25	110	65	54	142	+0.007	M18X2X20	2.6
420.4410.322	HSK-A63-XP32-110	63	32	110	72	58	142	+0.007	M20X2X20	3.0

使用: 按DIN 1835 B型 (威尔顿型) 和DIN 6535 HB型夹持直柄铣刀, 带有中心冷却功能。

Use: For holding shank tools with lateral driving surface, DIN 1835 type B and DIN 6535 type HB. with closable cool stream bores.

说明: 包括配好的夹紧螺钉, 对于大于25mm的孔, 提供2个紧固螺钉。

Standard Specification: Clamping screw included. From location hole d1 = 25mm 2 clamping screws are included.

备注: 按订单生产。

Note: Other designs and sizes are available on request.

#### ACCESSORIES

配件

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带2° 斜削平型直柄立铣刀刀柄(威斯尔凹口型)

Reduction Sleeves for Straight Shanks with inclined clamping surface (Whistle Notch)



DIN 69882-5
Form D

 $R_a = 0,003$ 
G6,3 15,000min<sup>-1</sup>

CAD

No	GB Model	HSK-A	d1	A	d2	l1	g	L	Tol./d1	配用螺钉	kg
420.0151.320	HSK-A40-XPDP6-80	40	6	80	25	38	M5	100	+0.005	M6X10	0.4
420.0152.320	HSK-A40-XPDP8-80	40	8	80	28	38	M6	100	+0.005	M8X10	0.4
420.0153.320	HSK-A40-XPDP10-80	40	10	80	35	41	M8	100	+0.005	M10X12	0.6
420.0154.320	HSK-A40-XPDP12-90	40	12	90	42	47	M10	110	+0.005	M12X16	0.9
420.0155.320	HSK-A40-XPDP14-90	40	14	90	44	47	M10	110	+0.005	M12X16	0.9
420.0156.320	HSK-A40-XPDP16-90	40	16	90	48	50	M12	110	+0.005	M14X16	1.1
420.0151.321	HSK-A50-XPDP6-80	50	6	80	25	38	M5	105	+0.005	M6X10	0.6
420.0152.321	HSK-A50-XPDP8-80	50	8	80	28	38	M6	105	+0.005	M8X10	0.6
420.0153.321	HSK-A50-XPDP10-80	50	10	80	35	41	M8	105	+0.005	M10X12	0.7
420.0154.321	HSK-A50-XPDP12-90	50	12	90	42	47	M10	115	+0.005	M12X16	1.0
420.0155.321	HSK-A50-XPDP14-90	50	14	90	44	47	M10	115	+0.005	M12X16	1.1
420.0156.321	HSK-A50-XPDP16-90	50	16	90	48	50	M12	115	+0.005	M14X16	1.2
420.0157.321	HSK-A50-XPDP18-90	50	18	90	50	50	M12	115	+0.005	M14X16	1.3
420.0158.321	HSK-A50-XPDP20-100	50	20	100	52	52	M16	125	+0.007	M16X16	1.5
420.0151.322	HSK-A63-XPDP6-80	63	6	80	25	38	M5	112	+0.005	M6X10	0.8
420.0152.322	HSK-A63-XPDP8-80	63	8	80	28	38	M6	112	+0.005	M8X10	0.9
420.0153.322	HSK-A63-XPDP10-80	63	10	80	35	41	M8	112	+0.005	M10X12	1.0
420.0154.322	HSK-A63-XPDP12-90	63	12	90	42	47	M10	122	+0.005	M12X16	1.3
420.0155.322	HSK-A63-XPDP14-90	63	14	90	44	47	M10	122	+0.005	M12X16	1.3
420.0156.322	HSK-A63-XPDP16-100	63	16	100	48	50	M12	132	+0.005	M14X16	1.6
420.0157.322	HSK-A63-XPDP18-100	63	18	100	50	50	M12	132	+0.005	M14X16	1.7
420.0158.322	HSK-A63-XPDP20-100	63	20	100	52	52	M16	132	+0.007	M16X16	1.7
420.0159.322	HSK-A63-XPDP25-110	63	25	110	65	58	M20	142	+0.007	M18X2X20	2.6
420.0160.322	HSK-A63-XPDP32-110	63	32	110	72	61	M20	142	+0.007	M20X2X20	3.0
420.0151.323	HSK-A80-XPDP6-90	80	6	90	25	38	M5	130	+0.005	M6X10	1.3
420.0152.323	HSK-A80-XPDP8-90	80	8	90	28	38	M6	130	+0.005	M8X10	1.4
420.0153.323	HSK-A80-XPDP10-90	80	10	90	35	41	M8	130	+0.005	M10X12	1.5
420.0154.323	HSK-A80-XPDP12-100	80	12	100	42	47	M10	140	+0.005	M12X16	1.8
420.0155.323	HSK-A80-XPDP14-100	80	14	100	44	47	M10	140	+0.005	M12X16	1.9
420.0156.323	HSK-A80-XPDP16-100	80	16	100	48	50	M12	140	+0.005	M14X16	2.0
420.0157.323	HSK-A80-XPDP18-100	80	18	100	50	50	M12	140	+0.005	M14X16	2.1
420.0158.323	HSK-A80-XPDP20-110	80	20	110	52	52	M16	150	+0.007	M16X16	2.3
420.0159.323	HSK-A80-XPDP25-110	80	25	110	65	58	M20	150	+0.007	M18X2X20	3.1
420.0160.323	HSK-A80-XPDP32-120	80	32	120	72	61	M20	160	+0.007	M20X2X20	3.8

No	GB Model	HSK-A	d1	A	d2	l1	g	L	Tol./d1	配用螺钉	kg
420.0151.324	HSK-A100-XPD6-90	100	6	90	25	38	M5	140	+0.005	M6X10	2.2
420.0152.324	HSK-A100-XPD8-90	100	8	90	28	38	M6	140	+0.005	M8X10	2.2
420.0153.324	HSK-A100-XPD10-90	100	10	90	35	41	M8	140	+0.005	M10X12	2.4
420.0154.324	HSK-A100-XPD12-100	100	12	100	42	47	M10	150	+0.005	M12X16	2.7
420.0155.324	HSK-A100-XPD14-100	100	14	100	44	47	M10	150	+0.005	M12X16	2.7
420.0156.324	HSK-A100-XPD16-100	100	16	100	48	50	M12	150	+0.005	M14X16	2.9
420.0157.324	HSK-A100-XPD18-100	100	18	100	50	50	M12	150	+0.005	M14X16	3.0
420.0158.324	HSK-A100-XPD20-110	100	20	110	52	52	M16	160	+0.007	M16X16	3.2
420.0159.324	HSK-A100-XPD25-120	100	25	120	65	58	M20	170	+0.007	M18X2X20	4.1
420.0160.324	HSK-A100-XPD32-120	100	32	120	72	61	M20	170	+0.007	M20X2X20	4.6

使用：用于夹持带角度驱动面（2°）的直柄铣刀，DIN1835标准中的E型和DIN6535 HE型。

Use: For holding shank tools with inclined clamping surface (2°), DIN 1835 type E and DIN 6535 type HE.

说明：包括配好的夹紧螺钉和限位螺钉，对于大于25mm的孔，提供2个紧固螺钉。

Standard Specification: Clamping screw and adjusting screw included. From location hole d1 = 25mm 2 clamping screws are included.

备注：带孔的止动螺钉用于内冷却，其他型号和尺寸可按订货要求制作。

Note: Bored through adjusting screw for coolant. Other designs and sizes are available on request.

## ACCESSORIES

配件

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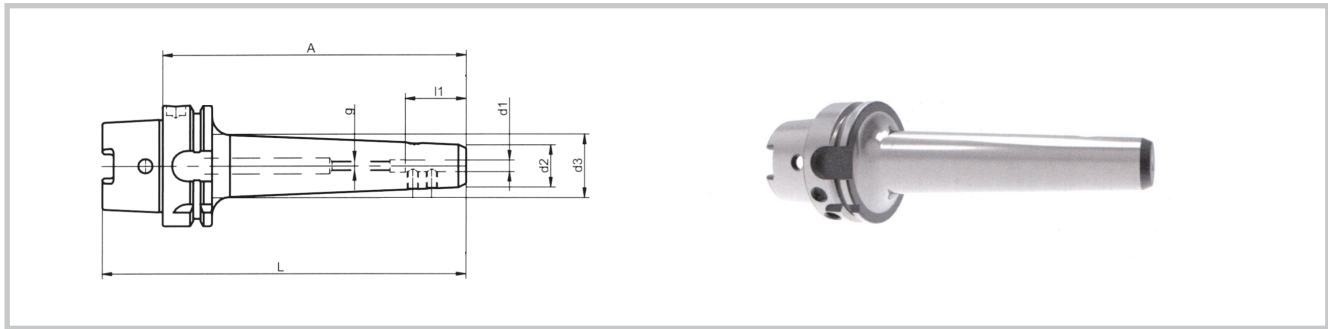


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削平型直柄立铣刀刀柄(细长型)

Reduction Sleeves for Straight Shanks slim version



No	GB Model	HSK-A	d1	A	d2	d3	l1	g	L	Tol./d1	配用螺钉	kg
420.0701.322	HSK-A63-XP6-100	63	6	100	22	27	38	M5	132	+0.005	M6X10	0.8
420.0702.322	HSK-A63-XP6-160	63	6	160	22	32	38	M5	192	+0.005	M6X10	1.0
420.0703.322	HSK-A63-XP8-100	63	8	100	24	29	38	M6	132	+0.005	M8X10	0.9
420.0704.322	HSK-A63-XP8-160	63	8	160	24	34	38	M6	192	+0.005	M8X10	1.1
420.0705.322	HSK-A63-XP10-100	63	10	100	25	31	41	M8	132	+0.005	M10X12	0.9
420.0706.322	HSK-A63-XP10-160	63	10	160	25	38	41	M8	192	+0.005	M10X12	1.1
420.0707.322	HSK-A63-XP12-100	63	12	100	26	34	47	M10	132	+0.005	M12X16	0.9
420.0708.322	HSK-A63-XP12-160	63	12	160	26	42	47	M10	192	+0.005	M12X16	1.1
420.0709.322	HSK-A63-XP14-100	63	14	100	28	37	47	M10	132	+0.005	M12X16	1.0
420.0710.322	HSK-A63-XP14-160	63	14	160	28	46	47	M10	192	+0.005	M12X16	1.2
420.0711.322	HSK-A63-XP16-100	63	16	100	30	38	50	M12	132	+0.005	M14X16	1.0
420.0712.322	HSK-A63-XP16-160	63	16	160	30	44	50	M12	192	+0.005	M14X16	1.3
420.0713.322	HSK-A63-XP18-100	63	18	100	32	39	50	M12	132	+0.005	M14X16	1.1
420.0714.322	HSK-A63-XP18-160	63	18	160	32	46	50	M12	192	+0.005	M14X16	1.4
420.0715.322	HSK-A63-XP20-100	63	20	100	34	42	52	M16	132	+0.007	M16X16	1.1
420.0716.322	HSK-A63-XP20-160	63	20	160	34	50	52	M16	192	+0.007	M16X16	1.5

使用：用于夹持直柄铣刀，接DIN1835-1B型（威尔顿型）和DIN1835-1E型（威斯尔凹口型）以及DIN6535 HB和HE型。

Use: For holding shank tools with lateral driving surface, DIN 1835-1 type B and inclined clamping surface (2°), DIN 1835-1 type E, DIN 6535 type HB and HE.

说明：包括配好的夹紧螺钉和限位螺钉。

Standard Specification: Clamping screw and adjusting screw included.

备注：带孔的止动螺钉用于内冷却，其他型号和尺寸可按订货要求制作。

Note: Bored through adjusting screw for coolant. Other designs and sizes are available on request.

ACCESSORIES

配件



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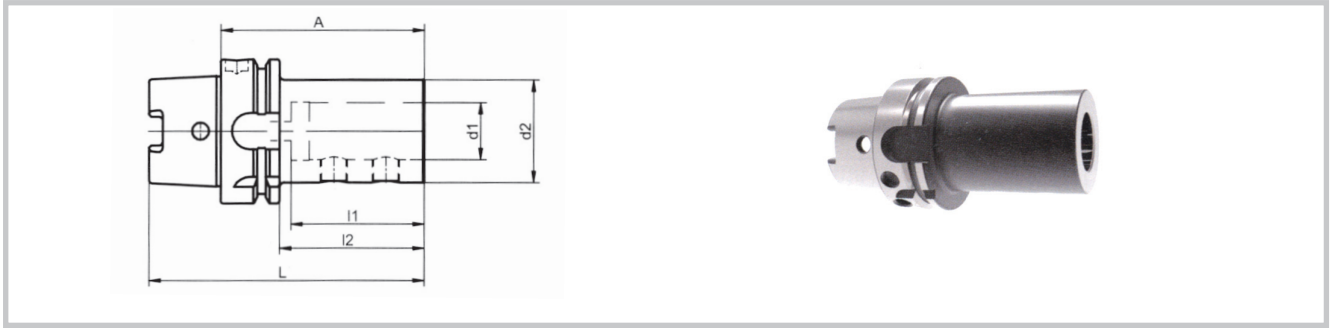


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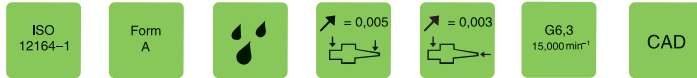
## 削平型浅孔钻刀柄

### Indexable Drill Holders



2.0

HSK



No	GB Model	HSK-A	d1	A	d2	l1	l2	L	kg
590.0001.322	HSK-A63-XPQ20-80	63	20	80	40	54	54	112	1.1
590.0002.322	HSK-A63-XPQ25-90	63	25	90	45	59	64	122	1.3
590.0003.322	HSK-A63-XPQ32-90	63	32	90	52	63	64	122	1.6
590.0001.324	HSK-A100-XPQ20-90	100	20	90	40	54	61	140	2.5
590.0002.324	HSK-A100-XPQ25-95	100	25	95	45	59	66	145	2.7
590.0003.324	HSK-A100-XPQ32-100	100	32	100	52	63	71	150	3.0
590.0004.324	HSK-A100-XPQ40-110	100	40	110	60	73	81	160	3.6

使用：用于夹持的浅孔钻柄部符合DIN 6595和ISO 9766。

Use: For holding Indexable Drills with shaft according to DIN 6595 and ISO 9766.

设计：螺纹孔的位置与夹持的浅孔钻柄部根据DIN 6595有0.4mm的错位间隙，是为了在通过螺钉连接时拉紧浅孔钻。

Design: Position of the front threaded pin opposite the countersunk point in straight shank offset by 0.4mm according to DIN 6595. The offset allows the flange of the drill to be clamped against the contact face of the tool holder when the threaded pin is tightened.

说明：包括夹紧螺钉。

Standard Specification: Clamping screw included.

#### ACCESSORIES

配件

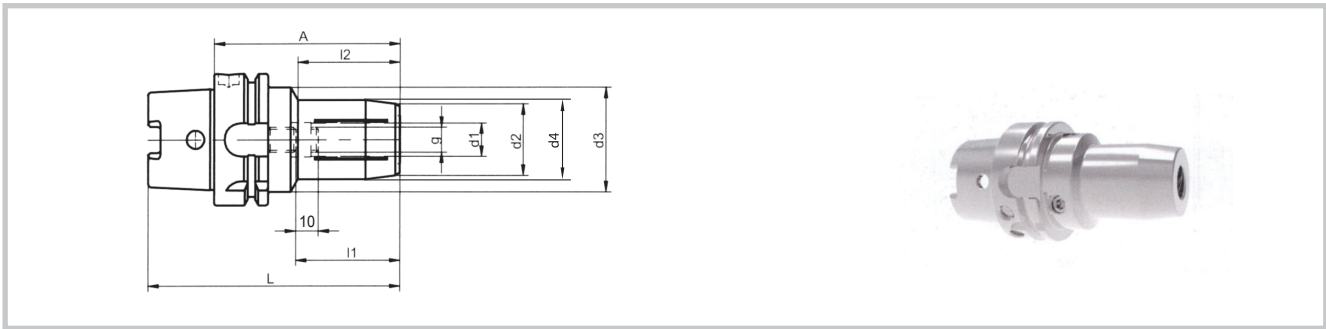


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液压夹头刀柄

Hydraulic Expansion Chucks



DIN 69882-7
Form F

 = 0,003
G2,5 25,000 mm<sup>2</sup> <1g mm
CAD

No	GB Model	HSK-A	d1	A	d2	d3	d4	l1	l2	g	L	kg
702.0001.321	HSK-A50-HD6-70	50	6	70	22	41.5	26	37	26	M5	95	0.7
702.0002.321	HSK-A50-HD8-70	50	8	70	24	41.5	28	37	26	M6	95	0.7
702.0003.321	HSK-A50-HD10-80	50	10	80	26	41.5	30	41	36	M6	105	0.7
702.0004.321	HSK-A50-HD12-85	50	12	85	28	41.5	32	46	40	M6	110	0.8
702.0005.321	HSK-A50-HD14-85	50	14	85	30	41.5	34	46	40	M6	110	0.8
702.0006.321	HSK-A50-HD16-90	50	16	90	34	41.5	38	49	46	M6	115	0.9
702.0007.321	HSK-A50-HD18-90	50	18	90	36	41.5	40	49	46	M6	115	0.9
702.0008.321	HSK-A50-HD20-90	50	20	90	38	41.5	41.5	51	64	M6	115	0.9
702.0001.322	HSK-A63-HD6-70	63	6	70	22	50	26	37	26	M5	102	1.0
702.0031.322	HSK-A63-HD6-150	63	6	150	22	50	26	37	105	M5	182	1.3
702.0032.322	HSK-A63-HD6-200	63	6	200	22	50	26	37	155	M5	232	1.4
702.0002.322	HSK-A63-HD8-70	63	8	70	24	50	28	37	26	M6	102	1.0
702.0033.322	HSK-A63-HD8-150	63	8	150	24	50	28	37	105	M6	182	1.3
702.0034.322	HSK-A63-HD8-200	63	8	200	24	50	28	37	155	M6	232	1.5
702.0003.322	HSK-A63-HD10-80	63	10	80	26	50	30	41	35	M8	112	1.1
702.0035.322	HSK-A63-HD10-150	63	10	150	26	50	30	41	105	M8	182	1.4
702.0036.322	HSK-A63-HD10-200	63	10	200	26	50	30	41	155	M8	232	1.6
702.0004.322	HSK-A63-HD12-85	63	12	85	28	50	32	46	40	M10	117	1.1
702.0037.322	HSK-A63-HD12-150	63	12	150	28	50	32	46	105	M10	182	1.5
702.0038.322	HSK-A63-HD12-200	63	12	200	28	50	32	46	155	M10	232	1.7
702.0005.322	HSK-A63-HD14-85	63	14	85	30	50	34	46	40	M10	117	1.2
702.0039.322	HSK-A63-HD14-150	63	14	150	30	50	34	46	105	M10	182	1.5
702.0040.322	HSK-A63-HD14-200	63	14	200	30	50	34	46	155	M10	232	1.8
702.0006.322	HSK-A63-HD16-90	63	16	90	34	50	38	49	46	M10	122	1.2
702.0041.322	HSK-A63-HD16-150	63	16	150	34	50	38	49	105	M10	182	1.7
702.0042.322	HSK-A63-HD16-200	63	16	200	34	50	38	49	155	M10	232	2.0
702.0007.322	HSK-A63-HD18-90	63	18	90	36	50	40	49	46	M10	122	1.3
702.0043.322	HSK-A63-HD18-150	63	18	150	36	50	40	49	105	M10	182	1.8
702.0044.322	HSK-A63-HD18-200	63	18	200	36	50	40	49	155	M10	232	2.1
702.0008.322	HSK-A63-HD20-90	63	20	90	38	50	42	51	46	M10	122	1.3
702.0045.322	HSK-A63-HD20-150	63	20	150	38	50	42	51	105	M10	182	1.8
702.0046.322	HSK-A63-HD20-200	63	20	200	38	50	42	51	155	M10	232	2.3
702.0009.322	HSK-A63-HD25-120	63	25	120	45	55	50	57	75	M16	152	1.9
702.0010.322	HSK-A63-HD32-125	63	32	125	56	63	63	61	83	M16	157	2.6

No	GB Model	HSK-A	d1	A	d2	d3	d4	l1	l2	g	L	kg
702.0001.324	HSK-A100-HD6-75	100	6	75	22	50	26	37	26	M5	125	2.4
702.0002.324	HSK-A100-HD8-75	100	8	75	24	50	28	37	26	M6	125	2.4
702.0003.324	HSK-A100-HD10-90	100	10	90	26	50	30	41	40	M8	140	2.5
702.0004.324	HSK-A100-HD12-95	100	12	95	28	50	32	46	40	M10	145	2.6
702.0005.324	HSK-A100-HD14-95	100	14	95	30	50	34	46	40	M10	145	2.6
702.0006.324	HSK-A100-HD16-100	100	16	100	34	50	38	49	46	M12	150	2.7
702.0007.324	HSK-A100-HD18-100	100	18	100	36	50	40	49	46	M12	150	2.7
702.0008.324	HSK-A100-HD20-105	100	20	105	38	50	42	51	46	M12	155	2.8
702.0009.324	HSK-A100-HD25-115	100	25	115	45	55	50	57	86	M16	165	3.0
702.0010.324	HSK-A100-HD32-120	100	32	120	56	70	63	61	91	M16	170	3.8

使用: 用于夹持按DIN1835A、B型或DIN 6535 HA或HB型直柄刀具, DIN1835 C、DE型和DIN 6535 HE型刀柄, 仅能与变径套共用。夹持精度h6级, 粗糙度最小为Ra0.3, 对于Φ25和Φ32只有DIN 1835 A型和DIN 6535HA型可用。

说明: 带内置的限位螺钉。

备注: 其他型号和尺寸可按订货要求制作。刀具的刀柄夹紧长度必须保证L-V尺寸, 否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。

Use: For shank tools according to DIN1835 type A and B and DIN 6535 type HE are only applicable with reduction bushes. Shank quality h6, Ra min.=0.3 For Φ25 and Φ32 only type A or HA can be used.

Standard Specification: Bored through adjusting screw included.

Note: Other designs and sizes are available on request.

Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.

## ACCESSORIES

配件



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4.18

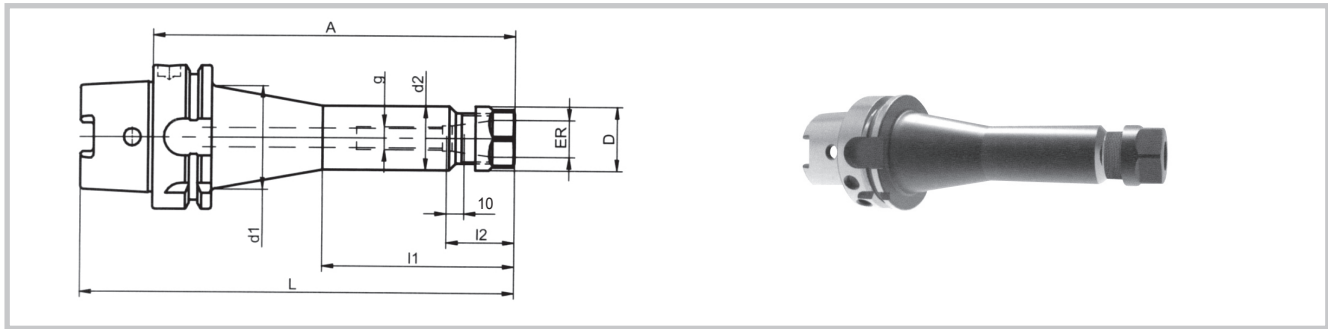


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ER/ESX ER-16弹簧夹头刀柄 (带调整螺钉孔)

Collet Chucks ER/ESX 16 with internal thread



No	GB Model	HSK-A	ER	A	d1	d2	D	l1	l2	g	L	kg
698.0001.320	HSK-A40-ER16-80	40	ER16(0.5-10)	80	-	28	28	-	27	M10	100	0.4
698.0001.321	HSK-A50-ER16-100	50	ER16(0.5-10)	100	-	28	28	-	27	M10	125	0.7
698.0011.322	HSK-A63-ER16-75	63	ER16(0.5-10)	75	-	28	28	-	27	M10	107	0.8
698.0001.322	HSK-A63-ER16-100	63	ER16(0.5-10)	100	-	28	28	-	27	M10	132	1.0
698.0002.322	HSK-A63-ER16-160	63	ER16(0.5-10)	160	45	28	28	85	27	M10	192	1.2
698.0001.324	HSK-A100-ER16-100	100	ER16(0.5-10)	100	-	28	28	-	27	M12	150	2.3
698.0002.324	HSK-A100-ER16-160	100	ER16(0.5-10)	160	60	28	28	85	27	M12	210	2.5

使用：用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明：夹头包括夹紧螺母。

Standard Specification: Collet chuck including clamping nut

备注：弹簧夹头配有标准调整螺钉便于调节；其他型号和尺寸可按订货要求制作。

Note : Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

ACCESSORIES

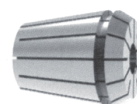
配件



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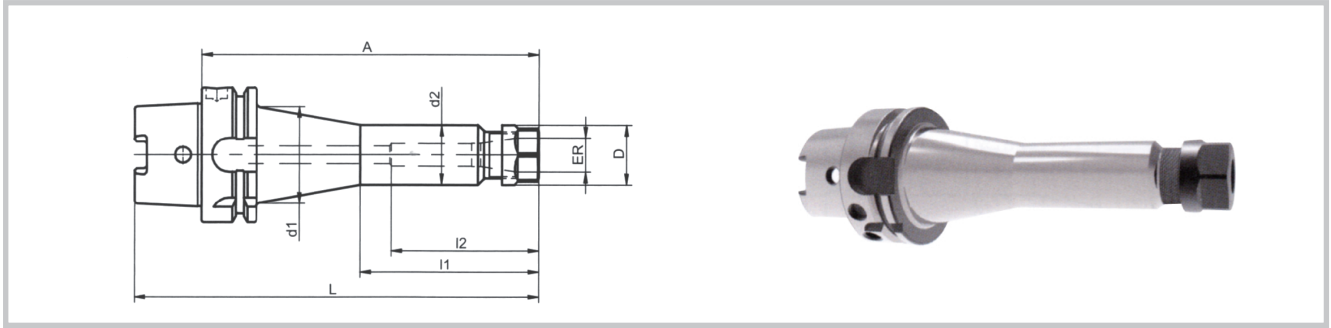
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## ER/ESX ER-11/16弹簧夹头刀柄 (不带调整螺钉孔) Collet Chucks ER/ESX 16 without internal thread



No	GB Model	HSK-A	ER	A	d1	d2	D	l1	l2	L	kg
698.0211.320	HSK-A40-ER11-80	40	ER11(0.5-7)	80	-	18.5	19	-	42	100	0.3
698.0201.320	HSK-A40-ER16-80	40	ER16(0.5-10)	80	-	28	28	-	61	100	0.4
698.0201.321	HSK-A50-ER16-100	50	ER16(0.5-10)	100	-	28	28	-	70	125	0.7
698.0201.322	HSK-A63-ER16-100	63	ER16(0.5-10)	100	-	28	28	-	70	132	1.0
698.0202.322	HSK-A63-ER16-160	63	ER16(0.5-10)	160	46	28	28	85	70	192	1.2
698.0201.324	HSK-A100-ER16-100	100	ER16(0.5-10)	100	-	28	28	-	70	150	2.3
698.0202.324	HSK-A100-ER16-160	100	ER16(0.5-10)	160	45	28	28	85	70	210	2.5

使用: 用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明: 夹头包括夹紧螺母。

Standard Specification: Collet chuck including clamping nut.

备注: 其他型号和尺寸可按订货要求制作。

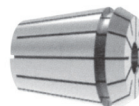
Note: Other designs and sizes are available on request

### ACCESSORIES

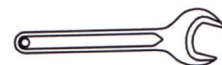
配件



4.15



4.02

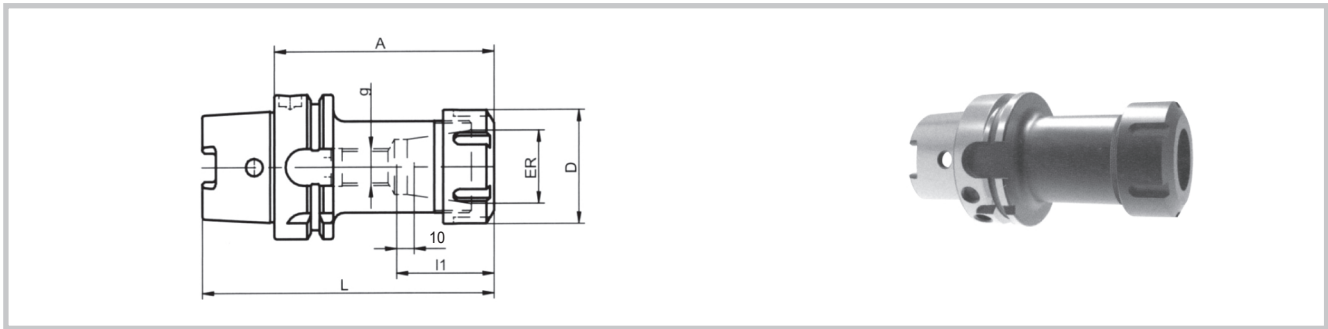


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ER/ESX ER-20/25/32/40弹簧夹头刀柄 (带调整螺钉孔)

Collet Chucks ER/ESX 20/25/32/40 with internal thread



No	GB Model	HSK-A	ER	A	D	l1	g	L	kg
640.0380.040	HSK-A40-ER20-80	40	ER20(1-13)	80	34	36	M10	100	0.6
697.0003.320	HSK-A40-ER25-80	40	ER25(1-16)	80	42	43	M10	100	0.8
640.0381.040	HSK-A50-ER20-100	50	ER20(1-13)	100	34	36	M10	125	0.9
697.0004.321	HSK-A50-ER25-100	50	ER25(1-16)	100	42	43	M10	125	1.1
640.0382.040	HSK-A63-ER20-75	63	ER20(1-13)	75	34	36	M10	107	0.9
640.0341.040	HSK-A63-ER20-100	63	ER20(1-13)	100	34	36	M10	132	1.1
640.0383.040	HSK-A63-ER20-160	63	ER20(1-13)	160	34	36	M10	192	1.5
697.0014.322	HSK-A63-ER25-75	63	ER25(1-16)	75	42	43	M10	107	1.1
697.0004.322	HSK-A63-ER25-100	63	ER25(1-16)	100	42	43	M10	132	1.4
697.0044.322	HSK-A63-ER25-160	63	ER25(1-16)	160	42	43	M10	192	1.9
697.0011.322	HSK-A63-ER32-75	63	ER32(2-20)	75	50	47	-	107	1.3
697.0001.322	HSK-A63-ER32-100	63	ER32(2-20)	100	50	47	M16	132	1.7
697.0041.322	HSK-A63-ER32-160	63	ER32(2-20)	160	50	47	M16	192	2.5
697.0012.322	HSK-A63-ER40-90	63	ER40(3-26)	90	63	53	-	122	2.0
697.0002.322	HSK-A63-ER40-120	63	ER40(3-26)	120	63	53	M16	152	2.7
697.0042.322	HSK-A63-ER40-160	63	ER40(3-26)	160	63	53	M16	192	3.6
640.0384.040	HSK-A80-ER20-100	80	ER20(1-13)	100	34	36	M10	140	1.6
697.0003.323	HSK-A80-ER25-100	80	ER25(1-16)	100	42	43	M10	140	1.8
697.0001.323	HSK-A80-ER32-100	80	ER32(2-20)	100	50	47	M16	140	2.1
697.0002.323	HSK-A80-ER40-120	80	ER40(3-26)	120	63	53	M16	160	3.2
640.0385.040	HSK-A100-ER20-100	100	ER20(1-13)	100	34	36	M10	150	2.4
640.0350.040	HSK-A100-ER20-160	100	ER20(1-13)	160	34	36	M10	210	2.8
697.0004.324	HSK-A100-ER25-100	100	ER25(1-16)	100	42	43	M10	150	2.7
697.0044.324	HSK-A100-ER25-160	100	ER25(1-16)	160	42	43	M10	210	3.3
697.0001.324	HSK-A100-ER32-100	100	ER32(2-20)	100	50	47	M16	150	3.0
697.0041.324	HSK-A100-ER32-160	100	ER32(2-20)	160	50	47	M16	210	3.8
697.0002.324	HSK-A100-ER40-120	100	ER40(3-26)	120	63	53	M16	170	4.0
697.0042.324	HSK-A100-ER40-160	100	ER40(3-26)	160	63	53	M16	210	4.9

使用: 用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明: 夹头包括夹紧螺母。

Standard Specification: Collet chuck including clamping nut.

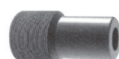
备注: 弹簧夹头配有标准调整螺钉便于调节; 其他型号和尺寸可按订货要求制作。

Note: Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

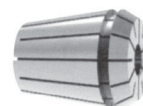
ACCESSORIES  
配件



4.15



4.20



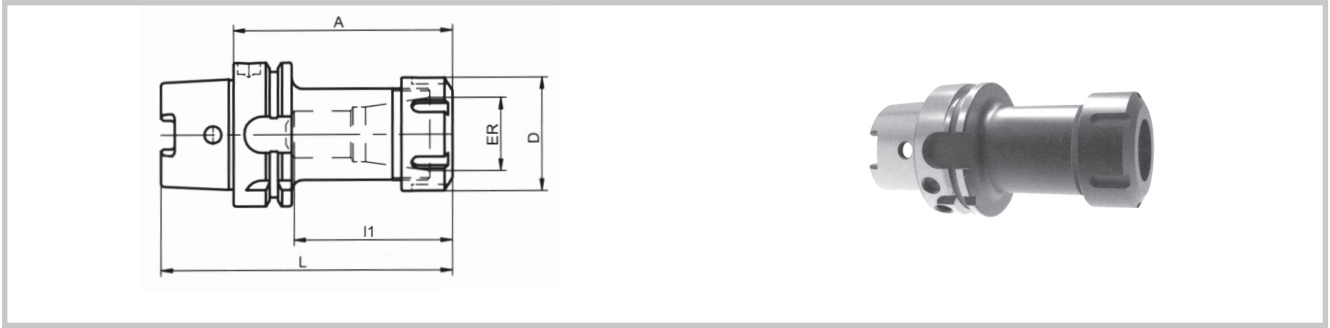
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## ER/ESX ER-25/32/40弹簧夹头刀柄 (不带调整螺钉孔) Collet Chucks ER/ESX 20/25/32/40 without internal thread



No	GB Model	HSK-A	ER	A	D	l1	L	kg
640.0386.040	HSK-A40-ER20-80	40	ER20(1-13)	80	34	60	100	0.6
697.0203.320	HSK-A40-ER25-80	40	ER25(1-16)	80	42	60	100	0.8
640.0387.040	HSK-A50-ER20-100	50	ER20(1-13)	100	34	72	125	0.9
697.0204.321	HSK-A50-ER25-100	50	ER25(1-16)	100	42	72	125	1.1
697.0201.321	HSK-A50-ER32-100	50	ER32(2-20)	100	50	73	125	1.4
640.0388.040	HSK-A63-ER20-100	63	ER20(1-13)	100	34	69	132	1.1
640.0389.040	HSK-A63-ER20-160	63	ER20(1-13)	160	34	69	192	1.5
697.0204.322	HSK-A63-ER25-100	63	ER25(1-16)	100	42	69	132	1.4
697.0244.322	HSK-A63-ER25-160	63	ER25(1-16)	160	42	69	192	1.9
697.0201.322	HSK-A63-ER32-100	63	ER32(2-20)	100	50	73	132	1.7
697.0241.322	HSK-A63-ER32-160	63	ER32(2-20)	160	50	73	192	2.5
697.0202.322	HSK-A63-ER40-120	63	ER40(3-26)	120	63	87	152	2.7
697.0242.322	HSK-A63-ER40-160	63	ER40(3-26)	160	63	87	192	3.6
640.0390.040	HSK-A100-ER20-100	100	ER20(1-13)	100	34	69	150	2.4
640.0391.040	HSK-A100-ER20-160	100	ER20(1-13)	160	34	69	210	2.8
697.0204.324	HSK-A100-ER25-100	100	ER25(1-16)	100	42	69	150	2.7
697.0244.324	HSK-A100-ER25-160	100	ER25(1-16)	160	42	69	210	3.3
697.0201.324	HSK-A100-ER32-100	100	ER32(2-20)	100	50	70	150	3.0
697.0241.324	HSK-A100-ER32-160	100	ER32(2-20)	160	50	70	210	3.8
697.0202.324	HSK-A100-ER40-120	100	ER40(3-26)	120	63	87	170	4.0
697.0242.324	HSK-A100-ER40-160	100	ER40(3-26)	160	63	87	210	4.9

使用：用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明：夹头包括夹紧螺母。

Standard Specification: Collet chuck including clamping nut.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request

### ACCESSORIES

配件



4.15



4.02

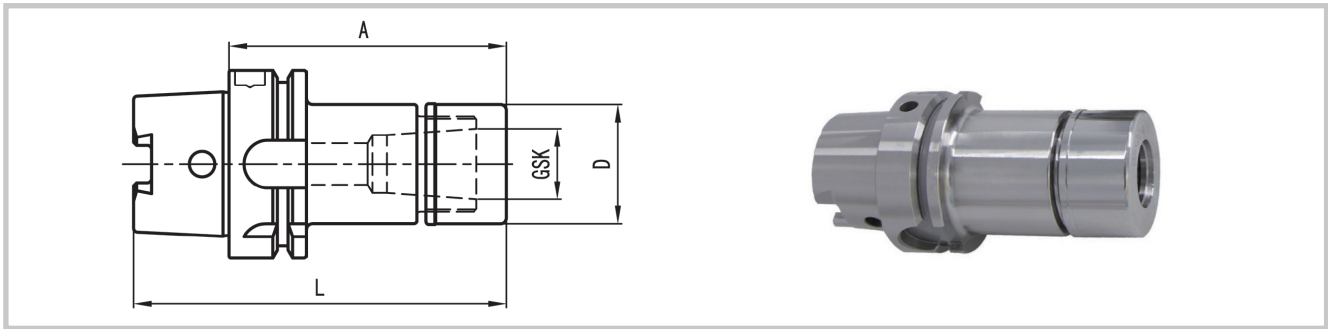


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页数



GSK高精度弹簧夹头刀柄  
Collet Chucks GSK6/10/16/20/25



ISO 12164-1    Form A        $\sigma = 0,003$     G2.5 25.000 min<sup>-1</sup> <1g mm    CAD

No	GB Model	HSK-A	GSK	A	D	L	Kg
440.0050.042	HSK-A40-GSK6-80	40	GSK6 ( 3-6 )	80	19.5	100	0.3
440.0051.042	HSK-A40-GSK10-80	40	GSK10 ( 2-10 )	80	27.5	100	0.4
440.0188.042	HSK-A40-GSK13-80	40	GSK13 ( 3-13 )	80	35	100	0.6
440.0052.042	HSK-A40-GSK16-80	40	GSK16 ( 3-16 )	80	40	100	0.7
440.0053.042	HSK-A50-GSK10-100	50	GSK10 ( 2-10 )	100	27.5	125	0.7
440.0189.042	HSK-A50-GSK13-100	50	GSK13 ( 3-13 )	100	35	125	0.9
440.0054.042	HSK-A50-GSK16-100	50	GSK16 ( 3-16 )	100	40	125	1.0
440.0055.042	HSK-A63-GSK10-100	63	GSK10 ( 2-10 )	100	27.5	132	0.9
440.0056.042	HSK-A63-GSK10-160	63	GSK10 ( 2-10 )	160	27.5	192	1.2
440.0190.042	HSK-A63-GSK13-100	63	GSK13 ( 3-13 )	100	35	132	1.1
440.0191.042	HSK-A63-GSK13-160	63	GSK13 ( 3-13 )	160	35	192	1.5
*440.0057.042	HSK-A63-GSK16-80	63	GSK16 ( 3-16 )	80	40	112	1.1
440.0058.042	HSK-A63-GSK16-100	63	GSK16 ( 3-16 )	100	40	132	1.3
440.0059.042	HSK-A63-GSK16-160	63	GSK16 ( 3-16 )	160	40	192	1.8
*440.0060.042	HSK-A63-GSK20-80	63	GSK20 ( 4-20 )	80	48	112	1.3
440.0061.042	HSK-A63-GSK20-100	63	GSK20 ( 4-20 )	100	48	132	1.6
440.0062.042	HSK-A63-GSK20-160	63	GSK20 ( 4-20 )	160	48	192	2.3
*440.0063.042	HSK-A63-GSK25-90	63	GSK25 ( 3-25 )	90	55	122	1.7
440.0064.042	HSK-A63-GSK25-120	63	GSK25 ( 3-25 )	120	55	152	2.2
440.0065.042	HSK-A80-GSK16-100	80	GSK16 ( 3-16 )	100	40	140	1.7
440.0066.042	HSK-A80-GSK20-100	80	GSK20 ( 4-20 )	100	48	140	2.0
440.0067.042	HSK-A80-GSK25-100	80	GSK25 ( 3-25 )	100	55	140	2.3
440.0068.042	HSK-A100-GSK10-100	100	GSK10 ( 2-10 )	100	27.5	150	2.3
440.0069.042	HSK-A100-GSK10-160	100	GSK10 ( 2-10 )	160	27.5	210	2.5
440.0192.042	HSK-A100-GSK13-100	100	GSK13 ( 3-13 )	100	35	150	2.5
440.0193.042	HSK-A100-GSK13-160	100	GSK13 ( 3-13 )	160	35	210	2.9
440.0070.042	HSK-A100-GSK16-100	100	GSK16 ( 3-16 )	100	40	150	2.6
440.0071.042	HSK-A100-GSK16-160	100	GSK16 ( 3-16 )	160	40	210	3.1
440.0072.042	HSK-A100-GSK20-100	100	GSK20 ( 4-20 )	100	48	150	2.9
440.0073.042	HSK-A100-GSK20-160	100	GSK20 ( 4-20 )	160	48	210	3.6
440.0074.042	HSK-A100-GSK25-120	100	GSK25 ( 3-25 )	120	55	170	3.5
440.0075.042	HSK-A100-GSK25-160	100	GSK25 ( 3-25 )	160	55	210	4.2

\*无冷却管。

**使用:** 用于夹持按DIN 1835 A型、B型、E型以及DIN 6535 HA型、HB型和HE型的直柄刀具。

**Use:** For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

**说明:** 夹头包括夹紧螺母，标准配置夹紧螺母为国产配件，如需进口配件需客户另外订购

**Standard Specification:** Collet chuck including clamping nut.

**备注:** 其他型号和尺寸可按订货要求制作。  
括号中数字仅表示夹持刀具柄部尺寸范围，不体现在产品型号中。

**Note:** Other designs and sizes are available on request.

## ACCESSORIES

配件

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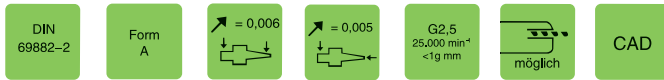
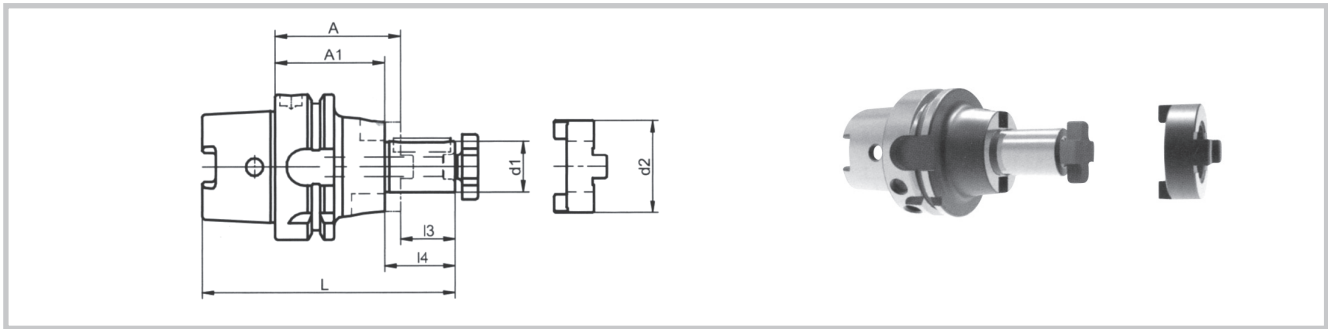
4.10



4.12

套式铣刀刀柄 (带平键和传动环)

Shell End Mill Arbors for milling cutters with longitudinal slot or tenon drive



No	GB Model	HSK-A	d1	A	A1	d2	l3	l4	L	kg
489.0001.320	HSK-A40-XM16-50	40	16	50	40	32	17	27	87	0.3
489.0002.320	HSK-A40-XM22-50	40	22	50	38	40	19	31	89	0.5
489.0003.320	HSK-A40-XM27-65	40	27	65	53	48	21	33	106	0.8
489.0001.321	HSK-A50-XM16-50	50	16	50	40	32	17	27	92	0.5
489.0002.321	HSK-A50-XM22-50	50	22	50	38	40	19	31	94	0.6
489.0003.321	HSK-A50-XM27-65	50	27	65	53	48	21	33	111	0.9
489.0004.321	HSK-A50-XM32-65	50	32	65	51	58	24	38	114	1.1
489.0001.322	HSK-A63-XM16-60	63	16	60	50	32	17	27	109	0.8
489.0031.322	HSK-A63-XM16-100	63	16	100	90	32	17	27	149	1.1
489.0041.322	HSK-A63-XM16-160	63	16	160	150	32	17	27	209	1.5
489.0002.322	HSK-A63-XM22-60	63	22	60	48	40	19	31	111	0.9
489.0032.322	HSK-A63-XM22-100	63	22	100	88	40	19	31	151	1.3
489.0042.322	HSK-A63-XM22-160	63	22	160	148	40	19	31	211	1.9
489.0003.322	HSK-A63-XM27-60	63	27	60	48	48	21	33	113	1.1
489.0033.322	HSK-A63-XM27-100	63	27	100	88	48	21	33	153	1.7
489.0043.322	HSK-A63-XM27-160	63	27	160	148	48	21	33	213	2.5
489.0004.322	HSK-A63-XM32-60	63	32	60	46	58	24	38	116	1.3
489.0034.322	HSK-A63-XM32-100	63	32	100	86	58	24	38	156	2.1
489.0044.322	HSK-A63-XM32-160	63	32	160	146	58	24	38	216	3.4
489.0005.322	HSK-A63-XM40-70	63	40	70	56	70	27	41	129	1.9
489.0035.322	HSK-A63-XM40-100	63	40	100	86	70	27	41	159	2.8
489.0045.322	HSK-A63-XM40-160	63	40	160	146	70	27	41	219	4.7
489.0001.323	HSK-A80-XM16-60	80	16	60	50	32	17	27	117	1.3
489.0002.323	HSK-A80-XM22-60	80	22	60	48	40	19	31	119	1.4
489.0003.323	HSK-A80-XM27-60	80	27	60	48	48	21	33	121	1.5
489.0004.323	HSK-A80-XM32-60	80	32	60	46	58	24	38	124	1.7
489.0005.323	HSK-A80-XM40-70	80	40	70	56	70	27	41	137	2.4
489.0006.323	HSK-A80-XM50-80	80	50	80	64	90	30	46	150	3.7

No	GB Model	HSK-A	d1	A	A1	d2	l3	l4	L	kg
489.0001.324	HSK-A100-XM16-60	100	16	60	50	32	17	27	127	2.1
489.0031.324	HSK-A100-XM16-100	100	16	100	90	32	17	27	167	2.4
489.0041.324	HSK-A100-XM16-160	100	16	160	150	32	17	27	227	2.8
489.0002.324	HSK-A100-XM22-60	100	22	60	48	40	19	31	129	2.3
489.0032.324	HSK-A100-XM22-100	100	22	100	88	40	19	31	169	2.6
489.0042.324	HSK-A100-XM22-160	100	22	160	148	40	19	31	229	3.2
489.0003.324	HSK-A100-XM27-60	100	27	60	48	48	21	33	131	2.4
489.0033.324	HSK-A100-XM27-100	100	27	100	88	48	21	33	171	3.0
489.0043.324	HSK-A100-XM27-160	100	27	160	148	48	21	33	231	3.8
489.0004.324	HSK-A100-XM32-60	100	32	60	46	58	24	38	134	2.6
489.0034.324	HSK-A100-XM32-100	100	32	100	86	58	24	38	174	3.4
489.0044.324	HSK-A100-XM32-160	100	32	160	146	58	24	38	234	4.6
489.0005.324	HSK-A100-XM40-70	100	40	70	56	70	27	41	147	3.2
489.0035.324	HSK-A100-XM40-100	100	40	100	86	70	27	41	177	4.1
489.0045.324	HSK-A100-XM40-160	100	40	160	146	70	27	41	237	5.9
489.0006.324	HSK-A100-XM50-80	100	50	80	64	90	30	46	160	4.4

使用：用于夹持轴向平键或端面键驱动的面铣刀。

Use: For clamping shell end mills and milling cutters with longitudinal slot or tenon drive.

设计：带有中心冷却功能，传动环符合DIN 138。

Design: Central boring for coolant supply. Cutter drive according to DIN 138.

说明：包括紧固螺钉、带有螺孔的平键和传动环

Standard Specification: Cutter retaining screw, feather key with withdrawal thread and drive ring included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件

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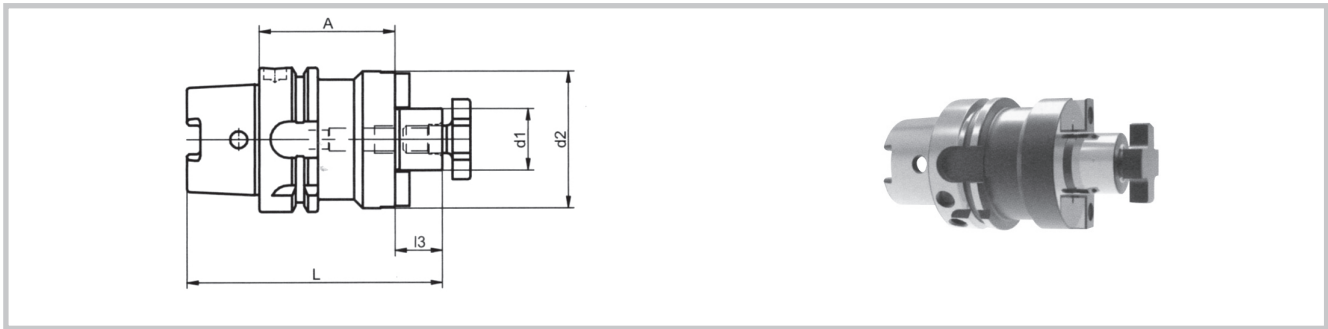
4.21



4.22

端铣刀柄

Shell End Mill Arbors with enlarged contact diameter



DIN 69882-3
Form B
 $\nabla = 0,006$ 
 $\nabla = 0,005$ 
G2.5  
25,000 min<sup>-1</sup>  
<1g mm
möglich
CAD

No	GB Model	HSK-A	d1	A	d2	l3	L	W	夹刀螺钉	十字形扳手	kg
579.0009.321	HSK-A50-XD16-50	50	16	50	40	17	92	8	M8	BS-16	0.6
579.0001.321	HSK-A50-XD22-60	50	22	60	50	19	104	10	M10	BS-22	1.0
579.0002.321	HSK-A50-XD27-60	50	27	60	60	21	106	12	M12	BS-27	1.2
579.0009.322	HSK-A63-XD16-50	63	16	50	40	17	99	8	M8	BS-16	0.9
579.0039.322	HSK-A63-XD16-100	63	16	100	40	17	149	8	M8	BS-16	1.4
579.0049.322	HSK-A63-XD16-160	63	16	160	40	17	209	8	M8	BS-16	2.0
579.0001.322	HSK-A63-XD22-50	63	22	50	50	19	101	10	M10	BS-22	1.1
579.0031.322	HSK-A63-XD22-100	63	22	100	50	19	151	10	M10	BS-22	1.8
579.0041.322	HSK-A63-XD22-160	63	22	160	50	19	211	10	M10	BS-22	2.8
579.0002.322	HSK-A63-XD27-60	63	27	60	60	21	113	12	M12	BS-27	1.5
579.0032.322	HSK-A63-XD27-100	63	27	100	60	21	153	12	M12	BS-27	2.4
579.0042.322	HSK-A63-XD27-160	63	27	160	60	21	213	12	M12	BS-27	3.7
579.0003.322	HSK-A63-XD32-60	63	32	60	78	24	116	14	M16	BS-32	2.1
579.0033.322	HSK-A63-XD32-100	63	32	100	78	24	156	14	M16	BS-32	3.6
579.0043.322	HSK-A63-XD32-160	63	32	160	78	24	216	14	M16	BS-32	5.8
579.0004.322	HSK-A63-XD40-60	63	40	60	89	27	119	16	M20	BS-40	2.6
579.0034.322	HSK-A63-XD40-100	63	40	100	89	27	159	16	M20	BS-40	4.5
579.0001.323	HSK-A80-XD22-50	80	22	50	50	19	109	10	M10	BS-22	1.5
579.0002.323	HSK-A80-XD27-50	80	27	50	60	21	111	12	M12	BS-27	1.7
579.0003.323	HSK-A80-XD32-60	80	32	60	78	24	124	14	M16	BS-32	2.5
579.0004.323	HSK-A80-XD40-60	80	40	60	89	27	127	16	M20	BS-40	3.0

No	GB Model	HSK-A	d1	A	d2	l3	L	W	夹刀螺钉	十字形扳手	kg
579.0009.324	HSK-A100-XD16-50	100	16	50	40	17	117	8	M8	BS-16	2.2
579.0039.324	HSK-A100-XD16-100	100	16	100	40	17	167	8	M8	BS-16	2.7
579.0049.324	HSK-A100-XD16-160	100	16	160	40	17	227	8	M8	BS-16	3.3
579.0001.324	HSK-A100-XD22-50	100	22	50	50	19	119	10	M10	BS-22	2.4
579.0031.324	HSK-A100-XD22-100	100	22	100	50	19	169	10	M10	BS-22	3.1
579.0041.324	HSK-A100-XD22-160	100	22	160	50	19	229	10	M10	BS-22	4.0
579.0002.324	HSK-A100-XD27-50	100	27	50	60	21	121	12	M12	BS-27	2.5
579.0032.324	HSK-A100-XD27-100	100	27	100	60	21	171	12	M12	BS-27	3.6
579.0042.324	HSK-A100-XD27-160	100	27	160	60	21	231	12	M12	BS-27	5.0
579.0003.324	HSK-A100-XD32-50	100	32	50	78	24	124	14	M16	BS-32	2.9
579.0033.324	HSK-A100-XD32-100	100	32	100	78	24	174	14	M16	BS-32	4.8
579.0043.324	HSK-A100-XD32-160	100	32	160	78	24	234	14	M16	BS-32	7.0
579.0004.324	HSK-A100-XD40-60	100	40	60	89	27	137	16	M20	BS-40	3.8
579.0034.324	HSK-A100-XD40-100	100	40	100	89	27	177	16	M20	BS-40	5.7
579.0044.324	HSK-A100-XD40-160	100	40	160	89	27	237	16	M20	BS-40	8.6
579.0005.324	HSK-A100-XD50-70	100	50	70	120	30	150	18	M24	BS-50	6.1
579.0035.324	HSK-A100-XD50-100	100	50	100	120	30	180	18	M24	BS-50	8.7
579.0045.324	HSK-A100-XD50-160	100	50	160	120	30	240	18	M24	BS-50	14.1
579.0006.324	HSK-A100-XD60-70	100	60	70	140	40	160	25.4	M30	BS-60	7.8
579.0036.324	HSK-A100-XD60-100	100	60	100	140	40	190	25.4	M30	BS-60	11.4

使用：用于夹持带有端面键槽的面铣刀。

Use: For clamping shell end mills and milling cutters with tenon drive.

设计：带有中心冷却功能， $\Phi 40$ 和 $\Phi 60$ 两种规格需要4个或8个螺钉夹紧，刀具和主轴的安装尺寸符合DIN 2079。

Design: Central boring for coolant supply. Clamping  $\Phi 40$  and  $\Phi 60$  with 4 or 8 threaded holes for holding cutters with tool holding according to DIN 2079.

说明：包括紧固螺钉和传动键。

Standard Specification: Cutter retaining screw and tightened drive keys included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



4.15



4.21

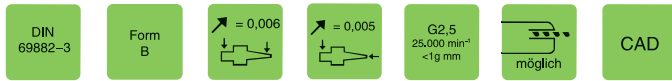
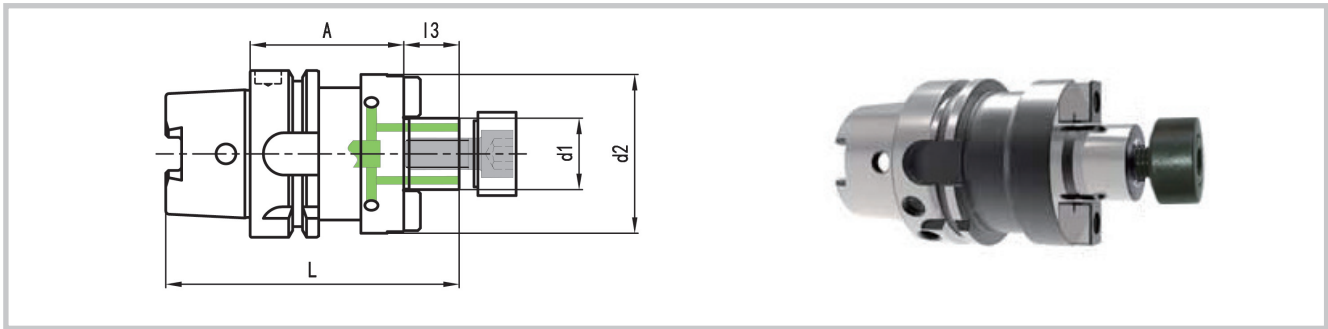


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端铣刀柄 (带内冷)

Shell End Mill Arbors with enlarged contact diameter



No	GB Model	HSK-A	d1	A	d2	l3	L	W	夹刀螺钉 GB/T70.1	垫片	kg
579.4009.322	HSK-A63-XD16-50	63	16	50	40	17	99	8	M8(SW6)	—	0.9
579.4039.322	HSK-A63-XD16-100	63	16	100	40	17	149	8	M8(SW6)	—	1.4
579.4049.322	HSK-A63-XD16-160	63	16	160	40	17	209	8	M8(SW6)	—	2.0
579.4001.322	HSK-A63-XD22-50	63	22	50	50	19	101	10	M10(SW8)	—	1.1
579.4031.322	HSK-A63-XD22-100	63	22	100	50	19	151	10	M10(SW8)	—	1.8
579.4041.322	HSK-A63-XD22-160	63	22	160	50	19	211	10	M10(SW8)	—	2.8
579.4002.322	HSK-A63-XD27-60	63	27	60	60	21	113	12	M12(SW10)	DQ-D27	1.5
579.4032.322	HSK-A63-XD27-100	63	27	100	60	21	153	12	M12(SW10)	DQ-D27	2.4
579.4042.322	HSK-A63-XD27-160	63	27	160	60	21	213	12	M12(SW10)	DQ-D27	3.7
579.4003.322	HSK-A63-XD32-60	63	32	60	78	24	116	14	M16(SW14)	DQ-D32	2.1
579.4033.322	HSK-A63-XD32-100	63	32	100	78	24	156	14	M16(SW14)	DQ-D32	3.6
579.4043.322	HSK-A63-XD32-160	63	32	160	78	24	216	14	M16(SW14)	DQ-D32	5.8
579.4004.322	HSK-A63-XD40-60	63	40	60	89	27	119	16	M20(SW17)	DQ-D40	2.6
579.4034.322	HSK-A63-XD40-100	63	40	100	89	27	159	16	M20(SW17)	DQ-D40	4.5

ACCESSORIES

配件



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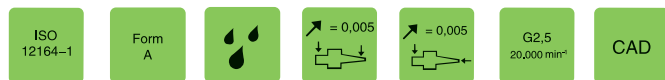
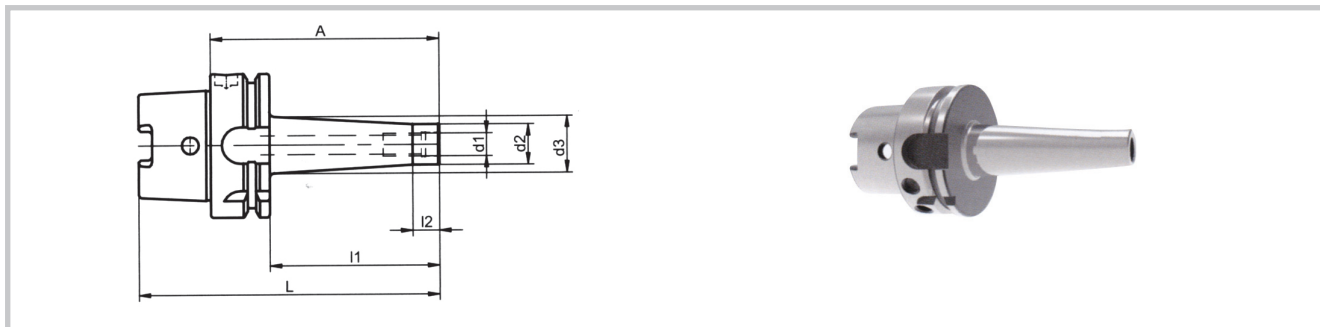
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## KFS模块式铣刀柄

### Holders for screw-in milling cutters



No	GB Model	HSK-A	d1	A	d2	d3	l1	l2	L	kg
571.0001.322	HSK-A63-KFS8-51	63	M8	51	12.8	15	25.0	12	83.0	0.7
571.0011.322	HSK-A63-KFS8-76	63	M8	76	12.8	23	50.0	12	108.0	0.7
571.0021.322	HSK-A63-KFS8-101	63	M8	101	12.8	23	75.0	12	133.0	0.7
571.0002.322	HSK-A63-KFS10-51	63	M10	51	17.8	20	25.0	12	83.0	0.7
571.0012.322	HSK-A63-KFS10-76	63	M10	76	17.8	25	50.0	12	108.0	0.7
571.0022.322	HSK-A63-KFS10-101	63	M10	101	17.8	25	75.0	12	133.0	0.8
571.0032.322	HSK-A63-KFS10-126	63	M10	126	17.8	32	100.0	12	158.0	0.8
571.0042.322	HSK-A63-KFS10-176	63	M10	176	17.8	35	150.0	12	208.0	0.9
571.0003.322	HSK-A63-KFS12-51	63	M12	51	20.8	24	25.0	12	83.0	0.7
571.0013.322	HSK-A63-KFS12-76	63	M12	76	20.8	28	50.0	12	108.0	0.8
571.0023.322	HSK-A63-KFS12-101	63	M12	101	20.8	31	75.0	12	133.0	0.8
571.0033.322	HSK-A63-KFS12-126	63	M12	126	20.8	33	100.0	12	158.0	0.9
571.0043.322	HSK-A63-KFS12-176	63	M12	176	20.8	40	150.0	12	208.0	1.0
571.0004.322	HSK-A63-KFS16-51	63	M16	51	28.8	-	25.0	-	83.0	0.8
571.0014.322	HSK-A63-KFS16-76	63	M16	76	28.8	34	50.0	12	108.0	0.9
571.0024.322	HSK-A63-KFS16-101	63	M16	101	28.8	34	75.0	12	133.0	1.0
571.0034.322	HSK-A63-KFS16-126	63	M16	126	28.8	36	100.0	12	158.0	1.1
571.0044.322	HSK-A63-KFS16-176	63	M16	176	28.8	42	150.0	12	208.0	1.4
571.0011.324	HSK-A100-KFS8-79	100	M8	79	12.8	23	50.0	12	129.0	2.0
571.0012.324	HSK-A100-KFS10-79	100	M10	79	17.8	25	50.0	12	129.0	2.1
571.0022.324	HSK-A100-KFS10-104	100	M10	104	17.8	25	75.0	12	154.0	2.1
571.0032.324	HSK-A100-KFS10-129	100	M10	129	17.8	32	100.0	12	179.0	2.2
571.0042.324	HSK-A100-KFS10-179	100	M10	179	17.8	35	150.0	12	229.0	2.3
571.0013.324	HSK-A100-KFS12-79	100	M12	79	20.8	28	50.0	12	129.0	2.1
571.0023.324	HSK-A100-KFS12-104	100	M12	104	20.8	31	75.0	12	154.0	2.2
571.0033.324	HSK-A100-KFS12-129	100	M12	129	20.8	33	100.0	12	179.0	2.2
571.0043.324	HSK-A100-KFS12-179	100	M12	179	20.8	40	150.0	12	229.0	2.4
571.0014.324	HSK-A100-KFS16-79	100	M16	79	28.8	34	50.0	12	129.0	2.2
571.0024.324	HSK-A100-KFS16-104	100	M16	104	28.8	34	75.0	12	154.0	2.4
571.0034.324	HSK-A100-KFS16-129	100	M16	129	28.8	36	100.0	12	179.0	2.5
571.0044.324	HSK-A100-KFS16-179	100	M16	179	28.8	42	150.0	12	229.0	2.7

使用：用于夹紧以螺纹连接的铣刀。

Use: For clamping screw-in milling cutters with thread.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



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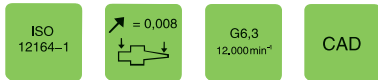
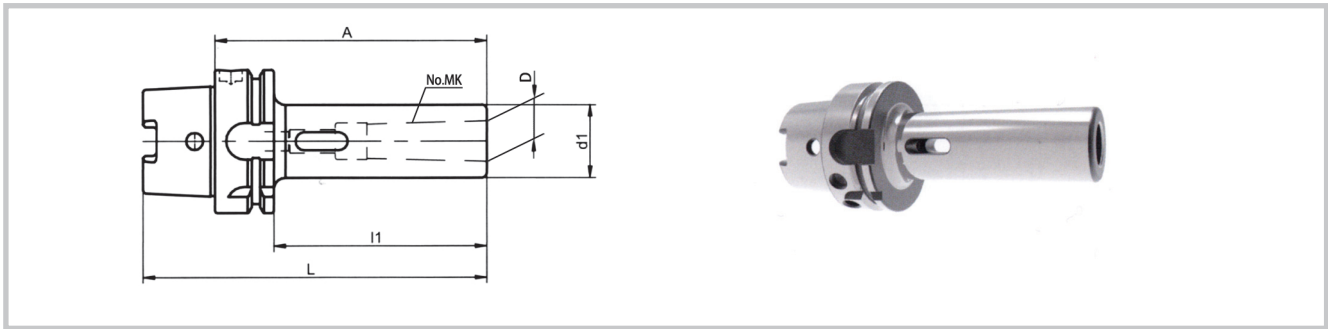
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带扁尾莫氏圆锥孔刀柄

Reduction Sleeves for morse taper with tang



No	GB Model	HSK-A	MK	D	A	d1	l1	L	kg
454.0001.321	HSK-A50-MK1-100	50	1	12.065	100	25	74.0	125	0.6
454.0002.321	HSK-A50-MK2-120	50	2	17.78	120	32	94.0	145	0.9
454.0003.321	HSK-A50-MK3-140	50	3	23.825	140	40	114.0	165	1.4
454.0001.322	HSK-A63-MK1-100	63	1	12.065	100	25	74.0	132	0.9
454.0002.322	HSK-A63-MK2-120	63	2	17.78	120	32	94.0	152	1.2
454.0003.322	HSK-A63-MK3-140	63	3	23.825	140	40	114.0	172	1.6
454.0004.322	HSK-A63-MK4-160	63	4	31.267	160	48	134.0	192	2.3
454.0001.323	HSK-A80-MK1-110	80	1	12.065	110	25	84.0	150	1.4
454.0002.323	HSK-A80-MK2-120	80	2	17.78	120	32	94.0	160	1.6
454.0003.323	HSK-A80-MK3-150	80	3	23.825	150	40	114.0	190	2.2
454.0004.323	HSK-A80-MK4-170	80	4	31.267	170	48	144.0	210	2.9
454.0005.323	HSK-A80-MK5-200	80	5	44.399	200	63	174.0	240	4.9
454.0001.324	HSK-A100-MK1-110	100	1	12.065	110	25	81.0	160	2.3
454.0002.324	HSK-A100-MK2-120	100	2	17.78	120	32	91.0	170	2.5
454.0003.324	HSK-A100-MK3-150	100	3	23.825	150	40	121.0	200	3.0
454.0004.324	HSK-A100-MK4-170	100	4	31.267	170	48	141.0	220	3.8
454.0005.324	HSK-A100-MK5-200	100	5	44.399	200	63	171.0	250	5.7

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



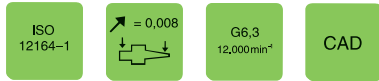
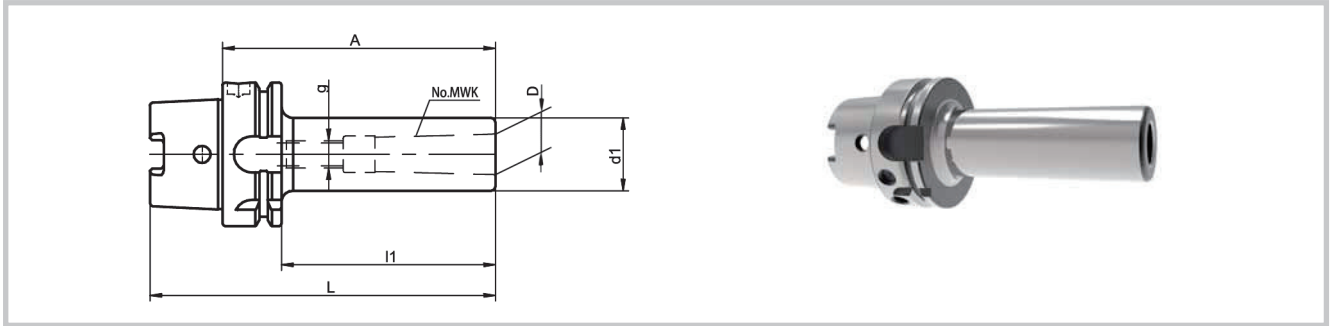
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## 无扁尾莫氏圆锥孔刀柄

### Reduction Sleeves for morse taper with thread



No	GB Model	HSK-A	MWK	D	A	d1	l1	L	g	kg
458.0001.321	HSK-A50-MWK1-100	50	1	12.065	100	25	74.0	M6	125.0	0.6
458.0002.321	HSK-A50-MWK2-120	50	2	17.78	120	32	94.0	M10	145.0	0.9
458.0003.321	HSK-A50-MWK3-130	50	3	23.825	130	40	104.0	M12	155.0	1.3
458.0001.322	HSK-A63-MWK1-100	63	1	12.065	100	25	74.0	M6	132.0	0.9
458.0002.322	HSK-A63-MWK2-120	63	2	17.78	120	32	94.0	M10	152.0	1.2
458.0003.322	HSK-A63-MWK3-130	63	3	23.825	130	40	104.0	M12	162.0	1.6
458.0004.322	HSK-A63-MWK4-160	63	4	31.267	160	63	134.0	M16	192.0	3.6
458.0001.323	HSK-A80-MWK1-120	80	1	12.065	120	25	94.0	M6	160.0	1.4
458.0002.323	HSK-A80-MWK2-120	80	2	17.78	120	32	94.0	M10	160.0	1.6
458.0003.323	HSK-A80-MWK3-140	80	3	23.825	140	40	114.0	M12	180.0	2.1
458.0004.323	HSK-A80-MWK4-170	80	4	31.267	170	63	144.0	M16	210.0	4.3
458.0005.323	HSK-A80-MWK5-200	80	5	44.399	200	78	174.0	M20	240.0	7.0
458.0001.324	HSK-A100-MWK1-120	100	1	12.065	120	25	91.0	M6	170.0	2.3
458.0002.324	HSK-A100-MWK2-120	100	2	17.78	120	32	91.0	M10	170.0	2.5
458.0003.324	HSK-A100-MWK3-140	100	3	23.825	140	40	111.0	M12	190.0	3.0
458.0004.324	HSK-A100-MWK4-170	100	4	31.267	170	63	141.0	M16	220.0	5.1
458.0005.324	HSK-A100-MWK5-200	100	5	44.399	200	78	171.0	M20	250.0	7.7

说明: 包括紧固螺钉和螺纹挡环。

Standard Specification: Retaining screw and threaded ring included.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件

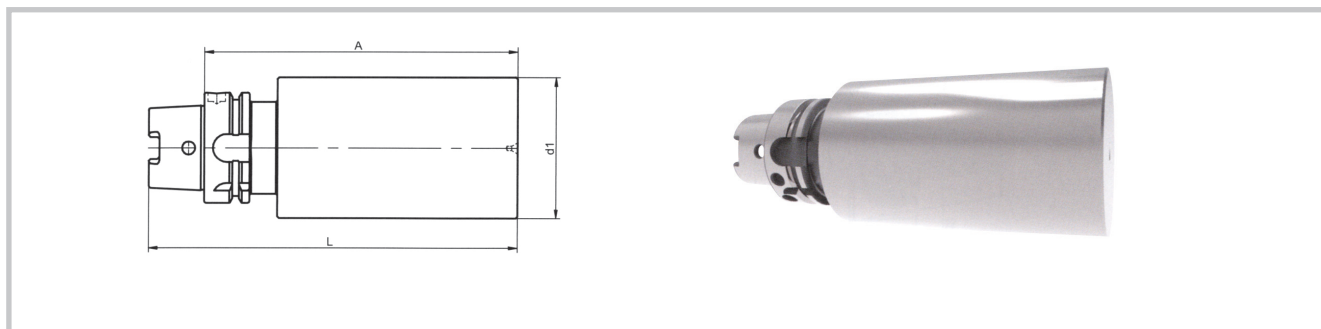


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毛坯刀柄

Tool Blanks



No	GB Model	HSK-A	d1	A	L	kg
517.6001.320	HSK-A40-MP40-200	40	40	200	220	2.0
517.5001.321	HSK-A50-MP50-150	50	50	150	175	2.3
517.5002.321	HSK-A50-MP50-200	50	50	200	225	3.1
517.5003.321	HSK-A50-MP63-150	50	63	150	175	3.4
517.6001.321	HSK-A50-MP63-200	50	63	200	225	4.6
517.5001.322	HSK-A63-MP63-150	63	63	150	182	3.7
517.5002.322	HSK-A63-MP63-200	63	63	200	232	4.9
517.5003.322	HSK-A63-MP63-250	63	63	250	282	6.1
517.5004.322	HSK-A63-MP80-150	63	80	150	182	5.5
517.5005.322	HSK-A63-MP80-200	63	80	200	232	7.5
517.6001.322	HSK-A63-MP80-250	63	80	250	282	9.5
517.5001.323	HSK-A80-MP80-150	80	80	150	190	6.0
517.5002.323	HSK-A80-MP80-200	80	80	200	240	8.0
517.6001.323	HSK-A80-MP80-250	80	80	250	290	9.9
517.5001.324	HSK-A100-MP95-150	100	95	150	200	8.7
517.5002.324	HSK-A100-MP95-200	100	95	200	250	11.5
517.6001.324	HSK-A100-MP95-250	100	95	250	300	14.3

使用：用于制造特殊刀具刀体及工具系统产品。

设计：锥柄为磨制成品，尺寸符合柄部标准，维氏硬度 HV670±40（近似于HRC58±2），淬硬层在 0.5mm以上。  
刀具端硬度HRC36-44。

材料：合金钢

备注：其他型号和尺寸可按订货要求制作。

Use: For own manufacture of special tools.

Design: The taper is finished with grinding, the dimensions are in accordance with the standard of the handle, HV670±40 (approximately HRC58±2), the hardened layer is above 0.5mm. Tool part is HRC36-44.

Material: Alloy steel.

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



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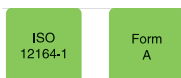
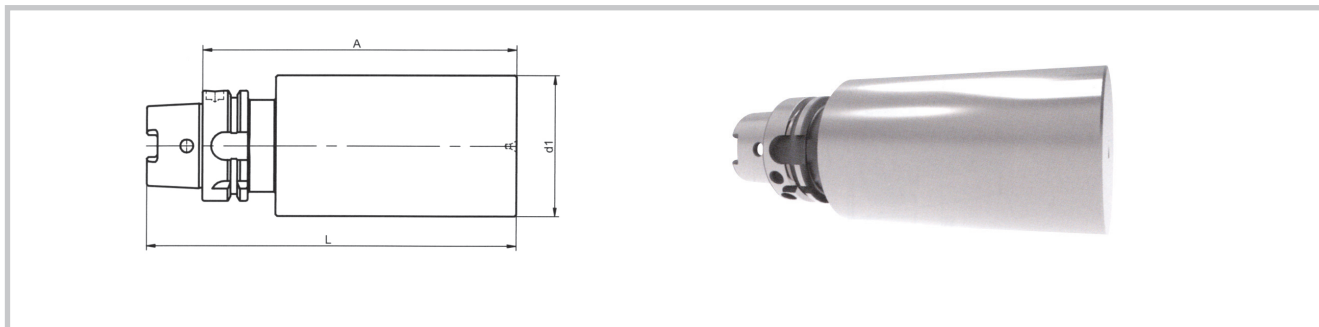
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## 毛坯刀柄

### Tool Blanks

2.0

HSK



No	GB Model	HSK-A	d1	A	L	kg
517.0001.320	HSK-A40-MP40-200	40	40	200	220	2.0
517.0001.321	HSK-A50-MP63-200	50	63	200	225	4.6
517.0001.322	HSK-A63-MP80-250	63	80	250	282	9.5
517.0001.323	HSK-A80-MP80-250	80	80	250	290	9.9
517.0001.324	HSK-A100-MP95-250	100	95	250	300	14.3

使用：用于制造工具系统产品。

设计：锥柄为磨制成品，尺寸符合柄部标准，维氏硬度

HV670±40（近似于HRC58±2）。

刀具端面抛光，未做淬硬处理，为原材料本身硬度。

材料：渗碳钢

备注：其他型号和尺寸可按订货要求制作。

Use: For own manufacture of special tools.

Design: Taper including flange hardened. Vickers hardness min. HV 670kp/mm<sup>2</sup> (min. HRC 58). Taper ground, shank not ground, prepared to be finished, unhardened.

Material: Alloyed case-hardened steel.

Note: Other designs and sizes are available on request.

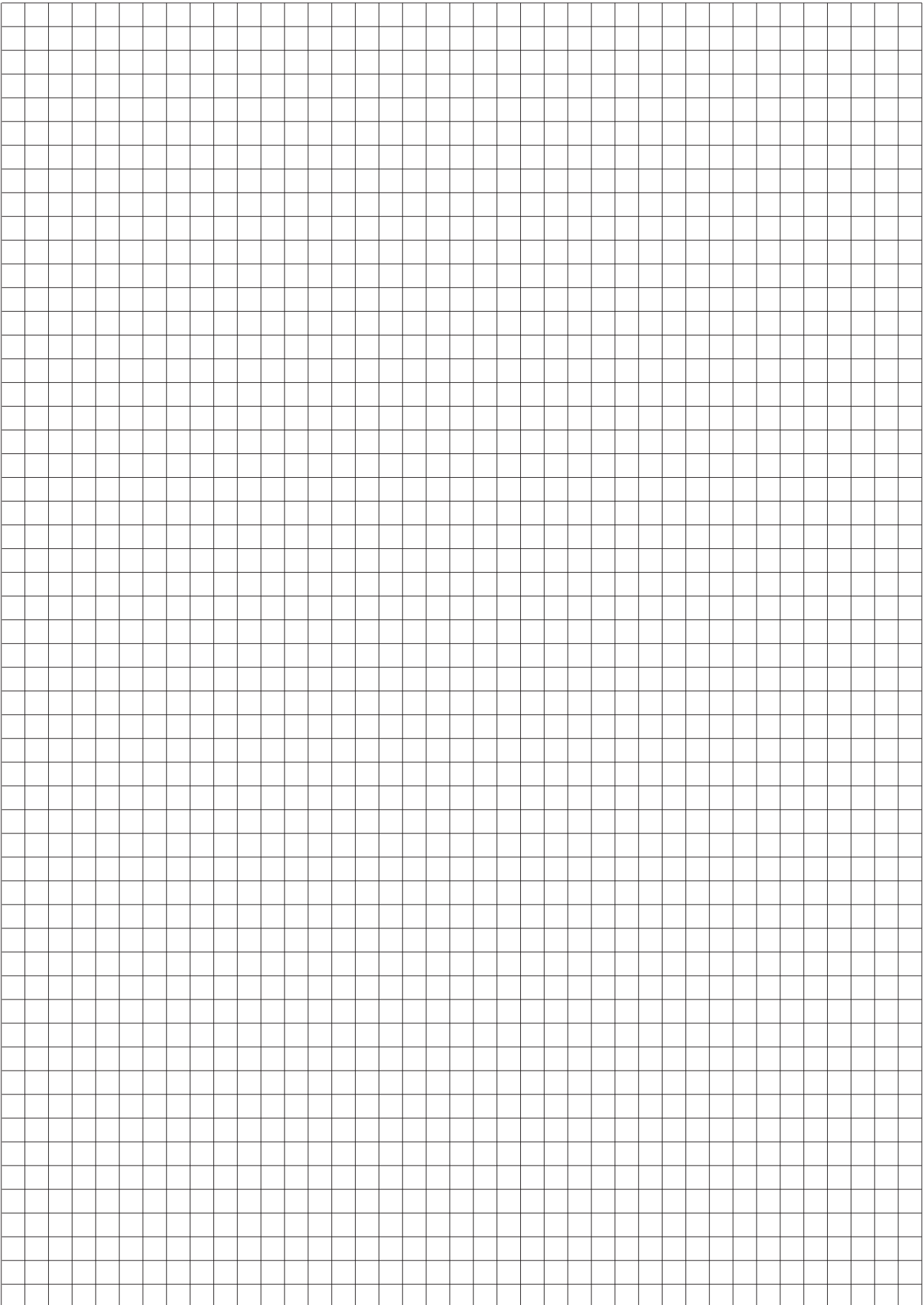
## ACCESSORIES

配件



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## 3.0 PSC–Polygonal Taper Shanks

### PSC精密刀柄

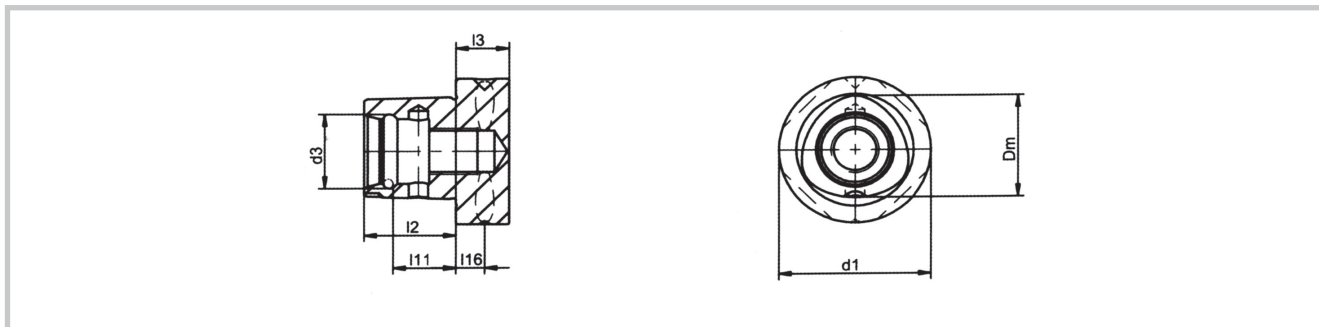
### PSC–Polygonal Taper Shanks



	PSC精密刀柄	PSC-Polygonal Taper Shanks to ISO 26623-1
3.03-3.05	i-tec® 热装夹头刀柄	i-tec® Shrink-fit Chucks
3.06	丝锥快换夹头刀柄	Quick Change Tapping Chucks
3.07-3.10	削平型直柄立铣刀刀柄	Reduction Sleeves for Straight Shanks
3.11	削平型浅孔钻头刀柄	Indexable Drill Holders
3.12	液压夹头刀柄	Hydraulic Expansion Chucks
3.13-3.17	弹簧夹头刀柄	Collet Chucks
3.18-3.19	套式铣刀刀柄 (带平键和端面键)	Shell End Mill Arbors for milling cutters with longitudinal slot or tenon drive
3.20	套式铣刀刀柄 (带平键)	Shell End Mill Arbors for milling cutters with longitudinal slot
3.20	KFS模块式铣刀柄	HOLDERS
3.22	带扁尾莫氏圆锥孔刀柄	Reduction Sleeves for morse taper with tang
3.23	等径接长杆	Extensions axial clamping
3.24	变径接长杆	Reducers cylindrical
3.25-3.26	毛坯刀柄	Tool Blanks

## PSC型锥柄

### Tool Holders for Polygonal Taper Shanks



ISO  
26623-1

3.0

PSC

PSC	d1	d3 ± 0.05	l2 ± 0.1	l3	l11 ± 0.1	l16	Dm
32	32	16,5	19	15	13,5	9	22
40	40	20	24	20	17,5	12	28
50	50	24	30	20	22	12	35
63	63	32	38	22	26	12	44
80	80	38	48	30	34	12	55

**设计:** 无数据孔的三棱锥柄符合ISO 26623-1, 一般要求: 硬度应满足较低的变形量, 维氏硬度在HV670 ± 40(近似于HRC58 ± 2), 淬硬(渗碳)层0.3-0.6mm。对于PSC柄部其他参数参见于上表。

**材料:** 一般要求: 符合硬度要求的合金钢材料, 并且能承受扭矩980N/mm<sup>2</sup>。

**说明:** 价格和交付情况如有变化会在详单上实时变更。制造商保留对技术修改的权力。单位以mm。

**Design:** Polygonal taper shanks according to ISO 26623-1 without bore for identification chip.If not otherwise specified : Hardened by means of a special lowdistortion hardening process Vickers hardness 670 ± 40 HV30(HRC58 ± 2).Hardaess depth Eht=min0.3-0.6mm.For details of concentricity of PSC to tool holder,refer to appropriate page of catalogue.

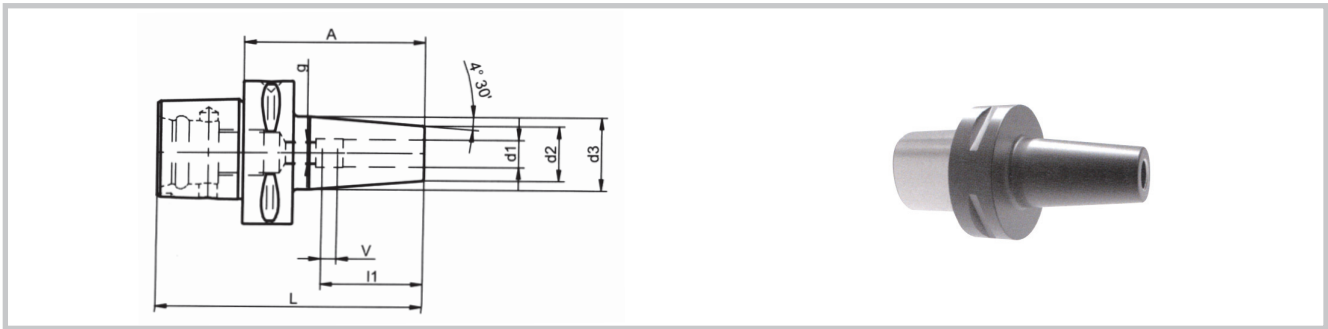
**Material:** If not otherwise specified:Case-hardened alloy steel with a core tensite strength after case hardening of min.980N/mm<sup>2</sup>.

**Standard Specification:** Prices and delivery conditions are shown in the corresponding price list valid at the time in question.Manufacturer reserves the right to make technical modifications.All dimensions in mm.



热装夹头刀柄 (标准型)

i-tec® Shrink-fit Chucks standard version



No	GB Model	PSC	d1	A	d2	d3	l1	g	L	v	kg
311.0001.381	PSC32-RZ6-65	32	6	65	21	27	36	M5	84	10	0.3
311.0002.381	PSC32-RZ8-65	32	8	65	21	27	36	M6	84	10	0.3
311.0003.381	PSC32-RZ10-70	32	10	70	24	32	41	M8 x 1	89	10	0.4
311.0004.381	PSC32-RZ12-75	32	12	75	24	32	47	M10 x 1	94	10	0.5
311.0001.382	PSC40-RZ6-75	40	6	75	21	27	36	M5	99	10	0.5
311.0002.382	PSC40-RZ8-75	40	8	75	21	27	36	M6	99	10	0.5
311.0003.382	PSC40-RZ10-75	40	10	75	24	32	41	M8 x 1	99	10	0.6
311.0004.382	PSC40-RZ12-75	40	12	75	24	32	47	M10 x 1	99	10	0.6
311.0005.382	PSC40-RZ14-80	40	14	80	27	34	47	M10 x 1	104	10	0.6
311.0006.382	PSC40-RZ16-80	40	16	80	27	34	50	M12 x 1	104	10	0.6
311.0007.382	PSC40-RZ18-80	40	18	80	33	42	50	M12 x 1	104	10	0.8
311.0008.382	PSC40-RZ20-85	40	20	85	33	42	52	M16 x 1	109	10	0.9
311.0011.383	PSC50-RZ3-65	50	3	65	12	17	-	-	95	-	0.5
311.0014.383	PSC50-RZ4-65	50	4	65	12	17	-	-	95	-	0.5
311.0017.383	PSC50-RZ5-65	50	5	65	12	17	-	-	95	-	0.5
311.0001.383	PSC50-RZ6-75	50	6	75	21	30	36	M5	105	10	0.7
311.0031.383	PSC50-RZ6-120	50	6	120	21	32	36	M5	150	10	1.0
311.0002.383	PSC50-RZ8-75	50	8	75	21	30	36	M6	105	10	0.7
311.0032.383	PSC50-RZ8-120	50	8	120	21	32	36	M6	150	10	1.0
311.0003.383	PSC50-RZ10-75	50	10	75	24	33	41	M8 x 1	105	10	0.7
311.0033.383	PSC50-RZ10-120	50	10	120	24	34	41	M8 x 1	150	10	1.1
311.0004.383	PSC50-RZ12-75	50	12	75	24	33	47	M10 x 1	105	10	0.7
311.0034.383	PSC50-RZ12-120	50	12	120	24	34	47	M10 x 1	150	10	1.1
311.0005.383	PSC50-RZ14-80	50	14	80	27	34	47	M10 x 1	110	10	0.8
311.0035.383	PSC50-RZ14-120	50	14	120	27	36	47	M10 x 1	150	10	1.1
311.0006.383	PSC50-RZ16-80	50	16	80	27	34	50	M12 x 1	110	10	0.8
311.0036.383	PSC50-RZ16-120	50	16	120	27	36	50	M12 x 1	150	10	1.1
311.0007.383	PSC50-RZ18-80	50	18	80	33	42	50	M12 x 1	110	10	1.0
311.0037.383	PSC50-RZ18-120	50	18	120	33	42	50	M12 x 1	150	10	1.4
311.0008.383	PSC50-RZ20-85	50	20	85	33	42	52	M16 x 1	115	10	1.0
311.0038.383	PSC50-RZ20-120	50	20	120	33	42	52	M16 x 1	150	10	1.4
311.0009.383	PSC50-RZ25-90	50	25	90	44	53	58	M16 x 1	120	10	1.5
311.0039.383	PSC50-RZ25-120	50	25	120	44	53	58	M16 x 1	150	10	2.0

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PSC

No	GB Model	PSC	d1	A	d2	d3	l1	g	L	v	kg
311.0011.384	PSC63-RZ3-80	63	3	80	12	17	-	-	118	-	0.8
311.0014.384	PSC63-RZ4-80	63	4	80	12	17	-	-	118	-	0.8
311.0017.384	PSC63-RZ5-80	63	5	80	12	17	-	-	118	-	0.8
311.0001.384	PSC63-RZ6-80	63	6	80	21	27	36	M5	118	10	1.0
311.0031.384	PSC63-RZ6-120	63	6	120	21	32	36	M5	158	10	1.3
311.0041.384	PSC63-RZ6-160	63	6	160	21	32	36	M5	198	10	1.5
311.0002.384	PSC63-RZ8-80	63	8	80	21	27	36	M6	118	10	1.0
311.0032.384	PSC63-RZ8-120	63	8	120	21	32	36	M6	158	10	1.3
311.0042.384	PSC63-RZ8-160	63	8	160	21	32	36	M6	198	10	1.5
311.0003.384	PSC63-RZ10-80	63	10	80	24	32	41	M8 x 1	118	10	1.1
311.0033.384	PSC63-RZ10-120	63	10	120	24	34	41	M8 x 1	158	10	1.4
311.0043.384	PSC63-RZ10-160	63	10	160	24	34	41	M8 x 1	198	10	1.6
311.0004.384	PSC63-RZ12-80	63	12	80	24	32	47	M10 x 1	118	10	1.1
311.0034.384	PSC63-RZ12-120	63	12	120	24	34	47	M10 x 1	158	10	1.4
311.0044.384	PSC63-RZ12-160	63	12	160	24	34	47	M10 x 1	198	10	1.6
311.0005.384	PSC63-RZ14-85	63	14	85	27	34	47	M10 x 1	123	10	1.1
311.0035.384	PSC63-RZ14-120	63	14	120	27	36	47	M10 x 1	158	10	1.4
311.0045.384	PSC63-RZ14-160	63	14	160	27	36	47	M10 x 1	198	10	1.7
311.0006.384	PSC63-RZ16-85	63	16	85	27	34	50	M12 x 1	123	10	1.1
311.0036.384	PSC63-RZ16-120	63	16	120	27	36	50	M12 x 1	158	10	1.4
311.0046.384	PSC63-RZ16-160	63	16	160	27	36	50	M12 x 1	198	10	1.7
311.0007.384	PSC63-RZ18-85	63	18	85	33	42	50	M12 x 1	123	10	1.4
311.0037.384	PSC63-RZ18-120	63	18	120	33	44	50	M12 x 1	158	10	1.8
311.0047.384	PSC63-RZ18-160	63	18	160	33	44	50	M12 x 1	198	10	2.2
311.0008.384	PSC63-RZ20-85	63	20	85	33	42	52	M16 x 1	123	10	1.4
311.0038.384	PSC63-RZ20-120	63	20	120	33	44	52	M16 x 1	158	10	1.8
311.0048.384	PSC63-RZ20-160	63	20	160	33	44	52	M16 x 1	198	10	2.2
311.0009.384	PSC63-RZ25-90	63	25	90	44	53	58	M16 x 1	128	10	1.8
311.0039.384	PSC63-RZ25-120	63	25	120	44	53	58	M16 x 1	158	10	2.3
311.0049.384	PSC63-RZ25-160	63	25	160	44	53	58	M16 x 1	198	10	2.9
311.0010.384	PSC63-RZ32-95	63	32	95	44	53	61	M16 x 1	133	10	1.9
311.0040.384	PSC63-RZ32-120	63	32	120	44	53	61	M16 x 1	158	10	2.3
311.0050.384	PSC63-RZ32-160	63	32	160	44	53	61	M16 x 1	198	10	2.9
311.0001.385	PSC80-RZ6-85	80	6	85	21	27	36	M5	133	10	1.9
311.0031.385	PSC80-RZ6-120	80	6	120	21	32	36	M5	168	10	2.2
311.0002.385	PSC80-RZ8-85	80	8	85	21	27	36	M6	133	10	1.9
311.0032.385	PSC80-RZ8-120	80	8	120	21	32	36	M6	168	10	2.2
311.0003.385	PSC80-RZ10-85	80	10	85	24	32	41	M8 x 1	133	10	2.0
311.0033.385	PSC80-RZ10-120	80	10	120	24	34	41	M8 x 1	168	10	2.3
311.0004.385	PSC80-RZ12-85	80	12	85	24	32	47	M10 x 1	133	10	2.0
311.0034.385	PSC80-RZ12-120	80	12	120	24	34	47	M10 x 1	168	10	2.3
311.0005.385	PSC80-RZ14-90	80	14	90	27	34	47	M10 x 1	138	10	2.1
311.0035.385	PSC80-RZ14-120	80	14	120	27	36	47	M10 x 1	168	10	2.4
311.0006.385	PSC80-RZ16-90	80	16	90	27	34	50	M12 x 1	138	10	2.1
311.0036.385	PSC80-RZ16-120	80	16	120	27	36	50	M12 x 1	168	10	2.4
311.0007.385	PSC80-RZ18-90	80	18	90	33	42	50	M12 x 1	138	10	2.3
311.0037.385	PSC80-RZ18-120	80	18	120	33	44	50	M12 x 1	168	10	2.7
311.0008.385	PSC80-RZ20-90	80	20	90	33	42	52	M16 x 1	138	10	2.3
311.0038.385	PSC80-RZ20-120	80	20	120	33	44	52	M16 x 1	168	10	2.7
311.0009.385	PSC80-RZ25-95	80	25	95	44	53	58	M16 x 1	143	10	2.7
311.0039.385	PSC80-RZ25-120	80	25	120	44	53	58	M16 x 1	168	10	3.1
311.0010.385	PSC80-RZ32-100	80	32	100	44	53	61	M16 x 1	148	10	2.8
311.0040.385	PSC80-RZ32-120	80	32	120	44	53	61	M16 x 1	168	10	3.1

设计：请使用柄部直径公差h6级的硬质合金刀具。

说明：不包括调整长度的调整螺钉。

备注：1、其他型号和尺寸可按订货要求制作。

- 2、装夹刀具的刀柄夹紧长度必须保证L1-V尺寸，否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。
- 3、建议使用专用热装机装卸刀具。

Design:The clamping diameter is designed for a cemented carbide shank tolerance of h6.

Standard Specification:Adjusting screw for length adjustment is not included.

Note: 1.Other designs and sizes are available on request.

2.Toolholder clamping length must be same to size L1-V. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder , tool couldn't be dismounted or toolholder damage and so on.

3.Special shrinking devices are recommended for tool mounting and dismounting.

ACCESSORIES

配件



4.24



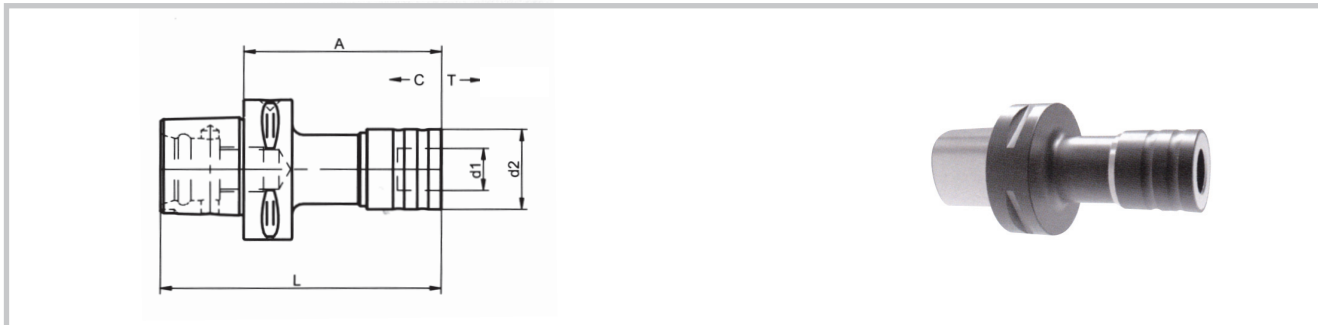
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## 丝锥快换夹头刀柄

### Quick Change Tapping Chucks



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PSC

No	GB Model	PSC	M	A	d1	d2	L	C	T	kg
440.0001.381	PSC32-G3-90	32	M3-M14	90	19	36	109	6.5	7.5	0.6
440.0001.382	PSC40-G3-90	40	M3-M14	90	19	36	114	6.5	7.5	0.8
440.0002.382	PSC40-G8-125	40	M4.5-M24	125	31	53	149	8.5	15	1.9
440.0001.383	PSC50-G3-90	50	M3-M14	90	19	36	120	6.5	7.5	0.9
440.0002.383	PSC50-G8-130	50	M4.5-M24	130	31	53	160	8.5	15	2.1
440.0001.384	PSC63-G3-90	63	M3-M14	90	19	36	128	6.5	7.5	1.2
440.0002.384	PSC63-G8-135	63	M4.5-M24	135	31	53	173	8.5	15	2.5
440.0001.385	PSC80-G3-90	80	M3-M14	90	19	36	138	6.5	7.5	2.1
440.0002.385	PSC80-G8-125	80	M4.5-M24	125	31	53	173	8.5	15	3.2

使用：用于夹持带或不带安全机构的快换丝锥夹套。

Use: For holding quick change inserts with or without safety clutch.

设计：长度补偿在收缩和拉伸方向取决于进给和螺距的不同。压缩时能够保证当轴向力达到允许值时立即脱离攻丝状态，拉力释放时能够保证快换丝锥夹套免于过大轴向拉力造成的损害。

Design: Length compensation on compression and tension to compensate the difference between feed and tap pitch. The pressure point mechanism guarantees that the tap immediately cuts the thread as soon as the permissible axial force is reached. The tension lock protects the tapping chuck against damage as a result of high axial tensile load.

备注：其他型号和尺寸可按订货要求制作。

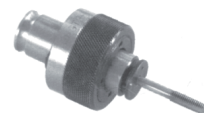
Note: Other designs and sizes are available on request.

### ACCESSORIES

配件



4.24

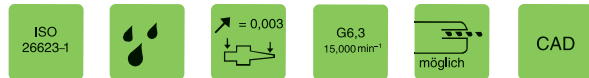
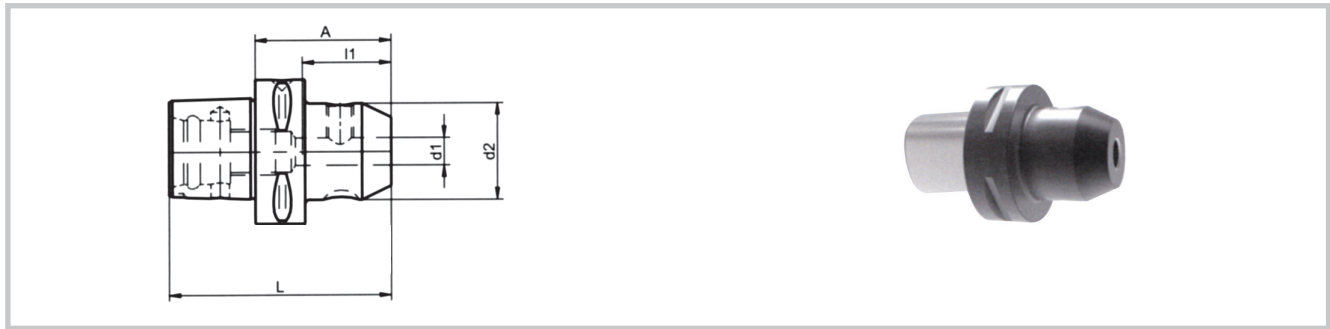


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削平型直柄立铣刀刀柄(威尔顿型)

Reduction Sleeves for Straight Shanks with lateral driving surface (Weldon)



No	GB Model	PSC	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
420.0001.381	PSC32-XP6-45	32	6	45	25	35	64	+0.005	M6X10	0.2
420.0002.381	PSC32-XP8-45	32	8	45	28	35	64	+0.005	M8X10	0.2
420.0003.381	PSC32-XP10-50	32	10	50	35	39	69	+0.005	M10X12	0.3
420.0004.381	PSC32-XP12-55	32	12	55	42	44	74	+0.005	M12X16	0.5
420.0001.382	PSC40-XP6-50	40	6	50	25	35	74	+0.005	M6X10	0.4
420.0002.382	PSC40-XP8-50	40	8	50	28	35	74	+0.005	M8X10	0.4
420.0003.382	PSC40-XP10-50	40	10	50	35	39	74	+0.005	M10X12	0.5
420.0004.382	PSC40-XP12-55	40	12	55	42	44	79	+0.005	M12X16	0.6
420.0005.382	PSC40-XP14-55	40	14	55	44	44	79	+0.005	M12X16	0.6
420.0006.382	PSC40-XP16-55	40	16	55	48	47	79	+0.005	M14X16	0.7
420.0001.383	PSC50-XP6-50	50	6	50	25	35	80	+0.005	M6X10	0.5
420.0002.383	PSC50-XP8-50	50	8	50	28	35	80	+0.005	M8X10	0.5
420.0003.383	PSC50-XP10-55	50	10	55	35	39	85	+0.005	M10X12	0.6
420.0004.383	PSC50-XP12-60	50	12	60	42	44	90	+0.005	M12X16	0.8
420.0005.383	PSC50-XP14-60	50	14	60	44	44	90	+0.005	M12X16	0.8
420.0006.383	PSC50-XP16-60	50	16	60	48	47	90	+0.005	M14X16	0.9
420.0007.383	PSC50-XP18-60	50	18	60	50	47	90	+0.005	M14X16	1.0
420.0008.383	PSC50-XP20-60	50	20	60	52	49	90	+0.007	M16X16	1.0
420.0009.383	PSC50-XP25-80	50	25	80	65	54	110	+0.007	M18X2X20	1.8
420.0001.384	PSC63-XP6-55	63	6	55	25	35	93	+0.005	M6X10	0.9
420.0002.384	PSC63-XP8-55	63	8	55	28	35	93	+0.005	M8X10	0.9
420.0003.384	PSC63-XP10-60	63	10	60	35	39	98	+0.005	M10X12	1.0
420.0004.384	PSC63-XP12-60	63	12	60	42	44	98	+0.005	M12X16	1.1
420.0005.384	PSC63-XP14-60	63	14	60	44	44	98	+0.005	M12X16	1.1
420.0006.384	PSC63-XP16-65	63	16	65	48	47	103	+0.005	M14X16	1.3
420.0007.384	PSC63-XP18-65	63	18	65	50	47	103	+0.005	M14X16	1.3
420.0008.384	PSC63-XP20-65	63	20	65	52	49	103	+0.007	M16X16	1.4
420.0009.384	PSC63-XP25-80	63	25	80	65	54	118	+0.007	M18X2X20	2.1
420.0010.384	PSC63-XP32-90	63	32	90	72	58	128	+0.007	M20X2X20	2.7
420.0011.384	PSC63-XP40-100	63	40	100	80	75	138	+0.007	M20X2X20	3.5

3.0

PSC

No	GB Model	PSC	d1	A	d2	l1	L	Tol./d1	配用螺钉	kg
420.0001.385	PSC80-XP6-70	80	6	70	25	35	118	+0.005	M6X10	1.8
420.0002.385	PSC80-XP8-70	80	8	70	28	35	118	+0.005	M8X10	1.9
420.0003.385	PSC80-XP10-70	80	10	70	35	39	118	+0.005	M10X12	2.0
420.0004.385	PSC80-XP12-70	80	12	70	42	44	118	+0.005	M12X16	2.1
420.0005.385	PSC80-XP14-70	80	14	70	44	44	118	+0.005	M12X16	2.1
420.0006.385	PSC80-XP16-70	80	16	70	48	47	118	+0.005	M14X16	2.2
420.0007.385	PSC80-XP18-70	80	18	70	50	47	118	+0.005	M14X16	2.3
420.0008.385	PSC80-XP20-70	80	20	70	52	49	118	+0.007	M16X16	2.3
420.0009.385	PSC80-XP25-80	80	25	80	65	54	128	+0.007	M18X2X20	2.9
420.0010.385	PSC80-XP32-80	80	32	80	72	58	128	+0.007	M20X2X20	3.1
420.0011.385	PSC80-XP40-110	80	40	110	80	75	158	+0.007	M20X2X20	4.6
420.0012.385	PSC80-XP50-120	80	50	120	100	83	168	+0.007	M24X2X20	6.7

使用：按DIN 1835 B型（威尔顿型）和DIN 6535 HB型夹持直柄铣刀。

Use: For holding shank tools with lateral driving surface, DIN 1835 type B and DIN 6535 type HB.

说明：包括配好的夹紧螺钉，对于大于25mm的孔，提供2个紧固螺钉。

Standard Specification: Clamping screw included. From location hole d1 = 25mm 2 clamping screws are included.

备注：PSC80 d1=40/50mm 未作动平衡，其他型号和尺寸可按订货要求制作。

Note: PSC 80 d1= 40/50 mm are not balanced. Other designs and sizes are available on request.

## ACCESSORIES

配件



4.24

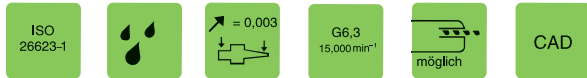
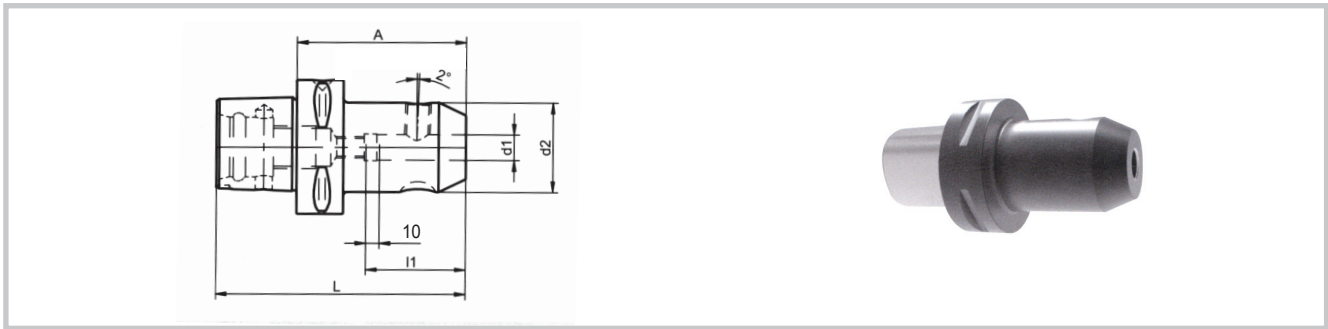


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带2° 斜削平型直柄立铣刀刀柄(威斯尔凹口型)

Reduction Sleeves for Straight Shanks with inclined clamping surface (Whistle Notch)



No	GB Model	PSC	d1	A	d2	l1	g	L	Tol./d1	配用螺钉	kg
420.0151.381	PSC32-XPД6-70	32	6	70	25	38	M5	89	+0.005	M6X10	0.3
420.0152.381	PSC32-XPД8-70	32	8	70	28	38	M6	89	+0.005	M8X10	0.3
420.0153.381	PSC32-XPД10-70	32	10	70	35	41	M8	89	+0.005	M10X12	0.5
420.0154.381	PSC32-XPД12-75	32	12	75	42	47	M10	94	+0.005	M12X16	0.7
420.0151.382	PSC40-XPД6-70	40	6	70	25	38	M5	94	+0.005	M6X10	0.4
420.0152.382	PSC40-XPД8-70	40	8	70	28	38	M6	94	+0.005	M8X10	0.5
420.0153.382	PSC40-XPД10-70	40	10	70	35	41	M8	94	+0.005	M10X12	0.6
420.0154.382	PSC40-XPД12-75	40	12	75	42	47	M10	99	+0.005	M12X16	0.8
420.0155.382	PSC40-XPД14-75	40	14	75	44	47	M10	99	+0.005	M12X16	0.8
420.0151.383	PSC50-XPД6-70	50	6	70	25	38	M5	100	+0.005	M6X10	0.6
420.0152.383	PSC50-XPД8-70	50	8	70	28	38	M6	100	+0.005	M8X10	0.6
420.0153.383	PSC50-XPД10-70	50	10	70	35	41	M8	100	+0.005	M10X12	0.8
420.0154.383	PSC50-XPД12-75	50	12	75	42	47	M10	105	+0.005	M12X16	0.9
420.0155.383	PSC50-XPД14-75	50	14	75	44	47	M10	105	+0.005	M12X16	1.0
420.0156.383	PSC50-XPД16-80	50	16	80	48	50	M12	110	+0.005	M14X16	1.2
420.0157.383	PSC50-XPД18-80	50	18	80	50	50	M12	110	+0.005	M14X16	1.2
420.0158.383	PSC50-XPД20-85	50	20	85	52	52	M16	115	+0.007	M16X16	1.4
420.0151.384	PSC63-XPД6-75	63	6	75	25	38	M5	113	+0.005	M6X10	0.9
420.0152.384	PSC63-XPД8-75	63	8	75	28	38	M6	113	+0.005	M8X10	1.0
420.0153.384	PSC63-XPД10-75	63	10	75	35	41	M8	113	+0.005	M10X12	1.1
420.0154.384	PSC63-XPД12-80	63	12	80	42	47	M10	118	+0.005	M12X16	1.3
420.0155.384	PSC63-XPД14-80	63	14	80	44	47	M10	118	+0.005	M12X16	1.4
420.0156.384	PSC63-XPД16-80	63	16	80	48	50	M12	118	+0.005	M14X16	1.5
420.0157.384	PSC63-XPД18-80	63	18	80	50	50	M12	118	+0.005	M14X16	1.5
420.0158.384	PSC63-XPД20-85	63	20	85	52	52	M16	123	+0.007	M16X16	1.7
420.0159.384	PSC63-XPД25-90	63	25	90	65	58	M16	128	+0.007	M18X2X20	2.3
420.0160.384	PSC63-XPД32-95	63	32	95	72	61	M16	133	+0.007	M20X2X20	2.8

3.0

PSC

No	GB Model	PSC	d1	A	d2	l1	g	L	Tol./d1	配用螺钉	kg
420.0151.385	PSC80-XPd6-65	80	6	65	25	38	M5	113	+0.005	M6X10	1.8
420.0152.385	PSC80-XPd8-65	80	8	65	28	38	M6	113	+0.005	M8X10	1.9
420.0153.385	PSC80-XPd10-65	80	10	65	35	41	M8	113	+0.005	M10X12	1.9
420.0154.385	PSC80-XPd12-70	80	12	70	42	47	M10	118	+0.005	M12X16	2.1
420.0155.385	PSC80-XPd14-70	80	14	70	44	47	M10	118	+0.005	M12X16	2.1
420.0156.385	PSC80-XPd16-75	80	16	75	48	50	M12	123	+0.005	M14X16	2.3
420.0157.385	PSC80-XPd18-75	80	18	75	50	50	M12	123	+0.005	M14X16	2.3
420.0158.385	PSC80-XPd20-80	80	20	80	52	52	M16	128	+0.007	M16X16	2.5
420.0159.385	PSC80-XPd25-90	80	25	90	65	58	M16	138	+0.007	M18X2X20	3.1
420.0160.385	PSC80-XPd32-95	80	32	95	72	61	M16	143	+0.007	M20X2X20	3.6

3.0

PSC

使用：对于带2°斜削平型工具刀柄，符合德国标准DIN 1835 E类型和DIN 6535 HE类型。

Use: For holding shank tools with inclined clamping surface (2°), DIN 1835 type E and DIN 6535 type HE.

备注：带孔的止动螺钉用于内冷却，其他型号和尺寸可按订货要求制作。

Note: Bored through adjusting screw for coolant. Other designs and sizes are available on request.

## ACCESSORIES

配件

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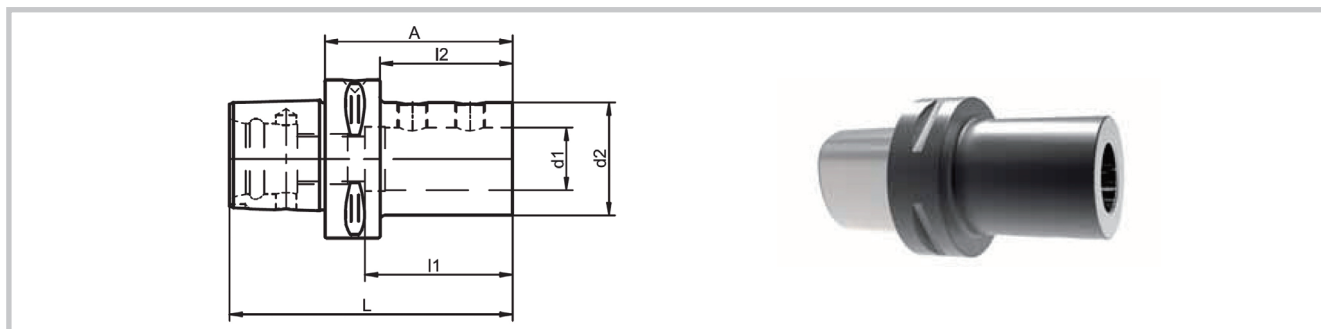
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削平型浅孔钻刀柄  
Indexable Drill Holders



No	GB Model	PSC	d1	A	d2	l1	l2	L	kg
590.0006.381	PSC32-XPQ16-55	32	16	55	36	49	40	74	0.4
590.0008.381	PSC32-XPQ20-60	32	20	60	40	54	45	79	0.5
590.0006.382	PSC40-XPQ16-60	40	16	60	36	49	40	84	0.5
590.0008.382	PSC40-XPQ20-60	40	20	60	40	54	40	84	0.6
590.0009.382	PSC40-XPQ25-80	40	25	80	45	59	60	104	0.9
590.0006.383	PSC50-XPQ16-65	50	16	65	36	49	45	95	0.7
590.0008.383	PSC50-XPQ20-65	50	20	65	40	54	45	95	0.8
590.0009.383	PSC50-XPQ25-70	50	25	70	45	59	50	100	1.0
590.0010.383	PSC50-XPQ32-75	50	32	75	52	63	55	105	1.2
590.0006.384	PSC63-XPQ16-70	63	16	70	36	49	48	108	1.1
590.0008.384	PSC63-XPQ20-70	63	20	70	40	54	48	108	1.2
590.0009.384	PSC63-XPQ25-75	63	25	75	45	59	53	113	1.3
590.0010.384	PSC63-XPQ32-75	63	32	75	52	63	53	113	1.5
590.0011.384	PSC63-XPQ40-85	63	40	85	65	73	63	123	2.2
590.0012.384	PSC63-XPQ50-115	63	50	115	75	83	93	153	3.6
590.0006.385	PSC80-XPQ16-80	80	16	80	36	49	50	128	2.1
590.0008.385	PSC80-XPQ20-80	80	20	80	40	54	50	128	2.2
590.0009.385	PSC80-XPQ25-85	80	25	85	45	59	55	133	2.3
590.0010.385	PSC80-XPQ32-90	80	32	90	52	63	60	138	2.6
590.0011.385	PSC80-XPQ40-95	80	40	95	65	73	65	143	3.2
590.0012.385	PSC80-XPQ50-100	80	50	100	75	83	70	148	3.9

使用：用于夹持符合DIN 6595和ISO 9766标准的可转位浅孔钻。

Use: For holding indexable drills with shank according to DIN 6595 und ISO 9766.

标准规格：包括夹紧螺钉。

Standard Specification: Includes clamping screw.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



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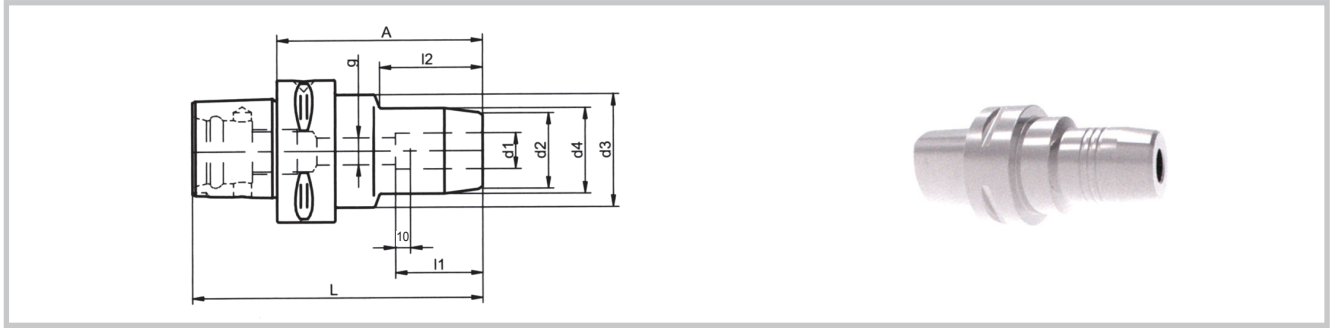


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## 液压夹头刀柄

### Hydraulic Expansion Chucks



No	GB Model	PSC	d1	A	d2	d3	d4	l1	l2	g	L	kg
702.0001.382	PSC40-HD6-80	40	6	80	22	50	26	37	40	M5	104	0.7
702.0002.382	PSC40-HD8-80	40	8	80	24	50	28	37	40	M6	104	0.7
702.0003.382	PSC40-HD10-85	40	10	85	26	50	30	41	40	M8X1	109	0.8
702.0004.382	PSC40-HD12-85	40	12	85	28	50	32	46	40	M8X1	109	0.8
702.0001.383	PSC50-HD6-65	50	6	65	22	50	26	37	30	M5	95	0.7
702.0002.383	PSC50-HD8-65	50	8	65	24	50	28	37	30	M6	95	0.8
702.0003.383	PSC50-HD10-75	50	10	75	26	50	30	41	40	M8X1	105	0.8
702.0004.383	PSC50-HD12-80	50	12	80	28	50	32	46	40	M10X1	110	0.9
702.0005.383	PSC50-HD14-80	50	14	80	30	50	34	46	40	M10X1	110	0.9
702.0006.383	PSC50-HD16-85	50	16	85	34	50	38	49	46	M12X1	115	1.0
702.0007.383	PSC50-HD18-85	50	18	85	36	50	40	49	46	M12X1	115	1.1
702.0008.383	PSC50-HD20-85	50	20	85	38	50	42	51	46	M16X1	115	1.1
702.0001.384	PSC63-HD6-65	63	6	65	22	50	26	37	25	M5	103	1.1
702.0002.384	PSC63-HD8-65	63	8	65	24	50	28	37	25	M6	103	1.1
702.0003.384	PSC63-HD10-75	63	10	75	26	50	30	41	35	M8X1	113	1.2
702.0004.384	PSC63-HD12-80	63	12	80	28	50	32	46	40	M10X1	118	1.2
702.0005.384	PSC63-HD14-80	63	14	80	30	50	34	46	40	M10X1	118	1.2
702.0006.384	PSC63-HD16-85	63	16	85	34	50	38	49	46	M12X1	123	1.3
702.0007.384	PSC63-HD18-85	63	18	85	36	50	40	49	46	M12X1	123	1.4
702.0008.384	PSC63-HD20-85	63	20	85	38	50	42	51	46	M16X1	123	1.4
702.0009.384	PSC63-HD25-95	63	25	95	45	55	50	57	50	M16X1	133	1.8
702.0010.384	PSC63-HD32-100	63	32	100	52	63	56	61	60	M16X1	138	2.1

使用: 用于夹持按DIN1835A、B型或DIN 6535 HA或HB型直柄刀具, DIN1835 C、DE型和DIN 6535 HE型刀柄, 仅能与变径套共用。夹持精度h6级, 粗糙度最小为Ra0.3, 对于Φ25和Φ32只有DIN 1835 A型和DIN 6535HA型可用。

说明: 带内置的限位螺钉。

备注: 其他型号和尺寸可按订货要求制作。刀具的刀柄夹紧长度必须保证l1-v尺寸, 否则将造成夹紧力减小、掉刀、刀具卸不下来和刀柄损坏等现象。

Use: For shank tools according to DIN1835 type A and B and DIN 6535 type HE are only applicable with reduction bushes. Shank quality h6, Ra min.=0.3 For Φ25 and Φ32 only type A or HA can be used.

Standard Specification: Bored through adjusting screw included.

Note: Other designs and sizes are available on request.

Toolholder clamping length must be same to size l1-v. if not, problem may happen such as clamping force maybe reduced, tools fall off the holder, tool couldn't be dismantled or toolholder damage and so on.

## ACCESSORIES

配件

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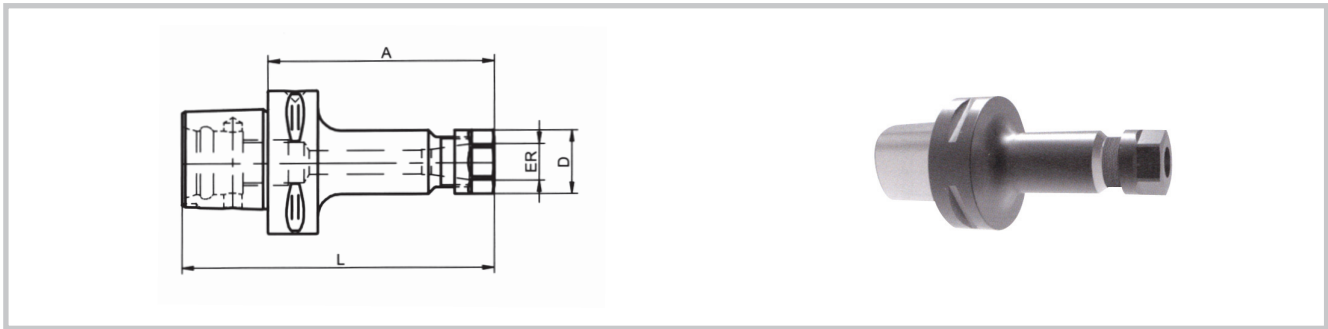
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ER/ESX ER-16弹簧夹头刀柄 (带调整螺钉孔)

Collet Chucks ER/ESX 16 with internal thread



No	GB Model	PSC	ER	A	D	L	kg
698.0001.381	PSC32-ER16-45	32	ER16(0.5-10)	45	28	64	0.2
698.0001.382	PSC40-ER16-55	40	ER16(0.5-10)	55	28	79	0.4
698.0001.383	PSC50-ER16-60	50	ER16(0.5-10)	60	28	90	0.6
698.0031.383	PSC50-ER16-100	50	ER16(0.5-10)	100	28	130	0.8
698.0001.384	PSC63-ER16-60	63	ER16(0.5-10)	60	28	98	0.9
698.0031.384	PSC63-ER16-100	63	ER16(0.5-10)	100	28	138	1.1
698.0001.385	PSC80-ER16-60	80	ER16(0.5-10)	60	28	108	1.8
698.0031.385	PSC80-ER16-100	80	ER16(0.5-10)	100	28	148	2.0

使用: 用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明: 夹头包括夹紧螺母。

Standard Specification: Collet chuck including clamping nut.

备注: 弹簧夹头配有标准调整螺钉便于调节; 其他型号和尺寸可按订货要求制作。

Note: Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

ACCESSORIES

配件



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4.02

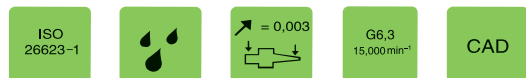
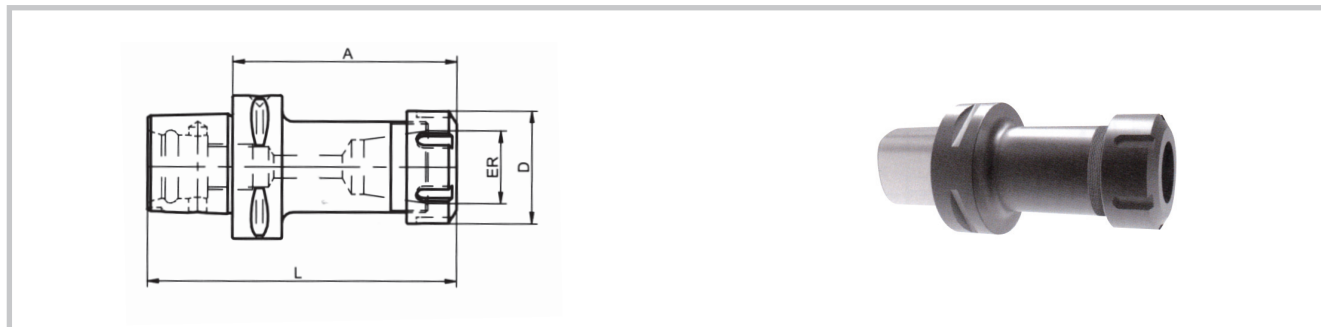
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## ER/ESX ER-20/25/32/40弹簧夹头刀柄 (带调整螺钉孔)

Collet Chucks ER/ESX 20/25/32/40 with internal thread



3.0

PSC

No	GB Model	PSC	ER	A	D	L	kg
697.0001.381	PSC32-ER20-45	32	ER20(1-13)	45	34	64	0.3
697.0001.382	PSC40-ER20-55	40	ER20(1-13)	55	34	79	0.5
697.0002.382	PSC40-ER25-55	40	ER25(1-16)	55	42	79	0.6
697.0003.382	PSC40-ER32-55	40	ER32(2-20)	55	50	79	0.7
697.0001.383	PSC50-ER20-60	50	ER20(1-13)	60	34	90	0.7
697.0031.383	PSC50-ER20-100	50	ER20(1-13)	100	34	130	0.9
697.0002.383	PSC50-ER25-60	50	ER25(1-16)	60	42	90	0.8
697.0032.383	PSC50-ER25-100	50	ER25(1-16)	100	42	130	1.2
697.0003.383	PSC50-ER32-60	50	ER32(2-20)	60	50	90	1.0
697.0033.383	PSC50-ER32-100	50	ER32(2-20)	100	50	130	1.5
697.0004.383	PSC50-ER40-65	50	ER40(3-26)	65	63	95	1.4
697.0034.383	PSC50-ER40-100	50	ER40(3-26)	100	63	130	2.2
697.0001.384	PSC63-ER20-60	63	ER20(1-13)	60	34	98	1.0
697.0031.384	PSC63-ER20-100	63	ER20(1-13)	100	34	138	1.2
697.0002.384	PSC63-ER25-60	63	ER25(1-16)	60	42	98	1.1
697.0032.384	PSC63-ER25-100	63	ER25(1-16)	100	42	138	1.5
697.0003.384	PSC63-ER32-60	63	ER32(2-20)	60	50	98	1.3
697.0033.384	PSC63-ER32-100	63	ER32(2-20)	100	50	138	1.8
697.0004.384	PSC63-ER40-65	63	ER40(3-26)	65	63	103	1.7
697.0034.384	PSC63-ER40-100	63	ER40(3-26)	100	63	138	2.5
697.0001.385	PSC80-ER20-65	80	ER20(1-13)	65	34	113	1.9
697.0031.385	PSC80-ER20-100	80	ER20(1-13)	100	34	148	2.2
697.0002.385	PSC80-ER25-70	80	ER25(1-16)	70	42	118	2.1
697.0032.385	PSC80-ER25-100	80	ER25(1-16)	100	42	148	2.4
697.0003.385	PSC80-ER32-70	80	ER32(2-20)	70	50	118	2.3
697.0033.385	PSC80-ER32-100	80	ER32(2-20)	100	50	148	2.7
697.0004.385	PSC80-ER40-80	80	ER40(3-26)	80	63	128	2.8
697.0034.385	PSC80-ER40-100	80	ER40(3-26)	100	63	148	3.3

使用：用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明：夹头包括夹紧螺母。

Standard Specification: Collet chuck including clamping nut.

备注：弹簧夹头配有标准调整螺钉便于调节；其他型号和尺寸可按订货要求制作。

Note: Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

ACCESSORIES

配件

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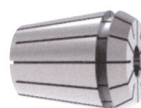
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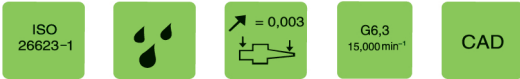
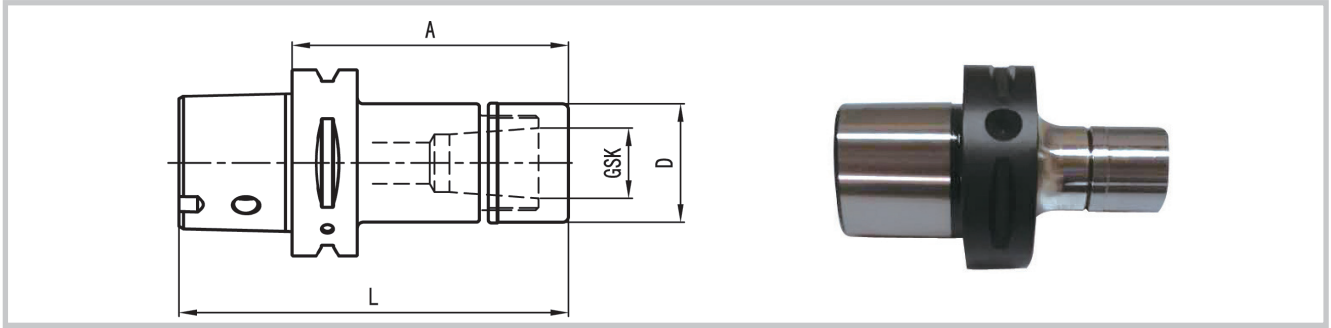
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## GSK高精度弹簧夹头刀柄

### Collet Chucks GSK10/16/20/25



No	GB Model	PSC	GSK	A	D	L	Kg
440.0076.042	PSC32-GSK10-70	32	GSK10 ( 2-10 )	70	27.5	89	0.3
440.0077.042	PSC40-GSK10-70	40	GSK10 ( 2-10 )	70	27.5	94	0.5
440.0194.042	PSC40-GSK13-70	40	GSK13 ( 3-13 )	70	35	94	0.6
440.0078.042	PSC40-GSK16-80	40	GSK16 ( 3-16 )	80	40	104	0.8
440.0079.042	PSC40-GSK20-80	40	GSK20 ( 4-20 )	80	48	104	1.0
440.0080.042	PSC50-GSK10-70	50	GSK10 ( 2-10 )	70	27.5	100	0.6
440.0081.042	PSC50-GSK10-100	50	GSK10 ( 2-10 )	100	27.5	130	0.7
440.0195.042	PSC50-GSK13-70	50	GSK13 ( 3-13 )	70	35	100	0.8
440.0196.042	PSC50-GSK13-100	50	GSK13 ( 3-13 )	100	35	130	1.0
440.0082.042	PSC50-GSK16-80	50	GSK16 ( 3-16 )	80	40	110	0.9
440.0083.042	PSC50-GSK16-100	50	GSK16 ( 3-16 )	100	40	130	1.1
440.0084.042	PSC50-GSK20-80	50	GSK20 ( 4-20 )	80	48	110	1.2
440.0085.042	PSC50-GSK20-100	50	GSK20 ( 4-20 )	100	48	130	1.4
440.0086.042	PSC50-GSK25-80	50	GSK25 ( 3-25 )	80	55	110	1.4
440.0087.042	PSC50-GSK25-100	50	GSK25 ( 3-25 )	100	55	130	1.8
440.0088.042	PSC63-GSK10-70	63	GSK10 ( 2-10 )	70	27.5	108	0.9
440.0089.042	PSC63-GSK10-100	63	GSK10 ( 2-10 )	100	27.5	138	1.1
440.0197.042	PSC63-GSK13-70	63	GSK13 ( 3-13 )	70	35	108	1.1
440.0198.042	PSC63-GSK13-100	63	GSK13 ( 3-13 )	100	35	138	1.3
440.0090.042	PSC63-GSK16-80	63	GSK16 ( 3-16 )	80	40	118	1.3
440.0091.042	PSC63-GSK16-100	63	GSK16 ( 3-16 )	100	40	138	1.4
440.0092.042	PSC63-GSK20-80	63	GSK20 ( 4-20 )	80	48	118	1.5
440.0093.042	PSC63-GSK20-100	63	GSK20 ( 4-20 )	100	48	138	1.7
440.0094.042	PSC63-GSK25-80	63	GSK25 ( 3-25 )	80	55	118	1.7
440.0095.042	PSC63-GSK25-100	63	GSK25 ( 3-25 )	100	55	138	2.1
440.0096.042	PSC80-GSK10-70	80	GSK10 ( 2-10 )	70	27.5	118	1.9
440.0097.042	PSC80-GSK10-100	80	GSK10 ( 2-10 )	100	27.5	148	2.0
440.0199.042	PSC80-GSK13-70	80	GSK13 ( 3-13 )	70	35	118	2.0
440.0200.042	PSC80-GSK13-100	80	GSK13 ( 3-13 )	100	35	148	2.2
440.0098.042	PSC80-GSK16-80	80	GSK16 ( 3-16 )	80	40	128	2.2
440.0099.042	PSC80-GSK16-100	80	GSK16 ( 3-16 )	100	40	148	2.3
440.0100.042	PSC80-GSK20-100	80	GSK20 ( 4-20 )	100	48	148	2.6
440.0101.042	PSC80-GSK20-100	80	GSK20 ( 4-20 )	100	48	148	2.6
440.0102.042	PSC80-GSK25-80	80	GSK25 ( 3-25 )	80	55	128	2.5
440.0103.042	PSC80-GSK25-100	80	GSK25 ( 3-25 )	100	55	148	2.9

使用：用于夹持按DIN 1835 A、B、E型或DIN 6535 HA、HB、HE型的直柄刀具。

Use: For clamping tools with straight shank according to DIN 1835 type A, B and E and DIN 6535 type HA, HB and HE.

说明：夹头包括夹紧螺母。

Standard Specification: Collet chuck including clamping nut.

备注：弹簧夹头配有标准调整螺钉便于调节；其他型号和尺寸可按订货要求制作。  
括号中数字仅表示夹持刀具柄部尺寸范围，不体现在产品型号中。

Note: Collet chucks are equipped with internal thread for adjusting screws. Other designs and sizes are available on request.

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4.12

## 套式铣刀刀柄 (带平键和端面键)

Shell End Mill Arbors for milling cutters with longitudinal slot or tenon drive



3.0

PSC

No	GB Model	PSC	d1	A	d2	l3	L	kg
489.0001.382	PSC40-XM16-28	40	16	28	40	17	69	0.4
489.0031.382	PSC40-XM16-63	40	16	63	40	17	104	0.7
489.0002.382	PSC40-XM22-40	40	22	40	50	19	83	0.6
489.0032.382	PSC40-XM22-63	40	22	63	50	19	106	1.0
489.0001.383	PSC50-XM16-28	50	16	28	40	17	75	0.5
489.0031.383	PSC50-XM16-63	50	16	63	40	17	110	0.9
489.0002.383	PSC50-XM22-28	50	22	28	50	19	77	0.6
489.0032.383	PSC50-XM22-63	50	22	63	50	19	112	1.1
489.0003.383	PSC50-XM27-32	50	27	32	50	21	83	0.7
489.0033.383	PSC50-XM27-63	50	27	63	50	21	114	1.2
489.0004.383	PSC50-XM32-40	50	32	40	63	24	94	1.1
489.0034.383	PSC50-XM32-63	50	32	63	63	24	117	1.6
489.0031.384	PSC63-XM16-63	63	16	63	40	17	118	1.2
489.0002.384	PSC63-XM22-28	63	22	28	63	19	85	1.0
489.0032.384	PSC63-XM22-63	63	22	63	50	19	120	1.4
489.0003.384	PSC63-XM27-28	63	27	28	58	21	87	1.0
489.0033.384	PSC63-XM27-63	63	27	63	58	21	122	1.7
489.0004.384	PSC63-XM32-22	63	32	22	63	24	84	0.9
489.0034.384	PSC63-XM32-86	63	32	86	63	24	148	2.5
489.0005.384	PSC63-XM40-40	63	40	40	70	27	105	1.6
489.0031.385	PSC80-XM16-63	80	16	63	40	17	128	2.1
489.0002.385	PSC80-XM22-30	80	22	30	50	19	97	1.8
489.0032.385	PSC80-XM22-63	80	22	63	50	19	130	2.3
489.0003.385	PSC80-XM27-30	80	27	30	58	21	99	1.8
489.0033.385	PSC80-XM27-63	80	27	63	58	21	132	2.5
489.0004.385	PSC80-XM32-30	80	32	30	63	24	102	1.9
489.0034.385	PSC80-XM32-86	80	32	86	62	24	158	3.2
489.0005.385	PSC80-XM40-40	80	40	40	70	27	115	2.3



使用：用于夹持轴向平键或端面键驱动的面铣刀。

Use: For clamping shell end mills and milling cutters with longitudinal slot or tenon drive.

设计：传动环符合DIN 138。

Design: Cutter drive according to DIN 138.

说明：包括紧固螺钉、带有螺孔的平键和传动环。

Standard Specification: Cutter retaining screw, feather key and drive keys included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

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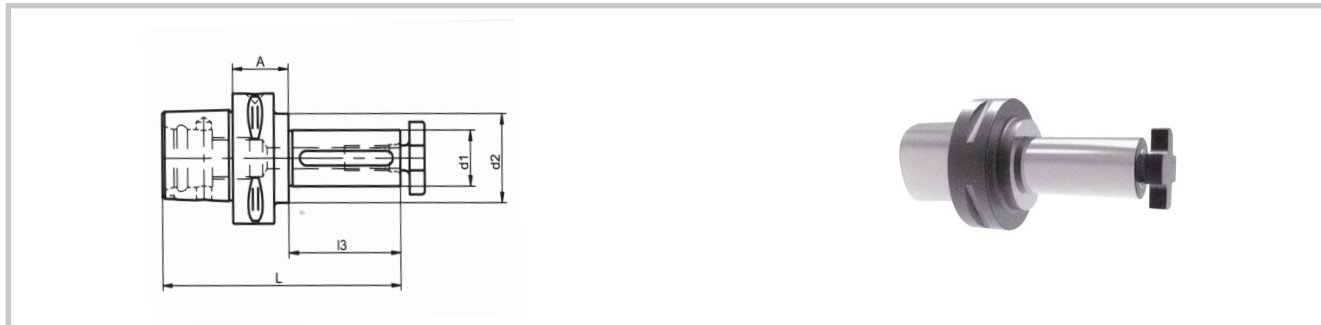
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## 套式铣刀刀柄 (带平键)

Shell End Mill Arbors for milling cutters with longitudinal slot



No	GB Model	PSC	d1	A	d2	l3	L	kg
422.0001.381	PSC32-XS16-20	32	16	20	28	30	69	0.2
422.0001.382	PSC40-XS16-25	40	16	25	28	30	79	0.3
422.0002.382	PSC40-XS22-25	40	22	25	36	40	89	0.4
422.0003.382	PSC40-XS27-25	40	27	25	40	60	109	0.6
422.0001.383	PSC50-XS16-25	50	16	25	28	30	85	0.5
422.0002.383	PSC50-XS22-25	50	22	25	36	40	95	0.6
422.0003.383	PSC50-XS27-25	50	27	25	43	60	115	0.7
422.0004.383	PSC50-XS32-25	50	32	25	50	60	115	0.9
422.0001.384	PSC63-XS16-30	63	16	30	28	30	98	0.8
422.0002.384	PSC63-XS22-30	63	22	30	36	40	108	0.9
422.0003.384	PSC63-XS27-30	63	27	30	43	60	128	1.1
422.0004.384	PSC63-XS32-25	63	32	25	48	60	123	1.2
422.0005.384	PSC63-XS40-25	63	40	25	56	60	123	1.4
422.0001.385	PSC80-XS16-40	80	16	40	28	30	118	1.8
422.0002.385	PSC80-XS22-40	80	22	40	36	40	128	1.9
422.0003.385	PSC80-XS27-30	80	27	30	43	60	138	2.0
422.0004.385	PSC80-XS32-30	80	32	30	48	60	138	2.1
422.0005.385	PSC80-XS40-30	80	40	30	56	60	138	2.3
422.0006.385	PSC80-XS50-30	80	50	30	70	60	138	2.6
422.0007.385	PSC80-XS60-30	80	60	30	60	60	138	3.0

使用: 用于夹持轴向平键的面铣刀。

Use: For clamping shell end mills and milling cutters with longitudinal slot.

设计: 传动环符合DIN 138。

Design Cutter drive according to DIN 138.

说明: 包括紧固螺钉、带有螺孔的平键。

Standard Specification: Cutter retaining screw and feather key included.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

### ACCESSORIES

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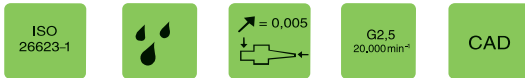
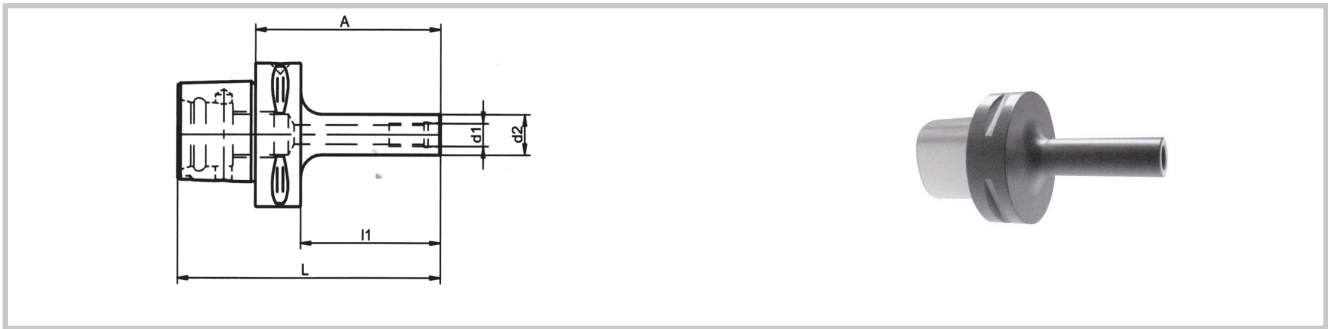
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4.21

KFS模块式铣刀柄

Holders for screw-in milling cutters



No	GB Model	PSC	d1	A	d2	l1	L	kg
571.0001.381	PSC32-KFS8-60	32	M8	60	12.8	45	79.0	0.2
571.0002.381	PSC32-KFS10-70	32	M10	70	17.8	55	89.0	0.2
571.0001.382	PSC40-KFS8-70	40	M8	70	12.8	50	94.0	0.3
571.0002.382	PSC40-KFS10-80	40	M10	80	17.8	60	104.0	0.4
571.0003.382	PSC40-KFS12-80	40	M12	80	20.8	60	104.0	0.4
571.0001.383	PSC50-KFS8-70	50	M8	70	12.8	50	100.0	0.5
571.0002.383	PSC50-KFS10-80	50	M10	80	17.8	60	110.0	0.5
571.0003.383	PSC50-KFS12-80	50	M12	80	20.8	60	110.0	0.6
571.0004.383	PSC50-KFS16-80	50	M16	80	28.8	60	110.0	0.7
571.0001.384	PSC63-KFS8-70	63	M8	70	12.8	48	108.0	0.8
571.0002.384	PSC63-KFS10-90	63	M10	90	17.8	68	128.0	0.9
571.0003.384	PSC63-KFS12-100	63	M12	100	20.8	78	138.0	0.9
571.0004.384	PSC63-KFS16-100	63	M16	100	28.8	78	138.0	1.1

使用: 用于夹紧以螺纹为连接的铣刀。

Use: For clamping screw-in milling cutters with thread.

备注: 其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



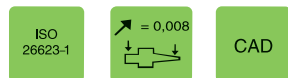
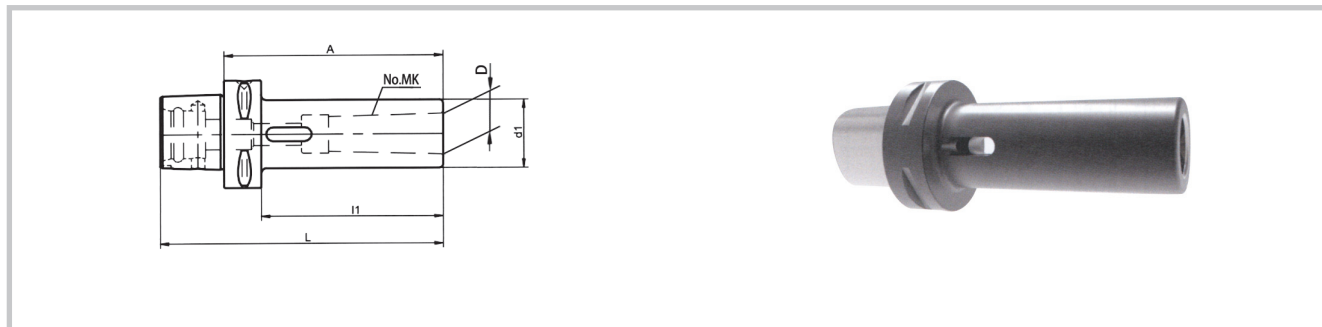
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## 带扁尾莫氏圆锥孔刀柄

### Reduction Sleeves for morse taper with tang



No	GB Model	PSC	MK	D	A	d1	l1	L	kg
454.0002.382	PSC40-MK2-110	40	2	17.78	110	32	90.0	134	0.8
454.0003.382	PSC40-MK3-130	40	3	23.825	130	40	110.0	154	1.2
454.0002.383	PSC50-MK2-110	50	2	17.78	110	32	90.0	140	0.9
454.0003.383	PSC50-MK3-130	50	3	23.825	130	40	110.0	160	1.4
454.0004.383	PSC50-MK4-150	50	4	31.267	150	48	130.0	180	2.1
454.0002.384	PSC63-MK2-110	63	2	17.78	110	32	88.0	148	1.2
454.0003.384	PSC63-MK3-130	63	3	23.825	130	40	108.0	168	1.7
454.0004.384	PSC63-MK4-150	63	4	31.267	150	48	128.0	188	2.4
454.0002.385	PSC80-MK2-120	80	2	17.78	120	32	90.0	168	2.2
454.0003.385	PSC80-MK3-140	80	3	23.825	140	40	110.0	188	2.7
454.0004.385	PSC80-MK4-160	80	4	31.267	160	48	130.0	208	3.4

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## ACCESSORIES

配件



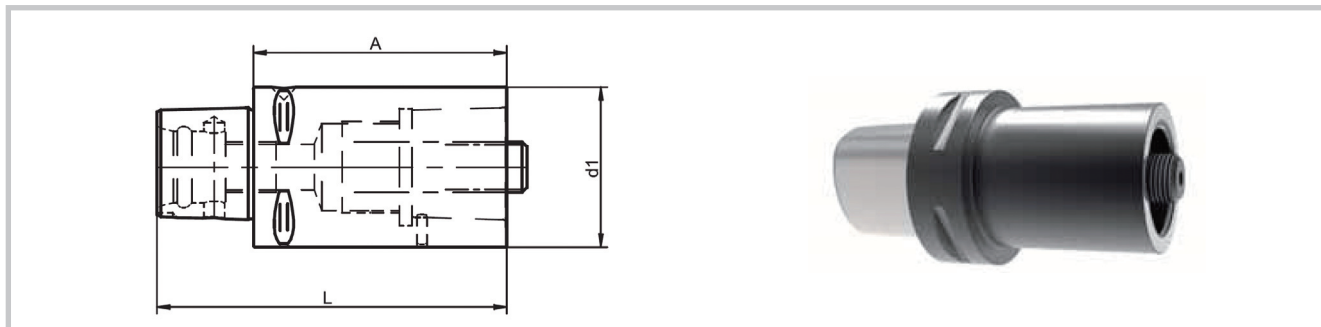
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等径接长杆

Extensions axial clamping



No	GB Model	PSC	d1	A	L	kg
706.0001.383	PSC50-PSC50-80	50	50	80	110	1.0
706.0002.383	PSC50-PSC50-100	50	50	100	130	1.3
706.0001.384	PSC63-PSC63-100	63	63	100	138	2.0
706.0002.384	PSC63-PSC63-140	63	63	140	178	2.9

使用：用于夹持符合ISO 26623-1标准的PSC柄工具，  
d1=PSC柄标称尺寸。

Use: For holding PSK tools according to ISO 26623-1, d1 =  
nominal size PSK.

标准规格：包括夹紧螺钉。

Standard Specification: Includes clamping screw.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



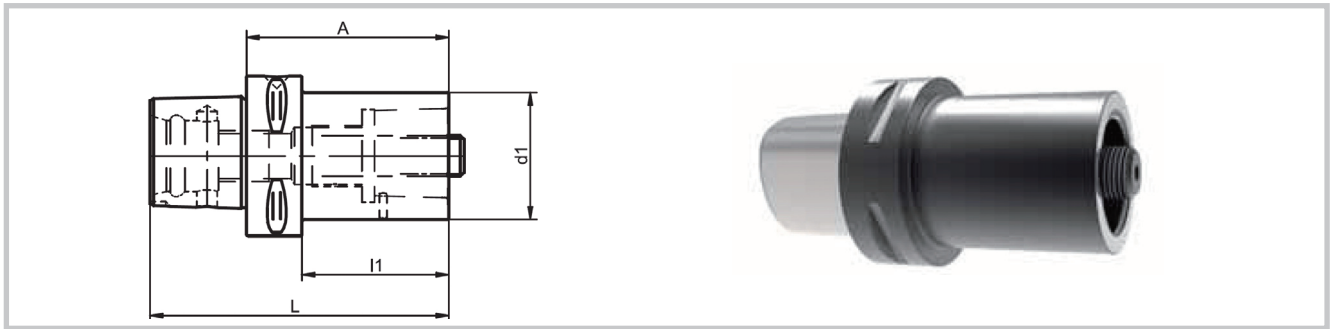
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## 变径接长杆

### Reducers cylindrical



3.0

PSC

No	GB Model	PSC	d1	A	l1	L	kg
707.0003.384	PSC63-PSC50-80	63	50	80	58	118	1.4

使用：用于夹持符合ISO 26623-1标准的PSC柄工具，  
d1=PSC柄标称尺寸。

标准规格：包括夹紧螺钉。

备注：其他型号和尺寸可按订货要求制作。

Use: For holding PSK tools according to ISO 26623-1, d1 =  
nominal size PSK.

Standard Specification: Includes clamping screw.

Note: Other designs and sizes are available on request.

## ACCESSORIES

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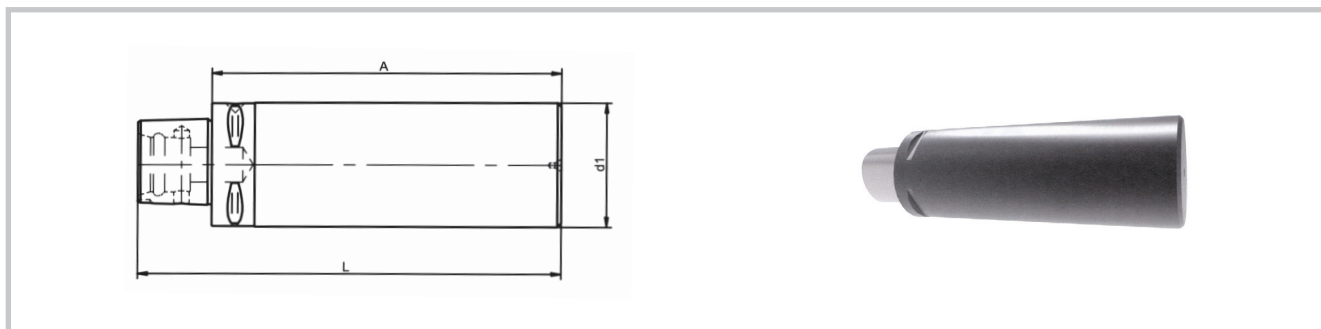
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毛坯刀柄

Tool Blanks



ISO  
26623-1

No	GB Model	PSC	d1	A	L	kg
517.6010.382	PSC40-MP40-95	40	40	95	119	1.0
517.6011.382	PSC40-MP40-120	40	40	120	144	1.2
517.6012.382	PSC40-MP60-165	40	60	165	189	3.5
517.6013.382	PSC40-MP80-75	40	80	75	99	2.4
517.6014.382	PSC40-MP80-120	40	80	120	144	4.2
517.6015.382	PSC40-MP100-85	40	100	85	109	4.3
517.6010.383	PSC50-MP50-125	50	50	125	155	2.0
517.6011.383	PSC50-MP50-150	50	50	150	180	2.4
517.6012.383	PSC50-MP75-175	50	75	175	205	5.8
517.6013.383	PSC50-MP90-80	50	90	80	110	3.4
517.6014.383	PSC50-MP95-150	50	95	150	180	7.6
517.6015.383	PSC50-MP110-90	50	110	90	120	5.6
517.6010.384	PSC63-MP63-180	63	63	180	218	4.6
517.6011.384	PSC63-MP75-195	63	75	195	233	6.7
517.6012.384	PSC63-MP110-85	63	110	85	123	5.4
517.6013.384	PSC63-MP120-180	63	120	180	218	14.8
517.6014.384	PSC63-MP130-95	63	130	95	133	8.4
517.6010.385	PSC80-MP80-200	80	80	200	248	8.4
517.6011.385	PSC80-MP120-160	80	120	160	208	13.3
517.6012.385	PSC80-MP130-90	80	130	90	138	8.0
517.6013.385	PSC80-MP145-200	80	145	200	248	23.8

使用：用于制造特殊刀具刀体及工具系统产品。

设计：锥柄为磨制成品，尺寸符合柄部标准，维氏硬度 HV670±40（近似于HRC58±2），淬硬层在 0.5mm以上。  
刀具端硬度HRC36-44。

材料：合金钢

备注：其他型号和尺寸可按订货要求制作。

Use: For own manufacture of special tools.

Design: The taper is finished with grinding, the dimensions are in accordance with the standard of the handle, HV670±40 (approximately HRC58±2), the hardened layer is above 0.5mm. Tool part is HRC36-44.

Material: Alloy steel.

Note: Other designs and sizes are available on request.

ACCESSORIES

配件



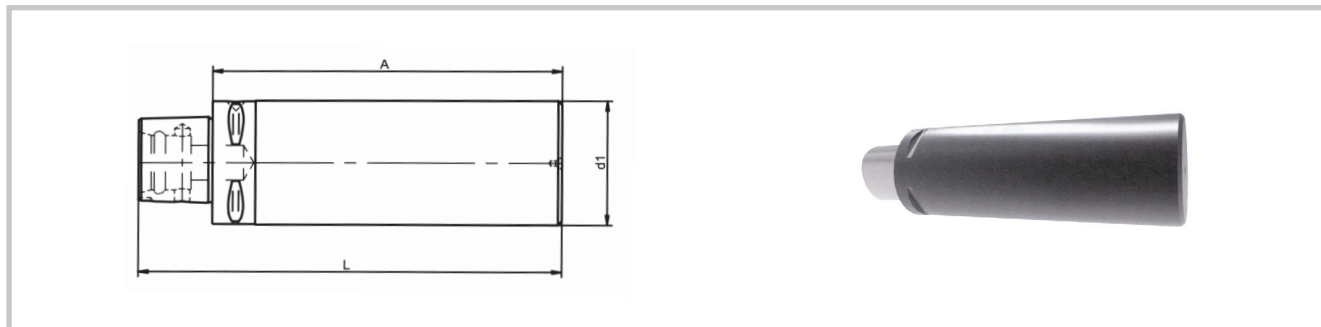
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## 毛坯刀柄

### Tool Blanks



ISO  
26623-1

No	GB Model	PSC	d1	A	L	kg
517.0010.382	PSC40-MP40-95	40	40	95	119	1.0
517.0011.382	PSC40-MP40-120	40	40	120	144	1.2
517.0012.382	PSC40-MP60-165	40	60	165	189	3.5
517.0013.382	PSC40-MP80-75	40	80	75	99	2.4
517.0014.382	PSC40-MP80-120	40	80	120	144	4.2
517.0015.382	PSC40-MP100-85	40	100	85	109	4.3
517.0010.383	PSC50-MP50-125	50	50	125	155	2.0
517.0011.383	PSC50-MP50-150	50	50	150	180	2.4
517.0012.383	PSC50-MP75-175	50	75	175	205	5.8
517.0013.383	PSC50-MP90-80	50	90	80	110	3.4
517.0014.383	PSC50-MP95-150	50	95	150	180	7.6
517.0015.383	PSC50-MP110-90	50	110	90	120	5.6
517.0010.384	PSC63-MP63-180	63	63	180	218	4.6
517.0011.384	PSC63-MP75-195	63	75	195	233	6.7
517.0012.384	PSC63-MP110-85	63	110	85	123	5.4
517.0013.384	PSC63-MP120-180	63	120	180	218	14.8
517.0014.384	PSC63-MP130-95	63	130	95	133	8.4
517.0010.385	PSC80-MP80-200	80	80	200	248	8.4
517.0011.385	PSC80-MP120-160	80	120	160	208	13.3
517.0012.385	PSC80-MP130-90	80	130	90	138	8.0
517.0013.385	PSC80-MP145-200	80	145	200	248	23.8

使用：用于制造工具系统产品。

设计：锥柄为磨制成品，尺寸符合柄部标准，维氏硬度

HV670±40（近似于HRC58±2）。

刀具端面抛光，未做淬硬处理，为原材料本身硬度。

材料：渗碳钢

备注：其他型号和尺寸可按订货要求制作。

Use: For own manufacture of special tools.

Design: Taper including flange hardened. Vickers hardness min. HV 670kp/mm<sup>2</sup> (min. HRC 58). Taper ground, shank not ground, prepared to be finished, unhardened.

Material: Alloyed case-hardened steel.

Note: Other designs and sizes are available on request.

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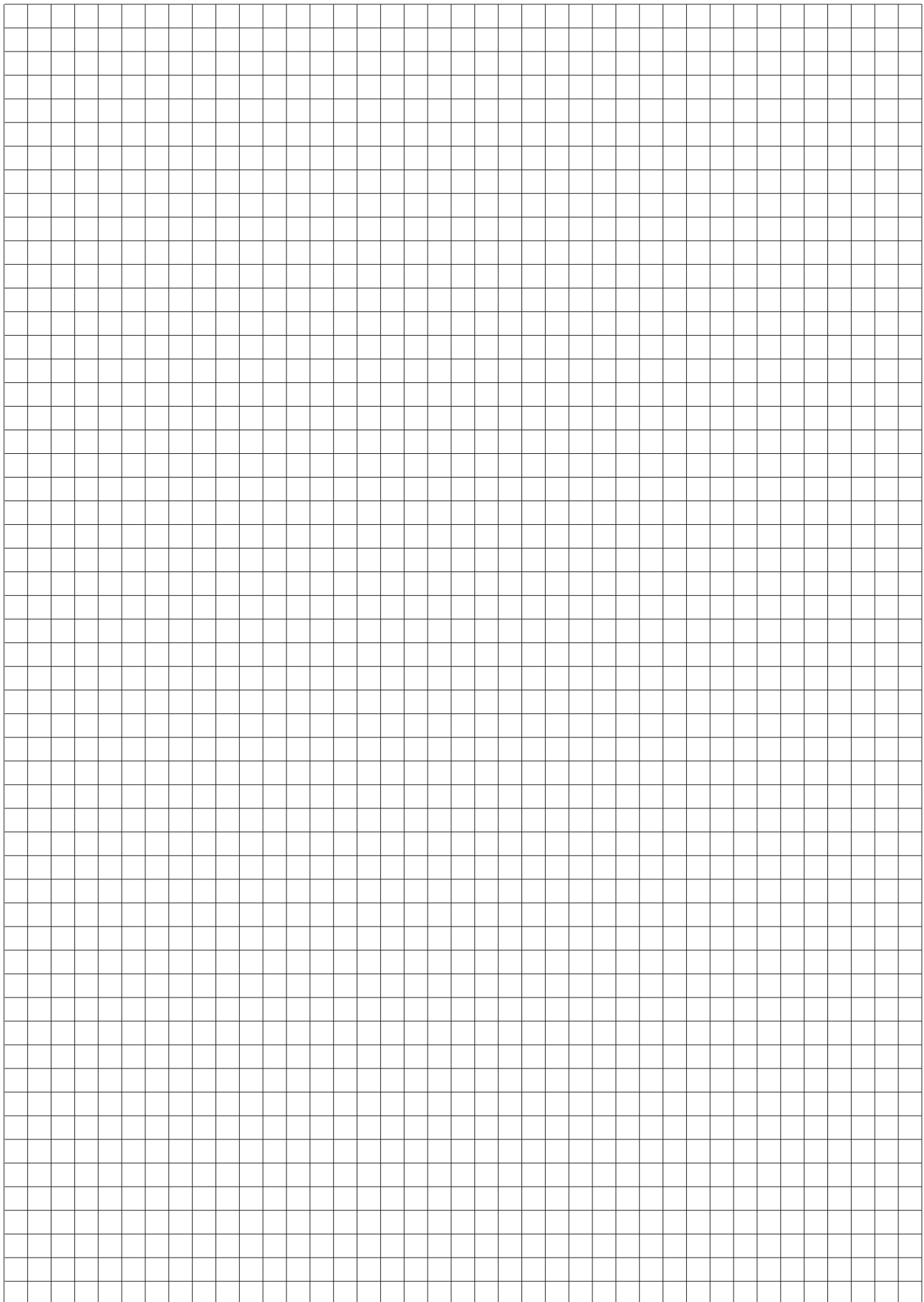
### 配件



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## 4.0 ACCESSORIES

配件

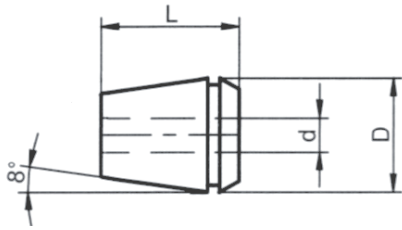
**Accessories and Spare Parts**



	夹簧，夹紧螺母及配件	Collets, Clamping Nuts and Accessories
4.02-4.03	高精度/普通级ER夹簧	ER-Collets according to DIN ISO 15488(DIN 6499)
4.03-4.04	刚性攻丝夹簧	ER-Collets for Rigid tapping
4.05-4.06	机械式密封ER夹簧	ER-Collets for Mechanical seal
4.06	ER夹紧螺母	ER Clamping Nuts
4.06	ER夹紧螺母扳手	Clamping Keys for ER clamping nuts
4.07	ER C型-内冷夹紧螺母	ER...C Clamping Nuts for internal coolant supply
4.07-4.09	密封垫圈	Sealing Disks
4.10-4.11	SK夹簧	SK-Collets
4.12	GSK夹紧螺母	GSK Clamping Nuts
4.12	GSK夹紧螺母扳手	Clamping Keys for GSK clamping nuts
4.13	弹性直夹套	Reduction Sleeve
4.14-2.20	快换丝锥夹套	Quick Change Inserts with safety clutch
4.20	自紧钻夹头	Drilling Chuck
4.20	强力铣夹头扳手	Clamping Keys for Strong Chuck Holder for Boring and Milling

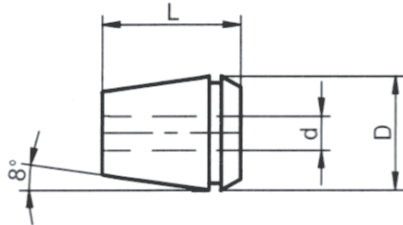
	冷却管、螺钉、键和备用配件	Coolant Tubes, Screws, Keys and Spare Parts
4.21	冷却管	Coolant Tubes
4.21	冷却管扳手	Keys for coolant tubes
4.22	国际标准B型拉钉	Pull Studs ISO 7388/2 Type B
4.22	DIN 69872 A型拉钉	Pull Studs DIN 69872 Type A
4.23	MAS拉钉	Pull Studs MAS
4.23	JIS B 6339 型拉钉	Pull Studs JIS B 6339
4.24-4.25	调整螺钉	Adjusting Screws
4.26	用于液压刀柄的变径套	Reduction Bushes for hydraulic expansion chucks
4.27	十字型螺钉	Cutter Retaining Screws for shell end mill arbors
4.27	十字型螺钉夹紧扳手	Keys for cutter retaining screws
4.28	垫片	Washers
4.28	平键	Feather Keys
4.29	铣刀柄的衬套	Rings for mill arbors
4.30	SK莫氏锥柄变径套的紧固螺钉	Retaining Screws for reduction sleeves SK for morse tapers
4.30	用于PSC的锁紧螺栓	Clamping bolts PSC

符合ISO 15488(DIN 6499)  
的ER夹簧 (高精度/普通级)  
ER-Collets according to DIN  
ISO 15488(DIN 6499)



高精度No	高精度型号	普通级No	普通级型号	d	D	L
153.0201	ER11-1.0P	153.201	ER11-1.0	1-0.5	11.5	18
153.0208	ER11-1.5P	153.208	ER11-1.5	1.5-1	11.5	18
153.0202	ER11-2.0P	153.202	ER11-2.0	2-1.5	11.5	18
153.0209	ER11-2.5P	153.209	ER11-2.5	2.5-2	11.5	18
153.0203	ER11-3.0P	153.203	ER11-3.0	3-2.5	11.5	18
153.0210	ER11-3.5P	153.210	ER11-3.5	3.5-3	11.5	18
153.0204	ER11-4.0P	153.204	ER11-4.0	4-3.5	11.5	18
153.0211	ER11-4.5P	153.211	ER11-4.5	4.5-4	11.5	18
153.0205	ER11-5.0P	153.205	ER11-5.0	5-4.5	11.5	18
153.0212	ER11-5.5P	153.212	ER11-5.5	5.5-5	11.5	18
153.0206	ER11-6.0P	153.206	ER11-6.0	6-5.5	11.5	18
153.0213	ER11-6.5P	153.213	ER11-6.5	6.5-6	11.5	18
153.0207	ER11-7.0P	153.207	ER11-7.0	7-6.5	11.5	18
153.0301	ER16-1.0P	153.301	ER16-1.0	1-0.5	17	27
153.0302	ER16-2.0P	153.302	ER16-2.0	2-1	17	27
153.0303	ER16-3.0P	153.303	ER16-3.0	3-2	17	27
153.0304	ER16-4.0P	153.304	ER16-4.0	4-3	17	27
153.0305	ER16-5.0P	153.305	ER16-5.0	5-4	17	27
153.0306	ER16-6.0P	153.306	ER16-6.0	6-5	17	27
153.0307	ER16-7.0P	153.307	ER16-7.0	7-6	17	27
153.0308	ER16-8.0P	153.308	ER16-8.0	8-7	17	27
153.0309	ER16-9.0P	153.309	ER16-9.0	9-8	17	27
153.0310	ER16-10.0P	153.310	ER16-10.0	10-9	17	27
153.0101	ER20-1.0P	153.101	ER20-1.0	1-0.5	21	32
153.0102	ER20-2.0P	153.102	ER20-2.0	2-1	21	32
153.0103	ER20-3.0P	153.103	ER20-3.0	3-2	21	32
153.0104	ER20-4.0P	153.104	ER20-4.0	4-3	21	32
153.0105	ER20-5.0P	153.105	ER20-5.0	5-4	21	32
153.0106	ER20-6.0P	153.106	ER20-6.0	6-5	21	32
153.0107	ER20-7.0P	153.107	ER20-7.0	7-6	21	32
153.0108	ER20-8.0P	153.108	ER20-8.0	8-7	21	32
153.0109	ER20-9.0P	153.109	ER20-9.0	9-8	21	32
153.0110	ER20-10.0P	153.110	ER20-10.0	10-9	21	32
153.0111	ER20-11.0P	153.111	ER20-11.0	11-10	21	32
153.0112	ER20-12.0P	153.112	ER20-12.0	12-11	21	32
153.0113	ER20-13.0P	153.113	ER20-13.0	13-12	21	32
153.0252	ER25-2.0P	153.252	ER25-2.0	2-1	26	34
153.0253	ER25-3.0P	153.253	ER25-3.0	3-2	26	34
153.0254	ER25-4.0P	153.254	ER25-4.0	4-3	26	34
153.0255	ER25-5.0P	153.255	ER25-5.0	5-4	26	34
153.0256	ER25-6.0P	153.256	ER25-6.0	6-5	26	34
153.0257	ER25-7.0P	153.257	ER25-7.0	7-6	26	34
153.0258	ER25-8.0P	153.258	ER25-8.0	8-7	26	34
153.0259	ER25-9.0P	153.259	ER25-9.0	9-8	26	34
153.0260	ER25-10.0P	153.260	ER25-10.0	10-9	26	34
153.0261	ER25-11.0P	153.261	ER25-11.0	11-10	26	34
153.0262	ER25-12.0P	153.262	ER25-12.0	12-11	26	34
153.0263	ER25-13.0P	153.263	ER25-13.0	13-12	26	34
153.0264	ER25-14.0P	153.264	ER25-14.0	14-13	26	34
153.0265	ER25-15.0P	153.265	ER25-15.0	15-14	26	34
153.0266	ER25-16.0P	153.266	ER25-16.0	16-15	26	34
153.0403	ER32-3.0P	153.403	ER32-3.0	3-2	33	40
153.0404	ER32-4.0P	153.404	ER32-4.0	4-3	33	40
153.0405	ER32-5.0P	153.405	ER32-5.0	5-4	33	40

符合ISO 15488(DIN 6499)  
的ER夹簧 (高精度/普通级)  
ER-Collets according to DIN  
ISO 15488(DIN 6499)



高精度No	高精度型号	普通级No	普通级型号	d	D	L
153.0406	ER32-6.0P	153.406	ER32-6.0	6-5	33	40
153.0407	ER32-7.0P	153.407	ER32-7.0	7-6	33	40
153.0408	ER32-8.0P	153.408	ER32-8.0	8-7	33	40
153.0409	ER32-9.0P	153.409	ER32-9.0	9-8	33	40
153.0410	ER32-10.0P	153.410	ER32-10.0	10-9	33	40
153.0411	ER32-11.0P	153.411	ER32-11.0	11-10	33	40
153.0412	ER32-12.0P	153.412	ER32-12.0	12-11	33	40
153.0413	ER32-13.0P	153.413	ER32-13.0	13-12	33	40
153.0414	ER32-14.0P	153.414	ER32-14.0	14-13	33	40
153.0415	ER32-15.0P	153.415	ER32-15.0	15-14	33	40
153.0416	ER32-16.0P	153.416	ER32-16.0	16-15	33	40
153.0417	ER32-17.0P	153.417	ER32-17.0	17-16	33	40
153.0418	ER32-18.0P	153.418	ER32-18.0	18-17	33	40
153.0419	ER32-19.0P	153.419	ER32-19.0	19-18	33	40
153.0420	ER32-20.0P	153.420	ER32-20.0	20-19	33	40
153.0504	ER40-4.0P	153.504	ER40-4.0	4-3	41	46
153.0505	ER40-5.0P	153.505	ER40-5.0	5-4	41	46
153.0506	ER40-6.0P	153.506	ER40-6.0	6-5	41	46
153.0507	ER40-7.0P	153.507	ER40-7.0	7-6	41	46
153.0508	ER40-8.0P	153.508	ER40-8.0	8-7	41	46
153.0509	ER40-9.0P	153.509	ER40-9.0	9-8	41	46
153.0510	ER40-10.0P	153.510	ER40-10.0	10-9	41	46
153.0511	ER40-11.0P	153.511	ER40-11.0	11-10	41	46
153.0512	ER40-12.0P	153.512	ER40-12.0	12-11	41	46
153.0513	ER40-13.0P	153.513	ER40-13.0	13-12	41	46
153.0514	ER40-14.0P	153.514	ER40-14.0	14-13	41	46
153.0515	ER40-15.0P	153.515	ER40-15.0	15-14	41	46
153.0516	ER40-16.0P	153.516	ER40-16.0	16-15	41	46
153.0517	ER40-17.0P	153.517	ER40-17.0	17-16	41	46
153.0518	ER40-18.0P	153.518	ER40-18.0	18-17	41	46
153.0519	ER40-19.0P	153.519	ER40-19.0	19-18	41	46
153.0520	ER40-20.0P	153.520	ER40-20.0	20-19	41	46
153.0521	ER40-21.0P	153.521	ER40-21.0	21-20	41	46
153.0522	ER40-22.0P	153.522	ER40-22.0	22-21	41	46
153.0523	ER40-23.0P	153.523	ER40-23.0	23-22	41	46
153.0524	ER40-24.0P	153.524	ER40-24.0	24-23	41	46
153.0525	ER40-25.0P	153.525	ER40-25.0	25-24	41	46
153.0526	ER40-26.0P	153.526	ER40-26.0	26-25	41	46

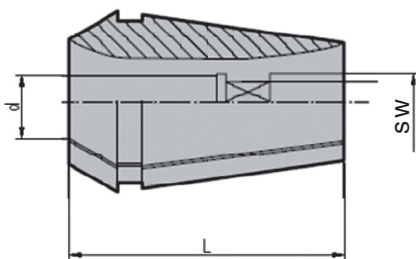
设计: ①表面硬化和磨制。

材料: 弹簧钢。

②普通级夹簧内径跳动小于0.01mm。

③高精度夹簧内径跳动小于0.005mm。

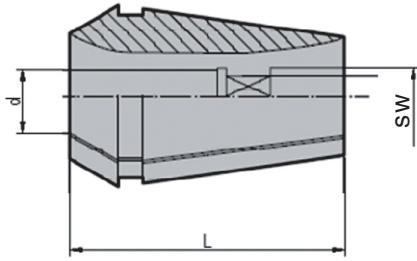
刚性攻丝夹簧  
ER-Collets for Rigid tapping



No	型号	d	SW	L1	L
442.501	ER16-2.24x1.8	2.24	1.8	15	27
442.502	ER16-3.15x2.5	3.15	2.5	16	27
442.219	ER16-4.0x3.0	4	3	17	27
442.220	ER16-4.0x3.15	4	3.15	17	27
442.520	ER16-4.5x3.55	4.5	3.55	17	27
442.221	ER16-5.0x4.0	5	4	17	27
442.222	ER16-6.0x4.9	6	4.9	18	27
442.223	ER16-6.3x5.0	6.3	5	18	27
442.224	ER16-7.1x5.6	7.1	5.6	18	27
442.225	ER16-8.0x6.3	8	6.3	18	27
442.226	ER16-9.0x7.1	9	7.1	20	27
442.503	ER20-2.24x1.8	2.24	1.8	15	32
442.504	ER20-3.15x2.5	3.15	2.5	16	32
442.227	ER20-4.0x3.15	4	3.15	18	32
442.521	ER20-4.5x3.55	4.5	3.55	18	32
442.228	ER20-5.0x4.0	5	4	18	32
442.229	ER20-6.0x4.9	6	4.9	18	32

## 刚性攻丝夹簧

### ER-Collets for Rigid tapping

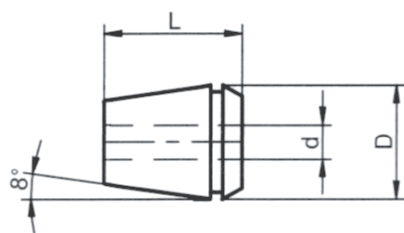


No	型号	d	SW	L1	L
442.230	ER20-6.3x5.0	6.3	5	20	32
442.231	ER20-7.1x5.6	7.1	5.6	20	32
442.232	ER20-8.0x6.3	8	6.3	20	32
442.233	ER20-9.0x7.1	9	7.1	20	32
442.234	ER20-10.0x8.0	10	8	20	32
442.235	ER20-11.0x9.0	11	9	23.5	32
442.505	ER20-11.2x9.0	11.2	9	23	34
442.236	ER20-12.0x9.0	12	9	23.5	32
442.506	ER20-12.5x10.0	12.5	10	23	34
442.507	ER25-2.24x1.8	2.24	1.8	15	34
442.508	ER25-3.15x2.5	3.15	2.5	16	34
442.237	ER25-4.0x3.0	4	3	20	34
442.522	ER25-4.5x3.55	4.5	3.55	20	34
442.238	ER25-4.0x3.15	4	3.15	20	34
442.239	ER25-5.0x4.0	5	4	20	34
442.240	ER25-6.0x4.9	6	4.9	20	34
442.241	ER25-6.3x5.0	6.3	5	22	34
442.242	ER25-7.1x5.6	7.1	5.6	22	34
442.243	ER25-8.0x6.3	8	6.3	23	34
442.244	ER25-9.0x7.1	9	7.1	23	34
442.245	ER25-10.0x8.0	10	8	23	34
442.246	ER25-11.0x9.0	11	9	23	34
442.509	ER25-11.2x9.0	11.2	9	23	34
442.247	ER25-12.0x9.0	12	9	23	34
442.510	ER25-12.5x10.0	12.5	10	23	34
442.248	ER25-14.0x11.2	14	11.2	25	34
442.249	ER25-15.0x12.0	15	12	25	34
442.250	ER25-16.0x12.0	16	12	25	34
442.511	ER25-16.0x12.5	16	12.5	25	34
442.512	ER32-3.15x2.5	3.15	2.5	16	34
442.251	ER32-4.0x3.0	4	3	20	40
442.252	ER32-4.0x3.15	4	3.15	20	40
442.523	ER32-4.5x3.55	4.5	3.55	20	40
442.253	ER32-5.0x4.0	5	4	20	40
442.254	ER32-6.0x4.9	6	4.9	20	40
442.255	ER32-6.3x5.0	6.3	5	22	40
442.256	ER32-7.1x5.6	7.1	5.6	22	40
442.257	ER32-8.0x6.3	8	6.3	25	40
442.258	ER32-9.0x7.1	9	7.1	25	40
442.259	ER32-10.0x8	10	8	25	40
442.260	ER32-11.0x9.0	11	9	25	40
442.513	ER32-11.2x9.0	11.2	9	23	34
442.261	ER32-12.0x9.0	12	9	25	40
442.514	ER32-12.5x10.0	12.5	10	23	34
442.262	ER32-14.0x11.2	14	11.2	25	40
442.263	ER32-15.0x12.0	15	12	25	40
442.264	ER32-16.0x12.0	16	12	25	40
442.515	ER32-16.0x12.5	16	12.5	25	34
442.265	ER32-17.0x13.0	17	13	25	40
442.266	ER32-18.0x14.0	18	14	25	40
442.267	ER32-18.0x14.5	18	14.5	25	40
442.268	ER32-20.0x16.0	20	16	28	40
442.269	ER40-4.0x3.0	4	3	21	46
442.270	ER40-4.0x3.15	4	3.15	21	46
442.524	ER40-4.5x3.55	4.5	3.55	21	46
442.271	ER40-5.0x4.0	5	4	21	46
442.272	ER40-6.0x4.9	6	4.9	21	46
442.273	ER40-6.3x5.0	6.3	5	22	46
442.274	ER40-7.1x5.6	7.1	5.6	22	46
442.275	ER40-8.0x6.3	8	6.3	27	46
442.276	ER40-9.0x7.1	9	7.1	27	46
442.277	ER40-10.0x8.0	10	8	27	46
442.278	ER40-11.0x9.0	11	9	27	46
442.516	ER40-11.2x9.0	11.2	9	23	34
442.279	ER40-12.0x9.0	12	9	27	46
442.517	ER40-12.5x10.0	12.5	10	23	34
442.280	ER40-14.0x11.2	14	11.2	28	46
442.281	ER40-15.0x12.0	15	12	28	46
442.282	ER40-16.0x12.0	16	12	28	46
442.518	ER40-16.0x12.5	16	12.5	25	34
442.283	ER40-17.0x13.0	17	13	28	46
442.284	ER40-18.0x14.0	18	14	28	46
442.285	ER40-18.0x14.5	18	14.5	28	46
442.286	ER40-20.0x16.0	20	16	28	46
442.287	ER40-22.4x18.0	22.4	18	32	46
442.288	ER40-25.0x20.0	25	20	32	46

注：订货时请确认丝锥柄径和方尾尺寸，其他型号和尺寸可按订货要求制作。

机械式密封ER夹簧

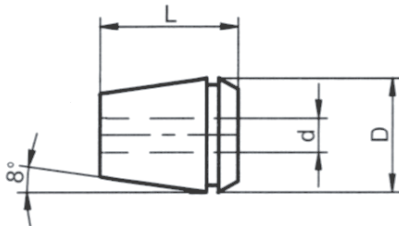
ER-Collets for Mechanical seal



No	型号	d	D	L
442.289	ER16-3.0NL	3-2	17	27
442.290	ER16-4.0NL	4-3	17	27
442.291	ER16-5.0NL	5-4	17	27
442.292	ER16-6.0NL	6-5	17	27
442.293	ER16-7.0NL	7-6	17	27
442.294	ER16-8.0NL	8-7	17	27
442.295	ER16-9.0NL	9-8	17	27
442.296	ER16-10.0NL	10-9	17	27
442.299	ER20-3.0NL	3-2	21	32
442.300	ER20-4.0NL	4-3	21	32
442.301	ER20-5.0NL	5-4	21	32
442.302	ER20-6.0NL	6-5	21	32
442.303	ER20-7.0NL	7-6	21	32
442.304	ER20-8.0NL	8-7	21	32
442.305	ER20-9.0NL	9-8	21	32
442.306	ER20-10.0NL	10-9	21	32
442.307	ER20-11.0NL	11-10	21	32
442.308	ER20-12.0NL	12-11	21	32
442.309	ER20-13.0NL	13-12	21	32
442.311	ER25-3.0NL	3-2	26	34
442.312	ER25-4.0NL	4-3	26	34
442.313	ER25-5.0NL	5-4	26	34
442.314	ER25-6.0NL	6-5	26	34
442.315	ER25-7.0NL	7-6	26	34
442.316	ER25-8.0NL	8-7	26	34
442.317	ER25-9.0NL	9-8	26	34
442.318	ER25-10.0NL	10-9	26	34
442.319	ER25-11.0NL	11-10	26	34
442.320	ER25-12.0NL	12-11	26	34
442.321	ER25-13.0NL	13-12	26	34
442.322	ER25-14.0NL	14-13	26	34
442.323	ER25-15.0NL	15-14	26	34
442.324	ER25-16.0NL	16-15	26	34
442.325	ER32-3.0NL	3-2	33	40
442.326	ER32-4.0NL	4-3	33	40
442.327	ER32-5.0NL	5-4	33	40
442.328	ER32-6.0NL	6-5	33	40
442.329	ER32-7.0NL	7-6	33	40
442.330	ER32-8.0NL	8-7	33	40
442.331	ER32-9.0NL	9-8	33	40
442.332	ER32-10.0NL	10-9	33	40
442.333	ER32-11.0NL	11-10	33	40
442.334	ER32-12.0NL	12-11	33	40
442.335	ER32-13.0NL	13-12	33	40
442.336	ER32-14.0NL	14-13	33	40
442.337	ER32-15.0NL	15-14	33	40
442.338	ER32-16.0NL	16-15	33	40
442.339	ER32-17.0NL	17-16	33	40
442.340	ER32-18.0NL	18-17	33	40
442.341	ER32-19.0NL	19-18	33	40
442.342	ER32-20.0NL	20-19	33	40
442.343	ER40-4.0NL	4-3	41	46
442.344	ER40-5.0NL	5-4	41	46
442.345	ER40-6.0NL	6-5	41	46
442.346	ER40-7.0NL	7-6	41	46
442.347	ER40-8.0NL	8-7	41	46
442.348	ER40-9.0NL	9-8	41	46

## 机械式密封ER夹簧

ER-Collets for Mechanical seal



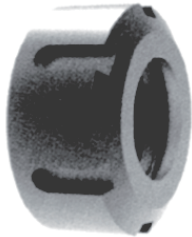
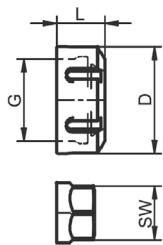
No	型号	d	D	L
442.349	ER40-10.0NL	10-9	41	46
442.350	ER40-11.0NL	11-10	41	46
442.351	ER40-12.0NL	12-11	41	46
442.352	ER40-13.0NL	13-12	41	46
442.353	ER40-14.0NL	14-13	41	46
442.354	ER40-15.0NL	15-14	41	46
442.355	ER40-16.0NL	16-15	41	46
442.356	ER40-17.0NL	17-16	41	46
442.357	ER40-18.0NL	18-17	41	46
442.358	ER40-19.0NL	19-18	41	46
442.359	ER40-20.0NL	20-19	41	46
442.360	ER40-21.0NL	21-20	41	46
442.361	ER40-22.0NL	22-21	41	46
442.362	ER40-23.0NL	23-22	41	46
442.363	ER40-24.0NL	24-23	41	46
442.364	ER40-25.0NL	25-24	41	46
442.365	ER40-26.0NL	26-25	41	46

## 4.0

### 配件

## ER夹紧螺母

ER Clamping Nuts



No	型号	D	L	G	SW	kg
095.400	LM-ER11	19	12	M14 × 0.75	17	0.02
095.401	LM-ER16	28	18	M22 × 1.5	25	0.04
095.405	LM-ER20	34	19.5	M25 × 1.5	30	0.08
095.406	LM-ER25	42	20.5	M32 × 1.5	-	0.1
095.402	LM-ER32	50	23.5	M40 × 1.5	-	0.15
095.403	LM-ER40	63	26	M50 × 1.5	-	0.28

使用：用于ER/ESX夹头。

Use: For ER/ESX collet chucks.

## ER夹紧螺母扳手

Clamping Keys for ER clamping nuts



No	型号	for	Typ
032.307	BS-ER11	698...	HSK/PSK/SK
032.308	BS-ER16	698...	HSK/PSK/SK
032.309	BS-ER20	698...	HSK/PSK/SK

No	型号	for	Typ
032.808	BS-ER25	697...	HSK/PSK/SK
032.809	BS-ER32	697...	HSK/PSK/SK
032.810	BS-ER40	697...	HSK/PSK/SK



ER...C型-内冷夹紧螺母

ER...C Clamping Nuts for internal coolant supply

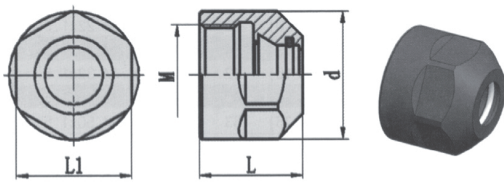


图1

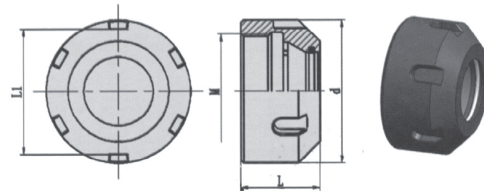


图2

No	型号	M	d	L	l1	配用密封垫套	图例
195.100	LM-ER16C	M22 × 1.5	28	22.5	17	DS/ER16	图1
195.101	LM-ER20C	M25 × 1.5	34	24.0	25	DS/ER20	图1
195.102	LM-ER25C	M32 × 1.5	42	25.0	36	DS/ER25	图2
195.103	LM-ER32C	M40 × 1.5	50	27.5	44	DS/ER32	图2
195.104	LM-ER40C	M50 × 1.5	63	30.5	57	DS/ER40	图2

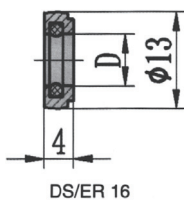
ER...C型-内冷夹紧螺母特色优势

- 1、适用于直柄刀具，具有内冷却功能，夹紧螺母搭配密封垫圈使用，等同于密封夹簧。
- 2、能承受高达150bar的冷却液压力。
- 3、防止灰尘和切削进入夹头。
- 4、夹紧螺母适用于标准的ER夹簧。
- 5、推荐使用扭矩扳手，最大扭矩值应不超过推荐扭矩值的1.25倍，详见下表。

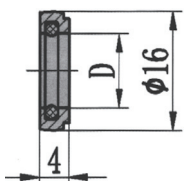
夹簧型号	夹持直径	推荐扭矩
ER16	3	20
ER16	4	40
ER16	5-10	56
ER20	3-6	32
ER20	7-13	80
ER25	3	24
ER25	4	56
ER25	5-7	80
ER25	8-16	104
ER32	3-20	136
ER40	3-26	176

密封垫圈

Sealing Disks

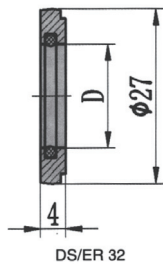
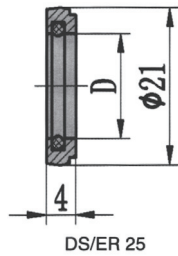
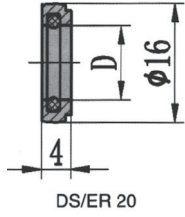


DS/ER 16

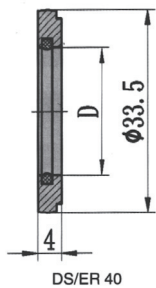
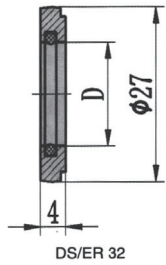


DS/ER 20

No	型号	D	Kg
195.200	DS/ER16-3.0	3.0-2.5	0.04
195.201	DS/ER16-3.5	3.5-3.0	0.04
195.202	DS/ER16-4.0	4.0-3.5	0.04
195.203	DS/ER16-4.5	4.5-4.0	0.04
195.204	DS/ER16-5.0	5.0-4.5	0.04
195.205	DS/ER16-5.5	5.5-5.0	0.04
195.206	DS/ER16-6.0	6.0-5.5	0.04
195.207	DS/ER16-6.5	6.5-6.0	0.04
195.208	DS/ER16-7.0	7.0-6.5	0.04
195.209	DS/ER16-7.5	7.5-7.0	0.04
195.210	DS/ER16-8.0	8.0-7.5	0.04
195.211	DS/ER16-8.5	8.5-8.0	0.04
195.212	DS/ER16-9.0	9.0-8.5	0.04
195.213	DS/ER16-9.5	9.5-9.0	0.04
195.214	DS/ER16-10.0	10.0-9.5	0.04
195.215	DS/ER20-3.0	3.0-2.5	0.06
195.216	DS/ER20-3.5	3.5-3.0	0.06
195.217	DS/ER20-4.0	4.0-3.5	0.06
195.218	DS/ER20-4.5	4.5-4.0	0.06
195.219	DS/ER20-5.0	5.0-4.5	0.06
195.220	DS/ER20-5.5	5.5-5.0	0.06
195.221	DS/ER20-6.0	6.0-5.5	0.06
195.222	DS/ER20-6.5	6.5-6.0	0.06

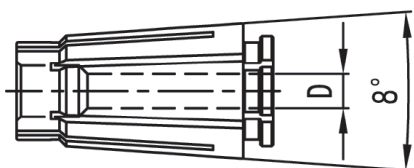


No	型号	D	Kg
195.223	DS/ER20-7.0	7.0-6.5	0.06
195.224	DS/ER20-7.5	7.5-7.0	0.06
195.225	DS/ER20-8.0	8.0-7.5	0.06
195.226	DS/ER20-8.5	8.5-8.0	0.06
195.227	DS/ER20-9.0	9.0-8.5	0.06
195.228	DS/ER20-9.5	9.5-9.0	0.06
195.229	DS/ER20-10.0	10.0-9.5	0.06
195.230	DS/ER20-10.5	10.5-10.0	0.06
195.231	DS/ER20-11.0	11.0-10.5	0.06
195.232	DS/ER20-11.5	11.5-11.0	0.06
195.233	DS/ER20-12.0	12.0-11.5	0.06
195.234	DS/ER20-12.5	12.5-12.0	0.06
195.235	DS/ER20-13.0	13.0-12.5	0.06
195.236	DS/ER25-3.0	3.0-2.5	0.10
195.237	DS/ER25-3.5	3.5-3.0	0.10
195.238	DS/ER25-4.0	4.0-3.5	0.10
195.239	DS/ER25-4.5	4.5-4.0	0.10
195.240	DS/ER25-5.0	5.0-4.5	0.10
195.241	DS/ER25-5.5	5.5-5.0	0.10
195.242	DS/ER25-6.0	6.0-5.5	0.10
195.243	DS/ER25-6.5	6.5-6.0	0.10
195.244	DS/ER25-7.0	7.0-6.5	0.10
195.245	DS/ER25-7.5	7.5-7.0	0.10
195.246	DS/ER25-8.0	8.0-7.5	0.10
195.247	DS/ER25-8.5	8.5-8.0	0.10
195.248	DS/ER25-9.0	9.0-8.5	0.10
195.249	DS/ER25-9.5	9.5-9.0	0.10
195.250	DS/ER25-10.0	10.0-9.5	0.10
195.251	DS/ER25-10.5	10.5-10.0	0.10
195.252	DS/ER25-11.0	11.0-10.5	0.10
195.253	DS/ER25-11.5	11.5-11.0	0.10
195.254	DS/ER25-12.0	12.0-11.5	0.10
195.255	DS/ER25-12.5	12.5-12.0	0.10
195.256	DS/ER25-13.0	13.0-12.5	0.10
195.257	DS/ER25-13.5	13.5-13.0	0.10
195.258	DS/ER25-14.0	14.0-13.5	0.10
195.259	DS/ER25-14.5	14.5-14.0	0.10
195.260	DS/ER25-15.0	15.0-14.5	0.10
195.261	DS/ER25-15.5	15.5-15.0	0.10
195.262	DS/ER25-16.0	16.0-15.5	0.10
195.263	DS/ER32-3.0	3.0-2.5	0.15
195.264	DS/ER32-3.5	3.5-3.0	0.15
195.265	DS/ER32-4.0	4.0-3.5	0.15
195.266	DS/ER32-4.5	4.5-4.0	0.15
195.267	DS/ER32-5.0	5.0-4.5	0.15
195.268	DS/ER32-5.5	5.5-5.0	0.15
195.269	DS/ER32-6.0	6.0-5.5	0.15
195.270	DS/ER32-6.5	6.5-6.0	0.15
195.271	DS/ER32-7.0	7.0-6.5	0.15
195.272	DS/ER32-7.5	7.5-7.0	0.15
195.273	DS/ER32-8.0	8.0-7.5	0.15
195.274	DS/ER32-8.5	8.5-8.0	0.15
195.275	DS/ER32-9.0	9.0-8.5	0.15
195.276	DS/ER32-9.5	9.5-9.0	0.15
195.277	DS/ER32-10.0	10.0-9.5	0.15
195.278	DS/ER32-10.5	10.5-10.0	0.15
195.279	DS/ER32-11.0	11.0-10.5	0.15
195.280	DS/ER32-11.5	11.5-11.0	0.15
195.281	DS/ER32-12.0	12.0-11.5	0.15
195.282	DS/ER32-12.5	12.5-12.0	0.15
195.283	DS/ER32-13.0	13.0-12.5	0.15
195.284	DS/ER32-13.5	13.5-13.0	0.15



No	型号	D	Kg
195.285	DS/ER32-14.0	14.0-13.5	0.15
195.286	DS/ER32-14.5	14.5-14.0	0.15
195.287	DS/ER32-15.0	15.0-14.5	0.15
195.288	DS/ER32-15.5	15.5-15.0	0.15
195.289	DS/ER32-16.0	16.0-15.5	0.15
195.290	DS/ER32-16.5	16.5-16.0	0.15
195.291	DS/ER32-17.0	17.0-16.5	0.15
195.292	DS/ER32-17.5	17.5-17.0	0.15
195.293	DS/ER32-18.0	18.0-17.5	0.15
195.294	DS/ER32-18.5	18.5-18.0	0.15
195.295	DS/ER32-19.0	19.0-18.5	0.15
195.296	DS/ER32-19.5	19.5-19.0	0.15
195.297	DS/ER32-20.0	20.0-19.5	0.15
195.298	DS/ER40-3.0	3.0-2.5	0.28
195.299	DS/ER40-3.5	3.5-3.0	0.28
195.300	DS/ER40-4.0	4.0-3.5	0.28
195.301	DS/ER40-4.5	4.5-4.0	0.28
195.302	DS/ER40-5.0	5.0-4.5	0.28
195.303	DS/ER40-5.5	5.5-5.0	0.28
195.304	DS/ER40-6.0	6.0-5.5	0.28
195.305	DS/ER40-6.5	6.5-6.0	0.28
195.306	DS/ER40-7.0	7.0-6.5	0.28
195.307	DS/ER40-7.5	7.5-7.0	0.28
195.308	DS/ER40-8.0	8.0-7.5	0.28
195.309	DS/ER40-8.5	8.5-8.0	0.28
195.310	DS/ER40-9.0	9.0-8.5	0.28
195.311	DS/ER40-9.5	9.5-9.0	0.28
195.312	DS/ER40-10.0	10.0-9.5	0.28
195.313	DS/ER40-10.5	10.5-10.0	0.28
195.314	DS/ER40-11.0	11.0-10.5	0.28
195.315	DS/ER40-11.5	11.5-11.0	0.28
195.316	DS/ER40-12.0	12.0-11.5	0.28
195.317	DS/ER40-12.5	12.5-12.0	0.28
195.318	DS/ER40-13.0	13.0-12.5	0.28
195.319	DS/ER40-13.5	13.5-13.0	0.28
195.320	DS/ER40-14.0	14.0-13.5	0.28
195.321	DS/ER40-14.5	14.5-14.0	0.28
195.322	DS/ER40-15.0	15.0-14.5	0.28
195.323	DS/ER40-15.5	15.5-15.0	0.28
195.324	DS/ER40-16.0	16.0-15.5	0.28
195.325	DS/ER40-16.5	16.5-16.0	0.28
195.326	DS/ER40-17.0	17.0-16.5	0.28
195.327	DS/ER40-17.5	17.5-17.0	0.28
195.328	DS/ER40-18.0	18.0-17.5	0.28
195.329	DS/ER40-18.5	18.5-18.0	0.28
195.330	DS/ER40-19.0	19.0-18.5	0.28
195.331	DS/ER40-19.5	19.5-19.0	0.28
195.332	DS/ER40-20.0	20.0-19.5	0.28
195.333	DS/ER40-20.5	20.5-20.0	0.28
195.334	DS/ER40-21.0	21.0-20.5	0.28
195.335	DS/ER40-21.5	21.5-21.0	0.28
195.336	DS/ER40-22.0	22.0-21.5	0.28
195.337	DS/ER40-22.5	22.5-22.0	0.28
195.338	DS/ER40-23.0	23.0-22.5	0.28
195.339	DS/ER40-23.5	23.5-23.0	0.28
195.340	DS/ER40-24.0	24.0-23.5	0.28
195.341	DS/ER40-24.5	24.5-24.0	0.28
195.342	DS/ER40-25.0	25.0-24.5	0.28
195.343	DS/ER40-25.5	25.5-25.0	0.28
195.344	DS/ER40-26.0	26.0-25.5	0.28

## SK夹簧 SK-Collets

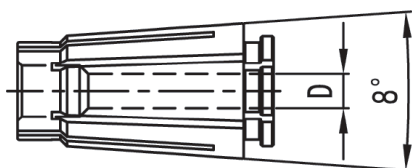


4.0

配件

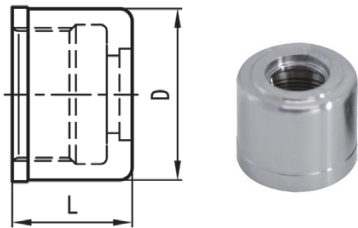
No	型号	D
442.101	SK6-3.0	2.75-3.0
442.102	SK6-3.5	3.0-3.5
442.103	SK6-4.0	3.5-4.0
442.104	SK6-4.5	4.0-4.5
442.105	SK6-5.0	4.5-5.0
442.106	SK6-5.5	5.0-5.5
442.107	SK6-6.0	5.5-6.0
442.108	SK10-2.0	1.75-2.0
442.109	SK10-2.25	2.0-2.25
442.110	SK10-2.5	2.25-2.5
442.111	SK10-2.75	2.5-2.75
442.112	SK10-3.0	2.75-3.0
442.113	SK10-3.5	3.0-3.5
442.114	SK10-4.0	3.5-4.0
442.115	SK10-4.5	4.0-4.5
442.116	SK10-5.0	4.5-5.0
442.117	SK10-5.5	5.0-5.5
442.118	SK10-6.0	5.5-6.0
442.119	SK10-6.5	6.0-6.5
442.120	SK10-7.0	6.5-7.0
442.121	SK10-7.5	7.0-7.5
442.122	SK10-8.0	7.5-8.0
442.123	SK10-8.5	8.0-8.5
442.124	SK10-9.0	8.5-9.0
442.125	SK10-9.5	9.0-9.5
442.126	SK10-10.0	9.5-10.5
442.400	SK13-3.0	2.75-3.0
442.401	SK13-3.5	3.0-3.5
442.402	SK13-4.0	3.5-4.0
442.403	SK13-4.5	4.0-4.5
442.404	SK13-5.0	4.5-5.0
442.405	SK13-5.5	5.0-5.5
442.406	SK13-6.0	5.5-6.0
442.407	SK13-6.5	6.0-6.5
442.408	SK13-7.0	6.5-7.0
442.409	SK13-7.5	7.0-7.5
442.410	SK13-8.0	7.5-8.0
442.411	SK13-8.5	8.0-8.5
442.412	SK13-9.0	8.5-9.0
442.413	SK13-9.5	9.0-9.5
442.414	SK13-10.0	9.5-10.0
442.415	SK13-10.5	10.0-10.5
442.416	SK13-11.0	10.5-11.0
442.417	SK13-11.5	11-11.5
442.418	SK13-12.0	11.5-12.0
442.419	SK13-12.5	12.0-12.5
442.420	SK13-13.0	12.5-13.0
442.127	SK16-3.0	2.75-3.0
442.128	SK16-3.5	3.0-3.5
442.129	SK16-4.0	3.5-4.0
442.130	SK16-4.5	4.0-4.5
442.131	SK16-5.0	4.5-5.0
442.132	SK16-5.5	5.0-5.5
442.133	SK16-6.0	5.5-6.0
442.134	SK16-6.5	6.0-6.5
442.135	SK16-7.0	6.5-7.0
442.136	SK16-7.5	7.0-7.5
442.137	SK16-8.0	7.5-8.0
442.138	SK16-8.5	8.0-8.5
442.139	SK16-9.0	8.5-9.0
442.140	SK16-9.5	9.0-9.5
442.141	SK16-10.0	9.5-10.0
442.142	SK16-10.5	10.0-10.5
442.143	SK16-11.0	10.5-11.0
442.144	SK16-11.5	11-11.5
442.145	SK16-12.0	11.5-12.0
442.146	SK16-12.5	12.0-12.5

SK夹簧  
SK-Collets



No	型号	D
442.147	SK16-13.0	12.5-13.0
442.148	SK16-13.5	13.0-13.5
442.149	SK16-14.0	13.5-14.0
442.150	SK16-14.5	14.0-14.5
442.151	SK16-15.0	14.5-15.0
442.421	SK16-15.5	15.0-15.5
442.422	SK16-16.0	15.5-16.0
442.154	SK20-4.0	3.5-4.0
442.155	SK20-4.5	4.0-4.5
442.156	SK20-5.0	4.5-5.0
442.157	SK20-5.5	5.0-5.5
442.158	SK20-6.0	5.5-6.0
442.159	SK20-6.5	6.0-6.5
442.160	SK20-7.0	6.5-7.0
442.161	SK20-7.5	7.0-7.5
442.162	SK20-8.0	7.5-8.0
442.163	SK20-8.5	8.0-8.5
442.164	SK20-9.0	8.5-9.0
442.165	SK20-9.5	9.0-9.5
442.166	SK20-10.0	9.5-10.0
442.167	SK20-10.5	10.0-10.5
442.168	SK20-11.0	10.5-11.0
442.169	SK20-11.5	11-11.5
442.170	SK20-12.0	11.5-12.0
442.171	SK20-12.5	12.0-12.5
442.172	SK20-13.0	12.5-13.0
442.173	SK20-13.5	13.0-13.5
442.174	SK20-14.0	13.5-14.0
442.175	SK20-14.5	14.0-14.5
442.176	SK20-15.0	14.5-15.0
442.177	SK20-15.5	15.0-15.5
442.178	SK20-16.0	15.5-16.0
442.179	SK20-16.5	16.0-16.5
442.180	SK20-17.0	16.5-17.0
442.181	SK20-17.5	17.0-17.5
442.182	SK20-18.0	17.5-18.0
442.423	SK20-18.5	18.0-18.5
442.424	SK20-19.0	18.5-19.0
442.425	SK20-19.5	19.0-19.5
442.426	SK20-20.0	19.5-20.0
442.183	SK25-3.0	2.5-3.0
442.184	SK25-4.0	3.5-4.0
442.185	SK25-6.0	5.5-6.0
442.186	SK25-8.0	7.5-8.0
442.187	SK25-10.0	9.5-10.0
442.188	SK25-12.0	11.5-12.0
442.189	SK25-16.0	15.5-16.0
442.190	SK25-16.5	16.0-16.5
442.191	SK25-17.0	16.5-17.0
442.192	SK25-17.5	17.0-17.5
442.193	SK25-18.0	17.5-18.0
442.194	SK25-18.5	18.0-18.5
442.195	SK25-19.0	18.5-19.0
442.196	SK25-19.5	19.0-19.5
442.197	SK25-20.0	19.5-20.0
442.198	SK25-20.5	20.0-20.5
442.199	SK25-21.0	20.5-21.0
442.200	SK25-21.5	21.0-21.5
442.201	SK25-22.0	21.5-22.0
442.202	SK25-22.5	22.0-22.5
442.203	SK25-23.0	22.5-23.0
442.204	SK25-23.5	23.0-23.5
442.205	SK25-24.0	23.5-24.0
442.206	SK25-24.5	24.0-24.5
442.207	SK25-25.0	24.5-25.0
442.208	SK25-25.4	25.0-25.4

## GSK夹紧螺母 GSK Clamping Nuts

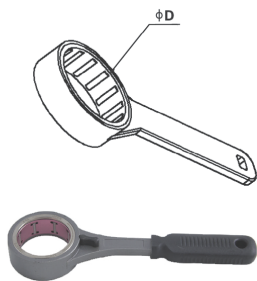


No	型号	D	T	L
442.209	LM-GSK 6	20.5	M15 × 1	21
442.210	LM-GSK10	27.5	M21.5 × 1	24
442.427	LM-GSK13	35	M28 × 1.5	27.5
442.211	LM-GSK16	40	M32 × 1.5	31
442.212	LM-GSK20	48	M40 × 1.5	35
442.213	LM-GSK25	55	M45 × 1.5	37

4.0

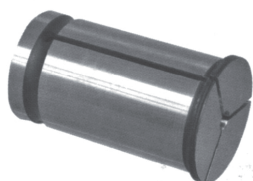
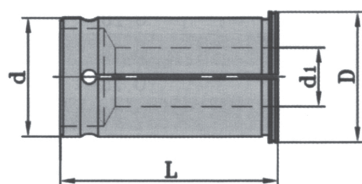
配件

## GSK夹紧螺帽扳手 Clamping Keys for GSK clamping nuts



No	型号	D
442.214	BS-GSK 6	19.5
442.215	BS-GSK10	27.5
442.428	BS-GSK13	35
442.216	BS-GSK16	40
442.217	BS-GSK20	48
442.218	BS-GSK25	55

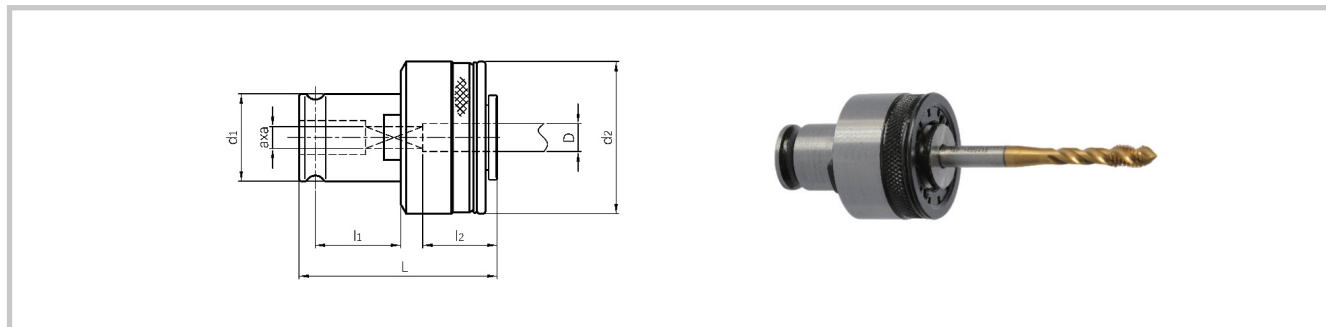
弹性直夹套  
Reduction Sleeve



No	型号	d	d1	D	L
253.100	ZQH20- 4	20	4	23	53
253.101	ZQH20- 5	20	5	23	53
253.102	ZQH20- 6	20	6	23	53
253.103	ZQH20- 8	20	8	23	53
253.104	ZQH20-10	20	10	23	53
253.105	ZQH20-12	20	12	23	53
253.106	ZQH20-14	20	14	23	53
253.107	ZQH20-16	20	16	23	53
253.108	ZQH25- 4	25	4	58	60
253.109	ZQH25- 5	25	5	58	60
253.110	ZQH25- 6	25	6	58	60
253.111	ZQH25- 8	25	8	58	60
253.112	ZQH25-10	25	10	58	60
253.113	ZQH25-12	25	12	58	60
253.114	ZQH25-14	25	14	58	60
253.115	ZQH25-16	25	16	58	60
253.116	ZQH25-18	25	18	58	60
253.117	ZQH25-20	25	20	58	60
253.118	ZQH32- 5	32	5	36	65
253.119	ZQH32- 6	32	6	36	65
253.120	ZQH32- 8	32	8	36	65
253.121	ZQH32-10	32	10	36	65
253.122	ZQH32-12	32	12	36	65
253.123	ZQH32-14	32	14	36	65
253.124	ZQH32-16	32	16	36	65
253.125	ZQH32-18	32	18	36	65
253.126	ZQH32-20	32	20	36	65
253.127	ZQH32-25	32	25	36	65
253.148	ZQH40- 5	40	5	44	74
253.128	ZQH40- 6	40	6	44	74
253.129	ZQH40- 8	40	8	44	74
253.130	ZQH40-10	40	10	44	74
253.131	ZQH40-12	40	12	44	74
253.149	ZQH40-14	40	14	44	74
253.132	ZQH40-16	40	16	44	74
253.133	ZQH40-18	40	18	44	74
253.134	ZQH40-20	40	20	44	74
253.135	ZQH40-25	40	25	44	74
253.136	ZQH40-32	40	32	44	74
253.150	ZQH40-40	40	40	44	74
253.137	ZQH50- 6	50	6	55	85
253.138	ZQH50- 8	50	8	55	85
253.139	ZQH50-10	50	10	55	85
253.140	ZQH50-12	50	12	55	85
253.141	ZQH50-14	50	14	55	85
253.142	ZQH50-16	50	16	55	85
253.143	ZQH50-18	50	18	55	85
253.144	ZQH50-20	50	20	55	85
253.145	ZQH50-25	50	25	55	85
253.146	ZQH50-32	50	32	55	85
253.147	ZQH50-40	50	40	55	85

## 快换丝锥夹套 ( 配用GB/T3464国家标准常用丝锥 )

Quick Change Inserts with safety clutch

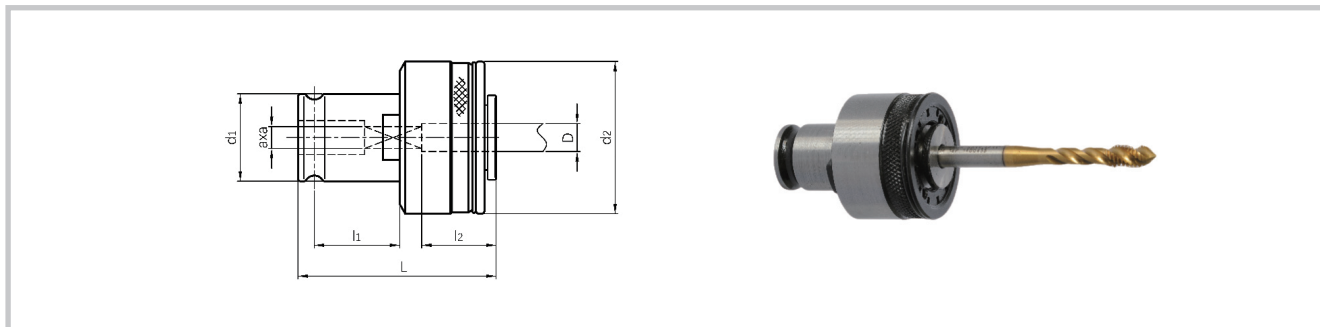


No	Model	d1	d2	L	L1	L2	D	a	配用丝锥 ( 粗柄 )
149.110	G3-M3x2.24x1.8	19	35	48	23	21	2.24	1.8	M3
149.111	G3-M4x3.15x2.5	19	35	48	23	21	3.15	2.5	M4 ( M3 )
149.112	G3-M5x4x3.15	19	35	48	23	21	4	3.15	M5/M5.5 ( M4 )
149.113	G3-M6x4.5x3.55	19	35	48	23	21	4.5	3.55	M6 ( M4.5 )
149.114	G3-M8x6.3x5	19	35	48	23	21	6.3	5	M8 ( M6 )
149.115	G3-M10x8x6.3	19	35	48	23	21	8	6.3	M10/M11 ( M8 )
149.116	G3-M12x9x7.1	19	35	48	23	21	9	7.1	M12 ( M9 )
149.133	G3-M14x11.2x9	19	35	48	23	21	11.2	9	M14
149.134	G8-M4.5x3.55x2.8	31	54	71	37	34	3.55	2.8	M4.5
149.135	G8-M5x4x3.15	31	54	71	37	34	4	3.15	M5
149.136	G8-M6x4.5x3.55	31	54	71	37	34	4.5	3.55	M6
149.117	G8-M8x6.3x5	31	54	71	37	34	6.3	5	M8
149.118	G8-M9x7.1x5.6	31	54	71	37	34	7.1	5.6	M9
149.119	G8-M10x8x6.3	31	54	71	37	34	8	6.3	M10/M11
149.120	G8-M12x9x7.1	31	54	71	37	34	9	7.1	M12
149.121	G8-M14x11.2x9	31	54	71	37	34	11.2	9	M14/M15
149.122	G8-M16x12.5x10	31	54	71	37	34	12.5	10	M16/M17
149.123	G8-M18x14x11.2	31	54	71	37	34	14	11.2	M18/M20
149.131	G8-M22x16x12.5	31	54	71	37	34	16	12.5	M22
149.132	G8-M24x18x14	31	54	71	37	34	18	14	M24/M25/M26
149.124	G14-M14x11.2x9	48	75	102	57	45	11.2	9	M14/M15
149.125	G14-M16x12.5x10	48	75	102	57	45	12.5	10	M16/M17
149.126	G14-M18x14x11.2	48	75	102	57	45	14	11.2	M18/M20
149.127	G14-M22x16x12.5	48	75	102	57	45	16	12.5	M22
149.128	G14-M24x18x14	48	75	102	57	45	18	14	M24/M25/M26
149.129	G14-M27x20x16	48	75	102	57	45	20	16	M27/M28/M30
149.130	G14-M32x22.4x18	48	75	102	57	45	22.4	18	M32/M33



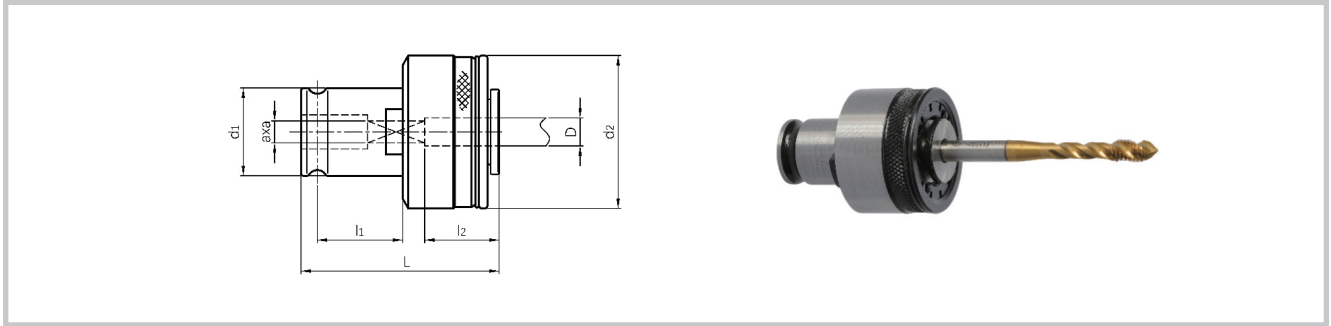
快换丝锥夹套（配用DIN357、371、376德国标准常用丝锥）

Quick Change Inserts with safety clutch



No	Model	d1	d2	L	L1	L2	D	a	配用丝锥
149.140	G3-M3.5x2.5x2.1	19	35	48	23	21	2.5	2.1	M3.5
149.141	G3-M4x2.8x2.1	19	35	48	23	21	2.8	2.1	M4
149.142	G3-M5x3.5x2.7	19	35	48	23	21	3.5	2.7	M4.5/M5
149.143	G3-M6x4.5x3.4	19	35	48	23	21	4.5	3.4	M6
149.144	G3-M7x5.5x4.3	19	35	48	23	21	5.5	4.3	M7
149.145	G3-M8x6x4.9	19	35	48	23	21	6	4.9	M8
149.146	G3-M10x7x5.5	19	35	48	23	21	7	5.5	M9/M10
149.147	G3-M11x8x6.2	19	35	48	23	21	8	6.2	M11
149.148	G3-M12x9x7	19	35	48	23	21	9	7	M12
149.149	G8-M6x4.5x3.4	31	54	71	37	34	4.5	3.4	M6
149.150	G8-M7x5.5x4.3	31	54	71	37	34	5.5	4.3	M7
149.151	G8-M8x6x4.9	31	54	71	37	34	6	4.9	M8
149.152	G8-M10x7x5.5	31	54	71	37	34	7	5.5	M9/M10
149.153	G8-M11x8x6.2	31	54	71	37	34	8	6.2	M11
149.154	G8-M12x9x7	31	54	71	37	34	9	7	M12
149.155	G8-M14x11x9	31	54	71	37	34	11	9	M14
149.156	G8-M16x12x9	31	54	71	37	34	12	9	M16
149.157	G8-M18x14x11	31	54	71	37	34	14	11	M18
149.158	G8-M20x16x12	31	54	71	37	34	16	12	M20
149.159	G14-M14x11x9	48	75	102	57	45	11	9	M14
149.160	G14-M16x12x9	48	75	102	57	45	12	9	M16
149.161	G14-M18x14x11	48	75	102	57	45	14	11	M18
149.162	G14-M20x16x12	48	75	102	57	45	16	12	M20
149.163	G14-M24x18x14.5	48	75	102	57	45	18	14.5	M22/M24
149.164	G14-M27x20x16	48	75	102	57	45	20	16	M27
149.165	G14-M30x22x18	48	75	102	57	45	22	18	M30
149.166	G14-M33x25x20	48	75	102	57	45	25	20	M33
149.167	G14-M36x28x22	48	75	102	57	45	28	22	M36

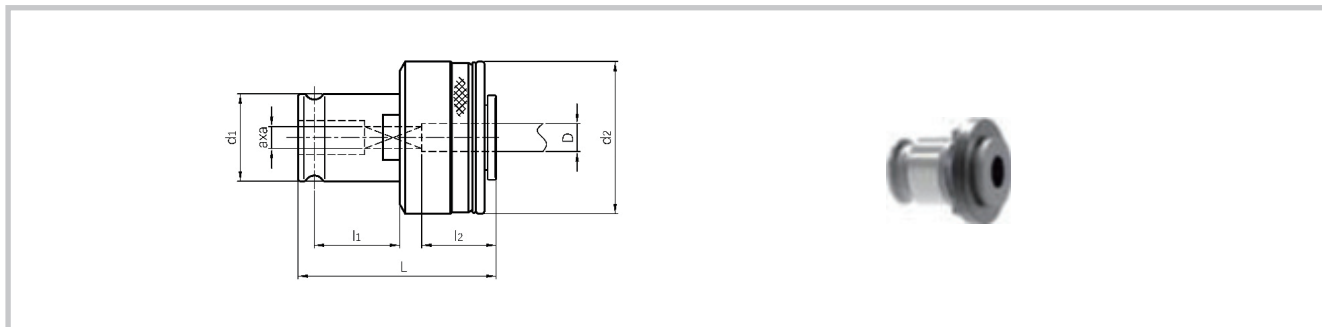
## 快换丝锥夹套（配用JIS日本标准常用丝锥） Quick Change Inserts with safety clutch



No	Model	d1	d2	L	L1	L2	D	a	配用丝锥
149.170	G3-M2x3x2.5	19	35	48	23	21	3	2.5	M1/M2/M2.5
149.171	G3-M3x4x3.2	19	35	48	23	21	4	3.2	M3/M3.5
149.172	G3-M4x5x4	19	35	48	23	21	5	4	M4/M4.5
149.173	G3-M5x5.5x4.5	19	35	48	23	21	5.5	4.5	M5
149.174	G3-M6x6x4.5	19	35	48	23	21	6	4.5	M6
149.175	G3-M8x6.2x5	19	35	48	23	21	6.2	5	M7/M8
149.176	G3-M10x7x5.5	19	35	48	23	21	7	5.5	M9/M10
149.177	G3-M11x8x6	19	35	48	23	21	8	6	M11
149.178	G3-M12x8.5x6.5	19	35	48	23	21	8.5	6.5	M12
149.179	G8-M4x5x4	31	54	71	37	34	5	4	M4/M4.5
149.180	G8-M5x5.5x4.5	31	54	71	37	34	5.5	4.5	M5
149.181	G8-M6x6x4.5	31	54	71	37	34	6	4.5	M6
149.182	G8-M8x6.2x5	31	54	71	37	34	6.2	5	M7/M8
149.183	G8-M10x7x5.5	31	54	71	37	34	7	5.5	M9/M10
149.184	G8-M11x8x6	31	54	71	37	34	8	6	M11
149.185	G8-M12x8.5x6.5	31	54	71	37	34	8.5	6.5	M12
149.186	G8-M14x10.5x8	31	54	71	37	34	10.5	8	M14
149.187	G8-M16x12.5x10	31	54	71	37	34	12.5	10	M16
149.188	G8-M18x14x11	31	54	71	37	34	14	11	M18
149.189	G8-M20x15x12	31	54	71	37	34	15	12	M20
149.190	G14-M14x10.5x8	48	75	102	57	45	10.5	8	M14
149.191	G14-M16x12.5x10	48	75	102	57	45	12.5	10	M16
149.192	G14-M18x14x11	48	75	102	57	45	14	11	M18
149.193	G14-M20x15x12	48	75	102	57	45	15	12	M20
149.194	G14-M22x17x13	48	75	102	57	45	17	13	M22
149.195	G14-M24x19x15	48	75	102	57	45	19	15	M24
149.196	G14-M27x20x15	48	75	102	57	45	20	15	M27
149.197	G14-M30x23x17	48	75	102	57	45	23	17	M30
149.198	G14-M33x25x19	48	75	102	57	45	25	19	M33

刚性快换丝锥夹套 ( 配用GB/T3464国家标准常用丝锥 )

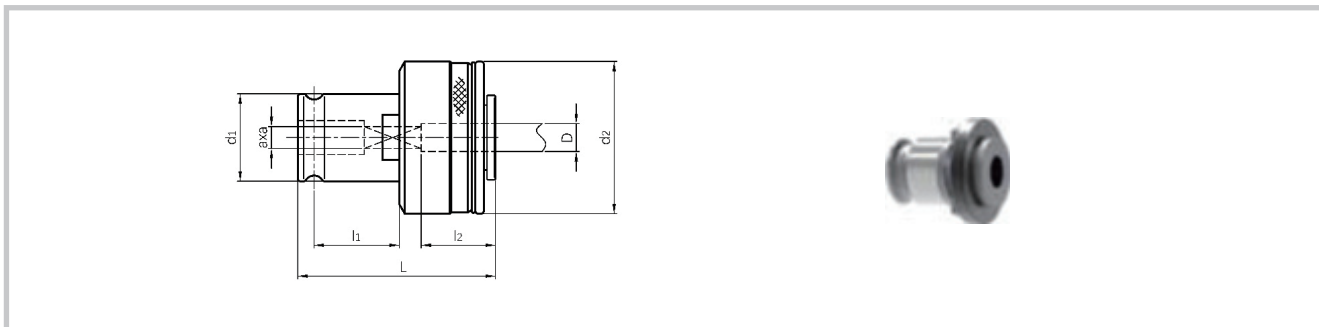
Quick Change Inserts with safety clutch



No	Model	d1	d2	L	L1	L2	D	a	配用丝锥
149.210	G3-M3x2.24x1.8	19	35	48	23	21	2.24	1.8	M3
149.211	G3-M4x3.15x2.5	19	35	48	23	21	3.15	2.5	M4 ( M3 )
149.212	G3-M5x4x3.15	19	35	48	23	21	4	3.15	M5/M5.5 ( M4 )
149.213	G3-M6x4.5x3.55	19	35	48	23	21	4.5	3.55	M6 ( M4.5 )
149.214	G3-M8x6.3x5	19	35	48	23	21	6.3	5	M8 ( M6 )
149.215	G3-M10x8x6.3	19	35	48	23	21	8	6.3	M10/M11 ( M8 )
149.216	G3-M12x9x7.1	19	35	48	23	21	9	7.1	M12 ( M9 )
149.233	G3-M14x11.2x9	19	35	48	23	21	11.2	9	M14
149.234	G8-M4.5x3.55x2.8	31	54	71	37	34	3.55	2.8	M4.5
149.235	G8-M5x4x3.15	31	54	71	37	34	4	3.15	M5
149.236	G8-M6x4.5x3.55	31	54	71	37	34	4.5	3.55	M6
149.217	G8-M8x6.3x5	31	54	71	37	34	6.3	5	M8
149.218	G8-M9x7.1x5.6	31	54	71	37	34	7.1	5.6	M9
149.219	G8-M10x8x6.3	31	54	71	37	34	8	6.3	M10/M11
149.220	G8-M12x9x7.1	31	54	71	37	34	9	7.1	M12
149.221	G8-M14x11.2x9	31	54	71	37	34	11.2	9	M14/M15
149.222	G8-M16x12.5x10	31	54	71	37	34	12.5	10	M16/M17
149.223	G8-M18x14x11.2	31	54	71	37	34	14	11.2	M18/M20
149.231	G8-M22x16x12.5	31	54	71	37	34	16	12.5	M22
149.232	G8-M24x18x14	31	54	71	37	34	18	14	M24/M25/M26
149.224	G14-M14x11.2x9	48	75	102	57	45	11.2	9	M14/M15
149.225	G14-M16x12.5x10	48	75	102	57	45	12.5	10	M16/M17
149.226	G14-M18x14x11.2	48	75	102	57	45	14	11.2	M18/M20
149.227	G14-M22x16x12.5	48	75	102	57	45	16	12.5	M22
149.228	G14-M24x18x14	48	75	102	57	45	18	14	M24/M25/M26
149.229	G14-M27x20x16	48	75	102	57	45	20	16	M27/M28/M30
149.230	G14-M32x22.4x18	48	75	102	57	45	22.4	18	M32/M33

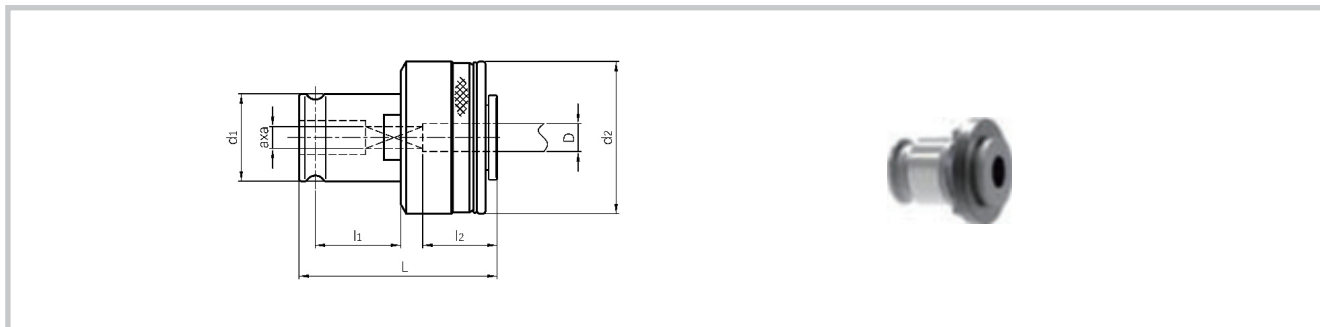
刚性快换丝锥夹套 ( 配用DIN357、371、376德国标准常用丝锥 )

Quick Change Inserts with safety clutch



No	Model	d1	d2	L	L1	L2	D	a	配用丝锥
149.240	G3-M3.5x2.5x2.1	19	35	48	23	21	2.5	2.1	M3.5
149.241	G3-M4x2.8x2.1	19	35	48	23	21	2.8	2.1	M4
149.242	G3-M5x3.5x2.7	19	35	48	23	21	3.5	2.7	M4.5/M5
149.243	G3-M6x4.5x3.4	19	35	48	23	21	4.5	3.4	M6
149.244	G3-M7x5.5x4.3	19	35	48	23	21	5.5	4.3	M7
149.245	G3-M8x6x4.9	19	35	48	23	21	6	4.9	M8
149.246	G3-M10x7x5.5	19	35	48	23	21	7	5.5	M9/M10
149.247	G3-M11x8x6.2	19	35	48	23	21	8	6.2	M11
149.248	G3-M12x9x7	19	35	48	23	21	9	7	M12
149.249	G8-M6x4.5x3.4	31	54	71	37	34	4.5	3.4	M6
149.250	G8-M7x5.5x4.3	31	54	71	37	34	5.5	4.3	M7
149.251	G8-M8x6x4.9	31	54	71	37	34	6	4.9	M8
149.252	G8-M10x7x5.5	31	54	71	37	34	7	5.5	M9/M10
149.253	G8-M11x8x6.2	31	54	71	37	34	8	6.2	M11
149.254	G8-M12x9x7	31	54	71	37	34	9	7	M12
149.255	G8-M14x11x9	31	54	71	37	34	11	9	M14
149.256	G8-M16x12x9	31	54	71	37	34	12	9	M16
149.257	G8-M18x14x11	31	54	71	37	34	14	11	M18
149.258	G8-M20x16x12	31	54	71	37	34	16	12	M20
149.259	G14-M14x11x9	48	75	102	57	45	11	9	M14
149.260	G14-M16x12x9	48	75	102	57	45	12	9	M16
149.261	G14-M18x14x11	48	75	102	57	45	14	11	M18
149.262	G14-M20x16x12	48	75	102	57	45	16	12	M20
149.263	G14-M24x18x14.5	48	75	102	57	45	18	14.5	M22/M24
149.264	G14-M27x20x16	48	75	102	57	45	20	16	M27
149.265	G14-M30x22x18	48	75	102	57	45	22	18	M30
149.266	G14-M33x25x20	48	75	102	57	45	25	20	M33
149.267	G14-M36x28x22	48	75	102	57	45	28	22	M36

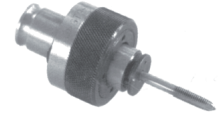
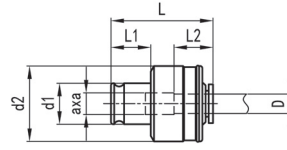
刚性快换丝锥夹套 ( 配用JIS日本标准常用丝锥 )  
Quick Change Inserts with safety clutch



No	Model	d1	d2	L	L1	L2	D	a	配用丝锥
149.270	G3-M2x3x2.5	19	35	48	23	21	3	2.5	M1/M2/M2.5
149.271	G3-M3x4x3.2	19	35	48	23	21	4	3.2	M3/M3.5
149.272	G3-M4x5x4	19	35	48	23	21	5	4	M4/M4.5
149.273	G3-M5x5.5x4.5	19	35	48	23	21	5.5	4.5	M5
149.274	G3-M6x6x4.5	19	35	48	23	21	6	4.5	M6
149.275	G3-M8x6.2x5	19	35	48	23	21	6.2	5	M7/M8
149.276	G3-M10x7x5.5	19	35	48	23	21	7	5.5	M9/M10
149.277	G3-M11x8x6	19	35	48	23	21	8	6	M11
149.278	G3-M12x8.5x6.5	19	35	48	23	21	8.5	6.5	M12
149.279	G8-M4x5x4	31	54	71	37	34	5	4	M4/M4.5
149.280	G8-M5x5.5x4.5	31	54	71	37	34	5.5	4.5	M5
149.281	G8-M6x6x4.5	31	54	71	37	34	6	4.5	M6
149.282	G8-M8x6.2x5	31	54	71	37	34	6.2	5	M7/M8
149.283	G8-M10x7x5.5	31	54	71	37	34	7	5.5	M9/M10
149.284	G8-M11x8x6	31	54	71	37	34	8	6	M11
149.285	G8-M12x8.5x6.5	31	54	71	37	34	8.5	6.5	M12
149.286	G8-M14x10.5x8	31	54	71	37	34	10.5	8	M14
149.287	G8-M16x12.5x10	31	54	71	37	34	12.5	10	M16
149.288	G8-M18x14x11	31	54	71	37	34	14	11	M18
149.289	G8-M20x15x12	31	54	71	37	34	15	12	M20
149.290	G14-M14x10.5x8	48	75	102	57	45	10.5	8	M14
149.291	G14-M16x12.5x10	48	75	102	57	45	12.5	10	M16
149.292	G14-M18x14x11	48	75	102	57	45	14	11	M18
149.293	G14-M20x15x12	48	75	102	57	45	15	12	M20
149.294	G14-M22x17x13	48	75	102	57	45	17	13	M22
149.295	G14-M24x19x15	48	75	102	57	45	19	15	M24
149.296	G14-M27x20x15	48	75	102	57	45	20	15	M27
149.297	G14-M30x23x17	48	75	102	57	45	23	17	M30
149.298	G14-M33x25x19	48	75	102	57	45	25	19	M33

## 快换丝锥夹套

### Quick Change Inserts with safety clutch



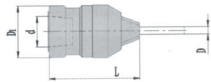
No	型号	d1	d2	L	L1	L2	a	D	配用丝锥	
									粗柄	细柄
149.110	G3-M 3	19	35	48	23	21	1.80	2.24	-	M3
149.111	G3-M 4	19	35	48	23	21	2.50	3.15	M3	M4
149.112	G3-M 5	19	35	48	23	21	3.15	4	M4	M5、M5.5
149.113	G3-M 6	19	35	48	23	21	3.55	4.5	M4.5	M6
149.114	G3-M 8	19	35	48	23	21	5.00	6.3	M6	M8
149.115	G3-M10	19	35	48	23	21	6.30	8	M8	M10、M11
149.116	G3-M12	19	35	48	23	21	7.10	9	M9	M12
149.117	G8-M 8	31	54	71	37	34	5.00	6.3	-	M8
149.118	G8-M 9	31	54	71	37	34	5.60	7.1	-	M9
149.119	G8-M10	31	54	71	37	34	6.30	8	-	M10、M11
149.120	G8-M12	31	54	71	37	34	7.10	9	-	M12
149.121	G8-M14	31	54	71	37	34	9.00	11.2	-	M14、M15
149.122	G8-M16	31	54	71	37	34	10.00	12.5	-	M16、M17
149.123	G8-M20	31	54	71	37	34	11.20	14	-	M18、M20
149.131	G8-M22	31	54	71	37	34	12.50	16	-	M22
149.132	G8-M24	31	54	71	37	34	14.00	18	-	M24、M25、M26
149.124	G14-M14	48	75	102	57	45	9.00	11.2	-	M14、M15
149.125	G14-M16	48	75	102	57	45	10.00	12.5	-	M16、M17
149.126	G14-M18	48	75	102	57	45	11.20	14	-	M18、M20
149.127	G14-M22	48	75	102	57	45	12.50	16	-	M22
149.128	G14-M24	48	75	102	57	45	14.00	18	-	M24、M25、M26
149.129	G14-M27	48	75	102	57	45	16.00	20	-	M27、M28、M30
149.130	G14-M33	48	75	102	57	45	18.00	22.4	-	M32、M33

4.0

配件

## 自紧钻夹头

### Drilling Chuck



No	型号	D	D1	d	L
253.300	ZJM 6	0.6-6	31	B10	64
253.301	ZJM10	1-10	42	B12	91
253.302	ZJM13	1-13	48	B16	106
253.303	ZJM16	3-16	53	B18	108

## 强力铣夹头扳手

### Clamping Keys for Strong Chuck Holder for Boring and Milling



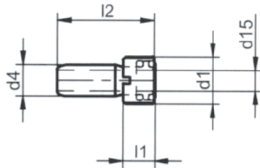
No	型号	for
032.810	BS-XJT20	55-62
032.811	BS-XJT25 / XJT32	68-72
032.812	BS-XJT40	78-85
032.813	BS-XJT50	100-110

4.20

冷却管、螺钉、键和备用配件

Coolant Tubes, Screws, Keys and Spare Parts

冷却管  
Coolant Tubes



No	HSK-A/E	HSK-B/F	d	d15	d4f8	l1	l2
159.714	32	40	M10 × 1	3.5	6	5.5	26
159.715	40	50	M12 × 1	5	8	7.5	29.1
159.711	50	63	M16 × 1	6.4	10	9.5	32.7
159.712	63	80	M18 × 1	8	12	11.5	36
159.710	80	100	M20 × 1.5	10	14	13.5	39.6
159.713	100	125	M24 × 1.5	12	16	15.5	43.6

使用: 为HSK工具供应最佳的内部冷却液。

Use: To optimise the internal coolant supply of HSK tools.

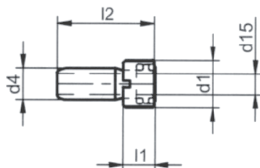
设计: 要求冷却管相对于轴向中心位置做±1°微小的往复运动。

Design: Minimum, easy-running angular movement of the coolant tube ±1°, centred neutrally, sealed axially.

说明: 带螺纹套和符合DIN3770标准的O型密封圈。

Standard Specification: With O-ring seals DIN 3770 and swivel nut.

冷却管  
Coolant Tubes



No	HSK-A	d	d15	d4f8	l1	l2
159.732	63	M22 × 1	8	12	11.5	36.5
159.733	100	M28 × 1,5	12	16	15.5	43.6

使用: 为716.0103.322, 716.0104.324, 716.0105.324提供冷却液选用。

Use: To optimise the internal coolant supply of adapters 716.0103.322, 716.0104.324, 716.0105.324.

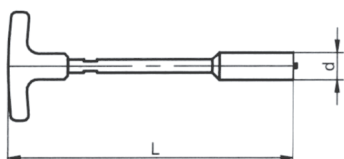
设计: 要求冷却管相对于轴向中心位置做±1°微小的往复运动。

Design: Minimum, easy-running angular movement of the coolant tube ±1°, centred neutrally, sealed axially.

说明: 带螺纹套和符合DIN3770标准的O型密封圈。

Standard Specification: With O-ring seals DIN 3770 and swivel nut.

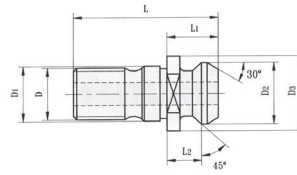
冷却管扳手  
Keys for coolant tubes



No	HSK-A/E	HSK-B/F	d	L
032.511	32	40	9	186
032.512	40	50	11	186
032.513	50	63	15	186
032.514	63	80	17	186
032.515	80	100	18.5	186
032.516	100	125	22.5	186

## 国际标准B型拉钉

### Pull Studs ISO 7388/2 Type B



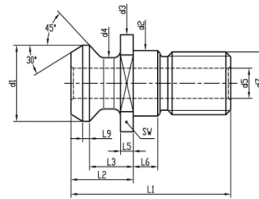
No	型号	D	D1	D2	D3	L	L1	L2	kg
499.0012.293	LDB30	M12	13	13.35	16.5	31.8	11.80	8.15	0.04
499.0011.292	LDB40	M16	17	18.95	22.5	44.4	16.40	11.15	0.08
499.0010.291	LDB50	M24	25	29.10	37.0	65.55	25.55	17.95	0.23
499.0009.290	LDB60	M30	32	37.25	50.0	88.15	38.15	27.65	0.51

备注：带冷却孔。

Note: Bored through.

## Mazak 拉钉

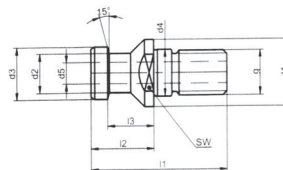
### Mazak Serial Pull Stud



No	型号	d1	d2	d3	d4	d5	d7	L1	L2	L3	L5	L6	L9	S	kg
499.6001.265	MAZAK-BT40	18.8	17	22	12.45	-	M16	44.1	19.1	14.02	3	5	1.52	19	0.064
499.6002.265	MAZAK-BT40/T	18.8	17	22	12.45	7	M16	44.1	19.1	14.02	3	5	1.52	19	0.051
499.6001.225	MAZAK-BT50	28.96	25	37	20.83	-	M24	65.2	25.2	17.58	5	8	2.54	30	0.232
499.6002.225	MAZAK-BT50/T	28.96	25	37	20.83	10	M24	65.2	25.2	17.58	5	8	2.54	30	0.191

## 拉钉DIN 69872 A型

### Pull Studs DIN 69872 Type A



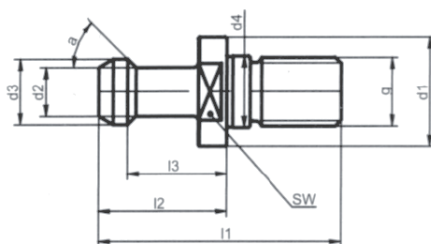
No	型号	d1	d2	d3	d4	d5	l1	l2	l3	SW	g	kg
499.0001.293	D30	17	9	13	13	-	44	24	19	14	M12	0.05
499.0001.292	D40	23	14	19	17	7	54	26	20	19	M16	0.07
499.0001.291	D50	36	21	28	25	11.5	74	34	25	30	M24	0.21
499.0001.290	D60	52	30	40	32	14	90	40	30	46	M30	0.51

备注：带冷却孔。可替代ISO 7388-3:2007 AD型拉钉。

Note: Bored through.



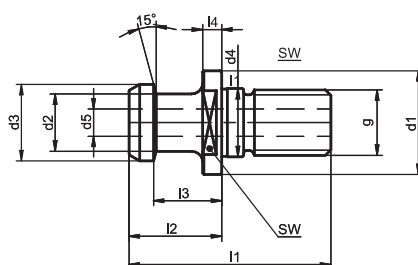
MAS拉钉  
Pull Studs MAS



No	型号	d1	d2	d3	d4	d5	l1	l2	l3	a	SW	g	kg
499.0011.293	P30TI	16.5	7	11	12.5	-	43	23	18	45°	13	M12	0.02
499.0021.293	P30TI-JD	16.5	7	11	12.5	2.5	43	23	18	45°	13	M12	0.02
499.0010.293	P30TII	16.5	7	11	12.5	-	43	23	18	60°	13	M12	0.02
499.0020.293	P30TII-JD	16.5	7	11	12.5	2.5	43	23	18	60°	13	M12	0.02
499.0006.293	P30TIII	16.5	7	11	12.5	-	43	23	18	90°	13	M12	0.02
499.0016.293	P30TIII-JD	16.5	7	11	12.5	2.5	43	23	18	90°	13	M12	0.02
499.0001.265	P40TI	23	10	15	17	-	60	35	28	45°	19	M16	0.08
499.0011.265	P40TI-JD	23	10	15	17	4	60	35	28	45°	19	M16	0.08
499.0002.265	P40TII	23	10	15	17	-	60	35	28	60°	19	M16	0.08
499.0012.265	P40TII-JD	23	10	15	17	4	60	35	28	60°	19	M16	0.08
499.0006.265	P40TIII	23	10	15	17	-	60	35	28	90°	19	M16	0.08
499.0016.265	P40TIII-JD	23	10	15	17	4	60	35	28	90°	19	M16	0.08
499.0002.225	P50TI	38	17	23	25	-	85	45	35	45°	30	M24	0.28
499.0012.225	P50TI-JD	38	17	23	25	8.5	85	45	35	45°	30	M24	0.28
499.0005.225	P50TII	38	17	23	25	-	85	45	35	60°	30	M24	0.28
499.0015.225	P50TII-JD	38	17	23	25	8.5	85	45	35	60°	30	M24	0.28
499.0006.225	P50TIII	38	17	23	25	-	85	45	35	90°	30	M24	0.28
499.0016.225	P50TIII-JD	38	17	23	25	8.5	85	45	35	90°	30	M24	0.28
499.0008.290	P60TI	56	24	32	31	-	115	65	53	45°	46	M30	0.52
499.0018.290	P60TI-JD	56	24	32	31	12	115	65	53	45°	46	M30	0.52
499.0005.290	P60TII	56	24	32	31	-	115	65	53	60°	46	M30	0.52
499.0015.290	P60TII-JD	56	24	32	31	12	115	65	53	60°	46	M30	0.52

备注：d5为通水孔尺寸。

JIS B 6339 型拉钉  
Pull Studs JIS B 6339



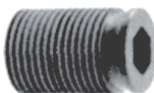
No	型号	d1	d2	d3	d4	d5	l1	l2	l3	l4	SW	g	kg
499.0007.293	30P	16.5	8	12	12.5	4	43	23.4	18.4	5	13	M12	0.04
499.0007.265	40P	23	14	19	17	7	54	29	23	7	19	M16	0.08
499.0007.225	50P	38	21	28	25	10	74	34	25	7	30	M24	0.22
499.0007.290	60P	48	27	36	31	12	98	48	36	11	41	M30	0.52

备注：带冷却孔。可替换ISO7388国际标准A型拉钉。

Note: Bored through.

## 用于热装刀柄的调整螺钉

### Adjusting Screws for shrink fit chucks and i-tec® SLOTT



No	for	d1	Typ
159.550	311.../420...	6/7	HSK/PSC/SK/Zyl.
159.551	311.../420...	8/9	HSK/PSC/SK/Zyl.
159.552	311...	10	HSK32 C/E
159.553	311...	10/11	HSK/PSC/SK/Zyl.
159.554	311...	12/14	HSK C
159.555	311...	12/14	HSK/PSC/SK/Zyl.
159.557	311...	16/18	HSK/PSC/SK/Zyl.
159.558	311...	20/25/32	HSK/PSC/SK/Zyl.

使用：在刀具切削过程中对尺寸补偿的调整。

设计：为细牙螺纹。

Use: For length adjustment of cutting tools.

Design: With fine thread.

## 用于HSK-A型和SK型削平型刀柄的调整螺钉

### Adjusting Screws for reduction sleeves HSK-A and SK

4.0

配件



No	for	d1	Typ
159.365	420...	6	HSK-A/Zyl./ SK40/50
159.366	420...	8	HSK-A/Zyl./ SK40/50
159.367	420...	10	HSK-A / SK40/50
159.357	420...	12/14	HSK-A40
159.368	420...	12/14	HSK-A50/63/80/100 / SK40/50
159.358	420...	16	HSK-A40
159.369	420...	16/18	HSK-A50/63/80/100 / SK40/50
159.355	420...	20	HSK-A50/63 / SK40/50
159.370	420...	20	HSK-A80/100
159.354	420...	25/32	HSK-A63/80 / SK40/50
159.371	420...	25/32	HSK-A100

使用：在刀具切削过程中对尺寸补偿的调整。

Use: For length adjustment of cutting tools.

## 用于液压刀柄的调整螺钉

### Adjusting Screws for hydraulic expansion chucks



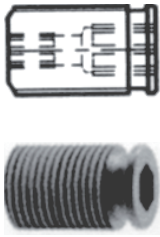
No	for	d	Typ
159.372	702...	6	HSK/SK
159.373	702...	8	HSK/SK
159.374	702...	10	HSK/SK
159.375	702...	12/14	HSK/SK
159.379	702...	16/18	HSK/SK
159.380	702...	20/25/32	HSK/SK

使用：在刀具切削过程中对尺寸补偿的调整。

Use: For length adjustment of cutting tools.

用于HSK-C型和PSC型削平型刀柄的调整螺钉

Adjusting Screws for reduction sleeves HSK-C and PSK



No	for	d1	Typ
159.378	420...	6	HSK40/50/63/100 / PSC32/40/50/63/80
159.385	420...	8	HSK40/80/100 / PSC32/40/50/63/80
159.386	420...	8	HSK50/63
159.389	420...	10	HSK40/100
159.377	420...	10	HSK50/63 / PSC32/40/50/63/80
159.382	420...	12/14	HSK40/100 / PSC32/40/50/63/80
159.388	420...	12/14	HSK50/63
159.384	420...	16/18	HSK40/80/100 / PSC50/63/80
159.390	420...	16/18	HSK50/63
159.391	420...	20	HSK80/100
159.361	420...	20/25/32	HSK50/63 / PSC50/63/80
159.363	420...	25/32	HSK63/80/100

使用：在刀具切削过程中对尺寸补偿的调整。 Use: For length adjustment of cutting tools.

用于削平型刀柄的夹紧螺钉

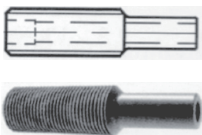
Clamping Screws for reduction sleeves



No	for	Typ	M	D
159.501	192.../420...	Flexibore/HSK/PSK/SK	M6 x 10	6
159.502	192.../420...	Flexibore/HSK/PSK/SK	M8 x 10	8
159.503	192.../420...	Flexibore/HSK/PSK/SK	M10 x 12	10
159.504	192.../420...	Flexibore/HSK/PSK/SK	M12 x 16	12/14
159.505	192.../420...	Flexibore/HSK/PSK/SK	M14 x 16	16/18
159.506	192.../420...	Flexibore/HSK/PSK/SK	M16 x 16	20
159.507	192.../420...	Flexibore/HSK/PSK/SK	M18 x 2 x 20	25
159.508	192.../420...	Flexibore/HSK/PSK/SK	M20 x 2 x 20	32/40
159.509	192.../420...	Flexibore/HSK/PSK/SK	M24 x 2 x 20	50
159.509-1	192.../420...	Flexibore/HSK/PSK/SK	M24 x 2 x 25	63

用于HSK-A/E/F型ER16弹簧夹头刀柄的调整螺钉

Adjusting Screws for collet chucks HSK-A, E and F - ER 16



No	for	ER	Typ	d
159.633	698...	ER16(0.5-10)	HSK40	2.8-5
159.612	698...	ER16(0.5-10)	HSK50/63	2.8-5
159.602	698...	ER16(0.5-10)	HSK80/100 / SK40/50	2.8-5
159.644	698...	ER16(0.5-10)	HSK32	4.8-7
159.634	698...	ER16(0.5-10)	HSK40	4.8-7
159.636	698...	ER16(0.5-10)	HSK50/63	4.8-7
159.601	698...	ER16(0.5-10)	HSK80/100 / SK40/50	4.8-7
159.645	698...	ER16(0.5-10)	HSK32	6.8-10
159.635	698...	ER16(0.5-10)	HSK40	6.8-10
159.637	698...	ER16(0.5-10)	HSK50/63	6.8-10
159.638	698...	ER16(0.5-10)	HSK80/100 / SK40/50	6.8-10

使用：在刀具切削过程中对尺寸补偿的调整。 Use: For length adjustment of cutting tools.

用于HSK-A/E/F型和SK型ER25/32/40弹簧夹头刀柄的调整螺钉

Adjusting Screws for collet chucks HSK-A,E and F and SK - ER 25/32/40

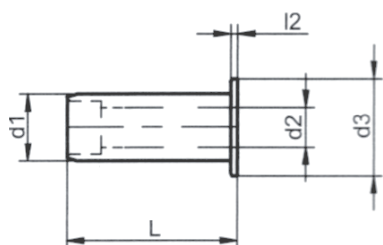


No	for	ER	Typ	d
159.650	697...	ER25	HSK40/50/63	3.8-7
159.616	697...	ER32/40	HSK40/50/63	3.8-7
159.604	697...	ER25/32/40	HSK80/100 / SK40/50	3.8-7
159.651	697...	ER25	HSK40/50/63	6.8-10
159.617	697...	ER32/40	HSK40/50/63	6.8-10
159.603	697...	ER25/32/40	HSK80/100 / SK40/50	6.8-10
159.652	697...	ER25	HSK40/50/63	9.8-13
159.639	697...	ER32/40	HSK40/50/63	9.8-13
159.640	697...	ER25/32/40	HSK80/100 / SK40/50	9.8-13
159.641	697...	ER32/40	HSK40/50/63	12.8-20
159.642	697...	ER32/40	HSK80/100 / SK40/50	12.8-20
159.362	697...	ER40	HSK63	19.8-26
159.336	697...	ER40	HSK80/100	19.8-26

使用：在刀具切削过程中对尺寸补偿的调整。 Use: For length adjustment of cutting tools.

## 用于液压刀柄的变径套

### Reduction Bushes for hydraulic expansion chucks



No	d1	d2	d3	l2	L	kg
302.521	12	3	16	4	44	0.1
302.522	12	4	16	4	44	0.1
302.523	12	5	16	4	44	0.1
302.524	12	6	16	4	44	0.1
302.525	12	8	16	4	44	0.1
302.507	20	3	25	4	54	0.1
302.508	20	4	25	4	54	0.1
302.509	20	5	25	4	54	0.1
302.501	20	6	25	4	54	0.1
302.510	20	7	25	4	54	0.1
302.502	20	8	25	4	54	0.1
302.526	20	9	25	4	54	0.1
302.503	20	10	25	4	54	0.1
302.527	20	11	25	4	54	0.1
302.504	20	12	25	4	54	0.1
302.528	20	13	25	4	54	0.1
302.505	20	14	25	4	54	0.1
302.529	20	15	25	4	54	0.1
302.506	20	16	25	4	54	0.1
302.531	32	6	36	4	64	0.3
302.532	32	8	36	4	64	0.3
302.533	32	10	36	4	64	0.3
302.534	32	12	36	4	64	0.3
302.535	32	14	36	4	64	0.3
302.536	32	16	36	4	64	0.3
302.537	32	18	36	4	64	0.3
302.538	32	20	36	4	64	0.3
302.539	32	25	36	4	64	0.3

使用: 用于减小液压刀柄紧直径。

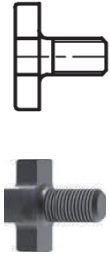
设计: 加工键槽利于减少衬套和冷却并且最大满足80个毛坯件同时加工。对直径在 $\Phi 6-\Phi 8\text{mm}$ 的刀柄满足公差等级h6, 直径在 $\Phi 9-\Phi 25\text{mm}$ 的刀柄满足公差等级h7。

Use: To reduce the clamping diameter of hydraulic expansion chucks.

Design: Slotted reduction bushes, coolant proof up to max. 80 bar. For the following shank tolerances: h6 for  $\Phi 6-\Phi 8\text{mm}$ , h7 for  $\Phi 9-\Phi 25\text{mm}$ .

## 十字型螺钉

### Cutter Retaining Screws for shell end mill arbors



No	型号	for	d1
031.003	D16/M 8	197.../489.../579...	16
031.004	D22/M10	197.../489.../579...	22
031.005	D27/M12	197.../489.../579...	27
031.006	D32/M16	197.../489.../579...	32
031.007	D40/M20	197.../489.../579...	40
031.008	D50/M24	489.../579...	50
031.009	D60/M30	489.../579...	60

d1 = Aufnahmezapfen / centering pivot / pivot de réception / centro del porta utensile

使用: 应用于将立铣刀安装在套式立铣刀柄上。

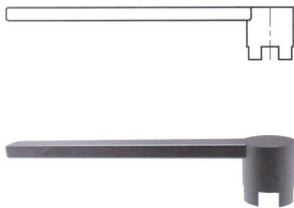
Use: For mounting shell end mills and angular milling cutters on shell end mill arbors.

设计: 承受力尽量保持在900 N/mm<sup>2</sup>以上。  
右螺纹。

Design: Tempered to min. 900 N/mm<sup>2</sup>.  
Right-hand thread.

## 十字型螺钉夹紧扳手

### Keys for cutter retaining screws



No	型号	for	d1
032.003	BS-16	197.../489.../579...	16
032.004	BS-22	197.../489.../579...	22
032.005	BS-27	197.../489.../579...	27
032.006	BS-32	197.../489.../579...	32
032.007	BS-40	197.../489.../579...	40
032.008	BS-50	489.../579...	50
032.009	BS-60	489.../579...	60

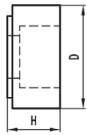
使用: 应用于套式立铣刀柄的紧固螺钉的装卸。

Use: For tightening and releasing cutter retaining screws on shell end mill arbors.

设计: 承受力尽量保持在1200 N/mm<sup>2</sup>以上, 并且保证紧密性。

Design: Tempered to min. 1200 N/mm<sup>2</sup> and welded.

## 垫片 Washers



No	型号	for	D	H	M
401.001	DQ-D27	579	31.5	16	M12
401.002	DQ-D32	579	41	16	M16
401.003	DQ-D40	579	48	21.5	M20

4.0

配件

## 套式立铣刀柄的平键 Feather Keys for shell end mill arbors



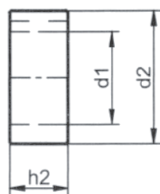
No	for	d1
047.501	197.../489..	16
047.502	489..	22
047.503	197.../489..	27
047.504	197.../489..	32
047.505	197.../489..	40
047.506	489..	50

## PSC型套式立铣刀柄的平键 Feather Keys for shell end mill arbors PSC



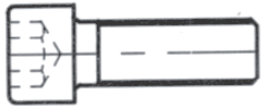
No	for	Typ
047.203	422...	16
047.204	422...	22
047.205	422...	27
047.206	422...	32
047.207	422...	40
047.208	422...	50
047.209	422...	60
047.601	489...	16
047.602	489...	22
047.603	489...	27
047.604	489...	32
047.605	489...	40

铣刀柄的衬套  
Rings for mill arbors



No	d1	d2	h2
045.011	16	25	2
045.012	16	25	3
045.013	16	25	4
045.014	16	25	5
045.015	16	25	6
045.016	16	25	10
045.017	16	25	20
045.018	16	25	30
045.021	22	33	2
045.022	22	33	3
045.023	22	33	4
045.024	22	33	5
045.025	22	33	6
045.026	22	33	10
045.027	22	33	20
045.028	22	33	30
045.031	27	39	2
045.032	27	39	3
045.033	27	39	4
045.034	27	39	5
045.035	27	39	6
045.036	27	39	10
045.037	27	39	20
045.038	27	39	30
045.041	32	45	2
045.042	32	45	3
045.043	32	45	4
045.044	32	45	5
045.045	32	45	6
045.046	32	45	10
045.047	32	45	20
045.048	32	45	30
045.051	40	54	2
045.052	40	54	3
045.053	40	54	4
045.054	40	54	5
045.055	40	54	6
045.056	40	54	10
045.057	40	54	20
045.058	40	54	30
045.061	50	67	2
045.062	50	67	3
045.063	50	67	4
045.064	50	67	5
045.065	50	67	6
045.066	50	67	10
045.067	50	67	20
045.068	50	67	30
045.071	60	83	2
045.072	60	83	3
045.073	60	83	4
045.074	60	83	5
045.075	60	83	6
045.076	60	83	10
045.077	60	83	20
045.078	60	83	30

## SK莫氏锥柄变径套的紧固螺钉 Retaining Screws for reduction sleeves SK for morse tapers



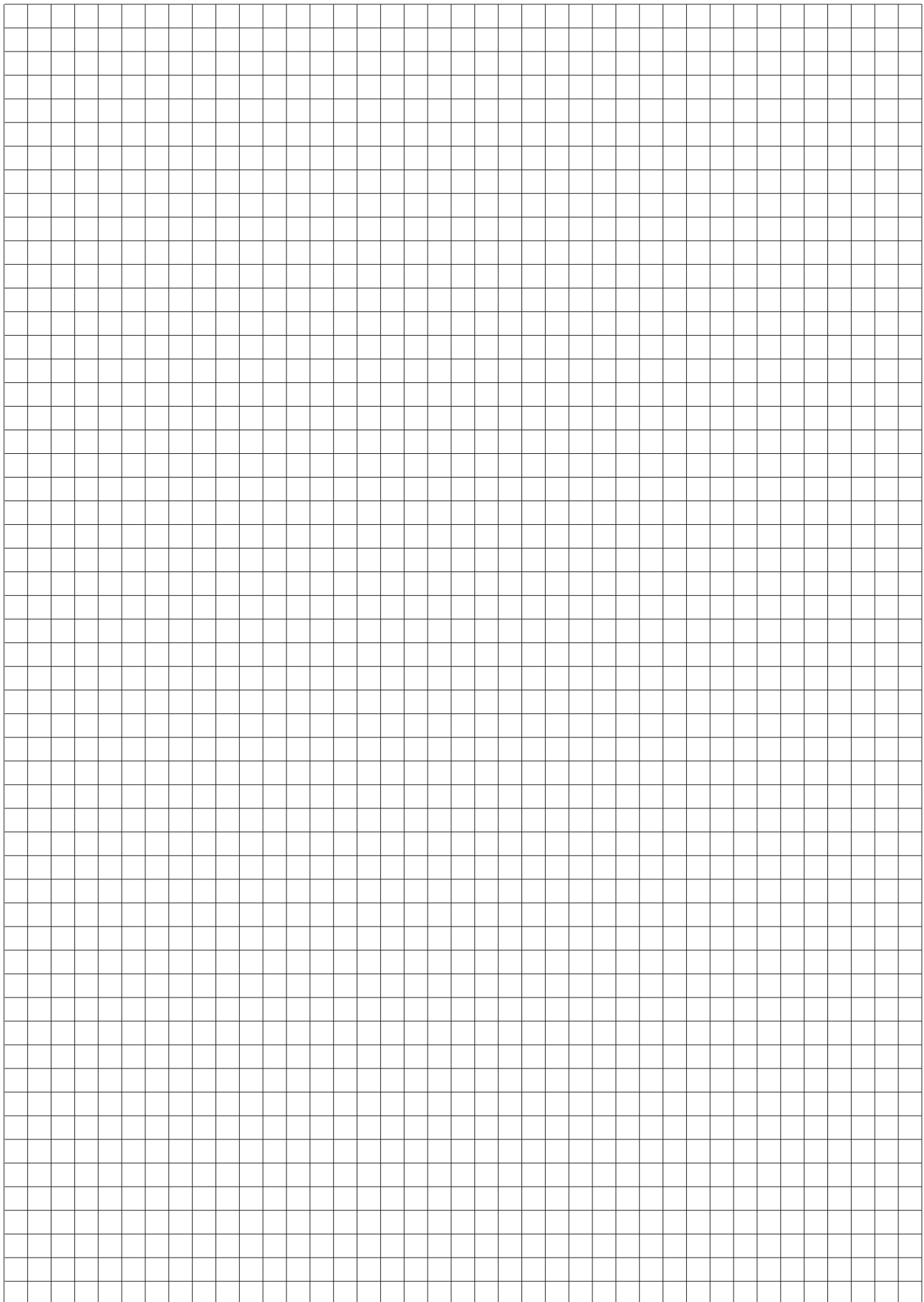
No	for	SK	MK
059.703	458...	40	1
059.552	458...	40	2
059.532	458...	40	3
059.704	458...	40	4
059.554	458...	50	1
059.555	458...	50	2
059.532	458...	50	3
059.588	458...	50	4
059.707	458...	50	5

## 用于PSC的锁紧螺栓 Clamping bolts PSC



No	for	PSC
499.0001.381	706.../707.../716.../316...	32
499.0001.382	706.../707.../716.../316...	40
499.0001.383	706.../707.../716.../316...	50
499.0001.384	706.../707.../716.../316...	63
499.0001.385	706.../707.../716.../316...	80





## 5.0 Accessories Of NC Machines And Arbors

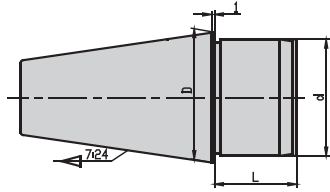
### 机床功能部件及刀柄附件

### Accessories Of NC Machines And Arbors



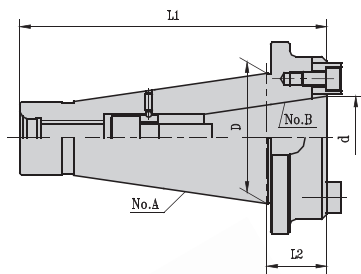
	机床功能部件及刀柄附件	Accessories of NC Machines and Arbors
5.02	定位芯轴	Location Shaft
5.02	过渡套	Taper Reduction Sleeves
5.02	精密莫氏变径套	Precision Morse Taper Reduction Sleeves
5.03	HSK-A圆锥检验棒	Test Arbors HSK-A automatic
5.04	HSK-C圆锥检验棒	Test Arbors HSK-C manual
5.05	7: 24圆锥检验棒	Test Bars with 7: 24 Taper
5.05	莫氏/公制圆锥检验棒	Test Bars with Morse/Metric Taper
5.05	直柄小弹簧夹头	Small Collet Chucks with Parallel Shanks
5.06-5.07	i-tec® 热装变径杆	i-tec® Shrink-fit Chuck Extensions
5.08-5.09	卸刀器	Mounting units
5.10	轴向对刀器	Axial Toll Adjusters
5.10	径向对刀器	Toll Adjusters Radial

## 定位芯轴 Location Shaft



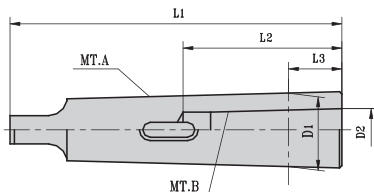
No	型号	圆锥号	D	d	L
440.0025.018	WST40/40-28	40	44.45	40	28
440.0020.018	WST50/40-28	50	69.85	40	28
440.0021.018	WST50/60-40	50	69.85	60	40
440.0023.018	WST60/40-28	60	107.95	40	28
440.0034.018	WST60/60-40	60	107.95	60	40
440.0024.018	ST40/40-28	40	44.45	40	28
440.0027.018	ST50/40-28	50	69.85	40	28
440.0011.018	ST50/60-40	50	69.85	60	40
440.0030.018	ST60/40-28	60	107.95	40	28
440.0035.018	ST60/60-40	60	107.95	60	40

## 过渡套 Taper Reduction Sleeves



No	型号	No.A	No.B	D	d	L1	L2
440.0020.016	JT50-JT40	JT50	JT40	69.85	44.45	150	48
440.0021.016	JT60-JT50	JT60	JT50	107.95	69.85	242	80
440.0012.016	BT50-BT40	BT50	BT40	69.85	44.45	150	48
440.0037.016	BT60-BT50	BT60	BT50	107.95	69.85	232	70
440.0011.016	WST50-WST40	WST50	WST40	69.85	44.45	162	60
440.0043.016	ST50-ST40	ST50	ST40	69.85	44.45	162	60
440.0017.016	ST60-ST50	ST60	ST50	107.95	69.85	257	50
440.0040.016	JT50-ST40	JT50	ST40	69.85	44.45	232	130
440.0014.016	JT60-ST50	JT60	ST50	107.95	69.85	247	85

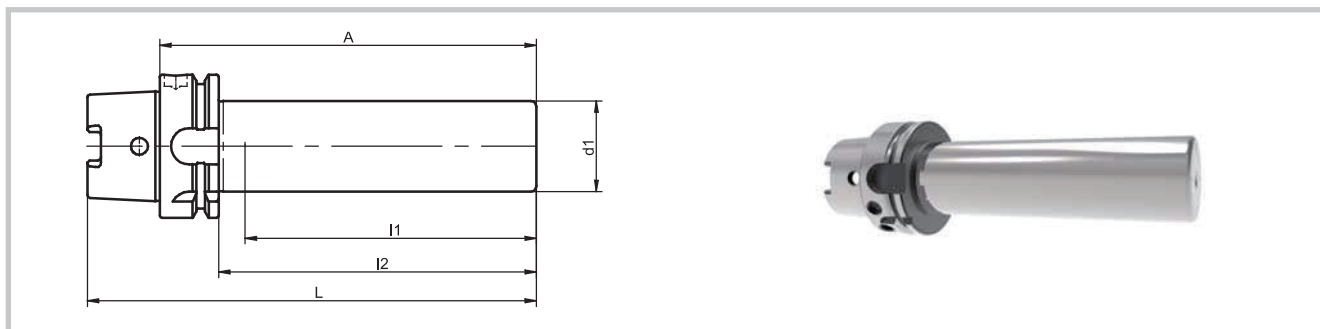
## 精密莫氏变径套 Precision Morse Taper Reduction Sleeves



No	型号	MT.A	D1	MT.B	D2	L1	L2	L3
440.0001.060	MT2-MT1	2	17.780	1	12.085	95	56	20.5
440.0002.060	MT3-MT1	3	23.825	1	12.085	115	56	21.5
440.0003.060	MT3-MT2	3	23.825	2	17.780	115	67	21.5
440.0004.060	MT4-MT1	4	31.267	1	12.085	140	56	22.5
440.0005.060	MT4-MT2	4	31.267	2	17.780	140	67	22.5
440.0006.060	MT4-MT3	4	31.267	3	23.825	140	84	22.5
440.0032.060	MT5-MT3	5	44.399	3	23.825	170	84	20.5
440.0033.060	MT5-MT4	5	44.399	4	31.267	158	107	20.5
440.0034.060	MT6-MT5	6	63.348	5	44.399	218	135	8

## HSK-A圆锥检验棒

### Test Arbors HSK-A automatic



No	HSK-A	d1	A	l1	l2	L	kg
418.0001.319	32	25	176	150	160	192	1.4
418.0001.320	40	25	180	150	160	200	1.7
418.0001.321	50	32	236	200	210	261	2.1
418.0001.322	63	40	346	300	320	378	2.8
418.0001.323	80	40	346	300	320	386	3.1
418.0001.324	100	40	349	300	320	399	3.5
418.0001.325	125	40	349	300	320	412	4
418.0001.326	160	40	400	320	369	480	4.5

使用：用来检测 ISO 标准推荐的 R 230 型机床。

说明：用木托立式存储。

备注：l1=有效测量长度。  
为了防止检验棒重量导致的测量结果误差，HSK 50 以上检验棒按中空阶梯孔设计。  
检验棒也可用于 DIN 69893 的 E 型和 F 型锥柄。

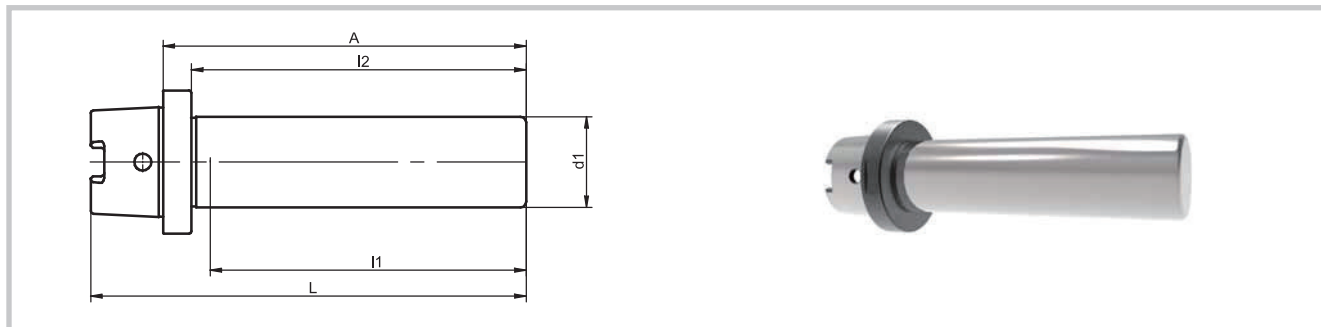
Use: For the acceptance test of machine tools in accordance with the ISO recommendation R 230.

Standard Specification: With wooden stand for vertical storage.

Note: l1=effective measuring length.  
To prevent wrong measuring results caused by their weight, the test arbors are hollowed out with a stepped bore from HSK 50.  
The test arbors can also be used for DIN 69893 type E and F.

## HSK-C圆锥检验棒

### Test Arbors HSK-C manual



No	HSK-C	d1	A	I1	I2	L	kg
418.0001.340	32	25	125	110	115	141	0.5
418.0001.341	40	25	125	110	115	145	0.6
418.0001.342	50	32	125	107.5	112.5	150	0.8
418.0001.343	63	40	160	137.5	147.5	192	1.6
418.0001.344	80	40	160	130	140	200	1.8
418.0001.345	100	40	160	130	140	210	2

## 5.0

### 附件

使用：用来检测 ISO 标准推荐的 R 230 型机床。

说明：用水托立式存储。

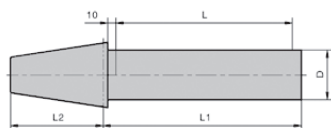
备注：I1=有效测量长度。  
检验棒也可用于 DIN 69893 的 E 型和 F 型锥柄。

Use: For the acceptance test of machine tools in accordance with the ISO recommendation R 230.

Standard Specification: With wooden stand for vertical storage.

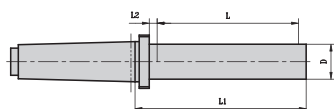
Note: I1=effective measuring length.  
The test arbors can also be used for DIN 69893 type E and F.

**7: 24圆锥检验棒**  
Test Bars with 7: 24  
Taper



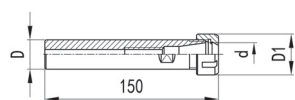
No	型号	圆锥号	D	L	L1	L2	径向圆跳动
JYB-061	JYB30 × 32 × 200-I A2	30	32	200	235	47.8	0.003
JYB-144	JYB30 × 32 × 200-II A2	30	32	200	235	48.4	0.003
JYB-148	JYB40 × 40 × 200-I A2	40	40	200	235	68.4	0.003
JYB-074	JYB40 × 40 × 200-II A2	40	40	200	235	65.4	0.003
JYB-055	JYB50 × 63 × 20 A2	50	63	200	235	101.8	0.003
JYB-088	JYB60 × 80 × 200 A2	60	80	200	235	161.8	0.003
JYB-142	JYB30 × 32 × 300-I A2	30	32	300	335	47.8	0.003
JYB-145	JYB30 × 32 × 300-II A2	30	32	300	335	48.4	0.003
JYB-056	JYB40 × 40 × 300-I A2	40	40	300	335	68.4	0.003
JYB-022	JYB40 × 40 × 300-II A2	40	40	300	335	65.4	0.003
JYB-023	JYB50 × 63 × 300 A2	50	63	300	335	101.8	0.003
JYB-058	JYB60 × 80 × 400 A2	60	80	400	435	161.8	0.003

**莫氏/公制圆锥检验棒**  
Test Bars with Morse/  
Metric Taper



No	型号	圆锥号	D	L	L1	L2	径向圆跳动
JYB-065	MS2 × 24 × 150 A2	2	24	150	175	5	0.003
JYB-018	MS3 × 32 × 200 A2	3	32	200	235	5	0.003
JYB-019	MS4 × 40 × 300 A2	4	40	300	335	10	0.003
JYB-020	MS5 × 40 × 300 A2	5	40	300	335	10	0.003
JYB-021	MS6 × 63 × 300 A2	6	63	300	335	10	0.003
JYB-094	KT80 × 63 × 300 A2	80	63	300	335	10	0.003

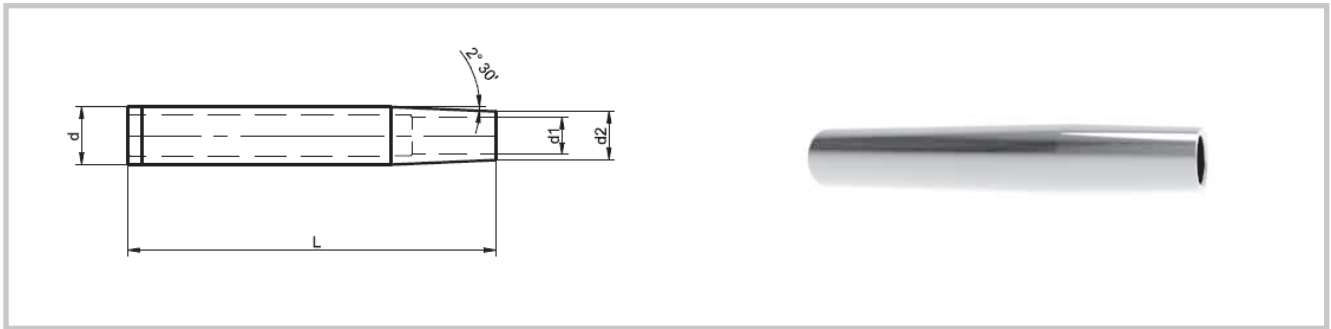
**直柄小弹簧夹头**  
Small Collet Chucks with  
Parallel Shanks



No	型号	D	D1	d	扳手规格	配用夹簧
640.0201.040	ZB20-ER16	20	28	3-10	BS-ER16	ER16
640.0202.040	ZB20-ER20	20	34	3-13	BS-ER20	ER20
640.0203.040	ZB20-ER16	20	28	3-10	BS-ER16	ER16
640.0204.040	ZB25-ER20	25	34	3-13	BS-ER20	ER20
640.0205.040	ZB25-ER25	25	42	4-16	BS-ER25	ER25
640.0206.040	ZB32-ER20	32	34	3-13	BS-ER20	ER20
640.0207.040	ZB32-ER25	32	42	4-16	BS-ER25	ER25
640.0208.040	ZB32-ER32	32	50	4-20	BS-ER32	ER32

## 热装变径杆

### i-tec® Shrink-fit Chuck Extensions , extremely slim version



No	GB Model	d	d1	L	d2	kg
311.610	ZB12-RZ3-160	12	3	160	8	0.1
311.611	ZB12-RZ4-160	12	4	160	9	0.1
311.620	ZB16-RZ3-160	16	3	160	8	0.3
311.621	ZB16-RZ4-160	16	4	160	9	0.3
311.622	ZB16-RZ5-160	16	5	160	10	0.3
311.623	ZB16-RZ6-160	16	6	160	11	0.3
311.633	ZB20-RZ6-160	20	6	160	11	0.4
311.663	ZB20-RZ6-300	20	6	300	11	0.7
311.634	ZB20-RZ8-160	20	8	160	13	0.4
311.664	ZB20-RZ8-300	20	8	300	13	0.7
311.635	ZB20-RZ10-160	20	10	160	15	0.4
311.636	ZB20-RZ12-160	20	12	160	17	0.4
311.645	ZB25-RZ10-160	25	10	160	15	0.6
311.675	ZB25-RZ10-300	25	10	300	15	1.2
311.646	ZB25-RZ12-160	25	12	160	17	0.6
311.676	ZB25-RZ12-300	25	12	300	17	1.2
311.648	ZB25-RZ14-160	25	14	160	19	0.6
311.677	ZB25-RZ16-300	25	16	300	21	1.2
311.688	ZB32-RZ20-300	32	20	300	25	1.9

使用：代替热缩刀柄，可以使用液压刀柄或弹簧夹头刀柄。

Use: To be used in i-tec® shrink fit chucks, hydraulic expansion chucks or collet chucks.

规格：细长型。  
刀具柄部应符合h6公差。

Design: Slim version The clamping diameter is designed for a shank tolerance of h6.

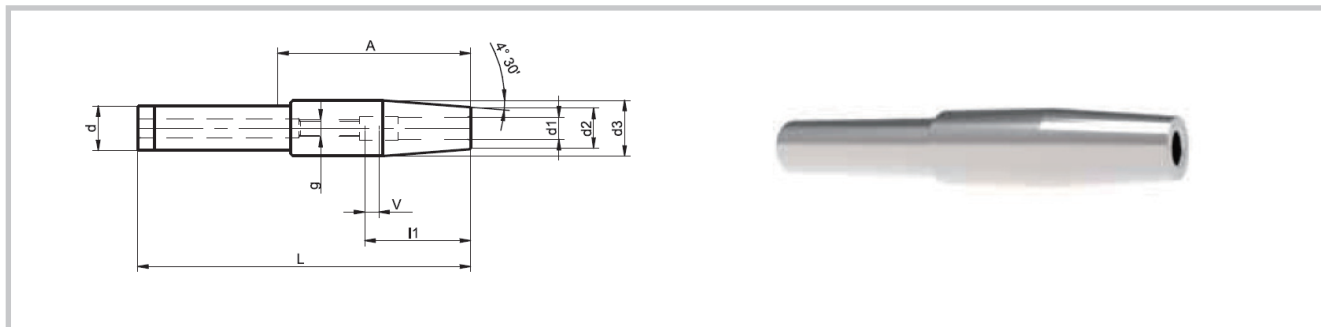
备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.



热装变径杆

i-tec® Shrink-fit Chuck Extensions



No	GB Model	d	d1	L	d2	d3	L1	g	A	V	kg
311.804	ZB16-RZ6-120	16	6	120	15	20.0	36	M5	70	10	0.3
311.805	ZB16-RZ8-120	16	8	120	15	20.0	36	M6	70	10	0.3
311.811	ZB20-RZ6-160	20	6	160	15	19.9	36	M5	110	10	0.4
311.812	ZB20-RZ8-160	20	8	160	15	19.9	36	M6	110	10	0.4
311.813	ZB20-RZ10-160	20	10	160	18	24.0	41	M8 × 1	110	10	0.6
311.863	ZB25-RZ10-160	25	10	160	18	24.9	41	M8 × 1	110	10	0.4
311.864	ZB25-RZ12-160	25	12	160	18	24.9	47	M10 × 1	110	10	0.4
311.823	ZB32-RZ12-160	32	12	160	18	32.0	47	M10 × 1	-	10	0.5
311.829	ZB32-RZ14-160	32	14	160	21	32.0	47	M10 × 1	-	10	0.5
311.824	ZB32-RZ16-160	32	16	160	21	32.0	53	M12 × 1	-	10	0.5
311.825	ZB32-RZ20-160	32	20	160	27	32.0	55	M16 × 1	-	10	0.5

使用：代替热缩刀柄，可以使用液压刀柄或弹簧夹头刀柄。

Use: To be used in i-tec® shrink fit chucks, hydraulic expansion chucks or collet chucks.

规格：细长型。  
刀具柄部应符合h6公差。

Design: Slim version The clamping diameter is designed for a shank tolerance of h6.

说明：不带限位螺钉。

Standard Specification: Adjusting screw for length adjustment is not included.

备注：其他型号和尺寸可按订货要求制作。

Note: Other designs and sizes are available on request.

## 卸刀器

Mounting units - To facilitate mounting and dismantling of tools



使用说明：卸刀器包括主体和法兰两部分，法兰可根据实际使用的刀柄进行选配。



主体订货号 126.801 型号: XDQ-HPSK01

备注：卸刀器主体尺寸330×160×230，重量6.5KG。

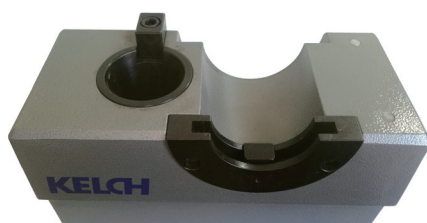


卸刀器法兰

法兰No Flange	适用规格
126.811	HSK32 / PSK32
126.812	HSK40 / PSK40
126.813	HSK50 / PSK50 / SK30
126.814	HSK63 / PSK63 / SK40
126.815	HSK80 / PSK80
126.816	HSK100 / PSK100 / SK50
126.831	VDI30
126.832	VDI40
126.833	VDI50
126.834	VDI60

## 卸刀器

Mounting units - To facilitate mounting and dismantling of tools

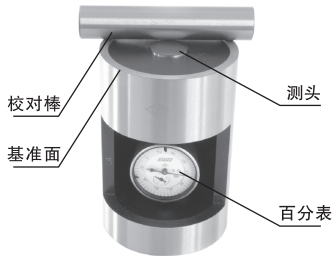


主体订货号: 126.100 型号: XDQ-HPSK02

备注: 卸刀器主体尺寸330×150×180, 重量9.8KG。

装配件No (含锥套)	法兰No	适用规格	标准
126.101	126.201	SK30	DIN 2080/WST
126.102	126.202	SK40	DIN 2080/WST
126.104	126.204	SK50	DIN 2080/WST
126.123	126.223	SK30	DIN 69871/JT
126.111	126.211	SK40	DIN 69871/JT
126.107	126.207	SK50	DIN 69871/JT
126.128	126.228	SK30	JIS B 6339/BT
126.109	126.209	SK40	JIS B 6339/BT
126.110	126.210	SK50	JIS B 6339/BT
126.153	126.253	HSK 50	HSK A-F
126.154	126.254	HSK 63	HSK A-F
126.155	126.255	HSK 80	HSK A-F
126.156	126.256	HSK 100	HSK A-F

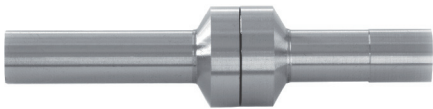
## 轴向对刀器 型号: SL001 货号: 440.0006.220 Axial Toll Adjusters



### 使用说明

- 1、首先用手按压住校对棒压下测头，使测头与基准面处于同一面。同时调整百分表刻度盘，使其归零。
- 2、再分别用参与加工的刀具压下测头，使百分表归零，这时各个刀具与机床工作台距离都为120mm。

## 径向对刀器 型号: SL002 货号: 440.0001.220 Toll Adjusters Radial



### 注意事项

- 1、不要弯曲，拉伸。
- 2、使用最高转速不得超过600rpm。
- 3、滑动面不允许有灰尘。

### 使用方法:

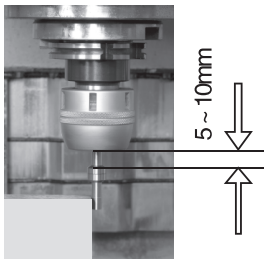


图 1

1、用能够夹持  $\phi 10$  直柄的强力铣夹头或弹簧夹头，夹紧此测量杆。如图1

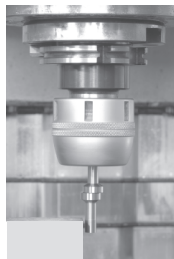


图 2

2、用手轻轻按侧头侧面，使其偏心0.5mm。如图2，转速采用400-580rpm，使侧头接触工件端面。



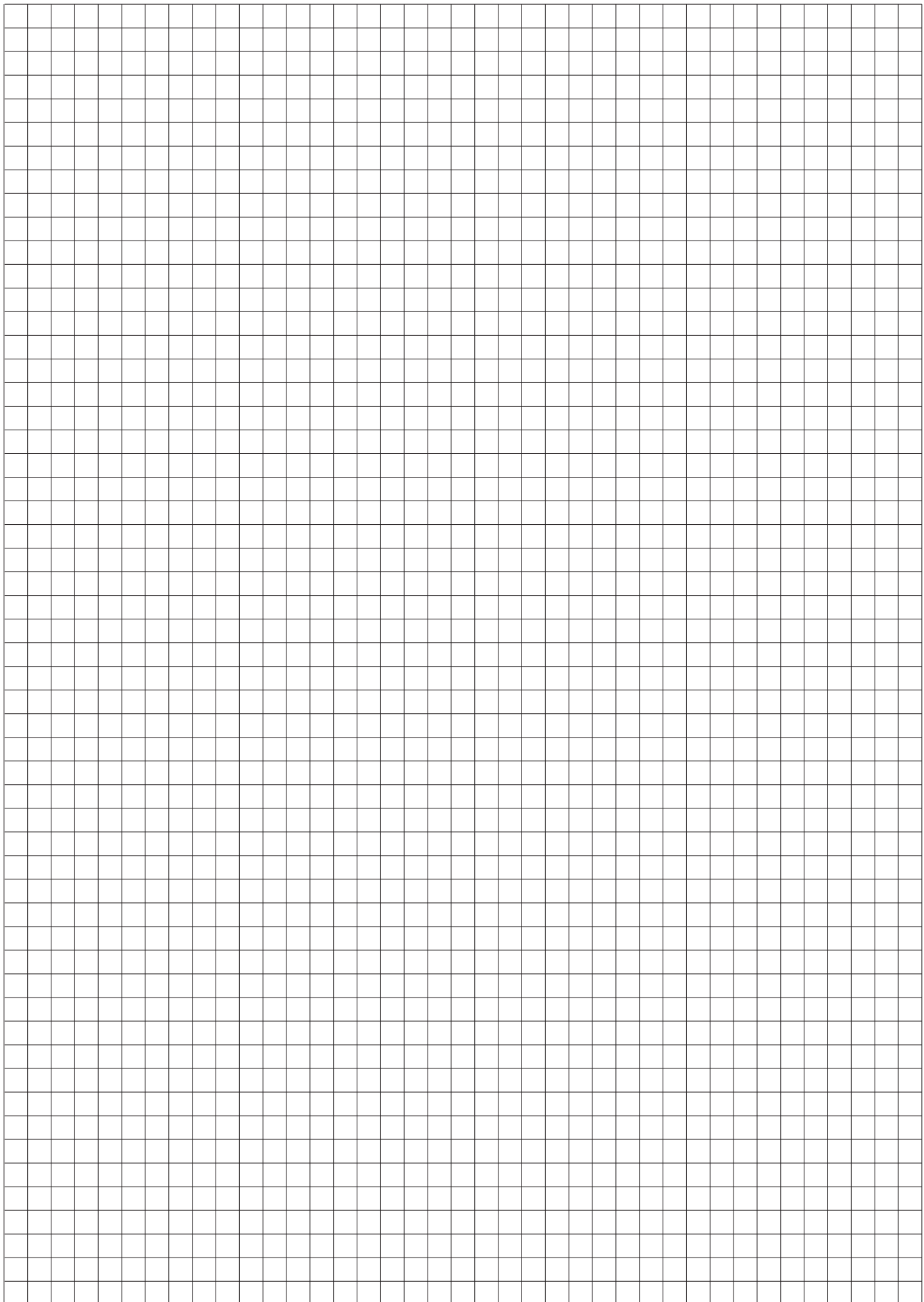
图 3

3、如图3所示，使侧头无径向跳动，即恰好静止。



图 4

4、再以微进给使之与工件接触上，如图4所示，侧头向一侧滑动，这滑动起始点即是所测的基准位。机床上显示的实际坐标减去侧头半径5mm，即为工件主体端面坐标位置。



# KELCH

[www.kelch.de](http://www.kelch.de)

## 德 国

( 公司总部 )

KELCH GmbH

Werkstraße 30

D-71384 Weinstadt

Tel: +49 (0) 7151/20522-0

Fax: +49(0) 7151/20522-11

Email: [info@kelchgmbh.de](mailto:info@kelchgmbh.de)

Web: [www.kelch.de](http://www.kelch.de)

## 中 国

德国Kelch公司中国代表处

中国哈尔滨市和平路44号

邮编 : 150040

电话 : +86 451 86792534

+86 451 82613579

传真 : +86 451 82637661

邮箱 : [SK@LINKS-CHINA.COM](mailto:SK@LINKS-CHINA.COM)

网址 : [www.links-china.com](http://www.links-china.com)