

工具系统 Chucks

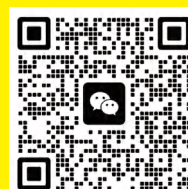


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方瀚工具源头生产厂家

上海方瀚精密工具有限公司

Shanghai Fonhae Precision Tools Co., Ltd.

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上海方瀚精密工具有限公司
Shanghai Fonhae Precision Tools Co., Ltd

精密机械加工刀具制造商，成立于2016 年，专业提供硬质合金、金属陶瓷刀具研发、生产、销售和服务的企业。

主要服务于航空航天、汽车、消费电子、液压气动、工程机械及精密机械等客户。

Manufacturer of precision machining tools, was established in 2016. The company specializes in providing tungsten carbide, cermet tools research and development, production, sales and service.

Mainly serve aerospace, automotive, consumer electronics, pneumatic hydraulic industry, engineering machinery and precision machinery customers.

公司提供的产品和服务
Products and services provided by the company

- 研究开发硬质合金材料、几何结构、涂层和加工工艺
- 依据客户要求开发非标刀具
- 客户服务和产品培训
- OEM-项目和加工工艺解决方案
- 效率和成本计算
- Researches and develops tungsten carbide materials, geometries, coatings and machining processes
- Develops special tools according to customer requirements
- Provides customer service and product training
- OEM - projects and machining process solutions
- Efficiency and cost calculation



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综合精度

在4xd处刀具综合跳动 $\leq 0.003\text{mm}$ ，可有效减少刀具磨损，提升加工质量。

Comprehensive accuracy

At the 4xd position, the comprehensive tool runout is $\leq 0.003\text{mm}$; it can effectively reduce tool wear and improve processing quality.

超大扭矩设计

双强力锁紧环整体式设计，能有效提升夹持扭矩及夹持刚性，使加工更稳定。

Extra-high torque design

The overall design of the dual strong locking ring can effectively improve the clamping torque and rigidity, making the processing more stable.

特殊外观设计

采用特殊的表面处理技术，增强刀柄表面的防锈能力。

Special design

Special surface treatment technology is used to enhance the rust resistance of the chucks surface.

深冷处理

防止变形，保证精度的稳定、持久。

Subzero treatment

Prevent deformation, ensure stability and durability of accuracy.





综合精度

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全能夹持

配合我司高性能热装机，在数秒内可实现对 $\Phi 3\text{-}32\text{mm}$ 的硬质合金刀具及 $\Phi 6\text{-}32\text{mm}$ 高速钢及钢制品的装夹，且对所有刀具柄部直径仅要求到达h6精度。

Almighty clamping

With our high-performance shrink fit machine, it is possible to clamp solid carbide cutting tools with a diameter of $\Phi 3\text{-}32\text{mm}$ and high-speed steel and steel products with a diameter of $\Phi 6\text{-}32\text{mm}$ in just a few seconds, with a requirement for the diameter of all tool shanks to reach h6 precision.

特种耐热材料制作

刀柄采用特种耐热材料制作，正确使用寿命不低于3000次装夹。

Made of special heat-resistant materials

The chucks is made of special heat-resistant material, and its correct service life is not less than 3000 clamping times when used correctly.

装刀指示环

获得专利的装刀指示环，将最小装刀深度在刀柄外部表示出来，能够有效的防止因刀具装入深度不够而损伤刀柄。

Tool loading indicator ring

The patented tool loading indicator ring displays the minimum installation depth outside the chucks, effectively preventing damage to the chucks due to insufficient depth of tool installation.

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防止变形，保证精度的稳定、持久。

Subzero treatment

Prevent deformation, ensure stability and durability of accuracy.





综合精度

严格的精度控制流程，保证每一件产品按照多次检测最大值满足要求进行出厂检验。

Comprehensive accuracy

Strict accuracy control process ensures that each product undergoes factory inspection according to the maximum value that meets the requirements after multiple tests.

特殊处理的螺母

螺母采用特殊表面处理技术，硬度高，摩擦系数低，能够稳定锁紧卡簧，防止卡簧在锁紧时承受过大的扭曲力，保证夹持精度。

Special treated nuts

The nut adopts special surface treatment technology, with high hardness and low friction coefficient, which can stably lock the retaining collets, prevent the retaining collets from bearing excessive torsional force during locking, and ensure the clamping accuracy.

高精度主体

刀柄主体内锥孔及锥柄经过精密磨削加工保证内锥孔对锥柄的径向跳动 $\leq 0.003\text{mm}$ 。

High-precision main body

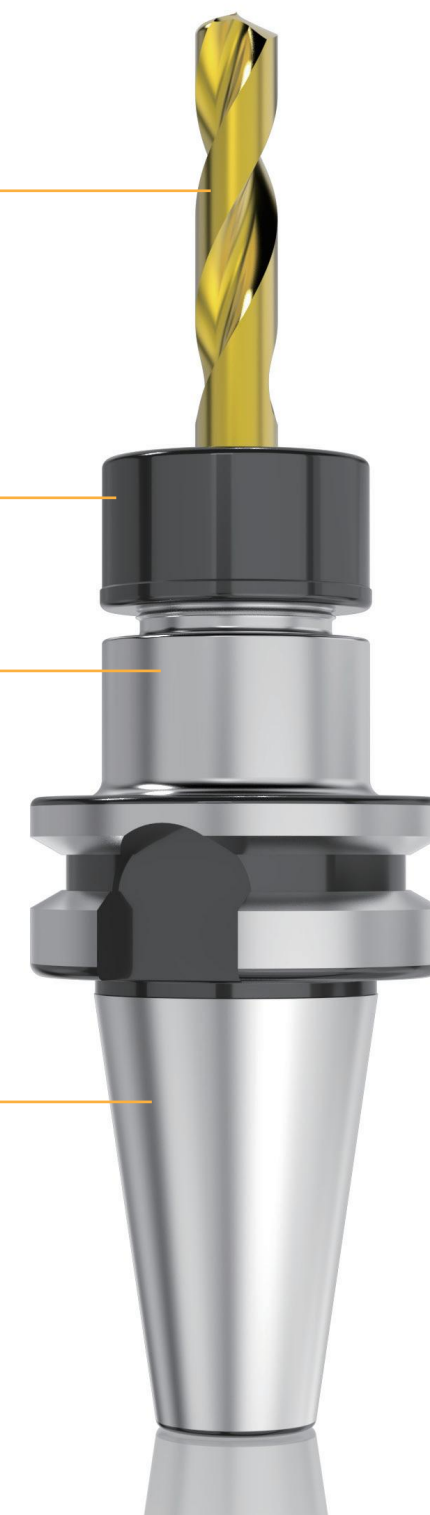
The main body of the chucks is subjected to precision grinding to ensure that the radial runout of the inner taper hole to the taper shank is $\leq 0.003\text{mm}$.

深冷处理

防止变形，保证精度的稳定、持久。

Subzero treatment

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特殊螺母处理

螺母采用特殊表面处理技术，硬度高，摩擦系数低，能够稳定锁紧卡簧，防止卡簧在锁紧时承受过大的扭曲力。

Special nut treatment

The nut adopts special surface treatment technology, with high hardness and low friction coefficient, which can stably lock the retaining collets, prevent the retaining collets from bearing excessive torsional force during locking.

微补偿结构

内置微补偿 ($\pm 0.5\text{mm}$) 结构，可有效补偿由于主轴旋转、进给和丝锥螺距间的细微同步偏差。减少丝锥应力，延长丝锥寿命，提高螺纹质量。

Micro compensation structure

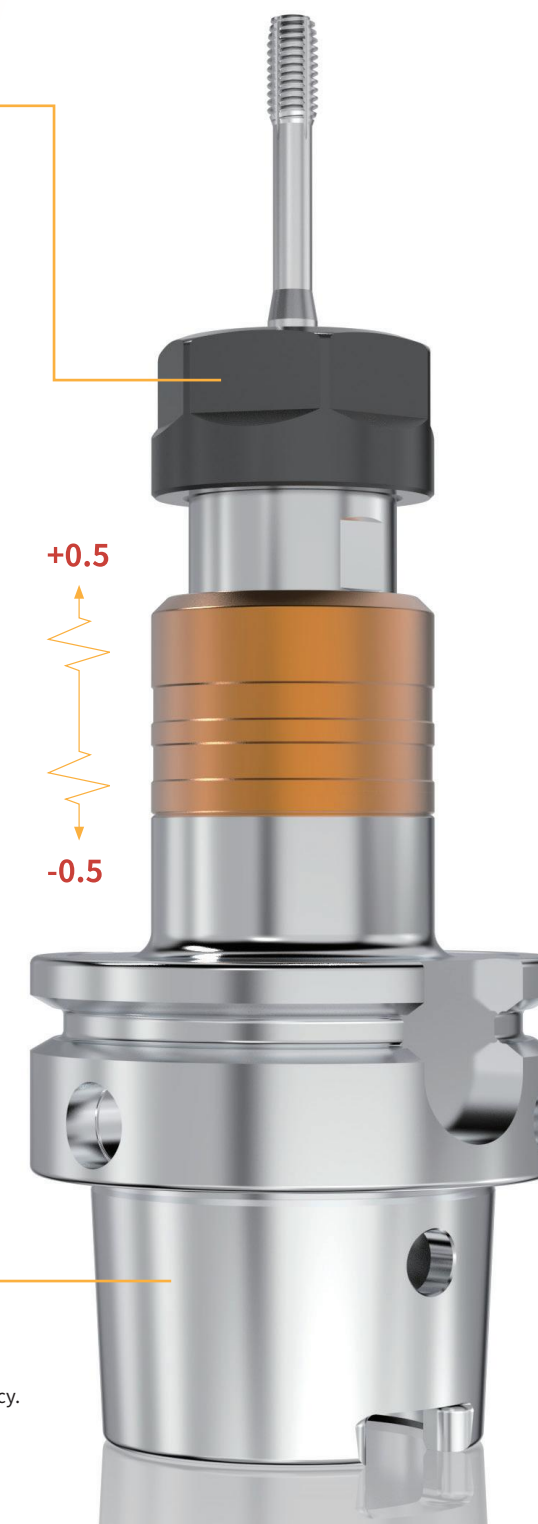
Built in micro compensation ($\pm 0.5\text{mm}$) structure can effectively compensate for subtle synchronization deviations between spindle rotation, feed, and tap pitch. Reduce tap stress, extend tap life, and improve thread quality.

深冷处理

防止变形，保证精度的稳定、持久。

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低温加热

加热温度仅430°C，加热后，表面不会氧化变黑。

Low temperature heating

The heating temperature is only 430 °C, and after heating, the surface will not oxidize or turn black.

通用性

适合多种场景加工需求。

generality

Suitable for processing needs in various scenarios.

特殊材料

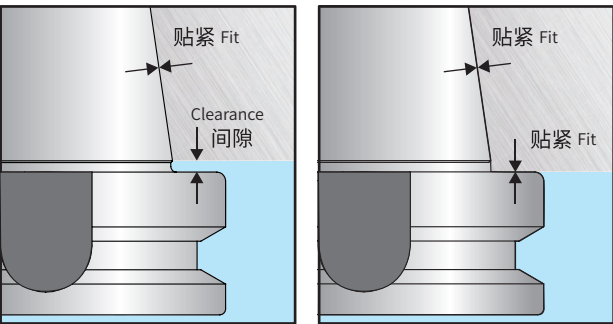
采用热装专用特殊不锈钢材料，加热温度低，耐热温度高。

Special materials

Using special stainless steel material for hot installation, with low heating temperature and high heat resistance temperature.



不锈钢热装刀柄/Stainless Shrink Fit chucks



普通BT接口
Ordinary BT interface

双面定位BB接口
Double-sided positioning BB interface

刀柄与主轴锥面、端面两面同时定位的优势

The advantages of simultaneous positioning of both sides of the chuck and the spindle cone and end face

- 增加刚性
Increase rigidity
法兰端面作为定位支面，刚性显著提升
The end face of the flange is used as the positioning support surface, and the rigidity is significantly improved

提升加工效率
Improve processing efficiency
抑制重切削振动，加工效率显著提升
The vibration of heavy cutting is suppressed, and the processing efficiency is significantly improved
- 延长刀具寿命
Extend tool life
提升加工表面质量
Improve the quality of machined surfaces

提高重复定位精度
Improve repeated positioning accuracy
保障工件加工尺寸精度
Ensure the dimensional accuracy of workpiece processing

所有BT型号均可升级为BB接口

All BT models can be upgraded to BB interface

欢迎下单及垂询

Welcome to place orders and inquire

订货示例：
Order example

液压刀柄 Hydraulic chucks	BB40-HCM20-90
强力夹头刀柄 Milling chucks	BB40-C32-90
ER弹簧夹头刀柄 ER Coollet chucks	BB50-ER32-100

BB刀柄工艺难度是普通刀柄的数倍 The difficulty of BB chuck is several times that of ordinary chuck.
方瀚批量引进瑞士进口磨床，为您精心制造真正合格的BB刀柄
Fonhae batch imported grinding machine from Switzerland, for you to carefully manufacture truly qualified BB chucks .



注：实现刀柄双面定位需配合使用专用主轴 Note: To realize the double-sided position of the chuck, a special spindle must be used.

液压刀柄

Hydraulic Chucks

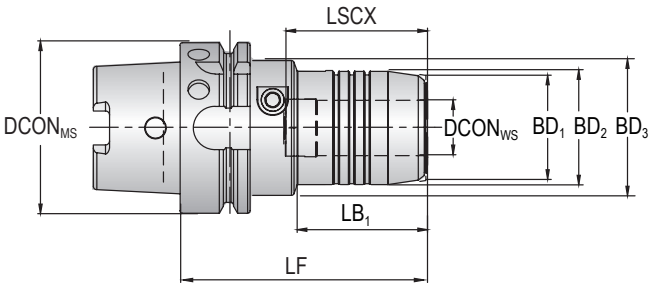
DIN69893 HSK-A



特点 Characteristic



- 综合跳动：≤0.003（4xd）
 - Comprehensive runout≤0.003mm（4xd）
 - 一般六角扳手即可实现快速换刀
 - A general hex wrench can achieve quick insert rotation
 - 要求刀具柄部公差h6
 - Require h6 tolerance for tool shank
 - 内通水设计，标配轴向调整螺钉
 - Internal water design, equipped with axial adjustment screws.
 - 标配动平衡G2.5/25000rpm
 - Standard dynamic balance G2.5/25000rpm
- 可搭配液压卡簧实现变径
Can be combined with hydraulic collets to achieve variable diameter



型号 Model DIN69893		尺寸 Dimensions（mm）									
		DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁		
HSK40A-HCM06-70	HSK-A40	40	6	22	26	45	70	37	16	HCSO05014C	-
HSK40A-HCM08-70	HSK-A40	40	8	24	28	48	70	37	16	HCSO05014C	-
HSK40A-HCM10-75	HSK-A40	40	10	26	30	48	75	41	20	HCSO05014C	-
HSK40A-HCM12-80	HSK-A40	40	12	28	32	48	80	46	25	HCSO05014C	HC12
HSK50A-HCM06-75	HSK-A50	50	6	22	26	42	75	37	28	HCSO05014C	-
HSK50A-HCM08-75	HSK-A50	50	8	24	28	42	75	37	28	HCSO06014C	-
HSK50A-HCM10-80	HSK-A50	50	10	26	30	42	80	41	38	HCSO06014C	-
HSK50A-HCM12-85	HSK-A50	50	12	28	32	42	85	46	44	HCSO06014C	HC12
HSK50A-HCM16-90	HSK-A50	50	16	34	38	53	90	49	25	HCSO06014C	-
HSK50A-HCM20-90	HSK-A50	50	20	38	42	53	90	51	29	HCSO06014C	HC20
HSK50A-HCM25-90	HSK-A50	50	25	53	57	72	90	57	25	HCSO06014C	-

- *如需其它型式或规格的 HSK 类产品请与本公司联系。
- *液压卡簧资料参见 82 页。
- *附件需单独订购。
- *For other types or specifications of HSK products, please contact our company.
- *Refer to page 82 for hydraulic collets information.
- *Accessories need to be ordered separately.

附件 Accessories	DCON _{WS}						
	6	8	10	12	16	20	25
扳手 Hex Wrench	TS5						TS6
附件 Accessories	DCON _{MS} =40				DCON _{MS} =50		
冷却液套管 Coolant Tube	TU-HSK40				TU-HSK50		
扳手 Coolant Tube Wrench	W-HSK40				W-HSK50		

液压刀柄

Hydraulic Chucks

DIN69893 HSK-A

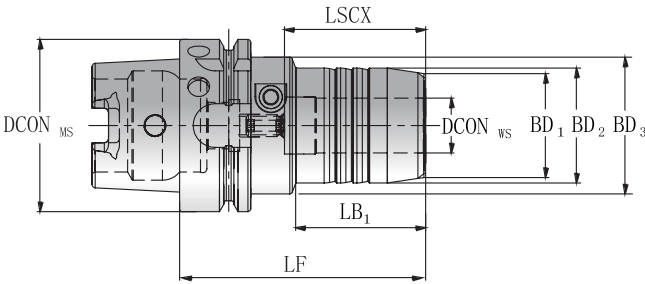


特点 Characteristic



- 综合跳动: ≤0.003 (4xd)
- Comprehensive runout≤0.003mm (4xd)
- 一般六角扳手即可实现快速换刀
- A general hex wrench can achieve quick insert rotation
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计, 标配轴向调整螺钉
- Internal water design, equipped with axial adjustment screws.
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm

可搭配液压卡簧实现变径
Can be combined with hydraulic collets to achieve variable diameter



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		DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁		
HSK63A-HCM06-70	HSK-A63	63	6	22	26	50	70	37	24	HCSO05014C	-
-90	HSK-A63	63	6	22	26	50	80	37	44	HCSO05014C	-
-120	HSK-A63	63	6	22	26	50	120	37	74	HCSO05014C	-
-150	HSK-A63	63	6	22	26	50	150	37	104	HCSO05014C	-
-200	HSK-A63	63	6	22	26	50	200	37	154	HCSO05014C	-
HSK63A-HCM08-70	HSK-A63	63	8	24	28	50	70	37	25	HCSO06014C	-
-90	HSK-A63	63	8	24	28	50	90	37	45	HCSO06014C	-
-120	HSK-A63	63	8	24	28	50	120	37	75	HCSO06014C	-
-150	HSK-A63	63	8	24	28	50	150	37	105	HCSO06014C	-
-200	HSK-A63	63	8	24	28	50	200	37	155	HCSO06014C	-
HSK63A-HCM10-80	HSK-A63	63	10	26	30	50	80	41	35	HCSO08014C	-
-120	HSK-A63	63	10	26	30	50	120	41	75	HCSO08014C	-
-150	HSK-A63	63	10	26	30	50	150	41	105	HCSO08014C	-
-200	HSK-A63	63	10	26	30	50	200	41	155	HCSO08014C	-
HSK63A-HCM12-85	HSK-A63	63	12	28	32	50	85	46	40	HCSO08014C	HC12
-120	HSK-A63	63	12	28	32	50	120	46	75	HCSO08014C	HC12
-150	HSK-A63	63	12	28	32	50	150	46	105	HCSO08014C	HC12
-200	HSK-A63	63	12	28	32	50	200	46	155	HCSO08014C	HC12
HSK63A-HCM14-85	HSK-A63	63	14	30	34	50	85	46	40	HCSO08014C	-
-1501	HSK-A63	63	14	30	34	50	150	46	105	HCSO08014C	-
HSK63A-HCM16-90	HSK-A63	63	16	34	38	50	90	49	46	HCSO08014C	-
-120	HSK-A63	63	16	34	38	50	120	49	76	HCSO08014C	-
-150	HSK-A63	63	16	34	38	50	150	49	106	HCSO08014C	-
-200	HSK-A63	63	16	34	38	50	200	49	156	HCSO08014C	-
HSK63A-HCM18-90	HSK-A63	63	18	36	40	50	90	49	47	HCSO08014C	-
-150	HSK-A63	63	18	36	40	50	150	49	107	HCSO08014C	-
HSK63A-HCM20-90	HSK-A63	63	20	38	42	50	90	51	48	HCSO08014C	HC20
-120	HSK-A63	63	20	38	42	50	120	51	78	HCSO08014C	HC20
-150	HSK-A63	63	20	38	42	50	150	51	108	HCSO08014C	HC20
-200	HSK-A63	63	20	38	42	50	200	51	158	HCSO08014C	HC20
HSK63A-HCM25-120	HSK-A63	63	25	53	57	63	120	57	59	HCSO12014C	-
HSK63A-HCM32-125	HSK-A63	63	32	60	64	75	125	61	63	HCSO12014C	HC32

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*液压卡簧资料参见 82 页。
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附件 Accessories	DCON _{WS}									
	6	8	10	12	14	16	18	20	25	32
 扳手 Hex Wrench	TS5								TS6	
 冷却液套管 Coolant Tube	TU-HSK63									
 扳手 Coolant Tube Wrench	W-HSK63									

液压刀柄

Hydraulic Chucks

DIN69893 HSK-A

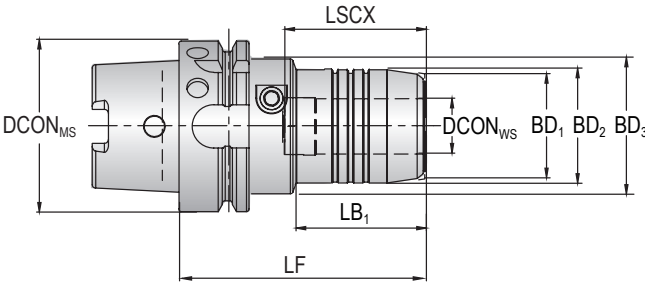


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HSK80A-HCM12-95	HSK-A80	80	12	28	32	50	95	46	50	HCSO08014C	HC12
HSK80A-HCM20-105	HSK-A80	80	20	38	42	50	105	51	47.5	HCSO12014C	HC20
HSK80A-HCM32-110	HSK-A80	80	32	60	64	68	110	57	65	HCSO12014C	HC32

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附件 Accessories	DCON _{WS}		
	12	20	32
扳手 Hex Wrench	TS5		TS6
冷却液套管 Coolant Tube	TU-HSK80		
扳手 Coolant Tube Wrench	W-HSK80		

液压刀柄

Hydraulic Chucks

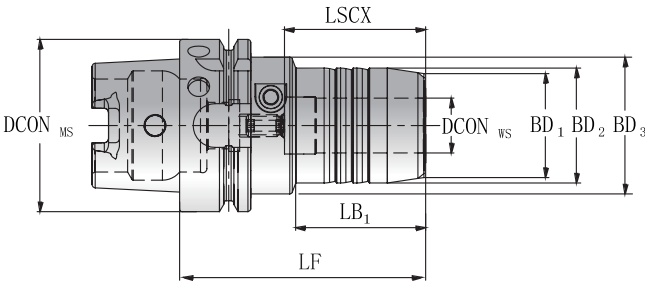
DIN69893 HSK-A

FONHAE 方瀚

特点 Characteristic



- 综合跳动：≤0.003（4xd）
- Comprehensive runout≤0.003mm（4xd）
- 一般六角扳手即可实现快速换刀
- A general hex wrench can achieve quick insert rotation
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计，标配轴向调整螺钉
- Internal water design, equipped with axial adjustment screws.
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 可搭配液压卡簧实现变径
- Can be combined with hydraulic collets to achieve variable diameter



型号 Model DIN69893		尺寸 Dimensions（mm）									
		DCON _{WS}	DCON _{WS}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁		
HSK100A-HCM06-75	HSK-A100	100	6	22	26	50	75	37	26	HCSO05014C	—
-90	HSK-A100	100	6	22	26	50	90	37	41	HCSO05014C	—
-120	HSK-A100	100	6	22	26	50	120	37	71	HCSO05014C	—
-150	HSK-A100	100	6	22	26	50	150	37	101	HCSO05014C	—
HSK100A-HCM08-75	HSK-A100	100	8	24	28	50	75	37	26	HCSO06014C	—
-90	HSK-A100	100	8	24	28	50	90	37	41	HCSO06014C	—
-120	HSK-A100	100	8	24	28	50	120	37	71	HCSO06014C	—
-150	HSK-A100	100	8	24	28	50	150	37	101	HCSO06014C	—
HSK100A-HCM10-90	HSK-A100	100	10	26	30	50	90	41	42	HCSO08014C	—
-120	HSK-A100	100	10	26	30	50	120	41	72	HCSO08014C	—
-150	HSK-A100	100	10	26	30	50	150	41	102	HCSO08014C	—
HSK100A-HCM12-95	HSK-A100	100	12	28	32	50	95	46	47	HCSO08014C	HC12
-120	HSK-A100	100	12	28	32	50	120	46	72	HCSO08014C	HC12
-150	HSK-A100	100	12	28	32	50	150	46	102	HCSO08014C	HC12
-200	HSK-A100	100	12	28	32	50	200	46	152	HCSO08014C	HC12
HSK100A-HCM14-95	HSK-A100	100	14	30	34	50	95	46	53	HCSO08014C	—
-150	HSK-A100	100	14	30	34	50	150	46	103	HCSO08014C	—
HSK100A-HCM16-100	HSK-A100	100	16	34	38	50	100	49	53	HCSO08014C	—
-120	HSK-A100	100	16	34	38	50	120	49	73	HCSO08014C	—
-150	HSK-A100	100	16	34	38	50	150	49	103	HCSO08014C	—
HSK100A-HCM18-100	HSK-A100	100	18	36	40	50	100	49	58	HCSO08014C	—
-150	HSK-A100	100	18	36	40	50	150	49	108	HCSO08014C	—
HSK100A-HCM20-105	HSK-A100	100	20	38	42	50	105	51	59	HCSO08014C	HC20
-120	HSK-A100	100	20	38	42	50	120	51	74	HCSO08014C	HC20
-150	HSK-A100	100	20	38	42	50	150	51	104	HCSO08014C	HC20
-200	HSK-A100	100	20	38	42	50	200	51	154	HCSO08014C	HC20
HSK100A-HCM25-110	HSK-A100	100	25	53	57	63	110	57	62	HCSO12014C	—
-150	HSK-A100	100	25	53	57	63	150	57	112	HCSO12014C	—
HSK100A-HCM32-110	HSK-A100	100	32	60	64	75	110	61	62	HCSO12014C	HC32
-150	HSK-A100	100	32	60	64	75	150	61	102	HCSO12014C	HC32

*如需其它型式或规格的 HSK 类产品请与本公司联系。

*液压卡簧资料参见 82 页。

*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.

*Refer to page 82 for hydraulic collets information.

*Accessories need to be ordered separately.

附件 Accessories	DCON _{WS}									
	6	8	10	12	14	16	18	20	25	32
 扳手 Hex Wrench	TS5								TS6	
 冷却液套管 Coolant Tube	TU-HSK100									
 扳手 Coolant Tube Wrench	W-HSK100									

液压刀柄

Hydraulic Chucks

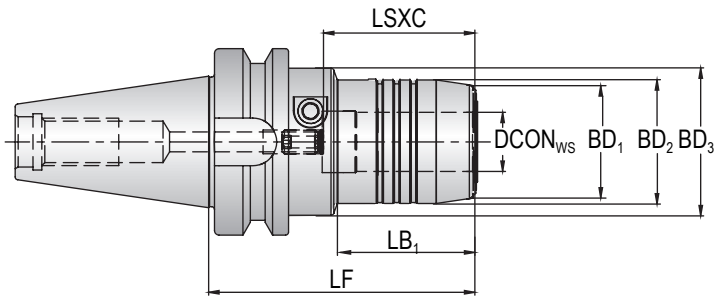
JISB6339 BT

FONHAE 方瀚

特点 Characteristic



- 综合跳动：≤0.003（4xd）
- Comprehensive runout≤0.003mm（4xd）
- 一般六角扳手即可实现快速换刀
- A general hex wrench can achieve quick insert rotation
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计，标配轴向调整螺钉
- Internal water design, equipped with axial adjustment screws.
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 可搭配液压卡簧实现变径
- Can be combined with hydraulic collets to achieve variable diameter



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)							 螺钉 Screw	 卡簧 Collets
		DCON _{WS}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁		
BT30-HCM06-50.8	30	6	23	26	46	50.8	37	15.6	HCSO05014C	-
-80	30	6	22	26	50	80	37	33	HCSO05014C	-
BT30-HCM08-50.8	30	8	25	28	46	50.8	37	15.6	HCSO06014C	-
-80	30	8	24	28	50	80	37	33	HCSO06014C	-
BT30-HCM10-50.8	30	10	27	30	46	50.8	41	15.6	HCSO08014C	-
-80	30	10	26	30	50	80	41	34	HCSO08014C	-
BT30-HCM12-50.8	30	12	29	32	46	50.8	46	15.6	HCSO08014C	HC12
-90	30	12	28	32	50	90	46	44	HCSO08014C	-
BT30-HCM14-90	30	14	30	34	50	90	46	40	HCSO08014C	-
BT30-HCM16-90	30	16	34	38	50	90	49	50	HCSO08014C	-
BT30-HCM18-90	30	18	36	40	50	90	49	47	HCSO08014C	-
BT30-HCM20-90	30	20	38	42	50	90	51	50	HCSO08014C	HC20
BT40-HCM06-90	40	6	22	26	50	90	37	43	HCSO05014C	-
-120	40	6	22	26	50	120	37	73	HCSO05014C	-
-150	40	6	22	26	50	150	37	103	HCSO05014C	-
-200	40	6	22	26	50	200	37	153	HCSO05014C	-
BT40-HCM08-90	40	8	24	28	50	90	37	44.5	HCSO06014C	-
-120	40	8	24	28	50	120	37	74.5	HCSO06014C	-
-150	40	8	24	28	50	150	37	104.5	HCSO06014C	-
-200	40	8	24	28	50	200	37	154.5	HCSO06014C	-
BT40-HCM10-90	40	10	26	30	50	90	41	44.5	HCSO08014C	-
-120	40	10	26	30	50	120	41	74.5	HCSO08014C	-
-150	40	10	26	30	50	150	41	104.5	HCSO08014C	-
-200	40	10	26	30	50	200	41	154.5	HCSO08014C	-
BT40-HCM12-90	40	12	28	32	50	90	46	44.5	HCSO08014C	HC12
-120	40	12	28	32	50	120	46	74.5	HCSO08014C	HC12
-150	40	12	28	32	50	150	46	104.5	HCSO08014C	HC12
-200	40	12	28	32	50	200	46	154.5	HCSO08014C	HC12
BT40-HCM14-90	40	14	30	34	50	90	46	44.5	HCSO08014C	-
-150	40	14	30x	34	50	150	46	104.5	HCSO08014C	-
BT40-HCM16-90	40	16	34	38	50	90	49	47.5	HCSO08014C	-
-120	40	16	34	38	50	120	49	77.5	HCSO08014C	-
-150	40	16	34	38	50	150	49	107.5	HCSO08014C	-
-200	40	16	34	38	50	200	49	157.5	HCSO08014C	-
BT40-HCM18-90	40	18	36	40	50	90	49	47.5	HCSO08014C	-
-150	40	18	36	40	50	150	49	107.5	HCSO08014C	-
BT40-HCM20-90	40	20	38	42	50	90	51	47.5	HCSO08014C	HC20
-120	40	20	38	42	50	120	51	77.5	HCSO08014C	HC20
-150	40	20	38	42	50	150	51	107.5	HCSO08014C	HC20
-200	40	20	38	42	50	200	51	157.5	HCSO08014C	HC20
BT40-HCM25-83	40	25	53	57	62	83	57	44	HCSO12014C	-
BT40-HCM32-83	40	32	60	63	80	83	61	24.9	HCSO12014C	HC32

*液压卡簧资料参见 82 页。

*附件需单独订购。

*如需其他规格型号产品请与本公司联系。

*Refer to page 82 for hydraulic collets information.

*Accessories need to be ordered separately.

*For other specifications or models, please contact our company.

附件 Accessories	DCON _{WS}						
	6	8	10	12	16	20	32
 扳手 Hex Wrench	TS5						TS6

液压刀柄

Hydraulic Chucks

JISB6339 BT

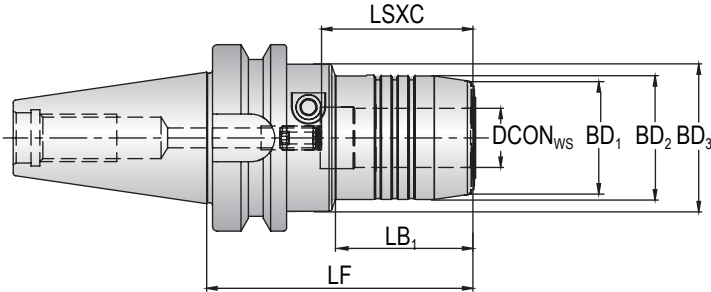
FONHAE 方瀚

特点 Characteristic



- 综合跳动：≤0.003（4xd）
- Comprehensive runout≤0.003mm（4xd）
- 一般六角扳手即可实现快速换刀
- A general hex wrench can achieve quick insert rotation
- 要求刀具柄部公差h6
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- 内通水设计，标配轴向调整螺钉
- Internal water design, equipped with axial adjustment screws.
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm

可搭配液压卡簧实现变径
 Can be combined with hydraulic collets to achieve variable diameter



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)									卡簧 Collets
		DCON _{ws}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁			
BT50-HCM06-90	50	6	22	26	50	90	37	29.5	HCSO05014C	-	-
-150	50	6	22	26	50	150	37	89.5	HCSO05014C	-	-
BT50-HCM08-90	50	8	24	28	50	90	37	30	HCSO06014C	-	-
-150	50	8	24	28	50	150	37	80	HCSO06014C	-	-
BT50-HCM10-90	50	10	26	30	50	90	41	31	HCSO08014C	-	-
-150	50	10	26	30	50	150	41	93	HCSO08014C	-	-
BT50-HCM12-90	50	12	28	32	44.5	90	46	34	HCSO08014C	HC12	HC12
-120	50	12	28	32	44.5	120	46	64	HCSO08014C	HC12	HC12
150	50	12	28	32	50	150	46	94	HCSO08014C	HC12	HC12
200	50	12	28	32	50	200	46	145	HCSO08014C	HC12	HC12
BT50-HCM14-90	50	14	30	34	44.5	90	46	34	HCSO08014C	-	-
-100	50	14	30	34	44.5	100	46	44	HCSO08014C	-	-
BT50-HCM16-90	50	16	34	38	44.5	90	49	34	HCSO08014C	-	-
-100	50	16	34	38	44.5	100	49	44	HCSO08014C	-	-
BT50-HCM18-90	50	18	36	40	44.5	90	49	34	HCSO08014C	-	-
-100	50	18	36	40	44.5	100	49	44	HCSO08014C	-	-
BT50-HCM20-90	50	20	38	42	44.5	90	51	34	HCSO08014C	HC20	HC20
-105	50	20	38	42	44.5	105	51	47.5	HCSO08014C	HC20	HC20
-120	50	20	38	42	44.5	120	51	62.5	HCSO08014C	HC20	HC20
-150	50	20	38	42	50	150	51	92.5	HCSO08014C	HC20	HC20
-200	50	20	38	42	50	200	51	142.5	HCSO08014C	HC20	HC20
BT50-HCM25-90	50	25	53	57	66	90	57	34	HCSO12014C	-	-
-110	50	25	53	57	66	110	57	54	HCSO12014C	-	-
BT50-HCM32-90	50	32	60	64	72	90	61	34	HCSO12014C	HC32	HC32
-115	50	32	60	64	72	115	46	59	HCSO12014C	HC32	HC32

* 液压卡簧资料参见 82 页

* 附件需单独订购。

* 如需其他规格型号产品请与本公司联系。

*Refer to page 82 for hydraulic collets information.

*Accessories need to be ordered separately.

*For other specifications or models, please contact our company.

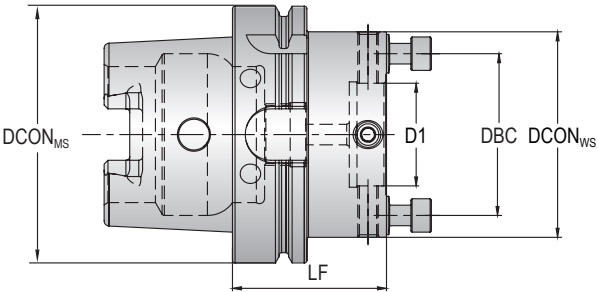
附件 Accessories	DCON _{ws}						
	6	8	10	12	16	20	32
扳手 Hex Wrench	TS5						TS6

HSK 可调刀柄主柄

HSK Adjustable Hydraulic Chuck Master Module

DIN69893 HSK

FONHAE 方瀚



型号 Model		尺寸 Dimensions (mm)						扳手 Wrench
		DCON _{ms}	DCON _{ws}	D1	DBC	LF		
HSK50A-DC70-65	HSK-50A	50	70	36	53	65	S5/S4	S5/S4
HSK50A-DC80-65	HSK-50A	50	80	40	63	65	S5/S4	S5/S4
HSK63A-DC70-65	HSK-63A	63	70	36	53	65	S5/S4	S5/S4
HSK63A-DC80-65	HSK-63A	63	80	40	63	65	S5/S4	S5/S4
HSK63A-DC100-70	HSK-63A	63	100	56	82	70	S6/S5	S6/S5
HSK100A-DC70-50	HSK-100A	100	70	36	53	50	S5/S4	S5/S4
HSK100A-DC80-50	HSK-100A	100	80	40	63	50	S5/S4	S5/S4
HSK100A-DC100-70	HSK-100A	100	100	56	82	70	S6/S5	S6/S5

* 液压卡簧资料参见 82 页。

* 附件需单独订购。

*Refer to page 82 for hydraulic collets information.

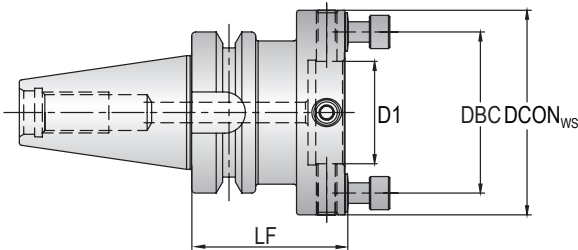
*Accessories need to be ordered separately.

备件 Spare Parts	DCON _{ws} =70	DCON _{ws} =80	DCON _{ws} =100
压紧螺钉 Screw	MS06020	MS06020	MS08025
调节螺钉 Screw	RS08016-B	RS08016-B	RS10020-B
附件 Accessories	DCON _{ms} =50	DCON _{ms} =63	DCON _{ms} =100
冷却液套管 Coolant tubes	TU-HSK50	TU-HSK63	TU-HSK100
扳手 Coolant tube Wrench	W-HSK50	W-HSK63	W-HSK100

BT 可调刀柄主柄

BT Adjustable Hydraulic Chuck Master Module

JIS B6339 BT

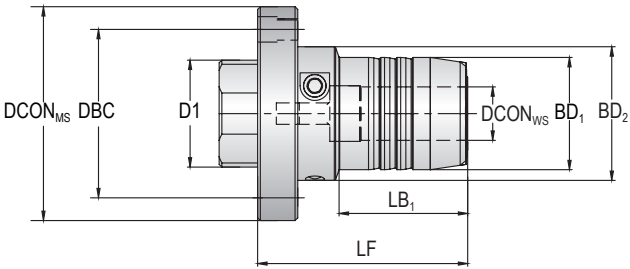


型号 Model JIS B6339-AD		尺寸 Dimensions (mm)			 扳手 Wrench
		DBC	DCON _{ws}	LF	
BT30-DC70-50	30	53	36	50	S4/S5
BT30-DC80-50	30	63	40	50	S4/S5
BT40-DC70-55	40	53	36	55	S4/S5
BT40-DC80-55	40	63	40	55	S4/S5
BT40-DC100-60	40	82	56	60	S5/S6
BT50-DC70-70	50	53	36	70	S4/S5
BT50-DC80-70	50	63	40	70	S4/S5
BT50-DC100-70	50	82	56	70	S5/S6

备件 Spare Parts	DCON _{ws} =70	DCON _{ws} =80	DCON _{ws} =100
压紧螺钉 Screw	MS06020	MS06020	MS08025
调节螺钉 Screw	RS08016-B	RS08016-B	RS10020-B

可调液压刀柄模块

Adjustable Hydraulic Chuck Module



型号 Model	尺寸 Dimensions (mm)										
	DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	LB ₁	LF	D1	DBC	螺钉 Screw	卡簧 Collets	扳手 Wrench
DC70-HCM06-80	70	6	26	50	30	80	36	53	HCSO05014C	-	TS5/S4
DC70-HCM08-80	70	8	28	50	30	80	36	53	HCSO06014C	-	TS5/S4
DC70-HCM10-80	70	10	30	50	35	80	36	53	HCSO08014C	-	TS5/S4
DC70-HCM12-85	70	12	32	50	40	85	36	53	HCSO08014C	HC12	TS5/S4
DC80-HCM06-60	80	6	26	50	24	60	40	63	HCSO05014C	-	TS5/S4
DC80-HCM08-60	80	8	28	50	25	60	40	63	HCSO06014C	-	TS5/S4
DC80-HCM10-70	80	10	30	50	35	70	40	63	HCSO08014C	-	TS5/S4
DC80-HCM12-80	80	12	32	50	44.5	70	40	63	HCSO08014C	HC12	TS5/S4
DC80-HCM16-80	80	16	38	50	46	80	40	63	HCSO08014C	-	TS5/S4
DC80-HCM20-80	80	20	42	50	47.5	80	40	63	HCSO08014C	HC20	TS5/S4
DC100-HCM12-80	100	12	35	50	46	80	56	82	HCSO08014C	HC12	TS5/S4
DC100-HCM16-80	100	16	38	50	47.5	80	56	82	HCSO08014C	-	TS5/S4
DC100-HCM20-80	100	20	42	50	47.5	80	56	82	HCSO08014C	HC20	TS5/S4
DC100-HCM25-90	100	25	57	63	59	90	56	82	HCSO12014C	-	TS6/S4
DC100-HCM32-90	100	32	64	75	58	90	56	82	HCSO12014C	HC32	TS6/S4

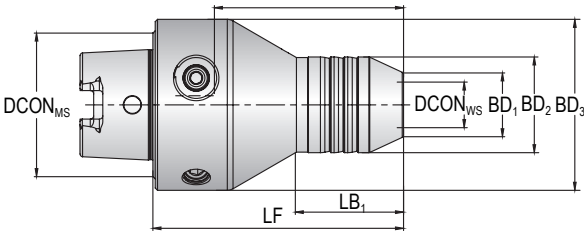
- *标准包装不含扳手，需另购。
- *需配合可调液压刀柄一起使用，详见 14 页。
- *可按客户要求定制特殊要求产品，具体请联系本公司。
- *The standard package does not include wrenches, which must be purchased separately.
- *Must be used in conjunction with an adjustable hydraulic handle, see 14 for details.
- *Customized products are available upon request, please contact us for details.

备件 Spare Parts	DCON _{ms} =70	DCON _{ms} =80	DCON _{ms} =100
调节块 Shim	ZAD095	ZAD095	ZAD095
调节螺钉 Screw	RS08008-B	RS08008-B	RS08008-B

HSK 工具磨液压刀柄

DIN69893 HSK

HSK Tool Grinding Hydraulic Chucks



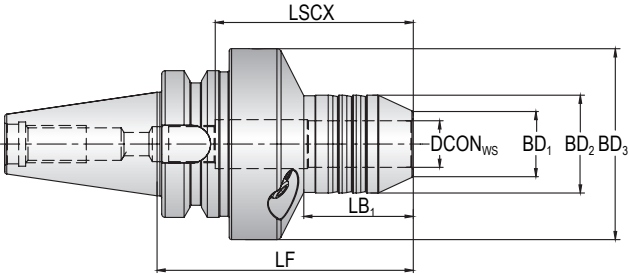
型号 Model		尺寸 Dimensions (mm)								 螺钉 Screw	 卡簧 Collets
		DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁		
HSK63C-HCM12-110M	HSK-A63	63	12	21.5	36.5	75	110	83	47	-	HC12
HSK63C-HCM20-110M	HSK-A63	63	20	28	42	75	110	83	47	-	HC20
HSK63C-HCM32-110M	HSK-A63	63	32	40	54	80	110	83	62.5	-	HC32

附件 Accessories	DCON _{WS}		
	12	20	30
扳手 Hex Wrench	TS5		

BT 工具磨液压刀柄

JISB6339 BT

BT Tool Grinding Hydraulic Chucks



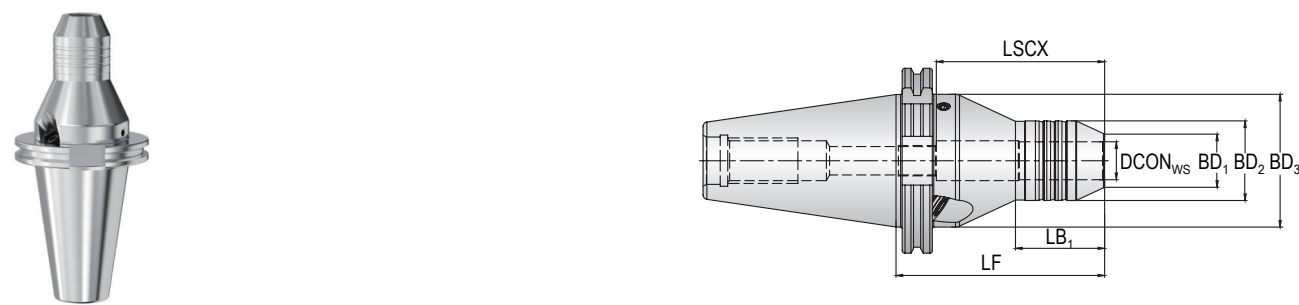
型号 Model		尺寸 Dimensions (mm)							 卡簧 Collets
		DCON _{WS}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁	
BT40-HCM12-110M	40	12	21.5	36.5	80	110	80	47	HC12
BT40-HCM20-110M	40	20	28	42	82	110	85	47	HC32

附件 Accessories	DCON _{WS}	
	12	20
扳手 Hex Wrench	TS5	

JT 工具磨液压刀柄

DIN69871 JT

JT Tool Grinding Hydraulic Chucks



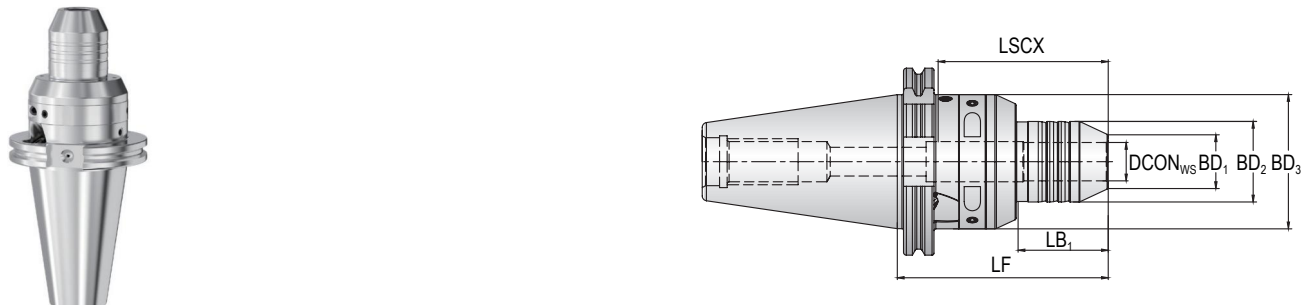
型号 Model		尺寸 Dimensions (mm)							 螺钉 Screw	 卡簧 Collets
		DCON _{ws}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁		
JT50-HCM12-110M	50	12	21.5	36.5	60	110	50	55	-	HC12
JT50-HCM20-110M	50	20	28	42	70	110	95	47	-	HC20
JT50-HCM32-110M	50	32	40	54	70	110	95	62.5	-	HC32

附件 Accessories	DCON _{ws}		
	12	20	30
扳手 Hex Wrench	TS5		

JT 工具磨可调液压刀柄

DIN69871 JT

JT Tool Grinding Adjustable Hydraulic Chucks



型号 Model		尺寸 Dimensions (mm)							 卡簧 Collets
		DCON _{ws}	BD ₁	BD ₂	BD ₃	LF	LSCX	LB ₁	
JT50-HCA12-110M	50	12	21.5	36.5	65.5	110	50	49	HC12
JT50-HCA20-110M	50	20	28	42	70.5	110	95	48	HC20
JT50-HCA32-115M	50	32	40	53.5	80.5	115	95	48	HC32

附件 Accessories	DCON _{ws}		
	12	20	30
扳手 Hex Wrench	TS5		

HSK-E 热装刀柄

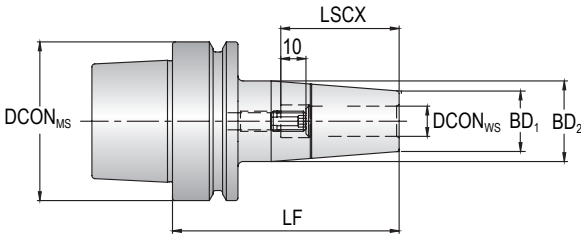
DIN69893 HSK-E

HSK-E Shrink Fit Chucks



特点 Characteristic

- 综合跳动: ≤ 0.003 (4xd)
- Comprehensive runout≤0.003mm (4xd)
- 特种耐热钢材质
- Special heat-resistant steel material
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计, 标配轴向调整螺钉^①
- Internal water design, equipped with axial adjustment screws.^①
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 与ESF系列热装机配合可夹持高速钢和硬质合金刀具
- Combined with the ESF series shrink fit machine, it can clamp high-speed steel and solid carbide tools.



型号 Model DIN69893		尺寸 Dimensions (mm)						 螺钉 Screw
		DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	LF	LSCX	
HSK40E-SFX03-60	HSK-E40	40	3	10	-	60	-	-
HSK40E-SFX04-60	HSK-E40	40	4	10	-	60	-	-
HSK40E-SFX05-60	HSK-E40	40	5	10	-	60	-	-
HSK40E-SFX06-80	HSK-E40	40	6	21	27	80	36	SO05014C
HSK40E-SF08-80	HSK-E40	40	8	21	27	80	36	SO06014C
HSK40E-SF10-80	HSK-E40	40	10	24	32	80	42	SO08014C
HSK40E-SF12-90	HSK-E40	40	12	24	32	90	47	SO08014C
HSK40E-SF14-90	HSK-E40	40	14	27	34	90	47	SO08014C
HSK40E-SF16-90	HSK-E40	40	16	27	34	90	50	SO12014C

*如需其它型式或规格的 HSK 类产品请与本公司联系。
*附件需单独订购。
*For other types or specifications of HSK products, please contact our company.
*Accessories need to be ordered separately.

- ① 3-5mm 端面通水设计, 无轴向调整螺钉。
① 3-5mm end face water design, no axial adjustment screw.

附件 Accessories	DCON _{WS}								
	3	4	5	6	8	10	12	14	16
 扳手 Hex Wrench	-			S2.5	S3	S4			S6
 冷却液套管 Coolant Tube	TU-HSK40								
 扳手 Coolant Tube Wrench	W-HSK40								

热装刀柄

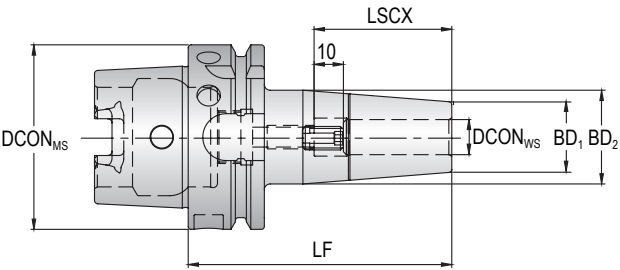
DIN69893 HSK-A

Shrink Fit Chucks



特点 Characteristic

- 综合跳动: ≤ 0.003 (4xd)
- Comprehensive runout≤0.003mm (4xd)
- 特种耐热钢材质
- Special heat-resistant steel material
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计, 标配轴向调整螺钉^①
- Internal water design, equipped with axial adjustment screws.^①
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 与ESF系列热装机配合可夹持高速钢和硬质合金刀具
- Combined with the ESF series shrink fit machine, it can clamp high-speed steel and solid carbide tools.



型号 Model DIN69893		尺寸 Dimensions (mm)						 螺钉 Screw
		DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	LF	LSCX	
HSK50A-SFX04-60	HSK-A50	50	4	10	-	60	-	-
HSK50A-SFX05-60	HSK-A50	50	5	10	-	60	-	-
HSK50A-SFX06-80	HSK-A50	50	6	21	27	80	36	SO05014C
HSK50A-SF08-80	HSK-A50	50	8	21	27	80	36	SO06014C
HSK50A-SF10-85	HSK-A50	50	10	24	32	85	42	SO08014C

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*附件需单独订购。
*For other types or specifications of HSK products, please contact our company.
*Accessories need to be ordered separately.

- ① 3-5mm 端面通水设计, 无轴向调整螺钉。
① 3-5mm end face water design, no axial adjustment screw.

附件 Accessories	DCON _{WS}				
	4	5	6	8	10
扳手 Hex Wrench	-		S2.5	S3	S4
冷却液套管 Coolant Tube	TU-HSK50				
扳手 Coolant Tube Wrench	W-HSK50				

热装刀柄

Shrink Fit Chucks

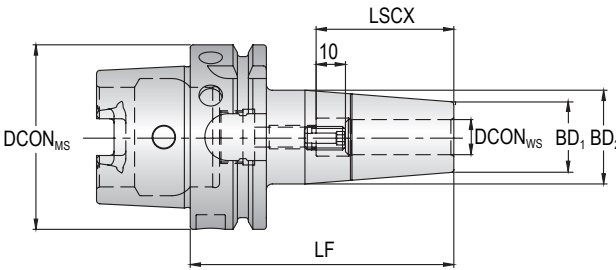
DIN69893 HSK-A

FONHAE 方瀚

特点 Characteristic



- 综合跳动: ≤ 0.003 (4xd)
- Comprehensive runout≤0.003mm (4xd)
- 特种耐热钢材质
- Special heat-resistant steel material
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计, 标配轴向调整螺钉^①
- Internal water design, equipped with axial adjustment screws.^①
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 与ESF系列热装机配合可夹持高速钢和硬质合金刀具
- Combined with the ESF series shrink fit machine, it can clamp high-speed steel and solid carbide tools.



型号 Model DIN69893		尺寸 Dimensions (mm)						 螺钉 Screw
		DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	LF	LSCX	
HSK63A-SFX03-80	HSK-A63	63	3	10	18.5	80	10	-
HSK63A-SFX04-80	HSK-A63	63	4	10	18.5	80	12	-
HSK63A-SFX05-80	HSK-A63	63	5	10	18.5	80	15	-
HSK63A-SFX06-80	HSK-A63	63	6	21	27	80	36	SO05014C
-120	HSK-A63	63	6	21	27	120	36	SO05014C
-160	HSK-A63	63	6	21	32	160	36	SO05014C
-200	HSK-A63	63	6	21	32	200	36	SO05014C
HSK63A-SF08-80	HSK-A63	63	8	21	27	80	36	SO06014C
-120	HSK-A63	63	8	21	27	120	36	SO06014C
-160	HSK-A63	63	8	21	32	160	36	SO06014C
-200	HSK-A63	63	8	21	32	200	36	SO06014C
HSK63A-SF10-85	HSK-A63	63	10	24	32	85	42	SO08014C
-120	HSK-A63	63	10	24	32	120	42	SO08014C
-160	HSK-A63	63	10	24	34	160	42	SO08014C
-200	HSK-A63	63	10	24	32	200	36	SO06014C
HSK63A-SF12-90	HSK-A63	63	12	24	32	90	47	SO08014C
-120	HSK-A63	63	12	24	32	120	47	SO08014C
-160	HSK-A63	63	12	24	34	160	47	SO08014C
-200	HSK-A63	63	12	24	34	200	47	SO08014C
HSK63A-SF14-90	HSK-A63	63	14	27	34	90	47	SO08014C
-120	HSK-A63	63	14	27	34	120	47	SO08014C
-160	HSK-A63	63	14	27	42	160	47	SO08014C
-200	HSK-A63	63	14	27	42	200	47	SO08014C
HSK63A-SF16-95	HSK-A63	63	16	27	34	95	50	SO12014C
-120	HSK-A63	63	16	27	34	120	50	SO12014C
-160	HSK-A63	63	16	27	42	160	50	SO12014C
-200	HSK-A63	63	16	27	42	200	50	SO12014C
HSK63A-SF18-95	HSK-A63	63	18	33	42	95	50	SO12014C
-120	HSK-A63	63	18	33	42	120	50	SO12014C
-160	HSK-A63	63	18	33	51	160	50	SO12014C
-200	HSK-A63	63	18	33	51	90	50	SO16016C
HSK63A-SF20-100	HSK-A63	63	20	33	42	100	52	SO16016C
-120	HSK-A63	63	20	33	42	120	52	SO16016C
-160	HSK-A63	63	20	33	51	160	52	SO16016C
-200	HSK-A63	63	20	33	51	200	52	SO16016C
HSK63A-SF25-115	HSK-A63	63	25	44	53	115	58	SO16016C
-160	HSK-A63	63	25	44	53	160	58	SO16016C
-200	HSK-A63	63	25	44	53	200	58	SO16016C
HSK63A-SF32-120	HSK-A63	63	32	44	53	120	58	SO16016C
-160	HSK-A63	63	32	44	53	160	58	SO16016C
-200	HSK-A63	63	32	44	53	200	58	SO16016C

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*附件需单独订购。

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*Accessories need to be ordered separately.

- ① 3-5mm 端面通水设计, 无轴向调整螺钉。
- ① 3-5mm end face water design, no axial adjustment screw.

附件 Accessories	DCON _{WS}												
	3	4	5	6	8	10	12	14	16	18	20	25	32
扳手 Hex Wrench	-	-	-	S2.5	S3	S4	S4	S4	S6	S6	S8	S8	S8
冷却液套管 Coolant Tube	TU-HSK63												
扳手 Coolant Tube Wrench	W-HSK63												

热装刀柄

Shrink Fit Chucks

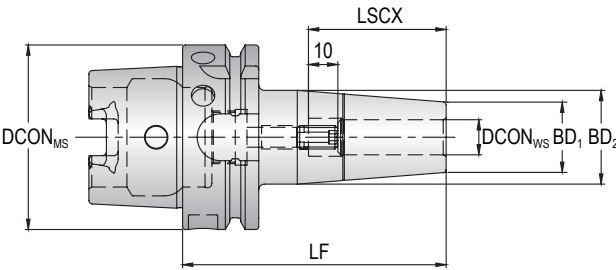
DIN69893 HSK-A

FONHAE 方瀚

特点 Characteristic



- 综合跳动: ≤ 0.003 (4xd)
- Comprehensive runout≤0.003mm (4xd)
- 特种耐热钢材质
- Special heat-resistant steel material
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计, 标配轴向调整螺钉^①
- Internal water design, equipped with axial adjustment screws.^①
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 与ESF系列热装机配合可夹持高速钢和硬质合金刀具
- Combined with the ESF series shrink fit machine, it can clamp high-speed steel and solid carbide tools.



型号 Model DIN69893		尺寸 Dimensions (mm)						 螺钉 Screw
		DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	LF	LSCX	
HSK100A-SFX06-85	HSK-A100	100	6	21	27	85	36	SO05014C
-120	HSK-A100	100	6	21	27	120	36	SO05014C
-160	HSK-A100	100	6	21	32	160	36	SO05014C
-200	HSK-A100	100	6	21	32	200	36	SO05014C
HSK100A-SF08-85	HSK-A100	100	8	21	27	85	36	SO06014C
-120	HSK-A100	100	8	21	27	120	36	SO06014C
-160	HSK-A100	100	8	21	32	160	36	SO06014C
-200	HSK-A100	100	8	21	32	200	36	SO06014C
HSK100A-SF10-90	HSK-A100	100	10	24	32	90	42	SO08014C
-120	HSK-A100	100	10	24	32	120	42	SO08014C
-160	HSK-A100	100	10	24	34	160	42	SO08014C
-200	HSK-A100	100	10	24	34	200	42	SO08014C
HSK100A-SF12-95	HSK-A100	100	12	24	32	95	47	SO08014C
-120	HSK-A100	100	12	24	32	120	47	SO08014C
-160	HSK-A100	100	12	24	34	160	47	SO08014C
-200	HSK-A100	100	12	24	34	200	47	SO08014C
HSK100A-SF14-95	HSK-A100	100	14	27	34	95	47	SO08014C
-120	HSK-A100	100	14	27	34	120	47	SO08014C
-160	HSK-A100	100	14	27	42	160	47	SO08014C
-200	HSK-A100	100	14	27	42	200	47	SO08014C
HSK100A-SF16-100	HSK-A100	100	16	27	34	100	50	SO12014C
-120	HSK-A100	100	16	27	34	120	50	SO12014C
-160	HSK-A100	100	16	27	42	160	50	SO12014C
-200	HSK-A100	100	16	27	42	200	50	SO12014C
HSK100A-SF18-100	HSK-A100	100	18	33	42	100	50	SO12014C
-120	HSK-A100	100	18	33	42	120	50	SO12014C
-160	HSK-A100	100	18	33	51	160	50	SO12014C
-200	HSK-A100	100	18	33	51	200	50	SO12014C
HSK100A-SF20-105	HSK-A100	100	20	33	42	105	52	SO16016C
-120	HSK-A100	100	20	33	42	120	52	SO16016C
-160	HSK-A100	100	20	33	51	160	52	SO16016C
-200	HSK-A100	100	20	33	51	200	52	SO16016C
HSK100A-SF25-115	HSK-A100	100	25	44	53	115	58	SO16016C
-160	HSK-A100	100	25	44	60	160	58	SO16016C
-200	HSK-A100	100	25	44	60	200	58	SO16016C
HSK100A-SF32-120	HSK-A100	100	32	44	53	120	58	SO16016C
-160	HSK-A100	100	32	44	60	160	58	SO16016C
-200	HSK-A100	100	32	44	60	200	58	SO16016C

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*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.
*Accessories need to be ordered separately.

附件 Accessories	DCON _{WS}												
	3	4	5	6	8	10	12	14	16	18	20	25	32
扳手 Hex Wrench	-	-	-	S2.5	S3	S4	S4	S4	S6	S6	S8	S8	S8
冷却液套管 Coolant Tube	TU-HSK100												
扳手 Coolant Tube Wrench	W-HSK100												

热装刀柄

Shrink Fit Chucks

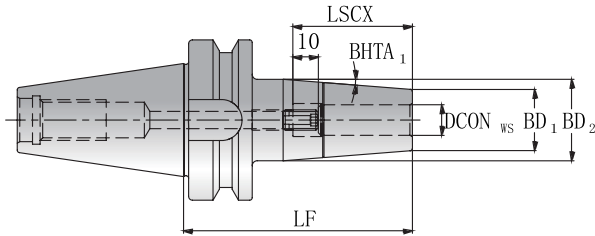
JISB6339 BT

FONHAE 方瀚

特点 Characteristic



- 综合跳动: ≤ 0.003 (4xd)
- Comprehensive runout≤0.003mm (4xd)
- 特种耐热钢材质
- Special heat-resistant steel material
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计, 标配轴向调整螺钉^①
- Internal water design, equipped with axial adjustment screws.^①
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 与ESF系列热装机配合可夹持高速钢和硬质合金刀具
- Combined with the ESF series shrink fit machine, it can clamp high-speed steel and solid carbide tools.



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)						 螺钉 Screw
		DCON _{ws}	BD ₁	BD ₂	LF	LSCX	BHTA ₁	
BT30-SFX03-60	30	3	10	16	60	60	4.5	-
BT30-SFX04-60	30	4	10	16	60	12	4.5	-
BT30-SFX05-60	30	5	10	16	60	15	4.5	-
BT30-SFX06-80	30	6	21	27	80	36	4.5	SO05014C
-105	30	6	21	27	105	36	4.5	SO05014C
-120	30	6	21	27	120	36	4.5	SO05014C
BT30-SF08-80	30	8	21	27	80	36	4.5	SO06014C
-105	30	8	21	27	105	36	4.5	SO06014C
-120	30	8	21	27	120	36	4.5	SO06014C
BT30-SF10-80	30	10	24	32	80	42	4.5	SO08014C
-105	30	10	24	32	105	42	4.5	SO08014C
-120	30	10	24	32	120	42	4.5	SO08014C
BT30-SF12-80	30	12	24	32	80	47	4.5	SO08014C
-105	30	12	24	32	105	47	4.5	SO08014C
-120	30	12	24	32	120	47	4.5	SO08014C
BT30-SF14-80	30	14	27	34	80	47	4.5	SO08014C
-105	30	14	27	34	105	47	4.5	SO08014C
-120	30	14	27	34	120	47	4.5	SO08014C
BT30-SF16-80	30	16	27	34	80	50	4.5	SO12014C
-105	30	16	27	34	105	50	4.5	SO12014C
-120	30	16	27	34	120	50	4.5	SO12014C

*附件需单独订购。
*Accessories need to be ordered separately.
① 3-5mm 端面通水设计, 无轴向调整螺钉。
① 3-5mm end face water design, no axial adjustment screw.

附件 Accessories	DCON _{ws}								
	3	4	5	6	8	10	12	14	16
扳手 Hex Wrench	-	-	-	S2.5	S3	S4	S4	S4	S6

热装刀柄

Shrink Fit Chucks

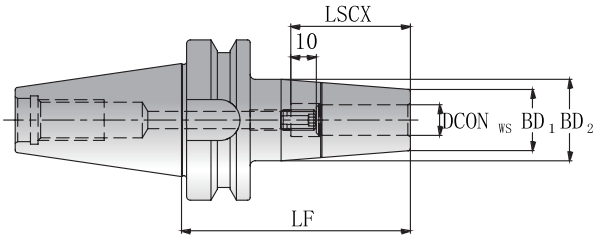
JISB6339 BT

FONHAE 方瀚

特点 Characteristic



- 综合跳动: ≤ 0.003 (4xd)
- Comprehensive runout≤0.003mm (4xd)
- 特种耐热钢材质
- Special heat-resistant steel material
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计, 标配轴向调整螺钉^①
- Internal water design, equipped with axial adjustment screws.^①
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 与ESF系列热装机配合可夹持高速钢和硬质合金刀具
- Combined with the ESF series shrink fit machine, it can clamp high-speed steel and solid carbide tools.



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)					 螺钉 Screw
		DCON _{ws}	BD ₁	BD ₂	LF	LSCX	
BT40-SFX03-80	40	3	10	18	80	10	-
BT40-SFX04-80	40	4	10	18	80	12	-
BT40-SFX05-80	40	5	10	18	80	15	-
BT40-SFX06-90	40	6	21	27	90	36	SO05014C
-120	40	6	21	27	120	36	SO05014C
-160	40	6	21	32	160	36	SO05014C
-200	40	6	21	32	200	36	SO05014C
BT40-SF08-90	40	8	21	27	90	36	SO06014C
-120	40	8	21	27	120	36	SO06014C
-160	40	8	21	32	160	36	SO06014C
-200	40	8	21	32	200	36	SO06014C
BT40-SF10-90	40	10	24	32	90	42	SO08014C
-120	40	10	24	32	120	42	SO08014C
-160	40	10	24	34	160	42	SO08014C
-200	40	10	24	34	200	42	SO08014C
BT40-SF12-90	40	12	24	32	90	47	SO08014C
-120	40	12	24	32	120	47	SO08014C
-160	40	12	24	34	160	47	SO08014C
-200	40	12	24	34	200	47	SO08014C
BT40-SF14-90	40	14	27	34	90	47	SO08014C
-120	40	14	27	34	120	47	SO08014C
-160	40	14	27	42	160	47	SO08014C
-200	40	14	27	42	200	47	SO08014C
BT40-SF16-90	40	16	27	34	90	50	SO12014C
-120	40	16	27	34	120	50	SO12014C
-160	40	16	27	42	160	50	SO12014C
-200	40	16	27	42	200	50	SO12014C
BT40-SF18-90	40	18	33	42	90	50	SO12014C
-120	40	18	33	42	120	50	SO12014C
-160	40	18	33	51	160	50	SO12014C
-200	40	18	33	51	200	50	SO12014C
BT40-SF20-90	40	20	33	42	90	52	SO16016C
-120	40	20	33	42	120	52	SO16016C
-160	40	20	33	51	160	52	SO16016C
-200	40	20	33	51	200	52	SO16016C
BT40-SF25-90	40	25	44	53	90	58	SO16016C
-100	40	25	44	53	100	58	SO16016C
-120	40	25	44	53	120	58	SO16016C
-160	40	25	44	60	160	58	SO16016C
-200	40	25	44	60	200	58	SO16016C
BT40-SF32-100	40	32	44	60	100	58	SO16016C
-160	40	32	44	60	160	58	SO16016C

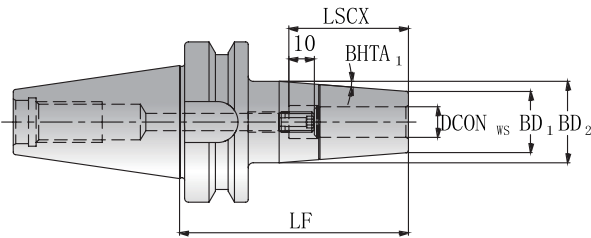
*附件需单独订购。
*Accessories need to be ordered separately.
① 3-5mm 端面通水设计, 无轴向调整螺钉。
① 3-5mm end face water design, no axial adjustment screw.

附件 Accessories	DCON _{WS}													
	3	4	5	6	8	10	12	14	16	18	20	25	32	
扳手 Hex Wrench	-	-	-	\$2.5	\$3	\$4	\$4	\$4	\$6	\$6	\$8	\$8	\$8	

特点 Characteristic



- 综合跳动: ≤ 0.003 (4xd)
- Comprehensive runout≤0.003mm (4xd)
- 特种耐热钢材质
- Special heat-resistant steel material
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank
- 内通水设计, 标配轴向调整螺钉^①
- Internal water design, equipped with axial adjustment screws.^①
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm
- 与ESF系列热装机配合可夹持高速钢和硬质合金刀具
- Combined with the ESF series shrink fit machine, it can clamp high-speed steel and solid carbide tools.



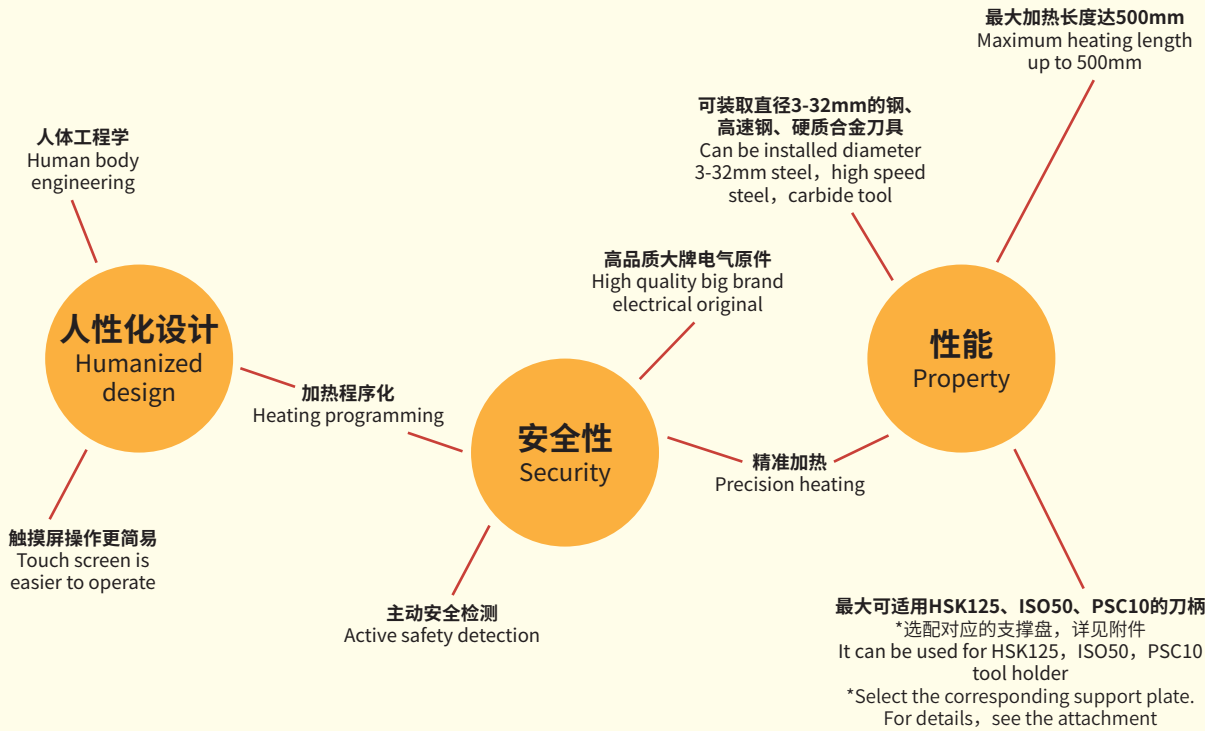
型号 Model JIS B6339-AD		尺寸 Dimensions (mm)					 螺钉 Screw
		DCON _{ws}	BD ₁	BD ₂	LF	LSCX	
BT50-SFX06-100	50	6	21	27	100	36	SO05014C
-120	50	6	21	27	120	36	SO05014C
-160	50	6	21	32	160	36	SO05014C
-200	50	6	21	32	200	36	SO05014C
BT50-SF08-100	50	8	21	27	100	36	SO06014C
-120	50	8	21	27	120	36	SO06014C
-160	50	8	21	32	160	36	SO06014C
-200	50	8	21	32	200	36	SO06014C
BT50-SF10-100	50	10	24	32	100	42	SO08014C
-120	50	10	24	32	120	42	SO08014C
-160	50	10	24	34	160	42	SO08014C
-200	50	10	24	34	200	42	SO08014C
BT50-SF12-100	50	12	24	32	100	47	SO08014C
-120	50	12	24	32	120	47	SO08014C
-160	50	12	24	34	160	47	SO08014C
-200	50	12	24	34	200	47	SO08014C
BT50-SF14-100	50	14	27	34	100	47	SO08014C
-120	50	14	27	34	120	47	SO08014C
-160	50	14	27	42	160	47	SO08014C
-200	50	14	27	42	200	47	SO08014C
BT50-SF16-100	50	16	27	34	100	50	SO12014C
-120	50	16	27	34	120	50	SO12014C
-160	50	16	27	42	160	50	SO12014C
-200	50	16	27	42	200	50	SO12014C
BT50-SF18-100	50	18	33	42	100	50	SO12014C
-120	50	18	33	42	120	50	SO12014C
-160	50	18	33	51	160	50	SO12014C
-200	50	18	33	51	200	50	SO12014C
BT50-SF20-100	50	20	33	42	100	52	SO16016C
-120	50	20	33	42	120	52	SO16016C
-160	50	20	33	51	160	52	SO16016C
-200	50	20	33	51	200	52	SO16016C
BT50-SF25-110	50	25	44	53	110	58	SO16016C
-135	50	25	44	53	135	58	SO16016C
-160	50	25	44	60	160	58	SO16016C
-200	50	25	44	60	200	58	SO16016C
BT50-SF32-110	50	32	44	53	110	58	SO16016C
-135	50	32	44	53	135	58	SO16016C
-160	50	32	44	60	160	58	SO16016C
-200	50	32	44	60	200	58	SO16016C

* 附件需单独订购。
*Accessories need to be ordered separately.

① 3-5mm 端面通水设计, 无轴向调整螺钉。
① 3-5mm end face water design, no axial adjustment screw.

附件 Accessories	DCON _{ws}									
	6	8	10	12	14	16	18	20	25	32
扳手 Hex Wrench	S2.5	S3	S4	S4	S4	S6	S6	S8	S8	S8

Shrink Fit Machine Solutions
热装机解决方案



ESF-1300热装机/ESF-1300 Shrink Fit machine

FONHAE方瀚

- ESF-1300电磁热装机是为热装刀柄设计的专用加热装置，它能在数秒内完成刀具的装取，选配循环式冷却模块后可快速完成刀柄与刀具的冷却，使热装刀柄的使用更安全、简单、绿色。配合我司SF系列热装刀柄可快速完成硬质合金、高速钢及钢制品刀具的装取。
- 本设备采用模块化设计，为您提供最大的灵活性，降低您使用热装刀柄的入门成本并可在后续通过添加合适的附件，提升您的使用舒适度。
- ESF-1300 electromagnetic shrink fit machine is a special heating device designed for shrink fit chucks, which can complete the tool loading in a few seconds, and the circulating cooling module can quickly complete the cooling of the chuck and the tool, making the use of the hot loading tool handle safer, simpler and greener. With our SF series shrink fit chuck can quickly complete the installation of carbide, high-speed steel and steel products tools.
- The modular design of the device provides you with maximum flexibility, reducing your entry cost of using the shrink fit chuck and increasing your comfort by adding suitable accessories later on.

I 热装机加热模块 Shrink fit machine heating module

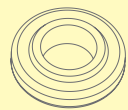
- 型号 Model: ESF-1300SM
电源 Power Supply: AC 3P 360~440V 25A
功率 Power: 13KW
尺寸 Size (LxWxH) : 645x570x965
交付包含 Delivery includes:
- 加热主机（含固定线圈）Heating host(including fixed coil)
 - 5* 止动盘，适合装取 Φ3-32mm 的刀具 5* stop disks, suitable for loading Φ3-32mm tool
 - 2* 支撑盘（可在附件中指定）2* support plates (can be specified in the accessories)
 - 支撑座 Support seat
 - 操作说明书 Operating instruction

II 可选附件 - 循环式冷却模块 Optional accessories - Circulating cooling module

- 型号 Model: ESF-1300CR
电源 Power Supply: AC 1P 220~240V 5A
功率 Power: 900W
- II-A 尺寸 Size (LxWxH) : 385x550x645
II-B 尺寸 Size (LxWxH) : 580x290x470
交付包含 Delivery includes:
- 带有后面板的冷却机箱（II -A）Cooling case with rear panel
 - 5* 冷却水套，适合 Φ6-32mm 标准热装刀柄，其余刀柄可通过定制冷却转换套实现快速冷却 5* cooling water jacket, suitable for Φ6-32mm standard shrink fit chuck, the rest of the chuck can be customized cooling transfer sleeve to achieve rapid cooling
 - 水冷机（II -B）Water cooler

III 可选附件 - 工作推车 Optional accessories - Work cart

- 型号 Model: ESF-1300CA
尺寸 Size (LxWxH) : 1200x600x800
交付包含 Delivery includes:
- 防静电工作台面 Anti-static work surface
 - 可移动车架 Movable frame
 - 组合抽屉 Combination drawer

附件（单独订购）Accessories（order separately）							
 支撑盘 Support plate	刀柄接口 Chucks interface	ISO30	ISO40	ISO50			
	订货型号 Order number	DBSF-ISO30	DBSF-ISO40	DBSF-ISO50			
	刀柄接口 Chucks interface	HSK40	HSK50	HSK63	HSK80	HSK100	HSK125
	订货型号 Order number	DBSF-HSK40	DBSF-HSK50	DBSF-HSK63	DBSF-HSK80	DBSF-HSK100	DBSF-HSK125
	刀柄接口 Chucks interface	PSC4	PSC5	PSC6	PSC8	PSC8X	PSC10
	订货型号 Order number	DBSF-PSC4	DBSF-PSC5	DBSF-PSC6	DBSF-PSC8	DBSF-PSC8X	DBSF-PSC10

不锈钢热装刀柄/Stainless steel Shrink Fit Chucks

FONHAE方瀚

一体型/One piece type

分体型/Two pieces type

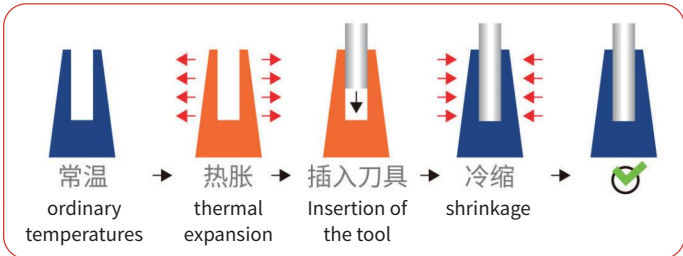


*如果您需要一体型，请联系方瀚，并提出您的需求。
*If you need a one-piece type, contact Fonhae with your needs.

- 刀柄材料采用了热装专用特殊不锈钢，在五轴加工、微细精密加工、重切削加工等多种加工场景都可发挥其优异性，在提高加工精度、延长刀具寿命、降低成本方面也能发挥重大作用。
- The chuck material adopts special stainless steel for shrink fit, which can play its advantages in various machining scenarios such as five axis machining, micro precision machining, and heavy cutting machining. It can also play a significant role in improving machining accuracy, extending tool life, and reducing costs.

高刚性

- 细长的本体形状有效避免了刀柄与工件、夹具之间干涉。
 - 可将刀具突出长度放至最短，降低了加工时的让刀、振刀、延长了刀具寿命。大幅提高精加工面的光洁度。
- High rigidity
- Slim body shape avoids interference between, workpiece and fixture.
 - The tool protruding length can be minimized, which reduces the cutter relieving and vibration during machining and prolongs the life of the tool. Dramatically improves the finish of finishing surfaces.



高精度

- 完全依靠本体夹持，同一刀柄重复使用可达2000次以上。
- High precision
- Completely dependent on the body clamping, the same chuck can be reused up to 2,000 times or more.

高夹持力

- 夹持力是弹簧夹头刀柄的3倍。
- High clamping force
- The clamping force is 3 times higher than that of collet chuck.



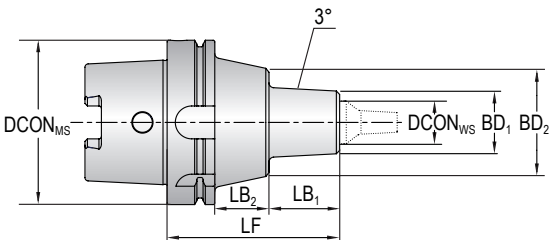
不锈钢热装刀柄/Stainless steel Shrink Fit Chucks



分体式不锈钢热装刀柄

2 Piece Type Stainless Shrink Fit chucks

DIN69893 HSK

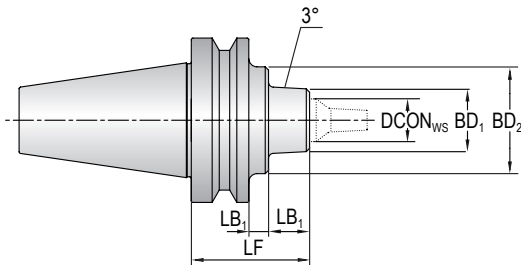


型号 Model JIS B6339-AD		尺寸 Dimensions (mm)						
		DCON _{MS}	DCON _{WS}	LF	BD ₁	LB ₁	LB ₂	BD ₂
HSK50A-STK12-75	HSK-A50	50	26	75	38	49	-	-
HSK63A-STK12-75	HSK-A63	63	26	75	38	49	-	-
-135	HSK-A63	63	26	135	38	109	-	-
HSK100A-STK12-105	HSK-A100	100	26	105	38	43	33	65
-135	HSK-A100	100	26	135	41	73	33	65
-225	HSK-A100	100	26	225	38	163	33	65
-315	HSK-A100	100	26	315	38	253	33	65

分体式不锈钢热装刀柄

2 Piece Type Stainless Shrink Fit chucks

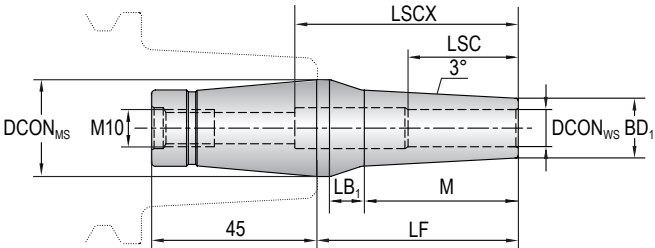
JISB6339 BT



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)					
		DCON _{ws}	LF	BD ₁	LB ₁	LB ₂	BD ₂
BT30-STK12-35-MAS1	30	26	35	38	13	-	-
BT30-STK12-35-MAS2	30	26	35	38	13	-	-
BT40-STK12-45	40	26	45	38	18	-	-
-75	40	26	75	38	48	-	-
BT50-STK12-75	50	26	75	38	25	12	65
-225	50	26	225	38	175	12	65
-315	50	26	315	38	225	52	65

CR 筒夹

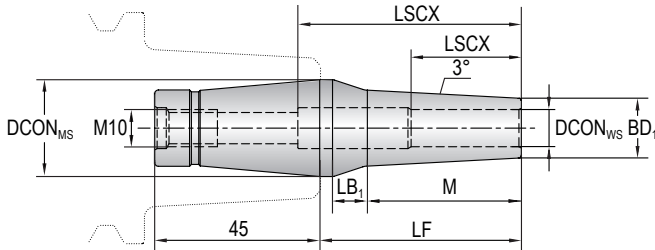
CR Collets



型号 Model	尺寸 Dimensions (mm)							
	DCON _{ms}	DCON _{ws}	BD ₁	LF	M	LB1	LSC	LSCX
CR12-ST04-55	4	26	10	35	22	9.5	12	80
-80	4	26	10	80	67	9.5	12	105
-110	4	26	10	110	97	9.5	12	135
CR12-ST06-55	6	26	12	35	22	9.5	18	80
-80	6	26	12	80	67	9.5	18	105
-110	6	26	12	110	97	9.5	18	135
CR12-ST08-55	8	26	14	55	42	9.5	25	80
-80	8	26	14	80	67	9.5	25	105
-110	8	26	14	110	97	9.5	25	135
CR12-ST10-55	10	26	16	55	42	9.5	30	60
-80	10	26	16	80	67	9.5	30	60
-110	10	26	16	110	97	9.5	30	60
CR12-ST12-55	12	26	20	55	42	9.5	30	60
-80	12	26	20	80	-	-	30	60
-110	12	26	20	110	-	-	30	60

CS 筒夹

CS Collets



型号 Model	尺寸 Dimensions (mm)						
	DCON _{MS}	BD ₁	LF	M	LB1	LSC	LSCX
CS12-ST04-55	4	7	55	42	9.5	12	80
-80	4	7	80	67	9.5	12	105
-110	4	7	110	97	9.5	12	135
CS12-ST06-55	6	9	55	42	9.5	18	80
-80	6	9	80	67	9.5	18	105
-110	6	9	110	97	9.5	18	135
CS12-ST08-55	8	11	55	42	9.5	25	80
-80	8	11	80	67	9.5	25	105
-110	8	11	110	97	9.5	25	135
CS12-ST10-55	10	13	55	42	9.5	30	60
-80	10	13	80	67	9.5	30	60
-110	10	13	110	97	9.5	30	60
CS12-ST12-55	12	15	55	42	9.5	30	60
-80	12	15	80	67	9.5	30	60
-110	12	15	110	-	-	30	60

ER 弹簧夹头刀柄

ER Collet Chucks

DIN69893 HSK-A



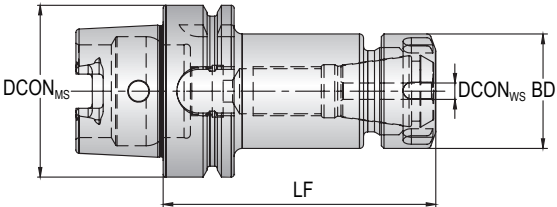
特点 Characteristic

- 本体内锥孔对柄部跳动≤ 0.003mm
- The runout of the taper hole to the shank in the tool is ≤ 0.003mm
- 螺母特殊表面处理，提高夹持稳定性
- Special surface treatment of nuts to improve clamping stability
- 内通水设计，可选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm



CN..HS

CN..B



型号 Model DIN69893		尺寸 Dimensions (mm)				 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{MS}	DCON _{WS}	BD	LF			
HSK63A-ER11-75	HSK-A63	63	1.0~7	19	75	CN11HS	SER11C	ER11
-80	HSK-A63	63	1.0~7	19	90	CN11HS	SER11C	ER11
-110	HSK-A63	63	1.0~7	19	120	CN11HS	SER11C	ER11
-160	HSK-A63	63	1.0~7	19	160	CN11HS	SER11C	ER11
HSK63A-ER16-80	HSK-A63	63	1.0~10	28	80	CN16HS	SER16C	ER16
-90	HSK-A63	63	1.0~10	28	90	CN16HS	SER11C	ER16
-100	HSK-A63	63	1.0~10	28	100	CN16HS	SER16C	ER16
-120	HSK-A63	63	1.0~10	28	120	CN16HS	SER16C	ER16
-160	HSK-A63	63	1.0~10	28	160	CN16HS	SER16C	ER16
-200	HSK-A63	63	1.0~10	28	200	CN16HS	SER16C	ER16
HSK63A-ER20-80	HSK-A63	63	1.0~13	34	80	CN20HS	SER20C	ER20
-90	HSK-A63	63	1.0~13	34	90	CN20HS	SER20C	ER20
-100	HSK-A63	63	1.0~13	34	100	CN20HS	SER20C	ER20
-120	HSK-A63	63	1.0~13	34	120	CN20HS	SER20C	ER20
-160	HSK-A63	63	1.0~13	34	160	CN20HS	SER20C	ER20
-200	HSK-A63	63	1.0~13	34	200	CN20HS	SER20C	ER20
HSK63A-ER25-80	HSK-A63	63	1.0~16	42	80	CN25B	SO08014C	ER25
-90	HSK-A63	63	1.0~16	42	90	CN25B	SER25C	ER25
-100	HSK-A63	63	1.0~16	42	100	CN25B	SER25C	ER25
-120	HSK-A63	63	1.0~16	42	120	CN25B	SER25C	ER25
-160	HSK-A63	63	1.0~16	42	160	CN25B	SER25C	ER25
-200	HSK-A63	63	1.0~16	42	200	CN25B	SER25C	ER25
HSK63A-ER32-80	HSK-A63	63	2.0~20	50	80	CN32B	SO08014C	ER32
-90	HSK-A63	63	2.0~20	50	90	CN32B	SER32C	ER32
-100	HSK-A63	63	2.0~20	50	100	CN32B	SER32C	ER32
-120	HSK-A63	63	2.0~20	50	120	CN32B	SER32C	ER32
-160	HSK-A63	63	2.0~20	50	160	CN32B	SER32C	ER32
-200	HSK-A63	63	2.0~20	50	200	CN32B	SER32C	ER32
HSK63A-ER40-80	HSK-A63	63	3.0~26	63	80	CN40B	-	ER40
-90	HSK-A63	63	3.0~26	63	90	CN40B	SER40C	ER40
-100	HSK-A63	63	3.0~26	63	100	CN40B	SER40C	ER40
-120	HSK-A63	63	3.0~26	63	120	CN40B	SER40C	ER40
-160	HSK-A63	63	3.0~26	63	160	CN40B	SER40C	ER40
-200	HSK-A63	63	3.0~26	63	200	CN40B	SER40C	ER40

*如需其它型式或规格的 HSK 类产品请与本公司联系。

* ER 卡簧资料参见 76 页，螺母参见 85 页。

*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.

*See page 76 for ER collets and page 85 for nuts.

*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20	ER25	ER32	ER40
扳手 Wrench	W17D	W25D	W30D	YER25B	YER32B	YER40B
冷却液套管 Coolant Tube	TU-HSK63					
扳手 Coolant Tube Wrench	W-HSK63					

ER 弹簧夹头刀柄

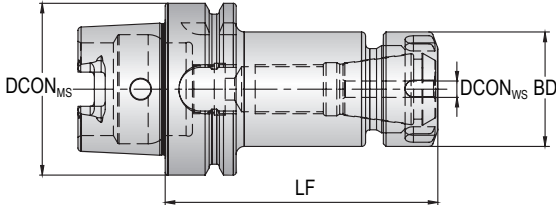
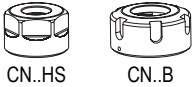
ER Collet Chucks

DIN69893 HSK-A



特点 Characteristic

- 本体内锥孔对柄部跳动≤ 0.003mm
- The runout of the taper hole to the shank in the tool is ≤ 0.003mm
- 螺母特殊表面处理，提高夹持稳定性
- Special surface treatment of nuts to improve clamping stability
- 内通水设计，可选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm



型号 Model DIN69893		尺寸 Dimensions (mm)				 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{ms}	DCON _{ws}	BD	LF			
HSK100A-ER16-90	HSK-A100	100	1.0~10	28	90	CN16HS	SER16C	ER16
-100	HSK-A100	100	1.0~10	28	100	CN16HS	SER16C	ER16
-120	HSK-A100	100	1.0~10	28	120	CN16HS	SER16C	ER16
-160	HSK-A100	100	1.0~10	28	160	CN16HS	SER16C	ER16
-200	HSK-A100	100	1.0~10	28	200	CN16HS	SER16C	ER16
HSK100A-ER20-90	HSK-A100	100	1.0~13	34	90	CN20HS	SER20C	ER20
-100	HSK-A100	100	1.0~13	34	100	CN20HS	SER20C	ER20
-120	HSK-A100	100	1.0~13	34	120	CN20HS	SER20C	ER20
-160	HSK-A100	100	1.0~13	34	160	CN20HS	SER20C	ER20
-200	HSK-A100	100	1.0~13	34	200	CN20HS	SER20C	ER20
HSK100A-ER25-90	HSK-A100	100	1.0~16	42	90	CN25B	SER25C	ER25
-100	HSK-A100	100	1.0~16	42	100	CN25B	SER25C	ER25
-120	HSK-A100	100	1.0~16	42	120	CN25B	SER25C	ER25
-160	HSK-A100	100	1.0~16	42	160	CN25B	SER25C	ER25
-200	HSK-A100	100	1.0~16	42	200	CN25B	SER25C	ER25
HSK100A-ER32-100	HSK-A100	100	2.0~20	50	100	CN32B	SER32C	ER32
-120	HSK-A100	100	2.0~20	50	120	CN32B	SER32C	ER32
-160	HSK-A100	100	2.0~20	50	160	CN32B	SER32C	ER32
-200	HSK-A100	100	2.0~20	50	200	CN32B	SER32C	ER32
HSK100A-ER40-100	HSK-A100	100	3.0~26	63	100	CN40B	SER40C	ER40
-120	HSK-A100	100	3.0~26	63	120	CN40B	SER40C	ER40
-160	HSK-A100	100	3.0~26	63	160	CN40B	SER40C	ER40
-200	HSK-A100	100	3.0~26	63	200	CN40B	SER40C	ER40

*如需其它型式或规格的 HSK 类产品请与本公司联系。

* ER 卡簧资料参见 76 页，螺母参见 85 页。

*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.

*See page 76 for ER collets and page 85 for nuts.

*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20	ER25	ER32	ER40
扳手 Hex Wrench	W17D	W25D	W30D	YER25B	YER32B	YER40B
冷却液套管 Coolant Tube	TU-HSK100					
扳手 Coolant Tube Wrench	W-HSK100					

ER 弹簧夹头刀柄

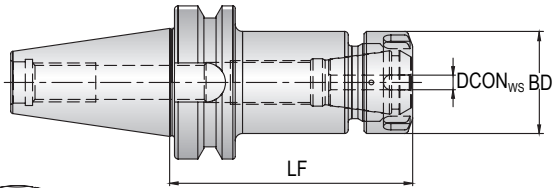
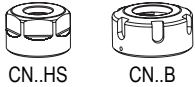
ER Collet Chucks

JISB6339 BT



特点 Characteristic

- 本体内锥孔对柄部跳动≤ 0.003mm
- The runout of the taper hole to the shank in the tool is ≤ 0.003mm
- 螺母特殊表面处理，提高夹持稳定性
- Special surface treatment of nuts to improve clamping stability
- 内通水设计，选配轴向调整螺钉
- Internal water passage design, optional axial adjusting screws
- 可选配动平衡G2.5/25000rpm
- Optional Dynamic Balance G2.5/25000rpm



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)			 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{ws}	BD	LF			
BT30-ER11-60	30	1.0~7	19	60	CN11HS	SER11C	ER11
-90	30	1.0~7	19	90	CN11HS	SER11C	ER11
BT30-ER16-60	30	1.0~10	28	60	CN16HS	SER16C	ER16
-90	30	1.0~10	28	90	CN16HS	SER16C	ER16
-120	30	1.0~10	28	120	CN16HS	SER16C	ER16
BT30-ER20-60	30	1.0~13	34	60	CN20HS	SER20C	ER20
-90	30	1.0~13	34	90	CN20HS	SER20C	ER20
-120	30	1.0~13	34	120	CN20HS	SER20C	ER20
BT30-ER25-60	30	1.0~16	42	60	CN25B	SER25C	ER25
-90	30	1.0~16	42	90	CN25B	SER25C	ER25
-120	30	1.0~16	42	120	CN25B	SER25C	ER25
BT30-ER32-60	30	2.0~20	50	60	CN32B	SER32C	ER32
-90	30	2.0~20	50	90	CN32B	SER32C	ER32

* ER 卡簧资料参见 76 页，螺母参见 85 页。

*附件需单独订购。

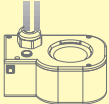
*See page 76 for ER collets and page 85 for nuts.

*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20	ER25	ER32
扳手 Hex Wrench	W17D	W25D	W30D	YER25B	YER32B



技术参数 Technical parameters

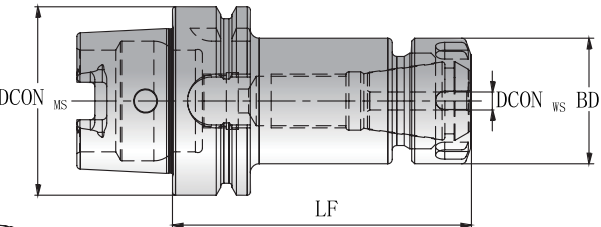
标准配备 Standard equipment		
 一个加热线圈 A heating coil	 五个止动盘 Five stop disks	 一个支撑座 A support seat
技术参数 Technical parameters		
主电源 Main power	3x360-440V, 25A	
功率 Power	13KW	
刀具 Tool	硬质合金、高速钢及钢制品 Solid carbide、High-speed steel and steel products	
刀具直径 Tool Diameter	φ3-32 (h6) mm	
可加热刀柄长度 Heatable chuck length	≤ 500mm	
冷却方式 Cooling method	循环式冷却 Recirculating cooling	
尺寸 (WxDxH) Size	960x550x1050	
重量 Weight	35kg	

附件（单独订购）Accessories（ordered separately）						
 支撑盘 Support plate	适用刀柄接口 Chucks interface is applicable	ISO30	ISO40	ISO50	HSK40	
	订货型号 Order Number	CHS-ISO30	CHS-ISO40	CHS-ISO50		
	适用刀柄接口 Chucks interface is applicable	HSK40	HSK50	HSK63	HSK80	HSK100
	订货型号 Order Number	CHS-HSK40	CHS-HSK50	CHS-HSK63	CHS-HSK80	CHS-HSK100



特点 Characteristic

- 本体内锥孔对柄部跳动≤ 0.003mm
- The runout of the taper hole to the shank in the tool is ≤ 0.003mm
- 螺母特殊表面处理，提高夹持稳定性
- Special surface treatment of nuts to improve clamping stability
- 内通水设计，可选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配动平衡G2.5/2500rpm
- Standard dynamic balance G2.5/2500rpm



型号 Model DIN69893		尺寸 Dimensions (mm)				 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{MS}	DCON _{WS}	BD	LF			
HSK63A-ER11-75	HSK-A63	63	1.0~7	19	75	CN11HS	SER11C	ER11
-90	HSK-A63	63	1.0~7	19	90	CN11HS	SER11C	ER11
-120	HSK-A63	63	1.0~7	19	120	CN11HS	SER11C	ER11
-160	HSK-A63	63	1.0~7	19	160	CN11HS	SER11C	ER11
HSK63A-ER16-80	HSK-A63	63	1.0~10	28	80	CN16HS	SER16C	ER16
-90	HSK-A63	63	1.0~10	28	90	CN16HS	SER11C	ER16
-100	HSK-A63	63	1.0~10	28	100	CN16HS	SER16C	ER16
-120	HSK-A63	63	1.0~10	28	120	CN16HS	SER16C	ER16
-160	HSK-A63	63	1.0~10	28	160	CN16HS	SER16C	ER16
-200	HSK-A63	63	1.0~10	28	200	CN16HS	SER16C	ER16
HSK63A-ER20-80	HSK-A63	63	1.0~13	34	80	CN20HS	SER20C	ER20
-90	HSK-A63	63	1.0~13	34	90	CN20HS	SER20C	ER20
-100	HSK-A63	63	1.0~13	34	100	CN20HS	SER20C	ER20
-120	HSK-A63	63	1.0~13	34	120	CN20HS	SER20C	ER20
-160	HSK-A63	63	1.0~13	34	160	CN20HS	SER20C	ER20
-200	HSK-A63	63	1.0~13	34	200	CN20HS	SER20C	ER20
HSK63A-ER25-80	HSK-A63	63	1.0~16	42	80	CN25B	SO08014C	ER25
-90	HSK-A63	63	1.0~16	42	90	CN25B	SER25C	ER25
-100	HSK-A63	63	1.0~16	42	100	CN25B	SER25C	ER25
-120	HSK-A63	63	1.0~16	42	120	CN25B	SER25C	ER25
-160	HSK-A63	63	1.0~16	42	160	CN25B	SER25C	ER25
-200	HSK-A63	63	1.0~16	42	200	CN25B	SER25C	ER25
HSK63A-ER32-80	HSK-A63	63	2.0~20	50	80	CN32B	SO08014C	ER32
-90	HSK-A63	63	2.0~20	50	90	CN32B	SER32C	ER32
-100	HSK-A63	63	2.0~20	50	100	CN32B	SER32C	ER32
-120	HSK-A63	63	2.0~20	50	120	CN32B	SER32C	ER32
-160	HSK-A63	63	2.0~20	50	160	CN32B	SER32C	ER32
-200	HSK-A63	63	2.0~20	50	200	CN32B	SER32C	ER32
HSK63A-ER40-80	HSK-A63	63	3.0~26	63	80	CN40B	-	ER40
-90	HSK-A63	63	3.0~26	63	90	CN40B	SER40C	ER40
-100	HSK-A63	63	3.0~26	63	100	CN40B	SER40C	ER40
-120	HSK-A63	63	3.0~26	63	120	CN40B	SER40C	ER40
-160	HSK-A63	63	3.0~26	63	160	CN40B	SER40C	ER40
-200	HSK-A63	63	3.0~26	63	200	CN40B	SER40C	ER40

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* ER 卡簧资料参见 76 页，螺母参见 85 页。
*附件需单独订购。
*For other types or specifications of HSK products, please contact our company.
*See page 76 for ER collets and page 85 for nuts.
*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20	ER25	ER32	ER40
 扳手 Wrench	W17D	W25D	W30D	YER25B	YER32B	YER40B
 冷却液套管 Coolant Tube	TU-HSK63					
 扳手 Coolant Tube Wrench	W-HSK63					

ER 弹簧夹头刀柄

DIN69893 HSK-A

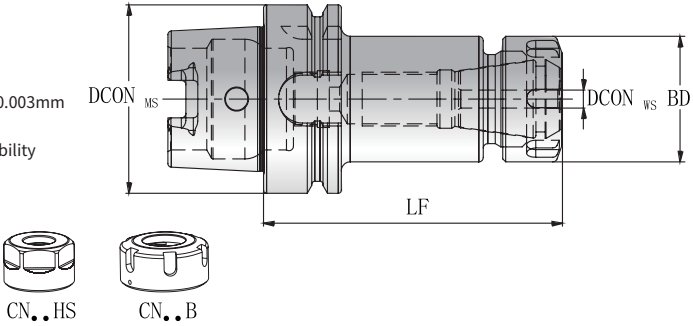
ER Collet Chucks





特点 Characteristic

- 本体内锥孔对柄部跳动≤ 0.003mm
- The runout of the taper hole to the shank in the tool is ≤ 0.003mm
- 螺母特殊表面处理，提高夹持稳定性
- Special surface treatment of nuts to improve clamping stability
- 内通水设计，可选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm



型号 Model DIN69893		尺寸 Dimensions (mm)				 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{MS}	DCON _{WS}	BD	LF			
HSK100A-ER16-90	HSK-A100	100	1.0~10	28	90	CN16HS	SER16C	ER16
-100	HSK-A100	100	1.0~10	28	100	CN16HS	SER16C	ER16
-120	HSK-A100	100	1.0~10	28	120	CN16HS	SER16C	ER16
-160	HSK-A100	100	1.0~10	28	160	CN16HS	SER16C	ER16
-200	HSK-A100	100	1.0~10	28	200	CN16HS	SER16C	ER16
HSK100A-ER20-90	HSK-A100	100	1.0~13	34	90	CN20HS	SER20C	ER20
-100	HSK-A100	100	1.0~13	34	100	CN20HS	SER20C	ER20
-120	HSK-A100	100	1.0~13	34	120	CN20HS	SER20C	ER20
-160	HSK-A100	100	1.0~13	34	160	CN20HS	SER20C	ER20
-200	HSK-A100	100	1.0~13	34	200	CN20HS	SER20C	ER20
HSK100A-ER25-90	HSK-A100	100	1.0~16	42	90	CN25B	SER25C	ER25
-100	HSK-A100	100	1.0~16	42	100	CN25B	SER25C	ER25
-120	HSK-A100	100	1.0~16	42	120	CN25B	SER25C	ER25
-160	HSK-A100	100	1.0~16	42	160	CN25B	SER25C	ER25
-200	HSK-A100	100	1.0~16	42	200	CN25B	SER25C	ER25
HSK100A-ER32-100	HSK-A100	100	2.0~20	50	100	CN32B	SER32C	ER32
-120	HSK-A100	100	2.0~20	50	120	CN32B	SER32C	ER32
-160	HSK-A100	100	2.0~20	50	160	CN32B	SER32C	ER32
-200	HSK-A100	100	2.0~20	50	200	CN32B	SER32C	ER32
HSK100A-ER40-100	HSK-A100	100	3.0~26	63	100	CN40B	SER40C	ER40
-120	HSK-A100	100	3.0~26	63	120	CN40B	SER40C	ER40
-160	HSK-A100	100	3.0~26	63	160	CN40B	SER40C	ER40
-200	HSK-A100	100	3.0~26	63	200	CN40B	SER40C	ER40

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*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.

*See page 76 for ER collets and page 85 for nuts.

*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20	ER25	ER32	ER40
 扳手 Hex Wrench	W17D	W25D	W30D	YER25B	YER32B	YER40B
 冷却液套管 Coolant Tube	TU-HSK100					
 扳手 Coolant Tube Wrench	W-HSK100					

ER 弹簧夹头刀柄

JISB6339 BT

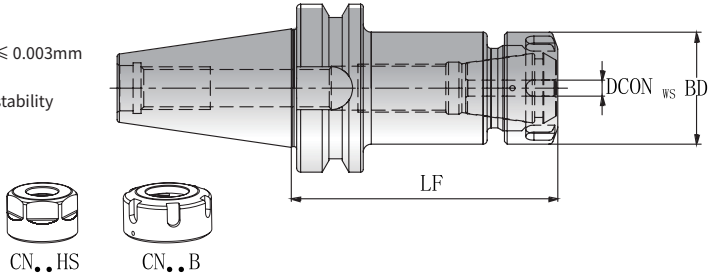
ER Collet Chucks





特点 Characteristic

- 本体内锥孔对柄部跳动≤ 0.003mm
- The runout of the taper hole to the shank in the tool is ≤ 0.003mm
- 螺母特殊表面处理，提高夹持稳定性
- Special surface treatment of nuts to improve clamping stability
- 内通水设计，可选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)			 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{WS}	BD	LF			
BT30-ER11-60	30	1.0~7	19	60	CN11HS	SER11C	ER11
-90	30	1.0~7	19	90	CN11HS	SER11C	ER11
BT30-ER16-60	30	1.0~10	28	60	CN16HS	SER16C	ER16
-90	30	1.0~10	28	90	CN16HS	SER16C	ER16
-120	30	1.0~10	28	120	CN16HS	SER16C	ER16
BT30-ER20-60	30	1.0~13	34	60	CN20HS	SER20C	ER20
-90	30	1.0~13	34	90	CN20HS	SER20C	ER20
-120	30	1.0~13	34	120	CN20HS	SER20C	ER20
BT30-ER25-60	30	1.0~16	42	60	CN25B	SER25C	ER25
-90	30	1.0~16	42	90	CN25B	SER25C	ER25
-120	30	1.0~16	42	120	CN25B	SER25C	ER25
BT30-ER32-60	30	2.0~20	50	60	CN32B	SER32C	ER32
-90	30	2.0~20	50	90	CN32B	SER32C	ER32

* ER 卡簧资料参见 76 页，螺母参见 85 页。

*附件需单独订购。

*See page 76 for ER collets and page 85 for nuts.

*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20	ER25	ER32
 扳手 Hex Wrench	W17D	W25D	W30D	YER25B	YER32B

ER 弹簧夹头刀柄

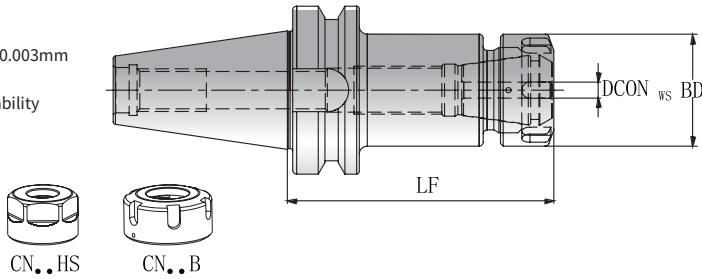
ER Collet Chucks

JISB6339 BT



特点 Characteristic

- 本体内锥孔对柄部跳动≤ 0.003mm
- The runout of the taper hole to the shank in the tool is ≤ 0.003mm
- 螺母特殊表面处理，提高夹持稳定性
- Special surface treatment of nuts to improve clamping stability
- 内通水设计，可选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)			 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{ws}	BD	LF			
BT40-ER11-70	40	0.5~7	19	70	CN11HS	SER11C	ER11
-90	40	0.5~7	19	90	CN11HS	SER11C	ER11
-100	40	0.5~7	19	100	CN11HS	SER11C	ER11
-120	40	0.5~7	19	120	CN11HS	SER11C	ER11
-160	40	0.5~7	19	160	CN11HS	SER11C	ER11
BT40-ER16-70	40	0.5~10	28	70	CN16HS	SER16C	ER16
-90	40	0.5~10	28	90	CN16HS	SER16C	ER16
-100	40	0.5~10	28	100	CN16HS	SER16C	ER16
-120	40	0.5~10	28	120	CN16HS	SER16C	ER16
-150	40	0.5~10	28	150	CN16HS	SER16C	ER16
-160	40	0.5~10	28	160	CN16HS	SER16C	ER16
-200	40	0.5~10	28	200	CN16HS	SER16C	ER16
BT40-ER20-70	40	1.0~13	34	70	CN20HS	SER20C	ER20
-80	40	1.0~13	34	80	CN20HS	SER20C	ER20
-90	40	1.0~13	34	90	CN20HS	SER20C	ER20
-100	40	1.0~13	34	100	CN20HS	SER20C	ER20
-120	40	1.0~13	34	120	CN20HS	SER20C	ER20
-150	40	1.0~13	34	150	CN20HS	SER20C	ER20
-160	40	1.0~13	34	160	CN20HS	SER20C	ER20
-200	40	1.0~13	34	200	CN20HS	SER20C	ER20
BT40-ER25-70	40	1.0~16	42	70	CN25B	SER25C	ER25
-80	40	1.0~16	42	80	CN25B	SER25C	ER25
-90	40	1.0~16	42	90	CN25B	SER25C	ER25
-100	40	1.0~16	42	100	CN25B	SER25C	ER25
-120	40	1.0~16	42	120	CN25B	SER25C	ER25
-150	40	1.0~16	42	150	CN25B	SER25C	ER25
-160	40	1.0~16	42	160	CN25B	SER25C	ER25
-200	40	1.0~16	42	200	CN25B	SER25C	ER25
BT40-ER32-60	40	2.0~20	50	60	CN32B	SER32C	ER32
-70	40	2.0~20	50	70	CN32B	SER32C	ER32
-80	40	2.0~20	50	80	CN32B	SER32C	ER32
-90	40	2.0~20	50	90	CN32B	SER32C	ER32
-100	40	2.0~20	50	100	CN32B	SER32C	ER32
-120	40	2.0~20	50	120	CN32B	SER32C	ER32
-150	40	2.0~20	50	150	CN32B	SER32C	ER32
-160	40	2.0~20	50	160	CN32B	SER32C	ER32
-200	40	2.0~20	50	200	CN32B	SER32C	ER32
-250	40	2.0~20	50	250	CN32B	SER32C	ER32
-300	40	2.0~20	50	300	CN32B	SER32C	ER32
-350	40	2.0~20	50	350	CN32B	SER32C	ER32
-400	40	2.0~20	50	400	CN32B	SER32C	ER32
BT40-ER40-80	40	3.0~26	63	80	CN40B	SER40C	ER40
-90	40	3.0~26	63	90	CN40B	SER40C	ER40
-100	40	3.0~26	63	100	CN40B	SER40C	ER40
-120	40	3.0~26	63	120	CN40B	SER40C	ER40
-150	40	3.0~26	63	150	CN40B	SER40C	ER40
-160	40	3.0~26	63	160	CN40B	SER40C	ER40
-200	40	3.0~26	63	200	CN40B	SER40C	ER40

* ER 卡簧资料参见 76 页，螺母参见 85 页。
*附件需单独订购。

*See page 76 for ER collets and page 85 for nuts.
*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20	ER25	ER32	ER40
扳手 Hex Wrench	W17D	W25D	W30D	YER25B	YER32B	YER40B

ER 弹簧夹头刀柄

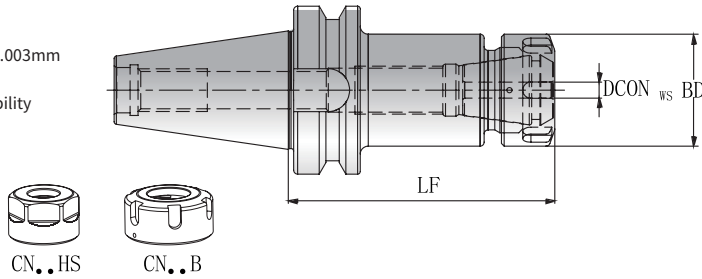
ER Collet Chucks

JISB6339 BT



特点 Characteristic

- 本体内锥孔对柄部跳动≤ 0.003mm
- The runout of the taper hole to the shank in the tool is ≤ 0.003mm
- 螺母特殊表面处理，提高夹持稳定性
- Special surface treatment of nuts to improve clamping stability
- 内通水设计，可选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配动平衡G2.5/25000rpm
- Standard dynamic balance G2.5/25000rpm



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)			 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{ws}	BD	LF			
BT50-ER16-70	50	0.5~10	28	70	CN16HS	SER16C	ER16
-80	50	0.5~10	28	80	CN16HS	SER16C	ER16
-90	50	0.5~10	28	90	CN16HS	SER16C	ER16
-100	50	0.5~10	28	100	CN16HS	SER16C	ER16
-120	50	0.5~10	28	120	CN16HS	SER16C	ER16
-165	50	0.5~10	28	165	CN16HS	SER16C	ER16
-200	50	0.5~10	28	200	CN16HS	SER16C	ER16
BT50-ER20-70	50	1.0~13	34	70	CN20HS	SER20C	ER20
-80	50	1.0~13	34	80	CN20HS	SER20C	ER20
-90	50	1.0~13	34	90	CN20HS	SER20C	ER20
-100	50	1.0~13	34	100	CN20HS	SER20C	ER20
-120	50	1.0~13	34	120	CN20HS	SER20C	ER20
-135	50	1.0~13	34	135	CN20HS	SER20C	ER20
-165	50	1.0~13	34	165	CN20HS	SER20C	ER20
-200	50	1.0~13	34	200	CN20HS	SER20C	ER20
BT50-ER25-70	50	1.0~16	42	70	CN25B	SER25C	ER25
-80	50	1.0~16	42	80	CN25B	SER25C	ER25
-90	50	1.0~16	42	90	CN25B	SER25C	ER25
-100	50	1.0~16	42	100	CN25B	SER25C	ER25
-120	50	1.0~16	42	120	CN25B	SER25C	ER25
-165	50	1.0~16	42	165	CN25B	SER25C	ER25
-200	50	1.0~16	42	200	CN25B	SER25C	ER25
BT50-ER32-70	50	2.0~20	50	70	CN32B	SER32C	ER32
-90	50	2.0~20	50	90	CN32B	SER32C	ER32
-100	50	2.0~20	50	100	CN32B	SER32C	ER32
-120	50	2.0~20	50	120	CN32B	SER32C	ER32
-165	50	2.0~20	50	165	CN32B	SER32C	ER32
-200	50	2.0~20	50	200	CN32B	SER32C	ER32
-250	50	2.0~20	50	250	CN32B	SER32C	ER32
-300	50	2.0~20	50	300	CN32B	SER32C	ER32
-350	50	2.0~20	50	350	CN32B	SER32C	ER32
-400	50	2.0~20	50	400	CN32B	SER32C	ER32
BT50-ER40-90	50	3.0~26	63	90	CN40B	SER40C	ER40
-100	50	3.0~26	63	100	CN40B	SER40C	ER40
-120	50	3.0~26	63	120	CN40B	SER40C	ER40
-165	50	3.0~26	63	165	CN40B	SER40C	ER40
-200	50	3.0~26	63	200	CN40B	SER40C	ER40

* ER 卡簧资料参见 76 页，螺母参见 85 页。
*附件需单独订购。
*See page 76 for ER collets and page 85 for nuts.
*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20	ER25	ER32	ER40
扳手 Hex Wrench	W17D	W25D	W30D	YER25B	YER32B	YER40B

ESK高速精密弹簧夹头刀柄

ESK high speed precision collet chucks



螺母外观来自先进表面处理技术。表面硬度更高，更加耐磨，提升高速加工精度。
Nut appearance from advanced surface treatment technology. Higher surface hardness, more wear-resistant, and improved high-speed machining accuracy.

螺母
表面经过特殊处理，表面硬度更高，摩擦系数低，能够稳定锁紧卡簧，防止卡簧在锁紧时承受过大的扭曲力，保证夹持精度。
Nut
The surface has been specially treated with higher surface hardness and low friction coefficient, which can stabilize the locking of the collet and prevent the collet from excessive twisting force during locking to ensure the clamping accuracy.

SK 高精度卡簧
严格把控材料、制造、热处理等多个环节，所有产品均经过多次严格的检验，品质值得信赖。
SK High Precision collet
Strictly control the material, manufacturing, heat treatment and other aspects, all products have gone through a number of rigorous inspection, the quality is trustworthy.

特点 specificities

- 标配无风阻螺帽
- Standardly equipped with no wind resistance nut
- 4d 处跳动≤ 0.005mm
- Runout at 4d ≤ 0.005mm
- ▼ SK 高精度卡簧
- ▼ SK high-precision collet
- 精密动平衡
- Precision Dynamic Balancing
- 适合高速高精加工
- Suitable for high speed and high precision machining

ESK 刀柄备货充足及时满足您的需求!
ESK chucks stock enough to meet your needs in time!

● 刀柄订货示例
● Example of a chucks order:
BT30-ESK10-60
HSK63A-ESK16-90

● 卡簧订货示例
● Ordering Example of collet:
SK10-3

相比于 ER 刀柄，具有更小的锥角，更长的夹持部位，夹持精度更高，夹持扭矩更大。
Compared to ER chucks, it has a smaller taper angle, longer clamping part, higher clamping accuracy and higher clamping torque.

-180° C 深冷处理，防止变形，保证精度的稳定、持久。
-180° C deep cold treatment to prevent deformation and ensure stable and long-lasting precision.



ESK 高精度弹簧夹头刀柄

ESK Precision Collet Chucks

DIN69893 HSK-A



特点 Characteristic

- 综合跳动: ≤ 0.005mm (4xd)
- Comprehensive runout≤0.005mm (4xd)
- 内通水设计，选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配无风阻螺帽
- Wind-free nut as standard
- 标配动平衡G2.5 25000rpm
- Standard dynamic balance G2.5/25000rpm

型号 Model DIN69893		尺寸 Dimensions (mm)			 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{ws}	BD	LF			
HSK63A-ESK06-90	HSK-A63	3~6	19.5	90	CN06K	SSK06C	SK06
-120	HSK-A63	3~6	19.5	120	CN06K	SSK06C	SK06
HSK63A-ESK10-90	HSK-A63	3~10	27	90	CN10K	SSK10C	SK10
-120	HSK-A63	3~10	27	120	CN10K	SSK10C	SK10
HSK63A-ESK13-90	HSK-A63	3~13	33	90	CN13K	SSK13C	SK13
-120	HSK-A63	3~13	33	120	CN13K	SSK13C	SK13
HSK63A-ESK16-90	HSK-A63	3~16	40	90	CN16K	SSK16C	SK16
-120	HSK-A63	3~16	40	120	CN16K	SSK16C	SK16
HSK63A-ESK20-90	HSK-A63	3~20	48.5	90	CN20K	SSK20C	SK20
-120	HSK-A63	3~20	48.5	120	CN20K	SSK20C	SK20
HSK63A-ESK25-90	HSK-A63	3~25	55	90	CN25K	SSK25C	SK25
-120	HSK-A63	3~25	55	120	CN25K	SSK25C	SK25
HSK100A-ESK06-105	HSK-A100	3~6	19.5	105	CN06K	SSK06C	SK06
HSK100A-ESK10-105	HSK-A100	3~10	27.5	105	CN10K	SSK10C	SK10
-120	HSK-A100	3~10	27.5	120	CN10K	SSK10C	SK10
-150	HSK-A100	3~10	27.5	150	CN10K	SSK10C	SK10
HSK100A-ESK13-105	HSK-A100	3~13	33	105	CN13K	SSK13C	SK13
-120	HSK-A100	3~13	33	120	CN13K	SSK13C	SK13
150	HSK-A100	3~13	33	150	CN13K	SSK13C	SK13
HSK100A-ESK16-105	HSK-100A	3~16	40	105	CN16K	SSK16C	SK16
-120	HSK-A100	3~16	40	120	CN16K	SSK16C	SK16
-150	HSK-A100	3~16	40	150	CN16K	SSK16C	SK16
HSK100A-ESK20-120	HSK-A100	3~20	48.5	120	CN20K	SSK20C	SK20
-150	HSK-A100	3~20	48.5	150	CN20K	SSK20C	SK20
-200	HSK-A100	3~20	48.5	200	CN20K	SSK20C	SK20
HSK100A-ESK25-120	HSK-A100	3~25	55	120	CN25K	SSK25C	SK25
-150	HSK-A100	3~25	55	150	CN25K	SSK25C	SK25

* SK 卡簧资料参见 80 页。

*附件需单独订购。

*See page 80 for SK collets data.

*Accessories need to be ordered separately.

附件 Accessories	SK06	SK10	SK13	SK16	SK20	SK25
扳手 Hex Wrench	YSK06	YSK10	YSK13	YSK16	YSK20	YSK25

附件 Accessories	HSK-A63	HSK-A100
冷却液套管 Coolant Tube	TU-HSK63	TU-HSK100
扳手 Coolant Tube Wrench	W-HSK63	W-HSK100

ESK 高精度弹簧夹头刀柄

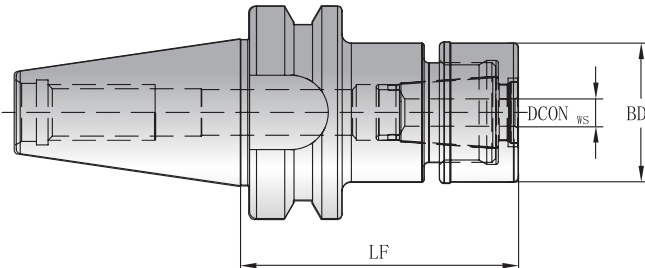
ESK Precision Collet Chucks

JISB6339 BT



特点 Characteristic

- 综合跳动：≤ 0.005mm (4xd)
- Comprehensive runout≤0.005mm (4xd)
- 内通水设计，选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配无风阻螺帽
- Wind-free nut as standard
- 标配动平衡G2.5 25000rpm
- Standard dynamic balance G2.5/25000rpm



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)			 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{WS}	BD	LF			
BT30-ESK06-60	30	3~6	19.5	60	CN06K	SSK06C	SK06
-90	30	3~6	19.5	90	CN06K	SSK06C	SK06
-120	30	3~6	19.5	120	CN06K	SSK06C	SK06
BT30-ESK10-60	30	3~10	27	60	CN10K	SSK10C	SK10
-90	30	3~10	27	90	CN10K	SSK10C	SK10
-120	30	3~10	27	120	CN10K	SSK10C	SK10
BT30-ESK13-60	30	3~13	33	60	CN13K	SSK13C	SK13
-90	30	3~13	33	90	CN13K	SSK13C	SK13
-120	30	3~13	33	120	CN13K	SSK13C	SK13
BT30-ESK16-60	30	3~16	40	60	CN16K	SSK16C	SK16
-90	30	3~16	40	90	CN16K	SSK16C	SK16
-120	30	3~16	40	120	CN16K	SSK16C	SK16
BT30-ESK20-60	30	3~20	48.5	60	CN20K	SSK20C	SK20
-90	30	3~20	48.5	90	CN20K	SSK20C	SK20
BT30-ESK25-90	30	3~20	55	90	CN25K	SSK25C	SK25
BT40-ESK06-60	40	3~6	19.5	60	CN06K	SSK06C	SK06
-90	40	3~6	19.5	90	CN06K	SSK06C	SK06
-120	40	3~6	19.5	120	CN06K	SSK06C	SK06
-150	40	3~6	19.5	150	CN06K	SSK06C	SK06
BT40-ESK10-60	40	3~10	27.5	60	CN10K	SSK10C	SK10
-90	40	3~10	27.5	90	CN10K	SSK10C	SK10
-120	40	3~10	27.5	120	CN10K	SSK10C	SK10
-150	40	3~10	27.5	150	CN10K	SSK10C	SK10
BT40-ESK13-60	40	3~13	33	60	CN13K	SSK13C	SK13
-90	40	3~13	33	90	CN13K	SSK13C	SK13
-120	40	3~13	33	120	CN13K	SSK13C	SK13
-150	40	3~13	33	150	CN13K	SSK13C	SK13
BT40-ESK16-60	40	3~16	40	60	CN16K	SSK16C	SK16
-90	40	3~16	40	90	CN16K	SSK16C	SK16
-120	40	3~16	40	120	CN16K	SSK16C	SK16
-150	40	3~16	40	150	CN16K	SSK16C	SK16
BT40-ESK20-60	40	3~20	48.5	60	CN20K	SSK20C	SK20
-90	40	3~20	48.5	90	CN20K	SSK20C	SK20
-120	40	3~20	48.5	120	CN20K	SSK20C	SK20
BT40-ESK25-90	40	3~25	55	90	CN25K	SSK25C	SK25
-120	40	3~25	55	120	CN25K	SSK25C	SK25

* SK 卡簧资料参见 80 页。
*附件需单独订购。
*See page 80 for SK collets data.
*Accessories need to be ordered separately.

附件 Accessories	SK06	SK10	SK13	SK16	SK20	SK25
扳手 Hex Wrench	YSK06	YSK10	YSK13	YSK16	YSK20	YSK25

ESK 高精度弹簧夹头刀柄

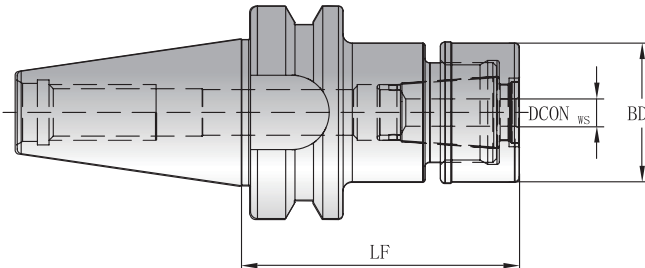
ESK Precision Collet Chucks

JISB6339 BT



特点 Characteristic

- 综合跳动：≤ 0.005mm (4xd)
- Comprehensive runout≤0.005mm (4xd)
- 内通水设计，选配轴向调整螺钉
- Internal water design, optional axial adjustment screws
- 标配无风阻螺帽
- Wind-free nut as standard
- 标配动平衡G2.5 25000rpm
- Standard dynamic balance G2.5/25000rpm



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)			 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
		DCON _{WS}	BD	LF			
BT50-ESK06-105	50	3~6	19.5	105	CN06K	SSK06C	SK06
-135	50	3~6	19.5	135	CN06K	SSK06C	SK06
-165	50	3~6	19.5	165	CN06K	SSK06C	SK06
-200	50	3~6	19.5	200	CN06K	SSK06C	SK06
BT50-ESK10-105	50	3~10	27	105	CN10K	SSK10C	SK10
-135	50	3~10	27	135	CN10K	SSK10C	SK10
-165	50	3~10	27	165	CN10K	SSK10C	SK10
-200	50	3~10	27	200	CN10K	SSK10C	SK10
BT50-ESK13-105	50	3~13	33	105	CN13K	SSK13C	SK13
-135	50	3~13	33	135	CN13K	SSK13C	SK13
-165	50	3~13	33	165	CN13K	SSK13C	SK13
-200	50	3~13	33	200	CN13K	SSK13C	SK13
BT50-ESK16-105	50	3~16	40	105	CN16K	SSK16C	SK16
-135	50	3~16	40	135	CN16K	SSK16C	SK16
-165	50	3~16	40	165	CN16K	SSK16C	SK16
-200	50	3~16	40	200	CN16K	SSK16C	SK16
BT50-ESK20-105	50	3~20	48.5	105	CN20K	SSK20C	SK20
-135	50	3~20	48.5	135	CN20K	SSK20C	SK20
-165	50	3~20	48.5	165	CN20K	SSK20C	SK20
-200	50	3~20	48.5	200	CN20K	SSK20C	SK20
BT50-ESK25-105	50	3~25	55	105	CN25K	SSK25C	SK25
-135	50	3~25	55	135	CN25K	SSK25C	SK25
-165	50	3~25	55	165	CN25K	SSK25C	SK25
-200	50	3~25	55	200	CN25K	SSK25C	SK25

* SK 卡簧资料参见 80 页。
*附件需单独订购。
*See page 80 for SK collets data.
*Accessories need to be ordered separately.

附件 Accessories	SK06	SK10	SK13	SK16	SK20	SK25
扳手 Hex Wrench	YSK06	YSK10	YSK13	YSK16	YSK20	YSK25

HSK 微补偿同步攻丝刀柄

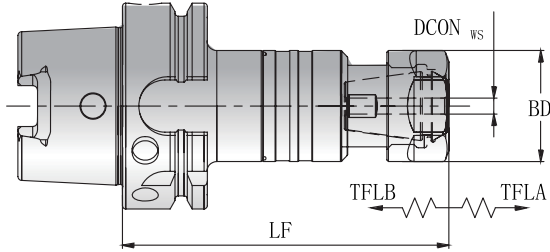
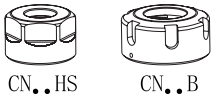
HSK micro-compensation synchro tap chucks

DIN69893 HSK-A



特点 Characteristic

- 内置微补偿（±0.5μ）结构，可有效补偿由于主轴旋转、进给和丝锥螺距间的细微同步偏差。减少丝锥应力，延长丝锥寿命，提高螺纹质量。
- The built-in micro-compensation（±0.5μ）structure effectively compensates for subtle synchronization deviations due to spindle rotation, feed and tap pitch. Reduce tap stress, extend tap life and improve thread quality.
- 内通水设计
- Internal water design



型号 Model DIN69893		适用丝锥 Application tap	尺寸 Dimensions (mm)					 螺钉 Screw	 卡簧 Collets
			BD	DCON _{ws}	LF	TFLA	TFLB		
HSK63A-V20-100	HSK-A63	M4~M12 (No.8~7/16)	34	3~10	100	0.5	0.5	CN20HS	ER20
HSK100A-V20-110	HSK-A100	M4~M12 (No.8~7/16)	34	3~10	110	0.5	0.5	CN20HS	ER20
HSK63A-V32-125	HSK-A63	M4~M20 (No.8~3/4)	50	3~16	125	0.5	0.5	CN32B	ER32
HSK100A-V32-130	HSK-A100	M4~M20 (No.8~3/4)	50	3~16	130	0.5	0.5	CN32B	ER32

- * 附件需单独订购。
- * 若需要中心通油，可选配内冷附件。
- * ER卡簧资料参见 76 页，螺母参见 85 页。
- * 内冷螺母参见 76 页，止水垫圈参见 86 页。
- * 如需其它型式或规格的 HSK 类产品请与本公司联系。
- *Accessories need to be ordered separately.
- *If central oil is required, an internal coolant accessory is optional.
- *See page 76 for ER collets and page 85 for nuts.
- *See page 76 for internal coolant nuts and 86 for sealing disk.
- *For other types or specifications of HSK products, please contact our company.

内冷附件 Coolant Accessories	EVA20	EVA32
内冷螺母 Coolant Nuts	CN20C	CN32C
止水垫圈 Sealing Disk	DER20C-*	DER32C-*

附件 Accessories	EVA20	EVA32
螺母扳手 Wrench For Nut	W30D	YER32B
限位扳手 Wrench	W24D	W36D

附件 Accessories	HSK-A63	HSK-A100
冷却液套管 Coolant Tube	TU-HSK63	TU-HSK100
扳手 Coolant Tube Wrench	W-HSK63	W-HSK100

BT 微补偿同步攻丝刀柄

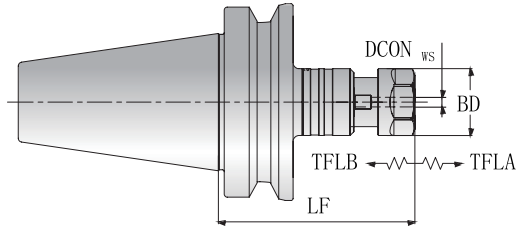
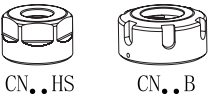
BT micro-compensation synchro tap chucks

JISB6339 BT



特点 Characteristic

- 内置微补偿（±0.5μ）结构，可有效补偿由于主轴旋转、进给和丝锥螺距间的细微同步偏差。减少丝锥应力，延长丝锥寿命，提高螺纹质量。
- The built-in micro-compensation（±0.5μ）structure effectively compensates for subtle synchronization deviations due to spindle rotation, feed and tap pitch. Reduce tap stress, extend tap life and improve thread quality.
- 内通水设计
- Internal water design



型号 Model JIS B6339		适用丝锥 Application tap	尺寸 Dimensions (mm)					 螺钉 Screw	 卡簧 Collets
			BD	DCON _{ws}	LF	TFLA	TFLB		
BT30-VA11-70	30	M1-M4	16	2.5-7.0	70	0.5	0.5	CNM11	ER11
BT30-VA20-80	30	M4~M12 (No.8~7/16)	34	3~10	80	0.5	0.5	CN20HS	ER20
BT40-VA20-85	40	M4~M12 (No.8~7/16)	34	3~10	85	0.5	0.5	CN20HS	ER20
BT50-VA20-100	50	M4~M12 (No.8~7/16)	34	3~10	100	0.5	0.5	CN20HS	ER20
BT40-VA32-100	40	M4~M20 (No.8~3/4)	50	3~16	100	0.5	0.5	CN32B	ER32
BT50-VA32-115	50	M4~M20 (No.8~3/4)	50	3~16	115	0.5	0.5	CN32B	ER32

- * 附件需单独订购。
- * 若需要中心通油，可选配内冷附件。
- * ER卡簧资料参见 76 页，螺母参见 85 页。
- * 内冷螺母参见 76 页，止水垫圈参见 86 页。
- * 如需其它型式或规格的 HSK 类产品请与本公司联系。
- *Accessories need to be ordered separately.
- *If central oil is required, an internal coolant accessory is optional.
- *See page 76 for ER collets and page 85 for nuts.
- *See page 76 for internal coolant nuts and 86 for sealing disk.
- *For other types or specifications of HSK products, please contact our company.

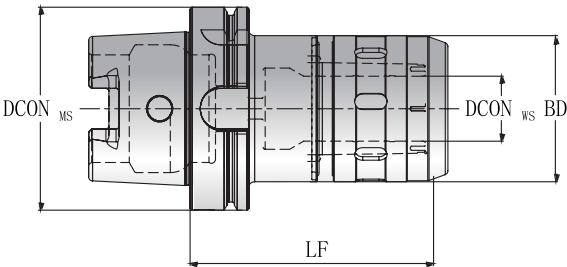
内冷附件 Coolant Accessories	EVA20	EVA32
内冷螺母 Coolant Nuts	CN20C	CN32C
止水垫圈 Sealing Disk	DER20C-*	DER32C-*

附件 Accessories	EVA11	EVA20	EVA32
螺母扳手 Wrench For Nut	WN11	W30D	YER32B
限位扳手 Wrench	W13D	W24D	W36D

特点 Characteristic



- 综合跳动≤0.01mm
- Comprehensive runout≤0.01mm
- 内壁开槽，可有效切断油膜提升夹持力和使用安全性
- The inner wall is grooved, which can effectively cut off the oil film to improve the clamping force and use safety
- 锁紧套前后密封设计，可有效防尘，降低因污染而导致刀柄失效的风险
- The front and rear sealing design of the locking sleeve can effectively prevent dust and reduces the risk of chucks failure due to contamination
- 内通水设计
- Internal water design
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank



型号 Model DIN69893		尺寸 Dimensions (mm)				 卡簧 Collets
		DCON _{MS}	DCON _{WS}	BD	LF	
HSK63A-C20-105	HSK-A63	63	20	55	105	C20
HSK63A-C25-110	HSK-A63	63	25	62	110	C25
HSK63A-C32-115	HSK-A63	63	32	72	115	C32
HSK80A-C32-115	HSK-A80	80	32	69	115	C32
HSK100A-C20-110	HSK-A100	100	20	55	110	C20
HSK100A-C25-115	HSK-A100	100	25	62	115	C25
HSK100A-C32-120	HSK-A100	100	32	72	120	C32
HSK100A-C42-120	HSK-A100	100	42	87	120	C42

*如需其它型式或规格的 HSK 类产品请与本公司联系。

*直筒卡簧资料参见 84 页

*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.

*See page 84 for straight-leg collets information.

*Accessories need to be ordered separately.

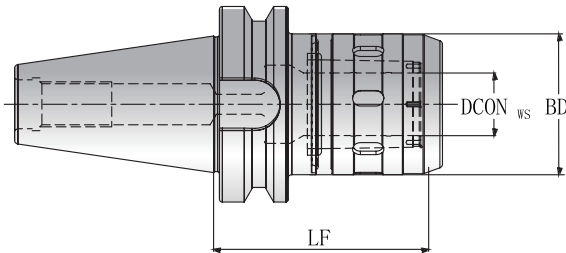
附件 Accessories	C20	C25	C32	C42
扳手 Wrench	WCN25	WCN32	WCN40	BS130UNT

附件 Accessories	HSK-A63	HSK-A100
冷却液套管 Coolant Tube	TU-HSK63	TU-HSK100
扳手 Coolant Tube Wrench	W-HSK63	W-HSK100

特点 Characteristic



- 综合跳动≤0.01mm
- Comprehensive runout≤0.01mm
- 内壁开槽，可有效切断油膜提升夹持力和使用安全性
- The inner wall is grooved, which can effectively cut off the oil film to improve the clamping force and use safety
- 锁紧套前后密封设计，可有效防尘，降低因污染而导致刀柄失效的风险
- The front and rear sealing design of the locking sleeve can effectively prevent dust and reduces the risk of chucks failure due to contamination
- 内通水设计
- Internal water design
- 要求刀具柄部公差h6
- Require h6 tolerance for tool shank



型号 Model JIS B6339-AD		尺寸 Dimensions (mm)			 卡簧 Collets
		DCON _{WS}	BD	LF	
BT30-C20-95	30	20	55	95	C20
BT40-C20-95	40	20	55	95	C20
-120	40	20	55	120	C20
BT40-C25-100	40	25	62	100	C25
-120	40	25	62	120	C25
BT40-C32-105	40	32	72	105	C32
BT50-C20-105	50	20	55	105	C20
-135	50	20	55	135	C20
BT50-C25-110	50	25	62	110	C25
-135	50	25	62	135	C25
BT50-C32-110	50	32	72	110	C32
-135	50	32	72	135	C32
-165	50	32	69	135	C32
-200	50	32	69	135	C32
BT50-C42-110	50	42	60	110	C42

*如需其它型式或规格的 HSK 类产品请与本公司联系。

*直筒卡簧资料参见 84 页

*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.

*See page 84 for straight-leg collets information.

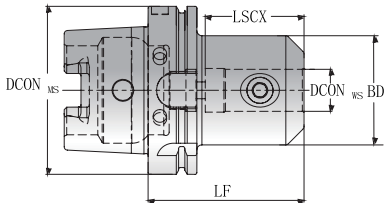
*Accessories need to be ordered separately.

附件 Accessories	C20	C25	C32	C42
扳手 Wrench	WCN25	WCN32	WCN40	BS130UNT

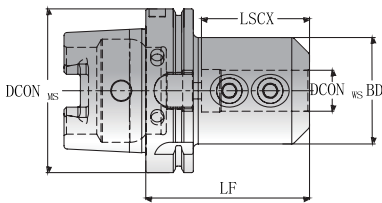


特点 Characteristic

- 头部内孔公差H5
- Head bore tolerance H5
- 用于夹持柄部符合DIN1835-B 的削平柄刀具
- Tools with flat shank for clamping with shank in accordance with DIN1835-B



Type I



Type II

型号 Model DIN69893		尺寸 Dimensions (mm)						型式 Type
		DCON _{MS}	DCON _{WS}	BD	LF	LSCX		
HSK63A-XP12-80	HSK-A63	63	12	42	80	49	SXP12	I
-160	HSK-A63	63	12	42	160	49	SXP12	I
HSK63A-XP16-80	HSK-A63	63	16	48	80	52	SXP16	I
-120	HSK-A63	63	16	48	120	52	SXP16	I
-160	HSK-A63	63	16	48	160	52	SXP16	I
-200	HSK-A63	63	16	48	200	52	SXP16	I
HSK63A-XP20-80	HSK-A63	63	20	50	80	54	SXP20	I
-120	HSK-A63	63	20	50	120	54	SXP20	I
-160	HSK-A63	63	20	52	160	54	SXP20	I
-200	HSK-A63	63	20	50	200	54	SXP20	I
HSK63A-XP25-110	HSK-A63	63	25	60	110	66	SXP25	II
-160	HSK-A63	63	25	60	160	66	SXP25	II
-200	HSK-A63	63	25	60	200	66	SXP25	II
HSK63A-XP32-110	HSK-A63	63	32	68	110	66	SXP32	II
-160	HSK-A63	63	32	68	160	70	SXP32	II
-200	HSK-A63	63	32	68	200	70	SXP32	II
				I				
HSK100A-XP16-100	HSK-A100	100	16	48	100	52	SXP16	I
-120	HSK-A100	100	16	48	120	52	SXP16	I
-160	HSK-A100	100	16	48	160	52	SXP16	I
-200	HSK-A100	100	16	48	200	52	SXP16	I
HSK100A-XP20-100	HSK-A100	100	20	50	100	54	SXP20	I
-120	HSK-A100	100	20	50	120	54	SXP20	I
-160	HSK-A100	100	20	50	160	54	SXP20	I
-200	HSK-A100	100	20	50	200	54	SXP20	I
HSK100A-XP25-100	HSK-A100	100	25	60	100	66	SXP25	II
-120	HSK-A100	100	25	60	120	66	SXP25	II
-160	HSK-A100	100	25	60	160	66	SXP25	II
-200	HSK-A100	100	25	60	200	66	SXP25	II
HSK100A-XP32-100	HSK-A100	100	32	68	100	66	SXP32	II
-120	HSK-A100	100	32	68	120	70	SXP32	II
-160	HSK-A100	100	32	68	160	70	SXP32	II
-200	HSK-A100	100	32	68	200	70	SXP32	II
HSK100A-XP40-120	HSK-A100	100	40	84	120	80	SXP40	II
-160	HSK-A100	100	40	84	160	80	SXP40	II
-200	HSK-A100	100	40	84	200	80	SXP40	II

*如需其它型式或规格的 HSK 类产品请与本公司联系。
*附件需单独订购。
*For other types or specifications of HSK products, please contact our company.
*Accessories need to be ordered separately.

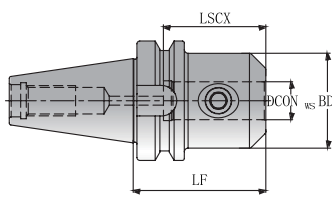
附件 Accessories	DCON _{WS}					
	12	16	20	25	32	40
扳手 Hex Wrench	S6	S6	S8	S8	S10	S10

附件 Accessories	HSK-A63	HSK-A100
冷却液套管 Coolant Tube	TU-HSK63	TU-HSK100
扳手 Coolant Tube Wrench	W-HSK63	W-HSK100

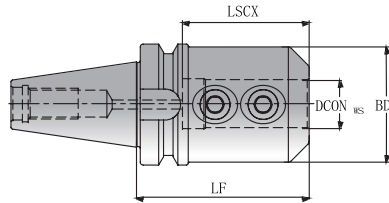


特点 Characteristic

- 头部内孔公差H5
- Head bore tolerance H5
- 用于夹持柄部符合DIN1835-B 的削平柄刀具
- Tools with flat shank for clamping with shank in accordance with DIN1835-B



Type I



Type II

型号 Model JIS B6339-AD		尺寸 Dimensions (mm)					型式 Type
		DCON _{MS}	BD	LF	LSCX		
BT30-XP16-63	30	16	48	63	52	SXP16	I
BT30-XP20-70	30	20	50	70	54	SXP20	I
				I			
BT40-XP12-63	40	12	42	63	49	SXP12	I
-100	40	12	42	100	49	SXP12	I
BT40-XP16-35	40	16	48	35	52	SXP16	I
-63	40	16	48	63	52	SXP16	I
-100	40	16	48	100	52	SXP16	I
BT40-XP20-35	40	20	50	35	54	SXP20	I
-70	40	20	50	70	54	SXP20	I
-100	40	20	50	100	54	SXP20	I
-120	40	20	50	120	54	SXP20	I
-160	40	20	50	160	54	SXP20	I
BT40-XP25-60	40	25	60	60	66	SXP25	II
-90	40	25	60	90	66	SXP25	II
-120	40	25	60	120	66	SXP25	II
-160	40	25	60	160	66	SXP25	II
BT40-XP32-65	40	32	68	65	70	SXP32	II
-100	40	32	68	100	70	SXP32	II
-120	40	32	68	120	70	SXP32	II
-160	40	32	68	160	70	SXP32	II
				I			
BT50-XP16-45	50	16	48	45	52	SXP16	I
-80	50	16	48	80	52	SXP16	I
-100	50	16	48	100	52	SXP16	I
BT50-XP20-45	50	20	52	45	54	SXP20	I
-80	50	20	50	80	54	SXP20	I
-100	50	20	50	100	54	SXP20	I
-120	50	20	50	120	54	SXP20	I
-160	50	20	50	160	54	SXP20	I
-200	50	20	50	200	54	SXP20	I
BT50-XP25-72	50	25	60	72	66	SXP25	II
-100	50	25	60	100	66	SXP25	II
-120	50	25	60	120	66	SXP25	II
-160	50	25	60	160	66	SXP25	II
-200	50	25	60	200	66	SXP25	II
BT50-XP32-75	50	32	72	75	70	SXP32	II
-105	50	32	68	105	70	SXP32	II
-120	50	32	68	120	70	SXP32	II
-160	50	32	68	160	70	SXP32	II
-200	50	32	68	200	70	SXP32	II
BT50-XP40-120	50	40	84	120	80	SXP40	II
-160	50	40	84	160	80	SXP40	II
-200	50	40	84	200	80	SXP40	II

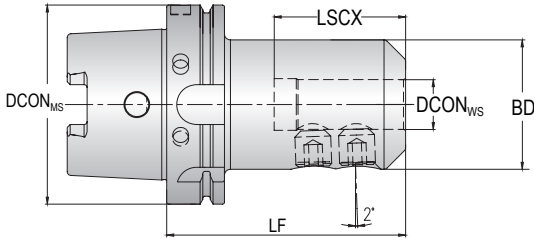
*附件需单独订购。
*Accessories need to be ordered separately.

附件 Accessories	DCON _{WS}					
	12	16	20	25	32	40
扳手 Hex Wrench	S6	S6	S8	S8	S10	S10

2° 侧固式刀柄

DIN69893 HSK-A

2° Side Lock Chucks



型号 Model DIN69893		尺寸 Dimensions (mm)						型式 Type
		DCON _{MS}	DCON _{WS}	BD	LF	LSCX		
HSK63A-XPD06-90	HSK-A63	63	6	25	90	64	SXP06	I
HSK63A-XPD08-90	HSK-A63	63	8	28	90	64	SXP08	I
HSK63A-XPD10-90	HSK-A63	63	10	35	90	64	SXP10	I
HSK63A-XPD12-100	HSK-A63	63	12	42	100	74	SXP12	I
HSK63A-XPD14-100	HSK-A63	63	14	44	100	74	SXP14	I
HSK63A-XPD16-100	HSK-A63	63	16	48	100	74	SXP16	I
HSK63A-XPD20-100	HSK-A63	63	20	52	100	74	SXP20	I
HSK63A-XPD25-110	HSK-A63	63	25	65	110	74	SXP25	II
HSK63A-XPD32-110	HSK-A63	63	32	72	110	74	SXP32	II
				I				
HSK100A-XPD06-90	HSK-A100	100	6	25	90	64	SXP06	I
HSK100A-XPD08-90	HSK-A100	100	8	28	90	64	SXP08	I
HSK100A-XPD10-90	HSK-A100	100	10	35	90	64	SXP10	I
HSK100A-XPD12-100	HSK-A100	100	12	42	100	74	SXP12	I
HSK100A-XPD14-100	HSK-A100	100	14	44	100	74	SXP14	I
HSK100A-XPD16-100	HSK-A100	100	16	48	100	74	SXP16	I
HSK100A-XPD20-110	HSK-A100	100	20	52	110	84	SXP20	I
HSK100A-XPD25-120	HSK-A100	100	25	65	120	94	SXP25	II
HSK100A-XPD32-120	HSK-A100	100	32	72	120	94	SXP32	II

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*附件需单独订购。

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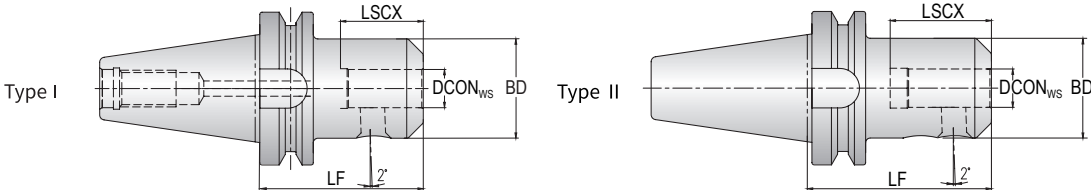
*Accessories need to be ordered separately.

附件 Accessories	DCON _{WS}									
	6	8	10	12	14	16	18	20	25	32
 扳手 Hex Wrench	S2.5	S3	S4			S6		S8		
附件 Accessories	HSK-A63					HSK-A100				
 冷却液套管 Coolant Tube	TU-HSK63					TU-HSK100				
 扳手 Coolant Tube Wrench	W-HSK63					W-HSK100				

2° 侧固式刀柄

JISB6339 BT

2° Side Lock Chucks



型号 Model DIN69893		尺寸 Dimensions (mm)						型式 Type
		DCON _{MS}	DCON _{WS}	BD	LF	LSCX		
BT40-XPD16-75	HSK-A63	63	16	48	75	55	SXP16	I
BT40-XPD16-120	HSK-A63	63	16	48	120	55	SXP16	I
BT40-XPD20-75	HSK-A63	63	20	52	75	57	SXP20	I
BT40-XPD20-120	HSK-A63	63	20	52	120	57	SXP20	I
BT40-XPD20-160	HSK-A63	63	20	52	160	57	SXP20	I
BT40-XPD25-90	HSK-A63	63	25	65	90	62	SXP25	II
BT40-XPD25-120	HSK-A63	63	25	65	120	62	SXP25	II
BT40-XPD25-165	HSK-A63	63	25	65	165	62	SXP25	II
BT40-XPD32-105	HSK-A63	63	32	72	105	63	SXP32	II
BT40-XPD32-165	HSK-A63	6	32	72	165	63	SXP32	II
				I				
BT50-XPD16-80	HSK-A100	100	16	48	80	55	SXP16	I
BT50-XPD16-120	HSK-A100	100	16	48	120	55	SXP16	I
BT50-XPD20-80	HSK-A100	100	20	52	80	57	SXP20	I
BT50-XPD20-120	HSK-A100	100	20	52	120	57	SXP20	I
BT50-XPD20-160	HSK-A100	100	20	52	160	57	SXP20	I
BT50-XPD25-100	HSK-A100	100	25	65	100	62	SXP25	II
BT50-XPD25-165	HSK-A100	100	25	65	165	62	SXP25	II
BT50-XPD32-105	HSK-A100	100	32	72	105	63	SXP32	II
BT50-XPD32-165	HSK-A100	100	32	72	165	63	SXP32	II

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*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.

*Accessories need to be ordered separately.

附件 Accessories	DCON _{WS}			
	16	20	25	32
扳手 Hex Wrench	S6	S8		S10

套式立铣刀刀柄

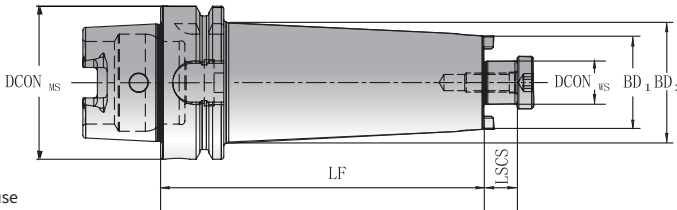
Shell Mill Chucks

DIN69893 HSK-A



特点 Characteristic

- 定位圆柱公差优于h6
- Positioning cylinder tolerance is better than h6
- 长型采用锥形设计刚性更佳
- Long shape with taper design for better rigidity
- 压紧螺钉一体式设计，使用更方便
- Pressure screw integrated design, more convenient to use



型号 Model DIN69893		尺寸 Dimensions (mm)								
		DCON _{MS}	DCON _{WS}	BD ₁	BD ₂	LF	LSCS			
HSK63A-XMB16-50	HSK-A63	63	16	34	-	50	17	MS08030	JC08017	MS03008
-100	HSK-A63	63	16	34	-	100	17	MS08030	JC08017	MS03008
HSK63A-XMB22-50	HSK-A63	63	22	42	-	50	19	MS10030	JC10021	MS04010
-100	HSK-A63	63	22	42	-	100	19	MS10030	JC10021	MS04010
-120	HSK-A63	63	22	42	-	120	19	MS10030	JC10021	MS04010
-150	HSK-A63	63	22	42	-	150	19	MS10030	JC10021	MS04010
-200	HSK-A63	63	22	42	-	200	19	MS10030	JC10021	MS04010
HSK63A-XMB27-60	HSK-A63	63	27	60	-	60	21	SXM27	JC12023	MS05016
-100	HSK-A63	63	27	60	-	100	21	SXM27	JC12023	MS05016
-120	HSK-A63	63	27	60	-	120	21	SXM27	JC12023	MS05016
HSK63A-XMB32-60	HSK-A63	63	32	78	-	60	24	SXM32	JC14020	MS06020
-100	HSK-A63	63	32	78	-	100	24	SXM32	JC14020	MS06020
-120	HSK-A63	63	32	78	-	120	24	SXM32	JC14020	MS06020
HSK63A-XMB40-60	HSK-A63	63	40	89	-	60	27	SXM40	KXM40	MS08020
-120	HSK-A63	63	40	89	-	120	27	SXM40	KXM40	MS08020
HSK100A-XMB22-50	HSK-A100	100	22	42	-	50	19	MS10030	JC10021	MS04010
-100	HSK-A100	100	22	42	-	100	19	MS10030	JC10021	MS04010
-120	HSK-A100	100	22	42	-	120	19	MS10030	JC10021	MS04010
-160	HSK-A100	100	22	42	60	160	19	MS10030	JC10021	MS04010
-200	HSK-A100	100	22	42	60	200	19	MS10030	JC10021	MS04010
HSK100A-XMB27-50	HSK-A100	100	27	60	-	50	21	SXM27	JC12023	MS05016
-60	HSK-A100	100	27	60	-	60	21	SXM27	C12023	MS05016
-100	HSK-A100	100	27	60	-	100	21	SXM27	JC12023	MS05016
-120	HSK-A100	100	27	60	-	120	21	SXM27	C12023	MS05016
-160	HSK-A100	100	27	60	75	160	21	SXM27	C12023	MS05016
-200	HSK-A100	100	27	60	75	200	21	SXM27	C12023	MS05016
HSK100A-XMB32-50	HSK-A100	100	32	78	-	50	24	SXM32	JC14020	MS06020
-60	HSK-A100	100	32	78	-	60	24	SXM32	C12023	MS06020
-100	HSK-A100	100	32	78	-	100	24	SXM32	JC14020	MS06020
-120	HSK-A100	100	32	78	-	120	24	SXM32	C12023	MS06020
-160	HSK-A100	100	32	78	-	160	24	SXM32	C12023	MS06020
-200	HSK-A100	100	32	78	-	200	24	SXM32	C12023	MS06020
HSK100A-XMB40-60	HSK-A100	100	40	89	-	60	27	SXM40	KXM40	MS08020
-100	HSK-A100	100	40	89	-	100	27	SXM40	KXM40	MS08020
-120	HSK-A100	100	40	89	-	120	27	SXM40	KXM40	MS08020

*如需其它型式或规格的 HSK 类产品请与本公司联系。
*需中心通油刀柄，请在订货时注明。
*附件需单独订购。

*For other types or specifications of HSK products, please contact our company.
*The center oil shank is required, please specify when ordering.
*Accessories need to be ordered separately.

附件 Accessories	DCON _{WS}				
	16	22	27	32	40
扳手 Hex Wrench	S6	S8	S10	S14	S17

附件 Accessories	HSK-A63	HSK-A100
冷却液套管 Coolant Tube	TU-HSK63	TU-HSK100
扳手 Coolant Tube Wrench	W-HSK63	W-HSK100

套式立铣刀刀柄

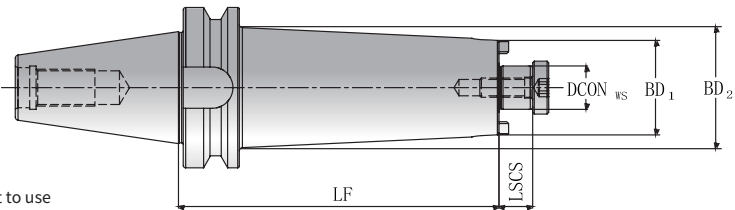
Shell Mill Chucks

JISB6339 BT



特点 Characteristic

- 定位圆柱公差优于h6
- Positioning cylinder tolerance is better than h6
- 长型采用锥形设计刚性更佳
- Long shape with taper design for better rigidity
- 压紧螺钉一体式设计，使用更方便
- Pressure screw integrated design, more convenient to use



型号 Model JIS B6339-A		尺寸 Dimensions (mm)							
		DCON _{WS}	BD ₁	BD ₂	LF	LSCS			
BT30-XMB16-60	30	16	34	-	60	17	MS08030	JC08017	MS03008
BT30-XMB22-45	30	22	42	-	45	19	MS10030	JC10021	MS04010
BT30-XMB27-45	30	27	60	-	45	21	SXM27	JC12023	MS05016
BT40-XMB16-60	40	16	34	-	60	17	MS08030	JC08017	MS03008
-90	40	16	34	-	90	17	MS08030	JC08017	MS03008
-120	40	16	34	-	120	17	MS08030	JC08017	MS03008
BT40-XMB22-45	40	22	42	-	45	19	MS10030	JC10021	MS04010
-60	40	22	42	-	60	19	MS10030	JC10021	MS04010
-90	40	22	42	-	90	19	MS10030	JC10021	MS04010
-105	40	22	42	-	105	19	MS10030	JC10021	MS04010
-120	40	22	42	-	120	19	MS10030	JC10021	MS04010
-150	40	22	42	60	150	19	MS10030	JC10021	MS04010
-200	40	22	42	60	200	19	MS10030	JC10021	MS04010
BT40-XMB27-45	40	27	60	-	45	21	SXM27	JC12023	MS05016
-60	40	27	60	-	60	21	SXM27	JC12023	MS05016
-90	40	27	60	-	90	21	SXM27	JC12023	MS05016
-105	40	27	60	-	105	21	SXM27	JC12023	MS05016
-120	40	27	60	-	120	21	SXM27	JC12023	MS05016
BT40-XMB32-45	40	32	78	-	60	24	SXM32	JC14020	MS06020
-60	40	32	78	-	60	24	SXM32	JC14020	MS06020
-90	40	32	78	-	60	24	SXM32	JC14020	MS06020
-105	40	32	78	-	60	24	SXM32	JC14020	MS06020
BT40-XMB40-60	40	40	89	-	60	27	SXM40	KXM40	MS08020

*需中心通油刀柄，请在订货时注明。
*附件需单独订购。
*The center oil shank is required, please specify when ordering.
*Accessories need to be ordered separately.

附件 Accessories	DCON _{WS}				
	16	22	27	32	40
扳手 Hex Wrench	S6	S8	S10	S14	S17

套式立铣刀刀柄

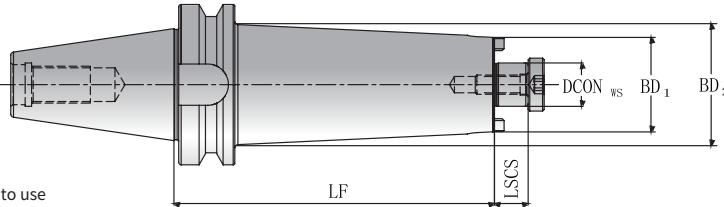
Shell Mill Chucks

JISB6339 BT



特点 Characteristic

- 定位圆柱公差优于h6
- Positioning cylinder tolerance is better than h6
- 长型采用锥形设计刚性更佳
- Long shape with taper design for better rigidity
- 压紧螺钉一体式设计，使用更方便
- Pressure screw integrated design, more convenient to use



型号 Model JIS B6339-A		尺寸 Dimensions (mm)							
		DCON _{ws}	BD ₁	BD ₂	LF	LSCS			
BT50-XMB16-60	50	16	34	-	60	17	MS08030	JC08017	MS03008
-90	50	16	34	-	90	17	MS08030	JC08017	MS03008
-120	50	16	34	-	120	17	MS08030	JC08017	MS03008
BT50-XMB22-60	50	22	42	-	60	19	MS10030	JC10021	MS04010
-90	50	22	42	-	90	19	MS10030	JC10021	MS04010
-105	50	22	42	-	105	19	MS10030	JC10021	MS04010
-120	50	22	42	-	120	19	MS10030	JC10021	MS04010
-150	50	22	42	60	150	19	MS10030	JC10021	MS04010
-200	50	22	42	60	200	19	MS10030	JC10021	MS04010
-250	50	22	42	60	250	19	MS10030	JC10021	MS04010
BT50-XMB27-45	50	27	60	-	45	21	SXM27	JC12023	MS05016
-60	50	27	60	-	60	21	SXM27	JC12023	MS05016
-90	50	27	60	-	90	21	SXM27	JC12023	MS05016
-105	50	27	60	-	105	21	SXM27	JC12023	MS05016
-120	50	27	60	-	120	21	SXM27	JC12023	MS05016
-150	50	27	60	75	150	21	SXM27	JC12023	MS05016
-200	50	27	60	75	200	21	SXM27	JC12023	MS05016
BT50-XMB32-45	50	32	78	-	45	24	SXM32	JC14020	MS06020
-60	50	32	78	-	60	24	SXM32	JC14020	MS06020
-75	50	32	78	-	75	24	SXM32	JC14020	MS06020
-90	50	32	78	-	90	24	SXM32	JC14020	MS06020
-105	50	32	78	-	105	24	SXM32	JC14020	MS06020
-120	50	32	78	-	120	24	SXM32	JC14020	MS06020
-150	50	32	78	-	150	24	SXM32	JC14020	MS06020
-200	50	32	78	-	200	24	SXM32	JC14020	MS06020
BT50-XMB40-45	50	40	89	-	45	27	SXM40	KXM40	MS08020
-60	50	40	89	-	60	27	SXM40	KXM40	MS08020
-70	50	40	89	-	70	27	SXM40	KXM40	MS08020
-90	50	40	89	-	90	27	SXM40	KXM40	MS08020
-105	50	40	89	-	105	27	SXM40	KXM40	MS08020
-120	50	40	89	-	120	27	SXM40	KXM40	MS08020

*需中心通油刀柄，请在订货时注明。

*附件需单独订购。

*The center oil shank is required, please specify when ordering.

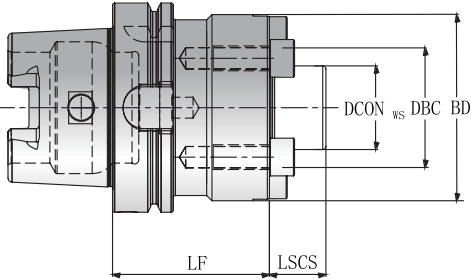
*Accessories need to be ordered separately.

附件 Accessories	DCON _{ws}				
	16	22	27	32	40
扳手 Hex Wrench	S6	S8	S10	S14	S17

面铣刀刀柄

Face Mill Chucks

DIN69893 HSK-A



型号 Model DIN69893		尺寸 Dimensions (mm)							
		DCON _{ws}	BD	DBC	LF	LSCS			
HSK63A-XMC40-75	HSK-A63	40	89	66.7	75	27	MS12045 (4)	KXM40	MS08020
HSK100A-XMC40-75	HSK-A100	40	89	66.7	75	27	MS12045 (4)	KXM40	MS08020
HSK100A-XMC60-75	HSK-A100	60	129	101.6	75	38	MS16045 (4)	KXMC60	MS10025

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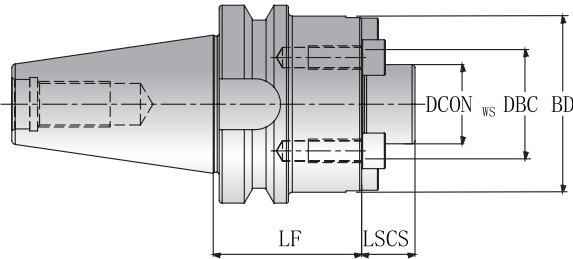
附件 Accessories	DCON _{ws}	
	63	100
扳手 Hex Wrench	S10	S14

附件 Accessories	HSK-A63	HSK-A100
冷却液套管 Coolant Tube	TU-HSK63	TU-HSK100
扳手 Coolant Tube Wrench	W-HSK63	W-HSK100

面铣刀刀柄

Face Mill Chucks

JISB6339 BT



型号 Model JIS B6339-A		尺寸 Dimensions (mm)					 螺钉 Screw	 键 Key	 螺钉 Screw
		DCON _{ws}	BD	DBC	LF	LSCS			
BT40-XMC40-60	40	40	89	66.7	60	27	MS12045 (4)	KXM40	MS08020
BT50-XMC40-75	50	40	89	66.7	75	27	MS12045 (4)	KXM40	MS08020
BT50-XMC60-75	50	60	129	101.6	75	38	MS16045 (4)	KXMC60	MS10025

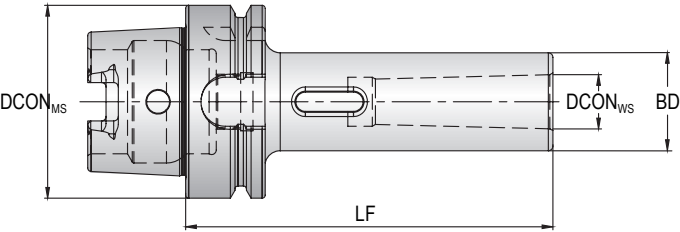
*附件需单独订购。
*Accessories need to be ordered separately.

附件 Accessories	DCON _{ws}	
	40	60
扳手 Hex Wrench	S10	S14

有扁尾莫氏圆锥孔刀柄

MT Reducing Adaptor With Tang

DIN69893 HSK-A



型号 Model DIN69893		莫氏锥度 Morse taper	安装钻头直径 (mm) Drilling tool diameter	尺寸 Dimensions (mm)			
				DCON _{ms}	BD	DCON _{ws}	LF
HSK63A-M1-100	HSK-A63	MT1	3-14	63	25	12.065	100
HSK63A-M2-120	HSK-A63	MT2	14.25-23.0	63	32	17.780	120
HSK63A-M3-140	HSK-A63	MT3	23.25-31.75	63	40	23.825	140
HSK63A-M4-160	HSK-A63	MT4	32.0-50.5	63	48	31.267	160
HSK100A-M1-110	HSK-A100	MT1	3-14	100	25	12.065	110
HSK100A-M2-120	HSK-A100	MT2	14.25-23.0	100	32	17.780	120
HSK100A-M3-150	HSK-A100	MT3	23.25-31.75	100	40	23.825	150
HSK100A-M4-170	HSK-A100	MT4	32.0-50.5	100	48	31.267	170
HSK100A-M5-200	HSK-A100	MT5	51-76	100	63	44.399	200

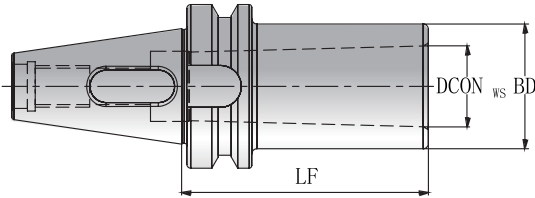
*如需其它型式或规格的 HSK 类产品请与本公司联系。
*附件需单独订购。
*For other types or specifications of HSK products, please contact our company.
*Accessories need to be ordered separately.

附件 Accessories	HSK-A63	HSK-A100
冷却液套管 Coolant Tube	TU-HSK63	TU-HSK100
扳手 Coolant Tube Wrench	W-HSK63	W-HSK100

有扁尾莫氏圆锥孔刀柄

MT Reducing Adaptor With Tang

JISB6339 BT

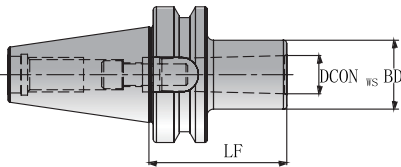


型号 Model JIS B6339-A		莫氏锥度 Morse taper	安装钻头直径 (mm) Drilling tool diameter	尺寸 Dimensions (mm)		
				DCON _{ws}	BD	LF
BT30-M1-50	30	MT1	3-14	12.065	25	50
BT30-M2-60	30	MT2	14.25-23	17.780	32	60
BT40-M1-45	40	MT1	3-14	12.065	25	45
-120	40	MT1	3-14	12.065	25	120
BT40-M2-60	40	MT2	14.25-23	17.780	32	60
-120	40	MT2	14.25-23	17.780	32	120
BT40-M3-75	40	MT3	23.25-31.75	23.825	40	75
-135	40	MT3	23.25-31.75	23.825	40	135
BT40-M4-95	40	MT4	32-50.5	31.267	48	95
-165	40	MT4	32-50.5	31.267	48	165
BT50-M1-45	50	MT1	3-14	12.065	25	45
-120	50	MT1	3-14	12.065	25	120
-180	50	MT1	3-14	12.065	25	180
BT50-M2-45	50	MT2	14.25-23	17.780	32	45
-135	50	MT2	14.25-23	17.780	32	135
-180	50	MT2	14.25-23	17.780	32	180
BT50-M3-75	50	MT3	23.25-31.75	23.825	40	75
-150	50	MT3	23.25-31.75	23.825	40	150
-180	50	MT3	23.25-31.75	23.825	40	180
BT50-M4-75	50	MT4	32-50.5	31.267	48	75
-180	50	MT4	32-50.5	31.267	48	180
BT50-M5-107	50	MT5	51-76	44.399	63	107
-210	50	MT5	51-76	44.399	63	210

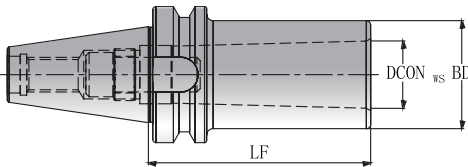
无扁尾莫氏圆锥孔刀柄

MT Reducing Adaptor For Locking Threads

JISB6339 BT



Type I



Type II

型号 Model JIS B6339-A		莫氏锥度 Morse taper	安装铣刀直径 (mm) Milling tool diameter	尺寸 Dimensions (mm)			 螺钉 Screw	型式 Type
				DCON _{ws}	BD	LF		
BT40-MW1-50	40	MT1	6-12	12.065	27	50	MS06025	I
BT40-MW2-64	40	MT2	14-20	17.780	32	64	MS10030-A	I
BT40-MW3-76	40	MT3	22-36	23.825	40	76	MS12035-A	II
BT40-MW4-103	40	MT4	32-56	31.267	50	103	MS16040-A	II
							I	
BT50-MW1-45	50	MT1	6-12	12.065	27	45	MS06025	I
BT50-MW2-60	50	MT2	14-20	17.780	32	60	MS10030	I
BT50-MW3-65	50	MT3	22-36	23.825	40	65	MS12035	I
BT50-MW4-75	50	MT4	32-56	31.267	50	75	MS16040-B	I
BT50-MW5-105	50	MT5	40-63	44.399	78	105	MS20048-A	II

*附件需单独订购。

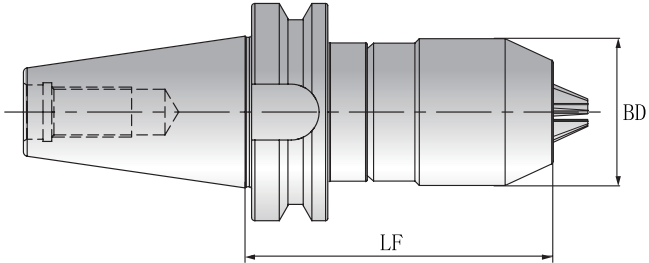
*Accessories need to be ordered separately.

附件 Accessories	MT1	MT2	MT3	MT4 (I)	MT4 (II)	MT5
 扳手 Hex Wrench	S5	S8	S10	S14	S12	S17

整体式钻夹头刀柄

Short Drill Chucks

JISB6339 BT



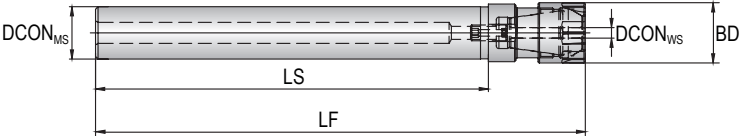
型号 Model JIS B6339-A		夹持范围 Clamping range (mm)	尺寸 Dimensions (mm)	
			BD	LF
BT30-KPU08-80	30	0.5-8	37.5	80
BT30-KPU13-110	30	1.0-13	50.5	110
BT40-KPU08-80	40	0.5-8	37.5	80
BT40-KPU13-95	40	1.0-13	50.5	95
BT40-KPU16-100	40	3-16	57	100
BT50-KPU13-105	50	1.0-13	50.5	105
BT50-KPU16-110	50	3-16	57	110

*附件需单独订购。
*Accessories need to be ordered separately.

附件 Accessories	KPU08	KPU13	KPU16
扳手 Wrench	WCN20	WCN32	WCN32

ER 卡簧接杆

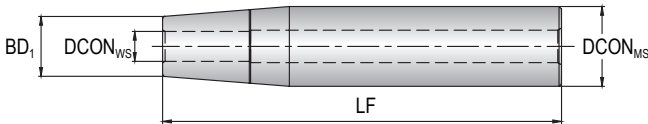
ER Collet Chucks Extensions



型号 Model	尺寸 Dimensions (mm)					 螺母 Nuts	 螺钉 Screw	 卡簧 Collets
	DCON _{WS}	BD	DCON _{MS}	LS	LF			
C16-ER11-100(M)	0.5~7	16	16	100	127	CNM11	SO06014C	ER11
C20-ER16-100(M)	0.5~10	23	20	100	135	CNM16	SO06014C	ER16
C20-ER16-150(M)	0.5~10	23	20	150	185	CNM16	SO06014C	ER16
C20-ER20-100(M)	1.0~13	28	20	100	138	CNM20	SO08014C	ER20
C20-ER20-150(M)	1.0~13	28	20	150	188	CNM20	SO08014C	ER20
C25-ER20-100(M)	1.0~13	28	25	100	138	CNM20	SO08014C	ER20
C25-ER20-150(M)	1.0~13	28	25	150	188	CNM20	SO08014C	ER20

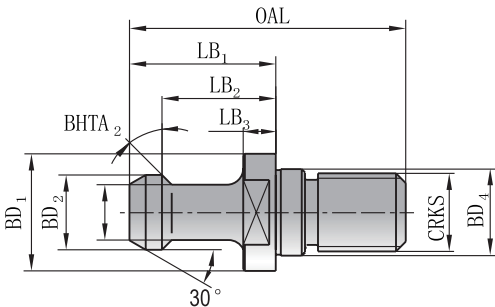
* ER 卡簧资料参见 76 页，螺母参见 85 页。
*附件需单独订购。
*See page 76 for ER collets and page 85 for nuts.
*Accessories need to be ordered separately.

附件 Accessories	ER11	ER16	ER20
扳手 Wrench	WM11	WM16	WM20



型号 Model	尺寸 Dimensions (mm)			
	DCON _{WS}	DCON _{MS}	BD ₁	LF
C12-SFX03-160	3	12	8	160
C12-SFX04-160	4	12	8	160
C16-SFX03-160	3	16	10	160
C16-SFX04-160	4	16	10	160
C16-SFX05-160	5	16	10	160
C16-SFX06-160	6	16	10	160
C20-SFX05-160	5	20	14	160
C20-SFX06-160	6	20	14	160
C20-SF08-160	8	20	14	160
C25-SF08-160	8	25	19	160
C25-SF10-160	10	25	20	160
C25-SF12-160	12	25	20	160
C25-SF14-160	14	25	20	160
C25-SF16-160	16	25	22	160
C32-SF10-160	10	32	24	160
C32-SF12-160	12	32	24	160
C32-SF14-160	14	32	27	160
C32-SF16-160	16	32	27	160
C32-SF18-160	18	32	27	160
C32-SF20-160	20	32	27	160

附件 Accessories	DCON _{WS}										
	3	4	5	6	8	10	12	14	16	18	20
扳手 Hex Wrench	-			S2.5	S3	S4			S6		S8

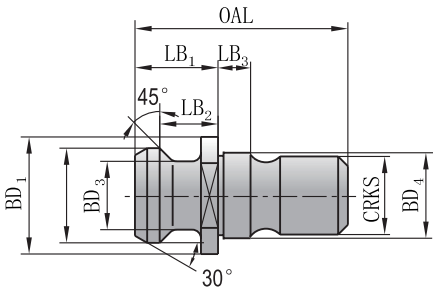


	型号 Model	尺寸 Dimensions (mm)									
		OAL	LB ₁	LB ₂	LB ₃	BD ₁	BD ₂	BD ₃	CRKS	BD ₄	BHTA ₂
30	P30T-I	43	23	18	4.5	16.5	11	7	M12	12.5	45°
30	P30T-II	43	23	18	4.5	16.5	11	7	M12	12.5	30°
40	P40T-I	60	35	28	6	23	15	10	M16	17	45°
40	P40T-II	60	35	28	6	23	15	10	M16	17	30°
40	P40T-III	60	35	28	6	23	15	10	M16	17	90°
50	P50T-I	85	45	35	10	38	23	17	M24	25	45°
50	P50T-II	85	45	35	10	38	23	17	M24	25	30°
50	P50T-III	85	45	35	10	38	23	17	M24	25	90°
60	P60T-I	115	65	53	14	56	32	24	M30	31	45°
60	P60T-II	115	65	53	14	56	32	24	M30	31	30°
60	P60T-III	115	65	53	14	56	32	24	M30	31	90°

* BT 柄标准拉钉, xxxx-I 为 45°拉钉、xxxx-II 为 30°拉钉、xxx-III 为 90°拉钉。
*BT shank standard pull studs, xxx-I is 45° pull studs, xxx-II is 30° pull studs, xxx-III is 90° pull studs.

MAZAK/BT 拉钉

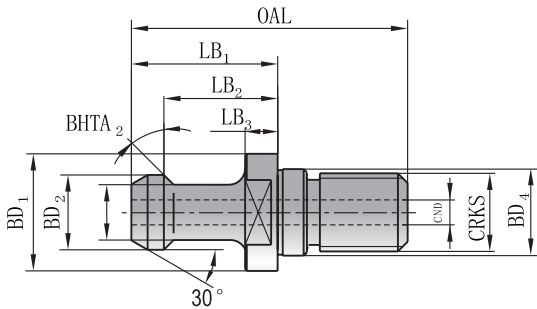
MAZAK/BT Pull Studs



	型号 Model	尺寸 Dimensions (mm)								
		OAL	LB ₁	LB ₂	LB ₃	BD ₁	BD ₂	BD ₃	CRKS	BD ₄
40	MAZAK/BT40	44.1	19.1	14.02	5	22	18.8	12.45	M16	17
50	MAZAK/BT50	65.2	25.2	17.58	8	37	29	20.83	M24	25

BT 内冷拉钉（MAS 403）

Coolant Pull Studs



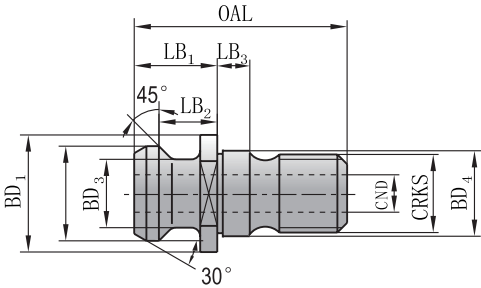
	型号 Model	尺寸 Dimensions (mm)											
		OAL	LB ₁	LB ₂	LB ₃	BD ₁	BD ₂	BD ₃	CRKS	BD ₄	BHTA ₂	CND	
	40	P40T-IC	60	35	28	6	23	15	10	M16	17	45°	4.0
	40	P40T-IIC	60	35	28	6	23	15	10	M16	17	30°	4.0
	40	P40T-IIIC	60	35	28	6	23	15	10	M16	17	90°	4.0
	50	P50T-IC	85	45	35	10	38	23	17	M24	25	45°	7.0
	50	P50T-IIC	85	45	35	10	38	23	17	M24	25	30°	7.0
	50	P50T-IIIC	85	45	35	10	38	23	17	M24	25	90°	7.0
	60	P60T-IC	115	65	53	14	56	32	24	M30	31	45°	12.0
	60	P60T-IIC	115	65	53	14	56	32	24	M30	31	30°	12.0
	60	P60T-IIIC	115	65	53	14	56	32	24	M30	31	90°	12.0

* BT 柄标准拉钉，xxxx-I 为 45°拉钉、xxxx-II 为 30°拉钉、xxxx-III 为 90°拉钉。

*BT shank standard pull studs, xxx-I is 45° pull studs, xxx-II is 30° pull studs, xxx-III is 90° pull studs.

MAZAK/BT 内冷拉钉

MAZAK/BT Coolant Pull Studs



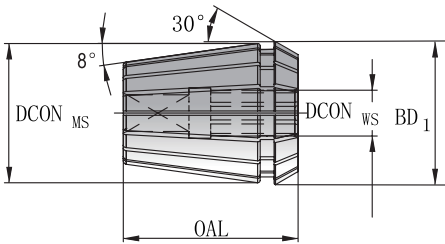
	型号 Model	尺寸 Dimensions (mm)									
		OAL	LB ₁	LB ₂	LB ₃	BD ₁	BD ₂	BD ₃	CRKS	BD ₄	CND
40	MAZAK/BT40C	44.1	19.1	14.02	5	22	18.8	12.45	M16	17	7.0
50	MAZAK/BT50C	65.2	25.2	17.58	8	37	29	20.83	M24	25	10

ER 卡簧（DIN 6499）

ER Collets

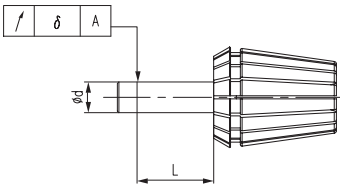


- 精度按DIN6499 标准执行（见表一）
- 刀具夹持小于2/3 卡簧内孔长度将造成卡簧永久性损坏
- 夹持等于卡簧内孔长度可获得最好的夹持精度和夹持力
- 被夹持的刀具直径不得大于卡簧最大夹持直径
- 卡簧夹持范围：ER11 为0.5mm，ER16 及以上为1.0mm
- Accuracy according to DIN6499 standard（see Table 1）
- The tool clamping is less than 2/3, the length of the inner hole of the collets will cause permanent loss of the collets
- Clamping is equal to the length of the collets bore for the best clamping accuracy and clamping force
- The diameter of the tool to be clamped shall not be greater than the maximum clamping diameter of the collets
- Collets clamping range：0.5mm for ER11 and 1.0mm for ER16 and above



ER11 OAL/BD ₁ (mm) 18.5/11.5	ER16 OAL/BD ₁ (mm) 27.5/17.0	ER20 OAL/BD ₁ (mm) 31.5/21.0	ER25 OAL/BD ₁ (mm) 34.0/26.0	ER32 OAL/BD ₁ (mm) 40.0/33.0	ER40 OAL/BD ₁ (mm) 46.0/41.0	卡簧 Collets DCON _{WS} 夹持范围 Clamping range (mm)
ER11-1	ER16-1	ER20-1	ER25-1	ER32-1		1.0-0.5
ER11-1.5	ER16-1.5					1.5-1.0
ER11-2	ER16-2	ER20-2	ER25-2	ER32-2		2.0-1.0
ER11-2.5	ER16-2.5					2.5-1.5
ER11-3	ER16-3	ER20-3	ER25-3	ER32-3		3.0-2.5
ER11-3.5	ER16-3.5					3.5-3.0
ER11-4	ER16-4	ER20-4	ER25-4	ER32-4	ER40-4	4.0-3.5
ER11-4.5	ER16-4.5					4.5-4.0
ER11-5	ER16-5	ER20-5	ER25-5	ER32-5	ER40-5	5.0-4.5
ER11-5.5	ER16-5.5					5.5-5.0
ER11-6	ER16-6	ER20-6	ER25-6	ER32-6	ER40-6	6.0-5.5
ER11-6.5	ER16-6.5					6.5-6.0
ER11-7						7.0-6.5
	ER16-7	ER20-7	ER25-7	ER32-7	ER40-7	7.0-6.0
	ER16-8	ER20-8	ER25-8	ER32-8	ER40-8	8.0-7.0
	ER16-9	ER20-9	ER25-9	ER32-9	ER40-9	9.0-8.0
	ER16-10	ER20-10	ER25-10	ER32-10	ER40-10	10.0-9.0
		ER20-11	ER25-11	ER32-11	ER40-11	11.0-10.0
		ER20-12	ER25-12	ER32-12	ER40-12	12.0-11.0
		ER20-13	ER25-13	ER32-13	ER40-13	13.0-12.0
			ER25-14	ER32-14	ER40-14	14.0-13.0
			ER25-15	ER32-15	ER40-15	15.0-14.0
			ER25-16	ER32-16	ER40-16	16.0-15.0
				ER32-17	ER40-17	17.0-16.0
				ER32-18	ER40-18	18.0-17.0
				ER32-19	ER40-19	19.0-18.0
				ER32-20	ER40-20	20.0-19.0
					ER40-21	21.0-20.0
					ER40-22	22.0-21.0
					ER40-23	23.0-22.0
					ER40-24	24.0-23.0
					ER40-25	25.0-24.0
					ER40-26	26.0-25.0

表一



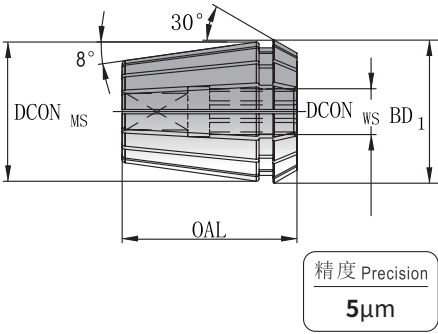
d (mm)	L (mm)	δ (mm)
		ERxx-x/ERxx-xC
1-1.6	6	0.015
1.6-3	10	0.015
3-6	16	0.015
6-10	25	0.015
10-18	40	0.020
18-26	50	0.020

ER 高精度卡簧（DIN 6499）

ER Precision Collets



- 为保证卡簧精度，推荐夹持定径刀具
- 刀具夹持小于2/3 卡簧内孔长度将造成卡簧永久性损坏
- 夹持等于卡簧内孔长度可获得最好的夹持精度和夹持力
- 被夹持的刀具直径不得大于卡簧最大夹持直径
- 卡簧夹持范围：ER11 为0.5mm，ER16 及以上为1.0mm
- To ensure the accuracy of the collets, it is recommended to clamp the sizing tool
- The tool clamping is less than 2/3, the length of the inner hole of the collets will cause permanent loss of the collets
- Clamping is equal to the length of the collets bore for the best clamping accuracy and clamping force
- The diameter of the tool to be clamped shall not be greater than the maximum clamping diameter of the collets
- Collets clamping range: 0.5mm for ER11 and 1.0mm for ER16 and above



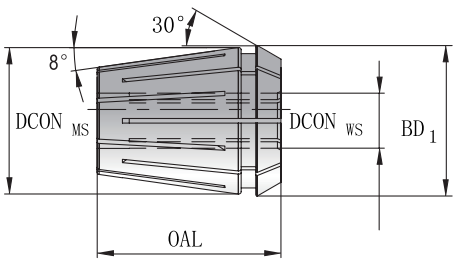
ER11 OAL/BD ₁ (mm) 18.5/11.5	ER16 OAL/BD ₁ (mm) 27.5/17.0	ER20 OAL/BD ₁ (mm) 31.5/21.0	ER25 OAL/BD ₁ (mm) 34.0/26.0	ER32 OAL/BD ₁ (mm) 40.0/33.0	ER40 OAL/BD ₁ (mm) 46.0/41.0	卡簧 Collets DCON _{WS} 夹持范围 Clamping range (mm)
ER11-2.5A						2.5-2.0
ER11-3A	ER16-3A	ER20-3A	ER25-3A	ER32-3A		3.0-2.5
ER11-3.5A						3.5-3.0
ER11-4A	ER16-4A	ER20-4A	ER25-4A	ER32-4A	ER40-4A	4.0-3.5
ER11-4.5A						4.5-4.0
ER11-5A	ER16-5A	ER20-5A	ER25-5A	ER32-5A	ER40-5A	5.0-4.5
ER11-5.5A						5.5-5.0
ER11-6A	ER16-6A	ER20-6A	ER25-6A	ER32-6A	ER40-6A	6.0-5.5
ER11-6.5A						6.5-6.0
ER11-7A						7.0-6.5
	ER16-7A	ER20-7A	ER25-7A	ER32-7A	ER40-7A	7.0-6.0
	ER16-8A	ER20-8A	ER25-8A	ER32-8A	ER40-8A	8.0-7.0
	ER16-9A	ER20-9A	ER25-9A	ER32-9A	ER40-9A	9.0-8.0
	ER16-10A	ER20-10A	ER25-10A	ER32-10A	ER40-10A	10.0-9.0
		ER20-11A	ER25-11A	ER32-11A	ER40-11A	11.0-10.0
		ER20-12A	ER25-12A	ER32-12A	ER40-12A	12.0-11.0
		ER20-13A	ER25-13A	ER32-13A	ER40-13A	13.0-12.0
			ER25-14A	ER32-14A	ER40-14A	14.0-13.0
			ER25-15A	ER32-15A	ER40-15A	15.0-14.0
			ER25-16A	ER32-16A	ER40-16A	16.0-15.0
				ER32-17A	ER40-17A	17.0-16.0
				ER32-18A	ER40-18A	18.0-17.0
				ER32-19A	ER40-19A	19.0-18.0
				ER32-20A	ER40-20A	20.0-19.0
					ER40-21A	21.0-20.0
					ER40-22A	22.0-21.0
					ER40-23A	23.0-22.0
					ER40-24A	24.0-23.0
					ER40-25A	25.0-24.0
					ER40-26A	26.0-25.0

ER 止水卡簧（DIN 6499）

ER Coolant Collets



- 精度按DIN6499 标准执行（见表一）
- 为保证良好的止水功能，推荐采用定径（柄部公差符合h9）夹持
- 夹持柄径长度必须大于等于卡簧内孔长度才能实现止水功能
- 被夹持的刀具直径不得大于卡簧最大夹持直径
- Accuracy according to DIN6499 standard（see Table 1）
- In order to ensure a good water stop function, it is recommended to use sizing（shank tolerance according to H9）clamping
- The length of the clamping shank diameter must be greater than or equal to the length of the inner hole of the collets to achieve the water-stopping function.
- The diameter of the tool to be clamped shall not be greater than the maximum clamping diameter of the collets



ER11 OAL/BD ₁ (mm) 18.5/11.5	ER16 OAL/BD ₁ (mm) 27.5/17.0	ER20 OAL/BD ₁ (mm) 31.5/21.0	ER25 OAL/BD ₁ (mm) 34.0/26.0	ER32 OAL/BD ₁ (mm) 40.0/33.0	ER40 OAL/BD ₁ (mm) 46.0/41.0	卡簧 Collets dm 夹持范围 Clamping range (mm)
ER11-3C	ER16-3C					3.0
ER11-3.5C						3.5
ER11-4C	ER16-4C					4.0
ER11-4.5C						4.5
ER11-5C	ER16-5C					5.0
ER11-5.5C						5.5
ER11-6C	ER16-6C					6.0
ER11-6.5C						6.5
ER11-7C	ER16-7C	ER20-7C				7.0
	ER16-8C	ER20-8C	ER25-8C	ER32-8C		8.0
	ER16-9C	ER20-9C	ER25-9C	ER32-9C		9.0
	ER16-10C	ER20-10C	ER25-10C	ER32-10C	ER40-10C	10.0
		ER20-11C	ER25-11C	ER32-11C	ER40-11C	11.0
		ER20-12C	ER25-12C	ER32-12C	ER40-12C	12.0
		ER20-13C	ER25-13C	ER32-13C	ER40-13C	13.0
			ER25-14C	ER32-14C	ER40-14C	14.0
			ER25-15C	ER32-15C	ER40-15C	15.0
			ER25-16C	ER32-16C	ER40-16C	16.0
				ER32-17C	ER40-17C	17.0
				ER32-18C	ER40-18C	18.0
				ER32-19C	ER40-19C	19.0
				ER32-20C	ER40-20C	20.0
					ER40-21C	21.0
					ER40-22C	22.0
					ER40-23C	23.0
					ER40-24C	24.0
					ER40-25C	25.0
					ER40-26C	26.0

＊若需要其他尺寸规格的卡簧，请与本公司咨询、订购。
*If you need other sizes and specifications of collets, please consult and order with our company.

表一

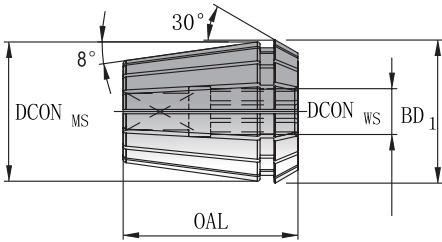
d (mm)	L (mm)	δ (mm)
		ERxx-x/ERxx-xC
1-1.6	6	0.015
1.6-3	10	0.015
3-6	16	0.015
6-10	25	0.015
10-18	40	0.020
18-26	50	0.020

ER 攻丝卡簧

ER Rigid Tap Collets



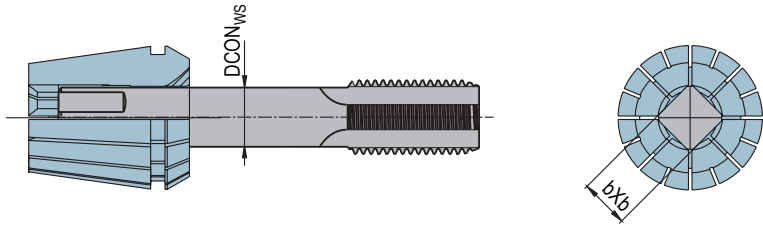
- 请确保所用丝锥外方与卡簧内方尺寸一致
- 被夹持的刀具直径不得大于卡簧最大夹持直径
- 丝锥方柄必须插入卡簧方孔内，方能进行加工
- Make sure that the outer dimensions of the tap used match the dimensions of the inside of the collets
- The diameter of the tool to be clamped shall not be greater than the maximum clamping diameter of the collets
- The tap shank must be inserted into the collets square hole before it can be machined



型号 Model		ISO529/ISO2283	DIN374/DIN376	JISB4430
ER20-6.3B5	ER32-6.3B5	M8	M8	M6/M8
ER20-7B5.5	ER32-7B5.5		M10	M10
ER20-8B6.3	ER32-8B6.3	M10		
ER20-8.5B6.5	ER32-8.5B6.5			M12
ER20-9B7.1	ER32-9B7.1	M12	M12	
	ER32-12B9		M16	
	ER32-12.5B10	M16		M16
	ER32-14B11.2	M18/M20	M18	M18
	ER32-15B12			M20
	ER32-16B12		M20	

攻丝卡簧应用指南

ER Rigid Tap Collets Application Guide



- 1) 丝锥方柄必须伸入卡簧方槽内，才能安全，有效的工作；

2) 选用卡簧时，请注意丝锥的四方柄与卡簧内四方的匹配；

3) 卡簧规格型号即包含了配用丝锥柄径及内方孔尺寸，请注意辨别；
- 1) The tap shank must protrude into the collets groove to work safely and efficiently;

2) When selecting the collets, pay attention to the matching of the square shank of the tap with the square in the collets;

3) The collets specification model includes the diameter of the tap shank and the size of the inner hole, please pay attention to identification;

The collets specifications are: ER16-9.5 B 7

卡簧型号规格为： ER16-9. 5 B 7

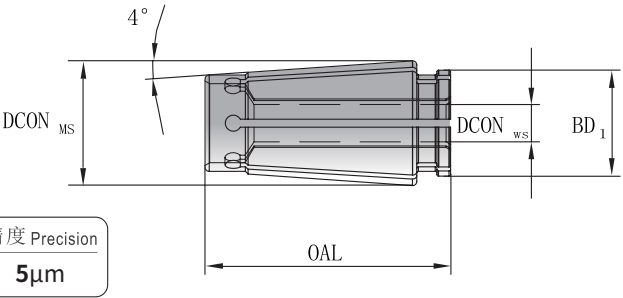
Tap shank size b
丝锥柄部四方尺寸 b
丝锥柄径 d
Tap shank diameter d

SK 卡簧

SK Collets



- 刀具夹持小于2/3 卡簧内孔长度将造成卡簧永久性损坏
- 夹持等于卡簧内孔长度可获得最好的夹持精度和夹持力
- 被夹持的刀具直径不得大于卡簧最大夹持直径
- The tool clamping is less than 2/3, the length of the inner hole of the collets will cause permanent loss of the collets
- Clamping is equal to the length of the collets bore for the best clamping accuracy and clamping force
- The diameter of the tool to be clamped shall not be greater than the maximum clamping diameter of the collets



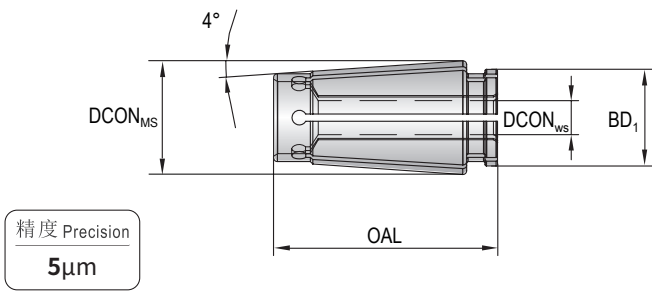
SK06 OAL/BD ₁ (mm) 25.0/9.0	SK10 OAL/BD ₁ (mm) 30.5/13.0	SK13 OAL/BD ₁ (mm) 39.0/17.0	SK16 OAL/BD ₁ (mm) 45.0/20.5	SK20 OAL/BD ₁ (mm) 54.0/25.0	SK25 OAL/BD ₁ (mm) 57.0/29.7	卡簧 Collets DCON _{WS} 夹持范围 Clamping range (mm)
SK06-3	SK10-3	SK13-3	SK16-3	SK20-3	SK25-3	2.8-3.0
SK06-4	SK10-4	SK13-4	SK16-4	SK20-4	SK25-4	3.5-4.0
SK06-5	SK10-5	SK13-5	SK16-5	SK20-5	SK25-5	4.5-5.0
SK06-6	SK10-6	SK13-6	SK16-6	SK20-6	SK25-6	5.5-6.0
	SK10-8	SK13-8	SK16-8	SK20-8	SK25-8	7.5-8.0
	SK10-10	SK13-10	SK16-10	SK20-10	SK25-10	9.5-10.0
		SK13-12	SK16-12	SK20-12	SK25-12	11.5-12.0
		SK13-13	SK16-13	SK20-13	SK25-13	12.5-13.0
			SK16-14	SK20-14	SK25-14	13.5-14.0
			SK16-16	SK20-16	SK25-16	15.5-16.0
				SK20-18	SK25-18	17.5-18.0
				SK20-20	SK25-20	19.5-20.0
					SK25-22	21.5-22.0
					SK25-25	24.5-25.0

SK 高精度卡簧

SK Precision Collets



- 刀具夹持小于2/3 卡簧内孔长度将造成卡簧永久性损坏
- 夹持等于卡簧内孔长度可获得最好的夹持精度和夹持力
- 被夹持的刀具直径不得大于卡簧最大夹持直径
- The tool clamping is less than 2/3, the length of the inner hole of the collets will cause permanent loss of the collets
- Clamping is equal to the length of the collets bore for the best clamping accuracy and clamping force
- The diameter of the tool to be clamped shall not be greater than the maximum clamping diameter of the collets



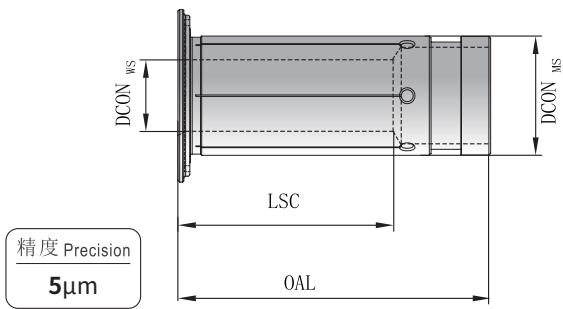
SK06 OAL/BD ₁ (mm) 25.0/9.0	SK10 OAL/BD ₁ (mm) 30.5/13.0	SK13 OAL/BD ₁ (mm) 39.0/17.0	SK16 OAL/BD ₁ (mm) 45.0/20.5	SK20 OAL/BD ₁ (mm) 54.0/25.0	SK25 OAL/BD ₁ (mm) 57.0/29.7	卡簧 Collets DCON _{WS} 夹持范围 Clamping range (mm)
SK06-3A	SK10-3A	SK13-3A	SK16-3A	SK20-3A	SK25-3A	2.8-3.0
SK06-4A	SK10-4A	SK13-4A	SK16-4A	SK20-4A	SK25-4A	3.5-4.0
SK06-5A	SK10-5A	SK13-5A	SK16-5A	SK20-5A	SK25-5A	4.5-5.0
SK06-6A	SK10-6A	SK13-6A	SK16-6A	SK20-6A	SK25-6A	5.5-6.0
	SK10-8A	SK13-8A	SK16-8A	SK20-8A	SK25-8A	7.5-8.0
	SK10-10A	SK13-10A	SK16-10A	SK20-10A	SK25-10A	9.5-10.0
		SK13-12A	SK16-12A	SK20-12A	SK25-12A	11.5-12.0
		SK13-13A	SK16-13A	SK20-13A	SK25-13A	12.5-13.0
			SK16-14A	SK20-14A	SK25-14A	13.5-14.0
			SK16-16A	SK20-16A	SK25-16A	15.5-16.0
				SK20-18A	SK25-18A	17.5-18.0
				SK20-20A	SK25-20A	19.5-20.0
					SK25-22A	21.5-22.0
					SK25-25A	24.5-25.0

液压卡簧

Hydraulic Collets



- 切削刀具必须完全接触长度为LSC 的液压卡簧型腔，否则会对液压卡簧及刀柄产生永久性的损伤
- 切削刀具必须为圆柱形柄，在使用内冷时，必须有一个通孔
- 液压卡簧必须完全插入到液压柄孔径中，直至肩部与液压柄前端面贴合
- 切削刀具的柄径公差等级为h6
- The cutting tool must be in full contact with the hydraulic collets cavity of length LSC, otherwise it will cause permanent damage to the hydraulic collets and the shank
- The cutting tool must be a cylindrical shank, and when using internal coolant, there must be a through-hole
- The hydraulic collets must be fully inserted into the hydraulic shank bore until the shoulder fits the front face of the hydraulic shank
- The shank diameter tolerance class of the cutting tool is h6



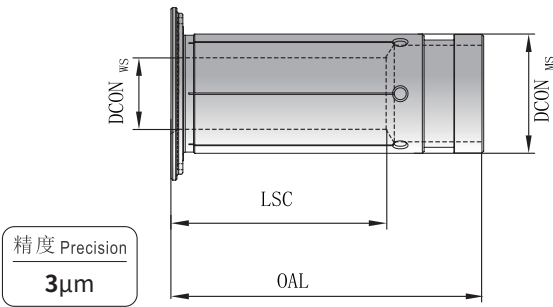
型号 Model	尺寸 Dimensions (mm)			
	DCON _{WS}	DCON _{WS}	LSC	OAL
HC12-3	3	12	16.5	47.5
HC12-4	4	12	16.5	47.5
HC12-5	5	12	16.5	47.5
HC12-6	6	12	24.0	47.5
HC12-8	8	12	25.5	47.5
HC20-3	3	20	17.5	52.5
HC20-4	4	20	17.5	52.5
HC20-5	5	20	17.5	52.5
HC20-6	6	20	25.5	52.5
HC20-7	7	20	28.0	52.5
HC20-8	8	20	28.0	52.5
HC20-9	9	20	32.5	52.5
HC20-10	10	20	32.5	52.5
HC20-11	11	20	36.0	52.5
HC20-12	12	20	36.0	52.5
HC20-13	13	20	36.5	52.5
HC20-14	14	20	37.0	52.5
HC20-15	15	20	37.0	52.5
HC20-16	16	20	37.5	52.5
HC32-6	6	32	25.5	63.5
HC32-8	8	32	27.5	63.5
HC32-10	10	32	30.5	63.5
HC32-12	12	32	30.5	63.5
HC32-14	14	32	32.5	63.5
HC32-16	16	32	40.5	63.5
HC32-18	18	32	40.5	63.5
HC32-20	20	32	40.5	63.5
HC32-25	25	32	48.5	63.5

液压卡簧

Hydraulic Collets



- 切削刀具必须完全接触长度为LSC的液压卡簧型腔，否则会对液压卡簧及刀柄产生永久性的损伤
- 切削刀具必须为圆柱形柄，在使用内冷时，必须有一个通孔
- 液压卡簧必须完全插入到液压柄孔径中，直至肩部与液压柄前端面贴合
- 切削刀具的柄径公差等级为h6
- The cutting tool must be in full contact with the hydraulic collets cavity of length LSC, otherwise it will cause permanent damage to the hydraulic collets and the shank
- The cutting tool must be a cylindrical shank, and when using internal coolant, there must be a through-hole
- The hydraulic collets must be fully inserted into the hydraulic shank bore until the shoulder fits the front face of the hydraulic shank
- The shank diameter tolerance class of the cutting tool is h6



精度 Precision
3μm

型号 Model	尺寸 Dimensions (mm)			
	DCON _{WS}	DCON _{MS}	LSC	OAL
HC12-3M	3	12	16.5	47.5
HC12-4M	4	12	16.5	47.5
HC12-5M	5	12	16.5	47.5
HC12-6M	6	12	24.0	47.5
HC12-8M	8	12	25.5	47.5
HC20-3M	3	20	17.5	52.5
HC20-4M	4	20	17.5	52.5
HC20-5M	5	20	17.5	52.5
HC20-6M	6	20	25.5	52.5
HC20-7M	7	20	28.0	52.5
HC20-8M	8	20	28.0	52.5
HC20-9M	9	20	32.5	52.5
HC20-10M	10	20	32.5	52.5
HC20-11M	11	20	36.0	52.5
HC20-12M	12	20	36.0	52.5
HC20-13M	13	20	36.5	52.5
HC20-14M	14	20	37.0	52.5
HC20-15M	15	20	37.0	52.5
HC20-16M	16	20	37.5	52.5
HC32-6M	6	32	25.5	63.5
HC32-8M	8	32	27.5	63.5
HC32-10M	10	32	30.5	63.5
HC32-12M	12	32	30.5	63.5
HC32-14M	14	32	32.5	63.5
HC32-16M	16	32	40.5	63.5
HC32-18M	18	32	40.5	63.5
HC32-20M	20	32	40.5	63.5
HC32-25M	25	32	48.5	63.5

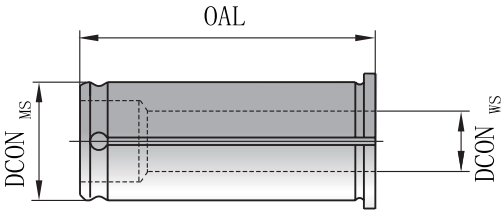
直筒卡簧

Straight Collets



- 适用于强力夹头刀柄
- 夹持柄径公差为h6
- Suitable for milling chucks
- The clamping shank diameter tolerance is h6

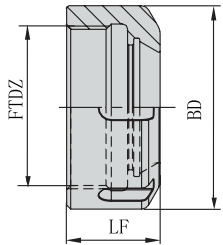
精度 Precision
0.01μm



卡簧 Collets DCON _{WS} 夹持范围 Clamping range (mm)	C20 OAL/DCON _{MS} (mm) 55/20	C25 OAL/DCON _{MS} (mm) 60/25	C32 OAL/DCON _{MS} (mm) 65/32	C42 OAL/DCON _{MS} (mm) 70/42	卡簧 Collets DCON _{WS} 夹持范围 Clamping range (mm)
3	C20-3				3
4	C20-4	C25-4			4
5	C20-5	C25-5			5
6	C20-6	C25-6	C32-6	C42-6	6
8	C20-8	C25-8	C32-8	C42-8	8
10	C20-10	C25-10	C32-10	C42-10	10
12	C20-12	C25-12	C32-12	C42-12	12
14	C20-14	C25-14	C32-14	C42-14	14
16	C20-16	C25-16	C32-16	C42-16	16
18		C25-18	C32-18	C42-18	18
19			C32-19		19
20		C25-20	C32-20	C42-20	20
24			C32-24		24
25			C32-25	C42-25	25
32				C42-32	32

ER 螺母 B 型

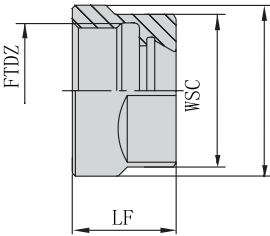
ER Nuts B



型号 Model	尺寸 Dimensions (mm)			 扳手 Wrench	描述 Description
	BD	FTDZ	LF		
CN25B	42	M32×1.5	20	YER25B	用于 ER25 弹簧夹头刀柄 For ER25 collet chucks
CN32B	50	M40×1.5	23	YER32B	用于 ER32 弹簧夹头刀柄 For ER32 collet chucks
CN40B	63	M50×1.5	26	YER40B	用于 ER40 弹簧夹头刀柄 For ER40 collet chucks

ER 螺母 HS 型

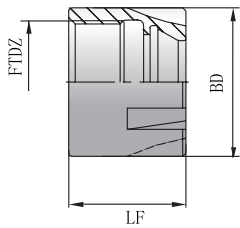
ER Nuts HS



型号 Model	尺寸 Dimensions (mm)				 扳手 Wrench	描述 Description
	BD	FTDZ	LF	WSC		
CN11HS	19	M14×0.75	11.3	17	W17D	用于 ER11 弹簧夹头刀柄 For ER11 collet chucks
CN16HS	28	M22×1.5	17.5	25	W25D	用于 ER16 弹簧夹头刀柄 For ER16 collet chucks
CN20HS	34	M25×1.5	19	30	W30D	用于 ER20 弹簧夹头刀柄 For ER20 collet chucks

ER 螺母 M 型

ER Nuts M



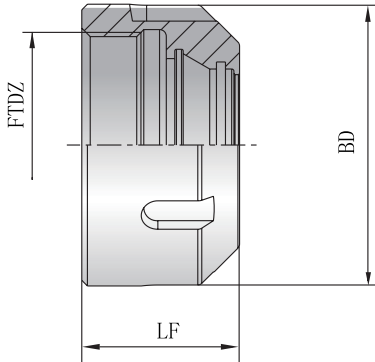
型号 Model	尺寸 Dimensions (mm)			 扳手 Wrench	描述 Description
	BD	FTDZ	LF		
CNM11	16	M13×0.75	12	WM11	用于 ER11 卡簧接杆 For ER11 collet coupling
CNM16	23	M19×1	18	WM16	用于 ER16 卡簧接杆 For ER16 collet coupling
CNM20	28	M24×1	19	WM20	用于 ER20 卡簧接杆 For ER20 collet coupling

*小径螺母为卡簧接杆专用螺母。

*The small diameter nut is a special nut for the collet coupling

内冷螺母

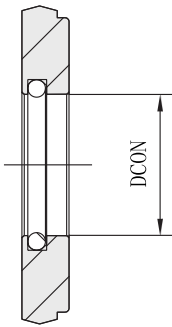
Coolant Nuts



型号 Model	尺寸 Dimensions (mm)			 扳手 Wrench	描述 Description
	BD	FTDZ	LF		
CN20C	34	M25×1.5	24	W30D	用于 ER20 卡簧内冷 For ER20 collet internal coolant
CN32C	50	M40×1.5	28	YER32B	用于 ER32 卡簧内冷 For ER32 collet internal coolant

止水垫圈

Sealing Disk



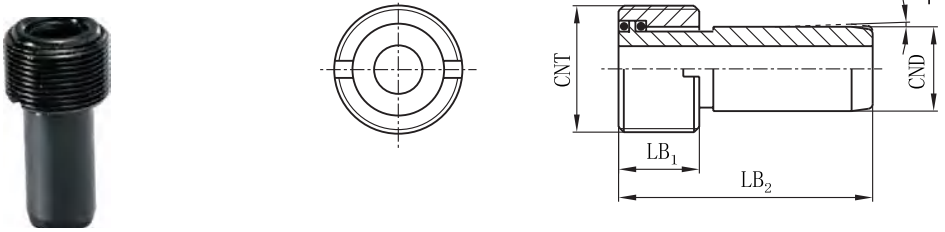
型号 Model		DCON (mm)	ISO		JIS		DIN DIN374/DIN376
			ISO529	ISO529/ISO2283	JISB4430	DIN371	
DER20C-6	DER32C-6	6			M6	M5/M6	M8
DER20C-6.5	DER32C-6.5	6.5	M6	M8	M8		
DER20C-7	DER32C-7	7			M10		M10
DER20C-8	DER32C-8	8	M8	M10		M8	
DER20C-8.5	DER32C-8.5	8.5			M12		
DER20C-9	DER32C-9	9		M12			M12
DER20C-10	DER32C-10	10	M10			M10	
	DER32C-12	12					M16
	DER32C-12.5	12.5		M16	M16		
	DER32C-14	14		M18/M20	M18		M18
	DER32C-15	15			M20		
	DER32C-16	16		M22			M20

HSK 冷却液套管及扳手

HSK Coolant Tubes And Coolant Tube Wrenches



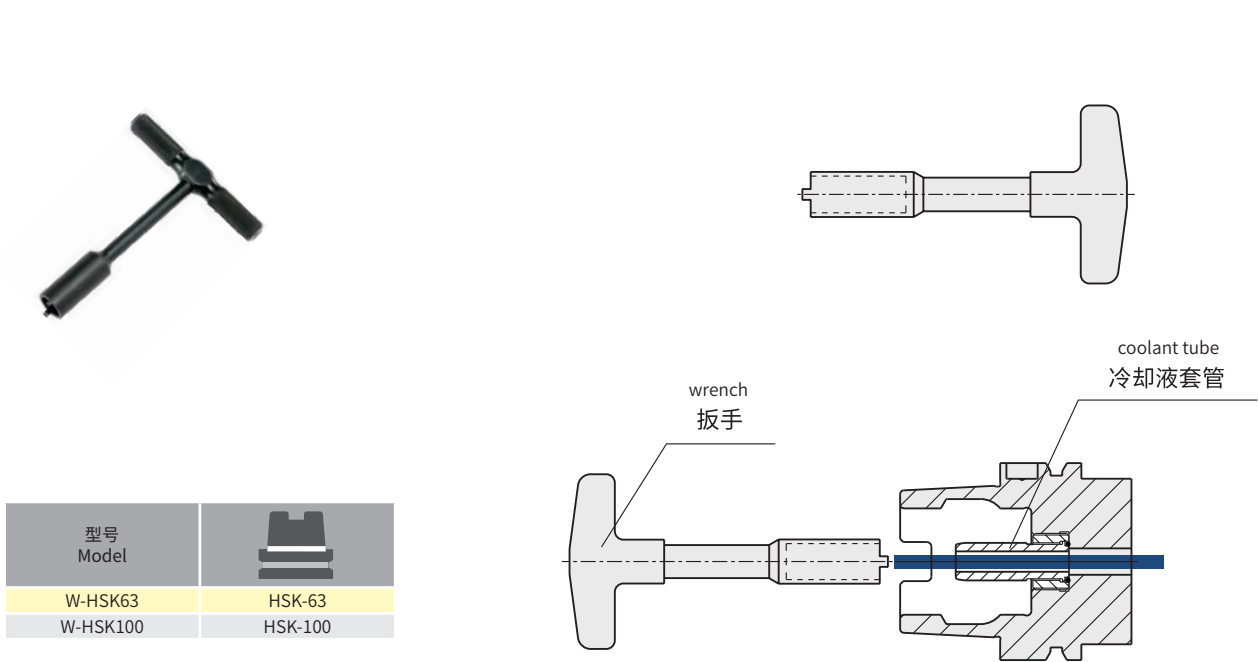
冷却液套管
Coolant Tube



型号 Model		尺寸 Dimensions (mm)			
		CNT	CND	LB ₁	LB ₂
TU-HSK40	HSK-40	M12×1	8	7.5	29.5
TU-HSK50	HSK-50	M16×1	10	9.5	33
TU-HSK63	HSK-63	M18×1	12	11.5	36.6
TU-HSK80	HSK-80	M20×1.5	14	13.5	40
TU-HSK100	HSK-100	M24×1.5	16	15.5	44.2

扳手

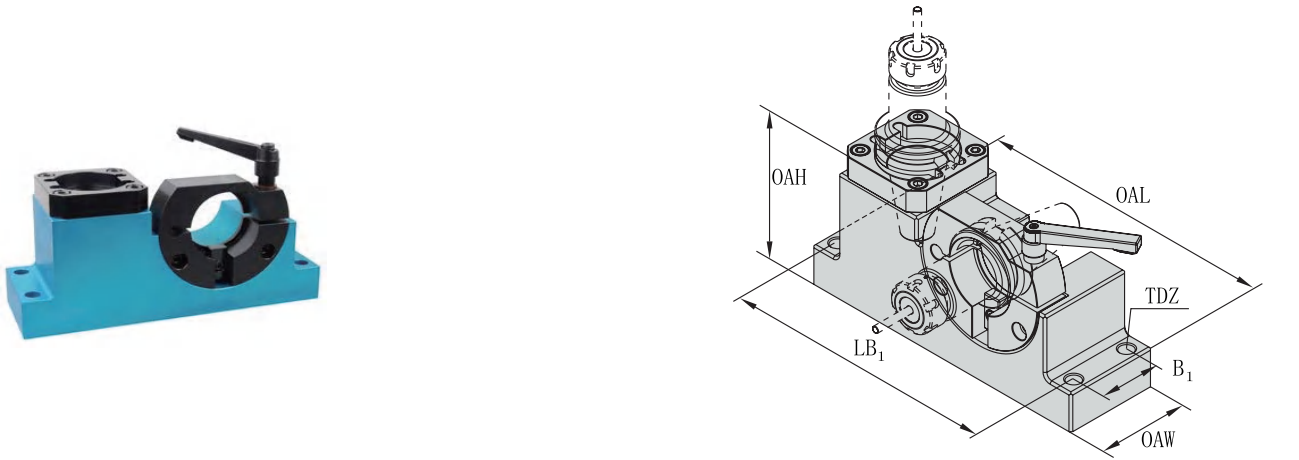
Wrench



型号 Model	
W-HSK63	HSK-63
W-HSK100	HSK-100

卸刀夹具

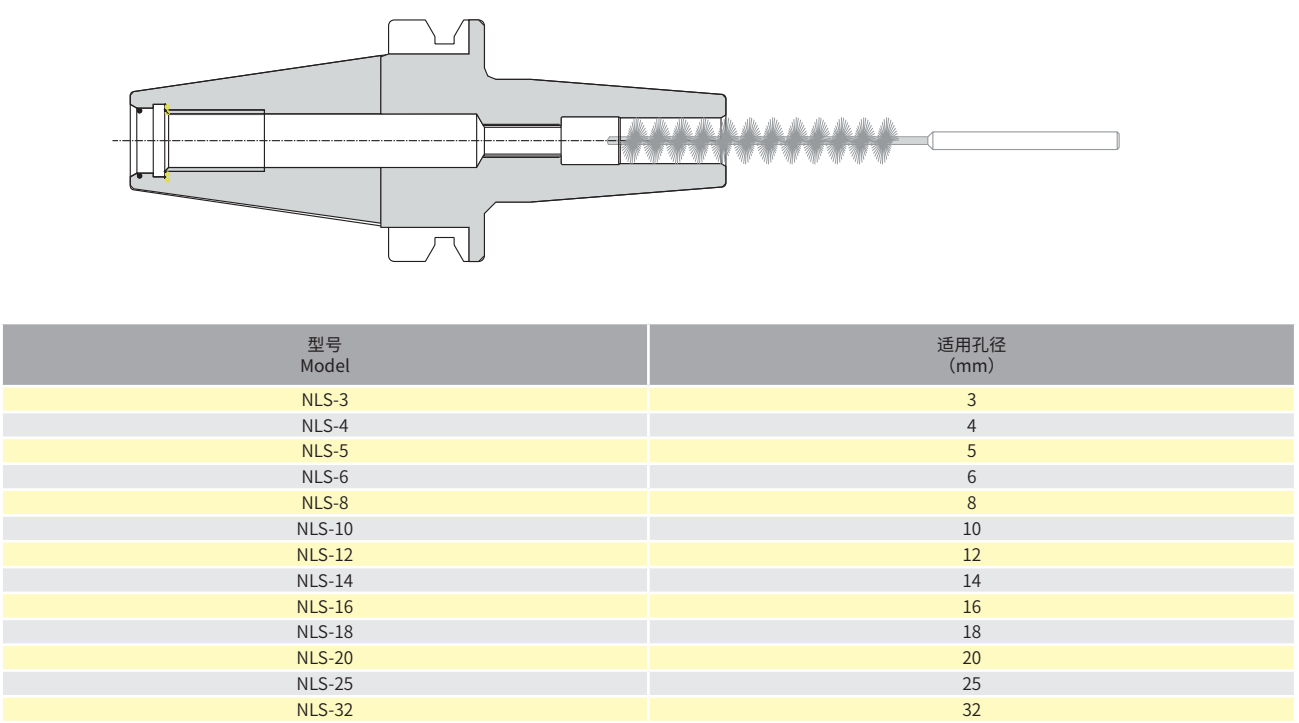
Tooling Setup Fixtures



型号 Model		尺寸 Dimensions (mm)						适用刀柄 Suitable for Chucks
		OAL	OAH	OAW	LB ₁	B ₁	TDZ	
T-M/BT30	30	200	96	64	184	40	M8	BT30
T-M/BT40	40	272	133	85	248	55	M12	BT40
T-M/BT50	50	364	168	125	338	85	M12	BT50
T-M/HSK63I	HSK63	272	135	85	248	55	M12	HSK63A, HSK63C
T-M/HSK100I	HSK100	364	170	125	338	85	M12	HSK100A, HSK100C

清洁毛刷

Cleaning brushes



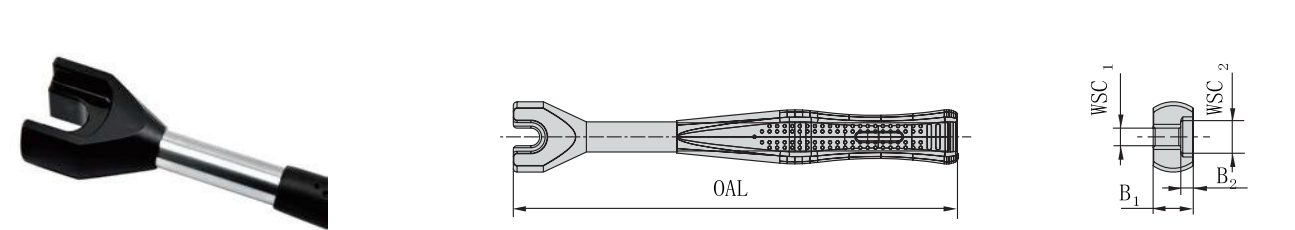
型号 Model	适用孔径 (mm)
NLS-3	3
NLS-4	4
NLS-5	5
NLS-6	6
NLS-8	8
NLS-10	10
NLS-12	12
NLS-14	14
NLS-16	16
NLS-18	18
NLS-20	20
NLS-25	25
NLS-32	32

*用于热装刀柄内孔清洁。

*For cleaning the inner hole of the shrink fit chucks .

拉钉扳手

Pull Nail Wrench



型号 Model	尺寸 Dimensions (mm)					扭矩 torque (N·m)	重量 weight (kg)	适用拉钉的标准 Applicable standards for nails
	OAL	B ₁	B ₂	WSC ₁	WSC ₂			
PW-BT30	210	16	5	7	13	≤ 80	0.31	MAS 403-1975
PW-BT40	230	25	6	10	19	≤ 150	0.43	MAS 403-1975
PW-BT50	280	33	10	17	30	≤ 280	0.84	MAS 403-1975

操作方法
Operation method

操作步骤：

- 1.如右图所示，将拉钉扳手的扳手头卡住拉钉颈部和法兰台阶。
- 2.手臂均匀用力，向左扳动可锁紧拉钉，向右扳动可松开拉钉。

Operation procedure

- 1.As shown in the picture on the right, the wrench head of the pull nail wrench is stuck on the nail neck and flange steps.
- 2.Apply even force on the arm, pull to the left to lock the nail, and to the right to loosen the nail.

注意事项：

- 1.操作前，注意刀柄要固定牢靠。
- 2.切勿使用加长杆增加力矩。
- 3.切勿使用锤子等敲击扳手。
- 4.BT 系列拉钉扳手仅适用于对应BT 系列之45°、60° 和90° 拉钉。

Notes

- 1.Before operation, pay attention to the chucks to be fixed firmly.
- 2.Never use an extension rod to increase the torque.
- 3.Never use a hammer or other to hit the wrench.
- 4.BT series pull nail wrenches are only available for 45° , 60° and 90° nails corresponding to BT series.

ER 螺母扳手

ER Nuts Wrench



型号 Model	尺寸 Dimensions (mm)			描述 Description
	LF	B ₁	WF	
PW-ER25B	250	35	5	用于 ER25 螺母 B 型 For ER25 nut B
PW-ER32B	270	45	5	用于 ER32 螺母 B 型 For ER32 nut B
PW-ER40B	300	57	5	用于 ER40 螺母 B 型 For ER40 nut B

HS 螺母扳手

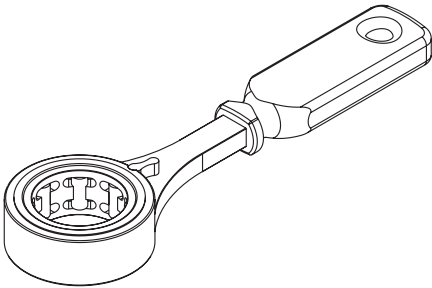
HS Nuts Wrench



型号 Model	尺寸 Dimensions (mm)		描述 Description
	LF	WSC	
PW-ER16HS	225	25	用于 ER16 螺母 HS 型 For ER16 nut HS
PW-ER20HS	240	30	用于 ER20 螺母 HS 型 For ER20 nut HS

HNSK 螺母扳手

HNSK Nuts Wrench



型号 Model	描述 Description
YSK06	用于 SK06 高精度弹簧夹头刀柄 For SK06 precision collet chucks
YSK10	用于 SK06 高精度弹簧夹头刀柄 For SK06 precision collet chucks
YSK13	用于 SK13 高精度弹簧夹头刀柄 For SK13 precision collet chucks
YSK16	用于 SK16 高精度弹簧夹头刀柄 For SK16 precision collet chucks
YSK20	用于 SK20 高精度弹簧夹头刀柄 For SK20 precision collet chucks
YSK25	用于 SK25 高精度弹簧夹头刀柄 For SK25 precision collet chucks

技术资料

Technical Data

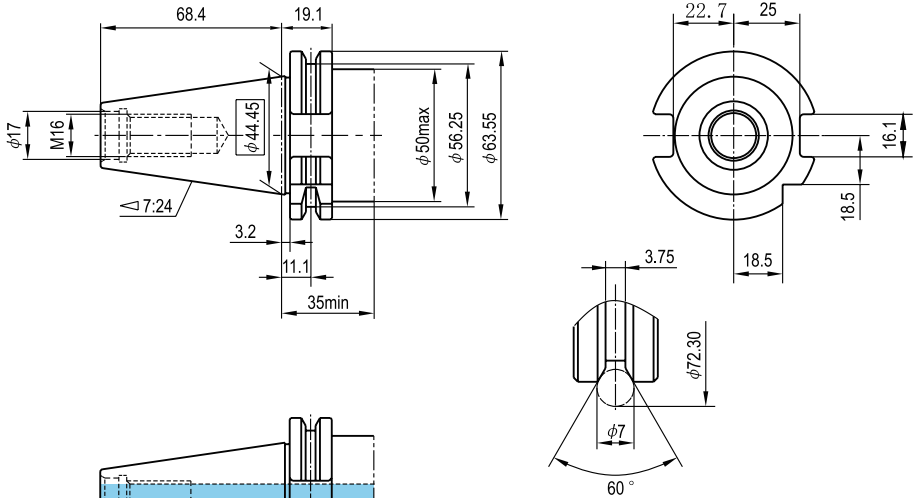


锥柄型式 (DIN 69871) Taper shank type

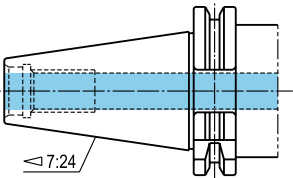


JT40 A/AD

A 型
Form A

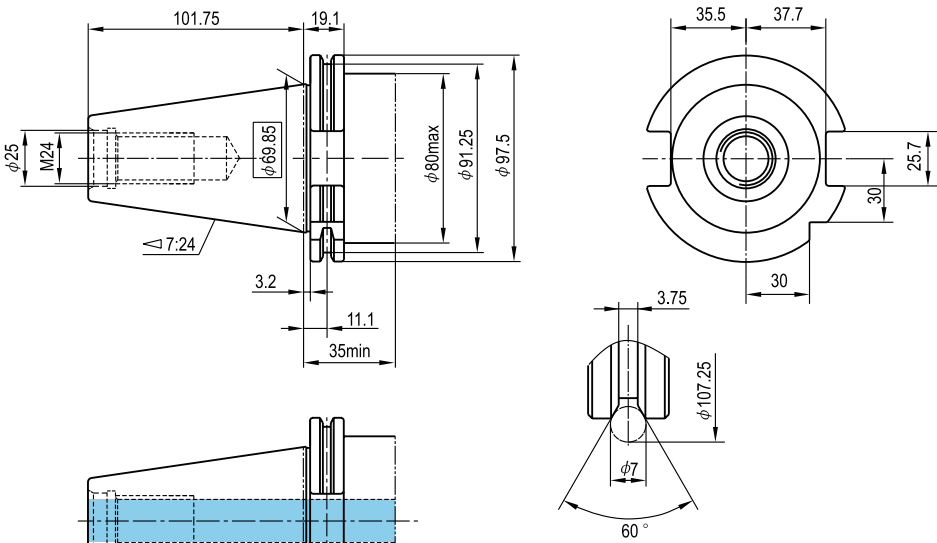


AD 型
Form AD

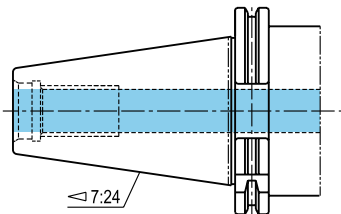


JT50 A/AD

A 型
Form A



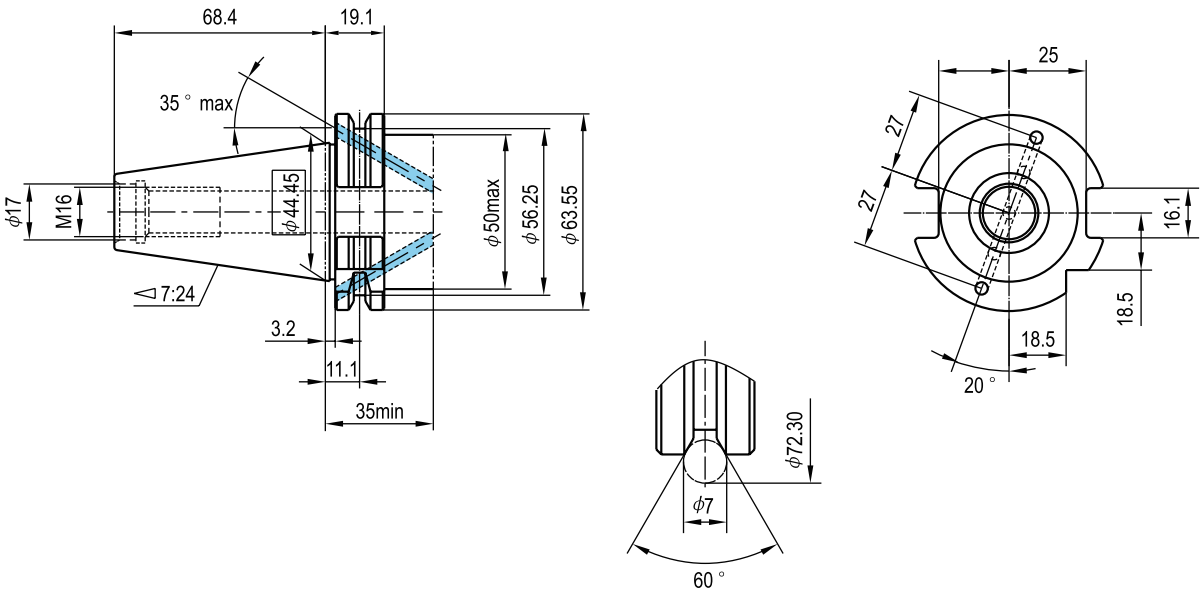
AD 型
Form AD



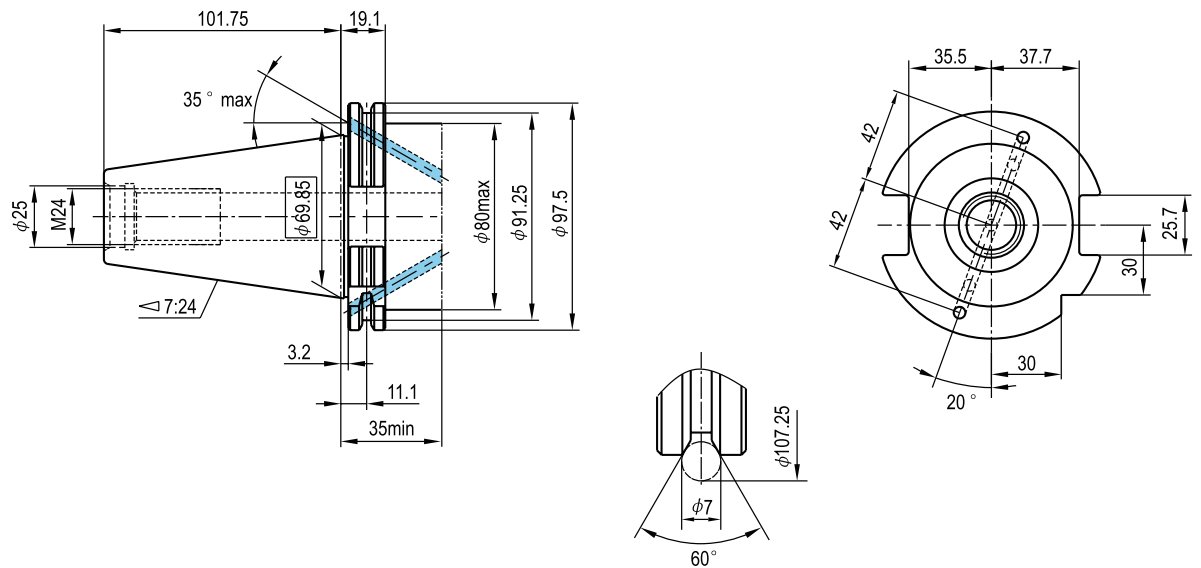
锥柄型式 (DIN 69871) Taper shank type



JT40 B



JT50 B



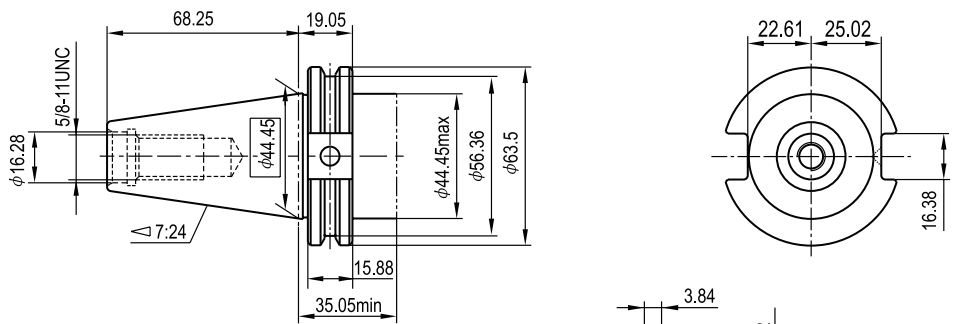
锥柄型式 (ANSI/AMSE B5.50CAT) Taper shank type



CT40 A/AD

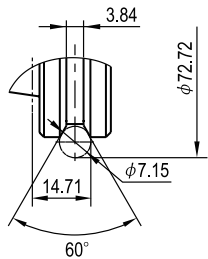
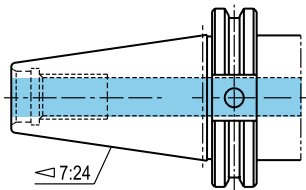
A 型

Form A



AD 型

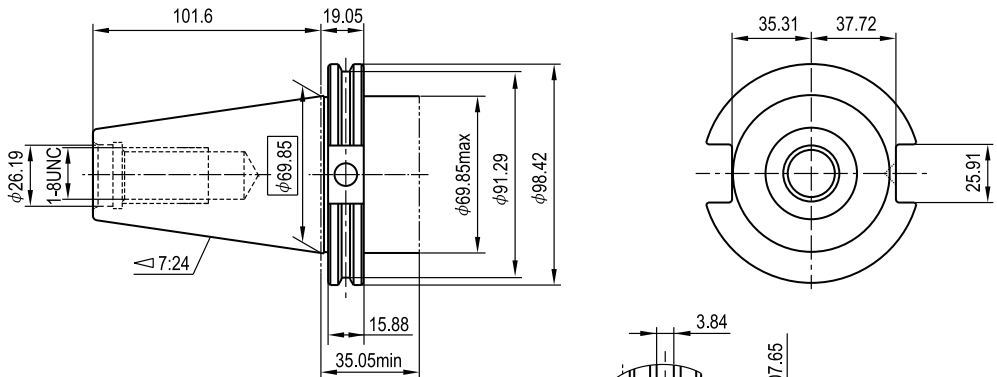
Form AD



CT50 A/AD

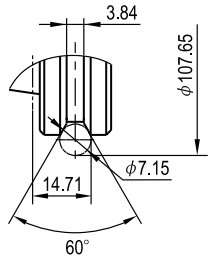
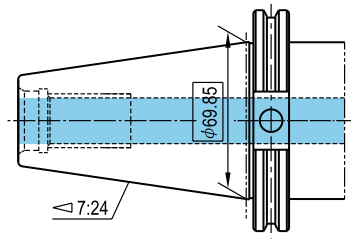
A 型

Form A



AD 型

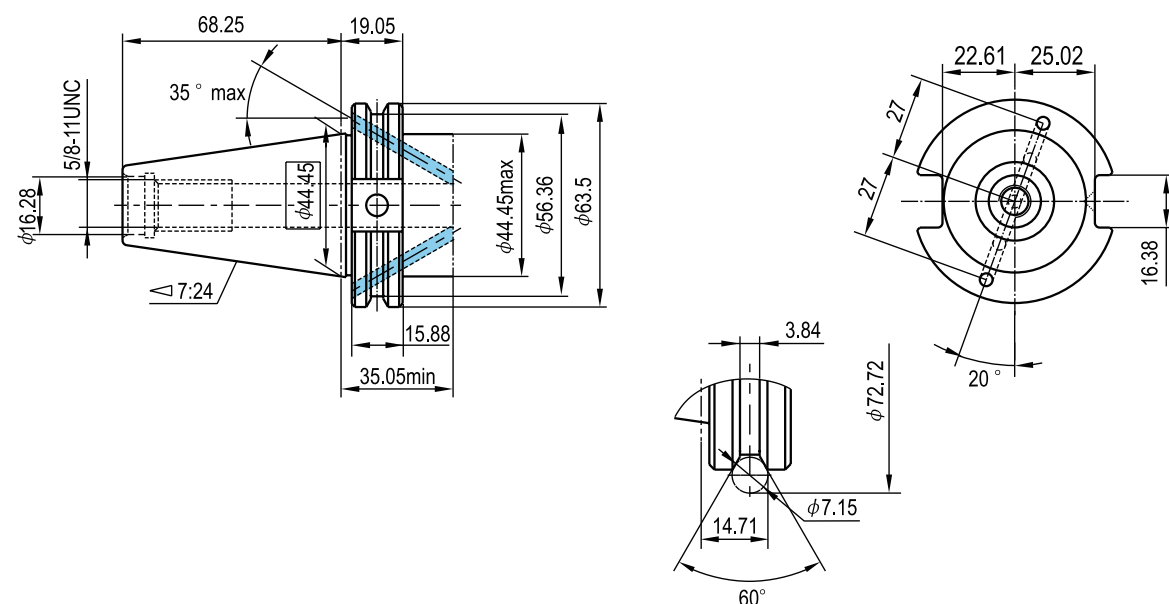
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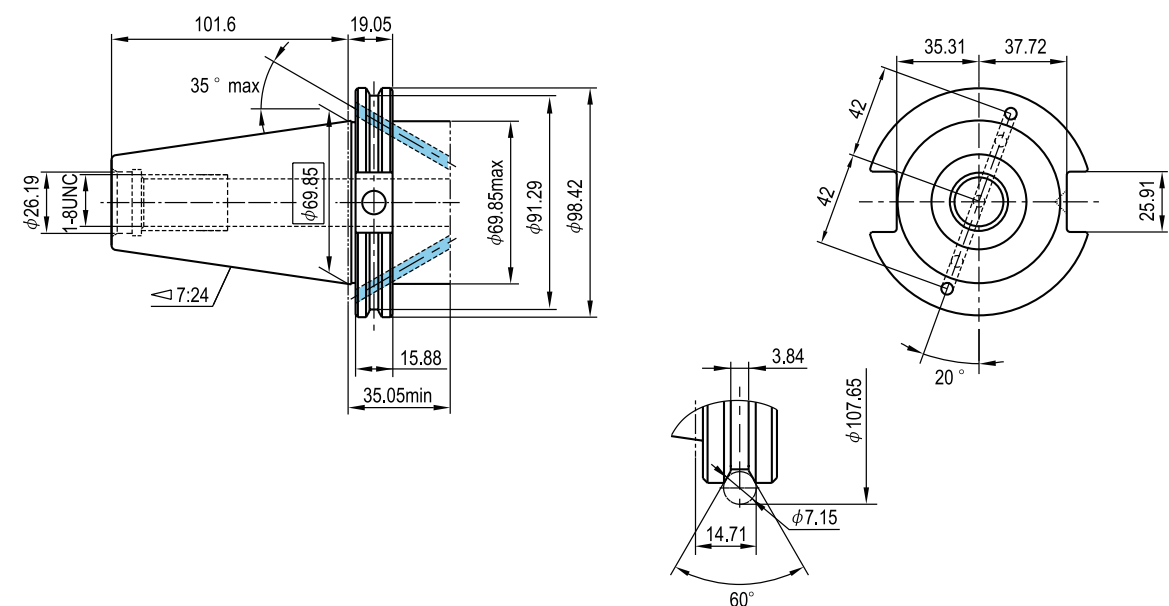
锥柄型式 (ANSI/AMSE B5.50CAT) Taper shank type



CT40 B



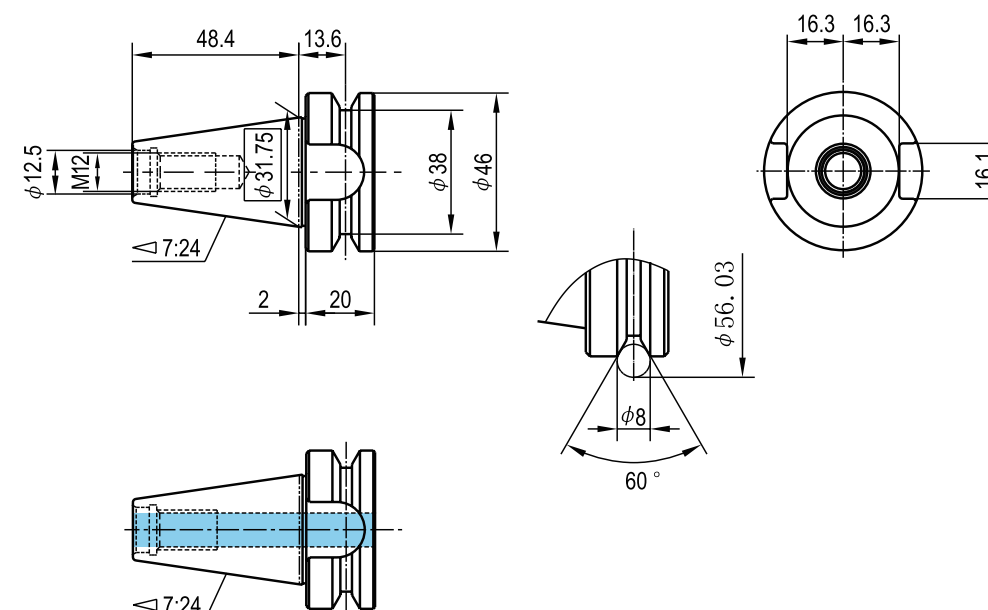
CT50 B



锥柄型式 (JIS B6339) Taper shank type

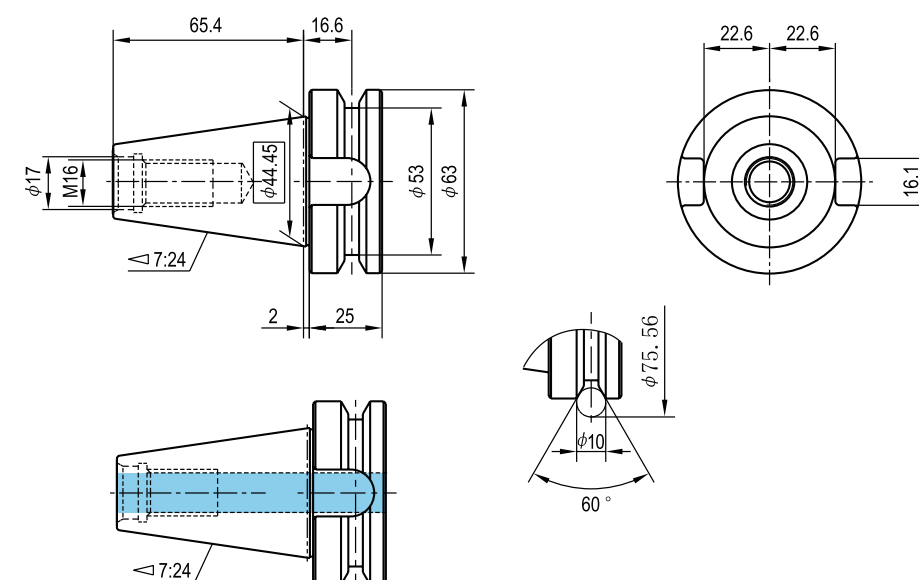


BT30 A/AD



BT40 A/AD

A 型
Form A



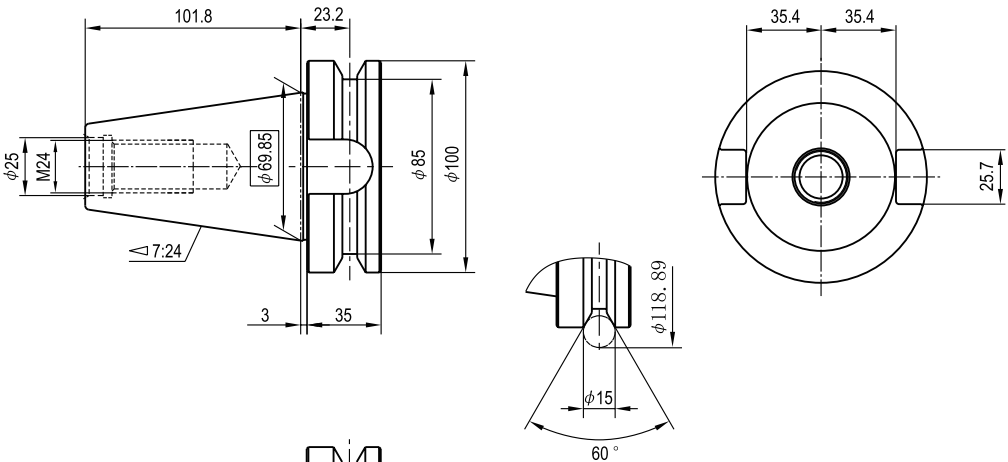
AD 型
Form AD

锥柄型式 (JIS B6339) Taper shank type

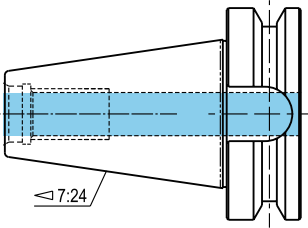


BT50 A/AD

A 型
Form A



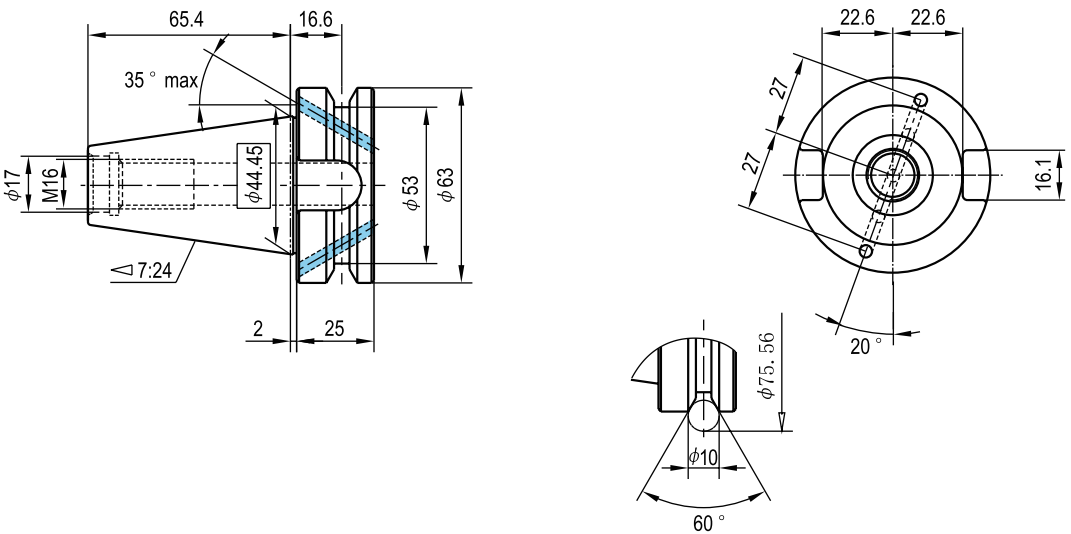
AD 型
Form AD



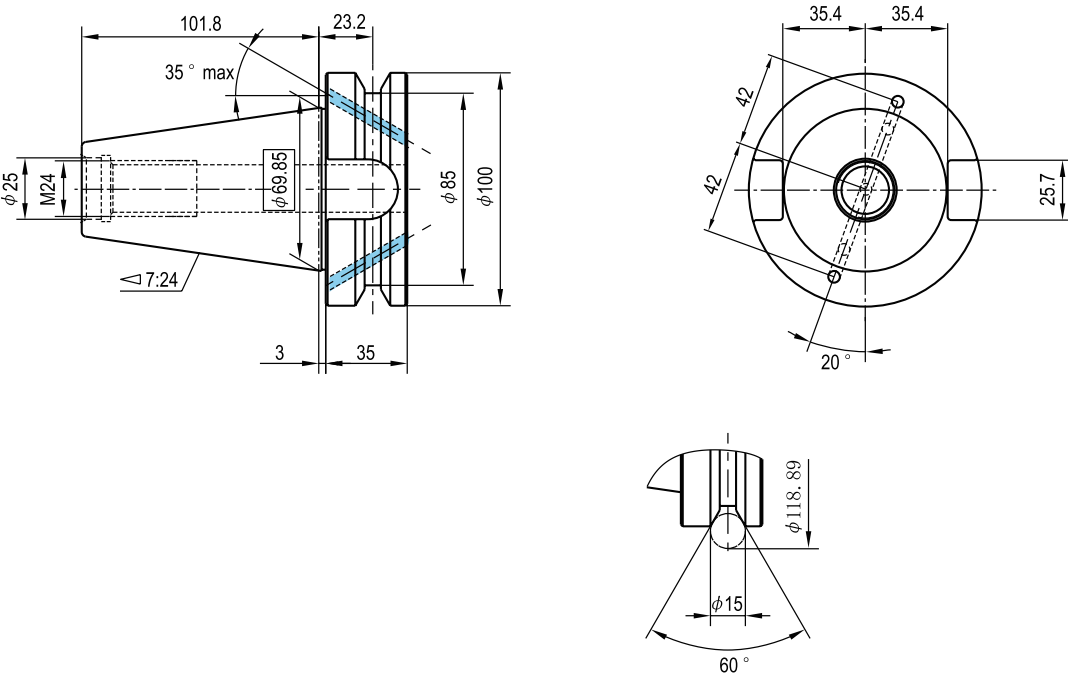
锥柄型式 (JIS B6339) Taper shank type



BT40 B

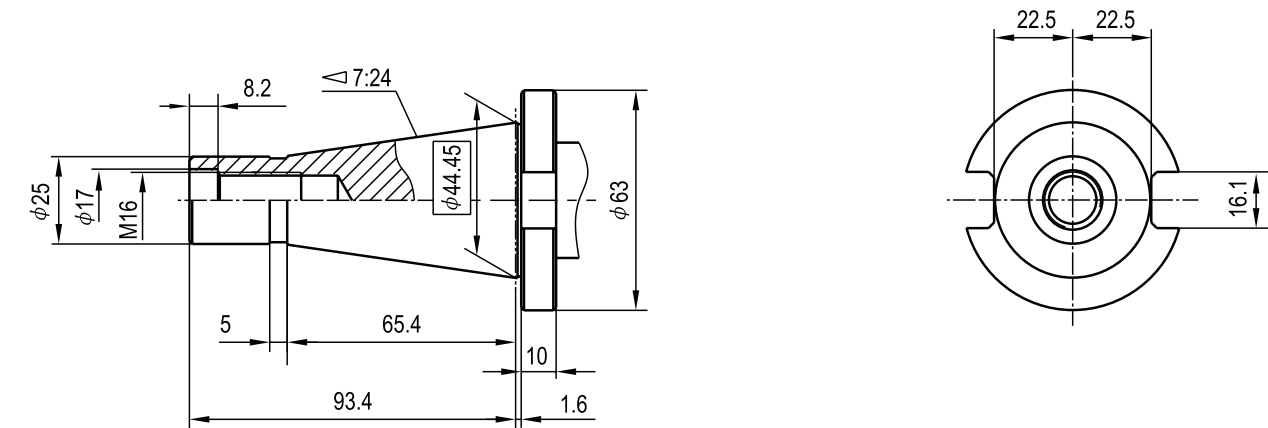


BT50 B

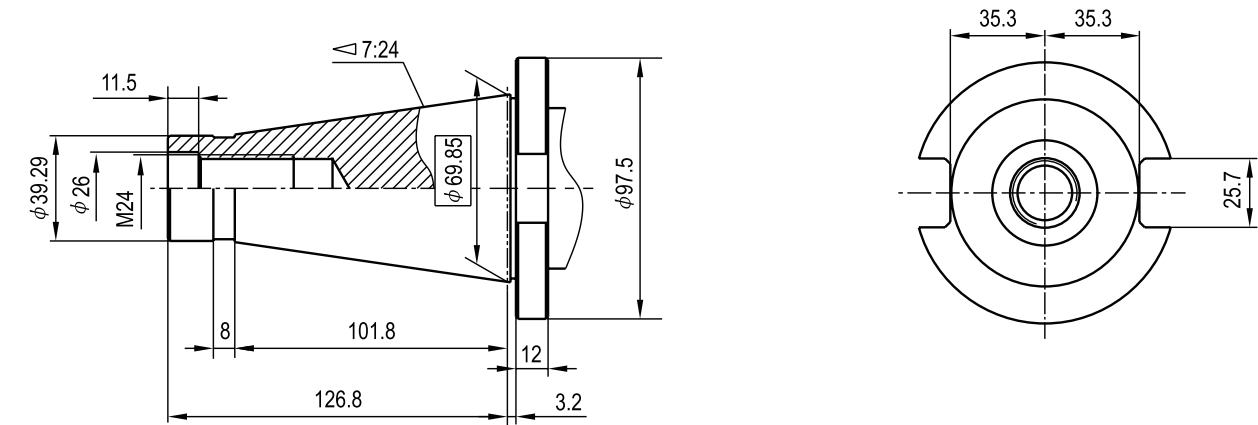


锥柄型式 (DIN 2080) Taper shank type

ST40

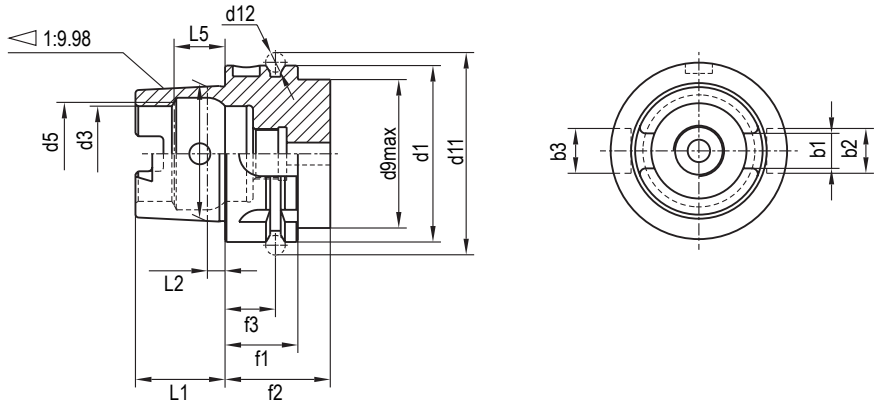


ST50



HSK 短锥型式 A 型 (DIN 69893 Form A)

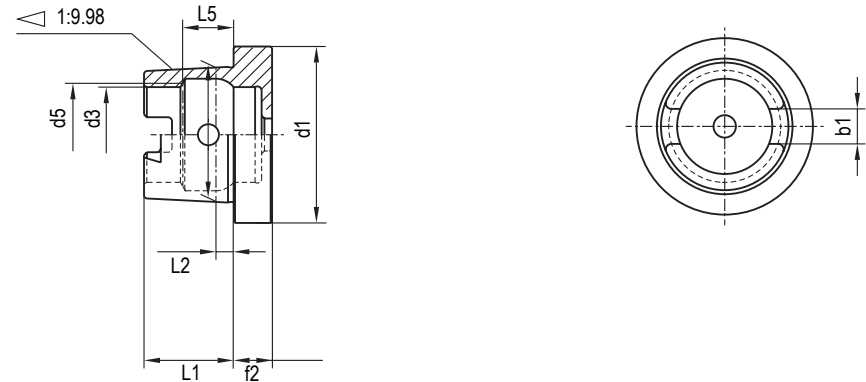
(HSK Taper Type Form A)



	尺寸 Dimensions (mm)															
	b1	b2	b3	d1	d2	d3	d5	d9	d11	d12	f1	CNT	f2	f3	L1	L2
HSK-A32	7.05	7	9	32	24.007	17	19	26	37	4	20	35	16	16	3.2	8.92
HSK-A40	8.05	9	11	40	30.007	21	23	34	45	4	20	35	16	20	4	11.42
HSK-A50	10.54	12	14	50	38.009	26	29	42	59.3	7	26	42	18	25	5	14.13
HSK-A63	12.54	16	18	63	48.010	34	37	53	72.3	7	26	42	18	32	6.3	18.13
HSK-A100	20.02	20	22	100	75.013	53	58	88	109.75	7	29	45	20	50	10	28.56

HSK 短锥型式 C 型 (DIN 69893 Form C)

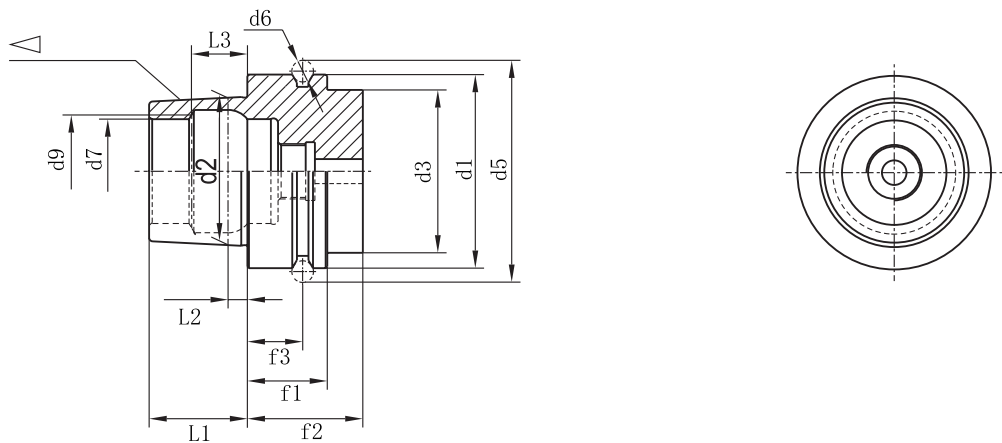
(HSK Taper Type Form C)



	尺寸 Dimensions (mm)								
	b1	d1	d2	d3	d5	f2	L1	L2	L5
HSK-C32	7.05	32	24.007	17	19	10	16	3.2	8.92
HSK-C40	8.05	40	30.007	21	23	10	20	4	11.42
HSK-C50	10.54	50	38.009	26	29	12.5	25	5	14.13
HSK-C63	12.54	63	48.010	34	37	12.5	32	6.3	18.13
HSK-C100	20.02	100	75.013	53	58	16	50	10	28.56

HSK 短锥型式 E 型 (DIN 69893 Form E)

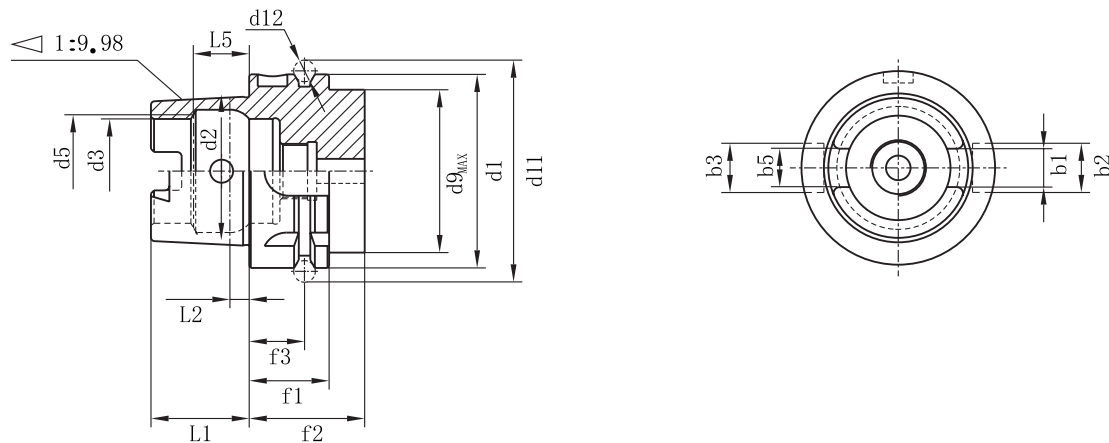
(HSK Taper Type Form E)



	尺寸 Dimensions (mm)												
	d1	d2	d7	d9	d3	d5	d6	f1	f2	f3	L1	L2	L3
HSK-E32	32	24.007	17	19	26	37	4	20	35	16	16	3.2	8.92
HSK-E40	40	30.007	21	23	34	45	4	20	35	16	20	4	11.42
HSK-E50	50	38.009	26	29	42	59.3	7	26	42	18	25	5	14.13
HSK-E63	63	48.010	34	37	53	72.3	7	26	42	18	32	6.3	18.13

HSK 短锥型式 T 型 (DIN 69893 Form T)

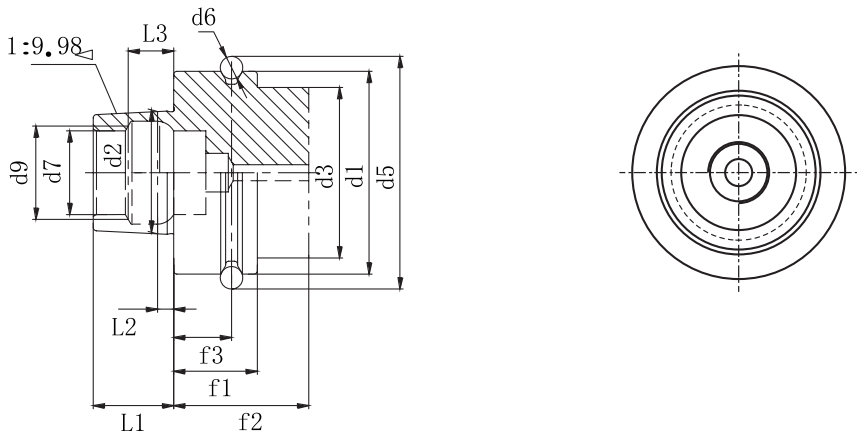
(HSK Taper Type Form T)



	尺寸 Dimensions (mm)																		
	b1	b5	b2	b3	d1	d2	d3	d5	d9	d11	d12	f1	f2	f3	L1	L2	L5		
HSK-T32	7.05	6.932	7	9	32	24.007	17	19	31	37	4	20	23	16	16	3.2	8.92		
HSK-T40	8.05	7.932	9	11	40	30.007	21	23	39	45	4	20	23	16	20	4	11.42		
HSK-T50	10.54	10.425	12	14	50	38.009	26	29	49	59.3	7	26	30	18	25	5	14.13		
HSK-T63	12.54	12.425	16	18	63	48.010	34	37	62	72.3	7	26	30	18	32	6.3	18.13		
HSK-T100	20.02	19.91	20	22	100	75.013	53	58	99	109.75	7	29	34	20	50	10	28.56		

HSK 短锥型式 F 型 (DIN 69893 Form F)

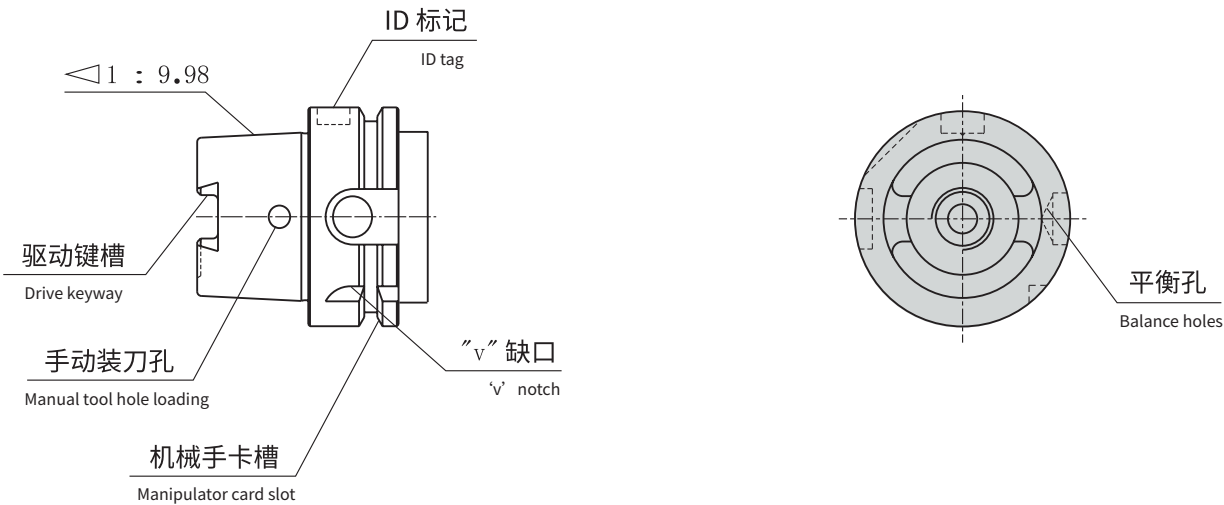
(HSK Taper Type Form F)



	尺寸 Dimensions (mm)												
	d1	d2	d7	d9	d3	d5	d6	f1	f2	f3	L1	L2	L3
HSK-F50	50	30.007	21	23	42	59.3	7	26	42	18	20	4	11.42
HSK-F63	63	38.009	26	29	53	72.3	7	26	42	18	25	5	14.13
HSK-F80	80	48.010	34	37	68	88.8	7	26	42	18	32	6.3	18.13

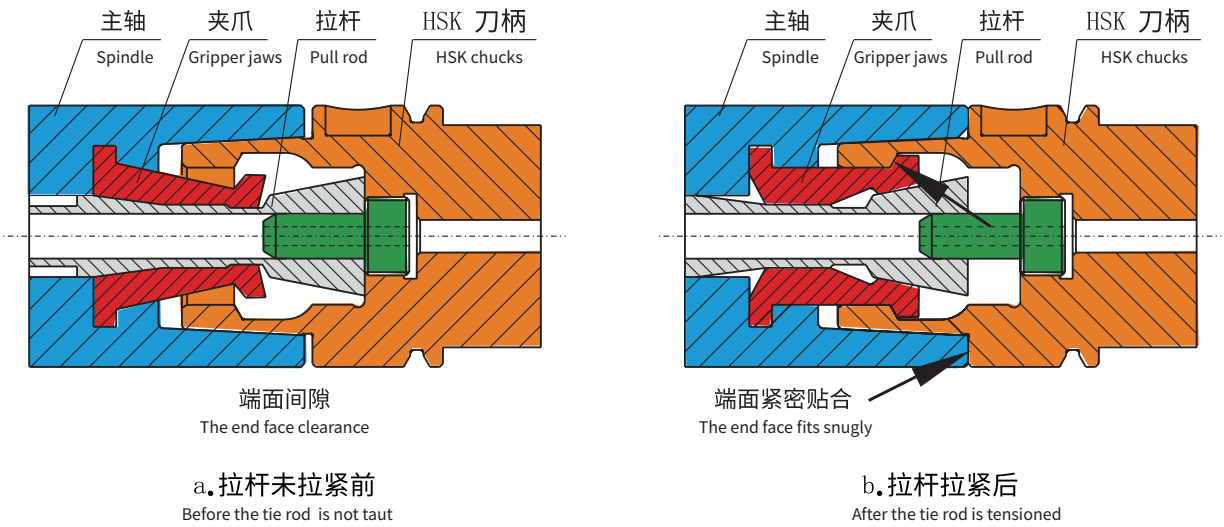
HSK 短锥柄特征说明

HSK Taper Shank Feature Description



HSK 工具系统的工作原理

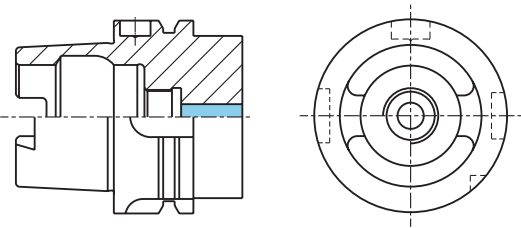
The Working Principle Of The HSK Tool System



HSK 刀柄的空心锥柄锥面与主轴孔锥面完全接触时，HSK 刀柄支面与主轴端面有约0.1mm 间隙（如图a）。在夹紧机构作用下，拉杆向左移动，夹爪胀开，夹爪外锥面顶在空心锥柄30° 锥面上，拉动HSK 刀柄向左移动，空心锥柄产生变形，刀柄端面与主轴端面靠紧，实现了刀柄与主轴锥面和端面两面同时定位和夹紧（如图b 所示）。
When the hollow taper cone of the HSK chucks is in full contact with the cone of the spindle bore, the HSK chucks support surface has a gap of about 0.1mm with the spindle end face（as shown in Figure a）. Under the action of the clamping mechanism, the tie rod moves to the left, the gripper expands, the outer cone surface of the gripper is on the 30° cone surface of the hollow cone shank, pulls the HSK chucks to move to the left, the hollow cone chucks is deformed, the end face of the chucks and the end face of the spindle are close together, and the chucks and the spindle cone and end face are positioned and clamped at the same time（as shown in Figure B）.

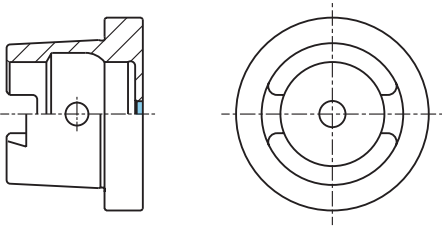
HSK 的各种特征及用途

Various Characteristics And Uses Of HSK



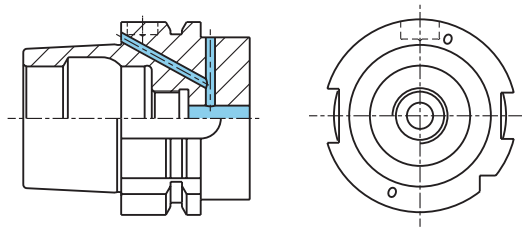
DIN 69893-HSK-A

- 用途：加工中心
- 中心冷却孔
- V 槽用于ATC 凹槽定位
- ID 凹槽孔
- Usage: machining center
- Center cooling hole
- The V slot is used for ATC groove positioning
- ID grooved hole



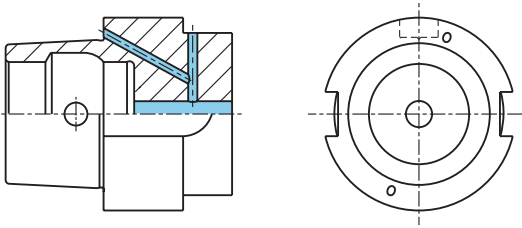
DIN 69893-HSK-C

- 用途：线路传输及无ATC 装置的机床
- 中心冷却孔
- 用法兰盘上驱动开关进行扭矩传输
- Usage: Line transmission and machine tools without ATC devices
- Center cooling hole
- Torque transmission is carried out with a flange drive switch



DIN 69893-HSK-B

- 用途：加工中心，铣床，车床
- 大直径法兰盘
- 冷却孔穿过法兰盘
- 凹槽定位
- ID 凹槽孔
- Usage: machining center,milling machines, lathes
- Large diameter flange
- The cooling hole passes through the flange
- Groove positioning
- ID grooved hole



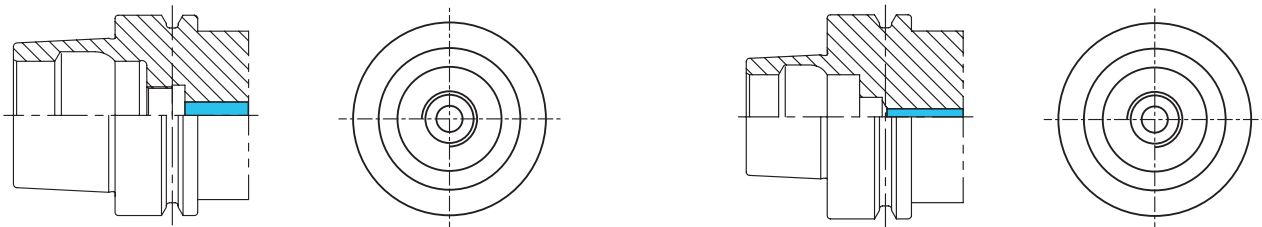
DIN 69893-HSK-D

- 用途：线路传输及无ATC 装置的机床
- 大直径法兰盘
- 冷却孔穿过法兰盘
- Usage: Line transmission and machine tools without ATC devices
- Large diameter flange
- The cooling hole passes through the flange

HSK 的各种特征及用途

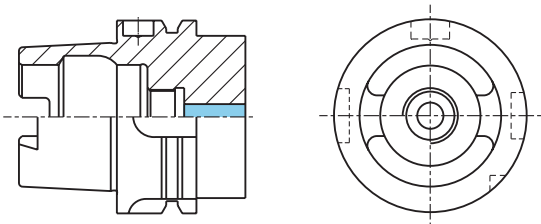
Various Characteristics And Uses Of HSK

FONHAE 方瀚



DIN 69893-HSK-E

- 用途：高速加工中心，木工机械
- 完全对称型，不带驱动开关
- 摩擦扭矩传输
- 中心冷却孔
- Usage: High-speed machining center, Woodworking machinery
- Fully symmetrical without actuation switch
- Frictional torque transmission
- Center cooling hole



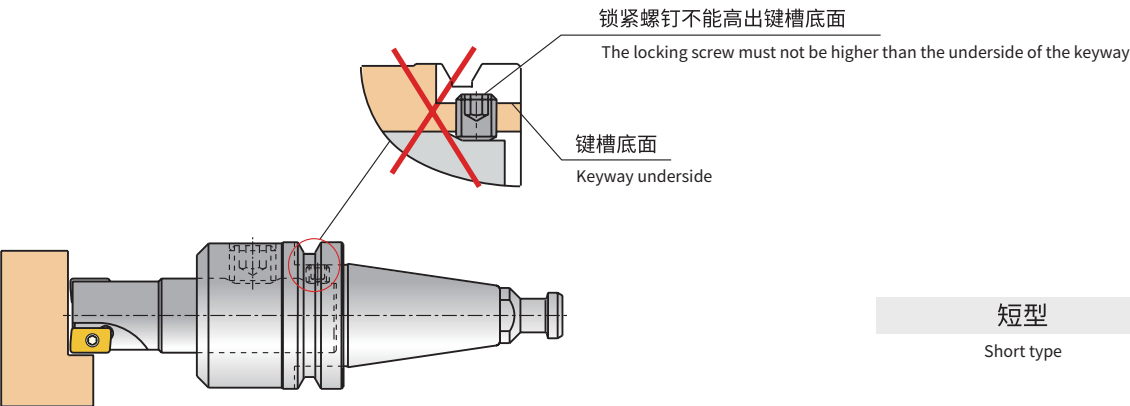
ISO12164-3-HSK-T

- 用途：加工中心及车铣复合机床
- 中心冷却孔
- 用法兰盘上驱动开关进行扭矩传输
- 精准的圆周定位，特别适用于静态刀具
- V 槽用于ATC 凹槽定位
- ID 凹槽孔
- Usage: Machining centers and turning and milling machines
- Center cooling hole
- Torque transmission is carried out with a flange drive switch
- Precise circumferential positioning, especially for static tools
- The V slot is used for ATC groove positioning
- ID grooved hole

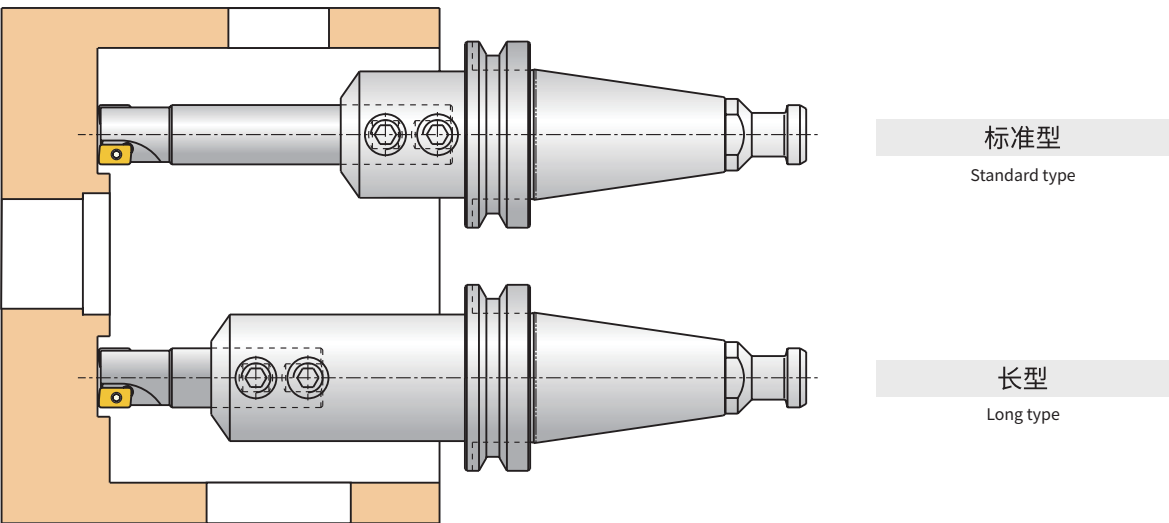
侧固式刀柄

Side Lock Chucks

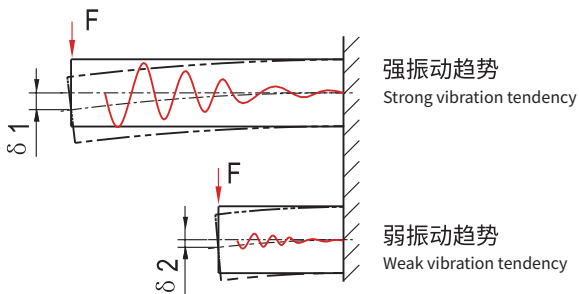
FONHAE 方瀚



- 技术信息
- 注意压紧螺钉长度不能太长，压紧后螺钉不能高于刀柄键槽底面
 - 刀柄越短，刚性越好
 - 主要适用立式加工中心
- Technical information
- Note that the length of the compression screw should not be too long, and the screw should not be higher than the bottom surface of the chuck keyway after pressing.
 - The shorter the chucks, the better the rigidity.
 - It is mainly suitable for vertical machining center.



- 技术信息
- 为保证刀具总长要求，使用长型刀柄可以减少刀杆悬伸长度从而提高系统刚性，适用于较深的型腔加工。
 - 适用于卧式加工中心，延长刀具总长。
- Technical information
- In order to ensure the overall tool length requirement, the use of long type chucks can reduce the overhang length of the tool holder and improve the rigidity of the system, which is suitable for deep cavity machining.
 - Suitable for horizontal machining centers, extending the overall tool length.



刀柄及刀具的长度选择

Selection Of Chucks And Tool Length

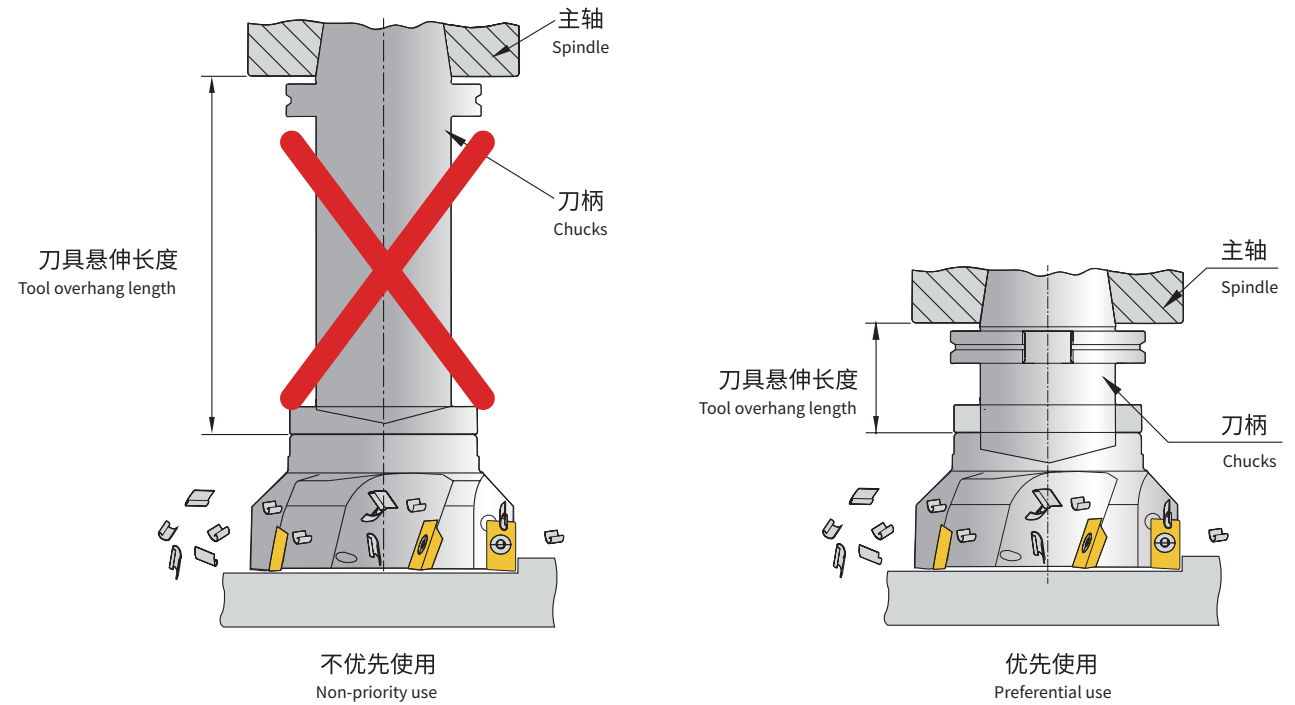


刀柄及刀具通常为了达到最好的使用刚性，选择短系列产品通常是最好的。
但是深型腔的加工往往需要长刀柄或刀具，在这时降低主轴转速，进给，切深可以减小切削过程中所产生的振动。
注意：优先使用短系列产品
In order to achieve the best rigidity in use, chucks and tools are usually best to choose a short series of products.
However, the machining of deep cavities often requires long chucks or tools, which are to reduce the spindle speed, feed, and depth of cut can reduce the vibration generated during cutting.
Note: Preference is given to short series products

刀柄存放

Chucks Storage

刀柄需存放在干燥的环境中，长期保存时，锥柄及工作部位需涂抹防锈油。
The chucks should be stored in a dry environment, and when stored for a long time, the taper shank and working area should be coated with anti rust oil.



侧固式刀柄接口型式（DIN1835-B）

Side Lock Chucks Interface Form (DIN1835-B)



DCON _{ws}	BD ₂	TD (6H)	MHD ₁ (° ₁)	MHD ₂ (±0.5)	LSCX (±1)	压紧整体硬质合金刀具推荐扭矩 Recommended torque for compacting solid carbide tools
6	25	M6	18.0	—	35	5Nm
8	28	M8	18.0	—	35	10Nm
10	35	M10	20.0	—	39	16Nm
12	42	M12	22.5	—	44	28Nm
14	44	M12	22.5	—	44	28Nm
16	48	M14	24.0	—	47	42Nm
18	50	M14	24.0	—	47	42Nm
20	50	M16	25.0	—	49	50Nm
25	60	M18×2	24.0	25	54	60Nm
32	68	M20×2	24.0	28	58	60Nm
40	84	M20×2	30.0	32	68	60Nm

削平柄刀具型式（DIN1835-B）

Flattening Shank Tool Form (DIN1835-B)



DCON _{ws} (h6)	LSCX (° ₀ ⁺²)	WF ₁ (° ₀ ⁺²)	WF ₂ (° ₀ ⁺²)	MHD ₁ (° ₁)	H ₁ (h13)
6	36	4.2	—	18.0	4.8
8	36	5.5	—	18.0	6.6
10	40	7.0	—	20.0	8.4
12	45	8.0	—	22.5	10.4
14	45	8.0	—	22.5	12.7
16	48	10.0	—	24.0	14.2
18	48	10.0	—	24.0	16.2
20	50	11.0	—	25.0	18.2
25	56	12.0	17	32.0	23.0
32	60	14.0	19	36.0	30.0
40	70	14.0	19	40.0	38.0

2° 侧固式刀具形式（DIN 1835-E）

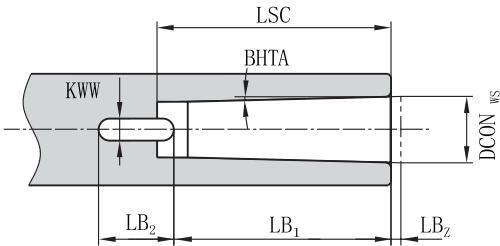
2° Side Lock Tool Form (DIN 1835-E)



DCON _{ws} (h6)	WF ₁ ≈	WF ₂	H ₁	H ₂ (h13)	LSCX (° ₀)	LB ₁ (° ₁)	LB ₂	R ₁ min
6	3.5	4.8	5.4	4.8	36	25	18	1.2
8	4.7	6.1	7.2	6.6	36	25	18	1.2
10	5.7	7.3	9.1	8.4	40	28	20	1.2
12	6.0	8.2	11.2	10.4	45	33	22.5	1.2
16	7.6	10.1	15.0	14.2	48	36	24	1.6
20	8.4	11.5	19.1	18.2	50	38	25	1.6
25	9.3	13.6	24.1	23.0	56	44	32	1.6
32	9.9	15.5	31.2	30.0	60	48	35	1.6
40	12.4	18.2	39.0	37.8	68	56	41	1.6

扁尾型莫氏锥柄连接尺寸（DIN228-D）

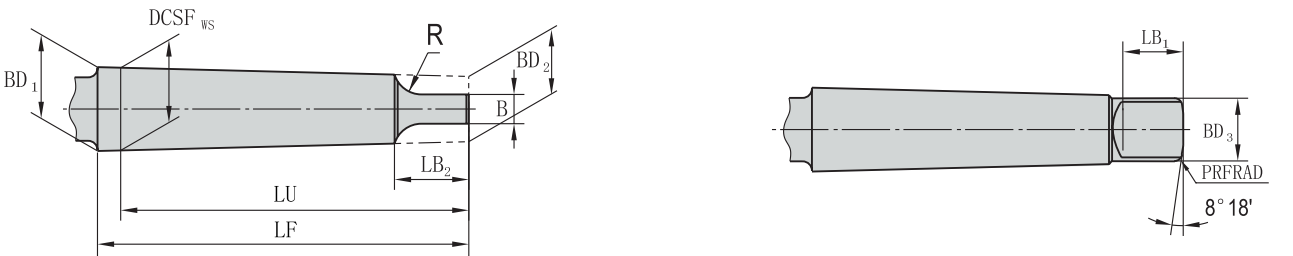
Morse Taper Shanks Connection Size (DIN228-D)



锥度号 Taper number	锥度 Taper		锥角 Taper Angle (BHTA)	DCON _{ws}	LSC (min)	LB ₁	KWW	LB ₂	LB _z	对应钻头直径 / 范围 Corresponds to drill diameter/range (mm)
MT0	1/19.212	0.05205	1° 29' 27"	9.045	52	49	3.9	15	1	—
MT1	1/20.047	0.04988	1° 25' 43"	12.065	56	52	5.2	19	1	3.00-14.00
MT2	1/20.020	0.04995	1° 25' 50"	17.780	67	62	6.3	22	1	14.00-23.00
MT3	1/19.922	0.05020	1° 26' 16"	23.825	84	78	7.8	27	1	23.00-32.00
MT4	1/19.254	0.05194	1° 29' 15"	31.267	107	98	11.9	32	1	32.00-50.00
MT5	1/19.002	0.05263	1° 30' 26"	44.399	135	125	15.9	38	1	50.00-75.00
MT6	1/19.180	0.05214	1° 29' 36"	63.348	188	177	19	47	1	75.00-100.00
MT7	1/19.231	0.05200	1° 29' 22"	83.058	258	241	28.8	69	1	—

有扁尾莫氏锥柄（DIN 228-B）

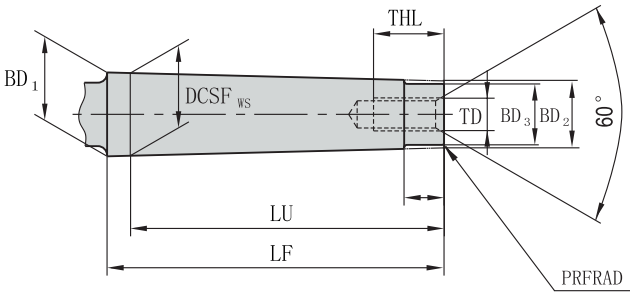
Morse Taper Shanks (DIN 228-B)



锥度号 Taper number	DCSF _{ws}	BD ₁	BD ₂	BD ₃	LU	LF	B	LB ₁	BD ₂	R	PRFRAD	对应钻头直径 / 范围 Corresponds to drill diameter/range (mm)
MT0	9.045	9.201	6.104	6	56.5	59.5	3.9	6.5	10.5	4	1	—
MT1	12.065	12.240	8.972	8.7	62.0	65.5	5.2	8.5	13.5	5	1.2	3.00-14.00
MT2	17.780	18.030	14.034	13.5	75.0	80.0	6.3	10.0	16.0	6	1.6	14.00-23.00
MT3	23.825	24.076	19.107	18.5	94.0	99.0	7.9	13.0	20.0	7	2	23.00-32.00
MT4	31.267	31.065	25.164	24.5	117.5	124.0	11.9	16.0	24.0	8	2.5	32.00-50.00
MT5	44.399	44.471	36.531	35.7	149.5	156.0	15.9	19.0	29.0	10	3	50.00-75.00
MT6	63.348	63.765	52.399	51.0	210.0	218.0	19.0	27.0	40.0	13	4	75.00-100.00
MT7	83.058	83.578	68.185	66.8	286.0	296.0	28.6	35.0	54.0	19	5	—

无扁尾莫氏锥柄（DIN 228-A）

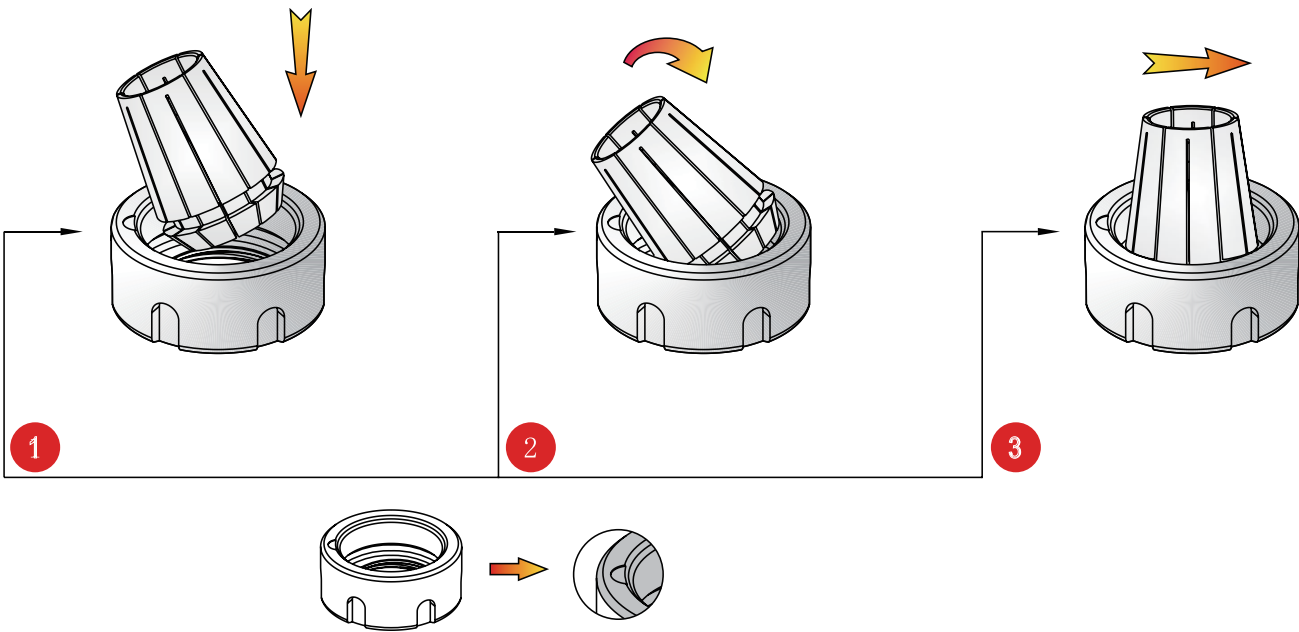
Morse Taper Shanks Without Flat (DIN 228-A)



锥度号 Taper number	DCSF _{ws}	BD ₁	BD ₂	BD ₃	LU	LF	LB ₁	PRFRAD	TD	THL	对应钻头直径 / 范围 Corresponds to drill diameter/range (mm)
MT0	9.045	9.201	6.442	6	50	53	4	0.2	—	—	—
MT1	12.065	12.240	9.396	9	53.5	57	5	0.2	M6	16	6.00-12.00
MT2	17.780	18.030	14.583	14	64	69	5	0.2	M10	24	14.00-20.00
MT3	23.825	24.076	19.759	19	81	86	7	0.6	M12	28	22.00-36.00
MT4	31.267	31.605	25.943	25	102.5	109	9	1.0	M16	32	32.00-56.00
MT5	44.399	44.741	37.584	35.7	129.5	136	9	2.5	M20	40	40.00-63.00
MT6	63.348	63.765	53.859	51	182	190	12	4.0	M24	50	—
MT7	83.058	83.578	70.052	65	250	260	18.5	5.0	M33	60	—

ER 螺母、卡簧装配说明

Assembly Instructions For ER Nut And Collets



- 1.确定ER 螺母端面方向缺口。

2.将卡簧沿方向缺口放入螺母（详见图①）。

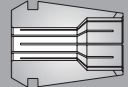
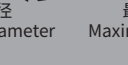
3.扳动卡簧，使卡簧完全放入螺母中（详见图②、图③），安装完成。
- 1.Confirm the ER nut end face orientation notch.

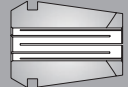
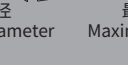
2.Place the collets in the nut along the directional notch（see Figure 1 for details）.

3.Pull the collets so that the collets is completely placed in the nut（see Figures 2 and 3 for details）, and the installation is complete.

ER 卡簧传递扭矩：
ER collets transmission torque：

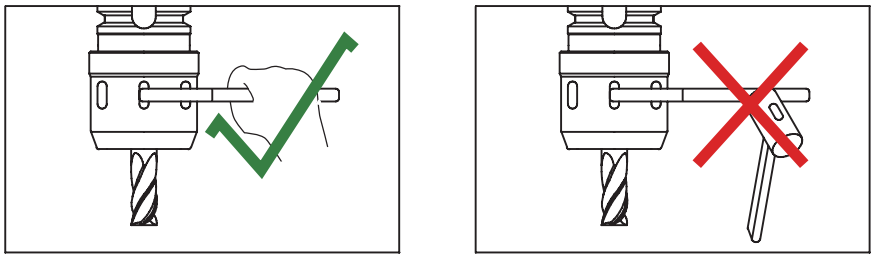
 卡簧 Collets		 螺母 Nuts	
ER11	CN11HS	1-2.5	13
	CNM11		11
	HN11		11
ER16	CN16HS	1-4.5	30
	CNM16		18
	HN16		30
ER20	CN20HS	1-6.5	45
	CNM20		22
	CN20C		45
	HN20		45
ER25	CN25B	1-6.5	55
	HN25		55
ER32	CN32B	2-6.5	70
	CN32C		70
ER40	CN40B	3-7.5	100
	CN40C		100

 夹持直径 Clamping diameter (mm)	 最大扭矩 Maximum torque (Nm)
1-2.5	13
	11
	11
1-4.5	30
	18
	30
1-6.5	45
	22
	45
	45
1-6.5	55
	55
2-6.5	70
	70
3-7.5	100
	100

 夹持直径 Clamping diameter (mm)	 最大扭矩 Maximum torque (Nm)
3-7	25
	18
	18
5-10	50
	28
	50
7-13	75
	35
	75
	75
7-16	85
	85
7-20	105
	105
8-26	150
	150

强力夹头刀柄的安装

Installation Of Milling Chucks



- 夹紧力最大，使用简单——夹紧安全可靠

● 精度高，寿命长——更有利于保护刀具，延长刀具寿命

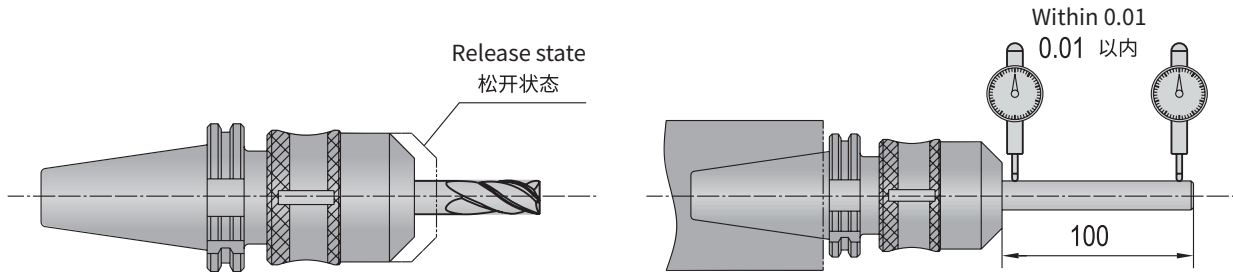
● 刚性高——适于大切削量加工

● 优良的耐久性——压力分散于保持架的滚针上
- Maximum clamping force and simple use——safe and reliable clamping.

High precision and long life——more conducive to protecting the tool and extending the tool life.

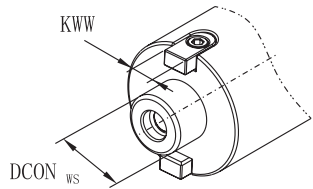
High rigidity——suitable for large cutting volumes.

Excellent durability——pressure is dispersed on the needle rollers of the cage.



面铣刀刀柄键槽尺寸

Face Mill Chucks Keyway Dimensions



公制 -Metric		英制 -Mm	
DCON _{ws} (mm)	KWW (mm)	DCON _{ws} (mm)	KWW (mm)
16	8	12.7	6.35
22	10	19.05	7.93
27	12	25.4	9.52
32	14	31.75	12.7
40	16	38.1	15.88
60	25.4	50.8	19.05
-	-	63.5	25.4

液压刀柄使用说明

Instructions For Using Hydraulic Chucks



结构说明
Structural description

- 1.刀柄主体
2.止动螺钉
3.施压螺钉
4.液压卡簧（需另购）
1.Chuck
2.Stop screws
3.Pressure screws
4.Hydraulic collets （sold separately）

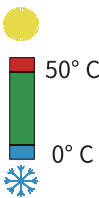
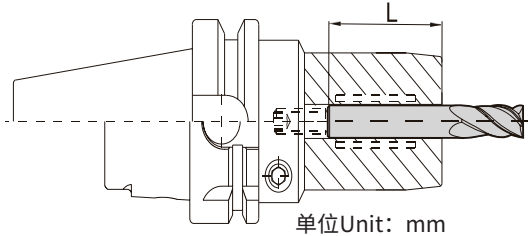
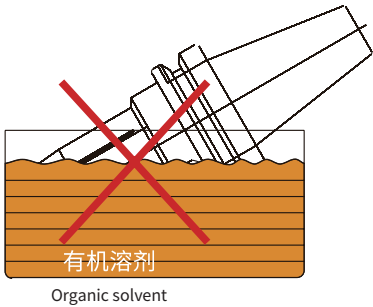
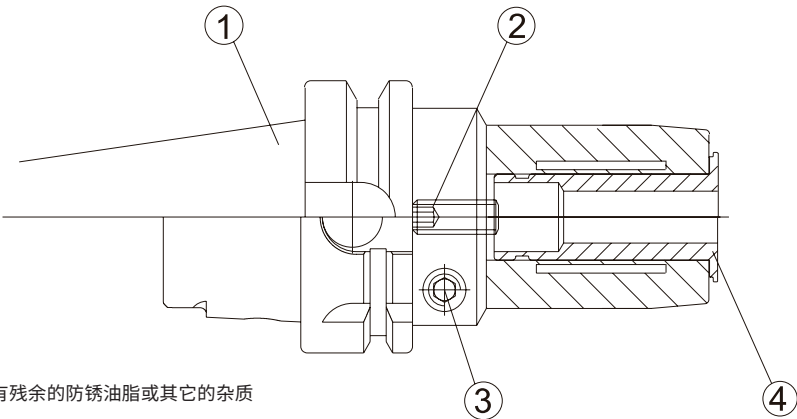
使用说明及注意事项
Instructions for use and precautions

- 1.清洁
液压刀柄夹头使用前，必须将刀柄内孔表面清洗干净，不得有残余的防锈油脂或其它的杂质附着于内孔表面。
2.刀具柄径
被夹持刀具柄径公差必须为h6，若低于此公差等级，则夹紧力会有较大损失，可能导致刀具在加工中出现意外。
3.夹持
将被夹持的刀具插入夹持孔内，注意当未使用卡簧变轻时，应保证刀具夹持长度应与刀柄油腔完全接触，即最小夹持深度必须得到保证：各系列液压刀柄对应最小夹持长度见下表：

刀柄内腔尺寸 Shank cavity size D	06	08	10	12	14	16	20	25	32
最小夹持长度 Minimum clamping length L	27	27	34	42	48	48	48	60	60

- 4.夹紧
被夹持刀具柄径公差必须为h6，若低于此公差等级，则夹紧力会有较大损失，可能导致刀具在加工中出现意外。
5.松刀
松开加压螺钉直到刀具松开。为了实现最佳的可靠性，只松开加压螺钉到刀具松开即可，避免加压螺钉脱落。如果加压螺钉不慎掉出，请认真清洗后装回，避免螺纹受损。
6.试用温度
本液压刀柄的最佳使用温度为0° C~50° C（液压刀柄夹头主体温度），切勿在超出此温度范围使用。

1. Cleaning
Before using the Hydraulic Chucks, the surface of the inner hole of the chucks must be cleaned, and no residual anti-rust grease or other impurities should be attached to the surface of the inner hole.
2. Tool shank diameter
The tolerance of the shank diameter of the tool to be clamped must be h6, below this tolerance class, the clamping force will be greatly lost, which may lead to accidents in the machining of the tool.
3. Clamping
Insert the clamped tool into the clamping hole, pay attention to when the collets is not used to become lighter, it should be ensured that the tool clamping length should be in full contact with the shank oil cavity, that is, the minimum clamping depth must be guaranteed: The minimum clamping length corresponding to each series of Hydraulic Chucks is shown in the following table:
4. Clamping
The tolerance of the shank diameter of the tool to be clamped must be h6, below this tolerance class, the clamping force will be greatly lost, which may lead to accidents in the machining of the tool.
5. Loose the tool
Loosen the pressure screw until the tool is released. For optimal reliability, only loosen the pressurized screw until the tool is released to prevent the pressurized screw from falling off. If the pressure screw accidentally falls out, please wash it carefully and replace it to avoid damage to the thread.
6. Trial temperature
The best use temperature of this Hydraulic Chucks is 0°C~50°C（Hydraulic Chucks body temperature）, do not use it beyond this temperature range.



液压刀柄使用说明

Instructions For Using Hydraulic Chucks



维护及保养
Care and maintenance

- 1.夹持力检验
使用中，请定期检验液压刀柄的夹紧功能，检验时，将检测（需单独订购）夹持于孔内，直至顶端，再拧紧施压螺钉至刚好将检测棒夹持（可用手试拧检测棒，手不能旋转即为初始状态），此时，再将施压螺钉旋至底部，计算施压螺钉施压圈数，如果施压圈数满足1.5 圈（HC06，HC08）或者大于（HC10 以上规格），则说明该刀柄具有夹紧功能，否则请将液压刀柄寄回我公司进行检测、维修。
2.存储
液压刀柄在非正式工作状态或未装刀具时，请将施压螺钉旋至放松状态，将刀柄擦拭干净并涂上防锈剂后存放。
3.其它
-请勿随意拆解密封胶部位，否则可能导致产品失压无法使用，
-若施压螺钉出现磨损或脱落请及时更换。

1. Clamping force test
In use, please regularly check the clamping function of the Hydraulic Chucks, when inspecting, the test（need to be ordered separately）clamped in the hole, to the top, and then tighten the pressure screw until just clamp the detection rod（you can use the hand to test the test rod, the hand can not rotate is the initial state），at this time, and then screw the pressure screw to the bottom, calculate the number of pressure screw pressure turns, if the number of pressure turns meets 1.5 turns（HC06, HC08）or greater than（HC10 or above specifications），then the chucks has a clamping function, Otherwise, please send the Hydraulic Chucks back to our company for inspection and maintenance.
2. Storage
When the Hydraulic Chucks is in informal working condition or when no tool is installed, screw the pressure screw to a relaxed state, wipe the shank clean and apply rust inhibitor before storing.
3.Others
-Do not disassemble the sealing rubber part at will, otherwise it may cause the product to lose pressure and cannot be used
-If the pressure screw is worn or falls off, please replace it in time.



警告：

未装刀具或测试棒，安装刀具或测试棒小于最小夹持长度，安装的刀具形式不正确等拧紧加压螺钉，将对刀柄产生永久损坏。

Warn：

Tightening the compression screw without a tool or test rod, installing a tool or test rod less than the minimum clamping length, installing an incorrect tool form, etc., will cause permanent damage to the chucks.

Test rod

根据螺纹尺寸推荐的钻头直径

Recommended Drill Diameter Based On Thread Size

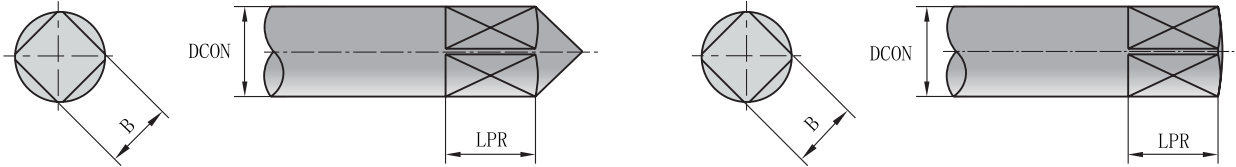


螺纹直径 Thread diameter	钻头直径 Drill diameter mm	螺距 Pitch mm	螺纹直径 Thread diameter	钻头直径 Drill diameter mm	螺距 Pitch TPI *	螺纹直径 Thread diameter	钻头直径 Drill diameter mm	螺距 Pitch TPI *
M 公制粗牙螺纹 M metric coarse thread			UNF 美制统一细牙螺纹 UNF United fine thread			Rc 英制圆锥管螺纹 Rc inch taper pipe thread		
M4	3.30	0.7	UNF NO.6	2.90	40	Rc 1/8"	8.40	28
M4.5	3.70	0.75	UNF NO.8	3.50	36	Rc 1/4"	11.20	19
M5	4.20	0.8	UNF NO.10	4.10	32	Rc 3/8"	14.75	19
M6	5.00	1	UNF NO.12	4.65	28	Rc 1/2"	18.25	14
M7	6.00	1	UNF 1/4"	5.50	28	Rc 3/4"	23.75	14
M8	6.80	1.25	UNF 5/16"	6.90	24	Rc 1"	30.00	11
M9	7.80	1.25	UNF 3/8"	8.50	24	G 英制圆柱管螺纹 G inch cylindrical pipe thread		
M10	8.50	1.5	UNF 7/16"	9.90	20	G 1/8"	8.80	28
M11	9.50	1.5	UNF 1/2"	11.50	20	G 1/4"	11.80	19
M12	10.20	1.75	UNF 9/16"	12.90	18	G 3/8"	15.25	19
M14	12.00	2	UNF 5/8"	14.50	18	G 1/2"	19.00	14
M16	14.00	2	UNF 3/4"	17.50	16	G 5/8"	21.00	14
M18	15.50	2.5	UNF 7/8"	20.50	14	G 3/4"	24.50	14
M20	17.50	2.5	UNF 1"	23.25	12	G 7/8"	28.25	14
M22	19.50	2.5	UNF 1 1/8"	26.50	12	G 1"	30.75	11
M24	21.00	3	UNF 1 1/4"	29.75	12	G 1 1/4"	39.50	11
M27	24.00	3	UNF 1 3/8"	32.80	12	G 1 1/2"	45.50	11
M30	26.50	3.5	UNF 1 1/2"	36.00	12	G 1 3/4"	51.40	11
M33	29.50	3.5				G 2"	57.20	11
M36	32.00	4	UNC 美制统一粗牙螺纹 UNC United coarse thread			NPT 60° 全牙型锥管螺纹 NPT60° full profile canal thread		
M39	35.00	4	UNC NO.6	2.80	32	NPT 1/16"	6.10	27
M42	37.50	4.5	UNC NO.8	3.40	32	NPT 1/8"	8.50	27
M45	40.50	4.5	UNC NO.10	3.90	24	NPT 1/4"	11.00	18
M48	43.00	5	UNC NO.12	4.50	24	NPT 3/8"	14.30	18
M52	47.00	5	UNC 1/4"	5.10	20	NPT 1/2"	17.80	14
			UNC 5/16"	6.60	18	NPT 3/4"	23.00	14
M 公制挤压螺纹 M metric extruded thread			UNC 3/8"	8.00	16	NPT 1"	29.00	11 1/2
M4	3.70	0.7	UNC 7/16"	9.40	14	NPT 1 1/4"	37.50	11 1/2
M5	4.63	0.8	UNC 1/2"	10.75	13	NPT 1 1/2"	43.70	11 1/2
M6	5.50	1	UNC 9/16"	12.25	12	NPT 2"	55.60	11 1/2
M7	6.51	1	UNC 5/8"	13.50	11	NPTF 60° 全牙型锥管螺纹 NPTF60° full profile canal thread		
M8	7.40	1.25	UNC 3/4"	16.50	10	NPTF 1/16"	6.00	27
M10	9.25	1.5	UNC 7/8"	19.50	9	NPTF 1/8"	8.40	27
M12	11.12	1.75	UNC 1"	22.25	8	NPTF 1/4"	10.90	18
M14	13.00	2	UNC 1 1/8"	25.00	7	NPTF 3/8"	14.25	18
M16	15.00	2	UNC 1 1/4"	28.25	7	NPTF 1/2"	17.75	14
			UNC 1 3/8"	30.80	6	NPTF 3/4"	23.00	14
M 公制细牙螺纹 M metric fine thread			UNC 1 1/2"	34.00	6	NPTF 1"	29.00	11 1/2
钻头直径 = 丝锥直径 - 螺距 Drill diameter = tap diameter - pitch			UNC 1 3/4"	39.50	5	NPTF 1 1/4"	37.75	11 1/2
			UNC 2"	45.25	4 1/2	NPTF 1 1/2"	43.75	11 1/2
						NPTF 2"	55.75	11 1/2

* M3-M10（DIN371），M12（DIN376）

丝锥柄部方头尺寸

Square Head Size Of Tap Shank



ISO					JIS				DIN				
柄部尺寸 Shank size			丝锥型号 Tap type		柄部尺寸 Shank size			丝锥型号 Tap type	柄部尺寸 Shank size			丝锥型号 Tap type	
d	a	l	ISO529 ⁽¹⁾	ISO529 ⁽²⁾ ISO2283	DCON	B	LPR	JISB4430 ⁽³⁾	DCON	B	LPR	DIN371 ⁽⁴⁾	DIN374 ⁽⁵⁾ DIN376
2.24	1.80	4		M3.0	3.00	2.50	5	M1.0-M2.6	2.50	2.10	5	M1-M1.8	M3.5
2.50	2.00	4	M1-M2	M3.5	4.00	3.20	6	M3.0-M3.5	2.80	2.10	5	M2-M2.5	M4.0
2.80	2.24	5	M2.2-M2.6		5.00	4.00	7	M4.0-M4.5	3.50	2.70	6	M3	M4.5-M5
3.15	2.50	5	M3.0	M4.0	5.50	4.50	7	M5.0	4.00	3.00	6	M3.5	
3.55	2.80	5	M3.5	M4.5	6.00	4.50	7	M6.0	4.50	3.40	6	M4.0	M6.0
4.00	3.15	6	M4.0	M5.0	6.20	5.00	8	M7.0-M8.0	6.00	4.90	8	M4.5-M6	M8.0
4.50	3.55	6	M4.5	M6.0	7.00	5.50	8	M9.0-M10	7.00	5.50	8	M7.0	M10
5.00	4.00	7	M5.0		8.00	6.00	9	M11	8.00	6.20	9	M8.0	
5.60	4.50	7		M7.0	8.50	6.50	9	M12	9.00	7.00	10		M12
6.30	5.00	8	M6.0	M8.0	9.50	7.00	10	M10-M11	10.00	8.00	11	M10.0	
7.10	5.60	8	M7.0	M9.0	10.5	8.00	11	M14	11.00	9.00	12		M14
8.00	6.30	9	M8.0	M10-M11	12.50	10.00	13	M16	12.00	9.00	12		M16
9.00	7.10	10	M9.0	M12	14.00	11.00	14	M18	14.00	11.00	14		M18
10.00	8.00	11	M10		15.00	12.00	15	M20	16.00	12.00	15		M20
11.20	9.00	12		M13-M15	17.00	13.00	16	M22	18.00	14.50	17		M22-M26
12.50	10.00	13		M16-M17	19.00	15.00	18	M24	20.00	16.00	19		M27
14.00	11.20	14		M18-M21	20.00	15.00	18	M27	22.00	18.00	21		M29-M32
16.00	12.50	16		M22-M23	23.00	17.00	20	M30	25.00	20.00	23		M33
18.00	14.00	18		M24-M26	25.00	19.00	22	M33	28.00	22.00	25		M34-M38
20.00	16.00	20		M27-M30	28.00	21.00	24	M36	32.00	24.00	27		M39-M42
22.40	18.00	22		M31-M33	30.00	23.00	26	M39	36.00	29.00	32		M44-M50
25.00	20.00	24		M36	32.00	26.00	30	M42	40.00	32.00	35		M52
28.00	22.40	26		M37-M42					45.00	35.00	38		M55-M60
31.50	25.00	28		M44-M50									
35.50	28.00	31		M52-M56									
40.00	31.50	34		M58-M65									
45.00	35.50	38		M66-M75									

注：(1)(4)为粗柄普通粗牙螺纹丝锥

(2)(5)为细柄普通粗牙螺纹丝锥

(3)为等径普通粗牙螺纹丝锥

Note: (1)(4) is the coarse shank general coarse thread tap

(2)(5) is the fine shank general coarse thread tap

(3) is the equal diameter general coarse thread tap

国际单位换算表

International Unit Conversion Table

● 压力/Pressure

Pa	KPa	MPa	bar	Kgf/cm ²	atm	mmH ₂ O	mmHg (Torr)
1	1×10 ⁻³	1×10 ⁻⁶	1×10 ⁻⁵	1.01972×10 ⁻⁵	9.86923×10 ⁻⁶	1.01972×10 ⁻¹	7.50062×10 ⁻³
1×10 ³	1	1×10 ⁻³	1×10 ⁻²	1.01972×10 ⁻²	9.86923×10 ⁻³	1.01972×10 ²	7.50062
1×10 ⁶	1×10 ³	1	1×10	1.01972×10	9.86923	1.01972×10 ⁵	7.50062×10 ³
1×10 ⁹	1×10 ⁶	1×10 ³	1	1.01972	9.86923×10 ⁻¹	1.01972×10 ⁸	7.50062×10 ⁶
9.80665×10 ⁴	9.80665×10	9.80665×10 ⁻²	9.80665×10 ⁻¹	1	9.67841×10 ⁻¹	1×10 ⁴	7.35559×10 ²
1.01325×10 ⁵	1.01325×10 ²	1.01325×10 ⁻¹	1.01325	1.03323	1	1.03323×10 ⁴	7.60000×10 ²
9.80665	9.80665×10 ⁻³	9.80665×10 ⁻⁶	9.80665×10 ⁻⁵	1×10 ⁻⁴	9.67841×10 ⁻⁵	1	7.35559×10 ⁻²
1.33322×10 ²	1.33322×10 ⁻¹	1.33322×10 ⁻⁴	1.33322×10 ⁻³	1.35951×10 ⁻³	1.31579×10 ⁻³	1.35951×10	1

注：1Pa=1 N/mm²

● 力/Force

N	dyn	Kgf
1	1×10 ⁵	1.01972×10 ⁻¹
1×10 ⁻⁵	1	1.01972×10 ⁻⁶
9.80665	9.80665×10 ⁵	1

● 应力/Stress

Pa	MPa (N/mm²)	Kgf/mm²	Kgf/cm²
1	1×10 ⁻⁶	1.01972×10 ⁻⁷	1.01972×10 ⁻⁵
1×10 ⁶	1	1.01972×10 ⁻¹	1.01972×10
9.80665×10 ⁶	9.80665	1	1×10 ²
9.80665×10 ⁴	9.80665×10 ⁻²	1×10 ⁻²	1

注：1Pa=1N/mm²

● 功效、能量、热量/Efficacy、Energy、Heat

J	Kw·h	Kgf·m	Kcal
1	2.77778×10 ⁻⁷	1.01972×10 ⁻¹	2.38889×10 ⁻⁴
3.600×10 ⁶	1	3.67098×10 ⁵	8.6000×10 ²
9.80665	2.72407×10 ⁻⁶	1	2.34270×10 ⁻³
4.18605×10 ³	1.16279×10 ⁻³	4.26858×10 ²	1

注：1J=1W·sKgf·m1J=1N·m 1cal=4.18605J

● 能量（功率、动力）、热流/Energy（power）, Heat flux

W	Kgf·m/S	PS	Kcal/h
1	1×10 ⁻⁶	1.01972×10 ⁻⁷	1.01972×10 ⁻⁵
1×106	1	1.01972×10 ⁻¹	1.01972×10
9.80665×106	9.80665	1	1×10 ²
9.80665×10,4	9.80665×10 ⁻²	1×10 ⁻²	1

注 Note：1W=1J/s 1Ps=0.7355KW（Ps: 马力 horsepower）1cal=4.18605J



应用技术是检验刀具性能的关键一步，设计制造的刀具是否可以满足客户要求，是否可以提升客户的加工效率，降低成本，都需要应用技术的支持。同样一把刀具，不同的加工参数和策略，结果可能会差异巨大。

如有任何需要请联系我们，期待与您合作!

Application technology is a key step to test tool performance. Whether the tool designed and manufactured can meet customer requirements, whether it can improve customer processing efficiency and reduce costs, all need the support of application technology. The same tool, different processing parameters and strategies, the results may be very different.

If you have any needs, please contact us and look forward to cooperating with you.