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HOLE MAKING TOOLS 孔加工刀具



A

DAMPING TOOLS 阻尼减振刀具



B

MILLING CUTTERS 铣削刀具



C

ADAPTORS 刀柄系统



D

TURNING TOOLS 车削刀具



E

INSERTS 刀片系列



F

SPECIAL TOOLS 非标刀具



G

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H

TECHNICAL INFORMATION 技术资料



K

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COMPANY PROFILE

企业简介

上海松德数控刀具制造有限公司成立于2004年，位于上海市松江科技园区，是专业的精密数控刀具制造企业。

多年来，松德公司一直专注于高端数控刀具产品的研发和生产制造，先后开发出了微米级精镗刀，阻尼减振刀具等系列产品，填补了国内空白。松德公司的镗刀产品规格齐全，加工范围从直径2mm到直径4.2m，调整精度从0.01mm/格到0.001mm/格，能满足不同客户的不同需要；松德公司的阻尼减振刀具全部实现了系列化、标准化，选用方便，交货周期短；还有铣削刀具、车削刀具、刀柄系统和合金刀具等丰富的产品可供选择；另外，松德公司还为客户提供个性化订制服务。

“缔造精品”是松德公司对于产品质量的一贯追求，高品质的产品来自于“松德制造”对产品质量的严格要求和根植到每个员工心目中的“精品意识”。为客户提供优质的产品，是松德公司的责任。松德公司还拥有经验丰富的技术服务团队，能随时随地为客户提供技术支持，包括提供成套的解决方案。

松德公司的产品在兵器、航空、船舶、汽车、工程机械、能源等行业中得到了广泛的应用，赢得了客户的一致好评。

松德数控刀具制造有限公司愿竭诚为您服务！



Shanghai Sunder Tools, located in Songjiang Shanghai, is a leading manufacturer of precision CNC cutting tools in China.

Since 2004, Sunder Tools concentrated its efforts on development and manufacturing of highest quality cutting tools. The company's leading achievements are design and development of micron boring heads and vibration dampening boring bars which are recognized domestically and globally. The company produces various precision boring tools with 2mm-4200mm diameter range, 0.01mm/dial and 0.001mm/dial adjustable accuracy, which meet and exceed our customers' expectations and requirements. The Sunder Tools has also long and proud traditions in manufacturing of milling cutters, turning tools, shanks, solid carbide tools and other machine tool accessories as per customer's demands. Furthermore, the company provides engineering and tool design services to our customer base.

"Creation of competitive, leading edge products" is Sunder Tools relentless pursuit. Supplying the highest quality products and services to our customers is the obligation of every team member in the company.

Our customer service team is next to none in providing support, logistics and tooling solutions to our customers. Sunder Tools have been a recognized and valued supplier of cutting tools and engineering solutions to defense, aerospace, automotive, shipping, and energy industries with well-established client base.

Sunder people at your service!



ENTERPRISE CERTIFICATE

企业证书

在中国制造趋向质造的今天，市场竞争越趋激烈。
我们松德人深谙“质量是企业生存之本”不惜巨资构筑质量系统工程。
并率先通过 ISO9001 国际质量体系认证、16 余项国家专利技术等荣誉称号。
为此在数控刀具行业中具有领先地位，松德的质量体系十分完善，各项质量活动已实现制度化、程序化、规范化。



With the development tendency from "made in China" to "created in China" and to "intelligent manufacturing in China", market competition is more and more and fierce. Our sunder personnel are deeply aware that quality is the basis for an enterprise to survive, and spare no effort to make huge investments in construing the quality system project.
We took the lead in obtaining the ISO9001 international quality system and have been granted more than 16 national patented technologies. Therefore, we are maintaining our leading position in the CNC tool industry.
Our quality system is very perfect, and systemized, programmed and standardized quality activities have been realized.



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MODULAR BORING TOOL 模块式镗刀

模块式 E 接口原理及连接锁紧方式

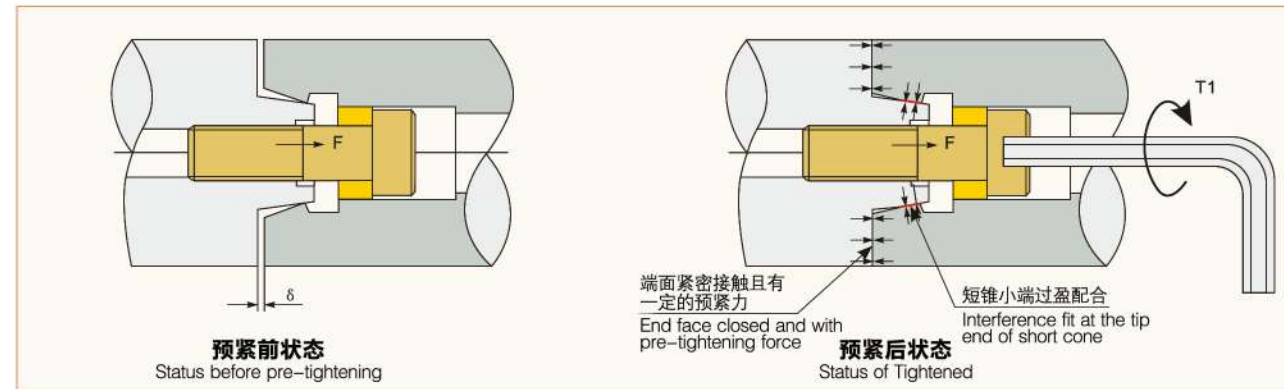
Clamping Principle and Assembly Instruction of Type E Connection

模块式 E 接口采用短锥过定位连接方式，自由状态时为短锥配合，端面有间隙；工作状态时轴向加一拉紧力 F，使短锥过盈并微量变形，同时端面接触并有一定的预紧力，使接口保持高的连接刚性和定位精度；短锥小端的过盈能保证中心拉紧时端面接触均匀、预紧力一致，使接口的连接性和定位精度更稳定；接口圆周上设计有一端面键，以传递更大的切削扭矩，模块式 E 接口分标准 E 接口和加长型 E 接口两种连接锁紧方式，标准 E 接口直接用轴向螺钉锁紧，简单快捷；加长型 E 接口通过锥面螺钉的转换，锁紧通过径向两螺钉的平衡加力，使接口锁紧，加长柄连接时方便省力。

The type E connection adopts the short cone over-positioning connecting method, and there will have space if it is the short cone fitting when it is free status. There will be axial tension F makes the short cone interfered and a little bit deformation, meanwhile the end face closed to and the pretightening force makes sure the high rigidity, high accuracy. The interference can make sure the contact surface well-distributed, pretightening force is coincident and with the high rigidity, high accuracy. There is an end face key at the circumference to transfer more cutting torsions. There are two styles of E connection, one is standard which is with axial screw tighten the boring tool and the adaptor for standard type Two radial screw tighten the boring tool and the adaptor with balance clamping force to make long type connection easily.

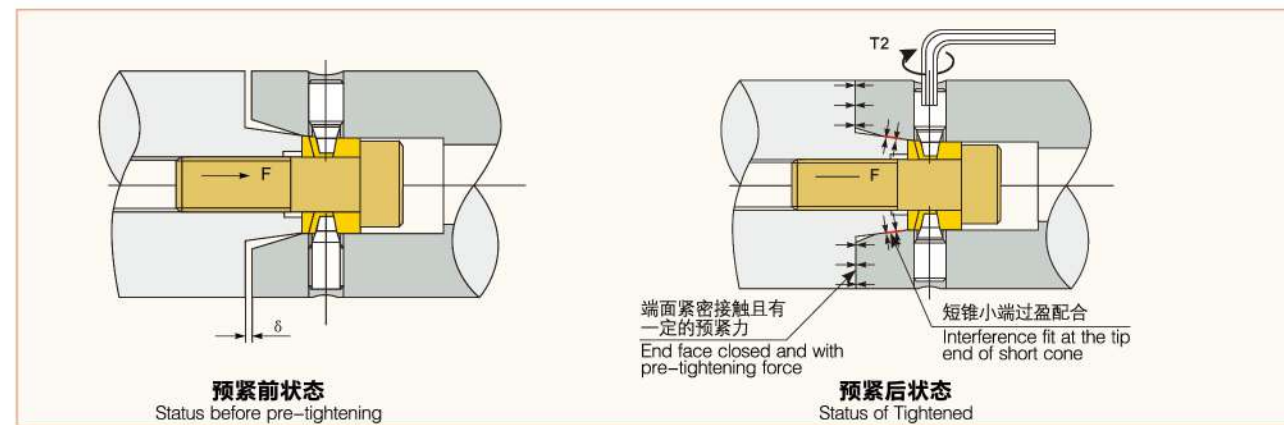
标准 E 接口原理图

Clamping Principle of Type E Connection



加长型 E 接口原理图

Clamping Principle of Type E Connection(Long Version)



模块式 E 接口锁紧力矩参考值

Recommend Value of Tightening Torque of Type E Connection

接口规格 Designation	E25	E32	E40	E50	E63	E80
标准 E 接口锁紧力矩 T1 T1 for Standard E connection	18	18	80	80	150	200
加长型 E 接口锁紧力矩 T2 T2 for Long type E connection	6	6	20	20	35	50

MODULAR BORING TOOL 模块式镗刀

双刃粗镗刀说明

Instruction of Two Flute Rough Boring Tool

短锥接口:
过定位配合使连接精度更高，刚性更好，并采用模块式连接结构连接方式多样化，减少库存量。
Short Cone Connection
High rigidity, high accuracy, economical inventory due to the interference fit connection method

碟形垫片:
刀座锁紧螺性配有碟形垫片使刀座带有一定预紧力保证刀座调整精度。
Disk Spring:
There is a butterfly shim for the carudge so that it will have pre-tightening force which is to make sure the high precision.

增加倒角环:
可在刀体上安装倒角环使粗镗、倒角一次完成，提高效率，降低成本。
Additional chamfering Ring:
There is a chamfering ring which can make sure roughing and chamfering can be ma-chined just at one time, which can enhance efficiency and lower cost.

矩形导轨:
刀座调整时左右不摆，轴向不变，且连接稳定。
Rectangular Slot Guide:
It can make sure the cartridge more stable when adjusting

径向微调:
借助对刀仪器调整精度可达 0.01mm。
Radial Micro-adjusting:
The accuracy can reach 0.01mm by the help of preseter.

更换刀座:
可完成通孔、盲孔镗削，倒角加二及实现双刃粗镗、单刃粗镗、反镗，并通过错齿排布，扩大加工范围。
Changing Cartridges:
It can machine for the through, blind hole and chamfering if changing different cartridges. Also there is single and twin cutters and staggered tool boring for wider machining range.

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

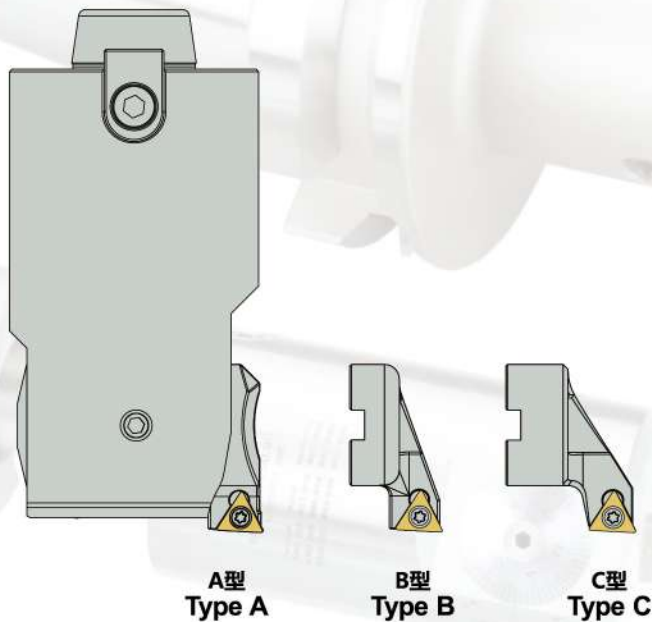
MODULAR BORING TOOL 模块式镗刀

单刃精镗刀说明

Instruction of Precision Boring Tool



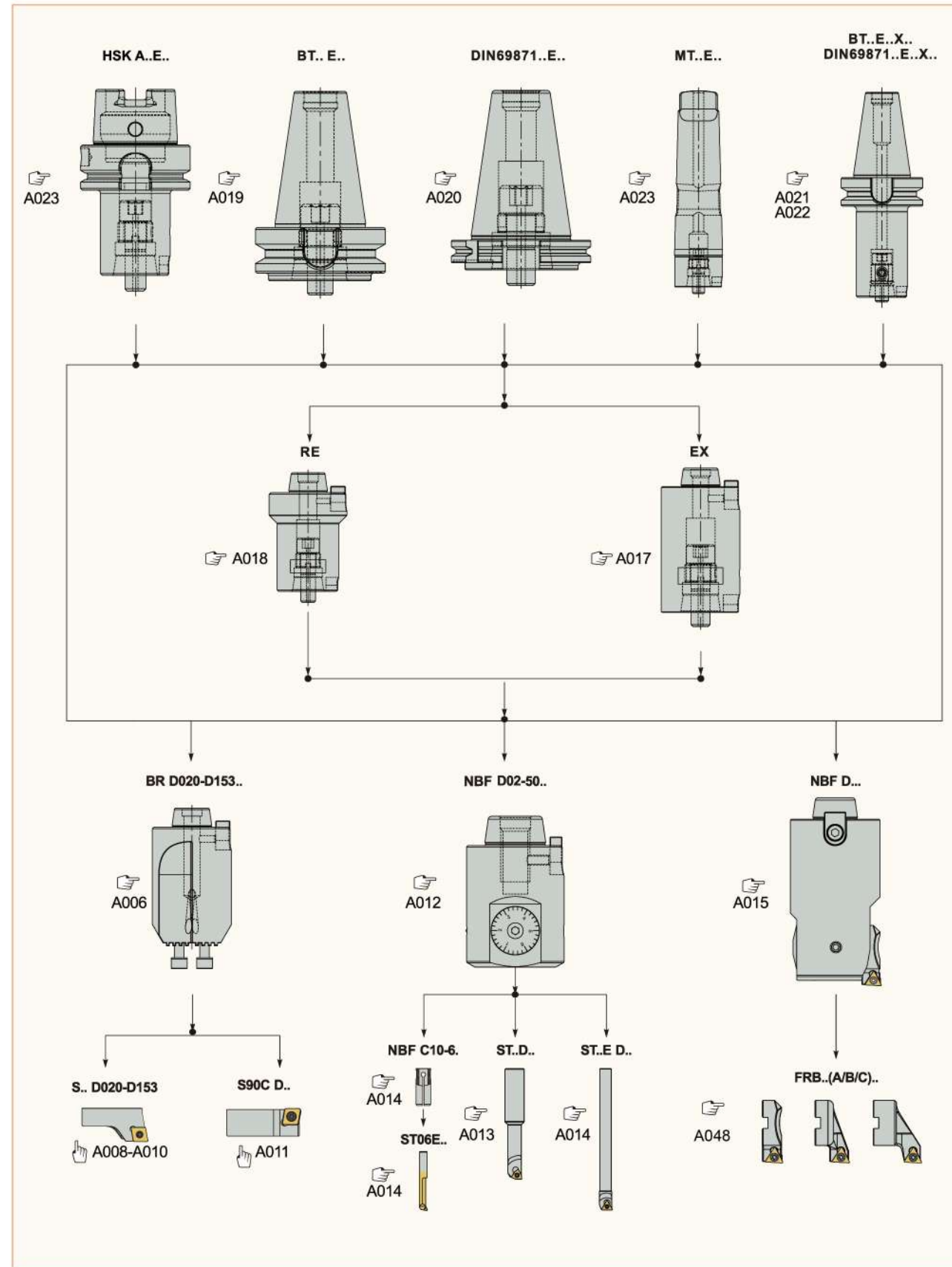
- 可精确调整一个刻度为 $\Phi 0.01\text{mm}$
- 紧凑的设计可达到较高的加工精度如 IT6、IT7
- 可进行正反镗加工
- 较广的加工范围：小孔径精镗刀 D2-D50mm
小孔径硬质合金杆镗刀为 L/D=6-8
杆式精镗刀为 D20-D212mm
杆式反镗为 D30-D212mm
套镗范围为 D2-D86mm
桥式精镗刀为 D150-D4200mm
- 柄部形式可使用：HSK A100/63、BT50/40、DIN69871 50/40、米制 80 柄、莫氏锥柄
- It can be micro adjusted and the dial each of which is 0.01mm on diameter.
- It can meet the higher precision due to eliable design.
- It can be general & back boring.
- Wider machining range: diameter of micro-finish boring bar is D2-D50mm
the length-diameter ratio of mini solid carbide boring bar is l./O=6-8
machining range of finish boring tool with boring bar is D20-D212mm
solid carbide finish boring bar is D20-D76mm, l./O=6-10
diameter of back boring bar is D30-D212mm
diameter of modular adapter for pin turning is D2-D86mm
diameter of large diameter precision boring tool is D150-D4200mm
- Adaptors could be: HSK A 100/63, BT50/40, DIN69871 50/40, metric 80 system, and Morse taper adaptor.



MODULAR BORING TOOL 模块式镗刀

模块式组合示意图

Instruction of Modular Combination



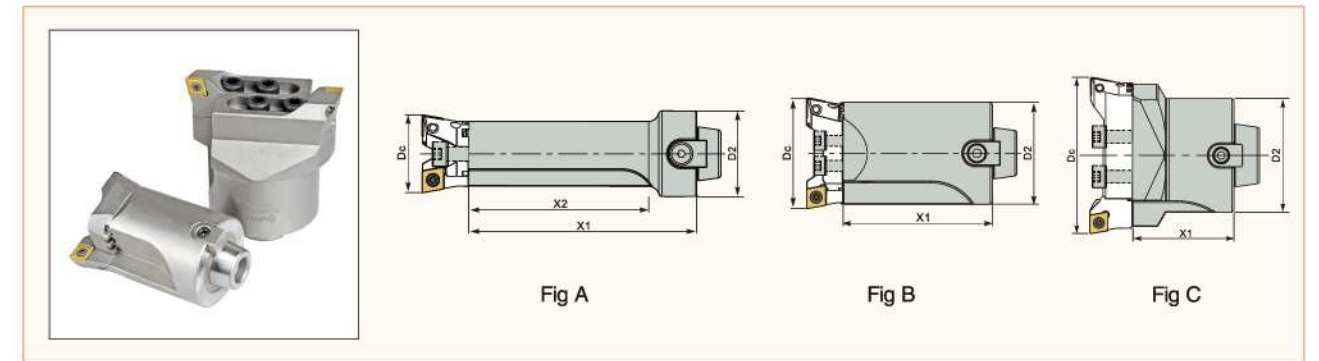
MODULAR BORING TOOL 模块式镗刀

BR 系列 E 接口粗镗刀

BR Rough Boring Tool with Type E Connection

双刃可调，镗孔加工范围 $\Phi 20-\Phi 153$ ，短锥模块式 E 接口，矩形槽刀座接口。

Two teeth rough boring tool, boring range 20-153. Hollow short taper modular connection type E. with rectangular guide slot cartridge.



规格型号 Designation	Dc	D2	X1	X2	Z	Fig	Kg	适配刀座 Cartridge	在庫 Stock
BR D020-027.E25.Z2.68	20-24	25	68	55	2	A	0.14	S..D020-024..	●
BR D020-027.E25.Z2.68.C	23-27	25	68	55	2	A	0.14	S..D023-027..	●
BR D020-027.E25.Z2.88	20-24	25	88	75	2	A	0.15	S..D020-024..	●
BR D020-027.E25.Z2.88.C	23-27	25	88	75	2	A	0.15	S..D023-027..	●
BR D026-035.E25.Z2.68	26-35	25	68	-	2	B	0.20	S..D026-035..	●
BR D026-035.E25.Z2.68.C	26-35	25	68	-	2	B	0.20	S..D026-035..	●
BR D033-041.E32.Z2.68	33-41	32	68	-	2	B	0.35	S..D033-041..	●
BR D033-041.E32.Z2.68.C	33-41	32	68	-	2	B	0.35	S..D033-041..	●
BR D041-055.E40.Z2.65	41-55	40	65	-	2	B	0.54	S..D041-055..	●
BR D041-055.E40.Z2.65.C	41-55	40	65	-	2	B	0.54	S..D041-055..	●
BR D055-070.E50.Z2.75	55-70	50	75	-	2	B	0.98	S..D055-070..	●
BR D055-070.E50.Z2.75.C	55-70	50	75	-	2	B	0.98	S..D055-070..	●
BR D070-090.E63.Z2.75	70-90	63	75	-	2	B	1.65	S..D070-090..	●
BR D070-090.E63.Z2.75.C	70-90	63	75	-	2	B	1.65	S..D070-090..	●
BR D090-110.E63.Z2.75	90-110	63	75	-	2	C	1.90	S..D090-110..	●
BR D090-110.E63.Z2.75.C	90-110	63	75	-	2	C	1.90	S..D090-110..	●
BR D090-110.E80.Z2.75	90-110	80	75	-	2	B	2.68	S..D090-110..	●
BR D090-110.E80.Z2.75.C	90-110	80	75	-	2	B	2.68	S..D090-110..	●
BR D110-153.E63.Z2.75	110-133	63	75	-	2	C	2.20	S..D110-133..	●
BR D110-153.E63.Z2.75.C	130-153	63	75	-	2	C	2.20	S..D130-153..	●
BR D110-153.E80.Z2.75	110-133	80	75	-	2	C	2.94	S..D110-133..	●
BR D110-153.E80.Z2.75.C	130-153	80	75	-	2	C	2.94	S..D130-153..	●

- 适配刀座需单独订购，请参照：A008, A009, A010 页
- 适配刀柄需单独订购，请参照：A019-A023 页
- 请根据具体情况使用冷却液，型号末尾带“C”的产品有中心内冷孔。
- 加工不同材料刀具的切削参数，请参照 K001-K004 页
- 订货示例：1 件 BR D020-027.E25.Z2.68.C
- The cartridge should be ordered separately, please see page A008, A009, A010.
- The adaptor should be ordered separately, please see page A019-A023.
- Please use coolant depend on different machining condition, code 'C' at the end of designation indicates internal coolant hole with boring body.
- Recommended cutting data please see page K001-K004.
- Ordering sample: 1 Piece BR D020-027.E25.Z2.68.C

备件

Spare Parts

Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	调整扳手 Allen key for adjusting screw
20-35mm	SR55 M4x16	GK20 D4	KEY01 M3
33-41mm	SR55 M5x16	GK20 D5	KEY01 M4
41-55mm	SR55 M6x20	GK20 D6	KEY01 M5
55-70mm	SR55 M6x20	GK20 D6	KEY01 M5
70-90mm	SR55 M8x25	GK20 D8	KEY01 M6
90-153mm	SR55 M10x30	GK20 D10	KEY01 M8

D2	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key
D2=25	PL03 8x2	SR57 M3x8
D2=32	PL03 8x6	SR57 M3x10
D2=40	PL03 10x5	SR57 M4x12
D2=50	PL04 12x9	SR55 M5x12
D2=63	PL04 14x12	SR55 M5x16
D2=80	PL04 16x14	SR55 M6x16

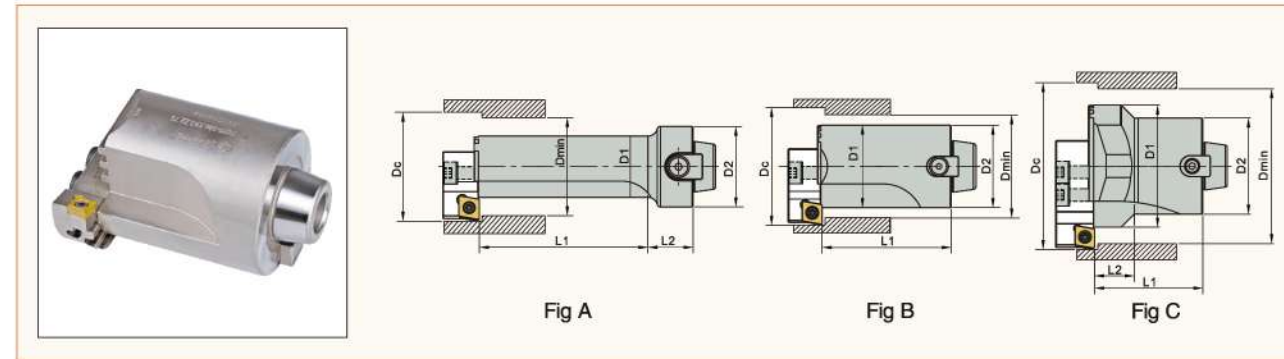
- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

BR 系列 E 接口粗镗刀 (反镗示意)

BR Rough Boring Tool for Back Boring with Type E Connection

BR 系列 E 接口粗镗刀配置矩形槽反镗刀座, 即可轻松实现反镗粗加工, 加工范围 $\Phi 30-\Phi 152$, 调整自如、稳定。过孔直径 D 满足 $D \geq (Dc+D1)/2 + 1$ 。Thanks of stable cartridge for back boring, so that it can be back boring easily. The back boring range is $\Phi 30-\Phi 152\text{mm}$, and also it can be adjusted freely and stably. The hole diameter D should meet the demand of $D \geq (Dc+D1)/2 + 1$.



规格型号 Designation	Dc	D1	D2	L1	L2	Z	Fig	Kg	适配刀座 Cartridge
BR D020-027.E25.Z2.68	30-35	19	25	52	14	1	A	0.15	S90C D19.3035.CC06
BR D020-027.E25.Z2.68.C	30-35	19	25	52	14	1	A	0.15	S90C D19.3035.CC06
BR D020-027.E25.Z2.88	30-35	19	25	72	14	1	A	0.15	S90C D19.3035.CC06
BR D020-027.E25.Z2.88.C	30-35	19	25	72	14	1	A	0.15	S90C D19.3035.CC06
BR D026-035.E25.Z2.68	40-48	25	25	65	-	1	B	0.22	S90C D25.4048.CC06
BR D026-035.E25.Z2.68.C	33-41	25	25	65	-	1	B	0.21	S90C D25.3341.CC06
BR D033-041.E32.Z2.68	51-61	32	32	65	-	1	B	0.38	S90C D32.5161.CC06
BR D033-041.E32.Z2.68.C	42-52	32	32	65	-	1	B	0.37	S90C D32.4252.CC06
BR D041-055.E40.Z2.65	64-76	40	40	62	-	1	B	0.61	S90C D40.6476.CC09
BR D041-055.E40.Z2.65.C	53-65	40	40	62	-	1	B	0.6	S90C D40.5365.CC09
BR D055-070.E50.Z2.75	53-69	50	50	72	-	1	B	1.04	S90C D50.5369.CC09
BR D055-070.E50.Z2.75.C	68-84	50	50	72	-	1	B	1.06	S90C D50.6884.CC09
BR D070-090.E63.Z2.75	83-99	50	50	72	-	1	B	1.08	S90C D50.8399.CC09
BR D070-090.E63.Z2.75.C	88-109	63	63	70	-	1	B	1.81	S90C D63.88109.CC09
BR D090-110.E63.Z2.75	68-89	63	63	70	-	1	B	1.77	S90C D63.6889.CC09
BR D090-110.E63.Z2.75.C	108-130	80	63	70	26	1	C	2.21	S90C D80.108130.CC12
BR D090-110.E63.Z2.75.C	88-110	80	63	70	26	1	C	1.72	S90C D80.88110.CC12
BR D090-110.E80.Z2.75	108-130	80	80	70	-	1	B	2.99	S90C D80.108130.CC12
BR D090-110.E80.Z2.75.C	88-110	80	80	70	-	1	B	2.92	S90C D80.88110.CC12
BR D110-153.E63.Z2.75	128-152	100	63	70	26	1	C	2.55	S90C D100.128152.CC12
BR D110-153.E63.Z2.75.C	108-132	100	63	70	26	1	C	2.48	S90C D100.108132.CC12
BR D110-153.E80.Z2.75	128-152	100	80	70	23	1	C	3.31	S90C D100.128152.CC12
BR D110-153.E80.Z2.75.C	108-132	100	80	70	23	1	C	3.24	S90C D100.108132.CC12

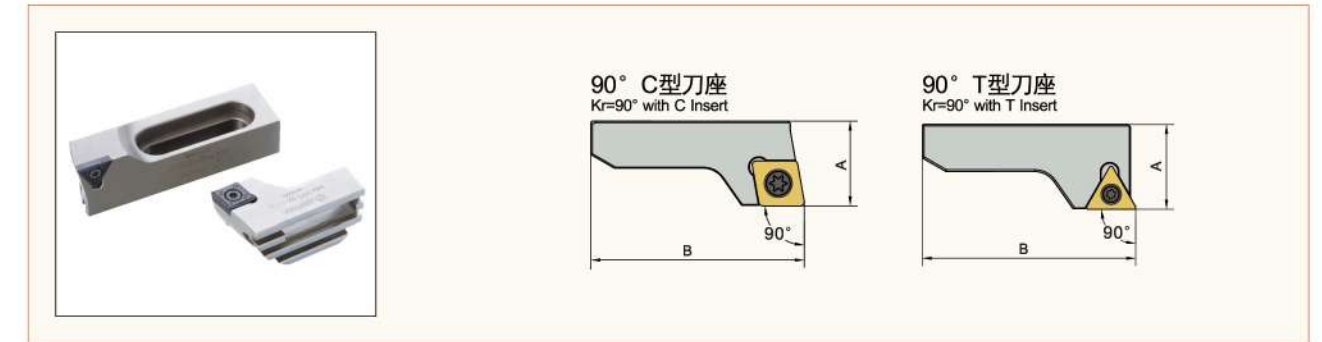
- 适配刀座需单独订购, 请参照: [A011](#) 页
- 适配刀柄需单独订购, 请参照: [A019-A023](#) 页
- 请根据具体情况使用冷却液, 规格型号末尾带“C”的产品带中心出水孔。
- 加工不同材料刀具的切削参数, 请参照: [K001-K004](#) 页
- 最小过孔直径 $D_{min}=(Dc+D1)/2+1$
- 订货示例: 1 件 BR D020-027.E25.Z2.68.
- The cartridge should be ordered separately, please see page [A011](#).
- The adaptor should be ordered separately, please see page [A019-A023](#).
- Please use coolant depend on different machining condition, code 'C' at the end of designation indicates internal coolant hole with boring body.
- Recommended cutting data please see page [K001-K004](#).
- Through hole of back boring $D_{min}=(Dc+D1)/2+1$.
- Ordering sample: 1 piece BR D020-027.E25.Z2.68.

MODULAR BORING TOOL 模块式镗刀

矩形槽粗镗刀座

Cartridge with Rectangular Slot Guide for Rough Boring Tool

适配于 BR 系列双刃粗镗刀, 矩形槽刀座接口, 调整方便
加工范围: 90° C 型刀座 $\Phi 20-\Phi 153$; 90° T 型刀座 $\Phi 33-\Phi 153$; 45° 刀座 $\Phi 23-\Phi 153$; 84° 刀座 $\Phi 20-\Phi 153$;
It is suitable for the BR rough boring tools with twin cutters, and also it can be adjusted freely due to the connection.
The boring range: 90° C style is $\Phi 20-\Phi 153$; 90° T style is $\Phi 33-\Phi 153$; 45° style is $\Phi 23-\Phi 53$; 84° style is $\Phi 20-\Phi 153$.



90° C 型刀座

Kr-90° with C Insert

规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
S90A D020-024.CC06	20-24	13.6	16	CC..0602..	0.01	SR50 M2.5x5	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
S90A D023-027.CC06	23-27	13.6	17	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
S90A D026-035.CC06	26-35	13.6	20	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
S90A D033-041.CC06	33-41	15	26	CC..0602..	0.02	SR50 M3.0x8	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
S90A D034-042.CC09	34-42	18	26	CC..09T3..	0.02	SR50 M3.0x8	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
S90A D041-055.CC09	41-55	18	32	CC..09T3..	0.03	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
S90A D047-059.CC12	47-59	22	35	CC..1204..	0.05	SR50 M3.0x10	KEY01 M1.5	SR21 M5x12.8	KEY02 T20	●
S90A D055-070.CC09	55-70	18	45	CC..09T3..	0.05	SR50 M4.0x10	KEY01 M2	SR21 M4x9.5	KEY02 T15	●
S90A D058-073.CC12	58-73	22	47	CC..1204..	0.06	SR50 M4.0x10	KEY01 M2	SR21 M5x12.8	KEY02 T20	●
S90A D070-090.CC12	70-90	30	59	CC..1204..	0.15	SR50 M5.0x12	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
S90A D090-110.CC12	90-110	30	74	CC..1204..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
S90A D110-133.CC12	110-133	30	85	CC..1204..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
S90A D130-153.CC12	130-153	30	96	CC..1204..	0.30	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●

- 刀片请根据不同材料单独订购, 请参照: [F002](#) 页
- 订货示例: 1 件 S90A D020-024.CC06
- The inserts with different materials should be ordered separately, please see page [F002](#).
- Ordering sample: 1 PC S90A D020-024.CC06.

90° T 型刀座

Kr-90° with T Insert

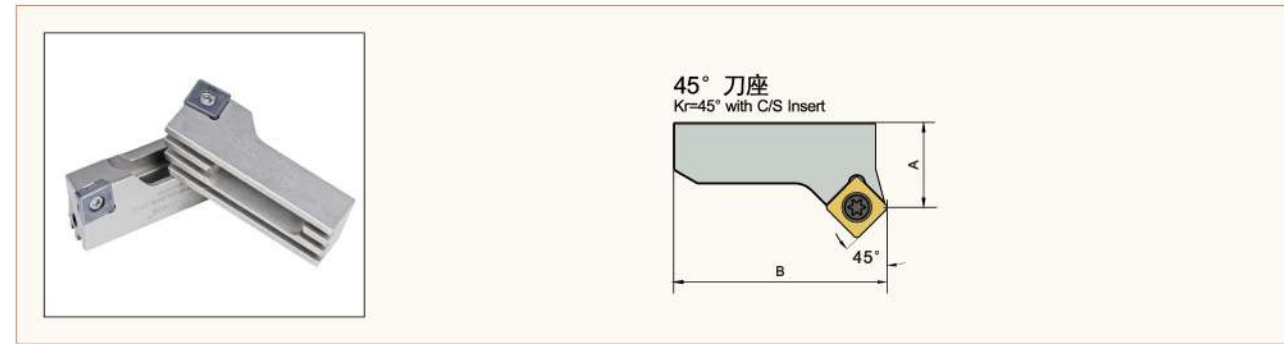
规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
S90A D033-041.TC11	33-41	15	26	TC..1102..	0.02	SR50 M3.0x8	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
S90A D041-055.TC11	41-55	18	32	TC..1102..	0.03	SR50 M3.0x10	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
S90A D055-070.TC11	55-70	18	45	TC..1102..	0.05	SR50 M4.0x10	KEY01 M2	SR20 M2.5x6	KEY02 T8	●
S90A D070-090.TC16	70-90	30	59	TC..16T3..	0.15	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
S90A D090-110.TC16	90-110	30	74	TC..16T3..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
S90A D110-133.TC16	110-133	30	85	TC..16T3..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
S90A D130-153.TC16	130-153	30	96	TC..16T3..	0.30	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●

- 刀片请根据不同材料单独订购, 请参照: [F003,F004](#) 页
- 订货示例: 1 件 S90A D033-041.TC11.
- The inserts with different materials should be ordered separately, please see page [F003, F004](#).
- Ordering sample: 1 PC S90A D033-041.TC11.

MODULAR BORING TOOL 模块式镗刀

矩形槽粗镗刀座

Cartridge with Rectangular Slot Guide for Rough Boring Tool



45° 刀座

Kr-45° with C/S Insert

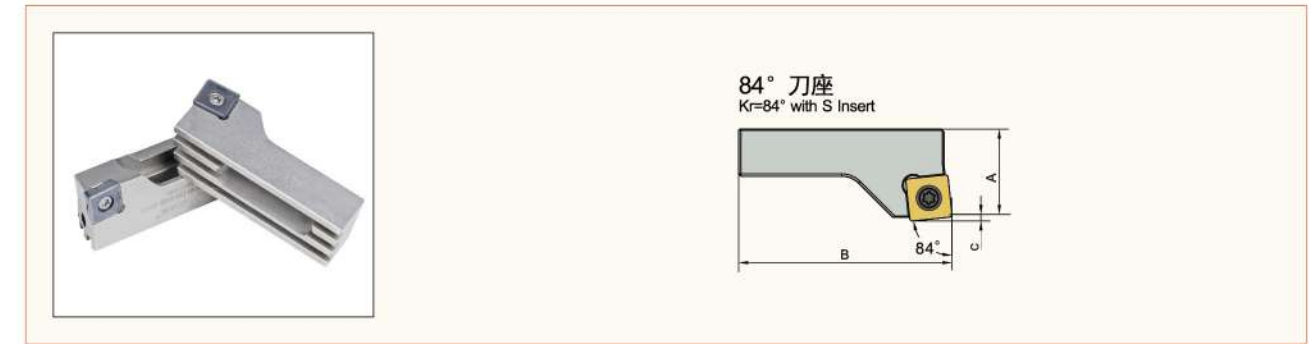
规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Cartridge for adjusting screw	刀座调整扳手 Allen key for adjusting	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw	在库 Stock
S45A D023-027.CC06	23-27	13.6	17	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
S45A D026-035.CC06	26-35	13.6	20	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
S45A D033-041.CC06	33-41	15	25	CC..0602..	0.02	SR50 M3.0x8	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
S45A D041-055.SC09	41-55	18	30	SC..09T3..	0.03	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
S45A D055-070.SC09	55-70	30	45	SC..09T3..	0.04	SR50 M4.0x10	KEY01 M2	SR21 M4x9.5	KEY02 T15	●
S45A D070-090.SC09	70-90	30	59	SC..09T3..	0.13	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
S45A D090-110.SC09	90-110	30	75	SC..09T3..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
S45A D110-133.SC09	110-133	30	85	SC..09T3..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
S45A D130-153.SC09	130-153	30	93	SC..09T3..	0.27	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●

- 刀片请根据不同材料单独订购，请参照：F002, F006 页
- 订货示例：1 件 S45A D023-027.CC06.
- The inserts with different materials should be ordered separately, please see page F002, F006.
- Ordering sample: 1 PC S45A D023-027.CC06.

MODULAR BORING TOOL 模块式镗刀

矩形槽粗镗刀座

Cartridge with Rectangular Slot Guide for Rough Boring Tool



84° 刀座

Kr-84° with S Insert

规格型号 Designation	镗削范围 Boring range	A	B	C	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
S84A D020-024.S006	20-24	13.9	17	0.7	SO..0603..	0.01	SR50 M2.5x5	KEY01 M1.3	SR20 M2.2x5.6	KEY02 T8	●
S84A D023-027.S006	23-27	13.9	17.9	0.7	SO..0603..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.2x5.6	KEY02 T8	●
S84A D026-035.S006	26-35	13.9	20.4	0.7	SO..0603..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.2x5.6	KEY02 T8	●
S84A D033-041.S006	33-41	15.1	25.8	0.7	SO..0603..	0.02	SR50 M3x8	KEY01 M1.5	SR20 M2.2x5.6	KEY02 T8	●
S84A D041-055.S009	41-55	18.1	32.1	0.7	SO..09T3..	0.03	SR50 M3x10	KEY01 M1.5	SR20 M3x6.6	KEY02 T9	●
S84A D055-070.S009	55-70	18.1	45.3	0.7	SO..09T3..	0.05	SR50 M4x10	KEY01 M2	SR20 M3x6.6	KEY02 T9	●
S84A D070-090.S012	70-90	30.3	58.8	1	SO..1204..	0.15	SR50 M5x12	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	●
S84A D090-110.S012	90-110	30.3	73.6	1	SO..1204..	0.22	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	●
S84A D110-133.S012	110-133	30.3	85.4	1	SO..1204..	0.26	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	●
S84A D130-153.S012	130-153	30.3	96.4	1	SO..1204..	0.31	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	●
S84A D090-110.S016	90-110	30.1	73.6	2.6	SO..1605..	0.22	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY02 T15	●
S84A D110-133.S016	110-133	30.1	85.4	2.6	SO..1605..	0.26	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY02 T15	●
S84A D130-153.S016	130-153	30.1	96.4	2.6	SO..1605..	0.32	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY02 T15	●

- 刀片请根据不同材料单独订购，请参照：F007 页
- 订货示例：1 件 S84A D033-041.S006
- The inserts with different materials should be ordered separately, please see page F007.
- Ordering sample: 1 PC S84A D033-041.S006.

规格型号 Designation	镗削范围 Boring range	A	B	C	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
S84A D033-041.SC09	33-41	16.5	26	1.3	SC..09T3..	0.02	SR50 M3x8	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
S84A D041-055.SC09	41-55	18	32	1.3	SC..09T3..	0.04	SR50 M3x8	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
S84A D047-059.SC12	47-59	20	36	2	SC..1204..	0.04	SR50 M3x10	KEY01 M1.5	SR21 M5x12.8	KEY02 T20	●
S84A D055-070.SC09	55-70	18	45	1.3	SC..09T3..	0.05	SR50 M4x10	KEY01 M2	SR21 M4x9.5	KEY02 T15	●
S84A D058-073.SC12	58-73	20	47	2	SC..1204..	0.05	SR50 M4x10	KEY01 M2	SR21 M5x12.8	KEY02 T20	●
S84A D070-090.SC12	70-90	30	59	2	SC..1204..	0.15	SR50 M5x12	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
S84A D090-110.SC12	90-110	30	74	2	SC..1204..	0.22	SR50 M5x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
S84A D110-133.SC12	110-133	30	85	2	SC..1204..	0.26	SR50 M5x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
S84A D130-153.SC12	130-153	30	96	2	SC..1204..	0.31	SR50 M5x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●

- 适用刀片请根据不同的加工材料单独订购，请参照：F006 页
- 订货示例：1 件 S84A D070-090.SC12
- The inserts with different materials should be ordered separately, please see page F006.
- Ordering sample: 1 PCS84A D070-090.SC12

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

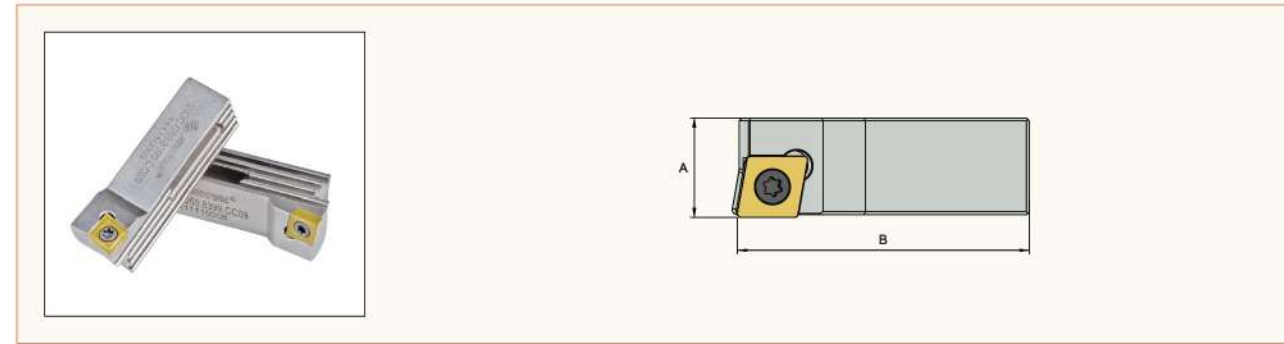
MODULAR BORING TOOL 模块式镗刀

反镗刀座

Cartridge for Back Boring

适配于 BR 系列矩形槽刀座接口的双刃粗镗刀，调整方便，加工范围：Φ30-Φ152

It is suitable for the BR series twin cutter rough boring tool, with the boring range of Φ30-Φ152, and also it can be adjusted easily.



规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	在库 Stock
S90C D19.3035.CC06	30-35	10.3	21	CC..0602..	0.01	●
S90C D25.3341.CC06	33-41	10.3	23	CC..0602..	0.01	●
S90C D25.4048.CC06	40-48	10.3	26.6	CC..0602..	0.02	●
S90C D32.4252.CC06	42-52	10.3	30.2	CC..0602..	0.02	●
S90C D32.5161.CC06	51-61	10.3	35	CC..0602..	0.03	●
S90C D40.5365.CC09	53-65	16.6	36.6	CC..09T3..	0.06	●
S90C D40.6476.CC09	64-76	16.6	42.3	CC..09T3..	0.07	●
S90C D50.5369.CC09	53-69	16.6	45	CC..09T3..	0.06	●
S90C D50.6884.CC09	68-84	16.6	52.8	CC..09T3..	0.08	●
S90C D50.8399.CC09	83-99	16.6	62	CC..09T3..	0.1	●
S90C D63.6889.CC09	68-89	16.6	57.3	CC..09T3..	0.12	●
S90C D63.88109.CC09	88-109	16.6	67.3	CC..09T3..	0.16	●
S90C D80.88110.CC12	88-110	25.6	70.4	CC..1204..	0.25	●
S90C D80.108130.CC12	108-130	25.6	82.4	CC..1204..	0.31	●
S90C D100.108132.CC12	108-132	25.6	82.3	CC..1204..	0.29	●
S90C D100.128152.CC12	128-152	25.6	92.1	CC..1204..	0.36	●

- 刀片请根据不同材料单独选购，请参照：F002 页
- 订货示例：1 件 S90C D32.4252.CC06
- The inserts with different materials should be ordered separately, please see page F002.
- Ordering sample: 1 PC S90C D32.4252.CC06.

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CC..0602..	SR20 M2.5x6	KEY02 T8
CC..09T3..	SR21 M4x9.5	KEY02 T15
CC..1204..	SR21 M5x12.8	KEY02 T20

- 标准库存
Item in stock
- 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

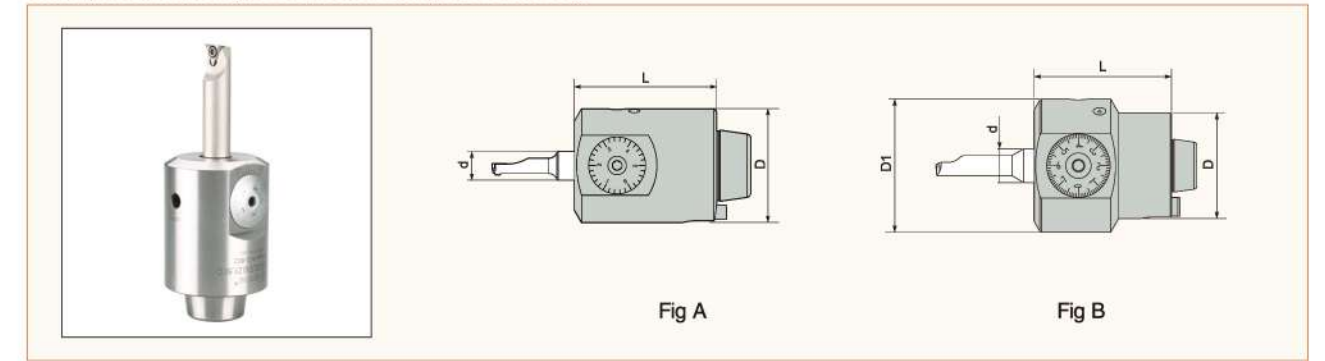
MODULAR BORING TOOL 模块式镗刀

NBF 系列 E 接口小孔径微调精镗刀

BHF Mini Precision Boring Tools with Type E Connection

小孔径可微调精镗刀，微调精度每格直径 0.01mm，加工范围 Φ2-Φ50，短锥模块式 E 接口，需配小孔精镗刀杆。

Mini boring tool has a highly precise adjustment mechanism, 1 DIV = 0.001 mm in diameter, and the boring range is Φ2-Φ50. High rigidity thanks of hollow short taper combination type E connection. Boring bars for the body.



规格型号 Designation	Dc	L	D	D1	D	Kg	Fig	适配刀杆 Boring bar	在库 Stock
NBF D02-22.E40.Z1.50.C	2-22	50	40	-	10	0.5	A	NBF C10-6+ST06E... ST10.. ST10E..	●
NBF D06-50.E50.Z1.65.C	6-50	65	50	63	16	1.15	B	ST16.. ST16E..	●
NBF D06-50.E63.Z1.70.C	6-50	70	63	-	16	1.55	A	ST16.. ST16E..	●

- 适配精镗刀杆需单独选购，请参照：A013, A014 页
- 适配刀柄需单独订购，请参照：A019-A023 页
- 加工不同材料刀具的切削参数，请参照：K005 页
- 订货示例：1 件 NBF D02-22.E40.Z1.50.C
- The boring bar should be ordered separately, please see page A013, A014.
- The adaptor should be ordered separately, please see page A019-A023.
- Recommended cutting data please see page K005.
- Ordering sample: 1 piece BHF D02-22.E40.Z1.50.C

备件

Spare Parts

规格型号 Designation	刀杆锁紧螺钉 Clamping screw for insert	LOCK 螺钉 Lock screw	调整扳手 Allen key for adjusting screw	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key
NBF D02-22.E40	SR54 M6x10	SR54 M6x10	KEY01 M3	PL03 10x5	SR57 M4x12
NBF D06-50.E50	SR54 M10x16	SR54 M10x16	KEY01 M5	PL04 12x9	SR55 M5x12
NBF D06-50.E63	SR54 M10x16	SR54 M10x16	KEY01 M5	PL04 14x12	SR55 M5x16

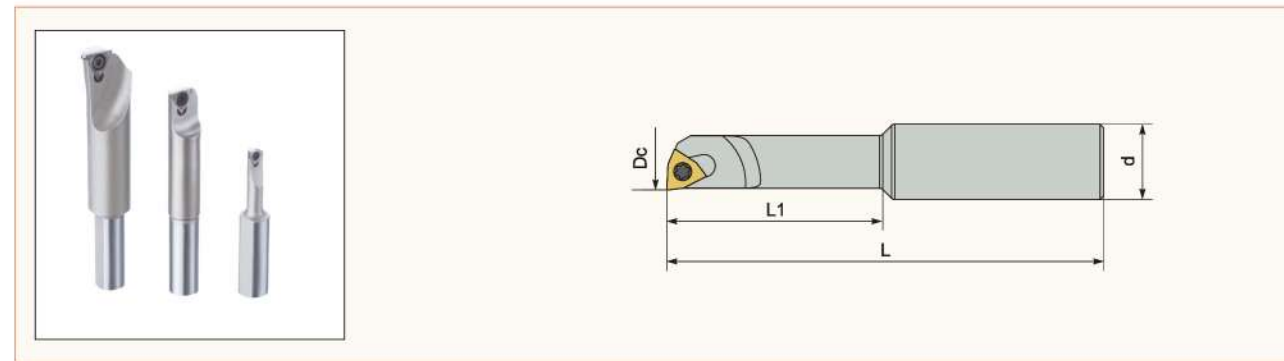
- 标准库存
Item in stock
- 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

小孔精镗刀杆 (标准)

Mini Precision Boring Bar

适配于小孔微精镗刀, 钢制, 标准长度。
Mini boring bar made of steel with standard length.



ST10

规格型号 Designation	Dc	d	L	L1	刀片 Insert	在庫 Stock
ST10 D06-08.WB06.23	6-8	10	53	23	WB..0601..	●
ST10 D08-10.WB06.25	8-10	10	55	25	WB..0601..	●
ST10 D10-12.WB06.30	10-12	10	60	30	WB..0601..	●
ST10 D12-14.TP09.36	12-14	10	66	36	TP..0902..	●
ST10 D14-16.TP09.42	14-16	10	72	42	TP..0902..	●
ST10 D16-18.TP11.48	16-18	10	78	48	TP..1103..	●
ST10 D18-20.TP11.54	18-20	10	84	54	TP..1103..	●
ST10 D20-22.TP11.60	20-22	10	90	60	TP..1103..	●

- 刀片请根据不同材料单独订购。请参照: F001,F02 页
- 订货示例: 1 件 ST10 D06-08.WB06.23
- The insert should be ordered separately, please see page F001,F002.
- Ordering sample: 1 piece ST10 D06-08.WB06.23

ST16

规格型号 Designation	Dc	d	L	L1	刀片 Insert	在庫 Stock
ST16 D06-08.WB06.23	6-8	16	63	23	WB..0601..	●
ST16 D08-11.WB06.28	8-11	16	68	28	WB..0601..	●
ST16 D10-13.WB06.36	10-13	16	76	36	WB..0601..	●
ST16 D12-16.TP09.50	12-16	16	90	50	TP..0902..	●
ST16 D15-21.TP09.60	15-21	16	100	60	TP..0902..	●
ST16 D20-26.TP11.64	20-26	16	104	64	TP..1103..	●
ST16 D25-31.TP11.64	25-31	16	104	64	TP..1103..	●
ST16 D30-36.TP11.72	30-36	16	112	72	TP..1103..	●
ST16 D35-41.TP11.72	35-41	16	112	72	TP..1103..	●
ST16 D40-46.TP11.72	40-46	16	112	72	TP..1103..	●
ST16 D44-50.TP11.72	44-50	16	112	72	TP..1103..	●

- 刀片请根据不同材料单独订购。请参照: F001,F02 页
- 订货示例: 1 件 ST16 D06-08.WB06.23
- The insert should be ordered separately, please see page F001,F002.
- Ordering sample: 1 piece ST16 D06-08.WB06.23

备件

Spare Parts

刀片 Insert	刀片螺钉 Clamping screw for insert	螺钉扳手 Allen key for insert clamping screw
WB..0601..	SR20 M2x3.5	KEY02 T6
TP..0902..	SR22 M2.5x6	KEY02 T8
TP..1103..	SR22 M3x8	KEY02 T8

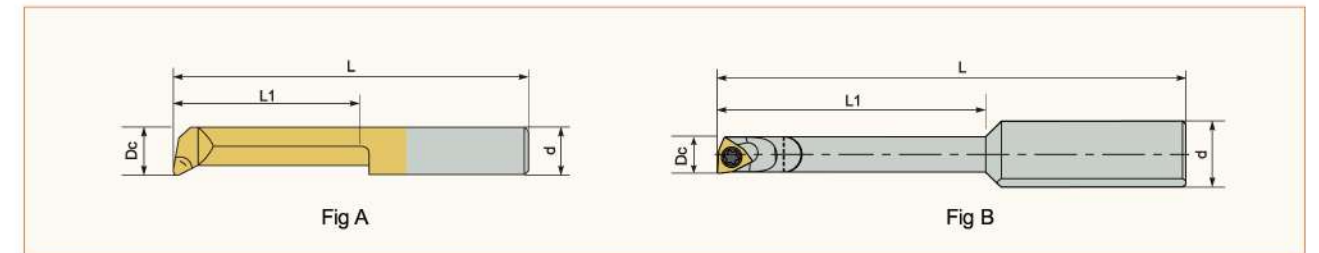
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

小孔精镗刀杆 (抗振型)

Mini Anti-Vibration Precision Boring Bar

适配于小孔微精镗刀, 硬质合金杆, 加长抗振型。
Anti-vibration mini boring bar made of carbide. Advantage: increase rigidity. Reduce deflection. Vibration neutralisation



ST06E10E

规格型号 Designation	Dc	d	L	L1	刀片 Insert	Fig	在庫 Stock
ST06E D02-03.10	2-3	6	35	10	-	A	○
ST06E D03-04.15	3-4	6	40	15	-	A	○
ST06E D04-06.20	4-6	6	45	20	-	A	○
ST10E D06-08.WB06.40	6-8	10	70	40	WB..0601..	B	●
ST10E D08-10.WB06.60	8-10	10	90	60	WB..0601..	B	●
ST10E D10-12.WB06.75	10-12	10	105	75	WB..0601..	B	●

- D2-D6 整体硬质合金镗刀杆最低订货量 5 支/次。ST06E 须用 NBF C10-6 变径套夹持。
- 刀片请根据不同材料单独订购。请参照: F001 页
- 订货示例: 5 件 ST06E D02-03.10
- D2-D6 is solid carbide boring bar and the MOQ is 5 units. ST06E must be clamped by the reduction sleeve whose model# is NBF C10-6.
- Insert should be ordered by separately, please see page F001.
- Ordering sample: 5 pieces ST06E D02-03.10

ST16E

规格型号 Designation	Dc	d	L	L1	刀片 Insert	Fig	在庫 Stock
ST16E D06-08.WB06.45	6-8	16	85	45	WB..0601..	B	●
ST16E D08-11.WB06.60	8-11	16	100	60	WB..0601..	B	●
ST16E D10-13.WB06.75	10-13	16	115	75	WB..0601..	B	●
ST16E D12-16.TP09.90	12-16	16	130	90	TP..0902..	B	●
ST16E D15-21.TP09.110	15-21	16	150	110	TP..0902..	B	●

- 刀片请根据不同材料单独订购。请参照: F001,F02 页
- 订货示例: 5 件 ST16E D06-08.WB06.45
- The insert should be ordered separately, please see page F001,F002.
- Ordering sample: 1 piece ST16E D06-08.WB06.45.

备件

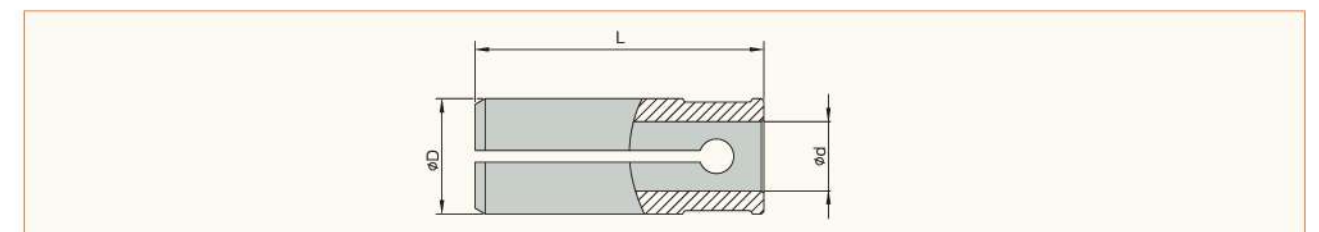
Spare Parts

刀片 Insert	刀片螺钉 Clamping screw for insert	螺钉扳手 Allen key for insert clamping screw
WB..0601..	SR20 M2x3.5	KEY02 T6
TP..0902..	SR22 M2.5x6	KEY02 T8

小孔精镗刀杆变径套

Reduction Sleeve for Mini Boring Bar

适用于 ST06E... 小孔精镗刀杆。
It is suitable for ST06E ... mini precision boring bar.



规格型号 Designation	D	d	L	在庫 Stock
NBF C10-6	10	6	25	○

- 订货示例: 1 件 NBF C10-6
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

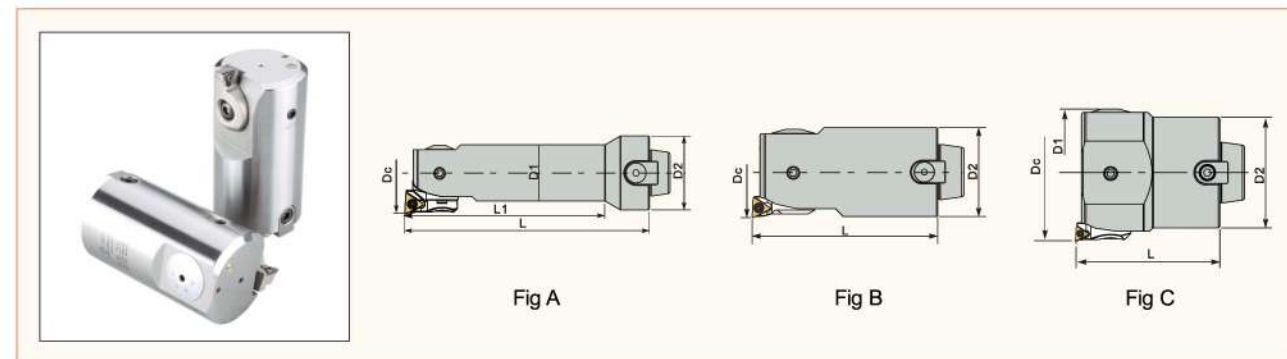
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

NBF 系列 E 接口微调精镗刀

NBF Mini Precision Boring Tool with Type E Connection

单刃可微调，微调精度每格直径 0.01mm，加工范围 $\Phi 20-\Phi 212$ ，短锥模块式 E 接口，适配直压式精镗刀头。
It can be micro adjusted with single tooth. 1 DIV=0.01mm in diameter. The boring range is $\Phi 20-\Phi 212$. Hollow short taper modular connection type E. Snail cartridge is for the body.



规格型号 Designation	Dc	D1	D2	L	L1	Fig	Kg	精镗刀头 Cartridge	在库 Stock
NBF D19.E25.65	20-26	19	25	80	65	A	0.18	FRB 10A...	●
NBF D19.E25.65.C	25-31	19	25	80	65	A	0.18	FRB 10B...	●
	30-36	19	25	80	65	A	0.18	FRB 10C...	●
NBF D25.E25.80	26-34	-	25	80	-	B	0.28	FRB 12A...	●
NBF D25.E25.80.C	33-41	-	25	80	-	B	0.28	FRB 12B...	●
	40-48	-	25	80	-	B	0.28	FRB 12C...	●
NBF D32.E32.80	33-43	-	32	80	-	B	0.17	FRB 16A...	●
NBF D32.E32.80.C	42-52	-	32	80	-	B	0.17	FRB 16B...	●
	51-61	-	32	80	-	B	0.17	FRB 16C...	●
NBF D40.E40.80	42-54	-	40	80	-	B	0.75	FRB 20A...	●
NBF D40.E40.80.C	53-65	-	40	80	-	B	0.75	FRB 20B...	●
	64-76	-	40	80	-	B	0.75	FRB 20C...	●
NBF D50.E50.90	53-69	-	50	90	-	B	1.31	FRB 25A...	●
NBF D50.E50.90.C	68-84	-	50	90	-	B	1.31	FRB 25B...	●
	83-99	-	50	90	-	B	1.31	FRB 25C...	●
NBF D63.E63.100	68-100	-	63	100	-	B	2.33	FRB 30A...	●
NBF D63.E63.100.C	98-130	-	63	100	-	B	2.33	FRB 30B...	●
	128-160	-	63	100	-	B	2.33	FRB 30C...	●
NBF D100.E63.100	100-152	100	63	100	-	C	3.24	FRB 30A...	●
NBF D100.E63.100.C	130-182	100	63	100	-	C	3.24	FRB 30B...	●
	160-212	100	63	100	-	C	3.24	FRB 30C...	●
NBF D80.E80.100	88-120	-	80	100	-	B	3.86	FRB 30A...	●
NBF D80.E80.100.C	118-150	-	80	100	-	B	3.86	FRB 30B...	●
	148-180	-	80	100	-	B	3.86	FRB 30C...	●
NBF D100.E80.100	100-152	100	80	100	-	C	4.37	FRB 30A...	●
NBF D100.E80.100.C	130-182	100	80	100	-	C	4.37	FRB 30B...	●
	160-212	100	80	100	-	C	4.37	FRB 30C...	●

- 适配刀头需单独订购，请参照：A048 页
- 适配刀柄需单独订购，请参照：A019-A023 页
- 请根据具体情况使用冷却液，型号末尾带“C”的产品有中心内冷孔。
- 加工范围 Dc 是指 FRB 10.. 刀座刀片圆角为 R0.2 时的值，FRB 12/16/20/25/30 刀座刀片圆角为 R0.4 的值
- 加工不同材料刀具的切削参数，请参照：K005 页
- 订货示例：1 件 NBF D19.E25.65.C
- The cartridge should be ordered separately, please see page A048.
- The adaptor should be ordered separately, please see page A019-A023.
- Please use coolant depend on different machining condition, code "C" at the end of designation indicates internal coolant hole with boring body.
- The diameter range Dc is the value that the radius of insert of FRB 10 cartridge is R0.2, and the radius of insert of FRB 12/16/20/25/30 cartridge is R0.4
- Recommend cutting data please see page K005.
- Ordering sample: 1 piece NBF 019. E25.65.C.

备件

Spare Parts



规格型号 Designation	LOCK 螺钉 Lock screw	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	刀头锁紧螺钉 Clamp screw for cartridge	刀头锁紧扳手 Allen key for cartridge clamping screw	调整扳手 Allen key for adjusting screw
NBF D19.E25.65	SR54-2 M4x4	PL03 8x2	SR57 M3x8	SR20 M4x6-X	KEY02 T15	KEY01 M2
NBF D25.E25.80	SR54-2 M4x6	PL03 8x2	SR57 M3x8	SR20 M4x8-X	KEY02 T15	KEY01 M2
NBF D32.E32.80	SR54-2 M5x8	PL03 8x6	SR57 M3x10	SR56 M5x10	KEY01 M3	KEY01 M2.5
NBF D40.E40.80	SR54 M6x10	PL03 10x5	SR57 M4x10	SR56 M5x12	KEY01 M3	KEY01 M3
NBF D50.E50.90	SR54 M6x12	PL04 12x9	SR55 M5x12	SR56 M6x16	KEY01 M4	KEY01 M3
NBF D63.E63.100	SR54 M10x16	PL04 14x12	SR55 M5x16	SR56 M8x20	KEY01 M5	KEY01 M5
NBF D80.E80.100	SR54 M10x20	PL04 16x14	SR55 M6x16	SR56 M8x25	KEY01 M5	KEY01 M5
NBF D100.E80.100	SR54 M10x20	PL04 16x14	SR55 M6x16	SR56 M8x25	KEY01 M5	KEY01 M5
NBF D100.E63.100	SR54 M10x16	PL04 14x12	SR55 M5x16	SR56 M8x25	KEY01 M5	KEY01 M5

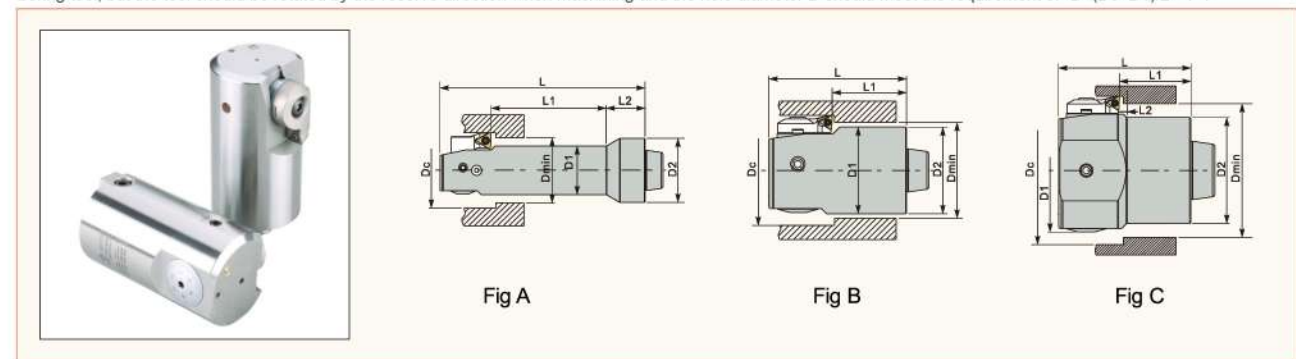
- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

NBF 系列 E 接口微调精镗刀 (反精镗加工示意)

NBF Precision Boring Tool for Back Boring with Type E Connection

直压式精镗刀头反装，即可轻松实现反镗精加工，加工范围 $\Phi 30-\Phi 212$ ，精度与正镗一致，但加工时刀具必须逆时针旋转，且过孔直径 D 满足 $D \geq (Dc+D1)/2+1$ 要求。
Please assemble the cartridge as its reverse direction, which is for back boring, and the back boring range is $\Phi 30-\Phi 212$ and also with the same precision as the ordinary boring tool, but the tool should be rotated by the reserve direction when machining and the hole diameter D should meet the requirement of $D \geq (Dc+D1)/2+1$.



适用精镗刀 Designation	Dc	D1	D2	L	L1	L2	Fig	Kg	精镗刀头 Cartridge
NBF D19.E25.65	30-36	19	25	80	44.5	15.5	A	0.18	FRB 10C...
NBF D19.E25.65.C	30-36	19	25	80	44.5	15.5	A	0.18	FRB 10C...
NBF D25.E25.80	36-41	25	25	80	55	-	B	0.28	FRB 12B...
NBF D25.E25.80.C	40-48	25	25	80	55	-	B	0.28	FRB 12C...
NBF D32.E32.80	47-52	32	32	80	51	-	B	0.47	FRB 16B...
NBF D32.E32.80.C	51-61	32	32	80	51	-	B	0.47	FRB 16C...
NBF D40.E40.80	55-65	40	40	80	46	-	B	0.75	FRB 20B...
NBF D40.E40.80.C	64-76	40	40	80	46	-	B	0.75	FRB 20C...
NBF D50.E50.90	62-69	50	50	90	50	-	B	1.31	FRB 25A...
NBF D50.E50.90.C	68-84	50	50	90	50	-	B	1.31	FRB 25B...
	83-99	50	50	90	50	-	B	1.31	FRB 25C...
NBF D63.E63.100	80-100	63	63	100	54	-	B	2.33	FRB 30A...
NBF D63.E63.100.C	98-130	63	63	100	54	-	B	2.33	FRB 30B...
	128-160	63	63	100	54	-	B	2.33	FRB 30C...
NBF D100.E63.100	112-152	100	63	100	54	6.5	C	3.24	FRB 30A...
NBF D100.E63.100.C	130-182	100	63	100	54	6.5	C	3.24	FRB 30B...
	160-212	100	63	100	54	6.5	C	3.24	FRB 30C...
NBF D80.E80.100	100-120	80	80	100	54	-	B	3.86	FRB 30A...
NBF D80.E80.100.C	118-150	80	80	100	54	-	B	3.86	FRB 30B...
	148-180	80	80	100	54	-	B	3.86	FRB 30C...
NBF D100.E80.100	112-152	100	80	100	54	6.5	C	4.37	FRB 30A...
NBF D100.E80.100.C	130-182	100	80	100	54	6.5	C	4.37	FRB 30B...
	160-212	100	80	100	54	6.5	C	4.37	FRB 30C...

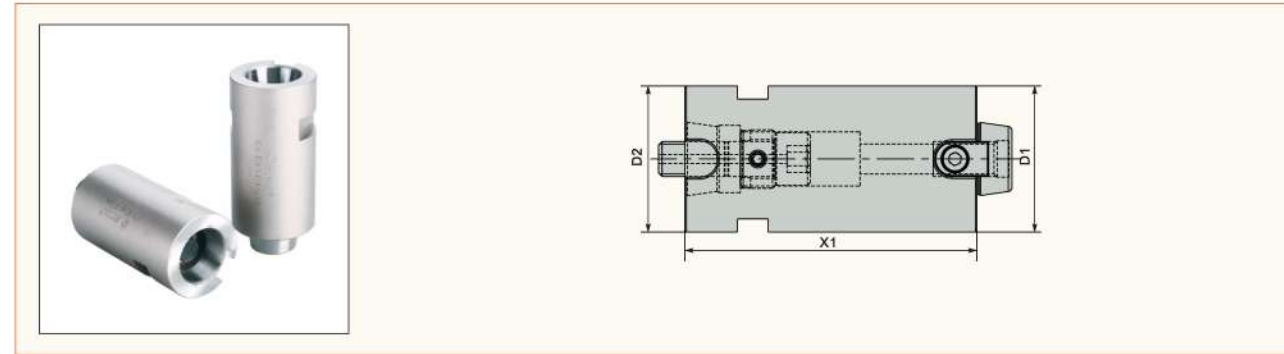
- 适配刀头需单独订购，请参照：A048 页
- 适配刀柄需单独订购，请参照：A019-A023 页
- 请根据具体情况使用冷却液，型号末尾带“C”的产品有中心出水孔。
- 加工时刀具必须逆时针旋转。
- 加工范围 Dc 是指 FRB 10.. 刀座刀片圆角为 R0.2 时的值，FRB 12/16/20/25/30 刀座刀片圆角为 R0.4 的值
- 加工不同材料刀具的切削参数，请参照：K005 页
- 最小过孔直径 $D_{min}=(Dc+D1)/2+1$
- 订货示例：1 件 NBF D19.E25.65.C
- The cartridge should be ordered separately, please see page A048.
- The adaptor should be ordered separately, please see page A019-A023.
- Please use coolant depend on different machining condition, code "C" at the end of designation indicates internal coolant hole with boring body.
- The tool should be rotated by the anticlockwise direction when machining.
- The diameter range Dc is the value of the radius of insert of FRB 10 cartridge is R0.2, and the radius of insert of FRB 12/16/20/25/30 cartridge is R0.4
- Recommended cutting data please see page K005.
- Through hole of back boring $D_{min}=(Dc+D1)/2+1$.
- Ordering sample: 1 piece NBF 019. E25.65.C.

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

E 接口接长杆

Extension with Type E Connection



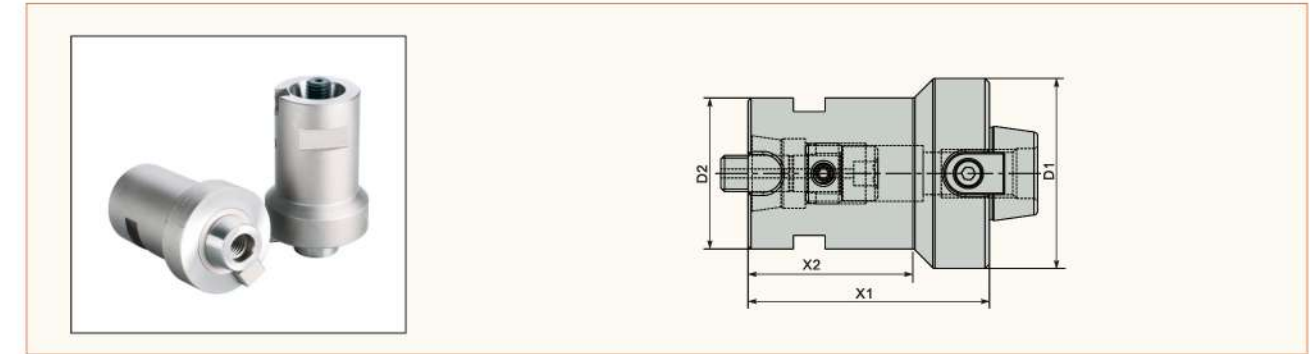
规格型号 Designation	D1	D2	X1	Kg	在庫 Stock
EX E25-E25x50	25	25	50	0.20	●
EX E25-E25x75	25	25	75	0.25	●
EX E32-E32x50	32	32	50	0.30	●
EX E32-E32x80	32	32	80	0.50	●
EX E40-E40x55	40	40	55	0.50	●
EX E40-E40x75	40	40	75	0.65	●
EX E40-E40x100	40	40	100	0.90	●
EX E50-E50x60	50	50	60	0.90	●
EX E50-E50x80	50	50	80	1.15	●
EX E50-E50x100	50	50	100	1.45	●
EX E63-E63x80	63	63	80	1.80	●
EX E63-E63x100	63	63	100	2.25	●
EX E63-E63x120	63	63	120	2.70	●
EX E80-E80x100	80	80	100	3.60	●
EX E80-E80x120	80	80	120	4.35	●
EX E80-E80x140	80	80	140	5.10	●
EX E80-E80x160	80	80	160	5.80	●

- 如需内冷, 请在规格型号后加 ".C"
- 适配刀柄需单独订购, 请参照: [A019-A023 页](#)
- 备件请参照: [A024 页](#)
- 订货示例: 1 件 EX E25-E25x50.C
- Please add ".C" at the end of designation by internal coolant hole requirement.
- The adaptor should be ordered separately, please see page A019-A023.
- Spare parts: please see page A024.
- Ordering sample: 1 piece EX E25-E25x50.

MODULAR BORING TOOL 模块式镗刀

E 接口缩径杆

Reduction with Type E Connection



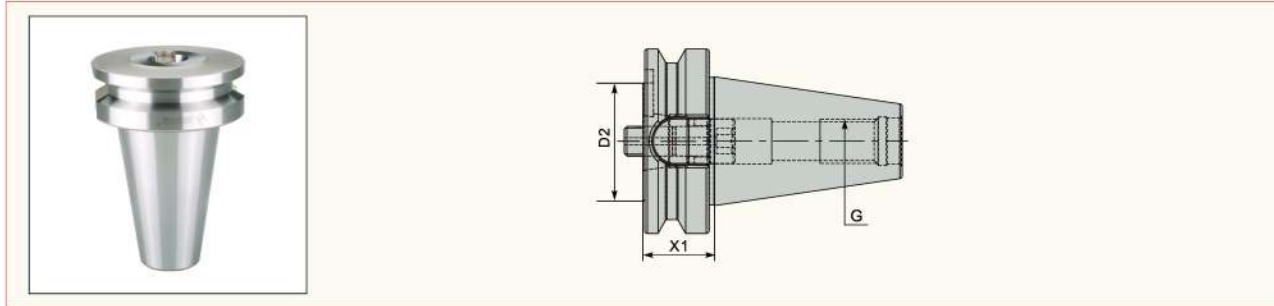
规格型号 Designation	D1	D2	X1	X2	Kg	在庫 Stock
RE E32-E25x50	32	25	50	32	0.21	●
RE E40-E25x50	40	25	50	30	0.30	●
RE E40-E32x50	40	32	50	28	0.38	●
RE E50-E25x50	50	25	50	25	0.30	●
RE E50-E32x50	50	32	50	25	0.50	●
RE E50-E40x70	50	40	70	50	0.70	●
RE E63-E25x50	63	25	50	20	0.70	●
RE E63-E25x80	63	25	80	50	0.80	●
RE E63-E32x50	63	32	50	20	0.80	●
RE E63-E32x80	63	32	80	50	0.95	●
RE E63-E40x80	63	40	80	55	1.00	●
RE E63-E40x100	63	40	100	75	1.20	●
RE E63-E40x120	63	40	120	95	1.40	●
RE E63-E40x140	63	40	140	15	1.60	●
RE E63-E50x80	63	50	80	55	1.30	●
RE E63-E50x100	63	50	100	75	1.60	●
RE E63-E50x120	63	50	120	95	1.90	●
RE E63-E50x140	63	50	140	15	2.20	●
RE E80-E32x80	80	32	80	45	1.45	●
RE E80-E40x80	80	40	80	45	1.65	●
RE E80-E50x80	80	50	80	48	1.95	●
RE E80-E50x100	80	50	100	63	2.20	●
RE E80-E63x80	80	63	80	50	2.25	●
RE E80-E63x100	80	63	100	63	2.80	●

- 如需内冷, 请在规格型号后加 ".C"
- 适配刀柄需单独订购, 请参照: [A019-A023 页](#)
- 备件请参照: [A024 页](#)
- 订货示例: RE E32-E25x50.C
- Please add ".C" at the end of designation by internal coolant hole requirement.
- The adaptor should be ordered separately, please see page A019-A023.
- Spare parts: please see page A024.
- Ordering sample: 1 piece RE E32-E25x50.C

MODULAR BORING TOOL 模块式镗刀

BT MAS403 标准 E 接口刀柄

MAS403 BT Adaptor with Type E Connection



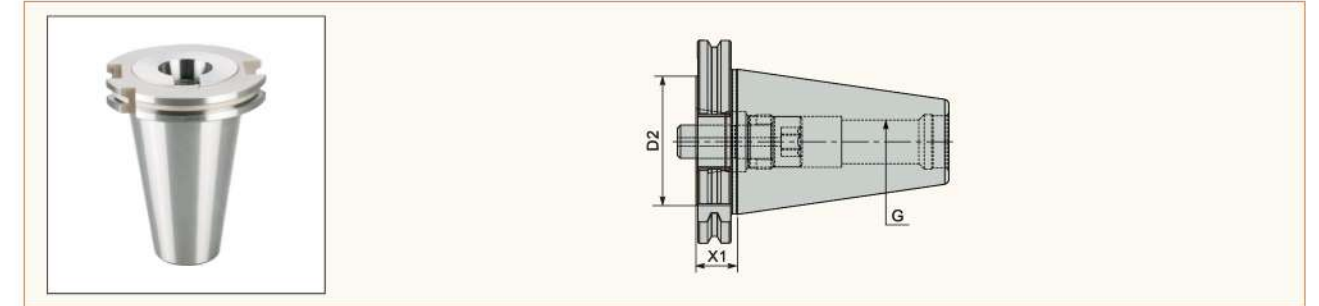
规格型号 Designation	ISO	D2	X1	G	Kg	在库 Stock
BT30 E25	30	25	23	M12	0.36	●
BT30 E32	30	32	23	M12	0.36	●
BT30 E40	30	40	55	M12	0.73	●
BT30 E50	30	50	60	M12	0.99	●
BT40 E25	40	25	28	M16	0.95	●
BT40 E32	40	32	28	M16	0.95	●
BT40 E40	40	40	28	M16	0.91	●
BT40 E50	40	50	28	M16	0.91	●
BT40 E63	40	63	50	M16	1.35	●
BT40 E80	40	80	90	M16	2.30	●
BT50 E25	50	25	40	M24	3.60	●
BT50 E32	50	32	40	M24	3.60	●
BT50 E40	50	40	40	M24	3.55	●
BT50 E50	50	50	40	M24	3.55	●
BT50 E63	50	63	40	M24	3.50	●
BT50 E80	50	80	45	M24	3.50	●

- 如需内冷, 请在规格型号后加 ".C"
- 刀柄尺寸: ☐ D001 页
- 备件请参照: ☐ A024 页
- 订货示例: BT30 E25.C
- Please add ".C" at the end of designation by internal coolant hole requirement.
- Size of adaptors please see page D001.
- Spare parts please see page A024
- Ordering sample: BT30 E25.C

MODULAR BORING TOOL 模块式镗刀

DIN69871-A 标准 E 接口刀柄

DIN69871-A Adaptor with Type E Connection



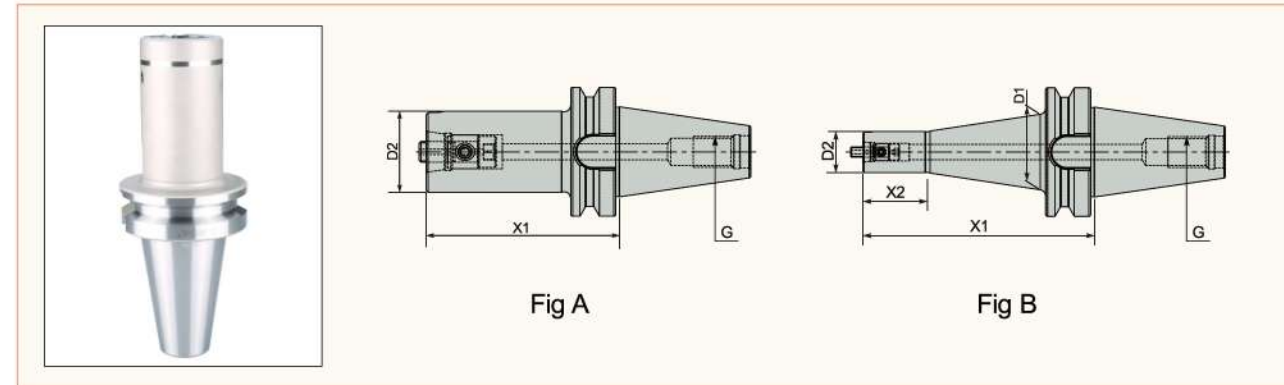
规格型号 Designation	ISO	D2	X1	G	Kg	在库 Stock
DIN69871 40 E25	40	25	20	M16	0.80	●
DIN69871 40 E32	40	32	20	M16	0.80	●
DIN69871 40 E40	40	40	20	M16	0.80	●
DIN69871 40 E50	40	50	20	M16	0.80	●
DIN69871 40 E63	40	63	50	M16	1.20	●
DIN69871 40 E80	40	80	72	M16	1.80	●
DIN69871 50 E25	50	25	20	M24	2.60	●
DIN69871 50 E32	50	32	20	M24	2.60	●
DIN69871 50 E40	50	40	20	M24	2.60	●
DIN69871 50 E50	50	50	20	M24	2.60	●
DIN69871 50 E63	50	63	20	M24	2.50	●
DIN69871 50 E80	50	80	25	M24	2.50	●

- 如需内冷, 请在规格型号后加 ".C"
- 刀柄尺寸: ☐ D018 页
- 备件请参照: ☐ A024 页
- 订货示例: DIN69871 40 E25.C
- Please add ".C" at the end of designation by internal coolant hole requirement.
- Size of adaptors please see page D018.
- Spare parts please see page A024.
- Ordering sample: DIN69871 40 E25.C.

MODULAR BORING TOOL 模块式镗刀

BT MAS403 加长 E 接口刀柄

MAS403 BT Adaptor with Type E Connection (Long Version)



规格型号 Designation	ISO	D1	D2	X1	X2	G	Fig	Kg	在库 Stock
BT40 E32x60	40	-	32	60	-	M16	A	1.15	●
BT40 E40x80	40	-	40	80	-	M16	A	1.40	●
BT40 E50x90	40	-	50	90	-	M16	A	1.82	●
BT40 E63x100	40	-	63	100	-	M16	A	2.55	●
BT40 E63x150	40	-	63	150	-	M16	A	3.70	●
BT50 E25x70	50	-	25	70	-	M24	A	3.70	●
BT50 E25x120	50	50	25	120	10	M24	B	4.20	●
BT50 E32x100	50	-	32	100	-	M24	A	3.92	●
BT50 E32x180	50	60	32	180	50	M24	B	5.00	●
BT50 E40x90	50	-	40	90	-	M24	A	3.95	●
BT50 E40x150	50	-	40	150	-	M24	A	4.42	●
BT50 E50x100	50	-	50	100	-	M24	A	4.35	●
BT50 E50x150	50	-	50	150	-	M24	A	5.02	●
BT50 E50x200	50	-	50	200	-	M24	A	5.70	●
BT50 E63x90	50	-	63	90	-	M24	A	4.67	●
BT50 E63x150	50	-	63	150	-	M24	A	6.05	●
BT50 E63x220	50	-	63	220	-	M24	A	7.66	●
BT50 E80x100	50	-	80	100	-	M24	A	5.91	●
BT50 E80x175	50	-	80	175	-	M24	A	8.23	●
BT50 E80x250	50	-	80	250	-	M24	A	10.95	●
BT50 E80x300	50	-	80	300	-	M24	A	12.83	●
BT50 E80x350	50	-	80	350	-	M24	A	14.71	●

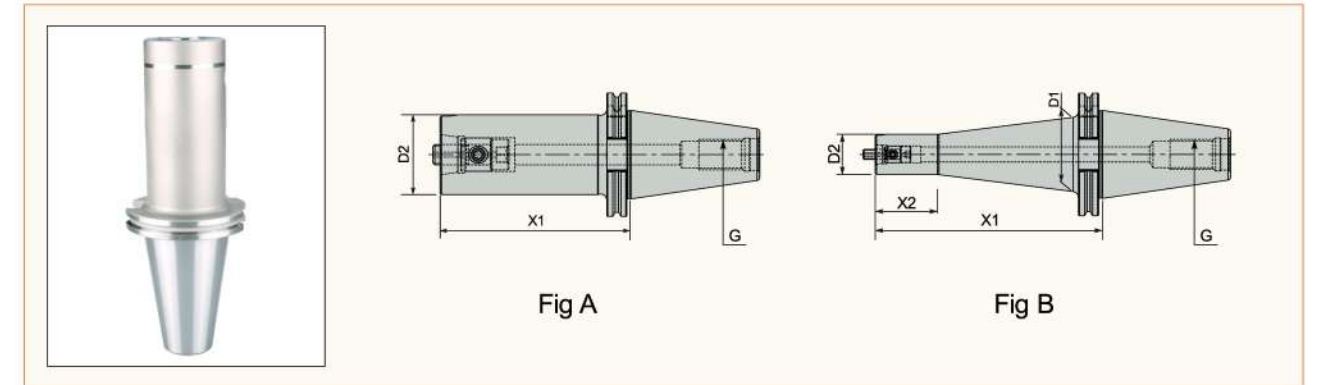
- 如需内冷, 请在规格型号后加 ".C"
- 刀柄尺寸: ☐ D001 页
- 备件及附件请参照: ☐ A024 页
- 订货示例: BT40 E32x60.C
- Please add ".C" at the end of designation by internal coolant hole requirement.
- Size of adaptors please see page D001.
- Spare parts please see page A024.
- Ordering sample: BT40 E32x60.C.

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

DIN69871-A 加长 E 接口刀柄

DIN69871-A Adaptor with Type E connection (Long Version)



规格型号 Designation	ISO	D1	D2	X1	X2	G	Fig	Kg	在库 Stock
DIN69871 40 E32x60	40	-	32	60	-	M16	A	1.05	●
DIN69871 40 E40x80	40	-	40	80	-	M16	A	1.30	●
DIN69871 40 E50x90	40	-	50	90	-	M16	A	1.76	●
DIN69871 40 E63x100	40	-	63	100	-	M16	A	2.50	●
DIN69871 40 E63x150	40	-	63	150	-	M16	A	3.65	●
DIN69871 50 E25x70	50	-	25	70	-	M24	A	2.75	●
DIN69871 50 E25x120	50	50	25	120	10	M24	B	3.40	●
DIN69871 50 E32x100	50	-	32	100	-	M24	A	3.05	●
DIN69871 50 E32x180	50	60	32	180	50	M24	B	4.30	●
DIN69871 50 E40x90	50	-	40	90	-	M24	A	3.15	●
DIN69871 50 E40x150	50	-	40	150	-	M24	A	3.60	●
DIN69871 50 E50x100	50	-	50	100	-	M24	A	3.65	●
DIN69871 50 E50x150	50	-	50	150	-	M24	A	4.35	●
DIN69871 50 E50x200	50	-	50	200	-	M24	A	5.05	●
DIN69871 50 E63x90	50	-	63	90	-	M24	A	4.10	●
DIN69871 50 E63x150	50	-	63	150	-	M24	A	5.50	●
DIN69871 50 E63x220	50	-	63	220	-	M24	A	7.05	●
DIN69871 50 E80x100	50	-	80	100	-	M24	A	5.29	●
DIN69871 50 E80x175	50	-	80	175	-	M24	A	8.10	●
DIN69871 50 E80x250	50	-	80	250	-	M24	A	10.90	●
DIN69871 50 E80x300	50	-	80	300	-	M24	A	12.77	●
DIN69871 50 E80x350	50	-	80	350	-	M24	A	14.64	●

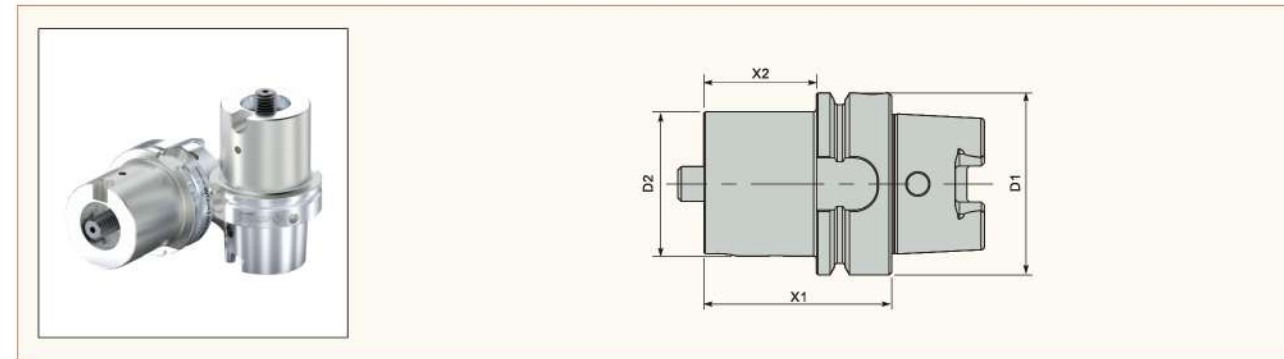
- 如需内冷, 请在规格型号后加 ".C"
- 刀柄尺寸: ☐ D018 页
- 备件及附件请参照: ☐ A024 页
- 订货示例: DIN69871 40 E32x60.C
- Please add ".C" at the end of designation by internal coolant hole requirement.
- Size of adaptors please see page D018.
- Spare parts please see page A024.
- Ordering sample: DIN69871 40 E32x60.C

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

HSK-A E 接口刀柄

HSK Adaptor with Type E Connection

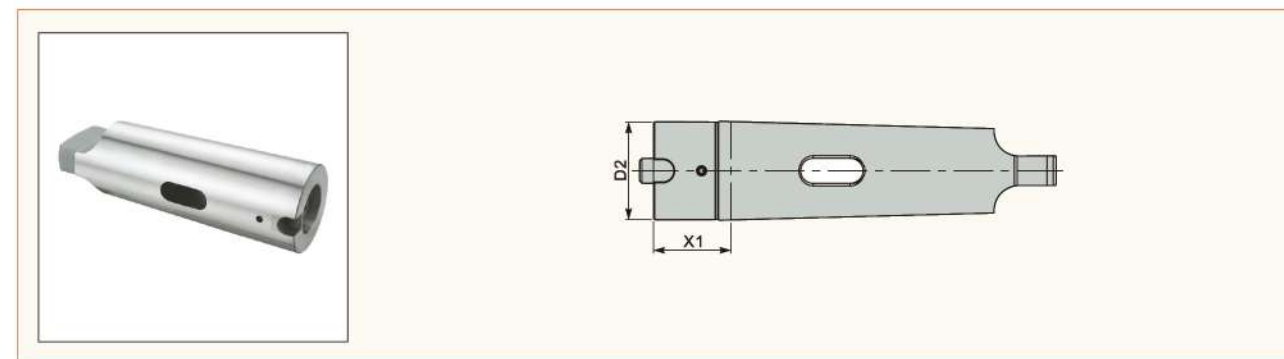


规格型号 Designation	D1	D2	X1	X2	Kg	在库 Stock
HSK A63 E25	63	25	60	34	0.80	●
HSK A63 E32	63	32	60	34	0.80	●
HSK A63 E40	63	40	75	49	0.90	●
HSK A63 E50	63	50	75	49	1.00	●
HSK A63 E63	63	63	80	54	1.40	●
HSK A100 E25	100	25	65	36	2.20	●
HSK A100 E32	100	32	65	36	2.20	●
HSK A100 E40	100	40	80	51	2.60	●
HSK A100 E50	100	50	80	51	2.80	●
HSK A100 E63	100	63	90	61	3.40	●
HSK A100 E80	100	80	100	71	4.10	●

- 如需内冷, 请在规格型号后加 ".C"
- 订货示例: HSK A63 E25.C
- 备件请参照: [A024](#) 页
- Please add ".C" at the end of designation by internal coolant hole requirement.
- Ordering sample :HSK A63 E25.C
- Spare parts please see page [AD24](#).

莫氏镗刀柄

Morse Taper Adaptor for Boring Tool



规格型号 Designation	标准柄 Standard shank	D2	X1	Kg	在库 Stock
MT6A E63	莫氏 6 号 MT#6	63	50	4.46	●
MT80A E80	米制 80Metric 80	80	28	7.61	●
MT80A K63	米制 80Metric 80	63	50	6.91	●

- 订货示例: 1 件 MT6A E63
- 备件请参照: [A025](#) 页
- Orderings ample: MT6AE 63
- Spare parts please see page [A025](#).

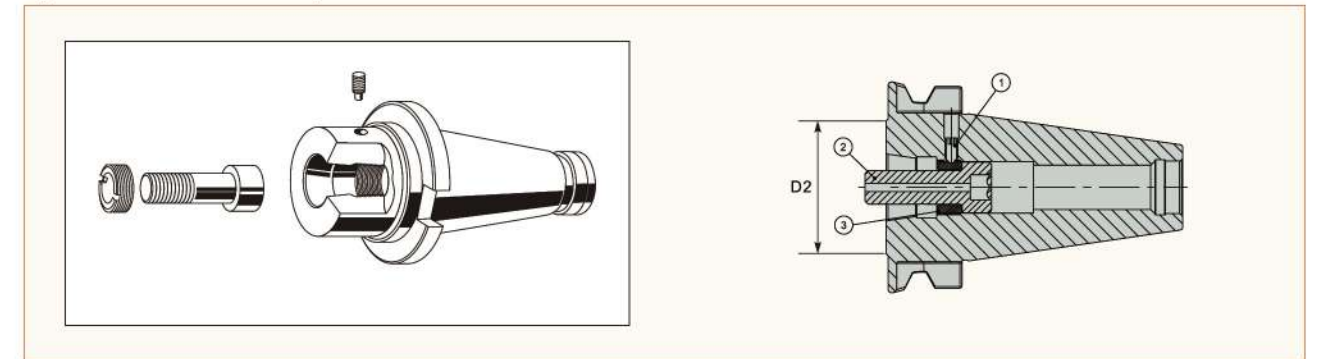
MODULAR BORING TOOL 模块式镗刀

模块式 E 接口标准刀柄备件

Spare Parts and Accessories for Adaptor with Type E Connection

标准手柄备件

Spare Parts for Basic Adaptor



D2	螺纹环锁紧螺钉 Clamping screw for thread ring	轴向拉紧螺钉 Axial tensioning		螺纹环 Thread ring	轴向拉紧螺钉扳手 Wrench for axial tighten	
		ISO40	ISO50		ISO40	ISO50
D2=25	SR51 M4x8	SR55 M8x30	SR55 M8x30	RG05 M14x1	KEY01 M6	KEY01 M6
D2=32	SR51 M4x8	SR55 M8x30	SR55 M8x30	RG05 M14x1	KEY01 M6	KEY01 M6
D2=40	SR51 M5x10	SR55 M12x40	SR55 M12x40	RG05 M20x1.5	KEY01 M10	KEY01 M10
D2=50	SR51 M5x10	SR55 M12x40	SR55 M12x40	RG05 M20x1.5	KEY01 M10	KEY01 M10
D2=63	SR51 M6x10	SR61 M16x45	SR55 M16x45	RG05 M26x1.5	KEY01 M12	KEY01 M14
D2=80	SR51 M6x12	SR62 M20x50	SR55 M20x50	RG05 M33x1.5	KEY01 M12	KEY01 M17

- 内冷产品配套的轴向拉紧螺钉型号后面 ".C", 若需单独订购备件的请在轴向拉紧螺钉型号后加上 ".C"
- 订货示例: 1 件 SR55 M8x30.C
- Please add ".C" at the end of designation by internal coolant hole requirement.
- Orderings ample: 1 piece SR55 M8x30.C

E 接口中间件备件

Spare Parts for Extension



D1	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	平键锁紧螺钉扳手 Wrench for clamping screw
D1=25	PL03 8x2	SR57 M3x8	KEY01 M2
D1=32	PL03 8x6	SR57 M3x10	KEY01 M2
D1=40	PL03 10x5	SR57 M4x12	KEY01 M2.5
D1=50	PL04 12x9	SR55 M5x12	KEY01 M4
D1=63	PL04 14x12	SR55 M5x16	KEY01 M4
D1=80	PL04 16x14	SR55 M6x16	KEY01 M5

D2	螺纹环锁紧螺钉 Clamping screw for thread ring	轴向拉紧螺钉 Axial tensioning		轴向拉紧螺钉扳手 Wrench for axial tighten	螺纹环 Thread ring
		接长杆 Extension	缩径杆 Reduction		
D2=25	SR51 M4x6	SR61 M8x30	SR55 M8x30	KEY01 M6	RG05 M14x1
D2=32	SR51 M4x8	SR61 M8x30	SR55 M8x30	KEY01 M6	RG05 M14x1
D2=40	SR51 M5x10	SR61 M12x40	SR55 M12x40	KEY01 M10	RG05 M20x1.5
D2=50	SR51 M6x12	SR61 M12x40	SR55 M12x40	KEY01 M10	RG05 M20x1.5
D2=63	SR51 M6x12	SR61 M16x45	SR55 M16x45	KEY01 M14	RG05 M26x1.5
D2=80	SR51 M6x12	SR61 M20x50	-	KEY01 M17	RG05 M33x1.5

- 内冷产品配套的轴向拉紧螺钉型号后面 ".C", 若需单独订购备件的请在轴向拉紧螺钉型号后加上 ".C"
- 订货示例: 1 件 SR61 M8x30.C
- Please add ".C" at the end of designation by internal coolant hole requirement.
- Orderings ample: 1 piece SR61 M8x30.C

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

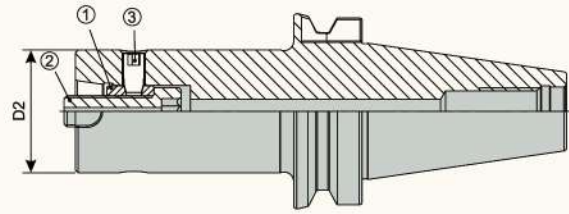
MODULAR BORING TOOL 模块式镗刀

模块式加长 E 接口刀柄备件和附件

Spare Parts and Accessories for Extension with Type E Connection

加长 E 接口刀柄备件

Spare Parts for Adaptor with Long Type E Connection

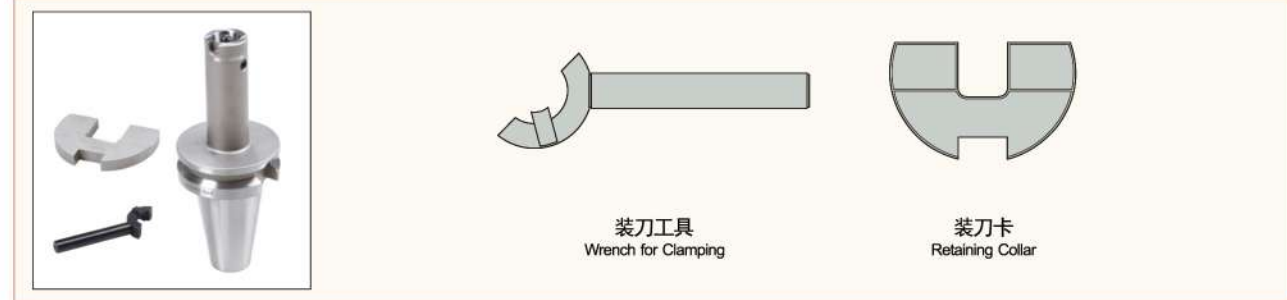


D2	锁紧环 Clamping ring	轴向拉紧螺钉 Axial tensioning screw	锁紧螺钉 Clamping screw	轴向拉紧螺钉扳手 Wrench for axial tighten	锁紧螺钉扳手 Wrench for clamping screw	轴向拉紧螺钉(内冷型) Axial tensioning screw(coolant)
D2=25	NG-E25	SR55 M8x30	SR65 M6x9	KEY01 M6	KEY01 M3	SR55 M8x35.C
D2=32	NG-E25	SR55 M8x30	SR65 M6x11	KEY01 M6	KEY01 M3	SR55 M8x35.C
D2=40	NG-E40	SR55 M12x40	SR65 M10x13	KEY01 M10	KEY01 M5	SR55 M12x45.C
D2=50	NG-E40	SR55 M12x40	SR65 M10x18	KEY01 M10	KEY01 M5	SR55 M12x45.C
D2=63	NG-E63	SR55 M16x45	SR65 M12x20	KEY01 M12	KEY01 M6	SR55 M16x50.C
D2=80	NG-E80	SR55 M20x50	SR65 M16x25	KEY01 M17	KEY01 M8	SR55 M20x55.C

- 内冷产品配套的锁紧环型号后面带“C”。若需单独订购备件的请在锁紧环型号后加上“C”。订货示例：1件 NG-E25.C
- 需要单独定制内冷型的轴向拉紧螺钉请参照规格，订货示例：SR55 M8x35.C
- Please add 'C' at the end of designation by internal coolant hole requirement. Ordering sample: NG-E25.C
- Please refer to the designation if ordering axial tensioning screw with coolant separately. Ordering sample: SR55.M8x35.C

装刀工具 / 装刀卡

Assembly Accessories



D2	装刀工具 Wrench for clamping
D2=25	TS-E32
D2=32	TS-E32
D2=40	TS-E40
D2=50	TS-E50
D2=63	TS-E63
D2=80	TS-E80

D2	装刀工具 Wrench for clamping
D2=25	VS BT50.22.E25
D2=32	VS BT50.27.E32
D2=40	VS BT50.32.E40
D2=50	VS BT50.41.E50
D2=63	VS BT50.55.E63
D2=80	VS BT50.70.E80

MODULAR BORING TOOL 模块式镗刀

镗刀 E 接口刀柄装配指南

Operating Instructions for Modular Boring System with Type E Connection

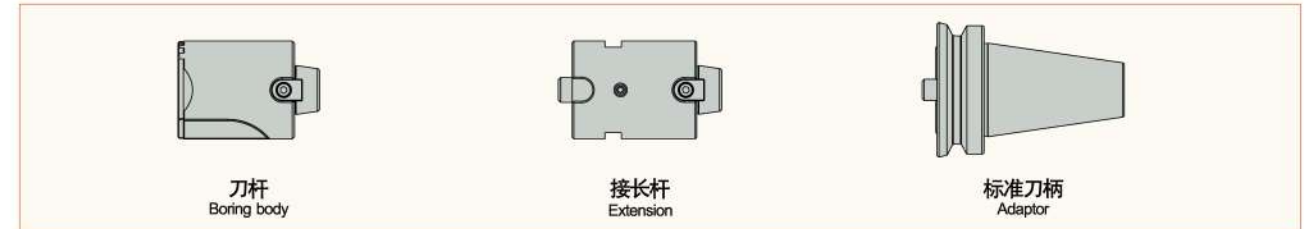
一、安装设备

Assembly Tools



二、标准刀柄连接示例

Assembly Instruction of Type E Connection

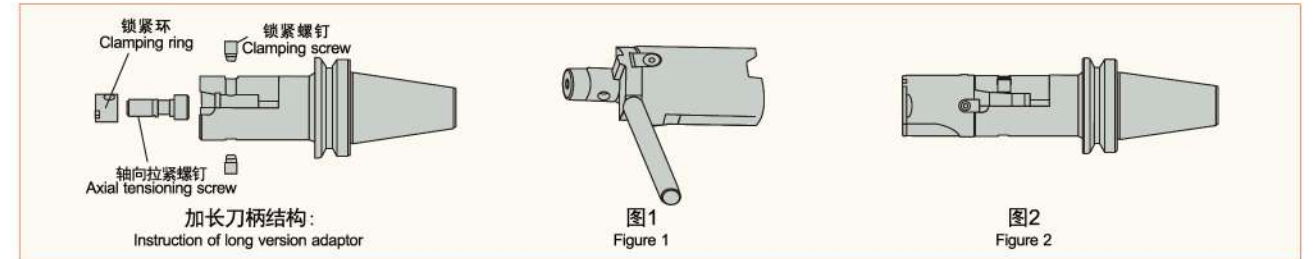


- 把装刀卡放入锁刀座；
- 把接长杆放入装刀卡；
- 用六角扳手从接长杆凸锥部伸入，将其与刀杆通过螺钉拧紧；
- 取下装刀卡，把刀柄放入锁刀座；
- 把接长杆和刀杆的连接体与刀柄固定在一起；
- 装好后保证接口两端面之间无间隙。

- Inside the retaining collar into the assembly device;
- Inside extension into the retaining collar;
- Screw the extension and the boring tools together, using Allen key;
- Take the collar off, inside the Adaptor into the tapered bush;
- Screw the tool element and adaptor together;
- Tighten with a torque wrench to make sure all parts combination stable.

三、加长刀柄连接示例

Assembly Instruction of Long Adaptor



- 将刀柄上的锁紧螺钉拧开，把锁紧环与轴向拉紧螺钉取出；
- 把装刀工具上的凹槽对准刀杆上的键，凸台对准锁紧环上的凹槽；
- 用锁紧螺钉将锁紧环压紧在刀杆上，如图1所示；
- 将装刀工具取下；
- 将装配好锁紧环的刀柄装入刀柄内；
- 将锁紧螺钉用扳手拧进刀柄，锁紧，装好后保证接口两端面之间无间隙。
- 完成后如图2所示。

- Loosen the radial clamping screws in the adaptor, taken the clamping ring and the axial screw out;
- Aim the groove of assembly tool to the key of the tool bar, and aim the lug boss to the groove of locking ring;
- Clamping the wrench closely to the boring head, see figure 1;
- Take the wrench for clamping off;
- Inside the tool element into the adaptor;
- Tighten the clamping screw to make sure two part combination stably;
- Combination status please see figure 2.

● 标准库存 Item in stock ○ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it) ○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

● 标准库存 Item in stock ○ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it) ○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)



MODULAR BORING TOOL

SHANGHAI SUNDER NC-TOOLS
MANUFACTURE CO.,LTD.

MODULAR BORING TOOL 模块式镗刀

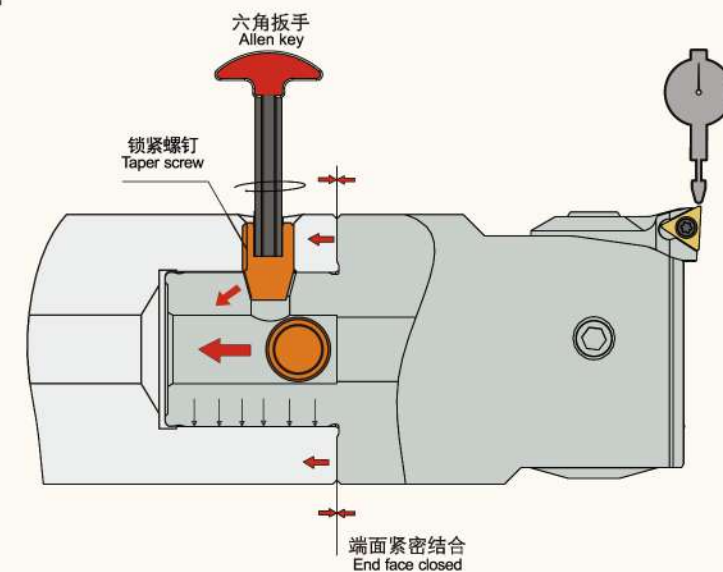
模块式 K 接口原理及连接锁紧方式

Clamping Principle for Type K Connection

K 接口连接方式，只需要六角扳手使锁紧螺钉拧紧就能强力将刀柄与刀杆的端面紧密结合在一起，连接方式简单。同一镗刀重复多次装取，刀尖的位置误差小于 $2\mu\text{m}$ ，是高精度连接系统。

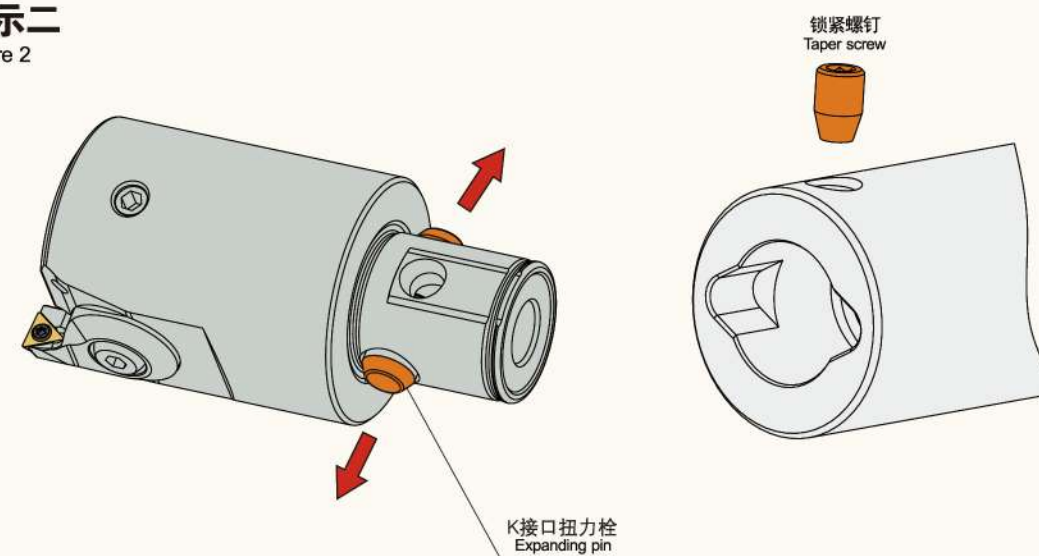
The type K connection is easy, tightening the taper screw so that end face between adaptor and boring heads closed. The tolerance is smaller than 0.002mm when assembling and disassembling repeatedly several times.

图示一
Figure 1



同一镗刀多次重复装取时，刀尖位置误差 $2\mu\text{m}$ 以内
Assembling and disassembling repeatedly several times, the tolerance of the tool nose is within 0.002mm

图示二
Figure 2



K 接口扭力栓的结构:

The Structure of Expanding Pin

加工时切削扭力非常大，因此必须使用 K 接口扭力栓。K 接口扭力栓采用左右浮动方式，安装镗刀时会自动平衡，因此可以承受非常强的切削力。

Please use the expanding pin if there is large cutting torsion when machining. It works by floating right and left and it will automatically balance when assembling the boring head, so that it will support so large cutting force.

MODULAR BORING TOOL 模块式镗刀

CBR 系列 K 接口粗镗刀

CBR Rough Boring Tool with Type K Connection

双刃可调, 镗孔加工范围 $\Phi 20-\Phi 153$, 圆柱模块式 K 接口, 矩形槽刀座接口。

Twin cutter rough boring head with boring range $\Phi 20-\Phi 153$. Cylinder modular connection type K, with rectangular guide slot cartridge.

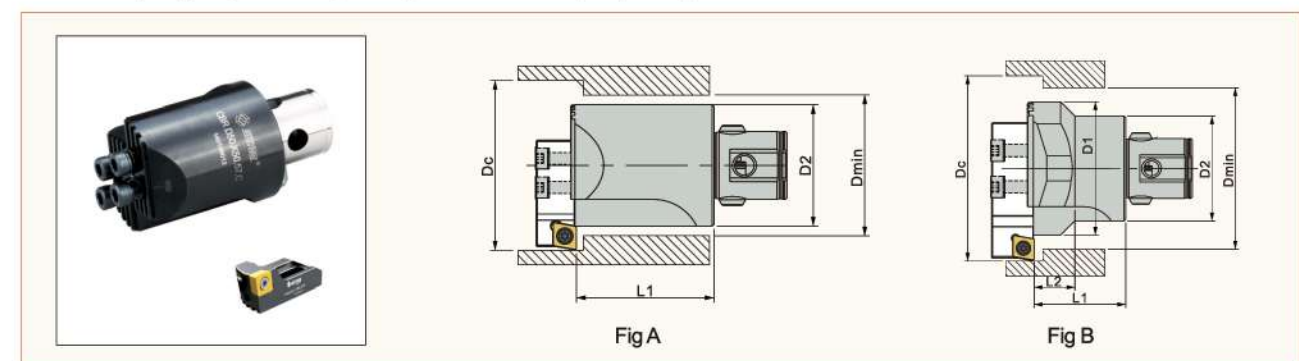
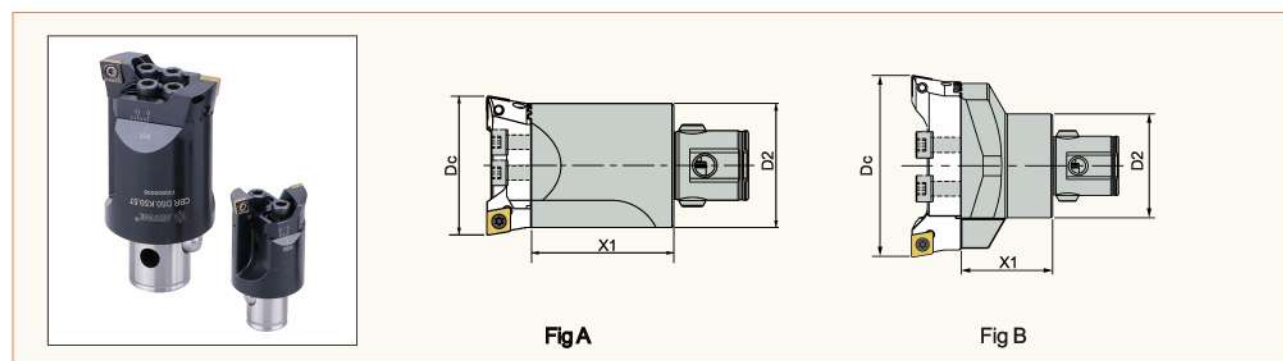
MODULAR BORING TOOL 模块式镗刀

CBR 系列 K 接口粗镗刀 (反镗示意)

CBR Rough Boring Tool for Back Boring with Type K Connection

CBR 系列 K 接口粗镗刀配置矩形槽反镗刀座, 即可轻松实现反镗粗加工, 加工范围 $\Phi 30-\Phi 152$, 调整自如、稳定、过孔直径 D 必须满足 $D \geq (Dc+D1)/2+1$ 要求。

Thanks of stable cartridge with rectangular slot guide for back boring, it can be back boring easily, boring range is $\Phi 30-\Phi 152$. It is with the features of adjusting freely and stability. Through hole of back boring $D \geq (Dc+D1)/2+1$.



规格型号 Designation	Dc	D2	X1	Z	Fig	Kg	适配刀座 Cartridge	在库 Stock
CBR D19.K19.22	20-24	19	22	2	A	0.05	C..D020-024..	●
CBR D19.K19.22.C	23-27	19	22	2	A	0.05	C..D023-027..	●
CBR D25.K25.25	26-35	25	25	2	A	0.09	C..D026-035..	●
CBR D25.K25.25.C	26-35	25	25	2	A	0.09	C..D026-035..	●
CBR D32.K32.30	33-41	32	30	2	A	0.19	C..D033-041..	●
CBR D32.K32.30.C	33-41	32	30	2	A	0.19	C..D033-041..	●
CBR D40.K40.30	41-55	40	30	2	A	0.25	C..D041-055..	●
CBR D40.K40.30.C	41-55	40	30	2	A	0.25	C..D041-055..	●
CBR D40.K40.52	41-55	40	52	2	A	0.47	C..D041-055..	●
CBR D40.K40.52.C	41-55	40	52	2	A	0.47	C..D041-055..	●
CBR D50.K50.57	55-70	50	57	2	A	0.86	C..D055-070..	●
CBR D50.K50.57.C	55-70	50	57	2	A	0.86	C..D055-070..	●
CBR D63.K63.55	70-90	63	55	2	A	1.49	C..D070-090..	●
CBR D63.K63.55.C	70-90	63	55	2	A	1.49	C..D070-090..	●
CBR D80.K63.55	90-110	63	55	2	B	1.73	C..D090-110..	●
CBR D80.K63.55.C	90-110	63	55	2	B	1.73	C..D090-110..	●
CBR D80.K90.55	90-110	88	55	2	A	2.77	C..D090-110..	●
CBR D80.K90.55.C	90-110	88	55	2	A	2.77	C..D090-110..	●
CBR D100.K63.55	110-133	63	55	2	B	2.03	C..D110-133..	●
CBR D100.K63.55.C	130-153	63	55	2	B	2.03	C..D130-153..	●
CBR D100.K90.55	110-133	88	55	2	B	3.06	C..D110-133..	●
CBR D100.K90.55.C	130-153	88	55	2	B	3.06	C..D130-153..	●

- 适配刀座需单独订购, 请参照: [A044, A045, A046](#) 页
- 适配刀柄需单独订购, 请参照: [A039-A043](#) 页
- 请根据具体情况使用冷却液, 规格型号末尾带“C”的产品带中心出水孔。
- 加工不同材料刀具的切削参数, 请参照: [K001-K004](#) 页
- 订货示例: 1 件 CBR D25.K25.25.C
- The cartridge should be ordered separately please see page [A044, A045, A046](#).
- The adaptor should be ordered separately, please see page [A039-A043](#).
- Please use coolant depend on different machining condition, code 'c' at the end of designation indicates internal coolant hole with boring body.
- Recommended cutting data please see page [K001-K004](#).
- Ordering sample: 1 PC CBR D25.K25.25.C

适用粗镗刀体 Designation	Dc	D1	D2	L1	L2	Z	Fig	kg	适配刀座 Cartridge
CBR D19.K19.22	30-35	19	19	20	-	1	A	0.06	C90C D19.3035.CC06
CBR D19.K19.22.C	30-35	19	19	20	-	1	A	0.06	C90C D19.3035.CC06
CBR D25.K25.25	33-41	25	25	23	-	1	A	0.10	C90C D25.3341.CC06
CBR D25.K25.25.C	40-48	25	25	23	-	1	A	0.11	C90C D25.4048.CC06
CBR D32.K32.30	42-52	32	32	28	-	1	A	0.21	C90C D32.4252.CC06
CBR D32.K32.30.C	51-61	32	32	28	-	1	A	0.22	C90C D32.5161.CC06
CBR D40.K40.52	53-65	40	40	52	-	1	A	0.53	C90C D40.5365.CC09
CBR D40.K40.52.C	64-76	40	40	52	-	1	A	0.54	C90C D40.6476.CC09
CBR D50.K50.57	53-69	50	50	57	-	1	A	0.92	C90C D50.5369.CC09
CBR D50.K50.57.C	68-84	50	50	57	-	1	A	0.94	C90C D50.6884.CC09
CBR D63.K63.55	83-99	50	50	57	-	1	A	0.96	C90C D50.8399.CC09
CBR D63.K63.55.C	68-89	63	63	55	-	1	A	1.61	C90C D63.6889.CC09
CBR D63.K63.55.C	88-109	63	63	55	-	1	A	1.65	C90C D63.88109.CC09
CBR D80.K63.55	88-110	80	63	55	25	1	B	1.98	C90C D80.88110.CC12
CBR D80.K63.55.C	108-130	80	63	55	25	1	B	2.04	C90C D80.108130.CC12
CBR D80.K90.55	88-110	88	88	55	-	1	A	3.02	C90C D80.88110.CC12
CBR D80.K90.55.C	108-130	88	88	55	-	1	A	3.08	C90C D80.108130.CC12
CBR D100.K63.55	108-132	100	63	55	27	1	B	2.32	C90C D100.108132.CC12
CBR D100.K63.55.C	128-152	100	63	55	27	1	B	2.39	C90C D100.128152.CC12
CBR D100.K90.55	108-132	100	88	55	27	1	B	3.35	C90C D100.108132.CC12
CBR D100.K90.55.C	128-152	100	88	55	27	1	B	3.43	C90C D100.128152.CC12

- 适配刀座需单独订购, 请参照: [A047](#) 页
- 适配刀柄需单独订购, 请参照: [A039-A043](#) 页
- 请根据具体情况使用冷却液, 规格型号末尾带“C”的产品带中心出水孔。
- 加工不同材料刀具的切削参数, 请参照: [K001-K004](#) 页
- 最小过孔直径 $D_{min}=(Dc+D1)/2+1$
- The cartridge should be ordered separately please see page [A047](#).
- The adaptor should be ordered separately, please see page [A039-A043](#).
- Please use coolant depend on different machining condition, code 'c' at the end of designation indicates internal coolant hole with boring body.
- Recommended cutting data please see page [K001-K004](#).
- The minimum diameter $D_{min}=(Dc+D1)/2+1$

备件

Spare Parts

Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	调整扳手 Allen key for adjusting
20-27mm	SR55 M4x16	GK20 D4	KEY01 M3
26-35mm	SR55 M4x16	GK20 D4	KEY01 M3
33-41mm	SR55 M5x16	GK20 D5	KEY01 M4
41-55mm	SR55 M6x20	GK20 D6	KEY01 M5
55-70mm	SR55 M6x20	GK20 D6	KEY01 M5
70-90mm	SR55 M8x25	GK20 D8	KEY01 M6
90-153mm	SR55 M10x30	GK20 D10	KEY01 M8

D2	K 接口扭力栓 Expanding pin	橡胶圈 Sealing disc
D2=19	FT90 D4x13.5	FT91 D4-1
D2=25	FT90 D5x17	FT91 D5-1
D2=32	FT90 D7x22	FT91 D7-1
D2=40	FT90 D8.5x26.5	FT91 D8.5-1.5
D2=50	FT90 D11x33	FT91 D11-1.5
D2=63	FT90 D14x43	FT91 D14-1.5
D2=88	FT90 D18x56	FT91 D16-1.5

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

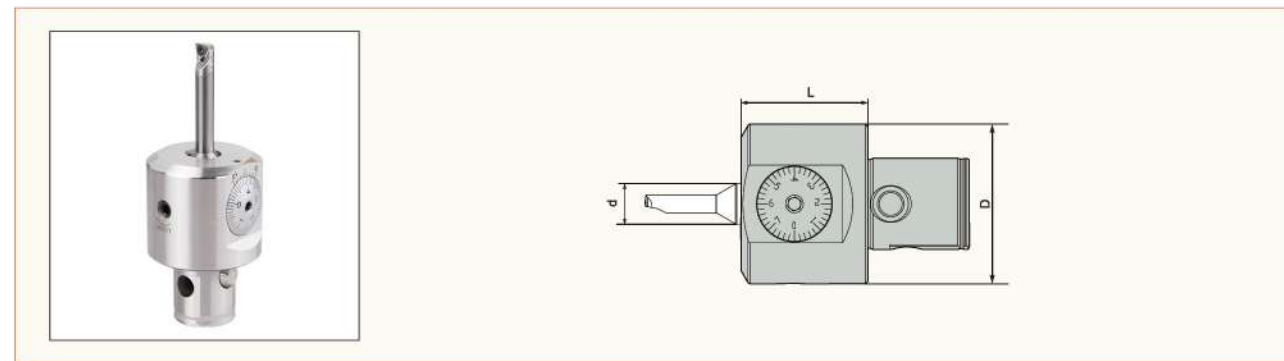
MODULAR BORING TOOL 模块式镗刀

CBF 系列 K 接口小孔径微调精镗刀

CBF Mini Precision Boring Tool with Type K Connection

小孔径微调精镗刀，微调精度每格直径 0.01mm，加工范围 $\Phi 2-\Phi 50$ ，圆柱模块式 K 接口，需配小孔精镗刀杆。

Mini boring tool has a highly precise adjustment mechanism, 1 DIV = 0.01 mm in diameter, and the boring range is $\Phi 2-\Phi 50$. High rigidity thanks of cylindrical modular connection type K. Boring bars for the body.



规格型号 Designation	Dc	L	D	d	Kg	适配刀杆 Boring bar	在库 Stock
CBF D02-22.K40.35.C	2-22	35	40	10	0.35	NBF C10+ST06E.. ST10.. ST10E..	●
CBF D06-50.K50.50.C	6-50	50	63	16	1.09	ST16.. ST16E..	●
CBF D06-50.K63.50.C	6-50	50	63	16	1.25	ST16.. ST16E..	●

- 适配精镗刀杆需单独订购，请参照：☞ A013, A014 页
- 适配刀柄需单独订购，请参照：☞ A039-A043 页
- 加工不同材料刀具的切削参数，请参照：☞ K005 页
- 订货示例：1 件 CBF D02-22.K40.35.C
- The boring bar should be ordered separately, please see page A013, A014.
- The adaptor should be ordered separately, please see page A039-A043.
- Recommended cutting data please see page K005.
- Ordering sample: 1 piece CBF D02-22.K40.35.C

备件

Spare Parts

规格型号 Designation	刀杆锁紧螺钉 Clamping screw for insert	LOCK 螺钉 Lock screw	调整扳手 Allen key for adjusting screw	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring
CBF D02-22.K40	SR54 M6x10	SR54 M6x10	KEY01 M3	FT90 D8.5x26.5	FT90 D8.5-1.5
CBF D06-50.K50	SR54 M10x16	SR54 M10x16	KEY01 M5	FT90 D11x33	FT90 D11-1.5
CBF D06-50.K63	SR54 M10x16	SR54 M10x16	KEY01 M5	FT90 D14x43	FT90 D14-1.5

- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

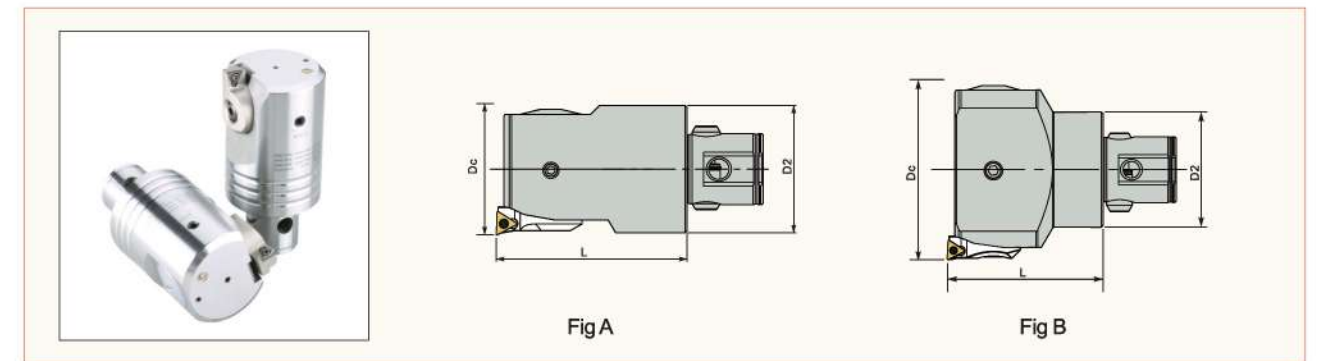
MODULAR BORING TOOL 模块式镗刀

CBF 系列 K 接口微调精镗刀

CBF Precision Boring Tool with Type K Connection

单刃可微调，微调精度每格直径 0.01mm，加工范围 $\Phi 20-\Phi 212$ ，圆柱模块式 K 接口，适配直压式精镗刀头。

It can be micro adjusted with single tooth. 1 DIV=0.01 mm in diameter. The boring range is $\Phi 20-\Phi 212$. Cylindrical modular connection type K. Axial combination precision cartridge for the body.



规格型号 Designation	Dc	D2	L	Kg	Fig	适配刀座 Cartridge	在库 Stock
CBF D19.K19.34	20-26	19	34	0.07	A	FRB 10A...	●
CBF D19.K19.34.C	25-31	19	34	0.07	A	FRB 10B...	●
	30-36	19	34	0.07	A	FRB 10C...	●
CBF D25.K25.37	26-34	25	37	0.13	A	FRB 12A...	●
CBF D25.K25.37.C	33-41	25	37	0.13	A	FRB 12B...	●
	40-48	25	37	0.13	A	FRB 12C...	●
CBF D32.K32.43	33-43	32	43	0.25	A	FRB 16A...	●
CBF D32.K32.43.C	42-52	32	43	0.25	A	FRB 16B...	●
	51-61	32	43	0.25	A	FRB 16C...	●
CBF D40.K40.48	42-54	40	48	0.45	A	FRB 20A...	●
CBF D40.K40.48.C	53-65	40	48	0.45	A	FRB 20B...	●
	64-76	40	48	0.45	A	FRB 20C...	●
CBF D40.K40.70	42-54	40	70	0.65	A	FRB 20A...	●
CBF D40.K40.70.C	53-65	40	70	0.65	A	FRB 20B...	●
	64-76	40	70	0.65	A	FRB 20C...	●
CBF D50.K50.75	53-69	50	75	1.12	A	FRB 25A...	●
CBF D50.K50.75.C	68-84	50	75	1.12	A	FRB 25B...	●
	83-99	50	75	1.12	A	FRB 25C...	●
CBF D63.K63.85	68-100	63	85	2.1	A	FRB 30A...	●
CBF D63.K63.85.C	98-130	63	85	2.1	A	FRB 30B...	●
	128-160	63	85	2.1	A	FRB 30C...	●
CBF D100.K63.85	100-152	63	85	2.97	B	FRB 30A...	●
CBF D100.K63.85.C	130-182	63	85	2.97	B	FRB 30B...	●
	160-212	63	85	2.97	B	FRB 30C...	●
CBF D100.K90.85	100-152	88	85	4.35	B	FRB 30A...	●
CBF D100.K90.85.C	130-182	88	85	4.35	B	FRB 30B...	●
	160-212	88	85	4.35	B	FRB 30C...	●

- 适配精镗刀杆需单独订购，请参照：☞ A048 页
- 适配刀柄需单独订购，请参照：☞ A039-A043 页
- 请根据具体情况使用冷却液，规格型号末尾带“C”的产品带中心出水孔。
- 加工不同材料刀具的切削参数，请参照：☞ K005 页
- 订货示例：1 件 CBF D32.K32.43.C

- The cartridge should be ordered separately please see page A048.
- The adaptor should be ordered separately, please see page A039-A043.
- Please use coolant depend on different machining condition, code "C" at the end of designation indicates internal coolant hole with boring body.
- Recommended cutting data please see page K005.
- Ordering sample: 1 pc CBF D32.K32.43.C

备件

Spare Parts

规格型号 Designation	LOCK 螺钉 Lock screw	刀头锁紧螺钉 Clamp screw for cartridge	调整扳手 Allen key for adjusting screw	刀头锁紧扳手 Allen key for cartridge clamping screw	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring
CBF D19.K19.34	SR54-2 M4x4	SR20 M4x6-x	KEY01 M2	KEY02 T15	FT90 D4x13.5	FT91 D4-1
CBF D25.K25.37	SR54-2 M4x6	SR20 M4x8-x	KEY01 M2	KEY02 T15	FT90 D5x17	FT91 D5-1
CBF D32.K32.43	SR54-2 M5x8	SR56 M5x10	KEY01 M2.5	KEY02 M3	FT90 D7x22	FT91 D7-1
CBF D40.K40.48	SR54 M6x10	SR56 M5x12	KEY01 M3	KEY02 M3	FT90 D8.5x26.5	FT91 D8.5-1.5
CBF D40.K40.70	SR54 M6x10	SR56 M5x12	KEY01 M3	KEY02 M3	FT90 D8.5x26.5	FT91 D8.5-1.5
CBF D50.K50.75	SR54 M6x12	SR56 M6x16	KEY01 M3	KEY02 M4	FT90 D11x33	FT91 D11-1.5
CBF D63.K63.85	SR54 M10x16	SR56 M8x20	KEY01 M5	KEY02 M5	FT90 D14x43	FT91 D14-1.5
CBF D100.K63.85	SR54 M10x16	SR56 M8x25	KEY01 M5	KEY02 M5	FT90 D14x43	FT91 D14-1.5
CBF D100.K90.85	SR54 M10x20	SR56 M8x25	KEY01 M5	KEY02 M5	FT90 D18x56	FT91 D16-1.5

- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

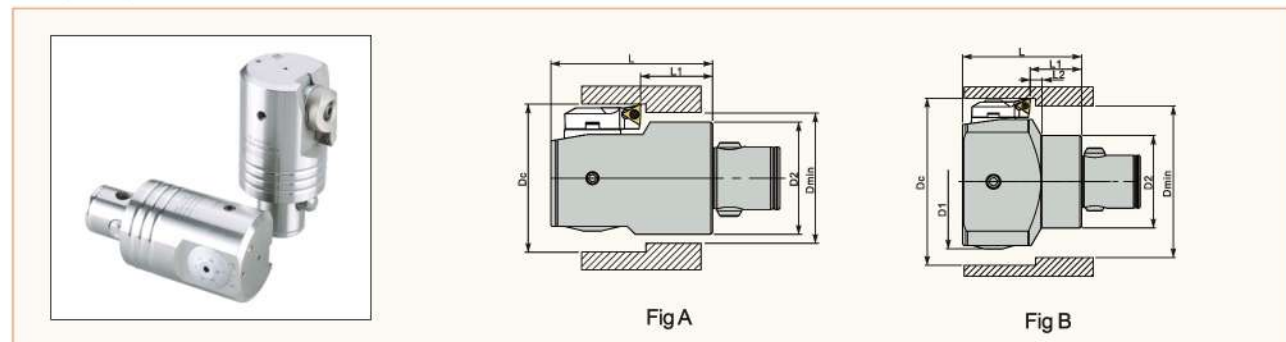
MODULAR BORING TOOL 模块式镗刀

CBF 系列 K 接口微调精镗刀 (反精镗加工示意)

CBF Precision Boring Tool for Back Boring with Type K Connection

直压式精镗刀头反装, 即可轻松实现反镗加工, 加工范围 $\Phi 30-\Phi 212$, 精度与正镗一致, 但加工时刀具必须逆时针旋转, 且过孔直径 D 满足 " $D \geq (Dc+D1)/2+1$ " 要求。

Please assemble the cartridge as its reverse direction, which is for back boring, and the back boring range is $\Phi 30-\Phi 212$ and also with the same precision as the ordinary boring tool, but the tool should be rotated by the reverse direction when machining and the hole diameter D should meet the requirement of " $D \geq (Dc+D1)/2+1$ ".



适用粗镗刀体 Designation	Dc	D1	D2	L	L1	L2	Z	Fig	Kg	适配刀座 Cartridge
CBF D19.K19.34	30-36	19	19	32	11.5	-	1	A	0.07	FRB 10C...
CBF D19.K19.34.C	30-36	19	19	32	11.5	-	1	A	0.07	FRB 10C...
CBF D25.K25.37	36-41	25	25	33	8.5	-	1	A	0.13	FRB 12B...
CBF D25.K25.37.C	40-48	25	25	33	8.5	-	1	A	0.13	FRB 12C...
CBF D32.K32.43	47-52	32	32	39	10.5	-	1	A	0.25	FRB 16B...
CBF D32.K32.43.C	51-61	32	32	39	10.5	-	1	A	0.25	FRB 16C...
CBF D40.K40.70	55-65	40	40	67	33.5	-	1	A	0.65	FRB 20B...
CBF D40.K40.70.C	64-76	40	40	67	33.5	-	1	A	0.65	FRB 20C...
CBF D50.K50.75	62-69	50	50	72	32	-	1	A	1.12	FRB 25A...
CBF D50.K50.75.C	68-84	50	50	72	32	-	1	A	1.12	FRB 25B...
CBF D63.K63.85	83-99	50	50	72	32	-	1	A	1.12	FRB 25C...
CBF D63.K63.85.C	80-100	63	63	81	35	-	1	A	2.1	FRB 30A...
CBF D100.K63.85	98-130	63	63	81	35	-	1	A	2.1	FRB 30B...
CBF D100.K63.85.C	128-160	63	63	81	35	-	1	A	2.1	FRB 30C...
CBF D100.K90.85	112-152	100	63	81	35	8	1	B	2.97	FRB 30A...
CBF D100.K90.85.C	130-182	100	63	81	35	8	1	B	2.97	FRB 30B...
CBF D100.K90.85	160-212	100	63	81	35	8	1	B	2.97	FRB 30C...
CBF D100.K90.85.C	112-152	100	88	81	35	8	1	B	4.35	FRB 30A...
CBF D100.K90.85	130-182	100	88	81	35	8	1	B	4.35	FRB 30B...
CBF D100.K90.85.C	160-212	100	88	81	35	8	1	B	4.35	FRB 30C...

- 适配刀座需单独订购, 请参照: [A048 页](#)
- 适配刀柄需单独订购, 请参照: [A039-A043 页](#)
- 请根据具体情况使用冷却液, 规格型号末尾带 "C" 的产品带中心出水孔。
- 加工范围 Dc 是指 FRB 10, 刀座刀片圆角为 R0.2 时的值, FRB 12/16/20/25/30 刀座刀片圆角为 R0.4 时的值
- 加工时刀具必须逆时针旋转;
- 加工不同材料刀具的切削参数, 请参照: [K005 页](#)
- 最小过孔直径 $D_{min}=(Dc+D1)/2+1$
- The cartridge should be ordered separately please see page [A048](#).
- The adaptor should be ordered separately, please see page [A039-A043](#).
- Please use coolant depend on different machining condition, code 'C' at the end of designation indicates internal coolant hole with boring body.
- The machine range Dc is the value which the radius of insert of FRB 10 cartridge is RD.2, and the radius of insert of FRB 12/16/20/25/30 cartridge is RD.4
- Rotating the tool on the anticlockwise direction.
- Recommended cutting data please see page [K005](#).
- The minimum hole diameter $D_{min}=(Dc+D1)/2+1$.

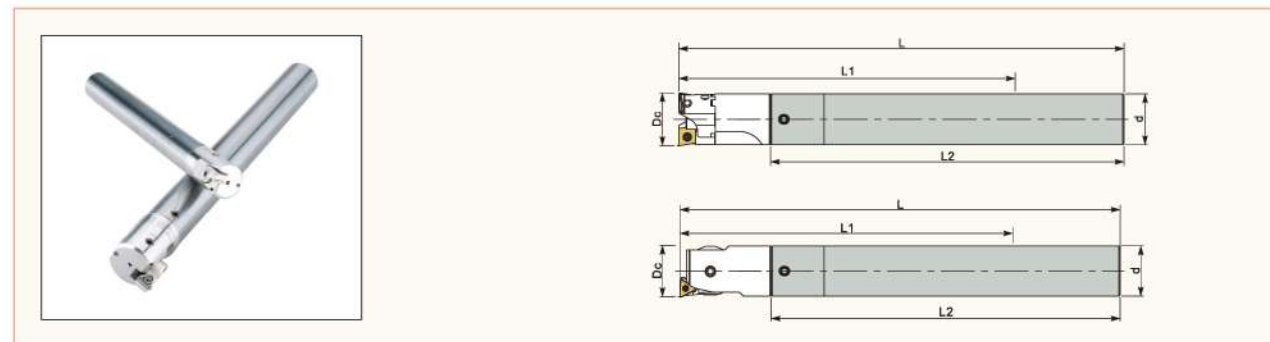
MODULAR BORING TOOL 模块式镗刀

硬质合金直柄 K 接口刀杆

Cylindrical Shank Solid Carbide Boring Bar with Type K Connection

硬质合金加长抗振杆, 适配粗、精镗刀可实现孔的粗、精加工。

The solid carbide extension anti-vibration boring bar is suitable for the rough and fine boring tool to meet the rough and finish boring.



规格型号 Designation	d	L	L1	L2	长径比 L/D ratio	适配粗镗刀 Rough boring head	适配精镗刀 Precision boring head	在库 Stock
STH K19-150.E	19	185	135	150	7.1	CBR D19.K19.22	CBF D19.K19.34	●
STH K19-200.E	19	235	185	200	9.7	CBR D19.K19.22	CBF D19.K19.34	●
STH K25-200.E	25	240	185	200	7.4	CBR D25.K25.25	CBF D25.K25.37	●
STH K25-250.E	25	290	235	250	9.4	CBR D25.K25.25	CBF D25.K25.37	●
STH K25-300.E	25	340	285	300	11.4	CBR D25.K25.25	CBF D25.K25.37	●
STH K32-250.E	32	290	230	250	7.2	CBR D32.K32.30	CBF D32.K32.43	●
STH K32-300.E	32	340	280	300	8.8	CBR D32.K32.30	CBF D32.K32.43	●
STH K32-400.E	32	440	380	400	11.9	CBR D32.K32.30	CBF D32.K32.43	●

- 此系列刀具推荐使用高精度强力夹头刀柄或液压力柄夹持
- 适配刀座需单独订购, 请参照: [A029, A032 页](#)
- 订货示例: 1 件 STH K19-150.E

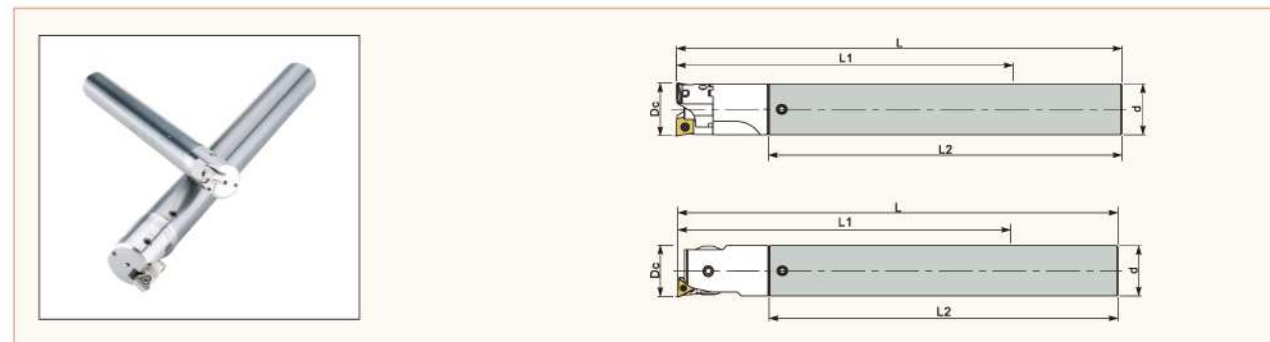
- Recommended for high precision power chuck adaptor or hydraulic adaptor.
- Recommended cutting data please see page [A029, A032](#).
- Ordering sample: 1 PC STH K19-150.E

钢制直柄 K 接口刀杆

Cylindrical Shank Steel Boring Bar with Type K Connection

钢制直柄 K 接口加长刀杆, 适配粗、精镗头可实现孔的粗、精加工。

The long version cylindrical shank steel bar with rough and precision boring heads can meet the rough and precision boring.



规格型号 Designation	d	L	L1	L2	长径比 L/D ratio	适配粗镗刀 Pough boring tool	适配精镗刀 Precision boring tool	在库 Stock
STH K19-140	19	175	125	140	6	CBR D19.K19.22	CBF D19.K19.34	●
STH K25-175	25	215	160	175	6	CBR D25.K25.25	CBF D25.K25.37	●
STH K32-215	32	260	200	215	6	CBR D32.K32.30	CBF D32.K32.43	●
STH K40-265	40	310	250	265	6	CBR D40.K40.30	CBF D40.K40.48	●

- 此系列刀具推荐使用高精度强力夹头刀柄或液压力柄夹持
- 适配刀座需单独订购, 请参照: [A029, A032 页](#)
- 订货示例: 1 件 STH K19-140

- Recommended for high precision power chuck adaptor or hydraulic adaptor.
- The boring tool should be ordered separately, please see page [AD29, AD32](#).
- Ordering sample: 1 PC STH K19-140

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

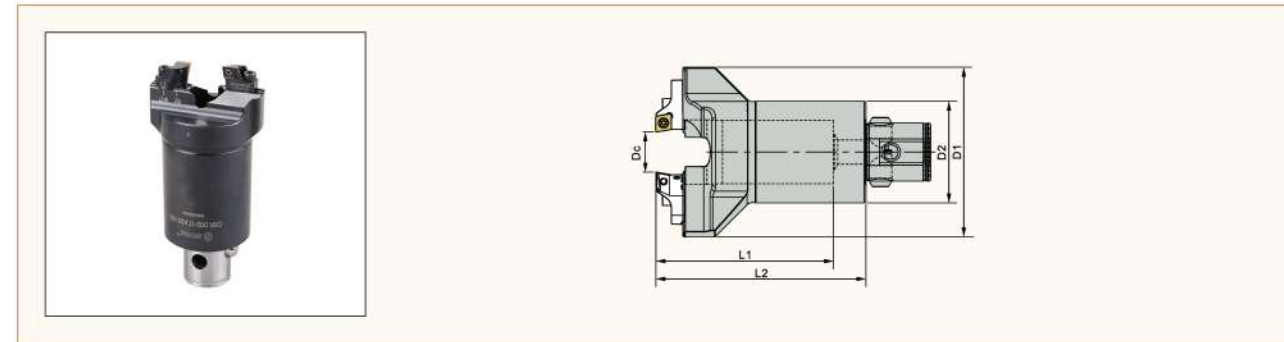
粗套镗刀

Rough Boring Tool for External Turning

K 接口粗套镗刀配置矩形槽镗刀座，调整自如、稳定，但加工时刀具必须逆时针旋转

Cartridge with rectangular slot guide, the cartridge move on the guide freely to reach the diameter.

Note: Tool rotating anticlockwise when external turning.



规格型号 Designation	Dc	D1	D2	L1	L2	Z	Kg	适配刀座 Cartridge	在库 Stock
CXR D02-17.K50.100	2-17	62	50	82	100	2	1.1	S90A D026-035.CC06	●
CXR D16-38.K63.120	16-38	105	63	110	130	2	2.3	S90A D041-055.CC09	●
CXR D28-50.K63.160	28-50	118	63	152	177	2	4.1	S90A D041-055.CC09	●
CXR D45-70.K90.230	45-70	164	90	214	239	2	6.9	S90A D055-070.CC09	●

- 适配刀座需单独订购，请参照：A044 页
- 适配刀柄需单独订购，请参照：A039-A043 页
- 订货示例：1 件 CXR D02-17.K50.100
- The cartridge should be ordered separately, please see page A044.
- The adaptor should be ordered separately, please see page A039-A043.
- Ordering sample: 1 PC CXR D02-17.K50.100

备件

Spare Parts



D2	刀座锁紧螺钉 Clamping screw for cartridge	蝶形垫片 Disk spring	调整扳手 Allen key for adjusting screw	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring
D2=50	SR55 M4x16	GK20 D4	KEY01 M4	FT90 D11x33	FT91 D11-1.5
D2=63	SR55 M6x20	GK20 D6	KEY01 M5	FT90 D14x43	FT91 D14-1.5
D2=90	SR55 M6x20	GK20 D6	KEY01 M5	FT90 D18x56	FT91 D16-1.5

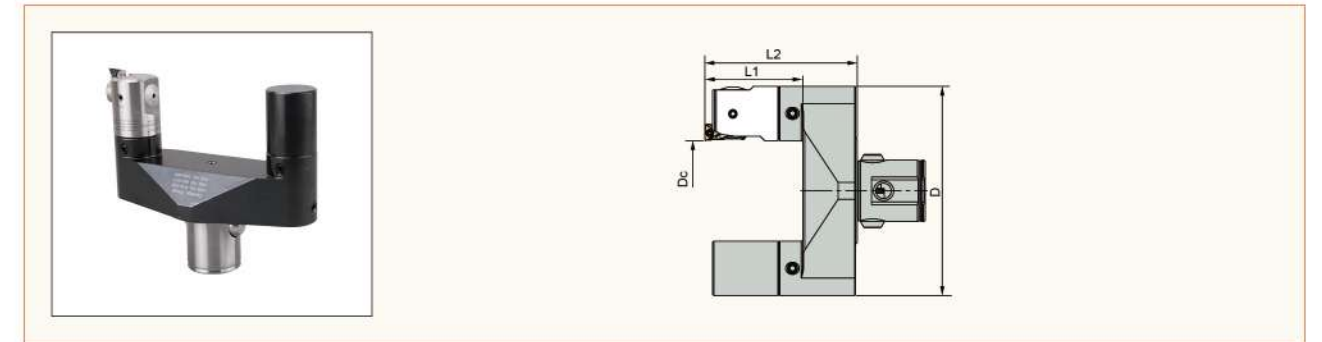
MODULAR BORING TOOL 模块式镗刀

精套镗刀

Precision Boring Tool for External Turning

K 接口精套镗刀，微调精度每格直径 0.01mm，调整自如、稳定，但加工时刀具必须逆时针旋转。

It is fine boring tool body with K connection, and the dial each of which is 0.01 mm on diameter, which can be adjusted freely and stably, but the tool should be rotated on the anticlockwise direction.



规格型号① Designation	Dc	L1	L2	D	Kg	适配精镗刀② Precision boring head	适配刀头③ Cartridge	配重块④ Balance block	在库 Stock
CXF D02-30.K63.88.C	2-12	56	88	95	1.8	CBF D32.K32.43.C	FRB 16C...	BHB K32.39	●
CXF D30-58.K63.88.C	11-21	56	88	95	1.8	CBF D32.K32.43.C	FRB 16A...	BHB K32.39	●
	20-30	56	88	95	1.8	CBF D32.K32.43.C	FRB 16C...	BHB K32.39	●
	30-40	56	88	125	2.1	CBF D32.K32.43.C	FRB 16C...	BHB K32.39	●
CXF D58-86.K63.88.C	39-49	56	88	125	2.1	CBF D32.K32.43.C	FRB 16B...	BHB K32.39	●
	48-58	56	88	125	2.1	CBF D32.K32.43.C	FRB 16A...	BHB K32.39	●
	58-68	56	88	150	2.4	CBF D32.K32.43.C	FRB 16C...	BHB K32.39	●
CXF D58-86.K63.88.C	67-77	56	88	150	2.4	CBF D32.K32.43.C	FRB 16B...	BHB K32.39	●
	76-86	56	88	150	2.4	CBF D32.K32.43.C	FRB 16A...	BHB K32.39	●

- 适配镗刀及刀头需单独订购，请参照：A032.A048 页
- 适配刀柄需单独订购，请参照：A039-A043 页
- 无需内冷时适配精镗刀为“CBF D32.K32.43”。
- 订货示例：1 件 CXF D02-30.K63.88.C
- The cartridge should be ordered separately, please see page A032.A048.
- The adaptor should be ordered separately, please see page A039-A043.
- The boring body which is without inner coolant, for example: 'CBF D32.K32.43'
- Ordering sample: 1 PC CXF D02-30.K63.88.C

备件

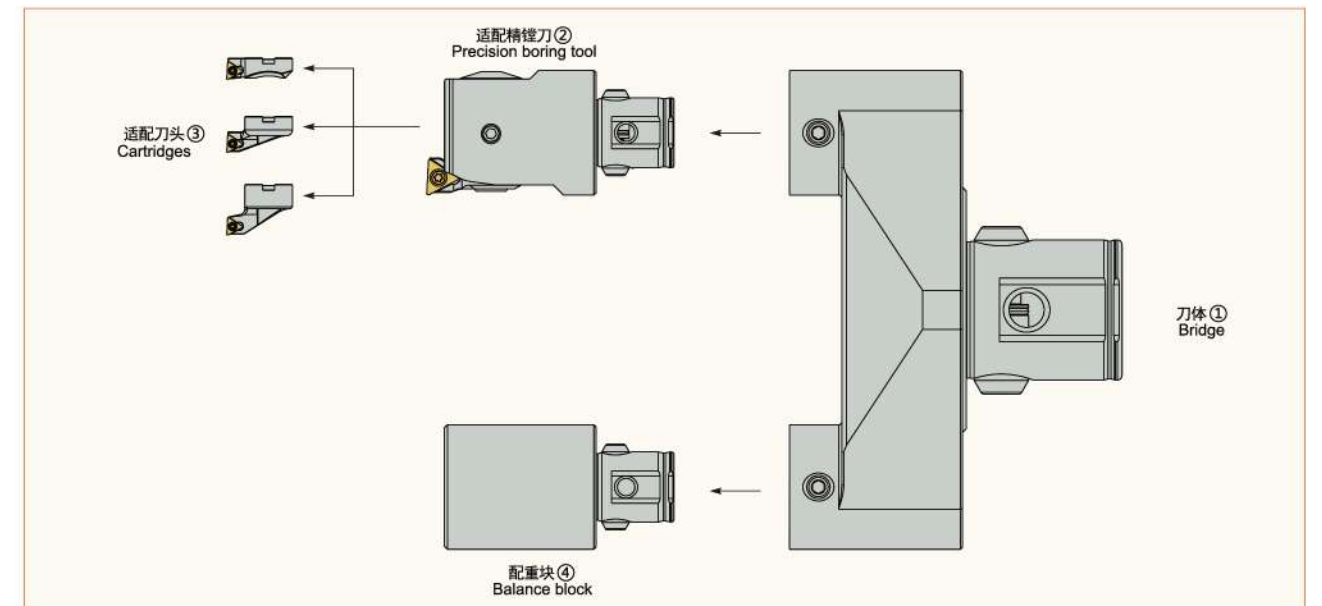
Spare Parts



规格型号 Designation	接口锁紧螺钉 Clamping	锁紧扳手 Allen key for clamping screw	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring
CXF D02-30.K63.88.C	SR65 M6x9-X	KEY01 M3	FT90 D14x43	FT91 D14-1.5
CXF D30-58.K63.88.C	SR65 M6x9-X	KEY01 M3	FT90 D14x43	FT91 D14-1.5
CXF D58-86.K63.88.C	SR65 M6x9-X	KEY01 M3	FT90 D14x43	FT91 D14-1.5

组合示意图

Instruction of Modular Combination Type K Connection



- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

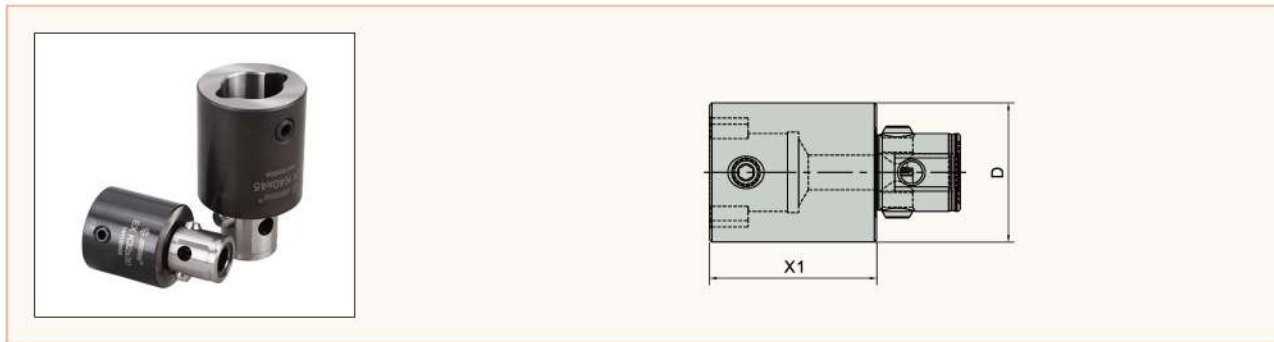
K 接口接长杆

Extension with Type K Connection

MODULAR BORING TOOL 模块式镗刀

K 接口缩径杆

Reduction with Type K Connection



规格型号 Designation	D	X1	Kg	在库 Stock
EX K19x20	19	20	0.04	●
EX K19x30	19	30	0.06	●
EX K25x30	25	30	0.1	●
EX K25x45	25	45	0.16	●
EX K32x30	32	30	0.17	●
EX K32x45	32	45	0.25	●
EX K40x45	40	45	0.39	●
EX K40x60	40	60	0.53	●
EX K50x60	50	60	0.83	●
EX K50x90	50	90	1.25	●
EX K63x60	63	60	2.22	●
EX K63x100	63	100	1.32	●
EX K90x105	88	105	4.59	●

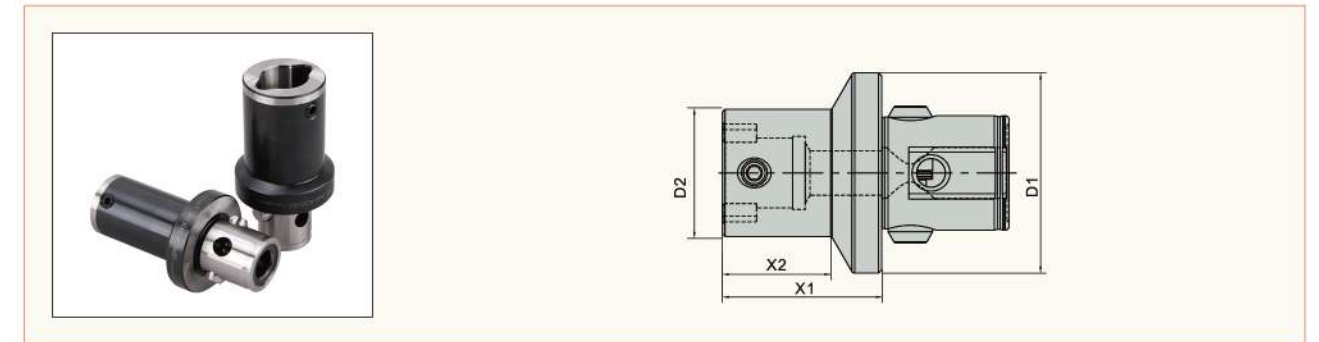
● 订货示例: 1 件 EX K19x20
● Ordering sample: 1 PC EX K19x20

备件

Spare Parts

D	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
D=19	FT90 D4x13.5	FT91 D4-1	SR65 M4x5-X	KEY01 M2
D=25	FT90 D5x17	FT91 D5-1	SR65 M5x6.5-X	KEY01 M2.5
D=32	FT90 D7x22	FT91 D7-1	SR65 M6x9-X	KEY01 M3
D=40	FT90 D8.5x26.5	FT91 D8.5-1.5	SR65 M8x11-X	KEY01 M4
D=50	FT90 D11x33	FT91 D11-1.5	SR65 M10x14-X	KEY01 M5
D=63	FT90 D14x43	FT91 D14-1.5	SR65 M12x18-X	KEY01 M6
D=88	FT90 D18x56	FT91 D16-1.5	SR65 M20x28-X	KEY01 M10

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)



规格型号 Designation	D1	D2	X1	X2	Kg	在库 Stock
RE K25-K19x40	25	19	40	26.5	0.1	●
RE K32-K19x40	32	19	40	27	0.14	●
RE K32-K25x35	32	25	35	22	0.16	●
RE K40-K19x50	40	19	50	35	0.25	●
RE K40-K25x50	40	25	50	38	0.28	●
RE K40-K32x50	40	32	50	38	0.32	●
RE K50-K19x60	50	19	60	40	0.38	●
RE K50-K25x50	50	25	50	33	0.4	●
RE K50-K25x80	50	25	80	63	0.51	●
RE K50-K32x50	50	32	50	33	0.54	●
RE K50-K32x80	50	32	80	63	0.64	●
RE K50-K40x40	50	40	40	23	0.47	●
RE K50-K40x70	50	40	70	53	0.82	●
RE K63-K19x70	63	19	70	36	0.84	●
RE K63-K25x70	63	25	70	54	0.69	●
RE K63-K25x95	63	25	95	79	0.98	●
RE K63-K32x60	63	32	60	44	0.75	●
RE K63-K32x90	63	32	90	74	1.12	●
RE K63-K40x50	63	40	50	34	0.8	●
RE K63-K40x85	63	40	85	69	1.28	●
RE K63-K50x40	63	50	40	24	0.92	●
RE K63-K50x75	63	50	75	59	1.33	●
RE K90-K63x105	88	63	105	88	3.1	●

● 订货示例: 1 件 RE K25-K19x40
● Ordering sample: 1 PC RE K25-K19x40

备件

Spare Parts

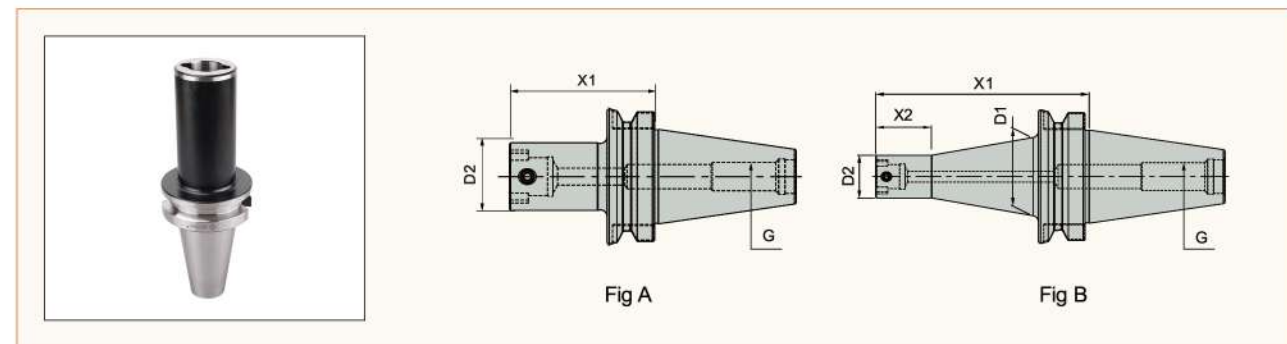
D1	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring	D2	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
D1=25	FT90 D5x17	FT91 D5-1	D2=19	SR65 M4x5-X	KEY01 M2
D1=32	FT90 D7x22	FT91 D7-1	D2=25	SR65 M5x6.5-X	KEY01 M2.5
D1=40	FT90 D8.5x26.5	FT91 D8.5-1.5	D2=32	SR65 M6x9-X	KEY01 M3
D1=50	FT90 D11x33	FT91 D11.5	D2=40	SR65 M8x11-X	KEY01 M4
D1=63	FT90 D14x43	FT91 D14-1.5	D2=50	SR65 M10x14-X	KEY01 M5
D1=88	FT90 D18x56	FT91 D16-1.5	D2=63	SR65 M12x18-X	KEY01 M6

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

BT MAS403 30/40 K 接口刀柄

MAS403 BT30/BT40 Adaptor with Type K Connection



规格型号 Designation	ISO	D1	D2	X1	X2	G	Fig	Kg	在库 Stock
BT30 K19x70	30	31	19	70	38	M12	B	0.49	●
BT30 K25x70	30	-	25	70	-	M12	A	0.52	●
BT30 K32x70	30	-	32	75	-	M12	A	0.64	●
BT30 K40x70	30	-	40	50	-	M12	A	0.55	●
BT30 K50x70	30	-	50	50	-	M12	A	0.65	●
BT40 K19x70	40	31	19	70	38	M16	B	1.07	●
BT40 K25x50	40	-	25	50	-	M16	A	1.01	●
BT40 K25x85	40	-	25	85	-	M16	A	1.14	●
BT40 K25x100	40	-	25	100	-	M16	A	1.16	●
BT40 K32x50	40	-	32	50	-	M16	A	1.05	●
BT40 K32x90	40	-	32	90	-	M16	A	1.28	●
BT40 K32x115	40	-	32	115	-	M16	A	1.4	●
BT40 K40x50	40	-	40	50	-	M16	A	1.09	●
BT40 K40x100	40	-	40	100	-	M16	A	1.54	●
BT40 K40x140	40	-	40	140	-	M16	A	1.89	●
BT40 K50x50	40	-	50	50	-	M16	A	1.2	●
BT40 K50x100	40	-	50	100	-	M16	A	1.87	●
BT40 K50x150	40	-	50	150	-	M16	A	2.25	●
BT40 K63x60	40	-	63	60	-	M16	A	1.45	●
BT40 K63x120	40	-	63	120	-	M16	A	2.74	●
BT40 K63x165	40	-	63	165	-	M16	A	3.76	●

● 订货示例: 1 件 BT40 K32x50
● Ordering sample: 1 PC BT 40 K32x50

备件

Spare Parts

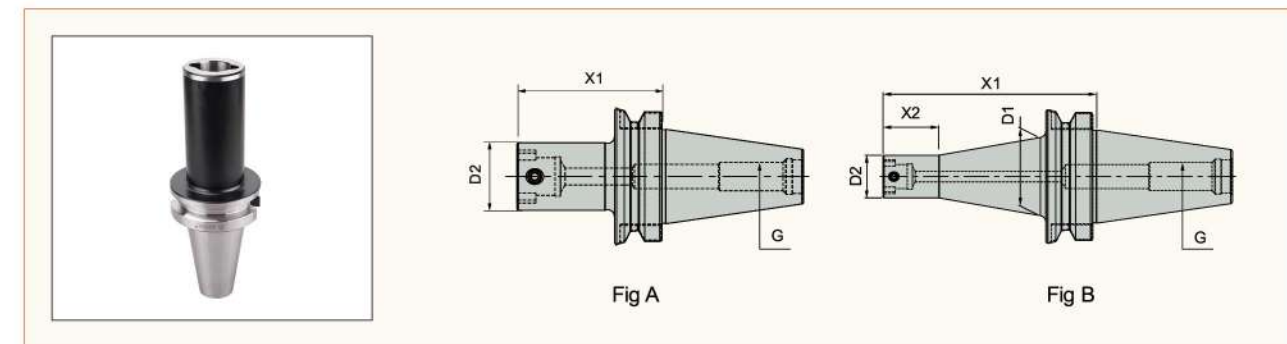
D2	锁紧螺钉 Clamping screw	锁紧螺钉扳手 Allen key for clamping screw
D2=19	SR65 M4x5-X	KEY01 M2
D2=25	SR65 M5x6.5-X	KEY01 M2.5
D2=32	SR65 M6x9-X	KEY01 M3
D2=40	SR65 M8x11-X	KEY01 M4
D2=50	SR65 M10x14-X	KEY01 M5
D2=63	SR65 M12x18-X	KEY01 M6

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

BT MAS403 50 K 接口刀柄

MAS403 BT40/BT50 Adaptor with Type K Connection



规格型号 Designation	ISO	D1	D2	X1	X2	G	Fig	Kg	在库 Stock
BT50 K19x100	50	31	19	100	42	M24	B	3.65	●
BT50 K25x70	50	50	25	70	22	M24	B	6.66	●
BT50 K25x110	50	50	25	110	62	M24	B	3.76	●
BT50 K25x140	50	50	25	140	32	M24	B	4.17	●
BT50 K32x70	50	-	32	70	-	M24	A	6.64	●
BT50 K32x120	50	-	32	120	-	M24	A	3.93	●
BT50 K32x160	50	60	32	160	42	M24	B	4.8	●
BT50 K40x70	50	-	40	70	-	M24	A	3.71	●
BT50 K40x110	50	-	40	110	-	M24	A	4.07	●
BT50 K40x160	50	-	40	160	-	M24	A	4.53	●
BT50 K40x200	50	-	40	200	-	M24	A	4.83	●
BT50 K50x70	50	-	50	70	-	M24	A	3.86	●
BT50 K50x110	50	-	50	110	-	M24	A	4.42	●
BT50 K50x160	50	-	50	160	-	M24	A	5.13	●
BT50 K50x210	50	-	50	210	-	M24	A	5.89	●
BT50 K50x230	50	-	50	230	-	M24	A	6.06	●
BT50 K50x250	50	-	50	250	-	M24	A	6.34	●
BT50 K63x80	50	-	63	80	-	M24	A	4.12	●
BT50 K63x160	50	-	63	160	-	M24	A	5.94	●
BT50 K63x230	50	-	63	230	-	M24	A	7.52	●
BT50 K63x260	50	-	63	260	-	M24	A	8.16	●
BT50 K63x280	50	-	63	280	-	M24	A	8.6	●
BT50 K63x300	50	-	63	300	-	M24	A	9.05	●
BT50 K90x100	50	-	88	100	-	M24	A	5.61	●
BT50 K90x180	50	-	88	180	-	M24	A	9.2	●
BT50 K90x250	50	-	88	252	-	M24	A	12.34	●
BT50 K90x320	50	-	88	320	-	M24	A	15.48	●
BT50 K90x350	50	-	88	350	-	M24	A	16.84	●

● 订货示例: 1 件 BT50 K19x100
● Ordering sample: 1 PC BT50 K19x100

备件

Spare Parts

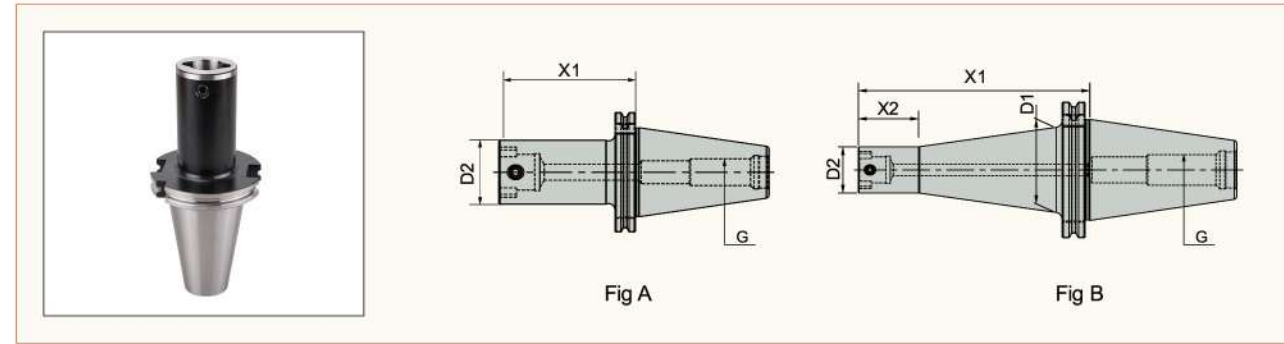
D2	锁紧螺钉 Clamping screw	锁紧螺钉扳手 Allen key for clamping screw
D2=19	SR65 M4x5-X	KEY01 M2
D2=25	SR65 M5x6.5-X	KEY01 M2.5
D2=32	SR65 M6x9-X	KEY01 M3
D2=40	SR65 M8x11-X	KEY01 M4
D2=50	SR65 M10x14-X	KEY01 M5
D2=63	SR65 M12x18-X	KEY01 M6
D2=88	SR65 M20x28-X	KEY01 M10

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

DIN69871-A 30/40 K 接口刀柄

DIN69871 SK30/SK40 Adaptor with Type K Connectio



规格型号 Designation	ISO	D1	D2	X1	X2	G	Fig	Kg	在庫 Stock
DIN69871 30 K19x70	30	31	19	70	38	M12	B	0.44	●
DIN69871 30 K25x70	30	-	25	70	-	M12	A	0.47	●
DIN69871 30 K32x75	30	-	32	75	-	M12	A	0.59	●
DIN69871 30 K40x50	30	-	40	50	-	M12	A	0.5	●
DIN69871 30 K50x50	30	-	50	50	-	M12	A	0.6	●
DIN69871 40 K19x70	40	31	19	70	38	M16	B	0.97	●
DIN69871 40 K25x50	40	-	25	50	-	M16	A	0.91	●
DIN69871 40 K25x85	40	-	25	85	-	M16	A	1.04	●
DIN69871 40 K25x100	40	-	25	100	-	M16	A	1.05	●
DIN69871 40 K32x50	40	-	32	50	-	M16	A	0.95	●
DIN69871 40 K32x90	40	-	32	90	-	M16	A	1.18	●
DIN69871 40 K32x115	40	-	32	115	-	M16	A	1.31	●
DIN69871 40 K40x50	40	-	40	50	-	M16	A	0.99	●
DIN69871 40 K40x100	40	-	40	100	-	M16	A	1.44	●
DIN69871 40 K40x140	40	-	40	140	-	M16	A	1.82	●
DIN69871 40 K50x50	40	-	50	50	-	M16	A	1.1	●
DIN69871 40 K50x100	40	-	50	100	-	M16	A	1.77	●
DIN69871 40 K50x150	40	-	50	150	-	M16	A	2.53	●
DIN69871 40 K63x60	40	-	63	60	-	M16	A	1.35	●
DIN69871 40 K63x120	40	-	63	120	-	M16	A	2.64	●
DIN69871 40 K63x165	40	-	63	165	-	M16	A	3.7	●

● 订货示例: DIN69871 30 K19x70
● Ordering sample: 1 PC DIN69871 30 K19x70

备件

Spare Parts

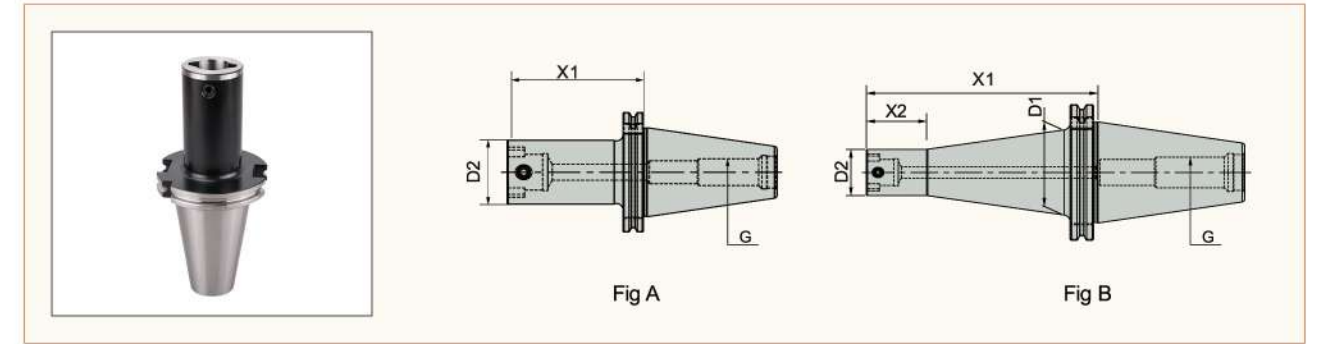
D2	锁紧螺钉 Clamping screw	锁紧螺钉扳手 Allen key for Clamping screw
D2=19	SR65 M4x5-X	KEY01 M2
D2=25	SR65 M5x6.5-X	KEY01 M2.5
D2=32	SR65 M6x9-X	KEY01 M3
D2=40	SR65 M8x11-X	KEY01 M4
D2=50	SR65 M10x14-X	KEY01 M5
D2=63	SR65 M12x18-X	KEY01 M6

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

DIN69871-A 50 K 接口刀柄

DIN69871 SK40/SK50 Adaptor with Type K Connection



规格型号 Designation	ISO	D1	D2	X1	X2	G	Fig	Kg	在庫 Stock
DIN69871 50 K19x100	50	31	19	100	42	M24	B	2.81	●
DIN69871 50 K25x70	50	50	25	70	22	M24	B	2.84	●
DIN69871 50 K25x110	50	50	25	110	62	M24	B	2.98	●
DIN69871 50 K25x140	50	50	25	140	32	M24	B	3.39	●
DIN69871 50 K32x70	50	-	32	70	32	M24	A	2.8	●
DIN69871 50 K32x120	50	-	32	120	32	M24	A	3.09	●
DIN69871 50 K32x160	50	60	32	160	42	M24	B	4.01	●
DIN69871 50 K40x70	50	-	40	70	-	M24	A	2.91	●
DIN69871 50 K40x110	50	-	40	110	-	M24	A	3.26	●
DIN69871 50 K40x160	50	-	40	160	-	M24	A	3.7	●
DIN69871 50 K40x200	50	-	40	200	-	M24	A	4.05	●
DIN69871 50 K50x70	50	-	50	70	-	M24	A	3.11	●
DIN69871 50 K50x110	50	-	50	110	-	M24	A	3.68	●
DIN69871 50 K50x160	50	-	50	160	-	M24	A	4.37	●
DIN69871 50 K50x210	50	-	50	210	-	M24	A	5.1	●
DIN69871 50 K50x230	50	-	50	230	-	M24	A	5.38	●
DIN69871 50 K50x250	50	-	50	250	-	M24	A	5.66	●
DIN69871 50 K63x80	50	-	63	80	-	M24	A	3.59	●
DIN69871 50 K63x160	50	-	63	160	-	M24	A	5.38	●
DIN69871 50 K63x230	50	-	63	230	-	M24	A	6.96	●
DIN69871 50 K63x260	50	-	63	260	-	M24	A	7.63	●
DIN69871 50 K63x280	50	-	63	280	-	M24	A	8.08	●
DIN69871 50 K63x300	50	-	63	300	-	M24	A	8.53	●
DIN69871 50 K90x100	50	-	88	100	-	M24	A	5.34	●
DIN69871 50 K90x180	50	-	88	180	-	M24	A	8.93	●
DIN69871 50 K90x250	50	-	88	250	-	M24	A	12.07	●
DIN69871 50 K90x320	50	-	88	320	-	M24	A	15.21	●
DIN69871 50 K90x350	50	-	88	350	-	M24	A	16.56	●

● 订货示例: 1 件 DIN69871 50 K19x100
● Ordering sample: 1 PC DIN69871 50 K19x100

备件

Spare Parts

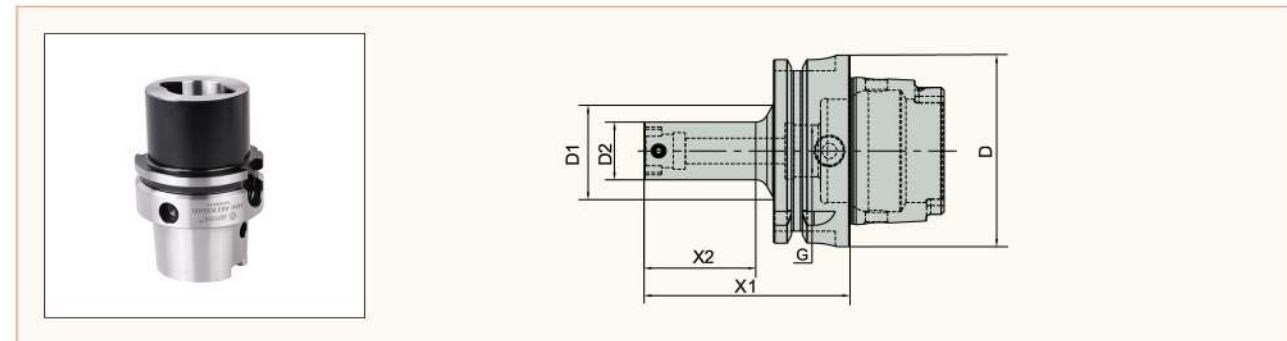
D2	锁紧螺钉 Clamping screw	锁紧螺钉扳手 Allen key for Clamping screw
D2=19	SR65 M4x5-X	KEY01 M2
D2=25	SR65 M5x6.5-X	KEY01 M2.5
D2=32	SR65 M6x9-X	KEY01 M3
D2=40	SR65 M8x11-X	KEY01 M4
D2=50	SR65 M10x14-X	KEY01 M5
D2=63	SR65 M12x18-X	KEY01 M6
D2=88	SR65 M20x28-X	KEY01 M10

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

HSK-A K 接口刀柄

HSK .Adaptor with Type K Connection



规格型号 Designation	D	D1	D2	X1	X2	G	Kg	在库 Stock
HSK A63 K19x80	63	31	19	80	40	M18x1	0.9	●
HSK A63 K25x80	63	-	25	80	-	M18x1	1.0	●
HSK A63 K32x85	63	-	32	85	-	M18x1	1.1	●
HSK A63 K40x80	63	-	40	80	-	M18x1	1.2	●
HSK A63 K50x60	63	-	50	60	-	M18x1	1.3	●
HSK A63 K63x70	63	-	63	70	-	M18x1	1.5	●
HSK A100 K19x100	100	31	19	100	40	M24x1.5	2.4	●
HSK A100 K25x115	100	50	25	115	70	M24x1.5	2.6	●
HSK A100 K32x110	100	-	32	110	-	M24x1.5	2.8	●
HSK A100 K40x105	100	-	40	105	-	M24x1.5	3.0	●
HSK A100 K50x75	100	-	50	75	-	M24x1.5	3.3	●
HSK A100 K63x75	100	-	63	75	-	M24x1.5	3.4	●
HSK A100 K90x125	100	-	88	125	-	M24x1.5	5.8	●

- 订货示例: 1 件 HSK A63 K19x80
- 内冷却管需单独订购, 请参照: [H017](#) 页
- Ordering Simple: 1 PC HSK A63 K19x80.
- Inner coolant should be ordered separately, please see page [H017](#).

备件

Spare Parts

D2	锁紧螺钉 Clamping screw	锁紧螺钉扳手 Allen key for clamping screw
D2=19	SR65 M4x5-X	KEY01 M2
D2=25	SR65 M5x6.5-X	KEY01 M2.5
D2=32	SR65 M6x9-X	KEY01 M3
D2=40	SR65 M8x11-X	KEY01 M4
D2=50	SR65 M10x14-X	KEY01 M5
D2=63	SR65 M12x18-X	KEY01 M6
D2=88	SR65 M20x28-X	KEY01 M10

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

矩形槽粗镗刀座

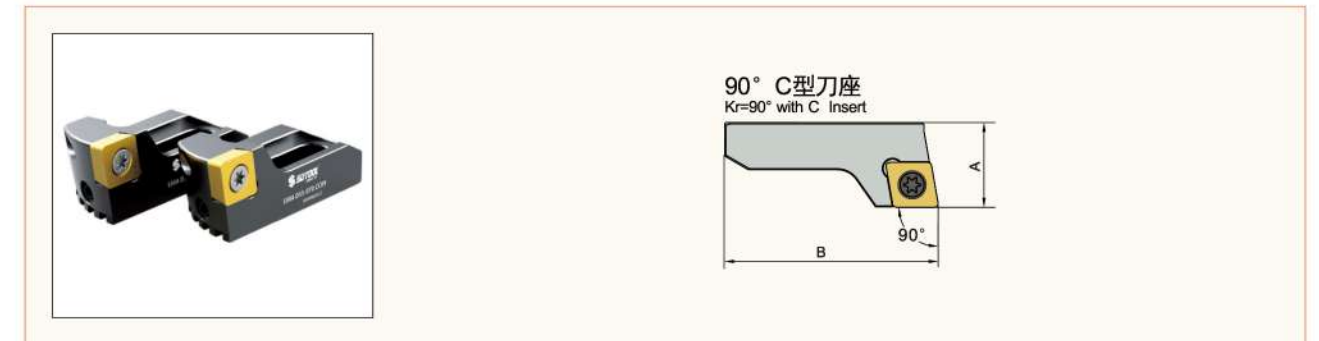
Cartridge with Rectangular Slot Guide for Rough Boring Tool

适配于 CBR 系列双刃粗镗刀, 矩形槽刀座接口, 调整方便

加工范围: 90° C 型刀座 $\Phi 20-\Phi 153$; 90° T 型刀座 $\Phi 33-\Phi 153$; 45° 刀座 $\Phi 23-\Phi 153$; 84° 刀座 $\Phi 20-\Phi 153$;

It is suitable for the CBR rough boring tools with twin cutters, and also it can be adjusted freely due to the connection.

The boring range: 90° C style is $\Phi 20-\Phi 153$; 90° T style is $\Phi 33-\Phi 153$; 45° style is $\Phi 23-\Phi 153$; 84° style is $\Phi 20-\Phi 153$.



90° C 型刀座

Kr=90° with C Insert

规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
C90A D020-024.CC06	23-27	13.6	16	CC..0602..	0.01	SR50 M2.5x5	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
C90A D023-027.CC06	23-27	13.6	17	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
C90A D026-035.CC06	26-35	13.6	20	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
C90A D033-041.CC06	33-41	15	26	CC..0602..	0.02	SR50 M3.0x8	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
C90A D041-055.CC09	41-55	18	32	CC..09T3..	0.03	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
C90A D055-070.CC09	55-70	18	45	CC..09T3..	0.05	SR50 M4.0x10	KEY01 M2	SR21 M4x9.5	KEY02 T15	●
C90A D070-090.CC12	70-90	30	59	CC..1204..	0.15	SR50 M5.0x12	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
C90A D090-110.CC12	90-110	30	74	CC..1204..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
C90A D110-133.CC12	110-133	30	85	CC..1204..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
C90A D130-153.CC12	130-153	30	96	CC..1204..	0.30	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●

- 刀片请根据不同材料单独选购, 请参照: [F002](#) 页
- 订货示例: 1 件 C90A D020-024.CC06

- The inserts with different materials should be ordered separately, please see page [F002](#).
- Ordering sample: 1 PC C90A D020-024.CC06

90° C 型刀座 (加大型)

Kr=90° with C Insert

规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
C90A D19.2630.CC06	26-30	13.6	19	CC..0602..	0.01	SR50 M2.5x5	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
C90A D25.3342.CC06	33-42	13.6	24	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
C90A D32.3947.CC09	39-47	15	29	CC..09T3..	0.02	SR50 M3.0x8	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
C90A D40.5367.CC09	53-67	18	38	CC..09T3..	0.05	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
C90A D50.6883.CC12	68-83	20	52	CC..1204..	0.07	SR50 M4.0x10	KEY01 M2	SR21 M5x12.8	KEY02 T20	●
C90A D63.88108.CC12	88-108	30	68	CC..1204..	0.19	SR50 M5.0x12	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●
C90A D80.108128.CC12	108-128	30	83	CC..1204..	0.26	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY02 T20	●

- 刀片请根据不同材料单独选购, 请参照: [F002](#) 页
- 订货示例: 1 件 C90A D020-024.CC06

- The inserts with different materials should be ordered separately, please see page [F002](#).
- Ordering sample: 1 PC C90A D020-024.CC06

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL 模块式镗刀

矩形槽粗镗刀座

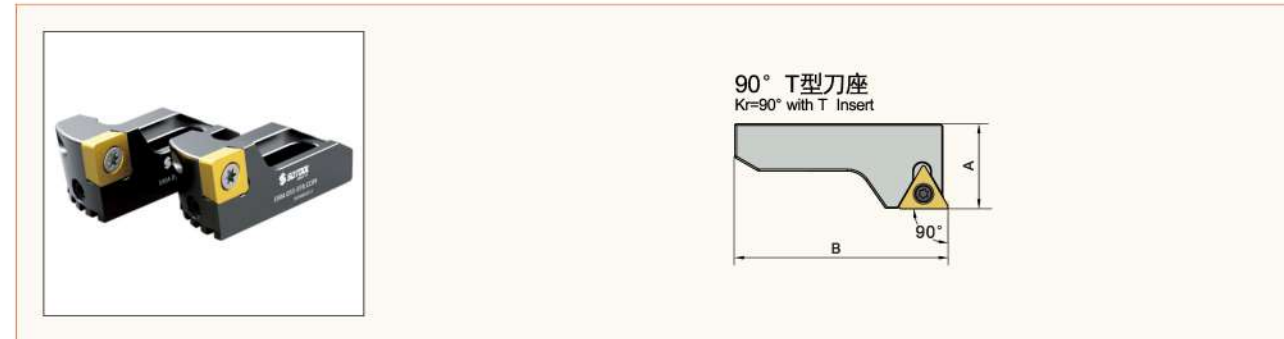
Cartridge with Rectangular Slot Guide for Rough Boring Tool

适配于 CBR 系列双刃粗镗刀，矩形槽刀座接口，调整方便

加工范围：90° C 型刀座 Φ20-Φ153；90° T 型刀座 Φ33-Φ153；45° 刀座 Φ23-Φ153；84° 刀座 Φ20-Φ153；

It is suitable for the CBR rough boring tools with twin cutters, and also it can be adjusted freely due to the connection.

The boring range: 90° C style is Φ20-Φ153; 90° T style is Φ33-Φ153; 45° style is Φ23-Φ153; 84° style is Φ20-Φ153.



90° T 型刀座

Kr=90° with T Insert

规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
C90A D033-041.TC11	33-41	15	26	TC..1102..	0.02	SR50 M3.0x8	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
C90A D041-055.TC11	41-55	18	32	TC..1102..	0.03	SR50 M3.0x10	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
C90A D055-070.TC11	55-70	18	45	TC..1102..	0.05	SR50 M4.0x10	KEY01 M2	SR20 M2.5x6	KEY02 T8	●
C90A D070-090.TC16	70-90	30	59	TC..16T3..	0.15	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
C90A D090-110.TC16	90-110	30	74	TC..16T3..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
C90A D110-133.TC16	110-133	30	85	TC..16T3..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
C90A D130-153.TC16	130-153	30	96	TC..16T3..	0.30	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●

● 刀片请根据不同材料单独订购，请参照：F004 页
● 订货示例：1 件 C90A D033-041.TC11

● The inserts with different materials should be ordered separately, please see page F004.
● Ordering sample: 1 PC C90A D033-041.TC11.

90° T 型刀座 (加大型)

Kr=90° with T Insert

规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
C90A D25.3342.TC11	33-42	13.6	24	TC..1102..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
C90A D32.3947.TC11	39-47	15	29	TC..1102..	0.02	SR50 M3.0x8	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
C90A D40.5367.TC11	53-67	18	38	TC..1102..	0.05	SR50 M3.0x10	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
C90A D50.6883.TC16	68-83	20	52	TC..16T3..	0.07	SR50 M4.0x10	KEY01 M2	SR21 M4x9.5	KEY02 T15	●
C90A D63.88108.TC16	88-108	30	68	TC..16T3..	0.19	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
C90A D80.108128.TC16	108-128	30	83	TC..16T3..	0.26	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●

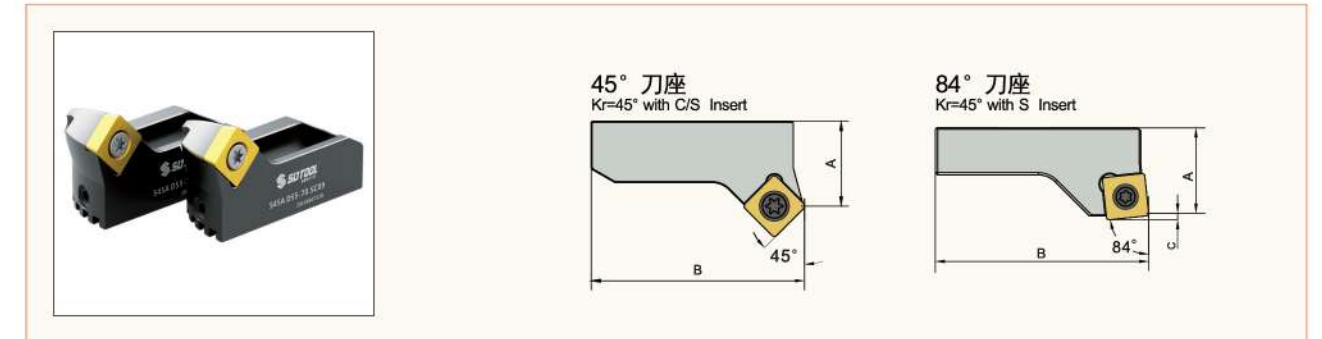
● 刀片请根据不同材料单独订购，请参照：F004 页
● 订货示例：1 件 C90A D033-041.TC11

● The inserts with different materials should be ordered separately, please see page F004.
● Ordering sample: 1 PC C90A D033-041.TC11.

MODULAR BORING TOOL 模块式镗刀

矩形槽粗镗刀座

Cartridge with Rectangular Slot Guide for Rough Boring Tool



45° 刀座

Kr=45° with C/S Inset

规格型号 Designation	镗削范围 Boring range	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Adjusting screw for insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
C45A D023-027.CC06	23-27	13.6	17	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
C45A D026-035.CC06	26-35	13.6	20	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.5x6	KEY02 T8	●
C45A D033-041.CC06	33-41	15	25	CC..0602..	0.02	SR50 M3.0x8	KEY01 M1.5	SR20 M2.5x6	KEY02 T8	●
C45A D041-055.SC09	41-55	18	30	CC..09T3..	0.03	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY02 T15	●
C45A D055-070.SC09	55-70	30	45	CC..09T3..	0.04	SR50 M4.0x10	KEY01 M2	SR21 M4x9.5	KEY02 T15	●
C45A D070-090.SC09	70-90	30	59	CC..09T3..	0.13	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
C45A D090-110.SC09	90-110	30	75	CC..09T3..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
C45A D110-133.SC09	110-133	30	85	CC..09T3..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●
C45A D130-153.SC09	130-153	30	93	CC..09T3..	0.27	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY02 T15	●

● 刀片请根据不同材料单独订购，请参照：F002 页
● 订货示例：1 件 C45A D023-027.CC06

● The inserts with different materials should be ordered separately, please see page F002.
● Ordering sample: 1 PC C45A D023-027.CC06.

84° 刀座

Kr=84° with S Inset

规格型号 Designation	镗削范围 Boring range	A	B	C	适用刀片 Insert	Kg	刀座调整螺钉 Clamping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
C84A D020-024.SO06	20-24	13.9	17	0.7	SO..0603..	0.01	SR50 M2.5x5	KEY01 M1.3	SR20 M2.2x5.6	KEY02 T8	●
C84A D023-027.SO06	23-27	13.9	17.9	0.7	SO..0603..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.2x5.6	KEY02 T8	●
C84A D026-035.SO06	26-35	13.9	20.4	0.7	SO..0603..	0.01	SR50 M2.5x6	KEY01 M1.3	SR20 M2.2x5.6	KEY02 T8	●
C84A D033-041.SO06	33-41	15.1	25.8	0.7	SO..0603..	0.02	SR50 M3x8	KEY01 M1.5	SR20 M2.2x5.6	KEY02 T8	●
C84A D041-055.SO09	41-55	18.1	32.1	0.7	SO..09T3..	0.03	SR50 M3x10	KEY01 M1.5	SR20 M3x6.6	KEY02 T9	●
C84A D055-070.SO09	55-70	18.1	45.3	0.7	SO..09T3..	0.05	SR50 M4x10	KEY01 M2	SR20 M3x6.6	KEY02 T9	●
C84A D070-090.SO12	70-90	30.3	58.8	1	SO..1204..	0.15	SR50 M5x12	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	●
C84A D090-110.SO12	90-110	30.3	73.6	1	SO..1204..	0.22	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	●
C84A D110-133.SO12	110-133	30.3	85.4	1	SO..1204..	0.26	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	●
C84A D130-153.SO12	130-153	30.3	96.4	1	SO..1204..	0.31	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY02 T15	●
C84A D090-110.SO16	90-110	30.3	73.6	2.6	SO..1605..	0.22	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY02 T15	●
C84A D110-133.SO16	110-133	30.3	85.4	2.6	SO..1605..	0.26	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY02 T15	●
C84A D130-153.SO16	130-153	30.3	96.4	2.6	SO..1605..	0.32	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY02 T15	●

● 刀片请根据不同材料单独订购，请参照：F007 页
● 订货示例：1 件 C84A D033-041.SO06

● The inserts with different materials should be ordered separately, please see page F007.
● Ordering sample: 1 PC C84A D033-041.SO06.

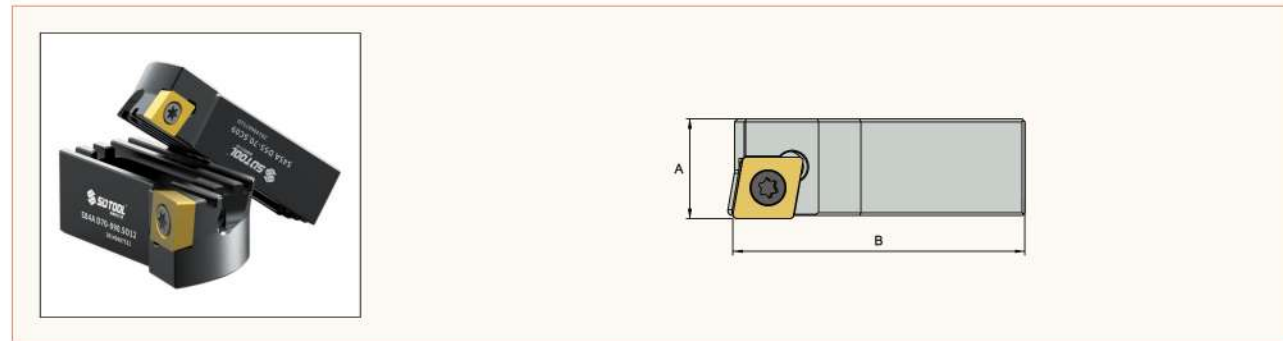
MODULAR BORING TOOL 模块式镗刀

反镗刀座

Cartridge for Back Boring

适配于 CBR 系列矩形槽刀座接口的双刃粗镗刀，调整方便，加工范围：Φ30-Φ152

It is suitable for the CBR series twin cutter rough boring tool, with the boring range of Φ30-Φ152, and also it can be adjusted easily.



规格型号 Designation	镗削范围 Boring range	A	B	刀片型号 Insert	Kg	在库 Stock
C90C D19.3035.CC06	30-35	10.3	21	CC..0602..	0.01	●
C90C D25.3341.CC06	33-41	10.3	23	CC..0602..	0.01	●
C90C D25.4048.CC06	40-48	10.3	26.6	CC..0602..	0.02	●
C90C D32.4252.CC06	42-52	10.3	30.2	CC..0602..	0.02	●
C90C D32.5161.CC06	51-61	10.3	35	CC..0602..	0.03	●
C90C D40.5365.CC09	53-65	16.6	36.6	CC..09T3..	0.06	●
C90C D40.6476.CC09	64-76	16.6	42.3	CC..09T3..	0.07	●
C90C D50.5369.CC09	53-69	16.6	45	CC..09T3..	0.06	●
C90C D50.6884.CC09	58-84	16.6	52.8	CC..09T3..	0.08	●
C90C D50.8399.CC09	83-99	16.6	62	CC..09T3..	0.1	●
C90C D63.6889.CC09	68-89	16.6	57.3	CC..09T3..	0.12	●
C90C D63.88109.CC09	88-109	16.6	67.3	CC..09T3..	0.16	●
C90C D80.88110.CC12	88-110	25.6	70.4	CC..1204..	0.25	●
C90C D80.108130.CC12	108-130	25.6	82.4	CC..1204..	0.31	●
C90C D100.108132.CC12	108-132	25.6	82.3	CC..1204..	0.29	●
C90C D100.128152.CC12	128-152	25.6	92.1	CC..1204..	0.36	●

- 刀片请根据不同材料单独订购，请参照：F002 页
- 订货示例：1 件 C90C D32.4252.CC06
- The inserts with different materials should be ordered separately, please see page F002.
- Ordering sample: 1 PC C902C D32.4252.CC06.

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CC..0602..	SR20 M2.5x6	KEY02 T8
CC..09T3..	SR21 M4x9.5	KEY02 T15
CC..1204..	SR21 M5x12.8	KEY02 T20

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

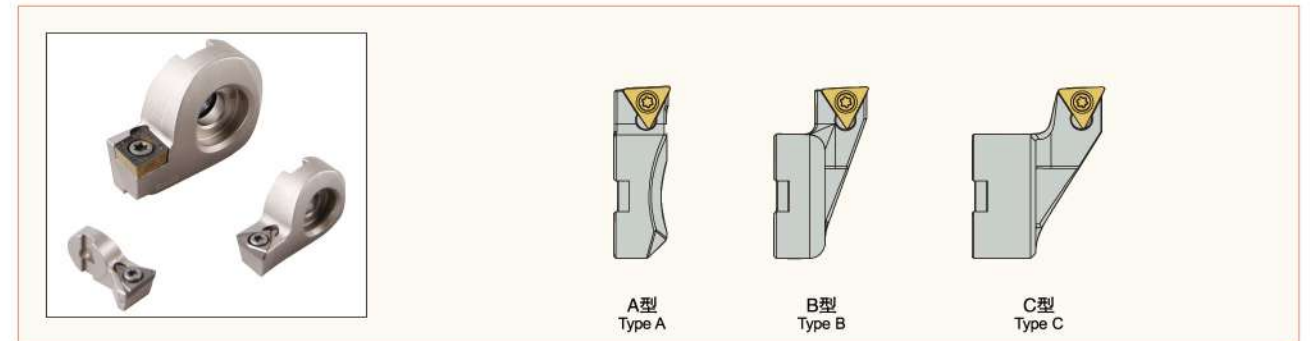
MODULAR BORING TOOL 模块式镗刀

直压式精镗刀头

Axial Combination Precision Cartridge

适配于 NBF,CBF 系列的微调精镗刀，定位锁紧稳固，更换简便，可方便进行正反镗加工的变换，配有不同规格的刀片。

It is suitable for the NBF & CBF series micro fine boring head, and has the features of locked firmly, easy to be changed and convenient for the general and back boring machining, and also could be suitable for inserts with different specifications.



规格型号 Designation	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	在库 Stock
FRB 10A.TB06	TB..0601..	SR20 M2x3.5	●
FRB 10B.TB06	TB..0601..	SR20 M2x3.5	●
FRB 10C.TB06	TB..0601..	SR20 M2x3.5	●
FRB 12A.TP09	TP..0902..	SR22 M2.5x6	●
FRB 12B.TP09	TP..0902..	SR22 M2.5x6	●
FRB 12C.TP09	TP..0902..	SR22 M2.5x6	●
FRB 16A.TP09	TP..0902..	SR22 M2.5x6	●
FRB 16B.TP09	TP..0902..	SR22 M2.5x6	●
FRB 16C.TP09	TP..0902..	SR22 M2.5x6	●
FRB 20A.TP09	TP..0902..	SR22 M2.5x6	●
FRB 20B.TP09	TP..0902..	SR22 M2.5x6	●
FRB 20C.TP09	TP..0902..	SR22 M2.5x6	●
FRB 25A.TP09	TP..0902..	SR22 M2.5x6	●
FRB 25B.TP09	TP..0902..	SR22 M2.5x6	●
FRB 25C.TP09	TP..0902..	SR22 M2.5x6	●
FRB 30A.TP11	TP..1103..	SR22 M3x8	●
FRB 30B.TP11	TP..1103..	SR22 M3x8	●
FRB 30C.TP11	TP..1103..	SR22 M3x8	●

规格型号 Designation	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	在库 Stock
FRB 12A.CC06	CC..0602..	SR20 M2.5x6	●
FRB 12B.CC06	CC..0602..	SR20 M2.5x6	●
FRB 12C.CC06	CC..0602..	SR20 M2.5x6	●
FRB 16A.CC06	CC..0602..	SR20 M2.5x6	●
FRB 16B.CC06	CC..0602..	SR20 M2.5x6	●
FRB 16C.CC06	CC..0602..	SR20 M2.5x6	●
FRB 20A.CC06	CC..0602..	SR20 M2.5x6	●
FRB 20B.CC06	CC..0602..	SR20 M2.5x6	●
FRB 20C.CC06	CC..0602..	SR20 M2.5x6	●
FRB 25A.CC06	CC..0602..	SR20 M2.5x6	●
FRB 25B.CC06	CC..0602..	SR20 M2.5x6	●
FRB 25C.CC06	CC..0602..	SR20 M2.5x6	●
FRB 30A.CC09	CC..09T3..	SR21 M4x9.5	●
FRB 30B.CC09	CC..09T3..	SR21 M4x9.5	●
FRB 30C.CC09	CC..09T3..	SR21 M4x9.5	●

备件

Spare Parts

刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
SR20 M2x3.5	KEY02 T6
SR22 M2.5x6	KEY02 T8
SR22 M3x8	KEY02 T8
SR20 M2.2x4.6	KEY02 T7
SR20 M2.5x6	KEY02 T8
SR21 M4x9.5	KEY02 T15

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

规格型号 Designation	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	在库 Stock
FRB 10A.TC06	TC..06T1..	SR20 M2x3.5	●
FRB 10B.TC06	TC..06T1..	SR20 M2x3.5	●
FRB 10C.TC06	TC..06T1..	SR20 M2x3.5	●
FRB 12A.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 12B.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 12C.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 16A.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 16B.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 16C.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 20A.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 20B.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 20C.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 25A.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 25B.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 25C.TC09	TC..0902..	SR20 M2.2x4.6	●
FRB 25A.TC11	TC..0902..	SR20 M2.2x4.6	●
FRB 25B.TC11	TC..0902..	SR20 M2.2x4.6	●
FRB 25C.TC11	TC..0902..	SR20 M2.2x4.6	●
FRB 30A.TC11	TC..1102..	SR20 M2.5x6	●
FRB 30B.TC11	TC..1102..	SR20 M2.5x6	●
FRB 30C.TC11	TC..1102..	SR20 M2.5x6	●

规格型号 Designation	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	在库 Stock
FRB 12A.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 12B.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 12C.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 16A.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 16B.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 16C.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 20A.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 20B.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 20C.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 25A.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 25B.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 25C.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 30A.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 30B.TC0903	TC..0903..	SR20 M2.5x6	●
FRB 30C.TC0903	TC..0903..	SR20 M2.5x6	●

- 刀片请根据不同材料单独订购，请参照：F001-F005 页
- 订货示例：1 件 FRB 10A.TB06
- The inserts with different materials should be ordered separately, please see page F001-F005.
- Ordering sample: 1 PC FRB 10A.TB06

MICRON BORING TOOL
SHANGHAI SUNDER NC-TOOLS
MANUFACTURE CO.,LTD.

Φ 0.001 mm/格
—— 调节精度 ——
ADJUSTABLE ACCURACY

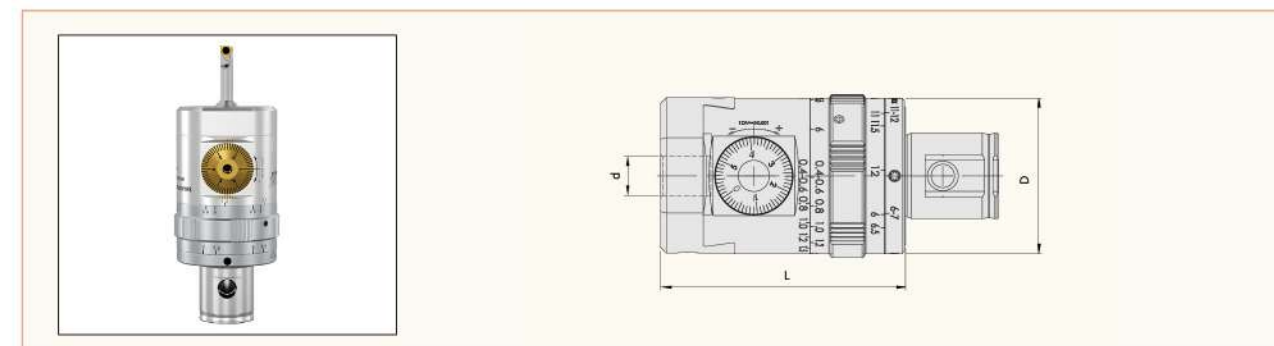
DAMPING TOOLS 小孔径微米镗刀

MBF 系列 K 接口小孔径微米镗刀

MBF Micron Boring Tool with Type K Connection

小孔径微米镗刀，微调精度每格直径 0.001mm，加工范围 Φ0.4—Φ12，圆柱模块式 K 接口，需配小孔精镗刀杆。

Micron boring tool has a highly precise adjustment mechanism, 1 DIV=0.001mm in diameter, and the diameter range is φ0.4-φ12. High rigidity thanks of cylindrical modular connection type K. Boring bars for the body.



规格型号 Designation	Dc	L	D	d	kg	适配刀杆 Boring bar	在库 Stock
MBF D0,4-12.K40.Z1.63.C	0.4-12	63	40	10	0.58	MBF C10-3+HT03E... MBF C10-5+HT05E... HT10E...	●

- 适配小孔径精镗刀杆需单独订购，请参照：☞ A051 页
- 适配刀柄需单独订购，请参照：☞ A039-A043 页
- 订货示例：1 件 MBF D0,4-12.K40.Z1.63.C
- 最高转速可达：24000r/min
- 刀体带有动平衡调整机构
- 刀具调整后无需锁紧
- 带内冷

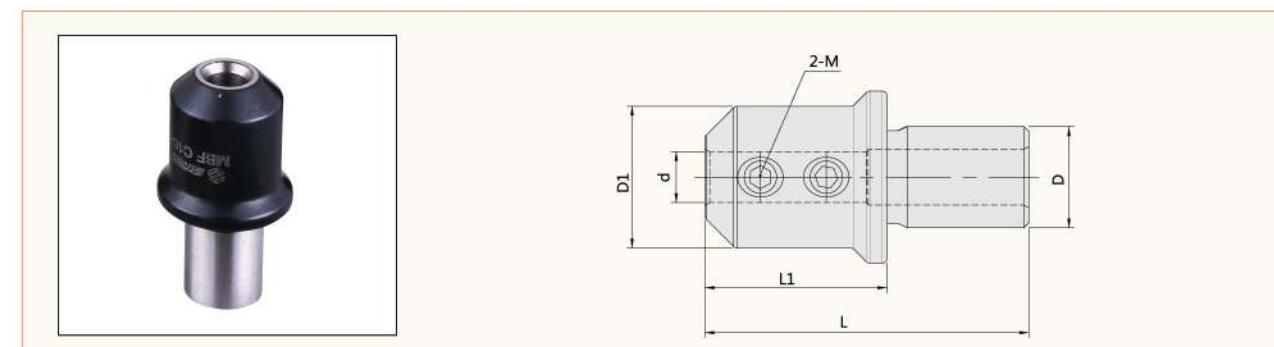
- The boring bar should be ordered separately, please see next page A051.
- The adaptor should be ordered separately, please see page A039-A043.
- Ordering sample: MBF D0,4-12.K40.Z1.63.C 1 piece
- Max. Speed: 24000r/min
- With dynamic balance adjustable mechanism
- No need to lock again after adjusting
- With coolant hole

小孔径精镗刀杆变径套

Reduction Sleeve

适用于 HT03E./HT05E.. 小孔径镗刀杆

It is suitable for HT03E .. /HT05E ... mini precision boring bar



规格型号 Designation	d	D	D1	L1	L	M	在库 Stock
MBF C10-3	3	10	14	20	34	M4	●
MBF C10-5	5	10	14	20	34	M4	●

- 订货示例：1 件 MBF C10-5
- Ordering sample: MBF C10-5 1piece

- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

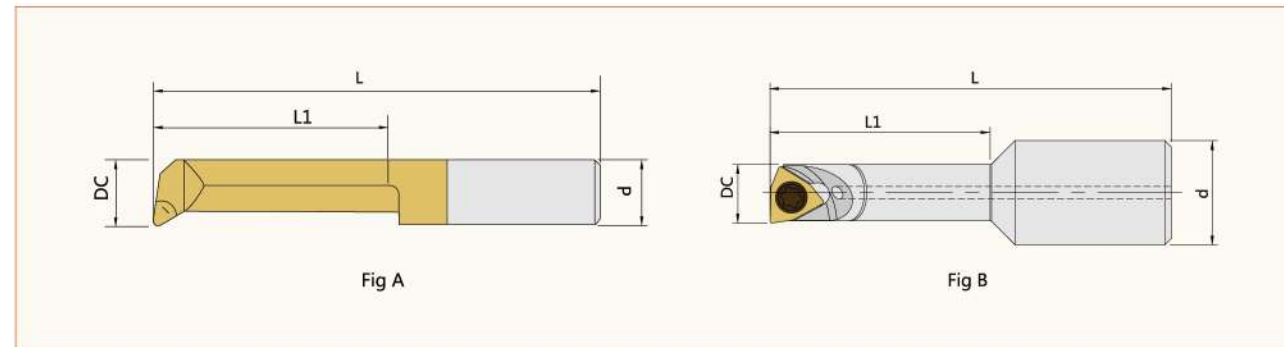
DAMPING TOOLS 小孔径微米镗刀

小孔径精镗刀杆

Mini Precision Boring Bar

适配于小孔径微精镗刀，硬质合金杆。

It is for the micron boring tool, made of solid carbide



规格型号 Designation	Dc	d	L	L1	刀片 Insert	Fig	在库 Stock
HT03E D0,4.2	0.4	3	38	2	-	A	●
HT03E D0,6.3	0.6	3	38	3	-	A	●
HT03E D0,8.3	0.8	3	38	3	-	A	●
HT03E D1,0.5	1.0	3	38	5	-	A	●
HT03E D1,2.5	1.2	3	38	5	-	A	●
HT03E D1,5.10	1.5	3	38	10	-	A	●
HT03E D02-03.10	2.0	3	38	10	-	A	●
HT05E D03-04.10	3.0	5	44	10	-	A	●
HT05E D04-05.13	4.0	5	46	13	-	A	●
HT05E D05-06.16	5.0	5	50	16	-	A	●
HT10E D06-07.WB060102.21.C	6.0	10	38	21	WB..0601..	B	●
HT10E D07-08.WB060102.24.C	7.0	10	42	24	WB..0601..	B	●
HT10E D08-09.WB060102.27.C	8.0	10	44	27	WB..0601..	B	●
HT10E D09-10.WB060102.30.C	9.0	10	46	30	WB..0601..	B	●
HT10E D10-11.WB060102.33.C	10.0	10	48	33	WB..0601..	B	●
HT10E D11-12.WB060102.36.C	11.0	10	50	36	WB..0601..	B	●

- D0.4-6 的整体硬质合金镗刀杆最低订货量 5 支 / 次
- HT03E 刀杆须用 MBF C10-3 变径套夹持，请参照：A050 页
- HT05E 刀杆须用 MBF C10-5 变径套夹持，请参照：A050 页
- 刀片请根据不同材料单独订购，请参照：F002 页
- 订货示例：5 件 HT05E D04-05.13
- MOQ for D0.4-6 mini solid carbide boring bar is 5 pcs
- HT03E boring bar should be clamped by C10-3 reduction sleeve, please see next page A050.
- HT05E boring bar should be clamped by C10-5 reduction sleeve, please see next page A050.
- Insert should be ordered separately, please see next page F002.
- Ordering sample: HT05E D04-05.13 Spcs

备件

Spare Parts

刀片 Insert	刀片螺钉 Clamping screw for insert	螺钉扳手 Allen key
WB... 0601...	SR20 M2x3.5	KEY02 T6

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

DAMPING TOOLS 小孔径微米镗刀

小孔径微米镗刀操作说明书

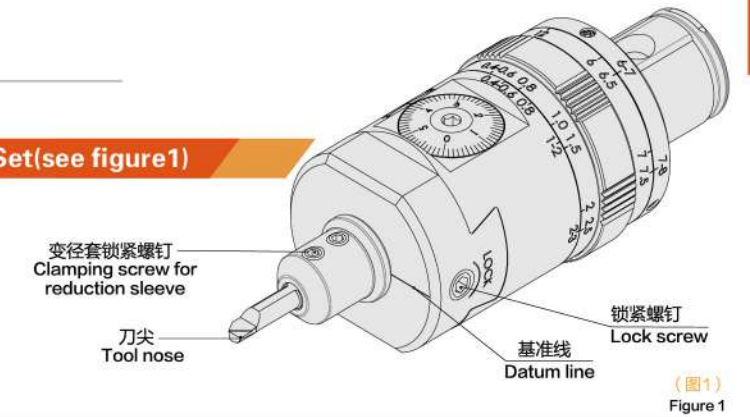
The Instruction Manual of Micron Boring Tool

小孔镗刀杆识别 Mini Precision Boring Bar

- 确认工件小孔工况并合理选择适配刀杆
- 连接刀杆，选择适配的变径套
- Select suitable boring bar for requested working condition
- Mount the boring bar then select the suitable reduction sleeve

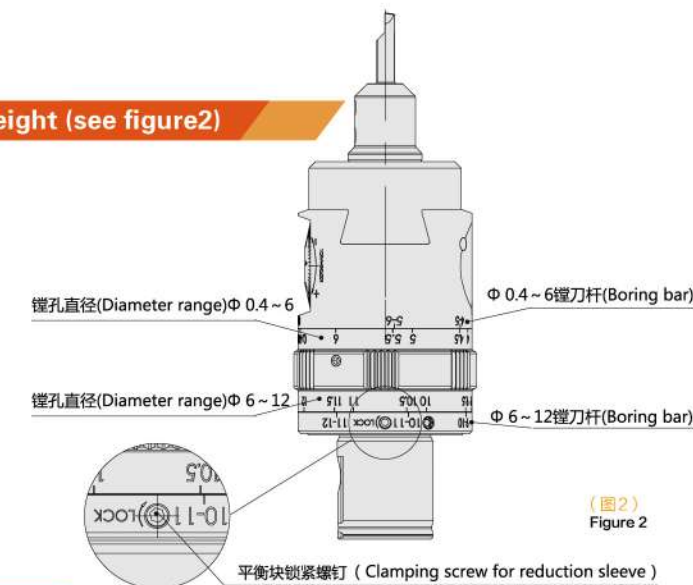
锁紧刀杆 (如图 1) Mounted Boring Tool Set (see figure 1)

- 锁紧小刀杆与变径套
- 转动刀杆，刀尖对准基准线
- LOCK 螺钉锁紧
- Lock boring bar and reduction sleeve
- Make sure the tool nose aim at the datum line
- Lock the screw tightly



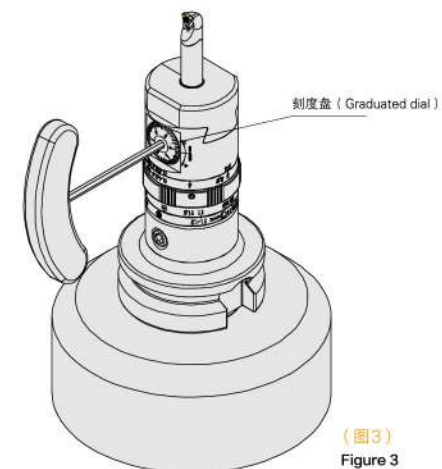
动平衡的调整 (如图 2) Adjustment of Balancing Weight (see figure 2)

- 松开平衡块锁紧螺钉
- 转动活动套，将最终镗孔直径与对应的刀杆刻度对齐
- 锁紧平衡块锁紧螺钉，完成调整
- Loose the clamping screw for balance weight
- Aim the diameter range at the dial by turning the sleeve
- Lock the screw tightly then finish the adjustment



尺寸调整 (如图 3) Adjustment (see figure 3)

- 连接专用的动平衡刀柄，对准锁紧孔，并锁紧螺钉
- 借助对刀仪，按工艺镗刀初始加工尺寸
- 试切、测量、调整微米镗刀刻度盘，补偿尺寸，达到工件图纸要求
- 微米镗刀刀体微调机构为自锁结构，不需松开锁定螺钉就可以直接调整刻度盘，调整完毕后，也无需锁紧螺钉
- Mount the suitable adaptor, and then lock the clamping screw.
- Adjusting the beginning dimension by the tool presetter.
- Test, measure the dimension, adjust the graduated dial, compensate size, and finally meet the requirements in the work piece diagram.
- There is a self-lock mechanism in the micron tool body part, then it can be adjusted directly without loosening any screw. It will be locked by itself after adjustment.



DAMPING TOOLS 小孔径微米镗刀

小孔径微米镗刀套装

Micron Boring Tool Set

小孔径微米镗刀套装 (Φ0.4—Φ12), 精镗头调整精度 Φ0.001 / 每格
 Micron boring tool set (Φ0.4-Φ12)
 Adjustable accuracy: Φ0.001mm/dial

订购型号 Ordering model	直径范围 Diameter range	含刀柄 Include adaptor	含镗刀和附件 Include boring bar and spare parts	适用机床主轴 Adapted spindle
KIT BT30.MBF D0.4-12.A	Φ6~12	BT30 K40x50	A 型	BT30
KIT BT40.MBF D0.4-12.A	Φ6~12	BT40 K40x50	A 型	BT40
KIT BT50.MBF D0.4-12.A	Φ6~12	BT50 K40x70	A 型	BT50
KIT DIN69871 30.MBF D0.4-12.A	Φ6~12	DIN69871 30 K40x50	A 型	DIN69871 30
KIT DIN69871 40.MBF D0.4-12.A	Φ6~12	DIN69871 40 K40x50	A 型	DIN69871 40
KIT DIN69871 50.MBF D0.4-12.A	Φ6~12	DIN69871 50 K40x70	A 型	DIN69871 50
KIT BT30.MBF D0.4-12.B	Φ3~12	BT30 K40x50	B 型	BT30
KIT BT40.MBF D0.4-12.B	Φ3~12	BT40 K40x50	B 型	BT40
KIT BT50.MBF D0.4-12.B	Φ3~12	BT50 K40x70	B 型	BT50
KIT DIN69871 30.MBF D0.4-12.B	Φ3~12	DIN69871 30 K40x50	B 型	DIN69871 30
KIT DIN69871 40.MBF D0.4-12.B	Φ3~12	DIN69871 40 K40x50	B 型	DIN69871 40
KIT DIN69871 50.MBF D0.4-12.B	Φ3~12	DIN69871 50 K40x70	B 型	DIN69871 50
KIT BT30.MBF D0.4-12.C	Φ0.4~12	BT30 K40x50	C 型	BT30
KIT BT40.MBF D0.4-12.C	Φ0.4~12	BT40 K40x50	C 型	BT40
KIT BT50.MBF D0.4-12.C	Φ0.4~12	BT50 K40x70	C 型	BT50
KIT DIN69871 30.MBF D0.4-12.C	Φ0.4~12	DIN69871 30 K40x50	C 型	DIN69871 30
KIT DIN69871 40.MBF D0.4-12.C	Φ0.4~12	DIN69871 40 K40x50	C 型	DIN69871 40
KIT DIN69871 50.MBF D0.4-12.C	Φ0.4~12	DIN69871 50 K40x70	C 型	DIN69871 50

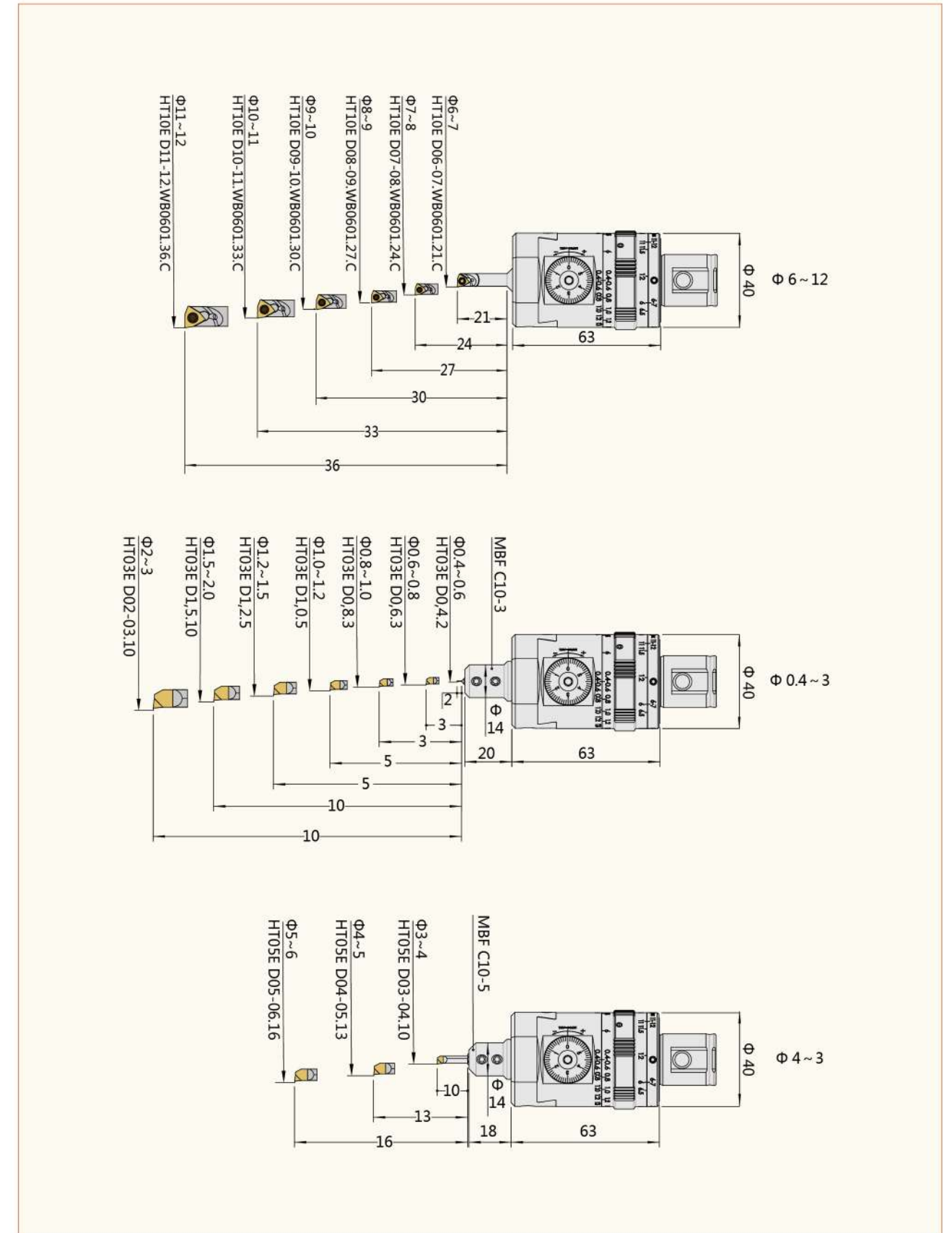
A 型 (Type A)	B 型 (Type B)	C 型 (Type C)
MBF D0.4-12.K40.Z1.63.C	MBF C10-5	MBF D0.4-12.K40.Z1.63.C
HT10E D06-07.WB060102.21.C	HT05E D03-04.10	HT03E D0,4.2
HT10E D07-08.WB060102.24.C	HT05E D04-05.13	HT03E D0,6.3
HT10E D08-09.WB060102.27.C	HT05E D05-06.16	HT03E D0,8.3
HT10E D09-10.WB060102.30.C	HT10E D06-07.WB060102.21.C	MBF C10-3
HT10E D10-11.WB060102.33.C	HT10E D07-08.WB060102.41C	MBF C10-5
HT10E D11-12.WB060102.36.C	HT10E D08-09.WB060102.27C	HT03E D01-02.5
WBGT 060102	HT10E D09-10.WB060102.30C	HT03E D02-03,10
	HT10E D10-11.WB060102.33C	HT05E D03-04,10
	HT10E D11-12.WB060102.36C	HT05E D04-05,13
	WBGT 060102	HT05E D05-06,16
		HT10 D06-07.WB060102.21.C
		HT10 D07-08.WB060102.24.C
		HT10 D08-09.WB060102.27.C
		HT10 D09-10.WB060102.30.C
		HT10 D10-11.WB060102.33.C
		HT10 D11-12.WB060102.36.C
		WBGT 060102



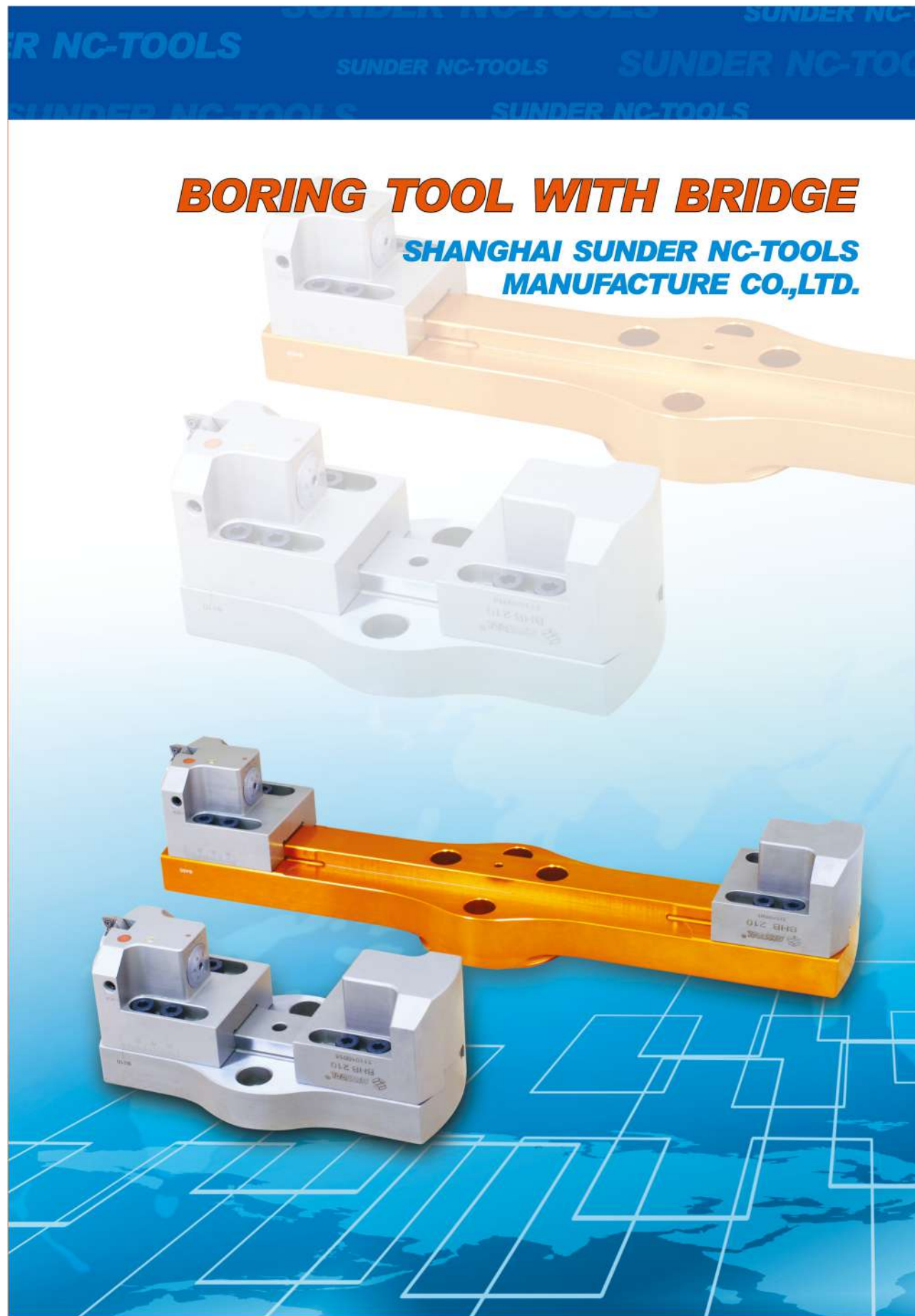
DAMPING TOOLS 小孔径微米镗刀

组合示意图

Combination



● 标准库存 Item in stock
 ● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
 ○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)



BORING TOOL WITH BRIDGE

SHANGHAI SUNDER NC-TOOLS
MANUFACTURE CO.,LTD.

BORING TOOL WITH BRIDGE 桥式镗刀

NLR 双刃桥式粗镗刀

NLR Two Flute Boring Tool With Bridge

适用于大孔加工的双刃桥式粗镗刀，全磨制导向槽，标准型加工范围 $\Phi 150-\Phi 210$ ，适配大矩形槽双刃桥式粗镗刀座。

It is suitable for the finish machining for the large diameter, complete ground guide slot, the boring range is $\Phi 150-\Phi 210$. There is special cartridge for it.

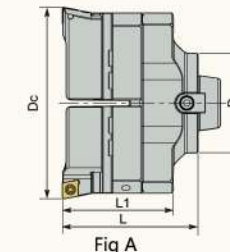


Fig A

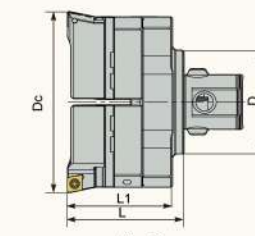
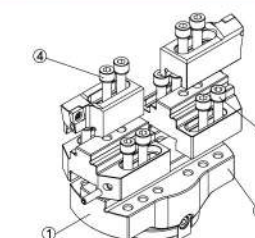


Fig B

规格型号 Designation	Dc	L1	L	D	Fig	手柄接口 Connection	Kg	适配刀座 Cartridge	在库 Stock
NLR D150-210.E63	150-210	89	105	63	A	E63	5.0	L..A D150..	●
NLR D150-210.E80	150-210	89	109	80	A	E80	5.4	L..A D150..	●
NLR D150-210.K63	150-210	89	99	63	B	K63	5.1	L..A D150..	●
NLR D150-210.K90	150-210	89	99	88	B	K90	5.4	L..A D150..	●

- 适配刀座单独订购，请参照：☞ A061 页
- 适配刀柄需单独订购，请参照：☞ A019-A023, A039-A043 页
- 加工不同材料刀具的切削参数，☞ K001-K004 页
- 订货示例：1 件 NLR D150-210.E63
- The cartridge should be ordered separately, please see page A061.
- The adaptor should be ordered separately, please see page A019-A023, A039-A043.
- Recommended cutting data please see page K001-K004.
- Ordering sample: 1 PC NLR D150-210.E63.



备件

Spare Parts

Dc	①刀桥 Bridge	②滑块 Cartridge holder	③滑块锁紧螺钉 Clamping screw for cartridge holder	④刀座锁紧螺钉 Clamping screw for cartridge	锁紧扳手 Allen key for clamping screw
150-210	SNL 150-210.E63	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6
	SNL 150-210.E80	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6
	SNL 150-210.K63	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6
	SNL 150-210.K90	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6

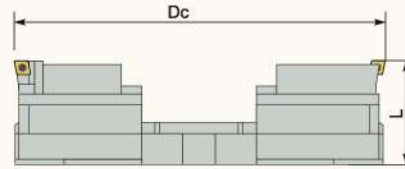
BORING TOOL WITH BRIDGE 桥式镗刀

NLR 双刃桥式粗镗刀

NLR Two Flute Boring Tool With Bridge

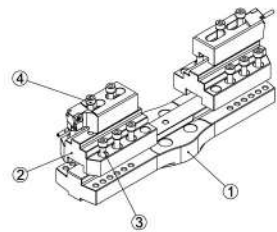
适用于大孔加工的双刃桥式粗镗刀，全磨制导向槽，标准型加工范围 $\Phi 210-\Phi 850$ ，适配大矩形槽双刃桥式粗镗刀座。

It is suitable for the finish machining for the large diameter, complete ground guide slot, the boring range is $\Phi 210-\Phi 850$. There is special cartridge for it.



规格型号 Designation	Dc	L	手柄接口 Connection	Kg	适配刀头 Cartridge	在库 Stock
NLR D210-290	210-290	89	SNL 32	4.83	L..A D150..	●
NLR D290-370	290-370	89	SNL 32	6.13	L..A D150..	●
NLR D370-490	370-490	100	SNL 32	12.64	L..A D370..	●
NLR D490-610	490-610	115	SNL 32	17.22	L..A D370..	●
NLR D610-730	610-730	120	SEL 40	22.6	L..A D370..	●
NLR D730-850	730-850	125	SEL 40	26.83	L..A D370..	●

- 适配刀座单独订购，请参照：A061 页
- 适配刀柄单独订购，请参照：A062 页
- 加工不同材料刀具的切削参数，请参照：K001-K004 页
- 订货示例：1 件 NLR D210-290
- The cartridge should be ordered separately, please see page A061.
- The adaptor should be ordered separately, please see page A062.
- The different cutting parameters of cutting tools for machining different materials, please see page K001-K004.
- Ordering sample: 1 PC NLR D210-290



备件

Spare Parts

Dc	①刀桥 Bridge	②滑块 Cartridge holder	③滑块锁紧螺钉 Clamping screw for cartridge holder	④刀座锁紧螺钉 Clamping screw for cartridge	锁紧扳手 Allen key for clamping screw
210-290	SNL 210-290	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6
290-370	SNL 290-370	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6
370-490	SNL 370-490	BLR 150 2 件	SR55 M8x35 12 件	SR55 M8x25 4 件	KEY01 M6
490-610	SNL 490-610	NLR 370 2 件	SR55 M8x35 12 件	SR55 M8x25 4 件	KEY01 M6
610-730	SNL 610-730	NLR 370 2 件	SR55 M8x35 12 件	SR55 M8x25 4 件	KEY01 M6
730-850	SNL 730-850	NLR 370 2 件	SR55 M8x35 12 件	SR55 M8x25 4 件	KEY01 M6

- 若有刀具质量过重的问题，可选用铝合金刀桥（质量减轻 60%），订货时请注明 AL：
如：
钢制桥式镗刀：NLR730-850 单独订购钢制刀桥：SNL 730-850
铝合金桥式镗刀：NLR 730-850AL 单独订购铝合金刀桥：SNL 730-850AL
- Please choose the connection made from aluminum which will be 60% lighter than the ordinary material, if considering the weight, and please indicate AL when ordering.
For example:
Connection made from steel: NLR 730-850 Ordering the steel connection separately: SNL 730-850
Connection made from aluminum: NLR 730-850AL Ordering the aluminum connection separately: SNL 730-850AL

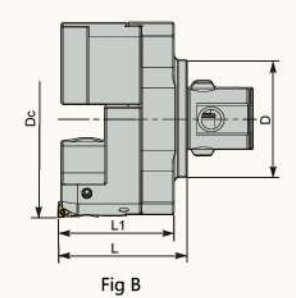
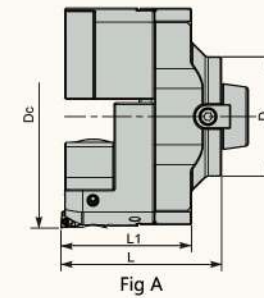
BORING TOOL WITH BRIDGE 桥式镗刀

NLF 单刃桥式微调精镗刀

NLF Precision Boring Tool with Bridge

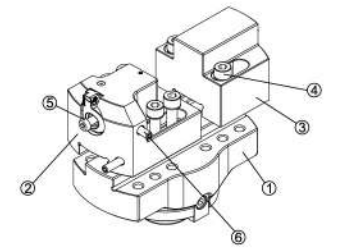
适用于大孔加工的单刃桥式微调精镗刀，调整精度高，每格直径 0.01mm，标准型加工范围 $\Phi 150-\Phi 210$ 。

It is suitable for the finish machining for large diameter, with high accuracy 0.01mm/dial. The diameter range is $\Phi 150-\Phi 210$.



规格型号 Designation	Dc	L1	L	D	Fig	手柄接口 Connection	Kg	适配刀头 Cartridge	在库 Stock
NLF D150-210.E63	150-210	87	103	63	A	E63	5.3	FRB 25A..	●
NLF D150-210.E80	150-210	87	107	80	A	E80	5.8	FRB 25A..	●
NLF D150-210.K63	150-210	87	97	63	B	K63	5.5	FRB 25A..	●
NLF D150-210.K90	150-210	87	97	88	B	K90	5.8	FRB 25A..	●

- 适配刀座单独订购，请参照：A048 页
- 适配刀柄单独订购，请参照：A019-A023, A039-A043 页
- 加工不同材料刀具的切削参数，请参照：K005 页
- 订货示例：1 件 NLF D150-210.E63
- The cartridge should be ordered separately, please see page A048.
- The adaptor should be ordered separately, please see page A019-A023, A039-A043.
- The different cutting parameters of cutting tools for machining different materials, please see page K005.
- Ordering sample: 1 PC NLF D150-210.E63



备件

Spare Parts

Dc	①刀桥 Bridge	②微调模块 Cartridge holder	③配重模块 Balance block	④滑块锁紧螺钉 Clamping screw for cartridge holder	⑤刀头锁紧螺钉 Clamping screw for cartridge	⑥ LOCK 螺钉 Locking screw
150-210	SNL 150-210.E63	NLF 150 1 件	BHB 150 1 件	SR55 M8x35 6 件	SR56 M6x16 1 件	SR54 M6x12 1 件
	SNL 150-210.E80	NLF 150 1 件	BHB 150 1 件	SR55 M8x35 6 件	SR56 M6x16 1 件	SR54 M6x12 1 件
	SNL 150-210.K63	NLF 150 1 件	BHB 150 1 件	SR55 M8x35 6 件	SR56 M6x16 1 件	SR54 M6x12 1 件
	SNL 150-210.K90	NLF 150 1 件	BHB 150 1 件	SR55 M8x35 6 件	SR56 M6x16 1 件	SR54 M6x12 1 件

- 标准库存
Item in stock
- 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

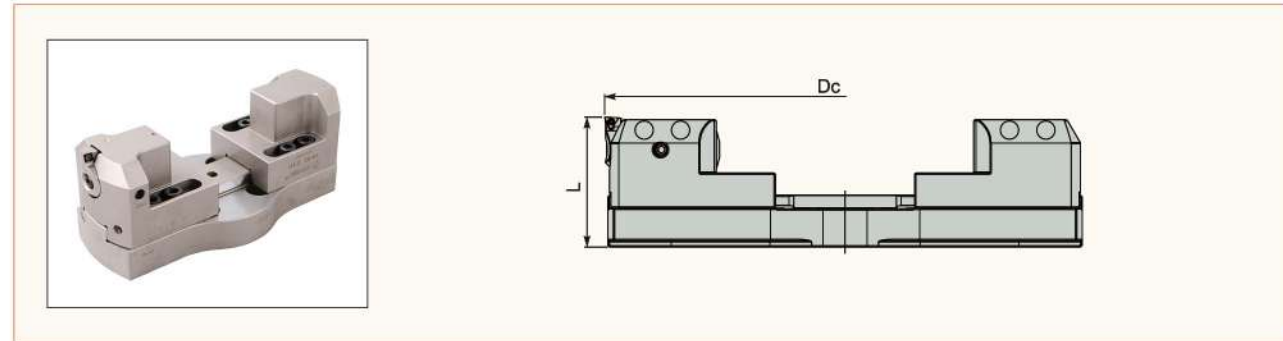
- 标准库存
Item in stock
- 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

BORING TOOL WITH BRIDGE 桥式镗刀

NLF 单刃桥式微调精镗刀

NLF Precision Boring Tool with Bridge

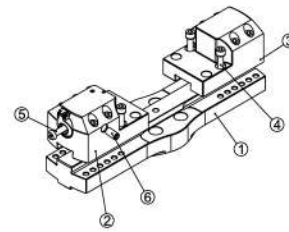
适用于大孔加工的单刃桥式微调精镗刀，调整精度高，每格直径 0.01mm，标准型加工范围 $\Phi 210-\Phi 850$ 。
It is suitable for the finish machining for large diameter, with high accuracy 0.01mm/dial. The diameter range is $\Phi 210-\Phi 850$.



规格型号 Designation	Dc	L	手柄接口 Connection	Kg	适配刀头 Cartridge	在库 Stock
NLF D210-290	210-290	89	SNL 32	6.0	FRB 25A..	●
NLF D290-370	290-370	89	SNL 32	7.3	FRB 25A..	●
NLF D370-490	370-490	100	SNL 32	12.64	FRB 30A..	●
NLF D490-610	490-610	115	SNL 32	17.22	FRB 30A..	●
NLF D610-730	610-730	120	SEL 40	22.6	FRB 30A..	●
NLF D730-850	730-850	125	SEL 40	26.83	FRB 30A..	●

- 适配刀座单独订购，请参照：A048 页
- 适配刀柄需单独订购，请参照：A062 页
- 加工不同材料刀具的切削参数，请参照：K005 页
- 订货示例：1 件 NLF D210-290

- The cartridge should be ordered separately, please see page A048.
- The adaptor should be ordered separately, please see page A062.
- Recommended cutting data please see page K005.
- Ordering sample: 1 PC NLF D210-290



备件

Spare Parts

Dc	①刀桥 Bridge	②微调模块 Cartridge holder	③配重模块 Balance block	④模块锁紧螺钉 Clamping screw for cartridge holder	⑤刀头锁紧螺钉 Clamping screw for cartridge	⑥ LOCK 螺钉 Locking screw
210-290	SNL 210-290	NLF 150 1 件	BHB 210 1 件	SR55 M8x35 8 件	SR56 M6x16 1 件	SR54 M6x12 1 件
290-370	SNL 290-370	NLF 150 1 件	BHB 210 1 件	SR55 M8x35 8 件	SR56 M6x16 1 件	SR54 M6x12 1 件
370-490	SNL 370-490	NLF 370 1 件	BHB 370 1 件	SR55 M8x35 12 件	SR56 M8x25 1 件	SR54 M10x20 1 件
490-610	SNL 490-610	NLF 370 1 件	BHB 370 1 件	SR55 M8x35 12 件	SR56 M8x25 1 件	SR54 M10x20 1 件
610-730	SNL 610-730	NLF 370 1 件	BHB 370 1 件	SR55 M8x35 12 件	SR56 M8x25 1 件	SR54 M10x20 1 件
730-850	SNL 730-850	NLF 370 1 件	BHB 370 1 件	SR55 M8x35 12 件	SR56 M8x25 1 件	SR54 M10x20 1 件

- 若有刀具质量超重的问题，可选用铝合金刀桥（重量减轻 60%）订货时请注册 AL。
如：钢制桥式镗刀：NLR 730-850 单独订购钢制刀桥：SNL 730-850AL
铝合金桥式镗刀：NLR 730-850AL 单独订购铝合金刀桥：SNL730-850AL
- Please choose the connection made from aluminum which will be 60% lighter than the ordinary material. If considering the weight, and please indicate AL when ordering.
For example:
Connection made from steel: NLR 730-850 Ordering the steel connection separately: SNL 730-850
Connection made from aluminum: NLR 730-850AL Ordering the aluminum connection separately: SNL 730-850AL

备件 Spare Parts	螺钉扳手 Allen key for clamping screw
SR55 M8x35	KEY01 M6
SR54 M6x12	KEY01 M3
SR54 M10x20	KEY01 M5
SR56 M6x16	KEY01 M4
SR56 M8x25	KEY01 M5

- 标准库存
Item in stock
- 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

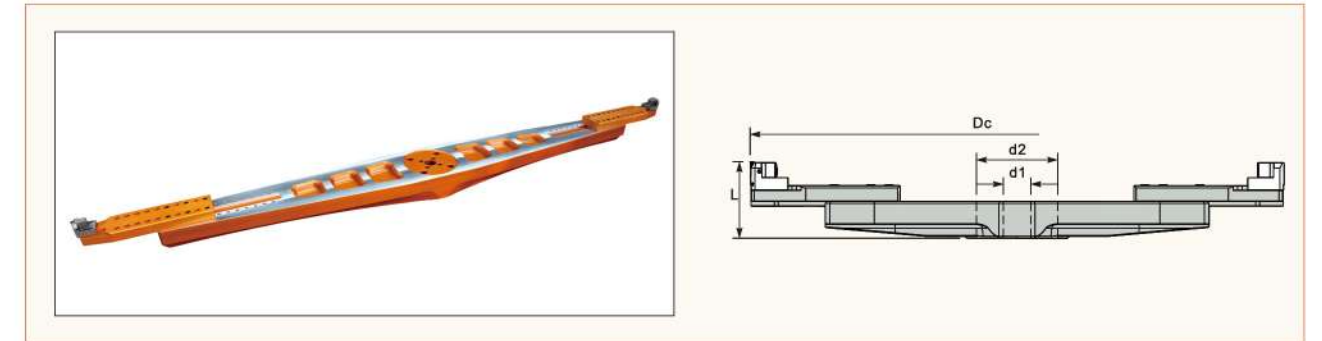
BORING TOOL WITH BRIDGE 桥式镗刀

大型铝合金桥式粗 / 精镗刀

Boring Tools (Rough/Finish) with Aluminum Bridge

镗孔范围 $\Phi 850$ 以上的桥式粗 / 精镗刀可根据客户的机床及加工尺寸等定制，高强度铝合金基体，重量轻，刚性足，调整范围大；刀座及刀片可方便更换，调整精度高，精镗微量每格直径 0.01mm。

We could do the customer designed boring tool if the boring range is diameter than $\Phi 850$ mm which depends on the size of machined work piece and machines. The body is made from high strength aluminum which is with the features of lighter weight, higher rigidity, wider adjusting range. It is so convenient to replace the cartridges and inserts, with high precision, and the dial each of which is 0.01 mm on diameter.



大型铝合金桥式精镗刀

Precision Boring Tool with Aluminum Bridge

Dc	刀桥 Bridge	延伸块 Extension slide	微调模块 Cartridge holder	配重模块 Balance block	适配刀头 Cartridge	组合规格 Assembled specification	L	d1	kg	在库 Stock
850-1250	SEL 850AL	BL400AL	NLF 150	BHB 210	FRB 25A...	BLF D850-1250AL	167	60	31	○
1200-1600	SEL 1200AL	BL400AL	NLF 150	BHB 210	FRB 25A...	BLF D1200-1600AL	177	60	42	○
1450-1850	SEL 1450AL	BL400AL	NLF 150	BHB 210	FRB 25A...	BLF D1450-1850AL	187	60	62	○
1450-2090	SEL 1450AL	BL640AL	NLF 150	BHB 210	FRB 25A...	BLF D1450-2090AL	197	60	72	○
2050-2690	SEL 2050AL	BL640AL	NLF 150	BHB 210	FRB 25A...	BLF D2050-2690AL	207	60	112	○
2660-3300	SEL 2660AL	BL640AL	NLF 150	BHB 210	FRB 25A...	BLF D2660-3300AL	217	60	172	○

大型铝合金桥式粗镗刀

Rough Boring Tool with Aluminum Bridge

Dc	刀桥 Bridge	延伸块 Extension slide	调整块 Cartridge holder	适配刀头 Cartridge	组合规格 Assembled specification	L	d1	kg	在库 Stock
850-1250	SEL 850AL	BL400AL	BLR 150	L..A D150..	BLR D850-1250AL	169	60	30	○
1200-1600	SEL 1200AL	BL400AL	BLR 150	L..A D150..	BLR D1200-1600AL	179	60	41	○
1450-1850	SEL 1450AL	BL400AL	BLR 150	L..A D150..	BLR D1450-1850AL	189	60	61	○
1450-2090	SEL 1450AL	BL640AL	BLR 150	L..A D150..	BLR D1450-2090AL	199	60	71	○
2050-2690	SEL 2050AL	BL640AL	BLR 150	L..A D150..	BLR D2050-2690AL	209	60	111	○
2660-3300	SEL 2660AL	BL640AL	BLR 150	L..A D150..	BLR D2660-3300AL	219	60	171	○

- 也可选配粗精组合配件，粗精加工一次完成！详情咨询销售工程师。
- If choosing both of rough and finish combined parts, it can do finish and rough machining just at one time, for any details please contact our sales engineers.

- 标准库存
Item in stock
- 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

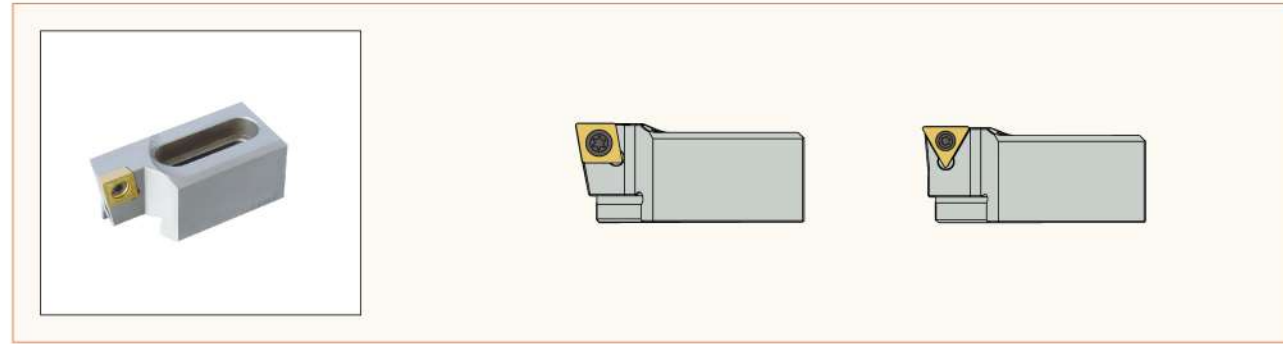
BORING TOOL WITH BRIDGE 桥式镗刀

NLR 双刃桥式粗镗刀刀座

Cartridge for NLR Large Diameter Rough Boring Head

全磨制大矩形槽导向，适用于桥式粗镗刀。

It is with the guide slot which is complete ground, and suitable for all of the large diameter rough and fine boring tools.



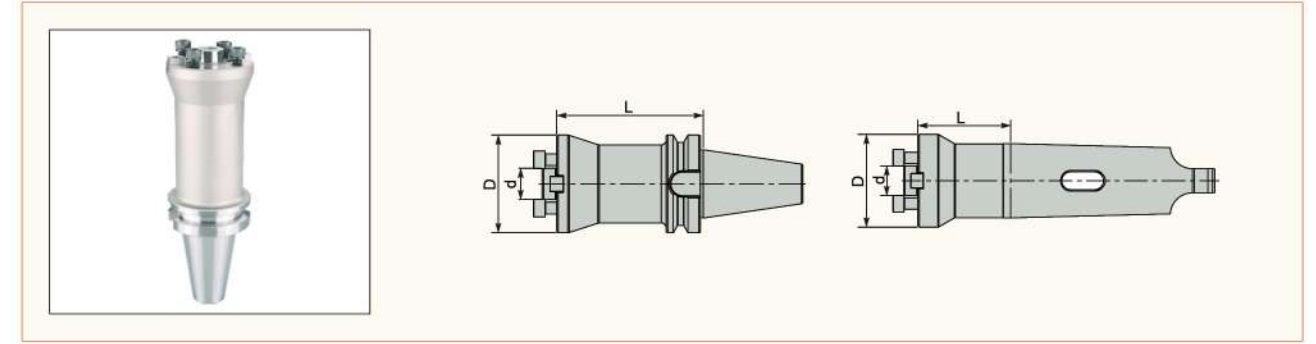
规格型号 Designation	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw	刀座调整螺钉 Adjusting screw for cartridge	刀座调整扳手 Allen key for adjusting screw	Kg	在库 Stock
L90A D150.CC12	CC..1204..	SR21 M5x12.8	KEY02 T20	SR50 M5x20	KEY01 M2.5	0.31	●
L90A D150.TC16	TC..16T3..	SR21 M4x9.5	KEY02 T15	SR50 M5x20	KEY01 M2.5	0.31	●
L90A D150.TC22	TC..2204..	SR21 M5x12.8	KEY02 T20	SR50 M5x20	KEY01 M2.5	0.34	●
L84A D150.SO16	SO..1605..	SR20 M5x13.8	KEY02 T15	SR50 M5x20	KEY01 M2.5	0.34	●
L45A D150.SC12	SC..1204..	SR21 M5x12.8	KEY02 T20	SR50 M5x20	KEY01 M2.5	0.34	●
L90A D370.CC12	CC..1204..	SR21 M5x12.8	KEY02 T20	SR50 M5x20	KEY01 M2.5	0.74	●
L90A D370.TC16	TC..16T3..	SR21 M4x9.5	KEY02 T15	SR50 M5x20	KEY01 M2.5	0.74	●
L90A D370.TC22	TC..2204..	SR21 M5x12.8	KEY02 T20	SR50 M5x20	KEY01 M2.5	0.79	●
L84A D370.SO16	SO..1605..	SR20 M5x13.8	KEY02 T15	SR50 M5x20	KEY01 M2.5	0.79	●
L45A D370.SC12	SC..1204..	SR21 M5x12.8	KEY02 T20	SR50 M5x20	KEY01 M2.5	0.79	●

- 刀片请根据不同材料单独订购，请参照：F002-F005 页
- 订货示例：1 件 L90A D150.CC12
- Insert should be ordered separately, please see page F002,F005.
- Ordering sample: 1 PC L90A D150.CC12

BORING TOOL WITH BRIDGE 桥式镗刀

桥式镗刀刀柄

Adaptor for Boring Tool with Bridge

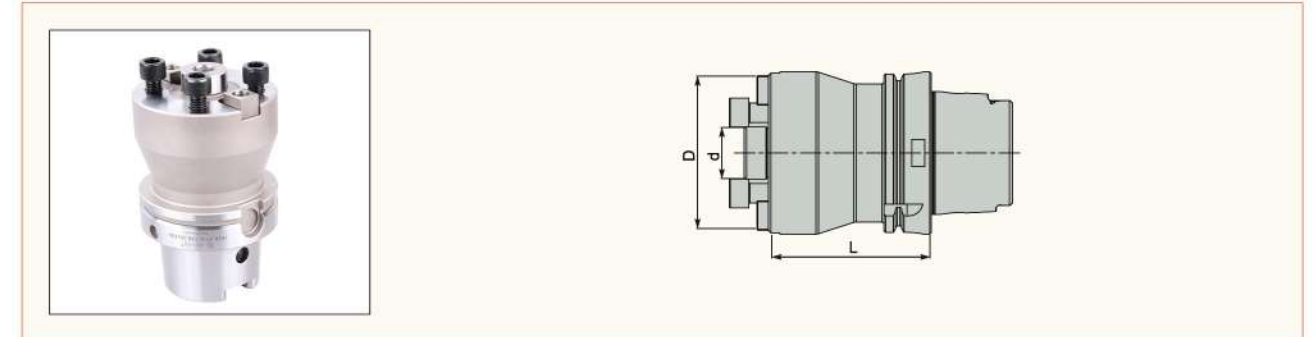


规格型号 Designation	柄部标准 Iso	L	d	D	锁刀螺钉 Clamping screw	平键 Flat key	Kg	在库 Stock
BT40 SNL32x60	BT40	60	32	100	SR55 M12x35	PL10 16x14	2.52	●
BT50 SNL32x100	BT50	100	32	100	SR55 M12x35	PL10 16x14	6.65	●
BT50 SNL32x150	BT50	150	32	100	SR55 M12x35	PL10 16x14	8.74	●
BT50 SNL32x200	BT50	200	32	100	SR55 M12x35	PL10 16x14	10.44	●
BT50 SNL32x250	BT50	250	32	100	SR55 M12x35	PL10 16x14	12.32	●
BT50 SNL32x300	BT50	300	32	100	SR55 M12x35	PL10 16x14	14.21	●
BT50 SNL32x350	BT50	350	32	100	SR55 M12x35	PL10 16x14	16.1	●
DIN69871 50 SNL32x100	DIN69871 50	100	32	100	SR55 M12x35	PL10 16x14	6.65	●
DIN69871 50 SNL32x150	DIN69871 50	150	32	100	SR55 M12x35	PL10 16x14	8.74	●
DIN69871 50 SNL32x200	DIN69871 50	200	32	100	SR55 M12x35	PL10 16x14	10.44	●
DIN69871 50 SNL32x250	DIN69871 50	250	32	100	SR55 M12x35	PL10 16x14	12.32	●
DIN69871 50 SNL32x300	DIN69871 50	300	32	100	SR55 M12x35	PL10 16x14	14.21	●
DIN69871 50 SNL32x350	DIN69871 50	350	32	100	SR55 M12x35	PL10 16x14	15.1	●
MT80A SNL32x100	米制 80 Metric 80	100	32	100	SR55 M12x35	PL10 16x14	10.95	●

- 刀柄尺寸：D001 页, D018 页
- 订货示例：1 件 BT40 SNL32x60
- Size of tool holder: please see page D001,D018.
- Ordering sample: 1 PC BT 40 SNL32x60

HSK 桥式镗刀柄

HSK Adaptor for Boring Tool with Bridge



规格型号 Designation	柄部标准 Iso	L	d	D	锁刀螺钉 Clamping screw	平键 Flat key	Kg	在库 Stock
HSK A100 SNL32x100	HSK A100	100	32	100	SR55 M12x35	PL10 16x14	5.87	●
HSK A100 SNL32x150	HSK A100	150	32	100	SR55 M12x35	PL10 16x14	7.81	●
HSK A100 SNL32x200	HSK A100	200	32	100	SR55 M12x35	PL10 16x14	9.95	●
HSK A100 SEL40x100	HSK A100	100	40	136	SR55 M16x50	PL10 25x18	8.80	●
HSK A100 SEL40x250	HSK A100	250	40	136	SR55 M16x50	PL10 25x18	15.7	●

- 刀柄尺寸：D032 页
- 订货示例：1 件 BT40 SNL32x60
- Size of tool holder: please see page D032.
- Ordering sample: 1 PC BT 40 SNL32x60

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

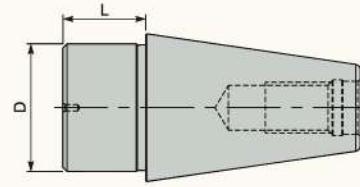
BORING TOOL WITH BRIDGE 桥式镗刀

定位芯轴

Location Spindle

D610 以上桥式镗刀可与机床主轴连接，连接时必须用此定位芯轴定心。

The boring tool could be connected directly to the spindle of the machine without any tool holders, if the hole diameter is larger than $\Phi 610\text{mm}$, but positioning spindle must be used.



规格型号 Designation	ISO	D	L	Kg	在庫 Stock
ISO50 SEM40	50	40	26	1.94	●
ISO50 SEM60	50	60	39	2.53	●
ISO60 SEM40	60	40	27	6.87	●
ISO60 SEM60	60	60	43	7.54	●

● 订货示例：1 件 ISO50 SEM40

● Ordering sample: 1 PC ISO50 SEM40

SUNDER NC-TOOLS SUNDER NC-TOOLS SUNDER NC-TOOLS

TALESCOPIC BACK BORING TOOL

SHANGHAI SUNDER NC-TOOLS MANUFACTURE CO.,LTD.

AUTOMATIC TELESCOPIC BACK BORING TOOL

自动伸缩式反刮刀

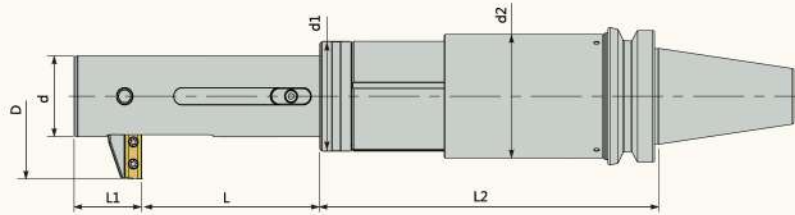
自动伸缩式反刮刀

Automatic Telescopic Back Boring Tool

适用于要求反刮面直径大，但过孔直径小，反刮面直径不大于过孔直径的2倍时均可使用；全自动的进出机构，无需定位装置；可根据客户需求订制。

It is suitable for the requirements of large diameter of back boring place but smaller diameter of through hole, which dia. of back boring place is no larger than 2 times dia. of through hole.

There is no need to do the position due to the automatic turnover structure of the tool body.



规格型号 Designation	D	d	d1	d2	L	L1	L2	Kg	适配刀头 Cartridge	在庫 Stock
BT50 ABR D070-d035x330	70	34.5	80	90	75	60	255	10.6	ABR D071-D034.AC21	●
BT50 ABR D080-d040x330	80	39.5	80	90	75	55	255	11.1	ABR D081-D039.AC27	●
BT50 ABR D090-d045x330	90	44.5	80	90	75	55	255	11.6	ABR D091-D044.AC27	●
BT50 ABR D100-d050x330	100	49.5	80	90	75	51	255	12.0	ABR D101-D049.AC27	●
BT50 ABR D110-d055x330	110	54.5	80	90	75	51	255	12.7	ABR D111-D054.AC32	●
BT50 ABR D120-d060x330	120	59.5	80	90	75	51	255	13.4	ABR D121-D064.AC37	●
BT50 ABR D130-d065x330	130	64.5	80	90	75	51	255	14.2	ABR D131-D064.AC37	●
BT50 ABR D140-d070x330	140	69.5	80	90	75	51	255	15.3	ABR D141-D069.AC37	●
DIN69871 50 ABR D070-d035x350	70	34.5	80	90	75	60	275	10.4	ABR D071-D034.AC21	●
DIN69871 50 ABR D080-d040x350	80	39.5	80	90	75	55	275	10.9	ABR D081-D039.AC27	●
DIN69871 50 ABR D090-d045x350	90	44.5	80	90	75	55	275	11.4	ABR D091-D044.AC27	●
DIN69871 50 ABR D100-d050x350	100	49.5	80	90	75	51	275	11.8	ABR D101-D049.AC27	●
DIN69871 50 ABR D110-d055x350	110	54.5	80	90	75	51	275	12.5	ABR D111-D054.AC32	●
DIN69871 50 ABR D120-d060x350	120	59.5	80	90	75	51	275	13.2	ABR D121-D059.AC37	●
DIN69871 50 ABR D130-d065x350	130	64.5	80	90	75	51	275	14.1	ABR D131-D064.AC37	●
DIN69871 50 ABR D140-d070x350	140	69.5	80	90	75	51	275	15.1	ABR D141-D069.AC37	●

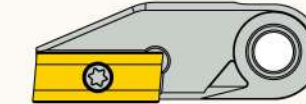
- 订货示例：1件 BT50 ABR D070-d035x330
- 根据反刮直径不同可更换不同的刀头，请参照：A066 页
- 刀头需单独订购，请参照：A066 页
- Ordering sample: 1 PC BT50 ABR D070-d035x330.
- Select suitable cartridges as customer's requirements, please see page A066.
- The cartridge should be ordered separately, please see page A066.

AUTOMATIC TELESCOPIC BACK BORING TOOL

自动伸缩式反刮刀

反刮刀刀头

Cartridge



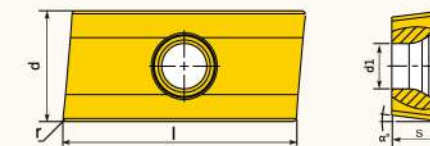
规格型号 Designation	适配刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for Clamping screw	刀座锁紧螺钉 Clamping screw for cartridge	锁紧螺钉扳手 Allen key for Clamping screw	在庫 Stock
ABR D071-D034.AC21	ACMX 2104-DL	SR20 M5X11	KEY02 T20	SR54 M4x6	KEY01 M2	●
ABR D081-D039.AC27	ACMX 2706-DL	SR20 M5X11	KEY02 T20	SR54 M4x6	KEY01 M2	●
ABR D091-D044.AC27	ACMX 2706-DL	SR20 M5X11	KEY02 T20	SR54 M4x6	KEY01 M2	●
ABR D101-D049.AC27	ACMX 2706-DL	SR20 M5X11	KEY02 T20	SR54 M4x6	KEY01 M2	●
ABR D111-D054.AC32	ACMX 3206-DL	SR20 M5X11	KEY02 T20	SR54 M4x6	KEY01 M2	●
ABR D121-D059.AC37	ACMX 3706-DL	SR20 M5X11	KEY02 T20	SR54 M4x6	KEY01 M2	●
ABR D131-D064.AC37	ACMX 3706-DL	SR20 M5X11	KEY02 T20	SR54 M4x6	KEY01 M2	●
ABR D141-D069.AC37	ACMX 3706-DL	SR20 M5X11	KEY02 T20	SR54 M4x6	KEY01 M2	●

- ACMX 3706-DL 刀片为两个锁紧螺钉。
- 订货示例：1件 ABR D071-D034.AC21.

- Two clamping screws need for ACMX3706-DL insert.
- Ordering sample: 1 PC ABR D071-D034AC21.

反刮刀刀片

Insert



规格型号 Designation	l	d	d1	r	S	α	材质 Grade SH1005
ACMX 2104-DL	21	12.7	5.2	0.5	4.76	7	●
ACMX 2706-DL	27	12.7	5.2	0.5	6	7	●
ACMX 3206-DL	32	12.7	5.2	0.5	6	7	●
ACMX 3706-DL	37	12.7	5.2	0.5	6	7	●

- ACMX 3706-DL 刀片为两个锁紧孔。
- 刀片材质为粉末 HSS+ 涂层。

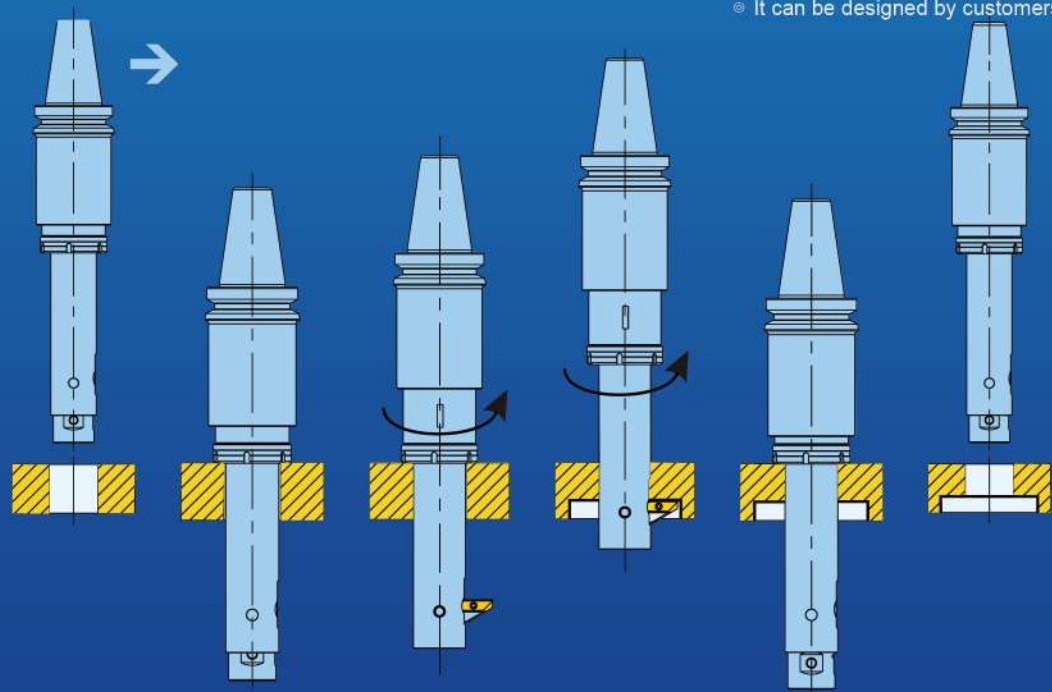
- Two clamping screws need for ACMX 3706-DL insert.
- Grade is powder HSS with coating.



特点 Features

- ⊙ 适用于要求反刮面直径大，但过孔直径小的位置；
 - ⊙ 反刮面直径不大于过孔直径的 2 倍时均可使用此刀具；
 - ⊙ 全自动的进出机构，不需要定位装置；
 - ⊙ 反刮效率高；
 - ⊙ 安全系数高；
 - ⊙ 一把刀具可对应不同规格的反刮面；
 - ⊙ 刀具根据客户需求非标订做。
- ⊙ It is suitable for the requirements of large diameter of back boring place but smaller diameter of the through hole.
 - ⊙ Using this tool when the diameter of back boring place is no larger than 2 times diameter of through hole.
 - ⊙ There is no need to do the positioning device due to the automatic turnover structure of the tool body.
 - ⊙ Highre performance.
 - ⊙ Higher coefficient of safety.
 - ⊙ One tool can meet several back boring diameters.
 - ⊙ It can be designed by customers' requirements

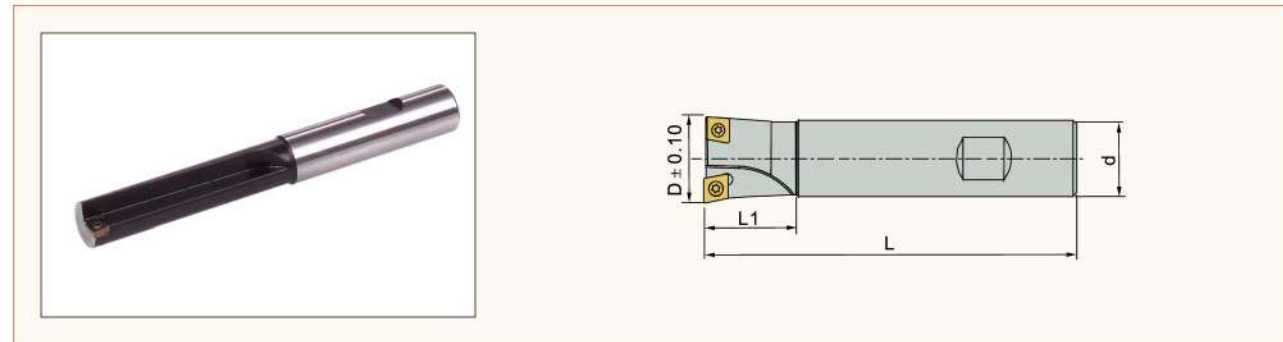
加工示意图 Processing Schematic



SOLID BORING TOOL 整体式镗刀

定尺寸镗刀

Fixed Size Boring Tool



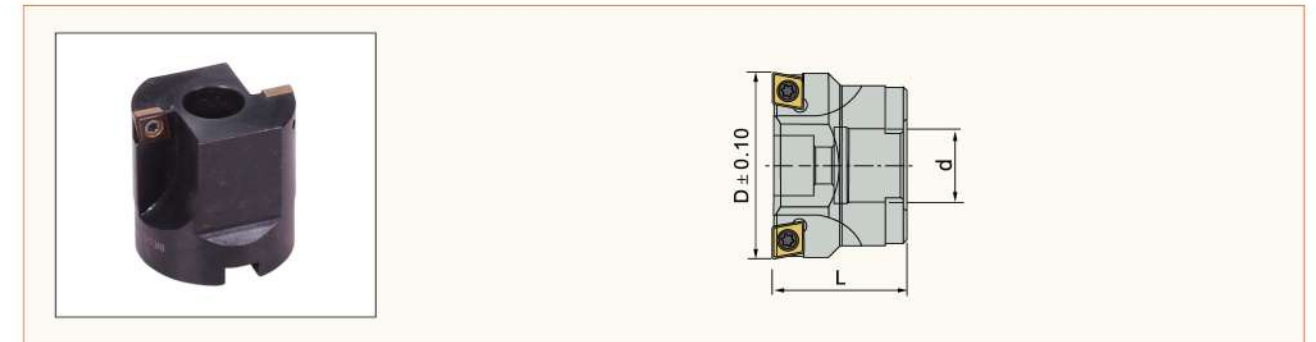
规格型号 Designation	D	d	L	L1	刃数 Z	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw	在庫 Stock
BR D17.7.W16.C6.120	17.7	16	120	30	2	CC..060204	SR20 M2.5x6	KEY02 T8	○
BR D18.7.W16.C6.120	18.7	16	120	30	2	CC..060204	SR20 M2.5x6	KEY02 T8	○
BR D19.7.W16.C6.120	19.7	16	120	30	2	CC..060204	SR20 M2.5x6	KEY02 T8	○
BR D21.7.W16.C6.120	21.7	16	120	30	2	CC..060204	SR20 M2.5x6	KEY02 T8	○
BR D23.7.W20.C6.130	23.7	20	130	30	2	CC..060204	SR20 M2.5x6	KEY02 T8	○
BR D24.7.W20.C6.130	24.7	20	130	30	2	CC..060204	SR20 M2.5x6	KEY02 T8	○
BR D25.7.W20.C9.130	25.7	20	130	30	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D26.7.W20.C9.130	26.7	20	130	30	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D27.7.W20.C9.130	27.7	20	130	30	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D29.7.W25.C9.160	29.7	25	160	40	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D31.7.W25.C9.160	31.7	25	160	40	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D34.7.W25.C9.160	34.7	25	160	40	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D39.7.W25.C9.160	39.7	25	160	40	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D41.7.W32.C12.200	41.7	32	200	45	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D44.7.W32.C12.200	44.7	32	200	45	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D47.7.W32.C12.200	47.7	32	200	45	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D49.7.W32.C12.200	49.7	32	200	45	2	CC..120408	SR21 M5x12.8	KEY02 T20	○

- 刀片请根据不同材料单独订购, 请参照: F002 页
- 加工不同材料刀具的切削参数, 请参照: K001-K004 页
- 订货示例: 1 件 BR D17.7.W16.C6.120
- Suitable insert should be ordered separately, please see page F002.
- Recommended cutting data please see page K001-K004.
- Ordering sample: 1PC BR D17.7.W16.C6.120.

SOLID BORING TOOL 整体式镗刀

定尺寸镗刀

Fixed Size Boring Tool



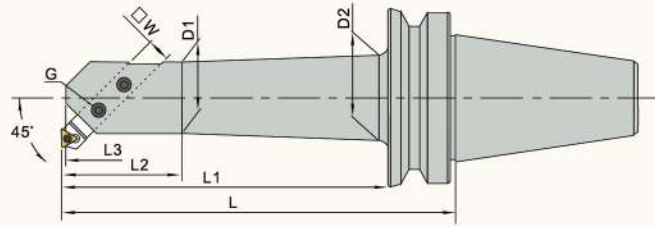
规格型号 Designation	D	d	L	刃数 Z	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw	在庫 Stock
BR D44.7.B22.C9.50	44.7	22	50	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D49.7.B22.C9.50	49.7	22	50	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D54.7.B22.C9.50	54.7	22	50	2	CC..09T304	SR21 M4x9.5	KEY02 T15	○
BR D59.7.B22.C12.50	59.7	22	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D61.7.B27.C12.50	61.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D64.7.B27.C12.50	64.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D69.7.B27.C12.50	69.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D74.7.B27.C12.50	74.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D79.7.B27.C12.50	79.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D84.7.B27.C12.50	84.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D89.7.B27.C12.50	89.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D94.7.B27.C12.50	94.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D99.7.B27.C12.50	99.7	27	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D104.7.B32.C12.50	104.7	32	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D109.7.B32.C12.50	109.7	32	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D114.7.B32.C12.50	114.7	32	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○
BR D119.7.B32.C12.50	119.7	32	50	2	CC..120408	SR21 M5x12.8	KEY02 T20	○

- 刀片请根据不同材料单独订购, 请参照: F002 页
- 加工不同材料刀具的切削参数, 请参照: K001-K004 页
- 订货示例: 1 件 BR D44.7.B22.C9.50
- Suitable insert should be ordered separately, please see page F002.
- Recommended cutting data please see page K001-K004.
- Ordering sample: 1PC BR D44.7.B22.C9.50

SOLID BORING TOOL 整体式镗刀

45° 单刃粗镗刀 (BT)

Kr=45° Rough Boring Tool with BT Adaptor



规格型号 Designation	镗孔范围 Boring range	适配刀座 Cartridge	刀座长度 Length	刀片 Insert	L	L1	L2	L3	D1	D2	W	G	Kg	在库 Stock
BT40 BSA25x135	25-38	SRC 08x45°.29	29	CC..0602..	135	108	35	1	20	24	8	M6	1.3	○
BT40 BSA30x165	30-42	SRC 08x45°.35	35	CC..0602..	165	138	40	1.6	24	28	8	M6	1.5	○
BT40 BSA38x180	38-52	SRC 10x45°.45	45	CC..0602..	180	153	50	2.6	30	36	10	M8	1.9	○
BT40 BSA50x180	50-70	SRC 13x45°.60	60	CC..09T3..	180	153	65	3	40	48	13	M10	2.6	○
BT40 BSA50x225	50-70	SRT 13x45°.60	60	TC..1102..	180	153	65	3	40	48	13	M10	2.6	○
BT40 BSA62x180	62-90	SRC 16x45°.75	75	CC..09T3..	180	153	80	2	50	60	16	M10	3.5	○
BT40 BSA62x240	62-90	SRT 16x45°.75	75	TC..16T3..	180	153	80	2	50	60	16	M10	3.5	○
BT40 BSA72x180	72-110	SRC 19x45°.88	88	CC..1204..	180	153	/	2.4	60	60	19	M10	4.2	○
BT40 BSA72x240	72-110	SRT 19x45°.88	88	TC..16T3..	180	153	/	3.4	60	60	19	M10	4.2	○
BT40 BSA90x225	90-125	SRC 19x45°.105	105	CC..1204..	225	198	82	4	75	60	19	M12	5.9	○
BT40 BSA90x300	90-125	SRT 19x45°.105	105	TC..16T3..	225	198	82	4	75	60	19	M12	5.9	○
BT50 BSA25x135	25-38	SRC 08x45°.29	29	CC..0602..	135	97	35	1	20	24	8	M6	3.9	○
BT50 BSA30x165	30-42	SRC 08x45°.35	35	CC..0602..	165	127	40	1.6	24	28	8	M6	4.1	○
BT50 BSA38x180	38-52	SRC 10x45°.45	45	CC..0602..	180	142	50	2.6	30	36	10	M8	4.5	○
BT50 BSA50x180	50-70	SRT 10x45°.45	45	TC..0902..	180	142	50	2.6	30	36	10	M8	4.5	○
BT50 BSA50x240	50-70	SRC 13x45°.60	60	CC..09T3..	180	142	65	3	40	48	13	M10	5.1	○
BT50 BSA62x195	62-90	SRC 16x45°.75	75	CC..09T3..	195	157	80	2	50	60	16	M10	6.2	○
BT50 BSA62x270	62-90	SRT 16x45°.75	75	TC..16T3..	195	157	80	2	50	60	16	M10	6.2	○
BT50 BSA72x195	72-110	SRC 19x45°.88	88	CC..1204..	195	157	95	2.4	60	70	19	M10	7.1	○
BT50 BSA72x285	72-110	SRT 19x45°.88	88	TC..16T3..	195	157	95	2.4	60	70	19	M10	7.1	○
BT50 BSA90x210	90-125	SRC 19x45°.105	105	CC..1204..	210	172	110	4	75	80	19	M12	9.3	○
BT50 BSA90x300	90-125	SRT 19x45°.105	105	TC..16T3..	210	172	110	4	75	80	19	M12	9.3	○
BT50 BSA105x195	105-160	SRC 25x45°.125	125	CC..1204..	300	262	110	4	75	80	19	M12	12.6	○
BT50 BSA105x300	105-160	SRT 25x45°.125	125	TC..16T3..	300	262	110	4	75	80	19	M12	12.6	○
BT50 BSA135x255	135-190	SRC 25x45°.168	168	CC..1204..	225	187	75	3	110	94	25	M12	15.1	○
BT50 BSA135x255	135-190	SRT 25x45°.168	168	TC..16T3..	225	187	75	3	110	94	25	M12	15.1	○

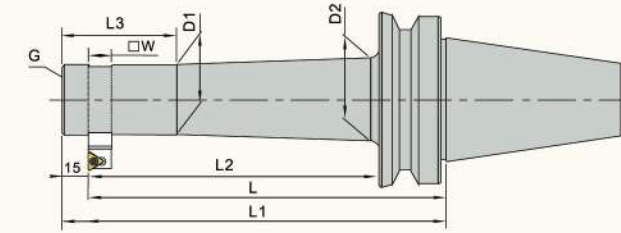
- 适配刀座需单独订购, 请参照: A074, A075 页
- 加工不同材料刀具的切削参数, 请参照: H001-H004 页
- 订货示例: 1 件 BT40 BSA25x135
- The cartridge should be ordered separately, please see page A074, A075.
- Recommended cutting data please see page H001-H004.
- Ordering sample: 1 PC BT40 BSA25x135.

- 标准库存 Item in stock
- ◐ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

SOLID BORING TOOL 整体式镗刀

90° 单刃粗镗刀 (BT)

Kr=90° Rough Boring Tool with BT Adaptor



规格型号 Designation	镗孔范围 Boring range	适配刀座 Cartridge	刀座长度 Length	刀片 Insert	L	L1	L2	L3	L4	D1	D2	W	G	Kg	在库 Stock
BT40 BSB25x135	25-38	SRC 08x90°.23	23	CC..0602..	135	150	108	50	15	20	24	8	M6	1.3	○
BT40 BSB38x180	38-55	SRC/SRT 10x90°.35	35	CC..0602..	180	195	153	70	15	30	36	10	M8	2	○
BT40 BSB50x180	55-70	SRC/SRT 13x90°.47	47	CC..09T3..	180	195	153	85	15	40	48	13	M10	2.7	○
BT40 BSB50x225	50-70	SRC/SRT 13x90°.47	47	CC..09T3..	225	240	198	85	15	40	48	13	M10	3.2	○
BT40 BSB62x180	62-90	SRC/SRT 16x90°.59	59	CC..09T3..	180	195	153	95	15	50	60	16	M10	3.7	○
BT40 BSB62x225	62-90	SRC/SRT 16x90°.59	59	CC..09T3..	225	240	198	95	15	50	60	16	M10	4.4	○
BT40 BSB72x180	72-105	SRC/SRT 19x90°.68	68	CC..1204..	180	196	153	/	16	60	60	19	M12	4.6	○
BT40 BSB72x225	72-105	SRC/SRT 19x90°.68	68	CC..1204..	225	241	198	/	16	60	60	19	M12	5.6	○
BT40 BSB90x180	90-125	SRC/SRT 19x90°.85	85	CC..1204..	180	196	153	70	16	75	60	19	M12	5.4	○
BT40 BSB90x225	90-125	SRC/SRT 19x90°.85	85	CC..1204..	225	241	198	70	16	75	60	19	M12	6.4	○
BT50 BSB25x135	25-38	SRC 08x90°.23	23	CC..0602..	135	150	97	50	15	20	24	8	M6	3.9	○
BT50 BSB38x180	38-55	SRC/SRT 10x90°.35	35	CC..0602..	180	195	142	70	15	30	33	10	M8	4.5	○
BT50 BSB50x180	50-70	SRC/SRT 13x90°.47	47	CC..09T3..	180	195	142	85	15	40	44	13	M10	5.2	○
BT50 BSB50x240	50-70	SRC/SRT 13x90°.47	47	CC..09T3..	240	255	202	85	15	40	44	13	M10	5.8	○
BT50 BSB62x195	62-90	SRC/SRT 16x90°.59	59	CC..09T3..	195	210	157	95	15	50	56	16	M10	6.4	○
BT50 BSB62x270	62-90	SRC/SRT 16x90°.59	59	CC..09T3..	270	285	232	95	15	50	56	16	M10	7.6	○
BT50 BSB72x195	72-105	SRC/SRT 19x90°.68	68	CC..1204..	195	210	157	110	16	60	66	19	M10	7.5	○
BT50 BSB72x285	72-105	SRC/SRT 19x90°.68	68	CC..1204..	285	301	247	110	16	60	66	19	M10	9.7	○
BT50 BSB90x210	90-125	SRC/SRT 19x90°.85	85	CC..1204..	210	226	172	130	16	75	80	19	M12	10.1	○
BT50 BSB90x300	90-125	SRC/SRT 19x90°.85	85	CC..1204..	300	316	262	130	16	75	80	19	M12	13.4	○
BT50 BSB105x195	105-140	SRC/SRT 25x90°.100	100	CC..1204..	195	211	157	/	16	90	90	25	M12	12.1	○
BT50 BSB105x285	105-140	SRC/SRT 25x90°.100	100	CC..1204..	285	301	247	/	16	90	90	25	M12	16.5	○
BT50 BSB140x255	140-190	SRC/SRT 25x90°.125	125	TC..16T3..	255	271	217	75	16	110	90	25	M12	17.2	○
BT50 BSB140x255	140-190	SRC/SRT 25x90°.125	125	CC..1204..	255	271	217	75	16	110	90	25	M12	17.2	○
BT50 BSB140x255	140-190	SRC/SRT 25x90°.125	125	TC..16T3..	255	271	217	75	16	110	90	25	M12	17.2	○

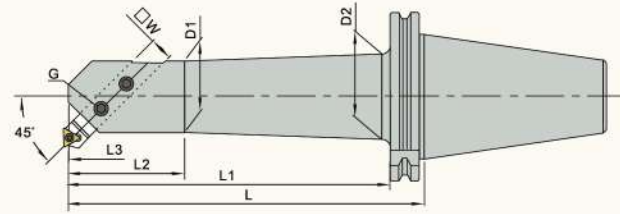
- 适配刀座需单独订购, 请参照: A074, A075 页
- 加工不同材料刀具的切削参数, 请参照: H001-H004 页
- 订货示例: 1 件 BT40 BSB25x135
- The cartridge should be ordered separately, please see page A074, A075.
- Recommended cutting data please see page H001-H004.
- Ordering sample: 1 PC BT 40 BSB25x135.

- 标准库存 Item in stock
- ◐ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

SOLID BORING TOOL 整体式镗刀

45° 单刃粗镗刀 (DIN69871)

Kr=45° Rough Boring Tool with DIN69871 Adaptor



规格型号 Designation	镗孔范围 Boring range	适配刀座 Cartridge	刀座长度 Length	刀片 Insert	L	L1	L2	L3	D1	D2	W	G	Kg	在库 Stock
DIN69871 40 BSA25x135	25-38	SRC 08x45°.29	29	CC..0602..	135	116	35	1	20	24	8	M6	1.1	○
DIN69871 40 BSA30x165	30-42	SRC 08x45°.35	35	CC..0602..	165	146	40	1.6	24	28	8	M6	1.4	○
DIN69871 40 BSA38x180	38-52	SRC 10x45°.45	45	CC..0602..	180	161	50	2.6	30	36	10	M8	1.8	○
DIN69871 40 BSA50x180	50-70	SRC 13x45°.60	60	CC..09T3..	180	161	65	3	40	48	13	M10	2.5	○
DIN69871 40 BSA50x225	50-70	SRT 13x45°.60	60	TC..1102..	180	161	65	3	40	48	13	M10	2.5	○
DIN69871 40 BSA50x225	50-70	SRC 13x45°.60	60	CC..09T3..	225	206	65	3	40	48	13	M10	3	○
DIN69871 40 BSA50x225	50-70	SRT 13x45°.60	60	TC..1102..	225	206	65	3	40	48	13	M10	3	○
DIN69871 40 BSA62x180	62-90	SRC 16x45°.75	75	CC..09T3..	180	161	/	2	50	50	16	M10	3.1	○
DIN69871 40 BSA62x180	62-90	SRT 16x45°.75	75	TC..16T3..	180	161	/	2	50	50	16	M10	3.1	○
DIN69871 40 BSA62x240	62-90	SRC 16x45°.75	75	CC..09T3..	240	221	/	2	50	50	16	M10	4	○
DIN69871 40 BSA62x240	62-90	SRT 16x45°.75	75	TC..16T3..	240	221	/	2	50	50	16	M10	4	○
DIN69871 40 BSA72x180	72-110	SRC 19x45°.88	88	CC..1204..	180	161	130	2.4	60	50	19	M10	4	○
DIN69871 40 BSA72x180	72-110	SRT 19x45°.88	88	TC..16T3..	180	161	130	2.4	60	50	19	M10	4	○
DIN69871 40 BSA72x240	72-110	SRC 19x45°.88	88	CC..1204..	240	221	184	2.4	60	50	19	M10	5.3	○
DIN69871 40 BSA72x240	72-110	SRT 19x45°.88	88	TC..16T3..	240	221	184	2.4	60	50	19	M10	5.3	○
DIN69871 40 BSA90x225	90-125	SRC 19x45°.105	105	CC..1204..	225	206	70	4	75	50	19	M12	5.1	○
DIN69871 40 BSA90x225	90-125	SRT 19x45°.105	105	TC..16T3..	225	206	70	4	75	50	19	M12	5.1	○
DIN69871 50 BSA25x135	25-38	SRC 08x45°.29	29	CC..062..	135	116	35	1	20	24	8	M6	2.9	○
DIN69871 50 BSA30x165	30-42	SRC 08x45°.35	35	CC..062..	165	146	40	1.6	24	28	8	M6	3.2	○
DIN69871 50 BSA38x180	38-52	SRC 10x45°.45	45	CC..062..	180	161	50	2.6	30	33	10	M8	3.5	○
DIN69871 50 BSA38x180	38-52	SRT 10x45°.45	45	TC..0902..	180	161	50	2.6	30	33	10	M8	3.5	○
DIN69871 50 BSA50x180	50-70	SRC 13x45°.60	60	CC..09T3..	180	161	65	3	40	48	13	M10	4.3	○
DIN69871 50 BSA50x180	50-70	SRT 13x45°.60	60	TC..1102..	180	161	65	3	40	48	13	M10	4.3	○
DIN69871 50 BSA50x240	50-70	SRC 13x45°.60	60	CC..09T3..	240	221	65	3	40	48	13	M10	5.3	○
DIN69871 50 BSA50x240	50-70	SRT 13x45°.60	60	TC..1102..	240	221	65	3	40	48	13	M10	5.3	○
DIN69871 50 BSA62x195	62-90	SRC 16x45°.75	75	CC..09T3..	195	176	80	2	50	60	16	M10	5.5	○
DIN69871 50 BSA62x195	62-90	SRT 16x45°.75	75	TC..16T3..	195	176	80	2	50	60	16	M10	5.5	○
DIN69871 50 BSA62x270	62-90	SRC 16x45°.75	75	CC..09T3..	270	251	80	2	50	60	16	M10	6.9	○
DIN69871 50 BSA62x270	62-90	SRT 16x45°.75	75	TC..16T3..	270	251	80	2	50	60	16	M10	6.9	○
DIN69871 50 BSA72x195	72-110	SRC 19x45°.88	88	CC..1204..	195	176	95	2.4	60	70	19	M10	6.6	○
DIN69871 50 BSA72x195	72-110	SRT 19x45°.88	88	TC..16T3..	195	176	95	2.4	60	70	19	M10	6.6	○
DIN69871 50 BSA72x285	72-110	SRC 19x45°.88	88	CC..1204..	285	266	95	2.4	60	70	19	M10	8.9	○
DIN69871 50 BSA72x285	72-110	SRT 19x45°.88	88	TC..16T3..	285	266	95	2.4	60	70	19	M10	8.9	○
DIN69871 50 BSA90x210	90-125	SRC 19x45°.105	105	CC..1204..	210	191	110	4	75	80	19	M12	9	○
DIN69871 50 BSA90x210	90-125	SRT 19x45°.105	105	TC..16T3..	210	191	110	4	75	80	19	M12	9	○
DIN69871 50 BSA90x300	90-125	SRC 19x45°.105	105	CC..1204..	300	281	110	4	75	80	19	M12	12.3	○
DIN69871 50 BSA90x300	90-125	SRT 19x45°.105	105	TC..16T3..	300	281	110	4	75	80	19	M12	12.3	○
DIN69871 50 BSA105x195	105-160	SRC 25x45°.125	125	CC..1204..	195	176	137	3	90	80	25	M12	10.5	○
DIN69871 50 BSA105x195	105-160	SRT 25x45°.125	125	TC..16T3..	195	176	137	3	90	80	25	M12	10.5	○
DIN69871 50 BSA105x300	105-160	SRC 25x45°.125	125	CC..1204..	300	281	232	3	90	80	25	M12	15.1	○
DIN69871 50 BSA105x300	105-160	SRT 25x45°.125	125	TC..16T3..	300	281	232	3	90	80	25	M12	15.1	○
DIN69871 50 BSA135x255	135-190	SRC 25x45°.168	168	CC..1204..	255	236	100	3	110	80	25	M12	13.2	○
DIN69871 50 BSA135x255	135-190	SRT 25x45°.168	168	TC..16T3..	255	236	100	3	110	80	25	M12	13.2	○

- 适配刀座需单独订购, 请参照: A074, A075 页
- 加工不同材料刀具的切削参数, 请参照: H001-H004 页
- 订货示例: 1 件 DIN69871 BSA25x135

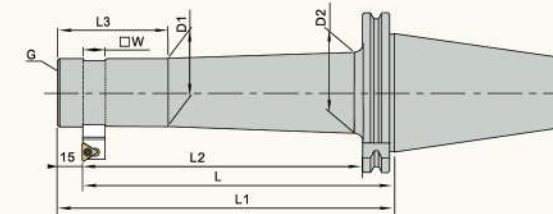
- The cartridge should be ordered separately, please see page A074, A075.
- Recommended cutting data please see page H001-H004.
- Ordering sample: 1 PC DIN69871 40 BSA25x135.

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

SOLID BORING TOOL 整体式镗刀

90° 单刃粗镗刀 (DIN69871)

Kr=90° Rough Boring Tool with DIN69871 Adaptor

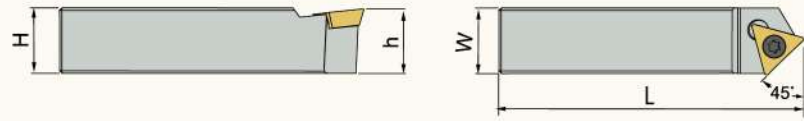


规格型号 Designation	镗孔范围 Boring range	适配刀座 Cartridge	刀座长度 Length	刀片 Insert	L	L1	L2	L3	L4	D1	D2	W	G	Kg	在库 Stock
DIN69871 40 BSB25x135	25-38	SRC 08x90°.23	23	CC..0602..	135	150	116	50	15	20	24	8	M6	1.2	○
DIN69871 40 BSB25x135	38-52	SRC 08x90°.35	35	CC..0602..	135	150	116	50	15	20	24	8	M6	1.2	○
DIN69871 40 BSB38x180	38-55	SRC/SRT 10x90°.35	35	CC..0602..	180	195	161	70	15	30	33	10	M8	1.8	○
DIN69871 40 BSB38x180	55-70	SRC/SRT 10x90°.48	48	TC..0902..	180	195	161	70	15	30	33	10	M8	1.8	○
DIN69871 40 BSB50x180	50-70	SRC/SRT 13x90°.47	47	CC..09T3..	180	195	161	85	15	40	44	13	M10	2.6	○
DIN69871 40 BSB50x180	70-90	SRC/SRT 13x90°.65	65	TC..1102..	180	195	161	85	15	40	44	13	M10	2.6	○
DIN69871 40 BSB50x225	50-70	SRC/SRT 13x90°.47	47	CC..09T3..	225	240	206	85	15	40	44	13	M10	3.1	○
DIN69871 40 BSB50x225	70-90	SRC/SRT 13x90°.65	65	TC..1102..	225	240	206	85	15	40	44	13	M10	3.1	○
DIN69871 40 BSB62x180	62-90	SRC/SRT 16x90°.59	59	CC..09T3..	180	195	161	/	15	50	50	16	M10	3.5	○
DIN69871 40 BSB62x180	90-115	SRC/SRT 16x90°.85	85	TC..16T3..	180	195	161	/	15	50	50	16	M10	3.5	○
DIN69871 40 BSB62x225	62-90	SRC/SRT 16x90°.59	59	CC..09T3..	225	240	206	/	15	50	50	16	M10	4.2	○
DIN69871 40 BSB62x225	90-115	SRC/SRT 16x90°.85	85	TC..16T3..	225	240	206	/	15	50	50	16	M10	4.2	○
DIN69871 40 BSB72x180	72-105	SRC/SRT 19x90°.68	68	CC..1204..	180	196	161	50	16	60	50	19	M12	3.8	○
DIN69871 40 BSB72x180	105-135	SRC/SRT 19x90°.85	85	TC..16T3..	180	196	161	50	16	60	50	19	M12	3.8	○
DIN69871 40 BSB72x225	72-105	SRC/SRT 19x90°.68	68	CC..1204..	225	241	206	50	16	60	50	19	M12	4.5	○
DIN69871 40 BSB72x225	105-135	SRC/SRT 19x90°.85	85	TC..16T3..	225	241	206	50	16	60	50	19	M12	4.5	○
DIN69871 40 BSB90x180	90-125	SRC/SRT 19x90°.85	85	CC..1204..	180	196	161	60	16	75	50	19	M12	4.7	○
DIN69871 40 BSB90x225	125-150	SRC/SRT 19x90°.105	105	TC..16T3..	180	196	161	60	16	75	50	19	M12	4.7	○
DIN69871 40 BSB90x225	90-125	SRC/SRT 19x90°.85	85	CC..1204..	225	241	206	60	16	75	50	19	M12	5.4	○
DIN69871 40 BSB90x225	125-150	SRC/SRT 19x90°.105	105	TC..16T3..	225	241	206	60	16	75	50	19	M12	5.4	○
DIN69871 50 BSB25x135	25-38	SRC 08x90°.23	23	CC..0602..	135	150	97	50	15	20	24	8	M6	3	○
DIN69871 50 BSB25x135	38-52	SRC 08x90°.35	32	CC..0602..	135	150	97	50	15	20	24	8	M6	3	○
DIN69871 50 BSB38x180	38-55	SRC/SRT 10x90°.35	35	CC..0602..	180	195	142	70	15	30	33	10	M8	3.6	○
DIN69871 50 BSB38x180	55-70	SRC/SRT 10x90°.48	48	TC..0902..	180	195	142	70	15	30	33	10	M8	3.6	○
DIN69871 50 BSB50x180	50-70	SRC/SRT 13x90°.47	47	CC..09T3..	180	195	142	85	15	40	44	13	M10	4.4	○
DIN69871 50 BSB50x180	70-90	SRC/SRT 13x90°.65	65	TC..1102..	180	195	142	85	15	40	44	13	M10	4.4	○
DIN69871 50 BSB50x240	50-70	SRC/SRT 13x90°.47	47	CC..09T3..	240	255	202	85	15	40	44	13	M10	5	○
DIN69871 50 BSB50x240	70-90	SRC/SRT 13x90°.65	65	TC..1102..	240	255	202	85	15	40	44	13	M10	5	○
DIN69871 50 BSB62x195	62-90	SRC/SRT 16x90°.59	59	CC..09T3..	195	210	157	95	15	50	56	16	M10	5.7	○
DIN69871 50 BSB62x195	90-115	SRC/SRT 16x90°.85	85	TC..16T3..	195	210	157	95	15	50	56	16	M10	5.7	○
DIN69871 50 BSB62x270	62-90	SRC/SRT 16x90°.59	59	CC..09T3..	270	285	232	95	15	50	56	16	M10	6.9	○
DIN69871 50 BSB62x270	90-115	SRC/SRT 16x90°.85	85	TC..16T3..	270	285	232	95	15	50	56	16	M10	6.9	○
DIN69871 50 BSB72x195															

SOLID BORING TOOL 整体式镗刀

45° 单刃粗镗刀座

Cartridge for Kr=45° Rough Boring Tool



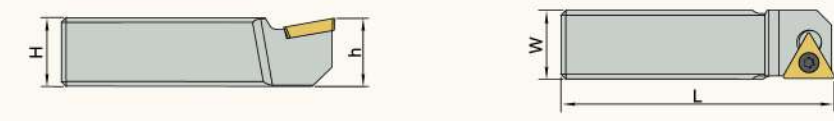
规格型号	W=H	h	L	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw	在庫 Stock
SRC 08x45° .29	8	7.8	29	CC..0602..	SR20 M2.5x6	KEY02 T8	○
SRC 10x45° .45	10	9.8	45	CC..0602..	SR20 M2.5x6	KEY02 T8	○
SRC 13x45° .60	13	12.8	60	CC..09T3..	SR21 M4x9.5	KEY02 T15	○
SRC 16x45° .75	16	15.8	75	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 19x45° .88	19	18.8	88	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 19x45° .105	19	18.8	105	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 25x45° .125	25	24.8	125	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 25x45° .168	25	24.8	168	TC..0902..	SR20 M2.2x4.6	KEY02 T7	○
SRT 10x45° .45	10	9.8	45	TC..1102..	SR20 M2.5x6	KEY02 T8	○
SRT 13x45° .60	13	12.8	60	TC..16T3..	SR21 M4x9.5	EY02 T15	○
SRT 16x45° .75	16	15.8	75	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 19x45° .88	19	18.8	88	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 19x45° .105	19	18.8	105	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 25x45° .125	25	24.8	125	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 25x45° .168	25	24.8	168	TC..16T3..	SR21 M4x9.5	KEY02 T15	○

- 刀片请根据不同材料单独订购, 请参照: F002,F003,F004 页
- 订货示例: 1 件 SRC 08x45° .29
- Inserts with different materials should be ordered separately, please see page F002,F003,F004.
- Ordering sample: 1 PC SAC OBx45°

SOLID BORING TOOL 整体式镗刀

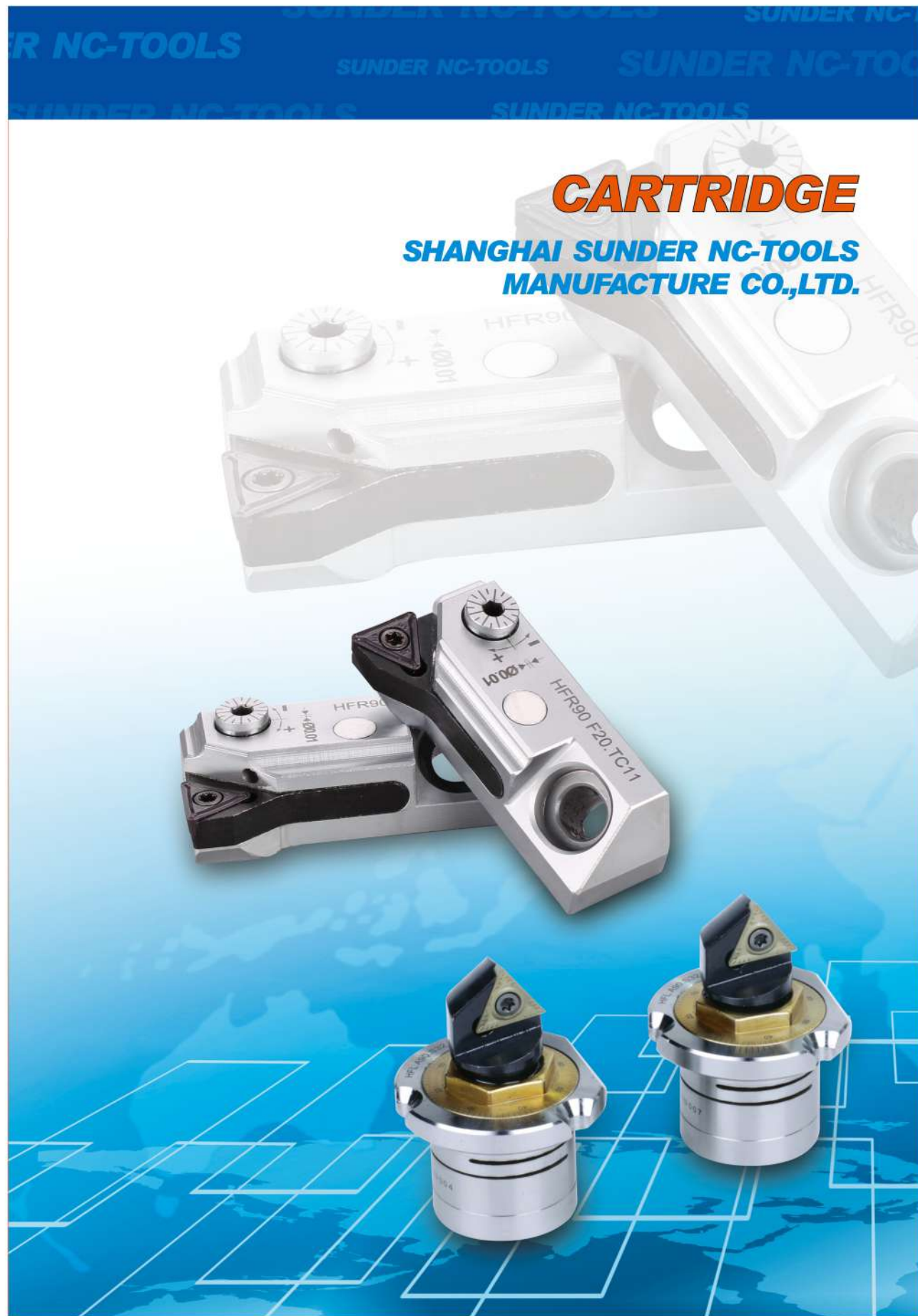
90° 单刃粗镗刀座

Cartridge for Kr=90° Rough Boring Tool



规格型号 Designation	W=H	h	L	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw	在庫 Stock
SRC 08x90° .23	8	7.8	23	CC..0602..	SR20 M2.5x6	KEY02 T8	○
SRC 08x90° .35	8	7.8	35	CC..0602..	SR20 M2.5x6	KEY02 T8	○
SRC 10x90° .35	10	9.8	35	CC..0602..	SR20 M2.5x6	KEY02 T8	○
SRC 10x90° .48	10	9.8	48	CC..0602..	SR20 M2.5x6	KEY02 T8	○
SRC 13x90° .47	13	12.8	47	CC..09T3..	SR21 M4x9.5	KEY02 T15	○
SRC 13x90° .65	13	12.8	65	CC..09T3..	SR21 M4x9.5	KEY02 T15	○
SRC 16x90° .59	16	15.8	59	CC..09T3..	SR21 M4x9.5	KEY02 T15	○
SRC 16x90° .85	16	15.8	85	CC..09T3..	SR21 M4x9.5	KEY02 T15	○
SRC 19x90° .68	19	18.8	68	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 19x90° .85	19	18.8	85	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 19x90° .105	19	18.8	105	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 25x90° .100	25	24.8	100	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 25x90° .125	25	24.8	125	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 25x90° .135	25	24.8	135	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRC 25x90° .170	25	24.8	170	CC..1204..	SR21 M5x12.8	KEY02 T20	○
SRT 10x90° .35	10	9.8	35	TC..0902..	SR20 M2.2x4.6	KEY02 T7	○
SRT 10x90° .48	10	9.8	48	TC..0902..	SR20 M2.2x4.6	KEY02 T7	○
SRT 13x90° .47	13	12.8	47	TC..1102..	SR20 M2.5x6	KEY02 T8	○
SRT 13x90° .65	13	12.8	65	TC..1102..	SR20 M2.5x6	KEY02 T8	○
SRT 16x90° .59	16	15.8	59	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 16x90° .85	16	15.8	85	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 19x90° .68	19	18.8	68	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 19x90° .85	19	18.8	85	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 19x90° .105	19	18.8	105	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 25x90° .100	25	24.8	100	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 25x90° .125	25	24.8	125	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 25x90° .135	25	24.8	135	TC..16T3..	SR21 M4x9.5	KEY02 T15	○
SRT 25x90° .170	25	24.8	170	TC..16T3..	SR21 M4x9.5	KEY02 T15	○

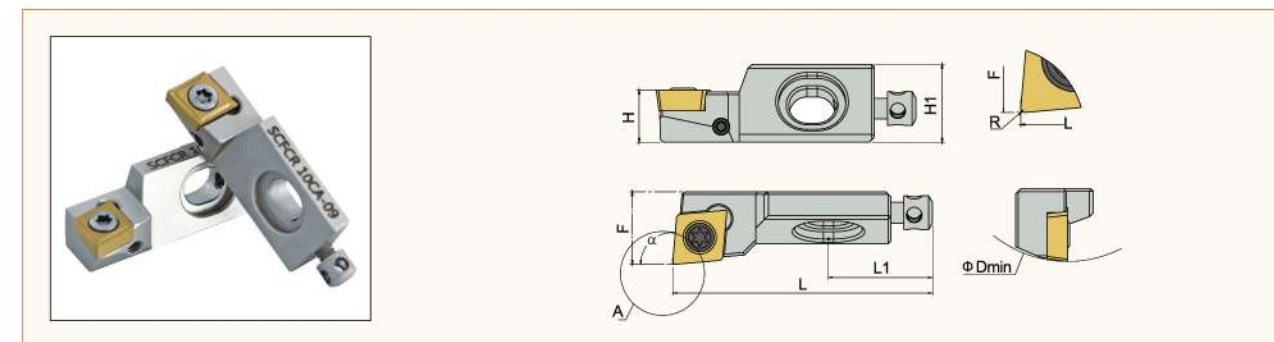
- 刀片请根据不同材料单独订购, 请参照: F002,F003,F004 页
- 订货示例: 1 件 SRC 08x90° .23
- Inserts with different materials should be ordered separately, please see page F002,F003,F004.
- Ordering sample: 1 PC SAC OBx90°



CARTRIDGE 刀座系列

ISO 刀座 SCFCR/L...

ISO Cartridge



主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在庫 Stock
90°	SCFPR 06CA-05	SCFPL 06CA-05	6	8	25	8.5	12	20	0.4	CP..0502..	●
	SCFCR 08CA-06	SCFCL 08CA-06	8	10	32	10	17	25	0.4	CC..0602..	●
	SCFCR 10CA-09	SCFCL 10CA-09	10	14	50	15	20	40	0.8	CC..09T3..	●
	SCFCR 12CA-12	SCFCL 12CA-12	12	20	55	20	20	50	0.8	CC..1204..	●
	SCFCR 16CA-12	SCFCL 16CA-12	16	25	63	25	25	55	0.8	CC..1204..	●

- 刀片请根据不同材料单独订购, 请参照: F002,F003 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F002,F003.
- Spare parts and assembled size, please see page A081.

ISO 刀座 STFCR/L...

ISO Cartridge

主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在庫 Stock
90°	STFCR 08CA-09	STFCL 08CA-09	8	10	32	10	17	25	0.4	TC..0902..	●
	STFCR 10CA-11	STFCL 10CA-11	10	14	50	15	20	40	0.4	TC..1102..	●
	STFCR 12CA-16	STFCL 12CA-16	12	20	55	20	20	50	0.8	TC..16T3..	●
	STFCR 16CA-16	STFCL 16CA-16	16	25	63	25	25	55	0.8	TC..16T3..	●

- 刀片请根据不同材料单独订购, 请参照: F004,F005 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F004,F005.
- Spare parts and assembled size, please see page A081.

备件

Spare Parts

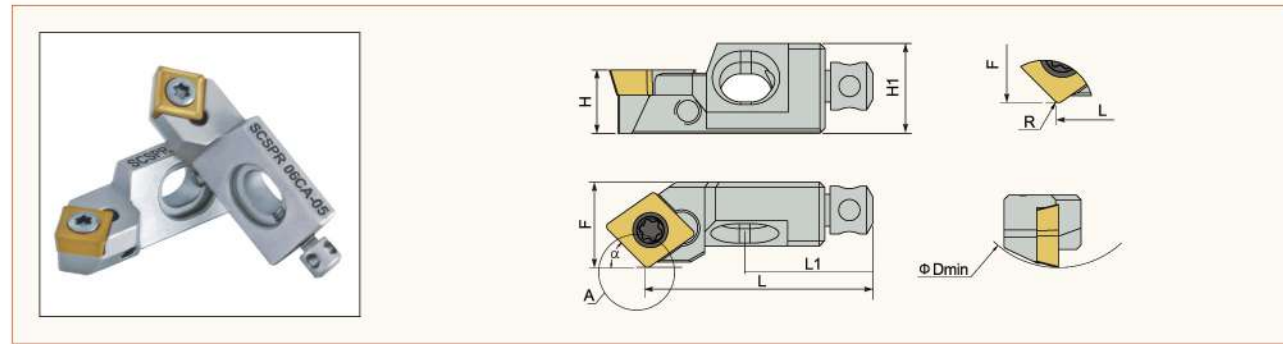
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CP..0502..	SR20 M2.2x4.6	KEY02 T7
CC..0602..	SR20 M2.5x6	KEY02 T8
CC..09T3..	SR20 M4x9.5	KEY02 T15
CC..1204..	SR20 M5x11	KEY02 T20
TC..0902..	SR20 M2.2x4.6	KEY02 T7
TC..1102..	SR20 M2.5x6	KEY02 T8
TC..16T3..	SR21 M4x9.5	KEY02 T15

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

CARTRIDGE 刀座系列

ISO 刀座 SCSCR/L...

ISO Cartridge



主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在库 Stock
45°	SCSPR 06CA-05	SCFPL 06CA-05	6	8	21.4	8.5	12	20	0.4	CP..0502..	●
	SCSCR 08CA-06	SCSCL 08CA-06	8	10	28	10	17	25	0.4	CC..0602..	●
	SCSCR 10CA-09	SCSCL 10CA-09	10	14	44	15	20	40	0.8	CC..09T3..	●

- 刀片请根据不同材料单独订购, 请参照: F002,F003 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F002,F003.
- Spare parts and assembled size, please see page A081.

ISO 刀座 SCTCR/L...

ISO Cartridge

主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在库 Stock
30°	SCTPR 06CA-05	SCTPL 06CA-05	6	8	20.4	8.5	12	20	0.4	CP..0502..	●
	SCTCR 08CA-06	SCTCL 08CA-06	8	10	26.7	10	17	25	0.4	CC..0602..	●
	SCTCR 10CA-09	SCTCL 10CA-09	10	14	42.3	15	20	40	0.8	CC..09T3..	●

- 刀片请根据不同材料单独订购, 请参照: F002,F003 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F002,F003.
- Spare parts and assembled size, please see page A081.

ISO 刀座 SCWCR/L...

ISO Cartridge

主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在库 Stock
60°	SCWPR 06CA-05	SCWPL 06CA-05	6	8	22.7	8.5	12	20	0.4	CP..0502..	●
	SCWCR 08CA-06	SCWCL 08CA-06	8	10	29	10	17	25	0.4	CC..0602..	●
	SCWCR 10CA-09	SCWCL 10CA-09	10	14	44	15	20	40	0.8	CC..09T3..	●

- 刀片请根据不同材料单独订购, 请参照: F002,F003 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F002,F003.
- Spare parts and assembled size, please see page A081.

备件

Spare Parts

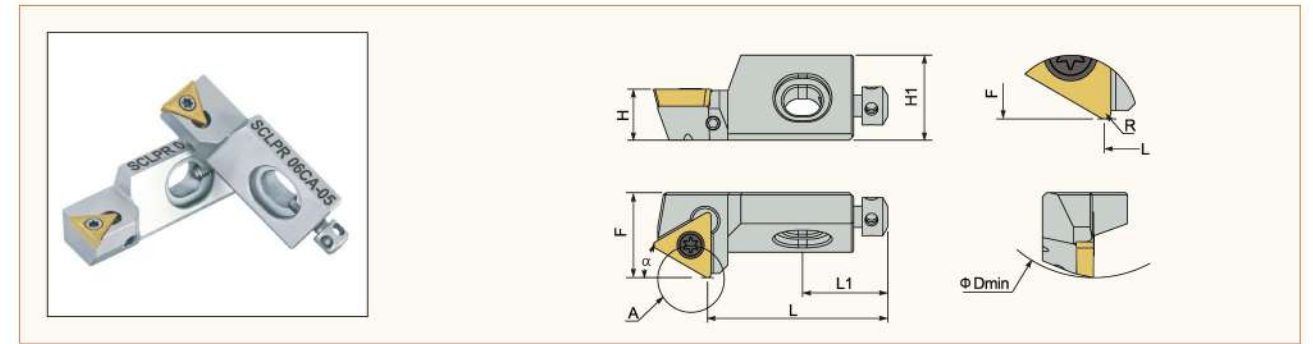
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CP..0502..	SR20 M2.2x4.6	KEY02 T7
CC..0602..	SR20 M2.5x6	KEY02 T8
CC..09T3..	SR20 M4x9.5	KEY02 T15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

CARTRIDGE 刀座系列

ISO 刀座 SCLCR/L...

ISO Cartridge



主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在库 Stock
95°	SCLPR 06CA-05	SCLPL 06CA-05	6	8	25	8.5	12	20	0.4	CP..0502..	●
	SCLCR 08CA-06	SCLCL 08CA-06	8	10	32	10	17	25	0.4	CC..0602..	●
	SCLCR 10CA-09	SCLCL 10CA-09	10	14	50	15	20	40	0.8	CC..09T3..	●
	SCLCR 12CA-12	SCLCL 12CA-12	12	20	55	20	20	50	0.8	CC..1204..	●
	SCLCR 16CA-12	SCLCL 16CA-12	16	25	63	25	25	55	0.8	CC..1204..	●

- 刀片请根据不同材料单独订购, 请参照: F002,F003 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F002,F003.
- Spare parts and assembled size, please see page A081.

ISO 刀座 STTCR/L...

ISO Cartridge

主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在库 Stock
30°	STTCR 08CA-09	STTCL 08CA-09	8	10	24.4	10	17	25	0.4	TC..0902..	●
	STTCR 10CA-11	STTCL 10CA-11	10	14	41.3	15	20	40	0.4	TC..1102..	●
	STTCR 12CA-16	STTCL 12CA-16	12	20	42.3	20	20	50	0.8	TC..16T3..	●
	STTCR 16CA-16	STTCL 16CA-16	16	25	50.3	25	25	55	0.8	TC..16T3..	●

- 刀片请根据不同材料单独订购, 请参照: F004,F005 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F004,F005.
- Spare parts and assembled size, please see page A081.

ISO 刀座 STWCR/L...

ISO Cartridge

主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在库 Stock
60°	STWCR 08CA-09	STWCL 08CA-09	8	10	28	10	17	25	0.4	TC..0902..	●
	STWCR 10CA-11	STWCL 10CA-11	10	14	44	15	20	40	0.4	TC..1102..	●
	STWCR 12CA-16	STWCL 12CA-16	12	20	47	20	20	50	0.8	TC..16T3..	●
	STWCR 16CA-16	STWCL 16CA-16	16	25	53	25	25	55	0.8	TC..16T3..	●

- 刀片请根据不同材料单独订购, 请参照: F004,F005 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F004,F005.
- Spare parts and assembled size, please see page A081.

备件

Spare Parts

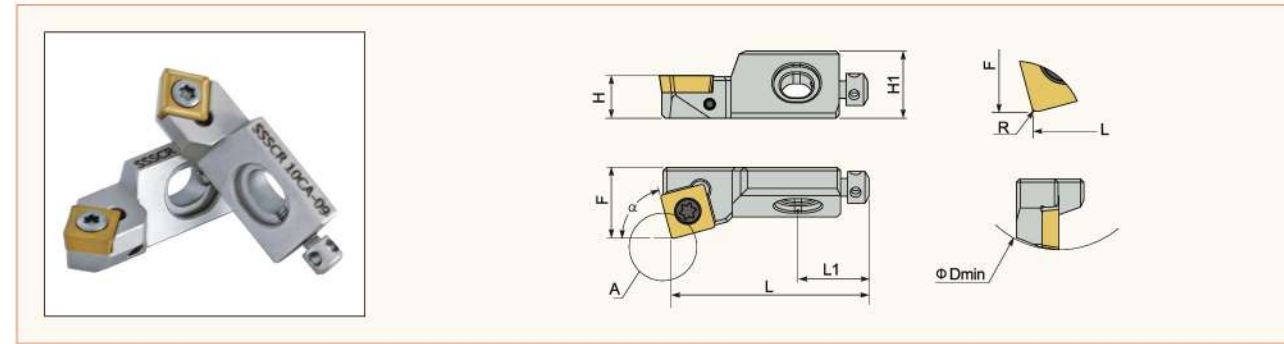
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CP..0502..	SR20 M2.2x4.6	KEY02 T7
CC..0602..	SR20 M2.5x6	KEY02 T8
CC..09T3..	SR20 M4x9.5	KEY02 T15
CC..1204..	SR20 M5x11	KEY02 T20
TC..0902..	SR20 M2.2x4.6	KEY02 T7
TC..1102..	SR20 M2.5x6	KEY02 T8
TC..16T3..	SR21 M4x9.5	KEY02 T15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

CARTRIDGE 刀座系列

ISO 刀座 SSKCRIL...

ISO Cartridge



主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在库 Stock
75°	SSKCR 10CA-09	SSKCL 10CA-09	10	14	50	15	20	40	0.8	SC..09T3..	●
	SSKCR 12CA-09	SSKCL 12CA-09	12	20	55	20	20	50	0.8	SC..09T3..	●
	SSKCR 12CA-12	SSKCL 12CA-12	12	20	55	20	20	50	0.8	SC..1204..	●
	SSKCR 16CA-12	SSKCL 16CA-12	16	25	63	25	25	55	0.8	SC..1204..	●

- 刀片请根据不同材料单独订购, 请参照: F006 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F006.
- Spare parts and assembled size, please see page A081.

ISO 刀座 SSSCRIL...

ISO Cartridge

主偏角 (α) Designation	右手型号 Right hand	左手型号 Left hand	H	F	L	H1	L1	Dmin	R	刀片型号 Insert	在库 Stock
45°	SSSCR 10CA-09	SSSCL 10CA-09	10	14	44	15	20	40	0.8	SC..09T3..	●
	SSSCR 12CA-09	SSSCL 12CA-09	12	20	47	20	20	50	0.8	SC..09T3..	●
	SSSCR 12CA-12	SSSCL 12CA-12	12	20	47	20	20	50	0.8	SC..1204..	●
	SSSCR 16CA-12	SSSCL 16CA-12	16	25	53	25	25	55	0.8	SC..1204..	●

- 刀片请根据不同材料单独订购, 请参照: F006 页
- 配件及安装尺寸: 请参照: A081 页
- Inserts with different materials should be ordered separately, please see page F006.
- Spare parts and assembled size, please see page A081.

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
SC..09T3..	SR21 M4x9.5	KEY02 T15
SC..1204..	SR20 M5x11	KEY02 T20

CARTRIDGE 刀座系列

ISO 刀座备件

Spare Parts for ISO Cartridge

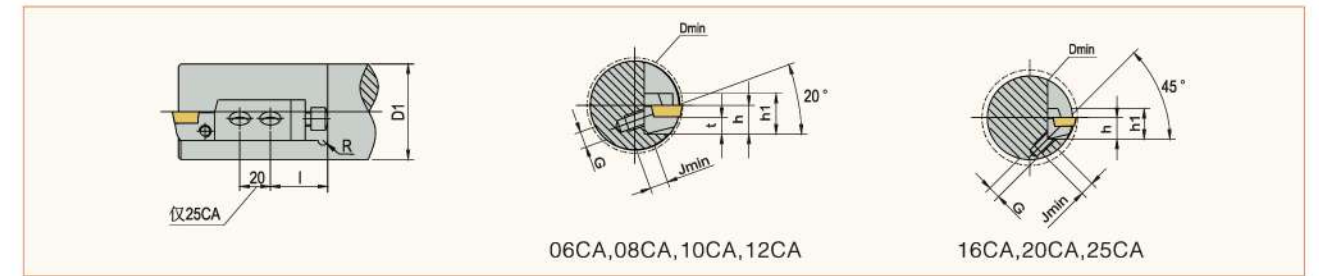
小刀夹型号 Designation	① 螺钉 Clamping screw	② 扳手 Allen key	③ 螺钉 Clamping screw	④ 螺钉 Clamping screw	⑤ 扳手 Allen key
06CA	SR56 M4x10	KEY01 M3	SR68 M3x9	SR50 M3x4	KEY01 M1.5
08CA	SR56 M4x16	KEY01 M3	SR68 M4x12	SR50 M3x6	KEY01 M1.5
10CA	SR55 M6x20	KEY01 M5	SR68 M4x12	SR50 M4x8	KEY01 M2
12CA	SR55 M6x25	KEY01 M5	SR68 M5x14	SR50 M4x12	KEY01 M2
16CA	SR55 M8x30	KEY01 M6	SR68 M6x20	SR50 M4x12	KEY01 M2
20CA	SR55 M8x30	KEY01 M6	SR68 M6x20	SR50 M6x20	KEY01 M3
25CA	SR55 M10x30	KEY01 M8	SR68 M6x20	SR50 M6x20	KEY01 M3

ISO 刀座安装示意图

Assembly Instruction for ISO Cartridge

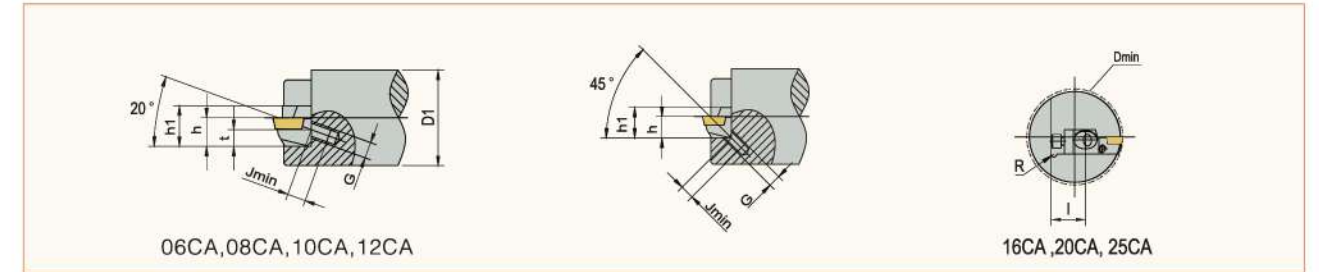
轴向安装

Assembly Instruction for Cartridge of Axial Clamping



径向安装

Assembly Instruction for Cartridge of Radial Clamping



小刀夹型号 Designation	h ± 0.076	l	G	Jmin	t	h1	Rmax	Dmin	D1
06CA	6	12	M4x0.7	10	3.5	8.5	2.0	20	刀杆最大直径小于镗孔直径 3mm The maximum diameter of boring bar should be smaller 3mm than the diameter of hole
08CA	8	17	M4x0.7	10	4.5	10	2.5	25	
10CA	10	20	M6x1	14	5	15	4.0	40	
12CA	12	20	M6x1	14	6	20	5.0	50	
16CA	16	25	M8x1.25	15	-	25	5.0	55	
20CA	20	30	M8x1.25	15	-	25	5.0	70	
25CA	25	30	M10x1.5	19	-	32	6.0	100	

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand (please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand (please confirm delivery time when ordering it)

CARTRIDGE 刀座系列

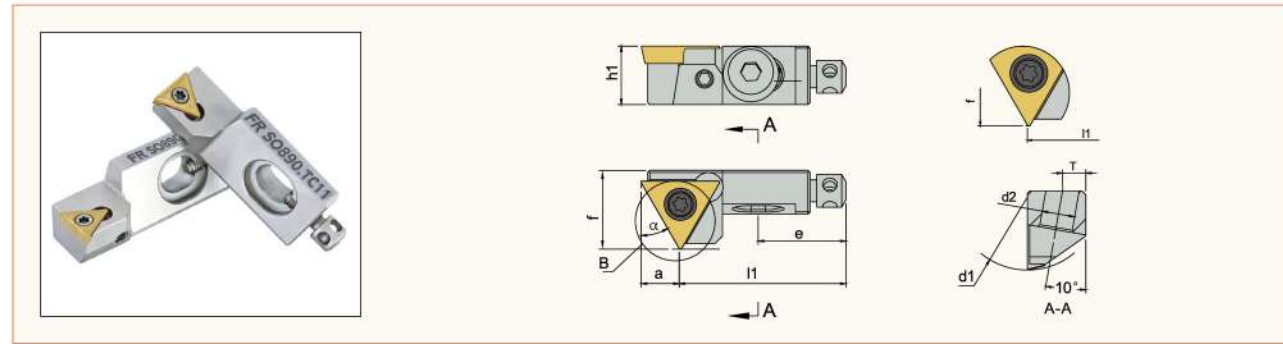
微型刀座

Mini Cartridge

CARTRIDGE 刀座系列

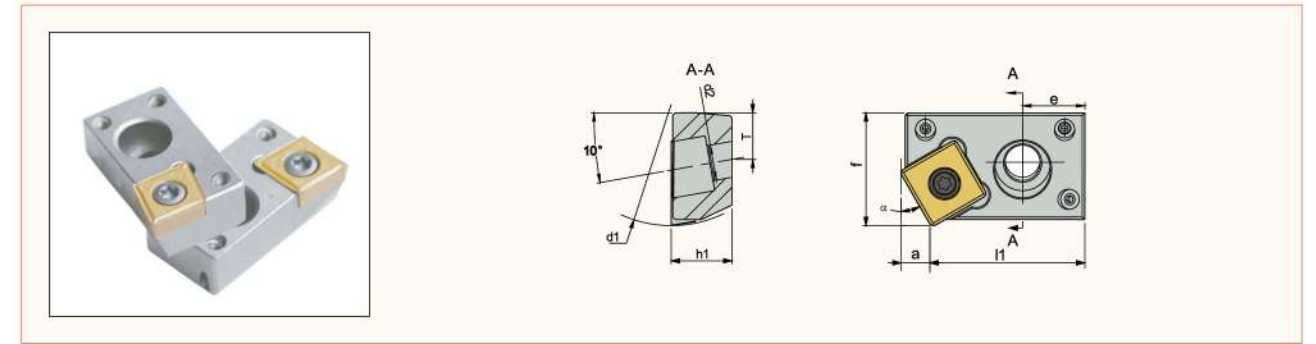
重切刀座

Mini Cartridge for Heavy Duty Cutting



主偏角 (α) Approach angle	右手型号 Right hand	左手型号 Left hand	a	d1	d2	e	h1	f	l1	T	适用刀片 Insert	在库 Stock
90°	FR S0690.CP05	FL S0690.CP05	-	14.5	3.4	10.5	6	8	25	2.3	CP..0502..	●
	FR S0690.CC06	FL S0690.CC06	-	20	3.4	10.5	6	9.7	25	2.3	CC..0602..	●
90°	FR S0890.TC11	FL S0890.TC11	-	20	4.5	12	8	11	28	3.2	TC..1102..	●
45°	FR S0845.TC11	FL S0845.TC11	7.4	20	4.5	12	8	10.8	20.6	3.2	TC..1102..	●
60°	FR S0860.TC11	FL S0860.TC11	9.1	20	4.5	12	8	11	18.9	3.2	TC..1102..	●
30°	FR S0830.TC11	FL S0830.TC11	5.2	20	4.5	12	8	10.8	22.8	3.2	TC..1102..	●
75°	FR S0875.TC11	FL S0875.TC11	10.1	20	4.5	12	8	11	17.9	3.2	TC..1102..	●

- 刀片请根据不同材料单独订购, 请参照: F002,F003,F004 页
- 订货示例: 1 件 FR S0690.CP05
- Inserts with different materials should be ordered separately, please see page F002,F003,F004.
- Ordering sample: 1 PC FR S0690.CP05.



主偏角 (α) Approach angle	右手型号 Right hand	左手型号 Left hand	a	d1	d2	e	f	h1	l1	T	适用刀片 Insert	在库 Stock
15°	FR B0875.CC06	FL B0875.CC06	1.2	32	5	12.3	14.3	8	24.1	5.9	CC..0602..	●
	FR B1075.CC09	FL B1075.CC09	2	40	6	12.3	18.3	10	28.3	7.5	CC..09T3..	●
90°	FR B1275.CC12	FL B1275.CC12	2.8	48	7	12.3	22.3	12	33.5	9.2	CC..1204..	●
	FR B0890.CC06	FL B0890.CC06	-	32	5	12.3	14.3	8	25.3	5.9	CC..0602..	●
15°	FR B1090.CC09	FL B1090.CC09	-	40	6	12.3	18.3	10	30.3	7.5	CC..09T3..	●
	FR B1290.CC12	FL B1290.CC12	-	48	7	12.3	22.3	12	36.3	9.2	CC..1204..	●
90°	FR B1290.TC16	FL B1290.TC16	-	48	7	12.3	22.3	12	36.3	9.2	TC..16T3..	●
	FR B1075.SC09	FL B1075.SC09	2	40	6	12.3	18.3	10	28.3	7.5	SC..09T3..	●
15°	FR B1275.SC12	FL B1275.SC12	2.8	48	7	12.3	22.3	12	33.5	9.2	SC..1204..	●
	FR B1030.SC09	FL B1030.SC09	4	40	6	12.3	18.3	10	26.3	7.5	SC..09T3..	●
30°	FR B1230.SC12	FL B1230.SC12	5.7	48	7	12.3	22.3	12	30.6	9.2	SC..1204..	●
	FR B1045.SC09	FL B1045.SC09	6.1	40	6	12.3	18.3	10	24.2	7.5	SC..09T3..	●
45°	FR B1245.SC12	FL B1245.SC12	9.3	48	7	12.3	22.3	12	28	9.2	SC..1204..	●

- 刀片请根据不同材料单独订购, 请参照: F002,F003,F004 页
- 订货示例: 1 件 FR B0875.CC06
- Inserts with different materials should be ordered separately, please see page F002,F003,F004.
- Ordering sample: 1 PC FR B0875.CC06

备件

Spare Parts

h1	锁紧螺钉 Clamping screw	径向调整螺钉 Radial adjusting screw	轴向调整螺钉 Axial adjusting screw	锁紧扳手 Allen key for clamping screw	径向调整扳手 Radial adjusting allen key
h1=6	SR56 M3x10	SR50 M3x4	SR68 M3x9	KEY01 M2	KEY01 M1.5
h1=8	SR56 M4x12	SR50 M3x4	SR68 M3x9	KEY01 M2.5	KEY01 M1.5

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CP..0502..	SR20 M2.2x4.6	KEY02 T7
CC..0602..	SR20 M2.5x5	KEY02 T8
TC..1102..	SR20 M2.5x6	KEY02 T8

备件

Spare Parts

h1	锁紧螺钉 Clamping screw	径 / 轴向调整螺钉 Radial adjusting screw	锁紧扳手 Allen key for clamping screw	径 / 轴向调整扳手 Radial/Axialadjusting allen key
h1=8	SR55 M4x12	SR67 M2.5x5	KEY01 M3	KEY01 M1.3
h1=10	SR55 M5x12	SR67 M3x6	KEY01 M4	KEY01 M1.5
h1=12	SR55 M6x16	SR67 M3x6	KEY01 M5	KEY01 M1.5

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CC..0602..	SR20 M2.5x6	KEY02 T8
CC..09T3..	SR20 M4x9.5	KEY02 T15
CC..1204..	SR20 M5x11	KEY02 T20
SC..09T3..	SR21 M4x9.5	KEY02 T15
SC..1204..	SR20 M5x11	KEY02 T20

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

CARTRIDGE 刀座系列

微调刀座

Mini Precision Boring Cartridge

CARTRIDGE 刀座系列

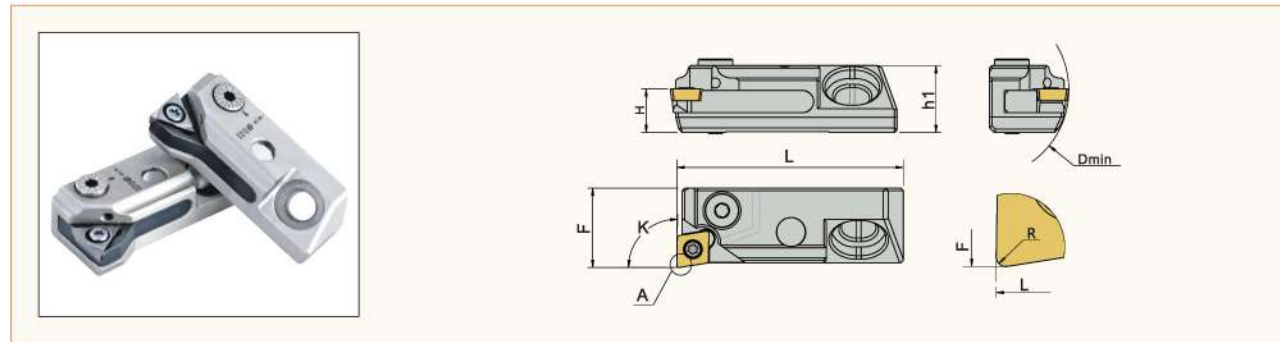
微调刀座安装尺寸

Setting Instructions for Precision Boring Cartridge

图示按照右手 R.H 刀座的方向设置。
使用左手 L.H 刀座时请按照镜像的方式设置。
The figure is for the right hand specification.
For the left hand specification, please refer to the opposite figure.
Setting Instruction

刀座安装尺寸

Setting Instruction



规格型号 Designation		尺寸规格 Dimensions								适用刀片 Suitable Insert	在库 Stock
右手型号 Right hand	左手型号 Left hand	K	H	F	L	h1	Dmin	R			
HFR90 F16.CC06	HFL90 F16.CC06	90	8.8	16	45.6	13.5	28	0.4	CC.0602..	●	
HFR95 F16.CC06	HFL95 F16.CC06	95	8.8	16	45.6	13.5	28	0.4	CC.0602..	●	
HFR90 F16.TP09	HFL90 F16.TP09	90	8.8	16	45.6	13.5	28	0.4	TP.0902..	●	
HFR95 F16.TP09	HFL95 F16.TP09	95	8.8	16	45.6	13.5	28	0.4	TP.0902..	●	
HFR90 F20.TC11	HFL90 F20.TC11	90	8.8	20	45.6	13.5	36	0.4	TC..1102..	●	
HFR95 F20.TC11	HFL95 F20.TC11	95	8.8	20	45.6	13.5	36	0.4	TC..1102..	●	
HFR90 F20.TC11	HFL90 F20.TC11	90	8.8	20	45.6	13.5	36	0.4	TP..1103..	●	
HFR95 F20.TC11	HFL95 F20.TC11	95	8.8	20	45.6	13.5	36	0.4	TP..1103..	●	

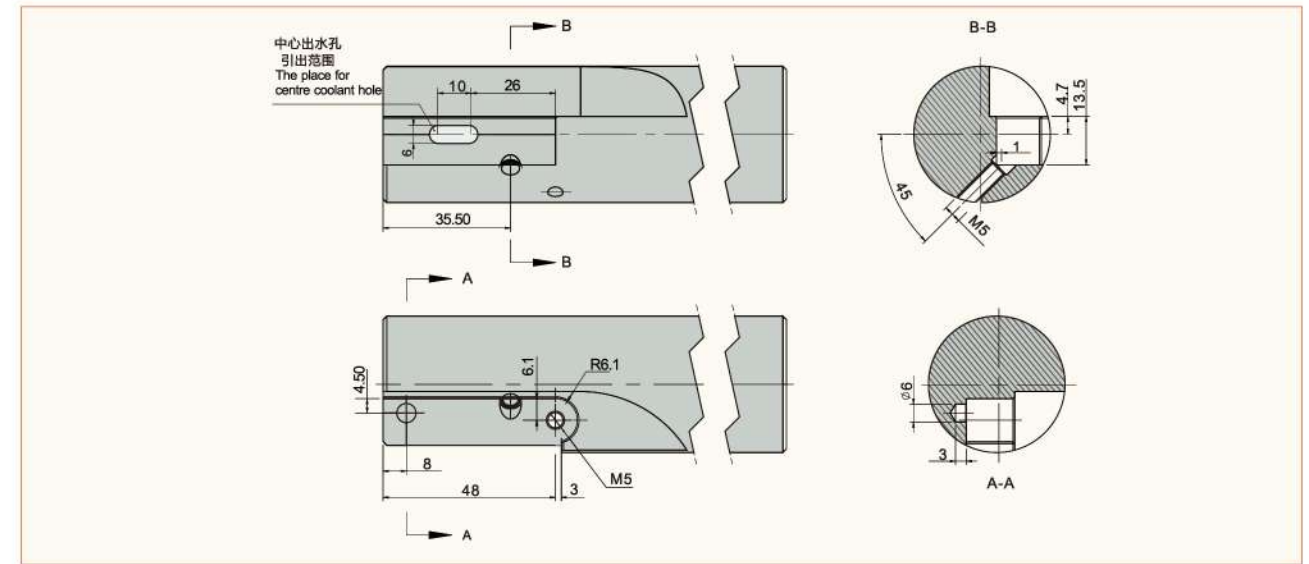
- 刀片请根据不同材料单独订购，请参照：F001,F002,F003,F004 页
- 预备库存有左手和右手型号
- 微调精度直径 0.01mm、半径 0.005mm
- 径向最大调整量直径 0.6mm、轴向调整量 1mm
- Inserts with different materials should be ordered separately, please see page F001,F002,F003,F004.
- There are right and left hand specifications available in stock.
- The adjustment: 0.01 mm on diameter and 0.005mm on radius.
- The adjustment range: 0.6mm on diameter by radial direction, 1 mm on diameter by axial direction.

备件

Spare Parts

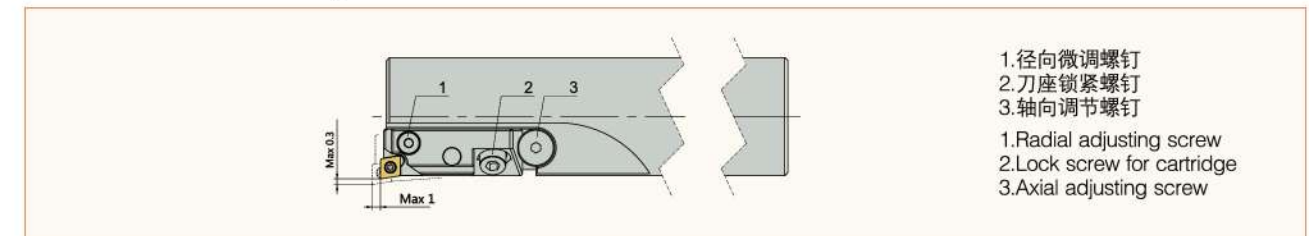


刀片型号 Insert	刀片锁紧螺钉 Clamping screw insert	轴向调整螺钉 Axial adjusting screw	刀座锁紧螺钉 Clamping screw for cartridge	轴向调节环 Axial adjusting ring	刀片锁紧扳手 Allen key for clamping screw	径向调整扳手 Allen key for radial adjusting	压紧扳手 Allen key for clamping	径向调整扳手 Allen key for radial adjusting
CC..0602..	SR20 M2.5x5	SR57 M5x20	SR55 M5x20	HFX.3	KEY02 T8	KEY01 M2.5	KEY01 M4	KEY01 M3
TP..0902..	SR22 M2.5x6	SR57 M5x20	SR55 M5x20	HFX.3	KEY02 T8	KEY01 M2.5	KEY01 M4	KEY01 M3
TC..1102..	SR20 M2.5x5	SR57 M5x20	SR55 M5x20	HFX.3	KEY02 T8	KEY01 M2.5	KEY01 M4	KEY01 M3
TP..1103..	SR22 M3x6	SR57 M5x20	SR55 M5x20	HFX.3	KEY02 T8	KEY01 M2.5	KEY01 M4	KEY01 M3



刀座调节方法

Instruction for Diameter Adjustment



轴向调节方法

Adjusting on axial direction

1. 稍微松开刀座锁紧螺钉 2.
2. 顺时针旋转轴向调节螺钉 3，刀座向前移动至需要的尺寸。
3. 夹紧刀座锁紧螺钉 2。

- 1, Loosening the 2# lock screw lightly.
- 2, Rotating the 3# axial adjusting screw on the anticlockwise direction, so that the cartridge can be moved forward to the required size.
- 3, Tightening the 2# lock screw firmly.

注意，如果刀座需要向后调节，应当松开刀座锁紧螺钉，并把刀座移动到后面，然后逐渐向前调节直到需要的尺寸。

Note: If the cartridge should be moved backward, please loosen the lock screw, and then move the cartridge to the back, finally adjust the cartridge to forward little by little to meet the required size.

刀具直径调节方法

Adjusting on radial direction

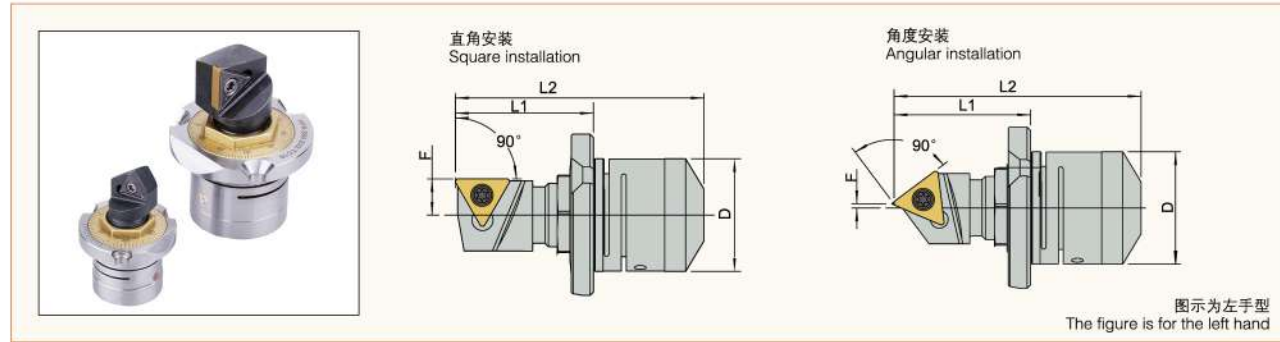
1. 顺时针方向旋转径向调节螺钉 1，刀具直径逐渐变大。
2. 逆时针方向旋转径向调节螺钉 1，刀具直径逐渐变小。
3. 径向调节螺钉调节是每旋转一个刻度，刀具直径变化 0.01mm

- 1, Rotating the 1# radial adjusting screw on the clockwise direction, so that the diameter of tool will be larger and larger.
- 2, Rotating the 1# radial adjusting screw on the anticlockwise direction, so that the diameter of tool will be smaller and smaller.
- 3, The adjustment on diameter: 0.01mm as per dial.

CARTRIDGE 刀座系列

微调镗头

Mini Precision Boring Head



微调镗头规格型号

Designation of Precision Boring Head

安装方式 Installation method	规格型号 Designation	主偏角 Approach angle	切入角 Entrance angle	D	L1	L2	F	Dmin	刀片型号 Insert	在库 Stock
角度安装 Angular installation 主偏角=90° Approach angle=90°	HFL/R A90.S16.CC06	90°	0°	16	14.2	25.15	0.45	25.5	CC.0602..	●
	HFL/R A90.S16.TC06	90°	0°	16	14.2	25.15	0.49	24.8	TC..06T1..	●
	HFL/R A90.S16.TB06	90°	0°	16	14.2	25.15	0.49	24.8	TB..0601..	●
	HFL/R A90.S20.TC09	90°	0°	20	19.8	34.3	0.9	32.5	TC..0902..	●
	HFL/R A90.S20.TP09	90°	0°	20	19.8	34.3	0.9	32.5	TP..0902..	●
	HFL/R A90.S22.TC11	90°	0°	22	23.8	46.2	1.1	42	TC..1102..	●
	HFL/R A90.S22.TP11	90°	0°	22	23.8	46.2	1.1	42	TP..1103..	●
	HFL/R A90.S32.TC16	90°	0°	32	32.15	63.14	1.2	59.4	TC..16T3..	●
	HFL/R A90.S32.TP11	90°	0°	32	32.15	63.14	1.2	59.4	TP..1103..	●
	HFL/R B90.S16.CC06	90°	0°	16	13.3	24.2	5.1	27	CC..0602..	●
直度安装 Square installation 主偏角=90° Approach angle=90°	HFL/R B90.S16.TC06	90°	0°	16	13.3	24.2	5.1	25	TB..0601..	●
	HFL/R B90.S16.TB06	90°	0°	16	13.3	24.2	5.1	25	TB..0601..	●
	HFL/R B90.S20.TC09	90°	0°	20	18.3	32.9	6.3	36.5	TC..0902..	●
	HFL/R B90.S20.TP09	90°	0°	20	18.3	32.9	6.3	36.5	TP..0902..	●
	HFL/R B90.S22.TC11	90°	0°	22	22.1	44.3	7.2	48.5	TC..1102..	●
	HFL/R B90.S22.TP11	90°	0°	22	22.1	44.3	7.2	48.5	TP..1103..	●
	HFL/R B90.S32.TP11	90°	0°	32	32	62.7	10.3	68.4	TP..1103..	●
	HFL/R B90.S32.TC16	90°	0°	32	32	62.7	10.3	68.4	TC..16T3..	●

- 刀片请根据不同材料单独订购，请参照：F001,F002,F003,F004 页
- 安装尺寸，请参照：A088 页
- 订货示例：1 件 HFR A90.S16.CC06
- Insert with different materials should be ordered separately, please see page F001,F002,F003,F004.
- Installation size, please see page A088.
- Ordering sample: 1 PC HFR A90.S16.CC06

备件

Spare Parts

D	镗头锁紧螺钉 Clamping screw for boring head	锁紧扳手 Allen key for clamping screw	调整扳手 Allen key for adjusting screw
D=16	SR22 M3x8	KEY02 T8	KEY S10
D=20	SR22 M3x8	KEY02 T8	KEY S13
D=22	SR20 M4x11.5	KEY02 T15	KEY S15
D=32	SR21 M5x12.8	KEY02 T20	KEY S22

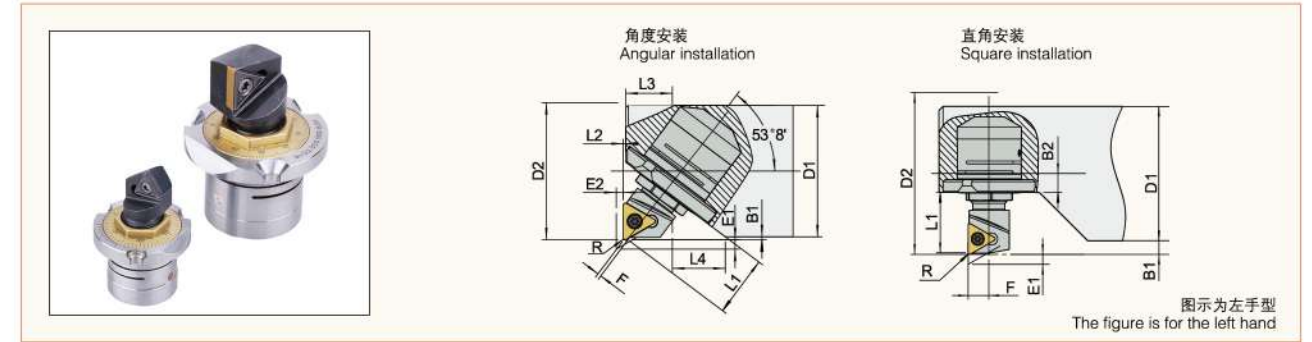
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CC..0602..	SR20 M2.5x6	KEY02 T8
TC..06T1..	SR20 M2x3.5	KEY02 T6
TC..0902..	SR20 M2.2x4.6	KEY02 T7
TC..1102..	SR20 M2.5x6	KEY02 T8
TC..16T3..	SR21 M4x9.5	KEY02 T15
TB..0601..	SR20 M2x3.5	KEY02 T6
TP..0902..	SR22 M2.5x6	KEY02 T8
TP..1103..	SR22 M3x8	KEY02 T8

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

CARTRIDGE 刀座系列

微调镗头

Mini Precision Boring Head



微调镗头安装尺寸

Installation Dimension

安装方式 Installation method	D	R	D1 min	D2 min	B1 min	E1 max	E2 max	B2 min	L1 min	L2	L3	L4	F
角度安装 Angular installation 主偏角=90° Approach angle=90°	16	0.2	26.0	27.9	0.6	2.5	-	3.6	9.8	-	-	-	5.1
		0.4	26.0	27.6	0.55	2.5	-	3.6	9.6	-	-	-	5.1
	16	0.2	24.0	25.9	0.6	2.5	-	3.6	8.8	-	-	-	5.1
		0.4	24.0	25.6	0.55	2.5	-	3.6	8.6	-	-	-	5.1
	20	0.2	24.0	25	0.5	2.5	-	3.6	8.1	-	-	-	5.1
		0.8	24.0	25	0.5	2.5	-	3.6	8.1	-	-	-	5.1
	20	0.2	34.5	37.4	1.45	3.5	-	4.55	13.95	-	-	-	6.3
		0.4	34.5	37.1	1.3	3.5	-	4.55	13.6	-	-	-	6.3
	22	0.2	46.5	49.4	1.45	6	-	7.75	16.75	-	-	-	7.2
		0.4	46.5	49.1	1.3	6	-	7.75	16.4	-	-	-	7.2
32	0.2	46.5	48.5	1	6	-	7.75	15.7	-	-	-	7.2	
	0.8	46.5	48.5	1	6	-	7.75	15.7	-	-	-	7.2	
32	0.4	67.0	69.6	1.3	10	-	9.4	25	-	-	-	10.3	
	0.8	67.0	69	1	10	-	9.4	24.3	-	-	-	10.3	
16	0.2	22.0	26.2	1.7	2	1.5	-	11	0.5	6.6	9.55	0.4	
	0.4	22.0	25.9	1.65	2	1.5	-	10.7	0.5	6.6	9.55	0.4	
16	0.2	22.0	25.3	1.6	2	1.5	-	10.1	0.5	6.6	9.55	0.45	
	0.8	22.0	25.3	1.6	2	1.5	-	10.1	0.5	6.6	9.55	0.45	
16	0.2	22.0	25.7	1.5	2	1.5	-	10.9	0.5	6.6	9.55	0.4	
	0.4	22.0	25.4	1.45	2	1.5	-	10.6	0.5	6.6	9.55	0.4	
20	0.2	22.0	24.8	1.4	2	1.5	-	10	0.5	6.6	9.55	0.45	
	0.8	22.0	24.8	1.4	2	1.5	-	10	0.5	6.6	9.55	0.45	
22	0.2	28.5	33.4	2.45	2.8	2.1	-	14.9	0.5	9.4	12.15	0.95	
	0.4	28.5	33.1	2.3	2.8	2.1	-	14.5	0.5	9.4	12.15	1	
22	0.2	28.5	32.5	2	2.8	2.1	-	13.7	0.5	9.4	12.15	1.1	
	0.8	28.5	32.5	2	2.8	2.1	-	13.7	0.5	9.4	12.15	1.1	
32	0.2	38.0	42.9	2.45	4.8	3.6	-	17.6	0.5	11.2	14.85	1.15	
	0.4	38.0	42.6	2.3	4.8	3.6	-	17.2	0.5	11.2	14.85	1.2	
32	0.2	38.0	42	2	4.8	3.6	-	16.4	0.5	11.2	14.85	1.3	
	0.8	38.0	42	2	4.8	3.6	-	16.4	0.5	11.2	14.85	1.3	
32	0.4	55.0	60.6	2.8	8	6	-	26.2	0.5	16.65	23.7	1.3	
	0.8	55.0	60	2.5	8	6	-	25.4	0.5	16.65	23.7	1.4	
32	1.2	55.0	59.4	2.2	8	6	-	24.6	0.5	16.65	23.7	1.5	

- 安装尺寸，请参照：A088 页
- Installation size, please see page A088.

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
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CARTRIDGE 刀座系列

微调镗头

Mini Precision Boring Head

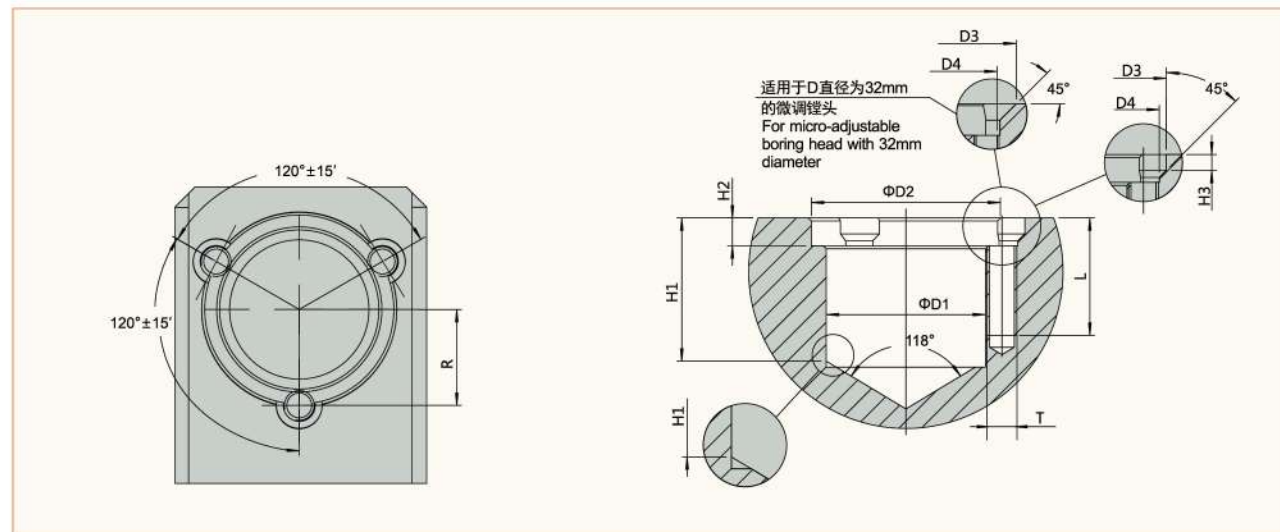
- 微调镗头是定制非标刀具系统中的精密微调模块，适合于精加工及半精加工工序的镗孔应用；
- 其结构化的设计、高精度、高可靠性的特点，使组合镗孔刀具的设计、生产效率大幅提升，且降低了刀具生产周期；
- 使用微调镗头模块的非标刀具在精镗孔的时候调节非常方便、操作简单、自锁的结构有效降低因操作不当引起的损坏。
- Micro boring head is the precision module for the special boring tools, which is for finishing and semi-finishing process;
- It is with the features of high precision, high reliability and high repeatability due to the modular structure, It improves the performance of modular boring tool, moreover shortens the production cycle;
- The special cutting tools with the micro boring head are easy to be adjusted and operated, and the damages caused by improper operation reduced due to the self-locking structure.

特点：

- 径向安装，轴向间距小，尤其在直径较小的刀具，优势更加明显。
- 微调刻度盘在模块的前方，所以可以在非常方便的角度进行微调。
- 微调单元是自锁的设计，在微调前无需其他操作，调整后不用锁紧。
- 整个微调单元安装在盲孔内，有效防止切削液、灰尘等进入，大大提高了使用寿命及尺寸稳定性。

Features:

- The axial gap is smaller when installing on radial direction, and the advantages are more obvious for the small diameter tools.
- It is easy to be adjusted due to the micro knob in the front of micro boring head.
- There is no need to do any operations before and after adjusting due to the self-locking structure.
- The micro boring head will be installed into the blind hole and it could help stop the cutting chips and dust, so that the tools will get higher stability and longer life.



安装尺寸

Setting Instruction

D 直径 Diameter	D1(H7)	D2	D3	D4	H1	H2	H3	L	R	T
16	16	19	4,6	3,2	11,5	2,8	1,6	9	9,65±0,02	M3
20	20	25	4,6	3,2	15,5	4	1,6	9	12,5±0,05	M3
22	22	30	6,5	4,3	24	5	1,8	13	15,4±0,05	M4
32	32	46	11,9	5,4	33	6,3	-	16	23±0,05	M5



CONTENTS

B

DAMPING TOOLS 阻尼减振刀具

DAMPING BORING TOOL 阻尼减振镗刀

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VBF 系列阻尼减振微调精镗刀 VBF Damping Mini Precision Boring Tool	B002
VBF 系列阻尼减振微调精镗刀 (反精镗加工示意) VBF Damping Precision Back Boring Tool	B003
VLR 桥式阻尼减振粗镗刀 VLR Damping Rough Boring Tool With Bridge	B004
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DAMPING BORING TOOL

阻尼减振镗刀

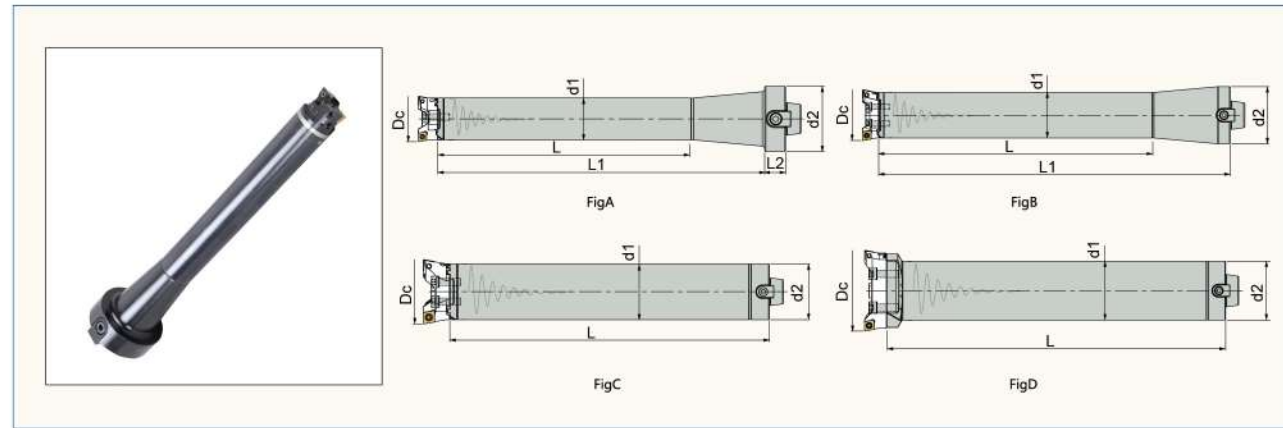


DAMPING TOOLS 阻尼减振刀具

VBR 系列阻尼减振粗镗刀

VBR Damping Rough Boring Tool

双刃可调, 镗孔加工范围 $\Phi 21-\Phi 153$, 短锥模块式 E 接口, 矩形槽刀座接口, 内置减振机构, 可有效抑制深孔加工时所产生的振动。
Two teeth rough boring tool, diameter range is $\Phi 21-\Phi 153$. Hollow short taper modular type E connection, with rectangular guide slot cartridge. It can effectively control the vibration when for the deep hole working due to the damping mechanism.



规格型号 Designation	Dc	d1	d2	L	L1	L2	Fig	Kg	适配刀座 Cartridge	在庫 Stock
VBR D20.E50.125	21-24	20	50	125	165	16	A	0.9	C90A D020-024.CC06	●
	23-27	20	50	125	165	16	A	0.9	C90A D023-027.CC06	●
	26-30	20	50	125	165	16	A	0.9	C90A D19.2630.CC06	●
VBR D25.E50.150	26-35	25	50	150	200	16	A	1.2	C90A D026-035.CC06	●
	33-42	25	50	150	200	16	A	1.2	C90A D25.3342.CC06	●
VBR D32.E50.195	33-41	32	50	195	252	16	A	2.1	C90A D033-041.CC06	●
	39-47	32	50	195	252	16	A	2.1	C90A D32.3947.CC06	●
VBR D40.E50.240	41-55	40	50	240	315	/	B	3.8	C90A D041-055.CC09	●
	53-67	40	50	240	315	/	B	3.8	C90A D40.5367.CC09	●
VBR D50.E63.300	55-70	50	63	300	390	/	B	6.1	C90A D055-070.CC09	●
	68-83	50	63	300	390	/	B	6.1	C90A D50.6883.CC09	●
VBR D63.E63.360	70-90	63	63	360	/	/	C	8.5	C90A D070-090.CC12	●
	88-108	63	63	360	/	/	C	8.5	C90A D63.88108.CC12	●
VBR D80.E80.460	90-110	80	80	460	/	/	C	17.1	C90A D090-110.CC12	●
	108-128	80	80	460	/	/	C	17.1	C90A D80.108128.CC12	●
VBR D100.E80.460	110-133	80	80	460	/	/	D	17.2	C90A D110-133.CC12	●
	130-153	80	80	460	/	/	D	17.2	C90A D130-153.CC12	●

- 当 $d1 \leq 50$ 时, 刀杆镗孔深度是镗孔直径的六倍, 当 $d1 \geq 63$ 时, 刀杆镗孔深度是镗杆直径的六倍。
- 适配刀座需单独订购, 请参照: [A044, A046](#) 页
- 适配刀柄需单独订购, 请参照: [A019-A020](#) 页
- 刀具具有内冷出水孔。
- 若出现减振能力下降时, 建议维修保养。
- 订货示例: 1 件 VBR D20.E50.125
- Hole depth is 6D(hole diameter) when $d1 \leq 50$, and hole depth is 6D(tool body diameter) when $d1 \geq 63$.
- The cartridge should be ordered separately, please see page [A044, A046](#).
- The adaptor should be ordered separately, please see page [A019-A020](#).
- With coolant hole.
- Suggest to do the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBR D20.E50.125

备件

Spare Parts

Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	调整扳手 Allen key for adjusting screw
21-39mm	SR55 M4x16	GK20 D4	KEY01 M3
33-47mm	SR55 M5x16	GK20 D5	KEY01 M4
41-61mm	SR55 M6x20	GK20 D6	KEY01 M5
55-76mm	SR55 M6x20	GK20 D6	KEY01 M5
70-108mm	SR55 M8x25	GK20 D8	KEY01 M6
90-153mm	SR55 M0x30	GK20 D10	KEY01 M8

D2	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key
D2=50	PL04 12x9	SR55 M5x12
D2=63	PL04 14x12	SR55 M5x16
D2=80	PL04 16x14	SR55 M6x16

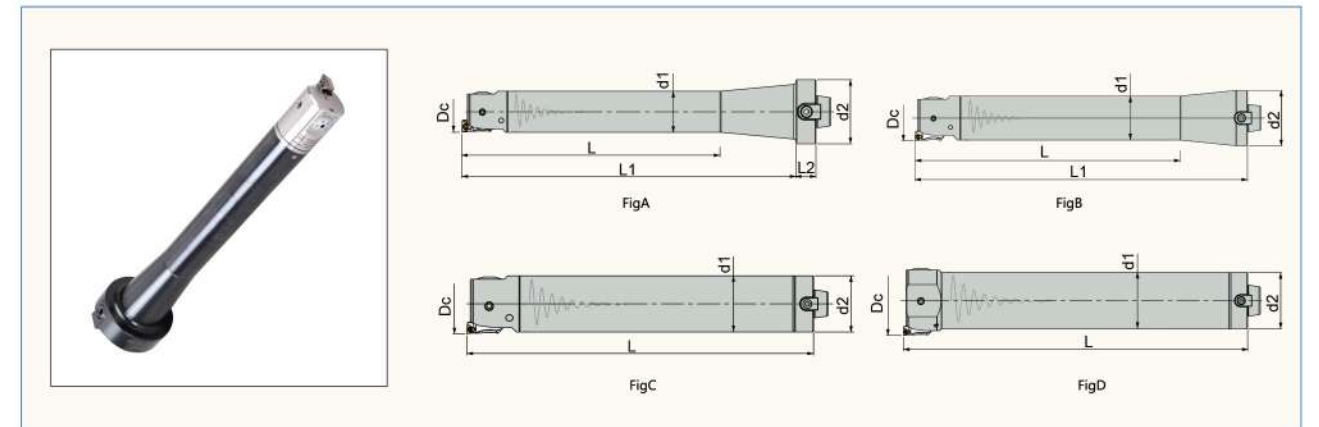
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

DAMPING TOOLS 阻尼减振刀具

VBF 系列阻尼减振微调精镗刀

VBF Damping Mini Precision Boring Tool

单刃可微调, 微调精度每格直径 0.01mm, 加工范围 $\Phi 21-\Phi 212$, 短锥模块式 E 接口, 适配直压式精镗刀头, 内置减振机构, 可有效抑制深孔加工时所产生的振动。
It can be micro-adjusted with single tooth. 1 DIV=0.01mm in diameter. The diameter range is $\Phi 21-\Phi 212$. Hollow short taper modular type E connection. It can effectively control the vibration when for the deep hole working due to the damping mechanism.



规格型号 Designation	Dc	d1	d2	L	L1	L2	Fig	Kg	适配刀座 Cartridge	在庫 Stock
VBF D20.E50.130	21-26	20	50	130	170	16	A	1.0	FRB 10A...	●
	25-31	20	50	130	170	16	A	1.0	FRB 10B...	●
	30-36	20	50	130	170	16	A	1.0	FRB 10C...	●
VBF D25.E50.155	26-34	25	50	155	205	16	A	1.2	FRB 12A...	●
	33-41	25	50	155	205	16	A	1.2	FRB 12B...	●
	40-48	25	50	155	205	16	A	1.2	FRB 12C...	●
VBF D32.E50.200	33-43	32	50	200	262	16	A	2.2	FRB 16A...	●
	42-52	32	50	200	262	16	A	2.2	FRB 16B...	●
	51-61	32	50	200	262	16	A	2.2	FRB 16C...	●
VBF D40.E50.245	42-54	40	50	245	325	/	B	3.8	FRB 20A...	●
	53-65	40	50	245	325	/	B	3.8	FRB 20B...	●
	64-76	40	50	245	325	/	B	3.8	FRB 20C...	●
VBF D50.E63.305	53-69	50	63	305	380	/	B	6.0	FRB 25A...	●
	68-84	50	63	305	380	/	B	6.0	FRB 25 B...	●
	83-99	50	63	305	380	/	B	6.0	FRB 25C...	●
VBF D63.E63.385	68-100	63	63	385	/	/	C	8.9	FRB 30A...	●
	98-130	63	63	385	/	/	C	8.9	FRB 30B...	●
	128-160	63	63	385	/	/	C	8.9	FRB 30C...	●
VBF D80.E80.485	88-120	80	80	485	/	/	C	18.1	FRB 30A...	●
	118-150	80	80	485	/	/	C	18.1	FRB 30B...	●
	148-180	80	80	485	/	/	C	18.1	FRB 30C...	●
VBF D100.E80.485	100-152	100	80	485	/	/	D	18.4	FRB 30A...	●
	130-182	100	80	485	/	/	D	18.4	FRB 30B...	●
	160-212	100	80	485	/	/	D	18.4	FRB 30C...	●

- 当 $d1 \leq 50$ 时, 刀杆镗孔深度是镗孔直径的六倍, 当 $d1 \geq 63$ 时, 刀杆镗孔深度是镗杆直径的六倍。
- 精镗刀头需单独订购, 请参照: [A048](#) 页
- 适配刀柄需单独订购, 请参照: [A019-A020](#) 页
- 刀具具有内冷出水孔。
- 若出现减振能力下降时, 建议维修保养。
- 订货示例: 1 件 VBF D20.E50.130
- Hole depth is 6D(hole diameter) when $d1 \leq 50$, and hole depth is 6D(tool body diameter) when $d1 \geq 63$.
- The cartridge should be ordered separately, please see page [A048](#).
- The adaptor should be ordered separately, please see page [A019-A020](#).
- With coolant hole.
- Suggest to do the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBF D20.E50.130

备件

Spare Parts

规格型号 Designation	LOCK 螺钉 Lock screw	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	刀头锁紧螺钉 Clamp screw for cartridge	刀头锁紧扳手 Allen key for cartridge clamping screw	调整扳手 Allen key for adjusting screw
VBF D20.E50.130	SR54 M4x4	PL03 8x2	SR57 M3x8	SR20 M4x6-X	KEY02 T15	KEY01 M2
VBF D25.E50.155	SR54 M4x6	PL03 8x2	SR57 M3x8	SR20 M4x8-X	KEY02 T15	KEY01 M2
VBF D32.E50.200	SR54 M5x8	PL03 8x6	SR57 M3x10	SR56 M5x10	KEY01 M3	KEY01 M2.5
VBF D40.E50.245	SR54 M6x10	PL03 10x5	SR57 M4x10	SR56 M5x12	KEY01 M3	KEY01 M3
VBF D50.E63.305	SR54 M6x12	PL04 12x9	SR55 M5x12	SR56 M6x16	KEY01 M4	KEY01 M3
VBF D63.E63.385	SR54 M10x16	PL04 14x12	SR55 M5x16	SR56 M8x20	KEY01 M5	KEY01 M5
VBF D80.E80.485	SR54 M10x20	PL04 16x14	SR55 M6x16	SR56 M8x25	KEY01 M5	KEY01 M5
VBF D100.E80.485	SR54 M10x20	PL04 16x14	SR55 M6x16	SR56 M8x25	KEY01 M5	KEY01 M5

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

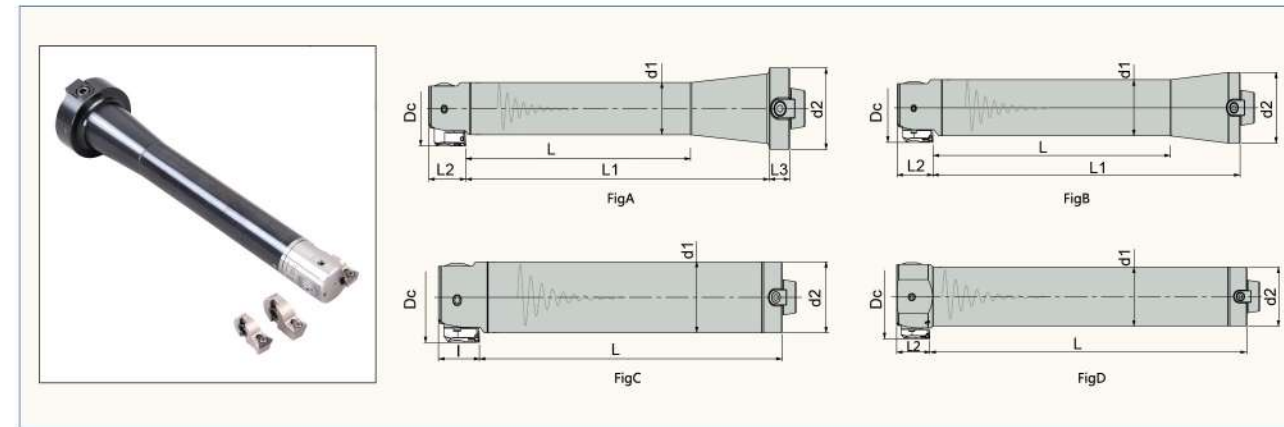
DAMPING TOOLS 阻尼减振刀具

VBF 系列阻尼减振微调精镗刀 (反精镗加工示意)

VBF Damping Precision Back Boring Tool

直压式精镗刀头反装,即可轻松实现反镗精加工。加工范围 $\Phi 30-\Phi 212$ 。精度与正镗一致,但加工时刀具必须逆时针旋转,且过孔直径 D 满足 " $D \geq (Dc+D1)/2+1$ " 要求。内置减振机构,可有效抑制深孔加工时所产生的振动。

Please assemble the cartridge as its reverse direction. Which is for back boring. And the back boring range is $\Phi 30-\Phi 212$ and also with the same precision as the ordinary boring tool. But the tool should be rotated by the reserve direction when machining and the hole diameter D should meet the requirement of " $D \geq (Dc+D1)/2+1$ ". It can effectively control the vibration when for the deep hole working due to the damping mechanism.



规格型号 Designation	Dc	d1	d2	L	L1	L2	L3	Fig	Kg	精镗刀头 Cartridge
VBF D20.E50.130	30-36	20	50	107	147	21	16	A	1.0	FRB 10C...
VBF D25.E50.155	36-41	25	50	125	175	25	16	A	1.2	FRB 12B...
	40-48	25	50	125	175	25	16	A	1.2	FRB 12C...
VBF D32.E50.200	47-52	32	50	165	230	29	16	A	2.2	FRB 16B...
	51-61	32	50	165	230	29	16	A	2.2	FRB 16C...
VBF D40.E50.245	55-65	40	50	205	285	34	/	B	3.8	FRB 20B...
	64-76	40	50	205	285	34	/	B	3.8	FRB 20C...
VBF D50.E63.305	62-69	50	63	260	335	40	/	B	6.0	FRB 25A...
	68-84	50	63	260	335	40	/	B	6.0	FRB 25B...
	83-99	50	63	260	335	40	/	B	6.0	FRB 25C...
VBF D63.E63.385	80-100	63	63	335	/	46	/	C	8.9	FRB 30A...
	98-130	63	63	335	/	46	/	C	8.9	FRB 30B...
	128-160	63	63	335	/	46	/	C	8.9	FRB 30C...
VBF D80.E80.485	100-120	80	80	435	/	46	/	C	18.1	FRB 30A...
	118-150	80	80	435	/	46	/	C	18.1	FRB 30B...
	148-180	80	80	435	/	46	/	C	18.1	FRB 30C...
VBF D100.E80.485	112-152	100	80	435	/	46	/	D	18.4	FRB 30A...
	130-182	100	80	435	/	46	/	D	18.4	FRB 30B...
	160-212	100	80	435	/	46	/	D	18.4	FRB 30C...

- 精镗刀头需单独订购, 请参照: A048 页
- 适配刀柄需单独订购, 请参照: A019-A020 页
- 刀具具有内冷出水孔。
- 若出现减振能力下降时, 建议维修保养。
- 订货示例: 1 件 VBF D20.E50.130
- The cartridge should be ordered separately, please see page A048.
- The adaptor should be ordered separately, please see page A019-A020.
- With coolant hole.
- Suggest to do the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBF D20.E50.130

DAMPING BORING TOOL WITH BRIDGE

阻尼减振桥式镗刀



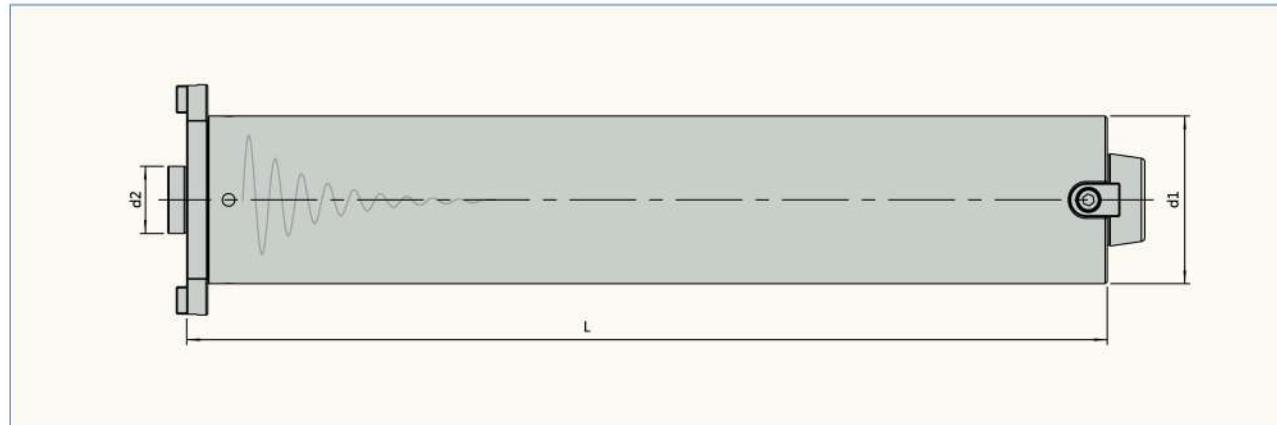
DAMPING TOOLS 阻尼减振刀具

VNL 桥式阻尼减振镗刀接杆

VNL Damping Adaptor for Boring Tool with Bridge

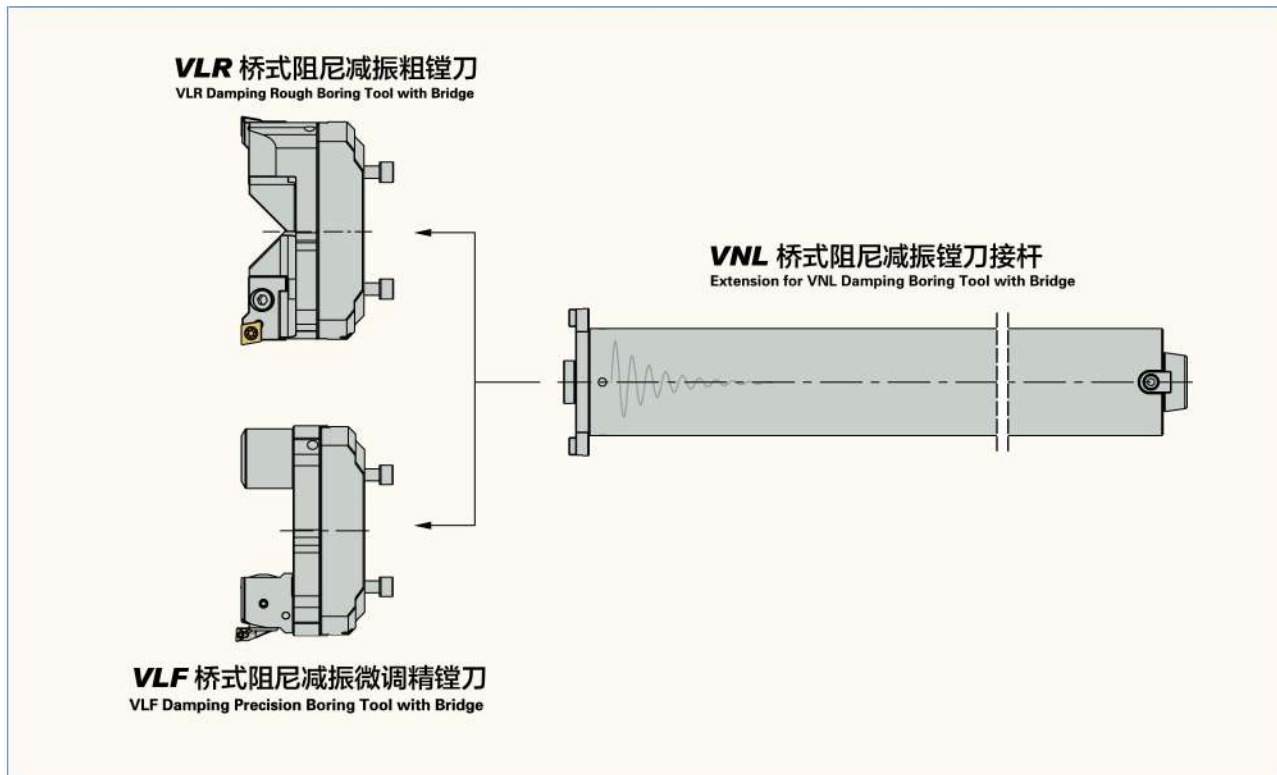
桥式减振镗刀专用接杆，内置减振机构，可有效抑制深孔加工时所产生的振动。

It can effectively control the vibration when for the deep hole working due to the damping mechanism.



规格型号 Designation	d1	d2	L	Kg	平键 Flat key	在库 Stock
VNL32 D80.E80.440	80	32	440	16.05	PL04 12x10	●

- 刀杆有内冷出水孔。
- 适配刀柄需单独订购，请参照：A019-A020 页
- 订货示例：1 件 VNL32 D80.E80.440
- With coolant hole.
- The adaptor should be ordered separately, please see page A019-A020.
- Ordering sample: 1 PC VNL32 D80.E80.440.



DAMPING TURNING TOOL HOLDER

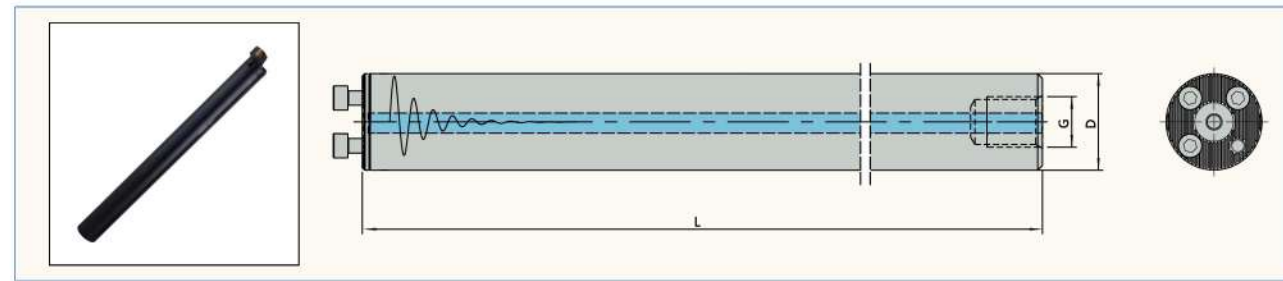
阻尼减振车刀杆



DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀杆

Damping Turning Tool Holder



规格型号 Designation	D	L	G	L/D	Kg	适配缩径头 Reducing head	适配刀头 Cartridge	在库 Stock
VT16 C16x156V	16	156	G1/8"	7	0.2	/	VT16..	●
VT16 C16x204VE	16	204	/	10	0.5	/	VT16..	●
VT20 C20x200V	20	200	G1/4"	7	0.4	/	VT20..	●
VT20 C20x260VE	20	260	/	10	0.8	/	VT20..	●
VT25 C25x255V	25	255	G1/4"	7	1.0	/	VT25..	●
VT25 C25x330V	25	330	G1/4"	10	1.3	/	VT25..	●
VT32 C32x320V	32	320	G3/8"	7	2.1	/	VT32..	●
VT32 C32x416V	32	416	G3/8"	10	2.8	/	VT32..	●
VT40 C40x408V	40	408	G1/2"	7	4.6	/	VT40..	●
VT40 C40x528V	40	528	G1/2"	10	5.3	/	VT40..	●
VT50 C50x518V	50	518	G1/2"	7	7.2	RE VT50-VT32	VT32..	●
VT50 C50x668V	50	668	G1/2"	10	9.3	RE VT50-VT40	VT40..	●
VT60 C60x628V	60	628	G3/4"	7	12.5	RE VT60-VT40	VT40..	●
VT60 C60x808V	60	808	G3/4"	10	16.3		VT40..	●

- 推荐最小夹紧长度为 4xD。
- 刀杆有内冷出水孔。
- 适配刀头需单独订购，请参照：☞ B009-B024 页
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 VT16 C16x156V。
- Suggested min. Length is 4xD.
- With coolant hole.
- The cartridge should be ordered separately, please see page B009-B024.
- The reducing head should be ordered separately.
- Suggest to do the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VT16 C16x156V.

备件

Spare Parts

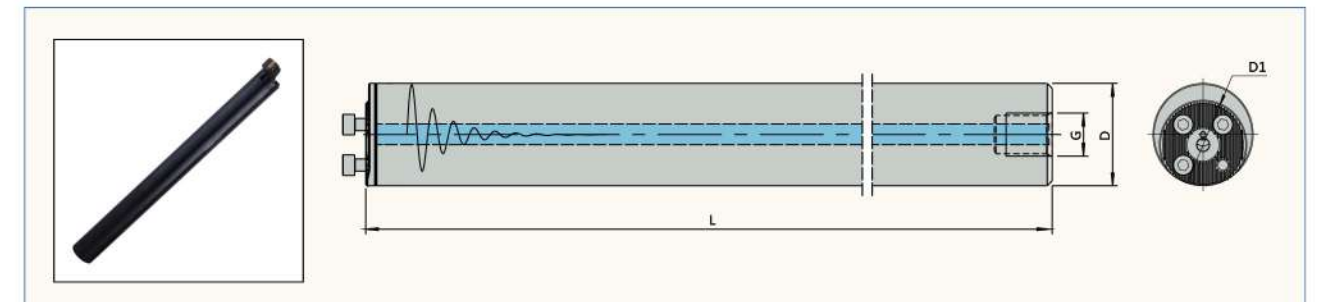
D	刀头锁紧螺钉 Clamp screw for cartridge	刀头锁紧扳手 Allen key for cartridge clamping screw
16	SR55 M3x10	KEY01 M2.5
20	SR55 M3.5x10	KEY01 M2.5
25	SR55 M4x12	KEY01 M3
32	SR55 M5x16	KEY01 M4
40	SR55 M6x16	KEY01 M5
50	SR55 M8x20	KEY01 M6
60	SR55 M8x20	KEY01 M6

- 标准库存 Item in stock
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DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀杆

Damping Turning Tool Holder



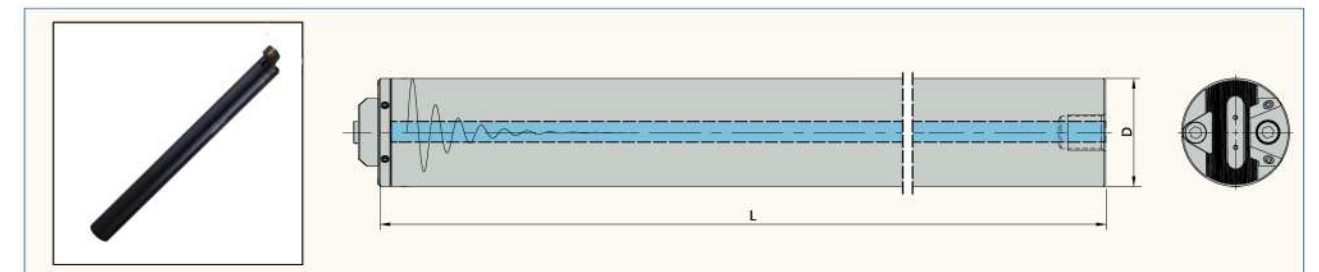
规格型号 Designation	D	D1	L	G	L/D	Dmin	Kg	适配刀头 Cartridge	在库 Stock
VT40 C50x518V	50	40	518	G1/2"	7	60	7.2	VT40..	●
VT40 C50x668V	50	40	668	G1/2"	10	60	9.3	VT40..	●
VT40 C60x628V	60	40	628	G3/4"	7	70	12.5	VT40..	●
VT40 C60x608V	60	40	808	G3/4"	10	70	16.3	VT40..	●

- 推荐最小夹紧长度为 4xD。
- 刀杆有内冷出水孔。
- 适配刀头需单独订购，请参照：☞ B009-B024 页
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 VT40 C50x518V。
- Suggested min. Length is 4xD.
- With coolant hole.
- The cartridge should be ordered separately, please see page B009-B024.
- Suggest to do the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VT40 C50x518V.

备件

Spare Parts

D1	刀头锁紧螺钉 Clamp screw for cartridge	刀头锁紧扳手 Allen key for cartridge clamping screw
40	SR55 M6x16	KEY01 M5



规格型号 Designation	D	L	G	L/D	Kg	适配刀头 Cartridge	在库 Stock
VH80 C80x880V	80	880	G3/4"	7	31.8	VH80..	●
VH80 C80x1200V	80	1200	G3/4"	10	52.3	VH80..	●

- 推荐最小夹紧长度为 4xD。
- 刀杆有内冷出水孔。
- 适配刀头需单独订购，请参照：☞ B009-B024 页
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 VT40 C50x518V。
- Suggested min. Length is 4xD.
- With coolant hole.
- The cartridge should be ordered separately, please see page B009-B024.
- Suggest to do the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VH800 C80x880V.

备件

Spare Parts

D1	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	上压板 Upper clamping pad	下压板 Lower clamping pad	压板弹簧 Spring clamping pad
80	SR55 M10x25	KEY01 M8	PB20 M10x16	PB20 M10x11	YH 12.5x0.9x18

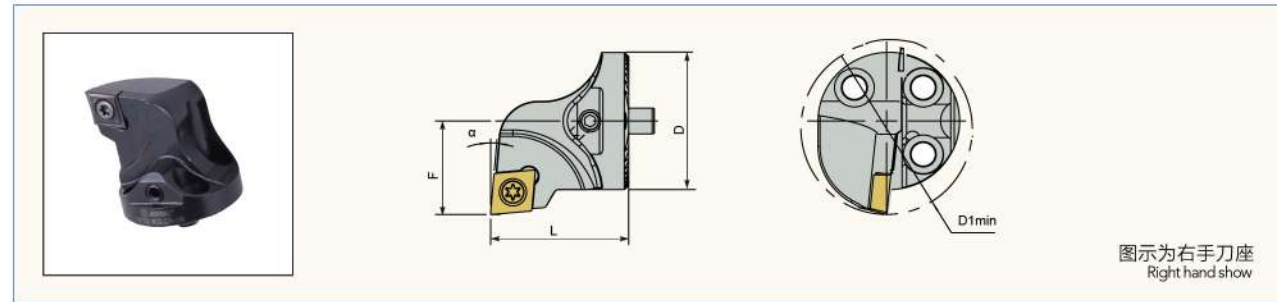
- 标准库存 Item in stock
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DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 95° 正镗 Positive Type 95° Boring



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VT16 SCLCR-06	16	20	11	20	5°	0.02	CC..0602..	●
VT20 SCLCR-09	20	25	13	20	5°	0.03	CC..09T3..	●
VT25 SCLCR-09	25	32	17	22	5°	0.04	CC..09T3..	●
VT32 SCLCR-09	30	40	22	32	5°	0.1	CC..09T3..	●
VT40 SCLCR-12T	40	50	27	38	5°	0.2	CC..1204..	●
VT16 SCLCL-06	16	20	11	20	5°	0.02	CC..0602..	●
VT20 SCLCL-09	20	25	13	20	5°	0.03	CC..09T3..	●
VT25 SCLCL-09	25	32	17	22	5°	0.04	CC..09T3..	●
VT32 SCLCL-09	30	40	22	32	5°	0.1	CC..09T3..	●
VT40 SCLCL-12T	40	50	27	38	5°	0.2	CC..1204..	●

● 刀片请根据不同材料单独订购, 请参照: F002 页
● 订货示例: 1 件 VT16 SCLCR-06.

● The insert should be ordered separately, please see page F002.
● Ordering sample: 1 PC VT16 SCLCR-06.

备件

Spare Parts

规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	刀垫 Shim	刀垫螺套 Sleeve for shim	刀垫扳手 Allen key for shim	定位销 Locating pin
VT16 ..-06	SR20 M2.5x6	KEY02 T8	--	--	--	FT39 D4-3x7
VT20 ..-09	SR21 M4x9.5	KEY02 T15	--	--	--	FT39 D6-5x8
VT25/32 ..-09	SR21 M4x9.5	KEY02 T15	--	--	--	FT39 D6-5x11
VT40 ..-12T	SR21 M5x12.8	KEY02 T20	ST01 CC12x2.8	SRT M7-M5x13	KEY01 M3	FT39 D6-5x11

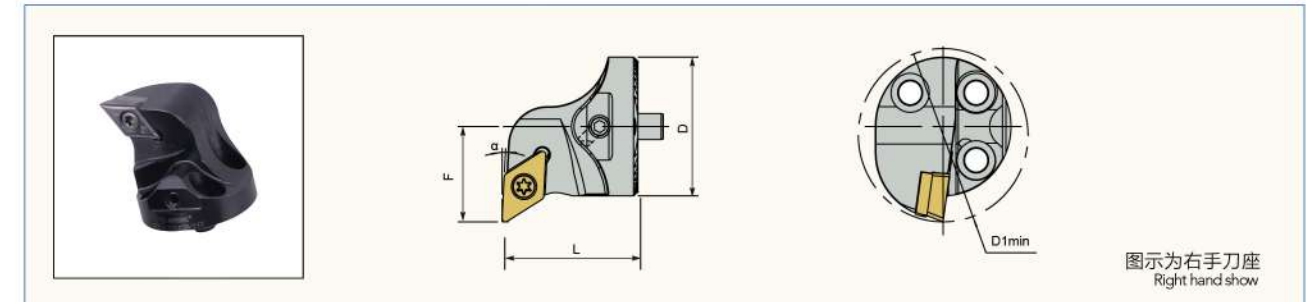
● 标准库存 Item in stock
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DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 正镗 Positive Type 93° Boring



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VT16 SDUCR-07	16	20	11	20	3°	0.02	DC..0702..	●
VT20 SDUCR-11	20	25	13	20	3°	0.03	DC..11T3..	●
VT25 SDUCR-11	25	32	17	22	3°	0.04	DC..11T3..	●
VT32 SDUCR-11T	30	40	22	32	3°	0.1	DC..11T3..	●
VT40 SDUCR-11T	40	50	27	38	3°	0.2	DC..11T3..	●
VT16 SDUCL-07	16	20	11	20	3°	0.02	DC..0702..	●
VT20 SDUCL-11	20	25	13	20	3°	0.03	DC..11T3..	●
VT25 SDUCL-11	25	32	17	22	3°	0.04	DC..11T3..	●
VT32 SDUCL-11T	30	40	22	32	3°	0.1	DC..11T3..	●
VT40 SDUCL-11T	40	50	27	38	3°	0.2	DC..11T3..	●

● 刀片请根据不同材料单独订购。
● 订货示例: 1 件 VT16 SDUCR-07.

● The insert should be ordered separately.
● Ordering sample: 1 PC VT16 SDUCR-07.

备件

Spare Parts

规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	刀垫 Shim	刀垫螺套 Sleeve for shim	刀垫扳手 Allen key for shim	定位销 Locating pin
VT16 ..-07	SR20 M2.5x6	KEY02 T8	-	-	-	FT39 D4-3x7
VT20 ..-11	SR21 M4x11	KEY02 T15	-	-	-	FT39 D6-5x8
VT25 ..-11	SR21 M4x11	KEY02 T15	-	-	-	FT39 D6-5x11
VT32/40 ..-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

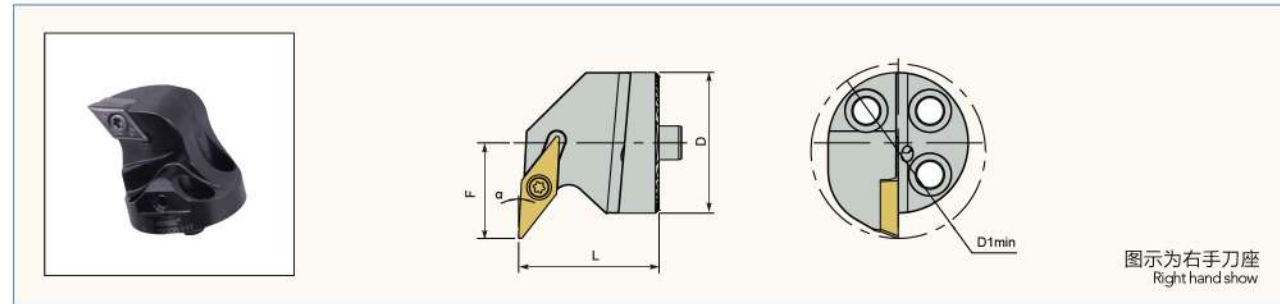
● 标准库存 Item in stock
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○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 正镗及仿形车 Positive Type 93° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在库 Stock
VT20 SVUCR-11	20	27	16	20	3°	0.02	VC..1103..	●
VT25 SVUCR-11	25	31	17	25	3°	0.04	VC..1103..	●
VT20 SVUCL-11	20	27	16	20	3°	0.02	VC..1103..	●
VT25 SVUCL-11	25	31	17	25	3°	0.04	VC..1103..	●

- 刀片请根据不同材料单独订购。
- 订货示例: 1 件 VT20 SVUCR-11。
- The insert should be ordered separately.
- Ordering sample: 1 PC VT20 SVUCR-11.

备件

Spare Parts

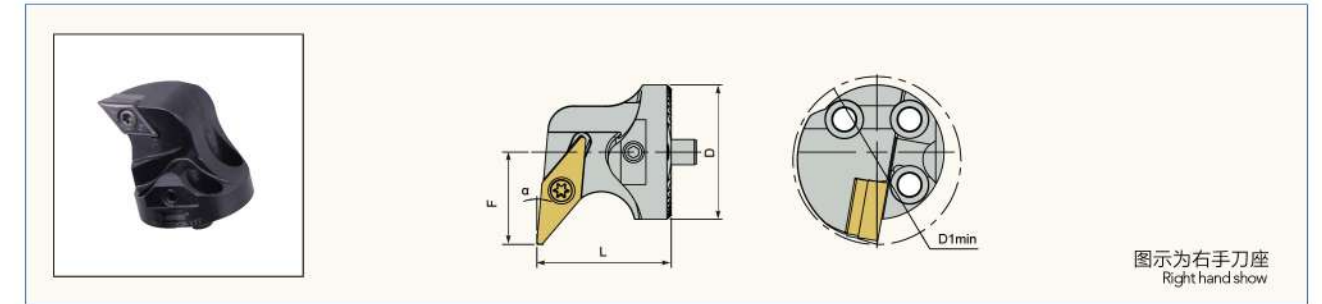
规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	定位销 Locating pin
VT20 ...-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x8
VT25 ...-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x11

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 95° 正镗及仿形车 Positive Type 95° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在库 Stock
VT32 SVLCR-16T	32	40	22	32	5°	0.1	VC..1604..	●
VT40 SVLCR-16T	40	50	27	32	5°	0.15	VC..1604..	●
VT32 SVLCL-16T	32	40	22	32	5°	0.1	VC..1604..	●
VT40 SVLCL-16T	40	50	27	32	5°	0.15	VC..1604..	●

- 刀片请根据不同材料单独订购, 请参照: F010 页
- 订货示例: 1 件 VT32 SVLCR-16T.
- The insert should be ordered separately, please see page F010.
- Ordering sample: 1 PC VT32 SVLCR-16T.

备件

Spare Parts

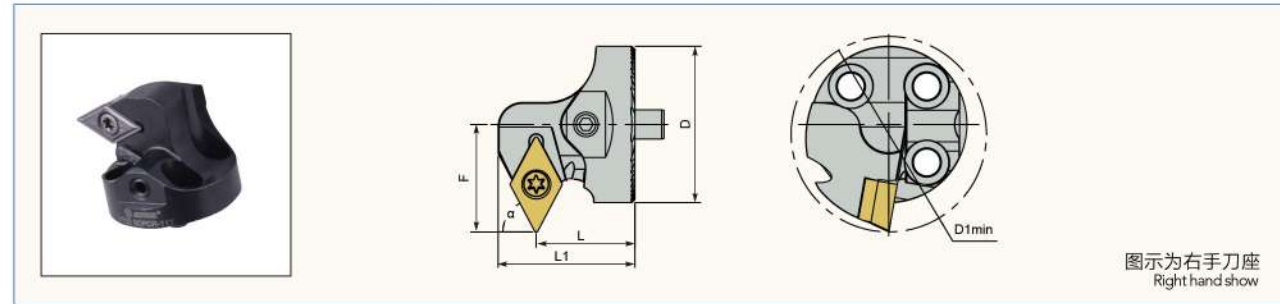
规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	刀垫 Shim	刀垫螺套 Sleeve for shim	刀垫扳手 Allen key for shim	定位销 Locating pin
VT32/40 ...-16T	SR21 M4x11	KEY02 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 62.5° 仿形车 Positive Type 62.5° Profile-turning



规格型号 Designation	D	D1 min	F	L	L1	α°	Kg	适配刀片 Insert	在庫 Stock
VT16 SDPCR-07	16	22	13	15	19	62.5°	0.01	DC..0702..	●
VT20 SDPCR-07	20	27	15	15	19	62.5°	0.02	DC..0702..	●
VT25 SDPCR-07	25	33	18	15	19	62.5°	0.03	DC..0702..	●
VT32 SDPCR-11T	32	40	22	20	28	62.5°	0.09	DC..11T3..	●
VT40 SDPCR-11T	40	50	27	15	28	62.5°	0.14	DC..11T3..	●
VT16 SDPCL-07	16	22	13	15	19	62.5°	0.01	DC..0702..	●
VT20 SDPCL-07	20	27	15	15	19	62.5°	0.02	DC..0702..	●
VT25 SDPCL-07	25	33	18	15	19	62.5°	0.03	DC..0702..	●
VT32 SDPCL-11T	32	40	22	20	28	62.5°	0.09	DC..11T3..	●
VT40 SDPCL-11T	40	50	27	20	28	62.5°	0.14	DC..11T3..	●

● 刀片请根据不同材料单独订购。
● 订货示例: 1 件 VT16 SDPCR-07.

● The insert should be ordered separately.
● Ordering sample: 1 PC VT16 SDZCR-07.

备件

Spare Parts

规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	刀垫 Shim	刀垫螺套 Sleeve for shim	刀垫扳手 Allen key for shim	定位销 Locating pin
VT16 ...-07	SR20 M2.5x6	KEY02 T8	-	-	-	FT39 D4-3x7
VT20 ...-07	SR20 M2.5x6	KEY02 T8	-	-	-	FT39 D6-5x8
VT25 ...-07	SR20 M2.5x6	KEY02 T8	-	-	-	FT39 D6-5x11
VT32/40 ...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

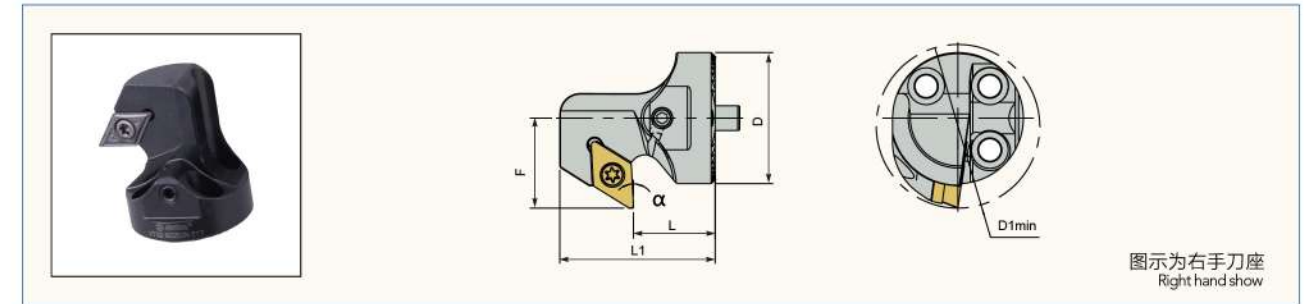
● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 反镗 Positive Type 93° Back Boring



规格型号 Designation	D	D1 min	F	L	L1	α°	Kg	适配刀片 Insert	在庫 Stock
VT16 SDZCR-07	16	22	13	15	27	3°	0.03	DC..0702..	●
VT20 SDZCR-07	20	27	15	15	27	3°	0.05	DC..0702..	●
VT25 SDZCR-07	25	33	18	15	27	3°	0.12	DC..0702..	●
VT32 SDZCR-11T	30	40	22	20	38	3°	0.14	DC..11T3..	●
VT40 SDZCR-11T	40	50	27	20	38	3°	0.19	DC..11T3..	●
VT16 SDZCL-07	16	22	13	15	27	3°	0.03	DC..0702..	●
VT20 SDZCL-07	20	27	15	15	27	3°	0.05	DC..0702..	●
VT25 SDZCL-07	25	33	18	15	27	3°	0.12	DC..0702..	●
VT32 SDZCL-11T	30	40	22	20	38	3°	0.14	DC..11T3..	●
VT40 SDZCL-11T	40	50	27	20	38	3°	0.19	DC..11T3..	●

● 刀片请根据不同材料单独订购。
● 订货示例: 1 件 VT16 SDZCR-07.

● The insert should be ordered separately.
● Ordering sample: 1 PC VT16 SDZCR-07.

备件

Spare Parts

规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	刀垫 Shim	刀垫螺套 Sleeve for shim	刀垫扳手 Allen key for shim	定位销 Locating pin
VT16 ...-07	SR20 M2.5x6	KEY02 T8	-	-	-	FT39 D4-3x7
VT20 ...-07	SR20 M2.5x6	KEY02 T8	-	-	-	FT39 D6-5x8
VT25 ...-07	SR20 M2.5x6	KEY02 T8	-	-	-	FT39 D6-5x11
VT32/40 ...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

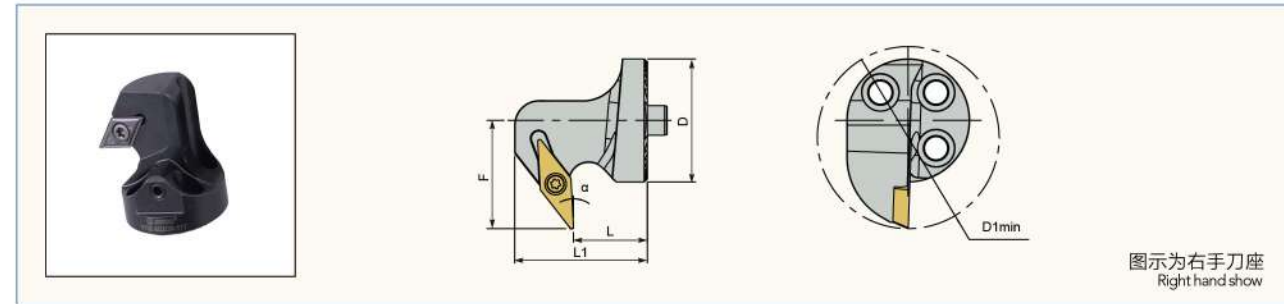
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DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 反镗及仿形车 Positive Type 93° Back Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	L1	α°	KG	适配刀片 Insert	在库 Stock
VT20 SVZCR-11	20	32	20	15	27	3°	0.03	VC.. 1103..	●
VT25 SVZCR-11	25	37	22	15	27	3°	0.05	VC.. 1103..	●
VT20 SVZCL-11	20	32	20	15	27	3°	0.03	VC.. 1103..	●
VT25 SVZCL-11	25	37	22	15	27	3°	0.05	VC.. 1103..	●

- 刀片请根据不同材料单独订购。
- 订货示例: 1 件 VT20 SVZCR-11。
- The insert should be ordered separately.
- Ordering sample: 1 PC VT20 SVZCR-11.

备件

Spare Parts

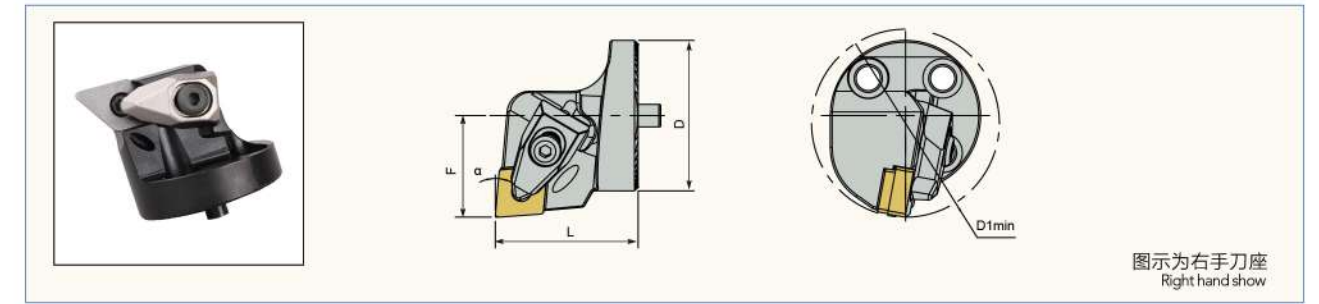
规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	定位销 Locating pin
VT20 ...-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x8
VT25 ...-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x11

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 95° 正镗 Negative Type 95° Boring



规格型号 Designation	D	D1 min	F	L	α°	kg	适配刀片 Insert	在库 Stock
VT32 DCLNR-12T	32	40	22	38	5°	0.12	CN.. 1204..	●
VT40 DCLNR-12T	40	50	27	38	5°	0.21	CN.. 1204..	●
VT32 DCLNL-12T	32	40	22	38	5°	0.12	CN.. 1204..	●
VT40 DCLNL-12T	40	50	27	38	5°	0.21	CN.. 1204..	●

- 刀片请根据不同材料单独订购。
- 订货示例: 1 件 VT32 DCLNR-12T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VT32 DCLNR-12T.

备件

Spare Parts

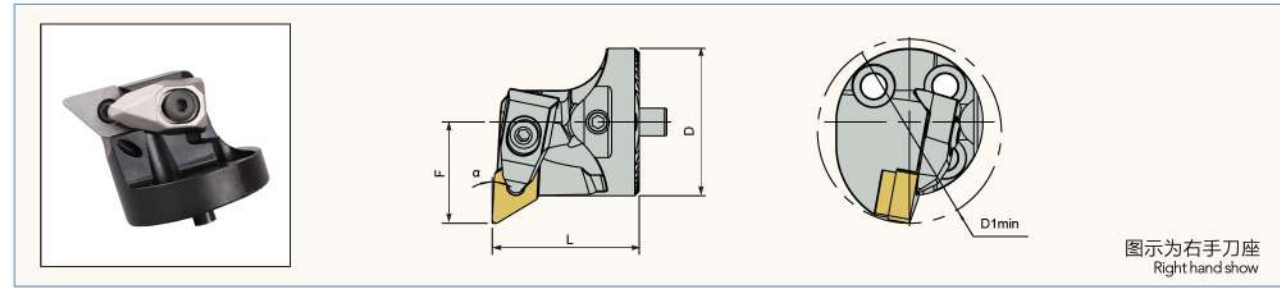
规格型号 Designation	压板 Clamping pad	压板弹簧 Spring for clamping pad	压板螺钉 Screw for clamping pad	刀垫 Shim	压板扳手 Allen key for clamping pad	刀垫锁紧螺钉 Clamping screw for shim	刀垫锁紧扳手 Allen key for shim	定位销 Locating pin
VT32/40 ...-12T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 CN12x3.2	KEY01 M3	SR20 M5x10	KEY02 T20	FT39 D6-5x11

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 93° 正镗及仿形车 Negative Type 93° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在库 Stock
VT32 DDUNL-11T	32	40	22	32	3°	0.11	DN.. 1104..	●
VT40 DDUNL-15T	40	50	27	38	3°	0.18	DN.. 1506..	●
VT32 DDUNR-11T	32	40	22	32	3°	0.11	DN.. 1104..	●
VT40 DDUNR-15T	40	50	27	38	3°	0.18	DN.. 1506..	●
VT40 DVUNR-16T	40	52	30	36	3°	0.2	VN.. 1604..	●
VT40 DVUNL-16T	40	52	30	36	3°	0.2	VN.. 1604..	●

- 刀片请根据不同材料单独订购。
- 订货示例：1件 VT32 DDUNR-11T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VT32 DDUNR-11T.

备件

Spare Parts



规格型号 Designation	压板 Clamping pad	压板弹簧 Spring for clamping pad	压板螺钉 Screw for clamping pad	刀垫 Shim	压板扳手 Allen key for clamping pad	刀垫锁紧螺钉 Clamping screw for shim	刀垫锁紧扳手 Allen key for shim	定位销 Locating pin
VT32 ...-11T	PB10 DDN11	YH 7x0.6x13	SR59 M4x16	ST01 DN11x3.18	KEY01 M2.5	SR20 M4x7.8	KEY02 T15	FT39 D6-5x11
VT40 ...-15T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 DN15x4.76	KEY01 M3	SR20 M4x11.5	KEY02 T15	FT39 D6-5x11
VT40 ...-16T	PB10 DVN16	YH 9x0.8x14	SR59 M6x26.5	ST01 VN16x4.76	KEY01 M4	SR20 M3.5x8.5	KEY02 T10	FT39 D6-5x11

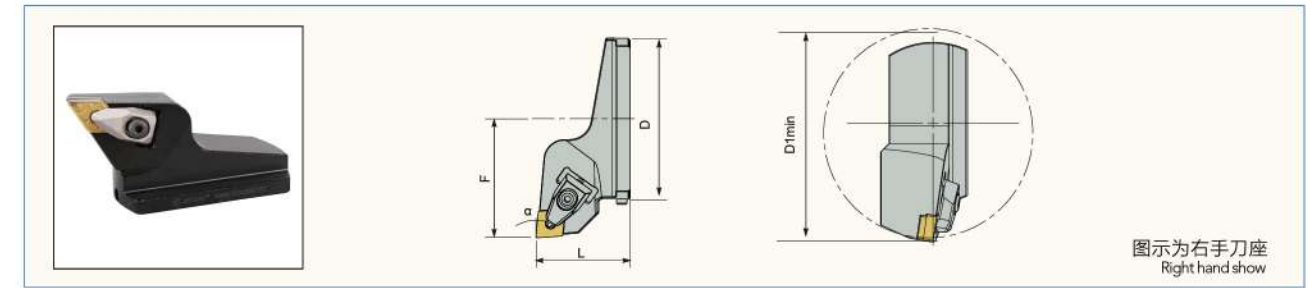
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DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 95° 正镗 Negative Type 95° Boring



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在库 Stock
VH80 DCLNR-12T	80	100	57	45	5°	0.49	CN.. 1204..	●
VH80 DCLNL-12T	80	100	57	45	5°	0.49	CN.. 1204..	●

- 刀片请根据不同材料单独订购。
- 订货示例：1件 VH80 DCLNR-12T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VHSO DCLNR-12T.

备件

Spare Parts



规格型号 Designation	压板 Clamping pad	压板弹簧 Spring for clamping pad	压板螺钉 Screw for clamping pad	刀垫 Shim	压板扳手 Allen key for clamping pad	刀垫锁紧螺钉 Clamping screw for shim	刀垫锁紧扳手 Allen key for shim
VH80 ...-12T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 CN12x3.2	KEY01 M3	SR20 M5x10	KEY02 T20

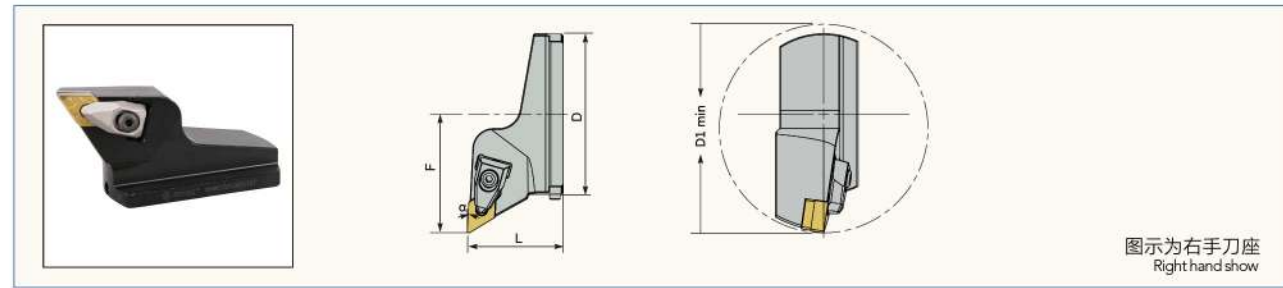
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- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 93° 正镗及仿形车 Negative Type 93° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VH80 DDUNL-15T	80	100	57	45	3°	0.5	DN.. 1506..	●
VH80 DDUNR-15T	80	100	57	45	3°	0.5	DN.. 1506..	●

- 刀片请根据不同材料单独订购。
- 订货示例：1件 VH80 DDUNR-15T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VH80 DDUNR-15T.

备件

Spare Parts



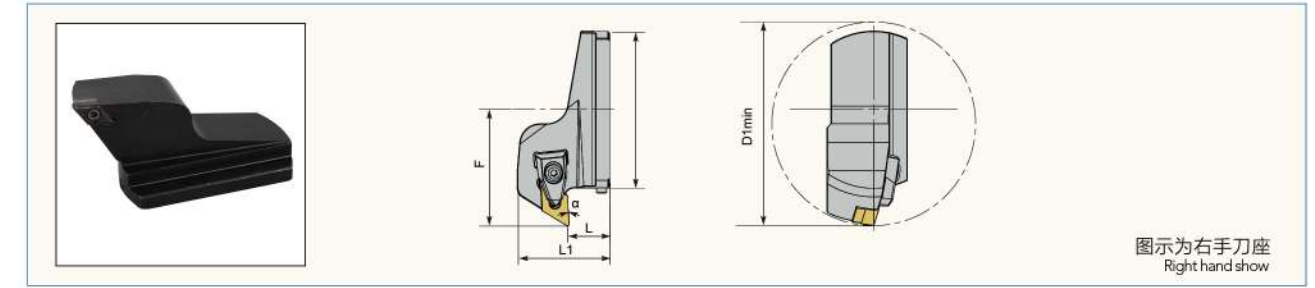
规格型号 Designation	压板 Clamping pad	压板弹簧 Spring for clamping pad	压板螺钉 Screw for clamping pad	刀垫 Shim	压板扳手 Allen key for clamping pad	刀垫锁紧螺钉 Clamping screw for shim	刀垫锁紧扳手 Allen key for shim
VH80 ...-15T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 DN15x4.76	KEY01 M3	SR20 M4x11.5	KEY02 T15

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 93° 反镗及仿形车 Negative Type 93° Back Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	L1	α°	Kg	适配刀片 Insert	在庫 Stock
VH80 DDZNR-15T	80	100	57	20	45	3°	0.55	DN.. 1506..	●
VH80 DDZNL-15T	80	100	57	20	45	3°	0.55	DN.. 1506..	●

- 刀片请根据不同材料单独订购。
- 订货示例：1件 VH80 DDZNR-15T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VH80 DDZNR-15T.

备件

Spare Parts



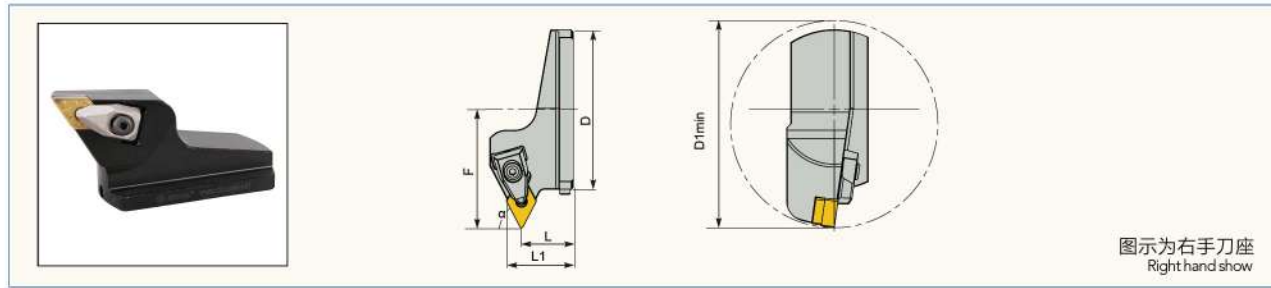
规格型号 Designation	压板 Clamping pad	压板弹簧 Spring for clamping pad	压板螺钉 Screw for clamping pad	刀垫 Shim	压板扳手 Allen key for clamping pad	刀垫锁紧螺钉 Clamping screw for shim	刀垫锁紧扳手 Allen key for shim
VH80 ...-15T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 DN15x4.76	KEY01 M3	SR20 M4x11.5	KEY02 T15

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 62.5° 仿形车 Negative Type 62.5° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	L1	α°	Kg	适配刀片 Insert	在庫 Stock
VH80 DDPNR-15T	80	100	57	25	40.3	62.5°	0.49	DN.. 1506..	●
VH80 DDPNL-15T	80	100	57	25	40.3	62.5°	0.49	DN.. 1506..	●

- 刀片请根据不同材料单独订购。
- 订货示例: 1 件 VH80 DDPNR-15T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VH80 DDPNR-15T.

备件

Spare Parts

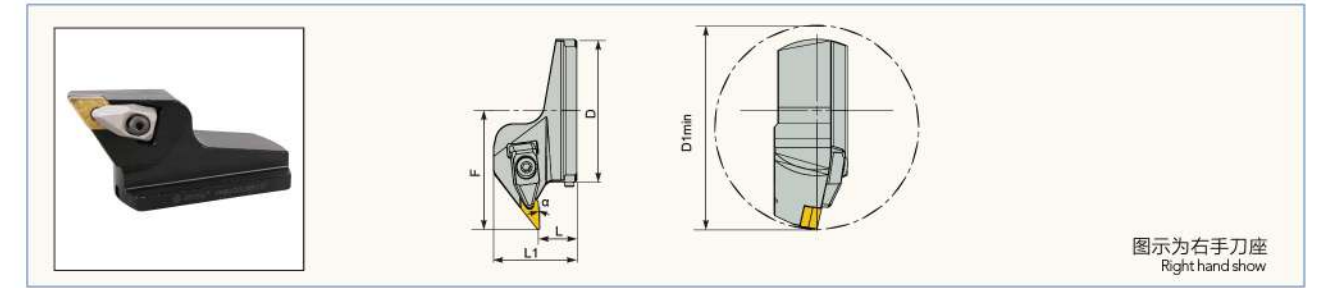
规格型号 Designation	压板 Clamping pad	压板弹簧 Spring for clamping pad	压板螺钉 Screw for clamping pad	刀垫 Shim	压板扳手 Allen key for clamping pad	刀垫锁紧螺钉 Clamping screw for shim	刀垫锁紧扳手 Allen key for shim
VH80 ...-15T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 DN15x4.76	KEY01 M3	SR20 M4x11.5	KEY02 T15

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 93° 反镗及仿形车 Negative Type 93° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	L1	α°	Kg	适配刀片 Insert	在庫 Stock
VH80 DVZNR-16T	80	110	64	20	45	3°	0.49	VN.. 1604..	●
VH80 DVZNL-16T	80	110	64	20	45	3°	0.49	VN.. 1604..	●

- 刀片请根据不同材料单独订购。
- 订货示例: 1 件 VH80 DVZNR-16T。
- Ordering sample: 1 PC VH80 DVZNR-15T.
- The insert should be ordered separately.

备件

Spare Parts

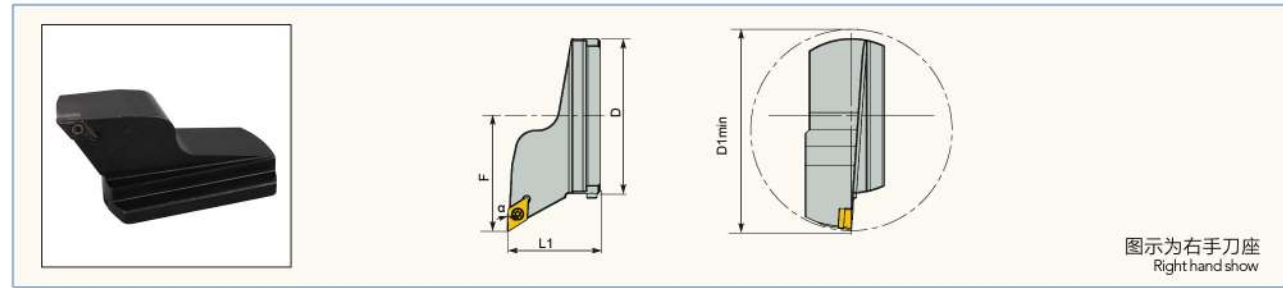
规格型号 Designation	压板 Clamping pad	压板弹簧 Spring for clamping pad	压板螺钉 Screw for clamping pad	刀垫 Shim	压板扳手 Allen key for clamping pad	刀垫锁紧螺钉 Clamping screw for shim	刀垫锁紧扳手 Allen key for shim
VH80 ...-16T	PB10 DVN16	YH 9x0.8x14	SR59 M6x26.5	ST01 VN16x4.76	KEY01 M4	SR20 M3.5x8.5	KEY02 T10

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 正镗及仿形车 Positive Type 93° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VH80 SDUCR-11T	80	100	57	45.7	3°	0.5	DC.. 11T3..	●
VH80 SDUCL-11T	80	100	57	45.7	3°	0.5	DC.. 11T3..	●

- 刀片请根据不同材料单独订购。
- 订货示例：1 件 VH80 SDUCR-11T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VH80 SDUCR-11T.

备件

Spare Parts

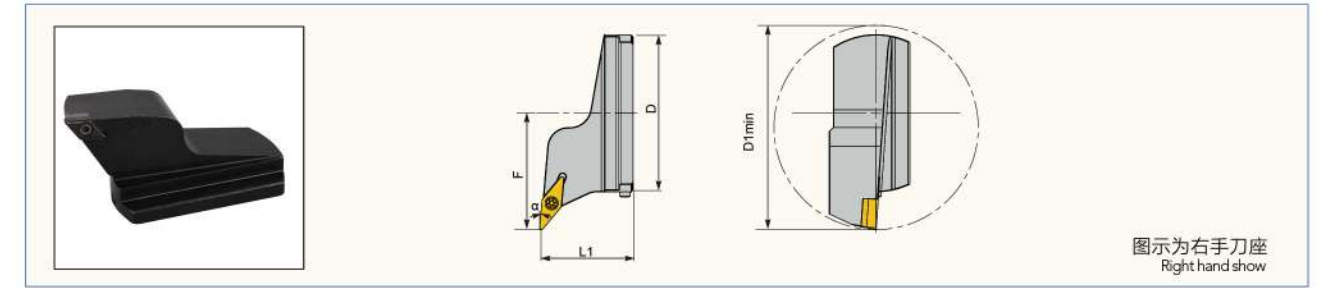
规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	刀垫 Shim	刀垫螺套 Sleeve for shim	刀垫扳手 Allen key for shim
VH80 ...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 95° 正镗及仿形车 Positive Type 95° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VH80 SVLCR-16T	80	100	57	45.7	5°	0.44	VC.. 1604..	●
VH80 SVLCL-16T	80	100	57	45.7	5°	0.44	VC.. 1604..	●

- 刀片请根据不同材料单独订购。
- 订货示例：1 件 VH80 SVLCR-16T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VH80 SCVCR-16T.

备件

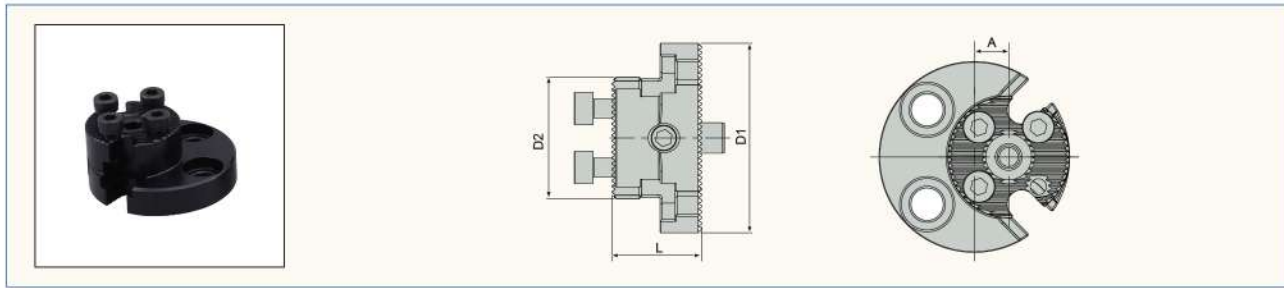
Spare Parts

规格型号 Designation	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	刀垫 Shim	刀垫螺套 Sleeve for shim	刀垫扳手 Allen key for shim
VH80 ...-16T	SR21 M4x11	KEY02 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4

DAMPING TOOLS 阻尼减振刀具

缩径头

Reducing Head



规格型号 Designation	D1	D2	L	A	Kg	在庫 Stock
RE VT50-VT32	50	32	23	9	0.18	●
RE VT50-VT40	50	40	23	10	0.22	●
RE VT60-VT40	60	40	23	10	0.3	●

● 订货示例: 1 件 RE VT50-VT32
● Ordering sample: 1 PC RE VT50-VT32

备件

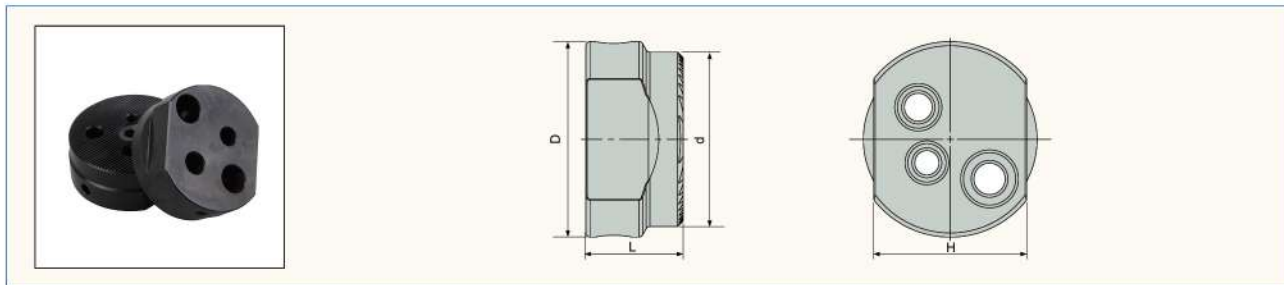
Spare Parts



规格型号 Designation	刀头锁紧螺钉 Clamping screw for cartridge	锁紧扳手 Allen key for clamping	定位销 Locating pin
RE VT50-VT32	SR55 M5x16	KEY01 M4	FT39 D8-7x11
RE VT50-VT40	SR55 M6x16	KEY01 M5	FT39 D8-7x11
RE VT60-VT40	SR55 M6x16	KEY01 M5	FT39 D12-10x11

中心校准块

Centre Calibration Block



规格型号 Designation	D	d	H	L	适用刀杆 Boring bar	Kg	在庫 Stock
VTXZ 16-25	28	25	22	14	VT16/VT20/VT25	0.05	●
VTXZ 32-60	62	60	52	25	VT32/VT40/VT50/VT60	0.45	●

● 订货示例: 1 件 VTXZ 16-25
● Ordering sample: 1 PC VTXZ 16-25

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀使用说明

User Guide for Damping Turning Tool

减振刀具安装及调整

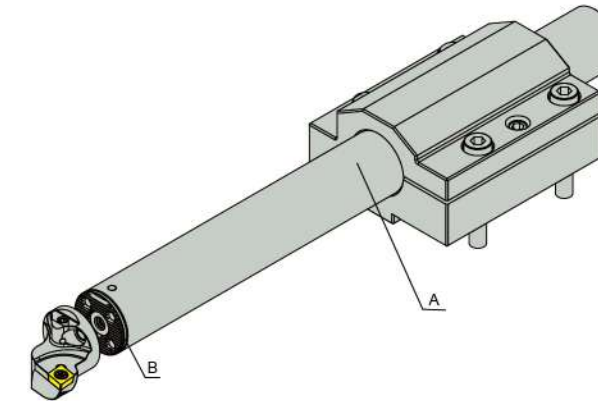
1. 准备

安装配合部位必须擦拭干净,如:减振刀杆及刀头V型定位槽、减振刀杆柄部外圆及安装座内孔,见下图A、B两处示意位置。

Assembly and Adjusting

Preparation

Wipe clean the positions which need to be assembled, like V geometric slot on the cartridge and shank, the end of the shank which will be connected with adaptor, and internal hole on the clamping holder. See A and B position on the following visual.

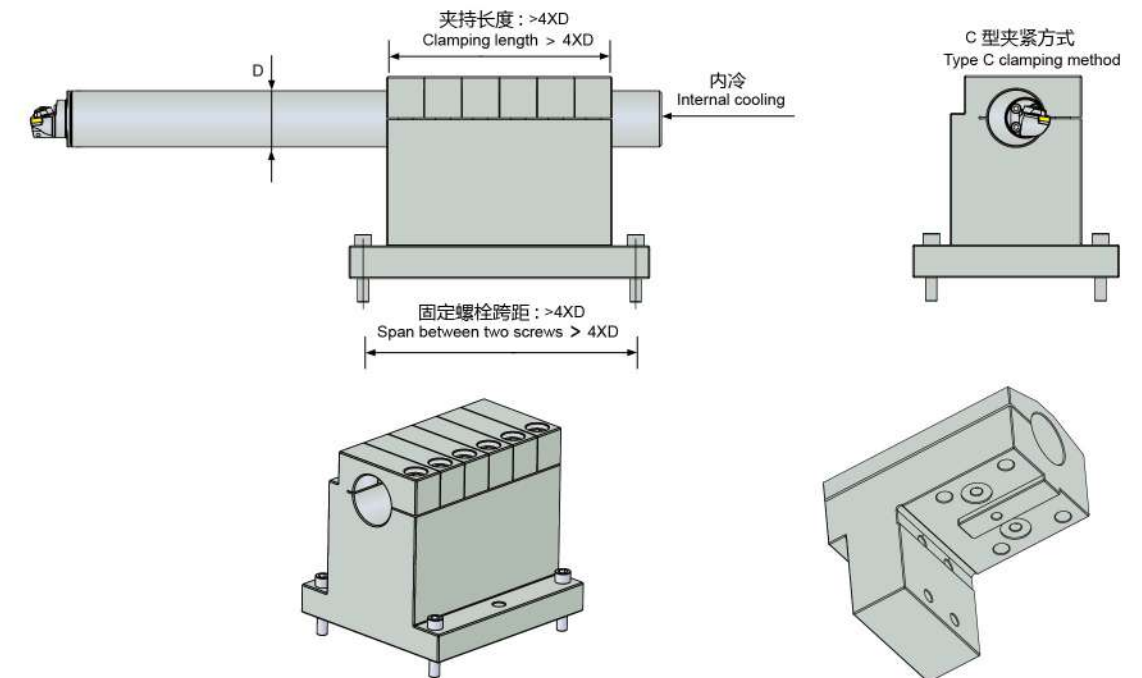


2. 刀杆的安装

安装夹持长度不少于刀杆径的4倍,使用开口夹套等抱紧装夹方式,禁止使用螺钉直压等锁紧方式,长时间使用必须使用内冷却,如下图所示。

Assembly for the Shank

The clamping length should not be less than 4 L/D ratio. Suggest using the clamping cover with opening method and other holding clamping methods. Do not use screw clamping method. Use inner cooling please when working a long time.

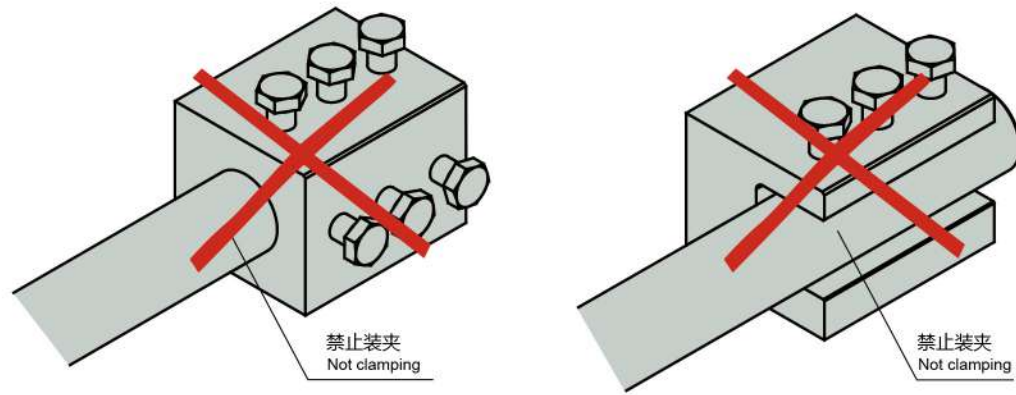


● 标准库存 Item in stock
● 半标准库存 (订货时,请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时,请确认交货期) Order on demand (please confirm delivery time when ordering it)

DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀使用说明

User Guide for Damping Turning Tool

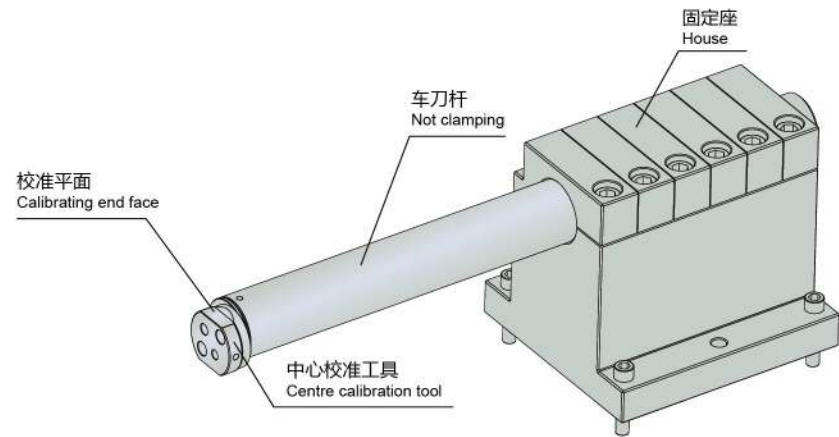


3. 中心高调整

首次安装刀杆需要使用专用中心高校准工具，安装于车刀杆齿形槽接口处，锁紧，沿机床 X 轴方向校平基准平面 0.01 以内，锁紧刀杆后拆掉校准工具。

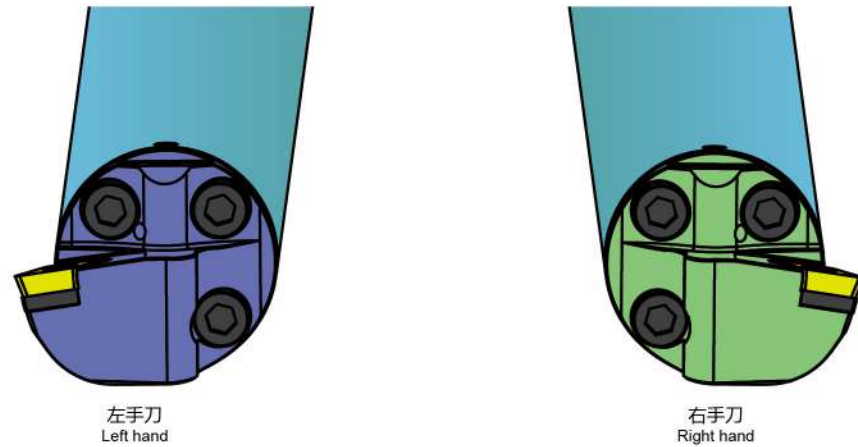
Adjusting the Height of Centre

Exclusive calibration tool for the height of centre should be used when assembling the shank when the first time.



4. 安装正确的车刀头：

Assemble the right cartridge, see below figure:



DAMPING TOOLS 阻尼减振刀具

阻尼减振车刀使用说明

User Guide for Damping Turning Tool

减振刀杆的长度调整

1. 推荐最小夹持长度 4xD
2. 镗杆可改制，切断后的长度如下表

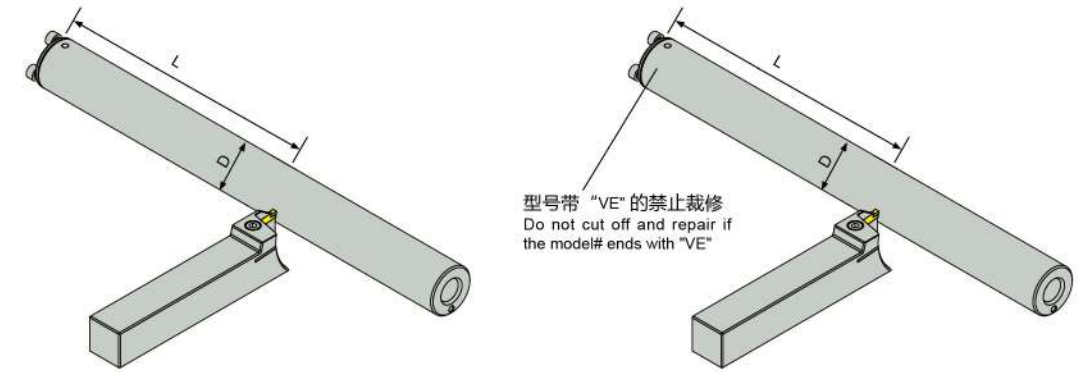
Adjusting the Length of the Shank

1. Suggested min. clamping length is 4xD
2. The boring bar can be cut off, the final length please see below figure:

产品类别 Type	切断后的最小长度 (L) Min. length after cutting off	
	4-7xD(mm)	7-10xD(mm)
D(mm)		
16	100	155
20	125	200
25	155	255
32	190	320
40	240	410
50	305	520
60	380	630

3. 后缀为 VE 系列的车刀杆禁止切断调整长度，如：VT16 C16x204VE，如下图所示：

3. Please do not cut off the adjusting length if the shank designation ends in VE. Example: VT16 C16x204VE, see below figure:



减振车刀使用环境要求

Environment for Damping Turning Tool

刀杆型号 Designation	悬伸长度 / 直径 Overhang length / Diameter	内冷压力 MAX (Bar) MAX: Internal cooling pressure	使用温度 MAX(°C) Operating temperature
VT16 C16x156V	7	30	100
VT16 C16x204VE	10	30	100
VT20 C20x200V	7	30	100
VT20 C20x260VE	10	30	100
VT25 C25x255V	7	40	100
VT25 C25x330V	10	40	100
VT32 C32x320V	7	50	100
VT32 C32x416V	10	50	100
VT40 C40x408V	7	70	100
VT40 C40x528V	10	70	100
VT50 C50x518V	7	70	100
VT50 C50x668V	10	70	100
VT60 C60x628V	7	70	100
VT60 C60x808V	10	70	100
VH80 C80x880V	7	70	100
VH80 C80x1200V	10	70	100

DAMPING MILLING CUTTER

阻尼减振铣刀柄



DAMPING TOOLS 阻尼减振刀具

阻尼减振铣刀柄

Damping Milling Cutter

主要考虑因素

使用旋转刀具加工不同于车削，在车削时，镗杆夹持在刚性的刀座上，但是车削加工中减振杆工作的原理在很大程度上相通的

- 刚性夹紧
- 尽可能短的刀具长度
- 尽可能大的总成直径
- 铣刀体的重量尽量轻，使抵抗切削力的阻尼系统充分工作

Major Consideration

Rotating tools are different from the turning tools, and the rigidity cartridge when turning machining clamps the boring bar. But the anti-vibration principle is almost same when turning and milling machining. Please see below points:

- Rigid clamping
- The shortest effective length
- The largest total diameter
- Lighter weight to be sure damping system works smoothly

降低振动

工件安装和机床稳定性是将振动减至最低需要仔细考虑的两项重要因素。

工件

- 以最佳的方式固定工件，让工装来承受加工过程中产生的切削力。
- 通过铣削刀具设计和主偏角选择能够使得切削力主要作用在工件夹持最稳定的方向上。
- 优化加工策略和方向，以尽可能实现最稳定的切削工况。

机床

- 机床状况会对切削振动产生巨大的影响。主轴轴承或进给装置的过度磨损会导致不良的加工特性。

Lower Down the Vibration

The mounted work piece and stability of machine tool are the main important facts that can lower down much vibration.

Work piece

Mount the work piece in the best way, then it will take some cutting force when machining.

- It will make sure that the cutting force will work for the most stable direction by two ways which are milling cutter design and selection of approach angle.
- To optimize the processing strategy and direction, then to meet the most stable cutting condition.

Machine Tools

- The condition of machine tool will affect the vibration situation greatly. The excessive wear of spindle bearing and work feeder can result in the poor processing characters.

非标订制



DAMPING TOOLS 阻尼减振刀具

阻尼减振铣刀柄

Damping Milling Cutter

影响振动的因素

有 4 种基本因素会对振动产生主要影响：

- 刀具的主偏角会影响切削力作用的方向
- 与径向切深有关的刀具直径
- 刀片槽形
- 刀具齿距

主偏角

主偏角决定了切削力的方向，因此非常重要。主偏角 (α) 越大，径向切削力就越大。根据工艺和应用场合选择合适刀具。

当径向切削力增加时，可以看出减振刀具与非减振刀具之间在功能方面的差异。

在主偏角较小且悬伸较短的情况下，可在出现振动之前调整刀具的切深甚至可以达到刀片所允许的最大切深

The Influence Facts of Vibration

There are 4 facts will affect the vibration condition mainly, please see below:

- The approach angle will affect the working direction of the cutting force
- Tool diameter which is relative to the radial cutting depth
- Insert groove
- Pitch

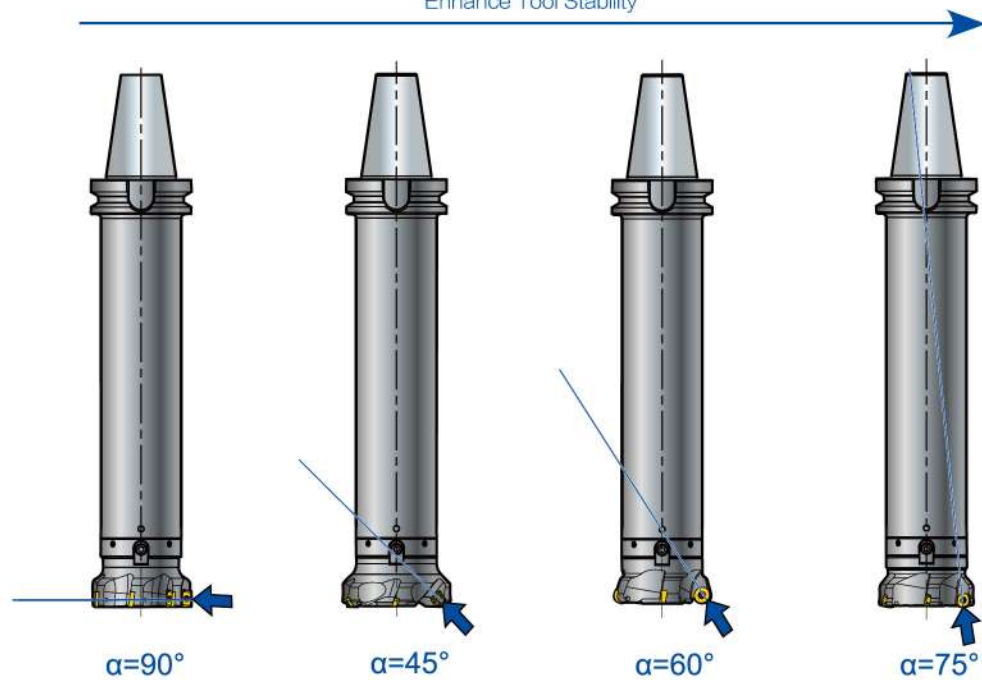
Approach Angle

The approach angle decides the direction of cutting force, so it is very important. The approach angle (α) is larger and the radial cutting force is larger. Select the tools according to the technology and working condition.

It will see the differences between damping tools and common tools clearly when the axial cutting force increases.

Under the condition of smaller approach angle and also shorter overhang, we can adjust the cutting depth which will probably meet the deepest depth precedes the vibration situation.

提高刀具稳定性
Enhance Tool Stability



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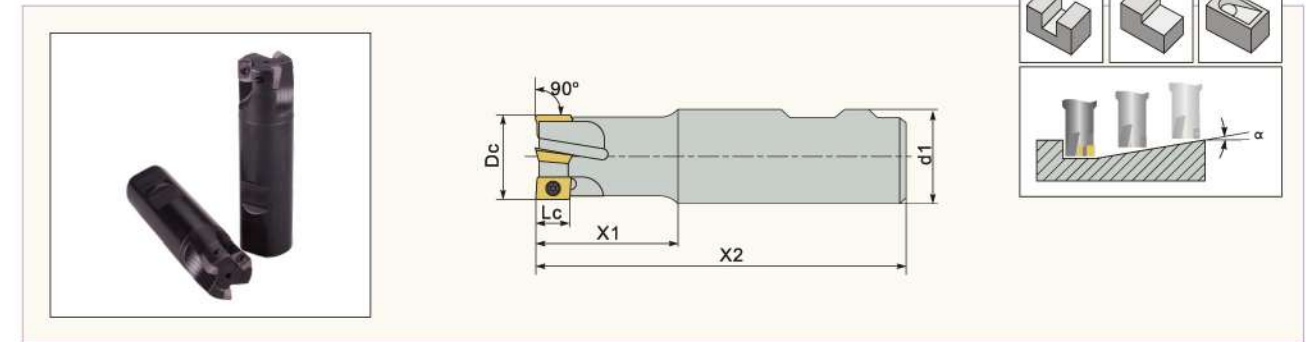
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INDEXABLE INSERT SHOULDER MILLING CUTTER 可转位立铣刀

ME90AP..1135..
Kr=90°



规格型号 Designation	Dc	d1	X1	X2	Lc	齿数 z	α°	Kg	刀片型号 Insert	在庫 Stock
ME90AP D016.C16.Z02.11.90	16	C16	26	90	9.52	2	15	0.13	AP..1135..	●
ME90AP D016.W16.Z02.11.85	16	W16	26	85	9.52	2	15	0.13	AP..1135..	●
ME90AP D020.C20.Z02.11.110	20	C20	30	110	9.52	2	7.5	0.25	AP..1135..	●
ME90AP D020.W20.Z02.11.90	20	W20	30	90	9.52	2	7.5	0.22	AP..1135..	●
ME90AP D025.C25.Z03.11.120	25	C25	35	120	9.52	3	11.5	0.46	AP..1135..	●
ME90AP D025.W25.Z03.11.95	25	W25	35	95	9.52	3	11.5	0.4	AP..1135..	●
ME90AP D032.C32.Z04.11.130	32	C32	40	130	9.52	4	10	0.75	AP..1135..	●
ME90AP D032.W32.Z04.11.110	32	W32	40	110	9.52	4	10	0.62	AP..1135..	●
ME90AP D040.C40.Z04.11.150	40	C40	45	150	9.52	4	10	0.86	AP..1135..	●
ME90AP D040.W40.Z04.11.130	40	W40	45	130	9.52	4	10	0.75	AP..1135..	●

- 刀片请根据不同材料单独订购，请参照：☞ F009 页
- 加工不同的切削参数，请参照：☞ K006,K007 页
- 订货示例：1 件 ME90AP D016.C16.Z02.11.90
- Inserts should be ordered separately please see page F009.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC ME90AP D016.C16.Z02.11.90

ME90AP..1604..
Kr=90°

规格型号 Designation	Dc	d1	X1	X2	Lc	齿数 z	α°	Kg	刀片型号 Insert	在庫 Stock
ME90AP D025.C25.Z02.16.120	25	C25	26	120	10.2	2	11.5	0.46	AP..1604..	●
ME90AP D025.W25.Z02.16.95	25	W25	26	95	10.2	2	11.5	0.4	AP..1604..	●
ME90AP D032.C32.Z03.16.130	32	C32	30	130	10.2	3	10	0.42	AP..1604..	●
ME90AP D032.W32.Z03.16.110	32	W32	30	110	10.2	3	10	0.62	AP..1604..	●
ME90AP D040.C40.Z03.16.150	40	C40	45	150	10.2	3	10	0.86	AP..1604..	●
ME90AP D040.W40.Z03.16.130	40	W40	45	130	10.2	3	10	0.75	AP..1604..	●

- 刀片请根据不同材料单独订购，请参照：☞ F009 页
- 加工不同材料刀具的切削参数，请参照：☞ K006,K007 页
- 订货示例：1 件 ME90AP D025.C25.Z02.16.120
- Insert should be ordered separately please see page F009.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC ME90AP D025.C25.Z02.16.120

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
AP..1135..	SR20 M2.5x6	KEY02 T8
AP..1604..	SR20 M4x9.5	KEY02 T15

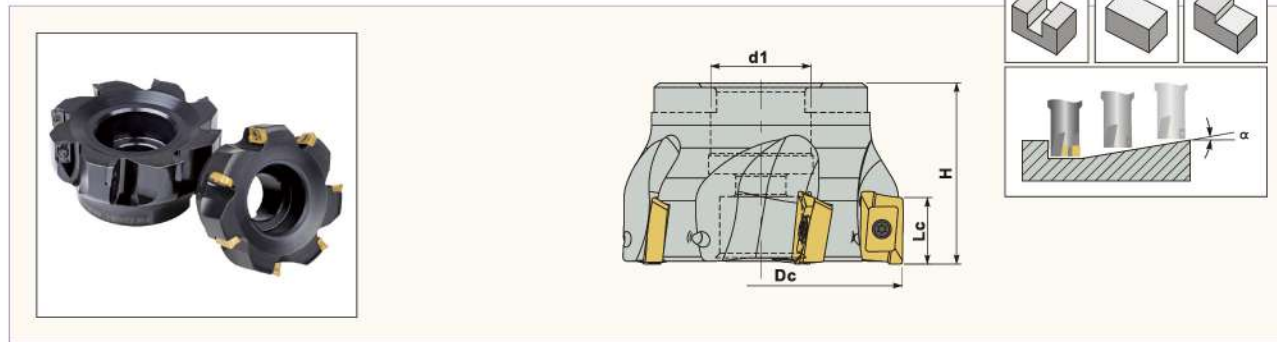
- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER

可转位盘铣刀

MF90AP..1135..

Kr=90°



规格型号 Designation	Dc	d1	H	Lc	刀片数 z	α°	Kg	刀片型号 Insert	在库 Stock
MF90AP D040.B16.Z04.11	40	16	40	11	4	1.85	0.25	AP..1135..	●
MF90AP D050.B22.Z05.11	50	22	40	11	5	1.4	0.35	AP..1135..	●
MF90AP D063.B22.Z06.11	63	22	40	11	6	1	0.53	AP..1135..	●
MF90AP D080.B27.Z08.11	80	27	50	11	8	0.9	0.87	AP..1135..	●

MF90AP..1604..

Kr=90°

规格型号 Designation	Dc	d1	H	Lc	刀片数 z	α°	Kg	刀片型号 Insert	在库 Stock
MF90AP D040.B16.Z03.16	40	16	40	16	3	4	0.2	AP..1604..	●
MF90AP D050.B22.Z04.16	50	22	40	16	4	2.6	0.33	AP..1604..	●
MF90AP D063.B22.Z05.16	63	22	40	16	5	2	0.44	AP..1604..	●
MF90AP D080.B27.Z06.16	80	27	50	16	6	0.8	0.94	AP..1604..	●
MF90AP D100.B32.Z07.16	100	32	50	16	7	0.7	1.48	AP..1604..	●
MF90AP D125.B40.Z08.16	125	40	63	16	8	0.5	2.92	AP..1604..	●

- 刀片请根据不同材料单独订购，请参照：F009 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 ME90AP D040.B16.Z03.16
- Insert should be ordered separately please see page F009.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MF90AP D040.B16.Z03.16

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
AP..1135..	SR20 M2.5x6	KEY02 T8
AP..1604..	SR20 M4x11.5	KEY02 T15

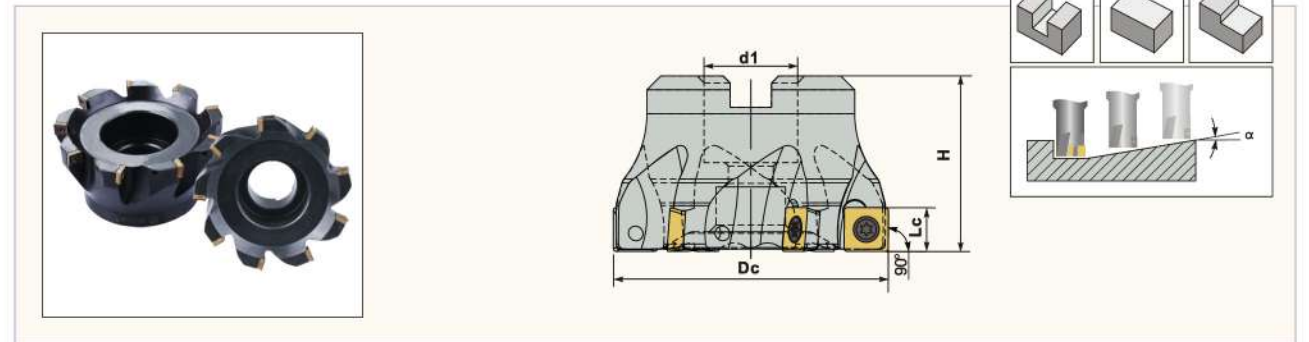
- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER

可转位盘铣刀

MF90SP..1004..

Kr=90°



规格型号 Designation	Dc	d1	H	Lc	刀片数 z	α°	Kg	刀片型号 Insert	在库 Stock
MF90SP D040.B16.Z03.10	40	16	40	9.6	3	-	0.19	SP..1004..	●
MF90SP D050.B22.Z04.10	50	22	40	9.6	4	2	0.33	SP..1004..	●
MF90SP D063.B22.Z05.10	63	22	40	9.6	5	0.8	0.45	SP..1004..	●
MF90SP D080.B27.Z05.10	80	27	50	9.6	6	1.25	0.88	SP..1004..	●
MF90SP D100.B32.Z07.10	100	32	50	9.6	7	0.75	1.40	SP..1004..	●
MF90SP D125.B40.Z09.10	125	40	63	9.6	9	0.75	2.58	SP..1004..	●

- 刀片请根据不同材料单独订购，请参照：F011 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 ME90SP D040.B16.Z03.10
- Insert should be ordered separately please see page F011.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MF90SP D040.B16.Z03.10

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
SP..1004..	SR21 M4x9.5	KEY02 T15

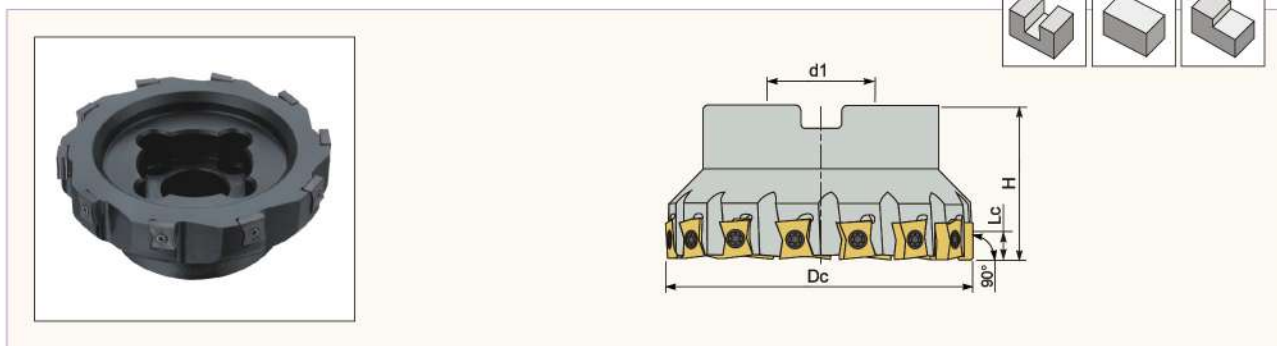
- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER

可转位盘铣刀

MF90LN..1106..

Kr=90°



规格型号 Designation	Dc	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在庫 Stock
MF90LN D040.B16.Z04.11.R/L	40	16	40	5	4	0.22	LN..1106..	●
MF90LN D040.B16.Z06.11.R/L	40	16	40	5	6	0.21	LN..1106..	○
MF90LN D050.B22.Z05.11.R/L	50	22	40	5	5	0.32	LN..1106..	●
MF90LN D050.B22.Z07.11.R/L	50	22	40	5	7	0.32	LN..1106..	○
MF90LN D063.B22.Z06.11.R/L	63	22	40	5	6	0.47	LN..1106..	●
MF90LN D063.B22.Z09.11.R/L	63	22	40	5	9	0.5	LN..1106..	○
MF90LN D080.B27.Z08.11.R/L	80	27	50	5	8	0.97	LN..1106..	●
MF90LN D080.B27.Z11.11.R/L	80	27	50	5	11	1.02	LN..1106..	○
MF90LN D100.B32.Z09.11.R/L	100	32	50	5	9	1.38	LN..1106..	●
MF90LN D100.B32.Z14.11.R/L	100	32	50	5	14	1.76	LN..1106..	○
MF90LN D125.B40.Z10.11.R/L	125	40	63	5	10	2.71	LN..1106..	●
MF90LN D125.B40.Z18.11.R/L	125	40	63	5	18	3.15	LN..1106..	○
MF90LN D160.B40.Z12.11.R/L	160	40	63	5	12	4.66	LN..1106..	●
MF90LN D200.B60.Z16.11.R/L	200	60	63	5	16	5.84	LN..1106..	○

- 刀片请根据不同材料单独订购，请参照：F008 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 MF90LN D040.B16.Z04.11.R
- Insert should be ordered separately please see page F008.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MF90LN D040.B16.Z04.11.R

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
LN..1106..	SR20 M3.5x11.5	KEY02 T10

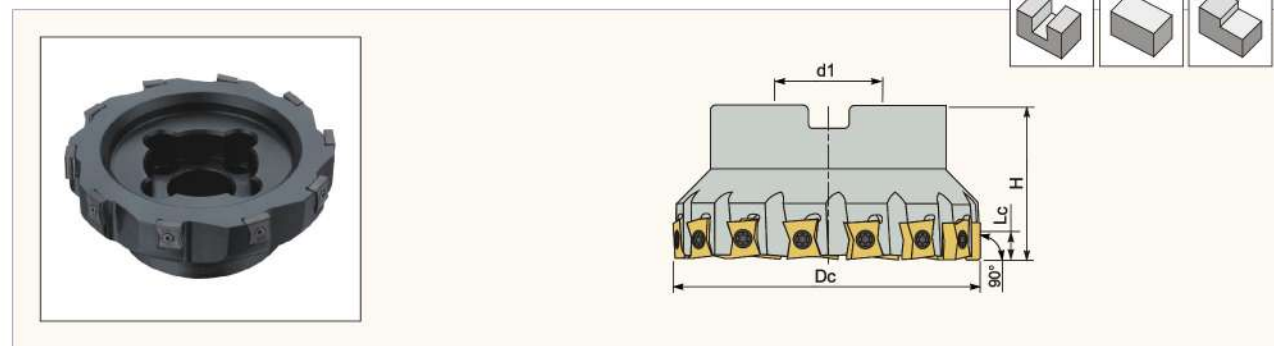
- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER

可转位盘铣刀

MF90LN..1506..

Kr=90°



规格型号 Designation	Dc	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在庫 Stock
MF90LN D050.B22.Z04.15.R/L	50	22	40	7	4	0.4	LN..1506..	●
MF90LN D063.B22.Z05.15.R/L	63	22	40	7	5	0.5	LN..1506..	●
MF90LN D063.B22.Z08.15.R/L	63	22	40	7	8	0.5	LN..1506..	○
MF90LN D080.B27.Z07.15.R/L	80	27	40	7	7	0.85	LN..1506..	●
MF90LN D080.B27.Z10.15.R/L	80	27	50	7	10	0.85	LN..1506..	○
MF90LN D100.B32.Z08.15.R/L	100	32	50	7	8	1.8	LN..1506..	●
MF90LN D100.B32.Z12.15.R/L	100	32	50	7	12	1.8	LN..1506..	○
MF90LN D125.B40.Z09.15.R/L	125	40	63	7	9	3.0	LN..1506..	●
MF90LN D125.B40.Z15.15.R/L	125	40	63	7	15	3.0	LN..1506..	○
MF90LN D160.B40.Z10.15.R/L	160	40	63	7	10	6.0	LN..1506..	●
MF90LN D160.B40.Z16.15.R/L	160	40	63	7	16	6.0	LN..1506..	○
MF90LN D200.B60.Z12.15.R/L	200	60	63	7	12	8.2	LN..1506..	●
MF90LN D200.B60.Z20.15.R/L	200	60	63	7	20	8.2	LN..1506..	○
MF90LN D250.B60.Z15.15.R/L	250	60	63	7	15	12.2	LN..1506..	●
MF90LN D250.B60.Z25.15.R/L	250	60	63	7	25	12.2	LN..1506..	○
MF90LN D315.B60.Z20.15.R/L	315	60	80	7	20	28.3	LN..1506..	●
MF90LN D315.B60.Z30.15.R/L	315	60	80	7	30	28.3	LN..1506..	○

- 刀片请根据不同材料单独订购，请参照：F008 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 MF90LN D050.B22.Z04.15.R
- Insert should be ordered separately please see page F008.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MF90LN D050.B22.Z04.15.R

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
LN..1506..	SR20 M4x11.5	KEY02 T15

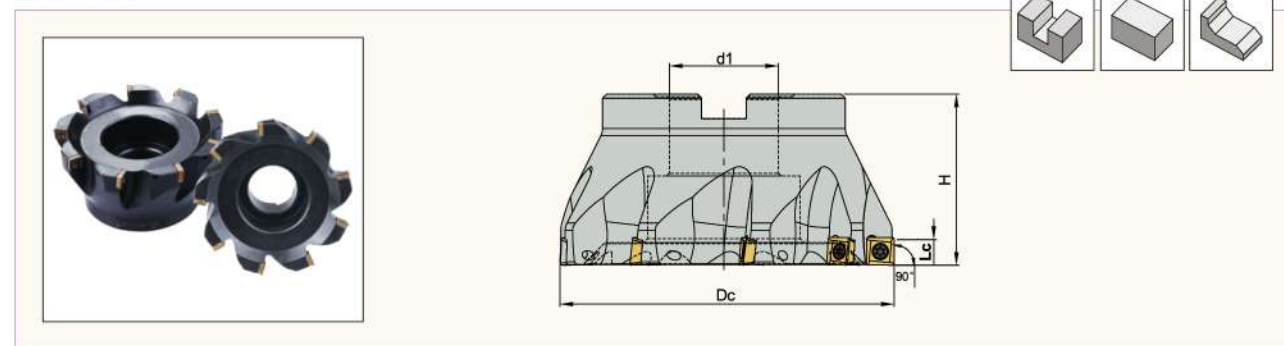
- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER

可转位盘铣刀

MF90SD..1205..

Kr=90°



规格型号 Designation	Dc	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在库 Stock
MF90SD D050.B22.Z04.12	50	22	40	11.8	4	0.26	SD..1205..	●
MF90SD D063.B22.Z05.12	63	22	40	11.8	5	0.42	SD..1205..	●
MF90SD D080.B27.Z06.12	80	27	50	11.8	6	0.86	SD..1205..	●
MF90SD D100.B32.Z07.12	100	32	50	11.8	7	1.42	SD..1205..	●
MF90SD D125.B40.Z08.12	125	40	63	11.8	8	2.65	SD..1205..	●
MF90SD D160.B40.Z09.12	160	40	63	11.8	9	3.77	SD..1205..	●
MF90SD D200.B60.Z13.12	200	60	63	11.8	13	6.70	SD..1205..	●

- 刀片请根据不同材料单独订购，请参照：F011 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 MF90SD D050.B22.Z05.12
- Insert should be ordered separately please see page F011.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MFOOSD 0050.822205.12

备件

Spare Parts

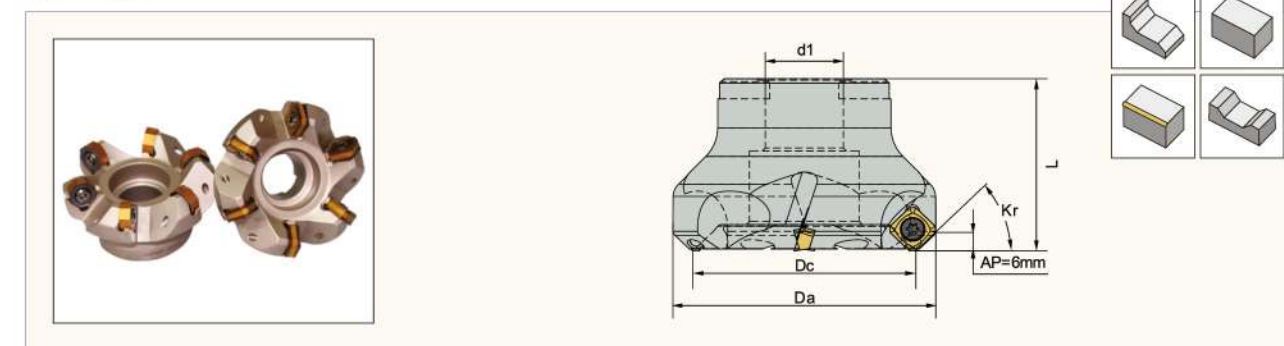
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
SD..1205..	SR20 M4x11.5	KEY02 T15

INDEXABLE INSERT FACE MILLING CUTTER

可转位盘铣刀

MF45SN..1306..

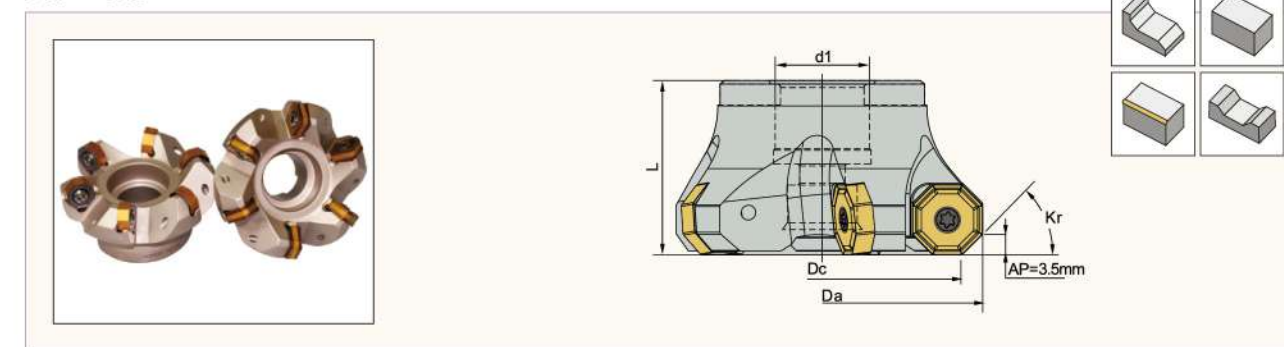
Kr=45°



规格型号 Designation	Dc	Da	d1	L	刀片数 z	Kr	Kg	刀片型号 Insert	在库 Stock
MF45SN D040.B22.Z04.13	40	50.4	22	41.2	4	45°	0.3	SN..1306..	●
MF45SN D050.B22.Z04.13	50	60.4	22	41.2	4	45°	0.4	SN..1306..	●
MF45SN D063.B22.Z06.13	63	73.4	22	41.2	6	45°	0.5	SN..1306..	●
MF45SN D080.B27.Z07.13	80	90.4	27	51.2	7	45°	1	SN..1306..	●
MF45SN D100.B32.Z08.13	100	110.4	32	51.2	8	45°	1.4	SN..1306..	●
MF45SN D125.B40.Z10.13	125	135.6	40	64.2	10	45°	2.7	SN..1306..	●
MF45SN D160.B40.Z12.13	160	170.4	40	63.0	12	45°	3.33	SN..1306..	●
MF45SN D200.B60.Z14.13	200	210.4	60	63.0	14	45°	5.78	SN..1306..	●
MF45SN D250.B60.Z16.13	250	260.4	60	63.0	16	45°	8.08	SN..1306..	●

MF45ON..0506..

Kr=45°



规格型号 Designation	Dc	Da	d1	L	刀片数 z	Kr	Kg	刀片型号 Insert	在库 Stock
MF45ON D040.B22.Z04.05	40	50.4	22	40	4	44°	0.32	ON..0506..	●
MF45ON D050.B22.Z05.05	50	60.4	22	40	5	44°	0.41	ON..0506..	●
MF45ON D063.B22.Z05.05	63	73.4	22	40	5	44°	0.45	ON..0506..	●
MF45ON D080.B27.Z06.05	80	90.4	27	50	6	44°	0.89	ON..0506..	●
MF45ON D100.B32.Z07.05	100	110.4	32	50	7	44°	1.45	ON..0506..	●
MF45ON D125.B40.Z08.05	125	135.6	40	63	8	44°	2.54	ON..0506..	●
MF45ON D160.B40.Z12.05	160	170.4	40	63	12	44°	3.33	ON..0506..	●
MF45ON D200.B60.Z14.05	200	210.4	60	63	14	44°	5.78	ON..0506..	●
MF45ON D250.B60.Z16.05	250	260.4	60	63	16	44°	8.08	ON..0506..	●

- 刀片请根据不同材料单独订购，请参照：F015 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 MF45N D040.B22.Z04.05

- Insert should be ordered separately please see page F015.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MF45ON D40.B22.Z04.05.

备件

Spare Parts

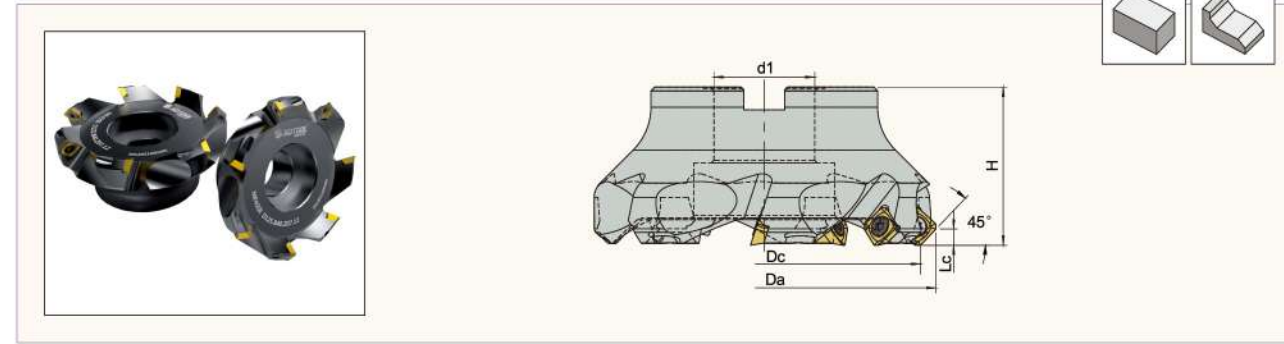
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
SN..1306..	SR26 M4x12.5	KEY02 T15
ON..0506..	SR20 M5x11	KEY02 T20

- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER 可转位盘铣刀

MF45SE..12T3..
Kr=45°



规格型号 Designation	Dc	Da	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在庫 Stock
MF45SE D050.B22.Z04.12	50	63	22	40	6.5	4	0.40	SE..12T3..	●
MF45SE D063.B22.Z05.12	63	75.9	22	40	6.5	5	0.54	SE..12T3..	●
MF45SE D080.B27.Z06.12	80	93.2	27	50	6.5	6	1.08	SE..12T3..	●
MF45SE D100.B32.Z06.12	100	113.2	32	50	6.5	6	1.54	SE..12T3..	●
MF45SE D125.B40.Z07.12	125	138	40	63	6.5	7	2.67	SE..12T3..	●
MF45SE D160.B40.Z07.12	160	173	40	63	6.5	7	4.10	SE..12T3..	●
MF45SE D200.B60.Z10.12	200	212.9	60	63	6.5	10	7.70	SE..12T3..	●
MF45SE D250.B60.Z13.12	250	262.9	60	63	6.5	13	10.50	SE..12T3..	●

- 刀片请根据不同材料单独订购, 请参照: F012 页
- 加工不同材料刀具的切削参数, 请参照: K006,K007 页
- 订货示例: 1 件 MF45SE D050.B22.Z04.12
- Insert should be ordered separately please see page F012.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MF45SE D050.B22.Z04.12

备件

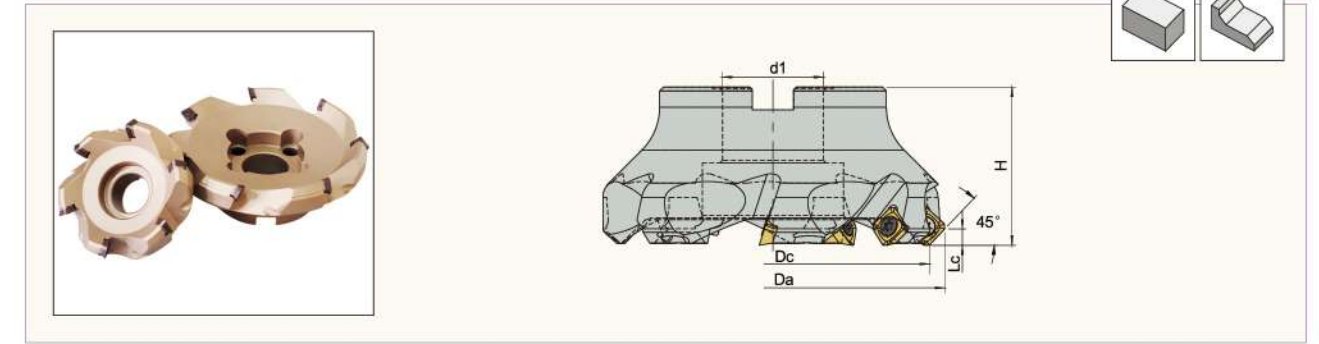
Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
SE..12T3..	SR20 M3.5x11	KEY02 T15

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER 可转位盘铣刀

MF45SET..12T3..
Kr=45°



规格型号 Designation	Dc	Da	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在庫 Stock
MF45SET D050.B22.Z04.12	50	63	22	40	6.5	4	0.4	SE..12T3..	●
MF45SET D063.B22.Z05.12	63	75.9	22	40	6.5	5	0.54	SE..12T3..	●
MF45SET D080.B27.Z06.12	80	93.2	27	50	6.5	6	1.08	SE..12T3..	●
MF45SET D100.B32.Z06.12	100	113.2	32	50	6.5	6	1.54	SE..12T3..	●
MF45SET D125.B40.Z07.12	125	138	40	63	6.5	7	2.67	SE..12T3..	●
MF45SET D160.B40.Z07.12	160	173	40	63	6.5	7	4.1	SE..12T3..	●
MF45SET D200.B60.Z10.12	200	212.9	60	63	6.5	10	7.7	SE..12T3..	●
MF45SET D250.B60.Z13.12	250	262.9	60	63	6.5	13	10.5	SE..12T3..	●

- 刀片请根据不同材料单独订购, 请参照: F012 页
- 加工不同材料刀具的切削参数, 请参照: K006,K007 页
- 订货示例: 1 件 MF45SE D050.B22.Z04.12
- Insert should be ordered separately please see page F012.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MF45SE D050.B22.Z04.12

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw	刀垫 Shim	刀垫螺钉 Screw for shim	刀垫锁紧扳手 Allen key for shim screw
SE..12T3..	SR20 M3.5x11	KEY02 T15	ST02 S12x0.8	SR28 M5x11	KEY01 M3.5

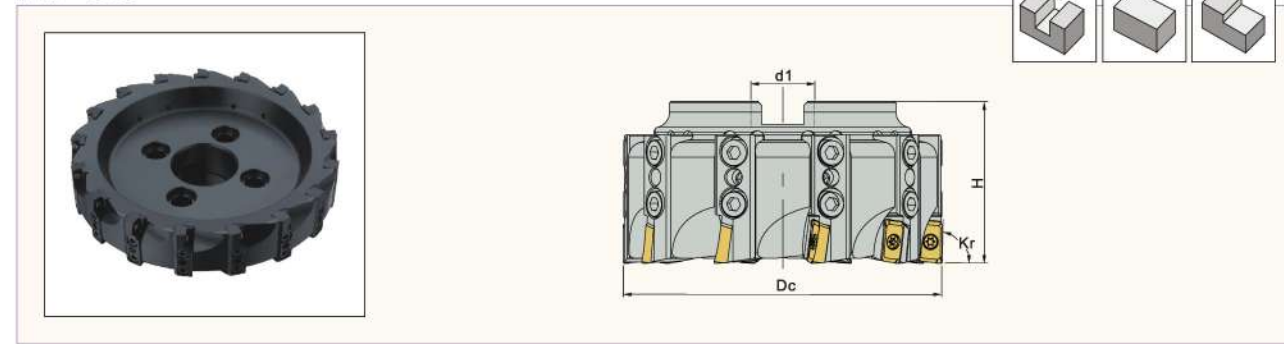
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

FACE MILLIG CUTTER WITH CARTRIDGE(AXIAL ADJUSTABLE) 可调式精铣刀

MFR/L901 可调式精铣刀

Milling Cutter with Cartridge (Axial Adjustable)

Kr=90°



规格型号 Designation	Dc	d1	H	刀片数 z	Kr	Kg	刀片型号 Insert	在库 Stock
MFR/L901 D080.B27.Z06.16	80	27	63	6	90°	1.5	AP..1604..	●
MFR/L901 D100.B32.Z08.16	100	32	63	8	90°	2.1	AP..1604..	●
MFR/L901 D125.B40.Z10.16	125	40	63	10	90°	3.5	AP..1604..	●
MFR/L901 D160.B40.Z12.16	160	40	63	12	90°	5.3	AP..1604..	●
MFR/L901 D200.B60.Z14.16	200	60	63	14	90°	8.1	AP..1604..	●
MFR/L901 D250.B60.Z17.16	250	60	63	17	90°	12.2	AP..1604..	●
MFR/L901 D315.B60.Z20.16	315	60	63	20	90°	20.5	AP..1604..	●
MFR/L901 D400.B60.Z24.16	400	60	63	24	90°	31.5	AP..1604..	●

- 备有铝合金刀体供客户选用，重量减轻 60%，型号后加 "AL"。
- 刀片请根据不同材料单独订购，请参照：F009 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 MFR901 D080.B27.Z06.16
- We have main body made from aluminum alloy which will be 60% lighter than the ordinary one, and "AL" at the end of model#.
- Insert with different materials should be ordered separately, please see page F009.
- The different cutting parameter of cutting tools is for machining different materials, please see page K006,K007.
- Ordering sample: 1 PC MFR901 DOBO.B27.Z06.16

备件

Spare Parts

规格型号 Designation	刀座 Cartridge	刀片锁紧螺钉 Clamping screw for insert	偏心销 Adjusting blot/ eccentric pin	刀座锁紧螺钉 Clamping screw for cartridge	垫片 Shim	刀片锁紧扳手 Allen key for clamping screw	调整扳手 Adjusting wrench	刀座调整扳手 Adjusting wrench for cartridge
MFR/L901..	MR/L901	SR20 M4x11.5	FT70 D8x12.5	SR55 M6x20	GK20 D6	KEY02 T15	KEY01 M4	KEY01 M5

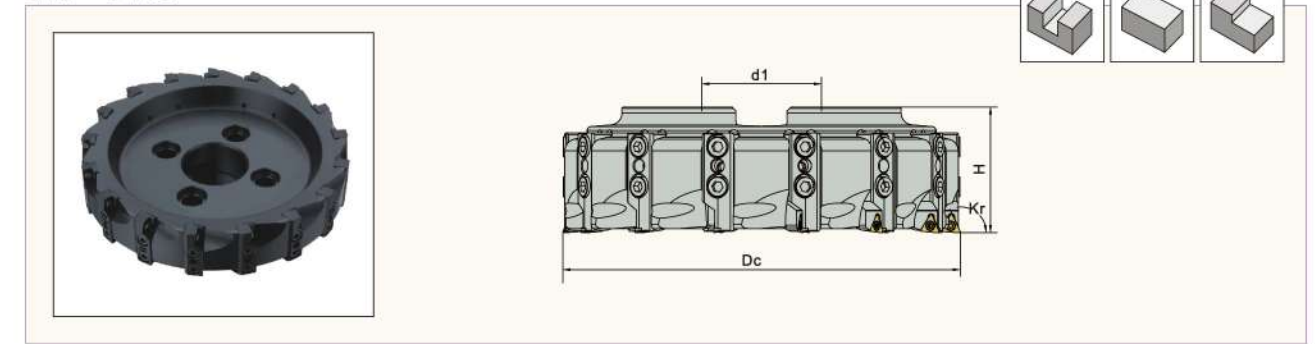
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

FACE MILLIG CUTTER WITH CARTRIDGE(AXIAL ADJUSTABLE) 可调式精铣刀

MFR/L115 可调式精铣刀

Milling Cutter with Cartridge (Axial Adjustable)

Kr=115°



规格型号 Designation	Dc	d1	H	Z	Kr	Kg	刀片型号 Insert	在库 Stock
MFR/L115 D080.B27.Z06.13	80	27	63	6	115°	1.5	TXMW 1303..	●
MFR/L115 D100.B32.Z08.13	100	32	63	8	115°	2.1	TXMW 1303..	●
MFR/L115 D125.B40.Z10.13	125	40	63	10	115°	3.5	TXMW 1303..	●
MFR/L115 D160.B40.Z12.13	160	40	63	12	115°	5.3	TXMW 1303..	●
MFR/L115 D200.B60.Z14.13	200	60	63	14	115°	8.1	TXMW 1303..	●
MFR/L115 D250.B60.Z17.13	250	60	63	17	115°	12.2	TXMW 1303..	●
MFR/L115 D315.B60.Z20.13	315	60	63	20	115°	20.5	TXMW 1303..	●
MFR/L115 D400.B60.Z24.13	400	60	63	24	115°	31.5	TXMW 1303..	●

- 适配刀片请根据不同材料单独订购，请参照：F008 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 刀具切深不能大于刀片圆角
- 订货示例：1 件 MFR 115 D080.B27.Z06.13
- Insert with different materials should be ordered separately, please see page F008.
- Recommended cutting data please see page K006,K007.
- The cutting depth should not be larger than the round of insert
- Ordering sample: 1 PC MFR 115 D080.B27.Z06.13

备件

Spare Parts

规格型号 Designation	刀座 Cartridge	刀片锁紧螺钉 Clamping screw for insert	偏心销 Adjusting blot/ eccentric pin	刀座锁紧螺钉 Clamping screw for cartridge	刀片锁紧扳手 Allen key for clamping screw	调整扳手 Adjusting wrench	刀座调整扳手 Adjusting wrench for cartridge
MFR/L115..	MR/L115	SR20 M2.5x6	FT70 D8x12.5	SR55 M6x20	KEY02 T8	KEY01 M4	KEY01 M5

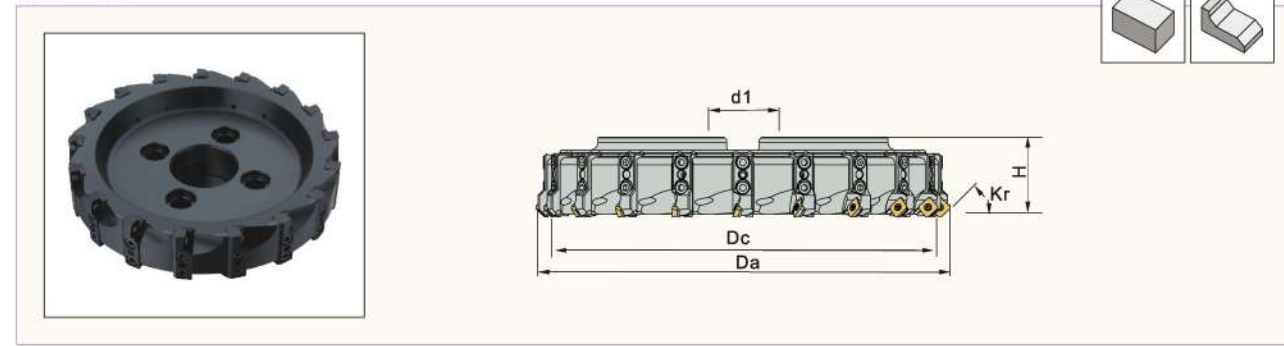
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

FACE MILLIG CUTTER WITH CARTRIDGE (AXIAL ADJUSTABLE) 可调式精铣刀

MFR/L451 可调式精铣刀

Milling Cutter with Cartridge (Axial Adjustable)

Kr=45°



规格型号 Designation	Dc	Da	d1	H	刀片数 z	Kr	Kg	刀片型号 Insert	在库 Stock
MFR/L451 D080.B27.Z06.12	80	93	27	63	6	43°	1.5	SE.. 1204..	○
MFR/L451 D100.B32.Z08.12	100	113	32	63	8	43°	2.1	SE.. 1204..	○
MFR/L451 D125.B40.Z10.12	125	138	40	63	10	43°	3.5	SE.. 1204..	○
MFR/L451 D160.B40.Z12.12	160	173	40	63	12	43°	5.3	SE.. 1204..	○
MFR/L451 D200.B60.Z14.12	200	213	60	63	14	43°	8.1	SE.. 1204..	○
MFR/L451 D250.B60.Z17.12	250	263	60	63	17	43°	12.2	SE.. 1204..	○
MFR/L451 D315.B60.Z20.12	315	328	60	63	20	43°	20.5	SE.. 1204..	○
MFR/L451 D400.B60.Z24.12	400	413	60	63	24	43°	31.5	SE.. 1204..	○

- 备有铝合金刀体供客户选用，重量减轻 60%，型号后加“AL”。
- 刀片请根据不同材料单独订购，请参照：F012 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 MFR451 D080.B27.Z06.12
- We have main body made from aluminum alloy which will be 60% lighter than the ordinary one, and 'AL' at the end of model#.
- Insert with different materials should be ordered separately, please refer to page F012.
- The different cutting parameter of cutting tools is for machining different materials, please refer to page K006,K007.
- Ordering sample: 1 PC MFR451 D080.B27.Z06.12

备件

Spare Parts



规格型号 Designation	刀座 Cartridge	刀片锁紧螺钉 Clamping screw for insert	偏心销 Adjusting blot/ eccentric pin	刀座锁紧螺钉 Clamping screw for cartridge	刀垫 Shim	刀垫螺钉 Clamping screw for insert	刀垫锁紧扳手 Allen key for clamping screw
MFR/L451..	MR/L451	SR20 M5x11	FT70 D8x12.5	SR55 M6x20	-	-	-
MFR/L452..	*MR/L452	SR20 M3.5x11	FT70 D8x12.5	SR55 M6x20	-	-	-
MFR/L453..	*MR/L453	SR20 M3.5x11	FT70 D8x12.5	SR55 M6x20	ST02 S12x0.8	SR28 M5x11	KEY01 M3.5

- 带“*”的刀座适配刀片为 SE..12T3..
- The cartridge marked with * indicates the suitable insert is SE..12T3..

备件

Spare Parts



规格型号 Designation	刀片锁紧扳手 Allen key for clamping screw	调整扳手 Adjusting wrench	刀座调整扳手 Adjusting wrench for cartridge
MFR/L451..	KEY02 T20	KEY01 M4	KEY01 M5
MFR/L452..	KEY02 T15	KEY01 M4	KEY01 M5
MFR/L453..	KEY02 T15	KEY01 M4	KEY01 M5

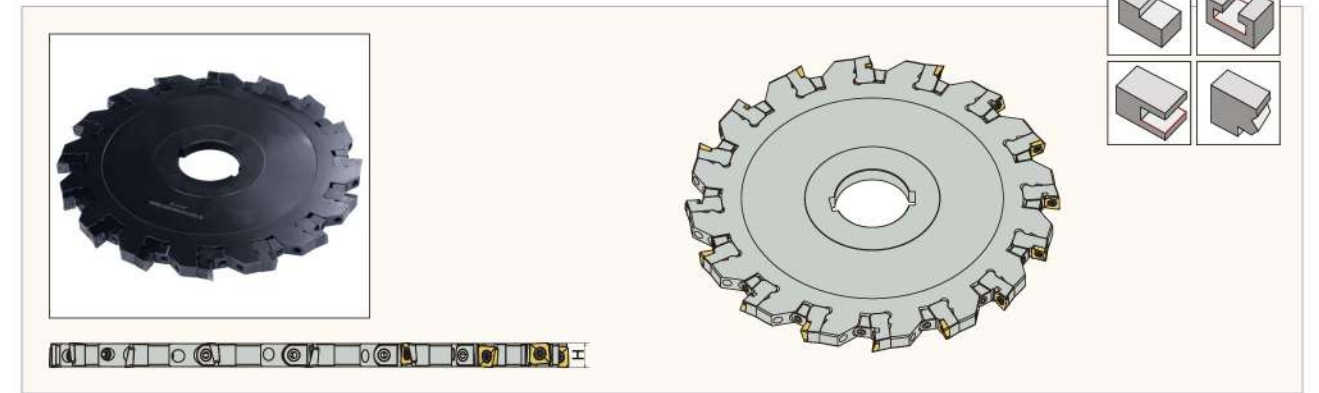
- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SIDE AND FACE MILLING CUTTER 三面刃铣刀

可调式槽铣刀

Adjustable Slot Milling Cutter

- 切宽可调 - 刀夹式槽铣刀
- 可调切宽系列槽铣刀 (通过在刀体上滑动刀夹实现) 大大延长了加工范围。
- 可通过附后的表中填写相应的尺寸，方便的定制半标准刀具，依靠松德专业软件，可快速做出包括刀具图纸、价格和交货期在内的方案。
- The cutting width can be adjusted
- This milling cutter is with cartridge, which expands the machining range.
- It is special tool. We will provide the optimal solution which including price, lead time, diagram quickly when customers fill up the attached forms with related dimensions.



槽铣刀直径 Diameter	刀片 / 刀夹 Insert/Cartridge				
	XOMT-QOMT	QPMT	QDMT		
	MSR/L H08.06	MSR/L H12.10	MSR/L H14.5		
	铣槽宽 H Width	铣槽宽 H Width	铣槽宽 H Width	芯轴孔直径 Diameter of mandrel	在库 Stock
MSSB 125/160	7.9-10.1	12.0-13.4	14.5-16.6	32;40;50	○
MSSB 125/160			16.4-19.0	32;40;50	○
MSSB 125/160	9.9-12.0	13.3-14.9	18.8-21.4	32;40;50	○
MSSB 200	7.9-10.1	12.0-13.4	14.5-16.6	40;50;60	○
MSSB 200			16.4-19.0	40;50;60	○
MSSB 200	9.9-12.0	13.3-14.9	18.8-21.4	40;50;60	○
MSSB 250	7.9-10.1	12.0-13.4	14.5-16.6	40;50;60	○
MSSB 250			16.4-19.0	40;50;60	○
MSSB 250	9.9-12.0	13.3-14.9	18.8-21.4	40;50;60	○
MSSB 315	7.9-10.1	12.0-13.4	14.5-16.6	40;50;60	○
MSSB 315			16.4-19.0	40;50;60	○
MSSB 315	9.9-12.0	13.3-14.9	18.8-21.4	40;50;60	○
MSSB 400	7.9-10.1	12.0-13.4	14.5-16.6	60	○
MSSB 400			16.4-19.0	60	○
MSSB 400	9.9-12.0	13.3-14.9	18.8-21.4	60	○

- 可按客户要求，提供宽度可调槽铣刀，其订货编号 (以 H=13.45 为例)：MSSB D250.B40.H13.45.10.
- 对于其他宽度订货编号如有疑问，请咨询销售工程师。
- It is customer designed, ordering sample: MSSB D250.B40.H13.45.10.
- Any questions please contact our sale engineers.

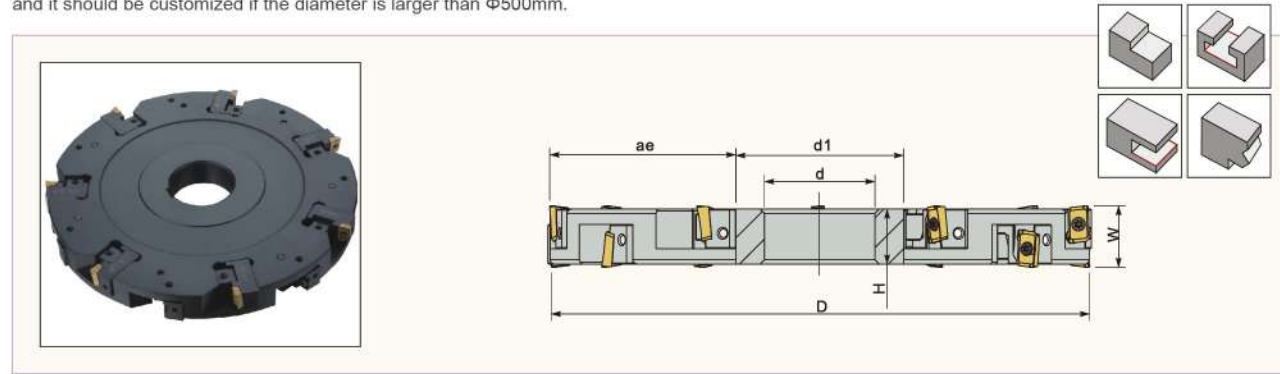
- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SIDE AND FACE MILLING CUTTER 三面刃铣刀

可调式三面刃铣刀

Adjustable Side and Face Milling Cutter

配置端面和径向可调的刀座，可更换不同刀片的刀座，调整更换方便；可正反铣面和铣槽；标准产品刀具直径Φ200-Φ500，直径Φ500以上非标定制。
It is with cartridge with different inserts; It can mill the surface and groove; the diameter of standard milling cutter Φ200-Φ500mm, and it should be customized if the diameter is larger than Φ500mm.



规格型号 Designation	D	W	ae	d	d1	H	Z	Kg	适配刀座 Cartridge	在库 Stock
MSSB D200.B40.W28.Z12.15	200	28	60	40	80	25	2x6	4.8	MSR 905 MSL 905	●
MSSB D250.B50.W28.Z14.15	250	28	75	50	100	25	2x7	7.8		●
MSSB D315.B50.W30.Z16.15	315	30	107	50	100	27	2x8	11.4		●
MSSB D400.B50.W30.Z20.15	400	30	150	50	100	27	2x10	19.3	MSR 902 MSL 902	●
MSSB D500.B50.W30.Z24.15	500	30	200	50	100	27	2x12	29.2		●
MSSB D200.B40.W28.Z12.16	200	28	60	40	80	25	2x6	4.8		●
MSSB D250.B50.W28.Z14.16	250	28	75	50	100	25	2x7	7.8	MSR 902 MSL 902	●
MSSB D315.B50.W30.Z16.16	315	30	107	50	100	27	2x8	11.4		●
MSSB D400.B50.W30.Z20.16	400	30	150	50	100	27	2x10	19.3		●
MSSB D500.B50.W30.Z24.16	500	30	200	50	100	27	2x12	29.2		●

- 请尽量使用冷却液；
- 刀片请根据不同材料单独订购，请参照：F009,F010 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 铣槽时请根据具体情况选择较小的切削参数；
- 订货示例：1 件 MSSB D200.B40.W28.Z12.15
- Please use the coolant oil as far as possible.
- Insert with different materials should be ordered separately, please see page F009,F010.
- Recommended cutting data please see page K006,K007.
- Please choose the smaller cutting parameter when machining groove.
- Ordering sample: 1 PC MSSB D200.B40.W28.Z12.15

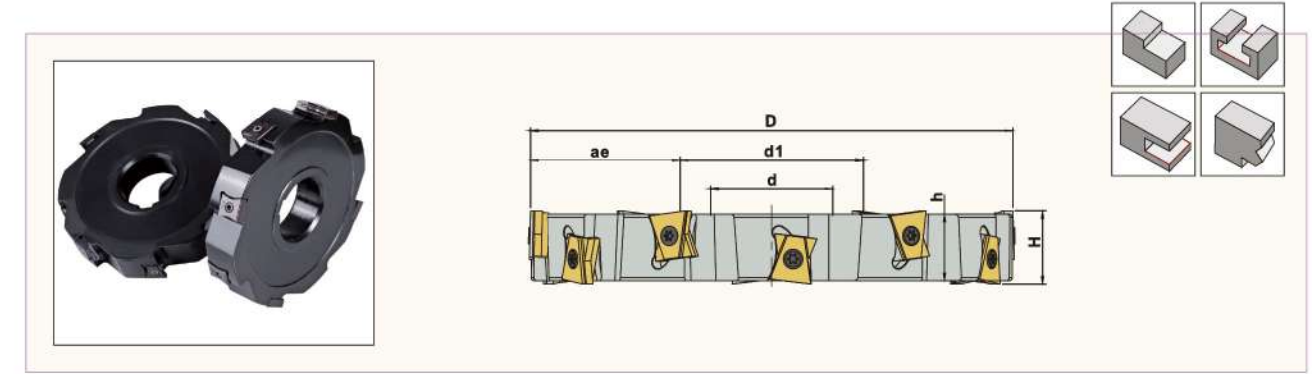
备件 Spare parts	刀座型号 Designation	刀片型号 Insert	刀片螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping screw
刀座 Cartridge	MSR/L 902	AP..1604..	SR20 M4x11.5	KEY02 T15
刀座 Cartridge	MSR/L 905	AD..1505..	SR20 M4x11.5	KEY02 T15
锁紧楔块 Lock wedge	XKM6-01	-	-	-
锁紧螺栓 Lock bolt	SR58 M6x21	-	-	KEY01 M3

- 标准库存
Item in stock
- 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

SIDE AND FACE MILLING CUTTER 三面刃铣刀

LN11 三面刃铣刀

LN11 Side and Face Milling Cutter



规格型号 Designation	D	H	ae	d	d1	h	Z	Kg	刀片型号 Insert	在库 Stock
MSSB D080.B27.H18.Z06.LN11	80	18	20	27	40	16	2x3	0.75	LN..1106..	●
MSSB D100.B27.H18.Z08.LN11	100	18	30	27	40	16	2x4	1.13	LN..1106..	●
MSSB D125.B32.H18.Z10.LN11	125	18	39	32	46	16	2x5	1.67	LN..1106..	●
MSSB D160.B40.H18.Z12.LN11	160	18	50	40	60	16	2x6	2.82	LN..1106..	●
MSSB D200.B50.H18.Z14.LN11	200	18	55	50	90	16	2x7	4.50	LN..1106..	●

- 适配刀片请根据不同材料单独订购，请参照：F008 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 MSSB D080.B27.H18.Z06.LN11

- Insert with different materials should be ordered separately, please see page F008.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MSSB DOB0.B27.H18.Z06.LN11

备件

Spare Parts

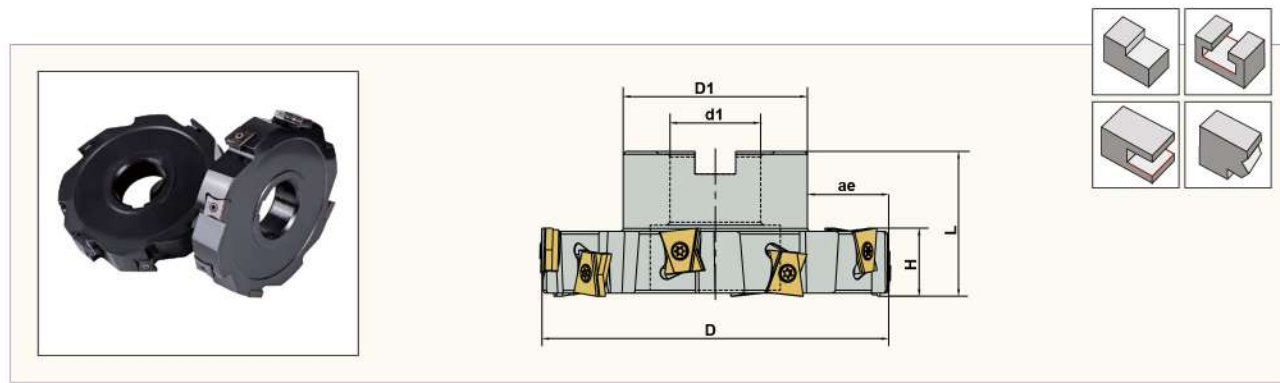
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping screw
LN..1106..	SR20 M3.5x11.5	KEY02 T10

- 标准库存
Item in stock
- 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

SIDE AND FACE MILLING CUTTER 三面刃铣刀

LN11 三面刃铣刀

LN11 Side and Face Milling Cutter



规格型号 Designation	D	D1	d1	H	L	ae	Z	Kg	刀片型号 Insert	在庫 Stock
MSSB D080.SEM22.H18.Z06.LN11	80	48	22	18	50	16	2x3	0.89	LN..1106..	●
MSSB D100.SEM22.H18.Z08.LN11	100	48	22	18	50	26	2x4	1.88	LN..1106..	●
MSSB D125.SEM27.H18.Z10.LN11	125	60	27	18	63	32	2x5	2.22	LN..1106..	●
MSSB D160.SEM32.H18.Z12.LN11	160	78	32	18	63	41	2x6	3.82	LN..1106..	●
MSSB D200.SEM40.H18.Z14.LN11	200	89	40	18	63	55	2x7	5.83	LN..1106..	●

- 刀片请根据不同材料单独订购，请参照：F008 页
- 订货示例：1 件 MSSB D080.SEM22.H24.Z06.LN11

- Insert should be ordered separately, please see page F008.
- Ordering sample: 1 PC MSSB DOBO.SEM22.H24.Z06.LN11.

备件

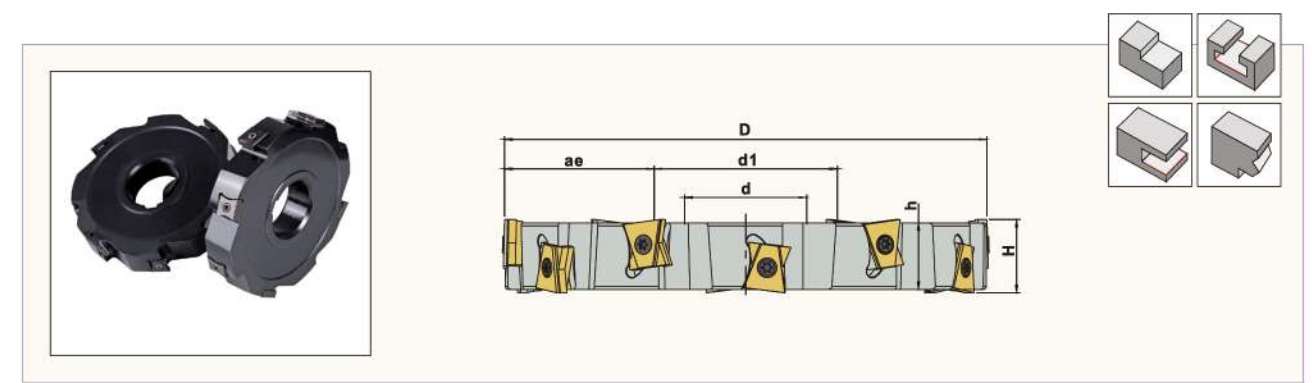
Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping screw
LN..1106..	SR20 M3.5x11.5	KEY02 T10

SIDE AND FACE MILLING CUTTER 三面刃铣刀

LN15 三面刃铣刀

LN15 Side and Face Milling Cutter



规格型号 Designation	D	H	ae	d	d1	h	Z	Kg	刀片型号 Insert	在庫 Stock
MSSB D080.B27.H24.Z06.LN15	80	24	20	27	40	21.8	2x3	0.64	LN..1506..	●
MSSB D100.B27.H24.Z08.LN15	100	24	30	27	40	21.8	2x4	1.03	LN..1506..	●
MSSB D125.B32.H24.Z10.LN15	125	24	39	32	46	21.8	2x5	1.57	LN..1506..	●
MSSB D160.B40.H24.Z12.LN15	160	24	50	40	60	21.8	2x6	2.72	LN..1506..	●
MSSB D200.B50.H24.Z14.LN15	200	24	55	50	90	21.8	2x7	4.32	LN..1506..	●

- 刀片请根据不同材料单独订购，请参照：F008 页
- 加工不同材料刀具的切削参数，请参照：K006,K007 页
- 订货示例：1 件 MSSB D080.B27.H24.Z06.LN15

- Insert with different materials should be ordered separately, please see page F008.
- Recommended cutting data please see page K006,K007.
- Ordering sample: 1 PC MSSB DOBO.B27.H24.Z06.LN15

备件

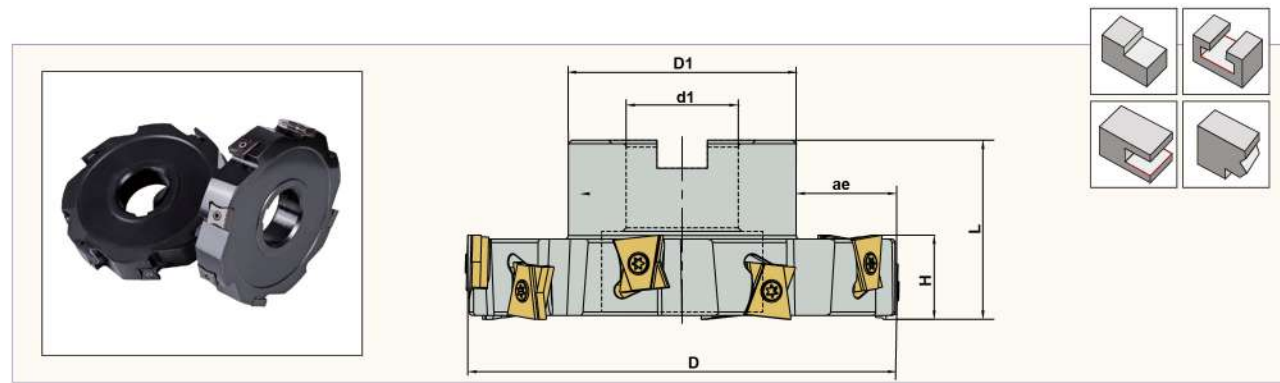
Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping screw
LN..1506..	SR20 M4x11.5	KEY02 T15

SIDE AND FACE MILLING CUTTER 三面刃铣刀

LN15 三面刃铣刀

LN15 Side and Face Milling Cutter



规格型号 Designation	D	D1	d1	H	L	ae	Z	Kg	刀片型号 Insert	在庫 Stock
MSSB D080.SEM22.H24.Z06.LN15	80	48	22	24	50	16	2x3	0.79	LN..1506..	●
MSSB D100.SEM22.H24.Z08.LN15	100	48	22	24	50	26	2x4	1.78	LN..1506..	●
MSSB D120.SEM27.H24.Z10.LN15	125	60	27	24	63	32	2x5	2.12	LN..1506..	●
MSSB D160.SEM32.H24.Z12.LN15	160	78	32	24	63	41	2x6	3.72	LN..1506..	●
MSSB D200.SEM40.H24.Z14.LN15	200	89	40	24	63	55	2x7	5.65	LN..1506..	●

● 刀片请根据不同材料单独订购，请参照：F008 页
 ● 订货示例：1 件 MSSB D080.SEM22.H24.Z06.LN15

● Insert should be ordered separately, please see page F008.
 ● Ordering sample: 1 PC MSSB DOBO.SEM22.H24.Z06.LN15.

备件

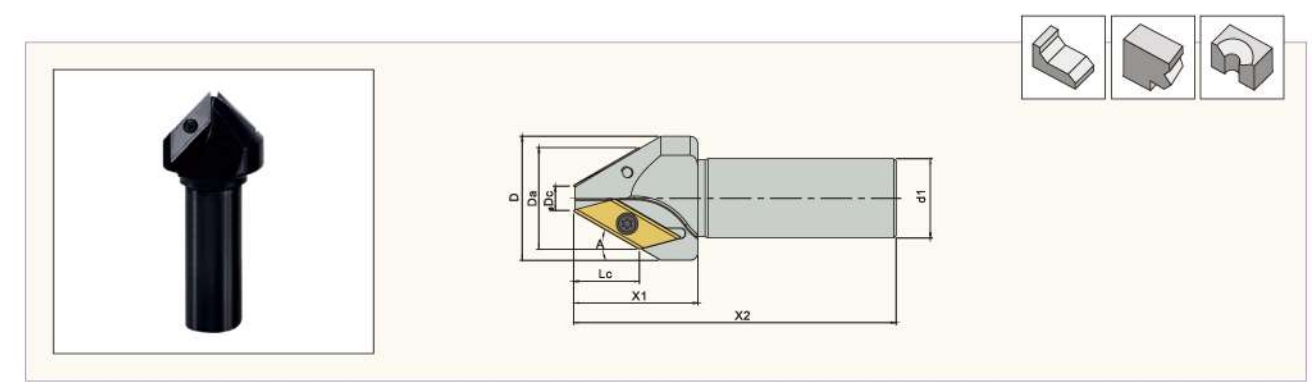
Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for claming screw
LN..1506..	SR20 M4x11.5	KEY02 T15

INDEXABLE INSERT CHAMFER CUTTER 可转位倒角刀

长刃倒角刀

Chamfering Cutter with Long Cutting Edge



规格型号 Designation	A	Da	Dc	D	d1	X1	X2	Lc	刀片数 Z	Kg	刀片型号 Insert	在庫 Stock
ME30XE D034.W32.Z01.31.130	30°	34	5	40	32	50	130	25.5	1	0.68	XCET 2204..	●
ME45XE D046.W32.Z02.31.130	45°	46	5	56	32	50	130	20.5	2	0.72	XCET 2204..	●
ME60XE D055.W32.Z02.31.130	60°	55	5	72	32	50	130	14.5	2	0.75	XCET 2204..	●

● 刀片请根据不同材料单独订购，请参照：F012 页
 ● 订货示例：1 件 ME30XE D034.W32.Z01.31.130
 ● Insert should be ordered separately please see page F012.
 ● Ordering sample: 1 PC ME30XE D034.W32.Z01.31.130

备件

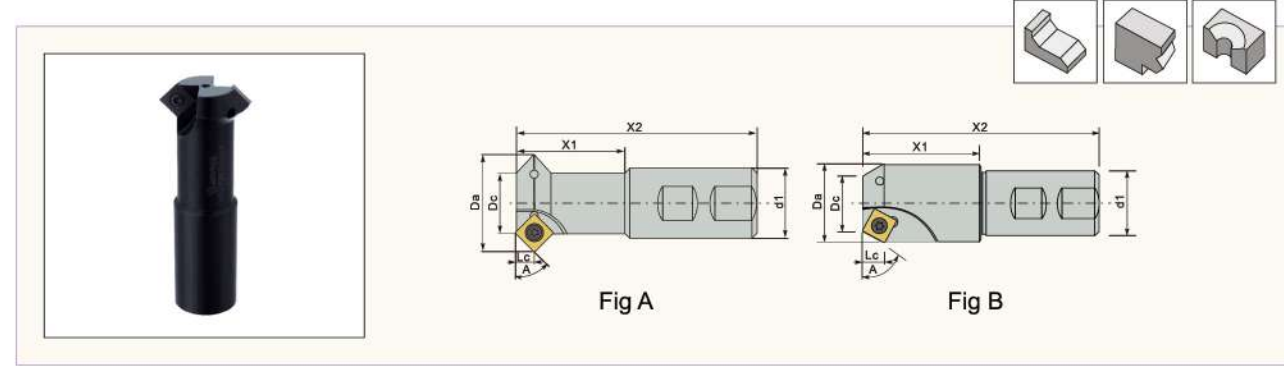
Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for claming screw
XCET 2204..	SR21 M5x12.8	KEY02 T20

INDEXABLE INSERT CHAMFER CUTTER 可转位倒角刀

杆式倒角刀

Chamfer Cutter with Cylindrical Shank



规格型号 Designation	A	Dc	Da	d1	X1	X2	Lc	刀片数 Z	Fig	Kg	刀片型号 Insert	在库 Stock
ME30SC D012.W16.Z01.12.100	30°	12	32	16	50	98	7	1	B	0.17	SC..1204..	●
ME30SC D028.W32.Z02.12.120	30°	28	48	32	60	120	7	2	B	0.70	SC..1204..	●
ME45SD D006.W16.Z01.09.90	45°	5	16	16	40	90	6	1	A	0.12	SD..0903..	●
ME45SD D012.W16.Z01.09.100	45°	12	23	16	52	100	6	1	A	0.12	SD..0903..	●
ME45SD D020.W20.Z02.09.100	45°	20	31	20	50	100	6	2	A	0.23	SD..0903..	●
ME45SC D028.W32.Z02.12.120	45°	28	44	32	60	120	7	2	A	0.64	SC..1204..	●
ME60SC D012.W16.Z01.12.100	45°	11	22	16	52	100	9	1	B	0.18	SC..1204..	●
ME60SC D020.W20.Z01.12.100	60°	20	31	20	50	100	9	1	B	0.32	SC..1204..	●
ME60SC D028.W32.Z02.12.120	60°	28	39	32	60	120	9	2	B	0.77	SC..1204..	●

- 刀片请根据不同材料单独订购，请参照：F006,F010 页
- 订货示例：1 件 ME30SC D012.W16.Z01.12.100
- Insert should be ordered separately please see page F006,F010.
- Ordering sample: 1 PC ME30SC D012.W16.Z01.12.100

备件

Spare Parts

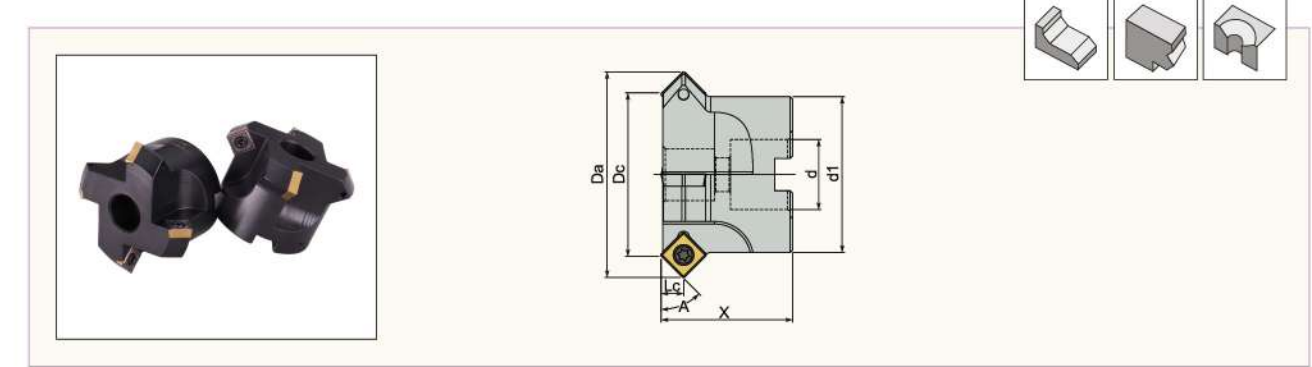
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping screw
SC..1204..	SR21 M5x12.8	KEY02 T20
SD..0903..	SR20 M4x7.8	KEY02 T15

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT CHAMFER CUTTER 可转位倒角刀

盘式倒角刀

Face Chamfering Cutter



规格型号 Designation	A	Dc	Da	d	d1	X	Lc	刀片数 Z	Kg	刀片型号 Insert	在库 Stock
MF45SC D040.B16.Z03.12.40	45°	40	56	16	38	40	7	3	0.26	SC..1204..	●
MF45SC D050.B22.Z04.12.40	45°	50	66	22	48	40	7	4	0.37	SC..1204..	●
MF45SC D063.B27.Z04.12.50	45°	63	79	27	60	50	7	4	0.75	SC..1204..	●
MF45SC D080.B32.Z05.12.50	45°	80	96	32	78	50	7	5	1.17	SC..1204..	●
MF45SC D100.B40.Z06.12.60	45°	100	116	40	89	60	7	6	1.93	SC..1204..	●

- 刀片请根据不同材料单独订购，请参照：F006 页
- 订货示例：1 件 MF45SC D040.B16.Z03.12.40
- Insert should be ordered separately please see page F006.
- Ordering sample: 1 PC MF45SC D040.B16.Z03.12.40

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping screw
SC..1204..	SR21 M5x12.8	KEY02 T20

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

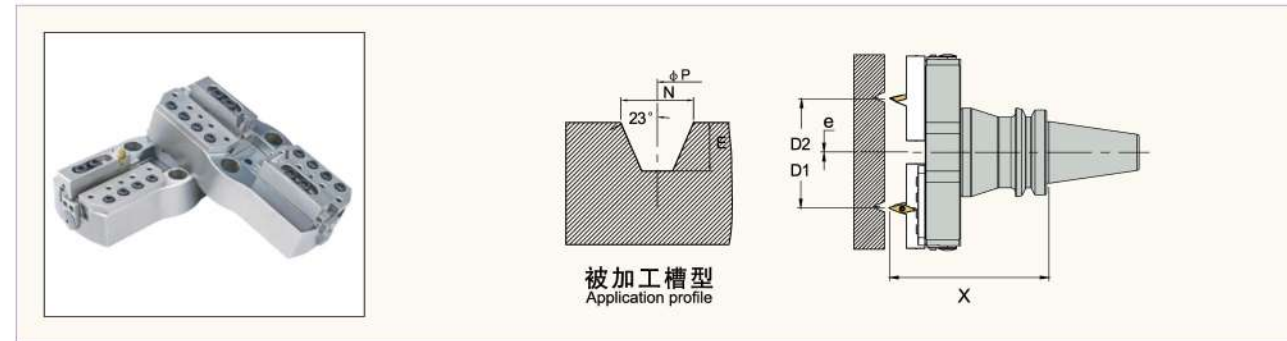
API GROOVING CUTTER 可调式端面槽铣刀

可调式端面槽铣刀

API Ring Grooving Cutter

松德可调式端面槽铣刀吸取国外端面槽铣刀优点,并结合实际加工工艺需要,设计的一款可内、外径进行粗调及精调合二为一的端面槽铣刀。操作简单,实用性强,两处微调机构,微调精度每格直径 0.01mm,使用范围广等特点,需配内、外径刀座。

For API ring groove machining both rough and finish. Inside cartridge and outside cartridge can be adjusted separately with 0.01mm on diameter per scale, wide diameter range, high accuracy and easy operating.



规格型号 Designation	槽型 P 值范围 P value	X	E	适配内径刀座 ID cartridge	适配外径刀座 OD cartridge	Kg	在库 Stock
BT40 MSD215x100	45-114	140	<18	L23N P43-112.H18.VC16	L23W P47-116.H18.VC16	8.21	●
BT40 MSD215x100	106-138	140	<18	L23N P104-136.H18.VC16	L23W P108-140.H18.VC16	8.21	●
BT40 MSD215x100	129-227	140	<18	L23N P127-225.H18.VC16	L23W P131-229.H18.VC16	8.21	●
BT50 MSD215x140	45-114	180	<18	L23N P43-112.H18.VC16	L23W P47-116.H18.VC16	12.61	●
BT50 MSD215x140	106-138	180	<18	L23N P104-136.H18.VC16	L23W P108-140.H18.VC16	12.61	●
BT50 MSD215x140	129-227	180	<18	L23N P127-225.H18.VC16	L23W P131-229.H18.VC16	12.61	●
DIN69871 50 MSD215x140	45-114	180	<18	L23N P43-112.H18.VC16	L23W P47-116.H18.VC16	12.31	●
DIN69871 50 MSD215x140	106-138	180	<18	L23N P104-136.H18.VC16	L23W P108-140.H18.VC16	12.31	●
DIN69871 50 MSD215x140	129-227	180	<18	L23N P127-225.H18.VC16	L23W P131-229.H18.VC16	12.31	●

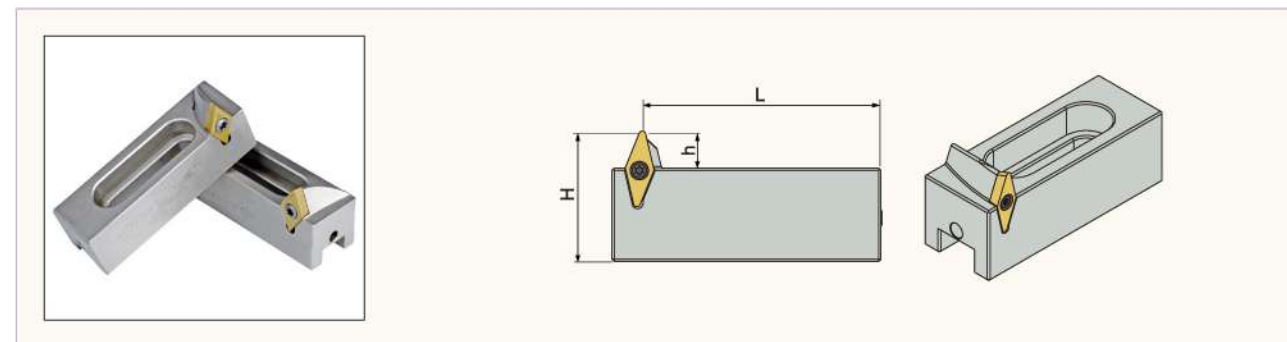
- 适配刀座需单独订购, 请参照: C022 页
- 如没有匹配的刀体, 需提供机床对应的刀柄大小非标定制刀体。
- 订货示例: 1 件 BT50 MSD215x140
- The suitable cartridge should be ordered separately, please see page C022.
- If you want main body with other sizes, please advise the specification of machine tool so that we could manufacture the customer designed tools.
- Ordering sample: 1 PC BT50 MSD215x140

可调式端面槽铣刀刀座

The Cartridges for Adjustable API Ring Groover

适配可调式端面槽铣刀刀体任意规格, 安装方便, 调整自如、稳定, 内外径刀座——对应。

It is suitable for any size of main body, and it can be assembled freely and stably. The ID and OD are one-to-one correspondence and with different inserts.



刀座型号 Designation	L	H	h	刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping screw	Kg	在库 Stock
L23N P43-112.H18.VC16	65.5	40	18.5	VCMT 160408	SR20 M4x11.5	KEY02 T15	0.19	●
L23N P104-136.H18.VC16	48	40	18.5	VCMT 160408	SR20 M4x11.5	KEY02 T15	0.26	●
L23N P127-225.H18.VC16	62.5	40	18.5	VCMT 160408	SR20 M4x11.5	KEY02 T15	0.20	●
L23W P47-116.H18.VC16	63.5	40	18.5	VCMT 160408	SR20 M4x11.5	KEY02 T15	0.19	●
L23W P108-140.H18.VC16	46	40	18.5	VCMT 160408	SR20 M4x11.5	KEY02 T15	0.26	●
L23W P131-229.H18.VC16	64.5	40	18.5	VCMT 160408	SR20 M4x11.5	KEY02 T15	0.20	●

- 刀片请根据不同材料单独订购, 请参照: F014 页
- 订货示例: 1 件 L23N P43-112.H18.VC16
- Insert with different materials should be ordered separately, please see page F014.
- Ordering sample: 1 PC L23N P43-112.H18.VC16

API GROOVING CUTTER 可调式端面槽铣刀

简易可调式槽铣刀刀座

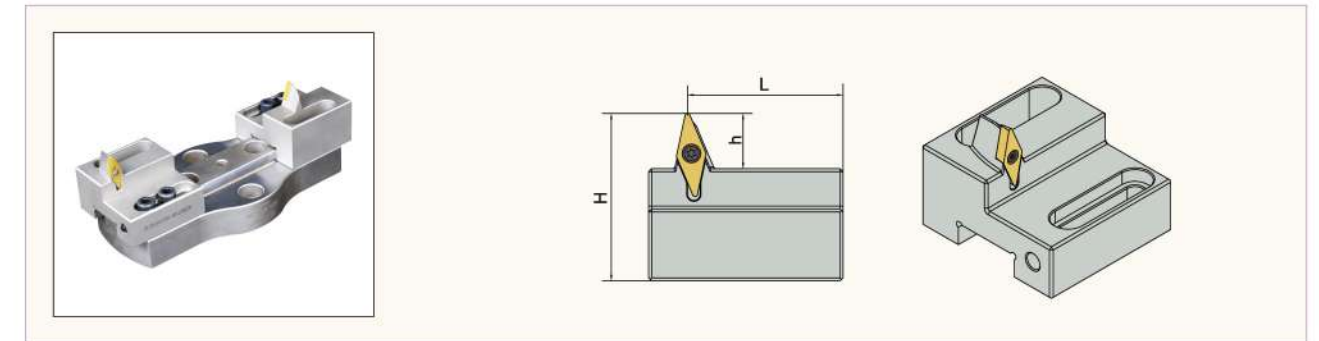
Simple Adjustable Cartridge

适配粗镗刀体及桥式刀体上, 安装方便。

刀座可进行粗调整, 操作简单, 实用性强, 内外径刀座——对应

It is suitable for large diameter rough boring tool body, which is easy to be assembled.

It can be rough adjusted and easy to be operated. The 10 and 00 are one-to-one correspondence.



刀座型号 Designation	L	H	h	刀片型号 Insert	Kg	P 值范围 P value	适配刀体 Main body	在库 Stock
P23N P45-65.H18.VC16	46.5	40	18.5	VCMT 160408	0.17	45-60	BR D070-090.E63.75	●
P23W P45-65.H18.VC16				●				
P23N P56-108.H18.VC16				●				
P23W P56-108.H18.VC16	28	56	18.5	VCMT 160408	0.69	60-108	SNL 150-210..	●
P23N P104-156.H18.VC16				●				
P23W P104-156.H18.VC16				●				
P23N P56-108.H18.VC16	52	56	18.5	VCMT 160408	0.69	104-155	SNL 150-210..	●
P23W P56-108.H18.VC16				●				
P23N P104-156.H18.VC16				●				
P23W P104-156.H18.VC16	28	56	18.5	VCMT 160408	0.69	155-175	SNL 210-290	●
P23N P104-156.H18.VC16				●				
P23W P104-156.H18.VC16				●				

- 刀片请根据不同材料单独订购, 请参照: F014 页
- 订货示例: 1 件 R23N P45-65.H18.VC16
- Insert should be ordered separately please see page F014.
- Ordering sample: 1 PC R23N P45-65.H18.VC16

备件

Spare Parts

刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping screw
VCMT 160408	SR20 M4x11.5	KEY02 T15

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

API GROOVING CUTTER 可调式端面槽铣刀

可调端面槽铣刀使用说明

The Instruction Manual for API Ring Groover

微调端面槽刀组成部分

Components of the API Ring Groover

- 1、刀体包括刀柄、刀桥及两端微调机构
- 2、外径刀座
- 3、内径刀座

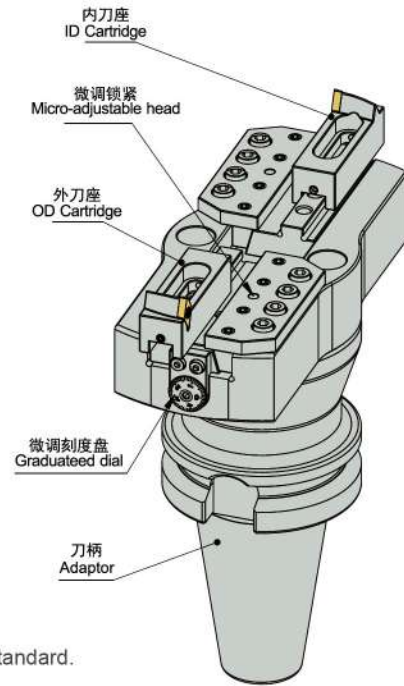
1. The main body includes tool holder, connection, and the two micro-adjustable head
2. OD cartridge
3. ID cartridge or correspondence.

特点

1. 适用于石油阀门类 API 标准的端面密封槽铣削加工；
2. 解决了由传统工艺无法达到加工要求或不能加工密封槽等问题；
3. 一把刀具配备不同的内外径刀座，可覆盖 API 标准全系列槽的加工；
4. 两端带有微调机构，调整精度 0.01mm/格；
5. 加工效率高，加工稳定性好；

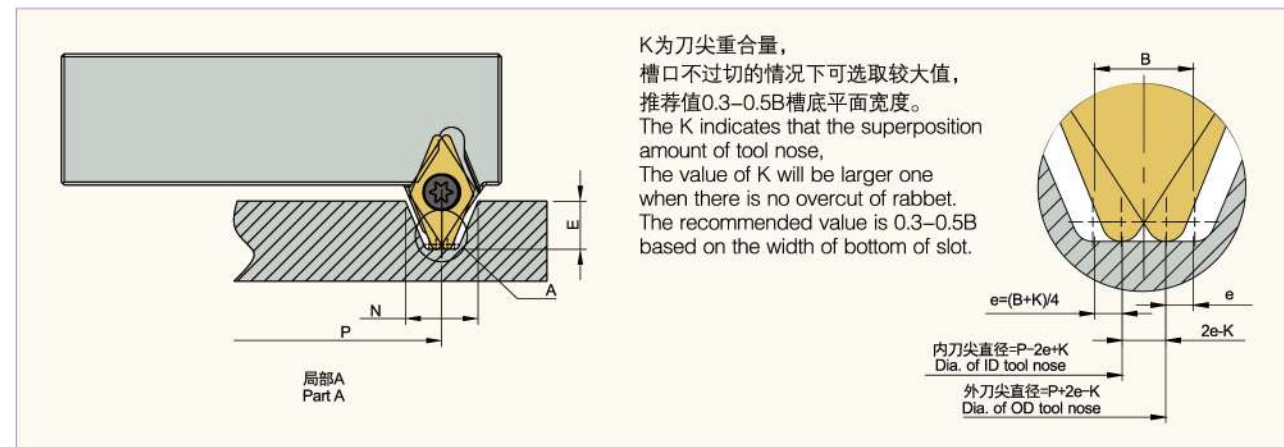
Features

1. It is suitable for machining the API ring groove.
2. It can solve the polished problem of other brands API ring groover could not do.
3. One tool body plus 3 sets ID & OD cartridges could machine all the grooves with API standard.
4. It can be micro adjusted, and the dial each of which is 0.01 mm on diameter.
5. Higher performance and higher stability.



刀具粗调整尺寸计算方法示意

The Diagram for Calculation Method of Rough Adjustable Dimension



加工方法

Processing Method

一般采用螺旋插补铣锥孔的方法，最小插补半径按“e”编程，半锥角按23°计算编程。

The general method is helix interpolation and milling for taper hole. The mini dia. of interpolation should be programmed as "e" and the half taper angle should be calculated as 23°



ADAPTORS 刀柄系统

CONTENTS

ADAPTORS 刀柄系统

MAS403 BT

D001-D017

BT MAS403 锥柄标准 MAS403 BT Adaptor	D001
普通 ER 筒夹刀柄 ER Collet Chuck Adaptor	D002-D003
高精度 ER 筒夹刀柄 High Precision ER Collet Chuck Adaptor	D004-D005
强力铣夹头刀柄 Power Chuck Adaptor	D006
侧固式刀柄 (DIN 1835-B) Weldon Adaptor	D007
2° 侧固式刀柄 (DIN 1835-E) Whistle-Notch Adaptor	D008
热缩刀柄 Shrink Fit Adaptor	D009-D010
攻丝刀柄 Tapping Chuck Adaptor	D011
面铣刀刀柄 Face Mill Adaptor	D012
侧铣刀刀柄 Side Mill Adaptor	D013
带扁尾莫氏锥孔刀柄 Morse Taper With Tang Adaptor	D014
无扁尾莫氏锥孔刀柄 Morse Taper With Draw Thread Adaptor	D015
钻夹头刀柄 Small Drill Chuck	D016
可调刀柄 Adjustable Adaptor	D017

DIN69871-A

D018-D031

DIN69871-A 锥柄标准 DIN69871-A Adaptor	D018
普通 ER 筒夹刀柄 ER Collet Chuck Adaptor	D019
高精度 ER 筒夹刀柄 High Precision ER Collet Chuck Adaptor	D020
强力铣夹头刀柄 Power Chuck Adaptor	D021
侧固式刀柄 (DIN 1835-B) Weldon Adaptor	D022
2° 侧固式刀柄 (DIN 1835-E) Whistle-Notch Adaptor	D023
热缩刀柄 Shrink Fit Adaptor	D024-D025
攻丝刀柄 Tapping Chuck Adaptor	D026
面铣刀刀柄 Face Mill Adaptor	D027
侧铣刀刀柄 Side Mill Adaptor	D028
带扁尾莫氏锥孔刀柄 Morse Taper With Tang Adaptor	D029

CONTENTS

ADAPTORS 刀柄系统

DIN69871-A

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HSK-A

D032-D041

HSK-A 锥柄标准 HSK-A Adaptor	D032
热缩刀柄 Shrink Fit Adaptor	D033-D035
普通 ER 筒夹刀柄 ER Collet Chuck Adaptor	D036
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侧固式刀柄 (DIN 1835-B) Weldon Adaptor	D038
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强力铣夹头刀柄 Milling Power Chuck	D039
面铣刀刀柄 Face Mill Adaptor	D040
可调刀柄 Adjustable Chuck	D041
DIN 69893 HSK A 型半成品刀柄 DIN 69893 HSK A Semifinished Adaptor	D041

MODULAR EXTENSIONS FOR ADAPTORS 模块式刀柄接杆

D042-D049

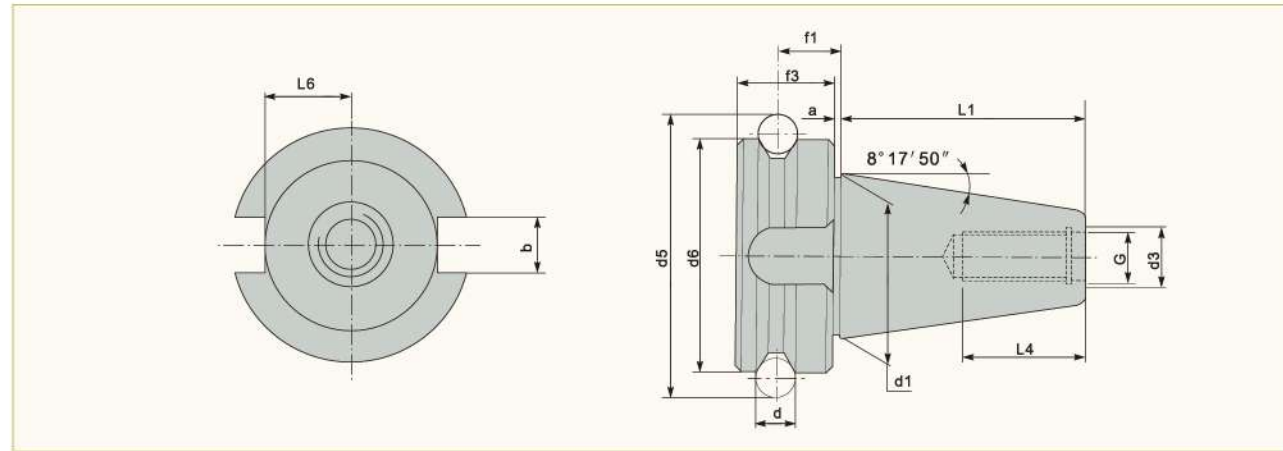
模块式刀柄接杆组合示意图 Combinational Figure	D042
ER 刀柄接杆 Extension for ER Collet Chuck Adaptor	D043
面铣刀刀柄接杆 Extension for Face Mill Adaptor	D044
侧固式刀柄接杆 Extension for Weldon Adaptor	D045
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热缩刀柄接杆 Extension for Weldon Adaptor	D048
BBT 刀柄 BBT Adaptor	D049

BT MAS403

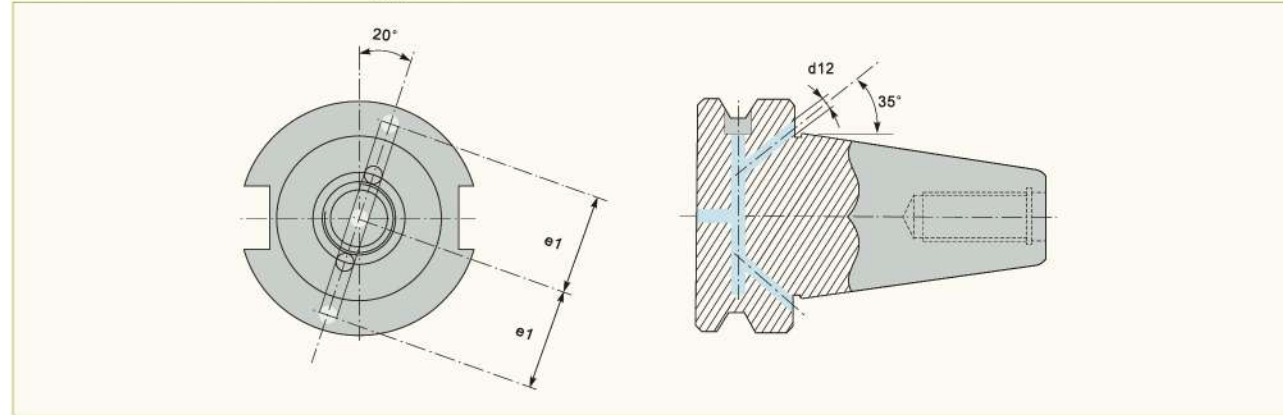
BT MAS403 锥柄标准

MAS403 BT Adaptor

BT MAS403-A 型 / Type A



BT MAS403-B 型 / Type B



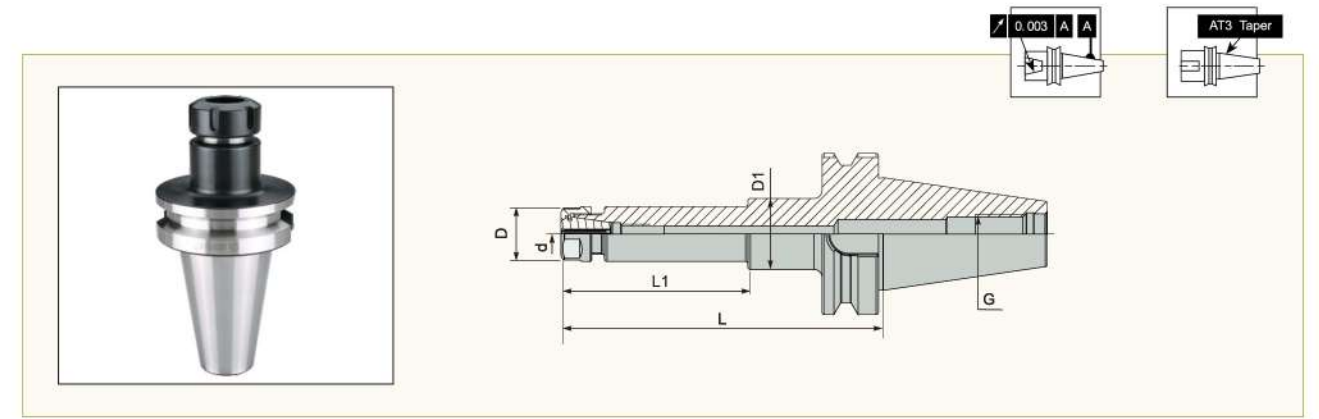
规格型号 Designation	a	b(H12)	d	d1	G	d3(H8)	d5	d6(H8)	f1 ± 0.1
BT 30	2	16.19	8	31.75	M12	12.5	56.12	46	13.6
BT 40	2	16.2	10	44.45	M16	17	75.656	63	16.6
BT 50	3	25.8	15	69.85	M24	25	118.99	100	23.2

规格型号 Designation	f3	L1 ± 0.2	L4min	L6 ± 0.2	e1 ± 0.1	d12	TAPER AT3
BT 30	20	48.4	24	16.3	16.2	4	0.002
BT 40	25	65.4	30	22.6	22.5	4	0.003
BT 50	35	101.8	45	35.4	35.3	6	0.004

BT MAS403

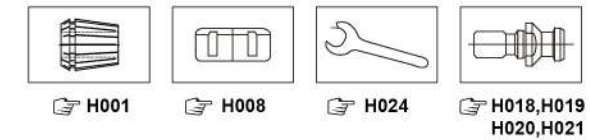
普通 ER 筒夹刀柄

ER Collet Chuck Adaptor



规格型号 Designation	L	D	d	D1	L1	G	Kg	在库 Stock
BT30 ER16x70	70	28	0.5-10	-	-	M12	0.47	●
BT30 ER16x100	100	28	0.5-10	-	-	M12	0.61	●
BT30 ER20x70	70	34	1-13	-	-	M12	0.61	●
BT30 ER20x100	100	34	1-13	-	-	M12	0.77	●
BT30 ER25x60	60	42	1-16	-	-	M12	0.67	●
BT30 ER25x100	100	42	1-16	-	-	M12	1.09	●
BT30 ER32x60	60	50	2-20	-	-	M12	0.78	●
BT30 ER32x100	100	50	2-20	-	-	M12	1.20	●
BT40 ER16x70	70	28	0.5-10	-	-	M16	1.06	●
BT40 ER16x100	100	28	0.5-10	-	-	M16	1.20	●
BT40 ER16x150	150	28	0.5-10	40	110	M16	1.56	●
BT40 ER16x200	200	28	0.5-10	40	85	M16	1.84	●
BT40 ER20x70	70	34	1-13	-	-	M16	1.07	●
BT40 ER20x100	100	34	1-13	-	-	M16	1.27	●
BT40 ER20x120	120	34	1-13	-	-	M16	1.39	●
BT40 ER20x150	150	34	1-13	-	-	M16	1.61	●
BT40 ER25x60	60	42	1-16	-	-	M16	1.00	●
BT40 ER25x100	100	42	1-16	-	-	M16	1.40	●
BT40 ER25x150	150	42	1-16	-	-	M16	2.07	●
BT40 ER32x60	60	50	2-20	-	-	M16	0.92	●
BT40 ER32x100	100	50	2-20	-	-	M16	1.45	●
BT40 ER32x120	120	50	2-20	-	-	M16	1.74	●
BT40 ER32x150	150	50	2-20	-	-	M16	2.19	●
BT40 ER32x200	200	50	2-20	-	-	M16	3.23	●
BT40 ER40x80	80	63	3-26	-	-	M16	1.10	●
BT40 ER40x100	100	63	3-26	-	-	M16	2.32	●
BT40 ER40x150	150	63	3-26	-	-	M16	3.36	●

● 订货示例: 1 件 BT30 ER16x70
 ● Ordering sample: 1 PC BT30 ER16x70



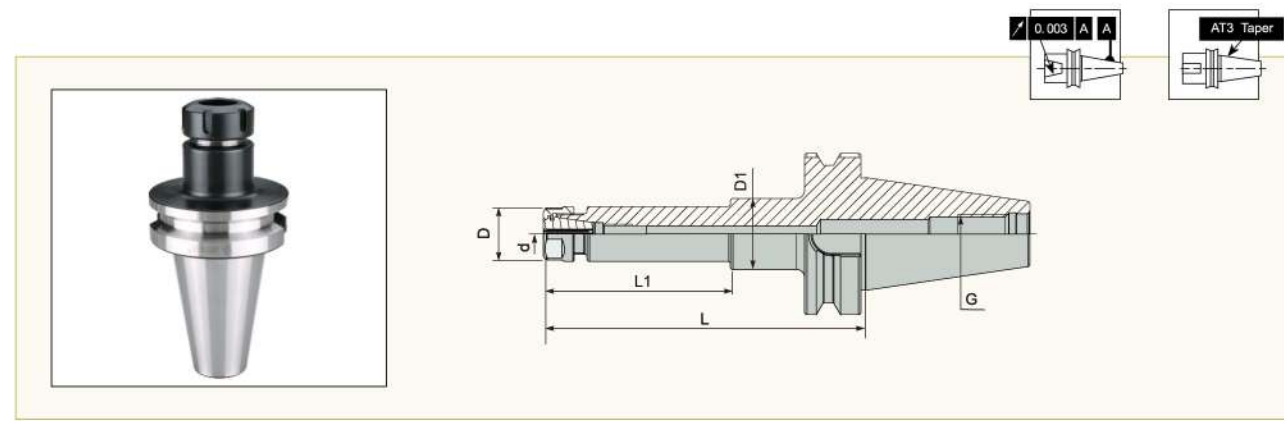
● 标准库存 Item in stock
 ● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
 ○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

● 标准库存 Item in stock
 ● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
 ○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BT MAS403

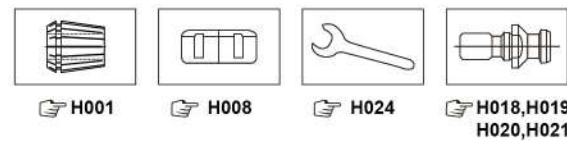
普通 ER 筒夹刀柄

ER Collet Chuck Adaptor



规格型号 Designation	L	D	d	D1	L1	G	Kg	在库 Stock
BT50 ER16x100	100	28	0.5-10	-	-	M24	3.70	●
BT50 ER16x125	125	28	0.5-10	-	-	M24	3.94	●
BT50 ER16x150	150	28	0.5-10	-	-	M24	4.00	●
BT50 ER16x200	200	28	0.5-10	40	85	M24	4.51	●
BT50 ER20x100	100	34	1-13	-	-	M24	3.81	●
BT50 ER20x125	125	34	1-13	-	-	M24	3.94	●
BT50 ER20x150	150	34	1-13	-	-	M24	4.06	●
BT50 ER20x200	200	34	1-13	50	85	M24	5.00	●
BT50 ER25x100	100	42	1-16	-	-	M24	3.9	●
BT50 ER25x150	150	42	1-16	-	-	M24	4.38	●
BT50 ER25x200	200	42	1-16	55	87	M24	5.29	●
BT50 ER32x100	100	50	2-20	-	-	M24	4.01	●
BT50 ER32x125	125	50	2-20	-	-	M24	4.24	●
BT50 ER32x150	150	50	2-20	-	-	M24	4.64	●
BT50 ER32x200	200	50	2-20	63	88	M24	5.80	●
BT50 ER40x100	100	63	3-26	-	-	M24	4.03	●
BT50 ER40x150	150	63	3-26	-	-	M24	5.05	●
BT50 ER40x200	200	63	3-26	-	-	M24	6.23	●

● 订货示例: 1 件 BT50 ER16x100
● Ordering sample: 1 PC BT50 ER16x100

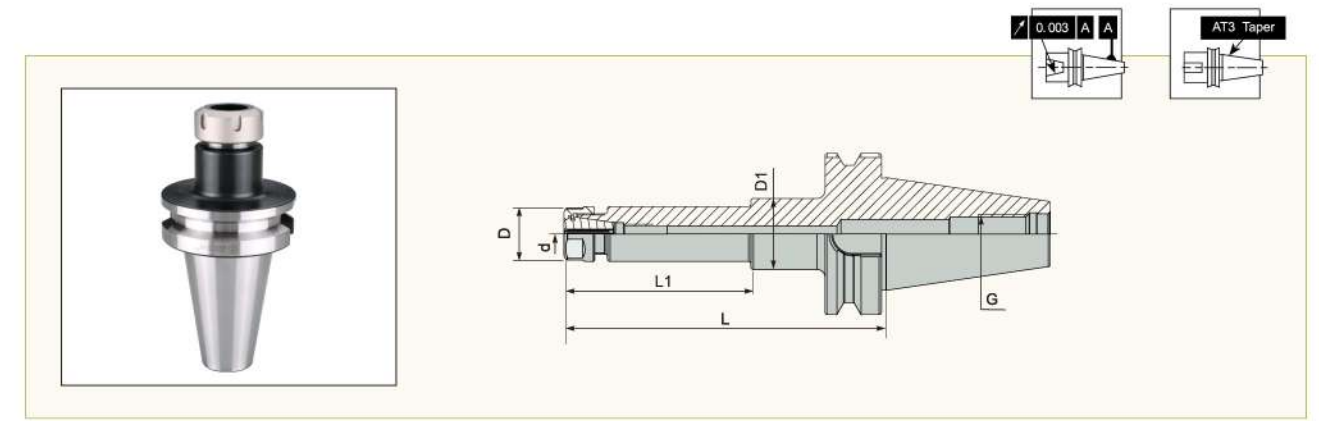


● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BT MAS403

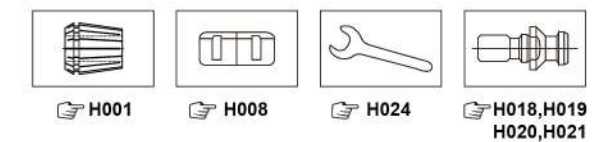
高精度 ER 筒夹刀柄

High Precision ER Collet Chuck Adaptor



规格型号 Designation	L	D	d	D1	L1	G	Kg	在库 Stock
BT30 ER16x70.TOP	70	28	0.5-10	-	-	M12	0.47	●
BT30 ER16x100.TOP	100	28	0.5-10	-	-	M12	0.61	●
BT30 ER20x70.TOP	70	34	1-13	-	-	M12	0.61	●
BT30 ER20x100.TOP	100	34	1-13	-	-	M12	0.77	●
BT30 ER25x60.TOP	60	42	1-16	-	-	M12	0.67	●
BT30 ER25x100.TOP	100	42	1-16	-	-	M12	1.09	●
BT30 ER32x60.TOP	60	50	2-20	-	-	M12	0.78	●
BT30 ER32x100.TOP	100	50	2-20	-	-	M12	1.20	●
BT40 ER16x70.TOP	70	28	0.5-10	-	-	M16	1.06	●
BT40 ER16x100.TOP	100	28	0.5-10	-	-	M16	1.20	●
BT40 ER16x150.TOP	150	28	0.5-10	40	110	M16	1.56	●
BT40 ER16x200.TOP	200	28	0.5-10	40	85	M16	1.84	●
BT40 ER20x70.TOP	70	34	1-13	-	-	M16	1.07	●
BT40 ER20x100.TOP	100	34	1-13	-	-	M16	1.27	●
BT40 ER20x120.TOP	120	34	1-13	-	-	M16	1.39	●
BT40 ER20x150.TOP	150	34	1-13	-	-	M16	1.61	●
BT40 ER25x60.TOP	60	42	1-16	-	-	M16	1.00	●
BT40 ER25x100.TOP	100	42	1-16	-	-	M16	1.40	●
BT40 ER25x150.TOP	150	42	1-16	-	-	M16	2.07	●
BT40 ER32x60.TOP	60	50	2-20	-	-	M16	0.92	●
BT40 ER32x100.TOP	100	50	2-20	-	-	M16	1.45	●
BT40 ER32x120.TOP	120	50	2-20	-	-	M16	1.74	●
BT40 ER32x150.TOP	150	50	2-20	-	-	M16	2.19	●
BT40 ER32x200.TOP	200	50	2-20	-	-	M16	3.23	●
BT40 ER40x80.TOP	80	63	3-26	-	-	M16	1.10	●
BT40 ER40x100.TOP	100	63	3-26	-	-	M16	2.32	●
BT40 ER40x150.TOP	150	63	3-26	-	-	M16	3.36	●

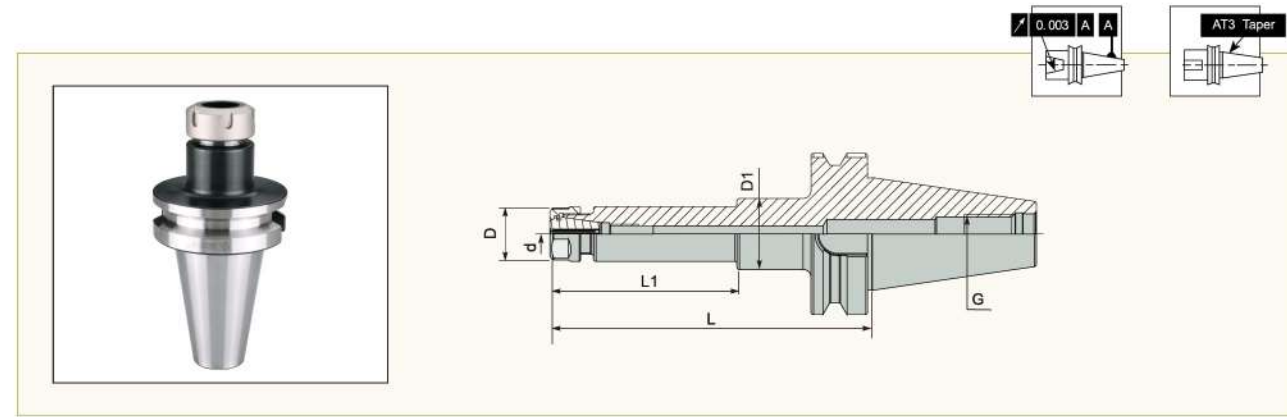
● 订货示例: 1 件 BT30 ER16x70.TOP
● Ordering sample: 1 PC BT30 ER16x70.TOP



● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

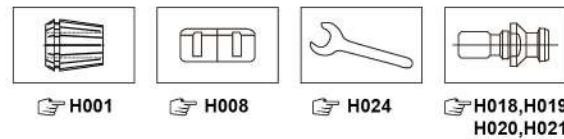
BT MAS403

高精度 ER 筒夹刀柄
High Precision ER Collet Chuck Adaptor



规格型号 Designation	L	D	d	D1	L1	G	Kg	在库 Stock
BT50 ER16x100.TOP	100	28	0.5-10	-	-	M24	3.70	●
BT50 ER16x125.TOP	125	28	0.5-10	-	-	M24	3.94	●
BT50 ER16x150.TOP	150	28	0.5-10	-	-	M24	4.00	●
BT50 ER16x200.TOP	200	28	0.5-10	40	85	M24	4.51	●
BT50 ER20x100.TOP	100	34	1-13	-	-	M24	3.81	●
BT50 ER20x125.TOP	125	34	1-13	-	-	M24	3.94	●
BT50 ER20x150.TOP	150	34	1-13	-	-	M24	4.06	●
BT50 ER20x200.TOP	200	34	1-13	50	85	M24	5.00	●
BT50 ER25x100.TOP	100	42	1-16	-	-	M24	3.9	●
BT50 ER25x150.TOP	150	42	1-16	-	-	M24	4.38	●
BT50 ER25x200.TOP	200	42	1-16	55	87	M24	5.29	●
BT50 ER32x100.TOP	100	50	2-20	-	-	M24	4.01	●
BT50 ER32x125.TOP	125	50	2-20	-	-	M24	4.24	●
BT50 ER32x150.TOP	150	50	2-20	-	-	M24	4.64	●
BT50 ER32x200.TOP	200	50	2-20	63	88	M24	5.80	●
BT50 ER40x100.TOP	100	63	3-26	-	-	M24	4.03	●
BT50 ER40x150.TOP	150	63	3-26	-	-	M24	5.05	●
BT50 ER40x200.TOP	200	63	3-26	-	-	M24	6.23	●

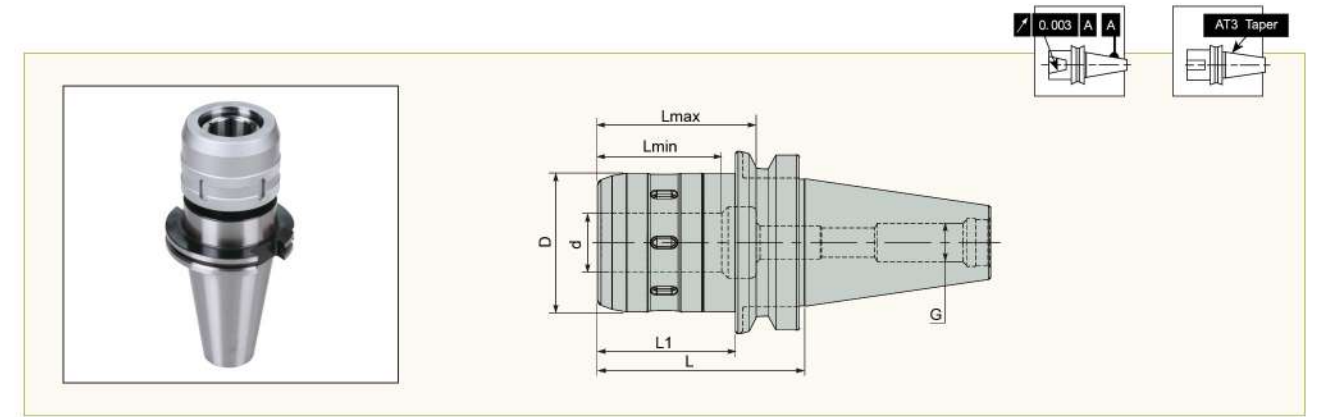
● 订货示例: 1 件 BT50 ER16x100.TOP
● Ordering sample: 1 PC BT50 ER16x100.TOP



● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BT MAS403

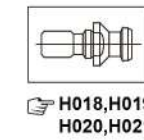
强力铣夹头刀柄
Power Chuck Adaptor



规格型号 Designation	D	d	L	L1	Lmin	Lmax	G	KG	在库 Stock
BT40 DMG20x85	53	20	85	58	61	75	M16	1.63	●
BT40 DMG32x110	76	32	110	83	68	87	M16	2.95	○
BT50 DMG20x95	53	20	95	57	61	75	M24	4.15	○
BT50 DMG32x110	76	32	110	72	68	87	M24	5.32	○
BT50 DMG40x135	90	40	135	97	83	103	M24	6.88	○
BT50 DMG42x135	90	42	135	97	83	103	M24	6.95	○

● 订货示例: 1 件 BT40 DMG20x85
● 强力直柄筒夹, 请参照: H008 页

● Ordering sample: 1 PC BT40 DMG20x85
● Power straight shank collet, please see page H008

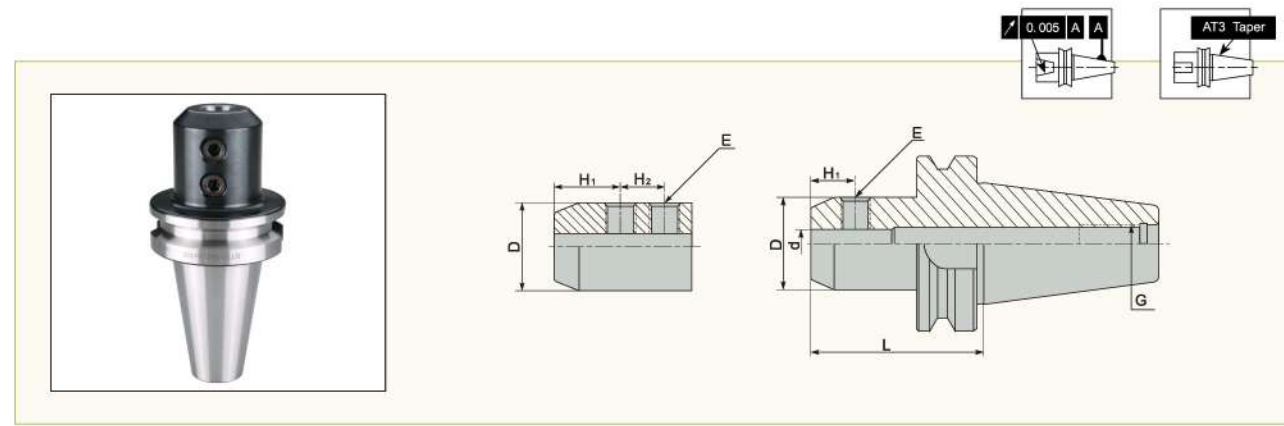


● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BT MAS403

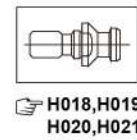
侧固式刀柄 (DIN 1835-B)

Weldon Adaptor



规格型号 Designation	d	D	L	H1	H2	E	G	Kg	在庫 Stock
BT30 EM16x60	16	46	60	24	-	M14x2	M12	0.79	●
BT30 EM20x80	20	52	80	25	-	M16x2	M12	1.04	●
BT40 EM16x65	16	48	65	24	-	M14x2	M16	1.35	●
BT40 EM20x75	20	52	75	25	-	M16x2	M16	1.54	●
BT40 EM25x105	25	65	105	24	25	M18x2	M16	2.5	●
BT40 EM32x110	32	72	110	24	28	M20x2	M16	2.84	●
BT50 EM16x100	16	48	100	24	-	M14x2	M24	4.21	●
BT50 EM20x100	20	52	100	25	-	M16x2	M24	4.28	●
BT50 EM25x115	25	65	115	24	25	M18x2	M24	5.06	●
BT50 EM32x115	32	72	115	24	28	M20x2	M24	5.28	●
BT50 EM40x115	40	90	115	30	32	M20x2	M24	6.18	●
BT50 EM50x125	50	100	125	35	35	M24x2	M24	6.94	●

- 订货示例: 1 件 BT30 EM16x60
- Ordering sample: 1 PC BT30 EM16x60



备件

Spare Parts

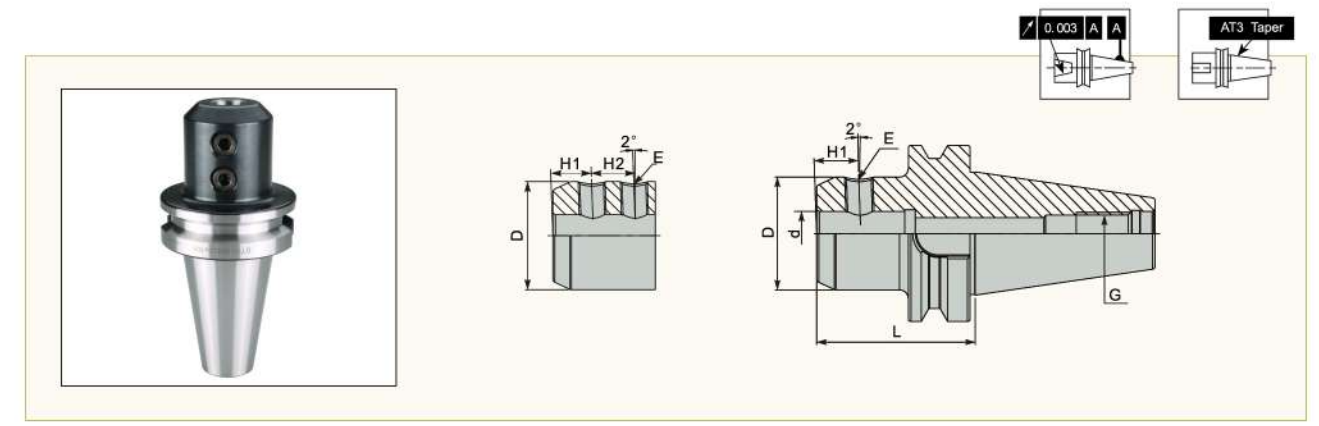
规格型号 Designation	锁紧螺钉 Clamping screw			锁紧扳手 Allen key for clamping screw
	ISO 30	ISO 40	ISO 50	
EM16	SR54 M14x16	SR54 M14x16	SR54 M14x16	KEY01 M6
EM20	SR54 M16x16	SR54 M16x16	SR54 M16x16	KEY01 M8
EM25	SR54 M18x16-X	SR54 M18x16-X	SR54 M18x20-X	KEY01 M8
EM32	-	SR54 M20x16-X	SR54 M20x20-X	KEY01 M10
EM40	-	-	SR54 M20x25-X	KEY01 M10
EM50	-	-	SR54 M24x25-X	KEY01 M12

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BT MAS403

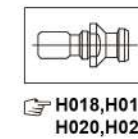
2° 侧固式刀柄 (DIN 1835-E)

Whistle-Notch Adaptor



规格型号 Designation	d	D	L	H1	H2	E	G	Kg	在庫 Stock
BT40 EM16x65E	16	48	65	24	-	M14x2	M16	1.38	●
BT40 EM20x75E	20	52	75	25	-	M16x2	M16	1.55	●
BT40 EM25x105E	25	65	105	24	25	M18x2	M16	2.47	●
BT40 EM32x110E	32	72	110	24	28	M20x2	M16	2.80	●
BT50 EM16x100E	16	48	100	24	-	M14x2	M24	4.27	●
BT50 EM20x100E	20	52	100	25	-	M16x2	M24	4.36	●
BT50 EM25x115E	25	65	115	24	25	M18x2	M24	5.08	●
BT50 EM32x115E	32	72	115	24	28	M20x2	M24	5.25	●
BT50 EM40x115E	40	90	125	30	32	M20x2	M24	6.19	●
BT50 EM50x125E	50	98	125	35	35	M24x2	M24	6.94	●

- 订货示例: 1 件 BT40 EM16x65E
- Ordering sample: 1 PC BT40 EM16x65E



备件

Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screw		锁紧扳手 Allen key for clamping screw
	ISO 40	ISO 50	
EM16	SR54 M14x16	SR54 M14x16	KEY01 M6
EM20	SR54 M16x16	SR54 M16x16	KEY01 M8
EM25	SR54 M18x16-X	SR54 M18x20-X	KEY01 M8
EM32	SR54 M20x16-X	SR54 M20x20-X	KEY01 M10
EM40	-	SR54 M20x25-X	KEY01 M10

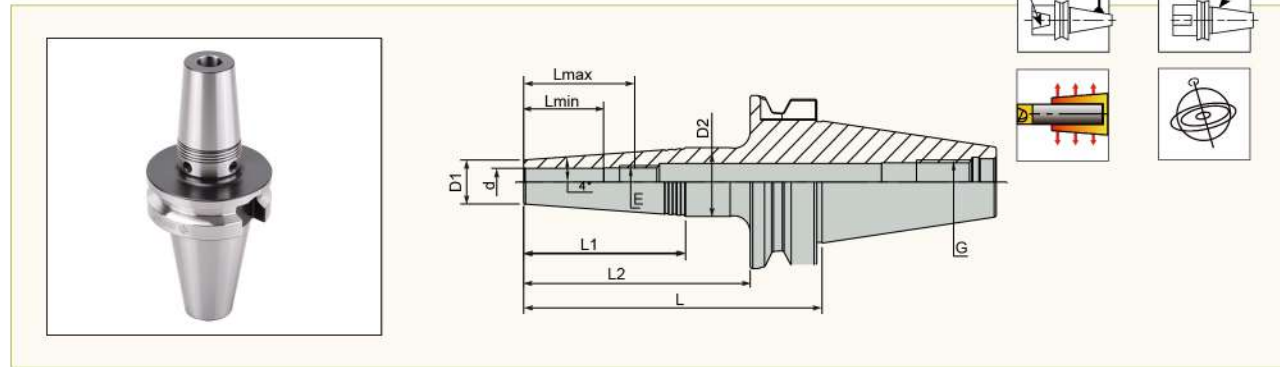
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BT MAS403

热缩刀柄

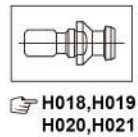
Shrink Fit Adaptor

BT MAS403 型热缩刀柄, 仅用于夹持整体硬质合金刀具
It is only for clamping the solid carbide tools



规格型号 Designation	d	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
BT40 SRK3x77	3	10	15	35.55	50	77	10	16	M6	M16	1.0	●
BT40 SRK3x112	3	10	19	64.15	85	112	10	16	M6	M16	1.0	●
BT40 SRK4x77	4	10	15	35.55	50	77	12	18	M6	M16	1.0	●
BT40 SRK4x112	4	10	19	64.15	85	112	12	18	M6	M16	1.0	●
BT40 SRK5x77	5	10	15	35.55	50	77	15	21	M6	M16	1.0	●
BT40 SRK5x112	5	10	19	64.15	85	112	15	21	M6	M16	1.0	●
BT40 SRK6x77	6	11	16	35.55	50	77	18	24	M8	M16	1.0	●
BT40 SRK6x112	6	11	20	64.15	85	112	18	24	M8	M16	1.1	●
BT40 SRK8x77	8	14	20	42.50	50	77	25	31	M10	M16	1.0	●
BT40 SRK8x112	8	14	23	63.95	85	112	25	31	M10	M16	1.1	●
BT40 SRK10x77	10	16	22	42.40	50	77	30	36	M12	M16	1.0	●
BT40 SRK10x112	10	16	25	60.28	85	112	30	36	M12	M16	1.1	●
BT40 SRK12x77	12	20	26	42.30	50	77	32	42	M10	M16	1.1	●
BT40 SRK12x112	12	20	28	56.60	85	112	32	42	M10	M16	1.2	●

- 当工作转速 N=25,000RPM 时, 刀柄的平衡等级为 G2.5
- 订货示例: 1 件 BT40 SRK3x77
- The collet should be ordered separately.
- Ordering sample: 1 PC BT40 SRK3x77.



备件

Spare Parts

E	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
M5	SR50 M5x20.BC	KEY01 M2.5
M6	SR50 M6x20.BC	KEY01 M3
M8	SR50 M8x20.BC	KEY01 M4
M10	SR50 M10x18.BC	KEY01 M5
M12	SR50 M12x18.BC	KEY01 M6

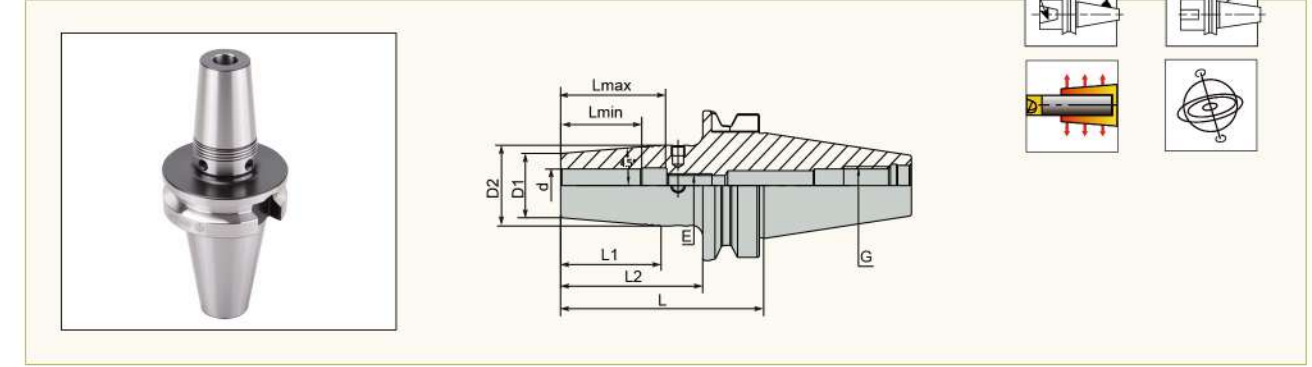
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

BT MAS403

热缩刀柄

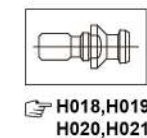
Shrink Fit Adaptor

BT MAS403 型热缩刀柄, 用于夹持整体硬质合金刀具或高速钢刀具
It is for clamping the solid carbide tools or HSS tools



规格型号 Designation	d	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
BT40 SRKIN6x80	6	21	27	38.0	60.9	80	25	36	M5	M16	1.0	●
BT40 SRKIN8x80	8	21	27	38.0	60.9	80	25	36	M6	M16	1.1	●
BT40 SRKIN10x80	10	24	32	50.5	60.9	80	31	42	M8	M16	1.0	●
BT40 SRKIN12x80	12	24	32	50.5	60.9	80	36	47	M10	M16	1.4	●
BT40 SRKIN14x80	14	27	34	44.5	60.9	80	36	47	M10	M16	1.1	●
BT40 SRKIN16x80	16	27	34	44.5	60.9	80	39	50	M12	M16	1.1	●
BT40 SRKIN18x80	18	33	42	57.0	60.9	80	39	50	M12	M16	1.2	●
BT40 SRKIN20x80	20	33	42	57.0	60.9	80	41	52	M16	M16	1.2	●
BT40 SRKIN25x100	25	44	53	57.0	80.9	100	47	58	M16	M16	1.7	●
BT50 SRKIN6x80	6	21	26	32.0	60.9	80	25	36	M5	M24	2.8	●
BT50 SRKIN8x80	8	21	27	38.0	60.9	80	25	36	M6	M24	2.8	●
BT50 SRKIN10x80	10	24	32	51.0	60.9	80	31	42	M8	M24	2.8	●
BT50 SRKIN12x80	12	24	32	51.0	60.9	80	36	47	M10	M24	2.8	●
BT50 SRKIN14x80	14	27	34	44.5	60.9	80	36	47	M10	M24	2.8	●
BT50 SRKIN16x80	16	27	34	44.5	60.9	80	39	50	M12	M24	2.8	●
BT50 SRKIN18x80	18	33	42	57.0	60.9	80	39	50	M12	M24	2.9	●
BT50 SRKIN20x80	20	33	42	57.0	60.9	80	41	52	M16	M24	2.9	●
BT50 SRKIN25x100	25	44	53	57.0	80.9	100	47	58	M16	M24	3.5	●
BT50 SRKIN32x100	32	44	53	57.0	80.9	100	47	58	M16	M24	3.4	●

- 当工作转速 N=25,000RPM 时, 刀柄的平衡等级为 G2.5
- 订货示例: 1 件 BT40 SRKIN6x80
- It is with G2.5/25,000 RPM.
- Ordering sample: 1 PC BT40 SRKIN6x80.



备件

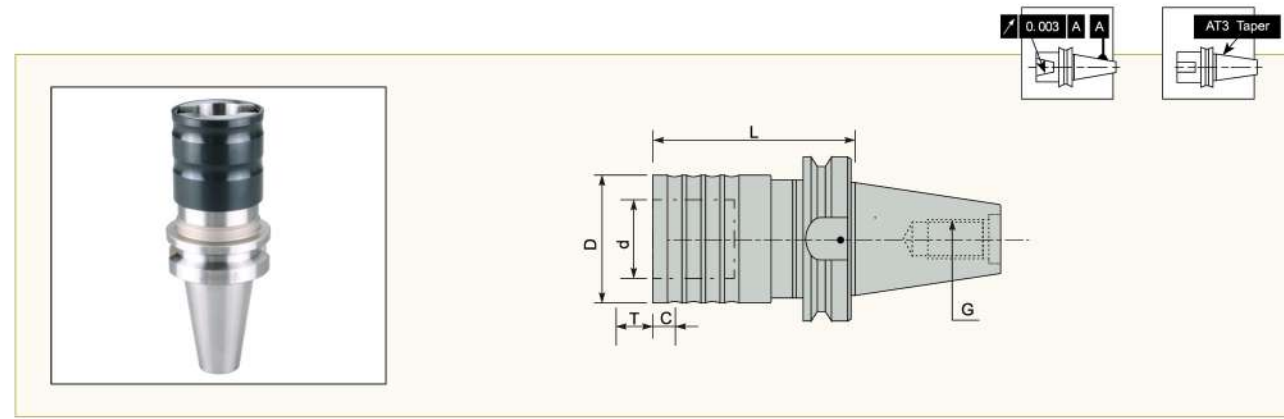
Spare Parts

E	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
M5	SR50 M5x20.BC	KEY01 M2.5
M6	SR50 M6x20.BC	KEY01 M3
M8	SR50 M8x20.BC	KEY01 M4
M10	SR50 M10x18.BC	KEY01 M5
M12	SR50 M12x18.BC	KEY01 M6
M16	SR50 M16x20.BC	KEY01 M8

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

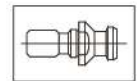
BT MAS403

攻丝刀柄 Tapping Chuck Adaptor



规格型号 Designation	d	D	L	长度补偿 Length compensation		攻丝范围 Tap	G	Kg	在库 Stock
				T	C				
BT40 TAP412x85	19	36	85	9	5	M4-M12	M16	1.2	●
BT40 TAP820x100	31	53.5	100	16	9	M8-M20	M16	1.8	●
BT50 TAP412x95	19	36.0	95	9	5	M4-M12	M24	3.8	●
BT50 TAP820x110	31	53.5	110	16	9	M8-M20	M24	4.3	●
BT50 TAP1433x140	48	78.0	140	26	15	M14-M33	M24	5.5	●
BT50 TAP2248x150	60	96.0	150	28	17	M22-M48	M24	6.6	●

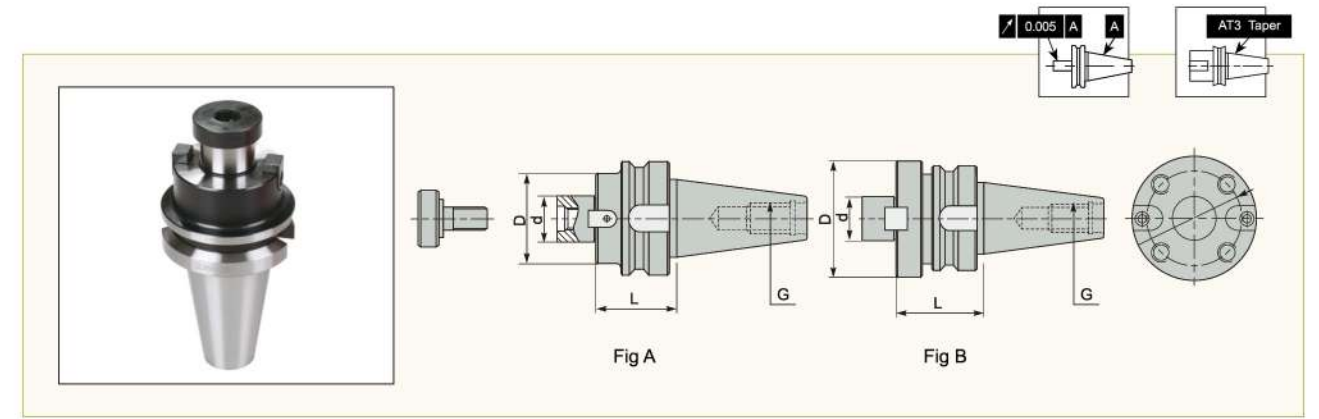
- 订货示例: 1 件 BT40 TAP412x85
- 每种规格的攻丝刀柄均有对应的攻丝快换夹头, 请参照: H010-H013 页
- Ordering sample: 1 PC BT40 TAP412x85
- Multiple quick change chucks for corresponding adaptors, please see page H010-H013.



H018, H019
H020, H021

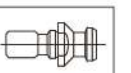
BT MAS403

面铣刀刀柄 Face Mill Adaptor



规格型号 Designation	d	D	L	Fig	G	Kg	在库 Stock
BT30 SEM16x50	16	38	50	A	M12	0.62	●
BT30 SEM22x50	22	47	50	A	M12	0.77	●
BT30 SEM27x50	27	58	50	A	M12	0.88	●
BT40 SEM16x60	16	38	60	A	M16	1.29	●
BT40 SEM16x120	16	38	120	A	M16	1.82	●
BT40 SEM22x60	22	47	60	A	M16	1.45	●
BT40 SEM22x120	22	47	120	A	M16	2.38	●
BT40 SEM27x45	27	58	45	A	M16	1.39	●
BT40 SEM27x105	27	58	105	A	M16	2.63	●
BT40 SEM32x60	32	65	60	A	M16	1.88	●
BT40 SEM32x75	32	65	75	A	M16	2.26	●
BT40 SEM40x60	40	88	60	B	M16	2.33	●
BT50 SEM16x75	16	38	75	A	M24	3.86	●
BT50 SEM16x120	16	38	120	A	M24	4.40	●
BT50 SEM22x75	22	47	75	A	M24	4.1	●
BT50 SEM22x120	22	47	120	A	M24	4.63	●
BT50 SEM22x50x220	22	50	220	A	M24	6.52	●
BT50 SEM22x64x320	22	64	320	A	M24	10.84	●
BT50 SEM27x60	27	58	60	A	M24	4.15	●
BT50 SEM27x105	27	58	105	A	M24	5.08	●
BT50 SEM32x48	32	66	48	A	M24	3.96	●
BT50 SEM32x75	32	66	75	A	M24	4.65	●
BT50 SEM40x60	40	88	60	B	M24	5.43	●
BT50 SEM60x75	60	128	75	B	M24	7.58	●

- 订货示例: 1 件 BT30 SEM16x50
- Ordering sample: 1 PC BT30 SEM16x50



H018, H019
H020, H021

备件

Spare Parts

规格型号 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	垫环 Backing ring	压紧螺钉 Clamping screw
SEM16	PL10 8x6	SR55 M3x10	-	SR55 M8x25
SEM22	PL10 10x9	SR55 M5x12	FMA-22	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	FMA-27	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	FMA-32	SR55 M16x40
SEM40	PL10 16x12	SR55 M6x16	FMA-40	SR55 M20x45
SEM60	PL10 25x16	SR55 M10x16	-	SR55 M16x60

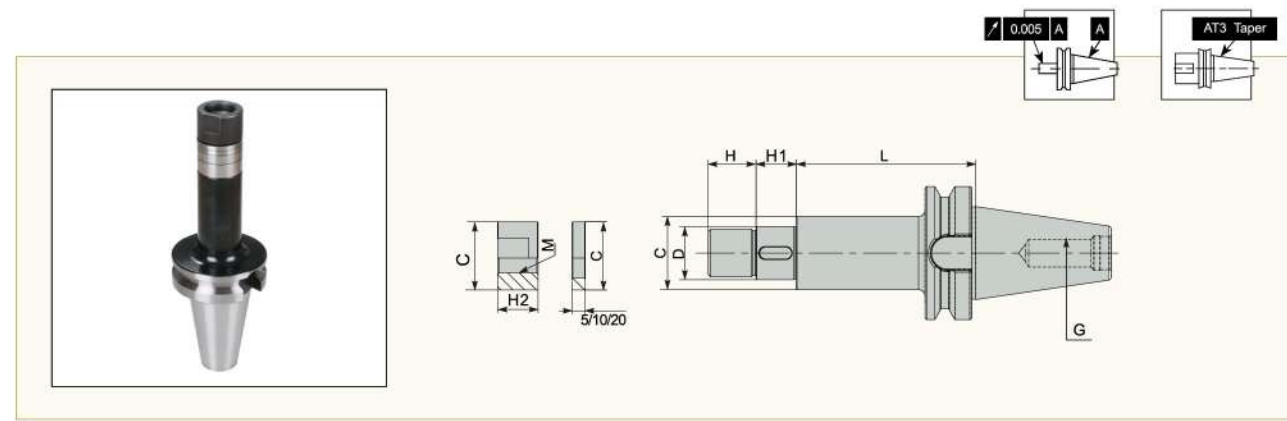
- BT50 SEM40x60 需配平键 PL10 16x14
- Balance key PL10 16X14 needed for BT50 SEM40X60

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

BT MAS403

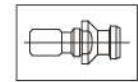
侧铣刀刀柄

Side Mill Adaptor



规格型号 Designation	D	L	H	C	H1	H2	M	G	Kg	在庫 Stock
BT30 SEMC13x75	13	75	15	20	30	12	M12x1.75	M12	0.6	●
BT30 SEMC16x75	16	75	16	26	30	13	M14x1.5	M12	0.7	●
BT30 SEMC22x75	22	75	21	34	30	18	M20x1.5	M12	0.8	●
BT40 SEMC13x75	13	75	15	20	30	12	M12x1.75	M16	1.3	●
BT40 SEMC13x105	13	105	15	20	30	12	M12x1.75	M16	1.4	●
BT40 SEMC16x75	16	75	16	26	30	13	M14x1.5	M16	1.4	●
BT40 SEMC16x105	16	105	16	26	30	13	M14x1.5	M16	1.5	●
BT40 SEMC22x75	22	75	21	34	30	18	M20x1.5	M16	1.6	●
BT40 SEMC22x105	22	105	21	34	30	18	M20x1.5	M16	1.9	●
BT40 SEMC27x75	27	75	25	40	30	21	M24x2.0	M16	2.1	●
BT40 SEMC27x120	27	120	25	40	30	21	M24x2.0	M16	2.5	●
BT40 SEMC32x90	32	90	30	46	30	26	M30x2.0	M16	2.6	●
BT50 SEMC13x75	13	75	15	20	30	12	M12x1.75	M24	3.7	●
BT50 SEMC13x105	13	105	15	20	30	12	M12x1.75	M24	3.8	●
BT50 SEMC16x90	16	90	16	26	30	13	M14x1.5	M24	4	●
BT50 SEMC16x120	16	120	16	26	30	13	M14x1.5	M24	4.1	●
BT50 SEMC22x90	22	90	21	34	30	18	M20x1.5	M24	4.3	●
BT50 SEMC22x135	22	135	21	34	30	18	M20x1.5	M24	4.6	●
BT50 SEMC27x90	27	90	25	40	30	21	M24x2.0	M24	4.7	●
BT50 SEMC27x135	27	135	25	40	30	21	M24x2.0	M24	5.1	●
BT50 SEMC32x90	32	90	30	46	30	26	M30x2.0	M24	5.1	●
BT50 SEMC32x135	32	135	30	46	30	26	M30x2.0	M24	5.7	●
BT50 SEMC40x90	40	90	36	55	30	31	M36x2.0	M24	5.8	●
BT50 SEMC40x135	40	135	36	55	30	31	M36x2.0	M24	6.8	●
BT50 SEMC50x100	50	100	40	90	40	36	M48x2.0	M24	8.7	●
BT50 SEMC50x150	50	150	40	90	40	36	M48x2.0	M24	11.1	●

● 订货示例: 1 件 BT30 SEMC13x75
● Ordering sample: 1 PC BT30 SEMC13x75



☞ H018,H019
H020,H021

备件

Spare Parts



平键
Flat key



锁紧螺母
Lock nut



间隔套
Spacer sleeve

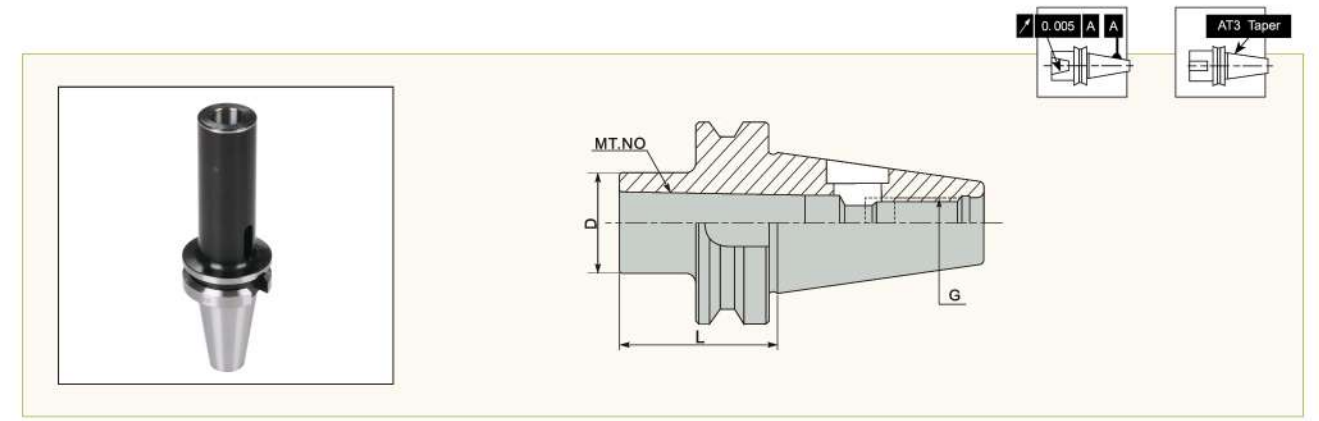
规格型号 Designation	平键 Flat key	锁紧螺母 Lock nut	间隔套 Spacer sleeve
SEMC13	-	LM M12x1.75	FJ SEMC13x5/10/20
SEMC16	PL08 4x4x25	LM M14x1.5	FJ SEMC16x5/10/20
SEMC22	PL08 6x6x25	LM M20x1.5	FJ SEMC22x5/10/20
SEMC27	PL08 7x7x25	LM M24x1.5	FJ SEMC27x5/10/20
SEMC32	PL08 8x7x25	LM M30x2	FJ SEMC32x5/10/20
SEMC40	PL08 10x8x25	LM M36x2	FJ SEMC40x5/10/20
SEMC50	PL08 12x8x25	LM M48x2	FJ SEMC50x5/10/20

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BT MAS403

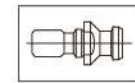
带扁尾莫氏锥孔刀柄

Morse Taper with Tang Adaptor



规格型号 Designation	MT	L	D	G	Kg	在庫 Stock
BT30 MTA1x45	1	45	25	M12	0.39	●
BT30 MTA2x60	2	60	32	M12	0.46	●
BT30 MTA3x80	3	80	40	M12	0.60	●
BT40 MTA1x45	1	45	25	M16	0.96	●
BT40 MTA1x120	1	120	25	M16	1.27	●
BT40 MTA2x45	2	45	32	M16	0.96	●
BT40 MTA2x120	2	120	32	M16	1.41	●
BT40 MTA3x75	3	75	40	M16	1.15	●
BT40 MTA3x135	3	135	40	M16	1.72	●
BT40 MTA4x90	4	90	50	M16	1.33	●
BT50 MTA1x45	1	45	25	M24	3.50	●
BT50 MTA1x120	1	120	25	M24	3.86	●
BT50 MTA2x45	2	45	32	M24	3.44	●
BT50 MTA2x135	2	135	32	M24	4.06	●
BT50 MTA3x45	3	45	40	M24	3.39	●
BT50 MTA3x150	3	150	40	M24	4.39	●
BT50 MTA4x75	4	75	50	M24	3.36	●
BT50 MTA5x105	5	105	60	M24	3.53	●

● 订货示例: 1 件 BT30 MTA1x45
● Ordering sample: 1 PC BT30 MTA1x45



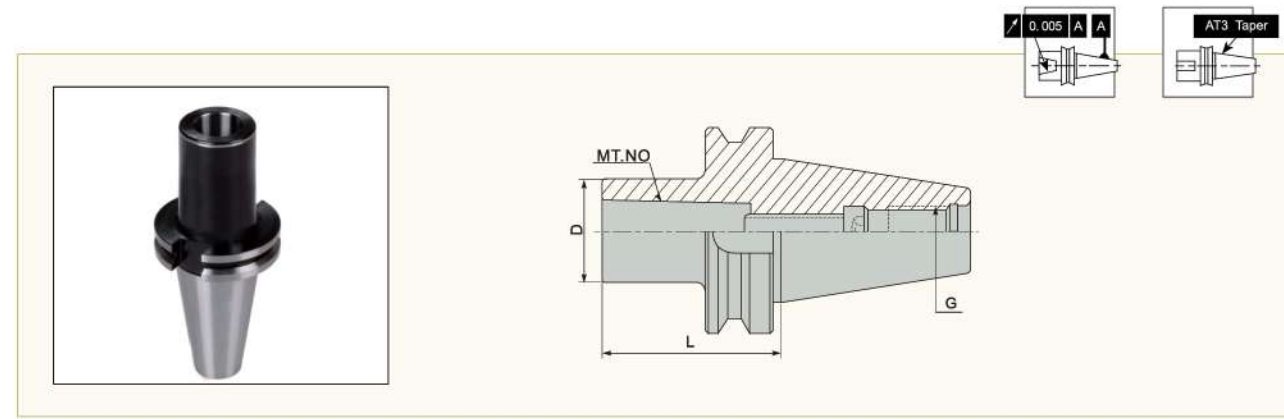
☞ H018,H019
H020,H021

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BT MAS403

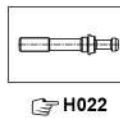
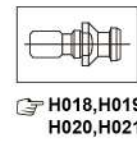
无扁尾莫氏锥孔刀柄

Morse Taper with Draw Thread Adaptor



规格型号 Designation	MT	L	D	G	Kg	在库 Stock
BT40 MTB1x45	1	45	25	M16	1.01	●
BT40 MTB2x60	2	60	32	M16	1.09	●
BT40 MTB3x75	3	75	40	M16	1.22	●
* BT40 MTB4x90	4	90	50	M16	1.26	●
BT50 MTB1x45	1	45	25	M24	3.54	●
BT50 MTB2x45	2	45	32	M24	3.56	●
BT50 MTB3x60	3	60	40	M24	3.61	●
BT50 MTB4x75	4	75	50	M24	3.73	●
* BT50 MTB5x120	5	120	65	M24	4.30	●

- 订货示例: 1 件 BT40 MTB1x45
- * 需配专用拉钉
- Ordering sample: 1 PC BT40 MTB1x45
- * 需配专用拉钉



备件

Spare Parts

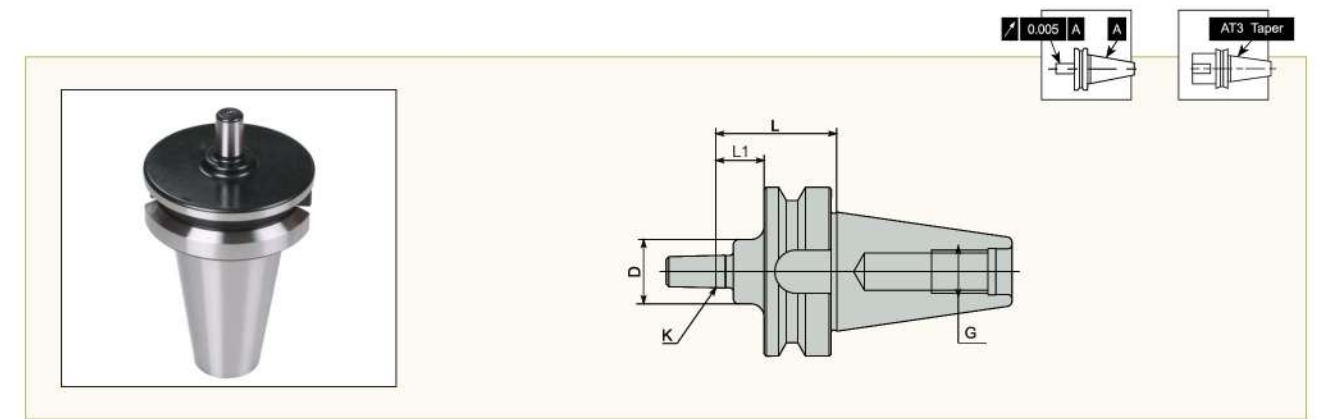
规格型号 Designation	锁紧螺钉 Clamping screw
BT40 MTB1x45	SR22 M6x25
BT40 MTB2x60	SR155 M10x35
BT40 MTB3x75	SR155 M12x30
BT40 MTB4x90	-
BT50 MTB1x45	SR55 M6x25
BT50 MTB2x45	SR55 M10x35
BT50 MTB3x60	SR55 M12x35
BT50 MTB4x75	SR155 M16x40
BT50 MTB5x120	-

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

BT MAS403

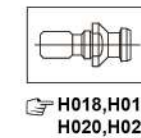
钻夹头刀柄

Small Drill Chuck



规格型号 Designation	K	L	L1	D	G	Kg	在库 Stock
BT30 B12x45	12	45	23	24	M12	0.6	●
BT30 B16x45	16	45	23	30	M12	0.6	●
BT40 B12x45	12	45	18	24	M16	1.09	●
BT40 B12x90	12	90	63	24	M16	1.46	●
BT40 B16x45	16	45	18	30	M16	1.13	●
BT40 B16x90	16	90	63	30	M16	1.57	●
BT40 B18x45	18	45	18	30	M16	1.19	●
BT40 B18x90	18	90	63	30	M16	1.63	●
BT50 B12x65	12	65	27	24	M24	3.89	●
BT50 B12x105	12	105	67	24	M24	4.14	●
BT50 B16x65	16	65	27	50	M24	3.92	●
BT50 B16x105	16	105	67	50	M24	4.17	●
BT50 B18x65	18	65	27	50	M24	3.9	●
BT50 B18x105	18	105	67	50	M24	4.18	●

- 订货示例: 1 件 BT30 B12x45
- Ordering sample: 1 PC BT30 B12x45

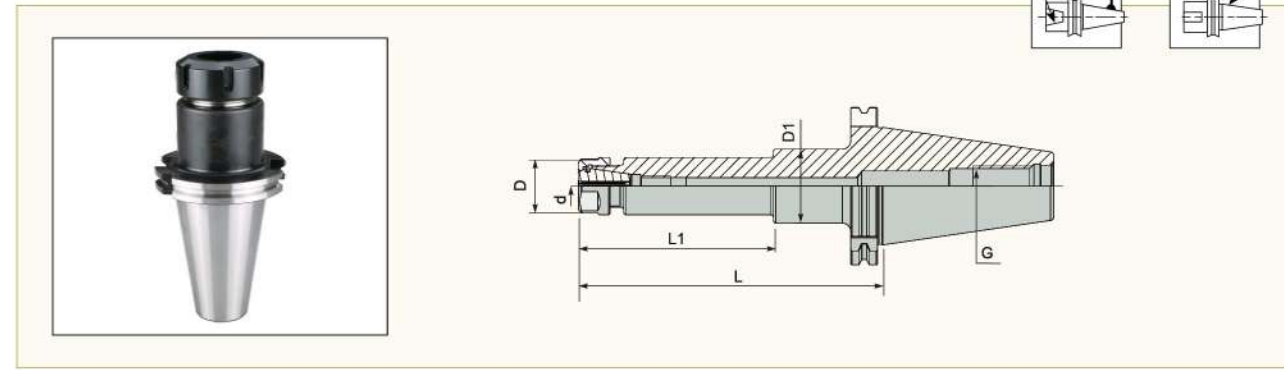


- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

DIN69871-A

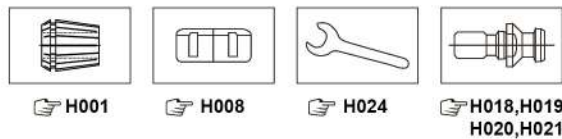
普通 ER 筒夹刀柄

ER Collet Chuck Adaptor



规格型号 Designation	L	D	d	D1	L1	G	Kg	在库 Stock
DIN69871 40 ER16x63	63	28	0.5-10	-	-	M16	0.86	●
DIN69871 40 ER16x100	100	28	0.5-10	-	-	M16	1.05	●
DIN69871 40 ER16x160	160	28	0.5-10	40	85	M16	1.52	●
DIN69871 40 ER20x63	63	34	1-13	-	-	M16	0.91	●
DIN69871 40 ER20x100	100	34	1-13	-	-	M16	1.16	●
DIN69871 40 ER20x160	160	34	1-13	44	91	M16	1.89	●
DIN69871 40 ER25x65	65	42	1-16	-	28	M16	0.90	●
DIN69871 40 ER25x100	100	42	1-16	-	-	M16	1.32	●
DIN69871 40 ER25x150	150	42	1-16	-	-	M16	1.81	●
DIN69871 40 ER32x65	65	50	2-20	40.4	32	M16	0.45	●
DIN69871 40 ER32x100	100	50	2-20	49	35	M16	1.38	●
DIN69871 40 ER32x150	150	50	2-20	49	35	M16	2.17	●
DIN69871 40 ER32x200	200	50	2-20	49	35	M16	3.00	●
DIN69871 40 ER40x70	70	63	3-26	50.4	32	M16	0.89	●
DIN69871 40 ER40x100	100	63	3-26	50.4	32	M16	1.22	●
DIN69871 40 ER40x150	150	63	3-26	50.4	32	M16	1.39	●
DIN69871 50 ER16x100	100	28	0.5-10	-	-	M24	2.6	●
DIN69871 50 ER16x160	160	28	0.5-10	40	85	M24	3.34	●
DIN69871 50 ER16x200	200	28	0.5-10	40	110	M24	3.52	●
DIN69871 50 ER20x100	100	34	1-13	-	-	M24	2.89	●
DIN69871 50 ER20x160	160	34	1-13	45	86	M24	3.5	●
DIN69871 50 ER25x100	100	42	1-13	-	-	M24	3.08	●
DIN69871 50 ER25x150	150	42	1-13	50	80.9	M24	3.75	●
DIN69871 50 ER25x200	200	42	1-13	55	85	M24	4.70	●
DIN69871 50 ER32x100	100	50	2-20	-	-	M24	3.2	●
DIN69871 50 ER32x150	150	50	2-20	-	-	M24	3.83	●
DIN69871 50 ER32x200	200	50	2-20	-	-	M24	4.51	●
DIN69871 50 ER40x100	100	63	3-26	-	-	M24	3.45	●
DIN69871 50 ER40x150	150	63	3-26	-	-	M24	4.54	●
DIN69871 50 ER40x200	200	63	3-26	-	-	M24	5.6	●

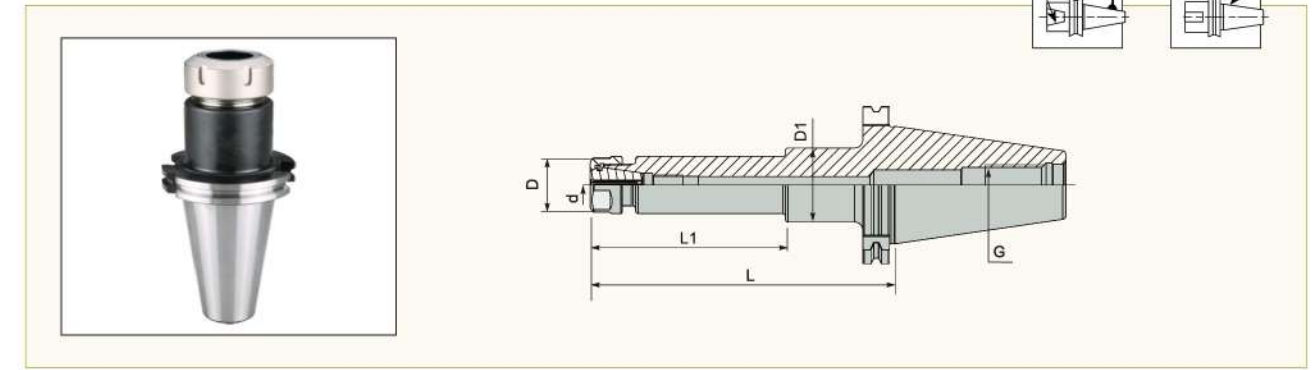
● 订货示例: 1 件 DIN69871 40 ER16x63
● Ordering sample: 1 PC DIN69871 40 ER16x63



DIN69871-A

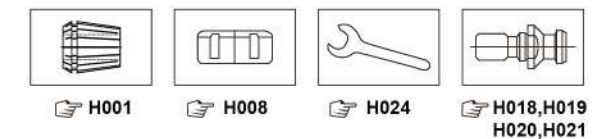
高精度 ER 筒夹刀柄

High Precision ER Collet Chuck Adaptor



规格型号 Designation	L	D	d	D1	L1	G	Kg	在库 Stock
DIN69871 40 ER16x63.TOP	63	28	0.5-10	-	-	M16	0.86	●
DIN69871 40 ER16x100.TOP	100	28	0.5-10	-	-	M16	1.05	●
DIN69871 40 ER16x160.TOP	160	28	0.5-10	85	40	M16	1.52	●
DIN69871 40 ER20x63.TOP	63	34	1-13	-	-	M16	0.91	●
DIN69871 40 ER20x100.TOP	100	34	1-13	-	-	M16	1.16	●
DIN69871 40 ER20x160.TOP	160	34	1-13	91	44	M16	1.89	●
DIN69871 40 ER25x65.TOP	65	42	1-16	28	-	M16	0.90	●
DIN69871 40 ER25x100.TOP	100	42	1-16	-	-	M16	1.32	●
DIN69871 40 ER25x150.TOP	150	42	1-16	-	-	M16	1.81	●
DIN69871 40 ER32x65.TOP	65	50	2-20	32	40.4	M16	0.45	●
DIN69871 40 ER32x100.TOP	100	50	2-20	35	49	M16	1.38	●
DIN69871 40 ER32x150.TOP	150	50	2-20	35	49	M16	2.17	●
DIN69871 40 ER32x200.TOP	200	50	2-20	35	49	M16	3.00	●
DIN69871 40 ER40x70.TOP	70	63	3-26	32	50.4	M16	0.89	●
DIN69871 40 ER40x100.TOP	100	63	3-26	32	50.4	M16	1.22	●
DIN69871 40 ER40x150.TOP	150	63	3-26	32	50.4	M16	1.39	●
DIN69871 50 ER16x100.TOP	100	28	0.5-10	-	-	M24	2.6	●
DIN69871 50 ER16x160.TOP	160	28	0.5-10	85	40	M24	3.34	●
DIN69871 50 ER16x200.TOP	200	28	0.5-10	110	40	M24	3.52	●
DIN69871 50 ER20x100.TOP	100	34	1-13	-	-	M24	2.89	●
DIN69871 50 ER20x160.TOP	160	34	1-13	86	45	M24	3.5	●
DIN69871 50 ER25x100.TOP	100	42	1-13	-	-	M24	3.08	●
DIN69871 50 ER25x150.TOP	150	42	1-13	80.9	50	M24	3.75	●
DIN69871 50 ER25x200.TOP	200	42	1-13	85	55	M24	4.70	●
DIN69871 50 ER32x100.TOP	100	50	2-20	-	-	M24	3.2	●
DIN69871 50 ER32x150.TOP	150	50	2-20	-	-	M24	3.83	●
DIN69871 50 ER32x200.TOP	200	50	2-20	-	-	M24	4.51	●
DIN69871 50 ER40x100.TOP	100	63	3-26	-	-	M24	3.45	●
DIN69871 50 ER40x150.TOP	150	63	3-26	-	-	M24	4.54	●
DIN69871 50 ER40x200.TOP	200	63	3-26	-	-	M24	5.60	●

● 订货示例: 1 件 DIN69871 40 ER16x63.TOP
● Ordering sample: 1 PC DIN69871 40 ER16x63.TOP



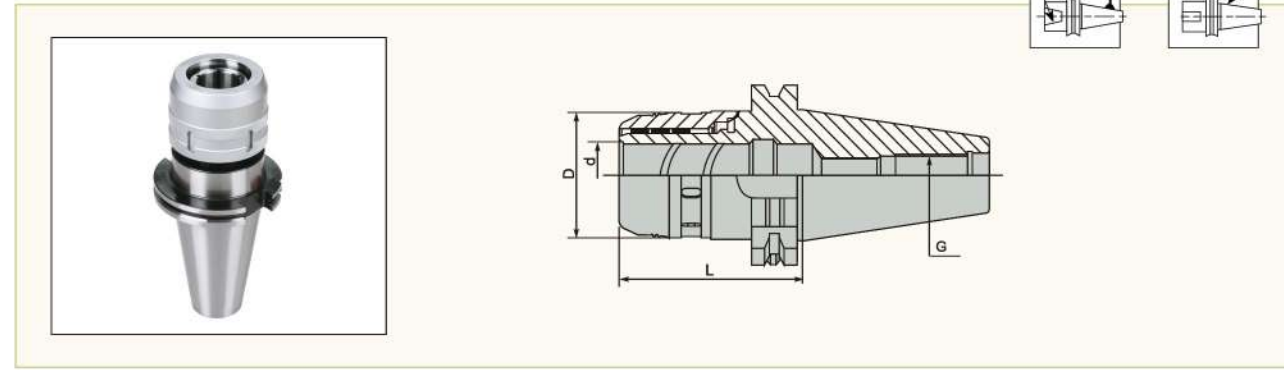
● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

DIN69871-A

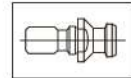
强力铣夹头刀柄

Power Chuck Adaptor



规格型号 Designation	D	d	L	L1	Lmin	Lmax	G	KG	在库 Stock
DIN69871 40 DMG20x85	53	20	85	58	61	75	M16	1.63	●
DIN69871 40 DMG32x110	76	32	110	83	68	87	M16	2.95	●
DIN69871 50 DMG20x95	53	20	95	57	61	75	M24	4.15	●
DIN69871 50 DMG32x110	76	32	110	72	68	87	M24	5.32	●
DIN69871 50 DMG40x135	90	40	135	97	83	103	M24	6.88	●
DIN69871 50 DMG42x135	90	42	135	97	83	103	M24	6.95	●

- 强力直柄筒夹订购，请参照：H008 页
- 订货示例：1 件 DIN69871 40 DMG20x85
- Straight shank collet should be ordered separately, please see page H008.
- Ordering sample: 1 PC DIN69871 40 DMG20x85

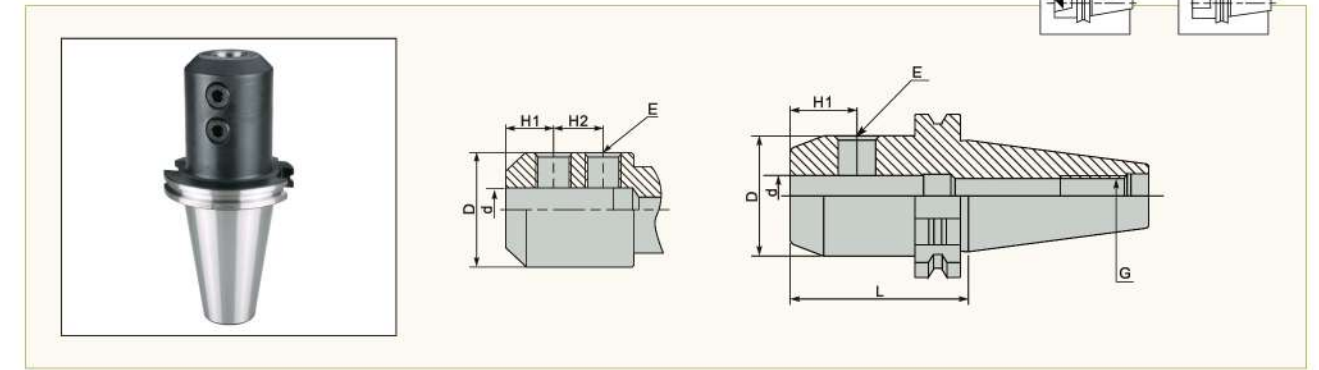


H018,H019
H020,H021

DIN69871-A

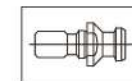
侧固式刀柄 (DIN 1835-B)

Weldon Adaptor



规格型号 Designation	d	D	L	H1	H2	E	G	Kg	在库 Stock
DIN69871 40 EM16x63	16	48	63	24	-	M14x2	M16	1.20	●
DIN69871 40 EM20x63	20	52	63	25	-	M16x2	M16	1.26	●
DIN69871 40 EM25x100	25	65	100	24	25	M18x2	M16	2.23	●
DIN69871 40 EM32x100	32	71	100	24	28	M20x2	M16	2.42	●
DIN69871 50 EM16x63	16	48	63	24	-	M14x2	M24	3.02	●
DIN69871 50 EM20x63	20	52	63	25	-	M16x2	M24	3.07	●
DIN69871 50 EM25x80	25	65	80	24	25	M18x2	M24	3.70	●
DIN69871 50 EM32x100	32	72	100	24	28	M20x2	M24	4.44	●
DIN69871 50 EM40x100	40	90	100	30	32	M20x2	M24	5.02	●
DIN69871 50 EM50x125	50	98	120	35	35	M24x2	M24	6.64	●

- 订货示例：1 件 DIN69871 40 EM16x63
- Ordering sample: 1 PC DIN69871 40 EM16x63



H018,H019
H020,H021

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screw		锁紧扳手 Allen key for clamping screw
	ISO 40	ISO 50	
EM16	SR54 M14x16	SR54 M14x16	KEY01 M6
EM20	SR54 M16x16	SR54 M16x16	KEY01 M8
EM25	SR54 M18x16-X	SR54 M18x20-X	KEY01 M8
EM32	SR54 M20x16-X	SR54 M20x20-X	KEY01 M10
EM40	-	SR54 M20x25-X	KEY01 M10
EM50	-	SR54 M24x25-X	KEY01 M12

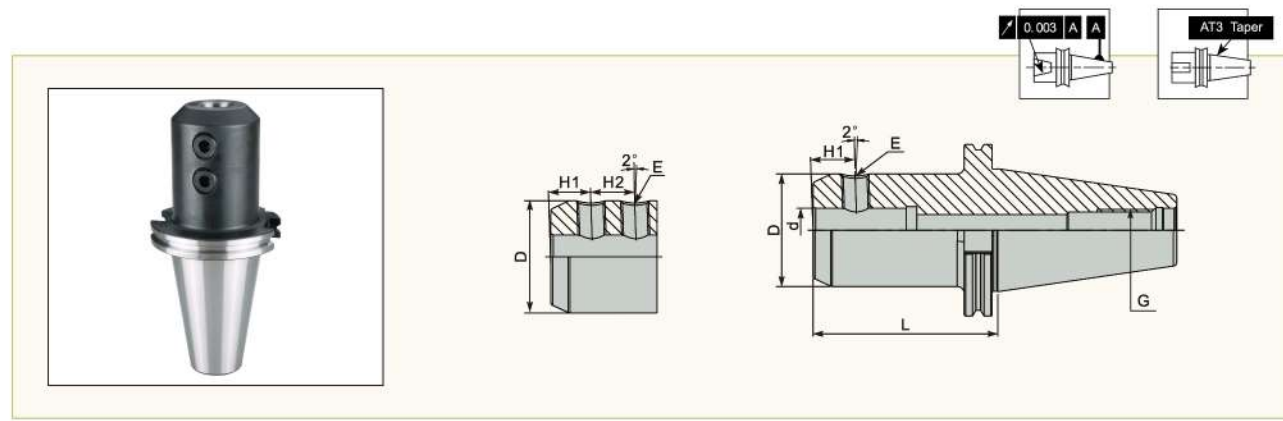
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

DIN69871-A

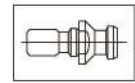
2° 侧固式刀柄 (DIN 1835-E)

Whistle-Notch Adaptor



规格型号 Designation	d	D	L	H1	H2	E	G	Kg	在庫 Stock
DIN69871 40 EM16x63E	16	48	63	24	-	M14x2	M16	1.28	●
DIN69871 40 EM20x63E	20	52	63	25	-	M16x2	M16	1.25	●
DIN69871 40 EM25x100E	25	65	100	24	25	M18x2	M16	2.18	●
DIN69871 40 EM32x100E	32	72	100	24	28	M20x2	M16	2.40	●
DIN69871 50 EM16x63E	16	48	100	24	-	M14x2	M24	3.07	●
DIN69871 50 EM20x63E	20	52	100	25	-	M16x2	M24	3.11	●
DIN69871 50 EM25x80E	25	65	80	24	25	M18x2	M24	3.67	●
DIN69871 50 EM32x100E	32	72	100	24	28	M20x2	M24	4.50	●
DIN69871 50 EM40x100E	40	90	100	30	32	M20x2	M24	5.05	●

- 订货示例: 1 件 DIN69871 40 EM16x63E
- Ordering sample: 1 PC DIN69871 40 EM16x63E



H018, H019
H020, H021

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screw		锁紧扳手 Allen key for clamping screw
	ISO 40	ISO 50	
EM16	SR54 M14x16	SR54 M14x16	KEY01 M6
EM20	SR54 M16x16	SR54 M16x16	KEY01 M8
EM25	SR54 M18x16-X	SR54 M18x20-X	KEY01 M8
EM32	SR54 M20x16-X	SR54 M20x20-X	KEY01 M10
EM40	-	SR54 M20x25-X	KEY01 M10
EM50	-	SR54 M24x25-X	KEY01 M12

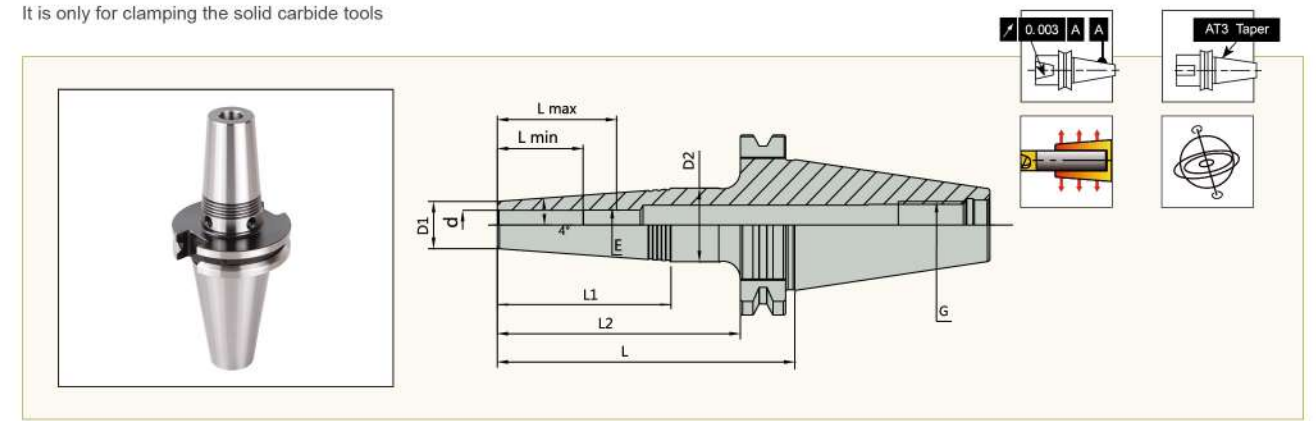
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

DIN69871-A

热缩刀柄

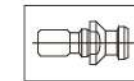
Shrink Fit Adaptor

DIN69871-A 型热缩刀柄, 仅用于夹持整体硬质合金刀具
It is only for clamping the solid carbide tools



规格型号 Designation	d	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在庫 Stock
DIN69871 40 SRK3x69	3	10	15.0	35.55	50	69.1	10	16	M6	M16	0.8	●
DIN69871 40 SRK3x104	3	10	19.0	64.15	85	104.1	10	16	M6	M16	1.0	●
DIN69871 40 SRK4x69	4	10	15.0	35.55	50	69.1	12	18	M6	M16	0.8	●
DIN69871 40 SRK4x104	4	10	19.0	64.15	85	104.1	12	18	M6	M16	0.9	●
DIN69871 40 SRK5x69	5	10	15.0	35.55	50	69.1	15	21	M6	M16	0.8	●
DIN69871 40 SRK5x104	5	10	19.0	64.15	85	104.1	15	21	M6	M16	1.0	●
DIN69871 40 SRK6x69	6	11	16.0	35.55	50	69.1	18	24	M8	M16	0.8	●
DIN69871 40 SRK6x104	6	11	20.0	64.15	85	104.1	18	24	M8	M16	0.8	●
DIN69871 40 SRK8x69	8	14	20.0	42.50	50	69.1	25	31	M10	M16	0.8	●
DIN69871 40 SRK8x104	8	14	23.0	63.95	85	104.1	25	31	M10	M16	0.9	●
DIN69871 40 SRK10x69	10	16	22.0	42.40	50	69.1	30	36	M12	M16	0.9	●
DIN69871 40 SRK10x104	10	16	24.5	60.28	85	104.1	30	36	M12	M16	0.9	●
DIN69871 40 SRK12x69	12	20	26.0	42.30	50	69.1	32	42	M10	M16	0.9	●
DIN69871 40 SRK12x104	12	20	28.0	56.60	85	104.1	32	42	M10	M16	1.1	●

- 当工作转速 N=25,000RPM 时, 刀柄的平衡等级为 G2.5
- 订货示例: DIN69871 40 SRK3x69
- It is with G2.5/25,000 RPM.
- Ordering sample: DIN69871 40 SRK3x69.



H018, H019
H020, H021

备件

Spare Parts

E	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
M5	SR50 M5x20.BC	KEY01 M2.5
M6	SR50 M6x20.BC	KEY01 M3
M8	SR50 M8x20.BC	KEY01 M4
M10	SR50 M10x18.BC	KEY01 M5
M12	SR50 M12x18.BC	KEY01 M6

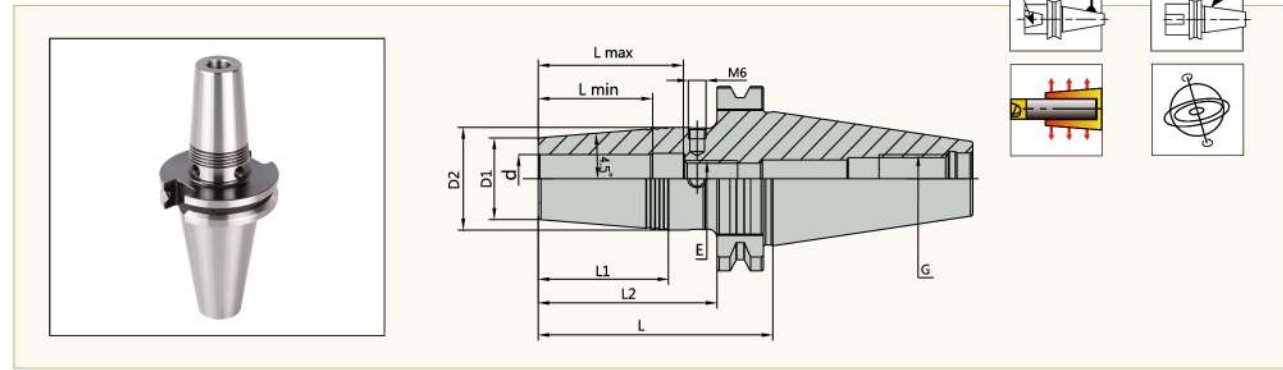
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

DIN69871-A

热缩刀柄

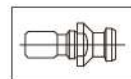
Shrink Fit Adaptor

DIN69871-A 型热缩刀柄，用于夹持整体硬质合金刀具或高速钢刀具
It is only for clamping the solid carbide tools and HSS tools



规格型号 Designation	d	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
DIN69871 40 SRKIN6x80	6	21	27	38.0	60.9	80	25	36	M5	M16	1.0	●
DIN69871 40 SRKIN8x80	8	21	27	38.0	60.9	80	25	36	M6	M16	1.1	●
DIN69871 40 SRKIN10x80	10	24	32	50.5	60.9	80	31	42	M8	M16	1.0	●
DIN69871 40 SRKIN12x80	12	24	32	50.5	60.9	80	36	47	M10	M16	1.4	●
DIN69871 40 SRKIN14x80	14	27	34	44.5	60.9	80	36	47	M10	M16	1.1	●
DIN69871 40 SRKIN16x80	16	27	34	44.5	60.9	80	39	50	M12	M16	1.1	●
DIN69871 40 SRKIN18x80	18	33	42	57.0	60.9	80	39	50	M12	M16	1.2	●
DIN69871 40 SRKIN20x80	20	33	42	57.0	60.9	80	41	52	M16	M16	1.2	●
DIN69871 40 SRKIN25x100	25	44	53	57.0	80.9	100	47	58	M16	M16	1.7	●
DIN69871 50 SRKIN6x80	6	21	26	32.0	60.9	80	25	36	M5	M24	2.8	●
DIN69871 50 SRKIN8x80	8	21	27	38.0	60.9	80	25	36	M6	M24	2.8	●
DIN69871 50 SRKIN10x80	10	24	32	51.0	60.9	80	31	42	M8	M24	2.8	●
DIN69871 50 SRKIN12x80	12	24	32	51.0	60.9	80	36	47	M10	M24	2.8	●
DIN69871 50 SRKIN14x80	14	27	34	44.5	60.9	80	36	47	M10	M24	2.8	●
DIN69871 50 SRKIN16x80	16	27	34	44.5	60.9	80	39	50	M12	M24	2.8	●
DIN69871 50 SRKIN18x80	18	33	42	57.0	60.9	80	39	50	M12	M24	2.9	●
DIN69871 50 SRKIN20x80	20	33	42	57.0	60.9	80	41	52	M16	M24	2.9	●
DIN69871 50 SRKIN25x100	25	44	53	57.0	80.9	100	47	58	M16	M24	3.5	●
DIN69871 50 SRKIN32x100	32	44	53	57.0	80.9	100	47	58	M16	M24	3.4	●

- 当工作转速 N=25,000RPM 时，刀柄的平衡等级为 G2.5
- 订货示例：DIN69871 40 SRKIN6*80
- It is with G2.5/25,000 RPM.
- Ordering sample: DIN69871 40 SRKIN6x80.



H018,H019
H020,H021

备件

Spare Parts



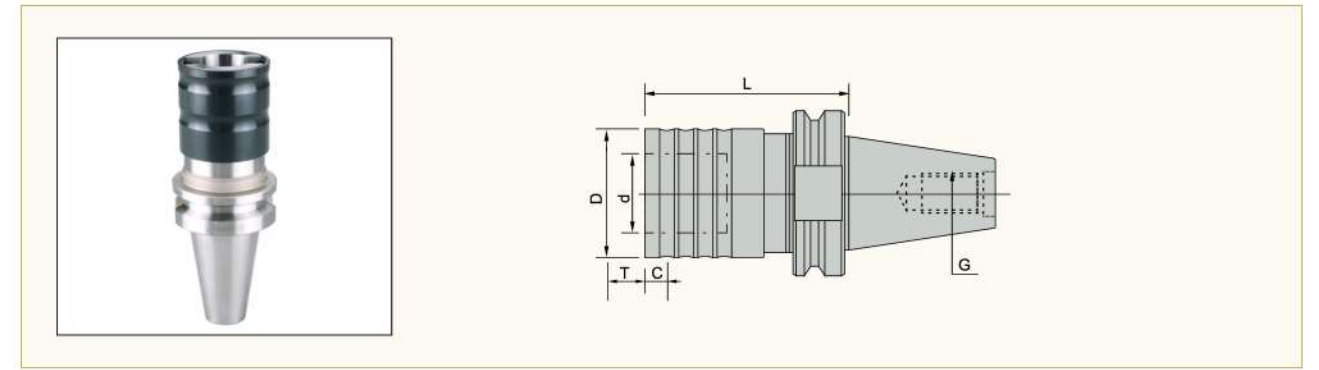
E	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
M5	SR50 M5x20.BC	KEY01 M2.5
M6	SR50 M6x20.BC	KEY01 M3
M8	SR50 M8x20.BC	KEY01 M4
M10	SR50 M10x18.BC	KEY01 M5
M12	SR50 M12x18.BC	KEY01 M6
M16	SR50 M16x20.BC	KEY01 M8

- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

DIN69871-A

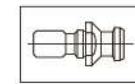
攻丝刀柄

Tapping Chuck Adaptor



规格型号 Designation	d	D	L	长度补偿 Length compensation		攻丝范围 Tap	G	Kg	在库 Stock
				T	C				
DIN69871 40 TAP412x75	19	36.0	75	9	5	M4-M12	M16	1.1	●
DIN69871 40 TAP820x100	31	53.5	100	16	9	M8-M20	M16	1.7	●
DIN69871 50 TAP412x75	19	36.0	75	9	5	M4-M12	M24	2.9	●
DIN69871 50 TAP820x100	31	53.5	100	16	9	M8-M20	M24	3.5	●
DIN69871 50 TAP1433x135	48	78.0	135	26	15	M14-M33	M24	4.9	●
DIN69871 50 TAP2248x155	60	96.0	155	28	17	M22-M48	M24	6.4	●

- 订货示例：1 件 DIN69871 40 TAP412x75
- 每种规格的攻丝刀柄均有对应的攻丝快换夹头，请参照：H010-H013 页
- Ordering sample: 1 PC DIN69871 40 TAP412x75
- Multiple quick change chucks for corresponding adaptors, please see page H010-H013

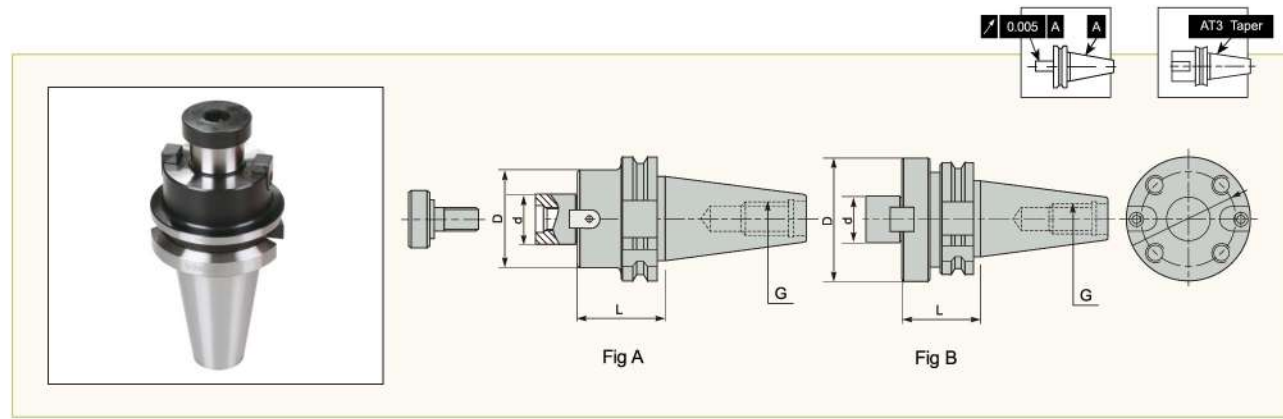


G017,G018
G019,G020

- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

DIN69871-A

面铣刀刀柄 Face Mill Adaptor



规格型号 Designation	d	D	L	Fig	G	Kg	在庫 Stock
DIN69871 40 SEM16x35	16	38	35	A	M16	0.92	●
DIN69871 40 SEM22x35	22	47	35	A	M16	1.02	●
DIN69871 40 SEM27x60	27	58	60	A	M16	1.60	●
DIN69871 40 SEM32x60	32	66	60	A	M16	1.78	●
DIN69871 40 SEM40x60	40	88	60	B	M16	2.25	●
DIN69871 50 SEM16x35	16	38	35	A	M24	2.79	●
DIN69871 50 SEM22x35	22	47	35	A	M24	2.88	●
DIN69871 50 SEM22x50x200	22	50	200	A	M24	5.44	●
DIN69871 50 SEM27x35	27	58	35	A	M24	2.94	●
DIN69871 50 SEM32x35	32	66	35	A	M24	3.00	●
DIN69871 50 SEM32x78x370	32		370	A	M24	15.78	●
DIN69871 50 SEM40x60	40	82	60	A	M24	5.16	●
DIN69871 50 SEM60x75	60	128	75	B	M24	7.53	●

● 订货示例: 1 件 DIN69871 40 SEM16x35
● Ordering sample: 1 PC DIN69871 40 SEM16x35



备件

Spare Parts

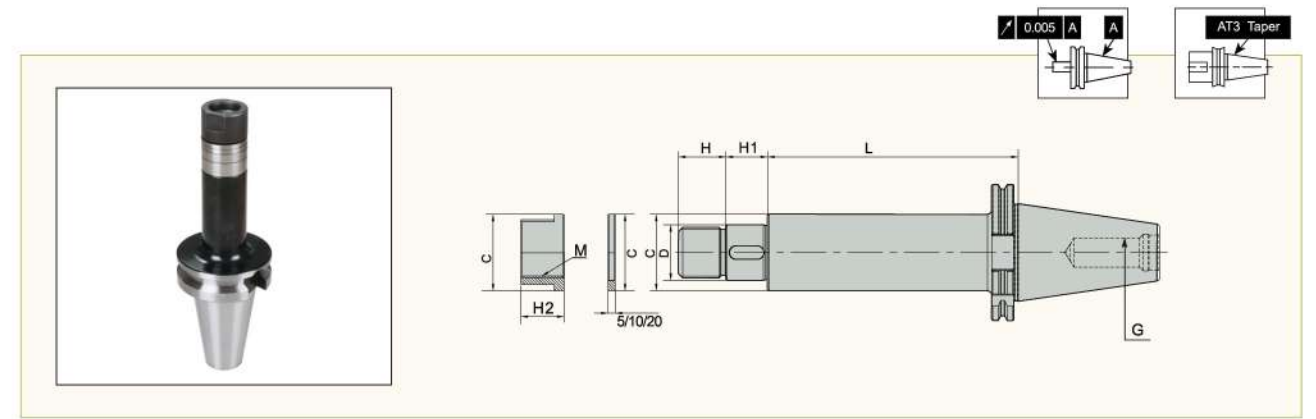
规格型号 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	垫环 Backing ring	压紧螺钉 Clamping screw
SEM16	PL10 8x6	SR55 M3x10	-	SR55 M8x25
SEM22	PL10 10x9	SR55 M5x12	FMA-22	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	FMA-27	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	FMA-32	SR55 M16x40
SEM40	PL10 16x12	SR55 M6x16	FMA-40	SR55 M20x45
SEM60	PL10 25x16	SR55 M10x16	-	SR55 M16x60

注: DIN69871 50 SEM40x60 需配平键 PL10 16x14
Note: DIN69871 50 SEM40x60 needs flat key PL 10 16x14

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

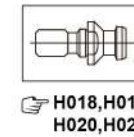
DIN69871-A

侧铣刀刀柄 Side Mill Adaptor



规格型号 Designation	D	L	H	C	H1	H2	M	G	Kg	在庫 Stock
DIN69871 30 SEMC13x75	13	75	15	20	30	12	M12x1.75	M12	0.6	●
DIN69871 30 SEMC16x75	16	75	16	26	30	13	M14x1.5	M12	0.7	●
DIN69871 30 SEMC22x75	22	75	21	34	30	18	M20x1.5	M12	0.8	●
DIN69871 40 SEMC13x75	13	75	15	20	30	12	M12x1.75	M16	1.3	●
DIN69871 40 SEMC13x105	13	105	15	20	30	12	M12x1.75	M16	1.4	●
DIN69871 40 SEMC16x75	16	75	16	26	30	13	M14x1.5	M16	1.4	●
DIN69871 40 SEMC16x105	16	105	16	26	30	13	M14x1.5	M16	1.5	●
DIN69871 40 SEMC22x75	22	75	21	34	30	18	M20x1.5	M16	1.6	●
DIN69871 40 SEMC22x105	22	105	21	34	30	18	M20x1.5	M16	1.9	●
DIN69871 40 SEMC27x75	27	75	25	40	30	21	M24x2.0	M16	2.1	●
DIN69871 40 SEMC22x120	27	120	25	40	30	21	M24x2.0	M16	2.5	●
DIN69871 40 SEMC32x90	32	90	30	46	30	26	M30x2.0	M16	2.6	●
DIN69871 50 SEMC13x75	13	75	15	20	30	12	M12x1.75	M24	3.7	●
DIN69871 50 SEMC13x105	13	105	15	20	30	12	M12x1.75	M24	3.8	●
DIN69871 50 SEMC16x90	16	90	16	26	30	13	M14x1.5	M24	4.0	●
DIN69871 50 SEMC16x120	16	120	16	26	30	13	M14x1.5	M24	4.1	●
DIN69871 50 SEMC22x90	22	90	21	34	30	18	M20x1.5	M24	4.3	●
DIN69871 50 SEMC22x135	22	135	21	34	30	18	M20x1.5	M24	4.6	●
DIN69871 50 SEMC27x90	27	90	25	40	30	21	M24x2.0	M24	4.7	●
DIN69871 50 SEMC27x135	27	135	25	40	30	21	M24x2.0	M24	5.1	●
DIN69871 50 SEMC32x90	32	90	30	46	30	26	M30x2.0	M24	5.1	●
DIN69871 50 SEMC32x135	32	135	30	46	30	26	M30x2.0	M24	5.7	●
DIN69871 50 SEMC40x90	40	90	36	55	30	31	M36x2.0	M24	5.8	●
DIN69871 50 SEMC40x135	40	135	36	55	40	31	M36x2.0	M24	6.8	●
DIN69871 50 SEMC50x150	50	150	40	90	40	36	M48x2.0	M24	9.59	●

● 订货示例: 1 件 DIN69871 30 SEMC13x75
● Ordering sample: 1 PC DIN69871 30 SEMC13x75



备件

Spare Parts

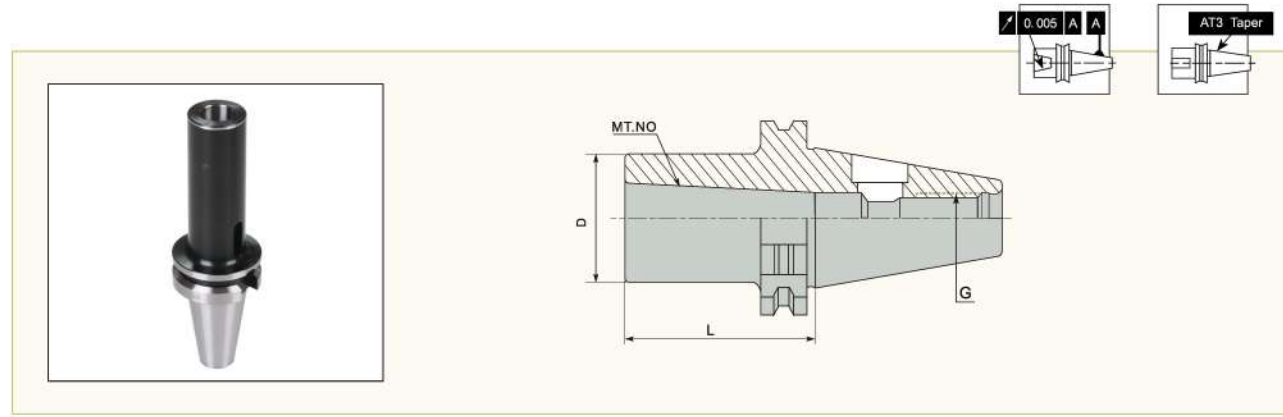
规格型号 Designation	平键 Flat key	锁紧螺母 Lock nut	间隔套 Spacer sleeve
SEMC13	-	LM M12x1.75	FJ SEMC13x5/10/20
SEMC16	PL08 4x4x25	LM M14x1.5	FJ SEMC16x5/10/20
SEMC22	PL08 6x6x25	LM M20x1.5	FJ SEMC22x5/10/20
SEMC27	PL08 7x7x25	LM M24x1.5	FJ SEMC27x5/10/20
SEMC32	PL08 8x7x25	LM M30x2.0	FJ SEMC32x5/10/20
SEMC40	PL08 10x8x25	LM M36x2.0	FJ SEMC40x5/10/20
SEMC50	PL08 12x8x30	LM M48x2.0	FJ SEMC50x5/10/20

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

DIN69871-A

带扁尾莫氏锥孔刀柄

Morse Taper with Tang Adaptor



规格型号 Designation	MT	L	D	G	Kg	在库 Stock
DIN69871 40 MTA1x45	1	45	25	M16	1	●
DIN69871 40 MTA1x120	1	120	25	M16	1.2	●
DIN69871 40 MTA2x45	2	45	32	M16	1	●
DIN69871 40 MTA2x120	2	120	32	M16	1.2	●
DIN69871 40 MTA3x75	3	75	40	M16	1.1	●
DIN69871 40 MTA3x135	3	135	40	M16	1.7	●
DIN69871 40 MTA4x90	4	90	50	M16	1.3	●
DIN69871 50 MTA1x45	1	45	25	M24	2.65	●
DIN69871 50 MTA1x120	1	120	25	M24	3	●
DIN69871 50 MTA2x45	2	45	32	M24	2.65	●
DIN69871 50 MTA2x135	2	135	3	M24	3.2	●
DIN69871 50 MTA3x45	3	45	240	M24	2.65	●
DIN69871 50 MTA3x150	3	150	40	M24	3.5	●
DIN69871 50 MTA4x75	4	75	50	M24	2.5	●
DIN69871 50 MTA5x105	5	105	60	M24	3.65	●

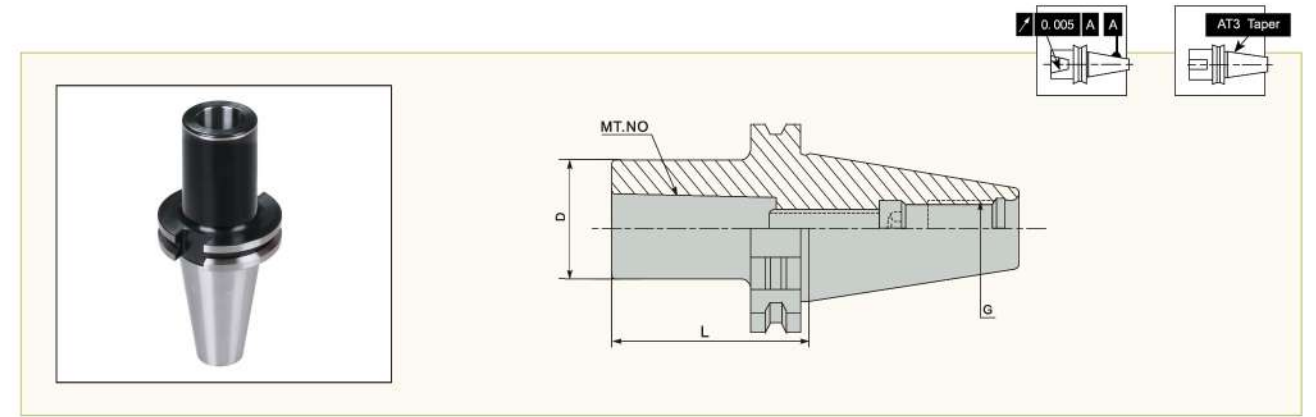
- 订货示例: 1 件 DIN69871 40 MTA1x45
- Ordering sample: 1 PC DIN69871 40 MTA1x45



DIN69871-A

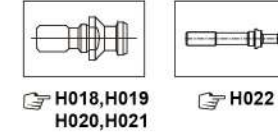
无扁尾莫氏锥孔刀柄

Morse Taper with Draw Thread Adaptor



规格型号 Designation	MT	L	D	G	Kg	在库 Stock
DIN69871 40 MTB1x45	1	45	25	M16	1.20	●
DIN69871 40 MTB2x60	2	60	32	M16	1.30	●
DIN69871 40 MTB3x75	3	75	40	M16	1.40	●
※ DIN69871 40 MTB4x90	4	90	50	M16	1.50	●
DIN69871 50 MTB1x45	1	45	25	M24	2.66	●
DIN69871 50 MTB2x45	2	45	32	M24	2.66	●
DIN69871 50 MTB3x60	3	60	40	M24	2.75	●
DIN69871 50 MTB4x75	4	75	50	M24	2.93	●
※ DIN69871 50 MTB5x120	5	120	65	M24	3.77	●

- 订货示例: 1 件 DIN69871 40 MTB1x45
- “※” 需配专用拉钉
- Ordering sample: 1 PC DIN69871 40 MTB1x45
- “※” marked Tool holder needs special pull stud



备件

Spare Parts

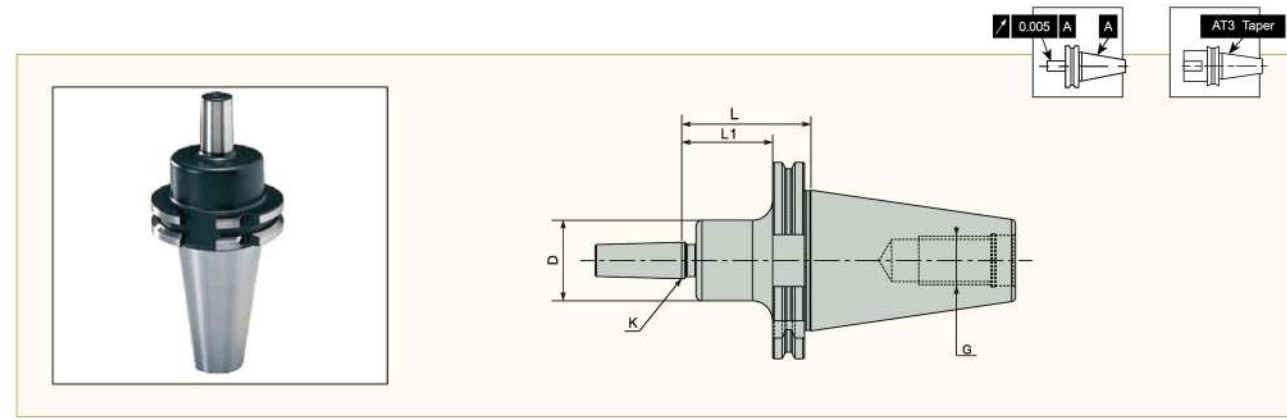
规格型号 Designation	锁紧螺钉 Clamping screw
BT40 MTB1x45	SR22 M6x25
BT40 MTB2x60	SR155 M10x35
BT40 MTB3x75	SR155 M12x30
BT40 MTB4x90	-
BT50 MTB1x45	SR55 M6x25
BT50 MTB2x45	SR55 M10x35
BT50 MTB3x60	SR55 M12x35
BT50 MTB4x75	SR155 M16x40
BT50 MTB5x120	-

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

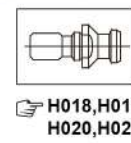
DIN69871-A

钻夹头刀柄 Small Drill Chuck

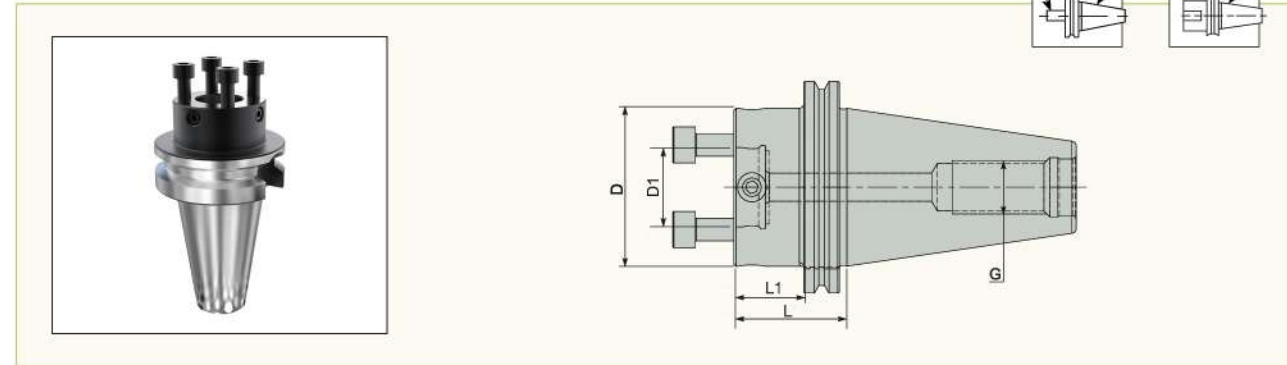


规格型号 Designation	K	L	L1	D	G	Kg	在库 Stock
DIN69871 30 B12x45	12	45	23	24	M12	0.60	●
DIN69871 30 B16x45	16	45	23	30	M12	0.60	●
DIN69871 40 B12x45	12	45	18	24	M16	1.02	●
DIN69871 40 B12x90	12	90	63	24	M16	1.39	●
DIN69871 40 B16x45	16	45	18	30	M16	1.09	●
DIN69871 40 B16x90	16	90	63	30	M16	1.49	●
DIN69871 40 B18x45	18	45	18	30	M16	1.13	●
DIN69871 40 B18x90	18	90	63	30	M16	1.57	●
DIN69871 50 B12x65	12	65	27	24	M24	2.88	●
DIN69871 50 B12x105	12	105	67	24	M24	3.36	●
DIN69871 50 B16x65	16	65	27	50	M24	2.90	●
DIN69871 50 B16x105	16	105	67	50	M24	3.39	●
DIN69871 50 B18x65	18	65	27	30	M24	2.93	●
DIN69871 50 B18x105	18	105	67	30	M24	3.41	●

● 订货示例: 1 件 DIN69871 30 B12x45
● Ordering sample: 1 PC DIN69871 30 B12x45

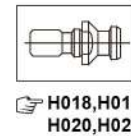


可调刀柄 Adjustable Chuck



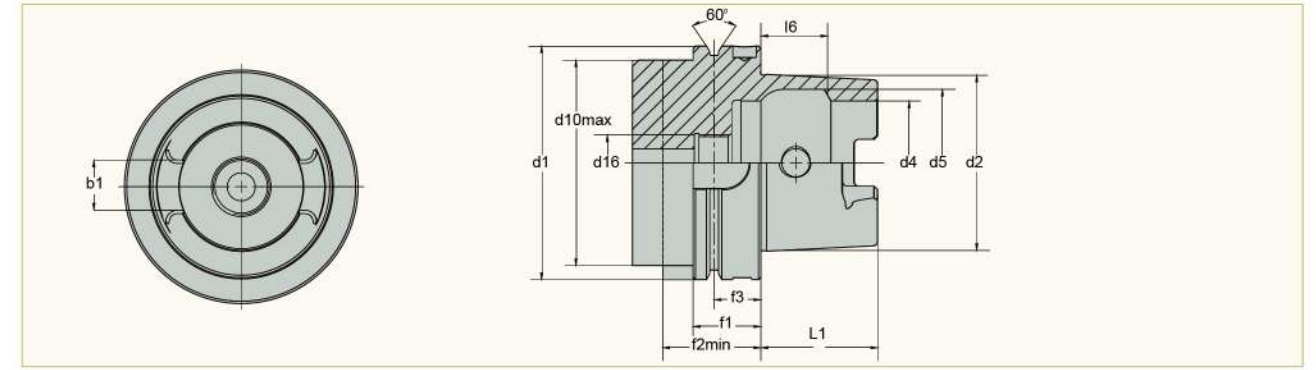
规格型号 Designation	ISO	D	D1	L	L1	G	kg	在库 Stock
DIN69871 40 SL70x55	40	70	35	50	31	M16	1.28	●
DIN69871 50 SL70x70	50	70	35	50	31	M24	3.32	●

● 刀柄配件, 请参照: D017 页
● 订货示例: 1 件 DIN69871 40 SL70x55
● Spare parts please see page D017.
● Ordering sample: 1 PC DIN69871 40 SL70x55



HSK-A

HSK-A 柄部标准 (DIN 69893) Standard



HSK-A	d1 (h10)	d2	d4 (H10)	d5 (H11)	d10 max	d16
63	63	48.010	34	40	53	M18x1.0
80	80	60.012	42	50	68	M20x1.5
100	100	75.013	53	63	88	M24x1.5

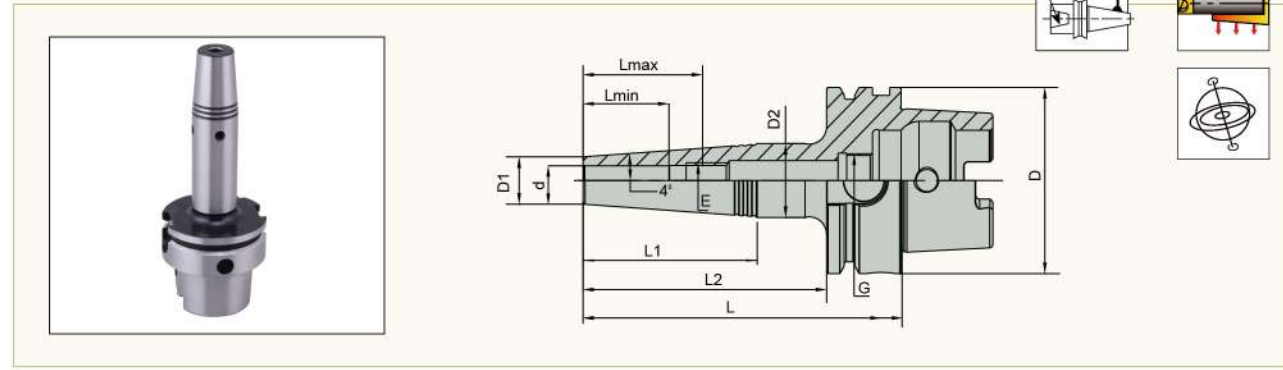
HSK-A	f1-0.2	l6 (Js10)	b1 ± 0.04	f1-0.1	f2 min	f3 ± 0.1
63	32	18.13	12.54	26	42	18
80	40	22.85	16.04	26	42	18
100	50	28.56	20.02	29	45	20

HSK-A

热缩刀柄

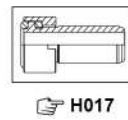
Shrink Fit Adaptor

DIN69871 HSK-A 型热缩刀柄, 仅用于夹持硬质合金刀具
It is for clamping the solid carbide tools or HSS tools



规格型号 Designation	d	D	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
HSK A63 SRK3x76	3	63	10	17.0	-	50	76	10	16	M6	M18x1	0.7	●
HSK A63 SRK3x111	3	63	10	21.0	79	85	111	10	16	M6	M18x1	0.8	●
HSK A63 SRK4x76	4	63	10	17.0	-	50	76	12	18	M6	M18x1	0.7	●
HSK A63 SRK4x111	4	63	10	21.0	79	85	111	12	18	M6	M18x1	0.7	●
HSK A63 SRK5x76	5	63	10	17.0	-	50	76	15	21	M6	M18x1	0.7	●
HSK A63 SRK5x111	5	63	10	21.0	79	85	111	15	21	M6	M18x1	0.8	●
HSK A63 SRK6x76	6	63	11	18.0	-	50	76	18	24	M8	M18x1	0.7	●
HSK A63 SRK6x111	6	63	11	22.0	79	85	111	18	24	M8	M18x1	0.8	●
HSK A63 SRK8x76	8	63	14	20.0	43	50	76	25	36	M6	M18x1	0.7	●
HSK A63 SRK8x111	8	63	14	23.0	64	85	111	25	36	M6	M18x1	0.8	●
HSK A63 SRK10x76	10	63	16	23.0	-	50	76	30	41	M8	M18x1	0.7	●
HSK A63 SRK10x111	10	63	16	26.0	72	85	111	30	41	M8	M18x1	0.8	●
HSK A63 SRK12x76	12	63	20	27.0	-	50	76	32	43	M8	M18x1	0.8	●
HSK A63 SRK12x111	12	63	20	30.0	72	85	111	32	43	M8	M18x1	0.9	●

- 内冷却管需单独订购
- 当工作转速 N=25,000RPM 时, 刀柄的平衡等级为 G2.5
- 订货示例: HSK A63 SRK3x76
- Inner coolant tube should be ordered separately.
- It is with G2.5/25,000 RPM.
- Ordering sample: 1 PC HSK A63 SRK3x76



备件

Spare Parts

E	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
M5	SR50 M5x20.BC	KEY01 M2.5
M6	SR50 M6x20.BC	KEY01 M3
M8	SR50 M8x20.BC	KEY01 M4
M10	SR50 M10x18.BC	KEY01 M5
M12	SR50 M12x18.BC	KEY01 M6
M16	SR50 M16x20.BC	KEY01 M8

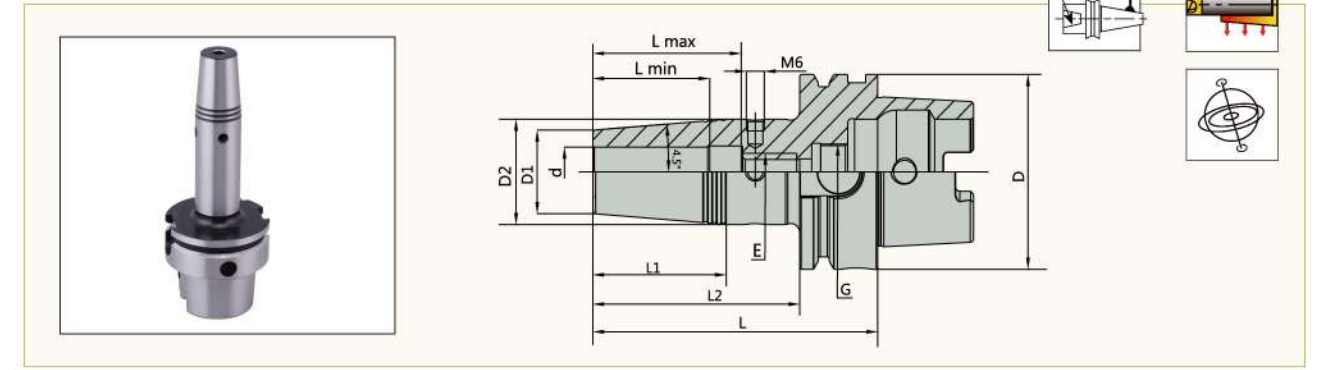
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

HSK-A

热缩刀柄

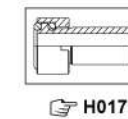
Shrink Fit Adaptor

DIN69893 HSK A 型热缩刀柄, 夹持整体硬质合金刀具或高速钢刀具
It is for clamping the solid carbide tools or HSS tools



规格型号 Designation	d	D	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
HSK A63 SRKIN6x80	6	63	21	27.0	38.0	54	80	25	36	M5	M18x1	0.8	●
HSK A63 SRKIN6x120	6	63	21	27.0	38.0	94	120	25	36	M5	M18x1	1.0	●
HSK A63 SRKIN6x160	6	63	21	27.0	38.0	134	160	25	36	M5	M18x1	1.2	●
HSK A63 SRKIN8x80	8	63	21	27.0	38.0	54	80	25	36	M6	M18x1	0.9	●
HSK A63 SRKIN8x120	8	63	21	27.0	38.0	94	120	25	36	M6	M18x1	1.0	●
HSK A63 SRKIN8x160	8	63	21	27.0	38.0	134	160	25	36	M6	M18x1	1.2	●
HSK A63 SRKIN10x85	10	63	24	32.0	51.0	59	85	31	42	M8	M18x1	0.9	●
HSK A63 SRKIN10x120	10	63	24	32.0	51.0	94	120	31	42	M8	M18x1	1.1	●
HSK A63 SRKIN10x160	10	63	24	32.0	51.0	134	160	31	42	M8	M18x1	1.4	●
HSK A63 SRKIN12x90	12	63	24	32.0	51.0	64	90	36	42	M8	M18x1	0.9	●
HSK A63 SRKIN12x120	12	63	24	32.0	51.0	94	120	36	47	M10	M18x1	1.0	●
HSK A63 SRKIN12x160	12	63	24	32.0	51.0	134	160	36	47	M10	M18x1	1.3	●
HSK A63 SRKIN14x90	14	63	27	34.0	45.0	64	90	36	47	M10	M18x1	0.9	●
HSK A63 SRKIN14x120	14	63	27	34.0	45.0	94	120	36	47	M10	M18x1	1.2	●
HSK A63 SRKIN14x160	14	63	27	34.0	45.0	134	160	36	47	M10	M18x1	1.4	●
HSK A63 SRKIN16x75	16	63	27	34.0	-	49	75	39	50	-	M18x1	0.9	●
HSK A63 SRKIN16x95	16	63	27	34.0	44.0	69	95	39	50	M12	M18x1	1.0	●
HSK A63 SRKIN16x120	16	63	27	34.0	44.0	94	120	39	50	M12	M18x1	1.1	●
HSK A63 SRKIN16x160	16	63	27	34.0	44.0	134	160	39	50	M12	M18x1	1.4	●
HSK A63 SRKIN18x95	18	63	33	42.0	57.0	69	95	39	50	M12	M18x1	1.1	●
HSK A63 SRKIN18x120	18	63	33	42.0	57.0	94	120	39	50	M12	M18x1	1.4	●
HSK A63 SRKIN18x160	18	63	33	42.0	57.0	134	160	39	50	M12	M18x1	1.8	●
HSK A63 SRKIN20x75	20	63	33	42.0	-	49	75	41	50	-	M18x1	0.9	●
HSK A63 SRKIN20x100	20	63	33	42.0	57.0	74	100	41	52	M16	M18x1	1.1	●
HSK A63 SRKIN20x120	20	63	33	42.0	57.0	94	120	41	52	M16	M18x1	1.4	●
HSK A63 SRKIN20x160	20	63	33	42.0	57.0	134	160	41	52	M16	M18x1	1.8	●
HSK A63 SRKIN25x85	25	63	44	53.0	-	59	85	47	58	-	M18x1	1.3	●
HSK A63 SRKIN25x115	25	63	44	53.0	55.0	89	115	47	58	M16	M18x1	1.7	●
HSK A63 SRKIN32x85	32	63	44	53.0	-	59	85	47	58	-	M18x1	1.1	●
HSK A63 SRKIN32x120	32	63	44	53.0	55.0	94	120	47	58	M16	M18x1	1.7	●

- 刀柄配件, 请参照: D033 页
- 内冷却管需单独订购
- 当工作转速 N=25,000RPM 时, 刀柄的平衡等级为 G2.5
- 订货示例: HSK A63 SRKIN6x80
- Spare parts, please see page D033.
- Inner coolant tube should be ordered separately.
- It is with G2.5/25,000 RPM.
- Ordering sample: 1 PC HSK A63 SRKIN6x80.



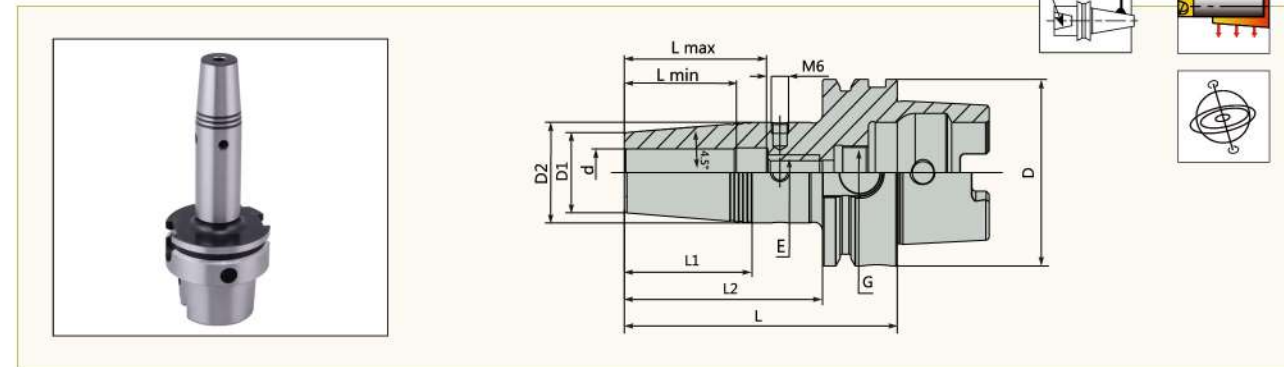
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

HSK-A

热缩刀柄

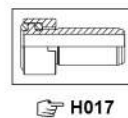
Shrink Fit Adaptor

DIN69893 HSK A 型热缩刀柄，夹持整体硬质合金刀具或高速钢刀具
It is for clamping the solid carbide tools or HSS tools



规格型号 Designation	d	D	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
HSK A100 SRKIN6x85	6	100	21	27.0	38.0	56	85	25	36	M5	M24x1.5	2.2	●
HSK A100 SRKIN6x120	6	100	21	27.0	38.0	91	120	25	36	M5	M24x1.5	2.3	●
HSK A100 SRKIN6x160	6	100	21	27.0	38.0	131	160	25	36	M5	M24x1.5	2.5	●
HSK A100 SRKIN8x85	8	100	21	27.0	38.0	56	85	25	36	M6	M24x1.5	2.2	●
HSK A100 SRKIN8x120	8	100	21	27.0	38.0	91	120	25	36	M6	M24x1.5	2.4	●
HSK A100 SRKIN8x160	8	100	21	27.0	38.0	131	160	25	36	M6	M24x1.5	2.6	●
HSK A100 SRKIN10x90	10	100	24	32.0	51.0	61	90	31	42	M8	M24x1.5	2.2	●
HSK A100 SRKIN10x120	10	100	24	32.0	51.0	91	120	31	42	M8	M24x1.5	2.5	●
HSK A100 SRKIN10x160	10	100	24	32.0	51.0	131	160	31	42	M8	M24x1.5	2.7	●
HSK A100 SRKIN12x95	12	100	24	32.0	51.0	66	95	36	42	M10	M24x1.5	2.3	●
HSK A100 SRKIN12x120	12	100	24	32.0	51.0	91	120	36	47	M10	M24x1.5	2.5	●
HSK A100 SRKIN12x160	12	100	24	32.0	51.0	131	160	36	47	M10	M24x1.5	2.7	●
HSK A100 SRKIN14x95	14	100	27	34.0	45.0	66	95	36	47	M10	M24x1.5	2.3	●
HSK A100 SRKIN14x120	14	100	27	34.0	45.0	91	120	36	47	M10	M24x1.5	2.5	●
HSK A100 SRKIN14x160	14	100	27	34.0	45.0	131	160	36	47	M10	M24x1.5	2.8	●
HSK A100 SRKIN16x100	16	100	27	34.0	45.0	71	100	39	50	M12	M24x1.5	2.4	●
HSK A100 SRKIN16x120	16	100	27	34.0	45.0	91	120	39	50	M12	M24x1.5	2.5	●
HSK A100 SRKIN16x160	16	100	27	34.0	45.0	131	160	39	50	M12	M24x1.5	2.7	●
HSK A100 SRKIN18x100	18	100	33	42.0	57.0	71	100	39	50	M12	M24x1.5	2.5	●
HSK A100 SRKIN18x160	18	100	33	42.0	57.0	131	160	39	50	M12	M24x1.5	3.1	●
HSK A100 SRKIN20x105	20	100	33	42.0	57.0	76	105	41	52	M16	M24x1.5	2.5	●
HSK A100 SRKIN20x160	20	100	33	42.0	57.0	131	160	41	52	M16	M24x1.5	3.0	●
HSK A100 SRKIN25x115	25	100	44	53.0	57.0	88	115	47	58	M16	M24x1.5	3.0	●
HSK A100 SRKIN32x120	32	100	44	53.0	57.0	91	120	47	58	M16	M24x1.5	3.0	●

- 刀柄配件，请参照：D033 页
- 内冷却管需单独订购
- 当工作转速 N=25,000RPM 时，刀柄的平衡等级为 G2.5
- 订货示例：HSK A100 SRKIN6x85
- Spare parts, please see page D033.
- Inner coolant tube should be ordered separately.
- It is with G2.5/25,000 RPM.
- Ordering sample: 1 PC HSK A100 SRKIN6x85.



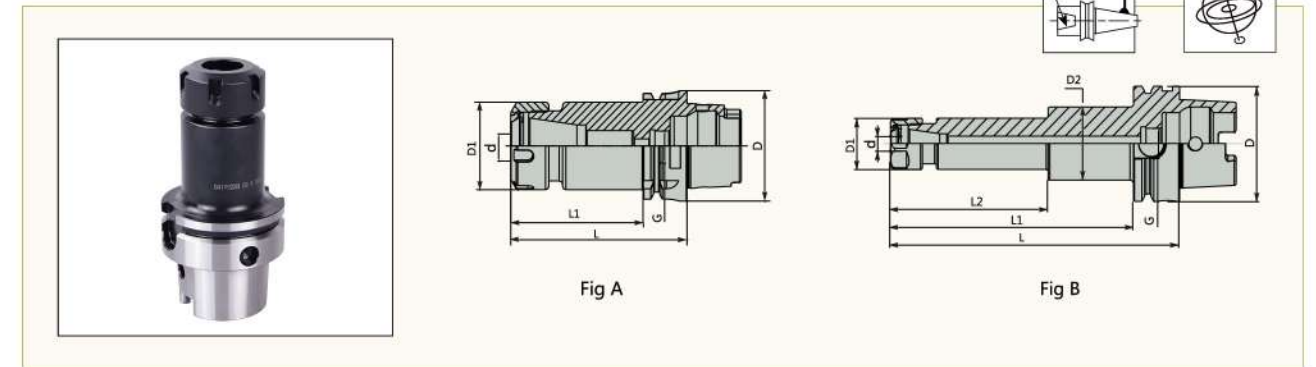
H017

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

HSK-A

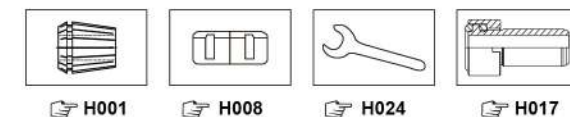
普通 ER 筒夹刀柄

ER Collet Chuck Adaptor



规格型号 Designation	L	L1	L1	D	D1	L2	d	Fig	G	Kg	在库 Stock
HSK A63 ER16x100 ⁽¹⁾	100	74	-	63	28	-	0.5-10	A	M18x1.0	0.8	●
HSK A63 ER16x120 ⁽¹⁾	120	94	-	63	28	-	0.5-10	A	M18x1.0	1.0	●
HSK A63 ER16x160 ⁽¹⁾	160	134	85.6	63	28	40	0.5-10	B	M18x1.0	1.4	●
HSK A63 ER20x100 ⁽¹⁾	100	74	-	63	34	-	1-13	A	M18x1.0	0.9	●
HSK A63 ER20x120 ⁽¹⁾	120	94	-	63	34	-	1-13	A	M18x1.0	1.1	●
HSK A63 ER20x160 ⁽¹⁾	160	134	85	63	34	45	1-13	B	M18x1.0	1.6	●
HSK A63 ER25x80 ⁽¹⁾	80	54	-	63	42	-	1-16	A	M18x1.0	0.9	●
HSK A63 ER25x100 ⁽¹⁾	100	74	-	63	42	-	1-16	A	M18x1.0	1.1	●
HSK A63 ER25x120 ⁽¹⁾	120	94	-	63	42	-	1-16	A	M18x1.0	1.3	●
HSK A63 ER25x160 ⁽¹⁾	160	134	-	63	42	-	1-16	A	M18x1.0	1.7	●
HSK A63 ER32x80 ⁽¹⁾	80	54	31	63	50	40	2-20	B	M18x1.0	0.8	●
HSK A63 ER32x100 ⁽¹⁾	100	74	-	63	50	-	2-20	A	M18x1.0	1.2	●
HSK A63 ER32x120 ⁽¹⁾	120	94	-	63	50	-	2-20	A	M18x1.0	1.5	●
HSK A63 ER32x160 ⁽¹⁾	160	134	-	63	50	-	2-20	A	M18x1.0	2.0	●
HSK A63 ER40x80 ⁽¹⁾	80	54	34	63	63	50.4	3-26	B	M18x1.0	0.9	●
HSK A63 ER40x100 ⁽¹⁾	100	74	34	63	63	50.4	3-26	B	M18x1.0	1.2	●
HSK A63 ER40x120 ⁽¹⁾	120	94	34	63	63	50.4	3-26	B	M18x1.0	1.4	●
HSK A100 ER16x100 ⁽²⁾	100	74	-	100	28	-	0.5-10	A	M24x1.5	2.2	●
HSK A100 ER16x160 ⁽²⁾	160	134	85	100	28	40	0.5-10	B	M24x1.5	2.7	●
HSK A100 ER20x100 ⁽²⁾	100	74	-	100	34	-	1-13	A	M24x1.5	2.3	●
HSK A100 ER16x160 ⁽²⁾	120	134	85	100	34	50	1-13	B	M24x1.5	3.1	●
HSK A100 ER25x100 ⁽²⁾	100	74	-	100	42	-	1-16	A	M24x1.5	2.5	●
HSK A100 ER25x120 ⁽²⁾	120	94	-	100	42	-	1-16	A	M24x1.5	2.7	●
HSK A100 ER25x160 ⁽²⁾	160	134	-	100	42	-	1-16	A	M24x1.5	3.1	●
HSK A100 ER32x100 ⁽²⁾	100	74	-	100	50	-	2-20	A	M24x1.5	2.5	●
HSK A100 ER32x120 ⁽²⁾	120	94	-	100	50	-	2-20	A	M24x1.5	2.8	●
HSK A100 ER32x160 ⁽²⁾	160	134	-	100	50	-	2-20	A	M24x1.5	3.3	●
HSK A100 ER40x100 ⁽²⁾	100	74	-	100	63	-	3-26	A	M24x1.5	2.8	●
HSK A100 ER40x120 ⁽²⁾	120	94	-	100	63	-	3-26	A	M24x1.5	3.2	●
HSK A100 ER40x160 ⁽²⁾	160	134	-	100	62	-	3-26	A	M24x1.5	4.1	●

- 内冷却管需单独订购
- (1)当工作转速 N=2000RPM 时，刀柄的平衡等级为 G2.5, (2)当工作转速 N=12000RPM 时，刀柄的平衡等级为 G6.3
- 订货示例：一件 HSK A63 ER16x100
- Inner coolant tube should be ordered separately.
- It is with G2.5/25,000 RPM, and G6.3/12,000 RPM.
- Ordering sample: 1 PC HSK A63 ER16x100.



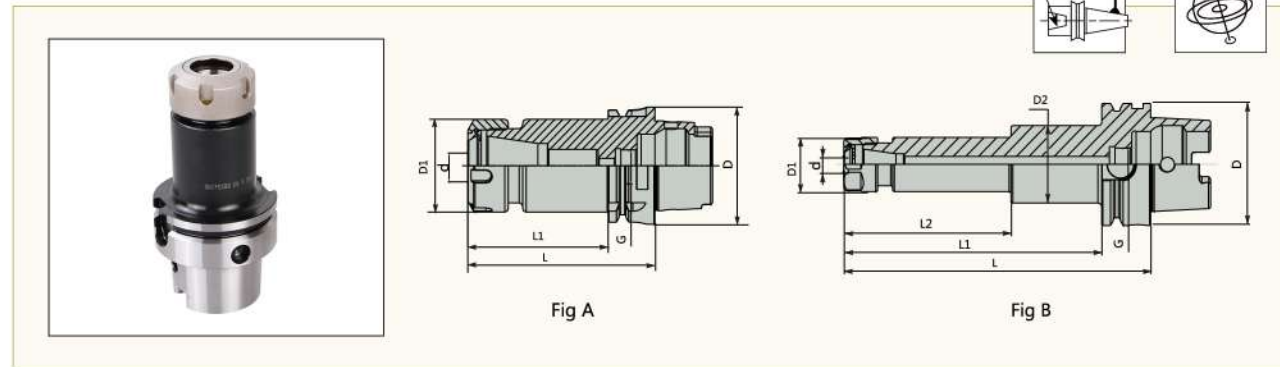
H001 H008 H024 H017

- 标准库存 Item in stock
- 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

HSK-A

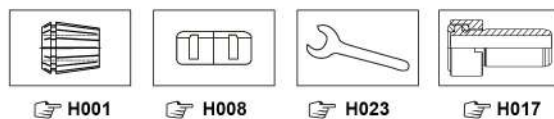
高精度 ER 筒夹刀柄

High Precision ER Collet Chuck Adaptor



规格型号 Designation	L	L1	L1	D	D1	L2	d	Fig	G	Kg	在库 Stock
HSK A63 ER16x100.TOP ⁽¹⁾	100	74	-	63	28	-	0.5-10	A	M18x1.0	0.8	●
HSK A63 ER16x120.TOP ⁽¹⁾	120	94	-	63	28	-	0.5-10	A	M18x1.0	1.0	●
HSK A63 ER16x160.TOP ⁽¹⁾	160	134	85.6	63	28	40	0.5-10	B	M18x1.0	1.4	●
HSK A63 ER20x100.TOP ⁽¹⁾	100	74	-	63	34	-	1-13	A	M18x1.0	0.9	●
HSK A63 ER20x120.TOP ⁽¹⁾	120	94	-	63	34	-	1-13	A	M18x1.0	1.1	●
HSK A63 ER20x160.TOP ⁽¹⁾	160	134	85	63	34	45	1-13	B	M18x1.0	1.6	●
HSK A63 ER25x80.TOP ⁽¹⁾	80	54	-	63	42	-	1-16	A	M18x1.0	0.9	●
HSK A63 ER25x100.TOP ⁽¹⁾	100	74	-	63	42	-	1-16	A	M18x1.0	1.1	●
HSK A63 ER25x120.TOP ⁽¹⁾	120	94	-	63	42	-	1-16	A	M18x1.0	1.3	●
HSK A63 ER25x160.TOP ⁽¹⁾	160	134	-	63	42	-	1-16	A	M18x1.0	1.7	●
HSK A63 ER32x80.TOP ⁽¹⁾	80	54	31	63	50	40	2-20	B	M18x1.0	0.8	●
HSK A63 ER32x100.TOP ⁽¹⁾	100	74	-	63	50	-	2-20	A	M18x1.0	1.2	●
HSK A63 ER32x120.TOP ⁽¹⁾	120	94	-	63	50	-	2-20	A	M18x1.0	1.5	●
HSK A63 ER32x160.TOP ⁽¹⁾	160	134	-	63	50	-	2-20	A	M18x1.0	2.0	●
HSK A63 ER40x80.TOP ⁽¹⁾	80	54	34	63	63	50.4	3-26	B	M18x1.0	0.9	●
HSK A63 ER40x100.TOP ⁽¹⁾	100	74	34	63	63	50.4	3-26	B	M18x1.0	1.2	●
HSK A63 ER40x120.TOP ⁽¹⁾	120	94	34	63	63	50.4	3-26	B	M18x1.0	1.4	●
HSK A100 ER16x100.TOP ⁽²⁾	100	74	-	100	28	-	0.5-10	A	M24x1.5	2.2	●
HSK A100 ER16x160.TOP ⁽²⁾	160	134	85	100	28	40	0.5-10	B	M24x1.5	2.7	●
HSK A100 ER20x100.TOP ⁽²⁾	100	74	-	100	34	-	1-13	A	M24x1.5	2.3	●
HSK A100 ER20x160.TOP ⁽²⁾	120	134	85	100	34	50	1-13	B	M24x1.5	3.1	●
HSK A100 ER25x100.TOP ⁽²⁾	100	74	-	100	42	-	1-16	A	M24x1.5	2.5	●
HSK A100 ER25x120.TOP ⁽²⁾	120	94	-	100	42	-	1-16	A	M24x1.5	2.7	●
HSK A100 ER25x160.TOP ⁽²⁾	160	134	-	100	42	-	1-16	A	M24x1.5	3.1	●
HSK A100 ER32x100.TOP ⁽²⁾	100	74	-	100	50	-	2-20	A	M24x1.5	2.5	●
HSK A100 ER32x120.TOP ⁽²⁾	120	94	-	100	50	-	2-20	A	M24x1.5	2.8	●
HSK A100 ER32x160.TOP ⁽²⁾	160	134	-	100	50	-	2-20	A	M24x1.5	3.3	●
HSK A100 ER40x100.TOP ⁽²⁾	100	74	-	100	63	-	3-26	A	M24x1.5	2.8	●
HSK A100 ER40x120.TOP ⁽²⁾	120	94	-	100	63	-	3-26	A	M24x1.5	3.2	●
HSK A100 ER40x160.TOP ⁽²⁾	160	134	-	100	62	-	3-26	A	M24x1.5	4.1	●

- 内冷却管需单独订购
- (1)当工作转速 N=20000RPM 时, 刀柄的平衡等级为 G2.5, (2)当工作转速 N=12000RPM 时, 刀柄的平衡等级为 G6.3
- 订货示例: 一件 HSK A63 ER16x100.TOP
- Inner coolant tube should be ordered separately
- It is with G2.5/25,000 RPM, and G6.3/12,000 RPM.
- Ordering sample: 1 PC HSK A63 ER16x100.TOP

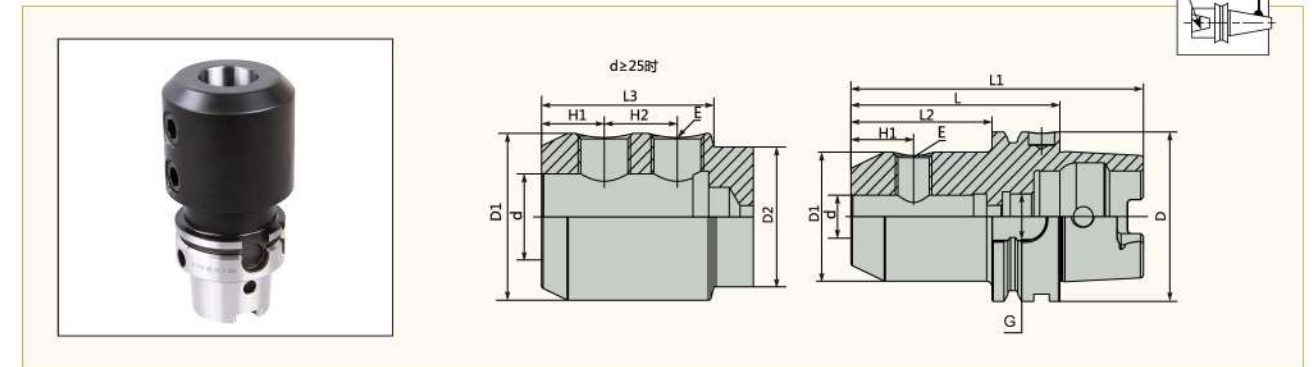


- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

HSK-A

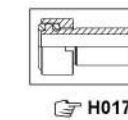
侧固式刀柄 (DIN 1835-B)

Weldon Adaptor



规格型号 Designation	d	D	D1	D2	L	L1	L2	L3	H1	H2	G	E	Kg	在库 Stock
HSK A63 EM16x80	16	63	48	-	80	112	54	-	24	-	M18x1	M14x2	1.20	●
HSK A63 EM20x80	20	63	52	-	80	112	54	-	25	-	M18x1	M16x2	1.30	●
HSK A63 EM25x110	25	63	65	52	110	142	8	66	24	25	M18x1	M18x2	2.24	●
HSK A63 EM32x110	32	63	72	52	110	142	84	66	24	28	M18x1	M20x2	2.24	●
HSK A100 EM16x100	16	100	48	-	100	150	71	-	24	-	M24x1.5	M14x2	2.82	●
HSK A100 EM20x100	20	100	52	-	100	150	71	-	25	-	M24x1.5	M16x2	2.93	●
HSK A100 EM25x100	25	100	65	-	100	150	71	-	24	25	M24x1.5	M18x2	3.50	●
HSK A100 EM32x100	32	100	72	-	100	150	71	-	24	28	M24x1.5	M20x2	3.70	●
HSK A100 EM40x110	40	100	85	-	110	160	81	-	30	32	M24x1.5	M20x2	4.52	●
HSK A100 EM50x140	50	100	98	87	140	190	111	93	35	32	M24x1.5	M24x2	6.70	●

- 内冷却管需单独订购
- 订货示例: 一件 HSK A63 EM16x80
- Inner coolant tube should be ordered separately
- Ordering sample: 1 PC HSK A63 EM16x80.



备件

Spare Parts

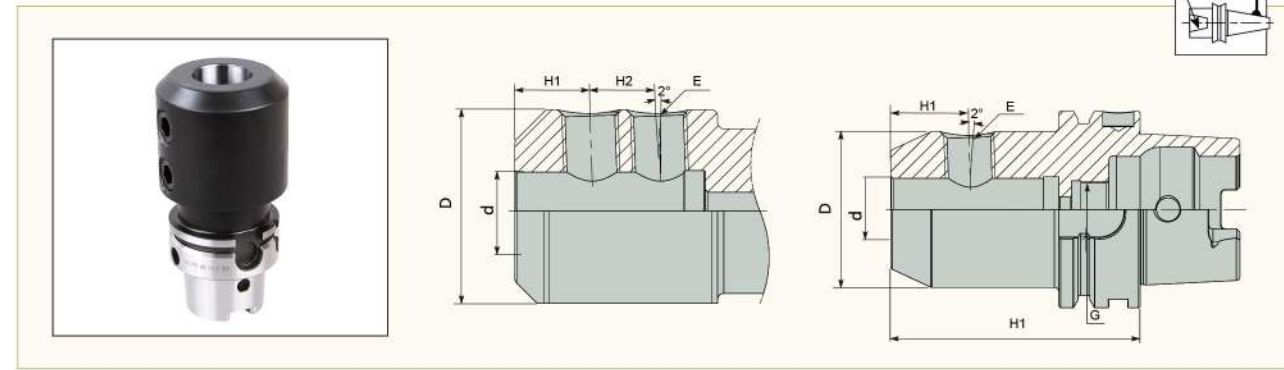
规格 Designation	锁紧螺钉 Lock screw	锁紧扳手 Allen key
EM16	SR54 M14x16	KEY01 M6
EM20	SR54 M16x16	KEY01 M8
EM25	SR54 M18x20-X	KEY01 M8
EM32	SR54 M20x20-X	KEY01 M10
EM40	SR54 M20x25-X	KEY01 M10
EM50	SR54 M24x25-X	KEY01 M12

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

HSK-A

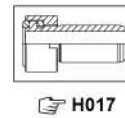
2° 侧固式刀柄 (DIN 1835-E)

Whistle-Notch Adaptor



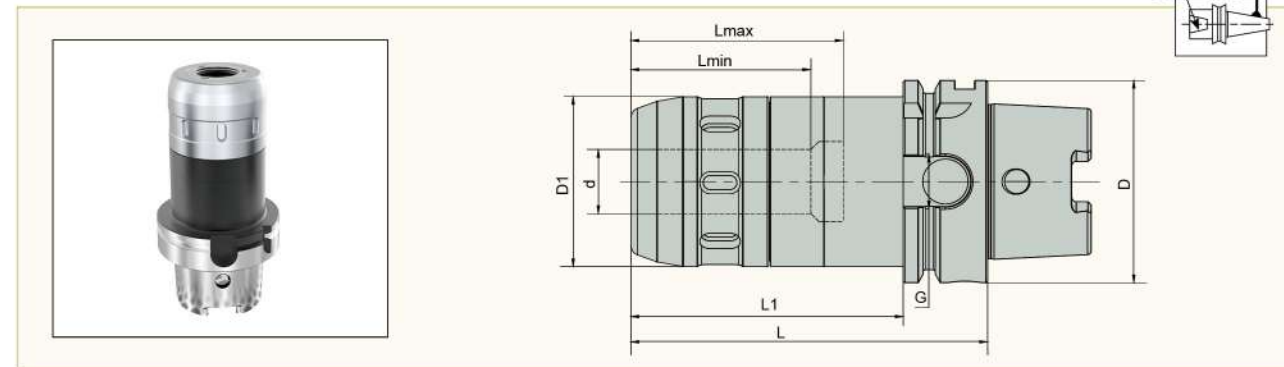
规格型号 Designation	d	D	L	H1	H2	E	G	Kg	在库 Stock
HSK A63 EM16x100E	16	48	100	24	-	M14x2	M18x1	1.51	●
HSK A63 EM20x100E	20	52	100	25	-	M16x2	M18x1	1.65	●
HSK A63 EM25x110E	25	65	110	24	25	M18x2	M18x1	2.23	●
HSK A63 EM32x110E	32	72	110	24	28	M20x2	M18x1	2.43	●
HSK A100 EM16x100E	16	48	100	24	-	M14x2	M24x1.5	2.88	●
HSK A100 EM20x110E	20	52	110	25	-	M16x2	M24x1.5	3.1	●
HSK A100 EM25x120E	25	65	120	24	25	M18x2	M24x1.5	3.91	●
HSK A100 EM32x120E	32	72	120	24	28	M20x2	M24x1.5	4.32	●

- 刀柄备件, 请参照: D038 页
- 内冷却管需单独订购
- 订货示例: 1 件 HSK A63 EM16x100E
- Spare parts, please see page D038.
- Inner coolant tube should be ordered separately.
- Ordering sample: 1 HSK A63 EM16x100E.



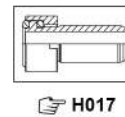
强力铣夹头刀柄

Milling Power Chuck



规格型号 Designation	D	D1	d	L	L1	Lmin	Lmax	G	Kg	在库 Stock
HSK A63 DMG20x110	63	53	20	110	84	61	75	M18x1	1.74	●
HSK A63 DMG32x140	63	76	32	140	114	68	87	M18x1	3.43	●
HSK A100 DMG20x115	100	53	20	115	86	61	75	M24x1.5	3.11	●
HSK A100 DMG32x145	100	76	32	145	116	68	87	M24x1.5	5.14	●
HSK A100 DMG40x165	100	90	40	165	136	83	103	M24x1.5	7.15	●
HSK A100 DMG42x165	100	90	42	165	136	83	103	M24x1.5	7.08	●

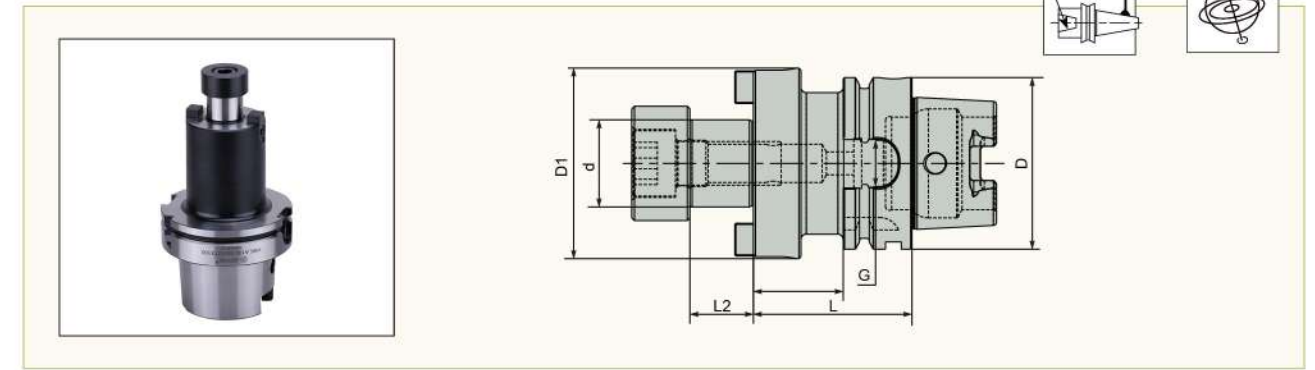
- 强力直柄筒夹, 请参照: H008 页
- 内冷却管需单独订购
- 订货示例: 1 件 HSK A63 DMG20x110
- Power straight shank collet, please see page H008
- Inner coolant tube should be ordered separately.
- Ordering sample: 1 HSK A63 DMG20x110.



HSK-A

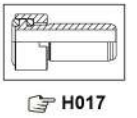
面铣刀刀柄

Face Mill Adaptor



规格型号 Designation	D	D1	d	L	L1	L2	G	Kg	在库 Stock
HSK A63 SEM16x50 ⁽¹⁾	63	38	16	50	24	17	M18x1	0.87	●
HSK A63 SEM22x50 ⁽¹⁾	63	47	22	50	24	19	M18x1	1.07	●
HSK A63 SEM27x60 ⁽¹⁾	63	58	27	60	34	21	M18x1	1.45	●
HSK A63 SEM32x60 ⁽¹⁾	63	66	32	60	34	24	M18x1	1.72	●
*HSK A63 SEM40x50 ⁽¹⁾	63	89	40	60	34	27	M18x1	2.37	●
HSK A100 SEMx50 ⁽²⁾	100	38	16	50	21	17	M24x1.5	2.20	●
HSK A100 SEM22x50 ⁽²⁾	100	47	22	50	21	19	M24x1.5	2.36	●
HSK A100 SEM27x60 ⁽²⁾	100	58	27	50	21	21	M24x1.5	2.59	●
HSK A100 SEM32x50	100	66	32	50	21	24	M24x1.5	2.91	●
*HSK A100 SEM40x60 ⁽²⁾	100	87	40	60	31	27	M24x1.5	3.96	●
HSK A100 SEM60x75 ⁽²⁾	100	128	60	75	46	30	M24x1.5	4.96	●

- 内冷却管需单独订购
- * 此刀柄如法兰盘连接, 请单独订购螺钉 (SR55 M12x50)
- (1) 当工作转速 N=15000RPM 时, 刀柄的平衡等级为 G2.5, (2) 当工作转速 N=12000RPM 时, 刀柄的平衡等级为 G6.3
- 订货示例: 1 件 HSK A63 SEM16x50
- Inner coolant tube should be ordered separately.
- *** marked adaptor needs to be connected with flange. Then please order the screws (SR55 M12x50) separately.
- It is with G2.5/25,000 RPM, and G6.3/12,000 RPM.
- Ordering sample: 1 PC HSK A63 SEM16x50.



备件

Spare Parts

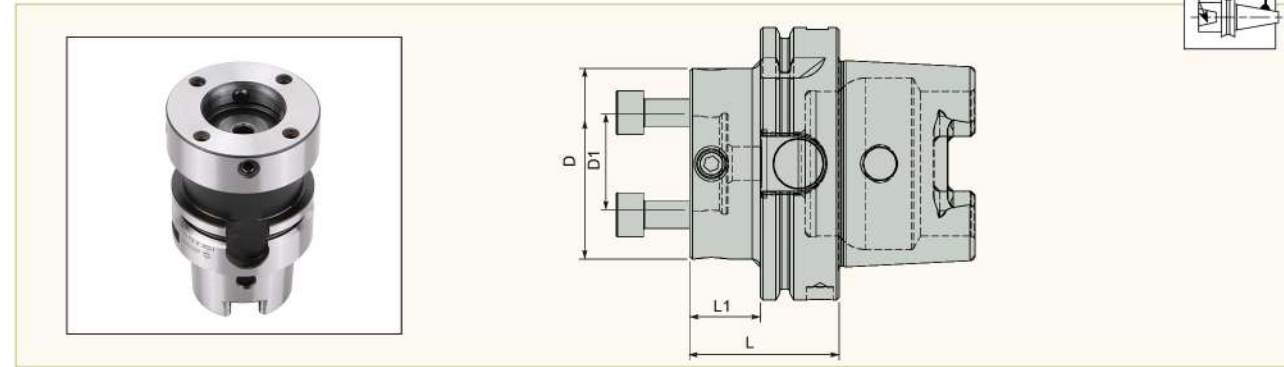
规格 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	垫环 Backing ring	压紧螺钉 Clamping screw
SEM16	PL10 8x6	SR55 M3x10	-	SR55 M8x25
SEM22	PL10 10x9	SR55 M5x12	FMA-22	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	FMA-27	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	FMA-32	SR55 M16x40
SEM40	PL10 16x12	SR55 M6x16	FMA-40	SR55 M20x45
SEM60	PL10 25x16	SR55 M10x16	-	SR55 M16x60

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

HSK-A

可调刀柄
Adjustable Chuck

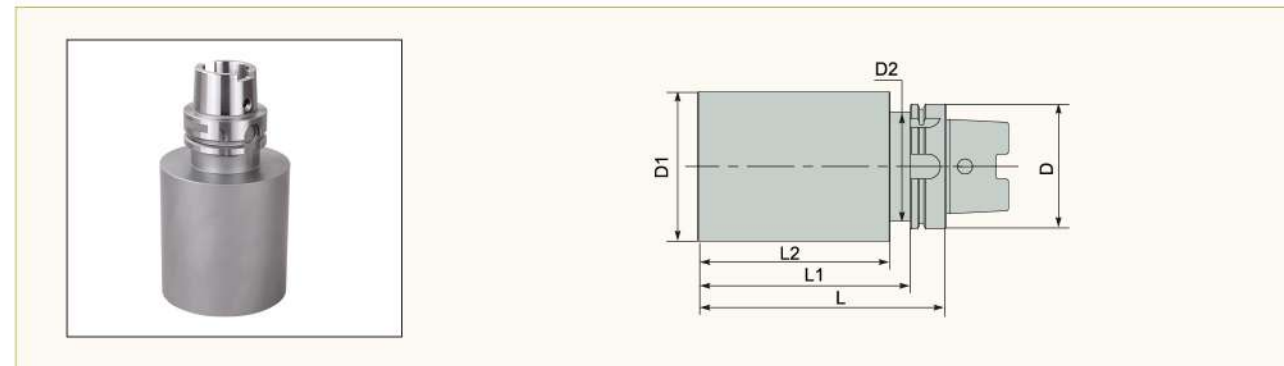


规格型号 Designation	ISO	D	D1	L	L1	kg	在庫 Stock
HSK A63 SL70x60	63	70	35	60	34	1.24	●
HSK A100 SL70x55	100	70	35	55	26	2.63	●

- 适配接杆需单独订购, 请参照: D047-D048 页
- 刀柄配件, 请参照: D017 页
- 订货示例: 1 件 HSK A63 SL70x60
- Extension should be ordered separately, please see page D047-D048.
- Spare parts, please see page D017.
- Ordering sample: 1 PC HSK A63 SL70x60

DIN 69893 HSK A 型半成品刀柄

DIN 69893 HSK A Semifinished Adaptor



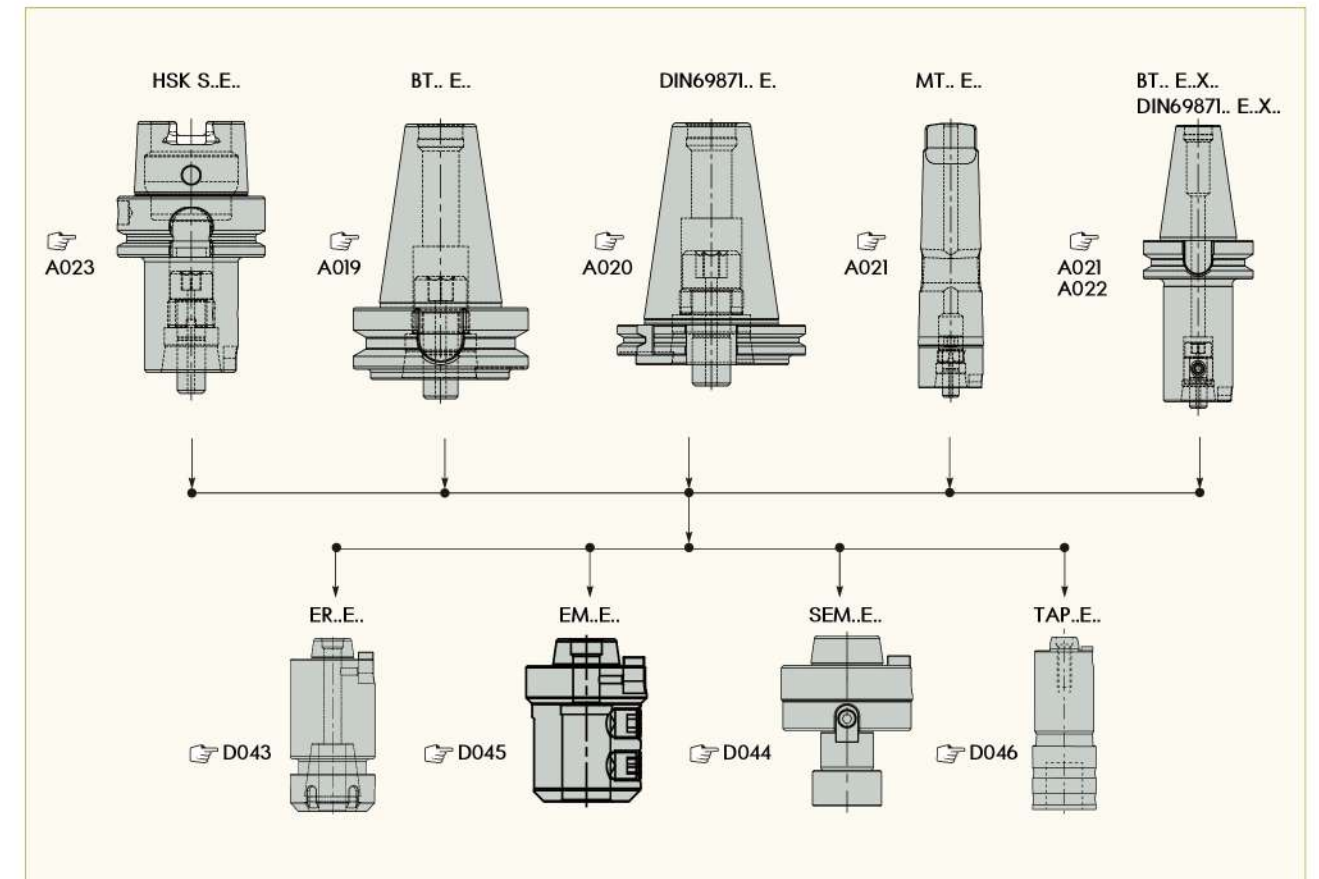
规格型号 Designation	D	D1	D2	L	L1	L2	kg	在庫 Stock
HSK A63 B 80x200	63	80	52.5	200	174	157.5	7	●
HSK A63 B 100x150	63	100	52.5	150	124	107.5	7.4	●
HSK A63 B 100x200	63	100	52.5	200	174	157.5	10.42	●
HSK A100 B 100x200	100	100	87.5	200	171	154.5	12.06	●
HSK A100 B 120x150	100	120	87.5	150	121	104.5	11.81	●
HSK A100 B 120x200	100	120	87.5	200	171	154.5	16.17	●

- 刀柄材质: 合金钢 硬度 42~46HRC
- 柄部接口内具有连接冷却液套管的螺纹接口
- Material: alloy steel, hardness 42-46HRC
- The shank connector has a threaded connection to the coolant casing pipe

MODULAR EXTENSIONS FOR ADAPTORS 模块式刀柄接杆

模块式刀柄接杆组合示意图

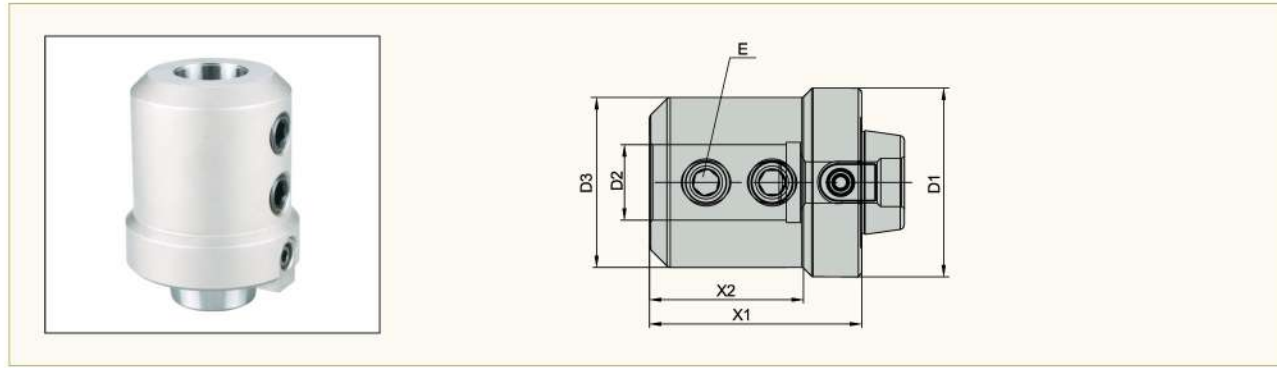
Combinational Figure



MODULAR EXTENSIONS FOR ADAPTORS 模块式刀柄接杆

侧固式刀柄接杆

Extension for Weldon Adaptor



规格型号 Designation	D1	D2	D3	X1	X2	E	Kg	在库 Stock
EM16.E40.70	40	16	48	70	50	M14x2	0.9	●
EM16.E50.70	50	16	48	70	50	M14x2	1.0	●
EM16.E63.70	63	16	48	70	50	M14x2	1.3	●
EM20.E63.75	63	20	52	75	55	M16x2	1.4	●
EM25.E63.85	63	25	63	85	65	M18x2	1.8	●
EM32.E63.90	63	32	72	90	70	M20x2	2.1	●
EM20.E80.75	80	20	52	75	50	M16x2	1.8	●
EM25.E80.85	80	25	63	85	60	M18x2	2.3	●
EM32.E80.90	80	32	72	90	65	M20x2	2.5	●
EM40.E80.100	80	40	90	100	75	M20x2	2.8	●
EM50.E80.120	80	50	98	120	95	M24x2	4.5	●

- 适配刀柄需单独订购，请参照：A019-A023 页
- 订货示例：1 件 EM16.E40.70
- The adaptor should be ordered separately, please see page A019-A023.
- Ordering sample: 1 PC EM16.E40.70

备件

Spare Parts

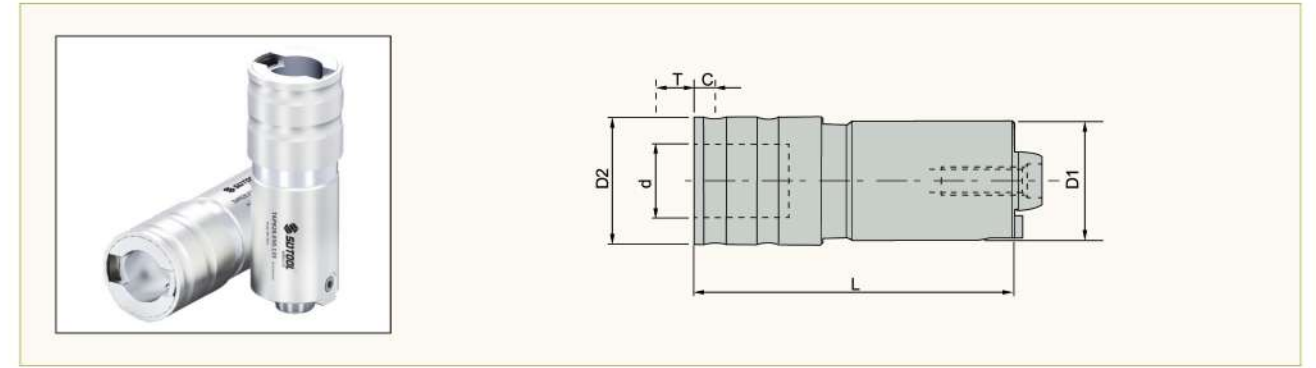
D1	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	平键锁紧扳手 Allen key for clamping screw
D1=40	PL03 10x5	SR57 M4x12	KEY01 M2.5
D1=50	PL04 12x9	SR55 M5x12	KEY01 M4
D1=63	PL04 14x12	SR55 M5x16	KEY01 M4
D1=80	PL04 16x14	SR55 M6x16	KEY01 M5

规格 Designation	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
EM16	SR54 M14x16	KEY01 M6
EM20	SR54 M16x16	KEY01 M8
EM25	SR54 M18x20-X	KEY01 M8
EM32	SR54 M20x20-X	KEY01 M10
EM40	SR54 M20x25-X	KEY01 M10
EM50	SR54 M24x25-X	KEY01 M12

MODULAR EXTENSIONS FOR ADAPTORS 模块式刀柄接杆

攻丝刀柄接杆

Extension for Tapping Chuck Adaptor



规格型号 Designation	D1	d	D2	L	长度补偿 Length compensation		攻丝范围 Tap	Kg	在库 Stock
					T	C			
TAP412.E40.110	40	19	36	110	9	5	M4-M12	0.7	●
TAP820.E50.135	50	31	53.5	135	16	9	M8-M20	1.7	●
TAP1433.E63.180	63	48	78	180	26	15	M14-M33	4.1	●
TAP2248.E63.196	63	60	96	196	28	17	M22-M48	6.2	●

- 适配刀柄需单独订购，请参照：A019-A023 页
- 订货示例：1 件 TAP412.E40.110
- 每种规格的攻丝刀柄接杆均有对应的攻丝快换夹头，请参照：H010-H013 页
- The adaptor should be ordered separately, please see page A019-A023.
- Ordering sample: 1 PC TAP412.E40.110
- Multiple quick change chucks for corresponding tool holder, please see page H010-H013

备件

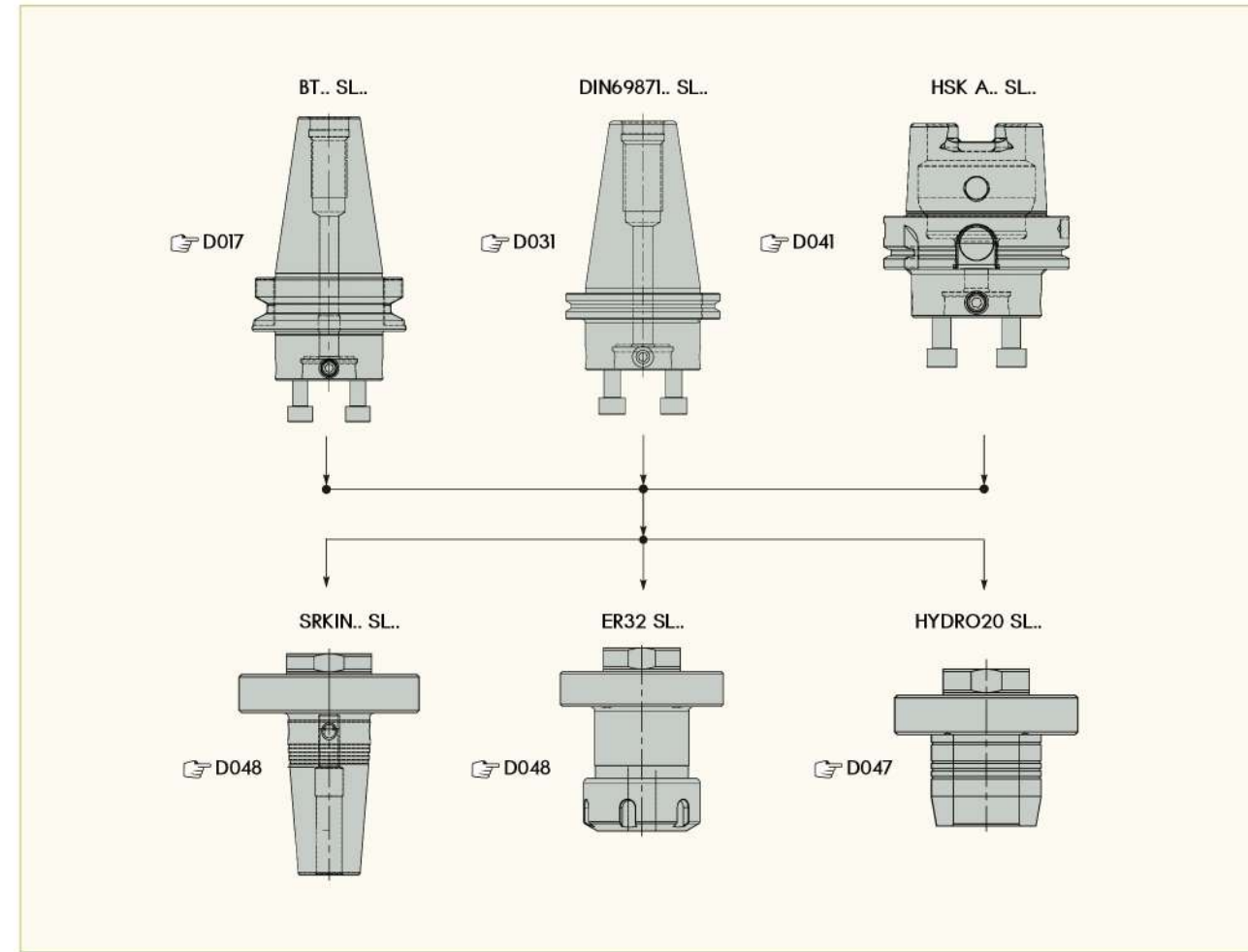
Spare Parts

D1	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	平键锁紧扳手 Allen key for clamping screw
D1=40	PL03 10x5	SR57 M4x12	KEY01 M2.5
D1=50	PL04 12x9	SR55 M5x12	KEY01 M4
D1=63	PL04 14x12	SR55 M5x16	KEY01 M4

MODULAR EXTENSIONS FOR ADAPTORS 模块式刀柄接杆

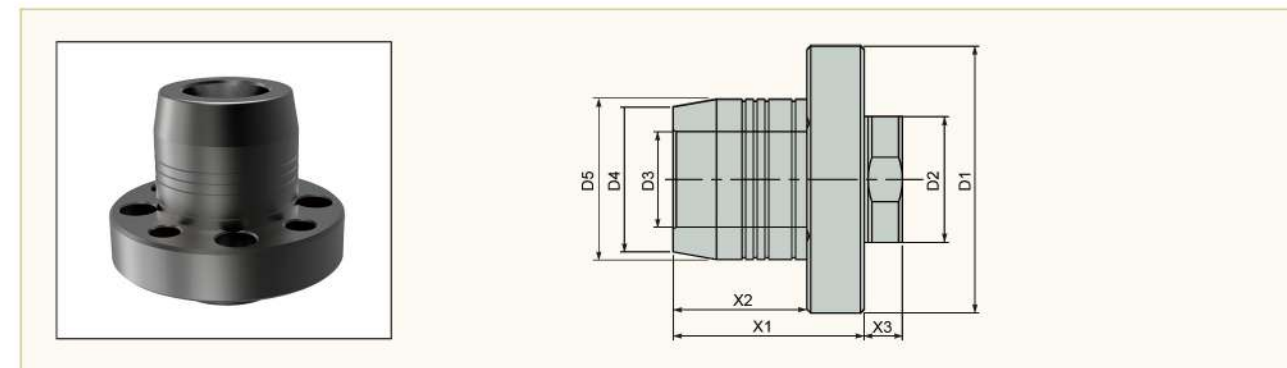
模块式刀柄接杆组合示意图

Combinational Figure



液压刀柄接杆

Extension for Hydraulic Adaptor



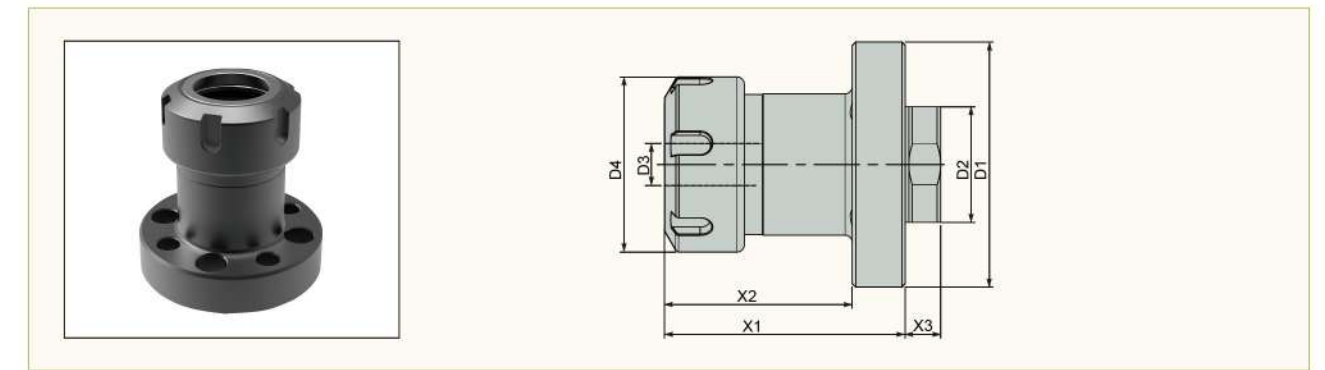
规格型号 Designation	D1	D2	D3	D4	D5	X1	X2	X3	在庫 Stock
HYDRO 20.SL70.50	70	35	20	38	42	50	35	10	●

- 适配刀柄需单独订购, 请参照: D017,D031,D041 页
- 订货示例: 1 件 HYDRO 20.SL70.50
- The adaptor should be ordered separately, please see page D017,D031,D041.
- Ordering sample: 1 PC HYDRO 20.SL70.50

MODULAR EXTENSIONS FOR ADAPTORS 模块式刀柄接杆

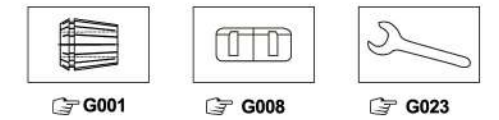
ER 刀柄接杆

Extension for ER Collet Chuck Adaptor



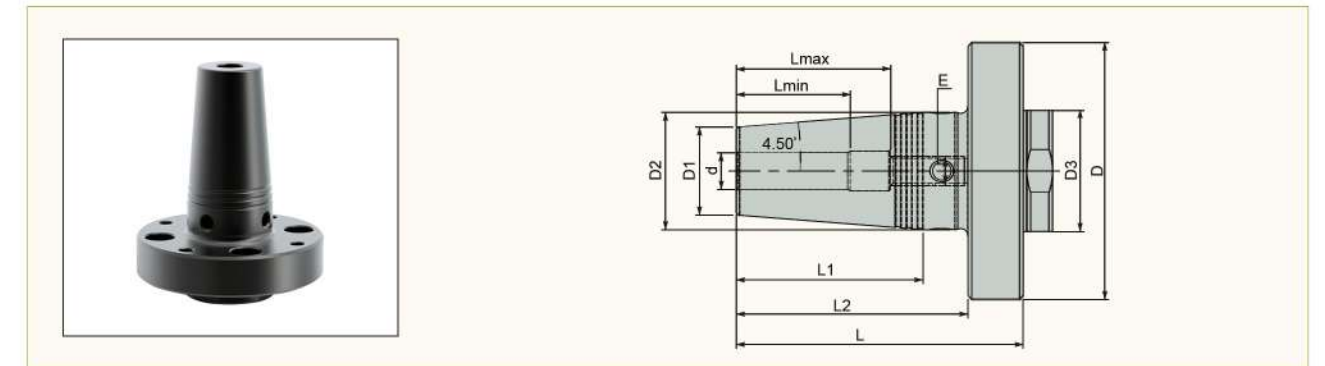
规格型号 Designation	D1	D2	D3	D4	X1	X2	X3	在庫 Stock
ER32.SL70.75	70	35	2-20	50	75	53	10	●

- 适配刀柄需单独订购, 请参照: D017,D031,D041 页
- 订货示例: 1 件 ER32.SL70.75
- The adaptor should be ordered separately, please see page D017,D031,D041.
- Ordering sample: 1 PC ER32.SL70.75



热缩刀柄接杆

Extension for Weldon Adaptor



规格型号 Designation	d	D	D1	D2	D3	L1	L2	L	Lmin	Lmax	E	Kg	在庫 Stock
SRKIN6.SL70.80	6	70	21	27.0	30	38.0	65	80	25	36	M5	0.7	●
SRKIN8.SL70.80	8	70	21	27.0	30	38.0	65	80	25	36	M6	0.7	●
SRKIN10.SL70.80	10	70	24	32.0	30	51.0	65	80	31	42	M8	0.8	●
SRKIN12.SL70.80	12	70	24	32.0	30	51.0	65	80	36	42	M8	0.8	●
SRKIN14.SL70.80	14	70	27	34.0	30	45.0	65	80	36	47	M10	0.9	●

- 适配刀柄需单独订购, 请参照: D017,D031,D041 页
- 订货示例: 1 件 SRKIN6.SL70.80
- The adaptor should be ordered separately, please see page D017,D031,D041.
- Ordering sample: 1 PC SRKIN6.SL70.80

备件

Spare Parts

E	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
M5	SR50 M5x20.BC	KEY01 M2.5
M6	SR50 M6x20.BC	KEY01 M3
M8	SR50 M8x20.BC	KEY01 M4
M10	SR50 M10x18.BC	KEY01 M5
M12	SR50 M12x18.BC	KEY01 M6
M16	SR50 M16x20.BC	KEY01 M8

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR EXTENSIONS FOR ADAPTORS 模块式刀柄接杆

BBT 刀柄

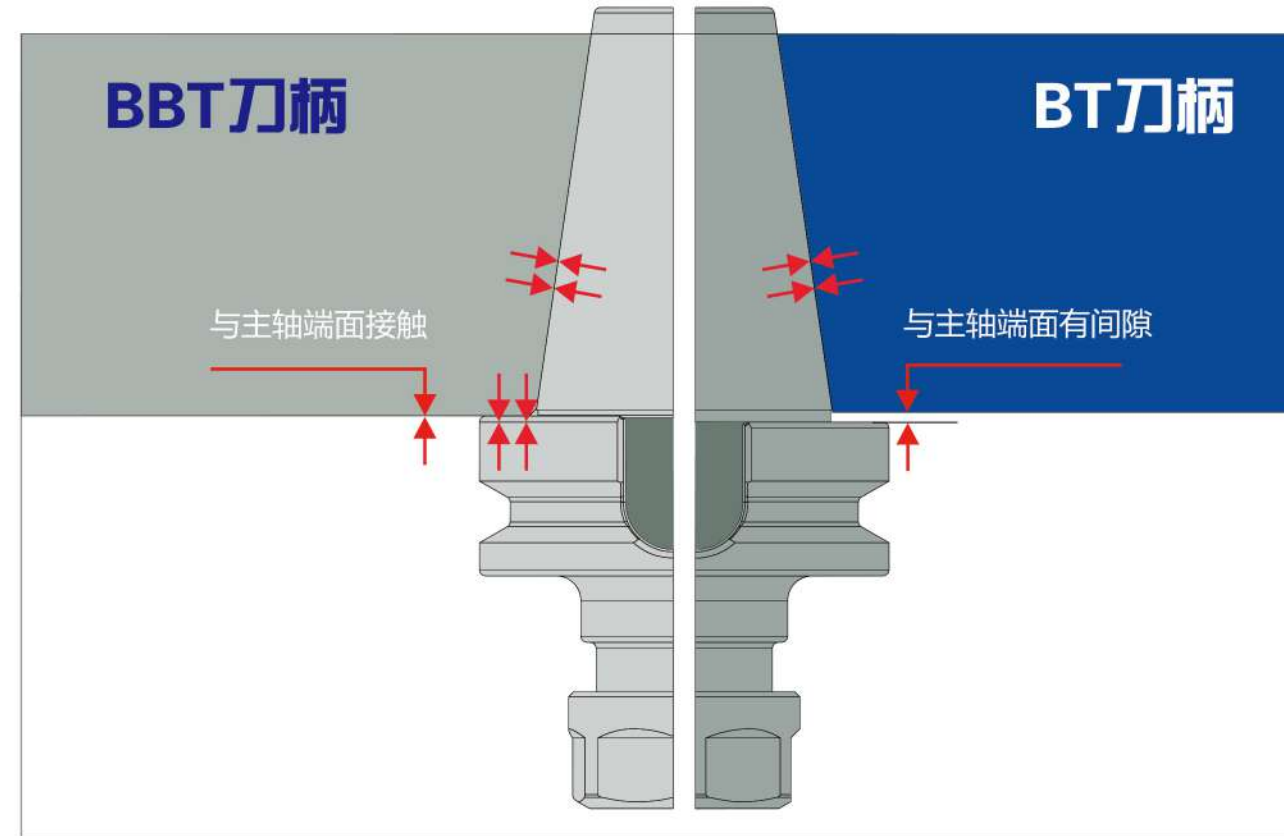
BBT Adaptor

双面接触刀柄，与普通 BT 刀柄可互换，刚性、定位精度大幅度提高，根据客户需求非标订制。

It is big plus, and can be replaced with BT adaptor. With higher rigidity, accuracy. Ordered as customer's design.

特点 Features

- | | |
|-----------------|--|
| 1. 增大定位基准，增强刚性。 | 1. Higher rigidity and location datum |
| 2. 提高加工尺寸稳定性。 | 2. Higher stability |
| 3. 提高轴向定位精度。 | 3. Higher accuracy of axial direction |
| 4. 可有效控制刀具振动。 | 4. Reduce the vibration situation |
| 5. 刀具寿命延长。 | 5. Longer tool life |
| 6. 高速运转时更安全。 | 6. Much safer when with high speed condition |



TURNING TOOLS
车削刀具

CONTENTS

E TURNING TOOLS 车削刀具

ISO DESIGNATION KEY FOR TURNING 刀具识别系统 E001-E004

EXTERNAL TURNING TOOL SERIES 外圆车削刀具 E007-E030

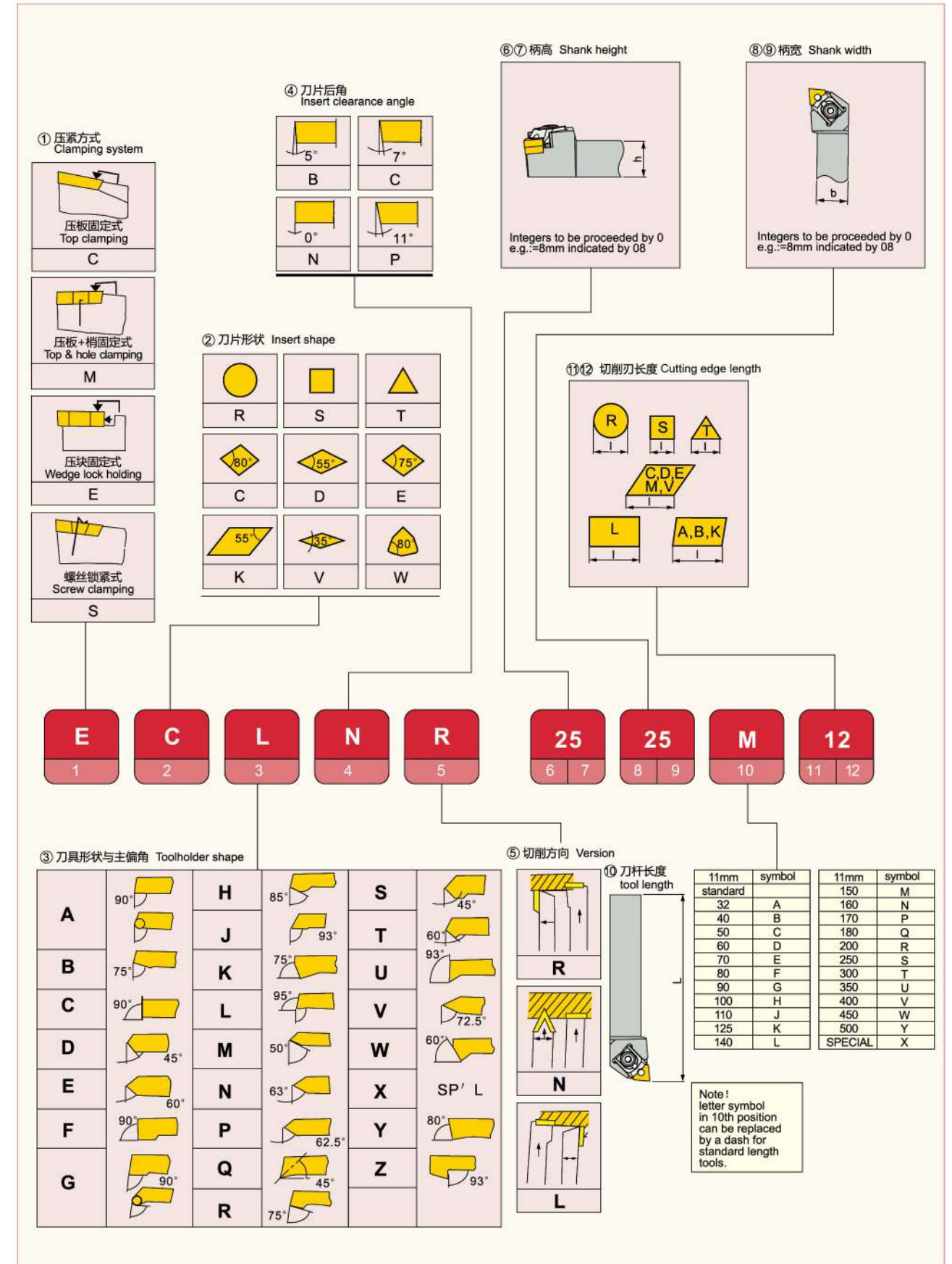
BORING BAR SERIES 内圆车削刀具 E032-E071

THREADING TURNING TOOL SERIES 螺纹车削刀具 E072-E075

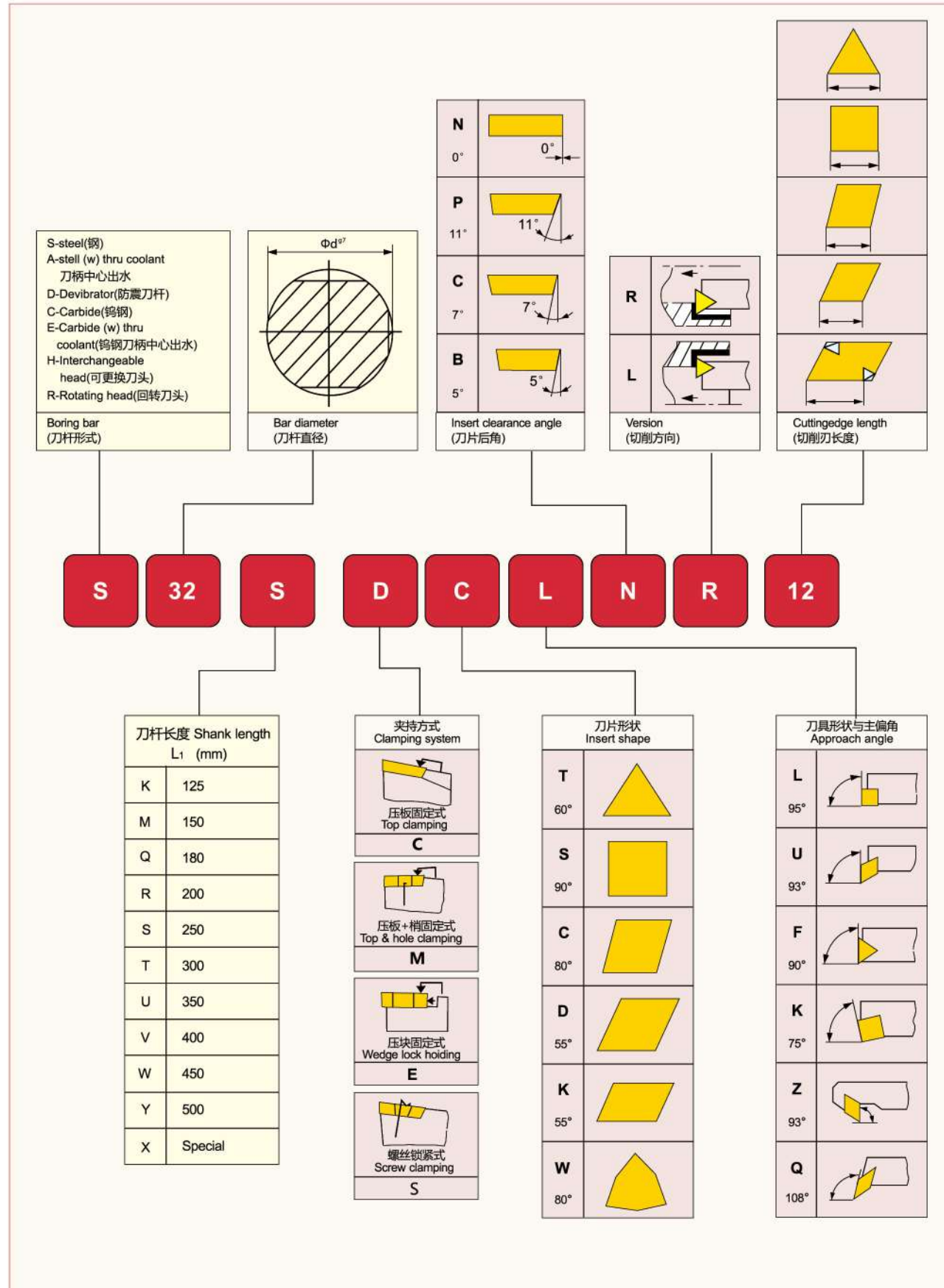
GROOVING TOOL SERIES 切槽刀具 E077-E091

MACHINE TOOL ACCESSORIES 机床配件 E092-E094

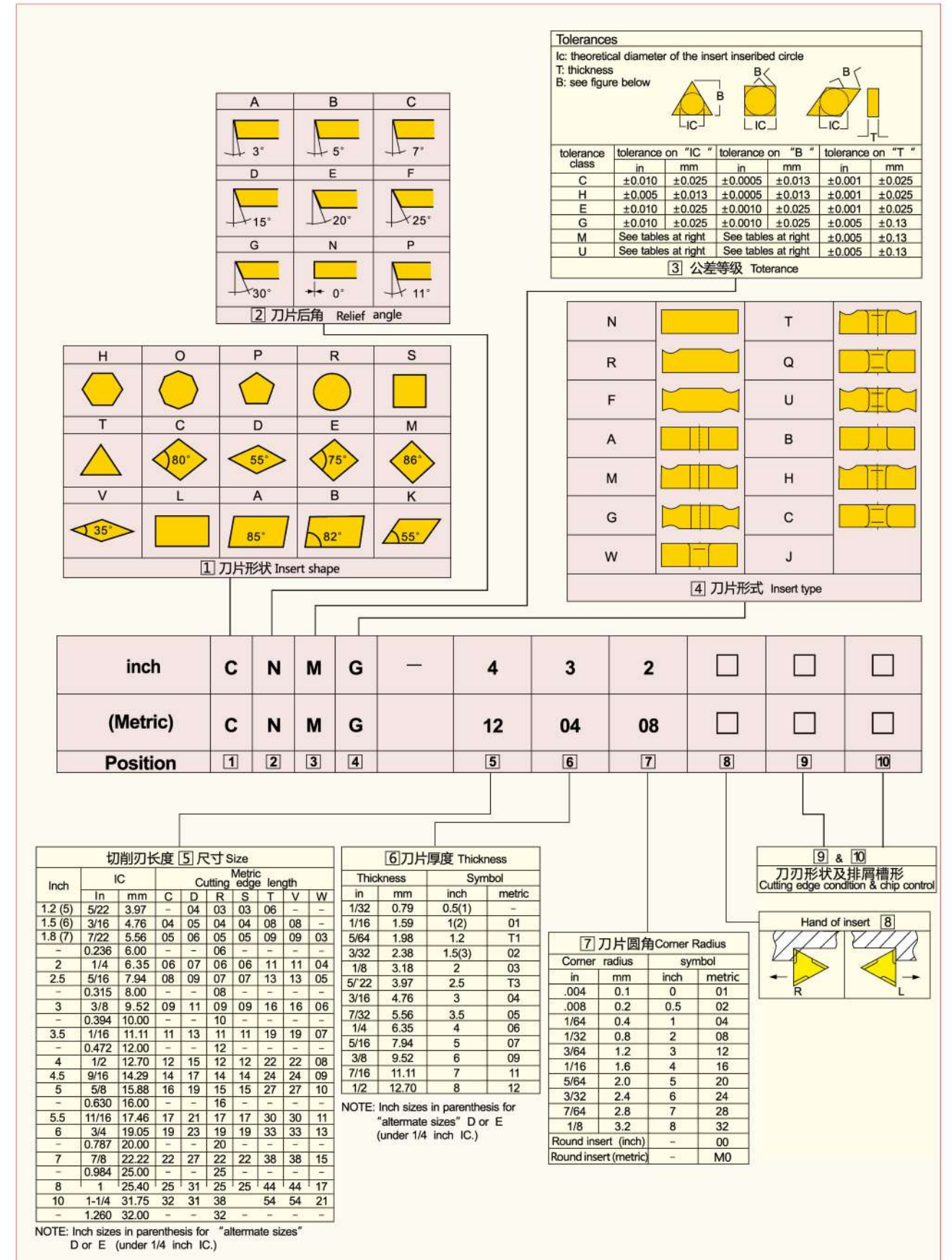
ISO DESIGNATION KEY FOR EXTERNAL TURNING TOOL 外圆车刀杆识别系统



ISO DESIGNATION KEY FOR BORING BAR 内圆车刀杆识别系统

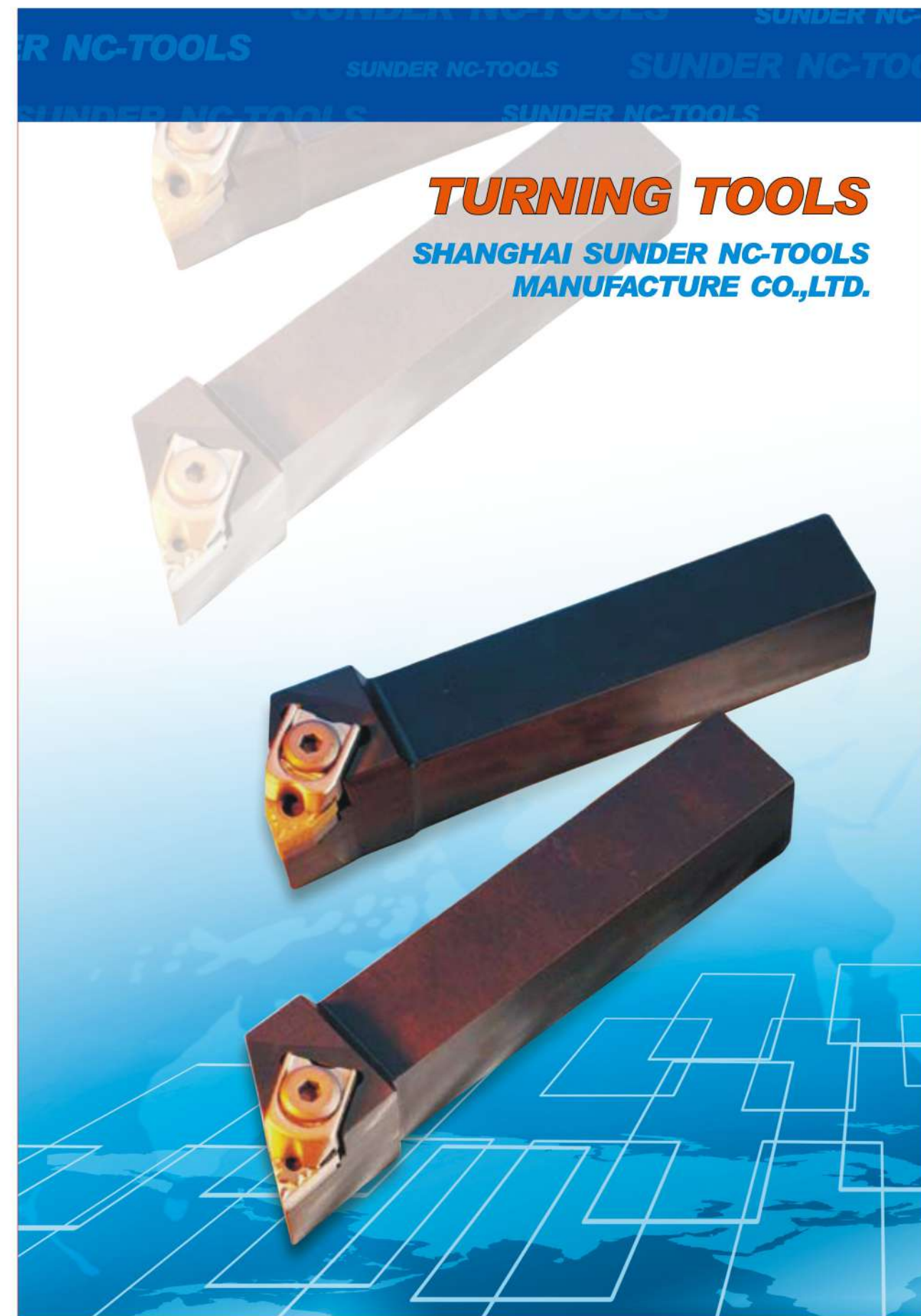
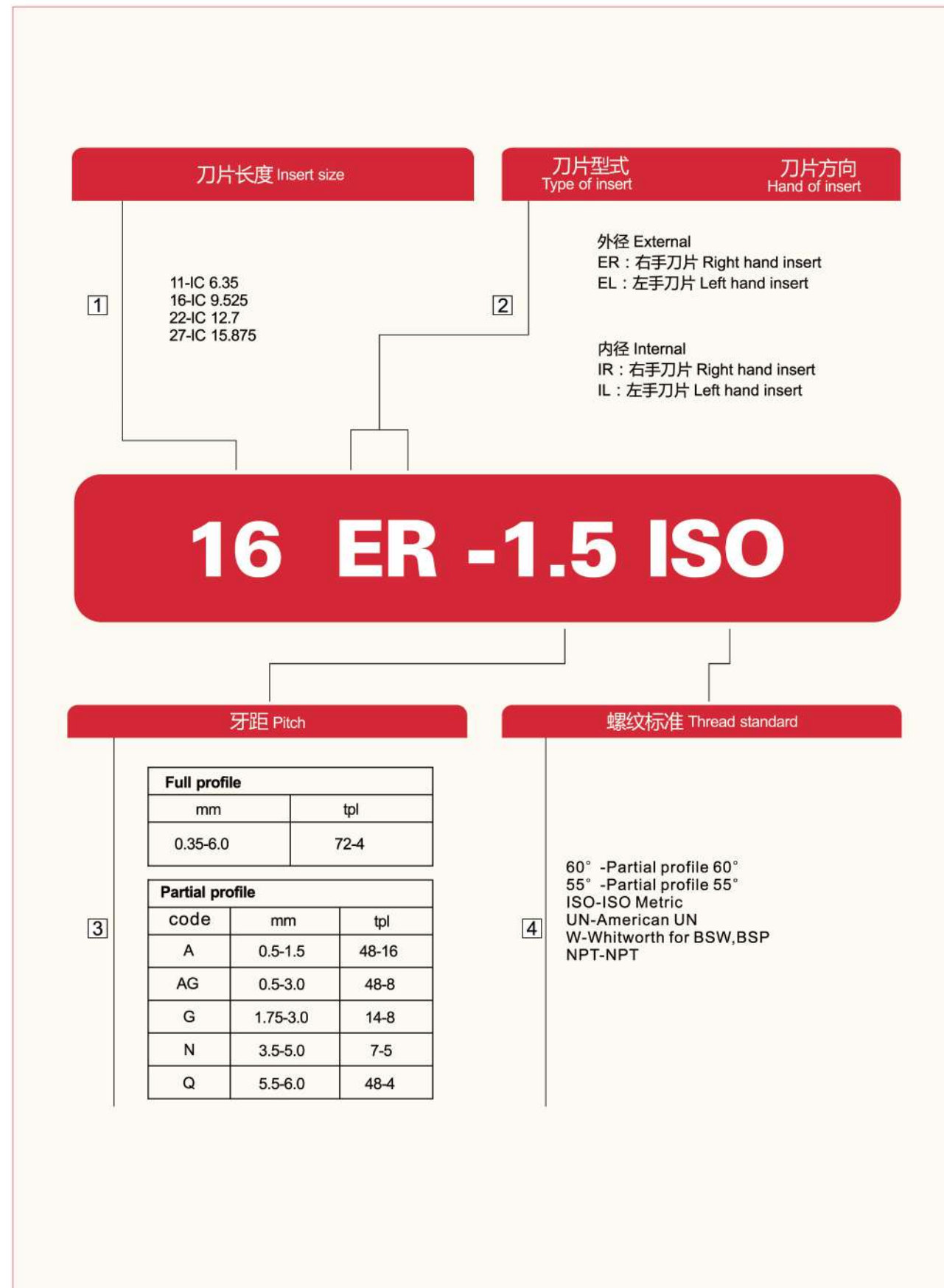


ISO DESIGNATION KEY FOR INDEXABLE INSERT 刀片识别系统



DESIGNATION KEY FOR THRFAD INSERT

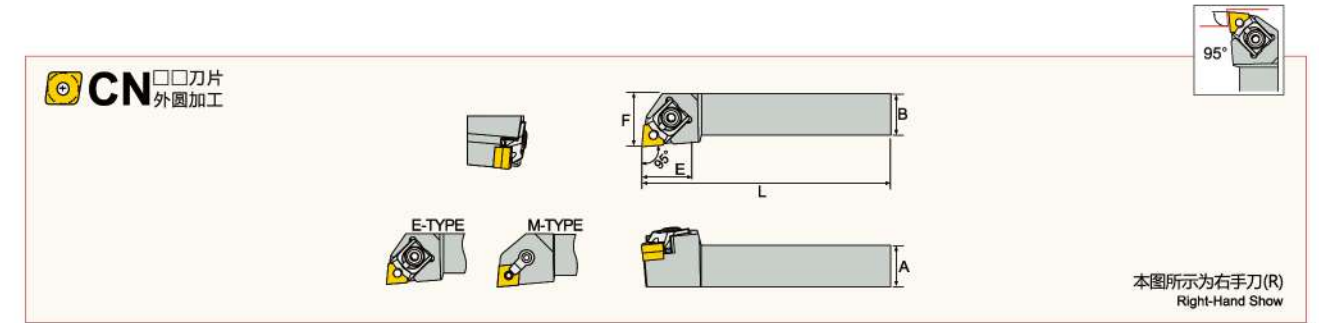
螺纹刀片识别系统



PRODUCT RANGE OVERVIEW OF EXTERNAL TURNING TOOLS 外圆车削刀具索引

刀片类型 Insert	压紧方式 Structure	加工方式 Tooling			
C 80° 菱形 Diamond Type	双重锁紧式 Double Clamp	ECLN D007	ECKN D008	ECRN D009	
	螺丝锁紧式 Srew-on	SCLC D024			
T 三角形 Triangular Type	双重锁紧式 Double Clamp	ETJN D010	ETGN D011	ETEN D012	ETQN D013
	双重锁紧式 Double Clamp	EWLN D014			
	双重锁紧式 Double Clamp	EDJN D022	EDQN D023		
	螺丝锁紧式 Srew-on	SDJC D029	SDQC D029	SDNC D030	SDJC-N D030
D 55° 菱形 Diamond Type	双重锁紧式 Double Clamp	EVJN D018	EVVN D020	EVVNR D019	EVQN D021
	螺丝锁紧式 Srew-on	SVJB D025	SVVB D025	SVUB D026	SVQB D026
	螺丝锁紧式 Srew-on	SVJC D027	SVVC D027	SVQC D028	SVJC(B)-N D025
	双重锁紧式 Double Clamp	ESDN D015	ESDN D015	ESSN D017	

EXTERNAL TURNING TOOL SERIES 外圆车削刀具 CLN95°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ECLNR/L-2020K12	20	20	125	32	25	CN..1204..	●	●
ECLNR/L-2525M12	25	25	150	32	32	CN..1204..	●	●
ECLNR/L-3232P12	32	32	170	32	40	CN..1204..	●	●
ECLNR/L-2525M16	25	25	150	32	32	CN..1204..	●	●
ECLNR/L-3232P16	32	32	170	32	40	CN..1204..	●	●

- 订货示例: 1 件 ECLNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC ECLNR-2020K12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
MCLNR/L-1616K12	16	16	125	32	20	CN..1204..	●	●
MCLNR/L-2020K12	20	20	125	32	25	CN..1204..	●	●
MCLNR/L-2525M12	25	25	150	32	32	CN..1204..	●	●
MCLNR/L-3232P12	32	32	170	32	40	CN..1204..	●	●

- 订货示例: 1 件 MCLNR-1616K12
- 刀片需单独订购
- Ordering sample: 1 PC MCLNR-1616K12
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ECLNR/L-2020K12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040
ECLNR/L-2525M12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040
ECLNR/L-3232P12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040
ECLNR/L-2525M16	SMC-416	LW-5	CN12-2	CS80	C-6	LW040
ECLNR/L-3232P16	SMC-416	LW-5	CN12-2	CS80	C-6	LW040

备件

Spare Parts

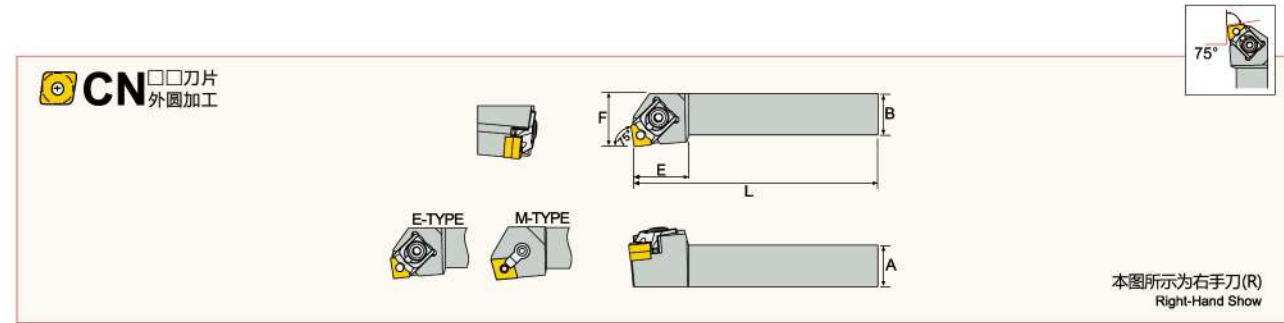
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MCLNR/L-1616K12	SMC-432	LCS-617	CP50-22	CS70-21	LW030
MCLNR/L-2020K12	SMC-432	LCS-617	CP50-22	CS70-21	LW030
MCLNR/L-2525M12	SMC-432	LCS-617	CP50-22	CS70-22	LW030
MCLNR/L-3232P12	SMC-432	LCS-617	CP50-22	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

CKN75°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
ECKNR/L-2020K12	20	20	125	32	25	CN..1204..	●	●
ECKNR/L-2525M12	25	25	150	32	32	CN..1204..	●	●
ECKNR/L-3232P12	32	32	170	32	40	CN..1204..	●	●

- 订货示例: 1 件 ECKNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC ECKNR-20201<12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
MCKNR/L-2020K12	20	20	125	32	25	CN..1204..	●	●
MCKNR/L-2525M12	25	25	150	32	32	CN..1204..	●	●
MCKNR/L-3232P12	32	32	170	32	40	CN..1204..	●	●

- 订货示例: 1 件 MCKNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC MCKNR-2020K12
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ECKNR/L-2020K12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECKNR/L-2525M12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECKNR/L-3232P12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040

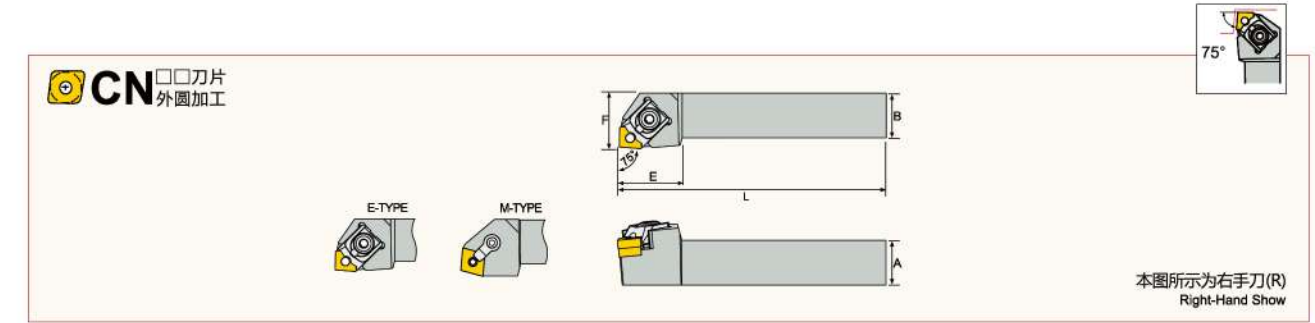
备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MCKNR/L-2020K12	SMC-432	LCS-617	CP50-22	CS70-21	LW030
MCKNR/L-2525M12	SMC-432	LCS-617	CP50-22	CS70-22	LW030
MCKNR/L-3232P12	SMC-432	LCS-617	CP50-22	CS70-22	LW030

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

CRN75°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
ECRNR/L-2020K12	20	20	125	32	25	CN..1204..	●	●
ECRNR/L-2525M12	25	25	150	32	32	CN..1204..	●	●
ECRNR/L-3232P12	32	32	170	32	40	CN..1204..	●	●

- 订货示例: 1 件 ECRNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC ECRNR-2020K12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
MCRNR/L-2020K12	20	20	125	32	25	CN..1204..	●	●
MCRNR/L-2525M12	25	25	150	32	32	CN..1204..	●	●
MCRNR/L-3232P12	32	32	170	32	40	CN..1204..	●	●

- 订货示例: 1 件 MCRNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC MCRNR-2020K12
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ECRNR/L-2020K12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECRNR/L-2525M12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECRNR/L-3232P12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040

备件

Spare Parts

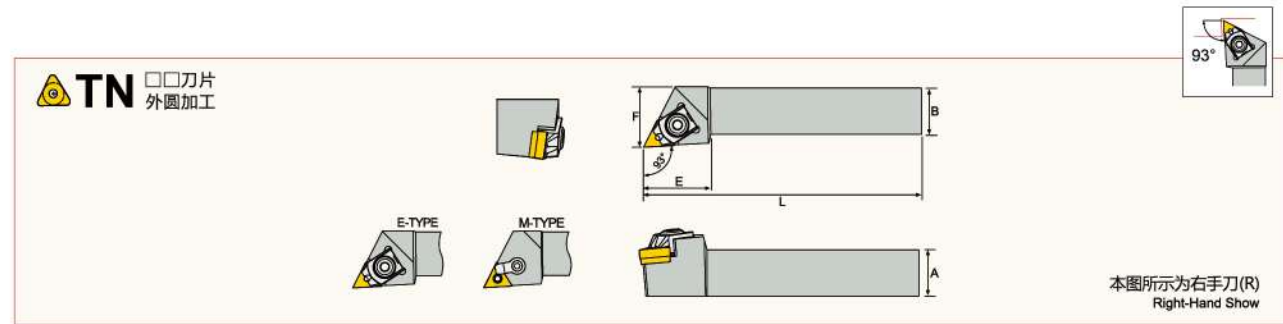
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MCRNR/L-2020K12	SMC-432	LCS-617	CP50-22	CS70-21	LW030
MCRNR/L-2525M12	SMC-432	LCS-617	CP50-22	CS70-22	LW030
MCRNR/L-3232P12	SMC-432	LCS-617	CP50-22	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

TJN93°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ETJNR/L-1616K16	16	16	125	30	20	TN..1604..	●	●
ETJNR/L-2020K16	20	20	125	32	25	TN..1604..	●	●
ETJNR/L-2525M16	25	25	150	32	32	TN..1604..	●	●
ETJNR/L-3232P16	32	32	170	32	40	TN..1604..	●	●

- 订货示例: 1 件 ETJNR-1616K16
- 刀片需单独订购
- Ordering sample: 1 PC ETJNR-1616K16
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
MTJNR/L-1616K16	16	16	125	30	20	TN..1604..	●	●
MTJNR/L-2020K16	20	20	125	32	25	TN..1604..	●	●
MTJNR/L-2525M16	25	25	150	32	32	TN..1604..	●	●
MTJNR/L-3232P16	32	32	170	32	40	TN..1604..	●	●

- 订货示例: 1 件 MTJNR-1616K16
- 刀片需单独订购
- Ordering sample: 1 PC MTJNR-1616K16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ETJNR/L-1616K16	SMT-322	LT-4	TN16-2	CS60E	C-5	LW025 LW040
ETJNR/L-2020K16	SMT-322	LT-3	TN16-3	CS60	C-6	LW025 LW040
ETJNR/L-2525M16	SMT-322	LT-3	TN16-3	CS60	C-6	LW025 LW040
ETJNR/L-3232P16	SMT-322	LT-3	TN16-3	CS60	C-6	LW025 LW040

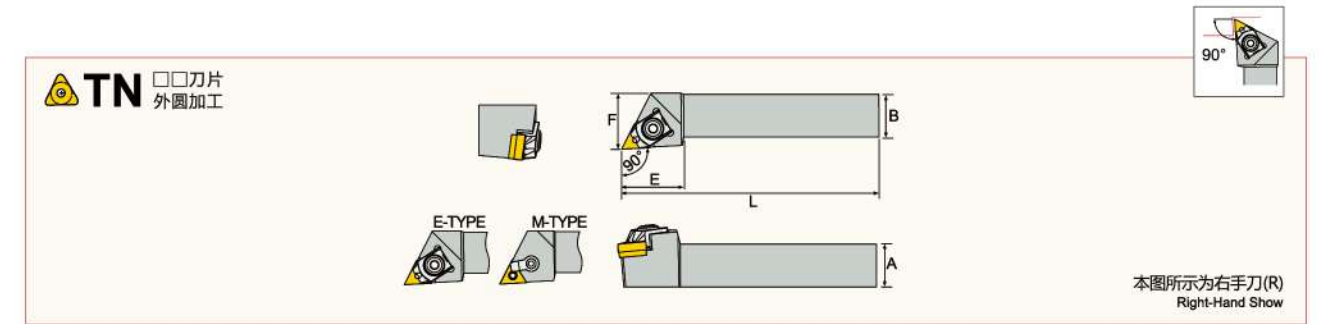
备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MTJNR/L-1616K16	SMT-322	LCS-513	CP50-22	CS70-21	LW020 LW030
MTJNR/L-2020K16	SMT-322	LCS-513	CP50-22	CS70-21	LW020 LW030
MTJNR/L-2525M16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030
MTJNR/L-3232P16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

TGN90°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ETGNR/L-1616K16	16	16	125	30	20	TN..1604..	●	●
ETGNR/L-2020K16	20	20	125	32	25	TN..1604..	●	●
ETGNR/L-2525M16	25	25	150	32	32	TN..1604..	●	●

- 订货示例: 1 件 ETxNR-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC ETxNR-2020K16
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
MTGNR/L-1616K16	16	16	125	32	20	TN..1604..	●	●
MTGNR/L-2020K16	20	20	125	32	25	TN..1604..	●	●
MTGNR/L-2525M16	25	25	150	32	32	TN..1604..	●	●

- 订货示例: 1 件 MTGNR-1616K16
- 刀片需单独订购
- Ordering sample: 1 PC MTGNR-1616K16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ECRNR/L-2020K12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECRNR/L-2525M12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECRNR/L-3232P12	MC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040

备件

Spare Parts

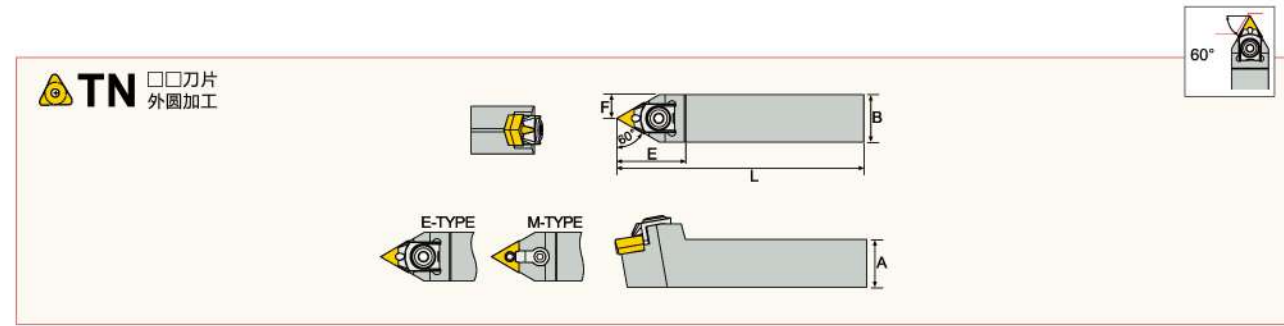
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MTGNR/L-1616K16	SMT-322	LCS-513	CP50-22	CS70-21	LW020 LW030
MTGNR/L-2020K16	SMT-322	LCS-513	CP50-22	CS70-21	LW020 LW030
MTGNR/L-2525M16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

7EN60°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ETENN-2020K16	20	20	125	32	10	TN..1604..	●	●
ETENN-2525M16	25	25	150	32	12.5	TN..1604..	●	●

- 订货示例: 1 件 ETENN-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC ETENN-2020a<16
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
MTENN-2020K16	20	20	125	32	10	TN..1604..	●	●
MTENN-2525M16	25	25	150	32	12.5	TN..1604..	●	●

- 订货示例: 1 件 MTENN-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC MTENN-20201<16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ETENN-2020K16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
ETENN-2525M16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040

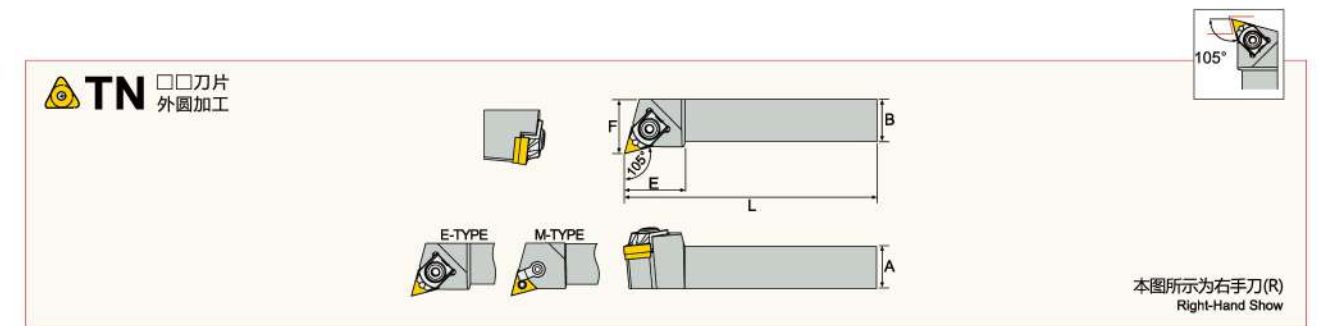
备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MTENN-2020K16	SMT-322	LCS-513	CP50-22	CS70-21	LW020 LW030
MTENN-2525M16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

TQN105°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ETQNR/L-2020K16	20	20	125	32	25	TN..1604..	●	●
ETQNR/L-2525M16	25	25	150	32	32	TN..1604..	●	●
ETQNR/L-3232P16	32	32	170	32	40	TN..1604..	●	●

- 订货示例: 1 件 ETQNR-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC ETQNR-2020K16
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ETQNR/L-2020K16	20	20	125	32	25	TN..1604..	●	○
ETQNR/L-2525M16	25	25	150	32	32	TN..1604..	●	○
ETQNR/L-3232P16	32	32	170	32	40	TN..1604..	●	○

- 订货示例: 1 件 ETQNR-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC ETQNR-2020K16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ETQNR/L-2020K16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
ETQNR/L-2525M16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
ETQNR/L-3232P16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040

备件

Spare Parts

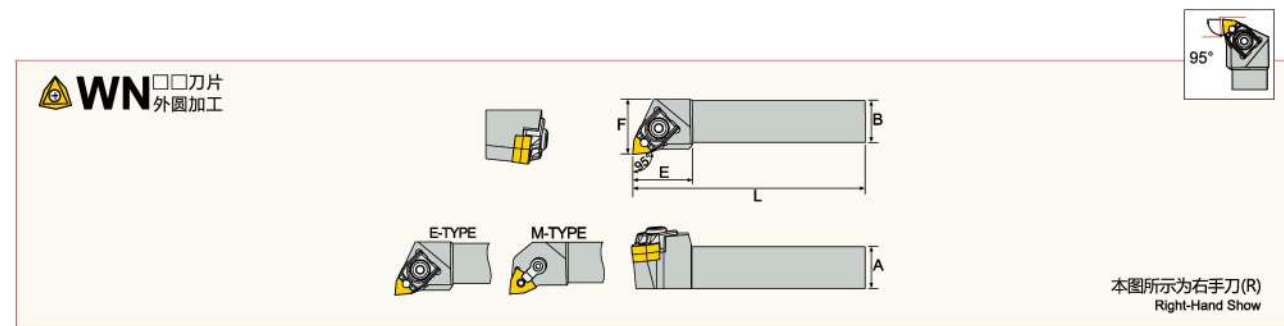
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MTQNR/L-2020K16	SMT-322	LCS-513	CP50-22	CS70-21	LW020 LW030
MTQNR/L-2525M16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030
MTQNR/L-3232P16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

WLN95°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
EWLNR/L-2020K06	20	20	125	32	25	WN..0604..	●	●
EWLNR/L-2525M06	25	25	150	32	32	WN..0604..	●	●
EWLNR/L-2020K08	20	20	125	32	25	WN..0604..	●	●
EWLNR/L-2525M08	25	25	150	32	32	WN..0604..	●	●
EWLNR/L-3232P08	31	32	170	32	40	WN..0604..	●	●

- 订货示例: 1件 EWLNR-2020K06
- 刀片需单独订购
- Ordering sample: 1 PC EWLNR-2021JK00
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
MWLNR/L-2020K08	20	20	125	32	25	WN..0804..	●	●
MWLNR/L-2525M08	25	25	150	32	32	WN..0804..	●	●
MWLNR/L-3232P08	32	32	170	32	40	WN..0804..	●	●

- 订货示例: 1件 MWLNR-2020K08
- 刀片需单独订购
- Ordering sample: 1 PC MWLNR-2020K08
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C扣环 Clasp	L型扳手 Allen key
EWLNR/L-2020K06	SMW-406	LT-3	WN06-2	CS60E	C-5	LW025 LW030
EWLNR/L-2525M06	SMW-406	LT-3	WN06-2	CS60E	C-5	LW025 LW030
EWLNR/L-2020K08	SMW-406	LT-3	WN06-4	CS80	C-6	LW030 LW040
EWLNR/L-2525M08	SMW-406	LT-3	WN06-4	CS80	C-6	LW030 LW040
EWLNR/L-3232P08	SMW-406	LT-3	WN06-4	CS80	C-6	LW030 LW040

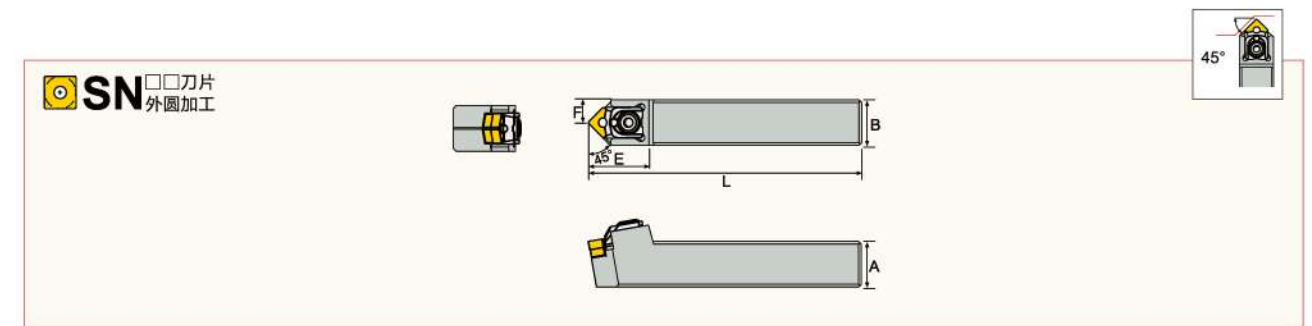
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Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
MWLNR/L-2020K08	SMW-422	LCS-617	CP50-22	CS70-21	LW030
MWLNR/L-2525M08	SMW-422	LCS-617	CP50-22	CS70-21	LW030
MWLNR/L-3232P08	SMW-422	LCS-617	CP50-22	CS70-21	LW030

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SDN45°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock
	A	B	L	E	F		
ESDNN-2020K12	20	20	125	34	10	SN..1204..	●
ESDNN-2525M12	25	25	150	34	12.5	SN..1204..	●
ESDNN-3232P12	32	32	170	34	16	SN..1204..	●

- 订货示例: 1件 ESDNN-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC ESDNN-2020K12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock
	A	B	L	E	F		
MSDNN-2020K12	20	20	125	34	10	SN..1204..	●
MSDNN-2525M12	25	25	150	34	12.5	SN..1204..	●
MSDNN-3232P12	32	32	170	34	16	SN..1204..	●

- 订货示例: 1件 MSDNN-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC MSDNN-2020K12
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C扣环 Clasp	L型扳手 Allen key
ESDNN-2020K12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040
ESDNN-2525M12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040
ESDNN-3232P12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040

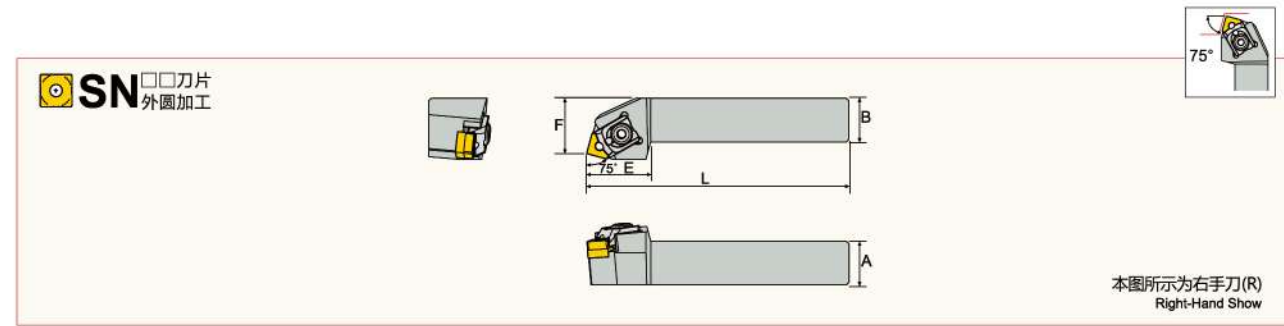
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Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
MSDNN-2020K12	SMS-423	LCS-617	CP50-22	CS70-21	LW030
MSDNN-2525M12	SMS-423	LCS-617	CP50-22	CS70-22	LW030
MSDNN-3232P12	SMS-423	LCS-617	CP50-22	CS70-22	LW030

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SBN75°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ESB NR/L-2020K12	20	20	125	32	25	SN..1204..	●	●
ESB NR/L-2525M12	25	25	150	32	32	SN..1204..	●	●
ESB NR/L-3232P12	32	32	170	32	40	SN..1204..	●	●

- 订货示例: 1 件 ESB NR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC ESB NR-2020K12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
MSB NR/L-2020K12	20	20	125	32	17	SN..1204..	●	●
MSB NR/L-2525M12	25	25	150	32	22	SN..1204..	●	●
MSB NR/L-3232P12	32	32	170	32	27	SN..1204..	●	●

- 订货示例: 1 件 MSB NR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC MSB NR-2020K12
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ESB NR/L-2020K12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040
ESB NR/L-2525M12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040
ESB NR/L-3232P12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040

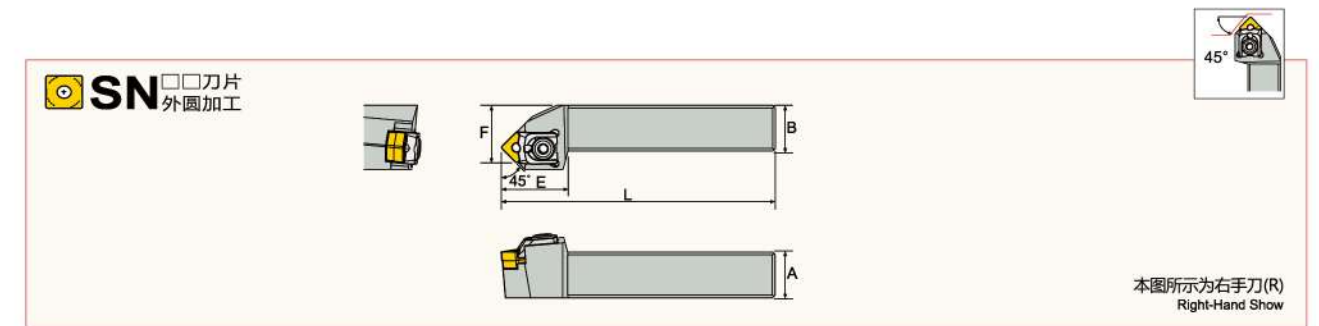
备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MSB NR/L-2020K12	SMS-423	LCS-617	CP50-22	CS70-21	LW030
MSB NR/L-2525M12	SMS-423	LCS-617	CP50-22	CS70-22	LW030
MSB NR/L-3232P12	SMS-423	LCS-617	CP50-22	CS70-22	LW030

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SSN45°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ESS NR/L-2020K12	20	20	125	32	25	SN..1204..	●	●
ESS NR/L-2525M12	25	25	150	32	32	SN..1204..	●	●
ESS NR/L-3232P12	32	32	170	32	40	SN..1204..	●	●

- 订货示例: 1 件 ESS NR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC ESS NR-2020K12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
MSS NR/L-2020K12	20	20	125	32	25	SN..1204..	●	●
MSS NR/L-2525M12	25	25	150	32	32	SN..1204..	●	●
MSS NR/L-3232P12	32	32	170	32	40	SN..1204..	●	●

- 订货示例: 1 件 MSS NR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC MSS NR-2020K12
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ESS NR/L-2020K12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040
ESS NR/L-2525M12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040
ESS NR/L-3232P12	SMS-423	LW-4	SN12	CS80	C-6	LW030 LW040

备件

Spare Parts

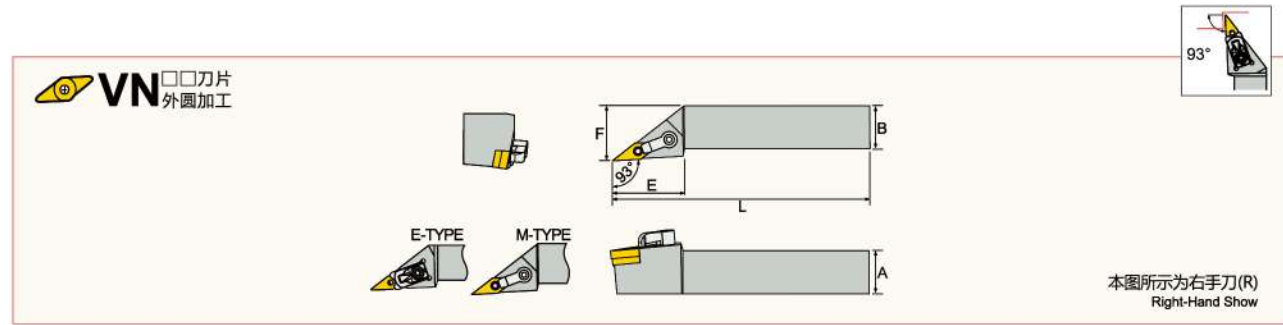
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
MSS NR/L-2020K12	SMS-423	LCS-617	CP50-22	CS70-21	LW030
MSS NR/L-2525M12	SMS-423	LCS-617	CP50-22	CS70-22	LW030
MSS NR/L-3232P12	SMS-423	LCS-617	CP50-22	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

VJN 93°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
EVJNR/L-2020K12	20	20	125	47	25	VN..12T3..	●	●
EVJNR/L-2525M12	25	25	150	47	32	VN..12T3..	●	●
EVJNR/L-2020K16	20	20	125	47	25	VN..1640..	●	●
EVJNR/L-2525M16	25	25	150	47	32	VN..1640..	●	●
EVJNR/L-3232P16	32	32	170	47	40	VN..1640..	●	●

- 订货示例: 1 件 EVJNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC EVJNR-2020K12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
EVJNR/L-2020K16	20	20	125	37	25	VN..1640..	●	●
EVJNR/L-2525M16	25	25	150	37	32	VN..1640..	●	●
EVJNR/L-3232P16	32	32	170	37	40	VN..1640..	●	●

- 订货示例: 1 件 MVJNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC MVJNR-2020K12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
EVJNR/L-2020K12	20	20	125	37	25	VN..12T3..	●	●
EVJNR/L-2525M12	25	25	150	37	32	VN..12T3..	●	●

- 订货示例: 1 件 SVJNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC SVJNR-2020K12
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EVJNR/L-2020K12	-	LT-1	VN12	CS60E	C-5	LW025 LW030
EVJNR/L-2525M12	-	LT-1	VN12	CS60E	C-5	LW025 LW030
EVJNR/L-2020K16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVJNR/L-2525M16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVJNR/L-3232P16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
EVJNR/L-2525M16	SMV-322	LCT-513	CP50-24	CS70-21	LW020 LW030
EVJNR/L-3232P16	SMV-322	LCT-513	CP50-24	CS70-21	LW020 LW030
EVJNR/L-3232P16	SMV-322	LCT-513	CP50-24	CS70-21	LW020 LW030

备件

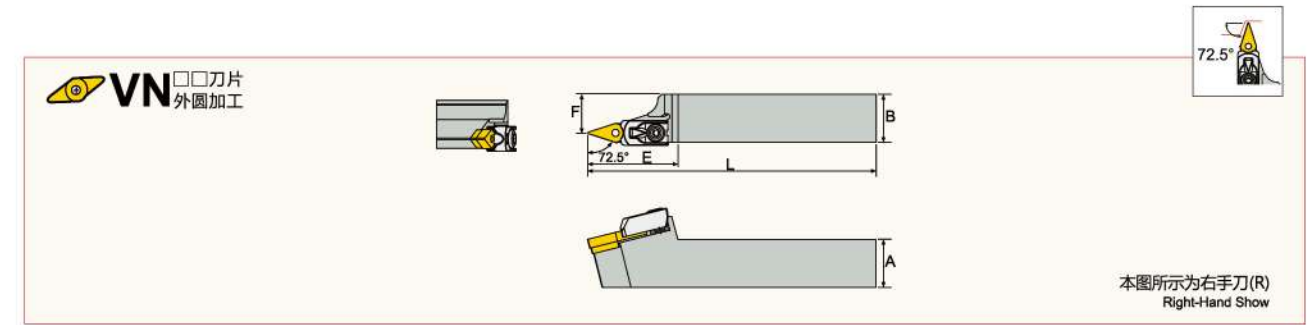
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 wrench
EVJNR/L-2020K12	CS30	T-10
EVJNR/L-2525M12	CS30	T-10

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

VVN72.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
EVJNR/L-2020K16	20	20	125	48	25	VN..1640..	●	●
EVJNR/L-2525M16	25	25	150	48	32	VN..1640..	●	●

- 订货示例: 1 件 EWNR-2020K12
- 刀片需单独订购
- Ordering sample: 1 PC EWNR-2020K12
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
EVJNR/L-2020K16	20	20	125	48	25	VN..1640..	●	●
EVJNR/L-2525M16	25	25	150	48	32	VN..1640..	●	●

- 订货示例: 1 件 MWNR-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC MWNR-2020K16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EVJNR/L-2020K16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVJNR/L-2525M16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

备件

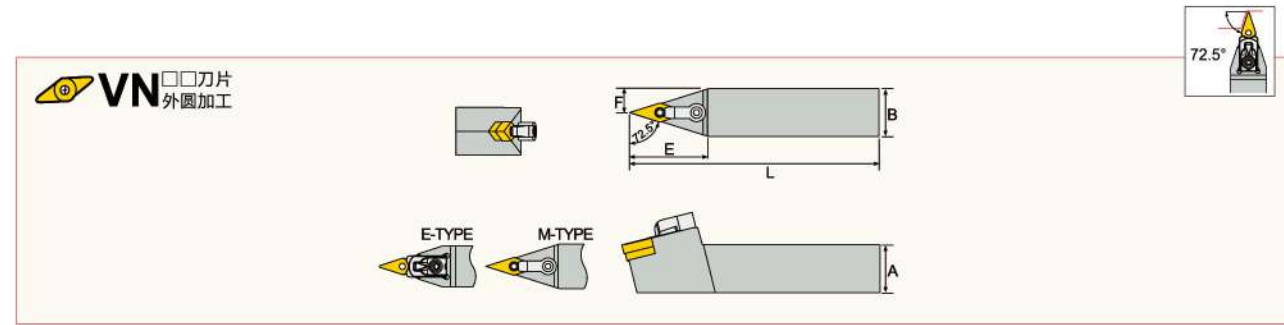
Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
EVJNR/L-2525M16	SMV-322	LCT-513	CP50-24	CS70-21	LW020 LW030
EVJNR/L-3232P16	SMV-322	LCT-513	CP50-24	CS70-21	LW020 LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

VVN72.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EVVNN-2020K16	20	20	125	48	10	VN..1640..	●	●
EVVNN-2525M16	25	25	150	48	12.5	VN..1640..	●	●
EVVNN-3232P16	32	32	170	48	16	VN..1640..	●	●

- 订货示例: 1 件 EVVNN-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC EVVNN-2020K16
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EVVNN-2020K16	20	20	125	48	10	VN..1640..	●	●
EVVNN-2525M16	25	25	150	48	12.5	VN..1640..	●	●
EVVNN-3232P16	32	32	170	48	16	VN..1640..	●	●

- 订货示例: 1 件 MVVNN-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC MVVNN-2020K16
- Insert should be ordered separately

备件

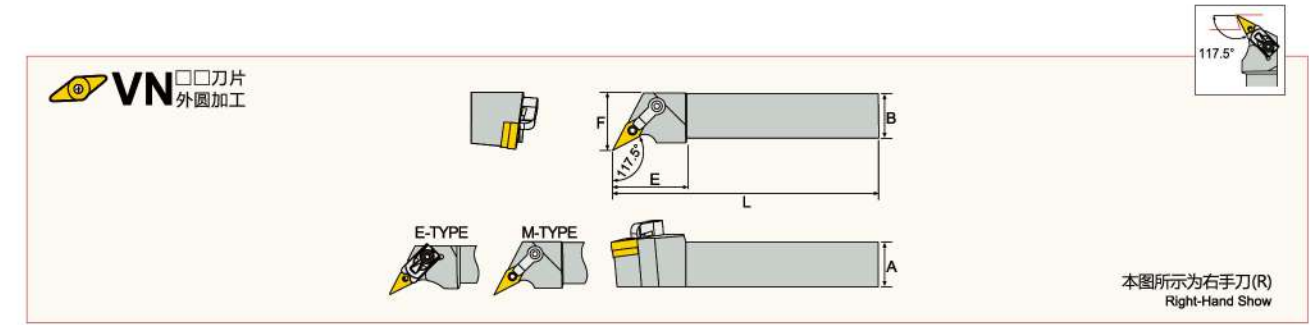
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EVVNN-2020K16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVVNN-2525M16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVVNN-3232P16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

备件

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
EVVNN-2020K16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030
EVVNN-2525M16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030
EVVNN-3232P16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

VQN 117.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EVQNR/L-2020K16	32	25	125	40	32	VN..1640..	●	●
EVQNR/L-3232M16	25	32	150	40	40	VN..1640..	●	●

- 订货示例: 1 件 EVQNR-2525K16
- 刀片需单独订购
- Ordering sample: 1 PC EVQNR-2525M16
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EVJNR/L-2020K16	32	20	125	40	25	VN..1640..	●	●
EVJNR/L-2525M16	25	25	150	40	32	VN..1640..	●	●
EVJNR/L-3232P16	32	25	170	40	40	VN..1640..	●	●

- 订货示例: 1 件 MVQNR-2020K16
- 刀片需单独订购
- Ordering sample: 1 PC MVQNR-2020K16
- Insert should be ordered separately

备件

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EVJNR/L-2525M16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVJNR/L-3232P16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

备件

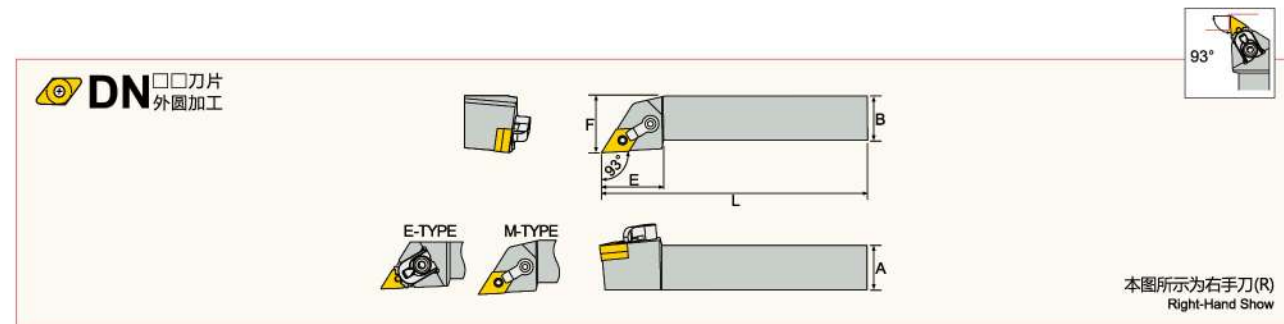
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
EVJNR/L-2020K16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030
EVJNR/L-2525M16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030
EVJNR/L-3232P16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

DJN93°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EDJNR/L-2020K11	20	20	125	36	25	DN..1104..	●	●
EDJNR/L-2525M11	25	25	150	36	32	DN..1104..	●	●
EDJNR/L-2020K15	20	20	125	36	25	DN..1504..	●	●
EDJNR/L-2525M15	25	25	150	36	32	DN..1504..	●	●
EDJNR/L-3232P15	32	32	170	36	40	DN..1504..	●	●

- 订货示例: 1 件 EDJNR-2020K11
- 刀片需单独订购
- Ordering sample: 1 PC EDJNR-2020K11
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EDJNR/L-2020K15	20	20	125	36	25	DN..1504..	●	●
EDJNR/L-2525M15	25	25	150	36	32	DN..1504..	●	●
EDJNR/L-3232P15	32	32	170	36	40	DN..1504..	●	●

- 订货示例: 1 件 MDJNR-2020K15
- 刀片需单独订购
- Ordering sample: 1 PC MDJNR-2020K15
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EDJNR/L-2020K11	SMD-363	LT-3	DN11	CS60E	C-5	LW025 LW030
EDJNR/L-2525M11	SMD-363	LT-3	DN11	CS60E	C-5	LW025 LW030
EDJNR/L-2020K15	SMD-463	LD-1	DN15	CS80E	C-6	LW025 LW040
EDJNR/L-2525M15	SMD-463	LD-1	DN15	CS80E	C-6	LW025 LW040
EDJNR/L-3232P15	SMD-463	LD-1	DN15	CS80E	C-6	LW025 LW040

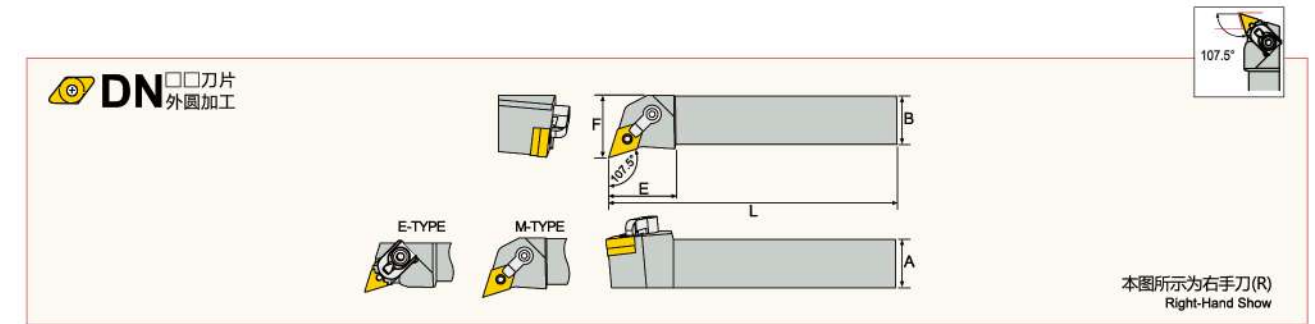
备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
EDJNR/L-2020K15	SMD-463	LCS-619	CP50-24	CS70-21	LW030
EDJNR/L-2525M15	SMD-463	LCS-619	CP50-24	CS70-22	LW030
EDJNR/L-3232P15	SMD-463	LCS-619	CP50-24	CS70-22	LW030

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

DQN107.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EDJNR/L-2525M15	25	25	150	36	32	DN..1504..	●	●
EDJNR/L-3232P15	32	32	170	36	40	DN..1504..	●	●

- 订货示例: 1 件 EDQNR-2525K15
- 刀片需单独订购
- Ordering sample: 1 PC EDQNR-2525K15
- Insert should be ordered separately

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EDJNR/L-2020K15	20	20	125	36	25	DN..1504..	●	●
EDJNR/L-2525M15	25	25	150	36	32	DN..1504..	●	●
EDJNR/L-3232P15	32	32	170	36	40	DN..1504..	●	●

- 订货示例: 1 件 MDQNR-2020K15
- 刀片需单独订购
- Ordering sample: 1 PC MDQNR-2020K15
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EDJNR/L-2525M15	SMD-463	LD-1	DN15	CS80E	C-6	LW025 LW040
EDJNR/L-3232P15	SMD-463	LD-1	DN15	CS80E	C-6	LW025 LW040

备件

Spare Parts

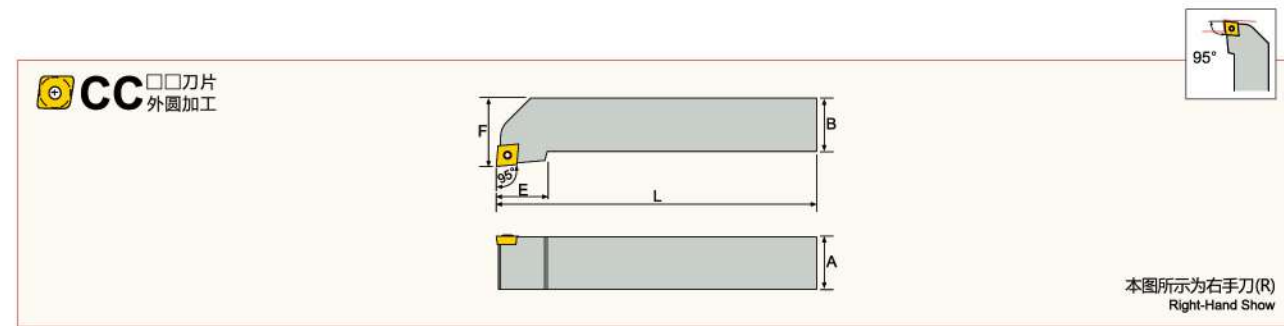
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
EDJNR/L-2020K15	SMD-463	LCS-619	CP50-24	CS70-21	LW030
EDJNR/L-2525M15	SMD-463	LCS-619	CP50-24	CS70-22	LW030
EDJNR/L-3232P15	SMD-463	LCS-619	CP50-24	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SCLC95°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SCLCR/L-0808K06	8	8	125	8	10	CC..0602..	●	●
SCLCR/L-1010K06	10	10	125	10	12	CC..0602..	●	●
SCLCR/L-1212K09	12	12	125	12	16	CC..09T3..	●	●
SCLCR/L-1616K09	16	16	125	16	20	CC..09T3..	●	●
SCLCR/L-2020K09	20	20	125	30	25	CC..09T3..	●	●
SCLCR/L-2525M09	25	25	150	30	32	CC..09T3..	●	●
SCLCR/L-2020K12	20	20	125	30	25	CC..1204..	●	●
SCLCR/L-2525M12	25	25	150	30	32	CC..1204..	●	●

- 订货示例: 1件 SCLCR-0808K06
- 刀片需单独订购
- Ordering sample: 1 PC SCLCR--OIDIK06
- Insert should be ordered separately

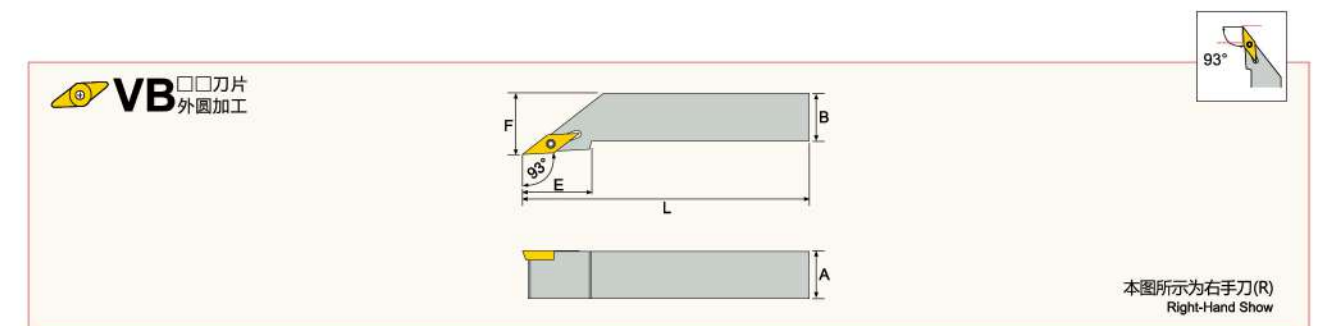
备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SCLCR/L-0808K06	CS25	T-8
SCLCR/L-1010K06	CS25	T-8
SCLCR/L-1212K09	CS35	T-15
SCLCR/L-1616K09	CS35	T-15
SCLCR/L-2020K09	CS35	T-15
SCLCR/L-2525M09	CS35	T-15
SCLCR/L-2020K12	CS45	T-15
SCLCR/L-2525M12	CS45	T-15

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SVJB93°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SVJBR/L-1010K11	10	10	125	18	12	VB..1103..	●	●
SVJBR/L-1212K11	12	12	125	18	16	VB..1103..	●	●
SVJBR/L-1616K11	16	16	125	30	20	VB..1103..	●	●
SVJBR/L-2020K11	20	20	125	30	25	VB..1103..	●	●
SVJBR/L-1616K16	16	20	125	30	20	VB..1604..	●	●
SVJBR/L-2020K16	20	20	125	30	25	VB..1604..	●	●
SVJBR/L-2525M16	25	25	150	30	32	VB..1604..	●	●

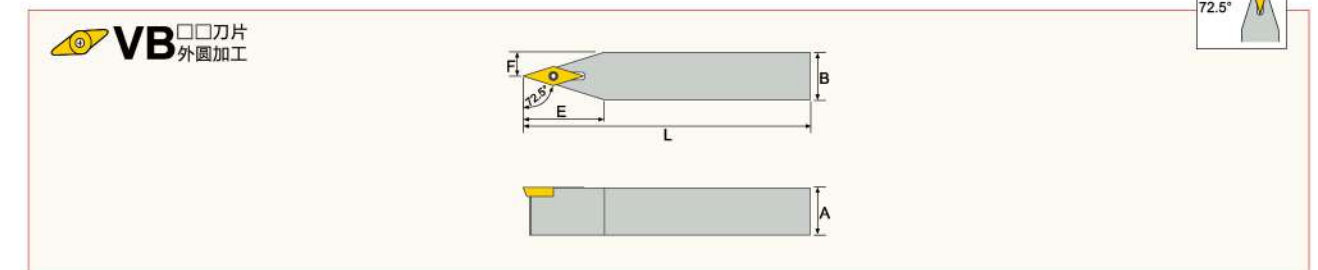
- 订货示例: 1件 SVJBR-1010K11
- 刀片需单独订购
- Ordering sample: 1 PC SVJBR-101DK11
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVJBR/L-1010K11	CS25	T-8
SVJBR/L-1212K11	CS25	T-8
SVJBR/L-1616K11	CS25	T-8
SVJBR/L-2020K11	CS25	T-8
SVJBR/L-1616K16	CS35	T-15
SVJBR/L-2020K16	CS35	T-15
SVJBR/L-2525K16	CS45	T-15

SVQB72.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
SVJBR/L-1010K11	10	10	125	18	5	VB..1103..	●
SVJBR/L-1212K11	12	12	125	18	6	VB..1103..	●
SVJBR/L-1616K11	16	16	125	30	8	VB..1103..	●
SVJBR/L-2020K16	20	20	125	30	10	VB..1604..	●
SVJBR/L-2525M16	25	25	150	30	12.5	VB..1604..	●

- 订货示例: 1件 SVVBN-1010K11
- 刀片需单独订购
- Ordering sample: 1 PC SWBN-1010K11
- Insert should be ordered separately

备件

Spare Parts

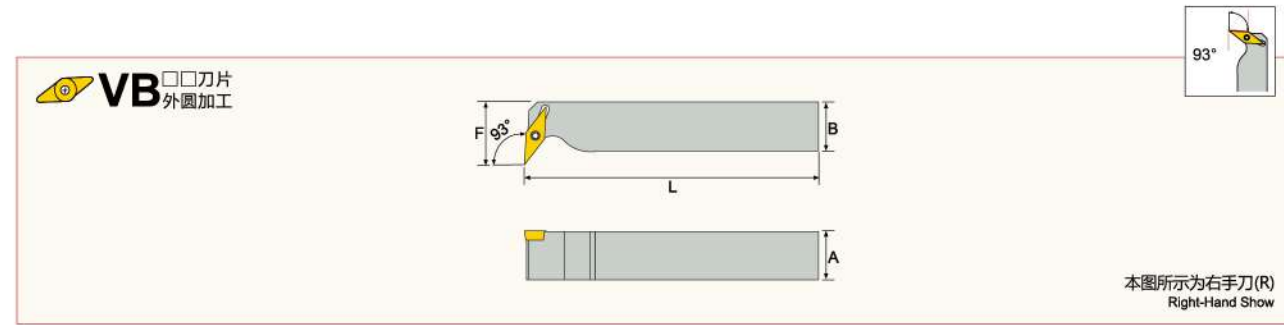
规格型号 Designation	螺钉 Screw	扳手 Wrench
SVJBR/L-1010K11	CS25	T-8
SVJBR/L-1212K11	CS25	T-8
SVJBR/L-1616K11	CS25	T-8
SVJBR/L-2020K16	CS35	T-15
SVJBR/L-2525M16	CS35	T-15

- 标准库存 Item in stock
- ◐ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- ◐ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SVUB93°



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
SYUBR/L-1616K11	16	16	125	25	VB..1103..	VB..1103..	●	●
SYUBR/L-2020K11	20	20	125	30	VB..1103..	VB..1103..	●	●
SYUBR/L-2020K16	20	20	125	30	VB..1604..	VB..1103..	●	●
SYUBR/L-2525M16	25	25	150	35	VB..1604..	VB..1103..	●	●

- 订货示例: 1件 SVUBR-1616K11
- 刀片需单独订购

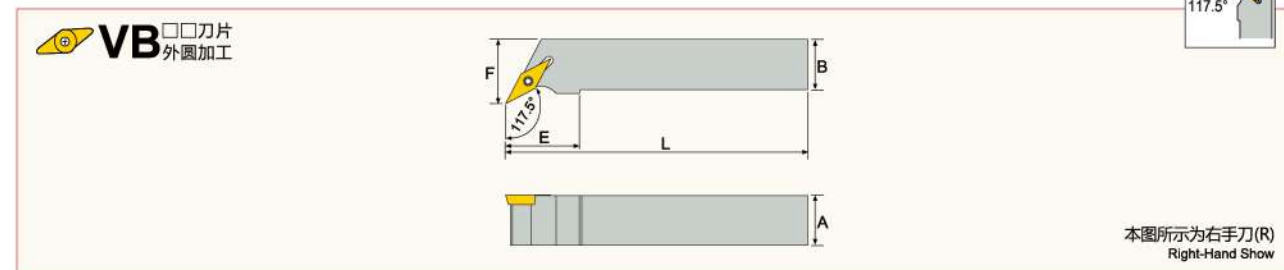
- Ordering sample: 1 PC SVUBR-1616K11
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SYUBR/L-1616K11	CS25	T-8
SYUBR/L-2020K11	CS25	T-8
SYUBR/L-2020K16	CS35	T-15
SYUBR/L-2525M16	CS35	T-15

SVQB117.5°



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
SVQBR/L-1010K11	10	10	125	14	14.5	VB..1103..	●	●
SVQBR/L-1212K11	12	12	125	18	16.5	VB..1103..	●	●
SVQBR/L-1616K11	16	16	125	30	20.5	VB..1103..	●	●
SVQBR/L-2020K11	20	20	125	30	25	VB..1103..	●	●
SVQBR/L-1616K16	16	16	125	30	20	VB..1604..	●	●
SVQBR/L-2020K16	20	20	125	30	25	VB..1604..	●	●
SVQBR/L-2525M16	25	25	150	30	32	VB..1604..	●	●

- 订货示例: 1件 SVQBR-1010K11
- 刀片需单独订购

- Ordering sample: 1 PCSVQBR-1010K11
- Insert should be ordered separately

备件

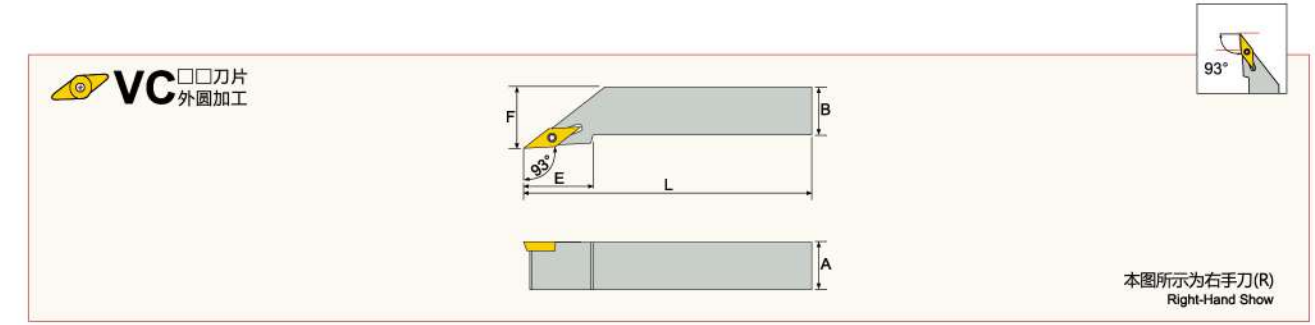
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVQBR/L-1010K11	CS25	T-8
SVQBR/L-1212K11	CS25	T-8
SVQBR/L-1616K11	CS25	T-8
SVQBR/L-2020K11	CS25	T-8
SVQBR/L-1616K16	CS35	T-15
SVQBR/L-2020K16	CS35	T-15
SVQBR/L-2525M16	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SVJC93°



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
SVJCR/L-1010K11	10	10	125	18	12	VC..1103..	●	●
SVJCR/L-1212K11	12	12	125	18	16	VC..1103..	●	●
SVJCR/L-1616K11	16	16	125	30	20	VC..1103..	●	●
SVJCR/L-2020K11	20	20	125	30	25	VC..1103..	●	●
SVJCR/L-1616K16	16	20	125	30	20	VC..1604..	●	●
SVJCR/L-2020K16	20	20	125	30	25	VC..1604..	●	●
SVJCR/L-2525M16	25	25	150	30	32	VC..1604..	●	●

- 订货示例: 1件 SVJCR-1010K11
- 刀片需单独订购

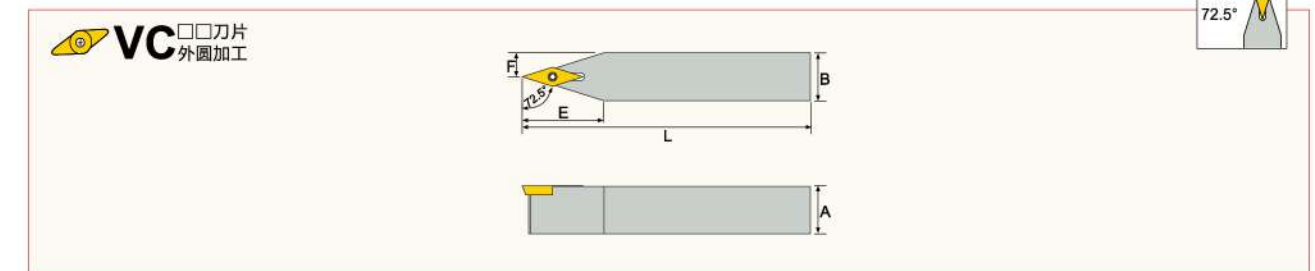
- Ordering sample: 1 PC SWCN-1010K11
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVJCR/L-1010K11	CS25	T-8
SVJCR/L-1212K11	CS25	T-8
SVJCR/L-1616K11	CS25	T-8
SVJCR/L-2020K11	CS25	T-8
SVJCR/L-1616K16	CS35	T-15
SVJCR/L-2020K16	CS35	T-15
SVJCR/L-2525M16	CS35	T-15

SVVC72.5°



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
SVJBR/L-1010K11	10	10	125	18	5	VB..1103..	●	●
SVJBR/L-1212K11	12	12	125	18	6	VB..1103..	●	●
SVJBR/L-1616K11	16	16	125	30	8	VB..1103..	●	●
SVJBR/L-2020K11	20	20	125	30	10	VB..1604..	●	●
SVJBR/L-2525M16	25	25	150	30	12.5	VB..1604..	●	●

- 订货示例: 1件 SVVCN-1010K11
- 刀片需单独订购

- Ordering sample: 1 PC SVVCN-1010K11
- Insert should be ordered separately

备件

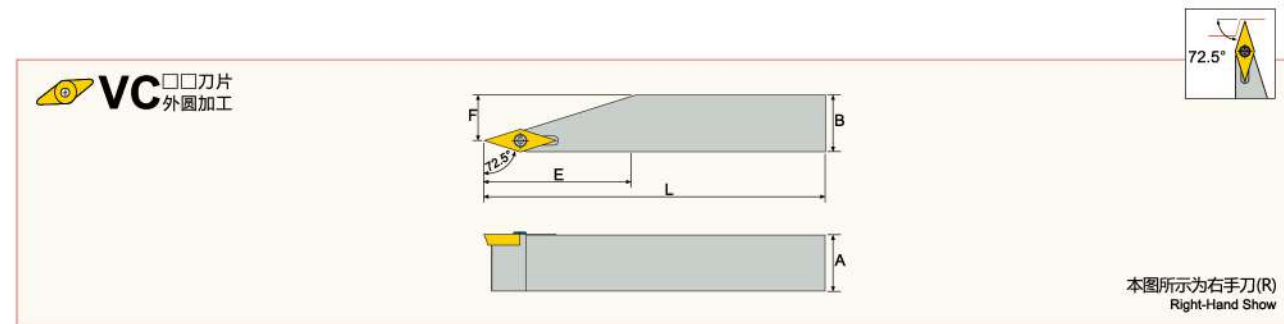
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVVCN-1010K11	CS25	T-8
SVVCN-1212K11	CS25	T-8
SVVCN-1616K11	CS25	T-8
SVVCN-2020K16	CS35	T-15
SVVCN-2525M16	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SVVC72.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SVVCR-2020K16	20	20	125	30	5	VC..1604..	●	●
SVVCR-2525M16	25	25	150	30	5	VC..1604..	●	●

- 订货示例: 1件 SVVCR-2020K16
- 刀片需单独订购

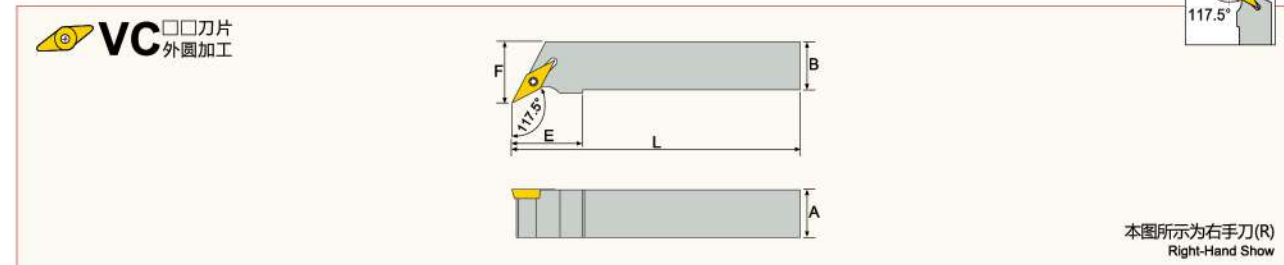
- Ordering sample: 1 PC VVCR-20ZJK16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 wrench
SVVCR-2020K16	CS35	T-15
SVVCR-2525M16	CS35	T-15

SVQC117.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SVQCR/L-1010K11	10	10	125	14	14.5	VC..1103..	●	●
SVQCR/L-1212K11	12	12	125	18	16.5	VC..1103..	●	●
SVQCR/L-1616K11	16	16	125	30	20.5	VC..1103..	●	●
SVQCR/L-2020K11	20	20	125	30	25.0	VC..1103..	●	●
SVQCR/L-1616K16	16	16	125	30	20.0	VC..1604..	●	●
SVQCR/L-2020K16	20	20	125	30	25.0	VC..1604..	●	●
SVQCR/L-2525M16	25	25	150	30	32.0	VC..1604..	●	●

- 订货示例: 1件 SVQCR-1010K11
- 刀片需单独订购

- Ordering sample: 1 PC SVQCR-1010K11
- Insert should be ordered separately

备件

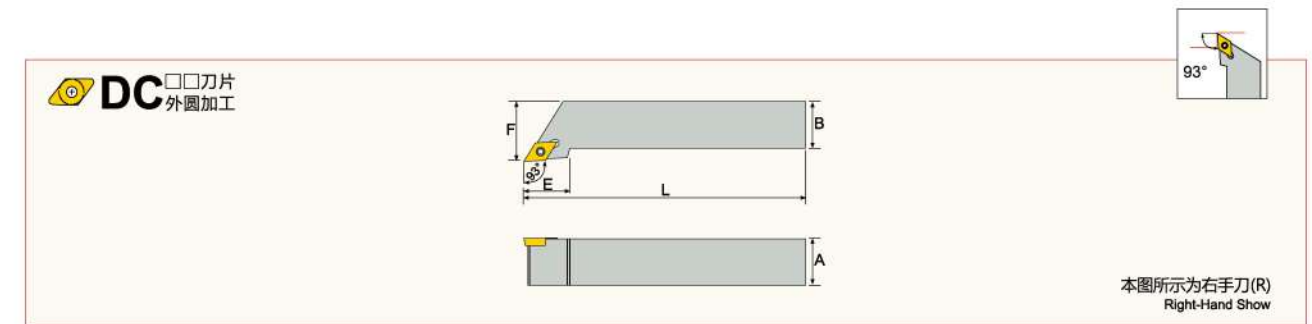
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVQCR/L-1010K11	CS25	T-8
SVQCR/L-1212K11	CS25	T-8
SVQCR/L-1616K11	CS25	T-8
SVQCR/L-2020K11	CS25	T-8
SVQCR/L-1616K16	CS35	T-15
SVQCR/L-2020K16	CS35	T-15
SVQCR/L-2525M16	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SDJC93°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SDJCR/L-0808K07	8	8	125	12	10	DC..0702..	●	●
SDJCR/L-1010K07	10	10	125	14	12	DC..0702..	●	●
SDJCR/L-1212K07	12	12	125	18	16	DC..0702..	●	●
SDJCR/L-1212K11	12	12	125	18	16	DC..11T3..	●	●
SDJCR/L-1616K11	16	16	125	30	20	DC..11T3..	●	●
SDJCR/L-2020K11	20	20	125	30	25	DC..11T3..	●	●
SDJCR/L-2525M11	25	25	150	30	32	DC..11T3..	●	●

- 订货示例: 1件 SDJCR-0808K07
- 刀片需单独订购

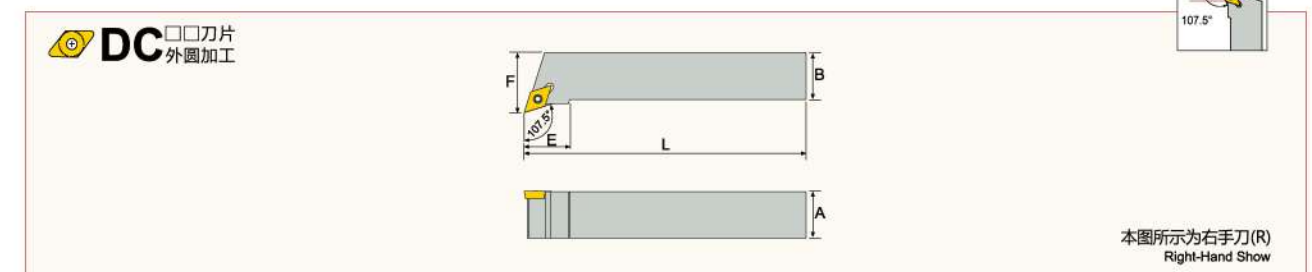
- Ordering sample: 1 PC SDJCR-08081<07
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SDJCR/L-0808K07	CS25	T-8
SDJCR/L-1010K07	CS25	T-8
SDJCR/L-1212K07	CS25	T-8
SDJCR/L-1212K11	CS25	T-8
SDJCR/L-1616K11	CS35	T-15
SDJCR/L-2020K11	CS35	T-15
SDJCR/L-2525M11	CS35	T-15

SDQC 107.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SDQCR/L-1010K07	10	10	125	14	12	DC..0702..	●	●
SDQCR/L-1212K07	12	12	125	18	16	DC..0702..	●	●
SDQCR/L-1212K11	12	12	125	18	16	DC..11T3..	●	●
SDQCR/L-1616K11	16	16	125	30	20	DC..11T3..	●	●
SDQCR/L-2020K11	20	20	125	30	25	DC..11T3..	●	●
SDQCR/L-2525M11	25	25	150	30	32	DC..11T3..	●	●

- 订货示例: 1件 SDQCR-1010K07
- 刀片需单独订购

- Ordering sample: 1 PC SDQCR-1 0101<07
- Insert should be ordered separately

备件

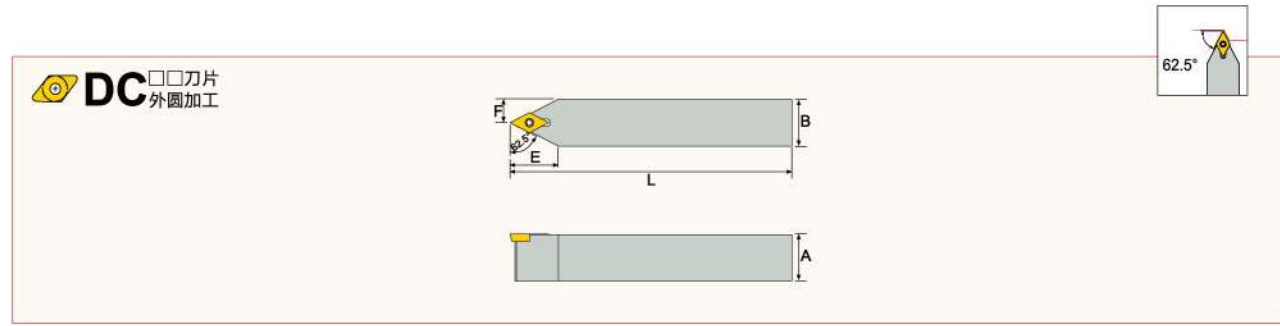
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SDQCR/L-1010K07	CS25	T-8
SDQCR/L-1212K07	CS25	T-8
SDQCR/L-1212K11	CS25	T-8
SDQCR/L-1616K11	CS35	T-15
SDQCR/L-2020K11	CS35	T-15
SDQCR/L-2525M11	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SDNC62.5°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
SDNCN-0808K07	8	8	125	4	4	DC..0702..	●
SDNCN-1010K07	10	10	125	5	5	DC..0702..	●
SDNCN-1212K11	12	12	125	6	6	DC..11T3..	●
SDNCN-1616K11	16	16	125	8	8	DC..11T3..	●
SDNCN-2020K11	20	20	125	10	10	DC..11T3..	●
SDNCN-2525M11	25	25	120	12.5	12.5	DC..11T3..	●

- 订货示例: 1 件 SDNCN-0808K07
- 刀片需单独订购

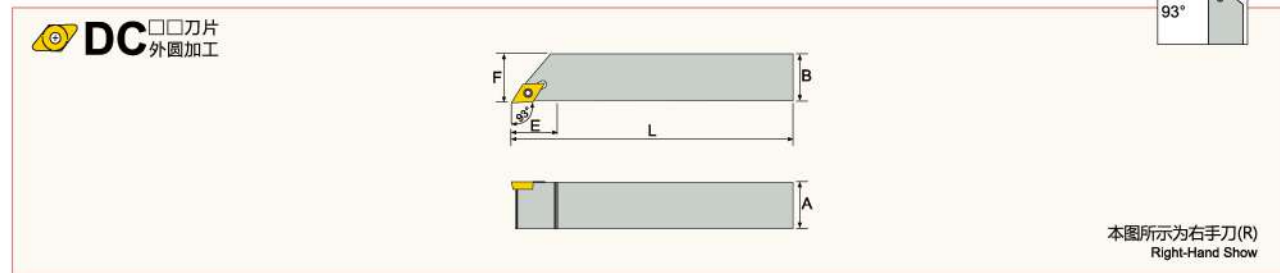
- Ordering sample: 1 PC SDNCN-0808K07
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SDNCN-0808K07	CS25	T-8
SDNCN-1010K07	CS25	T-8
SDNCN-1212K11	CS35	T-15
SDNCN-1616K11	CS35	T-15
SDNCN-2020K11	CS35	T-15
SDNCN-2525M11	CS35	T-15

SDJC-N 93°



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SDJCR/L-1010K07N	10	10	125	14	10	DC..0702..	●	●
SDJCR/L-1212K07N	12	12	125	18	12	DC..0702..	●	●
SDJCR/L-1212K11N	12	12	125	18	12	DC..11T3..	●	●
SDJCR/L-1616K11N	16	16	125	30	16	DC..11T3..	●	●

- 订货示例: 1 件 SDJCR-1010K07N
- 刀片需单独订购

- Ordering sample: 1 PC SDJCR-1010K07N
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SDJCR/L-1010K07N	CS25	T-8
SDJCR/L-1212K07N	CS25	T-8
SDJCR/L-1212K11N	CS35	T-15
SDJCR/L-1616K11N	CS35	T-15



PRODUCT RANGE OVERVIEW OF BORING BARS 内圆车削刀具索引

刀具材质 Shank Type	刀具形状 Tool Type	刀片形状 Insert Shape	加工方式 Tooling	柄径(D) Shank Dia.(mm)												页码 Page	
				04	05	06	08	10	12	14	16	18	20	22	25		32
硬质合金 Solid carbide	C-SDUC		 93°					•	•	•	•	•					D049
钢(带出水孔) Steel shank with coolant supply	A-SDUC		 93°					•	•	•							D049
钢 Steel	S-SDQC		 107.5°					•	•	•	•	•	•				D050
硬质合金 Solid carbide	C-SDQC		 107.5°					•	•	•	•	•					D050
钢(带出水孔) Steel shank with coolant supply	A-SDQC		 107.5°					•	•	•							D050
钢 Steel	S-SDZC		 93°					•	•	•	•	•	•	•			D051
	S-SDJC		 93°					•	•	•	•	•	•				D051
	S-SVJC		 93°					•	•	•	•	•	•	•			D052
	S-FSVJC		 93°							•	•	•					D053

PRODUCT RANGE OVERVIEW OF BORING BARS 内圆车削刀具索引

刀具材质 Shank Type	刀具形状 Tool Type	刀片形状 Insert Shape	加工方式 Tooling	柄径(D) Shank Dia.(mm)												页码 Page				
				04	05	06	08	10	12	14	16	18	20	22	25		32	40	50	
钢 Steel	S-SVUC		 93°												•	•	•	D052		
	S-SVQC		 117.5°												•	•	•	D053		
	S-SVJB		 93°												•	•	•	•	•	D054
	S-FSVJB		 93°													•	•	•	D055	
	S-SVUB		 93°													•	•	•	D054	
	S-SVQB		 117.5°													•	•	•	D055	
	S-SSSC		 45°													•	•	•	•	D056
	S-SSKC		 75°													•	•	•	•	D056
	S1600-STUB		 93°														•			D057
	硬质合金 Solid carbide	C-STUB		 93°														•		D057

PRODUCT RANGE OVERVIEW OF BORING BARS 内圆车削刀具索引

刀具材质 Shank Type	刀具形状 Tool Type	刀片形状 Insert Shape	加工方式 Tooling	柄径(D) Shank Dia.(mm)											页码 Page			
				04	05	06	08	10	12	14	16	18	20	22		25	32	40
钢 Steel	S0000-SWUB		93°			●		●	●		●							D058
硬质合金 Solid carbide	C-SWUB		93°			●		●	●									D058
钢 Steel	S-DCLN● S-MCLNO		95°								○	○	○	○	○	○	○	D059
	S-DCKN● S-MCKNO		75°								○	○	○	○	○	○	○	D060
	S-DTUN● S-MTUNO		93°							○	○	○	○	○	○	○	○	D061
	S-DTLN		95°								●	●						D062
	S-MTFN		91°								●	●	●	●	●			D062
	S-DTQN● S-MTQNO		105°								○	○	○	○	○	○	○	D063
	S-DWLN● S-MWLNO		95°							○	○	○	○	○	○	○	○	D065
	S-DDUN● S-MDUNO		93°									○	○	○	○	○	○	D066
	S-DDQN● S-MDQNO		107.5°									○	○	○	○	○	○	D067

PRODUCT RANGE OVERVIEW OF BORING BARS 内圆车削刀具索引

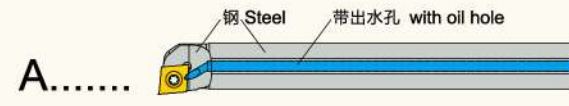
刀具材质 Shank Type	刀具形状 Tool Type	刀片形状 Insert Shape	加工方式 Tooling	柄径(D) Shank Dia.(mm)											页码 Page											
				04	05	06	08	10	12	14	16	18	20	22		25	32	40	50							
钢 Steel	S-MTWN		30°														●	●	●	●	●	●	D064			
	S-MDZN		93°																			●	●	●	D068	
	S-DVUN● S-MVUNO		93°																			○	○	○	○	D069
	S-DVQN● S-MVQNO		117.5°																			○	○	○	○	D070
	S-DVLN● S-MVLNO		95°																			○	○	○	○	D071

BORING BARS 内圆车削刀具

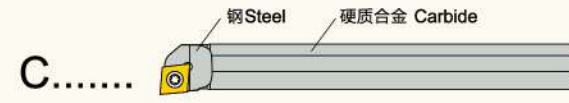
BORING BAR SERIES 内圆车削刀具 SCLC95°

内孔刀杆 Coolant through shank

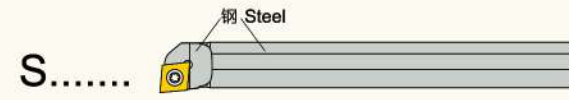
钢制刀杆 (带内冷出水)
Steel shank with coolant supply



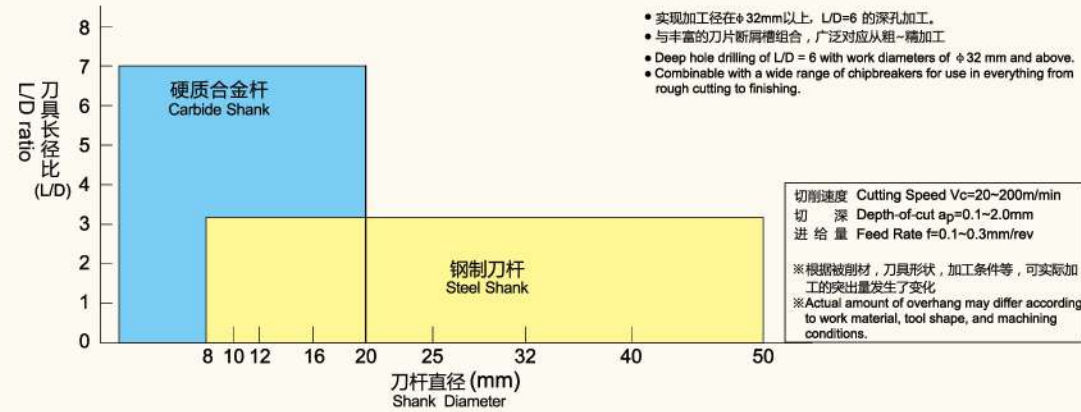
硬质合金杆
Carbide Shank



钢制刀杆
Steel Shank

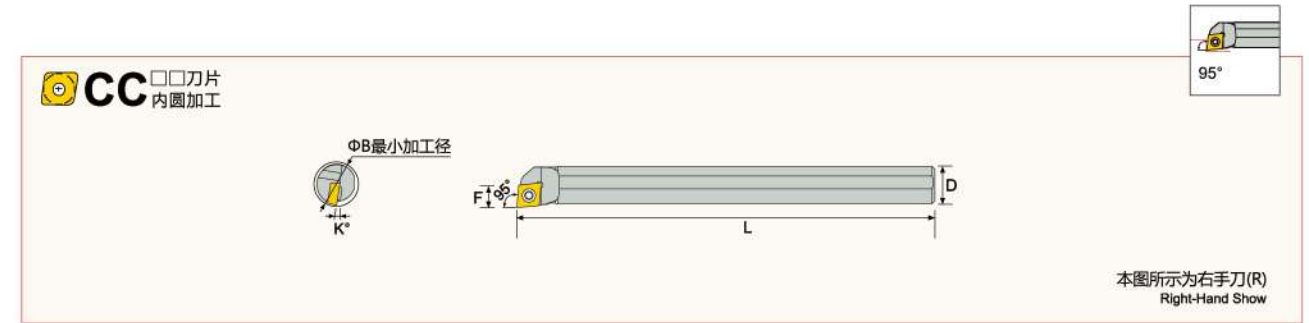


刀杆类型选择推荐 Recommended Shank Type Selection



刀具材质选定 Shank Material Selection

加工方法 Application		钢制刀杆 Steel Shank	硬质合金刀杆 Carbide Shank
一般钢 Steel	浅孔加工 (L/D<3) Short hole	◎ (经济性) ◎ (More economical)	
	深孔加工 (L/D>3) Deep hole		◎
利用修光刀片的高效率加工 Using wiper insert for high performance machining			◎
淬火钢, 高硬度材的加工 Hardened Steel			◎
高精度加工 Precision boring			◎



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
	A	B	L	E	F		R	L
SVJCR/L-1010K11	10	10	125	18	12	VC..1103..	●	●
SVJCR/L-1212K11	12	12	125	18	16	VC..1103..	●	●
SVJCR/L-1616K11	16	16	125	30	20	VC..1103..	●	●
SVJCR/L-2020K11	20	20	125	30	25	VC..1103..	●	●
SVJCR/L-1616K16	16	20	125	30	20	VC..1604..	●	●
SVJCR/L-2020K16	20	20	125	30	25	VC..1604..	●	●
SVJCR/L-2525M16	25	25	150	30	32	VC..1604..	●	●

- 订货示例: 1件 S08K-SCLCR06-09
- 刀片需单独订购
- Ordering sample: 1 PC SOBK-SCL.CRIS-00
- Insert should be ordered separately

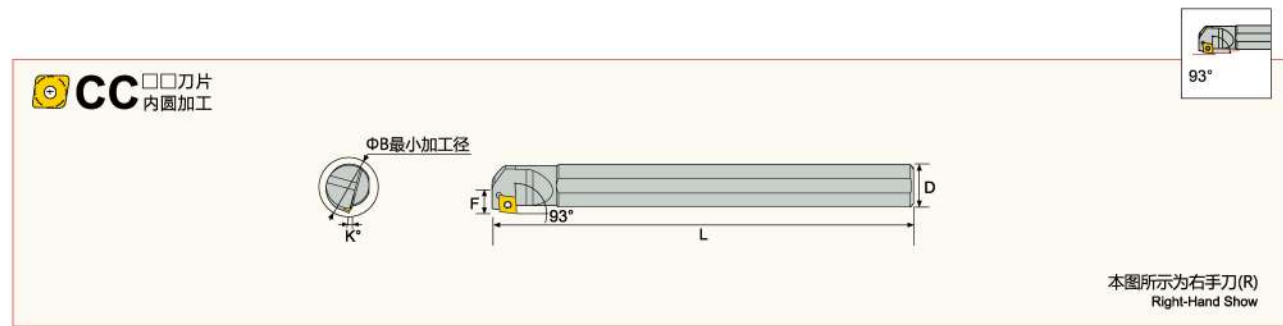
备件 Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SDQCR/L-1010K07	CS25	T-8
SDQCR/L-1212K07	CS25	T-8
SDQCR/L-1212K11	CS25	T-8
SDQCR/L-1616K11	CS35	T-15
SDQCR/L-2020K11	CS35	T-15
SDQCR/L-2525M11	CS35	T-15
SDQCR/L-1010K07	CS25	T-8
SDQCR/L-1212K07	CS25	T-8
SDQCR/L-1212K11	CS25	T-8
SDQCR/L-1616K11	CS35	T-15
SDQCR/L-2020K11	CS35	T-15
SDQCR/L-2525M11	CS35	T-15
SDQCR/L-1010K07	CS25	T-8
SDQCR/L-1212K07	CS25	T-8
SDQCR/L-1212K11	CS25	T-8
SDQCR/L-1616K11	CS35	T-15
SDQCR/L-2020K11	CS35	T-15
SDQCR/L-2525M11	CS35	T-15

- 标准库存 Item in stock
- ◎ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SCZC93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S08K-SCZCR/L06	12	8	6.5	125	13	CC..0602..	●	●
	S10K-SCZCR/L06	14	10	7.5	125	12	CC..0602..	●	●
	S12M-SCZCR/L06	16	12	8.5	150	10	CC..0602..	●	●
	S16Q-SCZCR/L09	21	16	11.5	180	10	CC..09T3..	●	●
	S20R-SCZCR/L09	25	20	13.5	200	8	CC..09T3..	●	●
	S25R-SCZCR/L09	32	25	16	200	6	CC..09T3..	●	●

- 订货示例: 1件 S08K-SCZCR06
- 刀片需单独订购

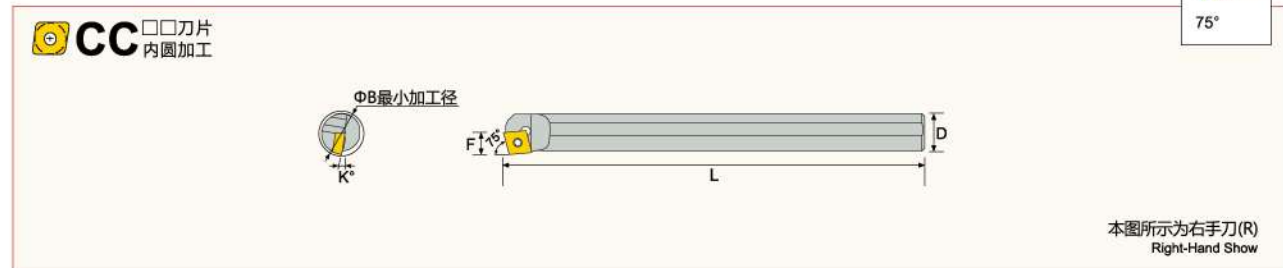
- Ordering sample: 1 PC S00K-SCZCA06
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-SCZCR/L06	CS25	T-8
S10K-SCZCR/L06	CS25	T-8
S12M-SCZCR/L06	CS25	T-8
S16Q-SCZCR/L09	CS35	T-15
S20R-SCZCR/L09	CS35	T-15
S25R-SCZCR/L09	CS35	T-15

SCKC75°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S08K-SCKCR/L06-10	10	8	5	125	15	CC..0602..	●	○
	S10K-SCKCR/L06-12	12	10	6	125	13	CC..0602..	●	○
	S12M-SCKCR/L06-14	14	12	8	150	10	CC..0602..	●	○
	S16Q-SCKCR/L06-18	18	16	10	180	7	CC..0602..	●	○
	S12M-SCKCR/L09-16	16	12	8	150	12	CC..09T3..	●	○
	S16Q-SCKCR/L09-18	18	16	10	180	7	CC..09T3..	●	○
	S20R-SCKCR/L09-22	22	20	12	200	8	CC..09T3..	●	○
	S25R-SCKCR/L09	31	25	14	200	8	CC..09T3..	●	○

- 订货示例: 1件 S08K-SCKCR06-10
- 刀片需单独订购

- Ordering sample: 1 PC S00K-SCKCROB-10
- Insert should be ordered separately

备件

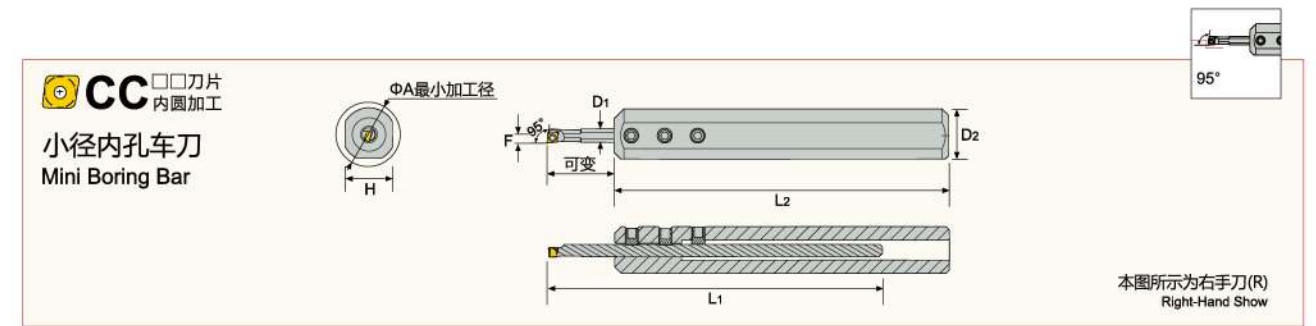
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-SCKCR/L06-10	CS25	T-8
S10K-SCKCR/L06-12	CS25	T-8
S12M-SCKCR/L06-14	CS25	T-8
S16Q-SCKCR/L06-18	CS25	T-8
S12M-SCKCR/L09-16	CS35	T-15
S16Q-SCKCR/L09-18	CS35	T-15
S20R-SCKCR/L09-22	CS35	T-15
S25R-SCKCR/L09	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SCLC95°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock			
		ΦA	D1	H	L1	L2		F	D2	R	L
硬质合金 Carbide	C04G-SCLCR/L03-05	5	4	15	90	100	2.5	16	CC..0301..	●	●
	C05H-SCLCR/L03-06	6	5	15	100	100	3	16	CC..0301..	●	●
	C06J-SCLCR/L04-07	7	6	15	110	100	3.5	16	CC..0401..	●	●

- 订货示例: 1件 C08G-SCLCR03-05
- 刀片需单独订购
- 套筒需另购, 请参照: D093, D094 页

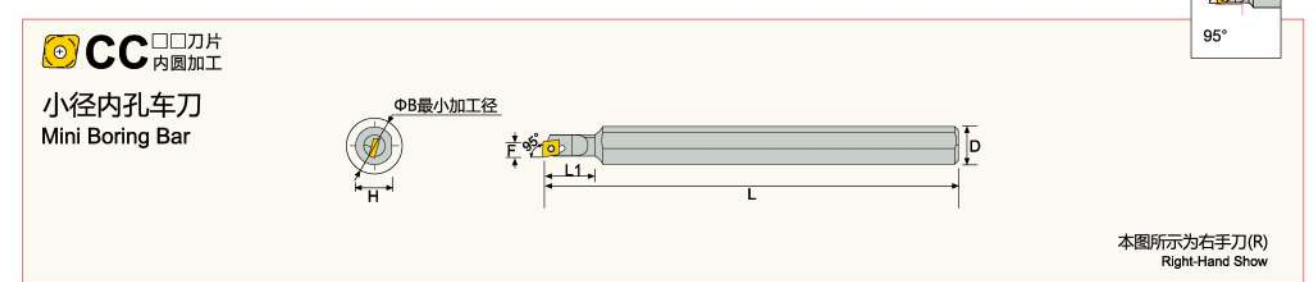
- Ordering sample: 1 PC C04G-SCLCR03-05
- Insert should be ordered separately
- Sleeve please see Page 0093, 0094

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
C04G-SCLCR/L03-05	CS18	T-6
C05H-SCLCR/L03-06	CS18	T-6
C06J-SCLCR/L04-07	CS22	T-7

SCLC95°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	L	L1	H		R	L
钢 Steel	S1004K-SCLCR/L03	5	10	125	12	9	CC..0301..	●	○
	S1204H-SCLCR/L03	5	12	100	8	11	CC..0301..	●	○
	S1206K-SCLCR/L04	7	12	125	14	11	CC..0401..	●	○
	S1607K-SCLCR/L06-08	8	16	125	15	15	CC..0602..	●	○
	S1608K-SCLCR/L06-09	9	16	125	15	15	CC..0602..	●	○
	S1609K-SCLCR/L06-10	10	16	125	15	15	CC..0602..	●	○
	S1610K-SCLCR/L06-12	12	16	125	15	15	CC..0602..	●	○

- 订货示例: 1件 S1004K-SCLCR03
- 刀片需单独订购

- Ordering sample: 1 PC S1004K-SCLCR03
- Insert should be ordered separately

备件

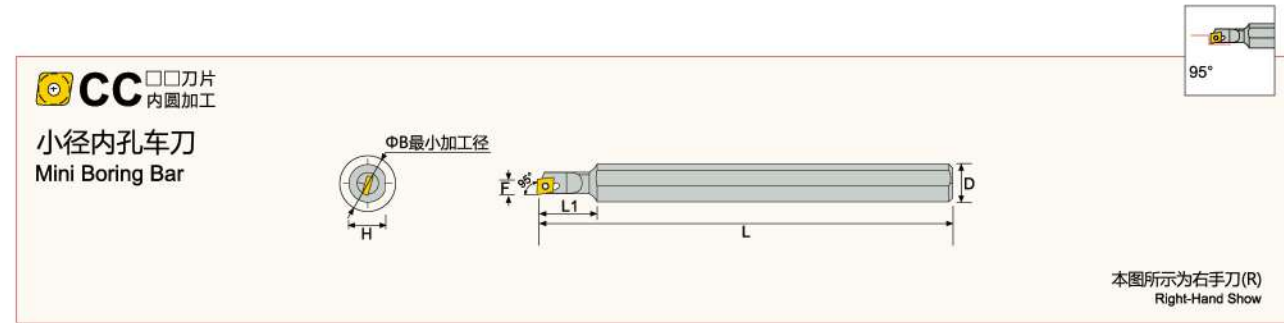
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S1004K-SCLCR/L03	CS18	T-6
S1204H-SCLCR/L03	CS18	T-6
S1206K-SCLCR/L04	CS22	T-7
S1607K-SCLCR/L06-08	CS25	T-8
S1608K-SCLCR/L06-09	CS25	T-8
S1609K-SCLCR/L06-10	CS25	T-8
S1610K-SCLCR/L06-12	CS25	T-8

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SET-SCLC 95°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	d	L	L ₁	H		R	L
钢 (带出水孔) Steel (with oil hole)	A0608H-SCLCR/L06	10	8	6	100	25	4	CC..0602..	○	○
	A0810J-SCLCR/L06	12	10	8	110	32	6	CC..0602..	○	○
	A1012K-SCLCR/L06	14	12	10	125	38	7	CC..0602..	○	○
	A1216M-SCLCR/L06	18	16	12	150	50	9	CC..0602..	○	○
	A0816SET-SCLCR/L	A0608H-SCLCR06x1,S25x6,T-8x1								

- 订货示例: 1件 A0608H-SCLCR06
- 刀片需单独订购
- Ordering sample: 1 PC AD60BH-SCLCA06
- Insert should be ordered separately

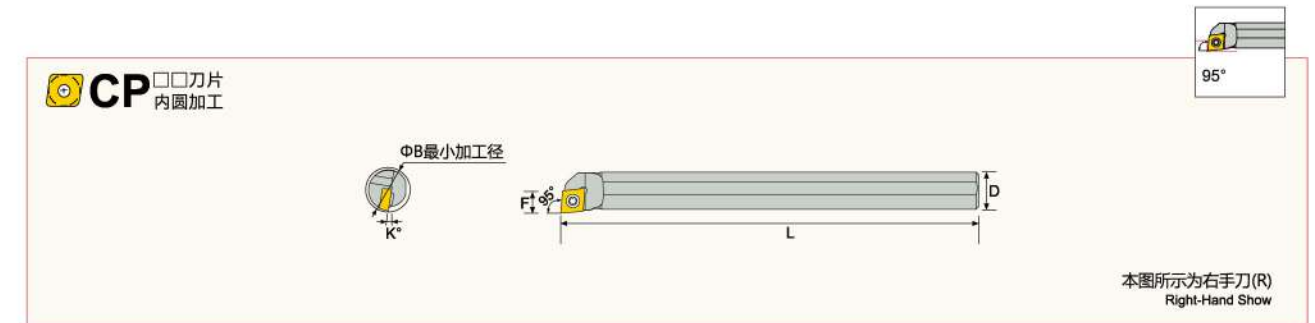
备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
A0608H-SCLCR/L06	CS25	T-8
A0810J-SCLCR/L06	CS25	T-8
A1012K-SCLCR/L06	CS25	T-8
A1216M-SCLCR/L06	CS25	T-8

BORING BAR SERIES 内圆车削刀具

SCLP95°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S10K-SCLPR/L08-12	12	10	6.5	125	7	CP..0802..	●	●	
	S12M-SCLPR/L08-14	14	12	7.5	150	6	CP..0802..	●	●	
	S12M-SCLPR/L09-16	16	12	8	150	6	CP..0903..	●	●	
	S14M-SCLPR/L09-16	16	14	8.5	150	6	CP..0903..	●	●	
	S16Q-SCLPR/L09-18	18	16	9.5	180	4	CP..0903..	●	●	
	S20R-SCLPR/L09-22	22	20	11.5	200	4	CP..0903..	●	●	
	S25R-SCLPR/L09	32	25	16	200	4	CP..0903..	●	●	
硬质合金 Solid carbide	S10K-SCKCR/L06-12	12	10	6	125	13	CP..0802..	○	○	
	S12M-SCKCR/L06-14	14	12	8	150	10	CP..0802..	○	○	
	S16Q-SCKCR/L06-18	18	16	10	180	7	CP..0903..	○	○	
	S12M-SCKCR/L09-16	16	12	8	150	12	CP..0903..	○	○	
	S16Q-SCKCR/L09-18	18	16	10	180	7	CP..0903..	○	○	
S20R-SCKCR/L09-22	22	20	12	200	8	CP..0903..	○	○		

- 订货示例: 1件 S10K-SCLPR08-12
- 刀片需单独订购
- Ordering sample: 1 PC 81 OK-SCI-PROB-12
- Insert should be ordered separately

备件

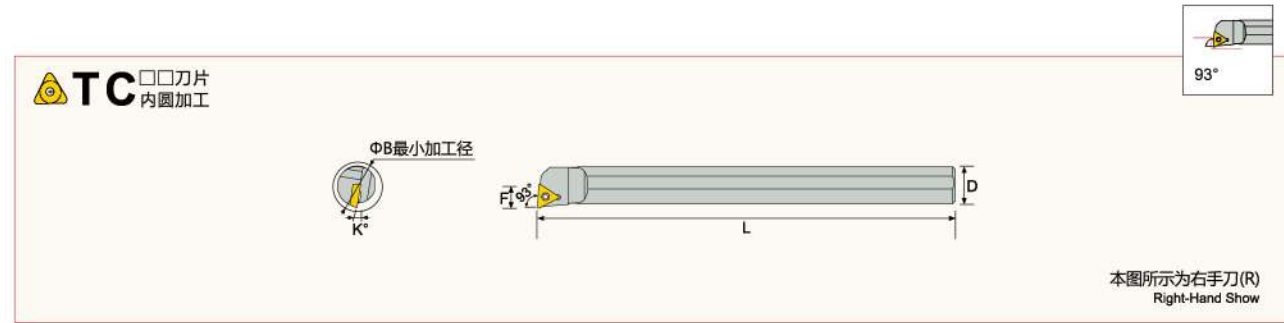
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SCLPR/L08-12	CS30	T-10
S12M-SCLPR/L08-14	CS30	T-10
S12M-SCLPR/L09-16	CS35	T15
S14M-SCLPR/L09-16	CS35	T15
S16Q-SCLPR/L09-18	CS35	T15
S20R-SCLPR/L09-22	CS35	T15
S25R-SCLPR/L09	CS35	T15
C10M-SCLPR/L08-12	CS30	T-10
C12Q-SCLPR/L08-14	CS30	T-10
C12Q-SCLPR/L09-14	CS35	T-15
C16R-SCLPR/L09-18	CS35	T-15
C20S-SCLPR/L09-22	CS35	T-15
C25T-SCLPR/L09	CS35	T-15

- 标准库存 Item in stock
- ◐ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

STUC 93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S08K-STUCR/L09-10	10	8	5.5	125	12	TC..0902..	●	●		
	S10K-STUCR/L09-12	12	10	6	125	15	TC..0902..	●	●		
	S10K-STUCR/L11-12	12	10	6	125	15	TC..1102..	●	●		
	S12M-STUCR/L11-14	14	12	7	150	10	TC..1102..	●	●		
	S14M-STUCR/L11-16	16	14	8	150	8	TC..1102..	●	●		
	S16Q-STUCR/L11-18	18	16	9	180	6	TC..1102..	●	●		
	S20R-STUCR/L11-22	22	20	11	200	3	TC..1102..	●	●		
	S20R-STUCR/L16-22	22	20	11	200	8	TC..16T3..	●	●		
	S25R-STUCR/L16	32	25	17	200	6	TC..16T3..	●	●		
	S32S-STUCR/L16	39	32	17.5	250	4	TC..16T3..	●	●		
硬质合金 Solid carbide	C08K-STUCR/L09-10	10	8	5.5	125	12	TC..0902..	●	○		
	C10M-STUCR/L09-12	12	10	6	150	15	TC..1102..	●	○		
	C10M-STUCR/L11-12	12	10	6	150	15	TC..1102..	●	○		
	C12Q-STUCR/L11-14	14	12	7	180	1	TC..1102..	●	○		
	C16R-STUCR/L11-18	18	16	9	200	6	TC..1102..	●	○		
	C20S-STUCR/L11-22	22	20	11	250	3	TC..1102..	●	○		

- 订货示例: 1 件 S08K-STUCR09-10
- 刀片需单独订购
- Ordering sample: 1 PC SOBK-STUCR09-10
- Insert should be ordered separately

备件

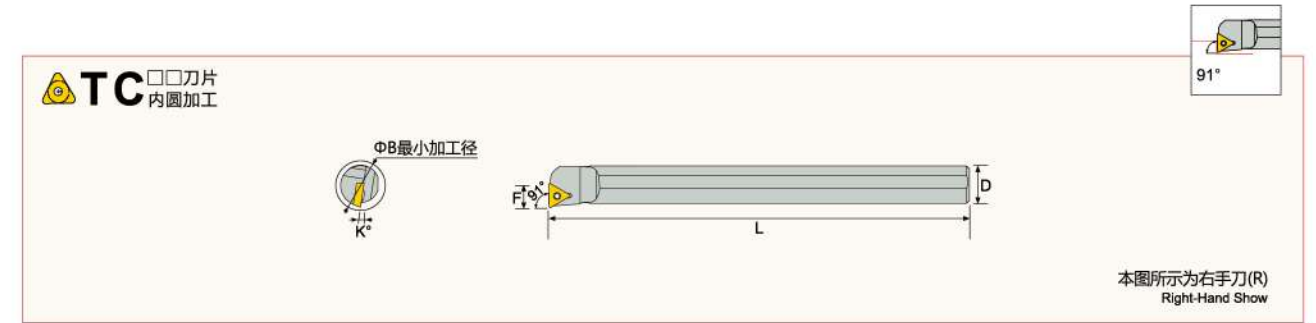
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-STUCR/L09-10	CS22	T-7
S10K-STUCR/L09-12	CS22	T-7
S10K-STUCR/L11-12	CS25	T-8
S12M-STUCR/L11-14	CS25	T-8
S14M-STUCR/L11-16	CS25	T-8
S16Q-STUCR/L11-18	CS25	T-8
S20R-STUCR/L11-22	CS25	T-8
S20R-STUCR/L16-22	CS35	T-15
S25R-STUCR/L16	CS35	T-15
S32S-STUCR/L16	CS35	T-15
C08K-STUCR/L09-10	CS22	T-7
C10M-STUCR/L09-12	CS22	T-7
C10M-STUCR/L11-12	CS25	T-8
C12Q-STUCR/L11-14	CS25	T-8
C16R-STUCR/L11-18	CS25	T-8
C20S-STUCR/L11-22	CS25	T-8

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

STFC91°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S08M-STFCR/L09-10	10	8	5.5	125	12	TC..0902..	●	●		
	S10K-STFCR/L09-12	12	10	6	125	15	TC..0902..	●	●		
	S12M-STFCR/L09-14	14	12	7	150	10	TC..0902..	●	●		
	S10K-STFCR/L11-12	12	10	6	125	15	TC..1102..	●	●		
	S12M-STFCR/L11-14	14	12	7	150	10	TC..1102..	●	●		
	S16Q-STFCR/L11-18	18	16	9	180	6	TC..1102..	●	●		
	S20R-STFCR/L11-22	22	20	11	200	3	TC..1102..	●	●		
	S20R-STFCR/L16-22	22	20	11	200	3	TC..16T3..	●	●		
	S25R-STFCR/L16	32	25	16	200	2	TC..16T3..	●	●		
	S32S-STFCR/L16	39	32	17.5	250	4	TC..16T3..	●	●		
硬质合金 Solid carbide	C08K-STFCR/L09-10	10	8	5.5	125	12	TC..0902..	●	○		
	C10M-STFCR/L09-12	12	10	6	150	15	TC..0902..	●	○		
	C12Q-STFCR/L09-14	14	12	7	180	10	TC..0902..	●	○		
	C12Q-STFCR/L11-14	14	12	7	180	10	TC..1102..	●	○		
	C16R-STFCR/L11-18	18	16	9	200	6	TC..1102..	●	○		
	C20S-STFCR/L11-22	22	20	11	250	3	TC..1102..	●	○		
钢 (带出水孔) Steel (with oil hole)	A08K-STFCR/L09-10	10	8	5.5	125	12	TC..0902..	●	○		
	A10M-STFCR/L11-12	12	10	6	150	15	TC..1102..	●	○		
	A12Q-STFCR/L11-14	14	12	7	180	10	TC..1102..	●	○		
	A16R-STFCR/L11-18	18	16	9	200	6	TC..1102..	●	○		

- 订货示例: 1 件 S08K-STFCR09-10
- 刀片需单独订购
- Ordering sample: 1 PC SOAK-STR:R00-10
- Insert should be ordered separately

备件

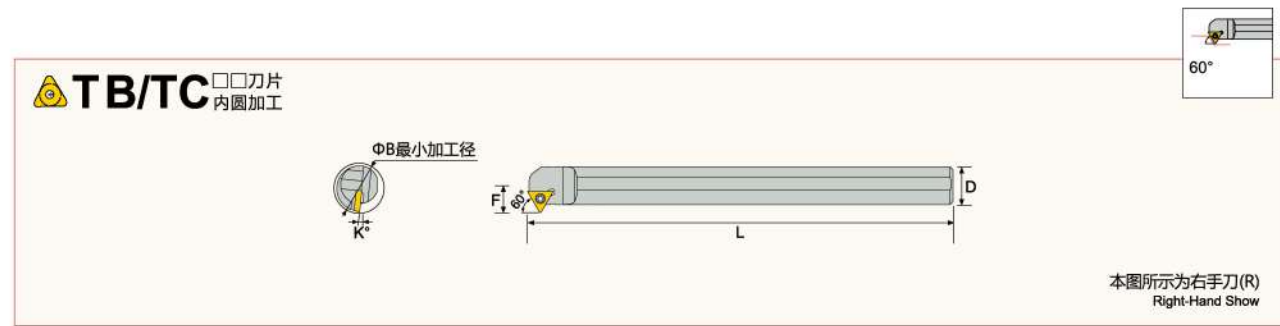
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S08M-STFCR/L09-10	CS22	T-7
S10K-STFCR/L09-12	CS22	T-7
S12M-STFCR/L09-14	CS22	T-7
S10K-STFCR/L11-12	CS25	T-8
S12M-STFCR/L11-14	CS25	T-8
S16Q-STFCR/L11-18	CS25	T-8
S20R-STFCR/L11-22	CS25	T-8
S20R-STFCR/L16-22	CS35	T-15
S25R-STFCR/L16	CS35	T-15
S32S-STFCR/L16	CS35	T-15
C08K-STFCR/L09-10	CS22	T-7
C10M-STFCR/L09-12	CS22	T-7
C12Q-STFCR/L09-14	CS22	T-7
C12Q-STFCR/L11-14	CS25	T-8
C16R-STFCR/L11-18	CS25	T-8
C20S-STFCR/L11-22	CS25	T-8
A08K-STFCR/L09-10	CS22	T-7
A10M-STFCR/L11-12	CS25	T-8
A12Q-STFCR/L11-14	CS25	T-8
A16R-STFCR/L11-18	CS25	T-8

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

STWC60°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S0806K-STWBR/L06	7	8	10	125	7	TB..0601..	●	●		
	S08K-STWBR/09	10	18	6	125	15	TC..0902..	●	●		
	S10K-STWBR/09	12	10	6	125	15	TC..0902..	●	●		
	S10K-STWBR/11	12	10	6	125	15	TC..1102..	●	●		
	S12M-STWBR/11	16	12	7	150	13	TC..1102..	●	●		
	S16Q-STWBR/11	20	16	9	180	10	TC..1102..	●	●		
	S20R-STWBR/11	25	20	11	200	7	TC..1102..	●	●		
	S25R-STWBR/16	30	25	14	200	5	TC..16T3..	●	●		
	S32S-STWBR/16	40	32	20	250	6	TC..16T3..	●	●		
	S40T-STWBR/16	48	40	24	300	0	TC..16T3..	●	●		

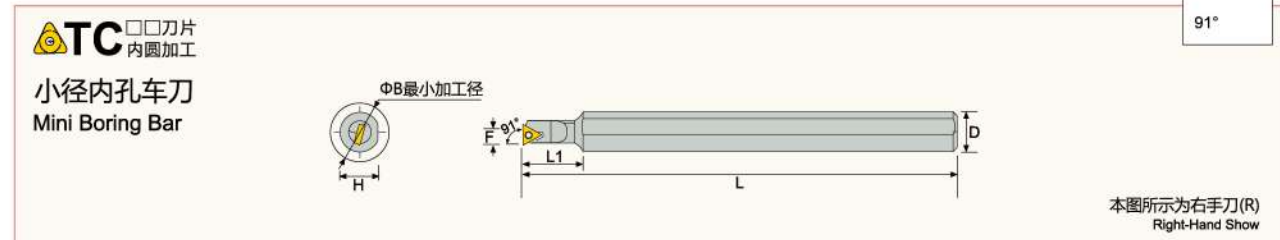
- 订货示例: 1件 S0806K-STWBR06
- 刀片需单独订购
- Ordering sample: 1 PC S0806K-S1WBR06
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S0806K-STWBR/L06	CS20	T-6
S08K-STWBR/09	CS22	T-7
S10K-STWBR/09	CS22	T-7
S10K-STWBR/11	CS25	T-8
S12M-STWBR/11	CS25	T-8
S16Q-STWBR/11	CS25	T-8
S20R-STWBR/11	CS25	T-8
S25R-STWBR/16	CS35	T-15
S32S-STWBR/16	CS35	T-15
S40T-STWBR/16	CS35	T-15

SET-STFC 91°



材质 Shark	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	d	L	L ₁	H	R		L	
钢 (带出水孔) Steel (with oil hole)	A0608H-SCLCR/L06	10	8	6	100	25	4	CC..0602..	○	○	
	A0810J-SCLCR/L06	12	10	8	110	32	6	CC..0602..	○	○	
	A1012K-SCLCR/L06	14	12	10	125	38	7	CC..0602..	○	○	
	A0816SET-SCLCR/L	A0608H-SCLCR06x1,S									

- 订货示例: 1件 A0810J-STFCR11
- 刀片需单独订购
- Ordering sample: 1 PC A0810J-STFCR11
- Insert should be ordered separately

备件

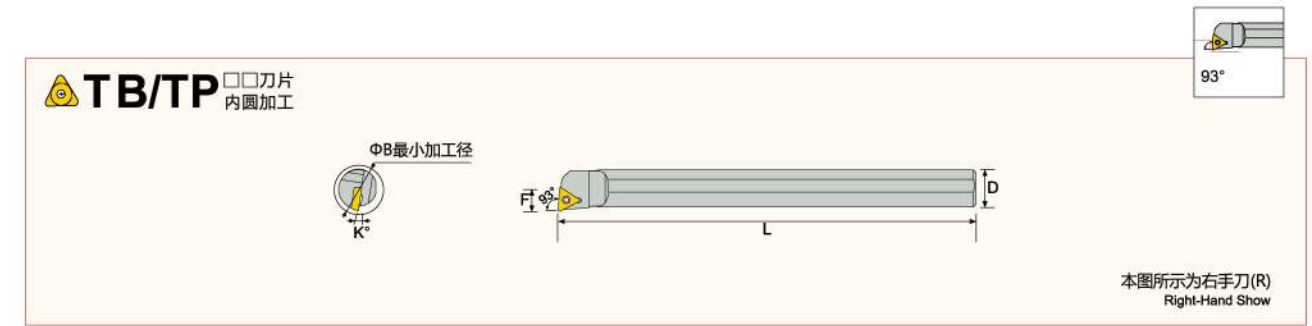
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
A0810J-STFCR/L11	CS25	T-8
A1012K-STFCR/L11	CS26	T-8
A1216M-STFCR/L11	CS27	T-8

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

STUP93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S08K-SUBR/L06-08	8	8	4	125	12	TB..0601..	●	●		
	S08K-SUPR/L08-10	10	8	5.5	125	10	TP..0802..	●	●		
	S08K-SUPR/L08-10	10	8	5.5	125	10	TP..0902..	●	●		
	S10K-SUPR/L09-12	12	10	6	125	8	TP..0902..	●	●		
	S12M-SUPR/L09-14	14	12	7	150	5	TP..0902..	●	●		
	S10K-SUPR/L11-12	12	10	6	125	8	TC..1102..	●	●		
	S12M-SUPR/L11-14	14	12	7	150	7	TC..1102..	●	●		
	S14M-SUPR/L11-16	16	14	8	150	6	TC..1102..	●	●		
	S16Q-SUPR/L11-18	18	16	9	180	4	TC..1102..	●	●		
	S18Q-SUPR/L11-20	20	18	10	180	4	TC..1102..	●	●		
	S20R-SUPR/L11-22	22	20	11	200	2	TC..1102..	●	●		
	S20R-SUPR/L1604-22	22	20	11	200	3	TP..1604..	●	●		
	S25R-SUPR/L1604	32	25	16	200	2	TP..1604..	●	●		
	S20R-SUPR/L1603-22	22	20	11	200	3	TP..1603..	●	●		
	S25R-SUPR/L1603	32	25	16	200	2	TP..1603..	●	●		
	硬质合金 Solid carbide	C0807K-STUBR/L06-08	8	8	4	125	9	TB..0601..	●	○	
		C08K-STUPR/L0810	10	8	5.5	125	10	TP..0802..	●	○	
		C08K-STUPR/L09-10	10	8	5.5	125	10	TP..0902..	●	○	
		C10M-STUPR/L09-12	12	10	6	150	15	TP..0902..	●	○	
		C12Q-STUPR/L09-14	14	12	7	180	15	TP..0902..	●	○	
C10K-STUPR/L11-12		12	10	6	125	15	TP..1103..	●	○		
C12Q-STUPR/L11-14		14	12	7	180	10	TP..1103..	●	○		
C16R-STUPR/L11-18		18	16	9	200	6	TP..1103..	●	○		
C20S-STUPR/L11-22		22	20	11	250	3	TP..1103..	●	○		
C12Q-STFCR/L11-14		14	12	7	180	10	TP..0902..	●	○		
钢 (带出水孔) Steel (with oil hole)	A08K-STFCR/L09-10	10	8	5.5	125	12	TP..0902..	●	○		
	A10M-STFCR/L11-12	12	10	6	150	15	TP..0902..	●	○		
	A12Q-STFCR/L11-14	14	12	7	180	10	TP..1103..	●	○		
	A16R-STFCR/L11-18	18	16	9	200	6	TP..1103..	●	○		

- 订货示例: 1件 S08K-STUBR06-08
- 刀片需单独订购
- Ordering sample: 1 PC S08K-SIUBROS-08
- Insert should be ordered separately

备件

Spare Parts

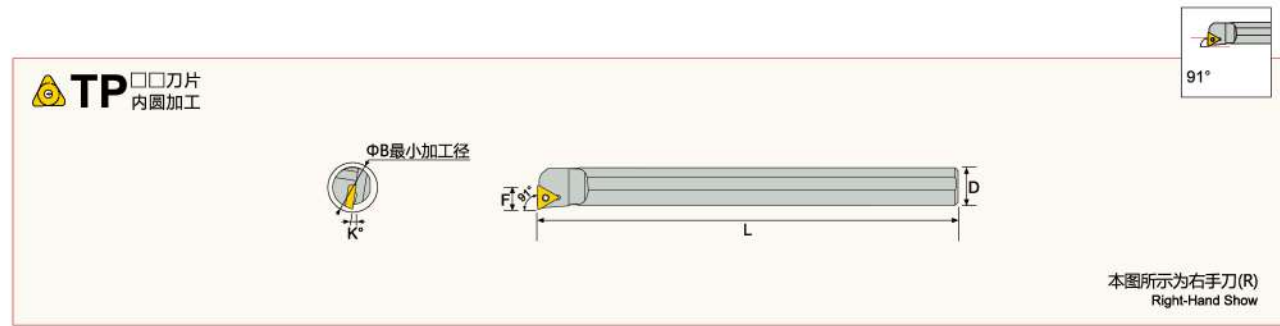
规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-SUBR/L06-08	CS20	T-6
S08K-SUPR/L08-10	CS22	T-7
S08K-SUPR/L08-10	CS25	T-8
S10K-SUPR/L09-12	CS25	T-8
S12M-SUPR/L09-14	CS25	T-8
S10K-SUPR/L11-12	CS30	T-10
S12M-SUPR/L11-14	CS30	T-10
S14M-SUPR/L11-16	CS30	T-10
S16Q-SUPR/L11-18	CS30	T-10
S18Q-SUPR/L11-20	CS30	T-10
S20R-SUPR/L11-22	CS30	T-10
S20R-SUPR/L1604-22	CS35	T-15
S25R-SUPR/L1604	CS35	T-15
S20R-SUPR/L1603-22	CS35	T-15
S25R-SUPR/L1603	CS35	T-15

规格型号 Designation	螺钉 Screw	扳手 Wrench
C0807K-STUBR/L06-08	CS20	T-6
C08K-STUPR/L0810	CS22	T-7
C08K-STUPR/L09-10	CS25	T-8
C10M-STUPR/L09-12	CS25	T-8
C12Q-STUPR/L09-14	CS25	T-8
C10K-STUPR/L11-12	CS30	T-10
C12Q-STUPR/L11-14	CS30	T-10
C16R-STUPR/L11-18	CS30	T-10
C20S-STUPR/L11-22	CS30	T-10
A08K-STUPR/L09-10	CS25	T-8
A10K-STUPR/L09-12	CS25	T-8
A12M-STUPR/L09-14	CS25	T-8
A16Q-STUPR/L11-18	CS30	T-15
A20R-STUPR/L11-22	CS30	T-15

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SIFP91°



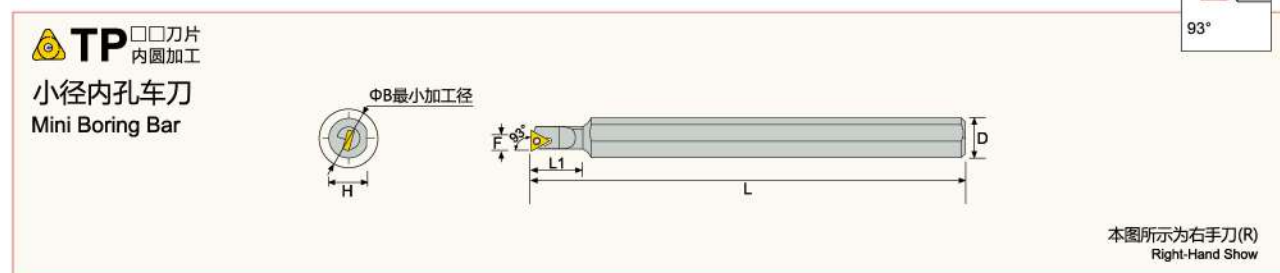
材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S10K-STFPR/L11-12	12	10	6	125	7	TP..1103..	●	●
	S12M-STFPR/L11-14	14	12	7	150	6	TP..1103..	●	●
	S16Q-STFPR/L11-18	18	16	9	180	4	TP..1103..	●	●
	S22R-STFPR/L11-22	22	20	11	200	4	TP..1103..	●	●

- 订货示例: 1件 S10K-STFPR11-12
- 刀片需单独订购
- Ordering sample: 1 PC S10K-STFPR11-12
- Insert should be ordered separately

备件

规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-STFPR/L11-12	CS30	T-10
S12M-STFPR/L11-14	CS30	T-10
S16Q-STFPR/L11-18	CS30	T-10
S22R-STFPR/L11-22	CS30	T-10

STUP93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	L	L ₁	H		R	L
钢 Steel	S1609J-STUPR/L08-12	10	16	110	15	15	TP..0802..	●	●
	S1610K-STUPR/L11-12	12	16	120	15	15	TP..1103..	●	●

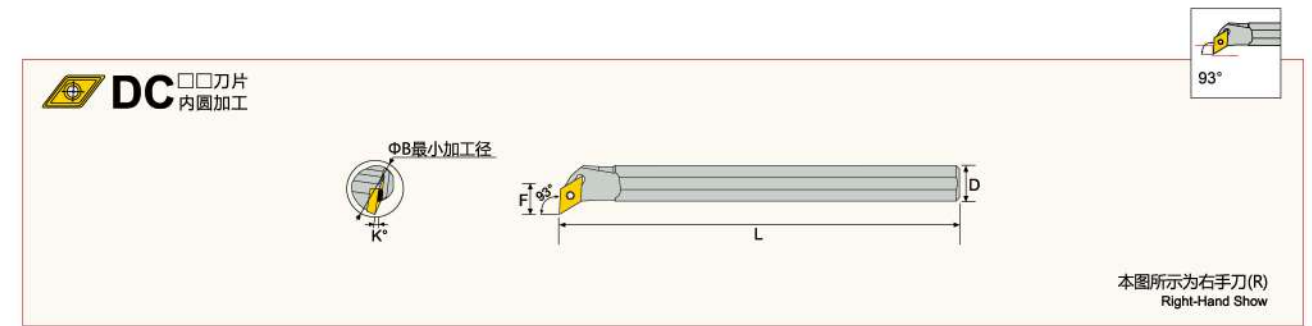
- 订货示例: 1件 S1609J-STUPR08-12
- 刀片需单独订购
- Ordering sample: 1 PC S1609J-STUPR08-12
- Insert should be ordered separately

备件

规格型号 Designation	螺钉 Screw	扳手 Wrench
S1609J-STUPR/L08-12	CS22	T-7
S1610K-STUPR/L11-12	CS30	T-10

BORING BAR SERIES 内圆车削刀具

SDUC93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S10K-SDUCR/L07	13	10	18	125	10	DC..0702..	●	●
	S12M-SDUCR/L07	16	12	9	120	8	DC..0702..	●	●
	S16Q-SDUCR/L07	20	16	11	180	6	DC..0702..	●	●
	S20R-SDUCR/L11	25	20	13	200	8	DC..11T3..	●	●
	S25R-SDUCR/L11	32	25	14	200	4	DC..11T3..	●	●
	S32S-SDUCR/L11	39	32	20	250	4	DC..11T3..	●	●
	S40T-SDUCR/L11	28	40	24	300	2	DC..11T3..	●	●
	C10M-SDUCR/L07	13	10	7	150	10	DC..0702..	●	○
	C12Q-SDUCR/L07	16	12	9	180	8	DC..0702..	●	○
	C16R-SDUCR/L07	20	16	11	200	6	DC..0702..	●	○
硬质合金 Solid carbide	C20S-SDUCR/L11	25	20	13	250	8	DC..11T3..	●	○
	C25T-SDUCR/L11	32	25	17	300	4	DC..11T3..	●	○
	A10K-SDUCR/L07	13	10	7	125	10	DC..0702..	●	○
	A12M-SDUCR/L07	16	12	9	150	8	DC..0702..	●	○
钢 (带出水孔) Steel (with oil hole)	A16Q-SDUCR/L07	20	16	11	180	6	DC..0702..	●	○

- 订货示例: 1件 S10K-SDUCR07
- 刀片需单独订购
- Ordering sample: 1 PC S10K-SDUCA07
- Insert should be ordered separately

备件

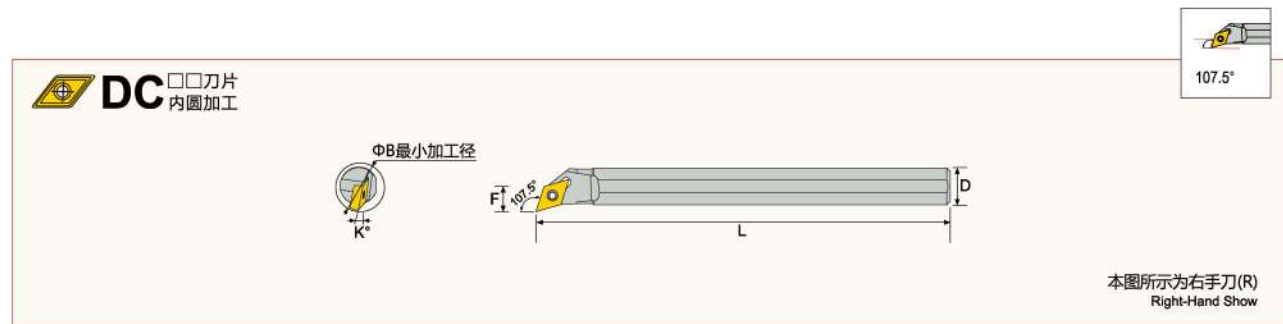
规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SDUCR/L07	CS25	T-8
S12M-SDUCR/L07	CS25	T-8
S16Q-SDUCR/L07	CS25	T-8
S20R-SDUCR/L11	CS35	T-15
S25R-SDUCR/L11	CS35	T-15
S32S-SDUCR/L11	CS35	T-15
S40T-SDUCR/L11	CS35	T-15
C10M-SDUCR/L07	CS25	T-8
C12Q-SDUCR/L07	CS25	T-8
C16R-SDUCR/L07	CS25	T-8
C20S-SDUCR/L11	CS35	T-15
C25T-SDUCR/L11	CS35	T-15
A10K-SDUCR/L07	CS25	T-8
A12M-SDUCR/L07	CS25	T-8
A16Q-SDUCR/L07	CS25	T-8

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SDQC 107.5°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S10K-SDQCR/L07	13	10	18	125	10	DC..0702..	●	●		
	S12M-SDQCR/L07	16	12	9	120	8	DC..0702..	●	●		
	S16Q-SDQCR/L07	20	16	11	180	6	DC..0702..	●	●		
	S16Q-SDQCR/L11	20	16	11	180	6	DC..11T3..	●	●		
	S20R-SDQCR/L11	25	20	13	200	8	DC..11T3..	●	●		
	S25R-SDQCR/L11	32	25	14	200	4	DC..11T3..	●	●		
	S32S-SDQCR/L11	39	32	20	250	4	DC..11T3..	●	●		
硬质合金 Solid carbide	C10M-SDQCR/L07	13	10	7	150	10	DC..0702..	●	○		
	C12Q-SDQCR/L07	16	12	9	180	8	DC..0702..	●	○		
	C16R-SDQCR/L07	20	16	11	200	6	DC..0702..	●	○		
	C20S-SDQCR/L11	25	20	13	250	8	DC..11T3..	●	○		
	C25T-SDQCR/L11	32	25	17	300	4	DC..11T3..	●	○		
钢 (带出水孔) Steel (with oil hole)	A10K-SDQCR/L07	13	10	7	125	10	DC..0702..	●	○		
	A12M-SDQCR/L07	16	12	9	150	8	DC..0702..	●	○		
	A16Q-SDQCR/L07	20	16	11	180	6	DC..0702..	●	○		

- 订货示例: 1件 S10K-SDQCR07
- 刀片需单独订购
- Ordering sample: 1 PC S10K-SDQCR07
- Insert should be ordered separately

备件

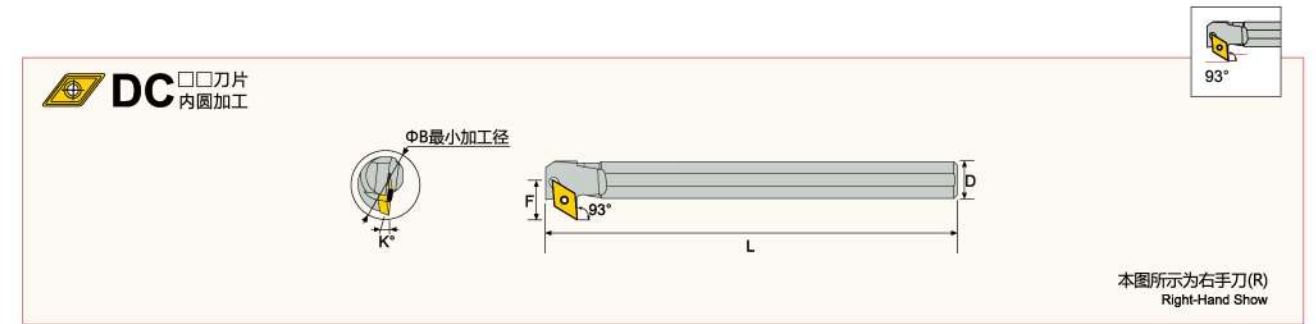
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SDQCR/L07	CS25	T-8
S12M-SDQCR/L07	CS25	T-8
S16Q-SDQCR/L07	CS25	T-8
S16Q-SDQCR/L11	CS35	T-15
S20R-SDQCR/L11	CS35	T-15
S25R-SDQCR/L11	CS35	T-15
S32S-SDQCR/L11	CS35	T-15
C10M-SDQCR/L07	CS25	T-8
C12Q-SDQCR/L07	CS25	T-8
C16R-SDQCR/L07	CS25	T-8
C20S-SDQCR/L11	CS35	T-15
C25T-SDQCR/L11	CS35	T-15
A10K-SDQCR/L07	CS25	T-8
A12M-SDQCR/L07	CS25	T-8
A16Q-SDQCR/L07	CS25	T-8

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SDZC93°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S10K-SDZCR/L07	15	10	8.5	125	12	DC..0702..	●	●		
	S12M-SDZCR/L07	17	12	10.5	150	9	DC..0702..	●	●		
	S16Z-SDZCR/L07	21	16	12.5	180	8	DC..0702..	●	●		
	S20R-SDZCR/L11	26	20	15.5	200	8	DC..11T3..	●	●		
	S25R-SDZCR/L11	33	25	18	200	6	DC..11T3..	●	●		
	S32S-SDZCR/L11	38	32	20.5	250	4	DC..11T3..	●	●		
	S40T-SDZCR/L11	41	40	20.5	300	4	DC..11T3..	●	●		

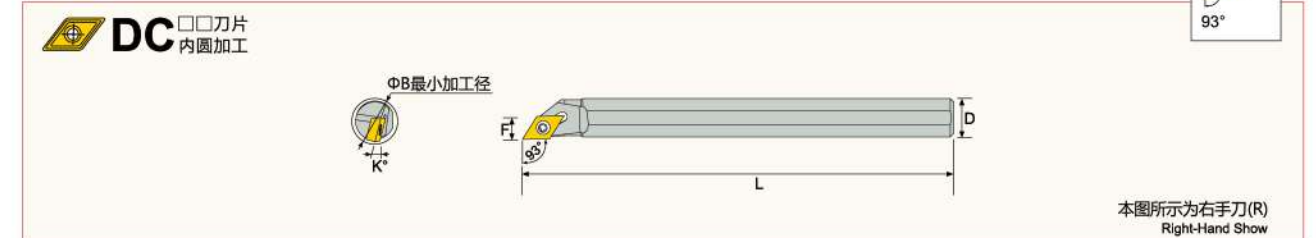
- 订货示例: 1件 S10K-SDZCR07
- 刀片需单独订购
- Ordering sample: 1 PC S10K-SDZCR07
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SDZCR/L07	CS25	T-8
S12M-SDZCR/L07	CS25	T-8
S16Z-SDZCR/L07	CS25	T-8
S20R-SDZCR/L11	CS35	T-15
S25R-SDZCR/L11	CS35	T-15
S32S-SDZCR/L11	CS35	T-15
S40T-SDZCR/L11	CS35	T-15

SDJC93°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S08K-SDJCR/L07	10	8	5	125	10	DC..0702..	●	●		
	S10K-SDJCR/L07	12	10	6	125	10	DC..0702..	●	●		
	S12N-SDJCR/L07	14	12	7	150	8	DC..0702..	●	●		
	S16J-SDJCR/L07	19	16	9	180	6	DC..0702..	●	●		
	S16J-SDJCR/L11	19	16	10	180	6	DC..11T3..	●	●		
	S20R-SDJCR/L11	24	20	12	200	8	DC..11T3..	●	●		
	S25R-SDJCR/L11	30	25	15	200	4	DC..11T3..	●	●		

- 订货示例: 1件 S08K-SDJCR07
- 刀片需单独订购
- Ordering sample: 1 PC ~SDJCR07
- Insert should be ordered separately

备件

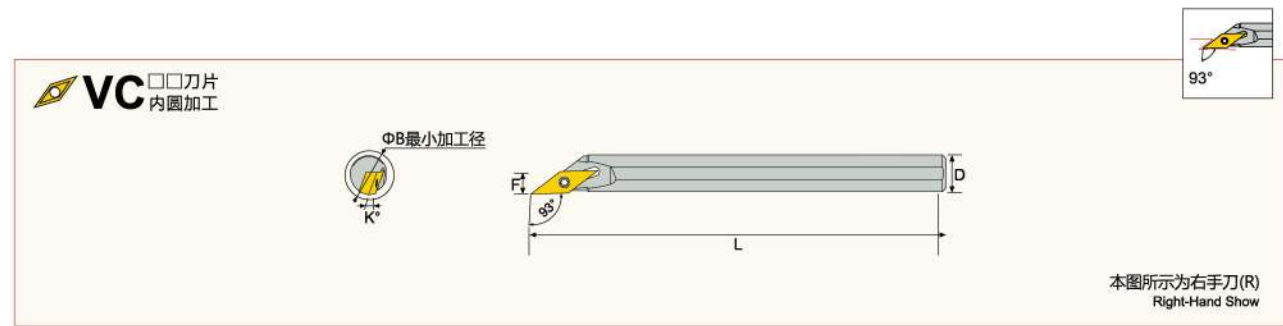
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-SDJCR/L07	CS25	T-8
S10K-SDJCR/L07	CS25	T-8
S12N-SDJCR/L07	CS25	T-8
S16J-SDJCR/L07	CS25	T-8
S16J-SDJCR/L11	CS35	T-15
S20R-SDJCR/L11	CS35	T-15
S25R-SDJCR/L11	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SVJC93°



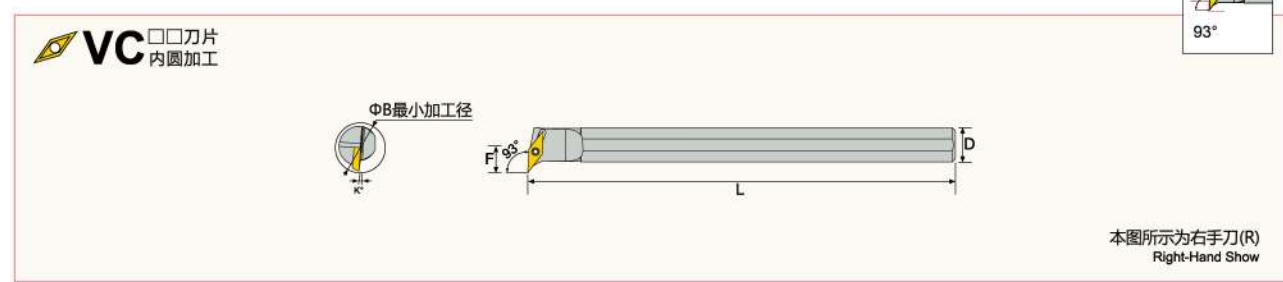
材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S10K-SVJCR/L11	12	10	6	125	10	VC..1103..	●	●		
	S12M-SVJCR/L11	14	2	7	150	10	VC..1103..	●	●		
	S16Q-SVJCR/L11	18	16	9	180	7	VC..1103..	●	●		
	S20R-SVJCR/L11	18	20	9	180	7	VC..1103..	●	●		
	S16Q-SVJCR/L16	18	16	9	180	7	VC..1604..	●	●		
	S20R-SVJCR/L16	25	20	9	200	7	VC..1604..	●	●		
	S25R-SVJCR/L16	32	25	11	200	7	VC..1604..	●	●		
	S32S-SVJCR/L16	40	32	14	250	5	VC..1604..	●	●		
	S40T-SVJCR/L16	47	40	23.5	300	8	VC..1604..	●	●		

- 订货示例: 1件 S10K-SVJCR11
- 刀片需单独订购
- Ordering sample: 1 PC S10K-SVJCR11
- Insert should be ordered separately

备件

规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SVJCR/L11	CS25	T-8
S12M-SVJCR/L11	CS25	T-8
S16Q-SVJCR/L11	CS25	T-8
S20R-SVJCR/L11	CS25	T-8
S16Q-SVJCR/L16	CS35	T-15
S20R-SVJCR/L16	CS35	T-15
S25R-SVJCR/L16	CS35	T-15
S32S-SVJCR/L16	CS35	T-15
S40T-SVJCR/L16	CS35	T-15

SVUC93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S10K-SVJCR/L11	12	10	6	125	10	VC..1103..	●	●		
	S12M-SVJCR/L11	14	2	7	150	10	VC..1103..	●	●		
	S16Q-SVJCR/L11	18	16	9	180	7	VC..1103..	●	●		
	S20R-SVJCR/L11	18	20	9	180	7	VC..1604..	●	●		

- 订货示例: 1件 S16Q-SVUCR11
- 刀片需单独订购
- Ordering sample: 1 PC S16Q-SVUCR11
- Insert should be ordered separately

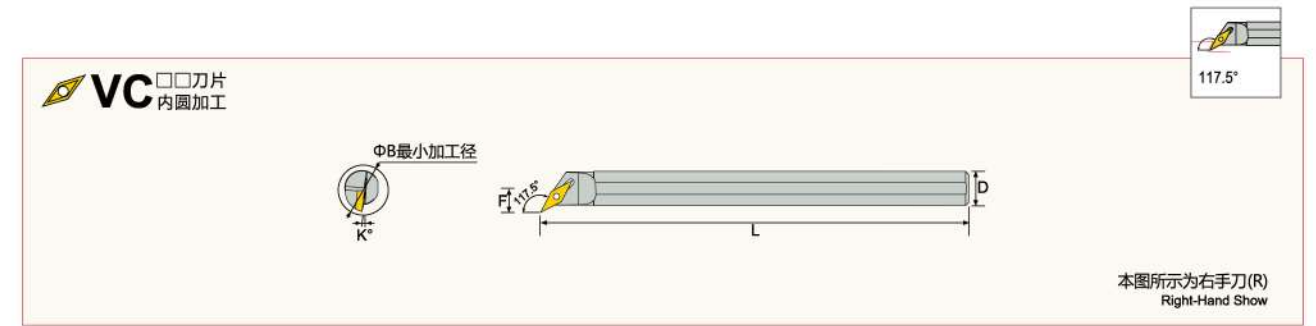
备件

规格型号 Designation	螺钉 Screw	扳手 Wrench
S16Q-SVUCR/L11	CS25	T-8
S20R-SVUCR/L11	CS25	T-8
S25R-SVUCR/L11	CS25	T-8
S25R-SVUCR/L16	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SVQC117.5°



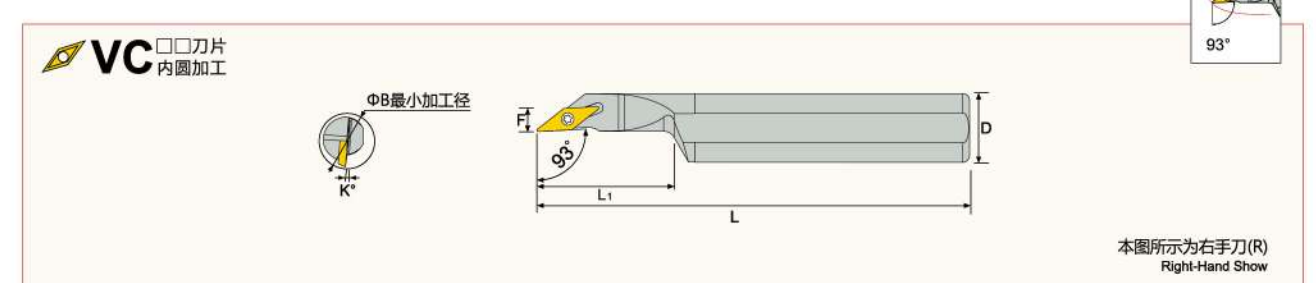
材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S16Q-SVQCR/L11	22	16	11	180	7	VC..1103..	●	●		
	S20R-SVQCR/L11	25	20	13	200	7	VC..1103..	●	●		
	S25R-SVQCR/L11	32	25	17	200	5	VC..1103..	●	●		
	S25R-SVQCR/L16	32	25	17	200	5	VC..1604..	●	●		

- 订货示例: 1件 S16Q-SVQCR11
- 刀片需单独订购
- Ordering sample: 1 PC S16Q-SVQCR11
- Insert should be ordered separately

备件

规格型号 Designation	螺钉 Screw	扳手 Wrench
S16Q-SVQCR/L11	CS25	T-8
S20R-SVQCR/L11	CS25	T-8
S25R-SVQCR/L11	CS25	T-8
S25R-SVQCR/L16	CS35	T-15

FS VJC93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)						刀片 Insert	在库 Stock	
		ΦB	D	F	L	L1	K°	R	L			
钢 Steel	S16K-FSVJCR/L11	20	16	2.0	125	36	5	VC..1103..	●	●		
	S20M-FSVJCR/L11	25	20	2.0	150	37.5	5	VC..1103..	●	●		
	S25M-FSVJCR/L11	30	25	3.5	150	45	5	VC..1103..	●	●		

- 订货示例: 1件 S16K-FSVJCR11
- 刀片需单独订购
- Ordering sample: 1 PC S16K-FSVJCR11
- Insert should be ordered separately

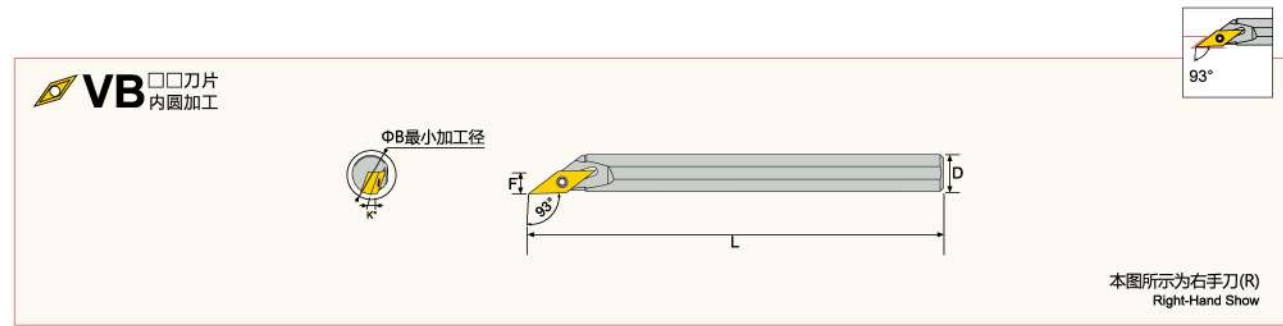
备件

规格型号 Designation	螺钉 Screw	扳手 Wrench
S16K-FSVJCR/L11	CS25	T-8
S20M-FSVJCR/L11	CS25	T-8
S25M-FSVJCR/L11	CS25	T-8

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SVJB93°



本图所示为右手刀(R)
Right-Hand Show

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S10K-SVJBR/L11	12	10	6	125	10	VC..1103..	●	●	
	S12M-SVJBR/L11	14	12	7	150	10	VC..1103..	●	●	
	S16Q-SVJBR/L16	18	16	9	180	7	VB..1604..	●	●	
	S20R-SVJBR/L16	25	20	9	200	7	VC..1604..	●	●	
	S25R-SVJBR/L16	32	25	11	200	7	VB..1604..	●	●	
	S40T-SVJBR/L16	57	40	28.5	300	8	VB..1604..	●	●	

- 订货示例: 1件 S10K-SVJBR11
- 刀片需单独订购

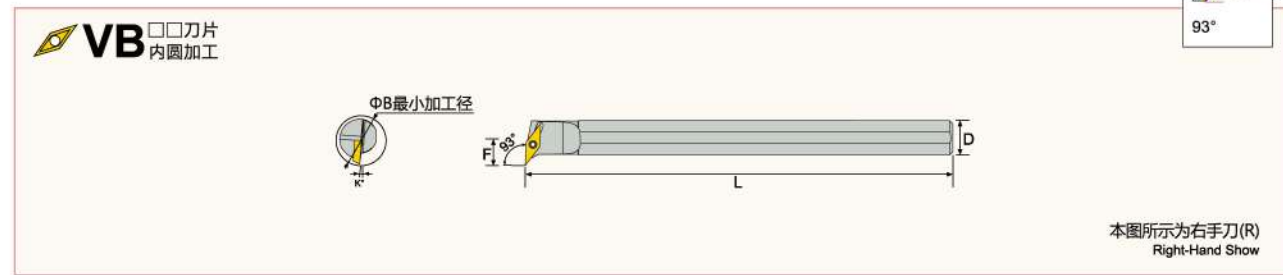
- Ordering sample: 1 PC S10K-SVJBR11
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SVJBR/L11	CS25	T-8
S12M-SVJBR/L11	CS26	T-8
S16Q-SVJBR/L16	CS35	T-15
S20R-SVJBR/L16	CS35	T-15
S25R-SVJBR/L16	CS35	T-15
S32S-SVJBR/L16	CS35	T-15
S40T-SVJBR/L16	CS35	T-15

SVUB93°



本图所示为右手刀(R)
Right-Hand Show

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S16Q-SVUBR/L11	22	16	11	180	7	VB..1103..	●	●	
	S20R-SVUBR/L11	27	20	13	200	7	VB..1103..	●	●	
	S25R-SVUBR/L16	33	16	17	200	5	VB..1604..	●	●	

- 订货示例: 1件 S16Q-SVUBR11
- 刀片需单独订购

- Ordering sample: 1 PC S16Q-SVUBR11
- Insert should be ordered separately

备件

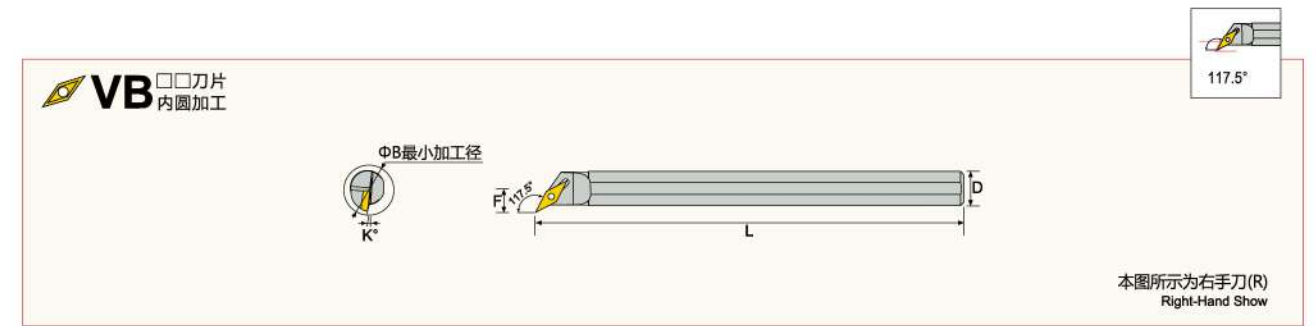
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S16Q-SVUBR/L11	CS25	T-8
S20R-SVUBR/L11	CS26	T-8
S25R-SVUBR/L16	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SVQB117.5°



本图所示为右手刀(R)
Right-Hand Show

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S16Q-SVQBR/L11	20	16	11	180	7	VB..1103..	●	●
	S20R-SVQBR/L11	25	20	13	200	7	VB..1103..	●	●
	S25R-SVQBR/L11	32	25	17	200	5	VB..1103..	●	●
	S25R-SVQBR/L16	32	25	17	200	5	VB..1604..	●	●

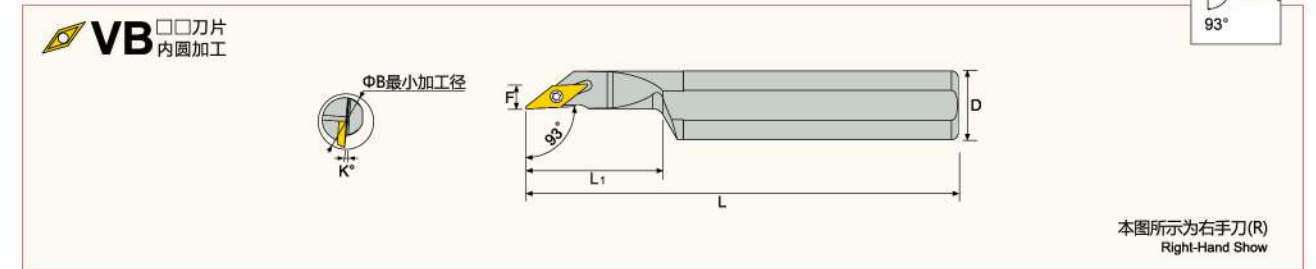
- 订货示例: 1件 S16Q-SVQBR11
- 刀片需单独订购
- Ordering sample: 1 PC S16Q-SVQBR11
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S16Q-SVQBR/L11	CS25	T-8
S20R-SVQBR/L11	CS25	T-8
S25R-SVQBR/L11	CS25	T-8
S25R-SVQBR/L16	CS35	T-15

FSVJB93°



本图所示为右手刀(R)
Right-Hand Show

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	L1	K°	R		L	
钢 Steel	S16K-FSVJBR/L11	20	16	2	125	36	5	VB..1103..	●	●	
	S20R-FSVJBR/L11	25	20	2	150	37.5	5	VB..1103..	●	●	
	S25R-FSVJBR/L11	30	25	3.5	150	45	5	VB..1103..	●	●	

- 订货示例: 1件 S16K-FSVJBR11
- 刀片需单独订购
- Ordering sample: 1 PC S16K-FSVJBR11
- Insert should be ordered separately

备件

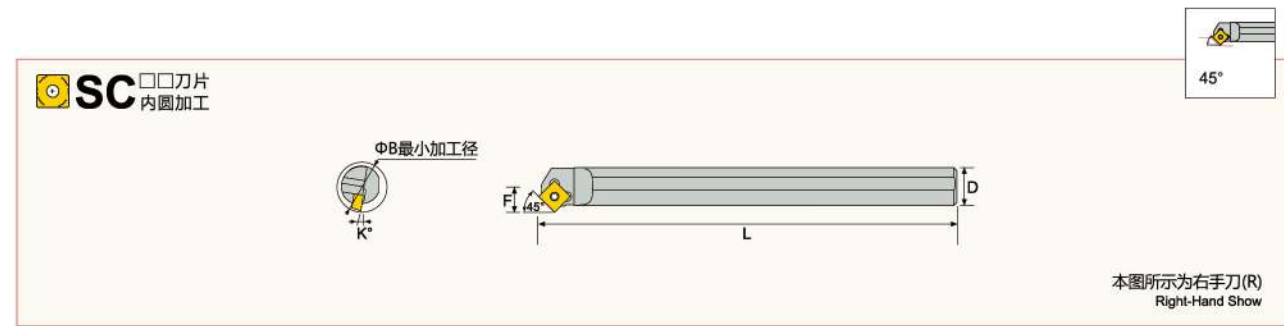
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S16K-FSVJBR/L11	CS25	T-8
S20R-FSVJBR/L11	CS25	T-8
S25R-FSVJBR/L11	CS25	T-8

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SSSC45°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S12M-SSSCR/L09	16	12	8.5	180	12	SC..09T3..	●	●	
	S09Q-SSSCR/L09	22	16	11.5	180	10	SC..09T3..	●	●	
	S20R-SSSCR/L09	26	20	13.5	200	8	SC..09T3..	●	●	
	S25R-SSSCR/L09	31	25	16	200	6	SC..09T3..	●	●	

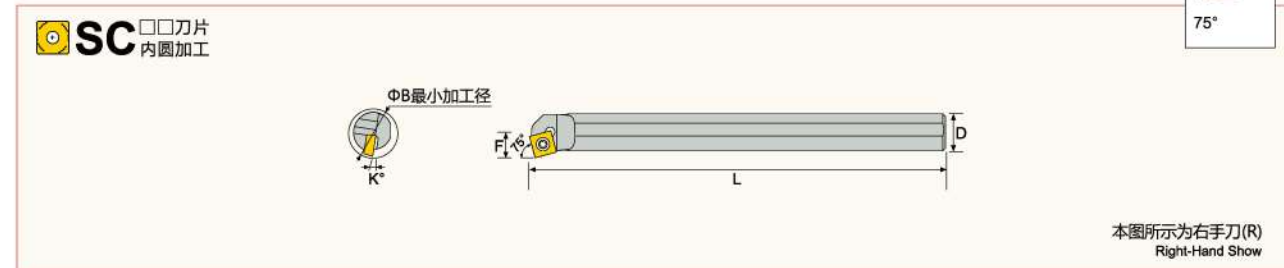
- 订货示例: 1件 S12M-SSSCR09
- 刀片需单独订购
- Ordering sample: 1 PC S12M-SSSCR09
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S12M-SSSCR/L09	CS35	T-15
S09Q-SSSCR/L09	CS35	T-15
S20R-SSSCR/L09	CS35	T-15
S25R-SSSCR/L09	CS35	T-15

SSKC75°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S12M-SSKCR/L09	16	12	8.5	150	12	SC..09T3..	●	●	
	S16Q-SSKCR/L09	20	16	10.5	160	10	SC..09T3..	●	●	
	S16Q-SSKCR/L09	20	16	10.5	180	10	SC..09T3..	●	●	
	S20R-SSKCR/L09	24	20	12.5	200	8	SC..09T3..	●	●	
	S25R-SSKCR/L09	31	25	15	200	6	SC..09T3..	●	●	

- 订货示例: 1件 S12M-SSKCR09
- 刀片需单独订购
- Ordering sample: 1 PC S12M-SSKCFDI
- Insert should be ordered separately

备件

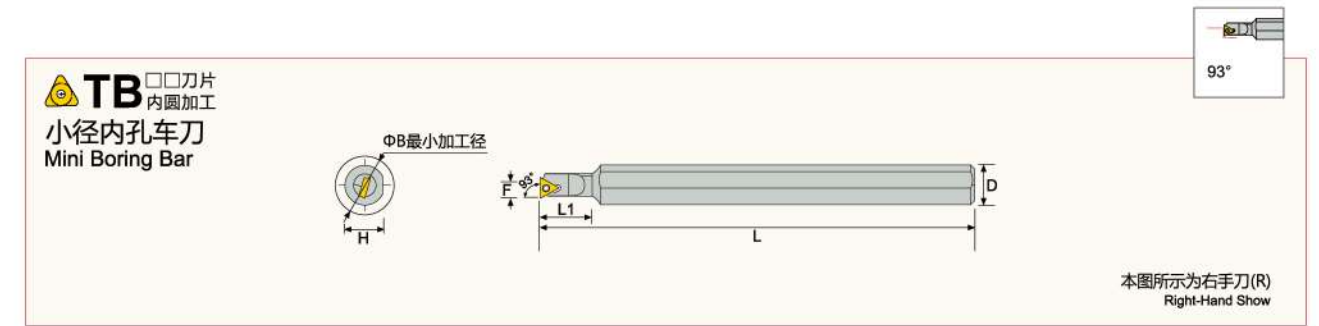
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S12M-SSKCR/L09	CS35	T-15
S16Q-SSKCR/L09	CS35	T-15
S16Q-SSKCR/L09	CS35	T-15
S20R-SSKCR/L09	CS35	T-15
S25R-SSKCR/L09	CS35	T-15

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

STU893°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	L	L1	H	R		L	
钢 Steel	S1606J-STUBR/L06-07	7	16	110	15	15	TB..0601..	●	○	
	S1607J-STUBR/L06-08	8	16	120	15	15	TB..0601..	●	○	
	S1608J-STUBR/L06-09	9	16	110	15	15	TB..0601..	●	○	
	S1609J-STUBR/L06-10	10	16	120	15	15	TB..0601..	●	○	

- 订货示例: 1件 S1606J-STUBR06-07
- 刀片需单独订购

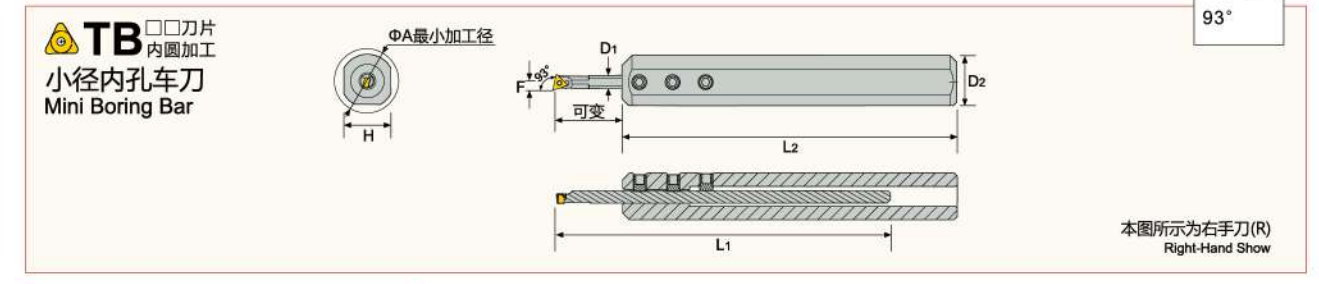
- Ordering sample: 1 PC S1606J-STUBR06-07
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S1606J-STUBR/L06-07	CS20	T-6
S1607J-STUBR/L06-08	CS20	T-6
S1608J-STUBR/L06-09	CS20	T-6
S1609J-STUBR/L06-10	CS20	T-6

STUB93°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)						刀片 Insert	在库 Stock	
		ΦB	D1	H	L	L1	F	D2	R		L	
钢 Steel	SC06J-STUBR/L06-07	16	6	15	110	100	3.5	16	TB..0601..	●	●	

- 订货示例: 1件 C06J-STUBR06-07
- 刀片需单独订购
- 套筒需另购, 请参照: D093, D094 页

- Ordering sample: 1 PC C06J-STUBR06-07
- Insert should be ordered separately
- Sleeve please see Page D093, D094

备件

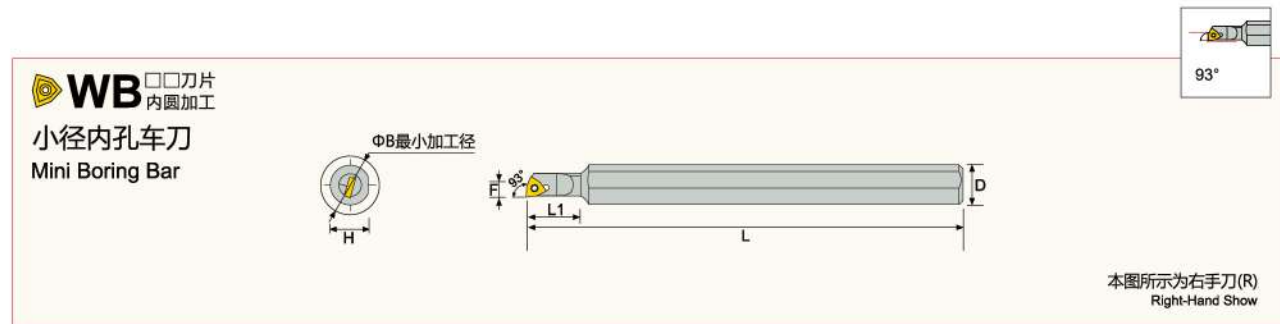
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
C06J-STUBR/L06-07	CS20	T-6

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

SWUB93°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	L	L ₁	H	R	L			
钢 Steel	S1005J-SWUBR/L06-06	6	10	110	15	9	WB..0601..	●	○		
	S1006J-SWUBR/L06-07	7	10	110	15	9	WB..0601..	●	○		
	S06J-SWUBR/L06-08	8	6	110	15	5	WB..0601..	●	○		
	S1205J-SWUBR/L06-06	6	12	110	15	11	WB..0601..	●	○		
	S1605J-SWUBR/L06-06	6	16	110	15	15	WB..0601..	●	○		
	S1606J-SWUBR/L06-07	7	16	110	15	15	WB..0601..	●	○		
	S1607J-SWUBR/L06-08	8	16	110	15	15	WB..0601..	●	○		
	S1608J-SWUBR/L06-09	9	16	110	15	15	WB..0601..	●	○		

• 订货示例: 1件 S1005J-SWUBR06-06
• 刀片需单独订购

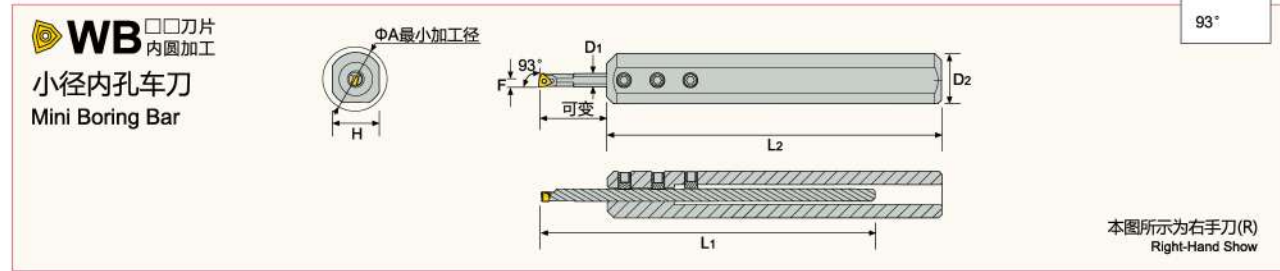
• Ordering sample: 1 PC S1005J-SWUBR06-06
• Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S1005J-SWUBR/L06-06	CS20	T-6
S1006J-SWUBR/L06-07	CS20	T-6
S06J-SWUBR/L06-08	CS20	T-6
S1205J-SWUBR/L06-06	CS20	T-6
S1605J-SWUBR/L06-06	CS20	T-6
S1606J-SWUBR/L06-07	CS20	T-6
S1607J-SWUBR/L06-08	CS20	T-6
S1608J-SWUBR/L06-09	CS20	T-6

SWUB93°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)							刀片 Insert	在库 Stock	
		ΦA	D ₁	H	L ₁	L ₂	F	D ₂	R	L			
硬 Carbide	C05H-SWUBR/L06-06	6	5	15	100	100	3	16	WB..0601..	●	○		
	C06J-SWUBR/L06-07	7	6	15	110	100	3.5	16	WB..0601..	●	○		
	C0807K-SWUBR/L06-08	8	7	15	125	100	4	16	WB..0601..	●	○		

• 订货示例: 1件 C05H-SWUBR06-06
• 刀片需单独订购
• 套筒需另购, 请参照: D093, D094

• Ordering sample: 1 PC C05H-SWUBR06-06
• Insert should be ordered separately
• Sleeve please see Page D093, D094

备件

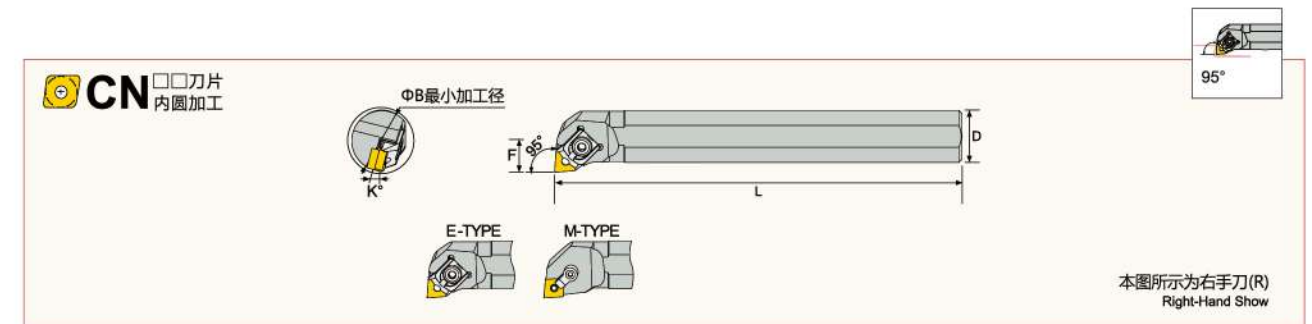
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
C05H-SWUBR/L06-06	CS20	T-6
C06J-SWUBR/L06-07	CS20	T-6
C0807K-SWUBR/L06-08	CS20	T-6

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

ECLN95°



材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S32S-ECLNR/L12	40	32	22	250	14	CN..1204..	●	●		
	S32U-ECLNR/L12	40	32	22	250	14	CN..1204..	●	●		
	S40T-ECLNR/L12	50	40	27	300	12	CN..1204..	●	●		
	S40W-ECLNR/L12	50	40	27	450	12	CN..1204..	●	●		
	S50U-ECLNR/L12	63	50	35	350	12	CN..1204..	●	●		
	S50Y-ECLNR/L12	63	50	35	500	10	CN..1204..	●	●		
	S60Y-ECLNR/L12	72	60	36	500	10	CN..1204..	●	●		
	S63Y-ECLNR/L12	76	63	38	500	10	CN..1204..	●	●		

• 订货示例: 1件 S32S-ECLNR12
• 刀片需单独订购
• Ordering sample: 1 PC S32S-ECLN12
• Insert should be ordered separately

材质 Material	规格型号 Designation	加工孔径 Min. Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S16Q-MCLNR/L09	22	16	11	180	17	CN..0903..	●	●		
	S20R-MCLNR/L09	25	20	13	200	17	CN..0903..	●	●		
	S20R-MCLNR/L12	25	20	13	200	17	CN..1204..	●	●		
	S25R-MCLNR/L12	32	25	17	200	14	CN..1204..	●	●		
	S32S-MCLNR/L12	40	32	22	250	14	CN..1204..	●	●		
	S40T-MCLNR/L12	50	40	27	300	12	CN..1204..	●	●		
	S50U-MCLNR/L12	63	50	35	350	12	CN..1204..	●	●		

• 订货示例: 1件 S16Q-MCLNR09
• 刀片需单独订购
• Ordering sample: 1 PC S16Q-MCLN09
• Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C扣环 Clasp	L型扳手 Allen key
S32S-ECLNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S32U-ECLNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S40T-ECLNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S40W-ECLNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S50U-ECLNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S50Y-ECLNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S60Y-ECLNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S63Y-ECLNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040

备件

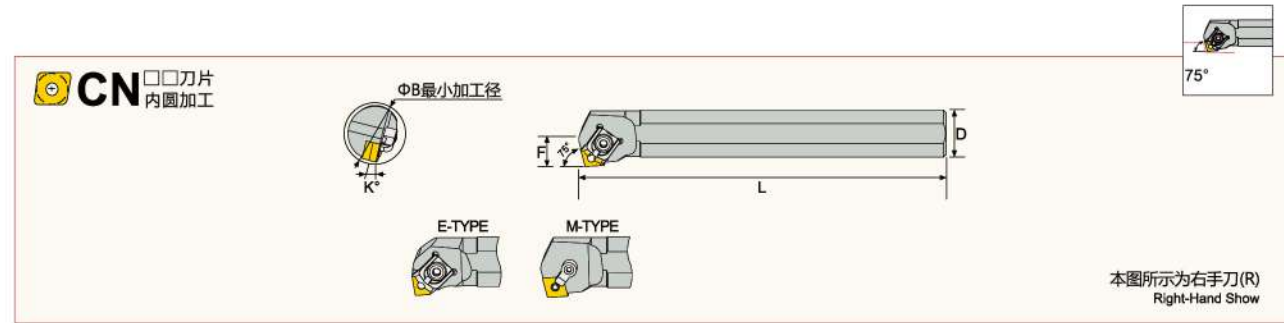
Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
S16Q-MCLNR/L09	-	LCS-509	CP50-21	CS70-20	LW020 LW025
S20R-MCLNR/L09	-	LCS-509	CP50-21	CS70-20	LW020 LW025
S20R-MCLNR/L12	-	LCS-511	CP50-21	CS70-20	LW025
S25R-MCLNR/L12	-	LCS-511	CP50-22	CS70-21	LW025 LW030
S32S-MCLNR/L12	SMC-432	LCS-617	CP50-22	CS70-22	LW030
S40T-MCLNR/L12	SMC-432	LCS-617	CP50-22	CS70-22	LW030
S50U-MCLNR/L12	SMC-432	LCS-617	CP50-22	CS70-22	LW030

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

ECKN75°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S32S-ECKNR/L12	40	32	22	250	14	CN..1204..	●	●		
	S40T-ECKNR/L12	50	40	27	300	12	CN..1204..	●	●		
	S50U-ECKNR/L12	63	50	35	300	12	CN..1204..	●	●		

- 订货示例: 1件 S32S-ECKNR12
- 刀片需单独订购
- Ordering sample: 1 PC S32S-ECKNR12
- Insert should be ordered separately

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S20R-MCKNR/L12	25	20	18	200	17	CN..1204..	●	●		
	S25R-MCKNR/L12	32	25	17	200	14	CN..1204..	●	●		
	S32S-MCKNR/L12	40	32	22	250	12	CN..1204..	●	●		
	S40T-MCKNR/L12	50	40	27	300	12	CN..1204..	●	●		
	S50U-MCKNR/L12	63	50	35	350	12	CN..1204..	●	●		

- 订货示例: 1件 S20R-MCKNR12
- 刀片需单独订购
- Ordering sample: 1 PC S20R-MCKNR12
- Insert should be ordered separately

备件

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C扣环 Clasp	L型扳手 Allen key
S32S-ECKNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S40T-ECKNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040
S50U-ECKNR/L12	SMC-432	LW-4B	CN12-2	CS80	C-6	LW030 LW040

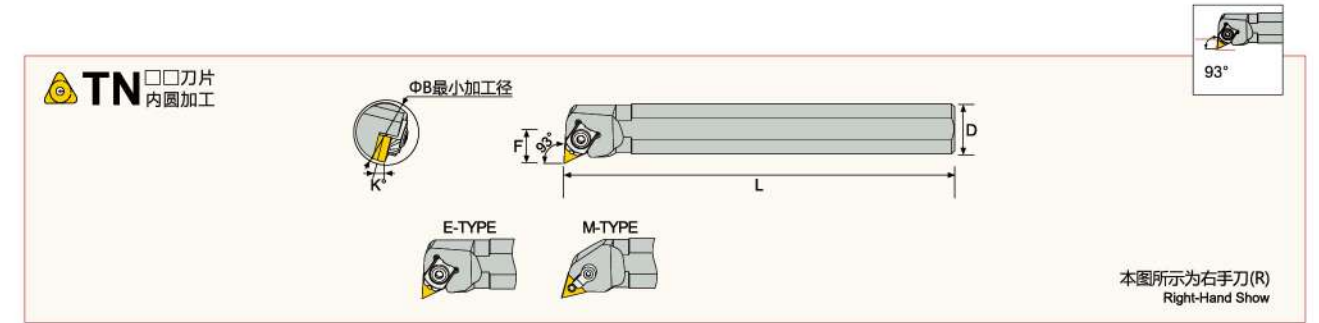
备件

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
S20R-MCKNR/L12	-	LCS-511	CP50-21	CS70-20	LW025
S25R-MCKNR/L12	-	LCS-511	CP50-22	CS70-21	LW025 LW030
S32S-MCKNR/L12	SMC-432	LCS-617	CP50-22	CS70-22	LW030
S40T-MCKNR/L12	SMC-432	LCS-617	CP50-22	CS70-22	LW030
S50U-MCKNR/L12	SMC-432	LCS-617	CP50-22	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

ETUN93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S25R-ETUNR/L16	32	25	17	200	12	TN..1604..	●	●		
	S25T-ETUNR/L16	32	25	17	300	12	TN..1604..	●	●		
	S32S-ETUNR/L16	40	32	22	250	10	TN..1604..	●	●		
	S32U-ETUNR/L16	40	32	22	350	10	TN..1604..	●	●		
	S40T-ETUNR/L16	50	40	27	300	10	TN..1604..	●	●		
	S40W-ETUNR/L16	50	40	27	450	10	TN..1604..	●	●		
	S50U-ETUNR/L16	63	50	35	350	8	TN..1604..	●	●		
	S50Y-ETUNR/L16	63	50	35	500	8	TN..1604..	●	●		
	S60Y-ETUNR/L16	72	60	36	500	10	TN..1604..	●	●		
	S63Y-ETUNR/L16	76	63	36	500	10	TN..1604..	●	●		

- 订货示例: 1件 S25R-ETUNR16
- 刀片需单独订购
- Ordering sample: 1 PC S25R-ETUNR16
- Insert should be ordered separately

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S16Q-MTUNR/L16A	22	16	11	180	17	TN..1604..	●	●		
	S20R-MTUNR/L16A	25	20	13	200	17	TN..1604..	●	●		
	S25R-MTUNR/L16A	32	25	17	200	12	TN..1604..	●	●		
	S32S-MTUNR/L16A	40	32	22	250	10	TN..1604..	●	●		
	S40T-MTUNR/L16A	50	40	27	300	10	TN..1604..	●	●		
	S50U-MTUNR/L16A	63	50	35	350	8	TN..1604..	●	●		

- 订货示例: 1件 S16Q-MTUNR16A
- 刀片需单独订购
- Ordering sample: 1 PC S16Q-MTUNR16A
- Insert should be ordered separately

备件

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C扣环 Clasp	L型扳手 Allen key
S25R-ETUNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S25T-ETUNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S32S-ETUNR/L16	WMT-322	LT-4	TN16-3	CS80	C-6	LW025 LW040
S32U-ETUNR/L16	WMT-322	LT-4	TN16-3	CS80	C-6	LW025 LW040
S40T-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S40W-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S50U-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S50Y-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S60Y-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S63Y-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040

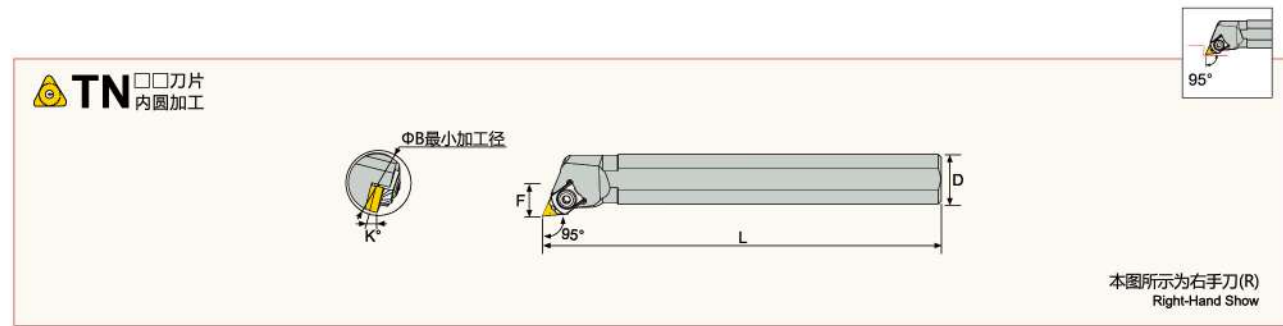
备件

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
S16Q-MTUNR/L16A	-	LCS-509	CP50-21	CS70-20	LW020 LW025
S20R-MTUNR/L16A	-	LCS-509	CP50-21	CS70-20	LW020 LW025
S25R-MTUNR/L16A	-	LCS-511	CP50-21	CS70-20	LW025
S32S-MTUNR/L16A	-	LCS-511	CP50-22	CS70-21	LW025 LW030
S40T-MTUNR/L16A	SMC-432	LCS-617	CP50-22	CS70-22	LW030
S50U-MTUNR/L16A	SMC-432	LCS-617	CP50-22	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

ETIN95°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S32S-ECKNR/L12	40	32	22	250	14	CN..1204..	●	●	
	S40T-ECKNR/L12	50	40	27	300	12	CN..1204..	●	●	
	S50U-ECKNR/L12	63	50	35	300	12	CN..1204..	●	●	

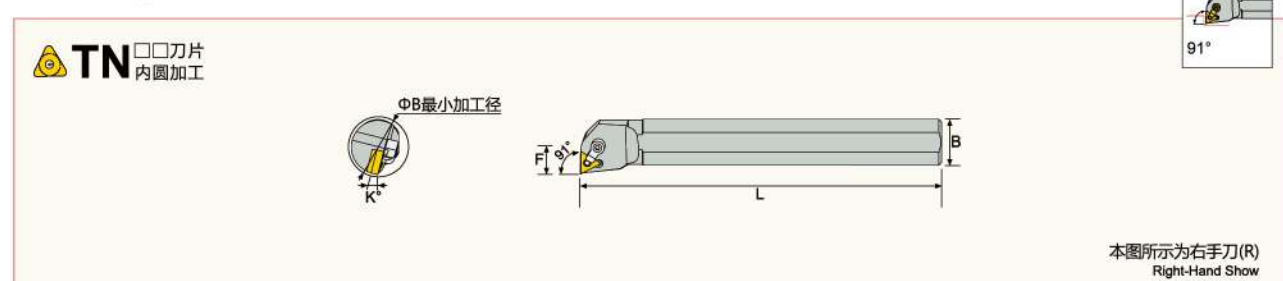
- 订货示例: 1件 S20R-ETLNR16
- 刀片需单独订购
- Ordering sample: 1 PC S20R-ETLNR16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S25R-ETUNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S25T-ETUNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030

MTFN91°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S20R-MTFNR/L16	25	20	13	200	17	TN..1604..	●	●	
	S25R-MTFNR/L16	32	25	17	200	12	TN..1604..	●	●	
	S32S-MTFNR/L16	40	32	22	250	10	TN..1604..	●	●	
	S40T-MTFNR/L16	50	40	27	300	10	TN..1604..	●	●	
	S50U-MTFNR/L16	63	50	35	350	8	TN..1604..	●	●	

- 订货示例: 1件 S20R-ETLNR16
- 刀片需单独订购
- Ordering sample: 1 PCS20R-ETLNR16
- Insert should be ordered separately

备件

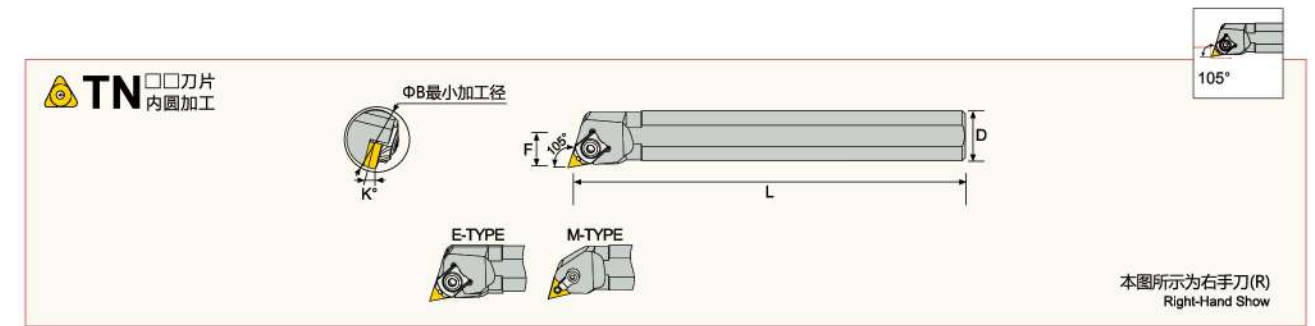
Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S16Q-MTUNR/L16A	-	LCS-510	CP50-21	CS70-20	LW020 LW025
S20R-MTUNR/L16A	-	LCS-510	CP50-22	CS70-20	LW020 LW030
S25R-MTUNR/L16A	SMT-322	LCS-513	CP50-22	CS70-20	LW020 LW030
S32S-MTUNR/L16A	SMT-322	LCS-513	CP50-22	CS70-21	LW020 LW030
S40T-MTUNR/L16A	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

ETQN 105°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S20R-ETQNR/L16	25	20	13	200	17	TN..1604..	●	●	
	S25R-ETQNR/L16	32	25	17	200	12	TN..1604..	●	●	
	S32S-ETQNR/L16	40	32	22	250	10	TN..1604..	●	●	
	S40T-ETQNR/L16	50	40	27	300	10	TN..1604..	●	●	
	S50U-ETQNR/L16	63	50	35	350	8	TN..1604..	●	●	

- 订货示例: 1件 S20R-ETQNR16
- 刀片需单独订购
- Ordering sample: 1 PC S20R-ETQNR16
- Insert should be ordered separately

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R		L	
钢 Steel	S20R-MTQNR/L16	25	20	13	200	17	TN..1604..	●	●	
	S25R-MTQNR/L16	32	25	17	200	12	TN..1604..	●	●	
	S32S-MTQNR/L16	40	32	22	250	10	TN..1604..	●	●	
	S40T-MTQNR/L16	50	40	27	300	10	TN..1604..	●	●	
	S50U-MTQNR/L16	63	50	35	350	8	TN..1604..	●	●	

- 订货示例: 1件 S20R-MTQNR16
- 刀片需单独订购
- Ordering sample: 1 PC S20R-MTQNR16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S25R-ETUNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S25T-ETUNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S32S-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S32U-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S40T-ETUNR/L16	WMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040

备件

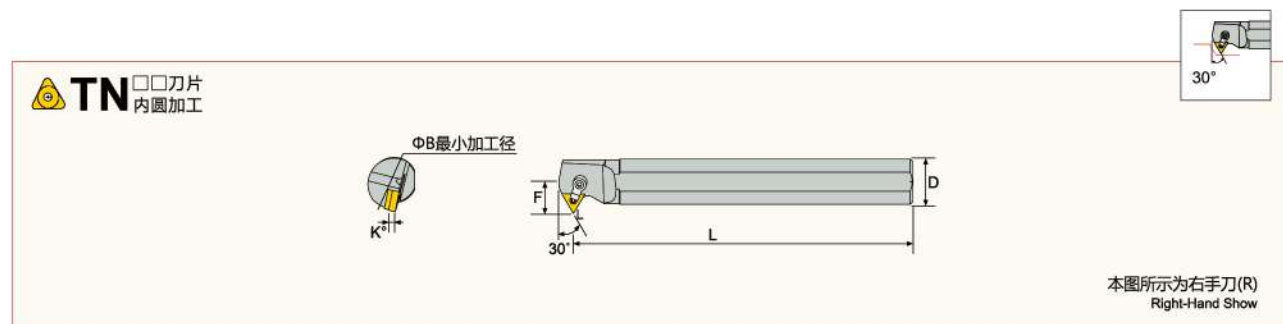
Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S20R-MTQNR/L16	-	LCS-510	CP50-21	CS70-20	LW020 LW025
S25R-MTQNR/L16	-	LCS-510	CP50-21	CS70-20	LW020 LW025
S32S-MTQNR/L16	SMT-322	LCS-513	CP50-21	CS70-20	LW025
S40T-MTQNR/L16	SMT-322	LCS-513	CP50-22	CS70-21	LW025 LW030
S50U-MTQNR/L16	SMT-322	LCS-513	CP50-22	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

MTWN30°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S16Q-MTWNR/L16	21	16	11	150	20	TN..1604..	●	●
	S20R-MTWNR/L16	27	20	14	200	17	TN..1604..	●	●
	S25R-MTWNR/L16	32	25	17	200	12	TN..1604..	●	●
	S32S-MTWNR/L16	39	32	20	250	17	TN..1604..	●	●
	S40T-MTWNR/L16	50	40	24	300	15	TN..1604..	●	●
	S50U-MTWNR/L16	57	50	29	350	12	TN..1604..	●	●

- 订货示例: 1件 S16Q-MTWNR16
- 刀片需单独订购
- Ordering sample: 1 PC S16Q-MTWNR16
- Insert should be ordered separately

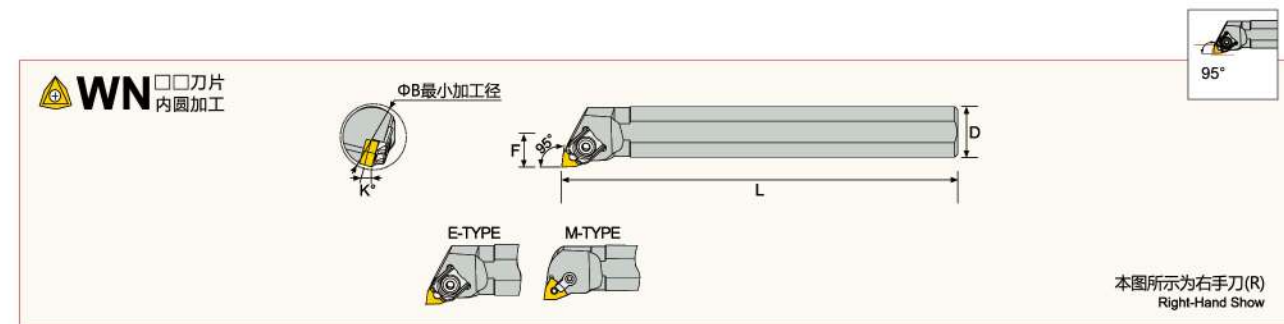
备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
S16Q-MTWNR/L16	-	LCS-510	CP50-21	CS70-20	LW025 LW020
S20R-MTWNR/L16	-	LCS-510	CP50-22	CS70-21	LW020 LW030
S25R-MTWNR/L16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030
S32S-MTWNR/L16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030
S40T-MTWNR/L16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030
S50U-MTWNR/L16	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030

BORING BAR SERIES 内圆车削刀具

EWLNR95°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S20R-EWLNR/L06	25	20	13	200	17	WN..0604..	●	●
	S25R-EWLNR/L06	32	25	17	200	14	WN..0604..	●	●
	S25R-EWLNR/L08	32	25	17	200	14	WN..0804..	●	●
	S25T-EWLNR/L08	32	25	17	300	14	WN..0804..	●	●
	S32S-EWLNR/L08	40	32	22	250	14	WN..0804..	●	●
	S32U-EWLNR/L08	40	32	22	350	14	WN..0804..	●	●
	S40T-EWLNR/L08	50	40	27	300	12	WN..0804..	●	●
	S40W-EWLNR/L08	50	40	27	450	12	WN..0804..	●	●
	S50U-EWLNR/L08	63	50	35	350	12	WN..0804..	●	●
	S50Y-EWLNR/L08	63	50	35	500	12	WN..0804..	●	●

- 订货示例: 1件 S20R-EWLNR06
- 刀片需单独订购
- Ordering sample: 1 PC S20R-EWLNR06
- Insert should be ordered separately

材质 Shark	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)			刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S06Q-MWLNR/L06	22	16	11	180	20	WN..0604..	●	●
	S20R-MWLNR/L08	25	20	13	200	17	WN..0804..	●	●
	S25R-MWLNR/L08	32	25	17	200	14	WN..0804..	●	●
	S32S-MWLNR/L08	40	32	22	250	14	WN..0804..	●	●
	S40T-MWLNR/L08	50	40	27	300	12	WN..0804..	●	●
	S50U-MWLNR/L08	63	50	35	350	12	WN..0804..	●	●

- 订货示例: 1件 S16Q-MWLNR06
- 刀片需单独订购
- Ordering sample: 1 PC S16Q-MWLNR06
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C扣环 Clasp	L型扳手 Allen key
S20R-EWLNR/L06	-	LT-2	WN06-2	CS60E	C-5	LW025 LW030
S25R-EWLNR/L06	-	LT-2	WN06-2	CS60E	C-5	LW025 LW030
S25R-EWLNR/L08	-	LW-3	WN06-3	CS60E	C-5	LW025 LW030
S25T-EWLNR/L08	-	LW-3	WN06-3	CS60E	C-5	LW025 LW030
S32S-EWLNR/L08	SMW-422	LW-4B	WN06-4	CS80	C-6	LW030 LW040
S32U-EWLNR/L08	SMW-422	LW-4B	WN06-4	CS80	C-6	LW030 LW040
S40T-EWLNR/L08	SMW-422	LW-4B	WN06-4	CS80	C-6	LW030 LW040
S40W-EWLNR/L08	WMT-322	LW-4B	WN06-4	CS80	C-6	LW030 LW040
S50U-EWLNR/L08	WMT-322	LW-4B	WN06-4	CS80	C-6	LW030 LW040
S50Y-EWLNR/L08	WMT-322	LW-4B	WN06-4	CS80	C-6	LW030 LW040

备件

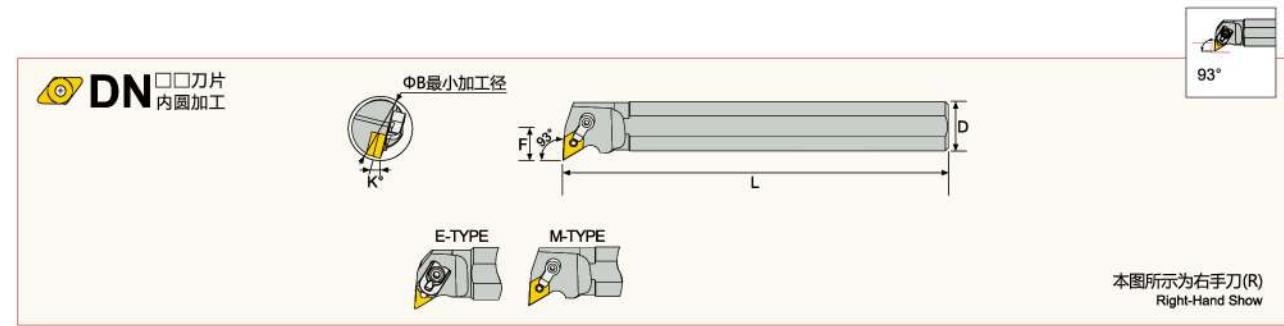
Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
S06Q-MWLNR/L06	-	LCS-510	CP50-21	CS70-20	LW020 LW025
S20R-MWLNR/L08	-	LCS-511	CP50-21	CS70-21	LW025
S25R-MWLNR/L08	-	LCS-511	CP50-22	CS70-21	LW025 LW030
S32S-MWLNR/L08	SMW-422	LCS-617	CP50-22	CS70-21	LW030
S40T-MWLNR/L08	SMW-422	LCS-617	CP50-22	CS70-22	LW030
S50U-MWLNR/L08	SMW-422	LCS-617	CP50-22	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

EDUN93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S40T-EDUNR/L15	50	40	27	300	10	DN..1504..	●	●		
	S50U-EDUNR/L15	63	50	35	350	10	DN..1504..	●	●		
	S40T-EDUNR/L15A	50	40	27	300	10	DN..1506..	●	●		
	S50U-EDUNR/L15A	63	50	35	350	10	DN..1506..	●	●		

- 订货示例: 1件 S40T-EDUNR15
- 刀片需单独订购
- Ordering sample: 1 PC S40T-EDUNR15
- Insert should be ordered separately

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S25R-MDUNR/L15	32	25	17	200	12	DN..1504..	●	●		
	S32S-MDUNR/L15	40	32	22	250	10	DN..1504..	●	●		
	S40T-MDUNR/L15	50	40	27	300	10	DN..1504..	●	●		
	S50U-MDUNR/L15	63	50	35	350	10	DN..1504..	●	●		

- 订货示例: 1件 S25R-MDUNR15
- 刀片需单独订购
- Ordering sample: 1 PC S25R-MDUNR15
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C扣环 Clasp	L型扳手 Allen key
S40T-EDUNR/L15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
S50U-EDUNR/L15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
S40T-EDUNR/L15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040
S50U-EDUNR/L15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040

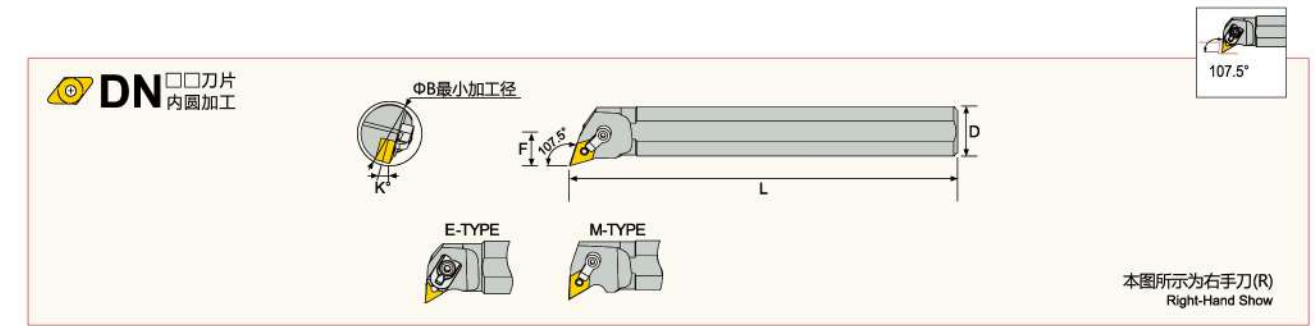
备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
S25R-MDUNR/L15	-	LCS-511	CP50-22	CS70-21	LW025 LW030
S32S-MDUNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030
S40T-MDUNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030
S50U-MDUNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030

BORING BAR SERIES 内圆车削刀具

EDQN107.5°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S40T-EDQNR/L15	50	40	27	300	10	DN..1504..	●	●		
	S50Q-EDQNR/L15	63	50	35	350	10	DN..1504..	●	●		
	S40T-EDQNR/L15A	50	40	27	300	10	DN..1506..	●	●		
	S50Q-EDQNR/L15A	63	50	35	350	10	DN..1506..	●	●		

- 订货示例: 1件 S40T-EDQNR15
- 刀片需单独订购
- Ordering sample: 1 PC S40T-EDQNR15
- Insert should be ordered separately

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S25R-MDQNR/L15	32	25	17	200	12	DN..1504..	●	●		
	S32S-MDQNR/L15	40	32	22	250	10	DN..1504..	●	●		
	S40T-MDQNR/L15	50	40	27	300	10	DN..1504..	●	●		
	S50U-MDQNR/L15	63	50	35	350	10	DN..1504..	●	●		

- 订货示例: 1件 S25R-MDQNR15
- 刀片需单独订购
- Ordering sample: 1 PC S25R-MDQNR15
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C扣环 Clasp	L型扳手 Allen key
S40T-EDUNR/L15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
S50U-EDUNR/L15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
S40T-EDUNR/L15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040
S50U-EDUNR/L15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040

备件

Spare Parts

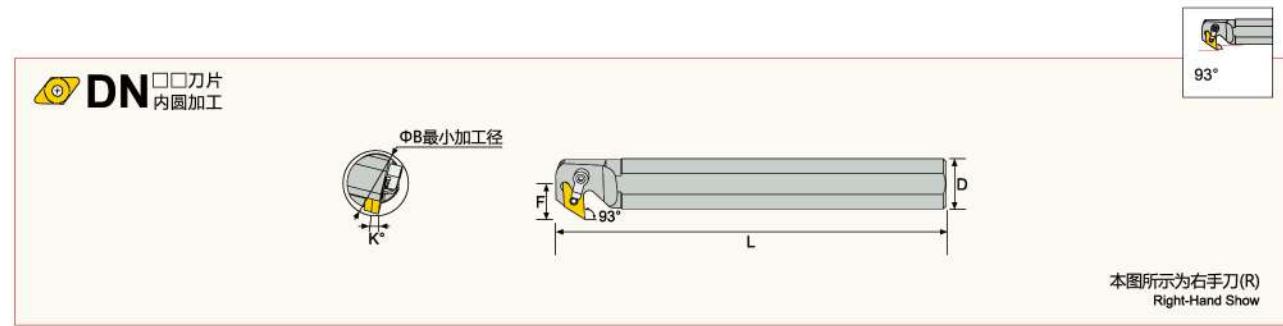
规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L型扳手 Allen key
S25R-MDQNR/L15	-	LCS-511	CP50-22	CS70-21	LW025 LW030
S32S-MDQNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030
S40T-MDQNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030
S50U-MDQNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

MDZN93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S32S-MDZNR/L15	40	32	22	250	17	DN..1504..	●	●		
	S40T-MDZNR/L15	50	40	27	300	15	DN..1504..	●	●		
	S50U-MDZNR/L15	63	50	35	350	12	DN..1504..	●	●		
	S50U-EDQNR/L15A	63	50	35	350	10	DN..1506..	●	●		

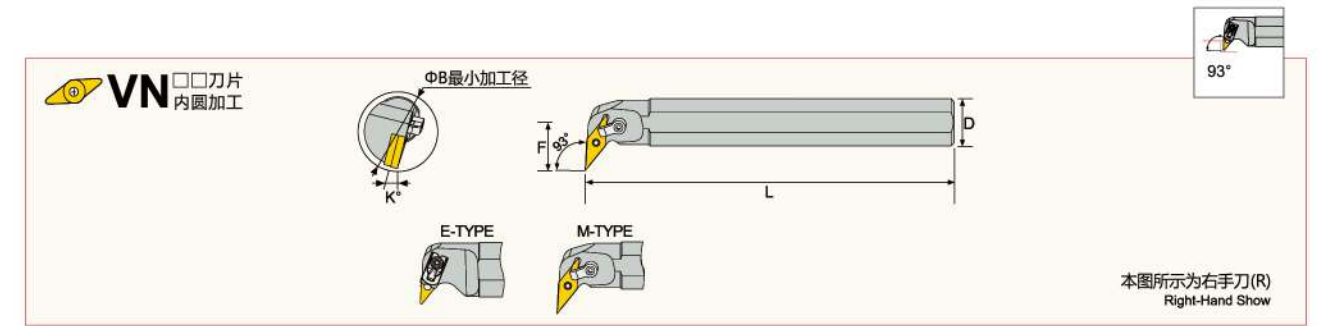
- 订货示例: 1 件 S32S-MDZNR15
- 刀片需单独订购
- Ordering sample: 1 PC S32S-MDZNR15
- Insert should be ordered separately

备件

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S32S-MDZNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030
S40T-MDZNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030
S50U-MDZNR/L15	SMD-463	LCS-619	CP50-24	CS70-22	LW030

BORING BAR SERIES 内圆车削刀具

EVUN93°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S40T-EDQNR/L15	50	40	27	300	10	DN..1504..	●	●		
	S50Q-EDQNR/L15	63	50	35	350	10	DN..1504..	●	●		
	S40T-EDQNR/L15A	50	40	27	300	10	DN..1506..	●	●		
	S50U-EDQNR/L15A	63	50	35	350	10	DN..1506..	●	●		

- 订货示例: 1 件 S40T-EVUNR16
- 刀片需单独订购
- Ordering sample: 1 PC S40T -EVUNR16
- Insert should be ordered separately

备件

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S40T-EVUNR/L16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
S50U-EVUNR/L16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

- 订货示例: 1 件 S25R-MVUNR16
- 刀片需单独订购
- Ordering sample: 1 PC S25R-MVUNR16
- Insert should be ordered separately

备件

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S25R-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030	
S32S-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030	
S40T-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030	
S50U-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030	

备件

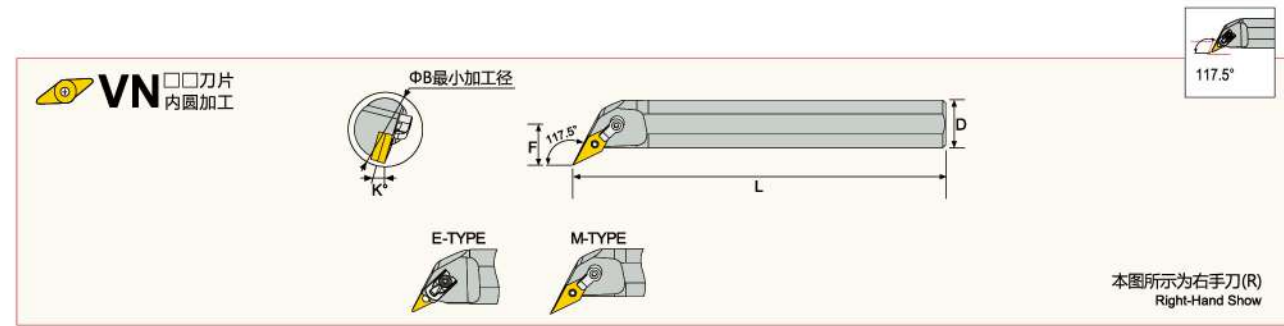
规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S25R-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030
S32S-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030
S40T-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030
S50U-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

BORING BAR SERIES 内圆车削刀具

EVQN117.5°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S40T-EVQNR/L16	50	40	26	300	15	VN..1604..	●	●		
	S50U-EVQNR/L16	63	50	32	350	12	VN..1604..	●	●		

- 订货示例: 1 件 S40T-EVQNR16
- 刀片需单独订购
- Ordering sample: 1 PC S40T -EVQNR16
- Insert should be ordered separately

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S25R-MVQNR/L16	36	25	20	200	12	VN..1604..	●	●		
	S32S-MVQNR/L16	42	32	22	250	17	VN..1604..	●	●		
	S40T-MVQNR/L16	50	40	26	300	15	VN..1604..	●	●		
	S50U-MVQNR/L16	63	50	32	350	12	VN..1604..	●	●		

- 订货示例: 1 件 S25R-MVQNR16
- 刀片需单独订购
- Ordering sample: 1 PC S25R-MVQNR16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S40T-EVQNR/L16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
S50U-EVQNR/L16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

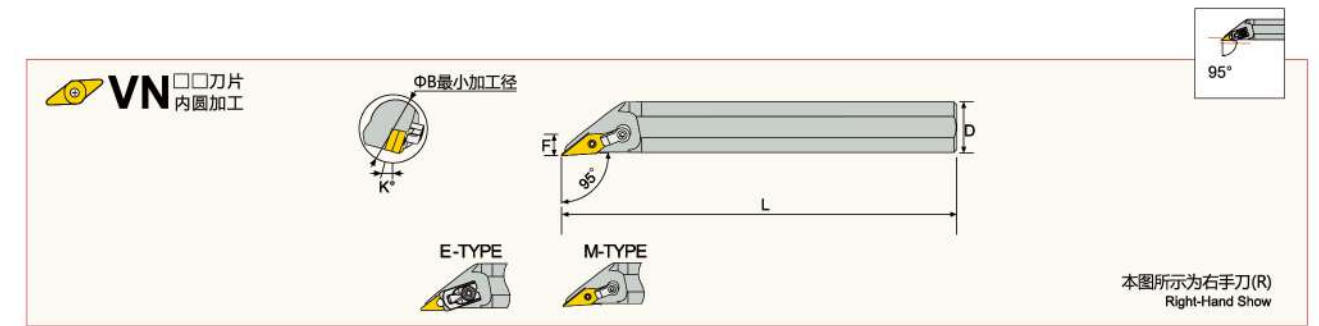
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Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S25R-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030
S32S-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030
S40T-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-22	LW020 LW030
S50U-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-22	LW020 LW030

BORING BAR SERIES 内圆车削刀具

EVLN95°



材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S40T-EVLNR/L16	50	40	26	300	15	VN..1604..	●	●		
	S50U-EVLNR/L16	63	50	32	350	12	VN..1604..	●	●		

- 订货示例: 1 件 S40T-EVLNR16
- 刀片需单独订购
- Ordering sample: 1 PC S40T -EVLNR16
- Insert should be ordered separately

材质 Material	规格型号 Designation	加工孔径 Min.Bore Dia.		尺寸 Dimensions(mm)					刀片 Insert	在庫 Stock	
		ΦB	D	F	L	K°	R	L			
钢 Steel	S25R-MVLNR/L16	36	25	20	200	12	VN..1604..	●	●		
	S32S-MVLNR/L16	42	32	22	250	17	VN..1604..	●	●		
	S40T-MVLNR/L16	50	40	26	300	15	VN..1604..	●	●		
	S50U-MVLNR/L16	63	50	32	350	12	VN..1604..	●	●		

- 订货示例: 1 件 S25R-MVLNR16
- 刀片需单独订购
- Ordering sample: 1 PC S25R-MVLNR16
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S40T-EVLNR/L16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
S50U-EVLNR/L16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

备件

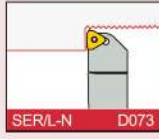
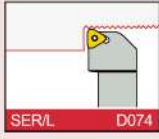
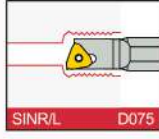
Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S25R-MVLNR/L16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030
S32S-MVLNR/L16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030
S40T-MVLNR/L16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030
S50U-MVLNR/L16	SMV-322	LCS-513	CP50-24	CS70-21	LW020 LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

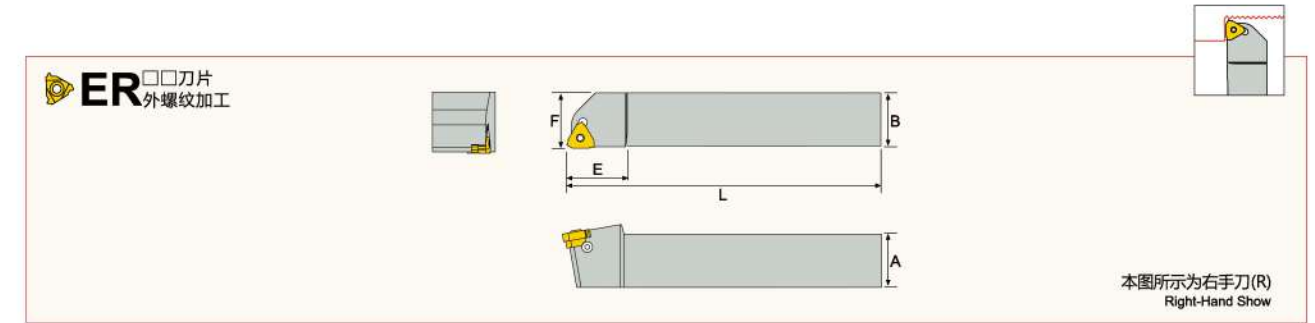
THREADING TURNING TOOL SERIES 螺纹车削刀具索引

刀片类型 Insert	压紧方式 Clamping	加工方式 Tooling	
ER/EL 外螺纹刀片 External thread insert	螺丝锁紧式 Screw clamping	 SER/L-N D073	 SER/L D074
IR/IL 内螺纹刀片 Internal thread insert	螺丝锁紧式 Screw clamping	 SINR/L D075	

THREADING TURNING TOOL SERIES 螺纹车削刀具

SERIL-N (外螺纹刀)

External Threading Tool



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SER/L-1212K11N	12	12	125	20	12	11ER/L..	●	●
SER/L-1010K16N	10	10	125	20	10	16ER/L..	●	●
SER/L-1212K16N	12	12	125	20	12	16ER/L..	●	●
SER/L-1616K16N	16	16	125	20	16	16ER/L..	●	●

- 16ER: 右手刀片 16EL: 左手刀片
- 订货示例: 1 件 SER-1212K11N
- 刀片需单独订购
- 16ER: right-hand Insert 16EL: left-hand insert
- Ordering sample: 1 PC SER-1212K11N
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片(右) Shim (right)	垫片(左) Shim (left)	刀片螺钉 Screw	垫片螺钉 Screw	旗型扳手 Wrench	L型扳手 Allen key
SER/L-1212K11N	-	-	CS30	-	T-10	-
SER/L-1010K16N	-	-	CS35	-	T-15	-
SER/L-1212K16N	-	-	CS35	-	T-15	-
SER/L-1616K16N	AE16	AL16	CS35115	CS6-0306	T-15	LW025

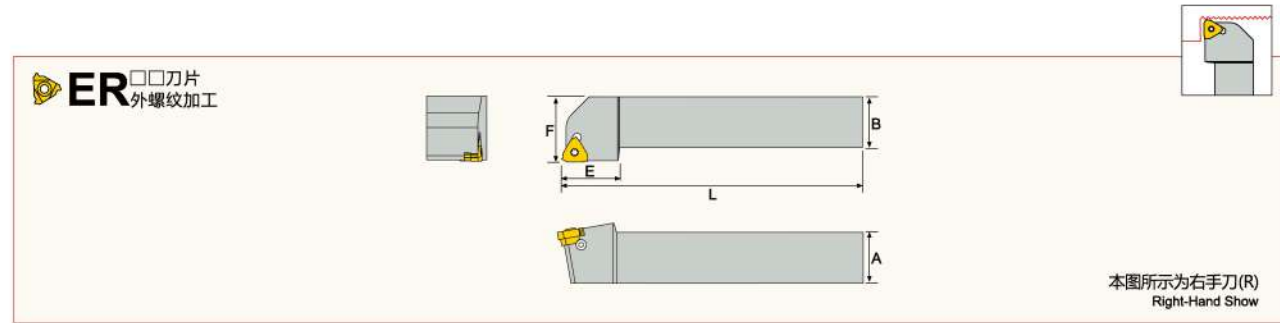
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

THREADING TURNING TOOL SERIES 螺纹车削刀具

SERIL (外螺纹刀)

External Threading Tool



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SER/L-1010K16	10	10	125	22	14	16ER/L...	●	●
SER/L-1212K16	16	16	125	22	20	16ER/L...	●	●
SER/L-2020K16	20	20	125	22	25	16ER/L...	●	●
SER/L-2525M16	25	25	150	22	32	16ER/L...	●	●
SER/L-3232P16	32	32	170	22	40	16ER/L...	●	●
SER/L-2525M22	25	25	150	22	32	22ER/L...	●	●
SER/L-3232P22	32	32	170	22	40	22ER/L...	●	●

- 16ER: 右手刀片 16EL: 左手刀片
- 订货示例: 1 件 SER-1010K16
- 刀片需单独订购
- 16ER: right-hand insert 16EL: left-hand insert
- Ordering sample: 1 PC SER-1010K16
- Insert should be ordered separately

备件

Spare Parts

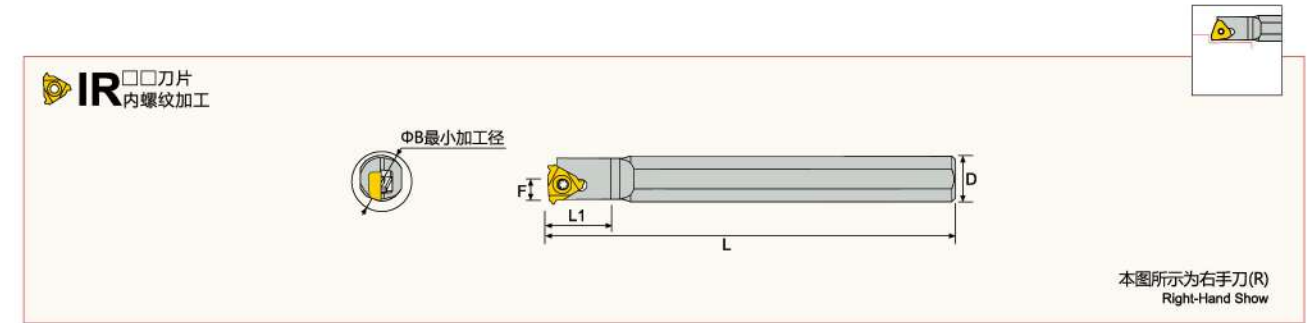
规格型号 Designation	垫片(右) Shim (right)	垫片(左) Shim (left)	刀片螺钉 Screw	垫片螺钉 Screw	旗型扳手 Wrench	L型扳手 Allen key
SER/L-1010K16	-	-	CS35	-	T-15	-
SER/L-1212K16	AE16	AI16	CS35115	CS6-0306	T-15	LW025
SER/L-2020K16	AE16	AI16	CS35115	CS6-0306	T-15	LW025
SER/L-2525M16	AE16	AI16	CS35115	CS6-0306	T-15	LW025
SER/L-3232P16	AE16	AI16	CS35115	CS6-0306	T-15	LW025
SER/L-2525M22	AE22	AI22	CS45115	CS6-0406	T-15	LW030
SER/L-3232P22	AE22	AI22	CS45115	CS6-0406	T-15	LW030

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

THREADING TURNING TOOL SERIES 螺纹车削刀具

SERIL (内螺纹刀)

Internal Threading Tool



材质 Material	规格型号 Designation	尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
		D	L	L ₁	H		R	L
钢 Steel	SNR0005H-06	12	100	10	6.4	6IE/L	●	●
	SNR0008K-08	16	125	15	9	8IR/L	●	●
	SINR/L-1012-11	12	125	25	10	11IR/L	●	●
	SINR/L-1210-11	10	125	25	12	11IR/L	●	●
	SINR/L-1216-11	16	150	25	12	11IR/L	●	●
	SINR/L-1516-11	16	150	30	15	11IR/L	●	●
	SINR/L-1616-16	16	150	20	16	16IR/L	●	●
	SINR/L-2016-16	16	150	20	20	16IR/L	●	●
	SINR/L-2420S-16	20	180	40	24	16IR/L	●	●
	SINR/L-3025S-16	25	200	40	30	16IR/L	●	●
	SINR/L-3732S-16	32	250	45	37	16IR/L	●	●
	SINR/L-3025S-22	25	200	40	30	22IR/L	●	●
	SINR/L-3732S-22	32	250	45	37	22IR/L	●	●

- IR: 右手刀片 IL: 左手刀片
- 订货示例: 1 件 SNR0005H-06
- 刀片需单独订购
- 161R: right-hand insert 161L: left-hand insert
- Ordering sample: 1 PC SNR0005H-06
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	垫片(右) Shim (right)	垫片(左) Shim (left)	刀片螺钉 Screw for insert	垫片螺钉 Screw for shim	旗型扳手 Wrench	L型扳手 Allen key
SER/L-1212K11N	-	-	CS20	-	T-6	-
SER/L-1010K16N	-	-	CS22	-	T-7	-
SER/L-1212K16N	-	-	CS30	-	T-10	-
SER/L-1616K16N	-	-	CS30	-	T-10	-
SER/L-1212K11N	-	-	CS30	-	T-10	-
SER/L-1010K16N	-	-	CS30	-	T-10	-
SER/L-1212K16N	-	-	CS35	-	T-15	-
SER/L-1616K16N	-	-	CS35	-	T-15	-
SER/L-1212K11N	AI16	AE16	CS35115	CS6-0306	T-15	LW025
SER/L-1010K16N	AI16	AE16	CS35115	CS6-0306	T-15	LW025
SER/L-1212K16N	AI16	AE16	CS35115	CS6-0306	T-15	LW025
SER/L-1616K16N	AI22	AE22	CS45115	CS6-0406	T-15	LW030
SER/L-1212K16N	AI22	AE22	CS45115	CS6-0406	T-15	LW030

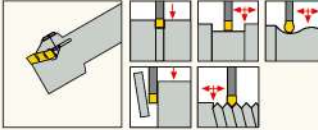
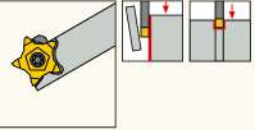
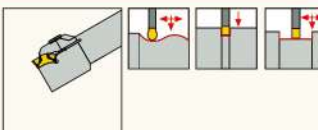
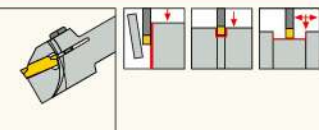
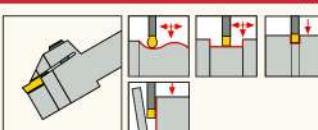
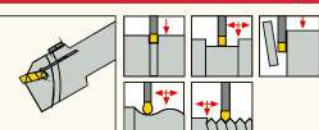




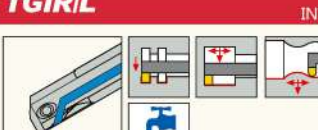
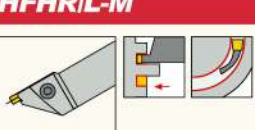

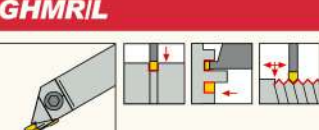

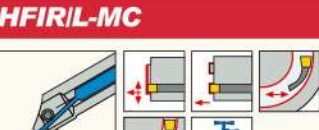
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

GROOVING TOOL SERIES

SHANGHAI SUNDER NC-TOOLS
MANUFACTURE CO.,LTD.

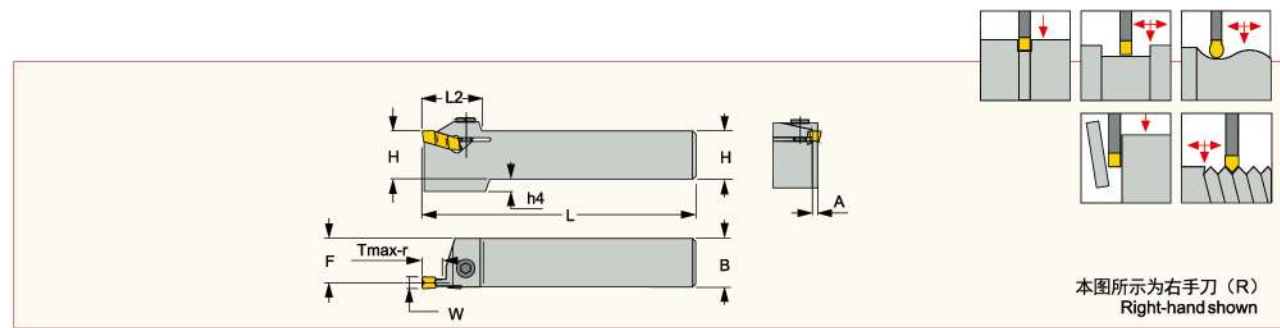


PRODUCT RANGE OVERVIEW OF GROOVING TOOLS 切槽刀索引

GHDRIL 外圆切槽刀 EXTERNAL GROOVING TOOL SERIES  W=2.2-11 Tmax=25 D078	PCHRIL 外圆切槽刀 EXTERNAL GROOVING TOOL SERIES  W=0.5-13.18 Tmax=6.5 D079
TGDRIL 外圆切槽刀 EXTERNAL GROOVING TOOL SERIES  W=3-6.35 Tmax=22 D081	PHGRIL 外圆切槽刀 EXTERNAL GROOVING TOOL SERIES  W=2.4-3.18 Tmax=17 D082
HELIRIL 外圆切槽刀 EXTERNAL GROOVING TOOL SERIES  W=3-6 Tmax=30 D082-D083	GHGRIL 外圆切槽刀 EXTERNAL GROOVING TOOL SERIES  W=2.2-8 Tmax=32 D084
HELIIRIL 内圆切槽刀 INTERNAL GROOVING TOOL SERIES  W=3-6 Dmin=26 Tmax=12 D085	GHIRIL 内圆切槽刀 INTERNAL GROOVING TOOL SERIES  W=1.9-8.3 Dmin=20 Tmax=20 D086
GEHIRIL 内圆切槽刀 INTERNAL GROOVING TOOL SERIES  W=1.9-3.2 Dmin=12.5 Tmax=3.0 D087	GEHIMRIL 内圆切槽刀 INTERNAL GROOVING TOOL SERIES  W≤1.9 Dmin=12.5 Tmax=2.5 D088
TGIRIL 内圆切槽刀 INTERNAL GROOVING TOOL SERIES  W=3-6.35 Dmin=20.5 Tmax=17.5 D088	HFHRIL-M 端面切槽刀 AXIAL GROOVING TOOLS  W=3-6 Dmin=20 Tmax=5 D089
HFHPRIL-M 端面切槽刀 AXIAL GROOVING TOOLS  W=3-6 Dmin=20 Tmax=5 D089	GHMIRIL 端面切槽刀 AXIAL GROOVING TOOLS  W=2.2-6.4 Tmax=4.8 D090
GHMPRIL 端面切槽刀 AXIAL GROOVING TOOLS  W=2.2-6.4 Tmax=4.8 D090	HFIRIL-MC 端面切槽刀 AXIAL GROOVING TOOLS  W=3-6 Dmin=20 Tmax=5 D091

EXTERNAL GROOVING TOOL SERIES 外圆切槽刀

GHDR/L



规格型号 Designation	W	T	HxB	L	F	A	L2	h4	适用刀片 Insert	在库 Stock
GHDR/L 12-3	12	2.8-4	12x12	110	10.8	2.4	25	4		●
GHDR/L 16-3	16	2.8-4	16x16	110	14.8	2.4	26	4		●
GHDR/L 16-3ST ⁽¹⁾	12	2.8-4	16x16.1	78	15	2.2	24	4		●
GHDR/L 20-3	10	2.8-4	20x20	120	18.8	2.4	26	-		●
GHDR/L 25-3	16	2.8-4	25x25	135	23.8	2.4	26	-		●
GHDR/L 16-4	16	4-5	16x16	110	14.4	3.2	25	4		●
GHDR/L 16-4ST ⁽¹⁾	16	4-5.4	16x15.7	78	14	3.4	25	4	GIP,GIF,GIA,	●
GHDR/L 20-4	16	4-5	20x20	120	18.4	3.2	26	-	GIPA,GIPY	●
GHDR/L 25-4	20	4-5	25x25	135	23.4	3.2	27	-	GITM,GIM	●
GHDR/L 32-4	25	4-5	32x32	150	30.4	3.2	27	-	GIMF,GIMY,	●
GHDR/L 20-5	32	5-6.4	25x25	120	17.9	4.2	29	-	GPC,TIP	●
GHDR/L 25-5	25	5-6.4	25x25	135	22.9	4.2	29	-		●
GHDR/L 32-5	32	5-6.4	32x25	150	29.9	4.2	29	-		●
GHDR/L 25-6	16	6-6.4	25x25	135	22.3	5.4	29	-		●
GHDR/L 25-8	12	6.6-8.3	25x25	150	22	6	40	7.6	GIF8,GIA	●
GHDR/L 3225-8	10	6.6-8.3	32x25	168.5	22	5.9	40	-	GDMM7CC	●
GHDR/L 25-812	16	6.6-8.3	25x25	140	22	5.9	33	-	GDMM8CC	●
GHDR/L 32-8	16	6.6-8.3	32x32	170	29	6	40	-	GIPA/GIDA8	●
GHDR/L 32-812	16	6.6-8.3	32x32	160	29	5.9	33	-	GDMY8..	●
GHDR/L 32-836	16	7-8.3	32x32	170	28.9	6.3	56	8	GDMF,GDMU	●
GHDR/L 25-8A ⁽²⁾	20	8	25x25	150	22	6	40	7.6	GIDA80-40	●
GHDR/L 32-8A ⁽²⁾	25	8	32x32	170	29	6	40	-		●
GHDR/L 25-P8	32	7.2-10	25x25	150	21.8	6.5	35.7	-	GIMY/GIMF/	●
GHDR/L 32-P8	25	7.2-10	32x32	170	28.8	6.5	35.7	-	GIPY8../10.. GPV	●
GHDR/L 25-10	32	8.6-11.1	25x25	150	21.3	7.4	43	7.6	GIF10,	●
GHDR/L 32-10	25	8.6-11.1	32x32	170	28.3	7.4	43	-	GDPY10/11	●
GHDR/L 40-10	32	8.6-11.1	40x40	200	36.3	7.4	43	-	GDPY10/11	●

- (1) GHDR/L-ST 用于 STAR 和多轴机床
- (2) 新肩台表面经硬化处理
- 订货示例: 1 件 GHDR/L2-3 1 件 GHDR/L 16-3
- (1) GHGFVL-ST For STAR or other machine tools with multiple spindles
- Hardened chip breaker surface.
- Ordering sample: 1 FC GHDA12-3 1 FC GHDL 16-3

备件

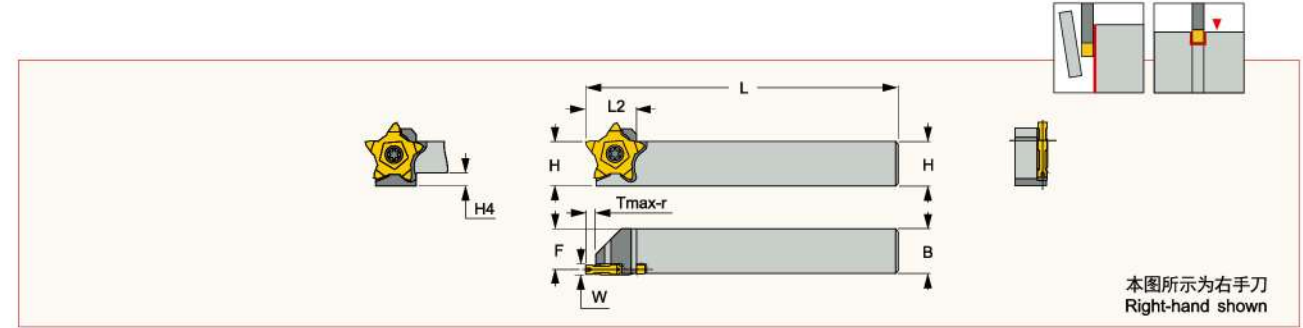
规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
GHDR/L 12-3	SR 76-1022	T-20/5
GHDR/L 16-3	SR M5x20	HW4
GHDR/L 16-3ST	SR M5x20	HW4
GHDR/L 20-3	SR M5x20	HW4
GHDR/L 25-3	SR M5x20	HW4
GHDR/L 16-4	SR M6x20	HW5
GHDR/L 16-4ST	SR M6x20	HW5
GHDR/L 20-4	SR M6x20	HW5
GHDR/L 25-4	SR M6x25	HW5
GHDR/L 32-4	SR M6x25	HW5
GHDR/L 20-5	SR M6x20	HW5
GHDR/L 25-5	SR M6x20	HW5
GHDR/L 32-5	SR M6x20	HW5
GHDR/L 25-6	SR M6x20	HW5

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
GHDR/L 25-8	SR M6x25	HW5
GHDR/L 3225-8	SR M6x25	HW5
GHDR/L 25-812	SR M6x25	HW5
GHDR/L 32-8	SR M6x25	HW5
GHDR/L 32-812	SR M6x25	HW5
GHDR/L 32-836	SR M8x30	HW6
GHDR/L 25-8A	SR M6x25	HW5
GHDR/L 32-8A	SR M6x25	HW5
GHDR/L 25-P8	SR M8x25	HW6
GHDR/L 32-P8	SR M8x25	HW6
GHDR/L 25-10	SR M8x25	HW6
GHDR/L 32-10	SR M8x25	HW6
GHDR/L 40-10	SR M8x25	HW6

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL GROOVING TOOL SERIES 外圆切槽刀

PCHR/L

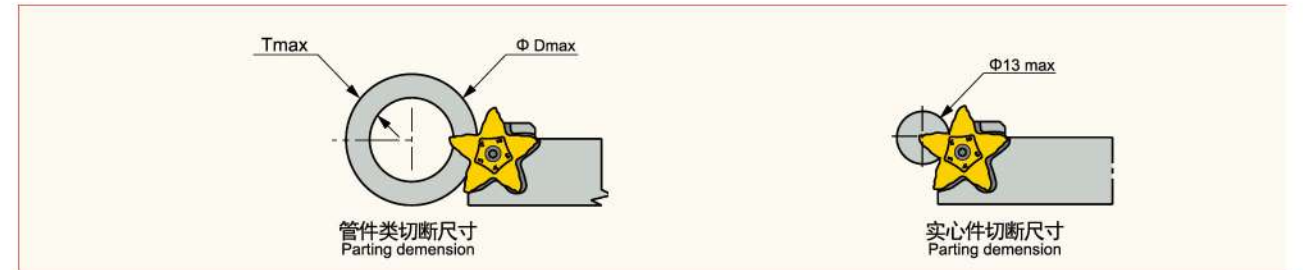


规格型号 Designation	HxB	F	L	L2	h4	适用刀片 Insert	在库 Stock
PCHR/L 10-24	10x10	8.5	120	19.5	7	PENTA24...	●
PCHR/L 12-24	12x112	10.5	120	19.5	5	PENTA24...	●
PCHR/L 16-24	16x16	14.5	120	19.5	-	PENTA24...	●
PCHR/L 20-24	20x20	18.5	120	19.5	-	PENTA24...	●
PCHR/L 25-24	25x25	23.5	135	19.5	-	PENTA24...	●

- 订货示例: 1 件 PCHR 10-24
- Ordering sample: 1 PC PCHR 10-24

备件

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
PCHR/L 10-24	SR 16-212-01397L SR 16-212-01397L	T2010/5
PCHR/L 12-24	SR 16-212-01397L SR 16-212-01397L	T2010/5
PCHR/L 16-24	SR 16-212-01397L SR 16-212-01397L	T2010/5
PCHR/L 20-24	SR 16-212-01397L SR 16-212-01397L	T2010/5
PCHR/L 25-24	SR 16-212-01397L SR 16-212-01397L	T2010/5

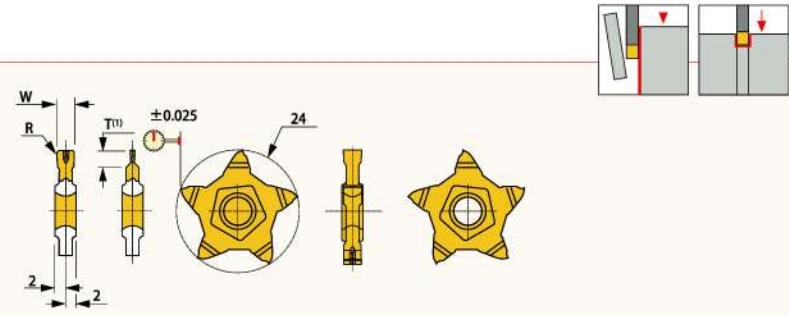


管件套最大切断直径与最大壁厚对应值								
Tmax	3.0	3.5	4.0	4.5	5.0	5.5	6	6.5
Dmax	NO limit	470	210	135	100	80	67	58

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL GROOVING TOOL SERIES 外圆切槽刀

PENTA-RILIN (切片)

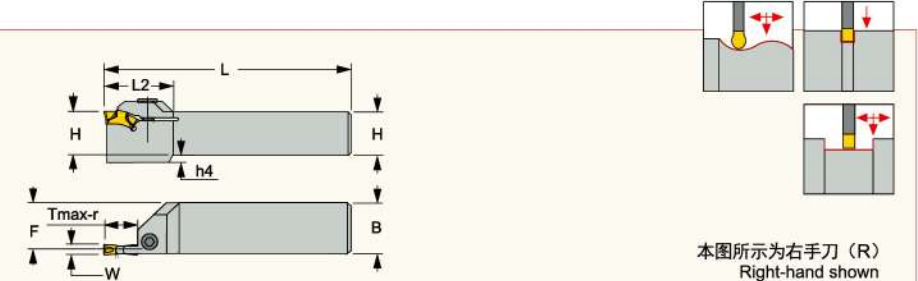


规格型号 Designation	W ± 0.02	R	Tmax	在库 Stock	Tmax Dmax	Dmax								
						T ≤ 3	T ≤ 3.5	T ≤ 4	T ≤ 4.5	T ≤ 5	T ≤ 5.5	T ≤ 6	T ≤ 6.5	
PENTA24N050J000	0.50	0.00	1.0	●	1.0/N.L.	-	-	-	-	-	-	-	-	-
PENTA24N050J004	0.50	0.04	2.5	●	2.5/N.L.	-	-	-	-	-	-	-	-	-
PENTA24N080J000	0.80	0.00	1.6	●	1.6/N.L.	-	-	-	-	-	-	-	-	-
PENTA24N080J006	1.00	0.06	3.5	●	N.L.	250	-	-	-	-	-	-	-	-
PENTA24N104J000	1.04	0.00	2.0	●	2.0/N.L.	-	-	-	-	-	-	-	-	-
PENTA24N120J000	1.20	0.00	2.0	●	2.0/N.L.	-	-	-	-	-	-	-	-	-
PENTA24N140J000	1.40	0.00	2.0	●	2.0/N.L.	-	-	-	-	-	-	-	-	-
PENTA24N147J000	1.47	0.00	2.5	●	2.5/N.L.	-	-	-	-	-	-	-	-	-
PENTA24N150J010	1.50	0.10	5.0	●	N.L.	470	210	70	30	-	-	-	-	-
PENTA24N157J015	1.57	0.15	3.0	●	N.L.	-	-	-	-	-	-	-	-	-
PENTA24N157J079	1.57	0.79	3.0	●	N.L.	-	-	-	-	-	-	-	-	-
PENTA24N170J010	1.70	0.10	3.0	●	N.L.	-	-	-	-	-	-	-	-	-
PENTA24N178J018	1.78	0.18	3.0	●	N.L.	-	-	-	-	-	-	-	-	-
PENTA24N196J015	1.96	0.15	3.0	●	N.L.	-	-	-	-	-	-	-	-	-
PENTA24N200J020	2.00	0.20	6.0	●	N.L.	-	-	-	-	-	-	-	-	-
PENTA24N200J100	2.00	1.00	3.0	●	N.L.	470	210	130	75	45	20	-	-	-
PENTA24N222J015	2.22	0.15	3.5	●	N.L.	-	-	-	-	-	-	-	-	-
PENTA24N230J020	2.30	0.20	3.5	●	N.L.	250	-	-	-	-	-	-	-	-
PENTA24N239J015	2.39	0.15	5.0	●	N.L.	250	-	-	-	-	-	-	-	-
PENTA24N239J120	2.39	1.20	5.0	●	N.L.	470	210	70	30	-	-	-	-	-
PENTA24N247J020	2.47	0.20	5.0	●	N.L.	470	210	70	30	-	-	-	-	-
PENTA24N270J010	2.70	0.10	5.0	●	N.L.	470	210	70	30	-	-	-	-	-
PENTA24N287J020	2.87	0.20	6.5	●	N.L.	470	210	135	100	80	67	40	-	-
PENTA24N300J000	3.00	0.00	6.5	●	N.L.	470	210	135	100	80	67	40	-	-
PENTA24N300J020	3.00	0.20	6.5	●	N.L.	470	210	135	100	80	67	40	-	-
PENTA24N300J040	3.00	0.40	6.5	●	N.L.	470	210	135	100	80	67	40	-	-
PENTA24N300J150	3.00	1.50	6.5	●	N.L.	470	210	135	100	80	67	40	-	-
PENTA24N315J015	3.15	0.15	6.5	●	N.L.	479	210	135	100	80	67	40	-	-
PENTA24N318J020	3.18	0.20	6.5	●	N.L.	479	210	135	100	80	67	40	-	-

- (1) 当刀片 ≥ 2.39 时, 方能精整车
- 订货示例: 1 件 PETA24N050 J004 IC1008
- (1) it can be finish turning if the insert width ≥ 2.39
- Ordering sample: 1 PC PENTA24N050 J004 IC1008

EXTERNAL GROOVING TOOL SERIES 外圆切槽刀

TGDRIL



规格型号 Designation	W	Tmax	HxB	L	F	L2	h4	适用刀片 Insert	在库 Stock
TGDR/L 1616-3M	3	7.5	16x16	100	14.75	30.5	6	TGMF 3..	●
TGDR/L 2020-3M	3	7.5	20x20	125	18.75	30.5	-	TGMF 3..	●
TGDR/L 2525-3M	3	7.5	25x25	140	23.75	30.5	-	TGMF 3..	●
TGDR/L 1616-4M	4-5	9.0	16x16	100	14.75	32.2	6	TGMF/P 4/5..	●
TGDR/L 2020-4M	4-5	9.0	20x20	125	18.75	32.2	-	TGMF/P 4/5..	●
TGDR/L 2525-4M	4-5	15.5	25x25	140	23.75	34.0	-	TGMF/P 4/5..	●
TGDR/L 2525-5M	5	18	25x25	140	22.75	37.0	-	TGMF/P 5..	●
TGDR/L 3232-5M	5	22	32x32	150	29.75	45.0	-	TGMF/P 5..	●
TGDR/L 2525-6M	6-6.35	22	25x25	150	22.5	43.0	-	TGMF 6..	●
TGDR/L 3232-6M	6-6.35	22	32x32	150	29.5	43.0	-	TGMF 6..	●

- 订货示例: 1 件 PENTA24N050 J004 IC1008
- 刀片订购请与销售工程师联系
- Ordering sample: 1 PC GDR 1616-3M 1 PC TGDL 2020-3M
- Insert should be ordered separately

备件

Spare Parts

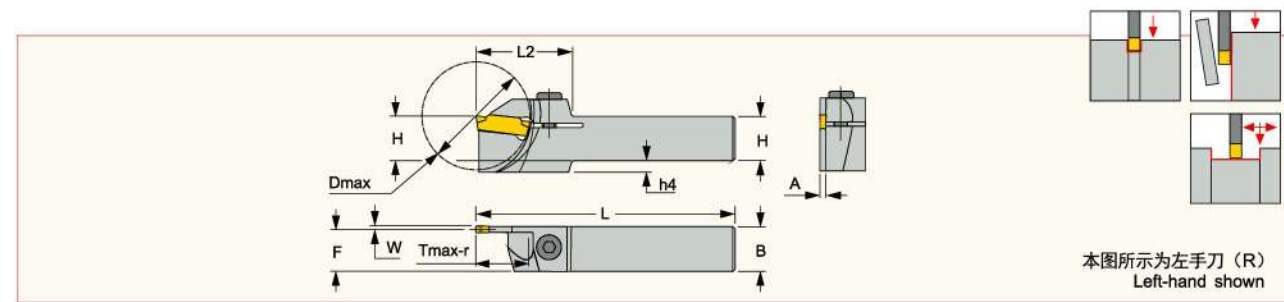
规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
PCHR/L 10-24	SR M5x16	HW4
PCHR/L 12-24	SR M5x20	HW4
PCHR/L 16-24	SR M5x20	HW4
PCHR/L 20-24	SR M5x20	HW4
PCHR/L 252-24	SR M5x20	HW4
PCHR/L 12-24	SR M5x20	HW4
PCHR/L 16-24	SR M5x25	HW4
PCHR/L 12-24	SR M6x25	HW5
PCHR/L 16-24	SR M6x25	HW5
PCHR/L 12-24	SR M6x25	HW5

- 标准库存 Item in stock
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- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

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- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
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EXTERNAL GROOVING TOOL SERIES 外圆切槽刀

PHGRIL



本图所示为左手刀 (R)
Left-hand shown

规格型号 Designation	W	Dmax	HxB	L	F	L2	h4	适用刀片 Insert	在庫 Stock
PHGR/L 16-2.4	2.4-3.18	34	16x16	110	15.1	33	5.5	GDMW 2.4 GDMY318-159	●
PHGR/L 20-2.4	2.4-3.18	34	20x20	120	19.1	33	-	GDMW 2.4 GDMY318-159	●
PHGR/L 25-2.4	2.4-3.18	34	25x25	140	24.1	33	-	GDMW 2.4 GDMY318-159	●

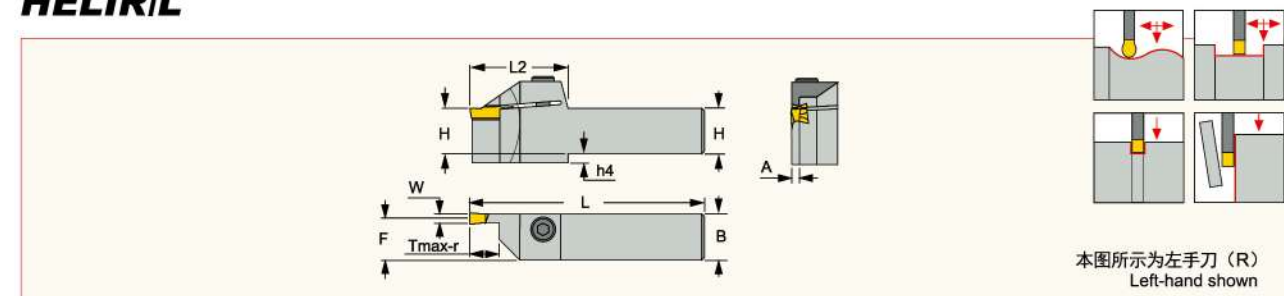
- 订货示例: 1件 PHGR 16-2.4 1件 PHGL 20-2.4
- 刀片订购请与我们的销售工程师联系
- Ordering sample: 1PC PHGR 16-2.4 1PC PHGL 20-2.4
- Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
PHGR/L 16-2.4	SR M5x20	HW4
PHGR/L 20-2.4	SR M5x20	HW4
PHGR/L 25-2.4	SR M5x20	HW4

HELIRIL



本图所示为左手刀 (R)
Left-hand shown

规格型号 Designation	W	T	HxB	L	F	A	L2	h4	适用刀片 Insert	在庫 Stock
HELIR/L-1212-3T12	3	12	12x12	135	10.0	2.4	30	3	GRIP-3.....HG□-3.....	●
HELIR/L-1616-3T12	3	12	16x16	135	14.8	2.4	30	-	GRIP-3.....HG□-3.....	●
HELIR/L-2020-3T12	3	12	20x20	135	18.8	2.2	29	-	GRIP-3.....HG□-3.....	●
HELIR/L-2525-3T12	3	12	25x25	135	23.8	2.4	29	-	GRIP-3.....HG□-3.....	●
HELIR/L-1616-4T12	4	12	16x16	135	14.4	3.2	29	4	GRIP-4.....HG□-4.....	●
HELIR/L-2020-4T12	4	12	20x20	135	18.4	3.2	29	-	GRIP-4.....HG□-4.....	●
HELIR/L-2525-4T12	4	12	25x25	135	23.4	3.2	29	-	GRIP-4.....HG□-4.....	●
HELIR/L-2020-5T12	5	12	20x20	135	17.9	4.2	29	-	GRIP-5.....HG□-5.....	●
HELIR/L-2525-5T12	5	12	25x25	135	22.9	4.2	29	-	GRIP-5.....HG□-5.....	●
HELIR/L-2525-6T12	6	12	25x25	135	22.4	5.2	29	-	GRIP-6.....HG□-6.....	●

- 订货示例: 1件 HELIR 1212-3T12 1件 HELIL 1616-3T12
- 刀片订购请与我们的销售工程师联系
- Ordering sample: 1PC HELIR 1212-3T12 1PC HBUL 1616-3T12
- Insert should be ordered separately

备件

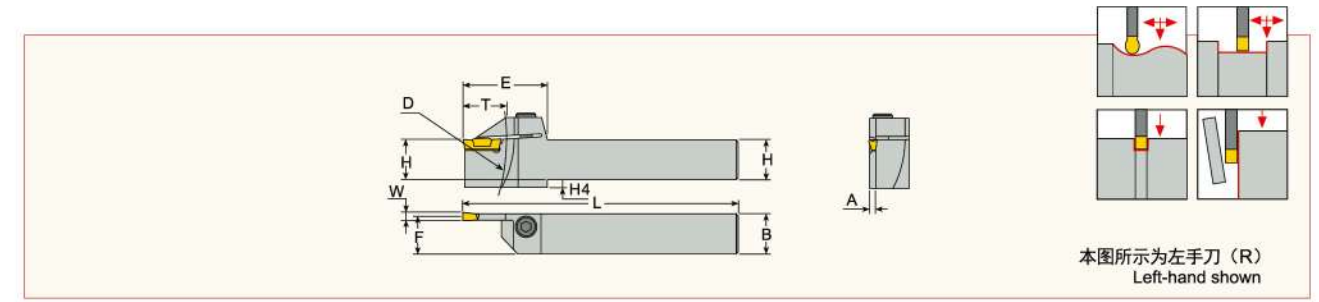
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HELIR/L-1212-3T12	SR M5x20	HW4
HELIR/L-1616-3T12	SR M5x20	HW4
HELIR/L-2020-3T12	SR M5x20	HW4
HELIR/L-2525-3T12	SR M5x25	HW4
HELIR/L-1616-4T12	SR M5x20	HW4
HELIR/L-2020-4T12	SR M6x20	HW5
HELIR/L-2525-4T12	SR M6x25	HW5
HELIR/L-2020-5T12	SR M6x20	HW5
HELIR/L-2525-5T12	SR M6x25	HW5
HELIR/L-2525-6T12	SR M6x25	HW5

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL GROOVING TOOL SERIES 外圆切槽刀

HELIRIL



本图所示为左手刀 (R)
Left-hand shown

规格型号 Designation	W	Dmax	HxB	L	F	A	E	H4	适用刀片 Insert	在庫 Stock
HELIR/L-1616-3T20	3	40	16x16	140	14.8	2.4	30	3	GRIP-3.....HGN 3.....	●
HELIR/L-2020-3T20	3	40	20x20	140	18.8	2.4	30	-	GRIP-3.....HGN 3.....	●
HELIR/L-2525-3T20	3	40	25x25	140	23.8	2.2	29	-	GRIP-3.....HGN 3.....	●
HELIR/L-3232-3T20	3	40	32x32	150	30.8	2.4	29	-	GRIP-3.....HGN 3.....	●
HELIR/L-1616-4T25	4	40	16x16	140	14.4	3.2	29	4	GRIP-4.....HGN 4.....	●
HELIR/L-2020-4T25	4	50	20x20	140	18.4	3.2	29	-	GRIP-4.....HGN 4.....	●
HELIR/L-2525-4T25	4	50	25x25	140	23.4	3.2	29	-	GRIP-4.....HGN 4.....	●
HELIR/L-3232-4T25	4	50	32x32	150	30.4	4.2	29	-	GRIP-5.....HGN 5.....	●
HELIR/L-2020-5T25	5	50	20x20	140	17.9	4.2	29	-	GRIP-5.....HGN 5.....	●
HELIR/L-2525-5T25	5	50	25x25	140	22.9	5.2	29	-	GRIP-6.....HGN 6.....	●
HELIR/L-3232-5T25	5	50	32x32	150	29.2	4.2	29	-	GRIP-5.....HGN 5.....	●
HELIR/L-2525-6T30	6	60	25x25	140	22.4	5.2	29	-	GRIP-6.....HGN 6.....	●
HELIR/L-3232-6T30	6	60	32x32	150	29.4	4.2	29	-	GRIP-5.....HGN 5.....	●

- 订货示例: 1件 HELIR1212-3T12 1件 HELIL1616-3T12
- 刀片订购请与我们的销售工程师联系
- Ordering sample: 1 PC HEUR 1212-3T12 1 PC HELIL 16163T12
- Insert should be ordered separately

备件

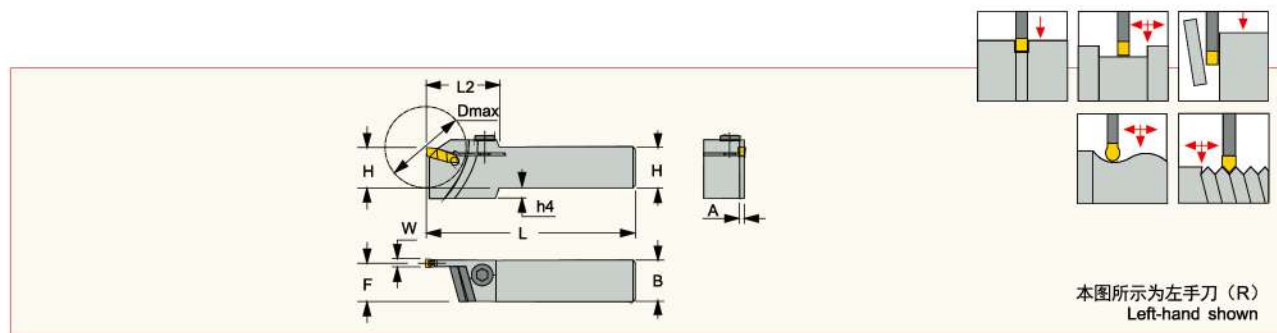
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HELIR/L-1616-3T20	SR M6x20	HW4
HELIR/L-2020-3T20	SR M5x20	HW4
HELIR/L-2525-3T20	SR M6x25	HW5
HELIR/L-3232-3T20	SR M6x25	HW5
HELIR/L-1616-4T25	SR M5x20	HW5
HELIR/L-2020-4T25	SR M5x20	HW5
HELIR/L-2525-4T25	SR M5x25	HW5
HELIR/L-3232-4T25	SR M6x20	HW5
HELIR/L-2020-5T25	SR M6x20	HW5
HELIR/L-2525-5T25	SR M6x25	HW5
HELIR/L-3232-5T25	SR M5x25	HW5
HELIR/L-2525-6T30	SR M6x25	HW5
HELIR/L-3232-6T30	SR M6x25	HW5

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL GROOVING TOOL SERIES 外圆切槽刀

GHGRIL



规格型号 Designation	W	Tmax	HxB	L	F	A	L2	h4	适用刀片 Insert	在庫 Stock
GHGR/L 20-2	2.2-2.4	34	20x20	120	19.2	1.7	33	-	GIP, TIP ⁽²⁾	●
GHGR/L 25-2	2.2-2.4	34	25x25	140	24.2	1.7	33	-	GIG, GIM	●
GHGR/L 16-3	3-4	40	16x16	110	14.7	2.5	36	4		●
GHGR/L 16-3ST ⁽¹⁾	3-4	34	16x16	78	15	2.4	33	4	GIP	●
GHGR/L 20-3	3-4	40	20x20	120	18.7	2.5	36	-	GIF	●
GHGR/L 25-3	3-4	40	25x25	140	23.7	2.5	36	-	GIA	●
GHGR/L 16-4	4-5	40	16x16	110	14.4	3.2	36	4	GIPA	●
GHGR/L 20-4	4-5	40	20x20	120	18.2	3.5	36	-	GIPY	●
GHGR/L 25-4	4-5	40	25x25	140	23.2	3.5	36	-	TIP	●
GHGR/L 25-425	4-5	50	25x25	140	23.2	3.5	41	-	GITM	●
GHGR/L 25-5	5-6.4	50	25x25	140	22.9	4.2	41	-	GIM	●
GHGR/L 32-5	5-6.4	50	32x32	150	29.9	4.2	41	-	GPV	●
GHGR/L 25-630	6-8	60	25x25	140	22.3	5.4	45	-	GIMF	●
GHGR/L 32-632	6-8	64	32x32	170	29.4	5.4	50	-	GIMY	●

- (1) GHGR/L-ST- 用于 STAR 和多轴类型机床
- (2) 刀垫处需根据刀片形状修整, 以避免干涉
- 订货示例: 1 件 GHGL 16-3 1 件 GHGL 16-3
- 刀片订购请与我们的销售工程师联系
- (1) GHGR/L-ST For STAR or other machine tools with multiple spindles
- (2) The area that shim and insert are close together should be repaired avoiding to the insert shape to avoiding the interference
- Ordering sample: 1 PC GHGL 16-3 1 PC GHGL 16-3
- Ordering inserts, please con1Bct our engineers

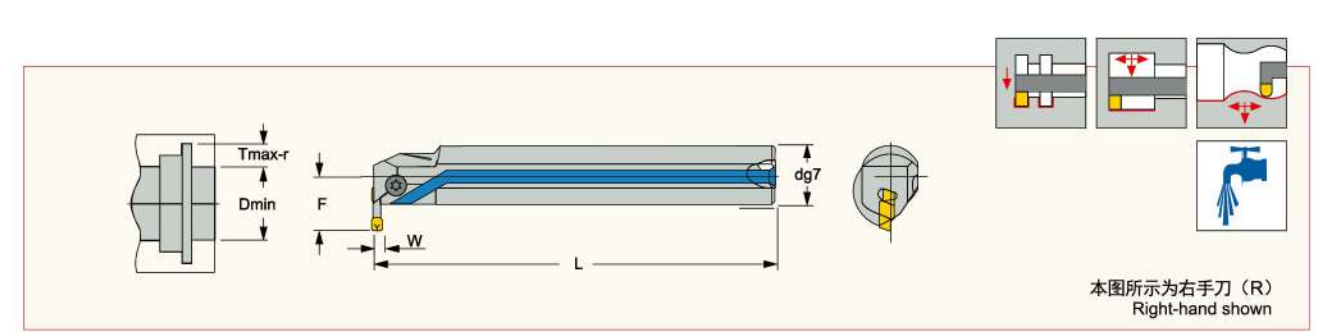
备件

Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
GHGR/L 25-5	SR M5x20	HW4
GHGR/L 32-5	SR M5x20	HW4
GHGR/L 25-5	SR M6x20	HW5
GHGR/L 32-5	SR M6x20	HW5
GHGR/L 25-5	SR M6x20	HW5
GHGR/L 32-5	SR M6x25	HW5
GHGR/L 25-5	SR M6x20	HW5
GHGR/L 32-5	SR M6x20	HW5
GHGR/L 25-5	SR M6x25	HW5
GHGR/L 32-5	SR M6x25	HW5
GHGR/L 25-5	SR M5x25	HW5
GHGR/L 32-5	SR M6x25	HW5
GHGR/L 25-5	SR M5x25	HW5
GHGR/L 32-5	SR M6x25	HW5

INTERNAL GROOVING TOOL SERIES 内圆切槽刀

HELIIRIL



规格型号 Designation	W	Dmax	d	Tmax	L	F	适用刀片 Insert	在庫 Stock
HELIIR/L-20C-305	3	26	20	140	5	15.2	GRIP-3...	●
HELIIR/L-25C-305	3	31	25	140	5	17.7	GRIP-3...	●
HELIIR/L-25C-410	4	43	25	140	10	22.7	GRIP-4...	●
HELIIR/L-25C-510	5	43	25	150	10	22.7	GRIP-5...	●
HELIIR/L-25C-610	6	43	25	140	10	22.7	GRIP-6...	●
HELIIR/L-32C-410	4	43	32	140	10	26.2	GRIP-4...	●
HELIIR/L-32C-510	5	43	32	140	10	26.2	GRIP-5...	●
HELIIR/L-32C-610	6	43	32	150	10	26.2	GRIP-6...	●
HELIIR/L-40C-412	4	53	40	140	12	32.2	GRIP-4...	●
HELIIR/L-40C-512	5	53	40	140	12	32.2	GRIP-5...	●
HELIIR/L-40C-612	6	53	40	140	12	32.2	GRIP-6...	●

- 订货示例: 1 件 HELIIR 20C-305 1 件 HELIL 20C-305
- 刀片订购请与我们的销售工程师联系
- Ordering sample: 1 PC HBJIR 20C-305 1PC HELIL 25C-305
- Insert should be ordered separately

备件

Spare Parts

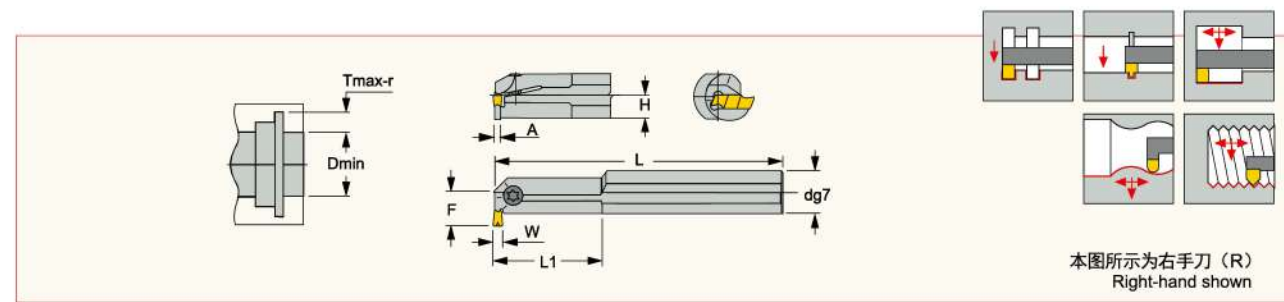
规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HELIIR/L-20C-305	SR 76-1400	T-20/5
HELIIR/L-25C-305	SR M5x16	HW4
HELIIR/L-25C-410	SR M5x16	HW4
HELIIR/L-25C-510	SR M5x16	HW4
HELIIR/L-25C-610	SR M5x16	HW4
HELIIR/L-32C-410	SR M5x16	HW4
HELIIR/L-32C-510	SR M5x16	HW4
HELIIR/L-32C-610	SR M5x16	HW4
HELIIR/L-40C-412	SR M5x16	HW4
HELIIR/L-40C-512	SR M5x16	HW4
HELIIR/L-40C-612	SR M5x16	HW4

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

INTERNAL GROOVING TOOL SERIES 内圆切槽刀

GHIRIL



规格型号 Designation	W	d	Dmin	Tmax	L	L ₁	F	H	A	适用刀片 Insert	在库 Stock
GHIR/L20-3	1.9-3.5	20	4.5	160	5	16	14.5	9.0	1.6	GIMIY TIPI GIPI GIFI	●
GHIR/L20-20-3	2-3.5	20	4.5	200	5	40	14.5	9.0	1.6		●
GHIR/L20-4	3-4.8	20	4.5	160	10	25	14.5	9.0	2.6		●
GHIR/L20-20-4	3-4.8	20	4.5	200	10	40	14.5	9.0	2.6		●
GHIR/L25-25-4	2.5-4	25	5	200	10	50	17.5	11.5	2.1		●
GHIR/L32-4	2.5-4	32	5	250	10	-	21.5	14.5	2.1		●
GHIR/L25-5	3.2-5.3	25	6	160	10	25	18.5	11.5	2.8		●
GHIR/L25-25-6	4-4.6	25	5	200	10	50	17.5	11.5	3.6		●
GHIR/L32-6	4-4.6	32	6.5	250	12	-	22.8	14.5	3.6		●
GHIR/L40-6	4-4.6	40	8	300	12	-	28.3	18	3.6		●

- 订货示例: 1件 GHIR 20-3 1件 GHIL 20-20-3
- 刀片订购请与我们的销售工程师联系
- Ordering sample: 1 PC GHIR 20-3 1PC GHIL 20-20-3
- Insert should be ordered separately

备件

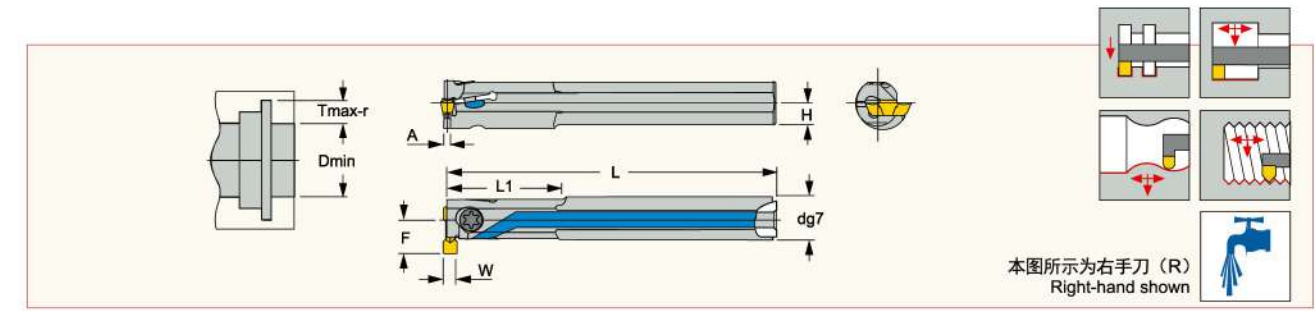
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
GHIR/L20-3	SR 76-1021	T-15/5
GHIR/L20-20-3	SR 76-1021	T-15/5
GHIR/L20-4	SR 76-1021	T-15/5
GHIR/L20-20-4	SR 76-1021	T-15/5
GHIR/L25-25-4	SR 76-1022	T-20/5
GHIR/L32-4	SR 76-1022	T-20/5
GHIR/L25-5	SR 76-1022	T-20/5
GHIR/L25-25-6	SR 76-1022	T-20/5
GHIR/L32-6	SR 76-1022	T-20/5
GHIR/L40-6	SR 76-1022	T-20/5

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INTERNAL GROOVING TOOL SERIES 内圆切槽刀

GEHIRL



规格型号 Designation	W	d	Dmin	Tmax	L	L ₁	F	H	A	适用刀片 Insert	在库 Stock
GEHIR/L10-13-2	1.9-2.4	10	12.5	2.4	125	30	7.5	5.0	1.6	GEMI GEPI	●
GEHIR/L12-14-2	1.9-2.4	12	14.0	2.6	140	40	9.1	6.0	1.6		●
GEHIR/L12-14-3	2.4-3.2	12	14.0	2.6	140	40	9.1	6.0	2.0		●
GEHIR/L16-13-2	1.9-2.4	16	12.5	2.4	125	35	10.5	7.5	1.6		●
GEHIR/L16-13-3	2.4-3.2	16	12.5	2.4	125	35	10.5	7.5	2.0		●
GEHIR/L16-14-2	1.9-2.4	16	14.0	2.6	140	40	11.0	7.5	1.6		●
GEHIR/L16-14-3	2.4-3.2	16	14.0	2.6	140	40	11.0	7.5	2.0		●
GEHIR/L16-16-2	1.9-2.4	16	16.0	3.0	200	70	11.0	7.5	1.6		●
GEHIR/L16-16-3	2.4-3.2	16	16.0	3.0	200	70	11.0	7.5	2.0		●

- 订货示例: 1件 GEHIR 12-14-3 1件 GEHIR 12SC-14-3
- 刀片订购请与我们的销售工程师联系
- Ordering sample: 1PC GEHIR 12-14-3 1PC GEHIR 12SC-14-3
- Insert should be ordered separately

备件

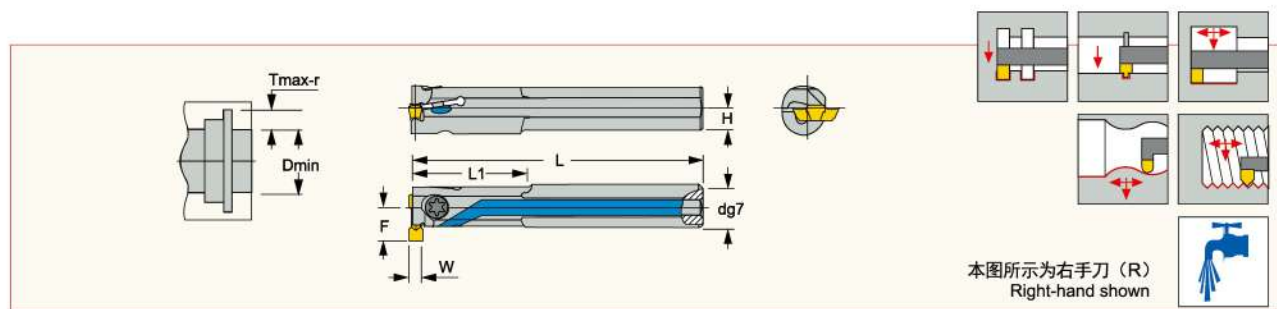
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
GEHIR/L10-13-2	SR 16-236	T-15/5
GEHIR/L12-14-2	SR 16-236	T-15/5
GEHIR/L12-14-3	SR 16-236	T-15/5
GEHIR/L16-13-2	SR 16-236	T-15/5
GEHIR/L16-13-3	SR 16-236	T-15/5
GEHIR/L16-14-2	SR 16-236	T-15/5
GEHIR/L16-14-3	SR 16-236	T-15/5
GEHIR/L16-16-2	SR 16-236	T-20/5
GEHIR/L16-16-3	SR 16-236	T-20/5

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INTERNAL GROOVING TOOL SERIES 内圆切槽刀

GEHIMR/L



规格型号 Designation	W	d	Dmin	Tmax	L	L ₁	F	H	适用刀片 Insert	在庫 Stock
GEHIMR/L10-13	≤1.9	10	12.5	2.5	125	30	7.6	5.0	GEMI GEPI	●
GEHIMR/L12-14	≤1.9	12	14.0	2.5	125	40	9.0	6.0		●
GEHIMR/L16-13	≤1.9	16	12.5	2.5	125	35	10.6	7.5		●
GEHIMR/L16-14	≤1.9	16	14.0	2.5	140	40	10.9	7.5		●
GEHIMR/L16-16	≤1.9	16	16.0	2.5	140	70	10.5	7.5		●

● 订货示例: 1件 PENTA24N050 J004 IC1008
● 刀片订购请与销售工程师联系

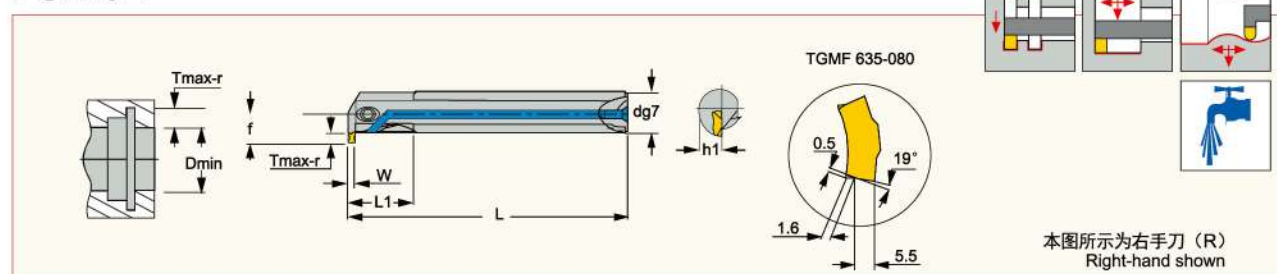
● Ordering sample: 1PC GEHIR 12-14-3 1PC GEHIR 12SC-14-3
● Insert should be ordered separately

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
GEHIMR/L10-13	SR 16-236	T-15/5
GEHIMR/L12-14	SR 16-236	T-15/5
GEHIMR/L16-13	SR 16-236	T-15/5
GEHIMR/L16-14	SR 16-236	T-15/5
GEHIMR/L16-16	SR M5-04451	T-20/5

TGIR/L



规格型号 Designation	W	d	Dmin	Tmax	L	L ₁	F	H	适用刀片 Insert	在庫 Stock
TGIR/L 16C-3	3	16	20.5	8.5	7.5	150	25	12.0	TGMF3	●
TGIR/L 20C-3	3	20	25.0	8.5	9.0	180	32	14.2		●
TGIR/L 25C-3	3	25	32.0	8.0	11.5	200	40	18.8	TGMF4	●
TGIR/L 25C-4	4-5	25	32.5	8.5	11.5	200	40	19.5		●
TGIR/L 32C-4	4-5	32	42.0	11.0	14.5	220	20	25.5	TGMP5	●
TGIR/L 32C-6	6-6.35	32	57.0	17.5	14.5	220	20	29.0		●
TGIR/L 40C-6	6-6.35	40	57.0	17.5	18.0	300	60	35.2	TGME6	●

● 订货示例: 1件 PENTA24N050 J004 IC1008
● 刀片订购请与销售工程师联系

● Ordering sample: 1PC TGIR 16C-3 1PC TGIL 20C-3
● Insert should be ordered separately

备件

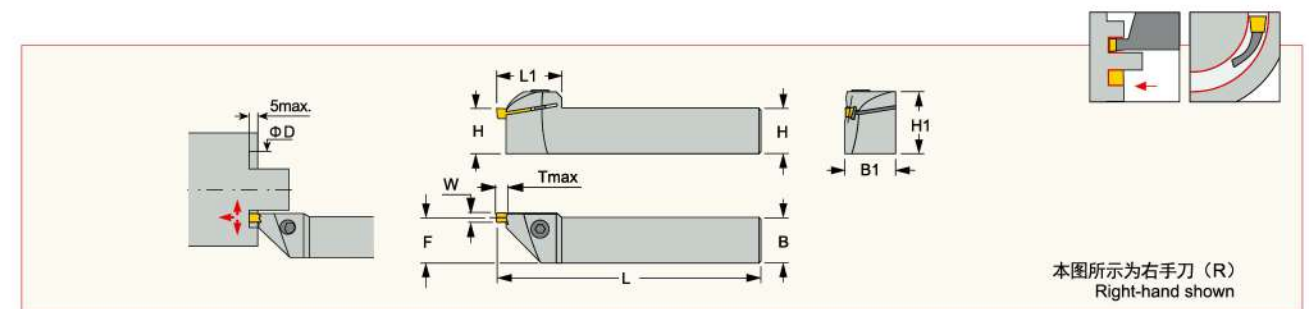
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
TGIR/L 16C-3	SR 76-1400	T-20/5
TGIR/L 20C-3	SR 76-1400	T-20/5
TGIR/L 25C-3	SR M5x16DIN912	HW4.0
TGIR/L 25C-4	SR M5x16DIN912	HW4.0
TGIR/L 32C-4	SR M5x16DIN912	HW5.0
TGIR/L 32C-6	SR M5x16DIN912	HW5.0
TGIR/L 40C-6	SR M5x25DIN912 UNB	HW5.0

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

AXIAL GROOVING TOOLS 端面切槽刀

HFHR/L-M



规格型号 Designation	W	HxB	L	L ₁	H1	B1	D		适用刀片 Insert	在庫 Stock
							Min	Max		
HFHR/L-20M	3-6	20x20	130	29	22.5	22.5	24	60	HFPR/L 3003/3015	●
							23	90	HFPR/L 4004/4020	
							21	300	HFPR/L 5004/5025	
							20	∞	HFPR/L 6004/6030	
HFHR/L-25M	3-6	25x25	150	34	27.5	27.5	24	60	HFPR/L 3003/3015	●
							23	90	HFPR/L 4004/4020	
							21	300	HFPR/L 5004/5025	
							20	∞	HFPR/L 6004/6030	

● 订货示例: 1件 HFHR 20M 1件 HFHL 25M
● 刀片根据车削材质另订购
● 各类非标刀具根据图纸订做

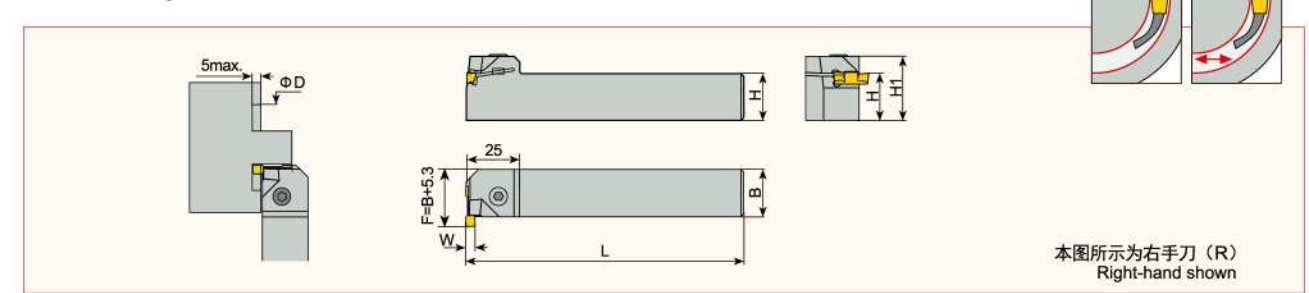
● Ordering sample: 1 PC HFHR 20M 1 PC HFHL 25M
● Insert should be ordered separately
● We can do special tools for customers

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HFHR/L-20M	SR M6x20	HW5
HFHR/L-25M	SR M6x20	HW5

HFHPR/L-M



规格型号 Designation	W	HxB	L	H1	D		适用刀片 Insert	在庫 Stock
					Min	Max		
HFHPR/L-20M	3-6	20x20	130	29	24	60	HFPR/L 3003/3015	●
					23	90	HFPR/L 4004/4020	
					21	300	HFPR/L 5004/5025	
HFHPR/L-25M	3-6	25x25	150	34	24	60	HFPR/L 3003/3015	●
					21	300	HFPR/L 6004/6030	

● 订货示例: 1件 HFHPR20M 1件 HFHPL25M
● 刀片根据车削材质另订购
● 各类非标刀具根据图纸订做

● Ordering sample: 1 PC HFHPR 20M 1PC HFHPL 25M
● Insert should be ordered separately
● We can do special tools for customers

备件

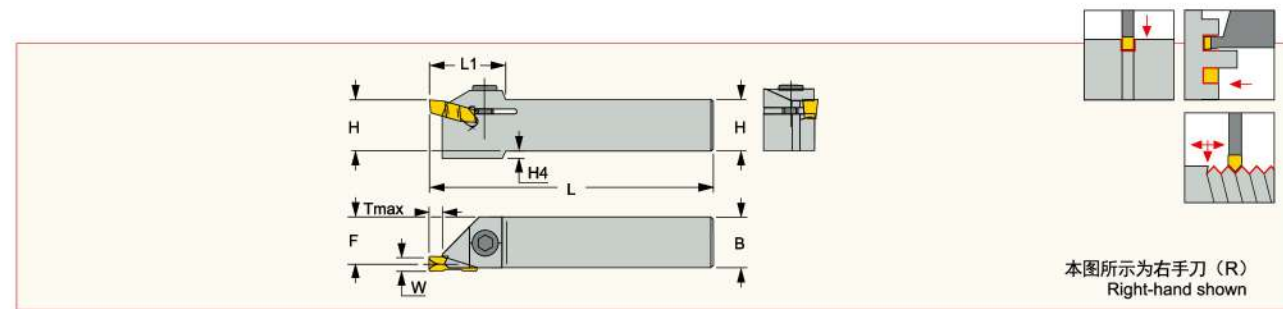
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HFHR/L-20M	SR M6x20	HW5
HFHR/L-25M	SR M6x20	HW5

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

AXIAL GROOVING TOOLS 端面切槽刀

GHMR/L



规格型号 Designation	W	T	HxB	L	L ₁	F	H	适用刀片 Insert	在库 Stock
GHMR/L 12	≤4	4.8	12x12	110	25	10.8	4	GIP,GIF,GIG,GIA	●
GHMR/L 16	≤4.8	4.8	16x16	115	25	14.5	-	GIPM,GIPY,TIP	●
GHMR/L 16-3ST ⁽¹⁾	≤5	4.8	16x16	78	25	15.0	4	GITM,GIPA,GIM	●
GHMR/L 20	≤6.4	4.8	20x20	125	25	18.5	-	GIP/GIF-D/G	●
GHMR/L 25	≤6.4	4.8	25x25	140	25	23.5	-	GIMF,GIMY,GPY	●
GHMR/L 32	≤6.4	4.8	32x32	150	25	30.2	-		●

- (1)GHGR/L-ST-用于STAR和多轴类型机床
- 订货示例: 1件GHMR12 1件GHML16
- 刀片订购请与我们的销售工程师联系

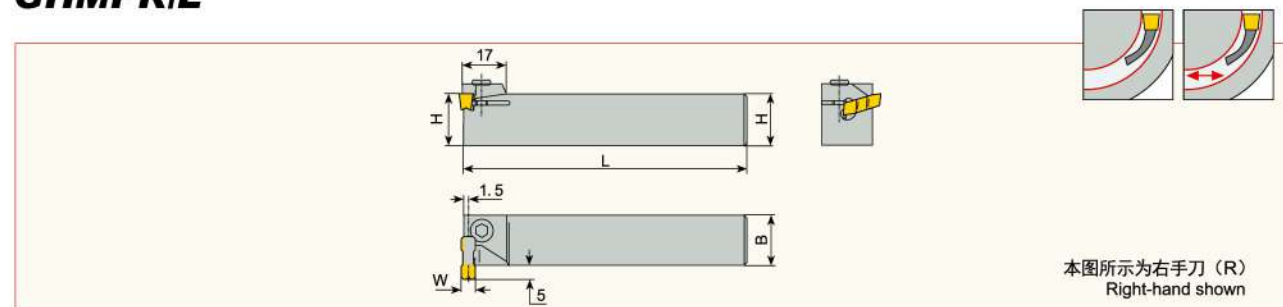
- (1)JHGR/L-ST For STAR or other machine tools with multiple spindle
- Ordering sample: 1PC GHMR12 1PC GHML16
- Ordering inserts, please contact our engineers

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
GHMR/L 12	SR 76-1022	T-20/5
GHMR/L 16	SR M6x16	HW5
GHMR/L 16-3ST	SR M6x16	HW5
GHMR/L 20	SR M6x20	HW5
GHMR/L 25	SR M6x25	HW5
GHMR/L 32	SR M6x25	HW5

GHMPR/L



规格型号 Designation	Wmax	HxB	L	适用刀片 Insert	在库 Stock
GHMPR/L 16	4.8	16x16	110	GIP,GIF,GIG,GIPA	●
GHMPR/L 20	6.4	20x20	120	GIM,GIP/GIF-D/G	●
GHMPR/L 25	6.4	25x25	135	GIMF,GIMY	●

- 订货示例: 1件GHPR 16 1件GHMPL 20
- 刀片订购请与我们的销售工程师联系

- Ordering sample: 1 PC GHMPR 16 1 PC GHMPL 20
- Insert should be ordered separately

备件

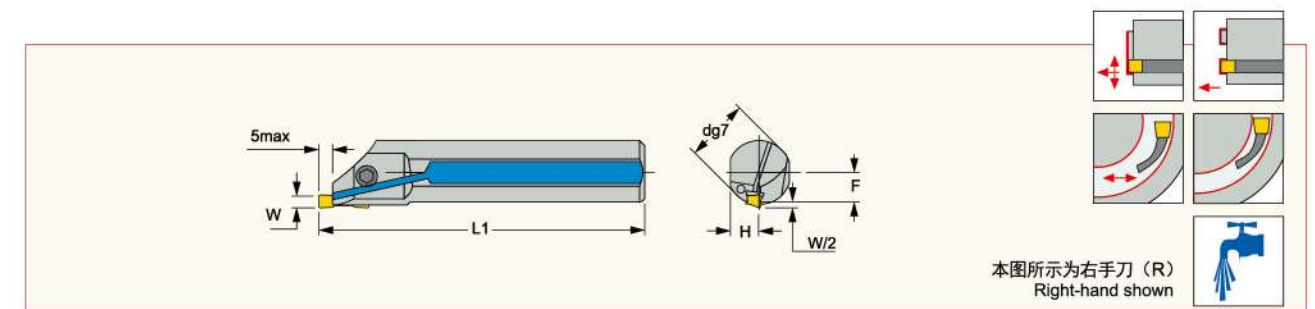
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
GHMPR/L 16	SR M6x16	HW5
GHMPR/L 20	SR M6x20	HW5
GHMPR/L 25	SR M6x25	HW5

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

AXIAL GROOVING TOOLS 端面切槽刀

HFIRIL-MC



规格型号 Designation	Wmax	HxB	L	F ± 0.1	H	适用刀片 Insert	在库 Stock
HFIR/L 25MC	3-6	25	200	11.14	11.5	HFPR/L	●
HFIR/L 32MC	3-6	32	250	16.68	14.5	HFPR/L	●
HFIR/L 40MC	3-6	40	300	18.73	18.0	HFPR/L	●

- 订货示例: 1件HFIR 25MC 1件HFIL 32MC
- 刀片订购请与我们的销售工程师联系
- Ordering sample: 1 PC HFIR 25MC 1 PC HRL 32MC
- Insert should be ordered separately

扩孔加工
Boring

$B \text{ Min.} = f + d/2 + W/2 + W2 + 2G$

内孔端面切槽加工
Internal Axial Grooving

$D \text{ Min.} = 2F + d + W + B + 2G$

内孔端面切槽带扩孔加工
Internal Axial Grooving/Boring

$P \text{ Min.} = 2F + d - W - B + 2G \quad G1 = 0.5MM$

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HFIR/L 25MC	SR M5x16	HW4
HFIR/L 32MC	SR M6x20	HW5
HFIR/L 40MC	SR M6x25	HW5

端面槽首切直径范围直径范围

The beginning dia. of Grooving

W	Min	Max
3	24	60
4	23	90
5	21	300
6	20	∞

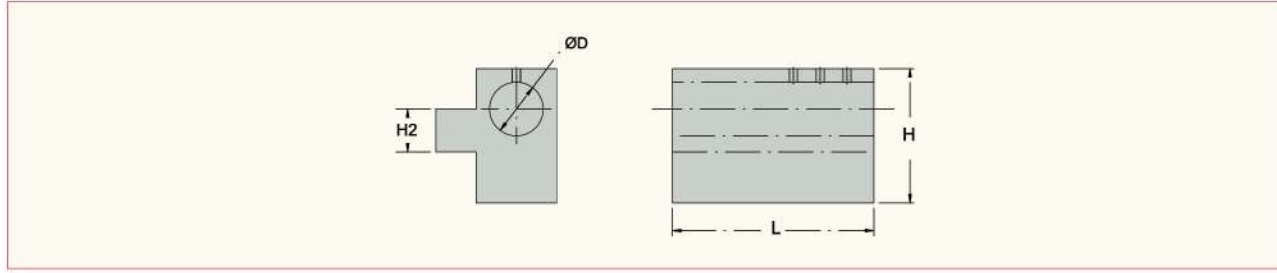
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

MACHINE TOOL ACCESSORIES 机床配件

内孔刀具定位座 / 中心钻刀杆

Center Block Tool Holder

ETHR



规格型号 Designation	尺寸 Dimensions(mm)					在库 Stock
	A	L	L1	H	H2	
ETHR2032	32	80	18	64	20	●
ETHR2532	32	80	18	64	25	●
ETHR2540	40	90	30	76	25	●
ETHR3240	40	90	30	76	32	●
ETHR2040	40	90	30	76	20	●

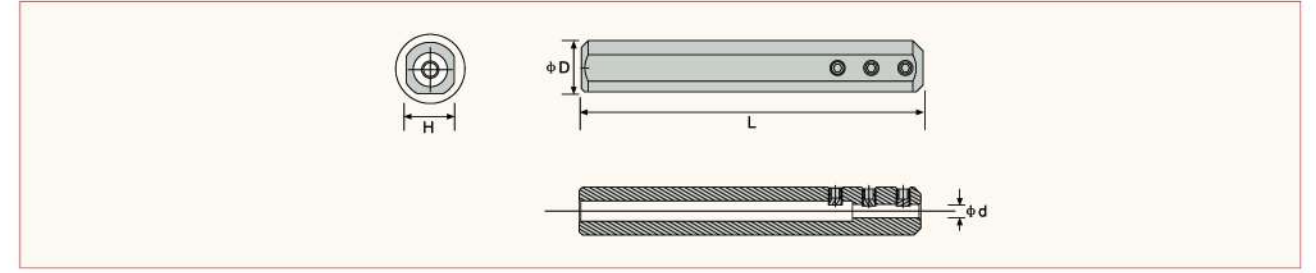
- 订货示例: 1 件 ETHR2032
- Ordering sample: 1 PC ETHR2032

MACHINE TOOL ACCESSORIES 机床配件

套筒

Sleeve

SHB



材质 Material	规格型号 Designation	尺寸 Dimensions(mm)				适用刀具 Adapted tools	在库 Stock
		ΦD	Φd	L	H		
钢 Steel	SHB-0416	16	4	100	15	C04	●
	SHB-0516	16	5	100	15	C05	●
	SHB-0616	16	6	100	15	C06	●
	SHB-0816	16	8	100	15	C08/S08	●
	SHB-1016	16	10	100	15	C10/S10	●
	SHB-0420	20	4	100	18	C04	●
	SHB-0520	20	5	100	18	C05	●
	SHB-0620	20	6	100	18	C06	●
	SHB-0820	20	8	100	18	C08/S08	●
	SHB-1020	20	10	100	18	C10/S10	●
	SHB-1220	20	12	100	18	C12/S12	●
	SHB-0422	22	4	100	20	C04	●
	SHB-0522	22	5	100	20	C05	●
	SHB-0622	22	6	100	20	C06	●
	SHB-0822	22	8	100	20	C08/S08	●
	SHB-1022	22	10	100	20	C10/S10	●
	SHB-1222	22	12	100	20	C12/S12	●
	SHB-1622	22	16	100	20	C16/S16	●

- 订货示例: 1 件 SHB-0416
- Ordering sample: 1 PC SHB-0416

备件

Spare Parts

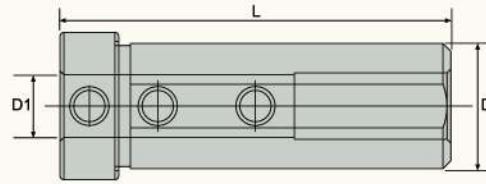
规格型号 Designation	螺钉 Screw	L 型扳手 Allen key
SHB-0416	ES40	LW020
SHB-0516	ES40	LW020
SHB-0616	ES40	LW020
SHB-0816	ES40	LW020
SHB-1016	ES40	LW020
SHB-0420	ES40	LW020
SHB-0520	ES40	LW020
SHB-0620	ES40	LW020
SHB-0820	ES60	LW030
SHB-1020	ES60	LW030
SHB-1220	ES60	LW030
SHB-0422	ES40	LW020
SHB-0522	ES40	LW020
SHB-0622	ES40	LW020
SHB-0822	ES60	LW030
SHB-1022	ES60	LW030
SHB-1222	ES60	LW030
SHB-1622	ES60	LW030

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MACHINE TOOL ACCESSORIES 机床配件

套筒
Sleeve
EHR



材质 Material	规格型号 Designation	尺寸 Dimensions(mm)			在库 Stock
		D1	D	L	
钢 Steel	HER-0625	6	25	64	●
	HER-0825	8	25	64	●
	HER-1025	10	25	64	●
	HER-1225	12	25	64	●
	HER-1625	16	25	64	●
	HER-2025	20	32	64	●
	HER-0632	6	32	64	●
	HER-0832	8	32	100	●
	HER-1032	10	32	100	●
	HER-1232	12	32	100	●
	HER-1632	16	32	100	●
	HER-2032	20	32	100	●
	HER-2532	25	40	100	●
	HER-0640	6	40	100	●
	HER-0840	8	40	100	●
	HER-1040	10	40	100	●
	HER-1240	12	40	100	●
	HER-1640	16	40	100	●
	HER-2040	20	40	100	●
	HER-2540	25	50	100	●
	HER-3240	32	50	100	●
	HER-0650	6	50	100	●
	HER-0850	8	50	100	●
	HER-1050	10	50	100	●
	HER-1250	12	50	100	●
	HER-1650	16	50	100	●
	HER-2050	20	50	100	●
	HER-2550	25	50	100	●
HER-3250	32	50	100	●	
HER-4050	40	50	100	●	

● 订货示例: 1 件 EHR-0625
● Ordering sample: 1 PC EHR-0625

备件

Spare Parts

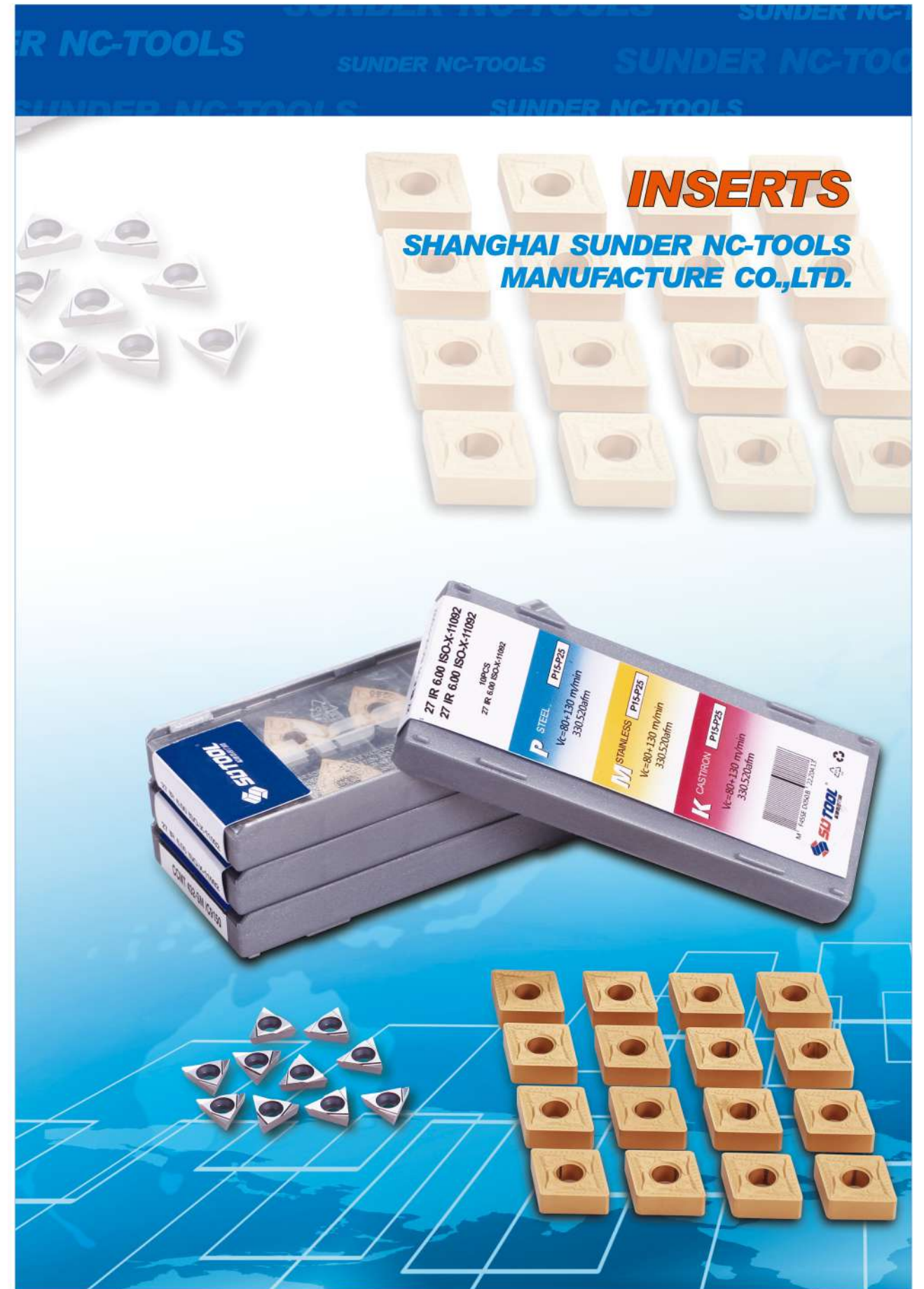


规格型号 Designation	螺钉 Screw
HER-0625	ES606
HER-0825	ES606
HER-1025	ES606
HER-1225	ES606
HER-1625	ES606
HER-2025	ES606
HER-0632	ES808
HER-0832	ES808
HER-1032	ES808
HER-1232	ES808
HER-1632	ES808
HER-2032	ES808
HER-2532	ES808
HER-0640	ES808
HER-0840	ES808



规格型号 Designation	螺钉 Screw
HER-1040	ES808
HER-1240	ES808
HER-1640	ES808
HER-2040	ES808
HER-2540	ES808
HER-3240	ES808
HER-0650	ES808
HER-0850	ES808
HER-1050	ES808
HER-1250	ES808
HER-1650	ES808
HER-2050	ES808
HER-2550	ES808
HER-3250	ES808
HER-4050	ES808

● 标准库存 Item in stock
● 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)



刀片系列
INSERTS

CONTENTS

F INSERIS 刀片系列

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WB 型刀片 WB..	F001
TP 型刀片 TP..	F002
CC 型刀片 CC..	F002
TB 型刀片 TB..	F003
CP 型刀片 CP..	F003
TC 型刀片 TC..	F004-F005
SC 型刀片 SC..	F006

INSERTS FOR DRILLING 钻刀片

F007

SO 型刀片 SO..	F007
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INSERTS FOR MILLING 铣刀片

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SE 型刀片 SE..	F012
XC 型刀片 XC..	F012
XO/QO 型刀片 XO/QO..	F013
QP 型刀片 QP..	F013
QD 型刀片 QD..	F014
VC 型刀片 VC..	F014
SN 型刀片 SN..	F015
ON 型刀片 ON..	F015

CARBIDE GRADE 刀片材质

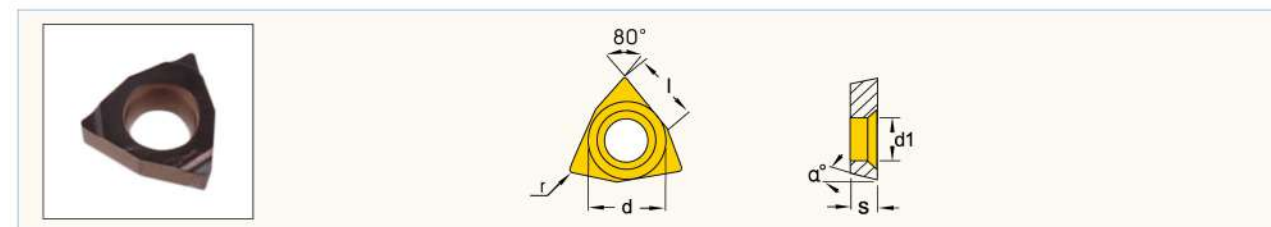
F016-F018

应用推荐 Cutting Material Application Table	F016
牌号说明 Cutting Material Application Recommendation	F017-F018

INSERTS FOR BORING 镗刀片

WC 型刀片

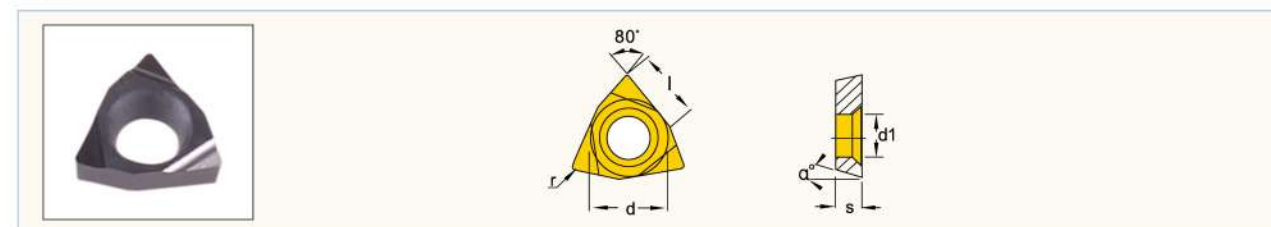
WC..



规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade	
							通用 General	钢 Steel
WCGT 020102-L	2.18	0.2	7	1.59	3.97	2.3	●	●
WCGT 020104-L	2.18	0.4	7	1.59	3.97	2.3	●	●

WB 型刀片

WB..



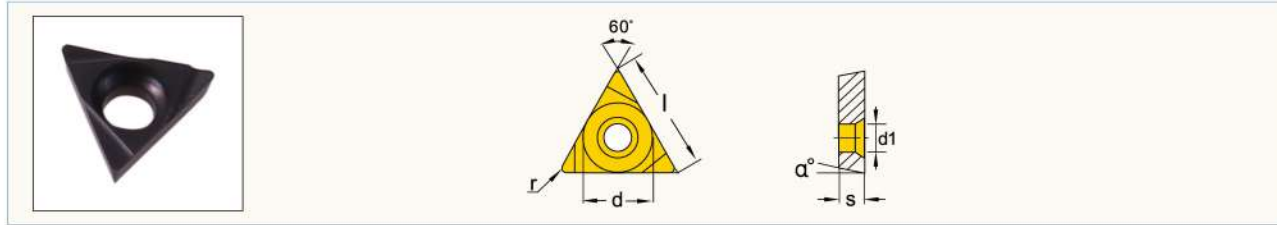
规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade		
							通用 General	不锈钢 Stainless steel	钢 Steel
WBGT 060102-L	2.18	0.2	5	1.59	3.97	2.24	●	●	
WBMT 060102-L	2.18	0.2	5	1.59	3.97	2.24			●

• 刀片材质，请参照：F017-F018 页
• Carbide grade please see page F017-F018.

INSERTS FOR BORING 镗刀片

TP 型刀片

TP..

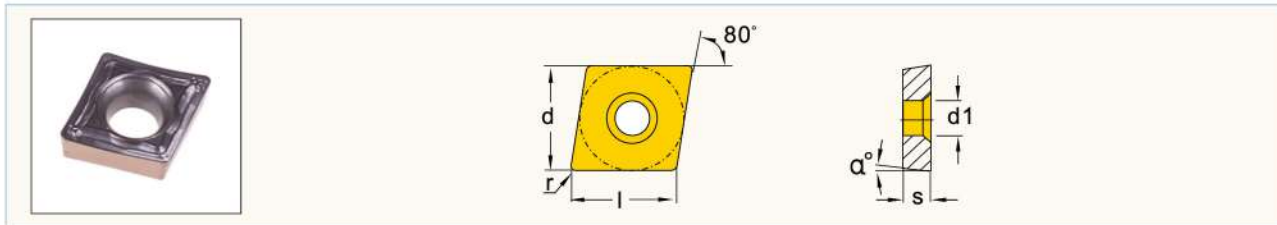


规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade		
							通用 General	有色金属 Non-ferrous metals	钢 Steel
							SC9125	SC4020	SC1010
TPGX 090202-L	9.52	0.2	11	2.38	5.56	3	●	●	●
TPGX 090204-L	9.52	0.4	11	2.38	5.56	3	●	●	●
TPGX 110302-L	11	0.2	11	3.18	6.35	3.5	●	●	●
TPGX 110304-L	11	0.4	11	3.18	6.35	3.5	●	●	●

• 刀片材质，请参照：F017-F018 页
• Carbide grade please see page F017-F018.

CC 型刀片

CC..



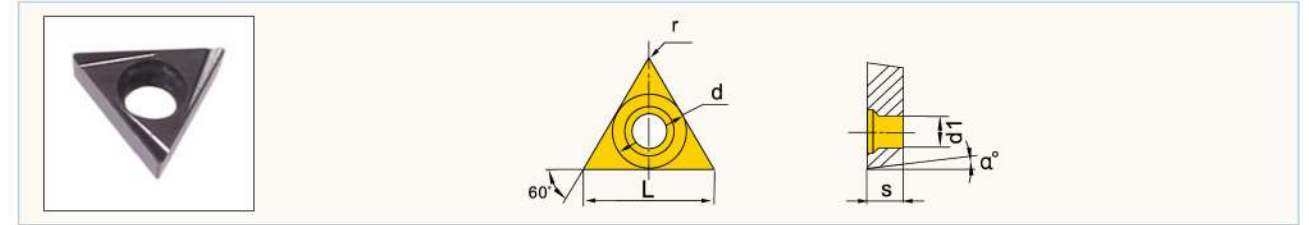
规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade									
							不锈钢 Stainless steel	钢 Steel	钢 Steel	有色金属 Non-ferrous metals	铸铁 Cast iron	铸铁 Cast iron	铸铁 Cast iron			
							SC2010	SC1215	SC1025	SC4020	SC3010	SC3015	SC3020			
CCMT 060202-TP	6.3	0.2	7	2.38	5.56	3	●	●	●							
CCGT 060202-TA	6.3	0.2	7	2.38	5.56	3				●						
CCGT 060204-TA	6.3	0.4	7	2.38	6.35	3.5				●						
CCMT 060204-TM	6.3	0.4	7	2.38	6.35	3.5	●					●				
CCMT 060204-TP	6.3	0.4	7	2.38	5.56	3	●	●	●							
CCMT 09T304-TP	9.7	0.4	7	3.97	5.56	3	●	●	●			●	●			
CCGT 09T304-TA	9.7	0.4	7	3.97	6.35	3.5				●						
CCMT 09T308-TP	9.7	0.4	7	3.97	6.35	3.5	●	●	●			●	●			
CCGT 09T308-TA	9.7	0.2	7	3.97	5.56	3				●						
CCMT 120404-TP	12.9	0.4	7	4.76	5.56	3	●	●	●							
CCGT 120404-TA	12.9	0.2	7	4.76	6.35	3.5				●						
CCMT 120408-TP	12.9	0.4	7	4.76	6.35	3.5	●	●	●							
CCMT 120408-TM	12.9	0.2	7	4.76	6.35	3.5										●
CCGT 120408-TA	12.9	0.4	7	4.76	6.35	3.5				●						

• CCGT...-TA 为加工铝合金刀片
• CCGT ...-TA: it is for aluminum alloy.

INSERTS FOR BORING 镗刀片

TB 型刀片

TB..

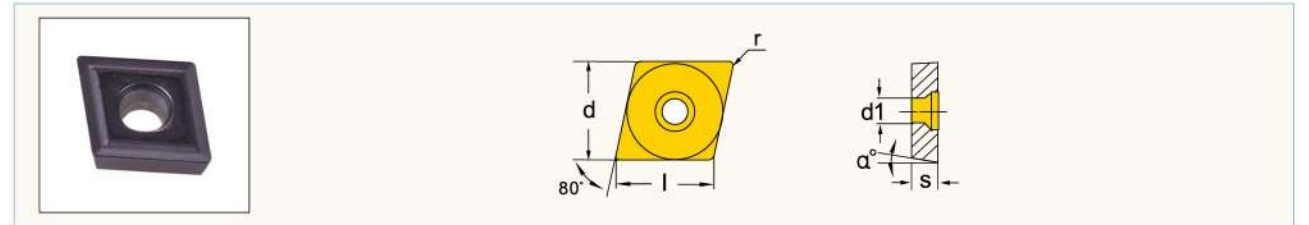


规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade			
							不锈钢 Stainless steel	钢 Steel	铸铁 Cast iron	有色金属 Non-ferrous metals
							SC2015	SC1030	SC3025	SC4025
TBGT 060102L-TP	6.9	0.2	5	1.59	3.97	2.3	●	●	●	●
TBGT 060104L-TP	6.9	0.4	5	1.59	3.97	2.3	●	●	●	●

• CCGT...-TA 为加工铝合金刀片
• CCGT ...-TA: it is for aluminum alloy.

CP 型刀片

CP..



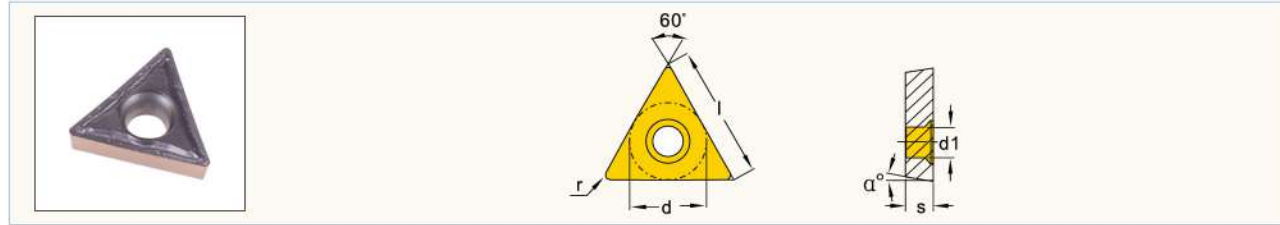
规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade			
							钢 Steel	不锈钢 Stainless steel	铸铁 Cast iron	有色金属 Non-ferrous metals
							SC1015	SC2020	SC3028	SC4230
CPGT 050202-TP	5.65	0.2	11	2.38	5.56	2.5	●	●	●	●
CPGT 050204-TP	5.65	0.4	11	2.38	5.56	2.5	●	●	●	●

• 刀片材质，请参照：F017-F018 页
• Carbide grade please see page F017-F018.

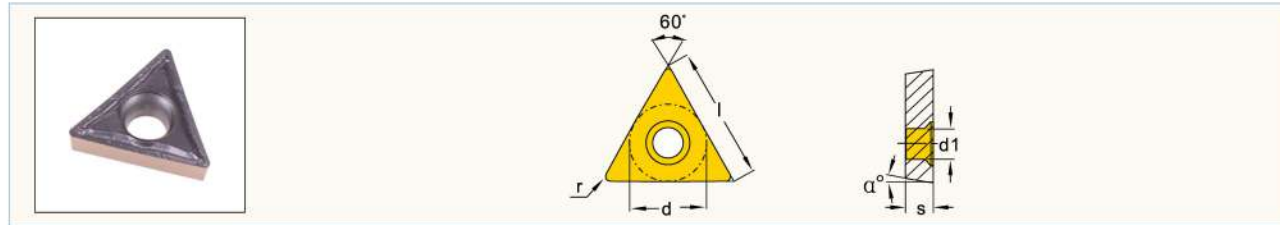
INSERTS FOR BORING 镗刀片

TC 型刀片

TC..



规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade					
							钢 Steel	钢 Steel	不锈钢 Stainless steel	不锈钢 Stainless steel	不锈钢 Stainless steel	
							SC1215	SC1025	SC2020	SC2016	SC2010	
TCMT 06T104F-TP	6	0.4	7°	1.98	3.96	2.3	●					●
TCMT 06T102F-TP	6	0.2	7°	1.98	3.96	2.3		●	●			
TCGX 06T104F-TA	6	0.4	7°	1.98	3.96	2.3						
TCMT 090202F-TP	9	0.2	7°	2.38	5.55	2.45	●			●		
TCMT 090204F-TP	9	0.4	7°	2.38	5.55	2.45	●			●		
TCGX 090202FL-TA	9	0.2	7°	2.38	5.55	2.45						
TCGX 090204-TA	9	0.4	7°	2.38	5.55	2.45						
TCGT 090304L-TP	9	0.4	7°	3.18	5.56	2.8						
TCMT 110202-TP	11	0.2	7°	2.38	6.35	2.8						●
TCMT 110204-TP	11	0.4	7°	2.38	6.35	2.8	●	●				●
TCGT 110204-TA	11	0.4	7°	2.38	6.35	2.8						



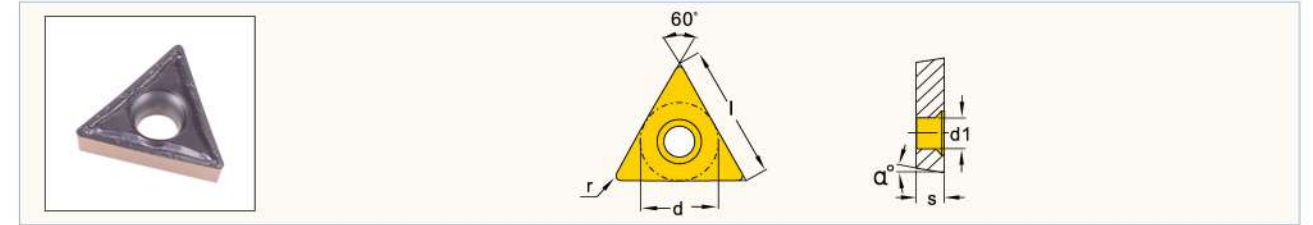
规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade						
							铸铁 Cast iron	铸铁 Cast iron	铸铁 Cast iron	铸铁 Cast iron	有色金属 Non-ferrous metals	钢 Steel	
							SC3010	SC3015	SC3025	SC3020	SC4020	SC1220	
TCMT 06T104F-TP	6	0.4	7°	1.98	3.96	2.3					●		
TCMT 06T102F-TP	6	0.2	7°	1.98	3.96	2.3				●			
TCGX 06T104F-TA	6	0.4	7°	1.98	3.96	2.3						●	
TCMT 090202F-TP	9	0.2	7°	2.38	5.55	2.45					●		
TCMT 090204F-TP	9	0.4	7°	2.38	5.55	2.45					●		
TCGX 090202FL-TA	9	0.2	7°	2.38	5.55	2.45						●	
TCGX 090204-TA	9	0.4	7°	2.38	5.55	2.45						●	
TCGT 090304L-TP	9	0.4	7°	3.18	5.56	2.8							●
TCMT 110202-TP	11	0.2	7°	2.38	6.35	2.8							
TCMT 110204-TP	11	0.4	7°	2.38	6.35	2.8	●	●					
TCGT 110204-TA	11	0.4	7°	2.38	6.35	2.8						●	

● 刀片材质，请参照：F017-F018 页
● Carbide grade please see page F017-F018.

INSERTS FOR BORING 镗刀片

TC 型刀片

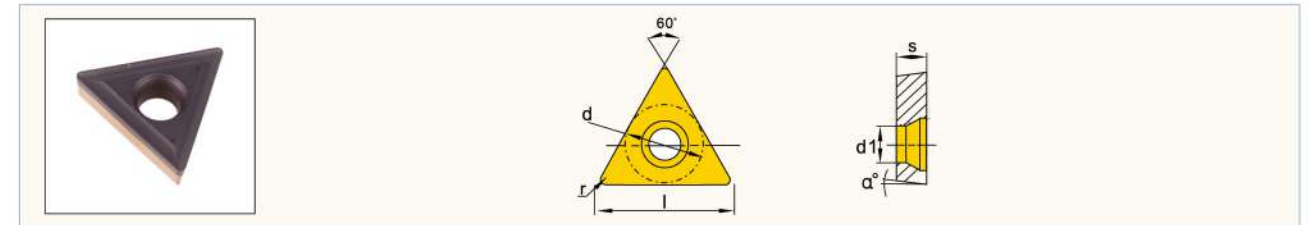
TC..



规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade						
							不锈钢 Stainless steel	钢 Steel	钢 Steel	有色金属 Non-ferrous metals	铸铁 Cast iron	铸铁 Cast iron	
							SC2010	SC1215	SC1025	SC4020	SC3010	SC3015	
TCGT 16T304-TA	16.5	0.4	7°	3.97	9.52	4.4				●			
TCMT 16T304-TP	16.5	0.8	7°	3.97	9.52	4.4	●	●	●		●		
TCGT 16T308-TA	16.5	0.8	7°	3.97	9.52	4.4				●			
TCMT 16T308-TP	16.5	0.8	7°	4.76	12.7	5.5	●	●	●				
TCMT 16T308-TM	16.5	0.8	7°	4.76	12.7	5.5	●	●	●		●		

TC 型刀片

TC..



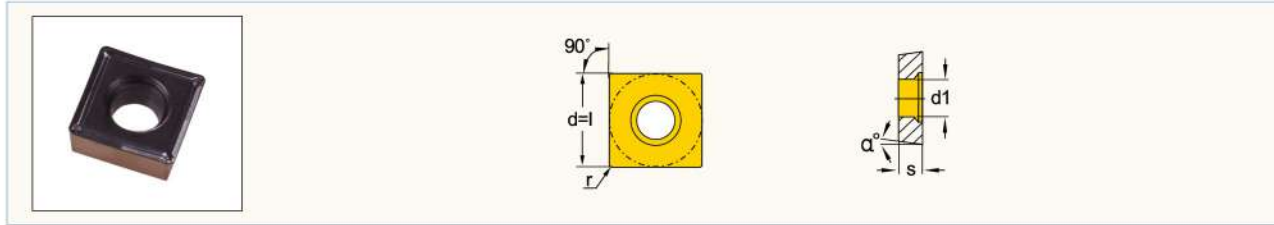
规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade	
							钢 Steel	不锈钢 Stainless steel
							SC1125	SC2025
TCMT 220408-TR	22	0.8	7°	4.76	12.7	5.5	●	●

● 刀片材质，请参照：F017-F018 页
● Carbide grade please see page F017-F018.

INSERTS FOR BORING 镗刀片

SC 型刀片

SC..



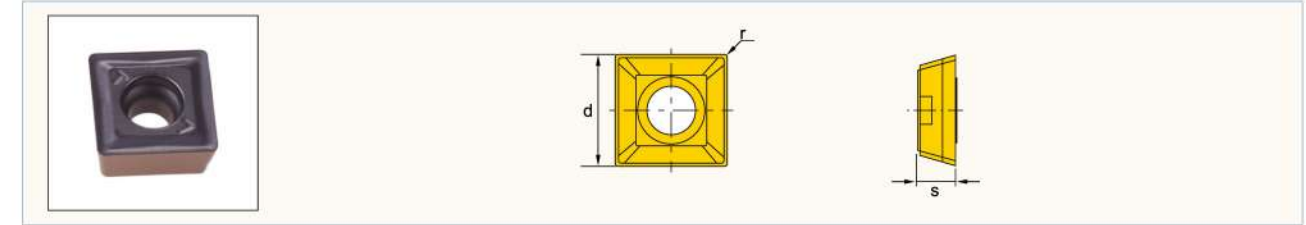
规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade			
							不锈钢 Stainless steel	钢 Steel	钢 Steel	有色金属 Non-ferrous metals
							SC2010	SC1215	SC1025	SC4020
SCMT 09T304-TP	9.52	0.4	7	3.97	9.52	4.4	●	●	●	
SCMT 09T308-TP	9.52	0.8	7	3.97	9.52	4.4	●	●	●	
SCGT 09T308-TA	9.52	0.8	7	3.97	9.52	4.4				●
SCMT 120408-TP	12.7	0.8	7	4.76	12.7	5.5	●	●	●	
SCGT 120408-TA	12.7	0.8	7	4.76	12.7	5.5				●

- 刀片材质，请参照：F017-F018 页
- Carbide grade please see page F017-F018.

INSERTS FOR DRILLING 钻刀片

SO 型刀片

SO..



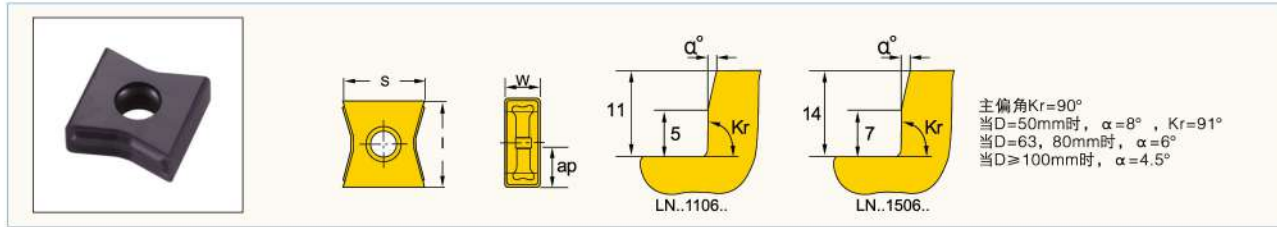
规格型号 Designation	d	s	r	工件材料 Carbide grade	
				通用 General	有色金属 Non-ferrous metals
				SC9125	SC4015
SOMX 060304-DR	6.2	3.2	0.4	●	
SOMX 060304-DM	6.2	3.2	0.4	●	
SOGX 060304-DA	6.2	3.2	0.4		●
SOMX 070305-DR	7.7	3.6	0.5	●	
SOMX 070305-DM	7.7	3.6	0.5	●	
SOGX 070305-DA	7.7	3.6	0.5		●
SOMT 09T306-DR	9	3.81	0.6	●	
SOMT 09T306-DM	9	3.81	0.6	●	
SOMT 120408-DR	12.7	4.76	0.8	●	
SOMT 120408-DM	12.7	4.76	0.8	●	
SOMT 160512-DR	16	5.56	1.2	●	
SOMT 160512-DM	16	5.56	1.2	●	

- DR- 通用型断屑槽，适用于中 - 高速进给
- DM- 独特断屑槽，适用于低 - 中速进给加工软金属
- OA- 铝合金专用断屑槽
- OR- Ordinary chip pocket which is suitable for medium and high feed.
- OM- Special chip pocket which is suitable for low and medium feed for soft metal.
- OA- Special chip pocket for aluminum alloy.

INSERTS FOR BORING 铣刀片

LN 型刀片

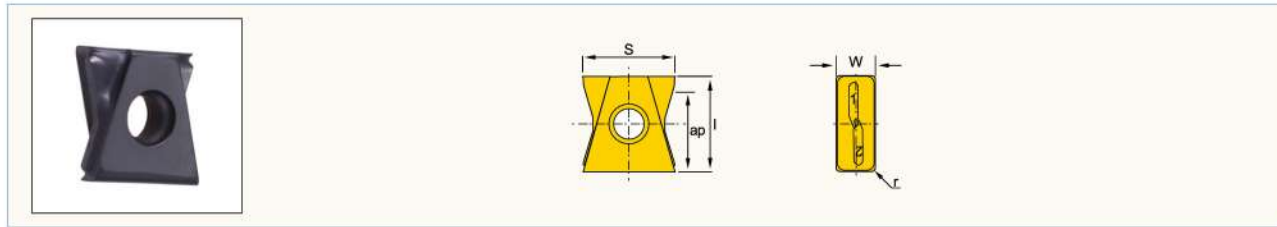
LN..



规格型号 Designation	w	l	s	r	加工类型 Tooling	工件材料 Carbide grade				ap	fz(mm/z)
						铸铁 Cast iron SC3115	通用 General SC9125	钢 Steel SC1135	有色金属 Non-ferrous metals SC4010		
LNAT 1106F-MW ⁽¹⁾	6	11.38	10.94	-	轻型 Light-duty		●			0.5-2.0	0.1-0.15
LNKX 1106T-MM	6	11.16	11	0.8	中型 Medium-duty					1.5-5.0	0.15-0.20
LNKX 1106T-MR	6	11.16	11	0.8	重型 Heavy-duty		●	●		1.5-5.0	0.17-0.25
LNAR 1106F-MA	6	11.16	11	0.8	轻型 Light-duty				●	1.5-5.0	0.15-0.20
LNAT 1506F-MW ⁽¹⁾	6	15.18	13.85	-	轻型 Light-duty	●	●			0.5-2.0	0.1-0.15
LNKX 1506T-MM	6	15	13.9	0.8	中型 Medium-duty	●				2.0-7.0	0.2-0.3
LNKX 1506T-MR	6	15	13.9	0.8	重型 Heavy-duty		●	●		2.0-7.0	0.3-0.4
LNAR 1506F-MA	6	15	13.6	0.8	轻型 Light-duty				●	2.0-7.0	0.1-0.15

(1) 修光刃刀片

(1) It is wiper insert



规格型号 Designation	w	l	s	r	加工类型 Tooling	工件材料 Carbide grade			ap	fz(mm/z)
						铸铁 Cast iron SC3115	钢 Steel SC1135	通用 General SC9125		
LNHT 1106TR-M ⁽³⁾	5.97	11.16	11	0.8	中型 Medium-duty	●	●	●	2-10 ⁽¹⁾	0.15-0.25
LNHT 1106T-MM ⁽⁴⁾	5.97	11.16	11	0.8	中型 Medium-duty	●	●	●	2-10 ⁽¹⁾	0.15-0.25
LNMT 1506TR-M ⁽³⁾	6	15	13.9	0.8	中型 Medium-duty	●	●		3-12 ⁽²⁾	0.15-0.25
LNMT 1506T-MM ⁽⁴⁾	6	15	14.03	0.8	中型 Medium-duty	●	●		3-12 ⁽²⁾	0.15-0.25

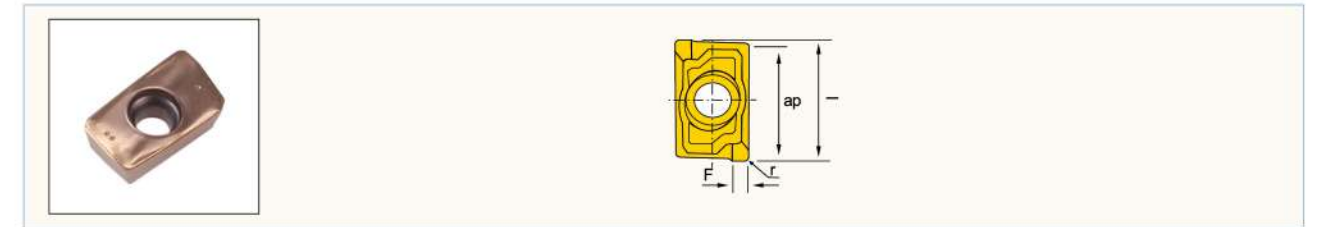
(1) 加工钢材时, 最大切深 8mm, 加工铸铁时, 最大切深 10mm
(2) 加工钢材时, 最大切深 9mm, 加工铸铁时, 最大切深 12mm
(3) 刀片有 4 个右手切削刃
(4) 刀片有 2 个右手切削刃, 2 个左手切削刃

(1) The max cutting depth is 8mm when machining the steel and 10mm for cast iron
(2) The max cutting depth is 9mm when machining the steel and 12mm for cast iron
(3) There are 4 cutting edges for right hand
(4) There are 2 cutting edges for right hand and 2 for left hand

INSERTS FOR BORING 铣刀片

AP 型刀片

AP..

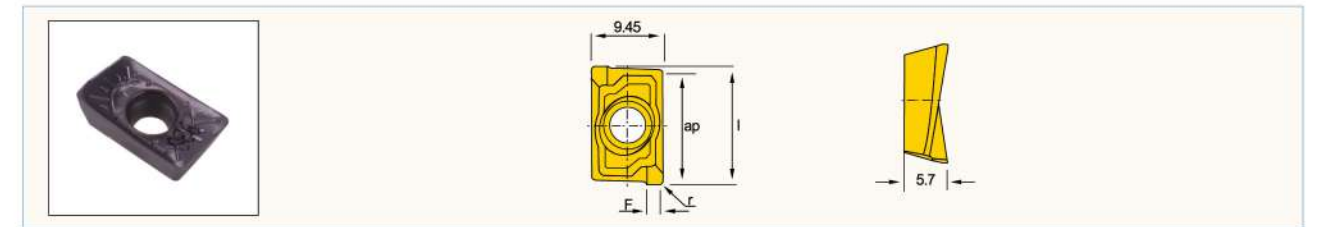


规格型号 Designation	r	F	l	加工类型 Tooling	工件材料 Carbide grade			ap	fz(mm/z)
					钢 Steel SC1135				
APMT 1135TR-MM	0.8	1.2	11.1	中型 Medium-duty	●			2.0-8.0	0.08-0.15

● 刀片材质, 请参照: F017-F018 页
● Carbide grade please see page F017-F018.

AP 型刀片

AP..



规格型号 Designation	r	F	l	加工类型 Tooling	工件材料 Carbide grade				ap	fz(mm/z)
					有色金属 Non-ferrous metals SC4030	钢 Steel SC1135	钢 Steel SC1225	铸铁 Cast iron SC3115		
APKT 1604TR-MR	0.8	1.8	17.3	重型 Heavy-duty		●			6.0-14	0.1-0.2
APKT 1604TL-MM ⁽¹⁾	0.8	1.7	17.7	中型 Medium-duty			●		6.0-14	0.08-0.15
APCR 1604FR-MA	0.8	1.7	17.92	中型 Medium-duty	●				6.0-14	0.15-0.25
APKT 1604TR-MM	0.8	1.7	17.92	中型 Medium-duty				●	6.0-14	0.08-0.15

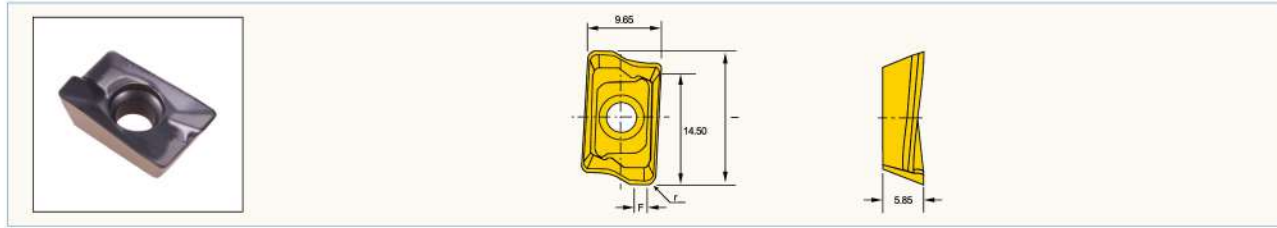
(1) 左手刀片

(1) Left hand

INSERTS FOR BORING 铣刀片

HM90 AD 型刀片

HM90 AD..

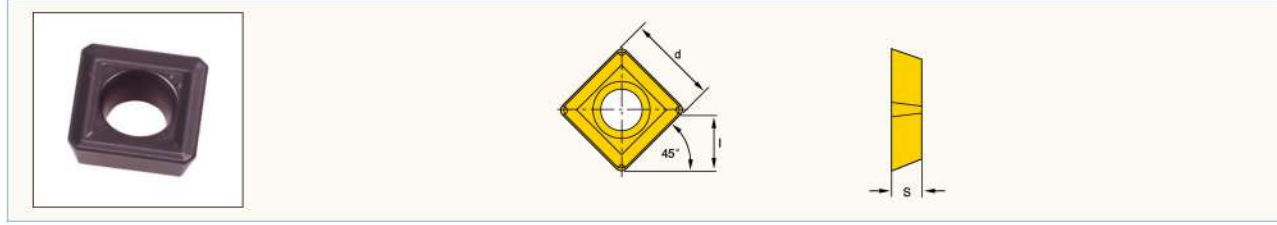


规格型号 Designation	r	F	l	加工类型 Tooling	工件材料 Carbide grade					ap	fz(mm/z)
					铸铁 Cast iron	钢 Steel	钢 Steel	通用 General	有色金属 Non-ferrous metals		
HM90 ADKT 1505TR-MM	0.8	2.16	16.18	中型 Medium-duty	●		●	●		5.0-12.0	0.08-0.15
HM90 ADCR 1505FR-MA	0.8	4	15.3	轻型 Light-duty					●	5.0-12.0	0.15-0.25
HM90 ADKT 1505F-MW ⁽²⁾	0.8	5.92	16.75	轻型 Light-duty			●	●		0.1-1.0	0.15-0.30
ADKT 1505TL-MM ⁽³⁾	0.8	1.6	15.7	中型 Medium-duty		●				5.0-12.0	0.07-0.15

(2) 左手刀片 (2) Left hand
(3) 修光刃刀片 (3) it is wiper insert

SD 型刀片

SD..



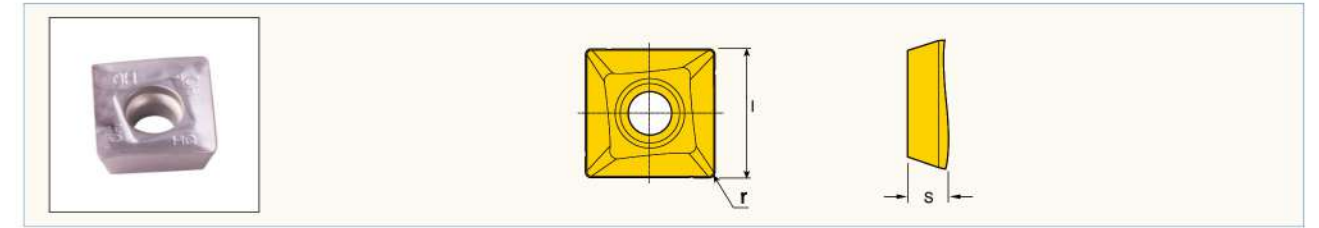
规格型号 Designation	l	S	d	加工类型 Tooling	工件材料 Carbide grade		ap	fz(mm/z)
					有色金属 Non-ferrous metals	钢 Steel		
SDMT 0903T-MM	5.6	3.18	9.53	中型 Medium-duty	●	●	5.0-12.0	0.08-0.15

• 刀片材质, 请参照: F017-F018 页
• Carbide grade please see page F017-F018.

INSERTS FOR DRILLING 铣刀片

SD 型刀片

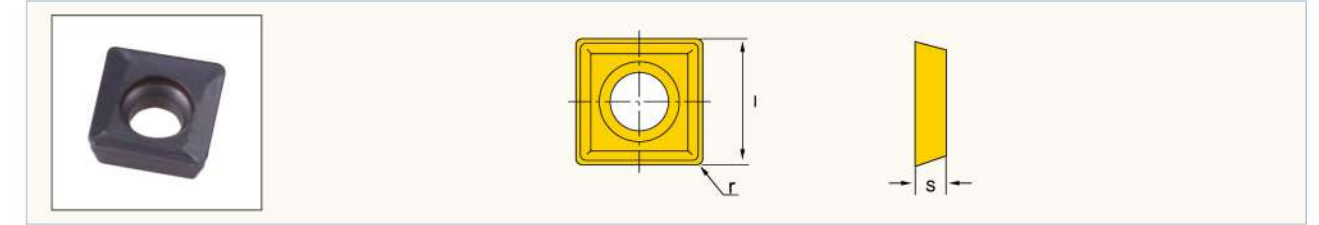
SD..



规格型号 Designation	l	S	r	加工类型 Tooling	工件材料 Carbide grade		ap	fz(mm/z)
					钢 Steel	铸铁 Cast iron		
SDMX 1205-MM	12.7	5.1	0.8	中型 Medium-duty	●	●	4-10	0.07-0.12

SP 型刀片

SP..

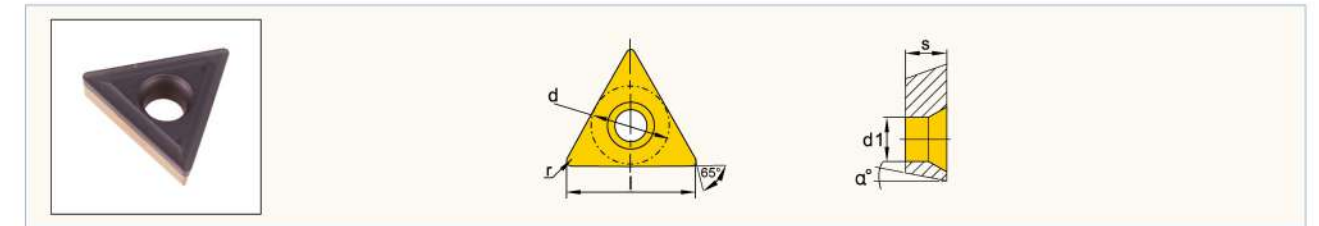


规格型号 Designation	l	S	r	加工类型 Tooling	工件材料 Carbide grade			ap	fz(mm/z)
					钢 Steel	通用 General	钢 Steel		
SPMT 100408TR-MM	10.2	4.23	0.7	中型 Medium-duty	●	●	●	4.0-8.0	0.08-0.15

• 刀片材质, 请参照: F017-F018 页
• Carbide grade please see page F017-F018.

TX 型刀片

TX..



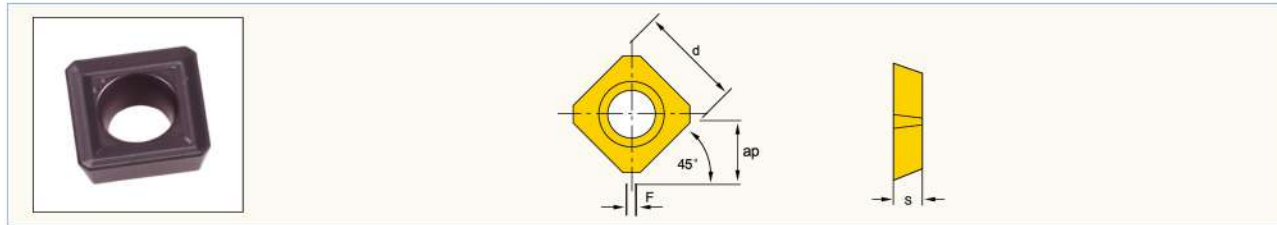
规格型号 Designation	l	r	α°	s	d	d1	工件材料 Carbide grade	
							铸铁 Cast iron	●
TXMW 130304	11	0.4	11	3.18	6.35	3.4	●	

• 刀片材质, 请参照: F017-F018 页
• Carbide grade please see page F017-F018.

INSERTS FOR BORING 铣刀片

SE 型刀片

SE..



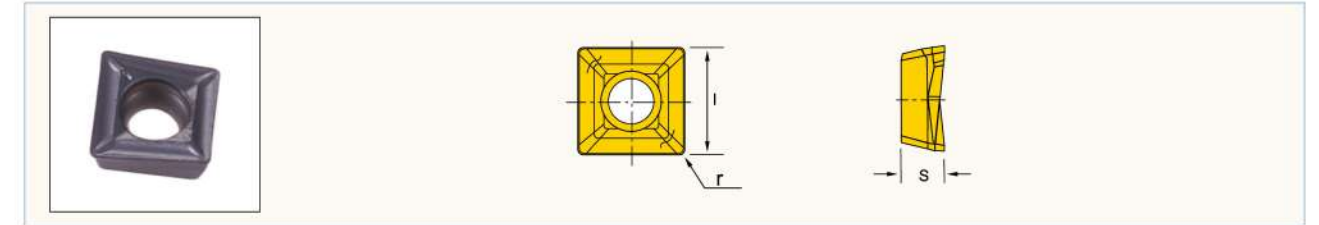
规格型号 Designation	F	S	d	加工类型 Tooling	工件材料 Carbide grade					ap fz(mm/z)		
					有色金属 Non-ferrous metals SC4020	有色金属 Non-ferrous metals SC4030	钢 Steel SC1020	钢 Steel SC1135	铸铁 Cast iron SC3115			通用 General SC9125
SEMT 1204T-MR	1.8	4.76	12.7	重型 Heavy-duty			●	●			2.0-6.0	0.2-0.3
SEMT 1204F-MP	2.2	4.76	12.7	中型 Medium-duty		●					2.0-6.0	0.12-0.2
SEMT 1204F-MA	2.2	4.76	12.7	中型 Medium-duty	●						2.0-6.0	0.12-0.2
SEMT 12T3-MM	2.2	3.81	12.7	中型 Medium-duty				●	●	●	2.0-6.0	0.12-0.2

- 刀片材质, 请参照: F017-F018 页
- Carbide grade please see page F017-F018.

INSERTS FOR MILLING 铣刀片

XO/QO 型刀片

XO/QO..

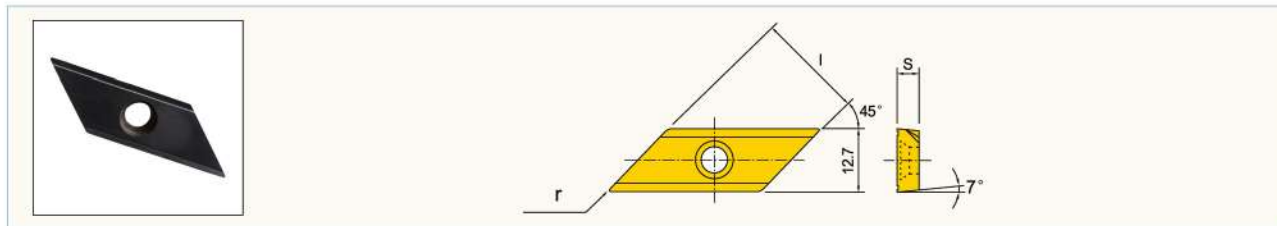


规格型号 Designation	l	S	r	加工类型 Tooling	工件材料 Carbide grade				ap fz(mm/z)		
					有色金属 Non-ferrous metals SC4030	钢 Steel SC1135	钢 Steel SC1225	铸铁 Cast iron SC3115			
XOMT 060204F-MM	6.16	2.56	0.4	轻型 Light-duty		●	●	●		2.0-4.0	0.07-0.10
XOMT 060204T-MM	6.16	2.56	0.4	中型 Medium-duty						2.0-4.0	0.10-0.15
QOMT 060208T-MM	6.16	2.56	0.8	中型 Medium-duty	●				●	2.0-4.0	0.07-0.12

- (1) 两对螺旋切削刃左手 / 右手
- (1) Two pairs of spiral cutting edges, right-hand / left-hand

XC 型刀片

XC..

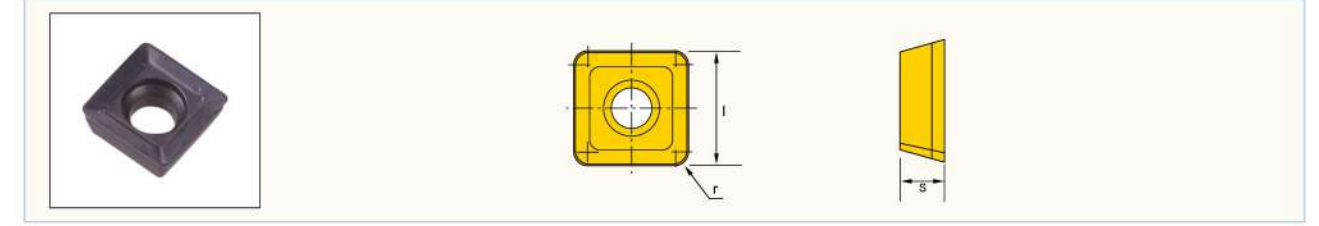


规格型号 Designation	l	S	r	加工类型 Tooling	工件材料 Carbide grade		ap fz(mm/z)	
					通用 General SC9030			
XCET 220404T-MM	22	4.5	0.4	中型 Medium-duty	●		2.0-20.0	0.12-0.15

- 刀片材质, 请参照: F017-F018 页
- Carbide grade please see page F017-F018.

QP 型刀片

QP..



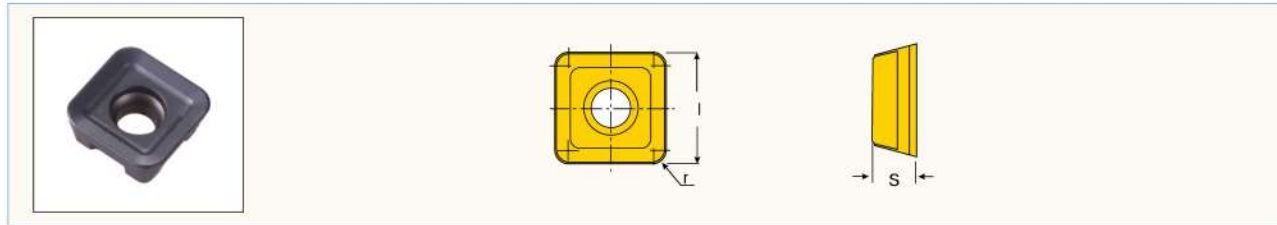
规格型号 Designation	l	S	r	加工类型 Tooling	工件材料 Carbide grade		ap fz(mm/z)	
					钢 Steel SC1135	铸铁 Cast iron SC3115		
QPMT 100408T-MM	10.35	4.12	0.7	中型 Medium-duty	●	●	3.0-8.0	0.08-0.15

- 刀片材质, 请参照: F017-F018 页
- Carbide grade please see page F017-F018.

INSERTS FOR MILLING 铣刀片

QD 型刀片

QD..

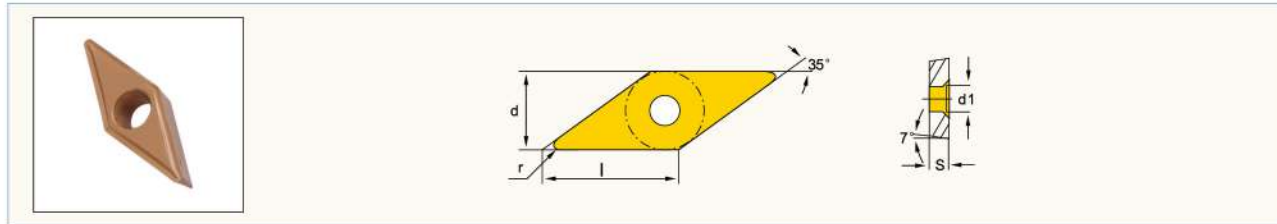


规格型号 Designation	l	s	r	加工类型 Tooling	工件材料 Carbide grade			ap fz(mm/z)	
					有色金属 Non-ferrous metals SC4030	钢 Steel SC1135	钢 Steel SC1225		
QDMT 1205T-MM	12.7	5	0.8	中型 Medium-duty	●	●	●	●	4.0-10.0 0.08-0.15
QDMT 120516T-MM	12.7	5	1.6	中型 Medium-duty	●	●	●	●	4.0-10.0 0.08-0.15
QDMT 120520T-MM	12.7	5	2	中型 Medium-duty	●	●	●	●	4.0-10.0 0.08-0.15

• 刀片材质, 请参照: F017-F018 页
• Carbide grade please see page F017-F018.

VC 型刀片

VC..



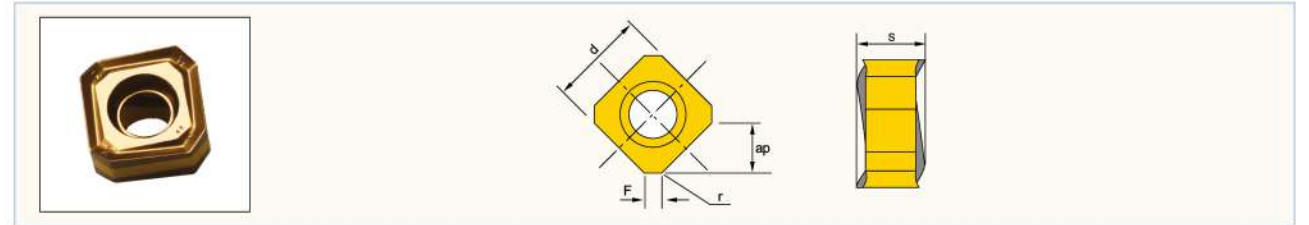
规格型号 Designation	l	d	d1	s	R	加工类型 Tooling	工件材料 Carbide grade		ap fz(mm/z)	
							不锈钢 Stainless steel SC2010	钢 Steel SC1215		
VCMT 160408F-MP	16	9.52	4.4	4.76	0.8	中型 Medium-duty	●	●	0.5-2.0 0.1-0.2	

• 刀片材质, 请参照: F017-F018 页
• Carbide grade please see page F017-F018.

INSERTS FOR MILLING 铣刀片

SN 型刀片

SN..

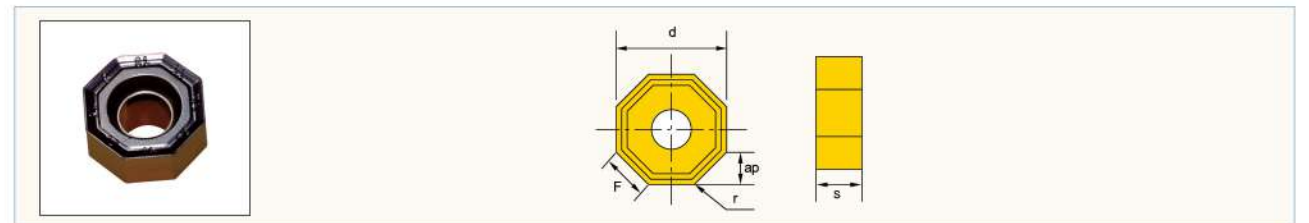


规格型号 Designation	d	ap	S	F	r	加工类型 Tooling	工件材料 Carbide grade					ap fz(mm/z)	
							钢 Steel SC1230	钢 Steel SC1135	通用 General SC9125	铸铁 Cast iron SC3115	铸铁 Cast iron SC3210		
SNMU 1306T-MR	13	6	6.2	3	0.5	重型 Heavy-duty	●	●	●	●	●	2.0-6.0 0.2-0.4	
SNMU 1306F-MR	13	6	6.2	3	0.5	重型 Heavy-duty	●	●	●	●	●	2.0-6.0 0.15-0.4	
SNHU 1306T-MR	13	6	6.2	3	0.5	重型 Heavy-duty	●	●	●	●	●	2.0-6.0 0.15-0.3	
SNHU 1306F-MR	13	6	6.2	3	0.5	重型 Heavy-duty	●	●	●	●	●	2.0-6.0 1.15-0.4	
SNHU 1306F-FW	13	6	6.2	8.1	-	轻型 Light-duty	●	●	●	●	●	0.8-3.0 0.1-0.2	

• 刀片材质, 请参照: F017-F018 页
• Carbide grade please see page F017-F018.

ON 型刀片

ON..



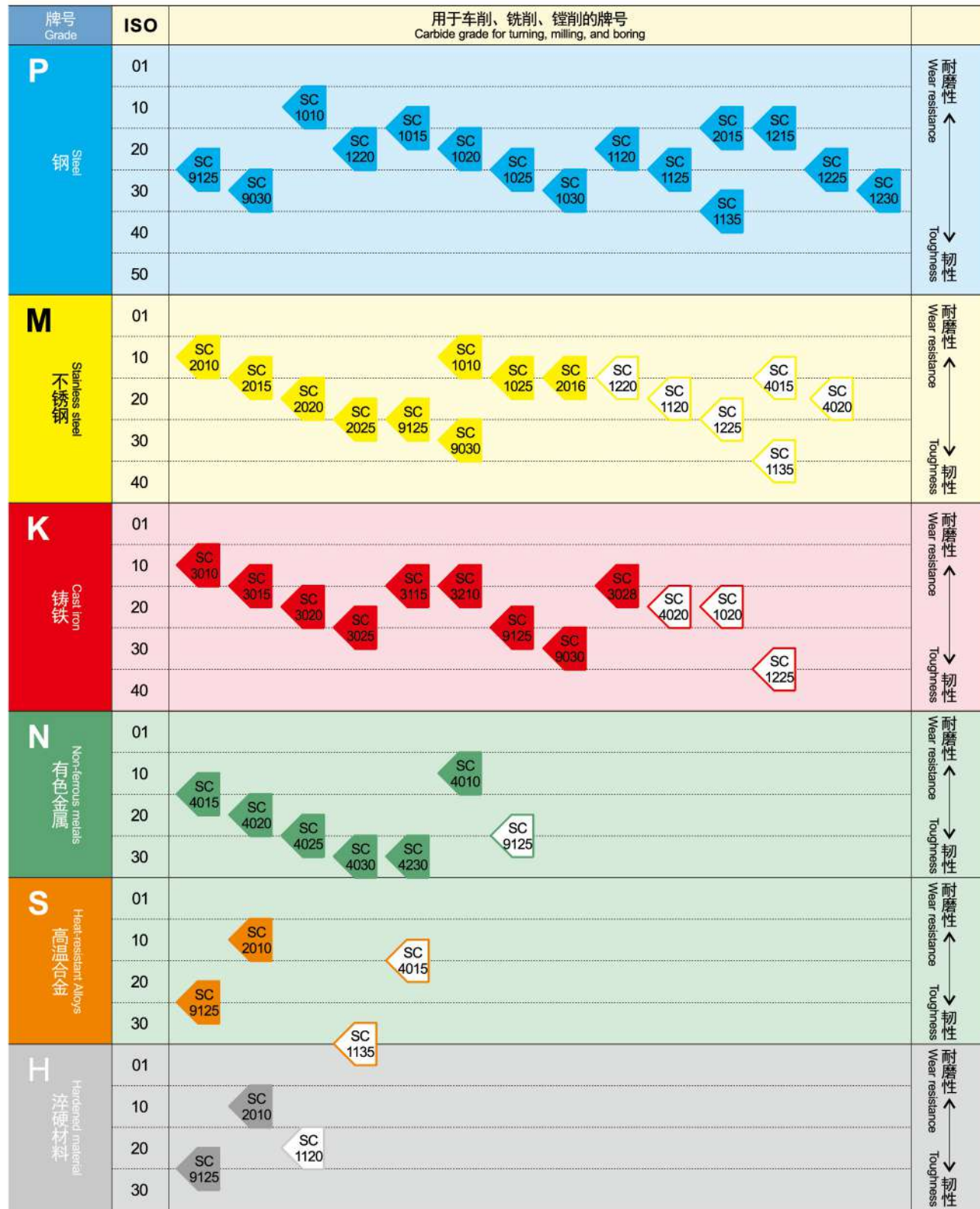
规格型号 Designation	d	ap	S	F	r	加工类型 Tooling	工件材料 Carbide grade					ap fz(mm/z)	
							铸铁 Cast iron SC3210	通用 General SC9125	钢 Steel SC1135	钢 Steel SC1230	铸铁 Cast iron SC3115		
ONMU 050605F-MR	13	3.5	5.5	5	0.5	重型 Heavy-duty	●	●	●	●	●	1.5-3 0.3-0.4	
ONMU 050605T-MR	13	3.5	5.5	5	0.5	重型 Heavy-duty	●	●	●	●	●	1.5-3 0.3-0.4	
ONHU 050605F-MR	13	3.5	5.5	5	0.5	重型 Heavy-duty	●	●	●	●	●	1.5-3 0.2-0.3	
ONHU 050605T-MR	13	3.5	5.5	5	0.5	重型 Heavy-duty	●	●	●	●	●	1.5-3 0.25-0.4	
ONHU 0506F-FW ⁽¹⁾	13	3.5	5.5	4.5	-	轻型 Light-duty	●	●	●	●	●	0.5-2 0.15-0.4	

• 刀片材质, 请参照: F017-F018 页
• (1) 修光刃刀片
• Carbide grade please see page F017-F018.
• (1)11 is wiper insert.

CARBIDE GRADE 刀片材质

应用推荐

Cutting Material Application Table



• 牌号标志的位置和形式表明所适用的应用
 • The location indicates carbide grade application range.

CARBIDE GRADE 刀片材质

牌号说明

Cutting Material Application Recommendation

规格型号 Designation	涂层 Coating	ISO 分类 ISO	可加工材质 Recommended applications	切削条件 Cutting condition	镗削 Boring	钻削 Drilling	铣削 Milling
SC9125	PVD	P15-P30 M20-M30 H05-H15 S15-S25 N15-N25 K20-K40	碳钢、奥氏体不锈钢、耐热合金、淬硬钢 Carbon steel, austenitic stainless steel, heat resistant alloys, hardened steel	强韧超细微粒基体, 韧性高, 耐磨性高, 中-高速切削, 抗边界磨损和抗积屑瘤能力强, 用于断续切削和工况恶劣条件的绝大多数材料的加工 fine grain substrate, high toughness, high resistance, wear-resistant. Medium to high cutting speed. Used for general material interrupt machining in bad machining condition.	■	■	■
SC9030	PVD	P30-P40 M35-M40 K15-K25 S15-S25	钢、不锈钢、铸铁、耐热合金 Steel, stainless steel, cast iron, heat resistant alloys	适用于绝大多数材料的通用加工, 平衡性能良好, 低-中速切削 used for general material, low to medium cutting speed.	■		■
SC1015	CVD	P01-P15 M05-M15	钢、不锈钢 Steel, stainless steel	适用于中-高速切削条件下, 稳定或轻微不稳定精加工钢与不锈钢 Medium to high cutting speed, used for finish machining steel and stainless steel. Both stable and unstable machine condition.	■		
SC1215	CVD	P01-P35 K05-K15	钢、铸铁 Steel, cast iron	具有高的热稳定性及抗剥落, 抗塑性变形的特点, 用于稳定或轻微不稳定条件下钢的高速加工 It is with the excellent thermal stability, resistance to wear and plastic deformation. Used for finishing operations for steel and stainless steel at medium and high cutting.	■		
SC1025	CVD	P01-P35 M05-M20	钢、不锈钢 Steel, stainless steel	具有强韧性及抗剥落, 抗塑性变形的特点, 用于多种切削条件下钢的通用加工 It is with the excellent thermal stability, resistance to wear and plastic deformation. Used for machining steel at multiple cutting conditions.	■		
SC1225	CVD	P15-P35 M10-M20 K10-K30	钢、铸铁、不锈钢 Steel, cast iron, stainless steel	适用于铣削钢, 可锻铸铁, 不锈钢, 中-高速切削 Used for milling steel and malleable cast iron, stainless steel at medium ad high cutting speeds.			▲
SC1125	CVD	P05-P25 M10-M30	钢、不锈钢 Steel, stainless steel	用于稳定性或轻微不稳定性条件下钢的通用加工 Used for general applications for steel at the unstable condition.	■		
SC1230	CVD	P20-P35	钢 Steel	推荐用于在高速的切削条件下铣削钢, 刀具寿命长 Used for milling steel at high speed, it is for longer tool life.			■
SC1135	PVD	P20-P50 K15-K40 M20-M40 S15-S40	钢、不锈钢、耐热合金 Steel, stainless steel, heat resistant alloys	具有高韧性, 适用于断续切削和重型条件下的铣削加工 It is with the excellent thermal stability. Used for interrupted cuts and very heavy duty milling operations.			■
SC1020	PVD	P10-P35 K10-K40	合金钢、铸钢、铸铁 Alloy steel, cast steel, heat resistant	具有耐磨性强, 用于合金钢和铸钢的重型铣削, 可用于铸铁铣削加工 It is with the resistance to wear. Used for very heavy duty milling operations for alloy steel and cast steel, and also for milling operations for cast iron.			■
SC1010	Cermets	P05-P25 M05-M15	钢、不锈钢 Steel, stainless steel	金属陶瓷材质, 具有耐磨性高和抗积屑瘤强的特点, 适用于工件的精-半精加工, 工件表面质量高 A cermet coated grade. Provides the excellent resistance to wear and plastic deformation even at medium and high cutting speeds. Used for turning semi-finishing and finishing applications at medium and high cutting speeds.	■		
SC1120	Cermets	P10-P30 M10-M20 H10-H25	钢、不锈钢 Steel, stainless steel	金属陶瓷材质, 具有耐磨性高和抗塑性变形强的特点, 适用于中-高速切削条件下, 工件的精-半精加工 A cermet coated grade. Provides the excellent resistance to wear and plastic deformation even at medium and high cutting speeds and medium feeds. Used for turning semi-finishing and finishing applications.	■		
SC1030	Cermets	P20-P40 M20-M35	钢、不锈钢 Steel, stainless steel	金属陶瓷材质, 用于工件的精-半精加工, 工件表面质量高 A cermet coated grade. Used for turning semi-finishing and finishing applications with perfect surface quality.	■		
SC1220	PVD	P10-P30 M10-M30	钢、不锈钢 Steel, stainless steel	涂层金属陶瓷材质, 具有高耐磨性和抗塑性变形强特点, 适用于高切削速和中速进给条件下车削加工, 推荐用于工件的半精和精加工 A cermet coated grade. Provides the excellent resistance to wear and plastic deformation even at medium and high cutting speeds and medium feeds. Used for turning semi-finishing and finishing applications.	■		
SC2015	Cermets	P10-P30 M10-M30	钢、不锈钢 Stainless steel	金属陶瓷材质, 耐磨性, 抗崩刃性优良, 用于工件的精-半精加工, 工件表面质量高 A cermet coated grade. It is with resistance to wear and well anti-tipping. Suitable for semifinishing and finishing when excellent finish is required.	■		
SC2016	PVD	M10-M20	不锈钢 Stainless steel	超细微粒基体加工 TIAN-PVD 涂层, 适用于不锈钢的精密加工 A tough submicron substrate TiAlN-PVD coated grade. Suitable for finish machining the stainless steel.	■		
SC2025	CVD	M15-M25	不锈钢 Stainless steel	适用于稳定或轻微不稳定条件下奥氏体不锈钢的通用加工 Suitable for machining the austenitic stainless steel and stainless st the unstable condition.	■		
SC2010	PVD	P10-P25 M05-M15 K10-K30 H05-H15 S05-S20	耐热合金、不锈钢、淬硬钢、合金钢 Heat resistant alloys, stainless steel, hardened steel, and alloy steel	低-中速切削条件下车削耐热合金, 不锈钢, 淬硬钢, 合金钢, 适用于绝大多数材质通用加工 Suitable for machining heat resistant alloys, stainless steel, hardened steel, and alloy steel at to medium cutting speeds			■
SC2020	CVD	P10-P35 M10-M35 S15-S40	钢、不锈钢、耐热合金 Steel, stainless steel, heat resistant alloys	低-中速切削条件下, 适用于工件的精-半精加工 Suitable for semi-finishing and finising at low to medium cutting speeds	■		

刀片系列
INSERIS

刀片系列
INSERIS

CARBIDE GRADE 刀片材质

牌号说明

Cutting Material Application Recommendation

规格型号 Designation	涂层 Coating	ISO 分类 ISO	可加工材质 Recommended applications	切削条件 Cutting condition	镗削 钻削 铣削 Boring Drilling Milling
SC9125	CVD	P05-P15 K10-K20	铸铁、钢 Cast iron, steel	中 - 高速度条件下, 适用于灰铸铁和球铁精 - 半精加工 Semi-finishing and finishing for grey cast iron, spheroidal graphite cast iron medium to high cutting speed.	■
SC3028	PVD	P10-P20 M10-M20 K10-K20	铸铁、钢、不锈钢 Cast iron, steel, stainless steel	低 - 中速条件下, 适用灰铸铁和球铁半精, 精加工, 亦可用于钢和不锈钢的精 - 半精加工 Suitable for semi-finishing and finishing for grey cast iron and at low to medium cutting speeds, and also for semi-finishing and finishing for steel and stainless steel.	■
SC3210	CVD	K10-K25 P15-P30	灰铸铁、球墨铸铁 Grey cast iron, spheroidal graphite cast iron	推荐高速度条件下, 铣削灰铸铁, 铣削球铁也表现优异 Suitable for milling grey cast iron, ductile cast iron at high cutting speeds.	■
SC3010	PVD	K05-K25 P15-P30	灰铸铁、球墨铸铁 Grey cast iron, spheroidal graphite cast iron	中 - 高速度条件下, 灰铸铁和球铁的首选铣削牌号 Suitable for milling grey cast iron, ductile cast iron at medium and high cutting speeds.	■ ■
SC3010	CVD	K05-K20 P05-P15 H15-H25	灰铸铁、球墨铸铁 Grey cast iron, spheroidal graphite cast iron	具有高的热稳定性及剥离落, 挠塑性变形, 更高耐磨性, 用于稳定或轻微不稳定下加工球墨铸铁, 加工灰铸铁表现也相当优异 It is with the excellent resistance to wear and plastic deformation. Suitable for machining grey cast iron, ductile cast iron at unstable condition.	■
SC3015	CVD	K05-K20	灰铸铁、球墨铸铁 Grey cast iron, spheroidal graphite cast iron	具有高的热稳定性, 高强度韧性, 用于稳定或轻微不稳定或轻微不稳定下加工灰铸铁, 加工球墨铸铁表现也相当优异 It is with the excellent thermal stability and plastic deformation. Suitable for machining grey cast iron, ductile cast iron at unstable condition.	■ ■
SC3025	UN	K10-K20 N15-N25	铸铁、铝合金 Grey cast iron, aluminum alloys	低 - 中速切削条件下铸铁, 铝合金的精 - 半精加工 Suitable for semi-finishing and finishing applications for grey cast iron and aluminum alloy at low to medium cutting speeds.	■
SC4010	UN	M10-M20 N10-N25 S10-S30	铝合金、耐热合金 Aluminum alloys, heat resistant alloys	非涂层, 低 - 中速条件下耐热合金和铝合金的铣加工, 切削刃十分锋利 An uncoated carbide grade. Used for aluminum alloy and heat resistant alloy at low to medium cutting speeds.	■ ■
SC4015	UN	M10-M30 N10-N25 S10-S30	铝合金、耐热合金 Aluminum alloys, heat resistant alloys	非涂层, 微细晶粒硬质合金材质, 低 - 中速条件下切削铝合金, 耐热合金 An uncoated submicron substrate carbide grade. Used for aluminum alloy and heat resistant alloy at low to medium cutting speeds.	■ ■
SC4020	UN	M10-M30 H05-H15 S05-S20 N05-N25 K10-K20	铝合金、铸铁、耐热合金 Aluminum alloys, cast iron, heat resistant alloys	非涂层硬质合金材质, 适用于低 - 中速切削条件下铝合金, 耐热合金, 铸铁的精 - 半精加工 An uncoated carbide grade. Used for the semi-finishing and finishing applications for aluminum alloy, cast iron and heat resistant alloy at low to medium cutting speeds.	■ ■
SC4030	UN	P30-P50 N10-N30 M30-M40 S20-S25	铝合金 Aluminum alloys	非涂层硬质合金材质, 用于伴有中 - 长切屑生成的切削条件下, 铝合金的中速切削, 切削刃口十分锋利 An uncoated carbide grade. Suitable for Aluminum alloy at medium cutting speed. Used for turning semi-finishing and finishing applications.	■ ■
SC4025	UN	K05-K15 N15-N35	铝合金、铸铁 Aluminum alloys, cast iron	非涂层硬质合金材质, 适用于低 - 中速切削条件下铝合金, 铸铁的精 - 半精加工 An uncoated carbide grade. Used for the semi-finishing and finishing applications for aluminum alloy, cast iron at low to medium cutting speeds.	■
SC4230	UN	N05-N15	铝合金 Aluminum alloys	非涂层硬质合金材质, 适用于中 - 高速切削条件下铝合金半精加工 - 精加工 Uncoated carbide grade. Used for the semi-finishing and finishing applications for aluminum alloy at medium and high cutting speeds.	■

■ 首选 Recommended ▲ 次选 Optional



SPECIAL TOOLS
非标刀具

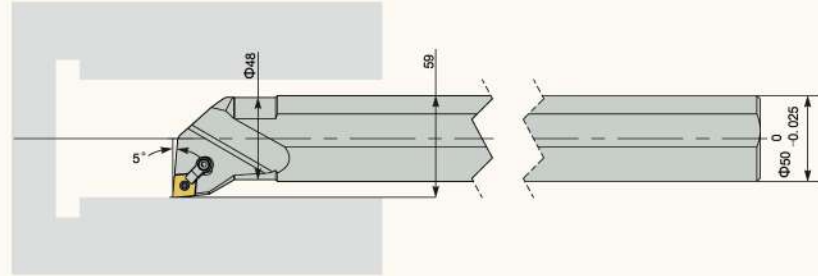
刀片系列
INSERTS

SPECIAL TOOLS 非标刀具

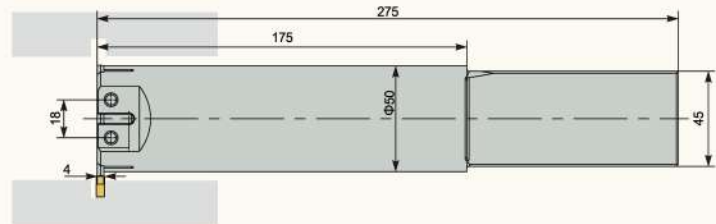
非标刀具范例

Samples for Special Tools

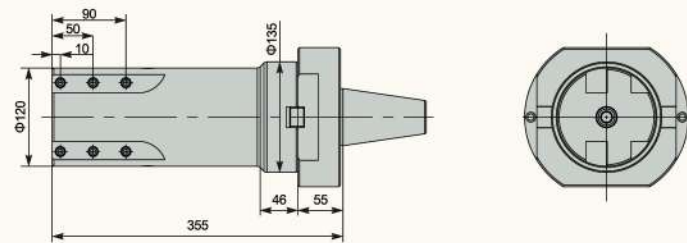
内孔车削
Boring bar



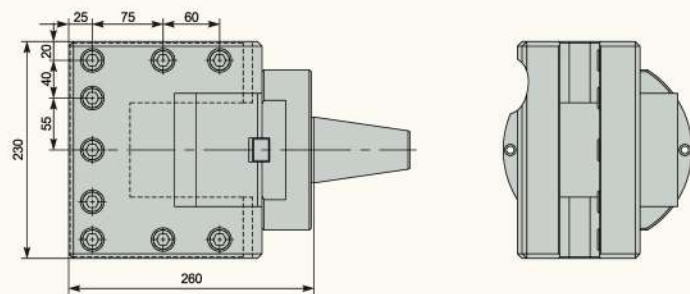
切槽刀
Grooving tool



立车刀柄
Vertical lathe arbor



复合立车刀柄
Tool holder for compound vertical lathe

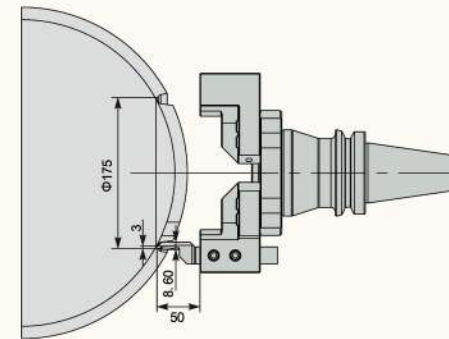


SPECIAL TOOLS 非标刀具

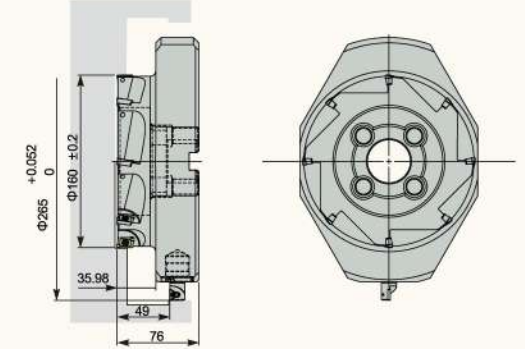
非标刀具范例

Samples for Special Tools

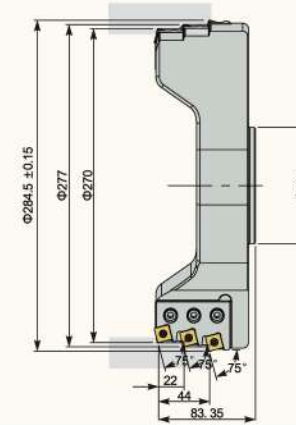
端面轮廓槽
End face profile groove



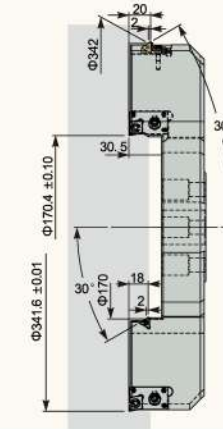
铣面, 镗孔
Surface milling, boring



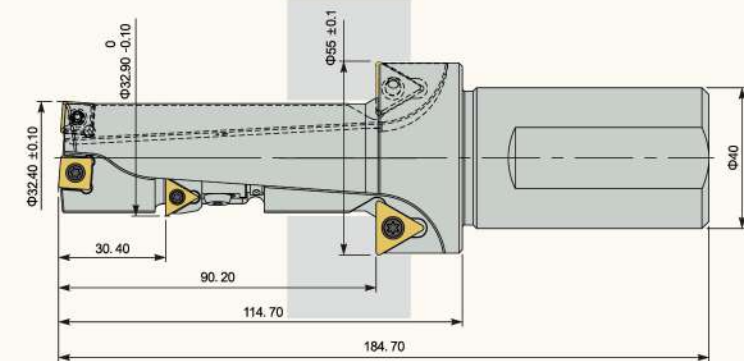
多刃复合镗削
Combination boring tool



镗孔、倒角
Boring and chamfering



钻孔、镗孔、镗面
Drilling, boring and countersinking

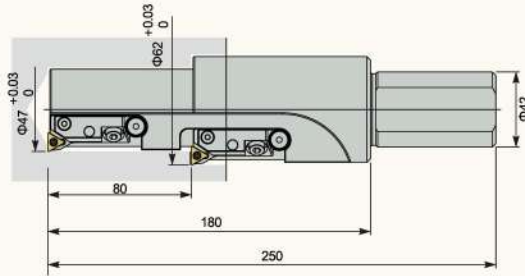


SPECIAL TOOLS 非标刀具

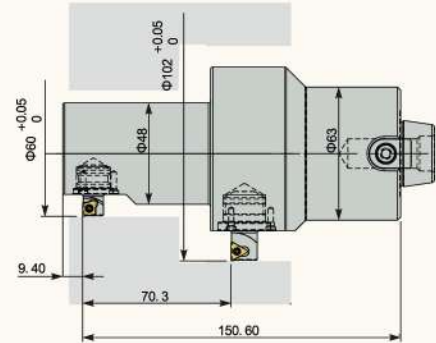
非标刀具范例

Samples for Special Tools

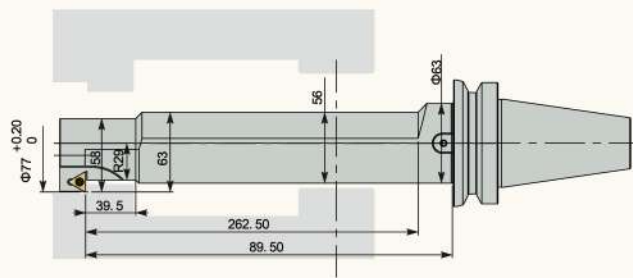
精镗孔
Finish boring



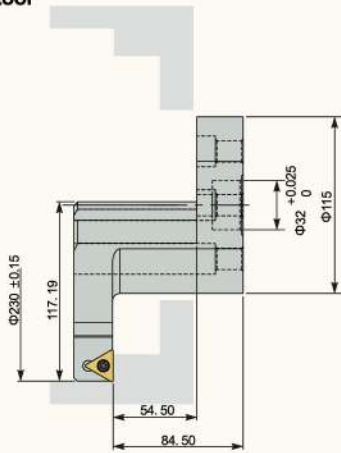
精镗同心度要求较高的台阶孔
Combined Machining finish stepped boring tool



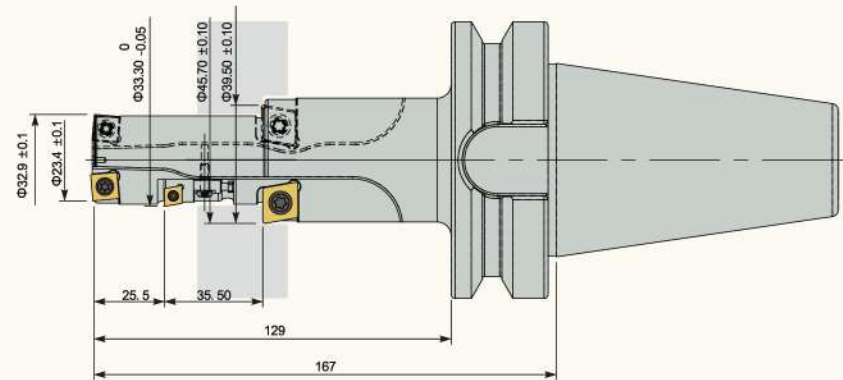
深孔偏心反刮刀
Telescopic back boring tool for deep hole



偏心反刮刀
Back boring tool



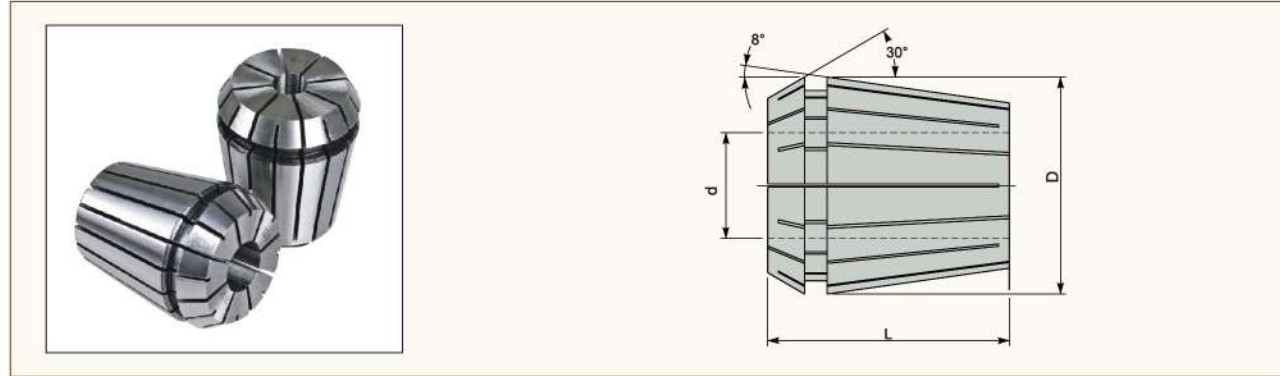
扩孔、粗镗、镗面
Boring and countersinking



ACCESSORIES
附件

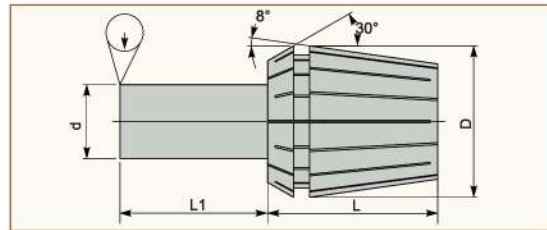
ACCESSORIES 附件

标准 ER 筒夹 Standard ER Collet



ER16		ER20		ER25		ER32		ER40	
规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range
ER16-D1	1-0.5	ER20-D2	2-1	ER25-D2	2-1	ER32-D3	3-2	ER40-4	4-3
ER16-D2	2-1	ER20-D3	3-2	ER25-D3	3-2	ER32-D4	4-3	ER40-5	5-4
ER16-D3	3-2	ER20-D4	4-3	ER25-D4	4-3	ER32-D5	5-4	ER40-6	6-5
ER16-D4	4-3	ER20-D5	5-4	ER25-D5	5-4	ER32-D6	6-5	ER40-7	7-6
ER16-D5	5-4	ER20-D6	6-5	ER25-D6	6-5	ER32-D7	7-6	ER40-8	8-7
ER16-D6	6-5	ER20-D7	7-6	ER25-D7	7-6	ER32-D8	8-7	ER40-9	9-8
ER16-D7	7-6	ER20-D8	8-7	ER25-D8	8-7	ER32-D9	9-8	ER40-10	10-9
ER16-D8	8-7	ER20-D9	9-8	ER25-D9	9-8	ER32-D10	10-9	ER40-11	11-10
ER16-D9	9-8	ER20-D10	10-9	ER25-D10	10-9	ER32-D11	11-10	ER40-12	12-11
ER16-D10	10-9	ER20-D11	11-10	ER25-D11	11-10	ER32-D12	12-11	ER40-13	13-12
-	-	ER20-D12	12-11	ER25-D12	12-11	ER32-D13	13-12	ER40-14	14-13
-	-	ER20-D13	13-12	ER25-D13	13-12	ER32-D14	14-13	ER40-15	15-14
-	-	-	-	ER25-D14	14-13	ER32-D15	15-14	ER40-16	16-15
-	-	-	-	ER25-D15	15-14	ER32-D16	16-15	ER40-17	17-16
-	-	-	-	ER25-D16	16-15	ER32-D17	17-16	ER40-18	18-17
-	-	-	-	-	-	ER32-D18	18-17	ER40-19	19-18
-	-	-	-	-	-	ER32-D19	19-18	ER40-20	20-19
-	-	-	-	-	-	ER32-D20	20-19	ER40-21	21-20
-	-	-	-	-	-	-	-	ER40-22	22-21
-	-	-	-	-	-	-	-	ER40-23	23-22
-	-	-	-	-	-	-	-	ER40-24	24-23
-	-	-	-	-	-	-	-	ER40-25	25-24
-	-	-	-	-	-	-	-	ER40-26	26-25

- 标准 ER 筒夹分普通 ER 筒夹和高精度 ER 筒夹；
- 高精度 ER 筒夹在规格型号后加 "AA"；
- 订购示例：1 件 ER16-D10；5 件 ER32-D8 AA。
- There are two styles of standard ER collet, one is general and the other is with high precision.
- There is "AA" at the end of the model# shows that it is high precision ER collet.
- Ordering sample: 1 PC ER16-D10; 5 PCS ER32-D8 AA.

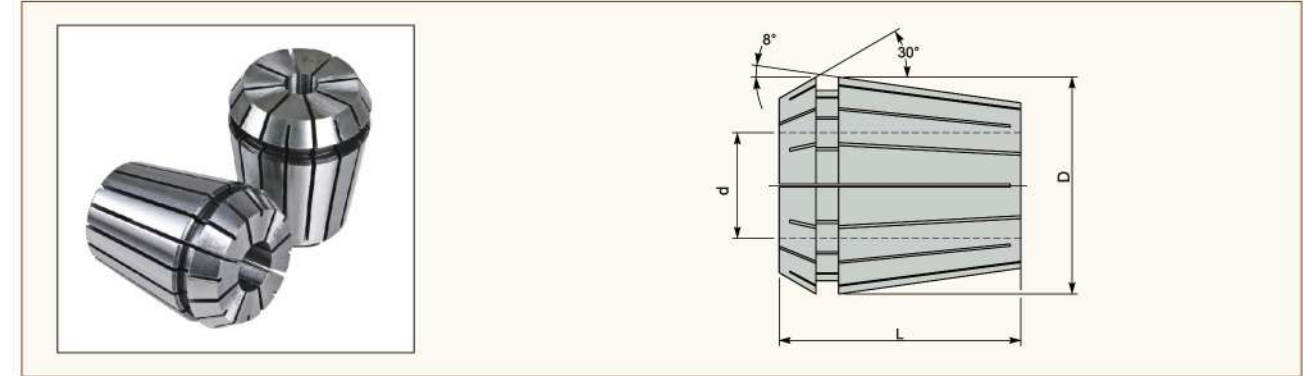


规格型号 Designation	D	d	L	L1	跳动 Run-out	
					普通 ER 筒夹 General ER collet	高精度 ER 筒夹 High accuracy ER collet
ER16	17	1.6-3.0	27	10	0.01	0.005
ER20	21	3.0-6.0	31	16	0.01	0.005
ER25	26	6.0-10.0	35	25	0.01	0.005
ER32	33	10.0-18.0	40	40	0.01	0.005
ER40	40	18.0-26.0	46	50	0.01	0.005

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

ACCESSORIES 附件

内冷式 ER 筒夹 ER Collet with Coolant



ER16		ER20		ER25		ER32		ER40	
规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range
ER16-D1.C	1-0.5	ER20-D2.C	2-1	ER25-D2.C	2-1	ER32-D3.C	3-2	ER40-D4.C	4-3
ER16-D2.C	2-1	ER20-D3.C	3-2	ER25-D3.C	3-2	ER32-D4.C	4-3	ER40-D5.C	5-4
ER16-D3.C	3-2	ER20-D4.C	4-3	ER25-D4.C	4-3	ER32-D5.C	5-4	ER40-D6.C	6-5
ER16-D4.C	4-3	ER20-D5.C	5-4	ER25-D5.C	5-4	ER32-D6.C	6-5	ER40-D7.C	7-6
ER16-D5.C	5-4	ER20-D6.C	6-5	ER25-D6.C	6-5	ER32-D7.C	7-6	ER40-D8.C	8-7
ER16-D6.C	6-5	ER20-D7.C	7-6	ER25-D7.C	7-6	ER32-D8.C	8-7	ER40-D9.C	9-8
ER16-D7.C	7-6	ER20-D8.C	8-7	ER25-D8.C	8-7	ER32-D9.C	9-8	ER40-D10.C	10-9
ER16-D8.C	8-7	ER20-D9.C	9-8	ER25-D9.C	9-8	ER32-D10.C	10-9	ER40-D11.C	11-10
ER16-D9.C	9-8	ER20-D10.C	10-9	ER25-D10.C	10-9	ER32-D11.C	11-10	ER40-D12.C	12-11
ER16-D10.C	10-9	ER20-D11.C	11-10	ER25-D11.C	11-10	ER32-D12.C	12-11	ER40-D13.C	13-12
-	-	ER20-D12.C	12-11	ER25-D12.C	12-11	ER32-D13.C	13-12	ER40-D14.C	14-13
-	-	ER20-D13.C	13-12	ER25-D13.C	13-12	ER32-D14.C	14-13	ER40-D15.C	15-14
-	-	-	-	ER25-D14.C	14-13	ER32-D15.C	15-14	ER40-D16.C	16-15
-	-	-	-	ER25-D15.C	15-14	ER32-D16.C	16-15	ER40-D17.C	17-16
-	-	-	-	ER25-D16.C	16-15	ER32-D17.C	17-16	ER40-D18.C	18-17
-	-	-	-	-	-	ER32-D18.C	18-17	ER40-D19.C	19-18
-	-	-	-	-	-	ER32-D19.C	19-18	ER40-D20.C	20-19
-	-	-	-	-	-	ER32-D20.C	20-19	ER40-D21.C	21-20
-	-	-	-	-	-	-	-	ER40-D22.C	22-21
-	-	-	-	-	-	-	-	ER40-D23.C	23-22
-	-	-	-	-	-	-	-	ER40-D24.C	24-23
-	-	-	-	-	-	-	-	ER40-D25.C	25-24
-	-	-	-	-	-	-	-	ER40-D26.C	26-25

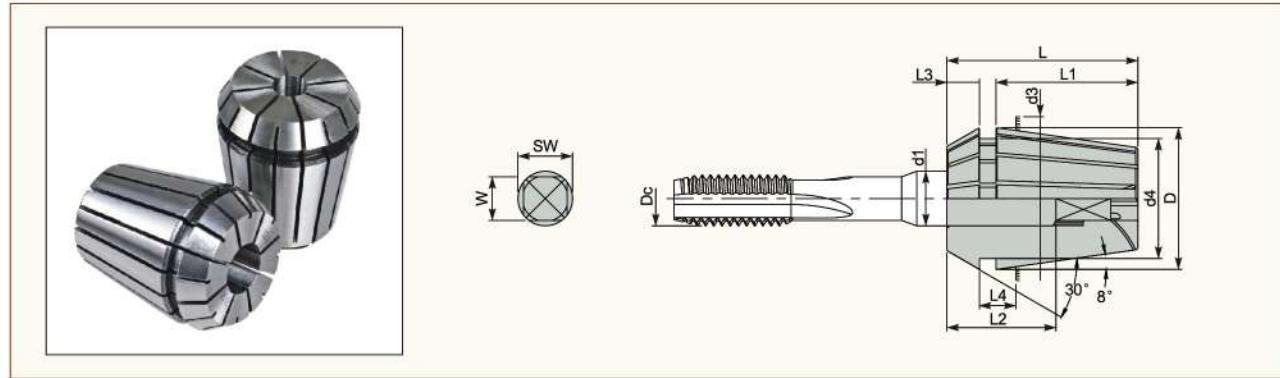
- 标准 ER 筒夹分普通 ER 筒夹和高精度 ER 筒夹；
- 高精度 ER 筒夹在规格型号后加 "AA"；
- 订购示例：1 件 ER16-D10.C；5 件 ER32-D8.C AA。
- 利用沟槽差异, 达到周围止水, 仅中心出水的功能；
- 适用于夹持有中心出水孔的刀具；
- 可承受水压 7Mpa。
- There are two styles of standard ER collet, one is general and the other is with high precision.
- There is "AA" at the end of the model# shows that it is high precision ER collet.
- Ordering sample: 1 PC ER16-D10.C; 5 PCS ER32-D8.C AA.
- Differences in the use of grooves to reach around the sealing.
- Central water feature only applies to folders to hold the water hold tool.
- Can withstand water pressure 7Mpa.

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

ACCESSORIES 附件

攻丝 ER 筒夹

ER Collet for Tapping Chuck



规格型号 Designation	D	d3	d4	L	L1	L3	L4	Capacity	Kg
ER16-G	16.74	16	13.8	27.5	20.8	4	6.26	M3-M10	0.03
ER20-G	20.74	20	17.4	31.5	23.9	4.8	6.36	M3-M17	0.04
ER25-G	25.74	25	22	34	25.9	5	6.66	M3-M22	0.06
ER32-G	32.74	32	29.2	40	31.8	5.5	7.16	M3-M27	0.10
ER40-G	40.74	40	36.2	46	35.5	7	7.66	M3-M27	0.25

ER16-G

规格型号 Designation	d1	SW	W	通用标准 Dc				L2	在库 Stock
				ISO	JIS	DIN371	DIN376		
ER16-G2.24	2.24	2	1.8	M3	-	-	-	15	●
ER16-G2.5	2.5	2.2	2.1	-	-	-	M3.5	15	●
ER16-G2.8	2.8	2.6	2.1	-	-	-	M4	15	●
ER16-G3	3	2.8	2.5	-	M2	-	-	18	●
ER16-G3.15	3.15	2.9	2.5	M3,M4	-	-	-	18	●
ER16-G3.5	3.5	3.3	2.7	-	-	M3	M5	18	●
ER16-G3.55	3.55	3.3	2.8	M3.5,M4.5	-	-	-	18	●
ER16-G4	4	3.8	3	-	-	M3.5	-	18	●
ER16-G4.5	4.5	4.3	3.4	-	M3	-	-	18	●
ER16-G5	5	4.7	4	M5	M4,M4.5	-	-	18	●
ER16-G5.5	5.5	4.37	4.3	-	-	-	M7	18	●
ER16-G6	6	5.09	4.5	-	M4,M5.5	-	-	18	●
ER16-G6.2	6.2	5.09	4.9	-	M6	-	-	18	●
ER16-G6.2	6.2	5.21	5	-	M5,M6	M8	-	18	●
ER16-G6.3	6.3	5.21	5	M6,M8	-	-	-	18	●
ER16-G7	7	5.84	5.5	-	M7,M8	-	-	18	●
ER16-G8	8	6.88	6	-	M9,M10	M7	M10	18	●
ER16-G8	8	6.88	6.2	-	M11	-	-	22	●
ER16-G8	8	6.88	6.3	M8,M10	-	-	-	22	●
ER16-8.5	8.5	7.14	6.5	-	M12	-	-	22	●
ER16-G9	9	7.95	7	-	-	-	M12	22	●
ER16-G9	9	7.95	7.1	M12	-	-	-	22	●
ER16-G10	10	9.16	8	M10	-	M10	-	25	●

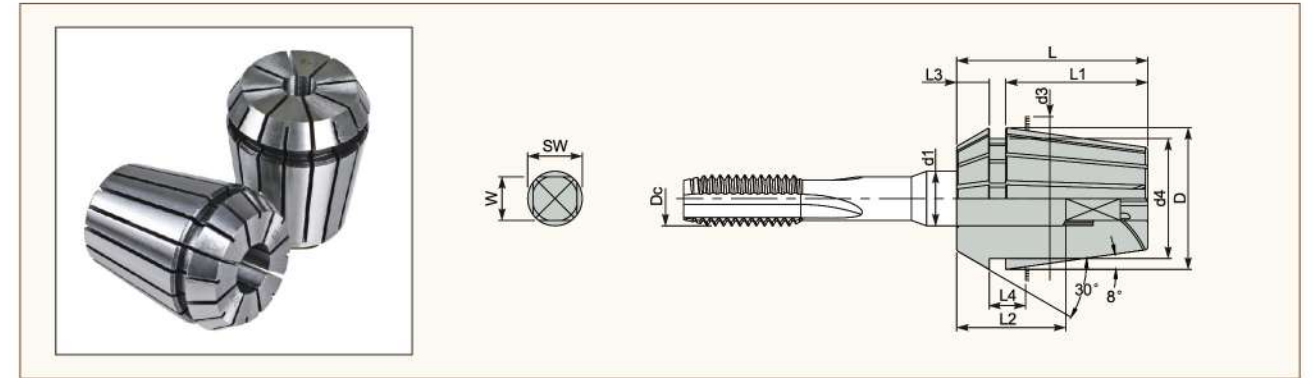
- 请根据 D, L, W 尺寸选择相对应的攻丝 ER 筒夹
- 订货示例: 1 件 ER16-G2.24
- Selecting the proper ER collet for tapping chuck according to the size of D, d1, W
- Ordering sample: 1 PC ER16-G2.24

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

ACCESSORIES 附件

攻丝 ER 筒夹

ER Collet for Tapping Chuck



ER20-G

规格型号 Designation	d1	SW	W	通用标准 Dc				L2	在库 Stock
				ISO	JIS	DIN371	DIN376		
ER20-G2.24	2.24	2	1.8	M3	-	-	-	15	●
ER20-G2.5	2.5	2.2	2.1	-	-	-	M3.5	15	●
ER20-G2.8	2.8	2.6	2.1	-	-	-	M4	15	●
ER20-G3	3	2.8	2.5	-	M2	-	-	18	●
ER20-G3.15	3.15	2.9	2.5	M3,M4	-	-	-	18	●
ER20-G3.5	3.5	3.3	2.7	-	-	M3	M5	18	●
ER20-G3.55	3.55	3.3	2.8	M3.5,M4.5	-	-	-	18	●
ER20-G4	4	3.8	3	-	-	M3.5	-	18	●
ER20-G4	4	3.8	3.1	-	M3	-	-	18	●
ER20-G4.5	4.5	4.3	3.4	-	-	M4	M6	18	●
ER20-G4.5	4.5	4.3	3.55	M6	-	-	-	18	●
ER20-G5	5	4.7	4	M5	M4,M4.5	-	-	18	●
ER20-G5.5	5.5	4.37	4.3	-	-	-	M7	18	●
ER20-G5.5	5.5	4.37	4.5	-	M4,M5.5	-	-	18	●
ER20-G6	6	5.09	4.5	-	M6	-	-	18	●
ER20-G6	6	5.09	4.9	-	-	M5,M6	M8	18	●
ER20-G6.2	6.2	5.21	5	-	M7,M8	-	-	18	●
ER20-G6.3	6.3	5.21	5	M6,M8	-	-	-	18	●
ER20-G7	7	5.84	5.5	-	M9,M10	M7	M10	18	●
ER20-G8	8	6.88	6	-	M11	-	-	22	●
ER20-G8	8	6.88	6.2	-	-	M8	M11	22	●
ER20-G8	8	6.88	6.3	M8,M10	-	-	-	22	●
ER20-8.5	8.5	7.14	6.5	-	M12	-	-	22	●
ER20-G9	9	7.95	7	-	-	-	M12	22	●
ER20-G9	9	7.95	7.1	M12	-	-	-	22	●
ER20-G10	10	9.16	8	M10	-	M10	-	25	●
ER20-G10.5	10.5	9.16	8	-	M14,M15	-	-	25	●
ER20-G11	11	10.53	9	-	-	-	M14	25	●
ER20-G11.2	11.2	10.53	9	M14	-	-	-	25	●
ER20-G12	12	10.53	9	-	-	-	M16	25	●
ER20-G12.5	12.5	11.91	10	M16	-	-	-	25	●
ER20-G13	13	11.91	10	-	M17	-	-	25	●

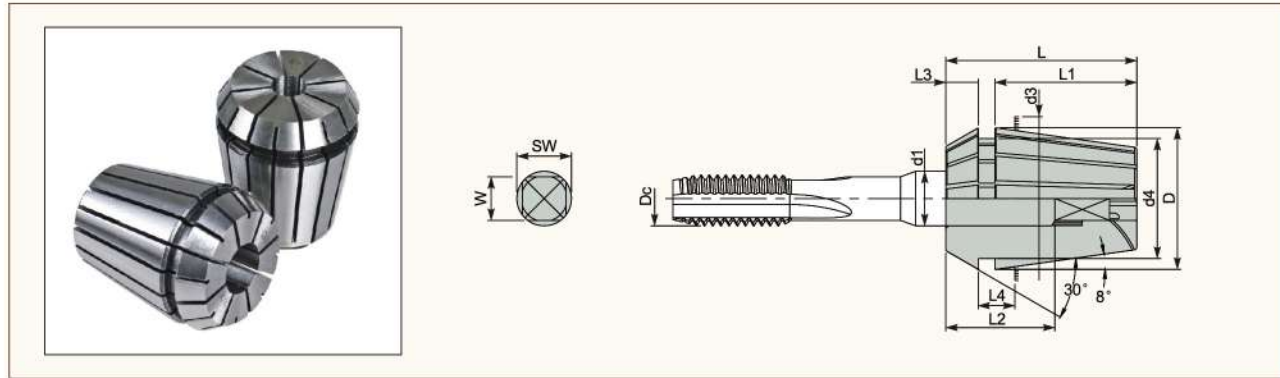
- 请根据 D, d1, W 尺寸选择相对应的攻丝 ER 筒夹
- 订货示例: 1 件 ER20-G2.24
- Selecting the proper ER collet for tapping chuck according to the size of D, d1, W
- Ordering sample: 1 PC ER20-G2.24

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

ACCESSORIES 附件

攻丝 ER 筒夹

ER Collet for Tapping Chuck



ER25-G

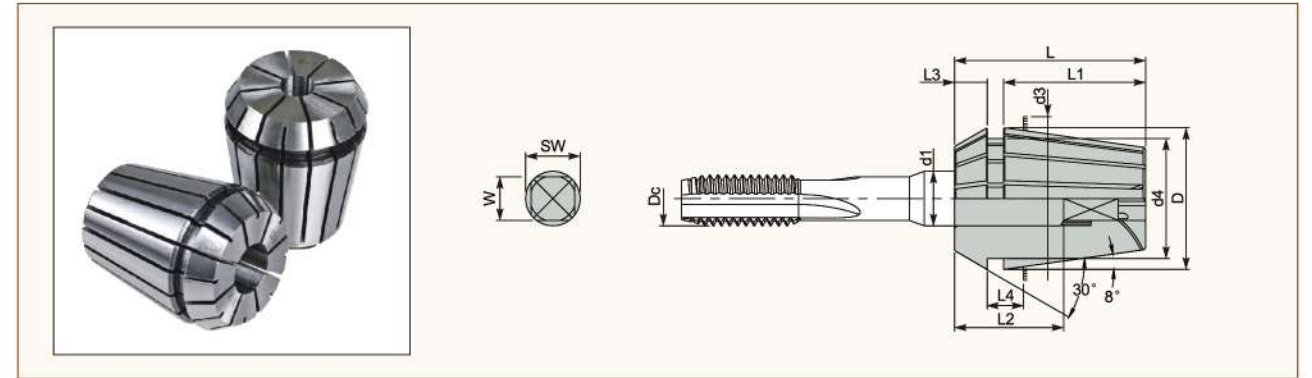
规格型号 Designation	d1	SW	W	通用标准 Dc				L2	在庫 Stock
				ISO	JIS	DIN371	DIN376		
ER25-G2.24	2.24	2	1.8	M3	-	-	-	15	●
ER25-G2.5	2.5	2.2	2.1	-	-	-	M3.5	15	●
ER25-G2.8	2.5	2.2	2	M3.5	-	-	-	15	●
ER25-G3	2.8	2.6	2.1	-	-	-	M4	15	●
ER25-G3.15	3	2.8	2.5	-	M2	-	-	18	●
ER25-G3.5	3.15	2.9	2.5	M3,M4	-	-	-	18	●
ER25-G3.5	3.5	3.3	2.7	-	-	M3	M5	18	●
ER25-G3.55	3.55	3.3	2.8	M3.5,M4.5	-	-	-	18	●
ER25-G4	4	3.8	3	-	-	M3.5	-	18	●
ER25-G4	4	3.8	3.1	-	M3	-	-	18	●
ER25-G4.5	4	3.8	3.15	M4,M5	-	-	-	18	●
ER25-G4.5	4.5	4.3	3.4	-	-	M4	M6	18	●
ER25-G5	4.5	4.3	3.55	M6	-	-	-	18	●
ER25-G5	5	4.7	4	M5	M4,M4.5	-	-	18	●
ER25-G5.5	5.5	4.37	4.3	-	-	-	M7	18	●
ER25-G5.5	5.5	4.37	4.5	-	M4,M5.5	-	-	18	●
ER25-G6	6	5.09	4.5	-	M6	-	-	18	●
ER25-G6.2	6	5.09	4.9	-	-	M5,M6	M8	18	●
ER25-G6.2	6.2	5.21	5	-	M7,M8	-	-	18	●
ER25-G6.3	6.3	5.21	5	M6,M8	-	-	-	18	●
ER25-G7	7	5.84	5.5	-	M9,M10	M7	M10	18	●
ER25-G8	8	6.88	6	-	M11	-	-	22	●
ER25-G8	8	6.88	6.2	-	-	M8	M11	22	●
ER25-G8.5	8	6.88	6.3	M8,M10	-	-	-	22	●
ER25-8.5	8.5	7.14	6.5	-	-	-	-	22	●
ER25-G9	9	7.95	7	-	-	-	M12	22	●
ER25-G10	9	7.95	7.1	M12	-	-	-	22	●
ER25-G10	10	9.16	8	M10	-	M10	-	25	●
ER25-G10.5	10.5	9.16	8	-	M14,M15	-	-	25	●
ER25-G11	11	10.53	9	-	-	-	M14	25	●
ER25-G11.2	11.2	10.53	9	M14	-	-	-	25	●
ER25-G12	12	10.53	9	-	-	-	M16	25	●
ER25-G12.5	12.5	11.91	10	M16	-	-	-	25	●
ER25-G13	13	11.91	10	-	M17	-	-	25	●
ER25-G14	14	12.97	11	-	M18	-	M18	28	●
ER25-G14	14	12.97	11.2	M18,M20	-	-	-	28	●
ER25-G15	15	14.06	12	-	M20	-	-	28	●
ER25-G16	16	14.06	12	-	-	M20	-	28	●
ER25-G16	16	14.06	12.5	M22	-	-	-	28	●

- 请根据 D,d1,W 尺寸选择相对应的攻丝 ER 筒夹
- 订货示例: 1 件 ER25-G2.24
- Selecting the proper ER collet for tapping chuck according to the size of D, d1, W
- Ordering sample: 1 PC ER25-G2.24

ACCESSORIES 附件

攻丝 ER 筒夹

ER Collet for Tapping Chuck



ER32-G

规格型号 Designation	d1	SW	W	通用标准 Dc				L2	在庫 Stock
				ISO	JIS	DIN371	DIN376		
ER32-G2.24	2.24	2	1.8	M3	-	-	-	15	●
ER32-G2.5	2.5	2.2	2.1	-	-	-	M3.5	15	●
ER32-G2.5	2.5	2.2	2	M3.5	-	-	-	15	●
ER32-G2.8	2.8	2.6	2.1	-	-	-	M4	15	●
ER32-G3	3	2.8	2.5	-	M2	-	-	18	●
ER32-G3.15	3.15	2.9	2.5	M3,M4	-	-	-	18	●
ER32-G3.5	3.5	3.3	2.7	-	-	M3	M5	18	●
ER32-G3.55	3.55	3.3	2.8	M3.5,M4.5	-	-	-	18	●
ER32-G4	4	3.8	3	-	-	M3.5	-	18	●
ER32-G4	4	3.8	3.1	-	M3	-	-	18	●
ER32-G4.5	4	3.8	3.15	M4,M5	-	-	-	18	●
ER32-G4.5	4.5	4.3	3.4	-	-	M4	M6	18	●
ER32-G5	4.5	4.3	3.55	M6	-	-	-	18	●
ER32-G5	5	4.7	4	M5	M4,M4.5	-	-	18	●
ER32-G5.5	5.5	4.37	4.3	-	-	-	M7	18	●
ER32-G5.5	5.5	4.37	4.5	-	M4,M5.5	-	-	18	●
ER32-G6	6	5.09	4.5	-	M6	-	-	18	●
ER32-G6	6	5.09	4.9	-	-	M5,M6	M8	18	●
ER32-G6.2	6.2	5.21	5	-	M7,M8	-	-	18	●
ER32-G6.3	6.3	5.21	5	M6,M8	-	-	-	18	●
ER32-G7	7	5.84	5.5	-	M9,M10	M7	M10	18	●
ER32-G8	8	6.88	6	-	M11	-	-	22	●
ER32-G8	8	6.88	6.2	-	-	M8	M11	22	●
ER32-G8.5	8	6.88	6.3	M8,M10	-	-	-	22	●
ER32-8.5	8.5	7.14	6.5	-	-	-	-	22	●
ER32-G9	9	7.95	7	-	-	-	M12	22	●
ER32-G10	9	7.95	7.1	M12	-	-	-	22	●
ER32-G10	10	9.16	8	M10	-	M10	-	25	●
ER32-G10.5	10.5	9.16	8	-	M14,M15	-	-	25	●
ER32-G11	11	10.53	9	-	-	-	M14	25	●
ER32-G11.2	11.2	10.53	9	M14	-	-	-	25	●
ER32-G12	12	10.53	9	-	-	-	M16	25	●
ER32-G12.5	12.5	11.91	10	M16	-	-	-	25	●
ER32-G13	13	11.91	10	-	M17	-	-	25	●
ER32-G14	14	12.97	11	-	M18	-	M18	28	●
ER32-G14	14	12.97	11.2	M18,M20	-	-	-	28	●
ER32-G15	15	14.06	12	-	M20	-	-	28	●
ER32-G16	16	14.06	12	-	-	-	M20	28	●
ER32-G16	16	14.06	12.5	M22	-	-	-	28	●
ER32-G17	17	15.44	13	-	M20	-	-	33	●
ER32-G18	18	17.52	14.5	-	-	-	M22,M24	33	●
ER32-G19	18	17.52	14	M24	-	-	-	33	●
ER32-G20	19	18.22	15	-	M24,M25	-	-	33	●
ER32-G20	19	18.22	15	-	M25,M26	-	-	33	●

- 请根据 D,d1,W 尺寸选择相对应的攻丝 ER 筒夹
- 订货示例: 1 件 ER32-G2.24
- Selecting the proper ER collet for tapping chuck according to the size of D, d1, W
- Ordering sample: 1 PC ER32-G2.24

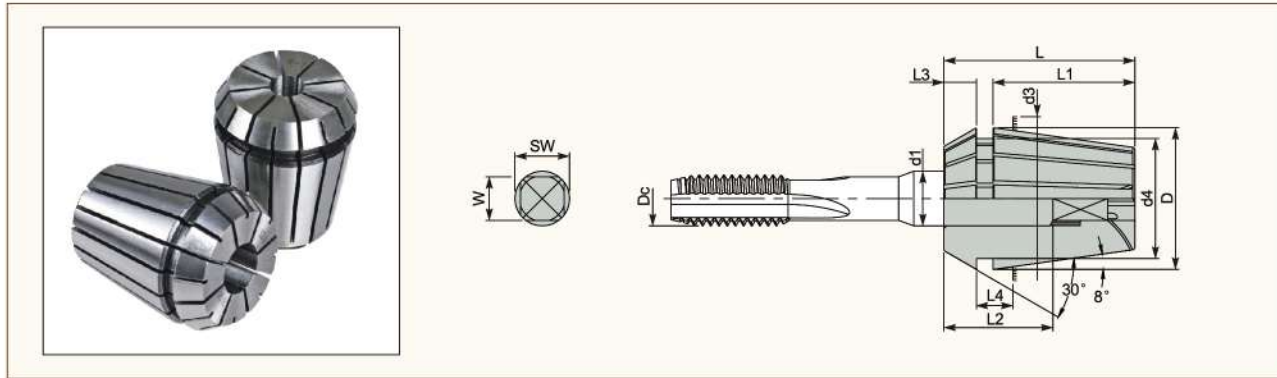
- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

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ACCESSORIES 附件

攻丝 ER 筒夹

ER Collet for Tapping Chuck



ER40-G

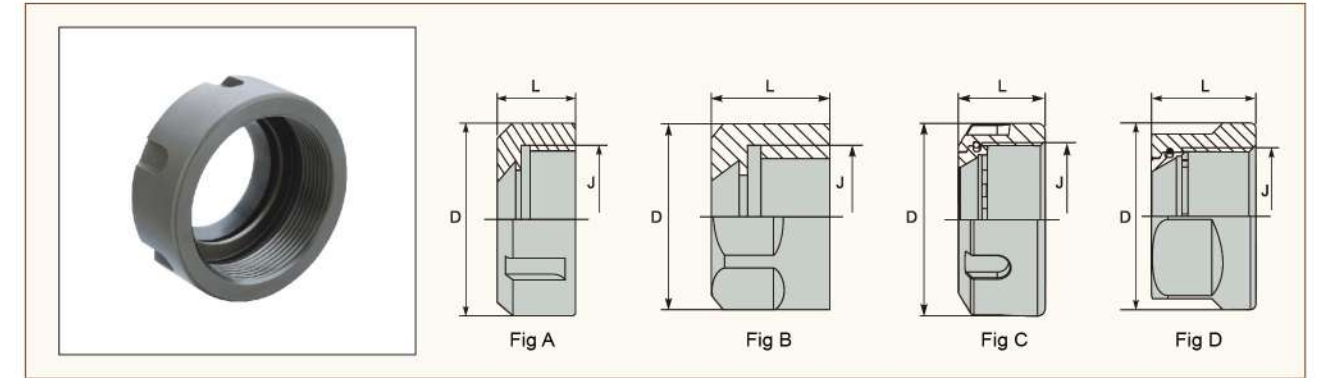
规格型号 Designation	d1	SW	W	通用标准 Dc				L2	在庫 Stock
				ISO	JIS	DIN371	DIN376		
ER40-G2.24	2.24	2	1.8	M3	-	-	-	15	●
ER40-G2.5	2.5	2.2	2.1	-	-	-	M3.5	15	●
ER40-G2.8	2.8	2.2	2	M3.5	-	-	-	15	●
ER40-G3	3	2.6	2.1	-	-	-	M4	15	●
ER40-G3.15	3.15	2.8	2.5	-	M2	-	-	18	●
ER40-G3.5	3.5	2.9	2.5	M3,M4	-	-	-	18	●
ER40-G3.55	3.55	3.3	2.7	-	-	M3	M5	18	●
ER40-G4	4	3.3	2.8	M3.5,M4.5	-	-	-	18	●
ER40-G4	4	3.8	3	-	-	M3.5	-	18	●
ER40-G4	4	3.8	3.1	-	M3	-	-	18	●
ER40-G4	4	3.8	3.15	M4,M5	-	-	-	18	●
ER40-G4.5	4.5	4.3	3.4	-	-	M4	M6	18	●
ER40-G4.5	4.5	4.3	3.55	M6	-	-	-	18	●
ER40-G5	5	4.7	4	M5	M4,M4.5	-	-	18	●
ER40-G5.5	5.5	4.37	4.3	-	-	-	M7	18	●
ER40-G5.5	5.5	4.37	4.5	-	M4,M5.5	-	-	18	●
ER40-G6	6	5.09	4.5	-	M6	-	-	18	●
ER40-G6	6	5.09	4.9	-	-	M5,M6	M8	18	●
ER40-G6.2	6.2	5.21	5	-	M7,M8	-	-	18	●
ER40-G6.3	6.3	5.21	5	M6,M8	-	-	-	18	●
ER40-G7	7	5.84	5.5	-	M9,M10	M7	M10	18	●
ER40-G8	8	6.88	6	-	M11	-	-	22	●
ER40-G8	8	6.88	6.2	-	-	M8	M11	22	●
ER40-G8	8	6.88	6.3	M8,M10	-	-	-	22	●
ER40-8.5	8.5	7.14	6.5	-	M12	-	-	22	●
ER40-G9	9	7.95	7	-	-	-	M12	22	●
ER40-G9	9	7.95	7.1	M12	-	-	-	22	●
ER40-G10	10	9.16	8	M10	-	M10	-	25	●
ER40-G10.5	10.5	9.16	8	-	M14,M15	-	-	25	●
ER40-G11	11	10.53	9	-	-	-	M14	25	●
ER40-G11.2	11.2	10.53	9	M14	-	-	-	25	●
ER40-G12	12	10.53	9	-	-	-	M16	25	●
ER40-G12.5	12.5	11.91	10	M16	M16	-	-	25	●
ER40-G13	13	11.91	10	-	M17	-	-	25	●
ER40-G14	14	12.97	11	-	M18	-	-	28	●
ER40-G14	14	12.97	11.2	M18,M20	-	-	-	28	●
ER40-G15	15	14.06	12	-	M20	-	-	28	●
ER40-G16	16	14.06	12	-	-	-	M20	28	●
ER40-G16	16	14.06	12.5	M22	-	-	-	28	●

- 请根据 D,d1,W 尺寸选择相对应的攻丝 ER 筒夹
- 订货示例: 1 件 ER40-G2.24
- Selecting the proper ER collet for tapping chuck according to the size of D, d1, W
- Ordering sample: 1 PC ER40-G2.24

ACCESSORIES 附件

ER 螺帽

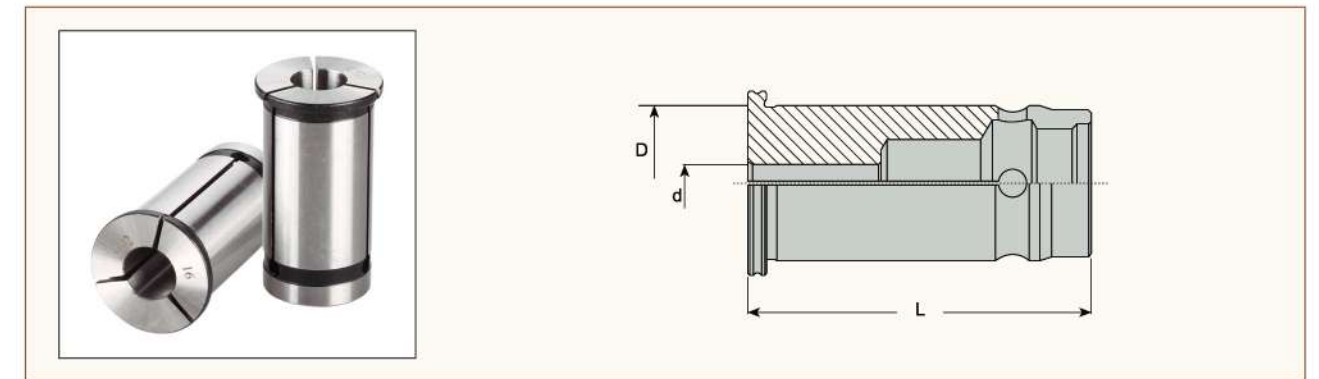
ER NUT



形式 Style	规格型号 Designation	D	L	J	Fig	
普通型 General style (Standard style & Hexagon style)	六角型 Hex style	NUT ER16	28	17	M22x1.5	B
		NUT ER20	34	19	M25x1.5	
	标准型 Standard style	NUT ER25	42	20	M32x1.5	A
		NUT ER32	50	22	M40x1.5	
高精度型 High precision (Standard style & Hexagon style)	六角型 Hex style	NUT ER16.TOP	28	17	M22x1.5	D
		NUT ER20.TOP	34	19	M25x1.5	
	标准型 Standard style	NUT ER25.TOP	42	20	M32x1.5	C
		NUT ER32.TOP	50	22	M40x1.5	
	NUT ER40.TOP	63	25	M50x1.5		

强力刀柄直筒夹

Straight Collet for Power Chuck



规格型号 Designation	D	d	L
C32-D3	32	3	70
C32-D4	32	4	70
C32-D5	32	5	70
C32-D6	32	6	70
C32-D8	32	8	70
C32-D10	32	10	70
C32-D12	32	12	70
C32-D15	32	15	70
C32-D16	32	16	70
C32-D19	32	19	70
C32-D20	32	20	70
C32-D22	32	22	70
C32-D24	32	24	70
C32-D25	32	25	70

- 标准库存 Item in stock
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ACCESSORIES 附件

高精度型 ER 螺帽

ER Collet

螺帽必须先装入筒夹后，再安装在弹簧夹头刀柄上
Always assemble the collet into the nut before mounting onto the collet chuck.

螺帽说明 Description

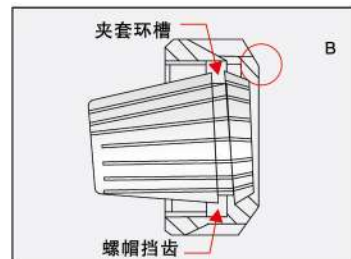
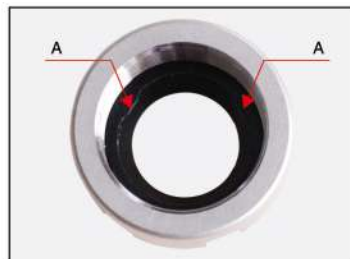
摩擦轴承 ER 螺帽具有独特的双摩擦结构的设计，可实现径向和角度方向的自动心功能。
Friction bearing ER nut with a unique two piece exclusive friction mechanism, combining radial and angular self-centering movements.

特征 Features

- 独特的双摩擦轴承；
- 径向和角度的浮动设计，可获得更好的同心度；
- 独特的摩擦轴承结构可获得具有更高的夹持力，对比于标准 ER 螺帽其夹持力可增加 50-100%；
- 螺帽内端面其独特的挡齿设计，在高的转速下保持更好的平稳性；
- 紧凑结构设计—与标准螺帽一致的尺寸规格；
- 可装夹密封型筒夹；
- Unique two-piece friction bearing.
- Radial and angular float for better concentricity.
- Powerful gripping force, 50-100% higher than the standard ER nut, due to the friction bearing mechanism.
- Balanced for higher spindle spin due to unique extractor teeth design.
- Compact design-general dimensions and size range are the same as the standard nut.
- Designed for use with sealed collets.

装夹顺序 Insertion Procedure

- 将筒夹倾斜插入螺帽内，并使螺帽的挡齿 (A) 卡在筒夹的环槽 (B) 内。
- 将上述两者部件一起放置在清洁、水平的工作台上。
- 用拇指向下压筒夹直到卡入螺帽内 (C)。
- Insert the collet at an angle, fitting the two extractor teeth which picture (A) into the collet's groove (B).
- Place the two parts on a clean and horizontal work surface.
- Press down with your thumb on the back end of the collet until it clicks into place (C).

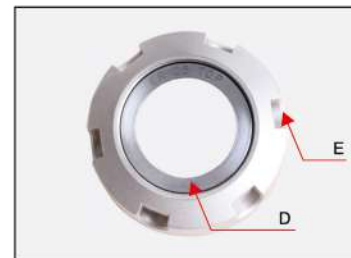


注意 Important

- 禁止将筒夹平行装入螺帽。否则将造成螺帽挡齿的破损。
- 当松开螺帽时，通过螺帽上的挡齿作用，筒夹可自动与刀柄联结的内锥孔分开。
- Never insert the collet parallel to the extractor ring. Doing this will chip or break the extractor's teeth.
- When unclamping the nut, the collet will self-release from the chuck by means of extractor teeth.

拆卸顺序 Extraction procedure

- 旋转螺帽，使螺帽的任意锁紧槽 (E) 对准筒夹端面上的菱形图标；
- 将此时的螺帽、筒夹扣放在水平、洁净的工作台上；
- 将螺丝刀对正图示 (D) 菱形图标位置，垂直插入螺帽和筒夹之间；
- 将螺丝刀向外扳，同时沿内侧方向 (F) 按住筒夹后端，卸开筒夹。
- Align the engraved diamond shape which is on the silver ring (D), with any of the key slots (E) of the nut.
- Place the nut with the collet facing down on a clean and horizontal work surface.
- Insert a screwdriver vertically between the nut slots and the collet on the reverse side of the engraved diamond shape (D).
- Tilt the screwdriver outwards, while helping the extraction by pushing the collet's back end in the opposite direction (F).



推荐扭矩 - 对于标准弹簧夹头 (标准筒夹与前端螺帽)
Recommended clamping torque for standard ER & ER-top clamping nut.

注意 Important

- 推荐的扭矩值是安装最大柄径 (每夹套规格) 计算，如装夹较小柄径时，扭矩需相应减少。
- This torque is calculated with the maximum diameter capacity per collet which should be gradually reduced when used with a smaller shank size.

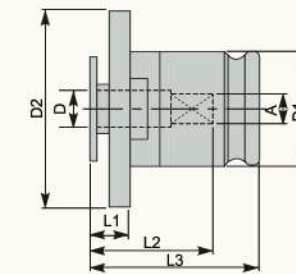
规格型号 Designation	Kg.m
ER16	7
ER20	12
ER25	20
ER32	22
ER40	25

- 标准库存 Item in stock
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ACCESSORIES 附件

丝锥快换夹头—不带过载保护

Quick Change Chuck without Overload Protection



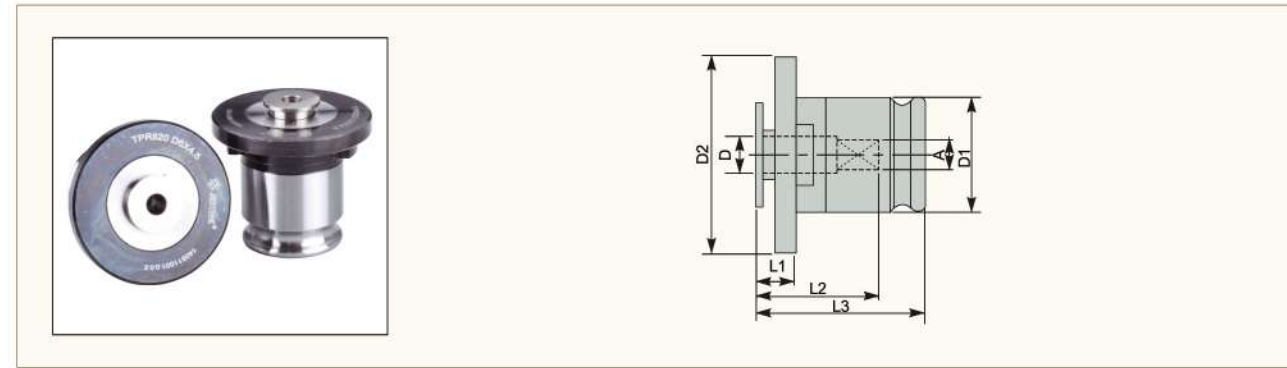
规格型号 Designation	D	A	D1	D2	L1	L2	L3	Kg						在库 Stock
									ISO529	ISO529/ISO2283	JISNB4430	DIN371	DIN374/DIN376	
TPR412 D2.8x2.1	2.8	2.1	19	36	11	25	33	0.1	-	-	-	M2-M2.5	M4	●
TPR412 D3.15x2.5	3.15	2.5	19	36	12	26	34	0.1	M3	M4	-	-	-	○
TPR412 D3.55x2.8	3.55	2.8	19	36	12	26	34	0.1	M3.5	M4.5	-	M3	M4.5-M5	○
TPR412 D4x3.15	4	3.15	19	36	12	27	34	0.1	M4	M5	-	M3.5	-	○
TPR412 D4.5x3.55	4.5	3.55	19	36	12	27	34	0.1	M4.5	M6	-	M4	M6	○
TPR412 D5x4	5	4	19	36	12	28	34	0.1	M5	-	M4-M4.5	-	-	○
TPR412 D5.5x4.5	5.5	4.5	19	36	11	27	34	0.1	-	-	M5	-	-	○
TPR412 D6x4.5	6	4.5	19	36	12	28	34	0.1	-	-	M6	-	-	○
TPR412 D6x4.9	6	4.9	19	36	12	29	34	0.1	-	-	-	M4.5-M6	M8	○
TPR412 D6.3x5	6.3	5	19	36	12	29	34	0.1	M6	M8	M7-M8	-	-	○
TPR412 D7x5.5	7	5.5	19	36	12	29	34	0.1	-	-	M9-M10	M7	M10	○
TPR412 D8x6.3	8	6.3	19	36	12	30	34	0.1	M8	M10-M11	-	M8	-	○
TPR412 D8.5x6.5	8.5	6.5	19	36	12	30	34	0.1	-	-	M12	-	-	○
TPR412 D9x7.1	9	7.1	19	36	12	30	34	0.1	M9	M12	-	-	M12	○
TPR412 D10x8	10	8	19	36	12	33	34	0.1	M10	-	-	M10	-	○
TPR820 D6x4.9	6	4.9	31	53.5	10	30	46	0.2	-	-	-	M4.5-M6	M8	○
TPR820 D6.3x5	6.3	5	31	53.5	11	31	46	0.2	M6	M8	M7-M8	-	-	○
TPR820 D7x5.5	7	5.5	31	53.5	10	30	46	0.2	-	-	M9-M10	M7	M10	○
TPR820 D8x6.3	8	6.3	31	53.5	10	31	46	0.2	M8	M10-M11	-	M8	-	○
TPR820 D8.5x6.5	8.5	6.5	31	53.5	10	31	46	0.2	-	-	M12	-	-	○
TPR820 D9x7.1	9	7.1	31	53.5	11	32	46	0.2	M9	M12	-	-	M12	○
TPR820 D10x8	10	8	31	53.5	10	33	46	0.2	M10	-	-	M10	-	○
TPR820 D10.5x8	10.5	8	31	53.5	11	43	46	0.2	-	-	M14	-	-	○
TPR820 D11.2x9	11.2	9	31	53.5	11	43	46	0.2	-	M13-M15	-	-	M14	○
TPR820 D12x9	12	9	31	53.5	11	45	46	0.2	-	-	-	-	M16	○
TPR820 D12.5x10	12.5	10	31	53.5	11	45	46	0.2	-	M16-M17	M16	-	-	○
TPR820 D14x11.2	14	11.2	31	53.5	11	45	46	0.2	-	M18-M21	M18	-	M18	○
TPR820 D15x12	15	12	31	53.5	11	45	46	0.2	-	-	M20	-	-	○
TPR820 D16x12	16	12	31	53.5	11	45	46	0.2	-	-	-	-	M20	○
TPR1433 D10.5x8	10.5	8	48	78	11	43	67	0.8	-	-	M14	-	-	○
TPR1433 D11.2x9	11.2	9	48	78	11	43	67	0.8	-	M13-M15	-	-	M14	○
TPR1433 D12x9	12	9	48	78	11	43	67	0.8	-	-	-	-	M16	○
TPR1433 D12.5x10	12.5	10	48	78	11	44	67	0.8	-	M16-M17	M16	-	-	○
TPR1433 D14x11.2	14	11.2	48	78	11	45	67	0.8	-	M18-M21	M18	-	M18	○
TPR1433 D15x12	15	12	48	78	11	46	67	0.8	-	-	M20	-	-	○
TPR1433 D16x12	16	12	48	78	11	46	67	0.8	-	-	-	-	M20	○
TPR1433 D16x12.5	16	12.5	48	78	11	52	67	0.8	-	M22-M23	-	-	-	○
TPR1433 D17x13	17	13	48	78	11	53	67	0.8	-	-	M22	-	-	○
TPR1433 D18x14	18	14	48	78	11	56	67	0.8	-	M24-M26	-	-	-	○
TPR1433 D18x14.5	18	14.5	48	78	11	52	67	0.8	-	-	-	-	M22-M26	○
TPR1433 D19x15	19	15	48	78	11	56	67	0.8	-	-	M22	-	-	○
TPR1433 D20x15	20	15	48	78	11	56	67	0.8	-	-	M27	-	-	○
TPR1433 D20x16	20	16	48	78	11	57	67	0.8	-	M27-M30	-	-	M27	○
TPR1433 D22.4x18	22.4	18	48	78	11	58	67	0.7	-	M31-M33	-	-	M29-M32	○
TPR1433 D23x17	23	17	48	78	11	57	67	0.7	-	-	M30	-	-	○
TPR1433 D25x19	25	19	48	78	11	58	67	0.7	-	-	M33	-	-	○
TPR1433 D25x20	25	20	48	78	11	60	67	0.7	-	-	-	-	M33	○

- 标准库存 Item in stock
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ACCESSORIES 附件

丝锥快换夹头—不带过载保护

Quick Change Chuck without Overload Protection



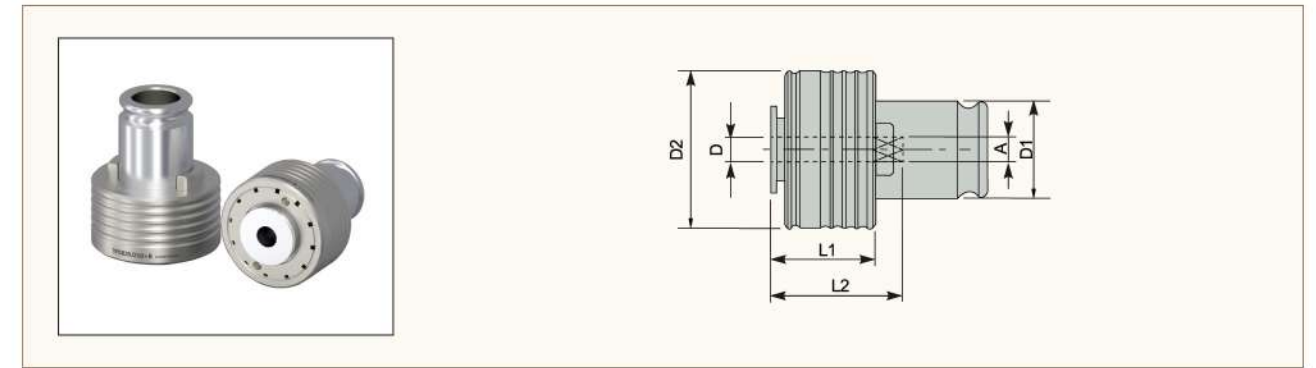
规格型号 Designation	D	A	D1	D2	L1	L2	L3	Kg	在库 Stock					
									ISO529	ISO529/ISO2283	JISNB4430	DIN371	DIN374/DIN376	
TPR2248 D16x12.5	16	12.5	60	96	16	53	80	1.6	-	M22-M23	-	-	-	●
TPR2248 D17x13	17	13	60	96	16	53	80	1.6	-	-	M22	-	-	●
TPR2248 D18x14	18	14	60	96	16	53	80	1.6	-	M24-M26	-	-	-	●
TPR2248 D18x14.5	18	14.5	60	96	16	54	80	1.6	-	-	-	M22-M26	-	●
TPR2248 D19x15	19	15	60	96	16	54	80	1.5	-	-	M24	-	-	●
TPR2248 D20x15	20	15	60	96	16	54	80	1.5	-	-	M27	-	-	●
TPR2248 D20x16	20	16	60	96	16	57	80	1.6	-	M27-M30	-	-	M27	●
TPR2248 D22.4x18	22.4	18	60	96	16	58	80	1.5	-	M31-M33	-	-	M29-M32	●
TPR2248 D23x17	23	17	60	96	16	56	80	1.5	-	-	M30	-	-	●
TPR2248 D25x19	25	19	60	96	16	59	80	1.5	-	-	M33	-	-	●
TPR2248 D25x20	25	20	60	96	16	60	80	1.5	-	-	-	M33	-	●
TPR2248 D28x21	28	21	60	96	22	73	86	1.5	-	-	M36	-	-	●
TPR2248 D28x22	28	22	60	96	22	74	86	1.5	-	-	-	M34-M38	-	●
TPR2248 D28x22.4	28	22.4	60	96	22	75	86	1.5	-	M37-M42	-	-	-	●
TPR2248 D30x23	30	23	60	96	22	75	86	1.5	-	-	M39	-	-	●
TPR2248 D31.5x25	31.5	25	60	96	22	77	86	1.5	-	M44-M50	-	-	-	●
TPR2248 D32x24	32	24	60	96	22	76	86	1.5	-	-	-	M39-M42	-	●
TPR2248 D32x26	32	26	60	96	22	79	86	1.5	-	-	M42	-	-	●
TPR2248 D35x26	35	23	60	96	22	79	86	1.5	-	-	M45	-	-	●
TPR2248 D36x29	36	29	60	96	22	81	86	1.5	-	-	-	M44-M50	-	●
TPR2248 D38x29	38	29	60	96	22	81	86	1.5	-	-	M48	-	-	●

- 每个尺寸的丝锥都需要一个快换件，按照 D,A 订购；
- 订货示例：1 件 TPR820 D9x7.1
- A,D 为粗柄普通螺纹丝锥；
- B,E 为细柄普通粗牙螺纹丝锥；
- C 为等径普通粗牙螺纹丝锥。
- Each tap has its own corresponded quick change chuck, please refer to order as figure D, A
- Ordering sample: 1 PC TPR820 D9x7.1
- A, D The taps with ordinary pitch and thick shank
- B, E The taps with ordinary coarse pitch and thin shank
- C The taps with ordinary coarse pitch and equal dia.

ACCESSORIES 附件

丝锥快换夹头—带过载保护

Quick Change Chuck with Overload Protection



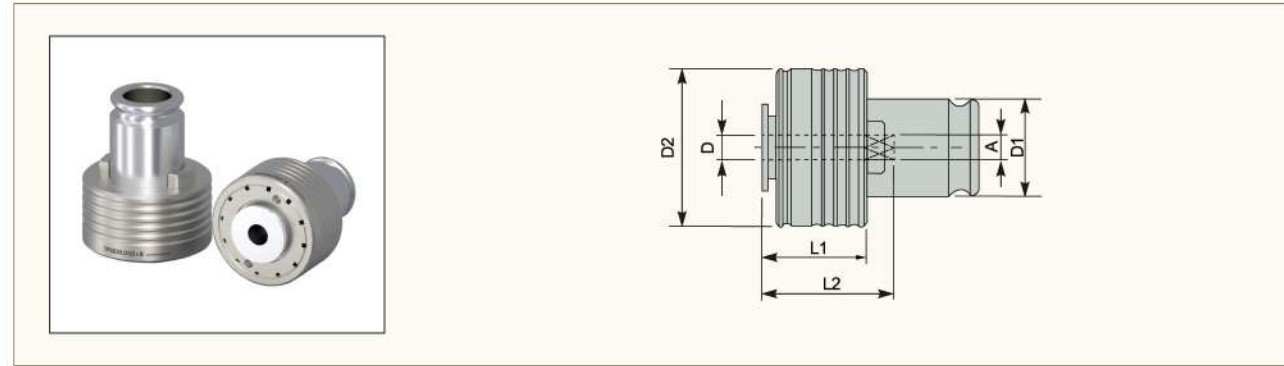
规格型号 Designation	D	A	D1	D2	L1	L2	Kg	在库 Stock					
								ISO529	ISO529/ISO2283	JISNB4430	DIN371	DIN374/DIN376	
TPS412 D2.8x2.1	2.8	2.1	19	36	26	26	0.2	-	-	-	M2-M2.5	M4	●
TPS412 D3.15x2.5	3.15	2.5	19	36	26	26	0.2	M3	M4	-	-	-	●
TPS412 D3.55x2.8	3.55	2.8	19	36	26	25	0.2	M3.5	M4.5	-	M3	M4.5-M5	●
TPS412 D4x3.15	4	3.15	19	36	26	27	0.2	M4	M5	-	M3.5	-	●
TPS412 D4.5x3.55	4.5	3.55	19	36	26	27	0.2	M4.5	M6	-	M4	M6	●
TPS412 D5x4	5	4	19	36	26	27	0.2	M5	-	M4-M4.5	-	-	●
TPS412 D5.5x4.5	5.5	4.5	19	36	27	29	0.2	-	-	M5	-	-	●
TPS412 D6x4.5	6	4.5	19	36	26	29	0.2	-	-	M6	-	-	●
TPS412 D6x4.9	6	4.9	19	36	26	30	0.2	-	-	-	M4.5-M6	M8	●
TPS412 D6.3x5	6.3	5	19	36	27	30	0.2	M6	M8	M7-M8	-	-	●
TPS412 D7x5.5	7	5.5	19	36	26	30	0.2	-	-	M9-M10	M7	M10	●
TPS412 D8x6.3	8	6.3	19	36	26	31	0.2	M8	M10-M11	-	M8	-	●
TPS412 D8.5x6.5	8.5	6.5	19	36	26	30	0.2	-	-	M12	-	-	●
TPS412 D9x7.1	9	7.1	19	36	26	31	0.2	M9	M12	-	-	M12	●
TPS412 D10x8	10	8	19	36	26	32	0.2	M10	-	-	M10	-	●
TPS820 D6x4.9	6	4.9	31	53.5	34	30	0.2	-	-	-	M4.5-M6	M8	●
TPS820 D6.3x5	6.3	5	31	53.5	34	30	0.6	M6	M8	M7-M8	-	-	●
TPS820 D7x5.5	7	5.5	31	53.5	33	30	0.6	-	-	M9-M10	M7	M10	●
TPS820 D8x6.3	8	6.3	31	53.5	33	31	0.6	M8	M10-M11	-	M8	-	●
TPS820 D8.5x6.5	8.5	6.5	31	53.5	33	31	0.6	-	-	M12	-	-	●
TPS820 D9x7.1	9	7.1	31	53.5	33	32	0.6	M9	M12	-	-	M12	●
TPS820 D10x8	10	8	31	53.5	33	33	0.6	M10	-	-	M10	-	●
TPS820 D10.5x8	10.5	8	31	53.5	34	42	0.6	-	-	M14	-	-	●
TPS820 D11.2x9	11.2	9	31	53.5	34	43	0.6	-	M13-M15	-	-	M14	●
TPS820 D12x9	12	9	31	53.5	33	45	0.6	-	-	-	-	M16	●
TPS820 D12.5x10	12.5	10	31	53.5	34	44	0.6	-	M16-M17	M16	-	-	●
TPS820 D14x11.2	14	11.2	31	53.5	34	44	0.6	-	M18-M21	M18	-	M18	●
TPS820 D15x12	15	12	31	53.5	34	45	0.6	-	-	M20	-	-	●
TPS820 D16x12	16	12	31	53.5	34	45	0.6	-	-	-	-	M20	●
TPS1433 D10.5x8	10.5	8	48	73.5	46	42	1.6	-	-	M14	-	-	●
TPS1433 D11.2x9	11.2	9	48	73.5	46	43	1.6	-	M13-M15	-	-	M14	●
TPS1433 D12x9	12	9	48	73.5	46	44	1.6	-	-	-	-	M16	●
TPS1433 D12.5x10	12.5	10	48	73.5	46	44	1.6	-	M16-M17	M16	-	-	●
TPS1433 D14x11.2	14	11.2	48	73.5	46	45	1.6	-	M18-M21	M18	-	M18	●
TPS1433 D15x12	15	12	48	73.5	46	45	1.6	-	-	M20	-	-	●
TPS1433 D16x12	16	12	48	73.5	46	45	1.6	-	-	-	-	M20	●
TPS1433 D16x12.5	16	12.5	48	73.5	46	52	1.6	-	M22-M23	-	-	-	●
TPS1433 D17x13	17	13	48	73.5	46	52	1.6	-	-	M22	-	-	●
TPS1433 D18x14	18	14	48	73.5	46	52	1.6	-	M24-M26	-	-	-	●
TPS1433 D18x14.5	18	14.5	48	73.5	46	56	1.6	-	-	-	-	M22-M26	●
TPS1433 D19x15	19	15	48	73.5	46	56	1.6	-	-	M22	-	-	●
TPS1433 D20x15	20	15	48	73.5	46	56	1.6	-	-	M27	-	-	●
TPS1433 D20x16	20	16	48	73.5	46	56	1.6	-	M27-M30	-	-	M27	●
TPS1433 D22.4x18	22.4	18	48	73.5	46	56	1.6	-	M31-M33	-	-	M29-M32	●
TPS1433 D23x17	23	17	48	73.5	46	56	1.6	-	-	M30	-	-	●
TPS1433 D25x19	25	19	48	73.5	46	58	1.6	-	-	M33	-	-	●
TPS1433 D25x20	25	20	48	73.5	46	58	1.6	-	-	-	-	M33	●

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

ACCESSORIES

丝锥快换夹头—带过载保护

Quick Change Chuck without Overload Protection



规格型号 Designation	D	A	D1	D2	L1	L2	Kg	在库 Stock					
								A	B	C	D	E	
TPS2248 D16x12.5	16	12.5	60	95	68	52	3.7	-	M22-M23	-	-	-	●
TPS2248 D17x13	17	13	60	95	68	52	3.7	-	-	M22	-	-	●
TPS2248 D18x14.5	18	14.5	60	95	68	52	3.7	-	-	-	M22-M26	-	●
TPS2248 D18x14	18	14	60	95	68	56	3.7	-	M24-M26	-	-	-	●
TPS2248 D19x15	19	15	60	95	68	56	3.7	-	-	M24	-	-	●
TPS2248 D20x16	20	16	60	95	68	56	3.7	-	M27-M30	-	M27	-	●
TPS2248 D20x15	20	15	60	95	68	56	3.7	-	-	M27	-	-	●
TPS2248 D23x17	23	17	60	95	68	56	3.7	-	-	M30	-	-	●
TPS2248 D22.4x18	22.4	18	60	95	68	56	3.7	-	M31-M33	-	M29-M32	-	●
TPS2248 D25x19	25	19	60	95	68	58	3.7	-	-	M33	-	-	●
TPS2248 D25x20	25	20	60	95	68	58	3.7	-	-	-	M33	-	●
TPS2248 D28x21	28	21	60	95	68	74	3.7	-	-	M36	-	-	●
TPS2248 D28x22	28	22	60	95	68	74	3.7	-	-	-	M34-M38	-	●
TPS2248 D28x22.4	28	22.4	60	95	68	76	3.7	-	M37-M42	-	-	-	●
TPS2248 D30x23	30	23	60	95	68	76	3.7	-	-	M39	-	-	●
TPS2248 D32x24	32	24	60	95	68	76	3.7	-	-	-	M39-M42	-	●
TPS2248 D32x26	32	26	60	95	68	79	3.7	-	-	M42	-	-	●
TPS2248 D31.5x25	31.5	25	60	95	68	78	3.7	-	M44-M50	-	-	-	●
TPS2248 D35x26	35	26	60	95	68	78	3.7	-	-	M45	-	-	●
TPS2248 D36x29	36	29	60	95	68	78	3.7	-	-	-	M44-M50	-	●
TPS2248 D38x29	38	29	60	95	68	82	3.7	-	-	M48	-	-	●

- 每个尺寸的丝锥对应一种规格的丝锥快换夹头，请参照图示 D.A 尺寸订购
- 供货状态：出厂前扭矩已按默认值调好，如需调整，请咨询销售工程师
- 订货示例：1 件 TPS2248 D16x12.5
- 丝锥快换夹头对应的攻丝刀柄请参照：D011, D026, D046 页
- 过载扭矩的调节请参照：H014 页
- Each tap has ~s own corresponded quick change chuck, please refer to order as figure D. A
- The torsion value has been pre-adjusted to the default one when exiting the factory, please ask our sales engineers - needing to be adjusted once again
- Ordering sample: 1 pc TPS2248 D16x12.5
- Corresponding tool holder, please refer to page D011, D026, D046
- Adjustment for overload torsion, please refer to page H014

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

ACCESSORIES 附件

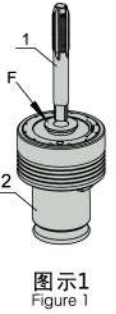
丝锥快换夹头—带过载保护

Quick Change Chuck with Overload Protection

特征 Features

1. 端面齿离合机构，传递扭矩可靠。
2. 安装方便快捷。
3. 带过载保护装置，使用安全稳定。
4. 可有效保护螺孔不易乱牙。
5. 遇到过大阻力，可有效打滑，在有效的压缩范围内可保护丝锥或工件。

1. The torque transmission is fixable and easy to be released due to the on-off structure between the teeth on the end face.
2. It is freely to be assembled and user friendly.
3. Fast installation and it is with overload protection so that it is safe and reliable in utilization.
4. It can protect the screwed hole which could not be mismatched.
5. It can skid to protect the tap or work piece when there is too much resistance.

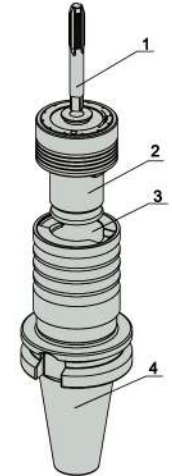


安装步骤 Assembling Steps

1. 与刀柄安装：将丝锥快换夹头 (2) 接口对准刀体接口 (3) 内孔及方槽，施力向下压缩即可安装于攻丝刀柄 (4) 内。
2. 安装丝锥 (1) 时，如图示 1 轴向施力 F 按压平面，将丝锥 (1) 装入夹头孔内，注意丝锥 (1) 后端方径必须完全装入丝锥快换夹头 (2) 孔内。
3. 拆卸丝锥 (1) 时，使用同样的方式，按压 F 平面后，拔出丝锥。

注意事项 Instruction and Notice of User

1. 丝锥快换夹头所需扭矩已在出厂前调整到默认数值，(默认扭矩是按被加工材料抗拉强度为 600-800N/mm² 钢测的值)。
2. 如需调整扭矩数值，请上本公司网站查询 (www.sunder-tools.com)。
3. 丝锥装入时，请确认丝锥方径是否全部装入丝锥快换夹头孔内。
4. 使用时确保丝锥与快换件是否适配。
5. 定期保养，长期不使用时，涂防锈油。
6. 请勿私自拆卸零件，否则会影响使用精度。



调整步骤 Adjusting Steps

以下状态可能需要提高锁紧力矩，如丝锥磨损、底孔偏小、冷却不足、刀具类型、攻丝深度。

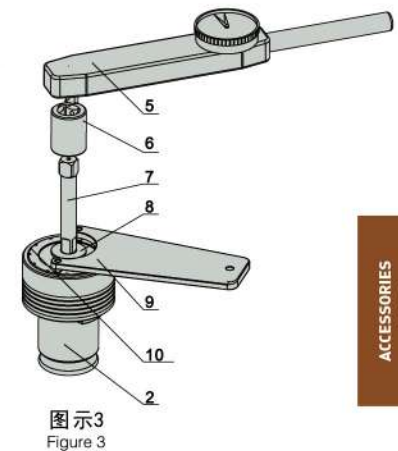
调整步骤如下：

- A: 扭力调节：松开调节螺母锁紧孔 (10) 处顶紧螺钉，用扭力调节扳手 (9) 按调节螺母所示扭力方向旋转调节螺母，将扭矩数值调整至所需，锁紧顶紧螺钉；快换件实际扭力值与丝锥规格、被攻丝材料、工况等有关；
- B: 扭力值的测定：扭力调整后，按图示 3 将方头螺栓 (7) 装入丝锥快换夹头 (2) 内孔及方孔内，将转换套 (6) 装入扭力扳手 (5) 及方头螺栓 (7) 的方头处，转动扭力扳手 (5) 读取数值；
- C: 新丝锥初次使用时，若出现过载保护，请检查攻丝深度是否加工到底孔深度，如攻丝深度安全，则将扭矩值一格一格逐步调大，直至攻丝至最佳状态。

The locking torsion should be enhanced when the following status:

Passivated tap, smaller bottom hole, coolant liquid, types of the cutting edge, and length of the section The Adjusting steps is as below:

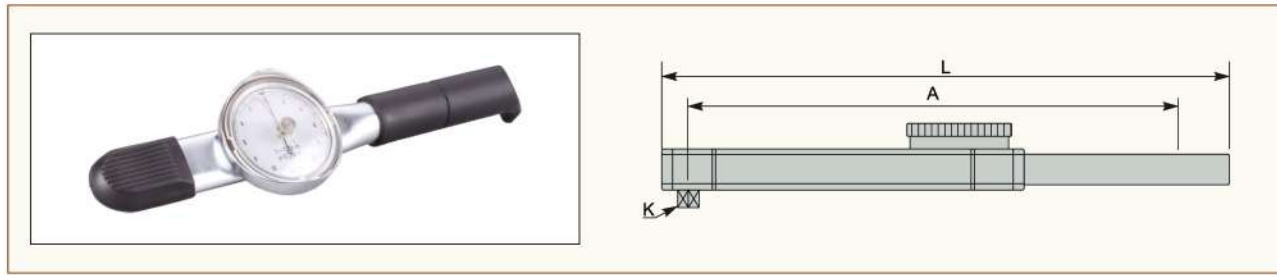
- A. Torsion adjustment: loosen the 10 top screw, use 9 to adjust the nut as the directed torsion direction up to the required value and then lock the 10 top screw; the torsion value is only for reference, it depends on the types of tap, application material and actual working condition.
- B. Torsion value measurement: install 7 into the internal and square hole as figure 1, install 6 into 5 and the head of 7 then turn 5 for the value.
- C. When using the tap at first time, probably it will be overpower protection, please check the tapping depth is same as the hole depth. If the tapping depth isn't out of range, adjust the torsion value one dial by one dial up to the best status of tapping.



ACCESSORIES 附件

单臂扭矩扳手

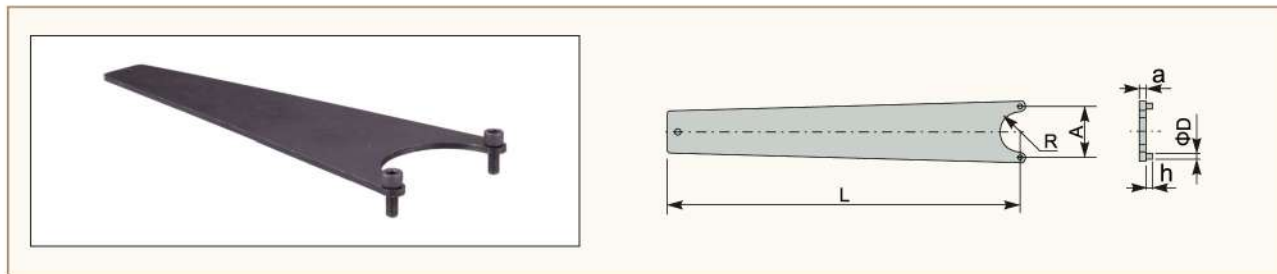
Torque Wrench



规格型号 Designation	扭矩 (N.M) Torsion	测量范围 Range	K	L	A	附带转换套筒 Sleeve
KEY50 N12	1-12	M4-M6	6.3	305	260	S6-6.3A型
KEY50 N50	5-50	M8-M12	9.5	355	290	S10-10A型
KEY50 N200	20-200	M14-M22	12.5	495	420	S18-12.5A型
KEY50 N1000	100-1000	M24-M48	25.4	1330	1260	S27-25/S34-25

调节扳手

Adjustable Wrench

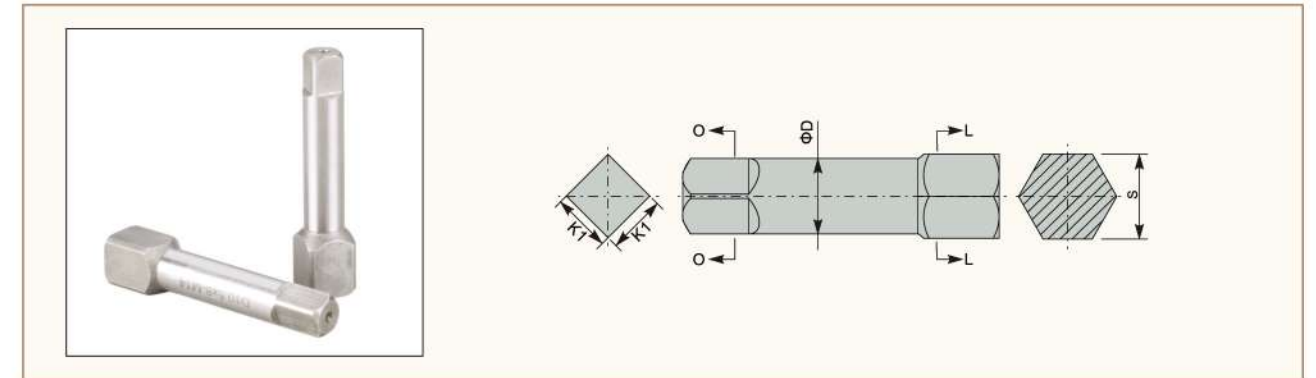


规格型号 Designation	R	ΦD	A	L	a	h	用于快换件 Precisuon	重量
	mm	mm	mm	mm	mm	mm		kg
KEY51 A412	9	3	23	200	5	5	TPS412	0.18
KEY51 A820	14.5	4	37	260	5	5	TPS820	0.36
KEY51 A1433	22	5	55	260	5	5	TPS1433	0.45
KEY51 A2248	30	6	72	260	5	5	TPS2248	0.53

ACCESSORIES 附件

方头螺栓

Coach Bolt



规格型号 Designation	适用扭矩扳手 Torque wrench	适用转换套筒 Sleeve	S	D	K1
KEY52 D2.8x2.1	KEY50 N12	S6-6.3	6	2.8	2.1
KEY52 D3.15x2.5	KEY50 N12	S6-6.3	6	3.15	2.5
KEY52 D3.55x2.8	KEY50 N12	S6-6.3	6	3.55	2.8
KEY52 D4x3.15	KEY50 N12	S6-6.3	6	4	3.15
KEY52 D4.5x3.55	KEY50 N12	S6-6.3	6	4.5	3.55
KEY52 D5x4	KEY50 N12	S6-6.3	6	5	4
KEY52 D5.5x4.5	KEY50 N12	S6-6.3	6	5.5	4.5
KEY52 D6x4.5	KEY50 N12	S6-6.3	6	6	4.5
KEY52 D6.4x9	KEY50 N12	S6-6.3	6	6	4.9
KEY52 D6.3x5	KEY50 N50	S10-10	10	6.3	5
KEY52 D7x5.5	KEY50 N50	S10-10	10	7	5.5
KEY52 D8x6.3	KEY50 N50	S10-10	10	8	6.3
KEY52 D8.5x6.5	KEY50 N50	S10-10	10	8.5	6.5
KEY52 D9x7.1	KEY50 N50	S10-10	10	9	7.1
KEY52 D10x8	KEY50 N50	S10-10	10	10	8
KEY52 D10.5x8	KEY50 N200	S18-12.5	18	10.5	8
KEY52 D11.2x9	KEY50 N200	S18-12.5	18	11.2	9
KEY52 D12x9	KEY50 N200	S18-12.5	18	12	9
KEY52 D12.5x10	KEY50 N200	S18-12.5	18	12.5	10
KEY52 D16x12	KEY50 N200	S18-12.5	18	16	12
KEY52 D16x12.5	KEY50 N200	S18-12.5	18	16	12.5
KEY52 D17x13	KEY50 N200	S18-12.5	18	17	13
KEY52 D18x14.5	KEY50 N200	S18-12.5	18	18	14.5
KEY52 D18x14	KEY50 N1000	S27-25	27	19	14
KEY52 D19x15	KEY50 N1000	S27-25	27	20	15
KEY52 D20x15	KEY50 N1000	S27-25	27	20	15
KEY52 D20x16	KEY50 N1000	S27-25	27	22.4	16
KEY52 D22.4x18	KEY50 N1000	S27-25	27	23	18
KEY52 D23x17	KEY50 N1000	S27-25	27	25	17
KEY52 D25x19	KEY50 N1000	S27-25	27	25	19
KEY52 D25x20	KEY50 N1000	S27-25	27	28	20
KEY52 D28x21	KEY50 N1000	S34-25	34	28	21
KEY52 D28x22	KEY50 N1000	S34-25	34	28	22
KEY52 D28x22.4	KEY50 N1000	S34-25	34	28	22.4
KEY52 D30x23	KEY50 N1000	S34-25	34	30	23
KEY52 D31.5x25	KEY50 N1000	S34-25	34	31.5	25
KEY52 D32x24	KEY50 N1000	S34-25	34	32	24
KEY52 D32x26	KEY50 N1000	S34-25	34	32	26
KEY52 D35x26	KEY50 N1000	S34-25	34	35	26
KEY52 D36x29	KEY50 N1000	S34-25	34	36	29
KEY52 D38x29	KEY50 N1000	S34-25	34	38	29

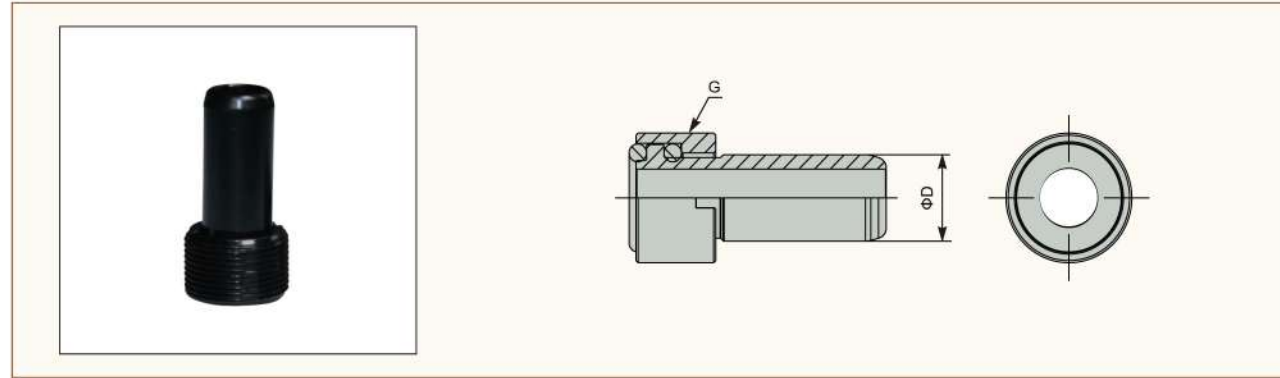
● 标准库存 Item in stock
 ○ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
 ○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

● 标准库存 Item in stock
 ○ 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
 ○ 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

ACCESSORIES 附件

HSK-A 型冷却管

HSK Type A Coolant Tube

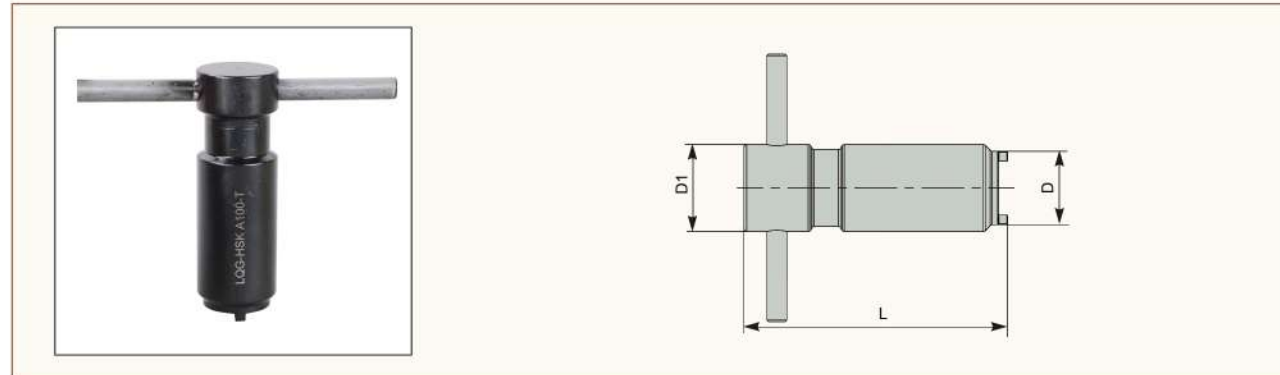


规格型号 Designation	D	G
LQG-HSK A63	12	M18x1
LQG-HSK A100	16	M24x1.5

- 订货示例: 1 件 LQG-HSK A63
- Ordering sample: 1 PC LQG-HSK A63-T

HSK-A 型冷却管扳手

Allen key for HSK Type A Coolant Tube



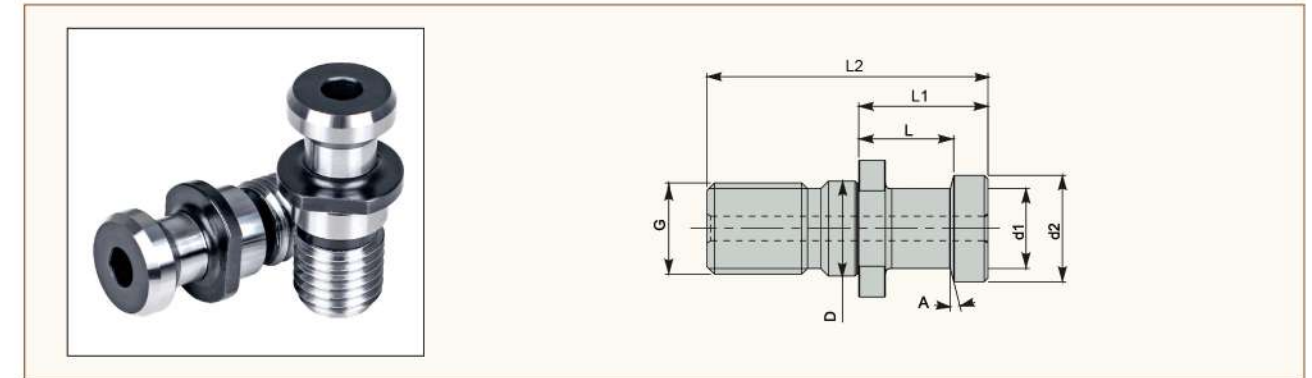
规格型号 Designation	D	D1	L
LQG-HSK A63-T	16.5	20	70
LQG-HSK A100-T	22	26	80

- 订货示例: 1 件 LQG-HSK A63-T
- Ordering sample: 1 PC LQG-HSK A63-T

ACCESSORIES 附件

ISO7388/2 A 型 / GB10945 A 型

1507388/2 A style /GB10945 A style

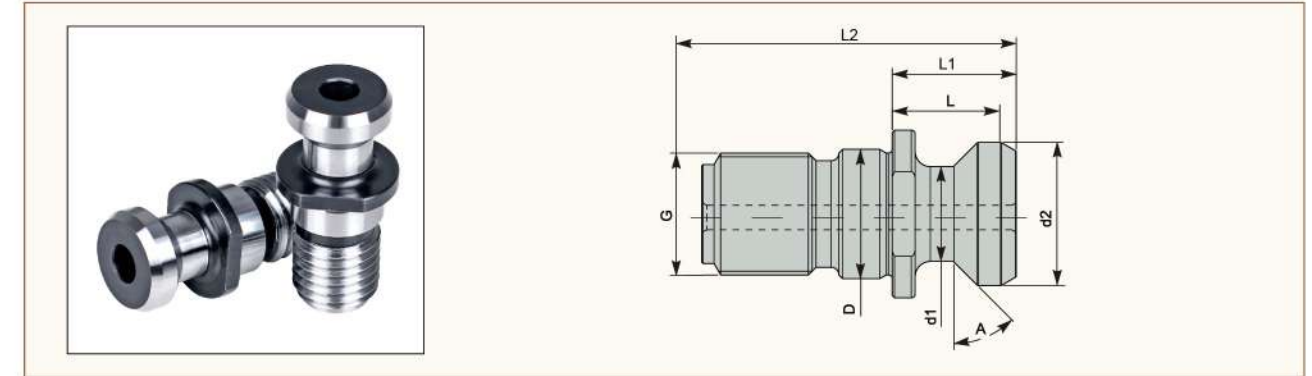


规格型号 Designation	尺寸 (mm) Size								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS SK30 15 ISO7388-A.C	M12	13	8	12	19	24	44	15°	0.04
PS SK40 15 ISO7388-A.C	M16	17	14	19	20	26	54	15°	0.08
PS SK50 15 ISO7388-A.C	M24	25	21	28	25	34	74	15°	0.25

- 型号尾部带有 .C 字样的表示带有冷孔
- Code 'C' at the end of designation indicates internal coolant hole with pull stud

ISO7388/2 B 型 / GB10945 B 型

1507388/2 B style /GN10945 B style

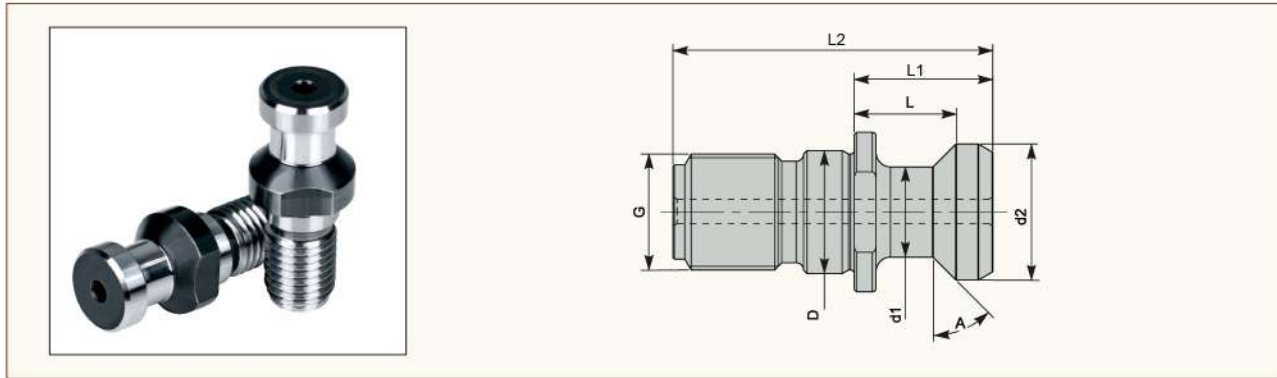


规格型号 Designation	尺寸 (mm) Size								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS SK30 45 ISO7388-B.C	M12	13	9.3	13.3	8.15	11.8	27	45°	0.04
PS SK40 45 ISO7388-B.C	M16	17	12.95	18.95	11.15	16.4	44.5	45°	0.07
PS SK50 45 ISO7388-B.C	M24	25	19.6	29.1	17.95	25.55	65.5	45°	0.22

- 型号尾部带有 .C 字样的表示带有冷孔
- Code 'C' at the end of designation indicates internal coolant hole with pull stud

ACCESSORIES 附件

MAZAK-BT IJIS 6339

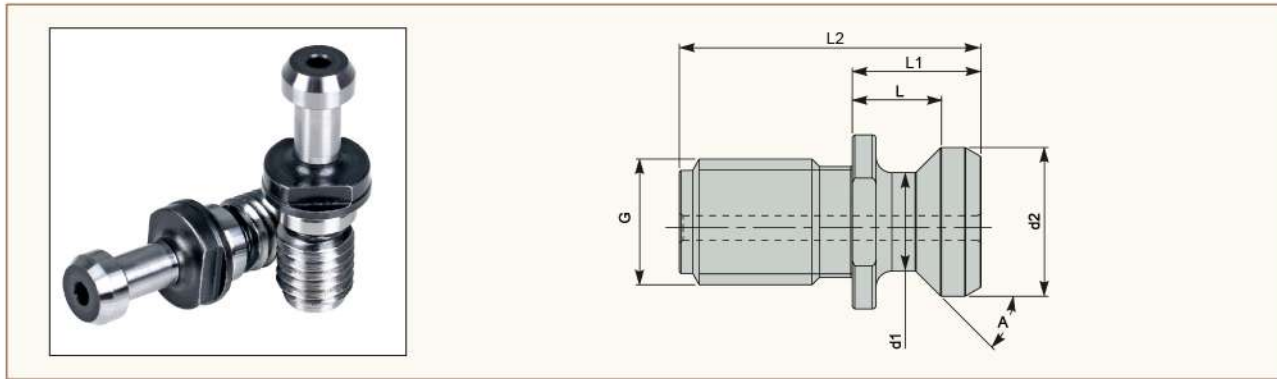


规格型号 Designation	尺寸 (mm) Size								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS BT40 45 MAZAK.C	M16	17	12.45	18.8	14.02	19.1	44.1	45°	0.05
PS BT50 45 MAZAK.C	M24	25	20.83	29	17.7	25.2	65.2	45°	0.19
PS BT30 15 JIS B	M12	12.5	8	12	18.4	23.4	43	15°	0.04
PS BT40 15 JIS B	M16	17	14	19	23	29	54	15°	0.08
PS BT50 15 JIS B	M24	25	21	28	25	34	74	15°	0.25

- 型号尾部带有 .C 字样的表示带有冷孔
- Code 'C' at the end of designation indicates internal coolant hole with pull stud

ANSI B5.50 标准

ANSI B5.50 Standard



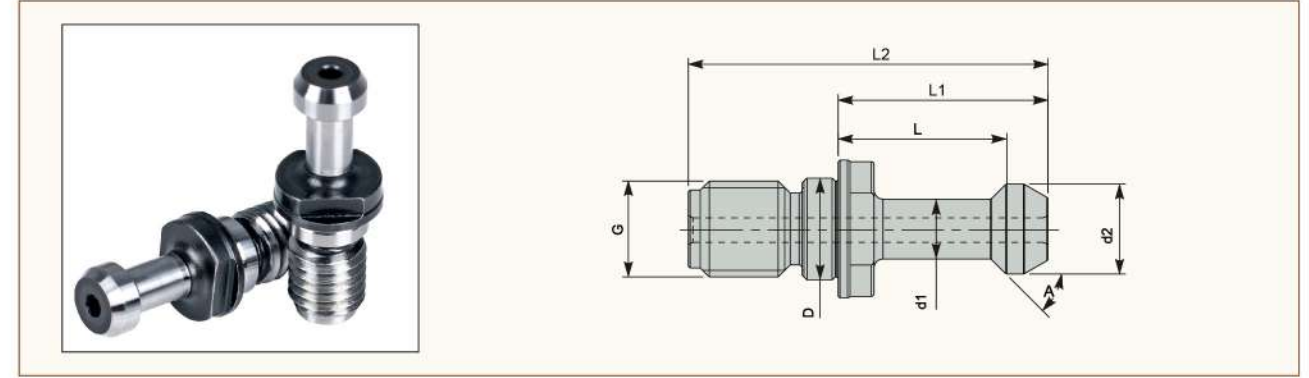
规格型号 Designation	尺寸 (mm) Size								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS CAT30 45 ANSI	1/2"-13	-	0.385	0.52	0.32	0.46	1.1	45°	0.03
PS CAT30 45 ANSI.CI	1/2"-13	-	0.385	0.52	0.32	0.46	1.1	45°	0.03
PS CAT40 45 ANSI	5/8"-11	-	0.49	0.74	0.44	0.64	1.5	45°	0.04
PS CAT40 45 ANSI.CI	5/8"-11	-	0.49	0.74	0.44	0.64	1.5	45°	0.03
PS CAT50 45 ANSI	1"-8	-	0.82	1.14	0.7	1	2	45°	0.17
PS CAT50 45 ANSI.CI	1"-8	-	0.82	1.14	0.7	1	2	45°	0.15

- 型号尾部带有 .C 字样的表示带有冷孔
- Code 'C' at the end of designation indicates internal coolant hole with pull stud

ACCESSORIES 附件

BT MAS 403 标准型拉钉

BT MAS 403 Standard Pull Stud



规格型号 Designation	尺寸 (mm) Size								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS BT30 45 MAS1	M12	12.5	7	11	18	23	43	45°	0.04
PS BT30 45 MAS1.C	M12	12.5	7	11	18	23	43	45°	0.03
PS BT30 60 MAS2	M12	12.5	7	11	18	23	43	60°	0.04
PS BT30 60 MAS2.C	M12	12.5	7	11	18	23	43	60°	0.03
PS BT30 90 MAS3	M12	12.5	7	11	18	23	43	90°	0.04
PS BT30 90 MAS3.C	M12	12.5	7	11	18	23	43	90°	0.03
PS BT40 45 MAS1	M16	17	10	15	28	35	60	45°	0.09
PS BT40 45 MAS1.C	M16	17	10	15	28	35	60	45°	0.08
PS BT40 60 MAS2	M16	17	10	15	28	35	60	60°	0.09
PS BT40 60 MAS2.C	M16	17	10	15	28	35	60	60°	0.08
PS BT40 90 MAS3	M16	17	10	15	28	35	60	90°	0.09
PS BT40 90 MAS3.C	M16	17	10	15	28	35	60	90°	0.08
PS BT50 45 MAS1	M24	25	17	23	35	45	85	45°	0.28
PS BT50 45 MAS1.C	M24	25	17	23	35	45	85	45°	0.24
PS BT50 60 MAS2	M24	25	17	23	35	45	85	60°	0.28
PS BT50 60 MAS2.C	M24	25	17	23	35	45	85	60°	0.24
PS BT50 90 MAS3	M24	25	17	23	35	45	85	90°	0.28
PS BT50 90 MAS3.C	M24	25	17	23	35	45	85	90°	0.24

- 型号尾部带有 .C 字样的表示带有冷孔
- Code 'C' at the end of designation indicates internal coolant hole with pull stud

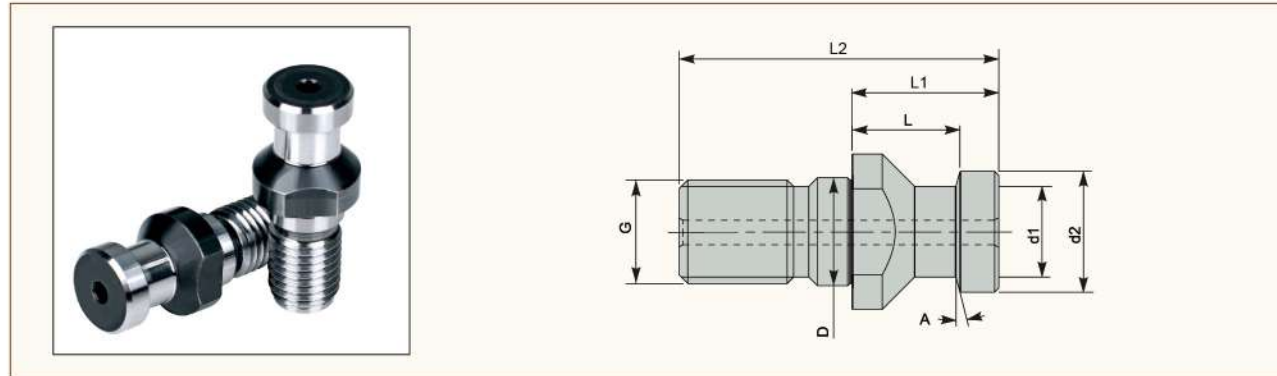
- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

- 标准库存
Item in stock
- 半标准库存 (订货时, 请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

ACCESSORIES 附件

DIN69872 标准

DIN69872 Standard



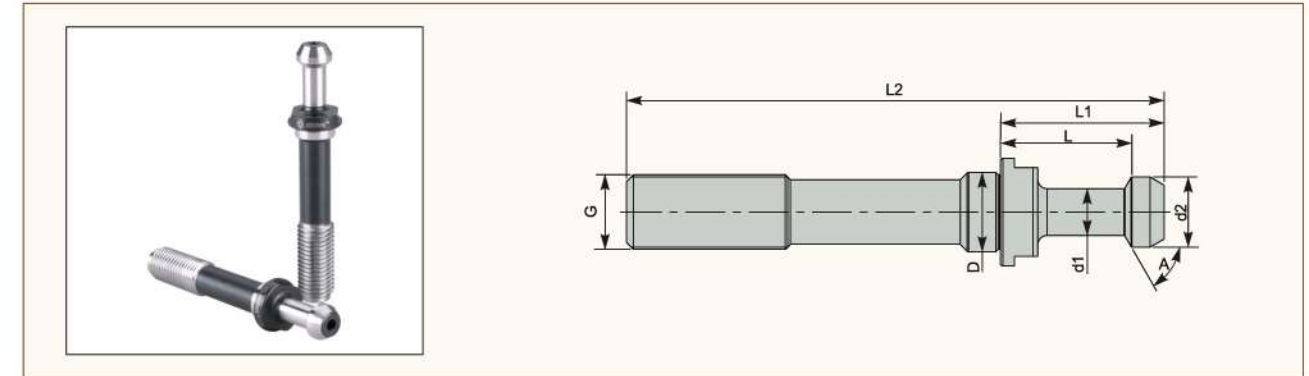
规格型号 Designation	尺寸 (mm) Size								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS SK30 15 DIN69872	M12	13	9	13	19	24	44	15°	0.05
PS SK30 15 DIN69872.C	M12	13	9	13	19	24	44	15°	0.04
PS SK30 15 DIN69872.BC	M12	13	9	13	19	24	44	15°	0.04
PS SK40 15 DIN69872	M16	17	14	19	20	26	54	15°	0.07
PS SK40 15 DIN69872.C	M16	17	14	19	20	26	54	15°	0.06
PS SK40 15 DIN69872.BC	M16	17	14	19	20	26	54	15°	0.06
PS SK50 15 DIN69872	M24	25	21	28	25	34	74	15°	0.28
PS SK50 15 DIN69872.C	M24	25	21	28	25	34	74	15°	0.21
PS SK50 15 DIN69872.BC	M24	25	21	28	25	34	74	15°	0.21
PS SK60 15 DIN69872	M30	32	30	40	30	40	90	15°	0.52
PS SK60 15 DIN69872.C	M30	32	30	40	30	40	90	15°	0.5
PS SK60 15 DIN69872.BC	M30	32	30	40	30	40	90	15°	0.5

- 型号尾部带有 .C 字样的表示带有冷孔
- 型号尾部带有 .BC 字样的表示带有内冷孔以及密封圈
- Code 'C' at the end of designation indicates internal coolant hole with pull stud.
- Code 'BC' at the end of designation indicates internal coolant hole and sealing ring with pull stud.

ACCESSORIES 附件

MTB 刀柄用拉钉

Pull Stud for MTB Adaptor

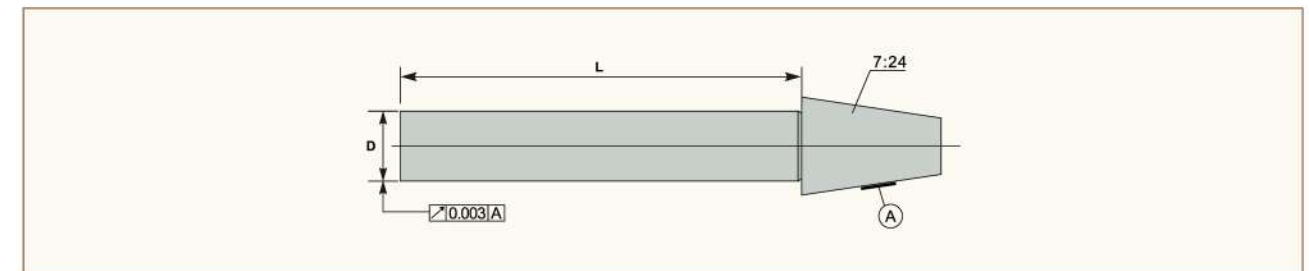


规格型号 Designation	尺寸 (mm) Size								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS BT40 45 MAS1.MTB4	M16	17	10	15	28	35	115	45°	0.15
PS BT40 45 MAS1.MTB4.C	M16	17	10	15	28	35	115	45°	0.15
PS BT40 60 MAS2.MTB4	M16	17	10	15	28	35	115	60°	0.15
PS BT40 60 MAS2.MTB4.C	M16	17	10	15	28	35	115	60°	0.15
PS BT40 90 MAS3.MTB4	M16	17	10	15	28	35	115	90°	0.15
PS BT40 90 MAS3.MTB4.C	M16	17	10	15	28	35	115	90°	0.15
PS BT50 45 MAS1.MTB5	M20	25	17	23	35	45	170	45°	0.47
PS BT50 45 MAS1.MTB5.C	M20	25	17	23	35	45	170	45°	0.47
PS BT50 60 MAS2.MTB5	M20	25	17	23	35	45	170	60°	0.47
PS BT50 60 MAS2.MTB5.C	M20	25	17	23	35	45	170	60°	0.47
PS BT50 60 MAS3.MTB5	M20	25	17	23	35	45	170	90°	0.47
PS BT50 60 MAS3.MTB5.C	M20	25	17	23	35	45	170	90°	0.47
PS BT40 15 DIN69872.MTB4	M16	17	14	19	20	26	116	75°	0.44
PS BT40 15 DIN69872.MTB4.C	M16	17	14	19	20	26	116	75°	0.44
PS BT40 15 DIN69872.MTB4.BC	M16	17	14	19	20	26	116	75°	0.44
PS BT50 15 DIN69872.MTB5	M20	25	21	28	25	34	116	75°	0.44
PS BT50 15 DIN69872.MTB5.C	M20	25	21	28	25	34	116	75°	0.44
PS BT50 15 DIN69872.MTB5.BC	M20	25	21	28	25	34	116	75°	0.44

- 型号尾部带有 .C 字样的表示带有冷孔
- 型号尾部带有 .BC 字样的表示带有内冷孔以及密封圈
- Code 'c' at the end of designation indicates internal coolant hole with pull stud.
- Code "BC" at the end of designation indicates internal coolant hole and sealing ring with pull stud.

标准测量棒

Standard Measuring Bar



规格型号 Designation	D	L	精度 Precisuon
ISO30 TSB230	30	230	0.003
ISO40 TSB300	40	300	0.003
ISO50 TSB300	50	300	0.003

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
- 无库存 (订货时, 请确认交货期) Order on demand (please confirm delivery time when ordering it)

- 标准库存 Item in stock
- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
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ACCESSORIES 附件

寻边器

Edge Sensor



光电式寻边器
Electronic Edge Sensor

规格型号 Designation	柄径 Shank diameter	总长度 Total length	测头 Probe
SOE-20S	20	120	Φ10



机械偏心式寻边器
Mechanical Edge Sensor

规格型号 Designation	柄径 Shank diameter	总长度 Total length	测头 Probe
SME-610	10	65	Φ6

- 转速选择 S400-S600rpm
- Rotated speed is S400-S600rpm

Z 轴设定器

Z-Axial Setter



光电式 Z 轴设定器
Electronic Z-Axial Setter

规格 Designation	形式 Style	总长度 Chief height
ZOP-50	光电式 Electronic	50



机械式 Z 轴设定器
Mechanical Z-Axial Setter

规格 Designation	形式 Style	总长度 Chief height
SD GD008	机械式 Mechanical	50

主轴清洁棒

Spindle Taper Cleaner

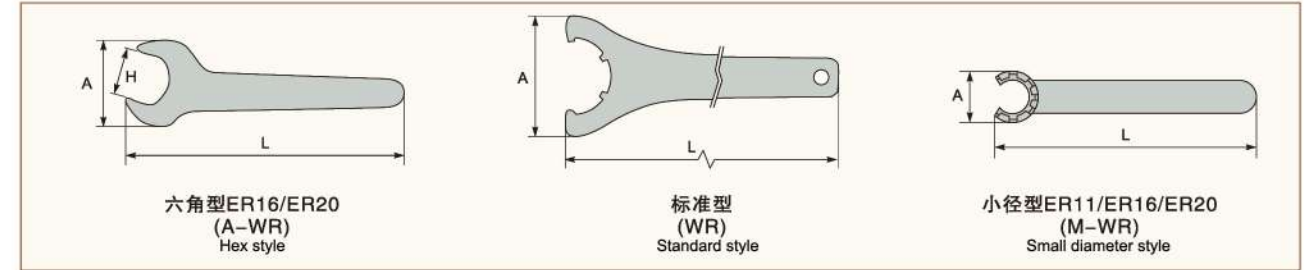


规格 Designation	斜度 Slant angle	重量 Weight	规格 (羊毛皮) Specification (woolfell)
W30	ISO30	0.03	W30S
W40	ISO40	0.04	W40S
W50	ISO50	0.07	W50S
W63	HSK A63	0.1	W63S
W100	HSK A100	0.15	W100S

ACCESSORIES 附件

ER 扳手

ER Wrench



形式 Style	规格型号 Designation	A	H	L
标准型 WR Standard style	SDER 25-WR	70	-	207
	SDER 32-WR	78	-	255
	SDER 40-WR	95	-	285
六角型 (A-WR) Hex style	SDER 16-A-WR	42	25	143
	SDER 20-A-WR	54	30	172
小径型 (M-WR) Small diameter style	SDER 11-M-WR	16.8	-	95
	SDER 16-M-WR	22.5	-	117
	SDER 20-M-WR	28	-	128
	SDER 25-M-WR	36	-	130

强力夹头刀柄专用钩形扳手

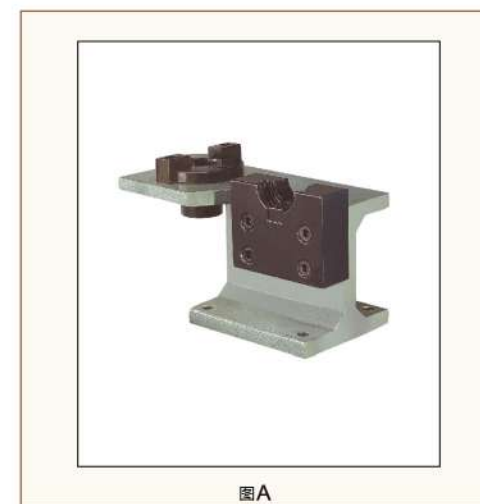
Wrench for Milling Chuck Holder



规格 Designation	适用刀柄 Adaptor
SD C20 WR	DMG20
SD C32 WR	DMG32

立卧两用锁刀座 (图 A)

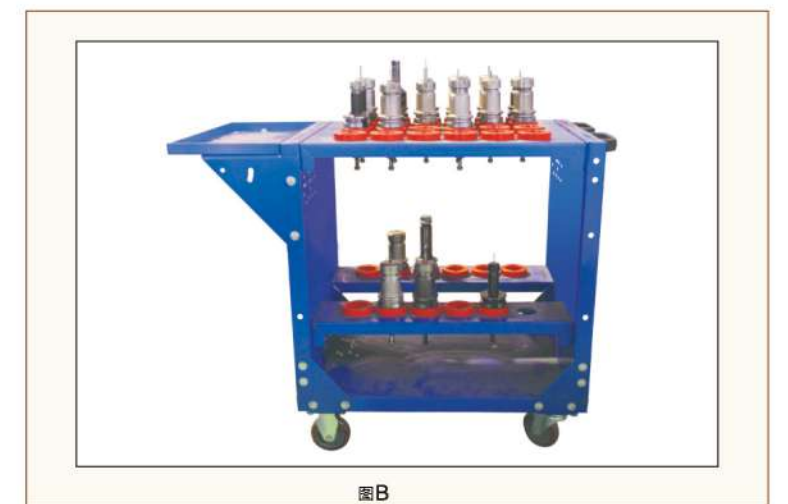
Assembly Device-Figure A



规格 Designation	适用刀柄 Adaptor
SDZ-BT30	BT30
SDZ-BT40	BT40
SDZ-BT50	BT50
SDZ-DIN69871 30	DIN69871 30
SDZ-DIN69871 40	DIN69871 40
SDZ-DIN69871 50	DIN69871 50
SDZ-HSK A63	HSK A63
SDZ-HSK A100	HSK A100

刀具管理车 (图 B)

Trolley for Tools-Figure B



规格 Designation	适用刀柄 Adaptor	储存刀柄数量 Amount
TOOLS-ISO30x36	BT30/DIN69871 30	36
TOOLS-ISO40x28	BT40/DIN69871 40	28
TOOLS-ISO50x20	BT50/DIN69871 50	20

- 标准库存 Item in stock
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- 半标准库存 (订货时, 请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
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TECHNICAL INFORMATION

SHANGHAI SUNDER NC-TOOLS
MANUFACTURE CO.,LTD.



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THREAD TAPPING HOLE DIAMETER COMPARISON 螺纹攻牙钻孔径对照表

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螺纹攻牙钻孔径对照表 THREAD TAPPING HOLE DIAMETER COMPARISON	K022-K024
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USER GUIDE 用户指南

粗镗刀切削参数

Recommended Cutting Data for Rough Boring

ISO	被加工材料 work-piece material	硬度 HB Hardness	悬伸 (稳定性) L/D Overhang L/D	镗削范围 D20-35 Boring range		镗削范围 D35-55 Boring range		镗削范围 D55-70 Boring range		镗削范围 D70-110 Boring range		镗削范围 D110-150 Boring range		镗削范围 D150- Boring range			
				Ap(mm)	0.5-1.2	1.2-2.5	0.8-1.5	1.5-2.5	0.8-1.5	1.5-3.0	0.8-1.5	1.5-3.5	0.8-2.0	2.0-3.5	0.8-2.0	2.0-4.0	
				R(Radius)	0.2	0.4	0.2-0.4	0.4	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	
P	碳钢 Unalloyed steel	HB<200	2.5(高) Good	Vc(m/min)	150-180	120-150	160-200	140-170	160-200	140-180	160-200	150-180	180-250	160-200	220-280	200-220	
				fz(mm/z)	0.1-0.2	0.08-0.2	0.15-0.2	0.1-0.175	0.15-0.25	0.08-0.2	0.15-0.25	0.08-0.2	0.15-0.3	0.1-0.2	0.15-0.3	0.1-0.15	
			4(一般) Normal	Vc(m/min)	140-160	100-140	160-180	120-150	160-180	120-150	140-180	120-150	160-200	140-180	-	-	-
				fz(mm/z)	0.1-0.18	0.08-0.15	0.1-0.12	0.08-0.1	0.1-0.12	0.08-0.1	0.08-0.1	0.08-0.15	0.1-0.2	0.08-0.15	-	-	-
			6.0(差) Difficult	Vc(m/min)	60-80	40-60	60-90	50-60	70-90	50-70	70-100	50-70	-	-	-	-	-
				fz(mm/z)	0.06-0.12	0.06-0.1	0.06-0.12	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	-	-	-	-	-
P	碳钢 Unalloyed steel	HB<200	2.5(高) Good	Vc(m/min)	130-160	100-130	140-180	120-160	140-180	120-160	140-180	120-160	150-170	100-140	100-140	80-120	
				fz(mm/z)	0.08-0.15	0.08-0.12	0.08-0.2	0.06-0.12	0.08-0.25	0.08-0.18	0.15-0.3	0.12-0.2	0.15-0.25	0.1-0.2	0.15-0.3	0.1-0.2	
			4(一般) Normal	Vc(m/min)	110-140	80-110	100-140	80-120	100-140	80-120	120-150	100-140	100-130	80-110	-	-	-
				fz(mm/z)	0.08-0.12	0.08-0.1	0.08-0.15	0.06-0.15	0.08-0.2	0.06-0.15	0.1-0.2	0.1-0.18	0.08-0.2	0.08-0.12	-	-	-
			6.0(差) Difficult	Vc(m/min)	70-90	60-70	80-100	60-80	80-100	60-80	80-100	60-80	-	-	-	-	-
				fz(mm/z)	0.08-0.1	0.06-0.08	0.06-0.1	0.06-0.08	0.08-0.15	0.06-0.1	0.08-0.12	0.08-0.12	-	-	-	-	-
P	合金钢 Lowalloyed steel	HB<200	2.5(高) Good	Vc(m/min)	140-160	90-120	150-180	100-130	160-200	140-180	160-220	140-180	160-220	140-180	140-180		
				fz(mm/z)	0.08-0.18	0.08-0.15	0.08-0.2	0.08-0.18	0.1-0.25	0.1-0.15	0.1-0.3	0.1-0.25	0.1-0.3	0.1-0.25	0.1-0.35	0.1-0.3	
			4(一般) Normal	Vc(m/min)	100-130	70-100	110-150	90-120	140-180	100-130	150-200	120-160	120-160	160-200	-	-	
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.08-0.15	0.08-0.18	0.08-0.12	0.1-0.2	0.08-0.18	0.1-0.2	0.08-0.18	-	-	
			6.0(差) Difficult	Vc(m/min)	80-100	60-90	80-100	70-90	100-140	80-120	100-140	100-140	-	-	-	-	
				fz(mm/z)	0.08-0.15	0.06-0.1	0.06-0.12	0.06-0.12	0.06-0.15	0.08-0.1	0.08-0.18	0.08-0.15	-	-	-	-	
P	合金钢 Lowalloyed steel	HB<200	2.5(高) Good	Vc(m/min)	130-150	120-140	130-150	120-140	140-170	120-150	160-200	140-180	140-200	140-200	140-180		
				fz(mm/z)	0.08-0.18	0.06-0.15	0.08-0.18	0.06-0.15	0.08-0.2	0.08-0.18	0.1-0.3	0.1-0.25	0.1-0.35	0.1-0.3	0.1-0.35	0.1-0.3	
			4(一般) Normal	Vc(m/min)	100-130	100-120	100-130	100-120	120-150	100-120	140-160	120-140	150-180	120-140	-	-	
				fz(mm/z)	0.08-0.15	0.06-0.13	0.08-0.15	0.06-0.13	0.08-0.18	0.08-0.15	0.08-0.2	0.08-0.15	0.12-0.12	-	-	-	
			6.0(差) Difficult	Vc(m/min)	80-100	70-90	80-100	70-90	100-120	70-90	100-120	70-90	-	-	-	-	
				fz(mm/z)	0.08-0.12	0.06-0.11	0.08-0.12	0.06-0.11	0.08-0.12	0.06-0.11	0.08-0.16	0.08-0.12	-	-	-	-	

注：当双刃镗削变成错齿镗或单齿镗时，切削进给降低 50%
Note: The feed should be 50% of recommended when staggered or single tooth cutting.

USER GUIDE 用户指南

粗镗刀切削参数

Recommended Cutting Data for Rough Boring

ISO	被加工材料 work-piece material	硬度 HB Hardness	悬伸 (稳定性) L/D Overhang L/D	镗削范围 D20-35 Boring range		镗削范围 D35-55 Boring range		镗削范围 D55-70 Boring range		镗削范围 D70-110 Boring range		镗削范围 D110-150 Boring range		镗削范围 D150- Boring range			
				Ap(mm)	0.5-1.0	1.0-1.8	0.5-1.0	1.0-1.8	0.5-1.2	1.2-2.0	0.8-1.8	1.8-2.5	0.8-2.0	2.0-3.0	0.8-2.0	2.0-3.5	
				R(Radius)	0.2	0.4	0.2-0.4	0.4	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	
M	不锈钢 Stainless steel	铁素体 & 马氏体 Ferritic & Martensitic	2.5(高) Good	Vc(m/min)	100-150	110-130	120-160	100-150	120-160	110-160	120-220	120-200	140-220	120-180	150-220	120-200	
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.06-0.12	0.08-0.25	0.08-0.18	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	
			4(一般) Normal	Vc(m/min)	90-130	90-120	100-140	90-140	100-150	80-120	100-160	90-140	120-180	90-140	120-180	-	-
				fz(mm/z)	0.08-0.12	0.06-0.1	0.08-0.12	0.06-0.1	0.08-0.18	0.08-0.12	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	0.08-0.25	-	-
			6.0(差) Difficult	Vc(m/min)	60-90	50-70	60-90	50-70	70-100	50-70	70-100	50-70	70-100	50-70	-	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.12	0.06-0.1	0.06-0.15	0.08-0.1	0.08-0.2	0.08-0.15	-	-	-	-	-
M	不锈钢 Stainless steel	奥氏体 Austenitic	2.5(高) Good	Vc(m/min)	110-130	100-130	120-150	110-140	110-160	100-150	120-200	100-160	120-200	100-160	120-200	100-180	
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.06-0.12	0.08-0.25	0.06-0.12	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	
			4(一般) Normal	Vc(m/min)	80-110	80-110	90-130	90-120	100-150	90-130	100-150	90-140	100-160	90-140	100-160	90-140	-
				fz(mm/z)	0.08-0.12	0.06-0.1	0.08-0.12	0.06-0.1	0.08-0.18	0.06-0.1	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	-
			6.0(差) Difficult	Vc(m/min)	60-90	50-70	60-90	50-70	70-100	50-70	70-100	50-70	70-100	50-70	-	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.12	0.06-0.1	0.06-0.15	0.06-0.1	0.08-0.2	0.08-0.15	-	-	-	-	-
M	铸造不锈钢 Cast stainless steel	铁素体 & 马氏体 Ferritic & Martensitic	2.5(高) Good	Vc(m/min)	90-130	100-130	120-150	110-140	120-160	100-150	130-200	120-180	140-200	120-160	140-200	120-180	
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.06-0.12	0.08-0.25	0.06-0.12	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	
			4(一般) Normal	Vc(m/min)	70-110	80-110	90-130	90-120	100-150	90-130	110-150	90-150	100-160	90-140	100-160	90-140	-
				fz(mm/z)	0.08-0.12	0.06-0.1	0.08-0.12	0.06-0.1	0.08-0.18	0.06-0.1	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	-
			6.0(差) Difficult	Vc(m/min)	60-90	50-70	60-90	50-70	70-100	50-70	70-100	50-70	70-100	50-70	-	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.12	0.06-0.1	0.06-0.15	0.06-0.1	0.08-0.2	0.08-0.15	-	-	-	-	-
M	铸造不锈钢 Cast stainless steel	奥氏体 Austenitic	2.5(高) Good	Vc(m/min)	80-120	70-110	100-150	90-140	110-150	100-150	130-180	120-180	120-200	100-160	120-200	100-180	
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.06-0.12	0.08-0.25	0.06-0.12	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	
			4(一般) Normal	Vc(m/min)	70-100	70-100	80-130	70-120	90-140	90-130	100-140	90-140	100-160	90-140	100-160	90-140	-
				fz(mm/z)	0.08-0.12	0.06-0.1	0.08-0.12	0.06-0.1	0.08-0.18	0.06-0.1	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	-
			6.0(差) Difficult	Vc(m/min)	60-90	50-70	60-90	50-70	70-100	50-70	70-90	50-70	70-90	50-70	-	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.12	0.06-0.1	0.06-0.15	0.06-0.1	0.08-0.2	0.08-0.15	-	-	-	-	-

注：当双刃镗削变成错齿镗或单齿镗时，切削进给降低 50%
Note: The feed should be 50% of recommended when staggered or single tooth cutting.

USER GUIDE 用户指南

粗镗刀切削参数

Recommended Cutting Data for Rough Boring

ISO	被加工材料 work-piece material	硬度 HB Hardness	悬伸 (稳定性) L/D Overhang L/D	镗削范围 D20-35 Boring range		镗削范围 D35-55 Boring range		镗削范围 D55-70 Boring range		镗削范围 D70-110 Boring range		镗削范围 D110-150 Boring range		镗削范围 D150- Boring range		
				Ap(mm)	0.5-1.0	1.0-1.8	0.5-1.0	1.0-1.8	0.5-1.2	1.2-2.0	0.8-1.8	1.8-2.5	0.8-2.0	2.0-3.0	0.8-2.0	2.0-3.5
				R(Radius)	0.2	0.4	0.2-0.4	0.4	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8
K	灰铸铁 GG 10-25 Grey cast iron	HB<200	2.5(高) Good	Vc(m/min)	120-160	100-140	120-180	110-150	120-180	110-150	120-200	110-150	150-250	180-280	150-250	180-280
				fz(mm/z)	0.06-0.15	0.06-0.18	0.06-0.15	0.06-0.12	0.08-0.2	0.08-0.12	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.35	0.08-0.25	0.08-0.35
			4(一般) Normal	Vc(m/min)	100-140	80-120	100-150	80-120	100-150	80-120	100-150	80-120	120-170	120-170	-	-
				fz(mm/z)	0.06-0.12	0.06-0.1	0.06-0.12	0.06-0.1	0.08-0.12	0.08-0.1	0.08-0.18	0.08-0.2	0.08-0.18	0.08-0.25	-	-
			6.0(差) Difficult	Vc(m/min)	70-100	60-90	70-100	60-90	70-100	60-90	70-100	60-90	-	-	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.08-0.1	0.08-0.1	0.08-0.15	0.08-0.12	-	-	-	-
K	灰铸铁 GG 10-25 Grey cast iron	HB<200	2.5(高) Good	Vc(m/min)	140-200	140-200	140-220	160-250	180-220	220-280	250-300	250-350	250-350	250-350	250-350	
				fz(mm/z)	0.06-0.15	0.06-0.18	0.06-0.15	0.06-0.18	0.08-0.2	0.1-0.25	0.12-0.35	0.12-0.35	0.15-0.3	0.15-0.4	0.15-0.3	0.15-0.4
			4(一般) Normal	Vc(m/min)	120-160	120-160	120-180	140-200	140-180	180-220	200-270	230-300	200-300	200-270	-	-
				fz(mm/z)	0.06-0.12	0.06-0.14	0.06-0.12	0.06-0.14	0.08-0.12	0.08-0.2	0.1-0.25	0.12-0.3	0.15-0.3	0.15-0.35	-	-
			6.0(差) Difficult	Vc(m/min)	70-100	60-90	70-100	60-90	60-100	60-120	70-150	60-120	-	-	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.08-0.1	0.08-0.1	0.1-0.15	0.12-0.25	-	-	-	-
K	铸铁 GGG Cast iron	球墨铸铁 Spheroidal graphite cast iron	2.5(高) Good	Vc(m/min)	120-180	120-180	120-200	140-220	180-220	180-240	200-240	200-280	200-280	220-300	220-300	220-300
				fz(mm/z)	0.06-0.15	0.06-0.18	0.06-0.15	0.06-0.18	0.08-0.18	0.1-0.2	0.12-0.3	0.12-0.3	0.15-0.3	0.15-0.35	0.15-0.3	0.15-0.35
			4(一般) Normal	Vc(m/min)	120-160	120-160	120-180	140-200	140-200	160-220	160-220	180-240	180-250	200-270	-	-
				fz(mm/z)	0.06-0.12	0.06-0.14	0.06-0.12	0.06-0.14	0.08-0.12	0.08-0.18	0.1-0.2	0.12-0.25	0.15-0.25	0.15-0.35	-	-
			6.0(差) Difficult	Vc(m/min)	60-100	60-90	60-100	60-90	60-90	60-100	60-100	60-100	-	-	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.08-0.1	0.08-0.1	0.1-0.15	0.12-0.2	-	-	-	-

注：当双刃镗削变成错齿镗或单齿镗时，切削进给降低 50%
Note: The feed should be 50% of recommended when staggered or single tooth cutting.

USER GUIDE 用户指南

粗镗刀切削参数

Recommended Cutting Data for Rough Boring

ISO	被加工材料 work-piece material	硬度 HB Hardness	悬伸 (稳定性) L/D Overhang L/D	镗削范围 D20-35 Boring range		镗削范围 D35-55 Boring range		镗削范围 D55-70 Boring range		镗削范围 D70-110 Boring range		镗削范围 D110-150 Boring range		镗削范围 D150- Boring range		
				Ap(mm)	0.5-1.5	1.5-2.5	0.5-1.5	1.5-2.5	0.5-2.0	1.2-3.0	0.8-3.0	1.8-4.0	0.8-3.0	2.0-4.0	0.8-3.0	2.0-4.5
				R(Radius)	0.2	0.4	0.2-0.4	0.4	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8
K	铝合金 / 铸造 Cast aluminum alloys	Si>12%	2.5(高) Good	Vc(m/min)	200-300	240-350	200-300	240-350	200-300	240-350	200-300	240-350	200-300	240-350		
				fz(mm/z)	0.06-0.2	0.06-0.25	0.06-0.2	0.06-0.25	0.06-0.25	0.06-0.3	0.06-0.25	0.06-0.3	0.06-0.25	0.06-0.4	0.06-0.25	0.06-0.4
			4(一般) Normal	Vc(m/min)	150-220	150-220	150-220	150-220	150-220	150-220	150-220	150-220	150-220	150-220	-	-
				fz(mm/z)	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	-	-
			6.0(差) Difficult	Vc(m/min)	60-100	60-100	60-100	60-100	60-100	60-100	60-100	60-100	60-100	60-100	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	-	-
K	铝合金 / 铸造 Cast aluminum alloys	Si<12%	2.5(高) Good	Vc(m/min)	180-250	220-280	180-250	220-280	180-250	220-280	180-250	220-280	180-250	220-280		
				fz(mm/z)	0.06-0.2	0.06-0.25	0.06-0.25	0.06-0.25	0.06-0.25	0.06-0.3	0.06-0.25	0.06-0.3	0.06-0.3	0.06-0.4	0.06-0.3	0.06-0.4
			4(一般) Normal	Vc(m/min)	120-220	120-220	120-220	120-220	120-220	120-220	120-220	120-220	120-220	120-220	-	-
				fz(mm/z)	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.25	0.06-0.25	0.06-0.25	0.06-0.25	0.06-0.25	-	-
			6.0(差) Difficult	Vc(m/min)	60-100	60-100	60-100	60-100	60-100	60-100	60-100	60-100	60-100	60-100	-	-
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	-	-

注：当双刃镗削变成错齿镗或单齿镗时，切削进给降低 50%
Note: The feed should be 50% of recommended when staggered or single tooth cutting.

USER GUIDE 用户指南

精镗刀切削参数

Recommended Cutting Data for Finish Boring

被加工材料 work-piece material	悬深 L/D Overhang L/D	稳定性 Stability	切削速度 Vc=m/min Cutting speed	切削进给 f=mm/rev		Ap(mm)	刀片合金牌号 Grade
				刀片刀尖角 Radius			
				R=0.2	R=0.4		
碳钢 Hb≤200	2.5	高 Good	200-300	0.05-0.08	0.08-0.1	0.1-0.25	SC1010 SC1220 SC1030
	4	一般 Normal	160-250	0.05-0.08	0.08-0.1		
	6	差 Difficult	70-100	0.05-0.08	-		
碳钢 Hb≥200	2.5	高 Good	160-250	0.05-0.08	0.08-0.1	0.1-0.25	SC1010 SC1220 SC1030
	4	一般 Normal	150-200	0.05-0.08	0.08-0.1		
	6	差 Difficult	70-100	0.05-0.08	-		
合金钢 Low alloyed steel	2.5	高 Good	150-200	0.05-0.08	0.08-0.1	0.1-0.25	SC1010 SC9125
	4	一般 Normal	120-160	0.05-0.08	0.08-0.1		
	6	差 Difficult	70-80	0.05-0.08	-		
合金钢 HB 480-550 Low alloyed steel	2.5	高 Good	120-160	0.05-0.08	0.08-0.1	0.1-0.25	SC9125 SC2010
	4	一般 Normal	100-140	0.05-0.08	0.08-0.1		
	6	差 Difficult	70-100	0.05-0.08	-		
铸铁 Castiron	2.5	高 Good	120-160	0.05-0.08	0.08-0.1	0.1-0.25	SC3010 SC3020 SC3015
	4	一般 Normal	100-140	0.05-0.08	0.08-0.1		
	6	差 Difficult	70-100	0.05-0.08	-		
铝合金 Aluminum alloy	2.5	高 Good	300-400	0.05-0.08	0.08-0.1	0.1-0.25	SC4015 SC4020 SC4025
	4	一般 Normal	250-350	0.05-0.08	0.08-0.1		
	6	差 Difficult	100-150	0.05-0.08	-		
不锈钢 Stainless steel	2.5	高 Good	160-210	0.05-0.08	0.08-0.1	0.1-0.25	SC2010 SC9125
	4	一般 Normal	120-160	0.05-0.08	0.08-0.1		
	6	差 Difficult	70-90	0.05-0.08	-		

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可转位铣刀参数

Recommended Cutting Data for Milling

ISO	被加工材料 Material	材料类型 Condition	抗拉强度 [N/MM2] Tensile strength (N/mm2)	硬度 HB Hardness	SC 1135	SC 1020	SC 9125	SC 3115	SC 1230	SC 4030	
P	非合金钢、铸钢、 易切削钢 Unalloyed steel, cast steel, free cutting steel	<0.25%C 退火 Annealed	420	125	170-220	210-350	380-400	230-390	200-220	80-110	
		>=0.25%C 退火 Annealed	650	190	160-190	150-250	305-325	16-270	150-190	70-90	
		<0.55%C 调质 Quenched and tempered	850	250	100-120	120-200	245-265	130-220	120-150	50-60	
		>=0.55%C 退火 Annealed	750	220	90-110	100-150	240-260	110-160	100-120	40-50	
		- 调质 Quenched and tempered	10000	300	70-100	170-400	205-225	190-440	100-170	40-50	
	低合金钢和铸钢 (合金元素 <5%) Low alloy steeland cast steel (less than 5% of alloying elements)	- 退火 Annealed	600	200	150-200	150-300	245-265	160-330	150-200	70-100	
		- 调质 Quenched and tempered	930	275	110-170	125-250	180-200	140-270	125-170	50-80	
		- 调质 Quenched and tempered	10000	300	100-150	100-200	190-210	110-220	100-150	50-70	
		- 调质 Quenched and tempered	1200	350	90-120	90-175	205-225	100-190	90-150	40-60	
		- 调质 Quenched and tempered	680	200	70-100	75-150	200-220	80-160	75-120	40-50	
M	高合金钢、精钢和工具钢 High alloy steel, cast steel, and tool steel	- 退火 Annealed	680	200	160-270	-	170-290	-	-	80-130	
		- 调质 Quenched and tempered	1100	325	70-90	75-130	110-130	80-140	75-100	30-40	
		- 调质 Quenched and tempered	680	200	160-270	-	170-290	-	-	80-130	
K	不锈钢 Stainless steel	- 铁素体 / 马氏体 Ferritic/martensitic	680	200	160-270	-	170-290	-	-	80-130	
		- 马氏体 Martensitic	820	240	100-250	-	100-260	-	-	50-120	
		- 奥氏体 Austenitic	600	180	120-160	-	130-170	-	-	60-80	
N	球墨铸铁 (GGG) Ductile cast iron(nodular)(GGG)	- 铁素体 / 珠光体 Pearlitic/ferritic	-	180	90-170	70-230	125-380	140-420	-	-	
		- 珠光体 Pearlitic	-	260	70-150	120-210	200-350	220-390	-	-	
		- 灰铸铁 (GG) Grey cast iron (GG)	-	160	160-300	130-240	220-400	240-440	-	-	
		- 珠光体 Pearlitic	-	250	140-250	80-240	130-400	140-440	-	-	
		- 铁素体 Ferritic	-	130	220-410	130-240	220-400	240-440	-	-	
S	可锻铸铁 Malleable cast iron	- 铁素体 Ferritic	-	230	200-360	120-210	200-350	220-390	-	-	
		- 珠光体 Pearlitic	-	230	200-360	120-210	200-350	220-390	-	-	
		- 未硬化 Not cureable	-	60	-	-	1180-1220	-	-	480-640	
		- 硬化 Cured	-	100	-	-	1070-1210	-	-	400-650	
		- 未硬化 Not cureable	-	75	-	-	1180-1220	-	-	50-640	
	H	铸造铝合金 Cast aluminium alloys	≤12% Si 未硬化 Not cureable	-	75	-	-	1180-1220	-	-	50-640
			- 硬化 Cured	-	90	-	-	1070-1210	-	-	400-560
			>12% Si 高温 High temperature	-	130	-	-	470-490	-	-	240-320
			>1% Pb 易切削 Free cutting	-	110	-	-	580-620	-	-	240-320
			- 黄铜 Brass	-	90	-	-	580-620	-	-	240-320
H	铜合金 Copper alloys	- 电解铜 Electrolytic copper	-	100	-	-	400-440	-	-	160-260	
		- 高温度塑料, 纤维塑 料 Duroplastics, fiber plastics	-	-	-	-	-	-	-	-	
		- 硬橡胶 Hard rubber	-	-	-	-	-	-	-	-	
		- 铁基 Fe based	退火 Annealed	-	200	40-50	-	40-50	-	-	20-30
		- 硬化 Cured	-	280	30-40	-	30-40	-	-	20-20	
H	高温合金 Heat-resistant alloys	- 镍基或钴基 Ni or Cobased	退火 Annealed	-	250	30-40	-	30-40	-	20-20	
		- 硬化 Cured	-	350	30-40	-	30-40	-	20-20		
		- 铸造 Cast	-	320	50-100	-	50-100	-	30-60		
		- 钛合金 Titanium alloys	-	RM 400	-	50-100	-	50-100	-	30-60	
		- 硬化钛合金 (Ti6Al4V) Alpha+beta alloys cured	-	RM 1050	-	50-100	-	50-100	-	30-60	
H	淬硬钢 Hardened steel	- 淬硬 Hardened	-	55 HRC	-	-	-	-	-		
		- 淬硬 Hardened	-	60HRC	-	-	-	-	-		
		- 淬硬 Hardened	-	-	-	-	-	-	-		
H	冷硬铸铁 Hardened cast iron	- 铸造 Cast	-	400	-	-	-	-	-		
		- 淬硬 Hardened	-	55 HRC	-	-	-	-	-		

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可转位铣刀参数

Recommended Cutting Data for Milling

ISO	被加工材料 Material	材料类型 Condition	抗拉强度 [N/MM2] Tensile strenght (N/mm2)	硬度 HB Hardness	SC 4010	SC 2010	SC 1225	SC 4020	SC 9030	SC 1215	SC 3210	
P	非合金钢、铸钢、 易切削钢 Unalloyed steel, cast steel, free cutting steel	<0.25%C 退火 Annealed	420	125	-	-	110-150	-	170-220	280-420	-	
		>=0.25%C 退火 Annealed	650	190	-	-	90-110	-	140-180	240-380	-	
		<0.55%C 调质 Quenched and tempered	850	250	-	-	80-100	-	130-150	200-340	-	
		>=0.55%C 退火 Annealed	750	220	-	-	70-90	-	100-120	220-360	-	
	低合金钢和铸钢 (合金元素 <5%) Low alloy steel and cast steel (less than 5% of alloying elements)	退火 Annealed	600	200	-	-	90-120	-	150-210	200-340	-	
		调质 Quenched and tempered	930	275	-	-	70-100	-	100-180	200-320	-	
		调质 Quenched and tempered	10000	300	-	-	70-90	-	90-170	190-300	-	
		调质 Quenched and tempered	1200	350	-	-	60-90	-	70-140	180-280	-	
		高合金钢、精钢和工具钢 High alloy steel, cast steel, and tool steel	退火 Annealed	680	200	-	-	60-70	-	70-100	200-320	-
		调质 Quenched and tempered	1100	325	-	-	50-90	-	60-120	180-280	-	
M	不锈钢 Stainless steel	铁素体 / 马氏体 Ferritic/martensitic	680	200	60-110	160-250	-	80-130	100-180	-	-	
		马氏体 Martensitic	820	240	40-100	160-250	-	80-100	90-160	-	-	
		奥氏体 Austenitic	600	180	40-80	100-200	-	70-90	60-120	-	-	
K	球墨铸铁 (GGG) Ductile cast iron(nodular)(GGG)	铁素体 / 珠光体 Pearlitic/ferritic	-	180	-	-	-	-	70-180	140-280	200-350	
		珠光体 Pearlitic	-	260	-	-	-	-	70-140	120-240	120-330	
	灰铸铁 (GG) Grey cast iron (GG)	铁素体 Ferritic	-	160	-	-	-	-	100-180	150-350	150-250	
		珠光体 Pearlitic	-	250	-	-	-	-	70-190	200-300	130-220	
可锻铸铁 Malleable cast iron	铁素体 Ferritic	-	130	-	-	-	-	110-210	180-320	200-350		
	珠光体 Pearlitic	-	230	-	-	-	-	100-190	150-250	180-330		
N	锻造铝合金 Aluminium wrought alloys	未硬化 Not cureable	-	60	800-900	-	530-690	480-690	-	-	-	
		硬化 Cured	-	100	700-800	-	450-510	400-510	-	-	-	
	铸造铝合金 Cast aluminium alloys	≤12% Si 未硬化 Not cureable	-	75	800-900	-	100-690	120-670	-	-	-	
		硬化 Cured	-	90	750-850	-	450-510	400-510	-	-	-	
		>12% Si 高温 High temperature	-	130	400-450	-	250-370	200-340	-	-	-	
	铜合金 Copper alloys	>1% Pb 易切削 Free cutting	-	110	500-550	-	290-370	250-320	-	-	-	
		黄铜 Brass	-	90	500-550	-	290-370	250-330	-	-	-	
	非金属 Non-metallic	电解铜 Electrolytic copper	-	100	350-380	-	210-290	230-260	-	-	-	
		高温塑料, 纤维塑料 Duroplastics, fiber plastics	-	-	-	-	-	-	-	-	-	
	S	高温合金 Heat-resistant alloys	铁基 Fe based	退火 Annealed	-	200	10-20	50-80	-	20-35	35-50	-
硬化 Cured			-	280	10-20	40-65	-	10-25	30-45	-		
镍基或钴基 Ni or Cobased			退火 Annealed	-	250	20-50	45-60	-	10-25	25-35	-	
硬化 Cured			-	350	20-50	35-45	-	10-25	25-30	-		
钛合金 Titanium alloys		-	铸造 Cast	-	320	20-50	30-50	-	30-50	35-75	-	
		硬化钛合金 (Ti6Al4V) Alpha+beta alloys cured	RM 400	-	20-30	150-200	-	20-45	35-75	-	-	
H	淬硬钢 Hardened steel	淬硬 Hardened	-	55 HRC	-	-	-	-	-	-	-	
		淬硬 Hardened	-	60HRC	-	-	-	-	-	-	-	
	冷硬铸铁 Hardened cast iron	铸造 Cast	-	400	-	-	-	-	-	-	-	
铸造 Cast iron	淬硬 Hardened	-	55 HRC	-	-	-	-	-	-	-		

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表面粗糙度理论计算公式

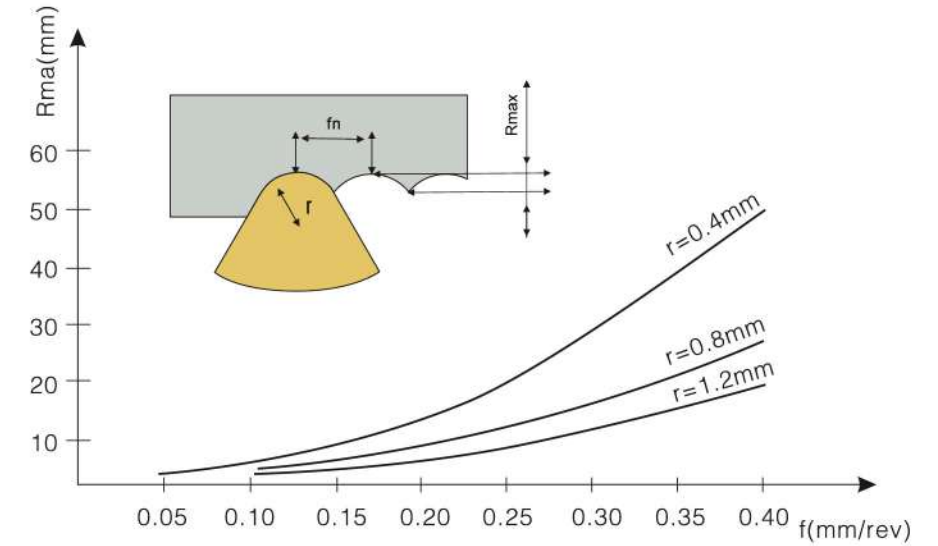
Achievable Surface Quality

$$R_{max} = \frac{f_n^2}{8r} \times 1000, \mu m$$

R_{max}=残留面积高度, μm

r=刀尖半径, mm

f_n=每转进给, mm/rev



表面粗糙度与刀尖半径、进给量的关系表

Achievable Surface Quality with Insert Radius and Feed Rate

Rt	Ra ISO 1302		刀尖半径及进给量 (mm/rev) Radius and feed			
			R=0.4	r=0.8	r=1.2	r=1.6
√Rt100	12.5-25	25	-	0.51	0.69	0.88
√Rt63	6.3-25	12.5	0.27	0.43	0.56	0.68
√Rt40	4.9-6.3	6.3	0.25	0.37	0.49	0.57
√Rt31.5	4.0-4.9	3.2	0.22	0.32	0.41	0.47
√Rt25	2.5-4.0	3.2	0.20	0.28	0.36	0.39
√Rt16	1.6-2.5	1.6	0.15	0.22	0.29	0.31
√Rt10	1.0-1.6	1.6	0.10	0.13	0.18	0.20

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镗刀选择指南

Boring Tools Select

在为振动敏感的工序选择镗刀时应考虑的因素

The factors should be considered in selecting boring tool when the process has to be vibrated.

* 在选择接近 90° 的主偏角，但不能小于 75°，使径向力最小
*Selecting the approach angle closed to 90° but not small than 70° when the radial force is the least.

* 选择小的刀尖半径
*Selecting the least diameter of tool nose

* 选择正前角刀片
注意：避免使用后刀面过度磨损的刀片！
*Selecting the insert with front angle
Please note: avoid the use of the insert with back wear down

通常的刀半径如图所示，从圆角到 35 度
The ordinary radius please see the right figure, which is from radius to 35°

■图例向左刀尖角越大，刀尖强度越好，向右刀尖角越小，刀尖强度越弱，通用性越高
*Please see the figure: the tool angle on the left is larger the strength is better; the tool angle on the right is smaller the rigidity is weaker but better universality.

■图例向右刀尖强度减弱，但加工时的振动倾向减小，所需功率减小
*If the strength is weaker, the vibration will be cut down, meanwhile the required power is decreased.

刀尖半径和进给

Nose Radius and Feed

刀尖半径主要影响以下几方面：

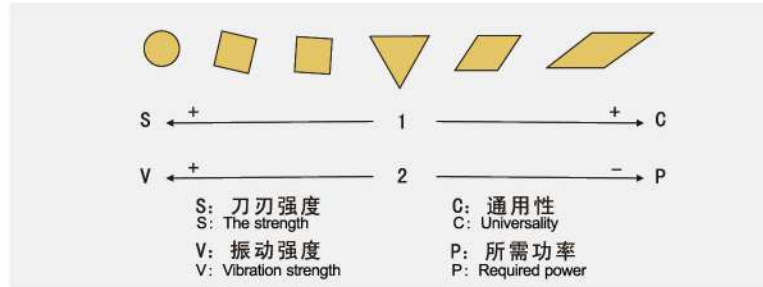
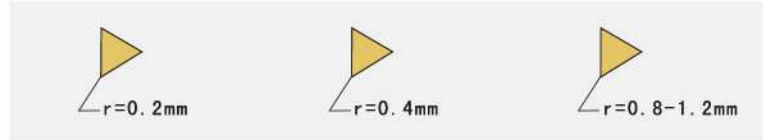
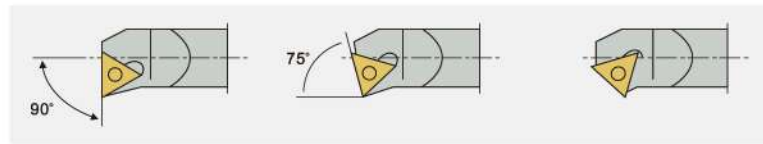
- * 粗加工中的刀刃强度
 - * 精加工中的表面精度
- The nose radius affected the below points:
"The strength when rough machining
"The roughness of finish machining

- 精加工
* 为提高刀刃强度，尽可能选择大刀尖半径
* 大刀尖半径可允许较大进给
* 如有振动倾向，选择较小刀尖半径

Finish machining
*In order to enhance the strength, please select the tool with larger nose radius
"Higher feed for larger nose radius
*Please select the tool with smaller nose radius if there is a tendency of vibration

当为粗加工选择进给量时，不要超过右表推荐值，作为经验法则，进给量可如下选择：

$F_n = 0.5 \times \text{刀尖半径}$
When selecting the feed for rough machining, the value should not be out of the ones in the table on the right, and the formula for the proper feed please see below:
 $f_n = 0.5 \times \text{Nose radius}$



不同刀尖半径最大进给指南

User guide for the max feed of different nose radius

刀尖半径 rmm Nose radius	0.4	0.8	1.2	1.6	2.4
最大推荐进给 f_n mm/rev Recommended max feed	0.25-0.35	0.4-0.7	0.5-1.0	0.7-1.3	1.0-1.8

粗加工时，常用刀片的刀尖半径是 0.8-1.6mm

上表中，最大推荐进给量是刀尖半径的 2/3

The universal radius is 0.8-1.6mm when rough machining.

The recommended highest feed should not be out of 2/3 radius in the above table

大进给量用于以下刀片：

- * 刀刃强度高且至少有 60° 刀尖角
- * 刀具主偏角小于 90°
- * 被加工材料有良好的加工性，中低等切削速度

The higher feed is suitable for below inserts:

"The radius is no smaller than 60° and with higher strength

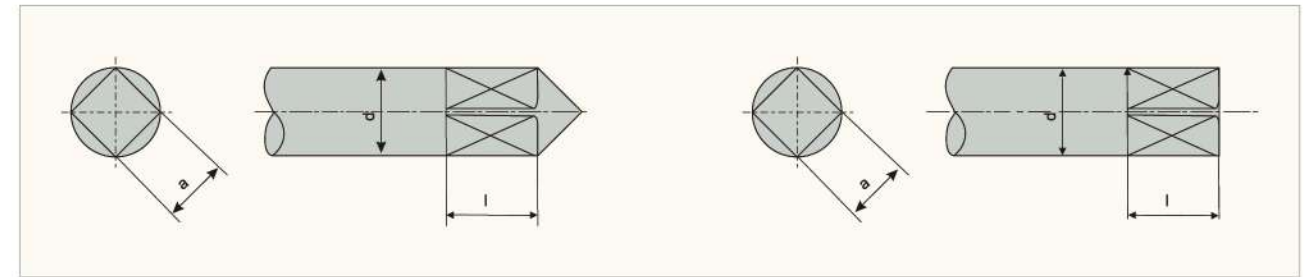
"The approach angle smaller than 90°

"For tough materials and with medium and low cutting speeds

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丝锥柄部方头尺寸

Dimensions of Tap Shank



ISO					JIS				DIN				
柄部尺寸 Shank			丝锥型号 Tap		柄部尺寸 Shank			丝锥型号 Tap	柄部尺寸 Shank			丝锥型号 Tap	
d	a	l	(1) ISO529	(2) ISO529 ISO2283	d	a	l	(3) JISB4430	d	a	l	(4) DIN371	(5) DIN374 DIN376
2.24	1.80	4	-	M3.0	3.00	2.5	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
2.50	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	-
7.10	5.60	8	M7.0	M9.0	10.50	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	35.00	26.00	30	M45	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	-	-	-	-	-	-	-	-	-

- * (1)、(4) 为粗柄普通牙螺纹丝锥
- * (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
- * (1)、(4) The taps with ordinary pitch and thick shank
- * (2)、(5) The taps with ordinary coarse pitch and thin shank
- * (3) The taps with ordinary coarse pitch and equal dia

USER GUIDE 用户指南

弹簧夹头的安装

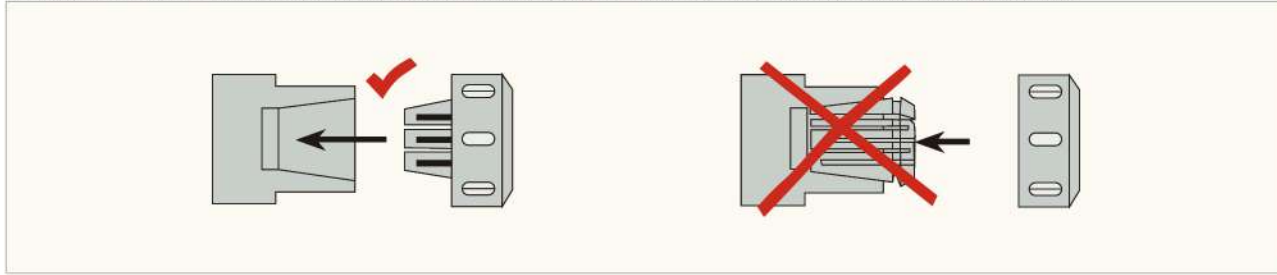
Assembly Instruction for Collet Chuck

在安装弹簧夹头之前，必须先将 ER 卡簧装入螺母之中，如图所示

为了获得最好的性能，在安装弹簧夹头之前，必须将 ER 卡簧，ER 螺母螺纹部分及定位面、夹套锥面清理干净！

Always assemble ER collet into the nut before mounting onto the collet chuck.

For maximum performance, the ER collet, ER nut, thread and collet taper must be cleaned before mounting onto the collet chuck!



ER 夹紧螺母推荐使用扭矩：

Recommended Torque for ER Nut Clamping

规格型号 Designation	ER11-M	ER11	ER16-M	ER16	ER20-M	ER20	ER25	ER32	ER40
扭矩 (Kg·M)	3	5	4	7	8	12	20	22	25

表中扭矩是以 ER 卡簧夹持最大直径能力计算的，当使用较小尺寸的刀柄时，其扭矩应该适当减少。

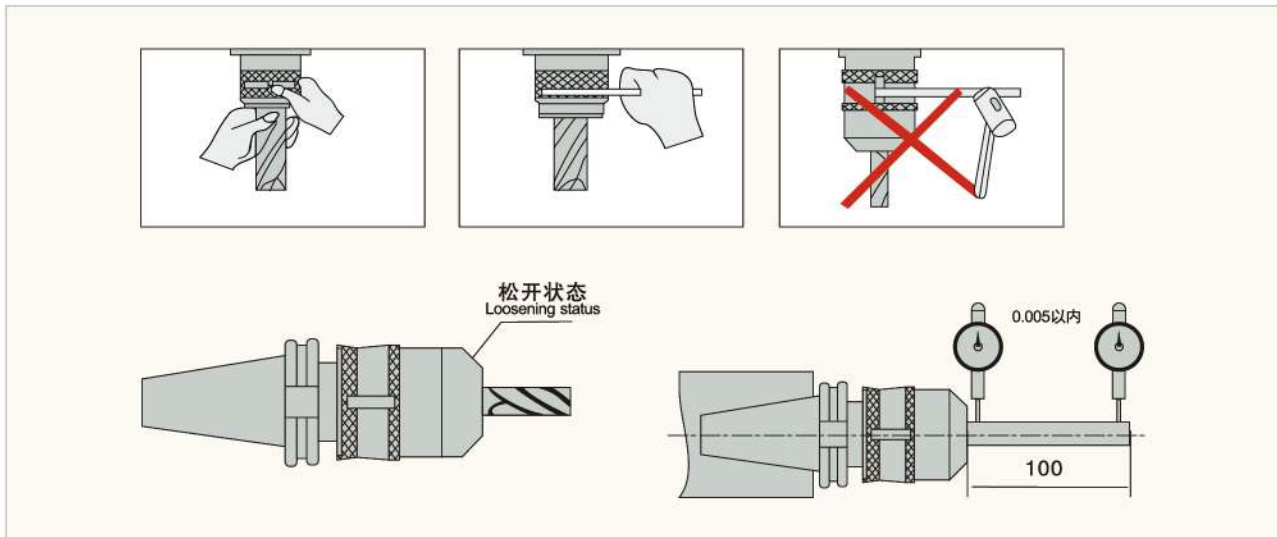
The torque in the above table is calculated with the maximum diameter capacity per collet which should be gradually reduced when used with a smaller shank size

强力铣夹头刀柄的特点

Features of Power Chuck

夹紧力最大，使用简单—夹紧安全可靠

The most powerful gripping force and simple operation which is for the safe and reliable clamping



• 精度高，寿命长—更有利于保护刀具，延长刀具寿命

• 刚度高—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

• Higher precision and longer tool life which is for protecting the tool and

• Higher rigidity which is suitable for large cutting amount machining

• Superior durability due to the reason that the pressure can be afforded by the needle roller

DIMENSIONS AND DESIGN FEATURES 刀具标准尺寸

侧固刀柄接口尺寸

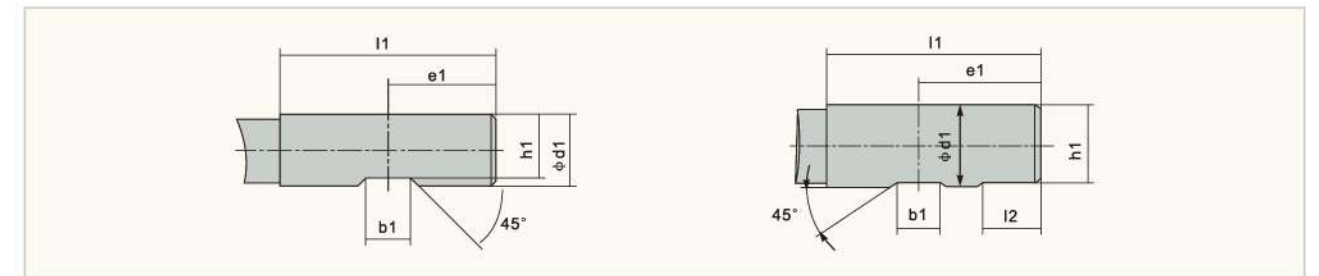
Dimensions of Weldon Adaptor



d1 (H5)	d2 (0-1)	d3 (6H)	d4 min	e3 (0/0.1)	e4 (±0.5)	l3 (±1)	t1
6	25	M6	8	18.0	-	35	1.0
8	28	M8	10	18.0	-	35	1.3
10	35	M10	12	20.0	-	39	1.5
12	42	M12	14	22.5	-	44	1.6
14	44	M12	14	22.5	-	44	1.6
16	48	M14	16	24.0	-	47	1.7
18	50	M14	16	24.0	-	47	1.7
20	52	M16	18	25.0	-	49	2.1
25	65	M18×2	20	24.0	25	54	2.1
32	72	M20×2	22	24.0	28	58	2.2
40	90	M24	26	30.0	32	68	2.2

侧固刀柄接口尺寸 (DIN 1835-B)

Dimensions of DIN1835-B Weldon Adaptor

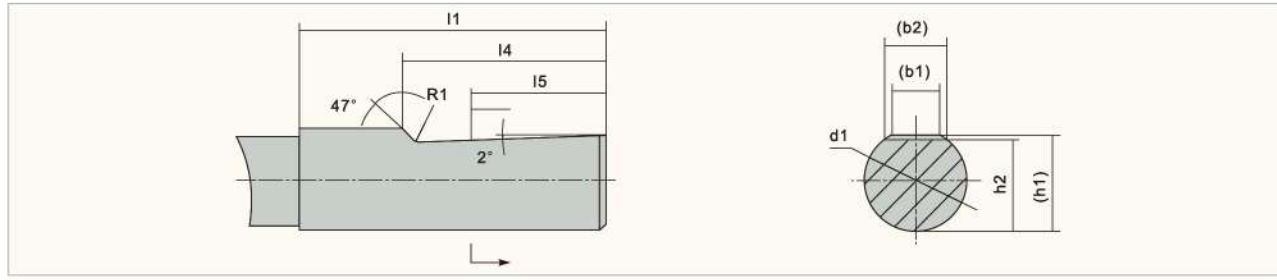


d1 (h6)	l1 (+2 0)	b1 (0.05 0)	l2 (+1 0)	e1 (-1 0)	h1 (h11)
6	36	4.2	-	18.0	5.1
8	36	5.5	-	18.0	6.9
10	40	7.0	-	20.0	8.5
12	45	8.0	-	22.5	10.4
14	45	8.0	-	22.5	12.7
16	48	10.0	-	24.0	14.2
18	48	10.0	-	24.0	16.2
20	50	11.0	-	25.0	18.2
25	56	12.0	17	32.0	23.0
32	60	14.0	19	35.0	30.0

DIMENSIONS AND DESIGN FEATURES 刀具标准尺寸

2° 削平柄尺寸 (DIN 1835-E)

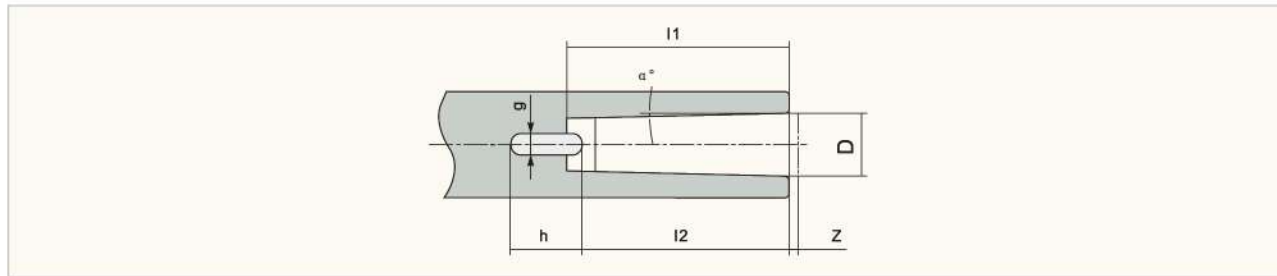
Dimensions of DIN1835-E Whistle Notch Adaptor



d1 (h6)	(b1) ≈	(b2)	(h1)	h2 (h13)	l1 ($^{+2}_0$)	l4 ($^{+0.1}_0$)	l5	R1 min
6	3.5	4.8	5.4	4.8	36	25	18	1.2
8	4.7	6.1	7.2	6.6	36	25	18	1.2
10	5.7	7.3	9.1	8.4	40	28	20	1.2
12	6.0	8.2	11.2	10.4	45	33	22.5	1.2
16	7.6	10.1	15.0	14.2	48	36	24	1.6
20	8.4	11.5	19.1	18.2	50	38	25	1.6
25	9.3	13.6	24.1	23.0	56	44	32	1.6
32	9.9	15.5	31.2	30.036	60	48	35	1.6

扁尾型莫氏锥柄连接尺寸 (DIN 228-D)

Dimensions of DIN228-D Morse Taper with Tang Adaptor

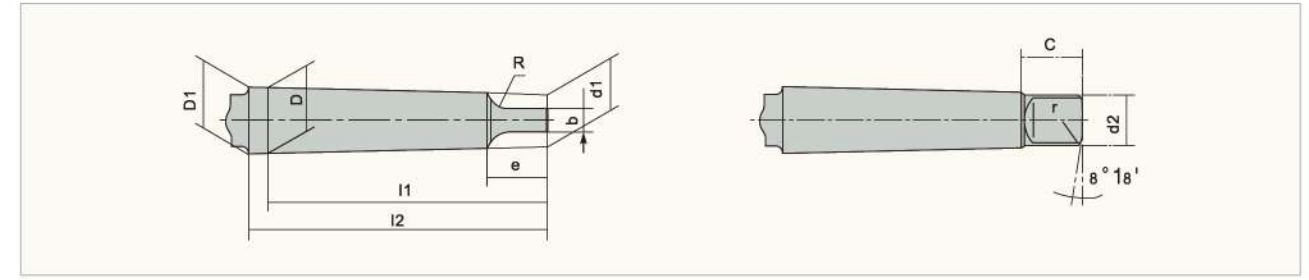


锥度号 Taper	锥度 Taper	锥角 (a°) Tangle	D	l1(min)	l2	g	h	z	对应钻头直径范围 (mm) Dia. of drill	
MT0	1/19.212	0.05205	1° 29'27"	9.045	52	49	4.1	15	1	-
MT1	1/20.047	0.04988	1° 25'43"	12.065	56	52	5.4	19	1	3.00-14.00
MT2	1/20.202	0.04995	1° 25'50"	17.780	67	62	6.6	22	1	14.00-23.00
MT3	1/19.922	0.05020	1° 26'16"	23.825	84	78	8.2	27	1	23.00-32.00
MT4	1/19.254	0.05194	1° 29'15"	31.267	107	98	12.2	32	1.5	32.00-50.00
MT5	1/19.002	0.05263	1° 30'26"	44.399	135	125	16.2	38	1.5	50.00-75.00
MT6	1/19.180	0.05214	1° 29'36"	63.348	188	177	19.3	47	2	75.00-100.00
MT7	1/19.231	0.05200	1° 29'22"	83.058	258	241	28.8	69	2	-

DIMENSIONS AND DESIGN FEATURES 刀具标准尺寸

有扁尾莫氏锥柄 (DIN 1838-B)

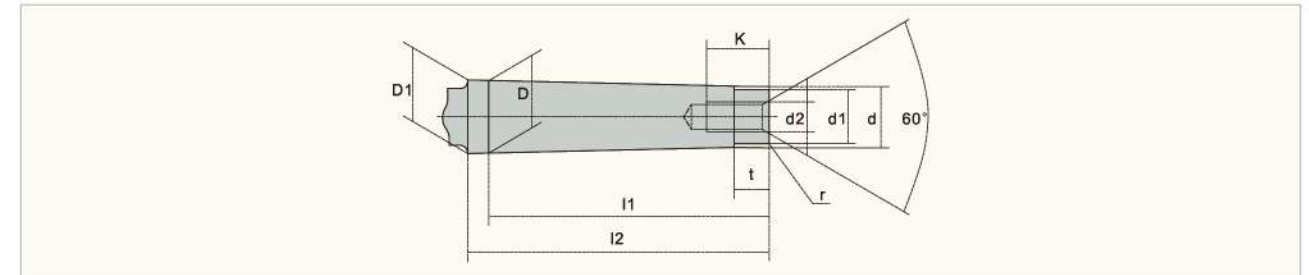
Dimensions of DIN228-B Morse Taper with Tang End



锥度号 Taper	D	D1	d1	d2	l1	l2	b	c	e	R	r	对应铣刀直径范围 (mm) Dia. of milling cutter
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	31.605	25.164	24.5	117.5	124.0	11.9	16.0	24.0	8	2.5	32.00-50.00
MT5	44.399	44.741	36.531	35.7	149.5	156.0	15.9	19.0	29.0	12	3	50.00-75.00
MT6	63.348	63.765	52.399	51.0	210.0	218.0	19.0	27.0	40.0	18	4	75.00-100.00
MT7	83.058	83.578	68.182	66.8	286.0	296.0	28.6	35.0	54.0	19	5	-

无扁尾莫氏锥柄 (DIN 228-A)

Dimensions of DIN228-A Morse Taper with Draw Thread



锥度号 Taper	D	D1	d	d1	l1	l2	t	r	d2	K	对应铣刀直径范围 (mm) Dia. of milling cutter
MT0	9.045	9.201	6.442	8	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	24	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	10	2.5	M20	40	40.00-63.00
MT6	63.348	63.765	53.859	51	182	190	16	4.0	M24	47	-
MT7	83.058	83.578	70.052	65	250	260	18.5	5.0	M33	60	-

CONVERSION TABLE 换算表

国际单位换算表

Conversion for International Units

压力

Pressure

Pa	Kpa	Mpa	bar	Kgf/cm	atm	mmH ₂ O	mmHg (Tom)
1	1×10 ⁻³	1×10 ⁻⁶	1×10 ⁻⁵	1.01972×10 ⁻⁵	9.86923×10 ⁻⁵	1.01972×10 ⁻⁵	7.50062×10 ⁻³
1×10 ³	1	1×10 ⁻³	1×10 ⁻²	1.01972×10 ⁻²	9.86923×10 ⁻²	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 ⁵	1×10 ²	1×10 ⁻¹	1	1.01972	9.86923×10 ⁻¹	1.01972×10 ⁴	7.50062×10 ²
9.80665×10 ⁴	9.80665×10	9.80665×10 ⁻²	9.80665×10 ⁻²	1	9.67841×10 ⁻¹	1×10 ⁴	7.35559×10 ²
1.01325×10 ⁵	1.01325×10 ²	1.01325×10 ⁻¹	1.01325×10 ⁻¹	1.03323	1	1.03323×10 ⁴	7.60000×10 ²
9.80665	9.80665×10 ⁻³	9.80665×10 ⁻⁶	9.80665×10 ⁻⁶	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 ⁴	1.35951×10 ⁻³	1.35951×10 ⁻³	1.35951×10	1

功效、能量、热量

Efficacy, Energy, Caloric

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

W	Kgf·m/S	PS	Kcal/h
1	1.01972×10 ⁻¹	2.77778×10 ⁻³	8.6000×10 ⁻¹
9.80665	1	1.33333×10 ⁻²	8.43371
7.355×10 ²	7.5×10	1	6.32529×10 ²
1.16279	1.18572×10 ⁻¹	1.58095×10 ⁻³	1

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/mm ²)	Kgf/mm ²	Kgf/cm ²
1	1×10 ⁻⁶	1.01972×10 ⁻³	1.01972×10 ⁻³
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/M²

CONVERSION TABLE 换算表

强度 \ 硬度换算表

Conversion Table for Hardness and Tensile strength

序 号 SN	洛氏 硬度 Rockwell hardness	洛氏 硬度 Rockwell hardness	维氏 硬度 Vickers hardness	布氏 硬度 Brinell hardness	布氏 硬度 Brinell hardness	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension	抗拉 强度 σ bMPa Intensity of tension
	HRC	HRA	HV	Hb30 D2	D10、 2d5、 4d2.5 mm	碳钢 Carbon steel	铬钢 Chrome steel	铬钒钢 Chrome- vanadium steel	铬镍钢 Chromium nickel steel	铬钼钢 Chrome molybden um steel	铬镍 钼钢 Chromium nickel molyb denum steel	铬锰 硅钢 Chromansil	超强度 钢 Super tough steel	不锈钢 Stainless steel	不分 钢种 General steel
1	17	-	211	211	4.15	736	706	705	772	726	-	757	-	703	724
2	17.5	-	214	214	4.13	744	714	712	775	731	-	763	-	711	731
3	18	-	216	216	4.11	753	723	719	779	737	-	769	-	719	737
4	18.5	-	218	218	4.09	762	731	727	783	743	-	776	-	728	744
5	19	-	221	220	4.07	771	739	735	788	749	-	782	-	737	752
6	19.5	-	223	222	4.05	780	748	743	792	755	-	789	-	745	759
7	20	-	226	225	4.03	790	757	751	797	761	-	796	-	754	767
8	20.5	-	229	227	4.02	799	766	759	802	768	-	803	-	764	774
9	21	-	231	227	4	809	775	767	807	775	-	810	-	773	782
10	21.5	-	234	232	3.97	819	785	776	813	782	-	817	-	782	791
11	22	-	237	234	3.95	829	794	785	819	789	-	825	-	792	799
12	22.5	-	240	237	3.93	839	804	794	825	797	-	832	-	802	808
13	23	-	243	240	3.91	849	814	803	831	805	-	840	-	812	816
14	23.5	-	246	242	3.89	860	824	813	838	813	-	848	-	822	825
15	24	-	249	245	3.87	870	834	823	845	821	-	856	-	832	835
16	24.5	-	252	248	3.85	881	844	833	852	830	-	865	-	843	844
17	25	-	255	251	3.83	892	855	843	860	838	-	874	-	853	854
18	25.5	-	258	254	3.8	903	865	853	868	847	866	882	-	864	864
19	26	-	261	257	3.78	914	876	864	876	857	876	892	-	875	874
20	26.5	-	264	260	3.76	926	887	875	884	867	886	901	-	885	884
21	27	-	268	263	3.74	937	898	886	893	877	897	910	-	897	895
22	27.5	-	271	266	3.72	949	909	897	902	887	907	920	-	908	906
23	28	-	274	269	3.7	961	920	909	912	897	918	930	-	919	917
24	28.5	-	278	273	3.67	972	932	921	922	908	930	941	-	931	928
25	29	-	281	276	3.65	984	943	933	932	919	941	951	-	942	940
26	29.5	-	285	280	3.63	997	955	946	942	931	953	962	-	954	951
27	30	-	298	283	3.61	1009	967	959	953	943	966	973	-	966	964
28	30.5	-	292	287	3.59	1021	979	972	964	955	978	985	-	978	976
29	31	-	296	291	3.56	1034	991	985	976	967	991	996	-	990	989
30	31.5	-	300	294	3.54	1047	1004	999	988	980	1005	1008	-	1003	1001
31	32	-	304	298	3.52	1060	1016	1013	1001	993	1018	1020	-	1015	1015
32	32.5	-	308	302	3.5	1073	1029	1027	1013	1007	1032	1033	-	1028	1028
33	33	-	312	306	3.38	1086	1042	1042	1027	1020	1047	1046	-	1041	1042
34	33.5	-	316	310	3.46	1100	1055	1057	1040	1035	1062	1059	-	1054	1056
35	34	-	320	314	3.43	1113	1068	1072	1054	1049	1077	10733	-	1067	1070
36	34.5	-	324	318	3.41	1127	1082	1088	1069	1064	1092	1086	-	1081	1085
37	35	-	329	323	3.39	1141	1095	1104	1084	1079	1108	1101	-	1095	1100
38	35.5	-	333	327	3.37	1156	1109	1120	1099	1095	1125	1115	-	1109	1115
39	36	-	338	332	3.34	1170	1124	1136	1115	1111	1141	1130	-	1123	1131
40	36.5	-	342	336	3.32	1185	1138	1153	1131	1128	1158	1146	-	1138	1147
41	37	-	347	341	3.3	1200	1153	1171	1148	1144	1176	1161	-	1153	1163
42	37.5	-	352	345	3.28	1215	1168	1188	1165	1162	1194	1177	-	1168	1180
43	38	-	357	350	3.26	1231	1184	1206	1182	1179	1212	1194	-	1184	1197
44	38.5	-	362	355	3.24	1246	1199	125	1200	1197	1231	1211	-	1200	1214
45	39	70	367	360	3.21	1263	1216	1243	1219	1216	1250	1228	1218	1316	1232
46	39.5	70.3	372	365	3.19	1279	1232	1262	1238	1235	1270	1246	1243	1233	1250
47	40	70.5	377	370	3.17	1296	1249	1282	1257	1254	1290	1264	1267	1250	1268
48	40.5	70.8	382	375	3.15	1213	1267	1302	1277	1274	1310	1283	1291	1268	1287
49	41	71.1	388	380	3.13	1331	1284	1322	1298	1294	1331	1302	1315	1286	1307
50	41.5	71.3	393	385	3.11	1348	1303	1342	1319	1315	1353	1322	1339	1305	1327
51	42	71.6	399	391	3.09	1367	1322	1364	1340	1336	1375	1342	1362	1325	1347
52	42.5	71.8	405	396	3.07	1386	1341	1385	1362	1357	1397	1362	1385	1345	1368
53	43	72.1	411	401	3.05	1405	1361	1407	1385	1379	1420	1384	1409	1366	1389
54	43.5	72.4	417	407	3.03	1425	1382	1429	1408	1402	443	1405	1432	1387	1411
55	44	72.6	423	413	3.01	1445	1403	1452	1431	1425	1467	1427	1455	1410	1434

CONVERSION TABLE 换算表

强度 \ 硬度换算表

Conversion Table for Hardness and Tensile strength

序 号 SN	洛氏 硬度 Rockwell hardness	洛氏 硬度 Rockwell hardness	维氏 硬度 Vickers hardness	布氏 硬度 Brinell hardness	布氏 硬度 Brinell hardness	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension	抗拉 强度 σ Intensity of tension
	HRC	HRA	HV	Hb30 D2	D10、 2d5、 4d2.5 mm	碳钢 Carbon steel	铬钢 Chrome steel	铬钒钢 Chromo- vanadium steel	铬镍钢 Chromium nickel steel	铬钼钢 Chromo- molybde- num steel	铬镍 钼钢 Chromium nickel molybde- num steel	铬锰 硅钢 Chromo- mansiil	超强 度钢 Super tough steel	不锈 钢 Stainless steel	不锈 钢 General steel
56	44.5	72.9	429	418	2.99	1466	1426	1475	1455	1448	1491	1450	1479	1433	1457
57	45	73.2	436	424	2.97	1488	1448	1498	1480	1472	1516	1474	1502	1457	1480
58	45.5	73.4	443	430	2.95	1510	1472	1522	1505	1497	1541	1498	1526	1482	1504
59	46	73.7	449	436	2.93	1533	1497	1547	1531	1522	1567	1522	1550	1508	1529
60	46.5	73.9	456	442	2.91	1556	1522	1572	1557	1547	1593	1457	1575	1535	1555
61	47	74.2	463	449	2.89	1581	1549	1597	1584	1573	1620	1573	1600	1563	1581
62	47.5	74.5	470	455	2.87	1606	1576	1623	1612	1599	1648	1600	1625	1592	1608
63	48	74.7	478	461	2.85	1631	1605	1649	1640	1626	1676	1627	1652	1623	1635
64	48.5	75	485	468	2.83	1658	1635	1675	1669	1654	1704	1654	1679	1655	1663
65	49	75.3	493	474	2.81	1686	1666	1702	1698	1682	1733	1683	1707	1688	1692
66	49.5	75.5	501	481	2.79	1714	1698	1730	1728	1710	1762	1712	1735	1723	1722
67	50	75.8	509	488	2.77	1744	1731	1758	1768	1739	1793	1742	1765	1759	1753
68	50.5	76.1	517	494	2.75	-	1767	1787	1790	1769	1823	1773	1795	-	1785
69	51	76.3	525	501	2.73	-	1803	1816	1821	1799	1854	1804	1827	-	1817
70	51.5	76.6	534	-	-	-	1841	1845	1854	1830	1886	1836	1860	-	1851
71	52	76.9	543	-	-	-	1881	1875	1887	1861	1918	1870	1894	-	1885
72	52.5	77.1	551	-	-	-	-	1906	1920	1893	1951	1903	1930	-	1921
73	53	77.4	561	-	-	-	-	1937	1955	1925	1985	1938	1967	-	1957
74	53.5	77.7	570	-	-	-	-	1968	1990	-	-	1974	2005	-	1995
75	54	77.9	579	-	-	-	-	2000	2025	-	-	2010	2045	-	2034
76	54.5	78.2	589	-	-	-	-	2033	2061	-	-	2048	2087	-	2074
77	55	78.5	599	-	-	-	-	2066	2098	-	-	2086	2131	-	2115
78	55.5	78.7	609	-	-	-	-	-	-	-	-	-	2177	-	2157
79	56	79	620	-	-	-	-	-	-	-	-	-	2224	-	2201
80	56.5	79.3	631	-	-	-	-	-	-	-	-	-	2274	-	2246
81	57	79.5	642	-	-	-	-	-	-	-	-	-	2326	-	2293
82	57.5	79.8	653	-	-	-	-	-	-	-	-	-	2380	-	2341
83	58	80.1	664	-	-	-	-	-	-	-	-	-	2437	-	2391
84	58.5	80.3	676	-	-	-	-	-	-	-	-	-	2496	-	2443
85	59	80.6	688	-	-	-	-	-	-	-	-	-	2558	-	2496
86	59.5	80.9	700	-	-	-	-	-	-	-	-	-	2623	-	2551
87	60	81.2	713	-	-	-	-	-	-	-	-	-	2691	-	2607
88	60.5	81.4	726	-	-	-	-	-	-	-	-	-	-	-	-
89	61	81.7	739	-	-	-	-	-	-	-	-	-	-	-	-
90	61.5	82	752	-	-	-	-	-	-	-	-	-	-	-	-
91	62	82.2	766	-	-	-	-	-	-	-	-	-	-	-	-
92	62.5	82.5	780	-	-	-	-	-	-	-	-	-	-	-	-
93	63	82.5	795	-	-	-	-	-	-	-	-	-	-	-	-
94	63.5	83.1	810	-	-	-	-	-	-	-	-	-	-	-	-
95	64	83.3	825	-	-	-	-	-	-	-	-	-	-	-	-
96	64.5	83.6	840	-	-	-	-	-	-	-	-	-	-	-	-
97	65	83.9	856	-	-	-	-	-	-	-	-	-	-	-	-
98	65.5	84.1	872	-	-	-	-	-	-	-	-	-	-	-	-
99	66	84.4	889	-	-	-	-	-	-	-	-	-	-	-	-
100	66.5	84.7	906	-	-	-	-	-	-	-	-	-	-	-	-
101	67	85	923	-	-	-	-	-	-	-	-	-	-	-	-
102	67.5	85.2	941	-	-	-	-	-	-	-	-	-	-	-	-
103	68	85.5	959	-	-	-	-	-	-	-	-	-	-	-	-
104	68.5	85.8	978	-	-	-	-	-	-	-	-	-	-	-	-
105	69	86.1	997	-	-	-	-	-	-	-	-	-	-	-	-
106	69.5	86.3	1017	-	-	-	-	-	-	-	-	-	-	-	-
107	70	86.6	1037	-	-	-	-	-	-	-	-	-	-	-	-

CONVERSION TABLE 切削符号

车削加工

Turning

根据切削参数符号变更, 依次有如下变更

Symbols of the cutting parameter were changed, see the following list

规格型号 Designation	旧符号 Old symbol	新符号 New symbol	单位 Units
切削速度	Vc	V	m/min
进给量	f	f	mm/rev
切深	ap	d	mm
刃宽	W	W	mm
加工径	Dm	D	mm
切削动力	Pc	Pkw	kW
比较切削阻力	Kc	Ks	MPa
理论表面粗糙度	h	Rz	μ m
刀尖角 R	r ϵ	R	mm
转速	n	N	min ⁻¹

铣削加工

Milling

规格型号 Designation	旧符号 Old symbol	新符号 New symbol	单位 Units
切削速度	Vc	V	m/min
进给速度	Vf	F	mm/min
单刃进给量	fz	f	mm/t
进给量	f	f	mm/rev
刃数	Z	Z	(枚)
轴方向切深	ap	d	mm
半径方向切深	ae	W	mm
大进给	Pf	Pf	mm
切削动力	Pc	PKw	KW
比较切削阻力	Kc	Ks	MPa
切屑排出量	Q	Q	cm ³ /min
转速	n	N	min ⁻¹

CONVERSION TABLE 切削符号

钻孔加工

Drilling

根据切削参数符号变更, 依次有如下变更

Symbols of the cutting parameter were changed, see the following list

规格型号 Designation	旧符号 Old symbol	新符号 New symbol	单位 Units
切削速度	Vc	V	m/min
进给速度	Vf	F	mm/min
进给量	f	f	mm/rev
直径	Dc	D(Ds)	mm
切削动力	Pc	PKw	kW
比较切削阻力	Kc	Ks	MPa
孔深	H	d	mm
转速	n	N	min ⁻¹

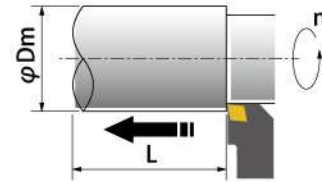
车削加工

Turning

● 切削速度

$$Vc = \frac{\pi \times Dm \times n}{1,000}$$

Vc : 切削速度 [m/min]
Dm : 被加工材料的直径 [mm]
n : 主轴转速 (min⁻¹)



● 切屑排出量

$$Q = Vc \times ap \times f$$

Q : 切屑排出量 [cm³/min=cc/min]
Vc : 切削速度 [m/min]
ap : 切深 [mm]
f : 每转进给量 [mm/rev]

CONVERSION TABLE 切削符号

铣削加工

Milling

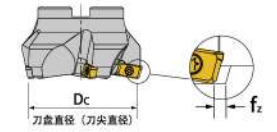
根据切削参数符号变更, 依次有如下变更

Symbols of the cutting parameter were changed, see the following list

● 切削速度

$$Vc = \frac{\pi \times Dc \times n}{1,000}$$

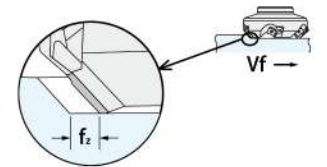
Vc : 切削速度 [m/min]
Dc : 刀盘直径 [mm]
n : 主轴转速 [min⁻¹]



● 工作台进给量与每刃进给量

$$fz = \frac{Vf}{Z \times n}$$

fz : 每刃进给量 [mm/t]
Vf : 工作台进给速度 [mm/min]
Z : 刀盘刃数 [片]
n : 主轴转速 [min⁻¹]



● 所需动力

$$Pc = \frac{Ks \times Q}{6,120 \times \eta} = \frac{Ks \times ae \times Vf \times ap}{6,120,000 \times \eta}$$

$$= \frac{Ks \times ae \times fz \times Z \times n \times ap}{6,120,000 \times \eta}$$

Pc : 所需动力 [kW]
P_{HP} : 所需动力 (马力) [HP]
ae : 切削宽度 [mm]
Vf : 工作台进给速度 [mm/min]
fz : 每刃进给量 [mm/t]
Z : 刀盘刃数 [片]
n : 主轴转速 [min⁻¹]
ap : 切深 [mm]
Ks : 比切削阻力值 [kgf/mm²]
η : 机械效率 (0.7~0.8)
Q : 切屑排出量 [cm³/min=cc/min]

Ks的大概值	
软钢	190
中碳钢	210
高碳钢	240
低合金钢	190
高合金钢	245
铸铁	93
可锻铸铁	120
青铜 / 黄铜	70

$$P_{HP} = \frac{6,120}{4,500} \times Pc$$

● 切屑排出量

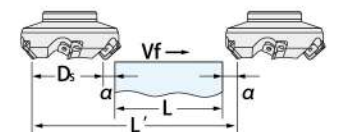
$$Q = \frac{ae \times Vf \times ap}{1,000} = \frac{ae \times fz \times Z \times n \times ap}{1,000}$$

Q : 切屑排出量 [cm³/min=cc/min]
ae : 切削宽度 [mm]
Vf : 工作台进给速度 [mm/min]
fz : 每刃进给量 [mm/t]
Z : 刀盘刃数 [片]
n : 主轴转速 [min⁻¹]
ap : 切深 [mm]

● 加工时间

$$T = \frac{60 \times L'}{Vf} = \frac{60 \times L'}{fz \times Z \times n}$$

T : 加工时间 [秒]
L' : 工作台的总进给长度 [mm]
(= L + Ds + 2α)
L : 被加工材料的长度 [mm]
Ds : 刀盘直径 [mm]
α : 多余距离 [mm]
Vf : 工作台进给速度 [mm/min]
fz : 每刃进给量 [mm/t]
Z : 刀盘刃数 [片]
n : 主轴转速 [min⁻¹]



CONVERSION TABLE 切削符号

钻孔加工

Drilling

根据切削参数符号变更，依次有如下变更

Symbols of the cutting parameter were changed, see the following list

● 切削速度

$$Vc = \frac{\pi \times Dc \times n}{1,000}$$

Vc : 切削速度 [m/min]
Dc : 钻头直径 [mm]
n : 主轴转速 [min⁻¹]

● 进给 (铣削加工时)

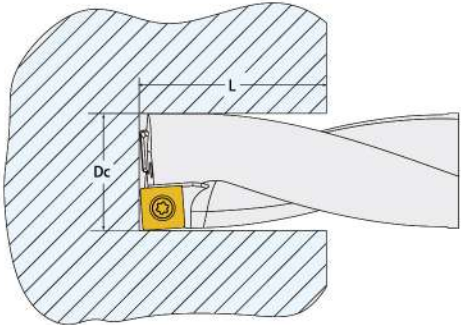
$$Vf = fz \times Z \times n$$

Vf : 工作台进给速度 [mm/min]
fz : 每刀进给量 [mm/t]
Z : 切刃数 (切刃数=1)
n : 主轴转速 [min⁻¹]

● 加工时间

$$T = \frac{60 \times L}{f \times n} = \frac{60 \times \pi \times Dc \times L}{1,000 \times Vc \times f}$$

T : 加工时间 [秒]
L : 孔深 [mm]
f : 每转进给量 [mm/rev]
n : 主轴转速 [min⁻¹]
Dc : 钻头直径 [mm]
Vc : 切削速度 [m/min]



● 所需动力 (标准值)

$$Pc = \frac{Dc}{20} \times \frac{Vc}{100} \times \left(1 + \left(\frac{2.5 \times f}{0.1} \right) \right)$$

Pc : 所需动力 [kW]
Dc : 钻头直径 [mm]
Vc : 切削速度 [m/min]
f : 每转进给量 [mm/rev]

THREAD TAPPING HOLE DIAMETER COMPARISON

螺纹攻牙钻孔径对照表

公制粗螺纹 Metric coarse thread					公制粗螺纹 Metric coarse thread				
规格 Specification	标准径 Standard diameter	2 级牙钻孔径 2nd. accuracy tapping hole diameter		规格 Specification	标准径 Standard diameter	2 级牙钻孔径 2nd. accuracy tapping hole diameter			
		最大 Max	最小 Min			最大 Max	最小 Min		
M1.0	0.25	0.75	0.785	0.729	M1.0	0.2	0.80	0.821	0.783
M1.1	0.25	0.85	0.885	0.829	M1.1	0.2	0.90	0.921	0.883
M1.2	0.25	0.95	0.985	0.929	M1.2	0.2	1.00	1.021	0.983
M1.4	0.3	1.10	1.142	1.075	M1.4	0.2	1.20	1.221	1.183
M1.6	0.35	1.25	1.321	1.221	M1.6	0.2	1.40	1.421	1.383
M1.7	0.35	1.35	1.421	1.321	M1.7	0.2	1.45	1.500	1.460
M1.8	0.35	1.45	1.521	1.421	M1.8	0.2	1.60	1.621	1.583
M2.0	0.4	1.60	1.679	1.567	M2.0	0.25	1.75	1.785	1.729
M2.2	0.45	1.75	1.838	1.713	M2.2	0.25	1.95	1.985	1.929
M2.3	0.4	1.90	1.979	1.867	M2.3	0.25	2.05	2.061	2.001
M2.5	0.45	2.10	2.138	2.013	M2.5	0.35	2.20	2.221	2.121
M2.6	0.45	2.20	2.238	2.113	M2.6	0.35	2.20	2.246	2.186
M3.0	0.5	2.50	2.599	2.459	M3.0	0.35	2.70	2.721	2.621
M3.5	0.6	2.90	3.010	2.850	M3.5	0.35	3.20	3.221	3.121
M4.0	0.7	3.30	3.422	3.242	M4.0	0.5	3.50	3.599	3.459
M4.5	0.75	3.80	3.878	3.688	M4.5	0.5	4.00	4.099	3.959
M5.0	0.8	4.20	4.334	4.134	M5.0	0.5	4.50	4.599	4.459
M6.0	1.0	5.00	5.153	4.917	M5.5	0.5	5.00	5.099	4.959
M7.0	1.0	6.00	6.153	5.917	M6.0	0.75	5.30	5.378	5.188
M8.0	1.25	6.80	6.912	6.647	M6.0	0.5	5.50	5.550	5.400
M9.0	1.25	7.80	7.912	7.647	M7.0	0.75	6.30	6.378	6.188
M10	1.5	8.50	8.676	8.376	M7.0	0.5	6.50	6.550	6.400
M11	1.5	9.50	9.676	9.376	M8.0	1.0	7.00	7.153	6.917
M12	1.75	10.30	10.441	10.106	M8.0	0.75	7.30	7.378	7.188
M14	2.0	12.00	12.210	11.835	M8.0	0.5	7.50	7.520	7.400
M16	2.0	14.00	14.210	13.835	M9.0	1.0	8.00	8.153	7.917
M18	2.5	15.50	15.744	15.294	M9.0	0.75	8.30	8.378	8.188
M20	2.5	17.50	17.744	17.294	M10	1.25	8.80	8.921	8.647
M22	2.5	19.50	19.744	19.294	M10	1.0	9.00	9.153	8.917
M24	3.0	21.00	21.252	20.752	M10	0.75	9.30	9.378	9.188
M27	3.0	24.00	24.252	23.752	M10	0.5	9.50	9.520	9.400
M30	3.5	26.50	26.771	26.211	M11	1.0	10.00	10.153	9.917
M33	3.5	29.50	29.771	29.211	M11	0.75	10.30	10.378	10.188
M36	4.0	32.00	32.270	31.670	M12	1.5	10.50	10.676	10.376
M39	4.0	35.00	35.270	34.670	M12	1.25	10.80	10.912	10.647
-	-	-	-	-	M12	1.0	11.00	11.153	10.917
-	-	-	-	-	M12	0.5	15.00	11.520	11.400
-	-	-	-	-	M14	1.5	12.50	12.676	12.376
-	-	-	-	-	M14	1.0	13.00	13.153	12.917
-	-	-	-	-	M15	1.5	13.50	13.676	13.376

THREAD TAPPING HOLE DIAMETER COMPARISON

螺纹攻牙钻孔径对照表

公制粗螺纹 Metric coarse thread					美制细螺纹 UNF				
规格 Specification	标准径 Standard diameter	2级牙钻孔径 2nd. accuracy tapping hole diameter			规格 Specification	标准径 Standard diameter	2级牙钻孔径 2nd. accuracy tapping hole diameter		
		最大 Max	最小 Min	最大 Max			最小 Min		
M15 1.0	14.00	14.153	13.917	(螺丝牙外径) Tooth diameter					
M16 1.5	14.50	14.676	14.376	No.0 -80(1.542)	1.25	1.305	1.182		
M16 1.0	15.00	15.153	14.917	No.1 -72(1.854)	1.55	1.612	1.474		
M17 1.5	15.50	15.676	15.376	No.2 -64(2.184)	1.85	1.912	1.756		
M17 1.0	16.00	16.153	15.917	No.3 -56(2.515)	2.10	2.197	2.025		
M18 2.0	16.00	16.210	15.835	No.4 -48(2.845)	2.40	2.458	2.271		
M18 1.5	16.50	16.676	16.376	No.5 -44(3.175)	2.70	2.740	2.551		
M18 1.0	17.00	17.153	16.917	No.6 -40(3.505)	2.90	3.022	2.82		
M20 2.0	18.00	18.210	17.835	No.8 -36(4.166)	3.50	3.606	3.404		
M20 1.5	18.50	18.676	18.376	No.10-32(4.826)	4.10	4.165	3.963		
M20 1.0	19.00	19.153	18.917	No.12-28(5.486)	4.60	4.724	4.496		
M22 2.0	20.00	20.210	19.835	1/4 -28	5.50	5.588	5.360		
M22 1.5	20.50	20.676	20.376	5/16 -24	6.90	7.035	6.782		
M22 1.0	21.00	21.153	20.917	3/8 -24	8.50	8.636	8.382		
M24 2.0	22.00	22.210	21.835	7/16 -20	9.90	10.033	9.729		
M24 1.5	22.50	22.676	22.376	1/2 -20	11.50	11.607	11.329		
M24 1.0	23.00	23.153	22.917	9/16 -18	12.90	13.081	12.751		
M25 2.0	23.00	23.210	22.835	5/8 -18	14.50	14.681	14.351		
M25 1.5	23.50	23.676	23.376	3/4 -16	17.50	17.678	17.323		
M25 1.0	24.00	24.153	23.917	7/8 -14	20.50	20.675	20.270		
M26 1.5	24.50	24.676	24.376	1 -12	23.30	23.571	23.114		
M27 2.0	25.00	25.210	24.835	1-1/8 -12	26.50	26.746	26.289		
M27 1.5	25.50	25.676	25.376	1-1/4 -12	29.60	29.921	29.464		
M27 1.0	26.00	26.153	25.917	1-3/8 -12	32.80	33.096	32.639		
M28 2.0	26.00	26.210	25.835	1-1/2 -12	36.00	36.271	35.814		
M28 1.5	26.50	26.676	26.376	美制迫牙丝攻钻孔径 American system extrusion tapping hole diameter					
M28 1.0	27.00	27.153	26.917	规格 Specification	精度 Accuracy	最大 Max	最小 Min		
M30 3.0	27.00	27.252	26.752	1 -64UNC	G5	1.76	1.68		
M30 2.0	28.00	28.210	27.835	2 -56	G4	2.04	1.96		
M30 1.5	28.50	28.676	28.376	3 -48	G4	2.35	2.25		
M30 1.0	29.00	29.153	28.917	4 -40	G5	2.64	2.54		
M32 2.0	30.00	30.210	29.835	5 -40	G5	2.97	2.87		
M32 1.5	30.50	30.676	30.376	6 -32	G5	3.22	3.11		
M33 3.0	30.00	30.252	29.752	8 -32	G6	3.89	3.78		
M33 2.0	31.00	31.210	30.835	10 -24	G6	4.44	4.30		
M33 1.5	31.50	31.676	31.376	12 -24	G6	5.07	4.96		
M35 1.5	33.50	33.676	33.376	1/4" -20	G7	5.86	5.73		
M36 3.0	33.00	33.252	32.752	-	-	-	-		
M36 2.0	34.00	34.210	33.835	-	-	-	-		
M36 1.5	34.50	34.676	34.376	-	-	-	-		

THREAD TAPPING HOLE DIAMETER COMPARISON

螺纹攻牙钻孔径对照表

美制迫牙丝攻钻孔径 American system extrusion tapping hole diameter				公制粗螺纹 Metric coarse thread			
规格 Specification	精度 Accuracy	最大 Max	最小 Min	规格 Specification	标准径 Standard diameter	2级牙钻孔径 2nd. accuracy tapping hole diameter	
						最大 Max	最小 Min
5/16" -18	G7	7.38	7.23	(螺丝牙外径) Tooth diameter			
3/8" -16	G7	8.89	8.72	No.1 -64(1.854)	1.55	1.582	1.425
7/16"-14	G8	10.40	10.02	No.2 -56(2.184)	1.80	1.871	1.695
1/2" -13	G8	11.92	11.70	No.3 -48(2.515)	2.10	2.146	1.941
0 -80UNF	G5	1.45	1.39	No.4 -40(2.845)	2.30	2.385	2.157
1 -72	G5	1.77	1.70	No.5 -40(3.175)	2.60	2.697	2.487
2 -64	G4	2.06	1.98	No.6 -32(3.505)	2.80	2.895	2.642
3 -56	G4	2.37	2.29	No.8 -32(4.166)	3.40	3.530	3.302
4 -48	G5	2.68	2.59	No.10-24(4.826)	3.90	3.962	3.683
5 -44	G5	2.99	2.90	No.12-24(5.486)	4.50	4.597	4.344
6 -40	G5	3.29	3.19	1/4 -20	5.10	5.257	4.979
8 -36	G5	3.91	3.81	5/16 -18	6.60	6.731	6.401
10 -32	G6	4.53	4.44	3/8 -16	8.00	8.153	7.798
12 -28	G6	5.13	5.03	7/16 -14	9.40	9.550	9.144
1/4" -28	G7	6.00	5.91	1/2 -13	10.90	11.023	10.592
5/16" -24	G7	7.53	7.42	9/16 -12	12.20	12.446	11.989
3/8" -24	G7	9.10	8.99	5/8 -11	13.60	13.868	13.386
7/16" -20	G8	10.62	10.48	3/4 -10	16.60	16.840	16.307
1/2" -20	G8	12.20	12.06	7/8 -9	19.60	19.761	19.177
美制特细螺纹 UNEF				1 -8	22.30	22.606	21.971
规格 Specification	标准径 Standard diameter	2级牙钻孔径 2nd. accuracy tapping hole diameter		1-1/8 -7	25.00	25.349	24.638
		最大 Max	最小 Min	1-1/4 -7	28.20	28.524	27.813
No.12 -32	4.70	4.826	4.623	1-3/8 -6	30.80	31.115	30.353
1/4 -32	5.60	5.689	5.487	1-1/2 -6	34.00	34.290	33.528
5/16 -32	7.10	7.264	7.087	1-3/4 -5	39.50	39.827	38.964
3/8 -32	8.70	8.864	8.662	2 -4-1/2	45.20	45.593	44.679
7/16 -28	10.20	10.337	10.135	公制迫牙丝攻钻孔径 Metric extrusion tapping hole diameter			
1/2 -28	11.80	11.938	11.710	规格 Specification	精度 Accuracy	最大 Max	最小 Min
9/16 -24	13.20	13.385	13.132	M1.0 0.25	G4	0.92	0.89
5/8 -24	14.80	14.968	14.732	M1.2 0.25	G4	1.11	1.09
3/4 -20	17.80	17.957	17.679	M1.4 0.30	G4	1.30	1.26
7/8 -20	21.00	21.132	20.854	M1.6 0.35	G4	1.47	1.43
1 -20	24.10	24.307	24.029	M1.7 0.35	G4	1.57	1.52
-	-	-	-	M1.8 0.35	G4	1.67	1.62
-	-	-	-	M2.0 0.40	G4	1.84	1.79
-	-	-	-	M2.2 0.45	G5	2.04	1.98
-	-	-	-	M2.3 0.40	G4	2.14	2.09
-	-	-	-	M2.5 0.45	G5	2.34	2.27

