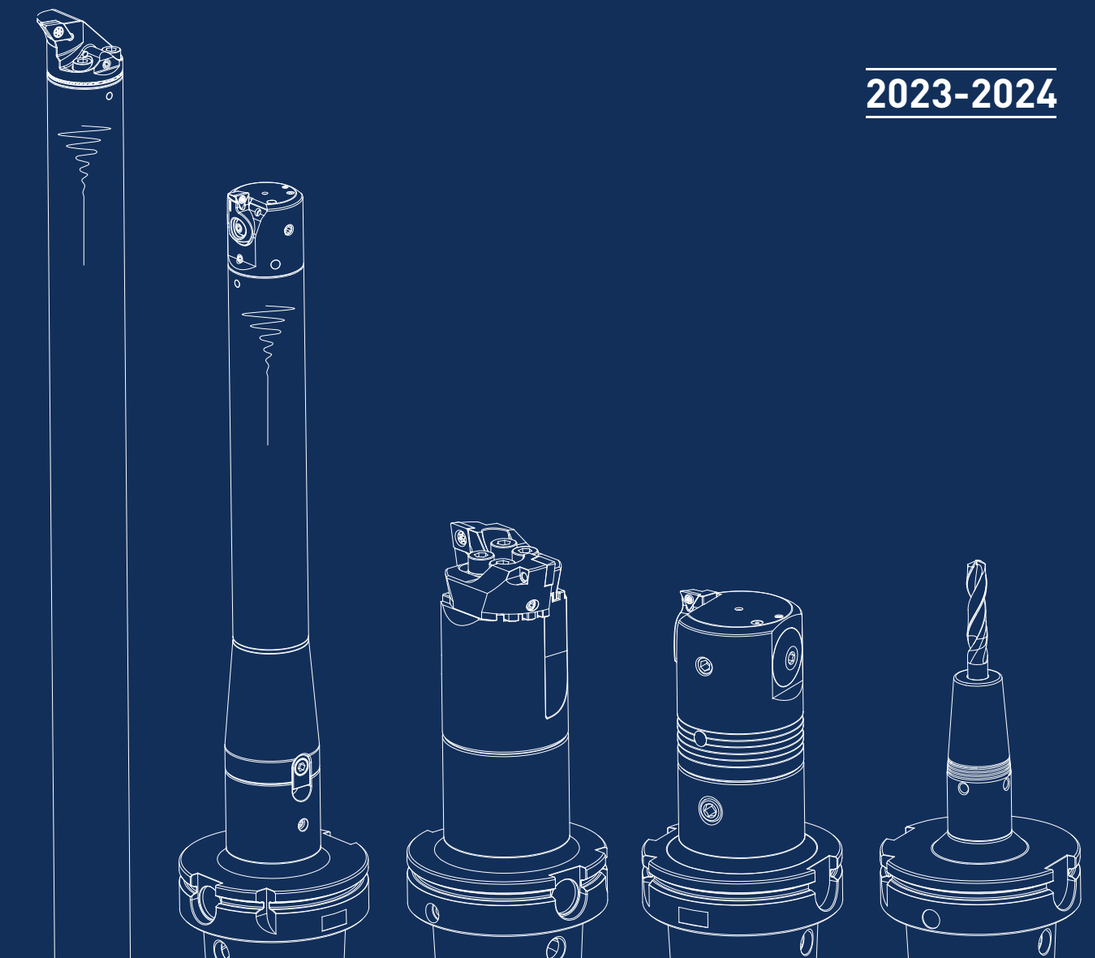
HUNAN BENEMETAL MATERIAL
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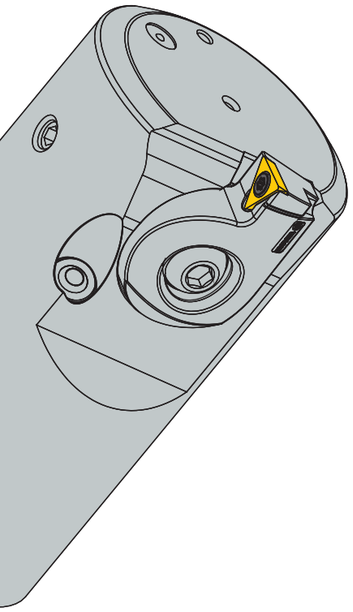
2023-2024



湖南倍力美特材料科技有限公司

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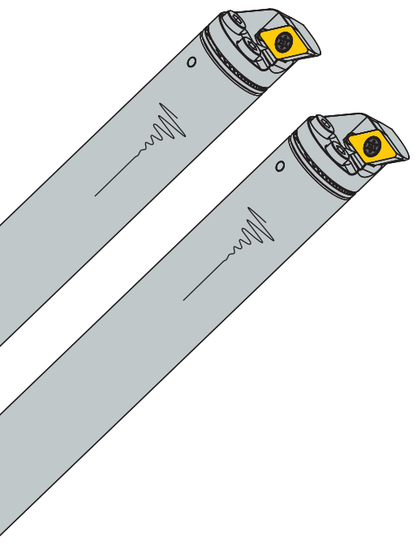
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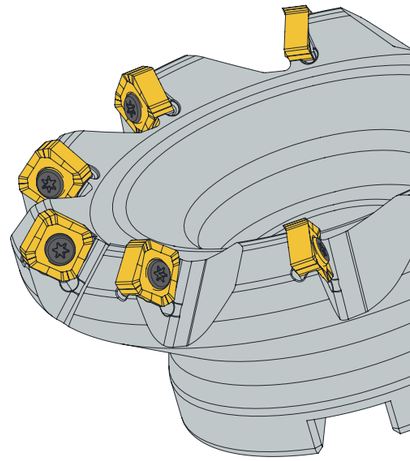
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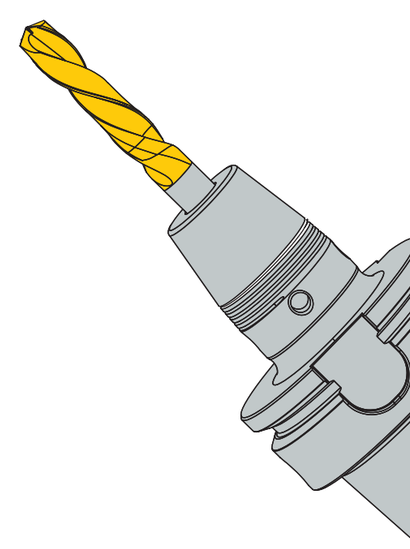
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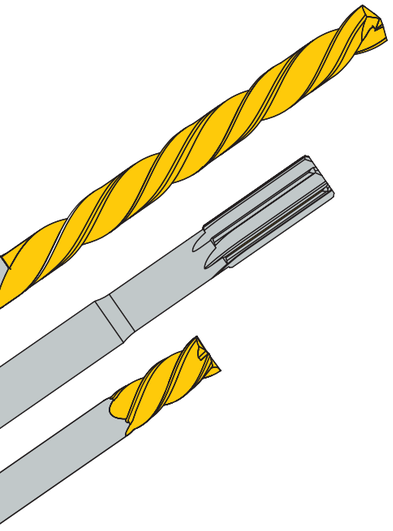
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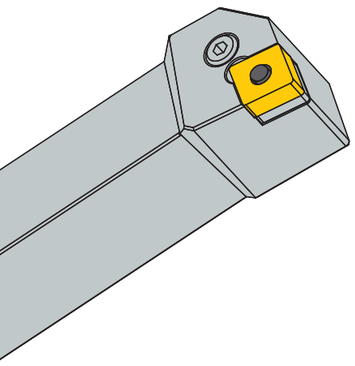
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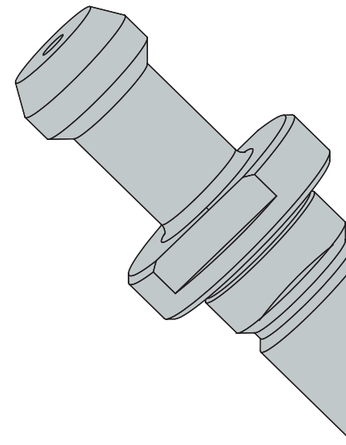
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MODULAR BORING TOOL WITH TYPE K CONNECTION

模块式镗刀 (K接口)



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孔加工刀具
HOLE MAKING TOOLS

模块式镗刀（K 接口）
Modular Boring Tool with Type K Connection

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模块式 K 接口原理及连接锁紧方式

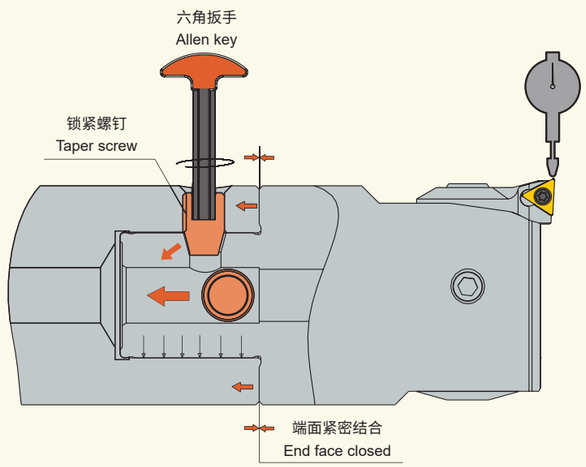
Clamping Principle for Type K Connection

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 2μm, 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 1

Figure 1

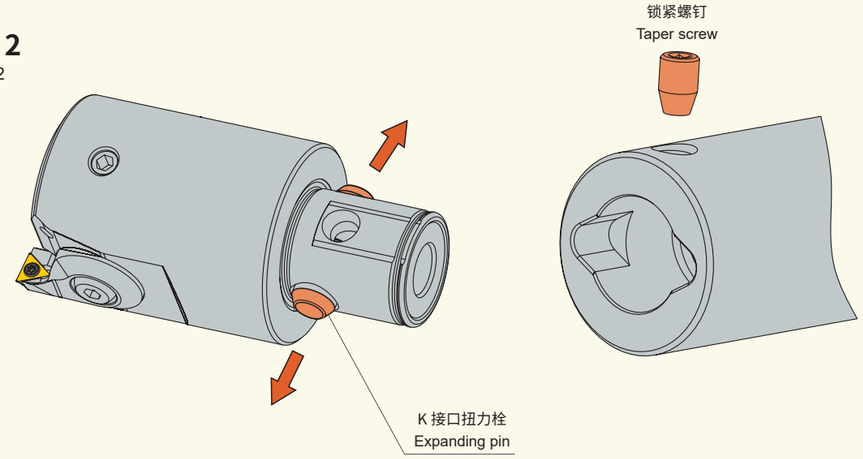


同一镗刀多次重复装取时，刀尖位置误差 2um 以内

Assembling and disassembling repeatedly several times. the tolerance of the tool nose is within 0.002mm

图示 2

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 WITH TYPE K CONNECTION 模块式镗刀 (K 接口)

孔加工刀具
HOLE MAKING TOOLS

CBR 系列粗镗刀

CBR Rough Boring Tool with Type K Connection

双刃可调，镗孔加工范围 Φ20-Φ153，圆柱模块式 K 接口，矩形槽刀座接口。

Twin cutter rough boring head with boring range Φ20- Φ153. Cylinder modular connection type K, with rectangular guide slot cartridge.



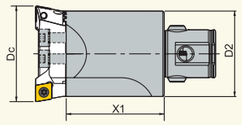


Fig A

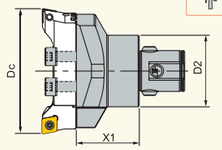


Fig B

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

- 适配刀座需单独订购，请参照：☞ A6-A8 页。
- 适配刀柄需单独订购，请参照：☞ A23-A28 页。
- 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
- 刀座刻线标注依据：CC06/CC09/TC11/TC16/SO06 圆角为 R0.4 时的值，SO09 圆角为 R0.6 时的值，CC12/SC09/SC12/SO12 圆角为 R0.8 时的值；SO16 圆角为 R1.2 时的值；
- 订货示例：1 件 CBR D25.K25.25.C。
- The cartridge should be ordered separately please see page A6-A8.
- The adaptor should be ordered separately, please see page A23-A28.
- Recommended cutting date please see page A117-A120.
- Scale mark basis.
  The scale value for CC06/CC09/TC11/SO06 with R0.4. The scale value for SO09 with R0.6.
  The scale value for CC12/SC09/SC12/SO12 with R0.8. The scale value for SO16 with R1.2.
- Ordering sample: 1 PC CBR D25.K25.25.C.

备件

Spare Parts

Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	锁紧扳手 Allen key for adjusting screw
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 Ssaling disc
D2=19	FT90 D4x13.5	FT91 D2x1
D2=25	FT90 D5x17	FT91 D3x1
D2=32	FT90 D7x22	FT91 D5x1
D2=40	FT90 D8.5x26.5	FT91 D5.5x1.5
D2=50	FT90 D11x33	FT91 D8.5x1.5
D2=63	FT90 D14x43	FT91 D11x1.5
D2=88	FT90 D18x56	FT91 D15x1.5

● 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 WITH TYPE K CONNECTION 模块式镗刀 (K 接口)

CBR 系列粗镗刀（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 Φ30-Φ152，调整自如、稳定、过孔直径 D 必须满足“D ≥ (Dc+D1)/2+1”要求。
Thanks to stable cartridge with rectangular slot guide for back boring, it can be back boring easily, boring range is Φ30-Φ152. It is with the features of adjusting freely and stability. Through hole of back boring D≥(Dc+D1)/2 + 1.



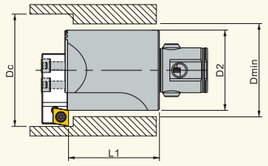


Fig A

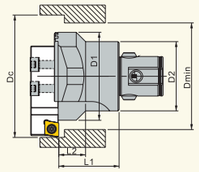


Fig B

适用粗镗刀体 Designation	Dc	D1	D2	L1	L2	Z	Fig	kg	适配刀座 Cartridge	在库 Stock
CBR D19.K19.22.C	30-35	19	19	20	-	1	A	0.06	C90C D19.3035.CC06	●
CBR D25.K25.25.C	33-41	25	25	23	-	1	A	0.10	C90C D25.3341.CC06	●
	40-48	25	25	23	-	1	A	0.11	C90C D25.4048.CC06	●
CBR D32.K32.30.C	42-52	32	32	28	-	1	A	0.21	C90C D32.4252.CC06	●
	51-61	32	32	28	-	1	A	0.22	C90C D32.5161.CC06	●
CBR D40.K40.52.C	53-65	40	40	52	-	1	A	0.53	C90C D40.5365.CC09	●
	64-76	40	40	52	-	1	A	0.54	C90C D40.6476.CC09	●
CBR D50.K50.57.C	53-69	50	50	57	-	1	A	0.92	C90C D50.5369.CC09	●
	68-84	50	50	57	-	1	A	0.94	C90C D50.6884.CC09	●
	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	●
	88-109	63	63	55	-	1	A	1.65	C90C D63.88109.CC09	●
CBR D80.K63.55.C	88-110	80	63	55	25	1	B	1.98	C90C D80.88110.CC12	●
	108-130	80	63	55	25	1	B	2.04	C90C D80.108130.CC12	●
CBR D80.K90.55.C	88-110	88	88	55	-	1	A	3.02	C90C D80.88110.CC12	●
	108-130	88	88	55	-	1	A	3.08	C90C D80.108130.CC12	●
CBR D100.K63.55.C	108-132	100	63	55	27	1	B	2.32	C90C D100.108132.CC12	●
	128-152	100	63	55	27	1	B	2.39	C90C D100.128152.CC12	●
CBR D100.K90.55.C	108-132	100	88	55	27	1	B	3.35	C90C D100.108132.CC12	●
	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：☞ A9 页。
- 适配刀柄需单独订购，请参照：☞ A23-A28 页。
- 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
- 刀座刻线标注依据：CC06/CC09/TC11/TC16/SO06 圆角为 R0.4 时的值，SO09 圆角为 R0.6 时的值，CC12/SC09/SC12/SO12 圆角为 R0.8 时的值；SO16 圆角为 R1.2 时的值；
- 最小过孔直径 Dmin=(Dc+D1)/2+1。
- 订货示例：1 件 CBR D19.K19.22.C。
- The cartridge should be ordered separately please see page A9.
- The adaptor should be ordered separately, please see page A23-A28.
- Recommended cutting data please see page A117-A120.
- Scale mark basis.
  The scale value for CC06/CC09/TC11/SO06 with R0.4. The scale value for SO09 with R0.6.
  The scale value for CC12/SC09/SC12/SO12 with R0.8. The scale value for SO16 with R1.2.
- The minimum diameter Dmin= (Dc+Dt)/2+1.
- Ordering sample: 1 PC CBR D19.K19.22.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
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孔加工刀具 HOLE MAKING TOOLS

MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (K 接口)

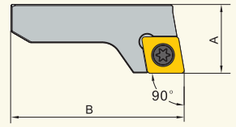
矩形槽粗镗刀座

Cartridge 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 isΦ20-Φ153; 90° T style isΦ33- Φ 153; 45° style is Φ23- Φ153; 84° style isΦ20- Φ153.



90° C型刀座
Kr=90° with C Insert



90°C 型刀座

Kr=90° with C Insert

规格型号 Designation	镗削范围 Boring rang	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
C90A D020-024.CC06	20-24	13.6	16	CC..0602..	0.01	SR50 M2.5x5	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
C90A D023-027.CC06	23-27	13.6	17	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
C90A D026-035.CC06	26-35	13.6	20	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
C90A D033-041.CC06	33-41	15.0	26	CC..0602..	0.02	SR50 M3.0x8	KEY01 M1.5	SR21 M2.5x5.3	KEY03 T7	●
C90A D041-055.CC09	41-55	18.0	32	CC..09T3..	0.03	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY03 T15	●
C90A D055-070.CC09	55-70	18.0	45	CC..09T3..	0.05	SR50 M4.0x10	KEY01 M2.0	SR21 M4x9.5	KEY03 T15	●
C90A D055-070.CC12	55-70	25.0	45.5	CC..1204..	0.08	SR50 M4x10	KEY01 M2.0	SR21 M5x12.8	KEY03 T20	●
C90A D070-090.CC12	70-90	30.0	59	CC..1204..	0.15	SR50 M5.0x12	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
C90A D090-110.CC12	90-110	30.0	74	CC..1204..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
C90A D110-133.CC12	110-133	30.0	85	CC..1204..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
C90A D130-153.CC12	130-153	30.0	96	CC..1204..	0.30	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
C90A D034-042.CC09	34-42	18.0	26	CC..09T3..	0.02	SR50 M3X8	KEY01 M1.5	SR21 M4X9.5	KEY03 T15	●
C90A D047-059.CC12	47-59	22.0	35	CC..1204..	0.05	SR50 M3X10	KEY01 M1.5	SR21 M5X12.8	KEY03 T20	●
C90A D058-073.CC12	58-73	22.0	47	CC..1204..	0.06	SR50 M4X10	KEY01 M2.5	SR21 M5X12.8	KEY03 T20	●

- 刀片请根据不同材料单独选购，请参照：☞ A95 页。
- 订货示例：1 件 C90A D020-024.CC06。
- The inserts for different materials should be ordered separately, please see page A95.
- 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 screw for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	刀片锁紧扳手 Allen key for clamping screw	在库 Stock
C90A D19.2630.CC06	26-30	13.6	19	CC..0602..	0.01	SR50 M2.5x5	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
C90A D25.3342.CC06	33-42	13.6	24	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
C90A D32.3947.CC09	39-47	15.0	29	CC..09T3..	0.02	SR50 M3.0x8	KEY01 M1.5	SR21 M4x9.5	KEY03 T15	●
C90A D40.5367.CC09	53-67	18.0	38	CC..09T3..	0.05	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY03 T15	●
C90A D50.6883.CC12	68-83	20.0	52	CC..1204..	0.07	SR50 M4.0x10	KEY01 M2.0	SR21 M5x12.8	KEY03 T20	●
C90A D63.88108.CC12	88-108	30.0	68	CC..1204..	0.19	SR50 M5.0x12	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
C90A D80.108128.CC12	108-128	30.0	83	CC..1204..	0.26	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●

- 刀片请根据不同材料单独选购，请参照：☞ A95 页。
- 订货示例：1 件 C90A D020-024.CC06。
- The inserts for different materials should be ordered separately, please see page A95.
- 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)

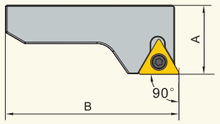
矩形槽粗镗刀座

Cartridge 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 isΦ20-Φ153; 90° T style isΦ33- Φ 153; 45° style is Φ23- Φ153; 84° style isΦ20- Φ153.



90° T型刀座
Kr=90° with T Insert



90°T 型刀座

Kr=90° with T Insert

规格型号 Designation	镗削范围 Boring rang	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	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	KEY03 T8	●
C90A D041-055.TC11	41-55	18	32	TC..1102..	0.03	SR50 M3.0x10	KEY01 M1.5	SR20 M2.5x6	KEY03 T8	●
C90A D055-070.TC11	55-70	18	45	TC..1102..	0.05	SR50 M4.0x10	KEY01 M2.0	SR20 M2.5x6	KEY03 T8	●
C90A D070-090.TC16	70-90	30	59	TC..16T3..	0.15	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
C90A D090-110.TC16	90-110	30	74	TC..16T3..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
C90A D110-133.TC16	110-133	30	85	TC..16T3..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
C90A D130-153.TC16	130-153	30	96	TC..16T3..	0.30	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●

- 刀片请根据不同材料单独订购，请参照：☞ A97-A99 页。
- 订货示例：1 件 C90A D033-041.TC11。
- The inserts for different materials should be ordered separately, please see page A97-A99.
- 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 rang	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	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	KEY03 T8	●
C90A D32.3947.TC11	39-47	15.0	29	TC..1102..	0.02	SR50 M3.0x8	KEY01 M1.5	SR20 M2.5x6	KEY03 T8	●
C90A D40.5367.TC11	53-67	18.0	38	TC..1102..	0.05	SR50 M3.0x10	KEY01 M1.5	SR20 M2.5x6	KEY03 T8	●
C90A D50.6883.TC16	68-83	20.0	52	TC..16T3..	0.07	SR50 M4.0x10	KEY01 M2.0	SR21 M4x9.5	KEY03 T15	●
C90A D63.88108.TC16	88-108	30.0	68	TC..16T3..	0.19	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
C90A D80.108128.TC16	108-128	30.0	83	TC..16T3..	0.26	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●

- 刀片请根据不同材料单独订购，请参照：☞ A97-A99 页。
- 订货示例：1 件 C90A D033-041.TC11。
- The inserts for different materials should be ordered separately, please see page A97-A99.
- Ordering sample: 1 PC C90A D033-041.TC11.

● 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)

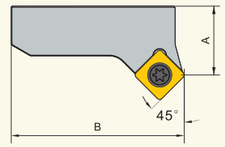
矩形槽粗镗刀座

Cartridge for Rough Boring Tool for Back Boring

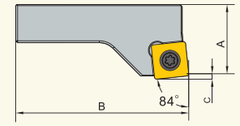
适配于 CBR 系列双刃粗镗刀，矩形槽刀座接口，调整方便
加工范围：90° C 型刀座 Φ20-Φ153；90° T 型刀座 Φ33-Φ153；45°刀座 Φ23-Φ153；84°刀座 Φ20-Φ153；
It is suitable for the CBR rough boring tools with twin cutters, and also it can be adjusted freely due to the connection.
The boring range: 90°C style isΦ20-Φ153; 90° T style isΦ33- Φ 153; 45° style is Φ23- Φ153; 84° style isΦ20- Φ153.



45° 型刀座
Kr=45° with C/S Insert



84° S 型刀座
Kr=84° with S Insert



45° 型刀座

Kr=45° with C/S Inseret

规格型号 Designation	镗削范围 Boring rang	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	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	SR21 M2.5x5.3	KEY03 T7	●
C45A D026-035.CC06	26-35	13.6	20	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
C45A D033-041.CC06	33-41	15.0	25	CC..0602..	0.02	SR50 M3.0x8	KEY01 M1.5	SR21 M2.5x5.3	KEY03 T7	●
C45A D041-055.SC09	41-55	18.0	30	SC..09T3..	0.03	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY03 T15	●
C45A D055-070.SC09	55-70	30.0	45	SC..09T3..	0.04	SR50 M4.0x10	KEY01 M2	SR21 M4x9.5	KEY03 T15	●
C45A D070-090.SC09	70-90	30.0	59	SC..09T3..	0.13	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
C45A D090-110.SC09	90-110	30.0	75	SC..09T3..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
C45A D110-133.SC09	110-133	30.0	85	SC..09T3..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
C45A D130-153.SC09	130-153	30.0	93	SC..09T3..	0.27	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●

- 刀片请根据不同材料单独订购，请参照：☞ A95 页，A100 页。
- 订货示例：1 件 C45A D023-027.CC06。
- The inserts for different materials should be ordered separately, please see page A95,A100.
- Ordering sample: 1 PC C45A D023-027.CC06.

84°S 型刀座

Kr=84° with S Insert

规格型号 Designation	镗削范围 Boring rang	A	B	C	适用刀片 Insert	Kg	刀座调整螺钉 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	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	KEY03 T7	●
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	KEY03 T7	●
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	KEY03 T7	●
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	KEY03 T7	●
C84A D041-055.SO09	41-55	18.1	32.1	0.7	SO..09T3..	0.03	SR50 M3x10	KEY01 M1.5	SR20 M3x6.6	KEY03 T9	●
C84A D055-070.SO09	55-70	18.1	45.3	0.7	SO..09T3..	0.05	SR50 M4x10	KEY01 M2	SR20 M3x6.6	KEY03 T9	●
C84A D070-090.SO12	70-90	30.3	58.8	1.0	SO..1204..	0.15	SR50 M5x12	KEY01 M2.5	SR20 M4x9.5	KEY03 T15	●
C84A D090-110.SO12	90-110	30.3	73.6	1.0	SO..1204..	0.22	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY03 T15	●
C84A D110-133.SO12	110-133	30.3	85.4	1.0	SO..1204..	0.26	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY03 T15	●
C84A D130-153.SO12	130-153	30.3	96.4	1.0	SO..1204..	0.31	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY03 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	KEY03 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	KEY03 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	KEY03 T15	●

- 刀片请根据不同材料单独订购，请参照：☞ A101 页。
- 订货示例：1 件 C84A D033-041.SO06。
- The inserts for different materials should be ordered separately, please see page A101.
- Ordering sample: 1 PC C84A D033-041.S006.

● 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 WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

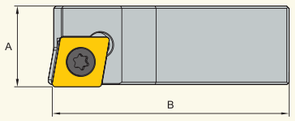
反镗刀座

Cartridge for Rough Boring Tool 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 rang	A	B	刀片型号 Insert	Kg	在库 Stock
C90C D19.3035.CC06	30-35	10.3	21.0	CC..0602..	0.01	◐
C90C D25.3341.CC06	33-41	10.3	23.0	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	35.0	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	45.0	CC..09T3..	0.06	◐
C90C D50.6884.CC09	68-84	16.6	52.8	CC..09T3..	0.08	◐
C90C D50.8399.CC09	83-99	16.6	62.0	CC..09T3..	0.10	◐
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：☞ A95 页。
- 订货示例：1 件 C90C D32.4252.CC06。
- The inserts for different materials should be ordered separately, please see page A95.
- 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..	SR21 M2.5x5.3	KEY03 T7
CC..09T3..	SR21 M4x9.5	KEY03 T15
CC..1204..	SR21 M5x12.8	KEY03 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)

孔加工刀具
HOLE MAKING TOOLS

MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

NBR 系列粗镗刀

NBR Rough Boring Tool with Type K Connection

双刃可调，圆柱模块式 K 接口，梯形槽刀座接口。

Twin cutter rough boring head.Cylinder modular connection type K, with rectangular guide slot cartridge..



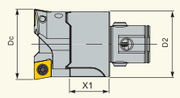


Fig A

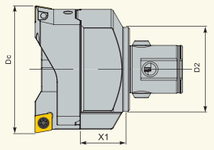


Fig B

规格型号 Designation	Dc	D2	X1	Z	Fig	Kg	适配刀座 Cartridge	在库 Stock
NBR D32.K32.22	32-42	30	22	2	A	0.15	N90 D32.3242.CC09	●
	41-51	30	22	2	A	0.15	N90 D32.4151.CC09	○
NBR D40.K40.27	41-54	39	27	2	A	0.3	N90 D40.4154.CC09	●
	53-66	39	27	2	A	0.3	N90 D40.5366.CC09	○
NBR D50.K50.32	53-70	49	32	2	A	0.56	N90 D50.5370.CC12	●
	69-86	49	32	2	A	0.56	N90 D50.6986.CC12	○
NBR D63.K63.42	68-90	63	42	2	A	1.21	N90 D63.6890.CC12	●
	88-110	63	42	2	A	1.21	N90 D63.88110.CC12	●
NBR D90.K63.40	98-126	63	40	2	B	1.67	N90 D90.98126.CC12	●
	125-153	63	40	2	B	1.67	N90 D90.125153.CC12	●

- 适配刀座需单独订购，请参照：☞ A11 页。
- 适配刀柄需单独订购，请参照：☞ A24-A28 页。
- 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
- 刀座刻线标注依据：CC06/CC09/TC11/TC16/SO06 圆角为 R0.4 时的值，SO09 圆角为 R0.6 时的值，CC12/SC09/SC12/SO12 圆角为 R0.8 时的值；SO16 圆角为 R1.2 时的值；
- 订货示例：1 件 NBR D32.K32.22。
- The cartridge should be ordered separately please see page A11.
- The adaptor should be ordered separately, please see page A24-A28.
- Recommended cutting date please see page A117-A120.
- Scale mark basis.
  The scale value for CC06/CC09/TC11/SO06 with R0.4. The scale value for SO09 with R0.6.
  The scale value for CC12/SC09/SC12/SO12 with R0.8. The scale value for SO16 with R1.2.
- Ordering sample: 1 PC NBR D32.K32.22.

备件

Spare Parts

Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	锁紧扳手 Allen key for adjusting screw
32-51	SR55 M6x20	GK20 D6	KEY01 M5
41-66	SR55 M8x25	GK20 D8	KEY01 M6
53-86	SR55 M10x30	GK20 D10	KEY01 M8
68-110	SR55 M10x30	GK20 D10	KEY01 M8
98-153	SR55 M12x35	GK20 D12	KEY01 M10

D2	K 接口扭力栓 Expanding pin	橡胶圈 Ssaling disc
D2=30	FT90 D7x22	FT91 D5x1
D2=39	FT90 D8.5x26.5	FT91 D5.5x1.5
D2=49	FT90 D11x33	FT91 D8.5x1.5
D2=63	FT90 D14x43	FT91 D11x1.5

● 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)

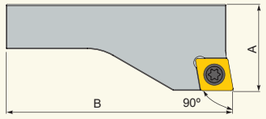
梯形槽粗镗刀座

Trapezoidal Slot Type of Cartridge

适配于 NBR 系列双刃粗镗刀，梯形槽刀座接口，调整方便。

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







规格型号 Designation	镗削范围 Boring rang	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
N90 D32.3242.CC09	32-42	18.9	27	CC..09T3..	0.02	SR50 M4X6	KEY01 M2.0	SR21 M4X9.5	KEY03 T15	●
N90 D32.4151.CC09	41-51	18.9	34	CC..09T3..	0.03	SR50 M4X6	KEY01 M2.0	SR21 M4X9.5	KEY03 T15	○
N90 D40.4154.CC09	41-54	22	35	CC..09T3..	0.05	SR50 M5X8	KEY01 M2.5	SR21 M4X9.5	KEY03 T15	●
N90 D40.5366.CC09	53-66	22	43	CC..09T3..	0.07	SR50 M5X8	KEY01 M2.5	SR21 M4X9.5	KEY03 T15	○
N90 D50.5370.CC12	53-70	27	45	CC..1204..	0.09	SR50 M5X10	KEY01 M2.5	SR21 M5X12.8	KEY03 T20	●
N90 D50.6986.CC12	69-86	27	55	CC..1204..	0.13	SR50 M5X10	KEY01 M2.5	SR21 M5X12.8	KEY03 T20	○
N90 D63.6890.CC12	68-90	31.6	56	CC..1204..	0.16	SR50 M6X12	KEY01 M3	SR21 M5X12.8	KEY03 T20	●
N90 D63.88110.CC12	88-110	31.6	79	CC..1204..	0.23	SR50 M6X16	KEY01 M3	SR21 M5X12.8	KEY03 T20	●
N90 D90.98126.CC12	98-126	34	89	CC..1204..	0.29	SR50 M6X20	KEY01 M3	SR21 M5X12.8	KEY03 T20	●
N90 D90.125153.CC12	125-153	34	103	CC..1204..	0.38	SR50 M8X20	KEY01 M4	SR21 M5X12.8	KEY03 T20	●

- 刀片请根据不同材料单独选购，请参照：☞ A95 页。
- 订货示例：1 件 N90 D32.3242.CC09。
- The inserts for different materials should be ordered separately, please see page A95.
- Ordering sample: 1 PC N90 D32.3242.CC09.

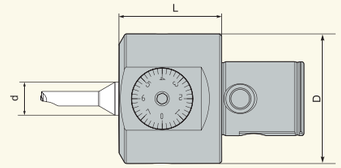
CBF 系列小孔径微调精镗刀

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 Φ2-Φ50，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 Φ2- Φ50. 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 C10-6 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：☞ A39-A40 页。
- 适配刀柄需单独订购，请参照：☞ A23-A28 页。
- 加工不同材料刀具的切削参数，请参照：☞ A121 页。
- 当 Dc 为 2-22 时，刀具调节行程为 -0.2~+1.2mm。
  当 Dc 为 6-50 时，刀具调节行程为 -0.2~+3.3mm。
- 订货示例：1 件 CBF D02-22.K40.35.C。
- The boring bar should be ordered separately, please see page A39-A40.
- The adaptor should be ordered separately, please see page A23-A28.
- Recommended cutting data please see page A121.
- The adjusting range is -0.2~+1.2mm when Dc range is 2-22.
  The adjusting range is -0.2~+3.3mm when Dc range is 6-50.
- 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	SR50 M6x10xD3.2	KEY01 M3	FT90 D8.5x26.5	FT91 D5.5x1.5
CBF D06-50.K50	SR54 M10x16	SR50 M10x16xD6	KEY01 M5	FT90 D11x33	FT91 D8.5x1.5
CBF D06-50.K63	SR54 M10x16	SR50 M10x16xD6	KEY01 M5	FT90 D14x43	FT91 D11x1.5

MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

CBF 系列微调精镗刀

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 Φ20-Φ212，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 Φ20- Φ212.Cylindrical modular connection type K. Axial combination precision cartridge for the body.



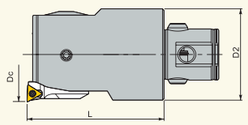


Fig A

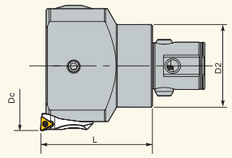


Fig B

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

- 适配刀座需单独订购，请参照：☞A15-A17 页。
- 适配刀柄需单独订购，请参照：☞A24-A28 页。
- 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。
- LOCK 可选配球头螺钉，请参照：☞A14 页。
- 加工不同材料刀具的切削参数，请参照：☞A121 页。
- 订货示例：1 件 CBF D32.K32.43.C。

- The cartridge should be ordered separately please see page A15-A17.
- The adaptor should be ordered separately, please see page A24-A28.
- The machine range De is the value which 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
- Recommendation for selecting the ball screw with lock screw, please see page A14.
- Recommended cutting data please see page A121.
- 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 secrew	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring
CBF D19.K19.34.C	SR54-2 M4x4	SR20 M4x6-X	KEY01 M2	KEY03 T15	FT90 D4x13.5	FT91 D2x1
CBF D25.K25.37.C	SR54-2 M4x6	SR20 M4x8-X	KEY01 M2	KEY03 T15	FT90 D5x17	FT91 D3x1
CBF D32.K32.43.C	SR54-2 M5x8	SR56-2 M5x10	KEY01 M2.5	KEY01 M3	FT90 D7x22	FT91 D5x1
CBF D40.K40.48.C	SR54 M6x10	SR56-2 M5x12	KEY01 M3	KEY01 M3	FT90 D8.5x26.5	FT91 D5.5x1.5
CBF D40.K40.70.C	SR54 M6x10	SR56-2 M5x12	KEY01 M3	KEY01 M3	FT90 D8.5x26.5	FT91 D5.5x1.5
CBF D50.K50.75.C	SR54 M6x12	SR56-2 M6x16	KEY01 M3	KEY01 M4	FT90 D11x33	FT91 D8.5x1.5
CBF D63.K63.85.C	SR54 M10x16	SR56 M8x20	KEY01 M5	KEY01 M5	FT90 D14x43	FT91 D11x1.5
CBF D100.K63.85.C	SR54 M10x16	SR56 M8x25	KEY01 M5	KEY01 M5	FT90 D14x43	FT91 D11x1.5
CBF D100.K90.85.C	SR54 M10x16	SR56 M8x25	KEY01 M5	KEY01 M5	FT90 D18x56	FT91 D15x1.5

● 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 WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

CBF 系列微调精镗刀（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，即可轻松实现反镗精加工，加工范围 Φ30-Φ212，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 ≥ (Dc+D1)/2+1”要求。

Please assemble the cartridge as its reverse direction, which is for back boring, and the back boring range isΦ30-Φ212 and also with the same precision as the ordinary boring tool, but 1he tool should be rotated by the reserve direction when machining and 1he hole diameter D should meet the requirement of "D≥(Dc+D1)/2+ 1" .



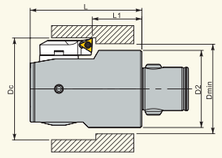


Fig A

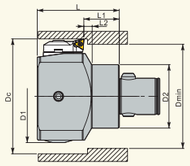


Fig B

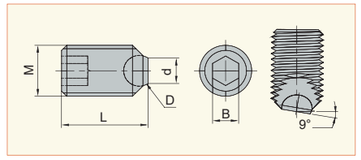
适用粗镗刀体 Designation	Dc	D1	D2	L	L1	L2	Z	Fig	Kg	适配刀座 Cartridge
CBF D19.K19.34.C	30-36	19	19	32	11.5	-	1	A	0.07	FRB 10C...
CBF D25.K25.37.C	36-41	25	25	33	8.5	-	1	A	0.13	FRB 12B...
	40-48	25	25	33	8.5	-	1	A	0.13	FRB 12C...
CBF D32.K32.43.C	47-52	32	32	39	10.5	-	1	A	0.25	FRB 16B...
	51-61	32	32	39	10.5	-	1	A	0.25	FRB 16C...
CBF D40.K40.70.C	55-65	40	40	67	33.5	-	1	A	0.65	FRB 20B...
	64-76	40	40	67	33.5	-	1	A	0.65	FRB 20C...
CBF D50.K50.75.C	62-69	50	50	72	32	-	1	A	1.12	FRB 25A...
	68-84	50	50	72	32	-	1	A	1.12	FRB 25B...
	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...
	98-130	63	63	81	35	-	1	A	2.1	FRB 30B...
	128-160	63	63	81	35	-	1	A	2.1	FRB 30C...
CBF D100.K63.85.C	112-152	100	63	81	35	8	1	B	2.97	FRB 30A...
	130-182	100	63	81	35	8	1	B	2.97	FRB 30B...
	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...
	130-182	100	88	81	35	8	1	B	4.35	FRB 30B...
	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：☞A15-A17 页。
- 适配刀柄需单独订购，请参照：☞A24-A28 页。
- 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：☞A121 页。
- 最小过孔直径 Dmin=(Dc+D1)/2+1。
- 订货示例： 1 件 CBF D19.K19.34.C。

- The cartridge should be ordered separately please see page A15-A17.
- The adaptor should be ordered separately, please see page A24-A28.
- The machine range De is the value which 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
- Rotating the tool on the anticlockwise direction.
- Recommended cutting data please see page A121.
- Minimum via diameter: Dmin=(Dc+D1)/2+1.
- Ordering sample: 1 PC CBF D19.K19.34.C.

备件

Spare Parts



● 特点：
通过钢球平面进行面接触
球头部位可灵活旋转 9°，即使配合面有倾斜误差仍可以牢牢的夹紧

产品名称 Designation	规格型号 Designation	接口 Interface	M	L	D	d	B
球头螺钉	SR50 M4x6xD2	K19/K25	4	6	2.5	2	2
球头螺钉	SR50 M5x8xD2.5	K32	5	8	3	2.5	2.5
球头螺钉	SR50 M6x10xD3.2	K40/K50	6	10	4	3.2	3
球头螺钉	SR50 M10x16xD6	K63	10	16	7	6	5
球头螺钉	SR50 M10x20xD6	K90	10	20	7	6	5

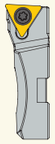
● Feature:
End face closed
The lip part can be rotated by 9° but with firmly clamping

MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

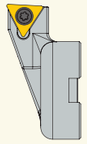
直压式精镗刀头
Cartridge for Precision Boring Tool

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.

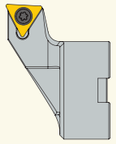




A型
Type A



B型
Type B



C型
Type C

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 M2x4.6	●
FRB 10B.TB06	TB..0601..	SR20 M2x4.6	●
FRB 10C.TB06	TB..0601..	SR20 M2x4.6	●
FRB 12A.TP08	TP..0802..	SR20 M2.2x5.6	●
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.TP08	TP..0802..	SR20 M2.2x5.6	●
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	●

- 刀片请根据不同材料单独订购，请参照：☞ A97-A99 页。
- 订货示例： 1 件 FRB 10A.TB06。
- The inserts for different materials should be ordered separately, please see page A97-A99.
- Ordering sample: 1 PC FRB 10A.TB06.

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 M2x4.6	●
FRB 10B.TC06	TC..06T1..	SR20 M2x4.6	●
FRB 10C.TC06	TC..06T1..	SR20 M2x4.6	●
FRB 12A.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 12B.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 12C.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 16A.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 16B.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 16C.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 20A.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 20B.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 20C.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 20A.TC11	TC..1102..	SR20 M2.5x6	●
FRB 20B.TC11	TC..1102..	SR20 M2.5x6	●
FRB 20C.TC11	TC..1102..	SR20 M2.5x6	●
FRB 25A.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 25B.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 25C.TC09	TC..0902..	SR20 M2.2x5.6	●
FRB 25A.TC11	TC..1102..	SR20 M2.5x6	●
FRB 25B.TC11	TC..1102..	SR20 M2.5x6	●
FRB 25C.TC11	TC..1102..	SR20 M2.5x6	●
FRB 30A.TC11	TC..1102..	SR20 M2.5x6	●
FRB 30B.TC11	TC..1102..	SR20 M2.5x6	●
FRB 30C.TC11	TC..1102..	SR20 M2.5x6	●

- 刀片请根据不同材料单独订购，请参照：☞ A97-A99 页。
- 订货示例： 1 件 FRB 10A.TC06。
- The inserts for different materials should be ordered separately, please see page A97-A99.
- Ordering sample: 1 PC FRB 10A.TC06.

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 M2x4.6	KEY03 T6
SR22 M2.5x6	KEY03 T8
SR22 M3x8	KEY03 T8
SR20 M2.2x5.6	KEY03 T7
SR20 M2.5x6	KEY03 T8
SR21 M4x9.5	KEY03 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)

MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

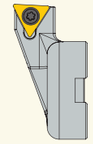
直压式精镗刀头
Cartridge for Precision Boring Tool

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 tool, 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.

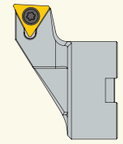




A型
Type A



B型
Type B



C型
Type C

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..	SR21 M2.5x5.3	●
FRB 12B.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 12C.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 16A.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 16B.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 16C.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 20A.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 20B.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 20C.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 25A.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 25B.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 25C.CC06	CC..0602..	SR21 M2.5x5.3	●
FRB 30A.CC09	CC..09T3..	SR21 M4x9.5	●
FRB 30B.CC09	CC..09T3..	SR21 M4x9.5	●
FRB 30C.CC09	CC..09T3..	SR21 M4x9.5	●

- 刀片请根据不同材料单独订购，请参照：☞ A95-A96 页。
- 订货示例： 1 件 FRB 12A.CC06。
- The inserts for different materials should be ordered separately, please see page A95-A96.
- Ordering sample: 1 PC FRB 12A.CC06.

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 25A.TC1103	TC..1103..	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 30A.TC1103	TC..1103..	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：☞ A97 页。
- 订货示例： 1 件 FRB 12A.TC0903。
- The inserts for different materials should be ordered separately, please see page A97.
- Ordering sample: 1 PC FRB 12A.TC0903.

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 M2x3.7	KEY03 T6
SR22 M2.5x6	KEY03 T8
SR22 M3x8	KEY03 T8
SR20 M2.2x5.6	KEY03 T7
SR20 M2.5x6	KEY03 T8
SR21 M2.5x5.3	KEY03 T7
SR21 M4x9.5	KEY03 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)

MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (K 接口)

清根槽刀头
Clearing Root Groove Head

适配于 NBF,CBF 系列的微调精镗刀，定位锁紧稳固，更换简便，可方便进行沟槽加工，主要针对有色金属加工。
It is suitable for NBF and CBF fine boring tools. Sable locking positioning, easy to be changed and machine the slots, mainly for non-ferrous metal processing.



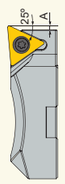


Fig A

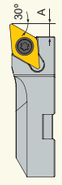
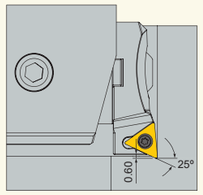


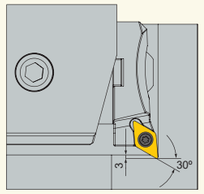
Fig B

规格型号 Designation	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	最大切深 A Maximum cutting depth A	Fig	在库 Stock
FRB 16A.TC09-25°	TC..0902..	SR20 M2.2x5.6	0.6	A	◐
FRB 20A.DC07-30°	DC..0702..	SR20 M2.5x6	3	B	◐
FRB 25A.DC07-30°	DC..0702..	SR20 M2.5x6	3	B	◐
FRB 30A.DC07-30°	DC..0702..	SR20 M2.5x6	3	B	◐
FRB 30A.DC11-30°	DC..11T3..	SR21 M4x11	4.5	B	◐

- 刀片请根据不同材料单独订购，请参照：☞ A96-A99 页。
- 订货示例：1 件 FRB 16A.TC09-25°。
- 最大切深 A 是指刀头刀片圆角为 R0.4 时的值 。
- The inserts for different materials should be ordered separately, please see page A96-A99.
- Ordering sample: 1 PC FRB 16A.TC09-25°.
- Maximum cutting depth A indicates that the value when the rounded corner of insert is R0.4.

加工部位示意图
Diagram for The Processing Part Area





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 M2x3.7	KEY03 T6
SR22 M2.5x6	KEY03 T8
SR22 M3x8	KEY03 T8
SR20 M2.2x5.6	KEY03 T7
SR20 M2.5x6	KEY03 T8
SR21 M4x9.5	KEY03 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)

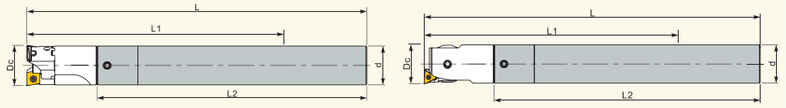
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (K 接口)

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 .





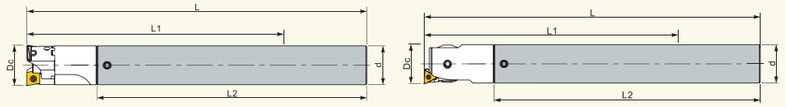
规格型号 Designation	d	L	L1	L2	长径比 L/D ratio	适配粗镗刀 Rough boring head	适配精镗刀 Precision boring head	在库 Stock
STH K19-150.E	19	185	135	150	7.1	CBR D19.K19.22.C	CBF D19.K19.34.C	●
STH K25-200.E	25	240	185	200	7.4	CBR D25.K25.25.C	CBF D25.K25.37.C	●
STH K32-250.E	32	290	230	250	7.2	CBR D32.K32.30.C	CBF D32.K32.43.C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

- 此系列刀具推荐使用高精度强力夹头刀柄或液压刀柄夹持。
- 型号后缀 ".E" 改为 ".EN" 的为不带扭力槽刀杆，适配于精镗刀，不适配粗镗刀
- 适配镗刀需单独订购，请参照：☞ A4,A13 页。
- 订货示例：1 件 STH K19-150.E。
- Recommended for high precision power chuck adaptor or hydraulic adaptor.
- End as ".E" can be changed into ".EN" which indicates the shank without the torsion slot. It is only suitable for precision boring head
- The suitable boring head should be ordered separately, please see page A4, A13.
- 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 Rough boring head	适配精镗刀 Precision boring head	在库 Stock
STH K19-140	19	175	125	140	6	CBR D19.K19.22.C	CBF D19.K19.34.C	◐
STH K25-175	25	215	160	175	6	CBR D25.K25.25.C	CBF D25.K25.37.C	◐
STH K32-215	32	260	200	215	6	CBR D32.K32.30.C	CBF D32.K32.43.C	◐
STH K40-265	40	310	250	265	6	CBR D40.K40.30.C	CBF D40.K40.48.C	◐

- 此系列刀具推荐使用高精度强力夹头刀柄或液压刀柄夹持。
- 适配镗刀需单独订购，请参照：☞ A4,A13 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 A4,A13.
- 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)

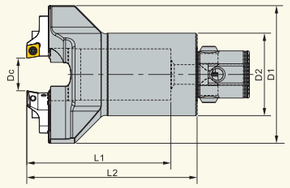
MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

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	1.3	C90A D026-035.CC06	◐
CXR D16-38.K63.120	16-38	105	63	110	130	2	2.3	C90A D041-055.CC09	◐
CXR D28-50.K63.160	28-50	118	80	152	177	2	4.1	C90A D041-055.CC09	◐
CXR D45-70.K90.230	45-70	164	95	214	239	2	6.9	C90A D055-070.CC09	◐

- 适配刀座需单独订购，请参照：☞ A6-A8 页。
- 适配刀柄需单独订购，请参照：☞ A23-A28 页。
- 订货示例：1 件 CXR D02-17.K50.100。
- The cartridge should be ordered separately, please see page A6-A8.
- The adaptor should be ordered separately, please see page A23-A28.
- Ordering sample: 1 PC CXR D02-17.K50.100

备件

Spare Parts

规格 Designation	刀座锁紧螺钉 Clamping screw for cartridge	蝶形垫片 Disk spring	锁紧扳手 Allen key for adjusting screw	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring
K50	SR55 M4x16	GK20 D4	KEY01 M3	FT90 D11x33	FT91 D8.5x1.5
K63	SR55 M6x20	GK20 D6	KEY01 M5	FT90 D14x43	FT91 D11x1.5
K90	SR55 M6x20	GK20 D6	KEY01 M5	FT90 D18x56	FT91 D15x1.5

● 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)

孔加工刀具
HOLE MAKING TOOLS

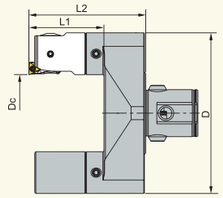
MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

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	◐
	11-21	56	88	95	1.8	CBF D32.K32.43.C	FRB 16B…	BHB K32.39	◐
	20-30	56	88	95	1.8	CBF D32.K32.43.C	FRB 16A…	BHB K32.39	◐
CXF D30-58.K63.88.C	30-40	56	88	125	2.1	CBF D32.K32.43.C	FRB 16C…	BHB K32.39	◐
	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	◐
CXF D58-86.K63.88.C	58-68	56	88	151	2.4	CBF D32.K32.43.C	FRB 16C…	BHB K32.39	◐
	67-77	56	88	151	2.4	CBF D32.K32.43.C	FRB 16B…	BHB K32.39	◐
	76-86	56	88	151	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：☞ A13,A15-A17 页。
- 适配刀柄需单独订购，请参照：☞ A23-A28 页。
- 订货示例：1 件 CXF D02-30.K63.88.C.
- The cartridge should be ordered separately, please see page A13,A15-A17.
- The adaptor should be ordered separately, please see page A23-A28.
- Ordering sample: 1 PC CXF D02-30.K63.88.C.

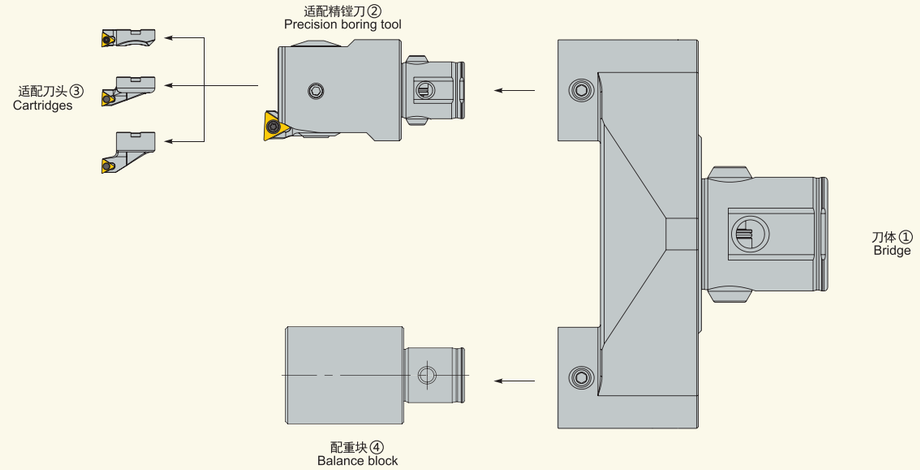
备件

Spare Parts

规格型号 Designation	接口锁紧螺钉 Clamping screw	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	SR65-2 M6x9-X	KEY01 M3	FT90 D14x43	FT91 D11x1.5
CXF D30-58.K63.88.C	SR65-2 M6x9-X	KEY01 M3	FT90 D14x43	FT91 D11x1.5
CXF D58-86.K63.88.C	SR65-2 M6x9-X	KEY01 M3	FT90 D14x43	FT91 D11x1.5

组合示意图

Instruction of Modular Combination Type K Connection



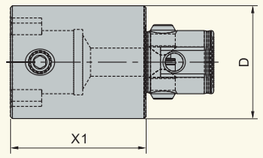
● 标准库存
Item in stock

◐ 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)

K 接口接长杆
Extension 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	1.32	●
EX K63x100	63	100	2.22	●
EX K90x105	88	105	4.59	●

- 适配刀柄需单独订购，请参照：☞ A23-A28 页。
- 订货示例：1 件 EX K19x20。
- Ordering sample: 1 PC EX K19x20.
- The adaptor should be ordered separately, please see page A23-A28.

备件
Spare Parts

规格型号 Designation	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 D2x1	SR65-2 M4x5-X	KEY01 M2
D=25	FT90 D5x17	FT91 D3x1	SR65-2 M5x6.5-X	KEY01 M2.5
D=32	FT90 D7x22	FT91 D5x1	SR65-2 M6x9-X	KEY01 M3
D=40	FT90 D8.5x26.5	FT91 D5.5x1.5	SR65 M8x11-X	KEY01 M4
D=50	FT90 D11x33	FT91 D8.5x1.5	SR65 M10x14-X	KEY01 M5
D=63	FT90 D14x43	FT91 D11x1.5	SR65 M12x18-X	KEY01 M6
D=88	FT90 D18x56	FT91 D15x1.5	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)

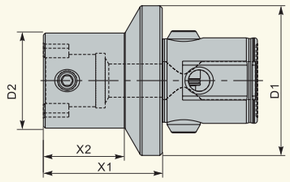
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (K 接口)

孔加工刀具
HOLE MAKING TOOLS

K 接口缩径杆
Reduction with Type K Connection





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	●

- 适配刀柄需单独订购，请参照：☞ A23-A28 页。
- 订货示例：1 件 RE K25-K19x40。
- Ordering sample: 1 PC RE K25-K19x40.
- The adaptor should be ordered separately, please see page A23-A28.

备件
Spare Parts

D1	K 接口扭力栓 Expanding pin	橡胶圈 Sealing ring
D1=25	FT90 D5x17	FT91 D3x1
D1=32	FT90 D7x22	FT91 D5x1
D1=40	FT90 D8.5x26.5	FT91 D5.5x1.5
D1=50	FT90 D11x33	FT91 D8.5x1.5
D1=63	FT90 D14x43	FT91 D11x1.5
D1=88	FT90 D18x56	FT91 D15x1.5

D2	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping screw
D2=19	SR65-2 M4x5-X	KEY01 M2
D2=25	SR65-2 M5x6.5-X	KEY01 M2.5
D2=32	SR65-2 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)

PSC-K 接口刀柄

PSC-K Adaptor with Type K Connection



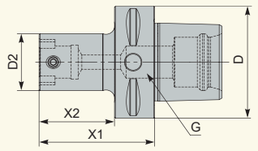


Fig A

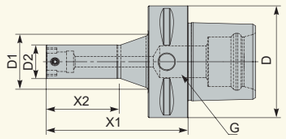


Fig B

规格型号 Designation	D	D1	D2	X1	X2	G	Fig	Kg	在库 Stock
C6 K19x80	63	31	19	80	40	M20x2	B	1.20	◐
C6 K25x80	63	-	25	80	57.5	M20x2	A	1.20	◐
C6 K32x65	63	-	32	65	42.5	M20x2	A	1.30	◐
C6 K32x100	63	-	32	100	77.5	M20x2	A	1.30	◐
C6 K40x60	63	-	40	60	37.5	M20x2	A	1.50	◐
C6 K40x95	63	-	40	95	72.5	M20x2	A	1.30	◐
C6 K50x50	63	-	50	50	27.5	M20x2	A	1.70	◐
C6 K50x85	63	-	50	85	62.5	M20x2	A	1.30	◐
C6 K63x60	63	-	63	60	37.5	M20x2	A	1.70	◐
C6 K63x95	63	-	63	95	72.5	M20x2	A	2.30	◐

● 订货示例：1 件 C6 K19x80。
● Ordering Simple: 1 PC C6 K19x80.

备件

Spare Parts

D2	锁紧螺钉 Clamping screw	锁紧螺钉扳手 Allen key for clamping screw
D2=19	SR65-2 M4x5-X	KEY01 M2
D2=25	SR65-2 M5x6.5-X	KEY01 M2.5
D2=32	SR65-2 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)

BT MAS403 K 接口刀柄

MAS403 BT Adaptor with Type K Connection



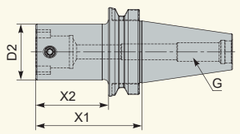


Fig A

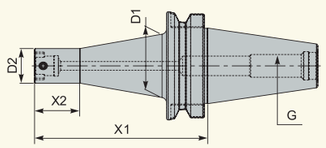


Fig B

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	48	M12	A	0.52	●
BT30 K32x75	30	-	32	75	53	M12	A	0.64	●
BT30 K40x50	30	-	40	50	28	M12	A	0.55	●
BT30 K50x50	30	-	50	50	28	M12	A	0.65	●
BT40 K19x70	40	31	19	70	38	M16	B	1.07	●
BT40 K25x50	40	-	25	50	23	M16	A	1.01	●
BT40 K25x85	40	-	25	85	58	M16	A	1.14	●
BT40 K25x100	40	-	25	100	73	M16	A	1.16	●
BT40 K32x50	40	-	32	50	23	M16	A	1.05	●
BT40 K32x90	40	-	32	90	63	M16	A	1.28	●
BT40 K32x115	40	-	32	115	88	M16	A	1.4	●
BT40 K40x50	40	-	40	50	23	M16	A	1.09	●
BT40 K40x100	40	-	40	100	73	M16	A	1.54	●
BT40 K40x140	40	-	40	140	113	M16	A	1.89	●
BT40 K50x50	40	-	50	50	23	M16	A	1.2	●
BT40 K50x100	40	-	50	100	73	M16	A	1.87	●
BT40 K50x150	40	-	50	150	123	M16	A	2.25	●
BT40 K63x60	40	-	63	60	33	M16	A	1.45	●
BT40 K63x120	40	-	63	120	93	M16	A	2.74	●
BT40 K63x165	40	-	63	165	138	M16	A	3.76	●

● 刀柄若需数据芯片孔，请在型号后加 “.X”。
● 订货示例：1 件 BT40 K32x50。
● If needing the hole for data chip, please add ".X" at the end of the designation.
● 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	SR65-2 M4x5-X	KEY01 M2
D2=25	SR65-2 M5x6.5-X	KEY01 M2.5
D2=32	SR65-2 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 WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

BT MAS403 K 接口刀柄

MAS403 BT Adaptor with Type K Connection



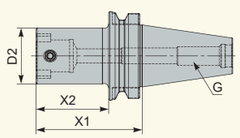


Fig A

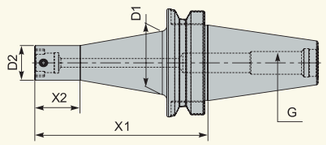


Fig B

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	3.62	●
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	32	M24	A	3.63	●
BT50 K32x120	50	-	32	120	82	M24	A	3.93	●
BT50 K32x160	50	60	32	160	42	M24	B	4.8	●
BT50 K40x70	50	-	40	70	32	M24	A	3.71	●
BT50 K40x110	50	-	40	110	72	M24	A	4.07	●
BT50 K40x160	50	-	40	160	122	M24	A	4.53	●
BT50 K40x200	50	-	40	200	162	M24	A	4.83	●
BT50 K50x70	50	-	50	70	32	M24	A	3.86	●
BT50 K50x110	50	-	50	110	72	M24	A	4.42	●
BT50 K50x160	50	-	50	160	122	M24	A	5.13	●
BT50 K50x210	50	-	50	210	172	M24	A	5.89	●
BT50 K50x230	50	-	50	230	192	M24	A	6.06	●
BT50 K50x250	50	-	50	250	212	M24	A	6.34	●
BT50 K63x80	50	-	63	80	42	M24	A	4.12	●
BT50 K63x120	50	-	63	120	82	M24	A	5.02	●
BT50 K63x160	50	-	63	160	122	M24	A	5.94	●
BT50 K63x230	50	-	63	230	192	M24	A	7.52	●
BT50 K63x260	50	-	63	260	222	M24	A	8.16	●
BT50 K63x280	50	-	63	280	242	M24	A	8.6	●
BT50 K63x300	50	-	63	300	262	M24	A	9.05	●
BT50 K90x100	50	-	88	100	62	M24	A	5.61	●
BT50 K90x180	50	-	88	180	142	M24	A	9.2	●
BT50 K90x250	50	-	88	250	212	M24	A	12.34	●
BT50 K90x320	50	-	88	320	282	M24	A	15.48	●
BT50 K90x350	50	-	88	350	312	M24	A	16.84	●

● 刀柄若需数据芯片孔，请在型号后加 “.X”。
● 订货示例：1 件 BT50 K19x100。
● If needing the hole for data chip, please add ".X" at the end of the designation.
● 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	SR65-2 M4x5-X	KEY01 M2
D2=25	SR65-2 M5x6.5-X	KEY01 M2.5
D2=32	SR65-2 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 WITH TYPE K CONNECTION 模块式镗刀 (*K* 接口)

DIN69871-A K 接口刀柄

DIN69871-A Adaptor with Type K Connection



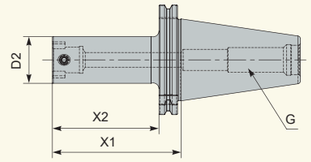


Fig A

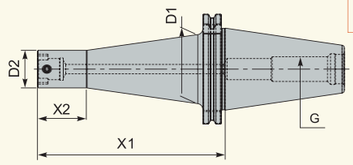


Fig B

规格型号 Designation	ISO	D1	D2	X1	X2	G	Fig	Kg	在库 Stock
DIN69871 30 K19x70	30	31	19	70	38	M12	B	0.44	●
DIN69871 30 K25x70	30	-	25	70	50.9	M12	A	0.47	●
DIN69871 30 K32x75	30	-	32	75	55.9	M12	A	0.59	●
DIN69871 30 K40x50	30	-	40	50	30.9	M12	A	0.5	●
DIN69871 30 K50x50	30	-	50	50	30.9	M12	A	0.6	●
DIN69871 40 K19x70	40	31	19	70	38	M16	B	0.97	●
DIN69871 40 K25x50	40	-	25	50	30.95	M16	A	0.91	●
DIN69871 40 K25x85	40	-	25	85	65.95	M16	A	1.04	●
DIN69871 40 K25x100	40	-	25	100	80.95	M16	A	1.05	●
DIN69871 40 K32x50	40	-	32	50	30.95	M16	A	0.95	●
DIN69871 40 K32x90	40	-	32	90	70.95	M16	A	1.18	●
DIN69871 40 K32x115	40	-	32	115	95.95	M16	A	1.31	●
DIN69871 40 K40x50	40	-	40	50	30.95	M16	A	0.99	●
DIN69871 40 K40x100	40	-	40	100	80.95	M16	A	1.44	●
DIN69871 40 K40x140	40	-	40	140	120.95	M16	A	1.82	●
DIN69871 40 K50x50	40	-	50	50	30.95	M16	A	1.1	●
DIN69871 40 K50x100	40	-	50	100	80.95	M16	A	1.77	●
DIN69871 40 K50x150	40	-	50	150	130.95	M16	A	2.53	●
DIN69871 40 K63x60	40	-	63	60	40.95	M16	A	1.35	●
DIN69871 40 K63x120	40	-	63	120	100.95	M16	A	2.64	●
DIN69871 40 K63x165	40	-	63	165	145.95	M16	A	3.7	●

● 刀柄若需数据芯片孔，请在型号后加 “.X”。
● 订货示例：DIN69871 30 K19x70。
● If needing the hole for data chip, please add ".X" at the end of the designation.
● 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	SR65-2 M4x5-X	KEY01 M2
D2=25	SR65-2 M5x6.5-X	KEY01 M2.5
D2=32	SR65-2 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)

DIN69871-A K 接口刀柄

DIN69871-A Adaptor with Type K Connection



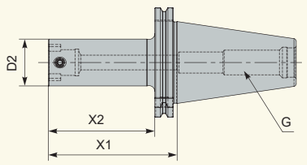


Fig A

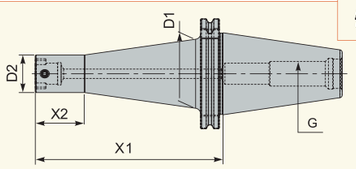


Fig B

规格型号 Designation	ISO	D1	D2	X1	X2	G	Fig	Kg	在库 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	50.95	M24	A	2.8	●
DIN69871 50 K32x120	50	-	32	120	100.95	M24	A	3.09	●
DIN69871 50 K32x160	50	60	32	160	42	M24	B	4.01	●
DIN69871 50 K40x70	50	-	40	70	50.95	M24	A	2.91	●
DIN69871 50 K40x110	50	-	40	110	90.95	M24	A	3.26	●
DIN69871 50 K40x160	50	-	40	160	140.95	M24	A	3.7	●
DIN69871 50 K40x200	50	-	40	200	180.95	M24	A	4.05	●
DIN69871 50 K50x70	50	-	50	70	50.95	M24	A	3.11	●
DIN69871 50 K50x110	50	-	50	110	90.95	M24	A	3.68	●
DIN69871 50 K50x160	50	-	50	160	140.95	M24	A	4.37	●
DIN69871 50 K50x210	50	-	50	210	190.95	M24	A	5.1	●
DIN69871 50 K50x230	50	-	50	230	210.95	M24	A	5.38	●
DIN69871 50 K50x250	50	-	50	250	230.95	M24	A	5.66	●
DIN69871 50 K63x80	50	-	63	80	60.95	M24	A	3.59	●
DIN69871 50 K63x160	50	-	63	160	140.95	M24	A	5.38	●
DIN69871 50 K63x230	50	-	63	230	210.95	M24	A	6.96	●
DIN69871 50 K63x260	50	-	63	260	240.95	M24	A	7.63	●
DIN69871 50 K63x280	50	-	63	280	260.95	M24	A	8.08	●
DIN69871 50 K63x300	50	-	63	300	280.95	M24	A	8.53	●
DIN69871 50 K90x100	50	-	88	100	80.95	M24	A	5.34	●
DIN69871 50 K90x180	50	-	88	180	160.95	M24	A	8.93	●
DIN69871 50 K90x250	50	-	88	250	230.95	M24	A	12.07	●
DIN69871 50 K90x320	50	-	88	320	300.95	M24	A	15.21	●
DIN69871 50 K90x350	50		88	350	330.95	M24	A	16.56	●

● 刀柄若需数据芯片孔，请在型号后加 “.X”。
● 订货示例：1 件 DIN69871 50 K19x100。
● If needing the hole for data chip, please add ".X" at the end of the designation.
● 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	SR65-2 M4x5-X	KEY01 M2
D2=25	SR65-2 M5x6.5-X	KEY01 M2.5
D2=32	SR65-2 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)

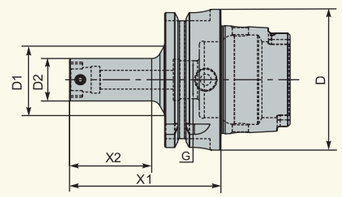
MODULAR BORING TOOL WITH TYPE K CONNECTION 模块式镗刀 (K 接口)

孔加工刀具
HOLE MAKING TOOLS

HSK-A K 接口刀柄

HSK-A 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	54	M18x1	1.0	●
HSK A63 K32x85	63	-	32	85	59	M18x1	1.1	●
HSK A63 K32x120	63	-	32	120	94	M18x1	1.13	●
HSK A63 K40x80	63	-	40	80	54	M18x1	1.2	●
HSK A63 K40x120	63	-	40	120	94	M18x1	1.42	●
HSK A63 K50x60	63	-	50	60	34	M18x1	1.3	●
HSK A63 K50x115	63	-	50	115	89	M18x1	1.78	●
HSK A63 K63x70	63	-	63	70	44	M18x1	1.5	●
HSK A63 K63x110	63	-	63	110	84	M18x1	2.02	●
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	50	32	110	76	M24x1.5	2.8	●
HSK A100 K40x105	100	-	40	105	76	M24x1.5	3.0	●
HSK A100 K40x150	100	-	40	150	121	M24x1.5	3.00	●
HSK A100 K50x75	100	-	50	75	46	M24x1.5	3.3	●
HSK A100 K50x140	100	-	50	140	111	M24x1.5	3.43	●
HSK A100 K50x185	100	-	50	185	156	M24x1.5	4.10	●
HSK A100 K63x75	100	-	63	75	46	M24x1.5	3.4	●
HSK A100 K63x165	100	-	63	165	136	M24x1.5	4.79	●
HSK A100 K63x215	100	-	63	215	186	M24x1.5	5.94	●
HSK A100 K90x125	100	-	88	125	96	M24x1.5	5.8	●
HSK A100 K90x215	100	-	88	215	186	M24x1.5	9.82	●
HSK A100 K90x275	100	-	88	275	246	M24x1.5	12.58	●

● 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	SR65-2 M4x5-X	KEY01 M2
D2=25	SR65-2 M5x6.5-X	KEY01 M2.5
D2=32	SR65-2 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

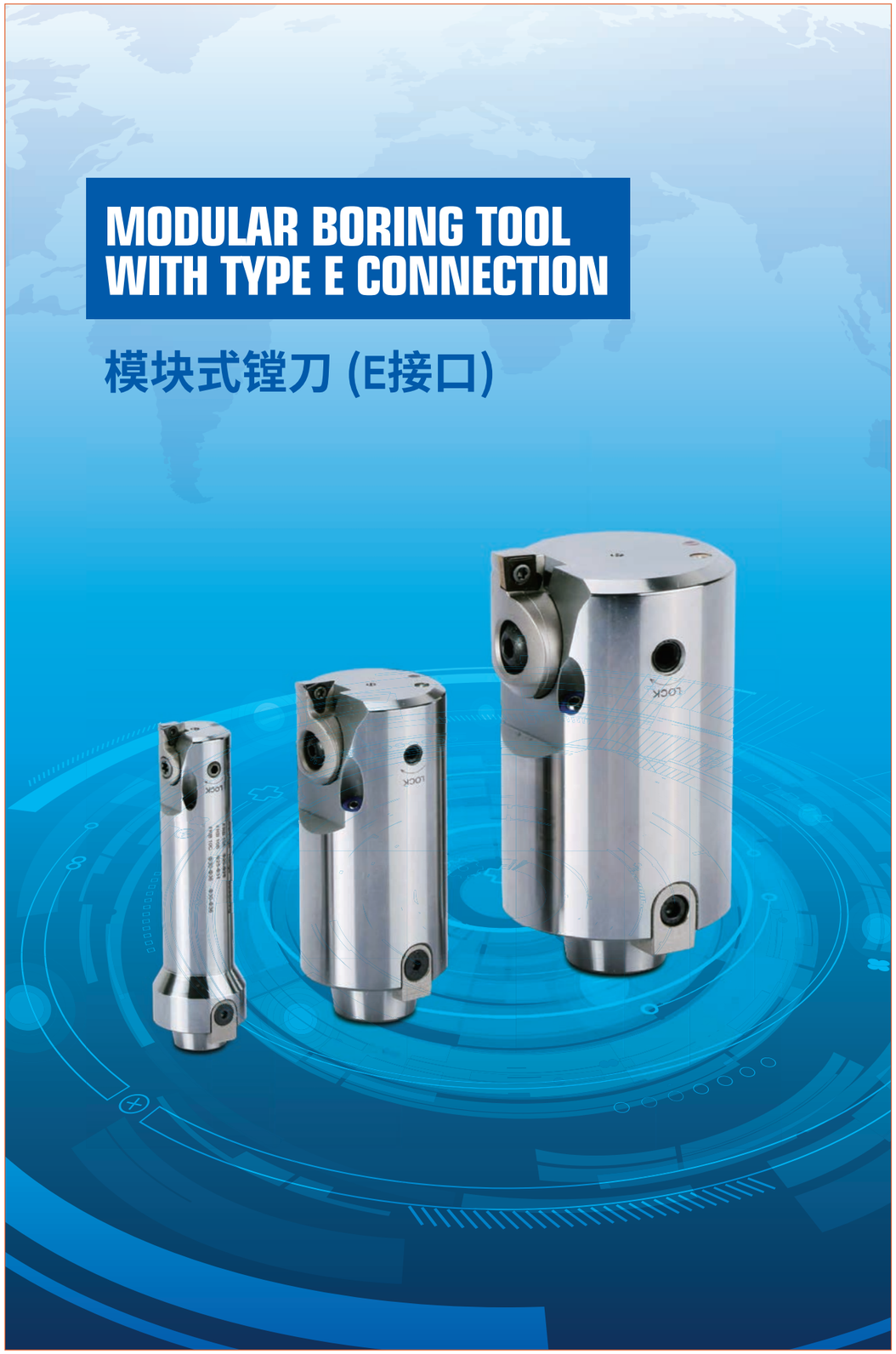
● 标准库存
Item in stock

◐ 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 WITH TYPE E CONNECTION

模块式镗刀 (E接口)



A

孔加工刀具
HOLE MAKING TOOLS

模块式镗刀（E 接口）
Modular Boring Tool with Type E Connection

模块式 E 接口原理及连接锁紧方式 A31
Clamping Principle for Type E Connection

BR 系列粗镗刀 A32
BR Rough Boring Tool with Type E Connection

BR 系列粗镗刀 (反镗示意） A33
BR Rough Boring Tool for Back Boring with Type E Connection

矩形槽粗镗刀座 A34
Cartridge for Rough Boring Tool

反镗刀座 A37
Cartridge for Rough Boring Tool for Back Boring

NBF 系列小孔径微调精镗刀 A38
NBF Mini Precision Boring Tool with Type E Connection

小孔精镗刀杆 A39
Mini Precision Boring Bar

小孔精镗刀杆变径套 A40
Reduction Sleeve for Mini Precision Boring Bar

NBF 系列微调精镗刀 A41
NBF Precision Boring Tool with Type E Connection

NBF 系列微调精镗刀 (反精镗加工示意） A42
NBF Precision Boring Tool for Back Boring with Type E Connection

E 接口接长杆 A43
Extension with Type E Connection

E 接口缩径杆 A44
Reduction with Type E Connection

BT MAS403 标准 E 接口刀柄 A45
MAS403 BT Adaptor with Type E Connection

DIN69871-A 标准 E 接口刀柄 A46
DIN69871-A Adaptor with Type E Connection

HSK-A E 接口刀柄 A47
HSK-A Adaptor with Type E Connection

莫氏镗刀柄 A48
Morse Taper Adaptor with Type E Connection

模块式 E 接口原理及连接锁紧方式

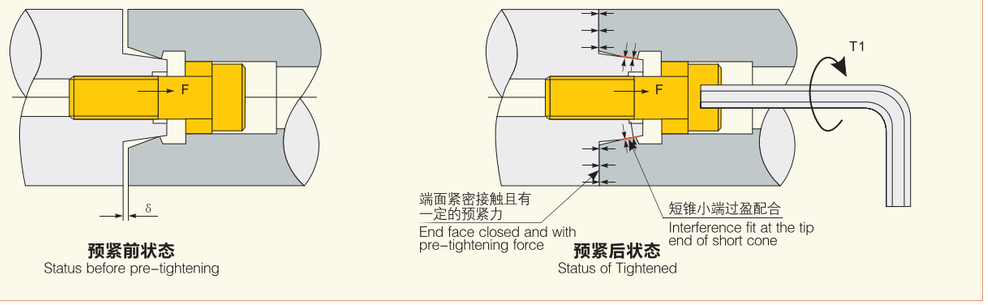
Clamping Principle and Assembly Instruction of Type E Connection

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.

标准型 E 接口原理图

Clamping Principle of Type E Connection



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

MODULAR BORING TOOL WITH TYPE E CONNECTION 模块式镗刀 (E 接口)

孔加工刀具
HOLE MAKING TOOLS

BR 系列粗镗刀

BR Rough Boring Tool with Type E Connection

双刃可调，镗孔加工范围 Φ20-Φ153，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.



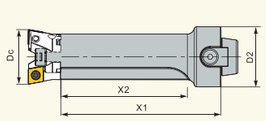


Fig A

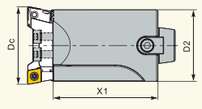


Fig B

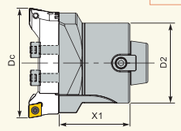


Fig C

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

● 适配刀座需单独订购，请参照：☞ A45-A48 页。
● 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
● 刀座刻线标注依据：CC06/CC09/TC11/TC16/SO06 圆角为 R0.4 时的值，SO09 圆角为 R0.6 时的值，CC12/SC09/SC12/SO12 圆角为 R0.8 时的值；SO16 圆角为 R1.2 时的值；
● 订货示例：1 件 BR D020-027.E25.Z2.68.C。
● The cartridge should be ordered separately, please see page A34-A36.
● The adaptor should be ordered separately, please see page A45-A48.
● Recommended cutting data please see page A117-A120.
● Scale mark basis.
The scale value for CC06/CC09/TC11/SO06 with R0.4. The scale value for SO09 with R0.6.
The scale value for CC12/SC09/SC12/SO12 with R0.8. The scale value for SO16 with R1.2.
● Ordering sample: 1 Piece BR D020-0 27.E25.I2 .68.C

备件

Spare Parts

Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	锁紧扳手 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 M3X6
D2=32	PL03 8x6	SR57 M3x10
D2=40	PL03 10x5	SR57 M4x12
D2=50	PL04 12x9	SR55 M5x12
D2=63	PL04 14x12	SR55 M5X12
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 WITH TYPE E CONNECTION 模块式镗刀 (*E* 接口)

BR 系列粗镗刀（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 Φ30-Φ152，调整自如、稳定、过孔直径 D 满足 "D ≥ (Dc+D1)/2+ 1"
Thanks of stable cartridge for back boring.so that it can be back boring easily. The back boring range isΦ30-Φ152mm, and also it can be adjusted freely and stably. The hole diameter D should meet the demand of "D≥ (Dc+D1)/2+ 1".



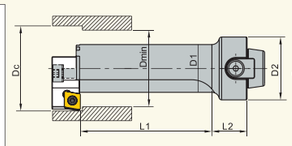


Fig A

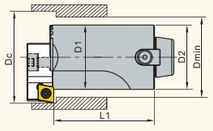


Fig B

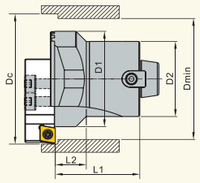


Fig C

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

● 订适配刀座需单独订购，请参照：☞ A37 页。
● 适配刀柄需单独订购，请参照：☞ A45-A48 页。
● 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
● 最小过孔直径 Dmin=(Dc+D1)/2+1。
● 刀座刻线标注依据：CC06/CC09/TC11/TC16/SO06 圆角为 R0.4 时的值，SO09 圆角为 R0.6 时的值，
CC12/SC09/SC12/SO12 圆角为 R0.8 时的值；SO16 圆角为 R1.2 时的值；
● 订货示例：1 件 BR D020-027.E25.Z2.68.C。
● The cartridge should be ordered separately, please see page A37.
● The adaptor should be ordered separately, please see page A45-A48.
● Recommended cutting data please see page A117-A120.
● Through hole of back boring Dmin= (Dc+D1)/2 + 1.
● Scale mark basis.
The scale value for CC06/CC09/TC11/SO06 with R0.4. The scale value for SO09 with R0.6.
The scale value for CC12/SC09/SC12/SO12 with R0.8. The scale value for SO16 with R1.2.
● Ordering sample: 1 piece BR D020-027.E25.Z2.68.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 WITH TYPE E CONNECTION 模块式镗刀 (*E* 接口)

孔加工刀具
HOLE MAKING TOOLS

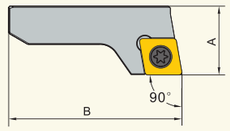
矩形槽粗镗刀座

Cartridge with Rectangular Slot Guide for Rough Boring Tool

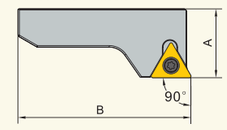
适配于 BR 系列双刃粗镗刀，矩形槽刀座接口，调整方便；
加工范围：90° C 型刀座 Φ20-Φ153; 90° T 型刀座 Φ33-Φ153; 45°刀座 Φ23-Φ153;84°刀座 Φ20-Φ153;
It is suitable for the BR rough boring tools with twin cutters, and also it can be adjusted freely due to the connection.
The boring range: 90° C style isΦ20-Φ153; 90° T style isΦ33-Φ153; 45° style isΦ23-Φ53; 84° style isΦ20-Φ153.



90° C型刀座
Kr=90° with C Insert



90° T型刀座
Kr=90° with T Insert



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 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	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	SR21 M2.5x5.3	KEY03 T7	●
S90A D023-027.CC06	23-27	13.6	17	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
S90A D026-035.CC06	26-35	13.6	20	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
S90A D033-041.CC06	33-41	15	26	CC..0602..	0.02	SR50 M3.0x8	KEY01 M1.5	SR21 M2.5x5.3	KEY03 T7	●
S90A D034-042.CC09	34-42	18	26	CC..09T3..	0.02	SR50 M3.0x8	KEY01 M1.5	SR21 M4x9.5	KEY03 T15	●
S90A D041-055.CC09	41-55	18	32	CC..09T3..	0.03	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY03 T15	●
S90A D047-059.CC12	47-59	22	35	CC..1204..	0.05	SR50 M3.0x10	KEY01 M1.5	SR21 M5x12.8	KEY03 T20	●
S90A D055-070.CC09	55-70	18	45	CC..09T3..	0.05	SR50 M4.0x10	KEY01 M2	SR21 M4x9.5	KEY03 T15	●
S90A D055-070.CC12	55-70	25	45.5	CC..1204..	0.08	SR50 M4.0x10	KEY01 M2	SR21 M5x12.8	KEY03 T20	●
S90A D070-090.CC12	70-90	30	59	CC..1204..	0.15	SR50 M5.0x12	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
S90A D090-110.CC12	90-110	30	74	CC..1204..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
S90A D110-133.CC12	110-133	30	85	CC..1204..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
S90A D130-153.CC12	130-153	30	96	CC..1204..	0.30	SR50 M5.0x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●

● 刀片请根据不同材料单独订购，请参照：☞ A95 页。
● 订货示例：1 件 S90A D020-024.CC06。
● The inserts for different materials should be ordered separately, please see page A95.
● Ordering sample: 1 PC S90A D020-024.CC06.

90°T 型刀座

Kr=90° with C Insert

规格型号 Designation	镗削范围 Boring rang	A	B	适用刀片 Insert	Kg	刀座调整螺钉 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	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	KEY03 T8	●
S90A D041-055.TC11	41-55	18	32	TC..1102..	0.03	SR50 M3.0x10	KEY01 M1.5	SR20 M2.5x6	KEY03 T8	●
S90A D055-070.TC11	55-70	18	45	TC..1102..	0.05	SR50 M4.0x10	KEY01 M2	SR20 M2.5x6	KEY03 T8	●
S90A D070-090.TC16	70-90	30	59	TC..16T3..	0.15	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
S90A D090-110.TC16	190-110	30	74	TC..16T3..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
S90A D110-133.TC16	110-133	30	85	TC..16T3..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
S90A D130-153.TC16	130-153	30	96	TC..16T3..	0.30	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●

● 刀片请根据不同材料单独订购，请参照：☞ A97-A99 页。
● 订货示例：1 件 S90A D033-041.TC11。
● The inserts with different materials should be ordered separately, please see page A97-A99.
● Ordering sample: 1 PC S90A D033-041.TC11.

● 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)

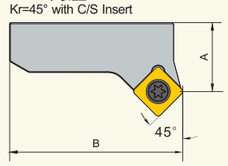
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL WITH TYPE E CONNECTION 模块式镗刀 (*E* 接口)

矩形槽粗镗刀座
Cartridge for Rough Boring Tool



45° 刀座
Kr=45° with C/S Insert



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 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
S45A D023-027.CC06	23-27	13.6	17	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
S45A D026-035.CC06	26-35	13.6	20	CC..0602..	0.01	SR50 M2.5x6	KEY01 M1.3	SR21 M2.5x5.3	KEY03 T7	●
S45A D033-041.CC06	33-41	15	25	CC..0602..	0.02	SR50 M3.0x8	KEY01 M1.5	SR21 M2.5x5.3	KEY03 T7	●
S45A D041-055.SC09	41-55	18	30	SC..09T3..	0.03	SR50 M3.0x10	KEY01 M1.5	SR21 M4x9.5	KEY03 T15	●
S45A D055-070.SC09	55-70	30	45	SC..09T3..	0.04	SR50 M4.0x10	KEY01 M2	SR21 M4x9.5	KEY03 T15	●
S45A D070-090.SC09	70-90	30	59	SC..09T3..	0.13	SR50 M5.0x12	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
S45A D090-110.SC09	90-110	30	75	SC..09T3..	0.21	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
S45A D110-133.SC09	110-133	30	85	SC..09T3..	0.25	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●
S45A D130-153.SC09	130-153	30	93	SC..09T3..	0.27	SR50 M5.0x16	KEY01 M2.5	SR21 M4x9.5	KEY03 T15	●

- 刀片请根据不同材料单独订购，请参照：☞ A95 页 ,A100 页。
- 订货示例：1 件 S45A D023-027.CC06。
- The inserts for different materials should be ordered separately, please see page A95,A100.
- Ordering sample: 1 PC S45A D023-027.CC06.

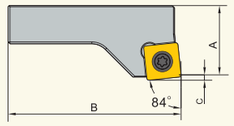
孔加工刀具
HOLE MAKING TOOLS

MODULAR BORING TOOL WITH TYPE E CONNECTION 模块式镗刀 (*E* 接口)

矩形槽粗镗刀座
Cartridge for Rough Boring Tool



84° 刀座
Kr=84° with S Insert



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 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	刀片锁紧扳手 Allen key for damping screw	在库 Stock
S84A D020-024.SO06	20-24	13.9	17	0.7	SO.. 0603..	0.01	SR50 M2.5x5	KEY01 M1.3	SR20 M2.2x5.6	KEY03 T7	●
S84A 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	KEY03 T7	●
S84A 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	KEY03 T7	●
S84A D033-041.SO06	33-41	15.1	25.8	0.7	SO.. 0603..	0.02	SR50 M3x8	KEY01M1.5	SR20 M2.2x5.6	KEY03 T7	●
S84A D041-055.SO09	41-55	18.1	32.1	0.7	SO.. 09T3..	0.03	SR50 M3x10	KEY01 M1.5	SR20 M3x6.6	KEY03 T9	●
S84A D055-070.SO09	55-70	18.1	45.3	0.7	SO.. 09T3..	0.05	SR50 M4x10	KEY01 M2	SR20 M3x6.6	KEY03 T9	●
S84A D070-090.SO12	70-90	30.3	58.8	1.0	SO.. 1204..	0.15	SR50 M5x12	KEY01 M2.5	SR20 M4x9.5	KEY03 T15	●
S84A D090-110.SO12	90-110	30.3	73.6	1.0	SO.. 1204..	0.22	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY03 T15	●
S84A D110-133.SO12	110-133	30.3	85.4	1.0	SO.. 1204..	0.26	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY03 T15	●
S84A D130-153.SO12	130-153	30.3	96.4	1.0	SO.. 1204..	0.31	SR50 M5x16	KEY01 M2.5	SR20 M4x9.5	KEY03 T15	●
S84A D090-110.SO16	90-110	30.1	73.6	2.6	SO.. 1605..	0.22	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY03 T15	●
S84A D110-133.SO16	110-133	30.1	85.4	2.6	SO.. 1605..	0.26	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY03 T15	●
S84A D130-153.SO16	130-153	30.1	96.4	2.6	SO.. 1605..	0.32	SR50 M5x16	KEY01 M2.5	SR20 M5x13.8	KEY03 T15	●

- 刀片请根据不同材料单独订购，请参照：☞ A101 页。
- 订货示例：1 件 S84A D033-041.SO06。
- The inserts for different materials should be ordered separately, please see page A101.
- Ordering sample: 1 PC S84A D033-041.SO06.

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 Clarping for adjusting insert	刀座调整扳手 Allen key for adjusting screw	刀片锁紧螺钉 Clamping screw for ingert	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	KEY03 T15	●
S84A D041-055.SC09	41-55	18.0	32	1.3	SC..09T3..	0.04	SR50 M3x8	KEY01 M1.5	SR21 M4x9.5	KEY03 T15	●
S84A D047-059.SC12	47-59	20.0	36	2.0	SC..1204..	0.04	SR50 M3x10	KEY01 M1.5	SR21 M5x12.8	KEY03 T20	●
S84A D055-070.SC09	55-70	18.0	45	1.3	SC..09T3..	0.05	SR50 M4x10	KEY01 M2.0	SR21 M4x9.5	KEY03 T15	●
S84A D058-073.SC12	58-73	20.0	47	2.0	SC..1204..	0.05	SR50 M4x10	KEY01 M2.0	SR21 M5x12.8	KEY03 T20	●
S84A D070-090.SC12	70-90	30.0	59	2.0	SC..1204..	0.15	SR50 M5x12	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
S84A D090-110.SC12	90-110	30.0	74	2.0	SC..1204..	0.22	SR50 M5x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
S84A D110-133.SC12	110-133	30.0	85	2.0	SC..1204..	0.26	SR50 M5x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●
S84A D130-153.SC12	130-153	30.0	96	2.0	SC..1204..	0.31	SR50 M5x16	KEY01 M2.5	SR21 M5x12.8	KEY03 T20	●

- 适用刀片请根据不同的加工材料单独选购，请参照：☞ A100 页。
- 订货示例：1 件 S84A D070-090.SC12。
- The inserts for different materials should be ordered separately, please see page A100.
- 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)

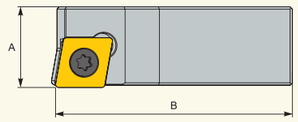
反镗刀座

Cartridge for Rough Boring Tool 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 rang	A	B	适用刀片 Insert	Kg	在库 Stock
S90C D19.3035.CC06	30-35	11.3	21.0	CC..0602..	0.01	◐
S90C D25.3341.CC06	33-41	11.3	23.0	CC..0602..	0.01	◐
S90C D25.4048.CC06	40-48	11.3	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	35.0	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	45.0	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	62.0	CC..09T3..	0.10	◐
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：☞ A95 页。
- 订货示例：1 件 S90C D32.4252.CC06。
- The inserts for different materials should be ordered separately, please see page A95.
- 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..	SR21 M2.5x5.3	KEY03 T7
CC..09T3..	SR21 M4x9.5	KEY03 T15
CC..1204..	SR21 M5x12.8	KEY03 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)

NBF 系列小孔径微调精镗刀

NBF 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。

It is suitable for the BR rough boring Mini boring tool has a highly precise adjustment mechanism, 1 DIV =0.001 mm in diameter, and the boring range isΦ 2-Φ50. High rigidity thanks of hollow short taper combination type E connection. Boring bars for the body.



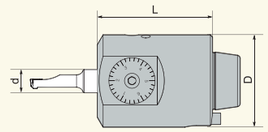


Fig A

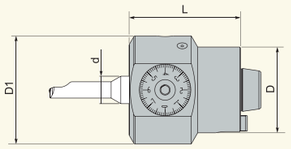


Fig B

规格型号 Designation	Dc	L	D	D1	d	Kg	Fig	适配刀杆 Boring bar	在库 Stock
NBF D02-22.E40.50.C	2-22	50	40	-	10	0.5	A	NBF C10-6 ST06E.. ST10.. ST10E..	●
NBF D06-50.E50.65.C	6-50	65	50	63	16	1.15	B	ST16 .. ST16E..	●
NBF D06-50.E63.70.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：☞ A39-A40 页。
- 适配刀柄需单独订购，请参照：☞ A45-A48 页。
- 加工不同材料刀具的切削参数，请参照：☞ A121 页。
- 当 Dc 为 2-22 时，刀具调节行程为 -0.2~+1.2mm。
  当 Dc 为 6-50 时，刀具调节行程为 -0.2~+3.3mm。
- 订货示例：1 件 NBF D02-22.E40.Z1.50.C。
- The boring bar should be ordered separately, please see page A39-A40.
- The adaptor should be ordered separately, please see page A45-A48.
- Recommended cutting data please see page A121.
- The adjusting range is -0.2~+1.2mm when Dc range is 2-22.
  The adjusting range is -0.2~+3.3mm when Dc range is 6-50.
- Ordering sample: 1 piece NBF 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	SR50 M6x10xD3.2	KEY01 M3	PL03 10x5	SR57 M4x12
NBF D06-50.E50	SR54 M10x16	SR50 M10x16xD6	KEY01 M5	PL04 12x9	SR55 M5x12
NBF D06-50.E63	SR54 M10x16	SR50 M10x16xD6	KEY01 M5	PL04 14x12	SR55 M5X12

● 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 WITH TYPE E CONNECTION 模块式镗刀 (*E* 接口)

小孔精镗刀杆
Mini Precision Boring Bar

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



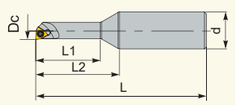


Fig A

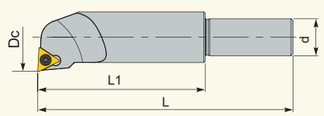


Fig B

ST10

规格型号 Designation	Dc	d	L	L1	L2	刀片 Insert	Fig	在库 Stock
ST10 D06-08.WB06.23	6-8	10	53	20	23	WB..0601..	A	●
ST10 D08-10.WB06.25	8-10	10	55	23	25	WB..0601..	A	●
ST10 D10-12.WB06.30	10-12	10	60	30	30	WB..0601..	A	●
ST10 D12-14.TP09.36	12-14	10	66	36	-	TP..0902..	B	●
ST10 D14-16.TP09.42	14-16	10	72	42	-	TP..0902..	B	●
ST10 D16-18.TP11.48	16-18	10	78	48	-	TP..1103..	B	●
ST10 D18-20.TP11.54	18-20	10	84	54	-	TP..1103..	B	●
ST10 D20-22.TP11.60	20-22	10	90	60	-	TP..1103..	B	●

- 刀片请根据不同材料单独订购。请参照：☞ A99 页 ,A102 页。
- 订货示例：1 件 ST10 D06-08.WB06.23。
- 内冷刀杆需单独订购，订货示例：1 件 ST10 D06-08.WB06.23.C。
- The insert should be ordered separately, please see page A99,A102.
- Ordering sample: 1 piece ST10 D06-08.WB06.23.
- Toolholder with inner coolant should be ordered separately. Ordering sample: 1 piece ST10 D06-08.WB06.23.C.

ST16

规格型号 Designation	Dc	d	L	L1	L2	刀片 Insert	Fig	在库 Stock
ST16 D06-08.WB06.23	6--8	16	63	23	33	WB..0601..	A	●
ST16 D08-11.WB06.28	8--11	16	68	28	36	WB..0601..	A	●
ST16 D10-13.WB06.36	10--13	16	76	36	42	WB..0601..	A	●
ST16 D12-16.TP09.50	12--16	16	90	50	54	TP..0902..	A	●
ST16 D15-21.TP09.60	15-21	16	100	60	61	TP..0902..	A	●
ST16 D20-26.TP11.64	20-26	16	104	64	-	TP..1103..	B	●
ST16 D25-31.TP11.64	25-31	16	104	64	-	TP..1103..	B	●
ST16 D30-36.TP11.72	30-36	16	112	72	-	TP..1103..	B	●
ST16 D35-41.TP11.72	35-41	16	112	72	-	TP..1103..	B	●
ST16 D40-46.TP11.72	40-46	16	112	72	-	TP..1103..	B	●
ST16 D44-50.TP11.72	44-50	16	112	72	-	TP..1103..	B	●

- 刀片请根据不同材料单独订购。请参照：☞ A99 页 ,A102 页。
- 订货示例：1 件 ST16 D06-08.WB06.23。
- 内冷刀杆需单独订购，订货示例：1 件 ST16 D06-08.WB06.23.C。
- The insert should be ordered separately, please see page A99,A102.
- Ordering sample: 1 piece ST16 D06-08.WB06.23.
- Toolholder with inner coolant should be ordered separately. Ordering sample: 1 piece ST16 D06-08.WB06.23.C.

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 M2x3.7	KEY03 T6
TP..0902..	SR22 M2.5x6	KEY03 T8
TP..1103..	SR22 M3x8	KEY03 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 WITH TYPE E CONNECTION 模块式镗刀 (*E* 接口)

小孔精镗刀杆（抗振型）
Mini Anti-Vibration Precision Boring Bar

适配于小孔径微调精镗刀，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.



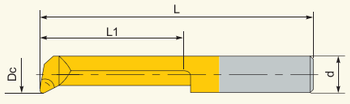


Fig A

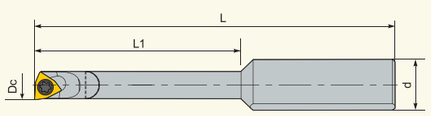


Fig B

ST06E/10E

规格型号 Designation	Dc	d	L	L1	刀片 Insert	Fig	在库 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 整体硬制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：☞ A102 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 separately, please see page A102.
- Ordering sample: 5 pieces ST06E D02-03.10.

ST16E

规格型号 Designation	Dc	d	L	L1	刀片 Insert	Fig	在库 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：☞ A99 页 ,A102 页。
- 订货示例：5 件 ST16E D06-08.WB06.45。

- The insert should be ordered separately, please see page A99,A102.
- Ordering sample: 1 piece ST16E D06-08.WB06.45.

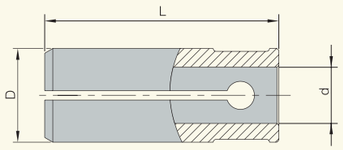
备件
Spare Parts

刀片 Insert	刀片螺钉 Clamping screw for insert	螺钉扳手 Allen key for insert clamping screw
WB..0601..	SR20 M2x3.7	KEY03 T6
TP..0902..	SR22 M2.5x6	KEY03 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	在库 Stock
NBF C10-6	10	6	25	○

- 订货示例：1 件 NBF C10-6。

- Ordering sample: 1 piece NBF C10-6.

● 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)

NBF 系列微调精镗刀

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 Φ20-Φ212，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=0.01m m in diameter. The boring range is Φ2 0- Φ212. Hollow short taper modular connection type E. Snail cartridge is for the body.



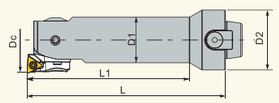


Fig A

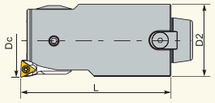


Fig B

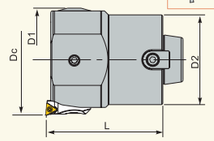


Fig C

规格型号 Designation	Dc	D1	D2	L	L1	Fig	Kg	精镗刀头 Cartridge	在库 Stock
NBF D19.E25.65.C	20-26	19	25	80	65	A	0.18	FRB 10A…	●
	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.C	26-34	-	25	80	-	B	0.28	FRB 12A…	●
	33-41	-	25	80	-	B	0.28	FRB 12B…	●
	40-48	-	25	80	-	B	0.28	FRB 12C…	●
NBF D32.E32.80.C	33-43	-	32	80	-	B	0.17	FRB 16A…	●
	42-52	-	32	80	-	B	0.17	FRB 16B…	●
	51-61	-	32	80	-	B	0.17	FRB 16C…	●
NBF D40.E40.80.C	42-54	-	40	80	-	B	0.75	FRB 20A…	●
	53-65	-	40	80	-	B	0.75	FRB 20B…	●
	64-76	-	40	80	-	B	0.75	FRB 20C…	●
NBF D50.E50.90.C	53-69	-	50	90	-	B	1.31	FRB 25A…	●
	68-84	-	50	90	-	B	1.31	FRB 25B…	●
	83-99	-	50	90	-	B	1.31	FRB 25C…	●
NBF D63.E63.100.C	68-100	-	63	100	-	B	2.33	FRB 30A…	●
	98-130	-	63	100	-	B	2.33	FRB 30B…	●
	128-160	-	63	100	-	B	2.33	FRB 30C…	●
NBF D100.E63.100.C	100-152	100	63	100	-	C	3.24	FRB 30A…	●
	130-182	100	63	100	-	C	3.24	FRB 30B…	●
	160-212	100	63	100	-	C	3.24	FRB 30C…	●
NBF D80.E80.100.C	88-120	-	80	100	-	B	3.86	FRB 30A…	●
	118-150	-	80	100	-	B	3.86	FRB 30B…	●
	148-180	-	80	100	-	B	3.86	FRB 30C…	●
NBF D100.E80.100.C	100-152	100	80	100	-	C	4.37	FRB 30A…	●
	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：☞A15-A17 页。
- 适配刀柄需单独订购，请参照：☞A45-A48 页。
- LOCK 可选配球头螺钉，请参照：☞A14 页。
- 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：☞A121 页。
- 订货示例：1 件 NBF D19.E25.65.C。

- The cartridge should be ordered separately, please see page A15-A17.
- The adaptor should be ordered separately, please see page A45-A48.
- Recommendation for selecting the ball screw with lock screw, please see page A14.
- The diameter range De 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 A121.
- Ordering sample: 1 piece NBF D19.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 secrew	调整扳手 Allen key for adjusting screw
NBF D19.E25.65.C	SR54-2 M4x4	PL03 8x2	SR57 M3x6	SR20 M4x6-X	KEY03 T15	KEY01 M2
NBF D25.E25.80.C	SR54-2 M4x6	PL03 8x2	SR57 M3x6	SR20 M4x8-X	KEY03 T15	KEY01 M2
NBF D32.E32.80.C	SR54-2 M5x8	PL03 8x6	SR57 M3x10	SR56-2 M5x10	KEY01 M3	KEY01 M2.5
NBF D40.E40.80.C	SR54 M6x10	PL03 10x5	SR57 M4x12	SR56-2 M5x12	KEY01 M3	KEY01 M3
NBF D50.E50.90.C	SR54 M6x12	PL04 12x9	SR55 M5x12	SR56-2 M6x16	KEY01 M4	KEY01 M3
NBF D63.E63.100.C	SR54 M10x16	PL04 14x12	SR55 M5X12	SR56 M8x20	KEY01 M5	KEY01 M5
NBF D80.E80.100.C	SR54 M10x20	PL04 16x14	SR55 M6x16	SR56 M8x25	KEY01 M5	KEY01 M5
NBF D100.E63.100.C	SR54 M10x16	PL04 14x12	SR55 M5X12	SR56 M8x25	KEY01 M5	KEY01 M5
NBF D100.E80.100.C	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)

MODULAR BORING TOOL WITH TYPE E CONNECTION 模块式镗刀 (E 接口)

孔加工刀具
HOLE MAKING TOOLS

NBF 系列微调精镗刀（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 Φ30-Φ212，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 ≥ (Dc+D1)/2+1”要求。
Please assemble the cartridge as its reverse direction, which is for back boring, and the back boring range isΦ30-Φ212 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≥(Dc+D1)/2+ 1" .



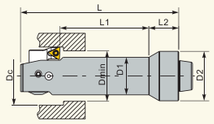


Fig A

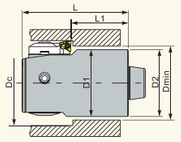


Fig B

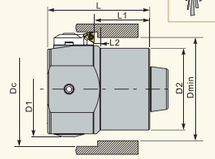


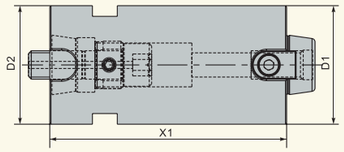
Fig C

规格型号 Designation	Dc	D1	D2	L	L1	L2	Fig	Kg	精镗刀头 Cartridge
NBF D19.E25.65.C	30-36	19	25	80	44.5	15.5	A	0.18	FRB 10C...
NBF D25.E25.80.C	36-41	25	25	80	55	-	B	0.28	FRB 12B...
	40-48	25	25	80	55	-	B	0.28	FRB 12C...
NBF D32.E32.80.C	47-52	32	32	80	51	-	B	0.47	FRB 16B...
	51-61	32	32	80	51	-	B	0.47	FRB 16C...
NBF D40.E40.80.C	55-65	40	40	80	46	-	B	0.75	FRB 20B...
	64-76	40	40	80	46	-	B	0.75	FRB 20C...
NBF D50.E50.90.C	62-69	50	50	90	50	-	B	1.31	FRB 25A...
	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.C	80-100	63	63	100	54	-	B	2.33	FRB 30A...
	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.C	112-152	100	63	100	54	6.5	C	3.24	FRB 30A...
	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.C	100-120	80	80	100	54	-	B	3.86	FRB 30A...
	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.C	112-152	100	80	100	54	6.5	C	4.37	FRB 30A...
	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：☞A15-A17 页。
- 适配刀柄需单独订购，请参照：☞A45-A48 页。
- 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：☞A121 页。
- 最小过孔直径 Dmin=(Dc+D1)/2+1。
- 订货示例：1 件 NBF D19.E25.65.C。
- The cartridge should be ordered separately, please see page A15-A17.
- The adaptor should be ordered separately, please see page A45-A48.
- The tool should be rotated by the anticlockwise direction when machining.
- The diameter range De 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 A121.
- Minimum via diameter Dmin=(Dc+D1)/2+1.
- Ordering sample: 1 piece NBF D19.E25.65.C.

E 接口接长杆
Extension with Type E Connection





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

- 适配刀柄需单独订购，请参照：☞ A45-A48 页。
- 备件请参照：☞ A114 页。
- 订货示例：1 件 EX E25-E25x50.C。
- The adaptor should be ordered separately, please see page A45-A48.
- Spare parts: please see page A114.
- Ordering sample: 1 piece EX E25-E25x50.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)

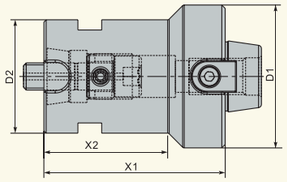
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL WITH TYPE E CONNECTION 模块式镗刀 (E 接口)

孔加工刀具
HOLE MAKING TOOLS

E 接口缩径杆
Reduction with Type E Connection





规格型号 Designation	D1	D2	X1	X2	Kg	在库 Stock
RE E32-E25x50.C	32	25	50	32	0.21	●
RE E40-E25x50.C	40	25	50	30	0.30	●
RE E40-E32x50.C	40	32	50	28	0.38	●
RE E50-E25x50.C	50	25	50	25	0.30	●
RE E50-E32x50.C	50	32	50	25	0.50	●
RE E50-E40x70.C	50	40	70	50	0.70	●
RE E63-E25x50.C	63	25	50	20	0.70	●
RE E63-E25x80.C	63	25	80	50	0.80	●
RE E63-E32x50.C	63	32	50	20	0.80	●
RE E63-E32x80.C	63	32	80	50	0.95	●
RE E63-E40x80.C	63	40	80	55	1.00	●
RE E63-E40x100.C	63	40	100	75	1.20	●
RE E63-E40x120.C	63	40	120	95	1.40	●
RE E63-E40x140.C	63	40	140	15	1.60	●
RE E63-E50x80.C	63	50	80	55	1.30	●
RE E63-E50x100.C	63	50	100	75	1.60	●
RE E63-E50x120.C	63	50	120	95	1.90	●
RE E63-E50x140.C	63	50	140	115	2.20	●
RE E80-E32x80.C	80	32	80	45	1.45	●
RE E80-E40x80.C	80	40	80	45	1.65	●
RE E80-E50x80.C	80	50	80	48	1.95	●
RE E80-E50x100.C	80	50	100	63	2.20	●
RE E80-E63x80.C	80	63	80	50	2.25	●
RE E80-E63x100.C	80	63	100	63	2.80	●

- 适配刀柄需单独订购，请参照：☞ A45-A48 页。
- 备件请参照：☞ A114 页。
- 订货示例 :RE E32-E25x50.C。
- The adaptor should be ordered separately, please see page A45-A48.
- Spare parts: please see page A114.
- Ordering sample: 1 piece RE E32-E25x50.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)

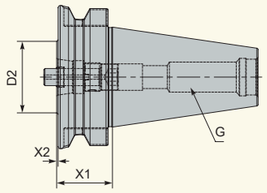
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MODULAR BORING TOOL WITH TYPE E CONNECTION 模块式镗刀 (*E* 接口)

BT MAS403 标准 *E* 接口刀柄

MAS403 BT Adaptor with Type E Connection





规格型号 Designation	ISO	D2	X1	X2	G	Kg	在库 Stock
BT30 E25.C	30	25	23	1	M12	0.36	●
BT30 E32.C	30	32	23	1	M12	0.36	●
BT30 E40.C	30	40	55	33	M12	0.73	●
BT30 E50.C	30	50	60	38	M12	0.99	●
BT40 E25.C	40	25	28	1	M16	0.95	●
BT40 E32.C	40	32	28	1	M16	0.95	●
BT40 E40.C	40	40	28	1	M16	0.91	●
BT40 E40x70.C	40	40	70	43	M16	1.27	●
BT40 E50.C	40	50	28	1	M16	0.91	●
BT40 E50x80.C	40	50	80	53	M16	1.64	●
BT40 E63.C	40	63	50	23	M16	1.35	●
BT40 E63x90.C	40	63	90	63	M16	2.24	●
BT40 E80.C	40	80	90	63	M16	2.30	●
BT50 E25.C	50	25	39	1	M24	3.60	●
BT50 E32.C	50	32	39	1	M24	3.60	●
BT50 E32x70.C	50	32	70	32	M24	3.73	●
BT50 E40.C	50	40	39	1	M24	3.55	●
BT50 E40x80.C	50	40	80	42	M24	3.84	●
BT50 E50.C	50	50	39	1	M24	3.55	●
BT50 E50x90.C	50	50	90	52	M24	4.2	●
BT50 E63.C	50	63	39	1	M24	3.50	●
BT50 E63x100.C	50	63	100	62	M24	4.81	●
BT50 E80.C	50	80	44	6	M24	3.50	●
BT50 E80x120.C	50	80	120	82	M24	6.3	●

● 刀柄若需数据芯片孔，请在型号后加 ".X"。
● 订货示例：BT30 E25.C。
● If needing the hole for data chip, please add ".X" at the end of the designation.
● Ordering sample: BT30 E25.C.

备件

Spare Parts

接口 Connection	螺纹环 Thread ring	锥端紧定螺钉 Locking screw	中心螺钉 Central Screw	备注 Remarks
E25/E32	RG05 M14x1	SR51 M4x8	SR155 M8x30.C	-
E40	RG05 M20x1.5	SR51 M5x10	SR55 M12x40.C	BT50/BT40
E40	RG05 M20x1.5	SR51 M5x10	SR61 M12x40.C	BT30
E50	RG05 M20x1.5	SR51 M6x12	SR55 M12x40.C	BT50/BT40
E50	RG05 M20x1.5	SR51 M6x12	SR61 M12x40.C	BT30
E63	RG05 M26x1.5	SR51 M6x12	SR55 M16x45.C	BT50
E63	RG05 M26x1.5	SR51 M6x12	SR61 M16x45.C	BT40
E80	RG05 M33x1.5	SR51 M6x12	SR55 M20x50.C	BT50
E80	RG05 M33x1.5	SR51 M6x12	SR62 M20x50.C	BT40

● 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)

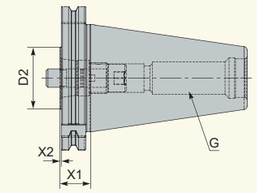
孔加工刀具
HOLE MAKING TOOLS

MODULAR BORING TOOL WITH TYPE E CONNECTION 模块式镗刀 (*E* 接口)

DIN69871-A 标准 *E* 接口刀柄

DIN69871-A Adaptor with Type E Connection





规格型号 Designation	ISO	D2	X1	X2	G	Kg	在库 Stock
DIN69871 40 E25.C	40	25	20	1	M16	0.80	●
DIN69871 40 E32.C	40	32	20	1	M16	0.80	●
DIN69871 40 E40.C	40	40	20	1	M16	0.80	●
DIN69871 40 E50.C	40	50	20	1	M16	0.80	●
DIN69871 40 E63.C	40	63	50	31	M16	1.20	●
DIN69871 40 E80.C	40	80	72	52.95	M16	1.80	●
DIN69871 50 E25.C	50	25	20	0.85	M24	2.60	●
DIN69871 50 E32.C	50	32	20	0.85	M24	2.60	●
DIN69871 50 E40.C	50	40	20	0.85	M24	2.60	●
DIN69871 50 E50.C	50	50	20	0.85	M24	2.60	●
DIN69871 50 E63.C	50	63	20	0.85	M24	2.50	●
DIN69871 50 E80.C	50	80	24	4.85	M24	2.50	●

● 刀柄若需数据芯片孔，请在型号后加 ".X"。
● 订货示例：DIN69871 40 E25.C。
● If needing the hole for data chip, please add ".X" at the end of the designation.
● Ordering sample: DIN69871 40 E25.C.

备件

Spare Parts

接口 Connection	螺纹环 Thread ring	锥端紧定螺钉 Locking screw	中心螺钉 Central Screw	备注 Remarks
E25/E32	RG05 M14x1	SR51 M4x8	SR155 M8x30.C	-
E40	RG05 M20x1.5	SR51 M5x10	SR55 M12x40.C	-
E50	RG05 M20x1.5	SR51 M6x12	SR55 M12x40.C	DIN69871 40
E50	RG05 M20x1.5	SR51 M5x10	SR55 M12x40.C	DIN69871 50
E63	RG05 M26x1.5	SR51 M6x12	SR55 M16x45.C	DIN69871 50
E63	RG05 M26x1.5	SR51 M6x12	SR61 M16x45.C	DIN69871 40
E80	RG05 M33x1.5	SR51 M6x12	SR55 M20x50.C	DIN69871 50
E80	RG05 M33x1.5	SR51 M6x8	SR62 M20x50.C	DIN69871 40

● 标准库存
Item in stock

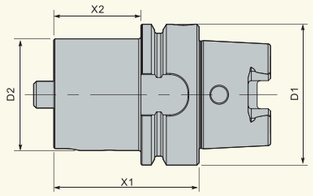
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

HSK-A E 接口刀柄

HSK-A Adaptor with Type E Connection





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

- 订货示例：HSK A63 E25.C。
- Ordering sample :HSK A63 E25.C

备件

Spare Parts

接口 Connection	螺纹环 Thread ring	锥端紧定螺钉 Locking screw	中心螺钉 Central Screw	备注 Remarks
E25/E32	RG05 M14x1	SR51 M4x8	SR155 M8x30.C	-
E40	RG05 M20x1.5	SR51 M5x10	SR55 M12x40.C	HSK A100
E40	RG05 M20x1.5	SR51 M5x10	SR61 M12x40.C	HSK A63
E50	RG05 M20x1.6	SR51 M6x12	SR55 M12x40.C	HSK A100
E50	RG05 M20x1.6	SR51 M6x12	SR61 M12x40.C	HSK A63
E63	RG05 M26x1.5	SR51 M6x13	SR61 M16x45.C	-
E80	RG05 M33x1.5	SR51 M6x13	SR61 M20x50.C	HSK A100

● 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)

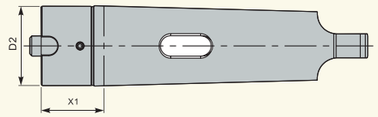
MODULAR BORING TOOL WITH TYPE E CONNECTION 模块式镗刀 (E 接口)

孔加工刀具
HOLE MAKING TOOLS

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	○

- 备件请参照：☞ A113 页。
- 订货示例：1 件 MT6A E63。
- Spare parts please see page A113.
- Ordering sample: MT6A E63.

● 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



A

孔加工刀具
HOLE MAKING TOOLS

桥式镗刀
Boring Tool With Bridge

NLR 双刃桥式粗镗刀 A51
NLR Two-flute Rough Boring Tool with Bridge

NLF 单刃桥式精镗刀 A53
NLF Precision Boring Tool with Bridge

大型铝合金桥式粗 / 精镗刀 A55
Boring Tool (Rough/Finish) with Aluminum Bridge

NLR 双刃桥式粗镗刀刀座 A56
Cartridge for Rough Boring Tool with Bridge

桥式镗刀刀柄 A57
Adaptor for Boring Tool with Bridge

定位芯轴 A58
Location Spindle

自动伸缩式反刮刀
Automatic Telescopic Back Boring Tool

自动伸缩式反刮刀 A60
Automatic Telescopic Back Boring Tool

反刮刀刀头 A61
Cartridge

反刮刀刀片 A61
Insert

定尺寸镗刀
Fixed Size Boring Tool

定尺寸镗刀 A63
Fixed Size Boring Tool

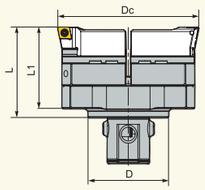
BORING TOOL WITH BRIDGE 桥式镗刀

NLR 双刃桥式粗镗刀

NLR Two-flute Rough Boring Tool With Bridge

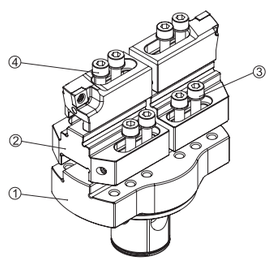
适用于大孔加工的双刃桥式粗镗刀，全磨制导向槽，标准型加工范围 Φ150-Φ210，适配大矩形槽双刃桥式粗镗刀座。
It is suitable for the finish machining for the large diameter, complete ground guide slot, the boring range isΦ150-Φ210.
There is special cartridge for it.





规格型号 Designation	Dc	L1	L	D	主柄接口 Connection	Kg	适配刀座 Cartridge	在库 Stock
NLR D150-210.K63.C	150-210	89	99	63	K63	5.1	L..A D150..	●
NLR D150-210.K90.C	150-210	89	99	88	K90	5.4	L..A D150..	●

- 适配刀座单独订购，请参照：☞ A56 页。
- 适配刀柄需单独订购，请参照：☞ A24-A28 页。
- 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
- 刀座刻线标注依据：CC06/CC09/TC11/TC16/SO06 圆角为 R0.4 时的值，SO09 圆角为 R0.6 时的值，
  CC12/SC09/SC12/SO12 圆角为 R0.8 时的值；SO16 圆角为 R1.2 时的值；
- 订货示例：1 件 NLR D150-210.K63.C。
- The cartridge should be ordered separately, please see page A56.
- The adaptor should be ordered separately, please see page A24-A28.
- Recommended cutting data please see page A117-A120.
- Scale mark basis.
  The scale value for CC06/CC09/TC11/SO06 with R0.4. The scale value for SO09 with R0.6.
  The scale value for CC12/SC09/SC12/SO12 with R0.8. The scale value for SO16 with R1.2.
- Ordering sample: 1 PC NLR D150-210.K63.C.



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.K63.C	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6
	SNL 150-210.K90.C	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	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)

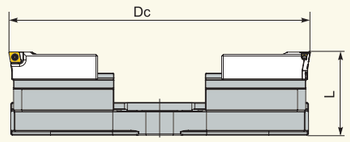
BORING TOOL WITH BRIDGE 桥式镗刀

NLR 双刃桥式粗镗刀

NLR Two-flute Rough Boring Tool With Bridge

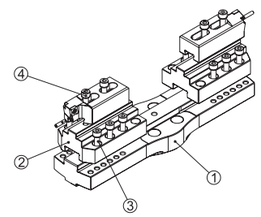
适用于大孔加工的双刃桥式粗镗刀，全磨制导向槽，标准型加工范围 Φ210-Φ850，适配大矩形槽双刃桥式粗镗刀座。
It is suitable for the finish machining for the large diameter, complete ground guide slot, the boring range isΦ210-Φ850.
There is special cartridge for it.





规格型号 Designation	Dc	L	主柄接口 Connection	Kg	适配刀头 Cartridge	在库 Stock
NLR D210-290.C	210-290	89	SNL 32	4.83	L..A D150..	●
NLR D290-370.C	290-370	89	SNL 32	6.13	L..A D150..	●
NLR D370-490.C	370-490	102	SNL 32	12.64	L..A D370..	●
NLR D490-610.C	490-610	117	SNL 32	17.22	L..A D370..	●
NLR D610-730.C	610-730	122	SEL 40	22.6	L..A D370..	●
NLR D730-850.C	730-850	127	SEL 40	26.83	L..A D370..	●

- 适配刀座单独订购，请参照：☞ A56 页。
- 适配刀柄需单独订购，请参照：☞ A57-A58 页。
- 210-290，290-370 规格内冷水管需单独订购，型号：SG M16X67-D3。
- 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
- 刀座刻线标注依据：CC06/CC09/TC11/TC16/SO06 圆角为 R0.4 时的值，SO09 圆角为 R0.6 时的值，
  CC12/SC09/SC12/SO12 圆角为 R0.8 时的值；SO16 圆角为 R1.2 时的值；
- 订货示例：1 件 NLR D210-290.C。
- TThe cartridge should be ordered separately, please see page A56.
- The adaptor should be ordered separately, please see page A57-A58.
- Coolant tube for item 210-290 and 290-370 should be ordered separately. Ordering sample: SG M16X67-D3.
- The different cutting parameters of cutting tools for machining different materials, please see page A117-A120.
- Scale mark basis.
  The scale value for CC06/CC09/TC11/SO06 with R0.4. The scale value for SO09 with R0.6.
  The scale value for CC12/SC09/SC12/SO12 with R0.8. The scale value for SO16 with R1.2.
- Ordering sample: 1 PC NLR D210-290.C.



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.C	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6
290-370	SNL 290-370.C	BLR 150 2 件	SR55 M8x35 8 件	SR55 M8x30 4 件	KEY01 M6
370-490	SNL 370-490.C	NLR 370.C 2 件	SR55 M8x35 12 件	SR55 M8x25 4 件	KEY01 M6
490-610	SNL 490-610.C	NLR 370.C 2 件	SR55 M8x35 12 件	SR55 M8x25 4 件	KEY01 M6
610-730	SNL 610-730.C	NLR 370.C 2 件	SR55 M8x35 12 件	SR55 M8x25 4 件	KEY01 M6
730-850	SNL 730-850.C	NLR 370.C 2 件	SR55 M8x35 12 件	SR55 M8x25 4 件	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)

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BORING TOOL WITH BRIDGE 桥式镗刀

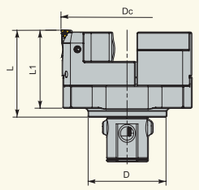
NLF 单刃桥式微调精镗刀

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 Φ150-Φ210。

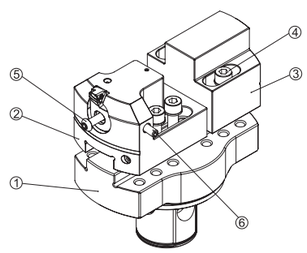
It is suitable for the finish machining for large diameter, with high accuracy 0.01mm/dial. The dimeter range is Φ150-Φ210.





规格型号 Designation	Dc	L1	L	D	主柄接口 Connection	Kg	适配刀头 Cartridge	在库 Stock
NLF D150-210.K63.C	150-210	87	97	63	K63	5.5	FRB 25A..	●
NLF D150-210.K90.C	150-210	87	97	88	K90	5.8	FRB 25A..	●

- 适配刀座单独订购，请参照：☞ A15-A17 页。
- 适配刀柄需单独订购，请参照：☞ A24-A28 页。
- 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：A121 页。
- 订货示例：1 件 NLF D150-210.K63.C。
- The cartridge should be ordered separately, please see page A15-A17.
- The adaptor should be ordered separately, please see page A24-A28.
- The diameter range De 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.
- The different cutting parameters of cutting tools for machining different materials, please see page A121.
- Ordering sample: 1 PC NLF D150-210.K63.C.



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 Lock screw
150-210	SNL 150-210.K63.C	NLF 150 1 件	BHB 150 1 件	SR55 M8x35 6 件	SR56 M6x16 1 件	SR54 M6x12 1 件
	SNL 150-210.K90.C	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)

BORING TOOL WITH BRIDGE 桥式镗刀

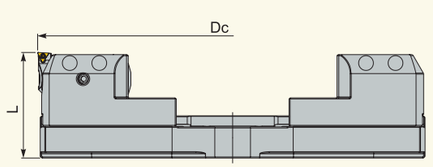
NLF 单刃桥式微调精镗刀

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 Φ210-Φ850。

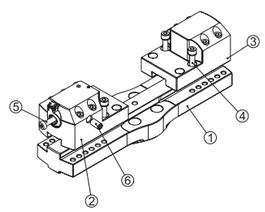
It is suitable for the finish machining for large diameter, with high accuracy 0.01mm/dial. The dimeter range is Φ210-Φ850.





规格型号 Designation	Dc	L	主柄接口 Connection	Kg	适配刀头 Cartridge	在库 Stock
NLF D210-290.C	210-290	87	SNL 32	6.0	FRB 25A..	●
NLF D290-370.C	290-370	87	SNL 32	7.3	FRB 25A..	●
NLF D370-490.C	370-490	100	SNL 32	12.64	FRB 30A..	●
NLF D490-610.C	490-610	115	SNL 32	17.22	FRB 30A..	●
NLF D610-730.C	610-730	120	SEL 40	22.6	FRB 30A..	●
NLF D730-850.C	730-850	125	SEL 40	26.83	FRB 30A..	●

- 适配刀座单独订购，请参照：☞ A15-A17 页。
- 适配刀柄需单独订购，请参照：☞ A57-A58 页。
- 210-290，290-370 规格内冷水管需单独订购，型号：SG M16X67-D3。
- 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：☞ A121 页。
- 订货示例：1 件 NLF D210-290.C。
- The cartridge should be ordered separately, please see page A15-A17.
- The adaptor should be ordered separately, please see page A57-A58.
- Coolant tube for item 210-290 and 290-370 should be ordered separately. Ordering sample: SG M16X67-D3.
- The diameter range De 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.
- Recommended cutting data please see page A121.
- Ordering sample: 1 PC NLF D210-290.C.



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.C	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.C	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.C	NLF 370.C 1 件	BHB 370 1 件	SR55 M8x35 12 件	SR56 M8x25 1 件	SR54 M10x20 1 件
490-610	SNL 490-610.C	NLF 370.C 1 件	BHB 370 1 件	SR55 M8x35 12 件	SR56 M8x25 1 件	SR54 M10x20 1 件
610-730	SNL 610-730.C	NLF 370.C 1 件	BHB 370 1 件	SR55 M8x35 12 件	SR56 M8x25 1 件	SR54 M10x20 1 件
730-850	SNL 730-850.C	NLF 370.C 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（刀桥重量减轻 60%）订货时请注明 AL;
  如：钢制桥镗刀：NLR 730-850.C 单独订购钢制刀桥：SNL 730-850.C
  铝合金桥镗刀：NLR 730-850AL.C 单独订购铝合金刀桥：SNL730-850AL.C
- 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.C Ordering the steel connection separately: SNL 730-850.C
  Connection made from aluminum: NLR 730-850AL.C Ordering the aluminum connection separately: SNL 730-850AL.C

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

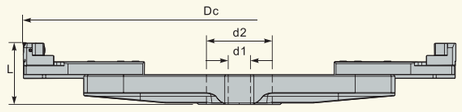
大型铝合金桥式粗 / 精镗刀

Boring Tool (Rough/Finish) with Aluminum Bridge

镗孔范围 Φ850 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，钢性足，调整范围大；刀座及刀片可方便更换，调整精度高，精镗微调量每格直径 0.01mm。

We could do the customer designed boring tool if the boring range is dimeter than Φ850mm 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

组合规格 Assembled specification	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	L	d1	d2	kg	在库 Stock
BLF D850-1250AL	850-1250	SEL 850AL	BL400AL	NLF 150	BHB 210	FRB 25A…	167	60	101.6	31	○
BLF D1200-1600AL	1200-1600	SEL 1200AL	BL400AL	NLF 150	BHB 210	FRB 25A…	177	60	101.6	42	○
BLF D1450-1850AL	1450-1850	SEL 1450AL	BL400AL	NLF 150	BHB 210	FRB 25A…	187	60	101.6	62	○
BLF D1450-2090AL	1450-2090	SEL 1450AL	BL640AL	NLF 150	BHB 210	FRB 25A…	197	60	101.6	72	○
BLF D2050-2690AL	2050-2690	SEL 2050AL	BL640AL	NLF 150	BHB 210	FRB 25A…	207	60	101.6	112	○
BLF D2660-3300AL	2660-3300	SEL 2660AL	BL640AL	NLF 150	BHB 210	FRB 25A…	217	60	101.6	172	○

- 适配刀头需单独订购，请参照：☞A15-A17 页。
- 适配定位芯轴需单独订购，请参照：☞A58 页。
- The suitable cartridge should be ordered separately, please see page A15-A17.
- The location Spindle should be ordered separately, please see page A58.

大型铝合金桥式粗镗刀

Rough Boring Tool with Aluminum Bridge

组合规格 Assembled specification	Dc	刀桥 Bridge	延伸块 Extension slide	调整块 Cartridge holder	适配刀头 Cartridge	L	d1	d2	kg	在库 Stock
BLR D850-1250AL	850-1250	SEL 850AL	BL400AL	BLR 150	L..A D150..	169	60	101.6	30	○
BLR D1200-1600AL	1200-1600	SEL 1200AL	BL400AL	BLR 150	L..A D150..	179	60	101.6	41	○
BLR D1450-1850AL	1450-1850	SEL 1450AL	BL400AL	BLR 150	L..A D150..	189	60	101.6	61	○
BLR D1450-2090AL	1450-2090	SEL 1450AL	BL640AL	BLR 150	L..A D150..	199	60	101.6	71	○
BLR D2050-2690AL	2050-2690	SEL 2050AL	BL640AL	BLR 150	L..A D150..	209	60	101.6	111	○
BLR D2660-3300AL	2660-3300	SEL 2660AL	BL640AL	BLR 150	L..A D150..	219	60	101.6	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

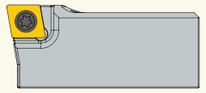
NLR 双刃桥式粗镗刀刀座

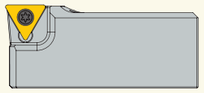
Cartridge for Rough Boring Tool with Bridge

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	KEY03 T20	SR50 M5x20	KEY01 M2.5	0.31	●
L90A D150.TC16	TC..16T3..	SR21 M4x9.5	KEY03 T15	SR50 M5x20	KEY01 M2.5	0.31	●
L90A D150.TC22	TC..2204..	SR21 M5x12.8	KEY03 T20	SR50 M5x20	KEY01 M2.5	0.34	●
L84A D150.SO16	SO..1605..	SR20 M5x13.8	KEY03 T15	SR50 M5x20	KEY01 M2.5	0.34	●
L45A D150.SC12	SC..1204..	SR21 M5x12.8	KEY03 T20	SR50 M5x20	KEY01 M2.5	0.34	●
L90A D370.CC12.C	CC..1204..	SR21 M5x12.8	KEY03 T20	SR50 M5x20	KEY01 M2.5	0.74	●
L90A D370.TC16.C	TC..16T3..	SR21 M4x9.5	KEY03 T15	SR50 M5x20	KEY01 M2.5	0.74	●
L90A D370.TC22.C	TC..2204..	SR21 M5x12.8	KEY03 T20	SR50 M5x20	KEY01 M2.5	0.79	●
L84A D370.SO16.C	SO..1605..	SR20 M5x13.8	KEY03 T15	SR50 M5x20	KEY01 M2.5	0.79	●
L45A D370.SC12.C	SC..1204..	SR21 M5x12.8	KEY03 T20	SR50 M5x20	KEY01 M2.5	0.79	●

- 刀片请根据不同材料单独订购，请参照：☞A95 页 ,A97-A99 页 ,A100 页 ,A101 页 。
- 订货示例：1 件 L90A D150.CC12。
- Insert should be ordered separately, please see page A95,A97-A99,A100,A101.
- Ordering sample: 1 PC L90A D150.CC12.

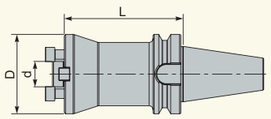
● 标准库存 Item in stock

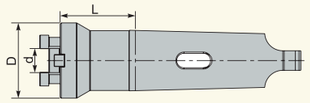
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

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

桥式镗刀刀柄
Adaptor for Boring Tool with Bridge





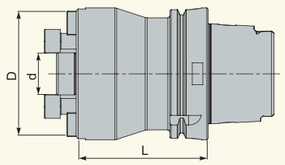


规格型号 Designation	柄部标准 ISO	L	d	D	锁刀螺钉 Clamping screw	平键 Flat key	Kg	在库 Stock
BT40 SNL32x60	BT40	60	32	100	SR55 M12x35	PL10 16x14	2.52	●
BT50 SNL32x100	BT50	100	32	100	SR55 M12x35	PL10 16x14	6.65	●
BT50 SNL32x150	BT50	150	32	100	SR55 M12x35	PL10 16x14	8.74	●
BT50 SNL32x200	BT50	200	32	100	SR55 M12x35	PL10 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	●
BT50 SEL40x100	BT50	100	40	136	SR55 M16x50	PL10 25x18	9.8	●
BT50 SEL40x250	BT50	250	40	136	SR55 M16x50	PL10 25x18	17.0	●
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	●
DIN69871 50 SEL40x100	DIN69871 50	100	40	136	SR55 M16x50	PL10 25x18	9.4	●
DIN69871 50 SEL40x250	DIN69871 50	250	40	136	SR55 M16x50	PL10 25x18	17.0	●
MT80A SNL32x100	米制 80 Metric 80	100	32	100	SR55 M12x35	PL10 16x14	10.95	●

● 刀柄尺寸：☞D59 页，D60 页。
● 刀柄若需数据芯片孔，请在型号后加 “.X”。
● 订货示例：1 件 BT40 SNL32x60。
● Size of tool holder: please see page D59,D60.
● If needing the hole for data chip, please add ".X" at the end of the designation.
● Ordering sample: 1 PC BT40 SNL32x60.

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
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：☞D62 页。
● 订货示例：1 件 BT40 SNL32x600。
● Size of tool holder: please see page D62.
● Ordering sample: 1 PC BT40 SNL32x600.

● 标准库存
Item in stock

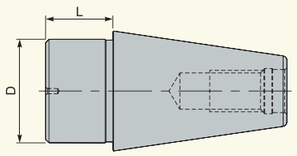
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

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 Φ610mm, but positioning spindle must be used.





规格型号 Designation	ISO	D	L	Kg	在库 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.

● 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)

AUTOMATIC TELESCOPIC BACK BORING TOOL

自动伸缩式反刮刀

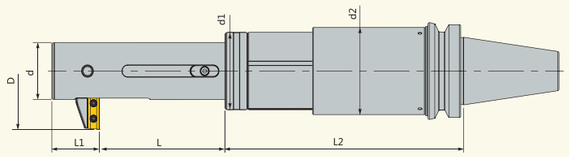


自动伸缩式反刮刀

Automatic Telescopic Back Boring Tool

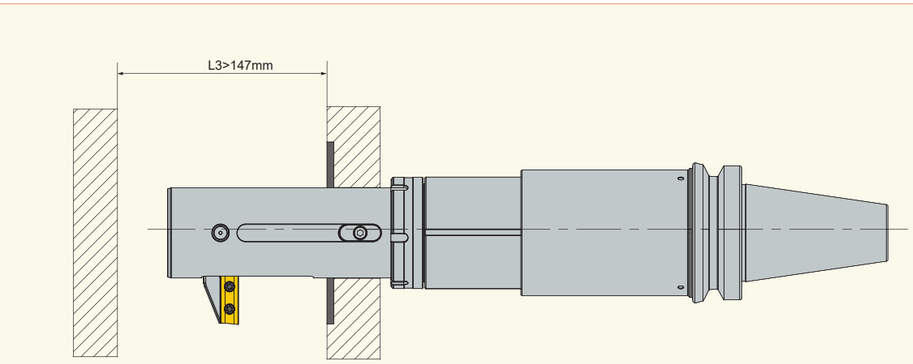
适用于要求反刮面直径大，但过孔直径小，反刮面直径不大于过孔直径的 2 倍时均可使用；
全自动的进出机构，无需定位装置；可根据客户需求订制。
It is suitable for the requirements of large diameter of back boring place but smaller diameter of through hole, which dia.of back boring place is no larger than 2 times dia. of through hole.
There is no need to do the position due 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	在库 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：☞ A61 页。
- 刀头需单独定购，请参照：☞ A61 页。
- Ordering sample: 1 PC BT50 ABR D070-d035x330.
- Select suitable cartridges as customer's requirements,please see page A61.
- The cartridge should be ordered separately,please see page A61.



- 开档部分 L3 需大于 147mm。
- L3 should be over 147mm.

● 标准库存
Item in stock

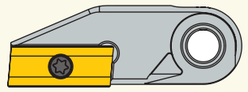
◐ 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)

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

AUTOMATIC TELESCOPIC BACK BORING TOOL 自动伸缩式反刮刀

反刮刀刀头
Cartridge



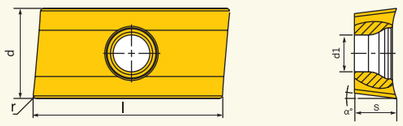


规格型号 Designation	适配刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for Clamping screw	刀座锁紧螺钉 Clamping screw for cartridge	锁紧螺钉扳手 Allen key for Clamping screw	在库 Stock
ABR D071-D034.AC21	ACMX 2104-DL	SR20 M5x11	KEY03 T20	SR54 M4x6	KEY01 M2	○
ABR D081-D039.AC27	ACMX 2706-DL	SR20 M5x11	KEY03 T20	SR54 M4x6	KEY01 M2	○
ABR D091-D044.AC27	ACMX 2706-DL	SR20 M5x11	KEY03 T20	SR54 M4x6	KEY01 M2	○
ABR D101-D049.AC27	ACMX 2706-DL	SR20 M5x11	KEY03 T20	SR54 M4x6	KEY01 M2	○
ABR D111-D054.AC32	ACMX 3206-DL	SR20 M5x11	KEY03 T20	SR54 M4x6	KEY01 M2	○
ABR D121-D059.AC37	ACMX 3706-DL	SR20 M5x11	KEY03 T20	SR54 M4x6	KEY01 M2	○
ABR D131-D064.AC37	ACMX 3706-DL	SR20 M5x11	KEY03 T20	SR54 M4x6	KEY01 M2	○
ABR D141-D069.AC37	ACMX 3706-DL	SR20 M5x11	KEY03 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 ACMX 3706-DL insert.
- Ordering sample: 1 PC ABR D071-D034.AC21.

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 requurements 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

● 标准库存
Item in stock

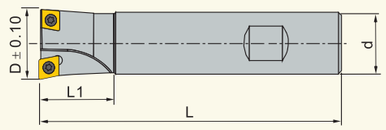
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

FIXED SIZE BORING TOOL 定尺寸镗刀

定尺寸镗刀
Fixed Size Boring Tool





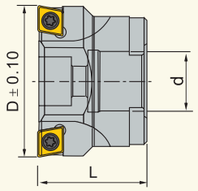
规格型号 Designation	D	d	L	L1	刃数 Z	适用刀片 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw	在库 Stock
BR D17.7.W16.C6.120	17.7	16	120	30	2	CC..060204	SR21 M2.5x5.3	KEY03 T7	◐
BR D18.7.W16.C6.120	18.7	16	120	30	2	CC..060204	SR21 M2.5x5.3	KEY03 T7	◐
BR D19.7.W16.C6.120	19.7	16	120	30	2	CC..060204	SR21 M2.5x5.3	KEY03 T7	◐
BR D21.7.W16.C6.120	21.7	16	120	30	2	CC..060204	SR21 M2.5x5.3	KEY03 T7	◐
BR D23.7.W20.C6.130	23.7	20	130	30	2	CC..060204	SR21 M2.5x5.3	KEY03 T7	◐
BR D24.7.W20.C6.130	24.7	20	130	30	2	CC..060204	SR21 M2.5x5.3	KEY03 T7	◐
BR D25.7.W20.C9.130	25.7	20	130	30	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D26.7.W20.C9.130	26.7	20	130	30	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D27.7.W20.C9.130	27.7	20	130	30	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D29.7.W25.C9.160	29.7	25	160	40	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D31.7.W25.C9.160	31.7	25	160	40	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D34.7.W25.C9.160	34.7	25	160	40	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D39.7.W25.C9.160	39.7	25	160	40	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D41.7.W32.C12.200	41.7	32	200	45	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D44.7.W32.C12.200	44.7	32	200	45	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D47.7.W32.C12.200	47.7	32	200	45	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D49.7.W32.C12.200	49.7	32	200	45	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐

- 刀片请根据不同材料单独订购，请参照：☞ A95 页。
- 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
- 订货示例：1 件 BR D17.7.W16.C6.120。
- Suitable insert should be ordered separately, please see page A95.
- Recommended cutting data please see page A117-A120.
- Ordering sample: 1 PC BR D17.7.W16.C6.120.

FIXED SIZE BORING TOOL 定尺寸镗刀

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 screww	在库 Stock
BR D44.7.B22.C9.50	44.7	22	50	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D49.7.B22.C9.50	49.7	22	50	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D54.7.B22.C9.50	54.7	22	50	2	CC..09T304	SR21 M4x9.5	KEY03 T15	◐
BR D59.7.B22.C12.50	59.7	22	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D61.7.B27.C12.50	61.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D64.7.B27.C12.50	64.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D69.7.B27.C12.50	69.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D74.7.B27.C12.50	74.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D79.7.B27.C12.50	79.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D84.7.B27.C12.50	84.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D89.7.B27.C12.50	89.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D94.7.B27.C12.50	94.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D99.7.B27.C12.50	99.7	27	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D104.7.B32.C12.50	104.7	32	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D109.7.B32.C12.50	109.7	32	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D114.7.B32.C12.50	114.7	32	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐
BR D119.7.B32.C12.50	119.7	32	50	2	CC..120408	SR21 M5x12.8	KEY03 T20	◐

- 刀片请根据不同材料单独订购，请参照：☞ A95 页。
- 加工不同材料刀具的切削参数，请参照：☞ A117-A120 页。
- 订货示例：1 件 BR D44.7.B22.C9.50。
- Suitable insert should be ordered separately, please see page A95.
- Recommended cutting data please see page A117-A120.
- Ordering sample: 1 PC BR D44.7.822.C9.50.

● 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
小刀座



A
孔加工刀具
HOLE MAKING TOOLS

小刀座
Cartridge

ISO 刀座 A67
ISO Cartridge

ISO 刀座备件 A71
Spare Parts for ISO Cartridge

ISO 刀座安装示意图 A71
Assembly Instruction for ISO Cartridge

微型刀座 A72
Mini Cartridge

重切刀座 A73
Mini Cartridge for Heavy Duty Cutting

微调刀座 A74
Mini Adjustable Cartridge

微调刀座安装尺寸 A75
Assembly Instruction for Mini Adjustable Cartridge

微调镗头 A76
Mini Precision Boring Head

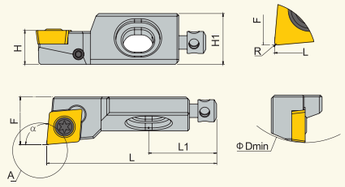
微调镗头安装尺寸 A77
Assembly Size for Mini Precision Boring Head

CARTRIDGE 小刀座

ISO 刀座 SCFCR/L...

ISO Cartridge





图示为右手型
The figure is for the right hand

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
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：☞ A95 页。
- 配件及安装尺寸：请参照：☞ A71 页。
- Inserts with different materials should be ordered separately, please see page A95.
- Spare parts and assembled size, please see page A71.

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	在库 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：☞ A97-A99 页。
- 配件及安装尺寸：请参照：☞ A71 页。
- Inserts with different materials should be ordered separately, please see page A97-A99.
- Spare parts and assembled size, please see page A71.

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 M2.2x5.6	KEY03 T7
CC..0602..	SR21 M2.5x5.3	KEY03 T7
CC..09T3..	SR20 M4x9.5	KEY03 T15
CC..1204..	SR21 M5x9.5	KEY03 T20
TC..0902..	SR20 M2.2x4.6	KEY03 T7
TC..1102..	SR20 M2.5x6	KEY03 T8
TC..16T3..	SR21 M4x9.5	KEY03 T15

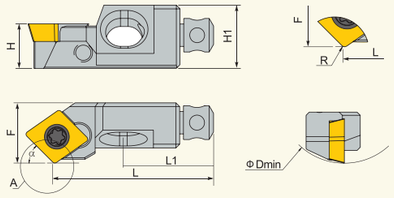
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

CARTRIDGE 小刀座

ISO 刀座 SCSCR/L...

ISO Cartridge





图示为右手型
The figure is for the right hand

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	SCSPL 06CA-05	6	8	21.4	8.5	12	20	0.4	CP..0502..	●
	SCSCR 08CA-06	SCSCL 08CA-06	8	10	28.0	10.0	17	25	0.4	CC..0602..	●
	SCSCR 10CA-09	SCSCL 10CA-09	10	14	44.0	15.0	20	40	0.8	CC..09T3..	●

- 刀片请根据不同材料单独订购，请参照：☞ A95 页。
- 配件及安装尺寸：请参照：☞ A71 页。
- Inserts with different materials should be ordered separately, please see page A95.
- Spare parts and assembled size, please see page A71.

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：☞ A95 页。
- 配件及安装尺寸：请参照：☞ A71 页。
- Inserts with different materials should be ordered separately, please see page A95.
- Spare parts and assembled size, please see page A71.

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 M2.2x5.6	KEY03 T7
CC..0602..	SR21 M2.5x5.3	KEY03 T7
CC..09T3..	SR20 M4x9.5	KEY03 T15

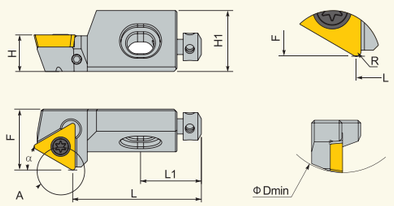
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

CARTRIDGE 小刀座

ISO 刀座 SCLCR/L...

ISO Cartridge





图示为右手型
The figure is for the right hand

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：A95 页。
- 配件及安装尺寸：请参照：A71 页。
- Inserts with different materials should be ordered separately, please see page A95.
- Spare parts and assembled size, please see page A71.

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：A97-A99 页。
- 配件及安装尺寸：请参照：A71 页。
- Inserts with different materials should be ordered separately, please see page A97-A99.
- Spare parts and assembled size, please see page A71.

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：☞ A97-A99 页。
- 配件及安装尺寸：请参照：☞ A71 页。
- Inserts with different materials should be ordered separately, please see page A97-A99.
- Spare parts and assembled size, please see page A71.

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 M2.2x5.6	KEY03 T7
CC..0602..	SR21 M2.5x5.3	KEY03 T7
CC..09T3..	SR20 M4x9.5	KEY03 T15
CC..1204..	SR21 M5x9.5	KEY03 T20
TC..0902..	SR20 M2.2x5.6	KEY03 T7
TC..1102..	SR20 M2.5x6	KEY03 T8
TC..16T3..	SR21 M4x9.5	KEY03 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)

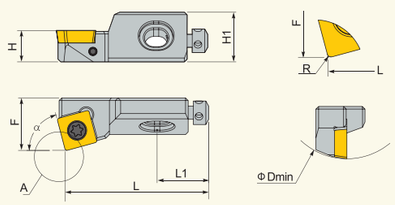
孔加工刀具
HOLE MAKING TOOLS

CARTRIDGE 小刀座

ISO 刀座 SSKCR/L...

ISO Cartridge





图示为右手型
The figure is for the right hand

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：A100 页。
- 配件及安装尺寸：请参照：A71 页。
- Inserts with different materials should be ordered separately, please see page A100.
- Spare parts and assembled size, please see page A71.

ISO 刀座 SSSCR/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°	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：☞ A100 页。
- 配件及安装尺寸：请参照：☞ A71 页。
- Inserts with different materials should be ordered separately, please see page A100.
- Spare parts and assembled size, please see page A71.

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	KEY03 T15
SC..1204..	SR21 M5x9.5	KEY03 T20

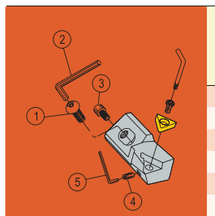
● 标准库存
Item in stock

◐ 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)

CARTRIDGE 小刀座

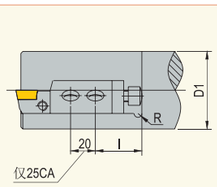
ISO 刀座备件
Spare Parts for ISO Cartridge

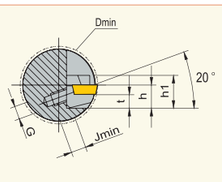


小刀夹型号 Designation	① 螺钉 Clamping scerw	② 扳手 Allen key	③ 螺钉 Clamping screw	④ 螺钉 Clamping screw	⑤ 扳手 Allen key
06CA	SR56 M4x10	KEY01 M2.5	SR68 M3x9	SR50 M3x4	KEY01 M1.5
08CA	SR56 M4x16	KEY01 M2.5	SR68 M4x12	SR50 M3x6	KEY01 M1.5
10CA	SR55 M6x20	KEY01 M5	SR68 M4x12	SR50 M4x8	KEY01 M2
12CA	SR55 M6x25	KEY01 M5	SR68 M5x14	SR50 M4x12	KEY01 M2
16CA	SR55 M8x30	KEY01 M6	SR68 M6x16	SR50 M4x12	KEY01 M2
20CA	SR55 M8x30	KEY01 M6	SR68 M6x16	SR50 M6x20	KEY01 M3
25CA	SR55 M10x30	KEY01 M8	SR68 M6x16	SR50 M6x20	KEY01 M3

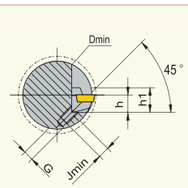
ISO 刀座安装示意图
Assembly Instruction for ISO Cartridge

轴向安装
Assembly Instruction for Cartrldge of Axlal Clamping



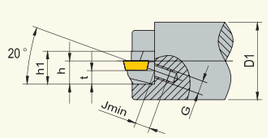


06CA,08CA,10CA,12CA

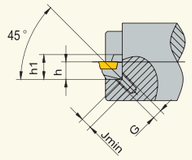


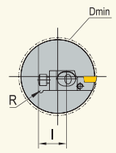
16CA,20CA,25CA

径向安装
Assembly Instruction for Cartrldge of Rdilal Clamping



06CA,08CA,10CA,12CA





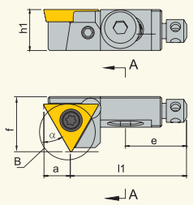
16CA,20CA,25CA

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	

CARTRIDGE 小刀座

微型刀座
Mini Cartridge





图示为右手型
The figure is for the right hand

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：☞ A95-A99 页。
- 订货示例：1 件 FR S0690.CP05。
- Inserts with different materials should be ordered separately, please see page A95-A99.
- Ordering sample: 1 PC FR S0690.CP05.

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

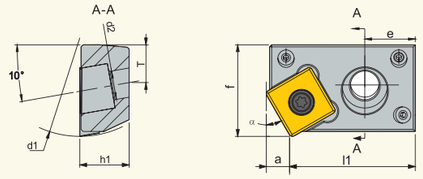
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CP..0502..	SR20 M2.2x5.6	KEY03 T7
CC..0602..	SR21 M2.5x5.3	KEY03 T7
TC..1102..	SR20 M2.5x6	KEY03 T8

● 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 小刀座

重切刀座
Mini Cartridge for Heavy Duty Cutting





图示为右手型
The figure is for the right hand

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..	●
	FR B1275.CC12	FL B1275.CC12	2.8	48	7	12.3	22.3	12	33.5	9.2	CC..1204..	●
90°	FR B0890.CC06	FL B0890.CC06	-	32	5	12.3	14.3	8	25.3	5.9	CC..0602..	●
	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..	●
	FR B1290.TC16	FL B1290.TC16	-	48	7	12.3	22.3	12	36.3	9.2	TC..16T3..	●
15°	FR B1075.SC09	FL B1075.SC09	2	40	6	12.3	18.3	10	28.3	7.5	SC..09T3..	●
	FR B1275.SC12	FL B1275.SC12	2.8	48	7	12.3	22.3	12	33.5	9.2	SC..1204..	●
30°	FR B1030.SC09	FL B1030.SC09	4	40	6	12.3	18.3	10	26.3	7.5	SC..09T3..	●
	FR B1230.SC12	FL B1230.SC12	5.7	48	7	12.3	22.3	12	30.6	9.2	SC..1204..	●
45°	FR B1045.SC09	FL B1045.SC09	6.1	40	6	12.3	18.3	10	24.2	7.5	SC..09T3..	●
	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：☞ A95-A100 页。
- 订货示例：1 件 FR B0875.CC06。
- Inserts with different materials should be ordered separately, please see page A95-A100.
- Ordering sample: 1 PC FR B0875.CC06.

备件
Spare Parts

h1	锁紧螺钉 Clamping screw	径 / 轴向调整螺钉 Radial/Axial 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..	SR21 M2.5x5.3	KEY03 T7
CC..09T3..	SR20 M4x9.5	KEY03 T15
CC..1204..	SR21 M5x9.5	KEY03 T20
SC..09T3..	SR21 M4x9.5	KEY03 T15
SC..1204..	SR21 M5x9.5	KEY03 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)

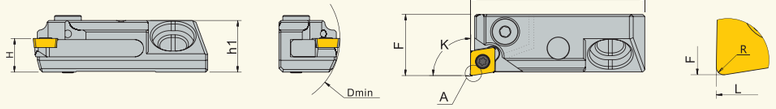
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

孔加工刀具
HOLE MAKING TOOLS

CARTRIDGE 小刀座

微调刀座
Mini Adjustable Cartridge





图示为右手型
The figure is for the right hand

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.TP11	HFL90 F20.TP11	90	8.8	20	45.6	13.5	36	0.4	TP..1103..	●
HFR95 F20.TP11	HFL95 F20.TP11	95	8.8	20	45.6	13.5	36	0.4	TP..1103..	●
HFR30 F16.DC07	HFL30 F16.DC07	120	8.8	16	48.5	13.5	28	0.4	DC..0702..	●

- 刀片请根据不同材料单独订购，请参照：☞ A95-A99 页。
- 货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 A95-A99.
- There are right and left hand specifications available in stock.
- The adjustment: 0.01mm on diameter and 0.005mm on radius.
- The adjustment range: 0.6mm on diameter by radial direction, 1mm 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 Axial key for radial adjusting
CC..0602..	SR21 M2.5x5.3	SR57 M5X16	SR55 M5x20	HFX.3	KEY03 T7	KEY01 M2.5	KEY01 M4	KEY01 M3
TP..0902..	SR22 M2.5x6	SR57 M5X16	SR55 M5x20	HFX.3	KEY03 T8	KEY01 M2.5	KEY01 M4	KEY01 M3
TC..1102..	SR21 M2.5x5.3	SR57 M5X16	SR55 M5x20	HFX.3	KEY03 T7	KEY01 M2.5	KEY01 M4	KEY01 M3
TP..1103..	SR22 M3x6	SR57 M5X16	SR55 M5x20	HFX.3	KEY03 T8	KEY01 M2.5	KEY01 M4	KEY01 M3

● 标准库存
Item in stock

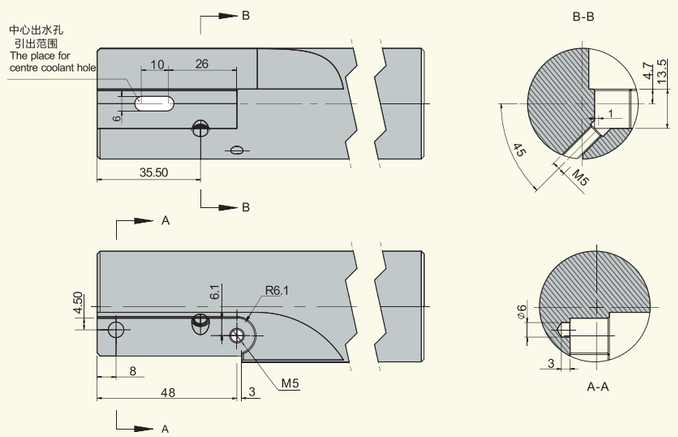
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

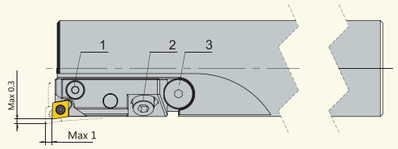
微调刀座安装尺寸
Assembly Instruction for Mini Adjustable Cartridge

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
Assembly Instruction



刀座调节方法
Adjustment Instruction



1.径向微调螺钉
2.刀座锁紧螺钉
3.轴向调节螺钉

1.Radial adjusting screw
2.Lock screw for cartridge
3.Axial adjusting screw

轴向调节方法
Adjusting on axial direction

- 稍微松开刀座锁紧螺钉 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。
- 夹紧刀座锁紧螺钉 2。

- Loosening the 2# lock screw lightly.
- Rotating the 3# axial adjusting screw on the anticlockwise direction, so that the cartridge can be moved forward to the required size.
- 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，并把刀座移动到最后面，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.

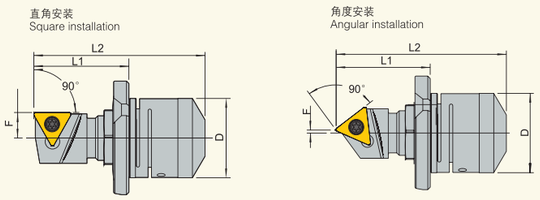
刀具直径调节方法
Adjusting on radial direction

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

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

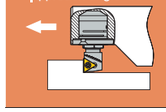
微调镗头
Mini Precision Boring Head





图示为左手型
The figure is for the left hand

微调镗头规格型号
Designation of Precision Boring Head

安装方式 Installation method	规格型号 Designaiton	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..	●
直度安装 Square installation 主偏角 =90° Approach angle=90° 	HFL/R B90.S16.CC06	90°	0°	16	13.3	24.2	5.1	27	CC..0602..	●
	HFL/R B90.S16.TC06	90°	0°	16	13.3	24.2	5.1	25	TC..06T1..	●
	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：☞ A95-A99 页。
- 安装尺寸，请参照：☞ A78 页。
- 订货示例：1 件 HFR A90.S16.CC06。
- Insert with different materials should be ordered separately, please see page A95-A99.
- Installation size, please see page A78.
- 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	KEY03 T8	KEY06 S10
D=20	SR22 M3x8	KEY03 T8	KEY06 S13
D=22	SR20 M4x11.5	KEY03 T15	KEY06 S15
D=32	SR21 M5x12.8	KEY03 T20	KEY06 S22

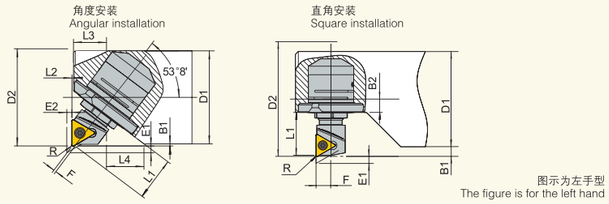
刀片型号 Insert	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for clamping screw
CC..0602..	SR21 M2.5x5.3	KEY03 T7
TC..06T1..	SR20 M2x3.7	KEY03 T6
TC..0902..	SR20 M2.2x5.6	KEY03 T7
TC..1102..	SR20 M2.5x6	KEY03 T8
TC..16T3..	SR21 M4x9.5	KEY03 T15
TB..0601..	SR20 M2x3.7	KEY03 T6
TP..0902..	SR22 M2.5x6	KEY03 T8
TP..1103..	SR22 M3x8	KEY03 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 小刀座

微调镗头
Mini Precision Boring Head





图示为左手型
The figure is for the left hand

微调镗头安装尺寸
Assembly Size for Mini Precision Boring Head

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
		0.8	26.0	27	0.5	2.5	-	3.6	9.1	-	-	-	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
		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
		0.8	34.5	36.5	1	3.5	-	4.55	12.9	-	-	-	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
		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
		1.2	67.0	68.4	0.7	10	-	9.4	23.6	-	-	-	10.3
直度安装 Square installation 主偏角 =90° Approach angle=90°	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
		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
		0.8	22.0	24.8	1.4	2	1.5	-	10	0.5	6.6	9.55	0.45
	20	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
		0.8	28.5	32.5	2	2.8	2.1	-	13.7	0.5	9.4	12.15	1.1
	22	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
		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
		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：☞ A78 页。
● Installation size, please see page A78.

孔加工刀具
HOLE MAKING TOOLS

CARTRIDGE 小刀座

微调镗头
Mini Precision Boring Head

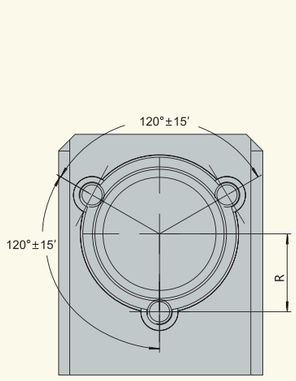
- 微调镗头是定制非标刀具系统中的精密微调模块，适合于精加工及半精加工工序的镗孔应用：
- 其结构化的设计、高精度、高可靠性的特点，使组合镗孔刀具的设计、生产效率大幅提升，且降低了刀具生产周期；
- 使用微调镗头模块的非标刀具在精镗孔的时候调节非常方便、操作简单、自锁的结构有效降低因操作不当引起的损坏。
- Micro boring head is the precision module for the special boring tools, which is for finishing and semi-finishing process;
- It is with the features 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.

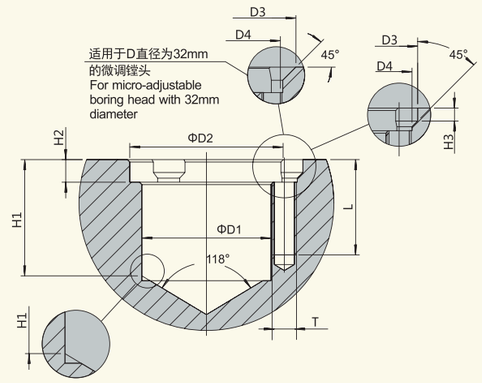
特点：

- 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
Assembly 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

U DRILL
浅孔钻



A
孔加工刀具
HOLE MAKING TOOLS

浅孔钻
U Drill

DR 钻头 (2D) A81
DR U Drill (2D)

DR 钻头 (3D) A83
DR U Drill (3D)

DR 钻头 (4D) A85
DR U Drill (4D)

DR 钻头 (5D) A87
DR U Drill (5D)

SP 钻削刀片 A89
Insert

技术参数 A90
Technical Information

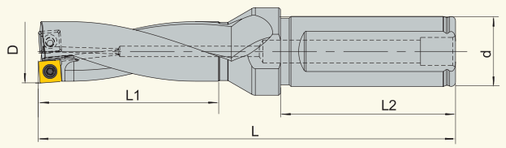
U DRILL 浅孔钻

DR 钻头 (2D)

DR U Drill (2D)

钻深 2xD，钻头直径范围 :Φ15-31.5 mm。
Drilling depth 2xD, drill diameter range: Φ15-31.5 mm.





规格型号 Designation	D	L1	L	L2	d	适用刀片 Suitable Insert	螺丝 Screw	扳手 Wrench	在库 Stock
DR D15.W25.30.SP05	15.0	30	108	56	25	SP..0502..	SR13 M2x5	KEY03 T6	●
DR D15,5.W25.31.SP06	15.5	31	109	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D16.W25.32.SP06	16.0	32	110	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D16,5.W25.33.SP06	16.5	33	111	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D17.W25.34.SP06	17.0	34	112	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR 17,5.W25.35.SP06	17.5	35	113	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D18.W25.36.SP06	18.0	36	114	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D18,5.W25.37.SP06	18.5	37	115	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D19.W25.38.SP06	19.0	38	116	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D19,5.W25.39.SP06	19.5	39	117	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D20.W25.40.SP06	20.0	40	119	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D20,5.W25.41.SP06	20.5	41	120	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D21.W25.42.SP06	21.0	42	121	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D21,5.W25.43.SP06	21.5	43	122	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D22.W25.44.SP07	22.0	44	123	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D22,5.W25.45.SP07	22.5	45	124	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D23.W25.46.SP07	23.0	46	125	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D23,5.W25.47.SP07	23.5	47	126	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D24.W25.48.SP07	24.0	48	127	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D24,5.W25.49.SP07	24.5	49	128	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D25.W32.50.SP07	25.0	50	141	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D25,5.W32.51.SP07	25.5	51	142	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D26.W32.52.SP07	26.0	52	143	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D26,5.W32.53.SP07	26.5	53	144	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D27.W32.54.SP07	27.0	54	145	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D27,5.W32.55.SP09	27.5	55	146	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D28.W32.56.SP09	28.0	56	147	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D28,5.W32.57.SP09	28.5	57	148	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D29.W32.58.SP09	29.0	58	149	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D29,5.W32.59.SP09	29.5	59	150	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D30.W32.60.SP09	30.0	60	151	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D30,5.W32.61.SP09	30.5	61	152	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D31.W32.62.SP09	31.0	62	153	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D31,5.W32.63.SP09	31.5	63	154	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●

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● 标准库存
Item in stock

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孔加工刀具
HOLE MAKING TOOLS

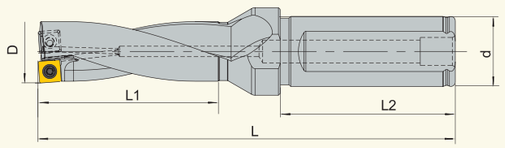
U DRILL 浅孔钻

DR 钻头 (2D)

DR U Drill (2D)

钻深 2xD，钻头直径范围 :Φ32-60 mm。
Drilling depth 2xD, drill diameter range: Φ32-60 mm.





规格型号 Designation	D	L1	L	L2	d	适用刀片 Suitable Insert	螺丝 Screw	扳手 Wrench	在库 Stock
DR D32.W32.64.SP09	32.0	64	155	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D32,5.W32.65.SP09	32.5	65	156	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D33.W32.66.SP09	33.0	66	157	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D33,5.W32.67.SP11	33.5	67	158	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D34.W32.68.SP11	34.0	68	159	60	32	SP..0502..	SR13 M4x10	KEY03 T15	●
DR D34,5.W32.69.SP11	34.5	69	160	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D35.W32.70.SP11	35.0	70	161	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D35,5.W32.71.SP11	35.5	71	162	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D36.W32.72.SP11	36.0	72	163	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D36,5.W32.73.SP11	36.5	73	164	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D37.W32.74.SP11	37.0	74	165	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D37,5.W32.75.SP11	37.5	75	166	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D38.W32.76.SP11	38.0	76	167	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D38,5.W32.77.SP11	38.5	77	168	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D39.W32.78.SP11	39.0	78	169	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D39,5.W32.79.SP11	39.5	79	170	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D40.W32.80.SP11	40.0	80	171	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D41.W32.82.SP14	41.0	82	173	60	32	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D42.W32.84.SP14	42.0	84	175	60	32	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D43.W40.86.SP14	43.0	86	186	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D44.W40.88.SP14	44.0	88	188	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D45.W40.90.SP14	45.0	90	190	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D46.W40.92.SP14	46.0	92	192	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D47.W40.94.SP14	47.0	94	194	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D48.W40.96.SP14	48.0	96	196	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D49.W40.98.SP14	49.0	98	198	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D50.W40.100.SP14	50.0	100	200	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D51.W40.102.SP14	51.0	102	202	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D52.W40.104.SP09	52.0	104	204	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D53.W40.106.SP09	53.0	106	206	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D54.W40.108.SP09	54.0	108	208	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D55.W40.110.SP09	55.0	110	210	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D56.W40.112.SP09	56.0	112	212	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D57.W40.114.SP09	57.0	114	214	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D58.W40.116.SP09	58.0	116	216	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D59.W40.118.SP09	59.0	118	218	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D60.W40.120.SP09	60.0	120	220	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●

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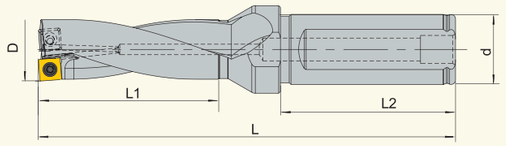
U DRILL 浅孔钻

DR 钻头 (3D)

DR U Drill (3D)

钻深 3xD，钻头直径范围 :Φ15-31.5 mm。
Drilling depth 3xD, drill diameter range: Φ15-31.5mm.





规格型号 Designation	D	L1	L	L2	d	适用刀片 Suitable Insert	螺丝 Screw	扳手 Wrench	在库 Stock
DR D15.W25.45.SP05	15.0	45.0	123	56	25	SP..0502..	SR13 M2x5	KEY03 T6	●
DR D15,5.W25.46,5.SP06	15.5	46.5	124	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D16.W25.48.SP06	16.0	48.0	126	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D16,5.W25.49,5.SP06	16.5	49.5	127	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D17.W25.51.SP06	17.0	51.0	129	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR 17,5.W25.52,5.SP06	17.5	52.5	130	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D18.W25.54.SP06	18.0	54.0	132	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D18,5.W25.55,5.SP06	18.5	55.5	133	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D19.W25.57.SP06	19.0	57.0	135	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D19,5.W25.58,5.SP06	19.5	58.5	135	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D20.W25.60.SP06	20.0	60.0	139	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D20,5.W25.61,5.SP06	20.5	61.5	140	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D21.W25.63.SP06	21.0	63.0	142	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D21,5.W25.64,5.SP06	21.5	64.5	143	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D22.W25.66.SP07	22.0	66.0	145	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D22,5.W25.67,5.SP07	22.5	67.5	148	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D23.W25.69.SP07	23.0	69.0	148	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D23,5.W25.70,5.SP07	23.5	70.5	149	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D24.W25.72.SP07	24.0	72.0	151	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D24,5.W25.73,5.SP07	24.5	73.5	152	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D25.W32.75.SP07	25.0	75.0	166	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D25,5.W32.76,5.SP07	25.5	76.5	167	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D26.W32.78.SP07	26.0	78.0	169	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D26,5.W32.79,5.SP07	26.5	79.5	170	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D27.W32.81.SP07	27.0	81.0	172	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D27,5.W32.82,5.SP09	27.5	82.5	173	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D28.W32.84.SP09	28.0	84.0	175	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D28,5.W32.85,5.SP09	28.5	85.5	176	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D29.W32.87.SP09	29.0	87.0	178	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D29,5.W32.88,5.SP09	29.5	88.5	179	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D30.W32.90.SP09	30.0	90.0	181	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D30,5.W32.91,5.SP09	30.5	91.5	182	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D31.W32.93.SP09	31.0	93.0	184	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D31,5.W32.94,5.SP09	31.5	94.5	185	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●

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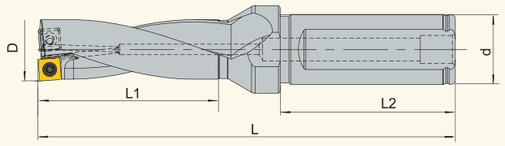
U DRILL 浅孔钻

DR 钻头 (3D)

DR U Drill (3D)

钻深 3xD，钻头直径范围 :Φ32-60 mm。
Drilling depth 3xD, drill diameter range: Φ32-60 mm.





规格型号 Designation	D	L1	L	L2	d	适用刀片 Suitable Insert	螺丝 Screw	扳手 Wrench	在库 Stock
DR D32.W32.96.SP09	32.0	96.0	187	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D32,5.W32.97,5.SP09	32.5	97.5	188	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D33.W32.99.SP09	33.0	99.0	190	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D33,5.W32.100,5.SP11	33.5	100.5	191	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D34.W32.102.SP11	34.0	102.0	193	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D34,5.W32.103,5.SP11	34.5	103.5	194	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D35.W32.105.SP11	35.0	105.0	196	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D35,5.W32.106,5.SP11	35.5	106.5	197	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D36.W32.108.SP11	36.0	108.0	199	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D36,5.W32.109,5.SP11	36.5	109.5	200	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D37.W32.111.SP11	37.0	111.0	202	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D37,5.W32.112,5.SP11	37.5	112.5	203	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D38.W32.114.SP11	38.0	114.0	205	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D38,5.W32.115,5.SP11	38.5	115.5	206	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D39.W32.117.SP11	39.0	117.0	206	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D39,5.W32.118,5.SP11	39.5	118.5	209	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D40.W32.120.SP11	40.0	120.0	211	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D41.W32.123.SP14	41.0	123.0	214	60	32	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D42.W32.126.SP14	42.0	126.0	217	60	32	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D43.W40.129.SP14	43.0	129.0	229	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D44.W40.132.SP14	44.0	132.0	232	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D45.W40.135.SP14	45.0	135.0	235	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D46.W40.138.SP14	46.0	138.0	238	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D47.W40.141.SP14	47.0	141.0	241	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D48.W40.144.SP14	48.0	144.0	244	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D49.W40.147.SP14	49.0	147.0	247	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D50.W40.150.SP14	50.0	150.0	250	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D51.W40.153.SP14	51.0	153.0	253	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D52.W40.156.SP09	52.0	156.0	256	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D53.W40.159.SP09	53.0	159.0	259	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D54.W40.162.SP09	54.0	162.0	262	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D55.W40.165.SP09	55.0	165.0	265	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D56.W40.168.SP09	56.0	168.0	268	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D57.W40.171.SP09	57.0	171.0	271	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D58.W40.174.SP09	58.0	174.0	274	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D59.W40.177.SP09	59.0	177.0	277	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D60.W40.180.SP09	60.0	180.0	280	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●

● 刀片请根据不同材料单独订购，请参照：☞ A89 页。
● Insert with different materials should be ordered separately, please see page A89.

● 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)

U DRILL 浅孔钻

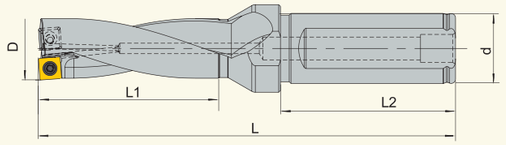
DR 钻头 (4D)

DR U Drill (4D)

钻深 4xD，钻头直径范围 :Φ15-31.5 mm。

Drilling depth 4xD, drill diameter range: Φ15-31.5mm.





规格型号 Designation	D	L1	L	L2	d	适用刀片 Suitable Insert	螺丝 Screw	扳手 Wrench	在库 Stock
DR D15.W25.60.SP05	15.0	60	138	56	25	SP..0502..	SR13 M2x5	KEY03 T6	●
DR D15,5.W25.62.SP06	15.5	62	140	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D16.W25.64.SP06	16.0	64	142	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D16,5.W25.66.SP06	16.5	66	144	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D17.W25.68.SP06	17.0	68	146	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR 17,5.W25.70.SP06	17.5	70	148	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D18.W25.72.SP06	18.0	72	150	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D18,5.W25.74.SP06	18.5	74	152	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D19.W25.76.SP06	19.0	76	154	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D19,5.W25.78.SP06	19.5	78	155	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D20.W25.80.SP06	20.0	80	159	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D20,5.W25.82.SP06	20.5	82	161	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D21.W25.84.SP06	21.0	84	163	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D21,5.W25.86.SP06	21.5	86	165	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D22.W25.88.SP07	22.0	88	167	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D22,5.W25.90.SP07	22.5	90	169	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D23.W25.92.SP07	23.0	92	171	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D23,5.W25.94.SP07	23.5	94	173	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D24.W25.96.SP07	24.0	96	175	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D24,5.W25.98.SP07	24.5	98	177	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D25.W32.100.SP07	25.0	100	191	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D25,5.W32.102.SP07	25.5	102	193	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D26.W32.104.SP07	26.0	104	195	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D26,5.W32.106.SP07	26.5	106	197	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D27.W32.108.SP07	27.0	108	199	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D27,5.W32.110.SP09	27.5	110	201	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D28.W32.112.SP09	28.0	112	203	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D28,5.W32.114.SP09	28.5	114	205	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D29.W32.116.SP09	29.0	116	207	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D29,5.W32.118.SP09	29.5	118	209	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D30.W32.120.SP09	30.0	120	211	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D30,5.W32.122.SP09	30.5	122	213	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D31.W32.124.SP09	31.0	124	215	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D31,5.W32.126.SP09	31.5	126	217	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●

● 刀片请根据不同材料单独订购，请参照：☞ A89 页。

● Insert with different materials should be ordered separately, please see page A89.

孔加工刀具
HOLE MAKING TOOLS

U DRILL 浅孔钻

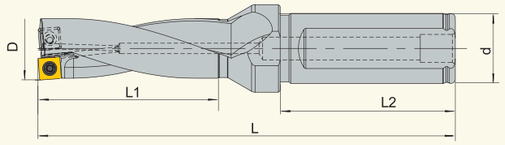
DR 钻头 (4D)

DR U Drill (4D)

钻深 4xD，钻头直径范围 :Φ32-60 mm。

Drilling depth 4xD, drill diameter range: Φ32-60 mm.





规格型号 Designation	D	L1	L	L2	d	适用刀片 Suitable Insert	螺丝 Screw	扳手 Wrench	在库 Stock
DR D32.W32.128.SP09	32.0	128	219	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D32,5.W32.130.SP09	32.5	130	221	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D33.W32.132.SP09	33.0	132	223	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D33,5.W32.134.SP11	33.5	134	225	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D34.W32.136.SP11	34.0	136	227	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D34,5.W32.138.SP11	34.5	138	229	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D35.W32.140.SP11	35.0	140	231	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D35,5.W32.142.SP11	35.5	142	233	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D36.W32.144.SP11	36.0	144	235	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D36,5.W32.146.SP11	36.5	146	237	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D37.W32.148.SP11	37.0	148	239	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D37,5.W32.150.SP11	37.5	150	241	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D38.W32.152.SP11	38.0	152	243	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D38,5.W32.154.SP11	38.5	154	245	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D39.W32.156.SP11	39.0	156	247	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D39,5.W32.158.SP11	39.5	158	249	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D40.W32.160.SP11	40.0	160	251	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D41.W32.164.SP14	41.0	164	255	60	32	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D42.W32.168.SP14	42.0	168	259	60	32	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D43.W40.172.SP14	43.0	172	272	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D44.W40.176.SP14	44.0	176	276	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D45.W40.180.SP14	45.0	180	280	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D46.W40.184.SP14	46.0	184	284	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D47.W40.188.SP14	47.0	188	288	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D48.W40.192.SP14	48.0	192	292	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D49.W40.196.SP14	49.0	196	296	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D50.W40.200.SP14	50.0	200	300	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D51.W40.204.SP14	51.0	204	304	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D52.W40.208.SP09	52.0	208	308	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D53.W40.212.SP09	53.0	212	312	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D54.W40.216.SP09	54.0	216	316	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D55.W40.220.SP09	55.0	220	320	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D56.W40.224.SP09	56.0	224	324	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D57.W40.228.SP09	57.0	228	328	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D58.W40.232.SP09	58.0	232	332	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D59.W40.236.SP09	59.0	236	336	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D60.W40.240.SP09	60.0	240	340	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●

● 刀片请根据不同材料单独订购，请参照：☞ A89 页。

● Insert with different materials should be ordered separately, please see page A89.

● 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
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○ 无库存 (订货时，请确认交货期)
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U DRILL 浅孔钻

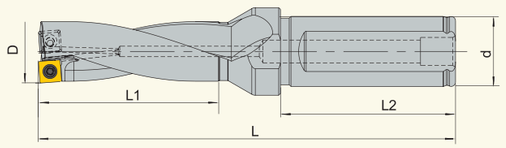
DR 钻头 (5D)

DR U Drill (5D)

钻深 5xD，钻头直径范围 :Φ20-35 mm。

Drilling depth 5xD, drill diameter range: Φ20-35 mm.





规格型号 Designation	D	L1	L	L2	d	适用刀片 Suitable Insert	螺丝 Screw	扳手 Wrench	在库 Stock
DR D20.W25.100.SP06	20.0	100.0	179	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D20,5.W25.102,5.SP06	20.5	102.5	181	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D21.W25.105.SP06	21.0	105.0	184	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D21,5.W25.107,5.SP06	21.5	107.5	186	56	25	SP..0602..	SR13 M2.2x5	KEY03 T6	●
DR D22.W25.110.SP07	22.0	110.0	189	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D22,5.W25.112.5.SP07	22.5	112.5	193	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D23.W25.115.SP07	23.0	115.0	194	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D23,5.W25.117,5.SP07	23.5	117.5	196	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D24.W25.120.SP07	24.0	120.0	199	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D24,5.W25.122,5.SP07	24.5	122.5	201	56	25	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D25.W32.125.SP07	25.0	125.0	216	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D25,5.W32.127,5.SP07	25.5	127.5	218	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D26.W32.130.SP07	26.0	130.0	221	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D26,5.W32.132,5.SP07	26.5	132.5	223	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D27.W32.135.SP07	27.0	135.0	226	60	32	SP..07T3..	SR13 M2.5x6	KEY03 T8	●
DR D27,5.W32.137,5.SP09	27.5	137.5	228	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D28.W32.140.SP09	28.0	140.0	231	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D28,5.W32.142,5.SP09	28.5	142.5	233	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D29.W32.145.SP09	29.0	145.0	236	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D29,5.W32.147,5.SP09	29.5	147.5	238	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D30.W32.150.SP09	30.0	150.0	241	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D30,5.W32.152,5.SP09	30.5	152.5	243	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D31.W32.155.SP09	31.0	155.0	246	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D31,5.W32.157,5.SP09	31.5	157.5	248	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D32.W32.160.SP09	32.0	160.0	251	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D32,5.W32.162,5.SP09	32.5	162.5	253	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D33.W32.165.SP09	33.0	165.0	256	60	32	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D33,5.W32.167,5.SP11	33.5	167.5	258	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D34.W32.170.SP11	34.0	170.0	261	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D34,5.W32.172,5.SP11	34.5	172.5	263	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D35.W32.175.SP11	35.0	175.0	266	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●

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● Insert with different materials should be ordered separately, please see page A89.

● 标准库存
Item in stock

◐ 半标准库存 (订货时，请确认交货期)
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Order on demand
(please confirm delivery time when ordering it)

U DRILL 浅孔钻

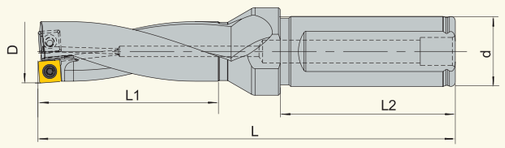
DR 钻头 (5D)

DR U Drill (5D)

钻深 5xD，钻头直径范围 :Φ35.5-60 mm。

Drilling depth 5xD, drill diameter range: Φ35.5 -60mm.





规格型号 Designation	D	L1	L	L2	d	适用刀片 Suitable Insert	螺丝 Screw	扳手 Wrench	在库 Stock
DR D35,5.W32.177,5.SP11	35.5	177.5	268	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D36.W32.180.SP11	36.0	180.0	271	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D36,5.W32.182,5.SP11	36.5	182.5	273	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D37.W32.185.SP11	37.0	185.0	276	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D37,5.W32.187,5.SP11	37.5	187.5	278	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D38.W32.190.SP11	38.0	190.0	281	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D38,5.W32.192,5.SP11	38.5	192.5	283	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D39.W32.195.SP11	39.0	195.0	284	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D39,5.W32.197,5.SP11	39.5	197.5	288	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D40.W32.200.SP11	40.0	200.0	291	60	32	SP..1104..	SR13 M4x10	KEY03 T15	●
DR D41.W32.205.SP14	41.0	205.0	296	60	32	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D42.W32.210.SP14	42.0	210.0	301	60	32	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D43.W40.215.SP14	43.0	215.0	315	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D44.W40.220.SP14	44.0	220.0	320	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D45.W40.225.SP14	45.0	225.0	325	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D46.W40.230.SP14	46.0	230	330	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D47.W40.235.SP14	47.0	235	335	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D48.W40.240.SP14	48.0	240	340	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D49.W40.245.SP14	49.0	245	345	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D50.W40.250.SP14	50.0	250	350	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D51.W40.255.SP14	51.0	255	355	65	40	SP..1405..	SR13 M5x10	KEY03 T20	●
DR D52.W40.260.SP09	52.0	260	360	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D53.W40.265.SP09	53.0	265	365	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D54.W40.270.SP09	54.0	270	370	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D55.W40.275.SP09	55.0	275	375	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D56.W40.280.SP09	56.0	280	380	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D57.W40.285.SP09	57.0	285	385	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D58.W40.290.SP09	58.0	290	390	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D59.W40.295.SP09	59.0	295	395	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●
DR D60.W40.300.SP09	60.0	300	400	65	40	SP..0904..	SR13 M3.5x8	KEY03 T15	●

● 刀片请根据不同材料单独订购，请参照：☞ A89 页。

● Insert with different materials should be ordered separately, please see page A89.

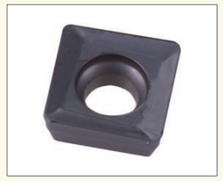
● 标准库存
Item in stock

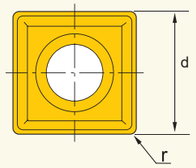
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

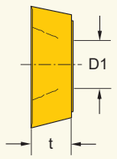
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

U DRILL 浅孔钻

SP 钻削刀片
SP drilling insert







规格型号 Designation	尺寸 Suitable Insert				加工材质 Suitable Insert						在库 Stock
	d	t	r	D1	P	M	K	N	S	H	
SPMG 050204-D1G 6230	5.00	2.38	0.40	2.25	●	●	●				●
SPMG 050204-D2G 1230	5.00	2.38	0.40	2.25	●	●	●				●
SPMG 050204-D2S 1130	5.00	2.38	0.40	2.25	●				●	●	●
SPGT 050204 -D3N 6010	5.00	2.38	0.40	2.25				●			●
SPMG 060204-D1G 6230	6.00	2.38	0.40	2.60	●	●	●				●
SPMG 060204-D2G 1230	6.00	2.38	0.40	2.60	●	●	●				●
SPMG 060204-D2S 1130	6.00	2.38	0.40	2.60	●				●	●	●
SPGT 060204-D3N 6010	6.00	2.38	0.40	2.60				●			●
SPMG 07T308-D1G 6230	7.94	3.97	0.80	2.85	●	●	●				●
SPMG 07T308-D2G 1230	7.94	3.97	0.80	2.85	●	●	●				●
SPMG 07T308-D2S 1130	7.94	3.97	0.80	2.85	●				●	●	●
SPGT 07T308-D3N 6010	7.94	3.97	0.80	2.85				●			●
SPMG 090408-D1G 6230	9.80	4.30	0.80	4.05	●	●	●				●
SPMG 090408-D2G 1230	9.80	4.30	0.80	4.05	●	●	●				●
SPMG 090408-D2S 1130	9.80	4.30	0.80	4.05	●				●	●	●
SPGT 090408-D3N 6010	9.80	4.30	0.80	4.05				●			●
SPMG 110408-D1G 6230	11.50	4.80	0.80	4.45	●	●	●				●
SPMG 110408-D2G 1230	11.50	4.80	0.80	4.45	●	●	●				●
SPMG 110408-D2S 1130	11.50	4.80	0.80	4.45	●				●	●	●
SPGT 110408-D3N 6010	11.50	4.80	0.80	4.45				●			●
SPMG 140512-D1G 6230	14.30	5.20	1.20	5.75	●	●	●		●	●	●
SPMG 140512-D2G 1230	14.30	5.20	1.20	5.75	●	●	●		●	●	●
SPGT 140512-D3N 6010	14.30	5.20	1.20	5.75				●			●

● 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)

U DRILL 浅孔钻

推荐切削参数
Recommended Cutting Parameter

DRILL 2,3,4xD 加工数据
DRILL 2,3,4xD

ISO	材质 Workpiece material		条件 Condition	拉伸强度 Tensile strength	单位面积比切力 Shearing force as per square (mm)	硬度 Hardness	切削速度 Cutting speed	进给 (mm/rev) 对比 钻头直径钻深 2,3,4XD Feed in different diameters						
								D13-D15	D15.5-D21.5	D22-D27	D27.5-D33	D33.5-D40	D41-D51	D52-D60
				N/mm2	N/mm2	HB	Vc(m/min)	SPMG 05	SPMG 06	SPMG 07	SPMG 09	SPMG 11	SPMG 14	SPMG 09
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	1350	125	250-350	0.04-0.06	0.04-0.06	0.04-0.08	0.04-0.08	0.06-0.10	0.06-0.12	0.04-0.08
		>=0.25%C	退火 Annealed	650	1500	190	180-250	0.05-0.08	0.06-0.10	0.06-0.12	0.07-0.13	0.08-0.15	0.08-0.16	0.07-0.13
		<0.55%C	调质 Quenched andtempered	850	1675	250	160-220	0.06-0.12	0.08-0.15	0.10-0.18	0.12-0.22	0.12-0.24	0.13-0.25	0.12-0.22
		>=0.55%C	退火 Annealed	750	1700	220	160-220	0.06-0.12	0.08-0.15	0.10-0.18	0.12-0.22	0.12-0.24	0.13-0.25	0.12-0.22
			调质 Quenched andtempered	1000	1900	300	160-220	0.06-0.12	0.08-0.15	0.10-0.18	0.12-0.22	0.12-0.24	0.13-0.25	0.12-0.22
	低合金钢和铸钢 (合金成份低于 5%) Low alloy steel and cast steel (less than 5% alloying elements)		退火 Annealed	600	1775	200	150-220	0.06-0.12	0.08-0.14	0.10-0.18	0.12-0.20	0.12-0.20	0.13-0.20	0.12-0.20
				930	1675	275	120-160	0.06-0.15	0.06-0.15	0.08-0.18	0.08-0.18	0.08-0.18	0.08-0.18	0.08-0.18
			调质 Quenched andtempered	1000	1725	300	120-160	0.06-0.15	0.06-0.15	0.08-0.18	0.08-0.18	0.08-0.18	0.08-0.18	0.08-0.18
				1200	1800	350	120-160	0.06-0.15	0.06-0.15	0.08-0.18	0.08-0.18	0.08-0.18	0.08-0.18	0.08-0.18
	高碳合金钢，铸钢，工具钢 High alloy steel, cast steel, and tool steel		退火 Annealed	680	2450	200	140-180	0.06-0.10	0.06-0.10	0.08-0.12	0.08-0.14	0.08-0.14	0.08-0.14	0.08-0.14
			调质 Quenched andtempered	1100	2500	325	130-180	0.06-0.10	0.08-0.12	0.10-0.15	0.12-0.15	0.12-0.18	0.13-0.18	0.12-0.15
M	不锈钢，铸钢 Stainless steel and cast steel		铁素体 / 马氏体 Ferritic/ martensitic	680	1875	200	170-240	0.05-0.10	0.06-0.12	0.08-0.15	0.09-0.16	0.10-0.17	0.11-0.18	0.09-0.16
			马氏体 Martensitic	820	1875	240	170-240	0.05-0.10	0.06-0.12	0.08-0.15	0.09-0.16	0.10-0.17	0.11-0.18	0.09-0.16
			奥氏体 Austenitic	600	2150	180	170-240	0.05-0.10	0.06-0.12	0.08-0.15	0.09-0.16	0.10-0.17	0.11-0.18	0.09-0.16
K	灰铸铁 (GG) Grey cast iron		铁素体 Ferritic		1150	160	180-250	0.06-0.12	0.08-0.16	0.12-0.20	0.15-0.25	0.16-0.28	0.18-0.30	0.15-0.25
			珠光体 Pearlite		1350	250	180-250	0.06-0.12	0.08-0.16	0.12-0.20	0.15-0.25	0.16-0.28	0.18-0.30	0.15-0.25
	球墨铸铁 (GGG) Ductile cast iron		铁素体 Ferritic		1225	180	180-250	0.06-0.12	0.08-0.16	0.12-0.20	0.15-0.25	0.16-0.28	0.18-0.30	0.15-0.25
			珠光体 Pearlite		1350	260	180-250	0.06-0.12	0.08-0.16	0.12-0.20	0.15-0.25	0.16-0.28	0.18-0.30	0.15-0.25
	可锻铸铁 Malleable cast iron		铁素体 Ferritic		1225	130	130-200	0.06-0.10	0.08-0.15	0.10-0.18	0.12-0.20	0.15-0.23	0.16-0.25	0.12-0.20
			珠光体 Pearlite		1420	230	130-200	0.06-0.10	0.08-0.15	0.10-0.18	0.12-0.20	0.15-0.23	0.16-0.25	0.12-0.20
N	锻造铝合金 Aluminium wrought alloys		未硬化 Not cureable		700	60	330-380	0.06-0.14	0.08-0.15	0.10-0.20	0.12-0.22	0.14-0.23	0.15-0.26	0.12-0.22
			硬化 Cured		800	100	330-380	0.06-0.14	0.08-0.15	0.10-0.20	0.12-0.22	0.14-0.23	0.15-0.26	0.12-0.22
	铸造铝合金 Aluminium wrought alloys	<=12% Si	未硬化 Not cureable		700	75	330-380	0.06-0.14	0.08-0.15	0.10-0.20	0.12-0.22	0.14-0.23	0.15-0.26	0.12-0.22
			硬化 Cured		700	90	330-380	0.06-0.14	0.08-0.15	0.10-0.20	0.12-0.22	0.14-0.23	0.15-0.26	0.12-0.22
		>12% Si	高温 High temperature		750	130	330-380	0.06-0.14	0.08-0.15	0.10-0.20	0.12-0.22	0.14-0.23	0.15-0.26	0.12-0.22
	铜合金 Copper alloys	>1% Pb	易切削 Free cutting		700	110	150-230	0.06-0.13	0.06-0.13	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15
			黄铜 Brass		700	90	150-230	0.06-0.13	0.06-0.13	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15
			电解铜 Electrolytic copper		700	100	150-230	0.06-0.13	0.06-0.13	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15
	非金属 Non-metallic		高强度塑料，纤维塑料 Duroplastic, fiber plastic				150-230	0.06-0.13	0.06-0.13	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15
			硬橡胶 Hard rubber				150-230	0.06-0.13	0.06-0.13	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15	0.08-0.15
S	高温合金 Heat-resistant	铁基 Fe based	退火 Annealed		2600	200	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09
			固化 Curing		3100	280	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09
		镍基或钴基 Ni or Co based	退火 Annealed		3300	250	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09
			固化 Curing		3300	350	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09
			铸造 Cast		3300	320	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09
	钛合金 Titanium alloys			Rm 400	1700		30-60	0.05-0.10	0.06-0.14	0.08-0.18	0.10-0.22	0.14-0.23	0.15-0.24	0.10-0.22
			硬化钛合金（TiAL4V) Alpha + beta alloys cured	Rm 1050	2110		30-60	0.05-0.10	0.06-0.14	0.08-0.18	0.10-0.22	0.14-0.23	0.15-0.24	0.10-0.22
H	淬硬钢 Hardened steel		淬硬 Hardened		4600	55HRC	30-60	0.05-0.09	0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10
			淬硬 Hardened		4700	60HRC	30-60	0.05-0.09	0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10
	冷硬铸铁 Hardened cast iron		铸造 Cast		4600	400	30-60	0.05-0.09	0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10
	铸铁 Cast iron		淬硬 Hardened		4500	55HRC	30-60	0.05-0.09	0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10

U DRILL 浅孔钻

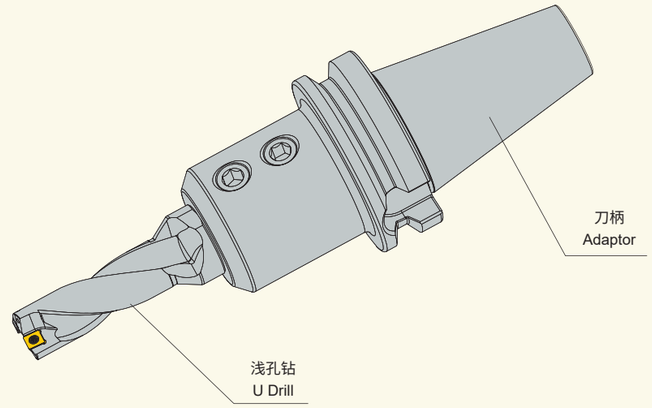
推荐切削参数
Recommended Cutting Parameter

DRILL 5xD 加工数据
DRILL 5xD

ISO	材质 Workpiece material		条件 Condition	拉伸强度 Tensile strength	单位面积比切力 Shearing force as per square (mm)	硬度 Hardness	切削速度 Cutting speed	进给 (mm/rev) 对比 钻头直径钻深 5XD Feed in different diameters						
								D13-D15	D15.5-D21.5	D22-D27	D27.5-D33	D33.5-D40	D41-D51	D52-D60
				N/mm2	N/mm2	HB	Vc(m/min)	SPMG 05	SPMG 06	SPMG 07	SPMG 09	SPMG 11	SPMG 14	SPMG 09
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	1350	125	250-350	0.04-0.05	0.04-0.05	0.04-0.06	0.04-0.07	0.06-0.08	0.06-0.10	0.04-0.07
		>=0.25%C	退火 Annealed	650	1500	190	180-250	0.06-0.08	0.06-0.08	0.06-0.10	0.07-0.12	0.08-0.13	0.08-0.14	0.07-0.12
		<0.55%C	调质 Quenched andtempered	850	1675	250	160-220	0.06-0.10	0.08-0.13	0.10-0.16	0.12-0.20	0.12-0.22	0.13-0.23	0.12-0.20
		>=0.55%C	退火 Annealed	750	1700	220	160-220	0.06-0.10	0.08-0.13	0.10-0.16	0.12-0.20	0.12-0.22	0.13-0.23	0.12-0.20
			调质 Quenched andtempered	1000	1900	300	160-220	0.06-0.10	0.08-0.13	0.10-0.16	0.12-0.20	0.12-0.22	0.13-0.23	0.12-0.20
	低合金钢和铸钢（合金成份低于 5%) Low alloy steel and cast steel (less than 5% alloying elements)		退火 Annealed	600	1775	200	150-220	0.06-0.10	0.08-0.12	0.10-0.16	0.12-0.18	0.12-0.18	0.13-0.18	0.12-0.18
				930	1675	275	120-160	0.06-0.12	0.06-0.13	0.08-0.16	0.08-0.16	0.08-0.17	0.08-0.17	0.08-0.16
			调质 Quenched andtempered	1000	1725	300	120-160	0.06-0.12	0.06-0.13	0.08-0.16	0.08-0.16	0.08-0.17	0.08-0.17	0.08-0.16
				1200	1800	350	120-160	0.06-0.12	0.06-0.13	0.08-0.16	0.08-0.16	0.08-0.17	0.08-0.17	0.08-0.16
	高碳合金钢，铸钢，工具钢 High alloy steel, cast steel, and tool steel		退火 Annealed	680	2450	200	140-180	0.06-0.08	0.06-0.08	0.08-0.10	0.08-0.12	0.08-0.12	0.08-0.12	0.08-0.12
			调质 Quenched andtempered	1100	2500	325	130-180	0.06-0.09	0.08-0.10	0.10-0.13	0.12-0.13	0.12-0.15	0.12-0.16	0.12-0.13
M	不锈钢，铸钢 Stainless steel and cast steel		铁素体 / 马氏体 Ferritic/ martensitic	680	1875	200	170-240	0.05-0.09	0.06-0.10	0.08-0.13	0.09-0.15	0.10-0.15	0.10-0.17	0.09-0.15
			马氏体 Martensitic	820	1875	240	170-240	0.05-0.09	0.06-0.10	0.08-0.13	0.09-0.15	0.10-0.15	0.10-0.17	0.09-0.15
			奥氏体 Austenitic	600	2150	180	170-240	0.05-0.09	0.06-0.10	0.08-0.13	0.09-0.15	0.10-0.15	0.10-0.17	0.09-0.15
K	灰铸铁 (GG) Grey cast iron		铁素体 Ferritic		1150	160	180-250	0.06-0.10	0.08-0.15	0.12-0.18	0.15-0.22	0.16-0.25	0.18-0.28	0.15-0.22
			珠光体 Pearlite		1350	250	180-250	0.06-0.10	0.08-0.15	0.12-0.18	0.15-0.22	0.16-0.25	0.18-0.28	0.15-0.22
	球墨铸铁 (GGG) Ductile cast iron		铁素体 Ferritic		1225	180	180-250	0.06-0.10	0.08-0.15	0.12-0.18	0.15-0.22	0.16-0.25	0.18-0.28	0.15-0.22
			珠光体 Pearlite		1350	260	180-250	0.06-0.10	0.08-0.15	0.12-0.18	0.15-0.22	0.16-0.25	0.18-0.28	0.15-0.22
	可锻铸铁 Malleable cast iron		铁素体 Ferritic		1225	130	130-200	0.06-0.08	0.08-0.12	0.10-0.16	0.12-0.18	0.15-0.22	0.16-0.23	0.12-0.18
			珠光体 Pearlite		1420	230	130-200	0.06-0.08	0.08-0.12	0.10-0.16	0.12-0.18	0.15-0.22	0.16-0.23	0.12-0.18
N	锻造铝合金 Aluminium wrought alloys		未硬化 Not cureable		700	60	330-380	0.06-0.12	0.08-0.15	0.10-0.13	0.12-0.18	0.14-0.20	0.14-0.24	0.12-0.18
			硬化 Cured		800	100	330-380	0.06-0.12	0.08-0.15	0.10-0.13	0.12-0.18	0.14-0.20	0.14-0.24	0.12-0.18
	铸造铝合金 Aluminium wrought alloys	<=12% Si	未硬化 Not cureable		700	75	330-380	0.06-0.12	0.08-0.15	0.10-0.13	0.12-0.18	0.14-0.20	0.14-0.24	0.12-0.18
			硬化 Cured		700	90	330-380	0.06-0.12	0.08-0.15	0.10-0.13	0.12-0.18	0.14-0.20	0.14-0.24	0.12-0.18
		>12% Si	高温 High temperature		750	130	330-380	0.06-0.12	0.08-0.15	0.10-0.13	0.12-0.18	0.14-0.20	0.14-0.24	0.12-0.18
	铜合金 Copper alloys	>1% Pb	易切削 Free cutting		700	110	150-230	0.06-0.12	0.06-0.12	0.08-0.13	0.08-0.13	0.08-0.14	0.08-0.14	0.08-0.13
			黄铜 Brass		700	90	150-230	0.06-0.12	0.06-0.12	0.08-0.13	0.08-0.13	0.08-0.14	0.08-0.14	0.08-0.13
			电解铜 Electrolytic copper		700	100	150-230	0.06-0.12	0.06-0.12	0.08-0.13	0.08-0.13	0.08-0.14	0.08-0.14	0.08-0.13
	非金属 Non-metallic		高强度塑料，纤维塑料 Duroplastic, fiber plastic				150-230	0.06-0.12	0.06-0.12	0.08-0.13	0.08-0.13	0.08-0.14	0.08-0.14	0.08-0.13
			硬橡胶 Hard rubber				150-230	0.06-0.12	0.06-0.12	0.08-0.13	0.08-0.13	0.08-0.14	0.08-0.14	0.08-0.13
S	高温合金 Heat-resistant	铁基	退火 Annealed		2600	200	30-60	0.05-0.07	0.05-0.07	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08
			固化 Curing		3100	280	30-60	0.05-0.07	0.05-0.07	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08
		镍基或钴基	退火 Annealed		3300	250	30-60	0.05-0.07	0.05-0.07	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08
			固化 Curing		3300	350	30-60	0.05-0.07	0.05-0.07	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08
			铸造 Cast		3300	320	30-60	0.05-0.07	0.05-0.07	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08	0.05-0.08
	钛合金 Titanium alloys			Rm 400	1700		30-60	0.05-0.09	0.08-0.13	0.08-0.17	0.10-0.20	0.14-0.22	0.14-0.24	0.10-0.20
			硬化钛合金（TiAL4V) Alpha + beta alloys cured	Rm 1050	2110		30-60	0.05-0.09	0.08-0.13	0.08-0.17	0.10-0.20	0.14-0.22	0.14-0.24	0.10-0.20
H	淬硬钢 Hardened steel		淬硬 Hardened		4600	55HRC	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09
			淬硬 Hardened		4700	60HRC	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09
	冷硬铸铁 Hardened cast iron		铸造 Cast		4600	400	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09
	铸铁 Cast iron		淬硬 Hardened		4500	55HRC	30-60	0.05-0.08	0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09	0.05-0.09

U DRILL 浅孔钻

浅孔钻加工易出现的问题
Common Problems



问题 Problems	可能因素 Possible cause
加工中刀具振动大 **Strong vibration**	● 过大的刀具悬伸和进给量 Longer overhang and roughing feed ● 机床刚性不足 Machine tool lacking of rigidity ● 工装夹具未紧固 Unfirm fixture
断屑效果差，拍屑不畅，导致被加工孔质量差 **Poor chip breaking，jam of chip removal cause poor performance**	● 未匹配正确的加工参数 Incorrect parameter ● 机床内冷压力不足（最小压力 1.5MPa) Less coolant pressure (mini pressure1.5MPa)
加工铸铁产品刀片寿命低 **Shorter tool life for cast iron material**	● 刀片材质及涂层选择错误 Incorrect insert
在车床上应用，内刀片容易崩刃 **Easy to be tipping**	● 刀具中心与工件回转中心不重合 Misalignment of the center point

INSERTS FOR BORING

镗刀片



A

孔加工刀具
HOLE MAKING TOOLS

镗刀片
Inserts for Boring

CC 型刀片 A95
CC..

DC 型刀片 A96
DC..

TB 型刀片 A97
TB..

TC 型刀片 A97
TC..

TP 型刀片 A99
TP..

SC 型刀片 A100
SC..

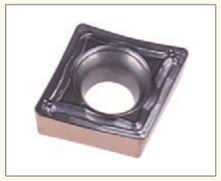
SO 型刀片 A101
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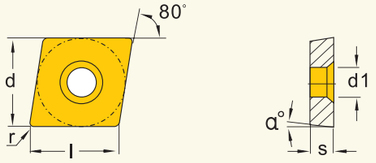
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INSERTS FOR BORING 镗刀片

CC 型刀片

CC..

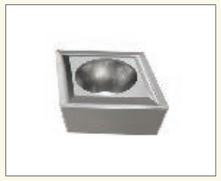


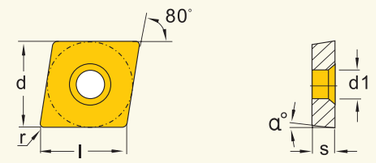


规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
CCMT 060204-F2P 1115	6.5	6.35	2.38	0.4	•						120-300	0.10-1.50	0.05-0.20
CCMT 060204-M2P 1115	6.5	6.35	2.38	0.4	•						120-300	0.50-2.50	0.08-0.30
CCMT 060204-M2M 1225	6.5	6.35	2.38	0.4		•					100-250	0.50-2.50	0.08-0.30
CCMT 060204-M2K 1115	6.5	6.35	2.38	0.4			•				150-350	0.50-2.50	0.08-0.30
CCMT 060204-F2S 1215	6.5	6.35	2.38	0.4					•		40-70	0.20-1.50	0.03-0.20
CCMT 060208-M2P 1125	6.5	6.35	2.38	0.8	•						120-280	0.50-2.50	0.08-0.35
CCMT 060208-M2K 1115	6.5	6.35	2.38	0.8			•				120-300	0.50-2.50	0.08-0.35
CCMT 09T304-F2P 1115	9.7	9.525	3.97	0.4	•						150-300	0.20-2.00	0.05-0.20
CCMT 09T304-M2P 1115	9.7	9.525	3.97	0.4	•						120-280	0.50-2.50	0.08-0.30
CCMT 09T304-M2M 1225	9.7	9.525	3.97	0.4		•					100-250	0.50-2.50	0.08-0.30
CCMT 09T304-M2K 1115	9.7	9.525	3.97	0.4			•				150-350	0.50-2.50	0.08-0.30
CCMT 09T304-F2S 1215	9.7	9.525	3.97	0.4					•		40-70	0.20-1.50	0.03-0.20
CCMT 09T308-R1P 1125	9.7	9.525	3.97	0.8	•						120-280	1.00-3.50	0.15-0.40
CCMT 09T308-M2M 1225	9.7	9.525	3.97	0.8		•					120-280	0.50-3.50	0.08-0.30
CCMT 09T308-M2K 1115	9.7	9.525	3.97	0.8			•				150-350	0.50-3.50	0.08-0.35
CCMT 120404-M2P 1125	12.9	12.7	4.76	0.4	•						120-280	0.50-2.50	0.08-0.30
CCMT 120404-M2M 1225	12.9	12.7	4.76	0.4		•					150-300	0.50-2.50	0.08-0.30
CCMT 120404-M2K 1115	12.9	12.7	4.76	0.4			•				150-350	0.50-2.50	0.08-0.30
CCMT 120408-M2P 1125	12.9	12.7	4.76	0.8	•						120-280	0.50-2.50	0.08-0.30
CCMT 120408-R1P 1125	12.9	12.7	4.76	0.8	•						120-280	1.00-3.50	0.15-0.40
CCMT 120408-M2M 3220	12.9	12.7	4.76	0.8	•	•					100-280	0.50-3.50	0.08-0.30
CCMT 120408-M2K 1115	12.9	12.7	4.76	0.8			•				200-350	0.50-3.50	0.08-0.30

CC 型刀片

CC..





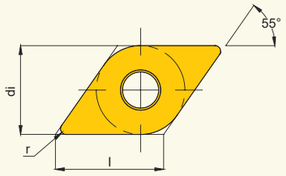
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
CCGT 060204-F4N 1015	6.5	6.35	2.38	0.4				•			300-1000	0.5-2.50	0.1-0.25
CCGT 060204-F5N 1010	6.5	6.35	2.38	0.4				•			300-1000	0.5-2.50	0.1-0.25
CCGT 09T304-F4N 1015	9.7	9.525	3.97	0.4				•			300-1000	0.5-3.00	0.1-0.25
CCGT 09T304-F5N 1010	9.7	9.525	3.97	0.4				•			300-1000	0.5-3.00	0.1-0.25
CCGT 09T308-F4N 1015	9.7	9.525	3.97	0.8				•			300-1000	0.5-3.50	0.1-0.30
CCGT 09T308-F5N 1010	9.7	9.525	3.97	0.8				•			300-1000	0.5-3.50	0.1-0.30
CCGT 120404-F4N 1015	12.9	12.7	4.76	0.4				•			300-1000	0.5-3.00	0.1-0.25
CCGT 120408-F5N 1010	12.9	12.7	4.76	0.8				•			300-1000	0.5-4.00	0.1-0.30
CCGT 120408-F4N 1015	12.9	12.7	4.76	0.8				•			300-1000	0.5-4.00	0.1-0.30

INSERTS FOR BORING 镗刀片

DC 型刀片

DC..

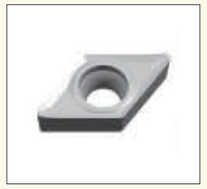


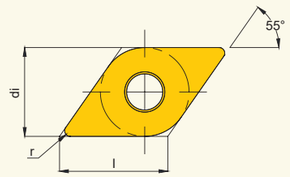


规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
DCMT 070204-F2P 1115	7.8	6.35	2.38	0.4	•						150-360	0.30-1.50	0.05-0.20
DCMT 070204-F2M 1115	7.8	6.35	2.38	0.4		•					200-300	0.30-1.50	0.05-0.20
DCMT 11T304-F2P 2125	11.6	9.525	3.97	0.4	•						150-360	0.50-2.50	0.08-0.30
DCMT 11T304-M2M 1115	11.6	9.525	3.97	0.4		•					200-300	0.50-2.50	0.08-0.30
DCMT 11T304-M2K 1115	11.6	9.525	3.97	0.4			•				150-350	0.50-2.50	0.08-0.30
DCMT 11T308-M2P 1115	11.6	9.525	3.97	0.8	•						150-360	0.50-2.50	0.08-0.30
DCMT 11T308-M2M 1115	11.6	9.525	3.97	0.8		•					200-300	0.50-2.50	0.08-0.30

DC 型刀片

DC..





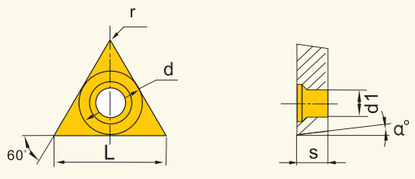
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
DCGT 070204-F4N 1020	7.8	6.35	2.38	0.4				•			300-1000	0.50-2.50	0.05-0.40
DCGT 11T304-F4N 1015	11.6	9.525	3.97	0.8				•			300-1000	0.50-3.50	0.05-0.50

INSERTS FOR BORING 镗刀片

TB 型刀片

TB..





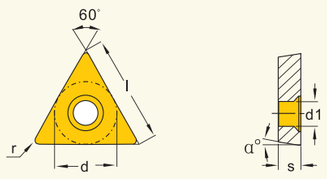
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	r	s	d1	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TBGT 060102-F7G 2315	6.9	0.2	1.59	2.3	●						100-250	0.08-0.15	0.05-0.10
TBGT 060102-F7K 1115	6.9	0.2	1.59	2.3			●				100-300	0.08-0.15	0.05-0.10
TBGT 060102-F7N 2020	6.9	0.2	1.59	2.3				●			150-400	0.08-0.15	0.05-0.15
TBGT 060102-F7P 1225	6.9	0.2	1.59	2.3	●	●			●		100-300	0.08-0.15	0.05-0.10
TBGT 060104-F7G 2315	6.9	0.4	1.59	2.3	●						100-250	0.10-0.20	0.08-0.15
TBGT 060104-F7K 1115	6.9	0.4	1.59	2.3			●				100-300	0.10-0.20	0.08-0.15
TBGT 060104-F7N 2020	6.9	0.4	1.59	2.3				●			150-400	0.10-0.20	0.08-0.15
TBGT 060104-F7P 1225	6.9	0.4	1.59	2.3	●	●			●		100-300	0.10-0.20	0.08-0.15
TBGT 060102-C1 CD05 ①	6.9	0.2	1.59	2.3				●			600-2000	0.10-0.20	0.05-0.25
TBGT 060104-C1 CD05 ①	6.9	0.4	1.59	2.3				●			600-2000	0.10-0.20	0.05-0.25
TBGT 060102-C1 CB05 ②	6.9	0.2	1.59	2.3			●				150-400	0.08-0.15	0.05-0.25
TBGT 060104-C1 CB05 ②	6.9	0.4	1.59	2.3			●				150-400	0.08-0.25	0.05-0.25

● 带①为 PCD 刀片。
● 带②为 CBN 刀片。

TC 型刀片

TC..





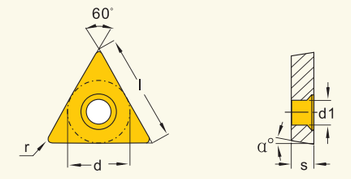
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	r	s	d1	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TCMT 06T102F-F7P 2125	6	0.2	1.98	2.3	●						100-300	0.10-0.15	0.05-0.15
TCMT 06T102F-F7M 2120	6	0.2	1.98	2.3		●					100-300	0.10-0.15	0.05-0.15
TCMT 06T102F-F7K 2025	6	0.2	1.98	2.3			●				100-300	0.10-0.15	0.05-0.15
TCMT 06T104F-F7P 2116	6	0.4	1.98	2.3	●						100-300	0.10-0.20	0.05-0.15
TCMT 06T104F-F7M 2210	6	0.4	1.98	2.3		●					100-300	0.10-0.20	0.05-0.15
TCMT 06T104F-F7K 2120	6	0.4	1.98	2.3			●				100-300	0.10-0.20	0.05-0.15
TCMT 090202F-F7P 2116	9	0.2	2.38	2.45	●						120-300	0.10-0.15	0.05-0.20
TCMT 090204F-F7P 2116	9	0.4	2.38	2.45	●						120-300	0.10-0.20	0.05-0.20
TCMT 090204F-F7M 2216	9	0.4	2.38	2.45		●					120-300	0.10-0.20	0.05-0.20
TCMT 090204F-F7K 2120	9	0.4	2.38	2.45			●				120-300	0.10-0.20	0.05-0.20
TCGT 090304L-M1P 1220	9	0.4	3.18	2.45	●	●					120-300	0.10-0.20	0.05-0.20

INSERTS FOR BORING 镗刀片

TC 型刀片

TC..

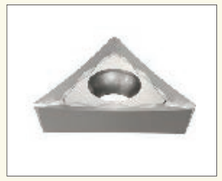


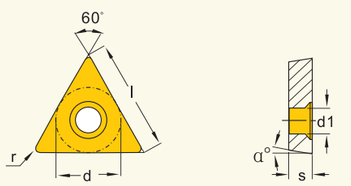


规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	d	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TCMT 110204-M2P 1115	11	6.35	2.38	0.4	●						120-300	0.5-2.5	0.08-0.30
TCMT 110204-F2M 1225	11	6.35	2.38	0.4		●					100-220	0.2-1.5	0.03-0.20
TCMT 110204-F2K 1115	11	6.35	2.38	0.4			●				150-350	0.5-2.5	0.08-0.30
TCMT 16T304-M2P 1125	16.5	9.525	3.97	0.4	●						120-280	0.5-2.5	0.08-0.30
TCMT 16T304-M2M 1215	16.5	9.525	3.97	0.4		●					120-300	0.5-2.5	0.08-0.30
TCMT 16T304-M2K 1115	16.5	9.525	3.97	0.4			●				150-350	0.5-2.5	0.08-0.30
TCMT 16T308-M2P 1125	16.5	9.525	3.97	0.8	●						120-280	0.5-3.0	0.10-0.30
TCMT 16T308-M2M 1225	16.5	9.525	3.97	0.8		●					100-220	0.5-3.0	0.10-0.30
TCMT 16T308-M2K 1115	16.5	9.525	3.97	0.8			●				150-350	0.5-3.0	0.10-0.30
TCMT 220408-M2P 1115	22	12.7	4.76	0.8	●						120-280	0.5-3.0	0.08-0.30

TC 型刀片

TC..



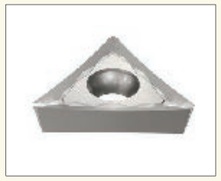


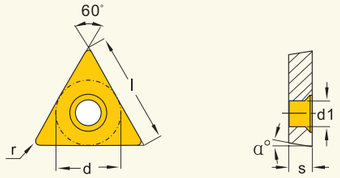
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	r	S	d1	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TCGT 06T104-F9N 2020	6	0.4	1.98	2.3				●			300-1000	0.2-0.40	0.05-0.30
TCGT 090204-F9N 2020	9	0.4	2.38	2.45				●			300-1000	0.2-0.40	0.05-0.30

INSERTS FOR BORING 镗刀片

TC 型刀片

TC..

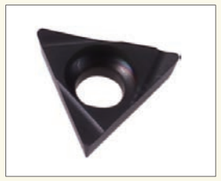


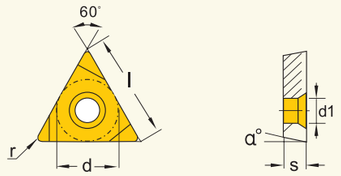


规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	d	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TCGT 110204-F4N 1025	11	6.35	2.38	0.4				•			300-1000	0.20-3.00	0.05-0.30
TCGT 110204-F5N 1010	11	6.35	2.38	0.4				•			300-1000	0.20-3.00	0.05-0.30
TCGT 110208-F5N 1010	11	6.35	2.38	0.8				•			300-1000	0.20-3.50	0.05-0.30
TCGT 16T304-F5N 1010	16.5	9.525	3.97	0.4				•			300-1000	0.50-3.50	0.1-0.30
TCGT 16T304-F4N 1015	16.5	9.525	3.97	0.4				•			300-1000	0.50-3.50	0.1-0.30
TCGT 16T308-F5N 1010	16.5	9.525	3.97	0.8				•			300-1000	0.50-4.00	0.1-0.30

TP 型刀片

TP..





规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	d	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TPGX 090202-F6G 1310	9.6	5.56	2.38	0.2	•						120-300	0.08-0.15	0.05-0.12
TPGX 090202-F5S 2125	9.6	5.56	2.38	0.2	•	•			•		70-260	0.08-0.15	0.05-0.12
TPGX 090202-F7P 1225	9.6	5.56	2.38	0.2	•						120-300	1.00-2.50	0.08-0.15
TPGX 090202-F5K 1115	9.6	5.56	2.38	0.2			•				120-300	1.00-2.50	0.08-0.15
TPGX 090204-F6G 1310	9.6	5.56	2.38	0.4	•						120-300	0.10-0.20	0.08-0.15
TPGX 090204-F5K 1115	9.6	5.56	2.38	0.4			•				120-300	0.10-0.20	0.08-0.15
TPGX 090204-F5S 2125	9.6	5.56	2.38	0.4	•	•			•		70-260	0.10-0.20	0.08-0.15
TPGX 090204-F1N 1010	9.6	5.56	2.38	0.4				•			300-1000	0.10-0.20	0.08-0.15
TPGX 090204-F7P 1225	9.6	5.56	2.38	0.4	•						120-300	1.00-2.50	0.08-0.15
TPGX 110302-F6G 1310	11	6.35	3.18	0.2	•						120-300	0.08-0.15	0.05-0.12
TPGX 110302-F5S 2125	11	6.35	3.18	0.2	•	•			•		70-260	0.08-0.15	0.05-0.12
TPGX 110302-F7P 1225	11	6.35	3.18	0.2	•						120-300	1.00-2.00	0.05-0.12
TPGX 110302-F5K 1115	11	6.35	3.18	0.2			•				120-300	1.00-2.00	0.05-0.12
TPGX 110304-F6G 1310	11	6.35	3.18	0.4	•						120-300	0.10-0.20	0.08-0.15
TPGX 110304-F5K 1115	11	6.35	3.18	0.4			•				120-300	0.10-0.20	0.08-0.15
TPGX 110304-F5S 2125	11	6.35	3.18	0.4	•	•			•		70-260	0.10-0.20	0.08-0.15
TPGX 110304-F1N 1010	11	6.35	3.18	0.4				•			300-1000	0.10-0.20	0.08-0.15
TPGX 110304-F7P 1225	11	6.35	3.18	0.4	•						120-300	1.00-3.00	0.08-0.15
TPGX 090204-C1 CD05 ①	9.6	5.56	2.38	0.4				•			600-2000	0.10-0.30	0.05-0.25
TPGX 110304-C1 CD05 ①	11	6.35	3.18	0.4				•			600-2000	0.10-0.30	0.05-0.30
TPGX 090204-C1 CB05 ②	9.6	5.56	2.38	0.4			•				150-400	0.08-0.25	0.05-0.20
TPGX 110304-C1 CB05 ②	11	6.35	3.18	0.4			•				150-400	0.08-0.25	0.05-0.20

● 带①为 PCD 刀片。
● 带②为 CBN 刀片。

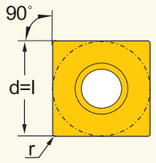
孔加工刀具
HOLE MAKING TOOLS

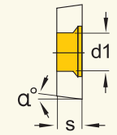
INSERTS FOR BORING 镗刀片

SC 型刀片

SC..





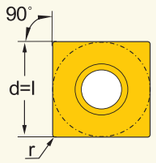


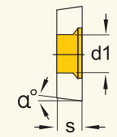
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	r	s	d1	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
SCMT 09T304-M2P 1125	9.525	0.4	3.97	4.4	•						120-280	0.40-2.00	0.08-0.20
SCMT 09T304-M2M 1115	9.525	0.4	3.97	4.4		•					120-300	0.40-2.00	0.08-0.20
SCMT 09T304-M2K 1115	9.525	0.4	3.97	4.4			•				120-300	0.40-2.00	0.08-0.20
SCMT 09T308-M2P 1125	9.525	0.8	3.97	4.4	•						120-280	0.50-2.50	0.10-0.30
SCMT 09T308-M2M 1125	9.525	0.8	3.97	4.4		•					120-280	0.50-2.50	0.10-0.30
SCMT 09T308-M2K 1115	9.525	0.8	3.97	4.4			•				120-300	0.50-2.50	0.10-0.30
SCMT 120408-M2P 1115	12.7	0.8	4.76	5.5	•						150-300	0.50-3.00	0.10-0.30
SCMT 120408-M2M 2210	12.7	0.8	4.76	5.5		•					150-300	0.50-3.00	0.10-0.30
SCMT 120408-M2K 1115	12.7	0.8	4.76	5.5			•				150-300	0.50-3.00	0.10-0.30

SC 型刀片

SC..







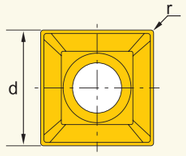
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	r	s	d1	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
SCGT 09T304-F5N 1010	9.52	0.4	3.97	4.4				•			300-1000	0.40-2.50	0.08-0.30
SCGT 09T308-F5N 1010	9.52	0.8	3.97	4.4				•			300-1000	0.50-3.00	0.10-0.30
SCGT 120408-F9N 2020	12.7	0.8	4.76	5.5				•			300-1000	0.50-3.00	0.15-0.30

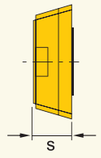
INSERTS FOR BORING 镗刀片

SO 型刀片

SO..







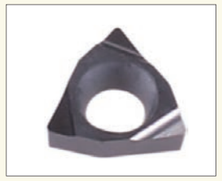
规格型号 Designation	尺寸 Size			加工材质 Material						切削参数推荐 Recommended cutting parameter	
	r	S	d	P	M	K	N	S	H	ap(mm)	fz(mm/z)
SOMX 060304-D4G 2225	0.4	3.2	6.2	●	●	●		●		0.50-2.50	0.08-0.20
SOMX 070305-D4G 2225	0.5	3.6	7.7	●	●	●		●		0.70-2.50	0.15-0.25
SOMT 09T306-D4G 2225	0.6	3.81	9	●	●	●		●		0.80-3.00	0.08-0.20
SOMT 120408-D4G 2225	0.8	4.76	12.7	●	●	●		●		0.80-3.50	0.08-0.25
SOMT 160512-D4G 2225	1.2	5.56	16	●	●	●		●		0.80-4.00	0.08-0.30

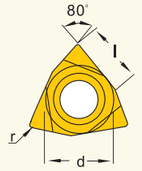
- D4- 通用型断屑槽，适用于中 - 高速进给。
- Insert with different materials should be ordered separately.

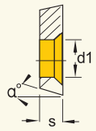
INSERTS FOR BORING 镗刀片

WB 型刀片

WB..







规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Recommended cutting parameter		
	l	r	s	d1	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
WBGT 060102-F6G 2225	2.18	0.2	1.59	2.24	●	●	●		●		70-200	0.08-0.15	0.05-0.12
WBGT 060102-F1N 1010	2.18	0.2	1.59	2.24				●			300-800	0.10-0.25	0.05-0.12
WBMT 060102-F6P 2220	2.18	0.2	1.59	2.24	●						100-250	0.08-0.15	0.05-0.12

TECHNICAL INFORMATION

技术资料



A

孔加工刀具
HOLE MAKING TOOLS

技术资料
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粗镗刀模块应用示例 A106
Example Application of Rough Boring Tool

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单刃精镗刀说明 A108
Instructions of Precision Boring Tool

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Modular Structure

精镗刀使用说明 A110
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桥式粗镗刀使用说明 A111
Instructions of Rough Boring Tool with Bridge

桥式精镗刀使用说明 A112
Instructions of Precision Boring Tool with Bridge

模块式 E 接口标准刀柄备件 A113
Spare Parts and Accessories for Adaptor with Type E Connection

模块式 E 接口刀柄装配指南 A116
Assembly Instruction for Adaptor of Boring Tool with Type E Connection

粗镗刀切削参数 A117
Recommended Cutting Data for Rough Boring

精镗刀切削参数 A121
Recommended Cutting Data for Finish Boring

镗刀选择指南 A125
Boring Tools Select

钻孔加工 A126
Drilling

双刃粗镗刀说明
Introduction 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 interence fit connection method

碟形垫片：
刀座锁紧螺栓配有蝶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 percision.

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.

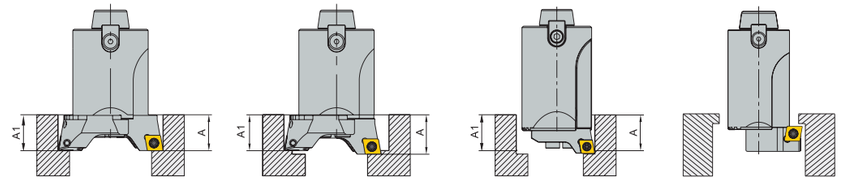
更换刀座：
可完成通孔、盲孔镗削，倒角加二及实现双刃粗镗、单刃粗镗、反镗，并通过错齿排布，扩大加工范围。

Changing Cartrudges:
It can machine for the through,blind hole and chamfering if changing different cartridges. Also there is single and twin cutters and staggersd tooh boring for wider machining range.

TECHNICAL INFORMATION 技术资料

孔加工刀具
HOLE MAKING TOOLS

粗镗刀模块应用示例
Example Application of Rough Boring Tool



双刃镗 Boring with Two Teeth　**错齿镗** Staggered tooth boring　**单刃镗** Single tooth　**反镗** Back boring

双刃镗： 两个切削刃，并且具有相同的切深可获得最高金属去除率，推荐使用；

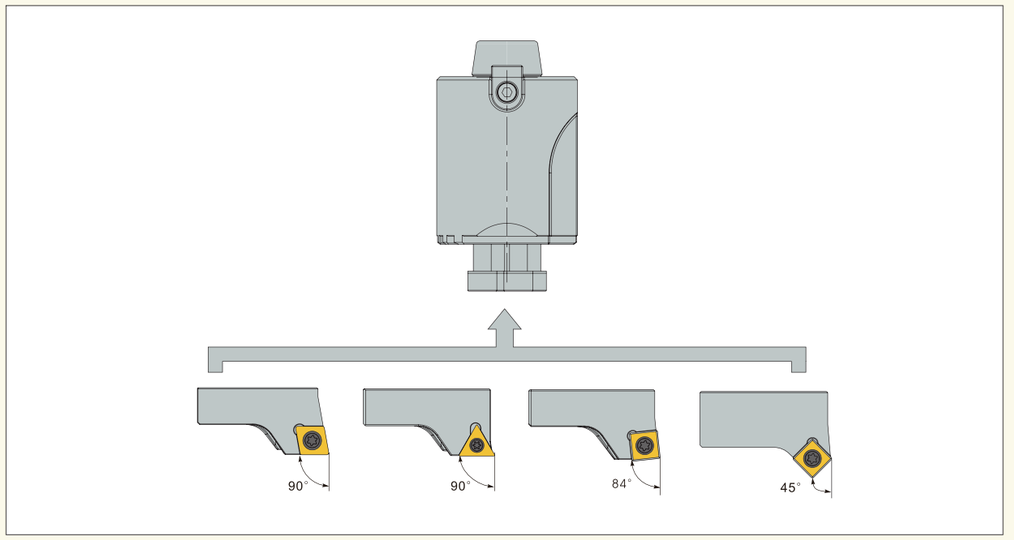
错齿镗： 通过两个不同高度的镗头形成两个高低切削刀，进给量减半，可获得最大总切深；

单刃镗： 一个切削刀，进给量减半。可获得最大的容屑空间，用于切屑大且不易排除的场合。镗头若经过精确调整，可作精镗使用；

反　镗： 粗镗刀配置矩形槽反镗刀座，即可轻松实现反镗粗加工，调整自如、稳定、过孔直径 D 满足 "D ≥ (Dc+D1)/2+ 1"。

Boring tool with two teeth: due to the two cutting edges, the metal is removed rapidly when there are two same cutting depths. Recommended
Staggered tooth boring: the two different cutting edges (high and low) can make the max cutting depth while half of feed.
Single tooth: single cutting edge with half of feed so that there is greatest chip space. It can be used as precision boring tool if adjusting it accurately.
Back boring: it can be back boring if assembling related cartridge. Also it is easy to be adjusted. Via hole diameter D≥(Dc+D1)/2+1.

刀座的角度
Assembling Point of View of Cartridge



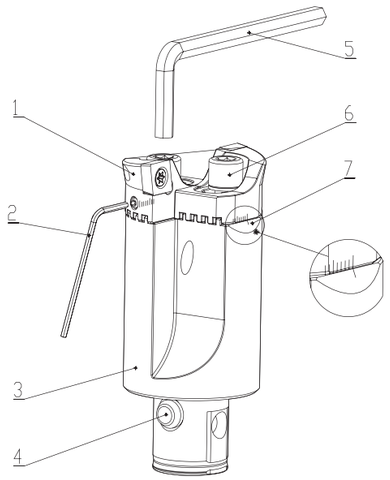
粗镗刀使用说明
Instructions of Rough Boring Tool

各项说明：

1. 粗镗刀座
2. 调整扳手
3. 刀体
4. 扭力栓
5. 锁紧扳手
6. 刀座锁紧螺钉
7. 粗调刻度线

Features:

1.Cartridge for rough boring
2.Allen key for adjusting screw
3.Boring tool body
4.Expanding pin
5.Lock wrench
6.Clamping screw for cartridge
7.Rough adjusting scale mark



调整步骤：

1. 松开 6# 刀座锁紧螺钉；
2. 根据刻度线粗调两刀座对称，两刀尖尺寸小于要加工的尺寸 0.5mm 左右；
3. 拧紧 6# 刀座锁紧螺钉，使刀座锁紧；拧动 2# 调整螺钉，顶紧在 6# 刀座锁紧螺钉上，以防让刀；
4. 试镗，测量加工孔的尺寸与要求尺寸比较，计算出偏小数值；
5. 稍微松开 6# 刀座锁紧螺钉，使 2# 调整螺钉可以推动刀座移动；
6. 顶紧 2# 调整螺钉用百分表对比，使移动量至计算出的偏小数值；
7. 锁紧 6# 刀座锁紧螺钉，加工工件至尺寸要求。

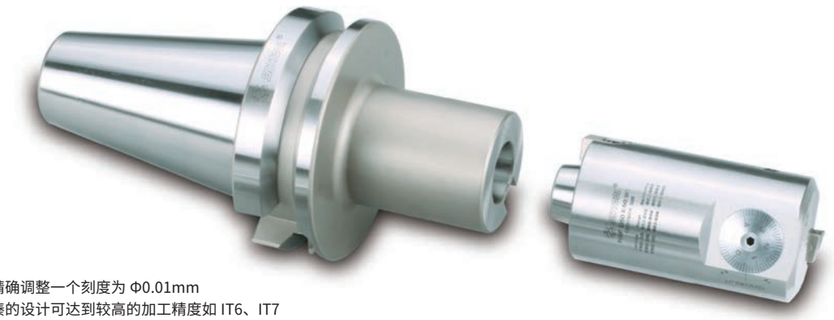
Adjustment Steps:

1.Loosening the 6# clamping screw;
2.Rough adjusting the insert holders as the scale mark, and the distance between the two bits should be 0.5mm shorter than the one of the demanded distance;
3.Tighten the 2# clamping screw to lock the cartridge; then rotate the 3# adjusting screw,preload the 2# clamping screw to avoid the cutter relieving;
4.Testing run and comparing the testing size and actual requirements, then figure out the smaller number;
5.Loosen the 6# clamping screw lightly, so that the 2# adjusting screw for cartridge can make the cartridge moved;
6.Pre-load the 3# adjusting screw, and then compare by the dial gage to make the amount of the payment come to the smaller number;
7.Lock the 6# screw, and then machining the work piece as the demanded dimension.
6.The boring tool must be turned by anticlockwise when back boring.

调整过程 Adjustment Process：

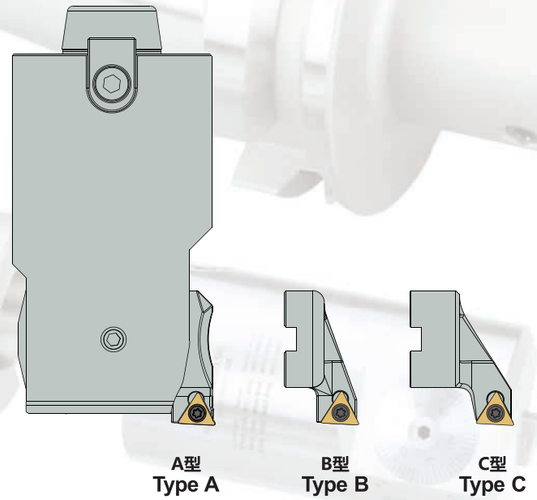


单刃精镗刀说明
Instructions of Rough Boring Tool



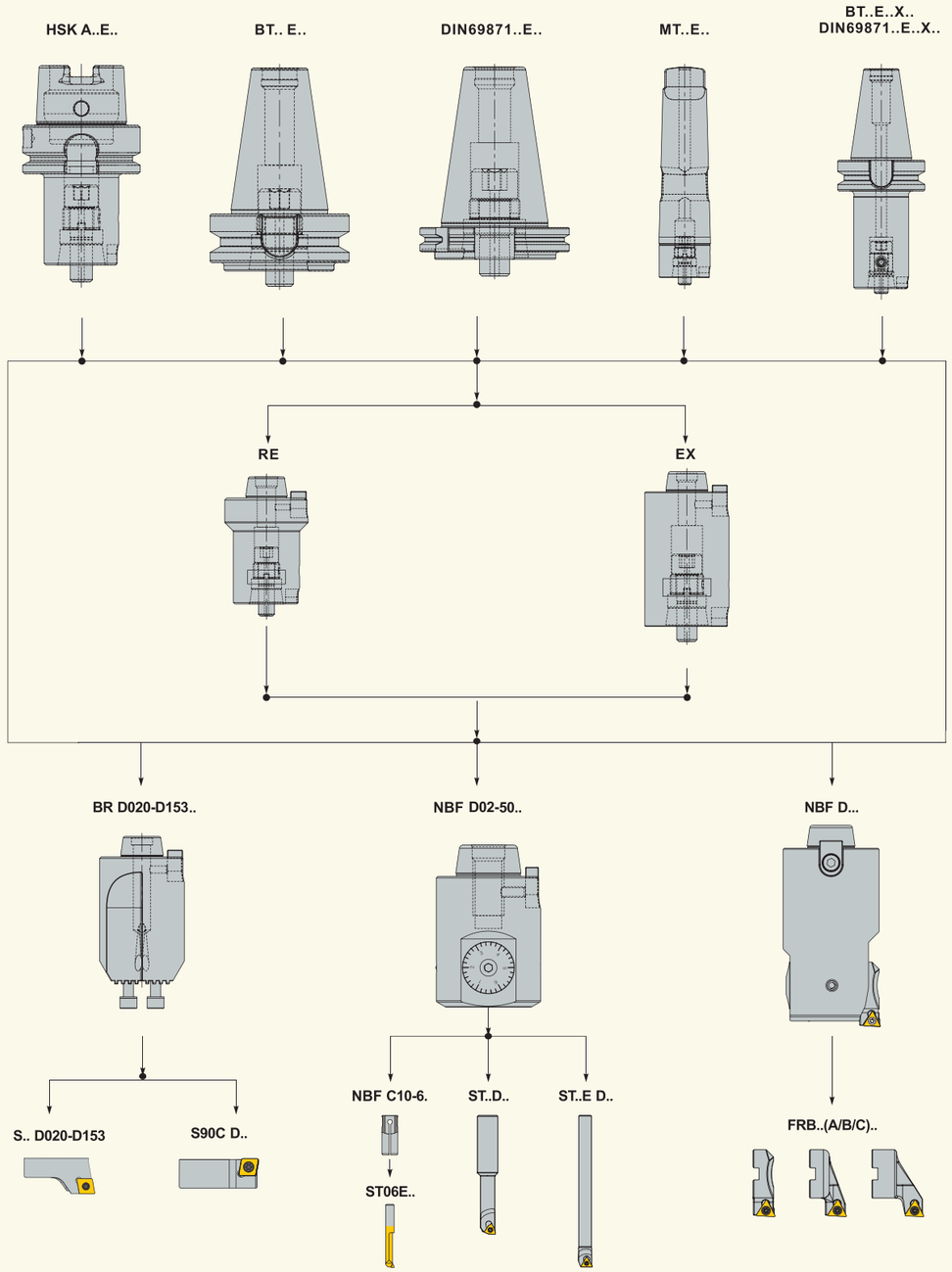
- 可精确调整一个刻度为 Φ0.01mm
- 紧凑的设计可达到较高的加工精度如 IT6、IT7
- 可进行正反镗加工
- 较广的加工范围：小孔径精镗刀 D2-D50mm
  小孔径硬质合金杆镗刀为 L/D=6-8
  杆式精镗刀为 D20-D212mm
  杆式反镗为 D30-D212mm
  套镗范围为 D2-D86mm
  桥式精镗刀为 D150-D4200mm
- 柄部形式可使用：HSK A100/63、BT50/40、DIN69871 50/40、米制 80 柄、莫氏锥柄

- 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./0=6-8
  machining range of finish boring tool with boring bar is D20-D212mm
  solid carbide finish boring bar is D20-D76mm, l./0=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.



A型 Type A　B型 Type B　C型 Type C

模块化组合
Modular Structure



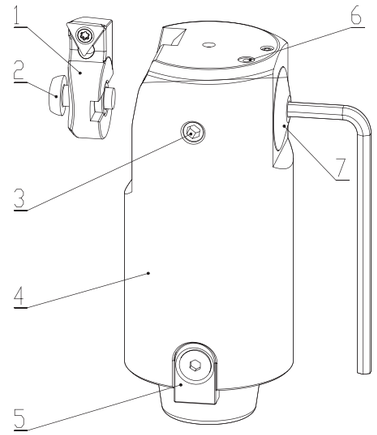
精镗刀使用说明
Instructions of Precision Boring Tool

各项说明：

1. 精镗刀头
2. 刀头锁紧螺钉
3. 锁紧螺钉
4. 精镗刀体
5. 传动键
6. 注油嘴
7. 刻度盘

Features:

1.Cartridge
2.Clamping screw for cartridge
3.Lock Screw
4.Boring tool body
5.Expanding pin
6.Oil hole
7.Micro-adjustable knob



调整步骤：

1. 把 1# 精镗刀头凹槽按正确方向对准卡入镗头内，并锁紧 2# 刀头锁紧螺钉；
2. 逆时针旋转松开 3# 锁紧螺钉，用内六角扳手转动刻度盘调整刀头到切削直径所需要的位置 , 然后顺时针旋转 3# 锁紧螺钉锁紧刀具 , 刻度盘每转动一格代表 0.01mm 的直径切深变化，（顺时针旋转——增大，逆时针旋转——减小）；
3. 刀头镗孔范围查看刀体标记。（切莫旋转刻度盘超出范围）；
4. 定期保养，注润滑油（6# 注油嘴注入）；
5. 用红漆封堵的地方不能拆动，否则会损坏镗头；
6. 反镗加工时，刀具旋转方向必须为反转。

Adjustment Steps:

1.Install the 1# cartridge firmly according to the correct direction, and then lock the 2# clamping screw.
2.Loosen the clamping screw (3#), adjust the micro-adjustable knob with the allen key to meet the demanded diameter and then rotate the clamping screw (3#) by clockwise direction. It is 0.01mm in diameter when rotating per graduation. (Rotate the graduated dial by clockwise is to increase the processing diameter and by anti-clockwise is to decrease the processing diameter);
3.Please see the mark on the body which indicates the boring range (Be sure not to be out of the adjustment range);
4.Do regular scheduled maintenance, dip it in lube oil (dipping the oil at the 6# oil hole);
5.Do not open the place where is sealed by the red paint, otherwise the accuracy of boring head will be damaged;
6.The boring tool must be turned by anticlockwise when back boring.

调整过程 Adjustment Process:



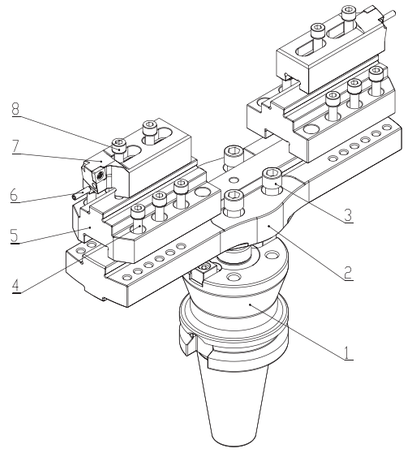
桥式粗镗刀使用说明
Instructions of Rough Boring Tool with Bridge

各项说明：

1. 刀柄
2. 刀桥
3. 刀桥锁紧螺钉
4. 滑块锁紧螺钉
5. 滑块
6. 刀座调整螺钉
7. 刀座
8. 刀座锁紧螺钉

Features:

1.Adaptor
2.Bridge
3.Clamping screw for adaptor
4.Clamping screw for cartridge holder
5.Cartridge holder
6.Adjusting screw for cartridge
7.Cartridge
8.Clamping screw for cartridge



调整步骤：

1. 松开 4# 滑块锁紧螺钉；
2. 根 据刻度线粗调 5# 滑块与 7# 刀座，刀尖尺寸小于要加工尺寸 0.5mm 左右，[注意：通过复合调整 5# 滑块 ,7# 刀座和 4# 滑块锁紧螺钉位置保证粗调尺寸]；
3. 拧紧 4# 滑块锁紧螺钉及 8# 刀座锁紧螺钉，拧动 6# 刀座调整螺钉，顶紧在 8# 刀座锁紧螺钉杆部，以防让刀；
4. 试镗，测量加工孔的尺寸与要求尺寸比较，计算出偏小数值；
5. 稍微松开 8# 刀座锁紧螺钉，使 6# 刀座调整螺钉可以推动 7# 刀座移动；
6. 使用扳手旋 6# 刀座调整螺钉用百分表对比，使移动量至计算出的偏小数值；
7. 使用扳手锁紧 8# 刀座锁紧螺钉，加工工件至尺寸。

Adjustment Steps:

1.Loosen the 4# clamping screw for the cartridge holder;
2.Rough adjusting the 5# cartridge holder and 7# cartridge as the scale mark, and the distance between the two bits should be 0.5mm shorter than the one of the demanded distance(note: by adjusting the position of cartridge & cartridge holder and clamping screw for the mobile slide to be sure the adjusting size);
3.Tighten the 4# balance block and 8# clamping screw for the cartridge, and rotate the 6# adjusting screw for cartridge, preload the 8# clamping screw for cartridge and 4# clamping screw for balance block to avoid to the cutter relieving;
4.Testing run and comparing the testing size and actual requirements, then figure out the smaller number;
5.Loosen the 5# clamping screw lightly, so that the 6# adjusting screw for cartridge can make the 7# cartridge moved;
6.Rotate the 6# adjusting screw for cartridge, compared by the dial gage to figure out the smaller number;
7.Lock the 8# screw, and then machining the work piece as the demanded dimension.

调整过程 Adjustment Process:



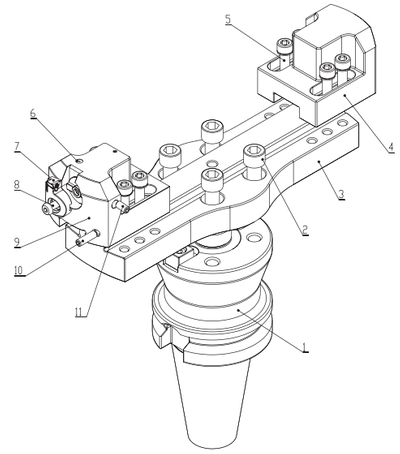
桥式精镗刀使用说明
Instructions of Precision Boring Tool with Bridge

各项说明：

1. 刀柄
2. 刀桥锁紧螺钉
3. 刀桥
4. 配重块
5. 锁紧螺钉
6. 注油嘴
7. 精镗刀头
8. 刀头锁紧螺钉
9. 精镗刀体
10. 刀体调节螺钉
11.Lock 锁紧螺钉

Features:

1.Adaptor
2.Clamping screw for adaptor
3.Bridge
4.Balance block
5.Clamping screw
6.Oil hole
7.Cartridge
8.Adjusting screw for cartridge
9.Precision boring body
10. Adjusting screw for tool body
11. Lock screw



调整步骤：

1. 松开 5# 锁紧螺钉；
2. 根据刻度线粗调 9# 精镗刀体，刀尖尺寸小于要加工尺寸 0.5mm 左右，[注意：通过复合调整 7# 精镗刀头与 9# 精镗刀体来保证粗调尺寸来保证精调尺寸]；
3. 拧紧 5# 锁紧螺钉，拧动 10# 刀体调节螺钉，顶紧锁紧螺钉杆部，以防让刀；
4. 用同样方法调整 4# 配重块，调好动平衡；
5. 锁紧 11#Lock 锁紧螺钉，试镗，测量加工孔的尺寸与要求尺寸比较，计算出偏小数值；
6. 松开 11#Lock 锁紧螺钉，旋刻度盘（刻度盘每转动一小格代表 0.01mm 的直径切深变化），使移动量至计算出的偏小数值；
7. 锁紧 10#Lock 锁紧螺钉，加工工件至尺寸；
8. 定期保养，注润滑油（从 6# 注油嘴处注入）。

Adjustment Steps:

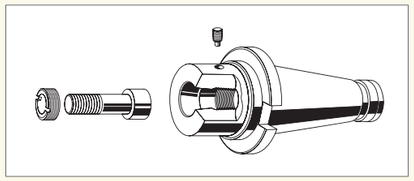
1.Loosen the 5# clamping screw;
2.Rough adjusting the 5# cartridge holder and 7# cartridge as the scale mark, and the distance between the two bits should be 0.5mm shorter than the one of the demanded distance(note: by adjusting the 7# cartridge and 9# boring tool body to be sure the adjusting size);
3.Tighten the 5# clamping screw, and rotate the 10# adjusting screw for tool body, preload the 5# clamping screw to avoid to the cutter relieving;
4.Adjust the balance block as the same process to be sure the dynamic balance;
5.Lock the 11# lock screw tightly, test run and comparing the testing size and actual requirements, then figure out the smaller number;
6.Loosen the 11# lock screw lightly, rotate the micro-adjustable knob (it is 0.01mm in diameter when rotating per graduation) to figure out the smaller number.
7.Lock the 8# screw, and then machining the work piece as the demanded dimension;
8.Do regular scheduled maintenance, dip it in lube oil (dipping the oil at the 6# oil hole).

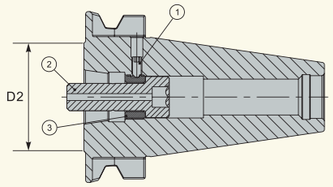
调整过程 Adjustment Process:



模块式 E 接口标准刀柄备件
Spare Parts and Accessories for Adaptor with Type E Connection

标准主柄备件
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	SR155 M8x30.C	SR155 M8x30.C	RG05 M14x1	KEY01 M6	KEY01 M6
D2=32	SR51 M4x8	SR155 M8x30.C	SR155 M8x30.C	RG05 M14x1	KEY01 M6	KEY01 M6
D2=40	SR51 M5x10	SR55 M12x40.C	SR55 M12x40.C	RG05 M20x1.5	KEY01 M10	KEY01 M10
D2=50	SR51 M5x10	SR55 M12x40.C	SR55 M12x40.C	RG05 M20x1.5	KEY01 M10	KEY01 M10
D2=63	SR51 M6x10	SR61 M16x45.C	SR55 M16x45.C	RG05 M26x1.5	KEY01 M12	KEY01 M14
D2=80	SR51 M6x12	SR62 M20x50.C	SR55 M20x50.C	RG05 M33x1.5	KEY01 M12	KEY01 M16

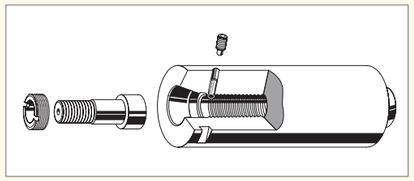
- 订货示例：1 件 SR55 M8x30.C。
- Orderings ample1: piece SR55 M8x30.C

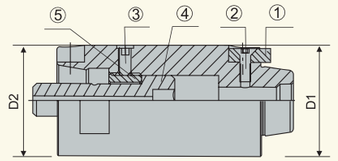
TECHNICAL INFORMATION 技术资料

孔加工刀具 HOLE MAKING TOOLS

模块式 E 接口标准刀柄备件
Spare Parts and Accessories for Adaptor with Type E Connection (Long Version)

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 M3x6	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 M5x12	KEY01 M4
D1=80	PL04 16x14	SR55 M6x16	KEY01 M5

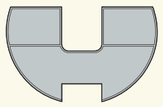
D2	螺纹环锁紧螺钉 Clamping screw for thread ring	轴向拉紧螺钉 Axial tensioning		轴向拉紧螺钉扳手 Wrench for axial tighten	螺纹环 Thread ringWrench for axial tighten
		接长杆 Extension	缩径杆 Reduction		
D2=25	SR51 M4x6	SR61 M8x30	SR61 M8x30	KEY01 M5	RG05 M14x1
D2=32	SR51 M4x8	SR61 M8x30	SR61 M8x30	KEY01 M5	RG05 M14x1
D2=40	SR51 M5x10	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 M16	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 ample1: piece SR61 M8x30.C.

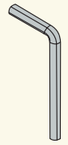
模块式 E 接口标准刀柄备件
Spare Parts and Accessories for Adaptor with Type E Connection (Long Version)

装刀卡
Retaining Collar





装刀卡
Retaining Collar



六角扳手
Allen key

D2	装刀卡 Retaining Collar
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

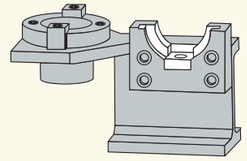
E 接口 Type E connection	六角扳手 Allen key				
	BT50	BT40	A100	A63	BT30
E25/E32	KEY01 M6	KEY01 M6	KEY01 M6	KEY01 M6	KEY01 M6
E40/E50	KEY01 M10	KEY01 M10	KEY01 M10	KEY01 M8	KEY01 M8
E63	KEY01 M14	KEY01 M12	KEY01 M12	KEY01 M12	-
E80	KEY01 M16	KEY01 M12	KEY01 M14	-	-

TECHNICAL INFORMATION 技术资料

孔加工刀具
HOLE MAKING TOOLS

镗刀 E 接口刀柄装配指南
Assembly Instruction for Adaptor of Boring Tool with Type E Connection

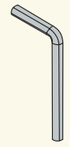
安装设备
Assembling Accessories



锁刀座
Assembly device

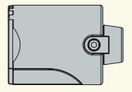


装刀卡
Retaining collar

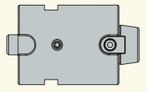


六角扳手
Allen key

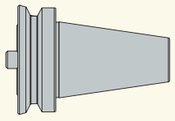
标准刀柄连接示例
Assembly Instruction of Type E Connection



刀杆
Boring body



接长杆
Extension



标准刀柄
Adaptor

- 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 cc>lar 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 taperd bush;
- Screw the tool element and adaptor together;
- Tighten with a torque wrench to make sure all parts combination stable.

粗镗刀切削参数
Recommended Cutting Data for Rough Boring

ISO	被加工材料 work-piece mater-ial	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 Unall-oyed 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	0.08-0.2	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 Unall-oyed 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 Lowalloy-ed 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	160-220	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) Normal	Vc(m/min)	100-130	70-100	110-150	90-120	140-180	100-130	150-200	120-160	120-160	120-160	-	-
				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 Lowalloy-ed 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	140-180	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	0.08-0.12	0.08-0.12	-	-
			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	-	-	-	-

- 因切削条件的不同会导致加工直径变动，请在正式加工前进行试切削。
- 实际使用设定切削参数的时候，机床主轴和工件刚性以及镗刀长度都会对加工有所影响，请完全确认后从低切削参数开始慢慢提升。
- "-" 表示不推荐，请与我们的销售工程师联系。
- Different cutting condition probably affect the machining diameter, so please do the tested cutting before the formal machining.
- When set the cutting parameters, the machine spindle, rigidity of workpiece and length of boring tool will have an impact on the processing. Please start from the low cutting parameters by slowly improving after confirming.
- "-" It indicates that not recommended. Please contact with our sales engineer.

TECHNICAL INFORMATION 技术资料

孔加工刀具 HOLE MAKING TOOLS

粗镗刀切削参数
Recommended Cutting Data for Rough Boring

ISO	被加工材料 work-piece mater-ial	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 Stain-less 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	-	-
				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	-	-
			6.0(差) Difficult	Vc(m/min)	60-90	50-70	60-90	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 Stain-less 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	-	-
				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	-	-
			6.0(差) Difficult	Vc(m/min)	60-90	50-70	60-90	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 stain-less 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	-	-
				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	-	-
			6.0(差) Difficult	Vc(m/min)	60-90	50-70	60-90	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 stain-less 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	-	-
				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	-	-
			6.0(差) Difficult	Vc(m/min)	60-90	50-70	60-90	50-70	70-100	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	-	-	-	-

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- 实际使用设定切削参数的时候，机床主轴和工件刚性以及镗刀长度都会对加工有所影响，请完全确认后从低切削参数开始慢慢提升。
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粗镗刀切削参数

Recommended Cutting Data for Rough Boring

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				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 25-40 Grey cast iron	-	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	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	-	-	-	-

- 因切削条件的不同会导致加工直径变动，请在正式加工前进行试切削。
- 实际使用设定切削参数的时候，机床主轴和工件刚性以及镗刀长度都会对加工有所影响，请完全确认后从低切削参数开始慢慢提升。
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TECHNICAL INFORMATION 技术资料

孔加工刀具 HOLE MAKING TOOLS

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
N	铝合金/铸造 Cast alum-inium 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	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	-	-	-	-
				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	-	-	-	-
N	铝合金/铸造 Cast alum-inium 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	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	0.06-0.2	0.06-0.25	0.06-0.2	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	-	-	-	-
				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	-	-	-	-

- 因切削条件的不同会导致加工直径变动，请在正式加工前进行试切削。
- 实际使用设定切削参数的时候，机床主轴和工件刚性以及镗刀长度都会对加工有所影响，请完全确认后从低切削参数开始慢慢提升。
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精镗刀切削参数

Recommended Cutting Data for Finish Boring

被加工材料 work-piece mater-ial	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 刀片刀尖角 Radius R=0.2	切削进给 f=mm/rev 刀片刀尖角 Radius R=0.4	Ap(mm)	刀片合金牌号 Grade
碳钢 Hb≤200	2.5	高 Good	200-300	0.05-0.08	0.08-0.1	0.1-0.25	P 1115 P 1125 P 1225 P 2125 P 2116 P 2220 G 2315 G 1310 G 2225
	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	
	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	
	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	
	4	一般 Normal	100-140	0.05-0.08	0.08-0.1		
	6	差 Difficult	70-100	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	M 1220 M 2216 M 2120 M 1225 M 2210 M 1215 M 1115
	4	一般 Normal	120-160	0.05-0.08	0.08-0.1		
	6	差 Difficult	70-90	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	K 1115 K 2025 K 2120
	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	N 2020 N 1010 N 1025 N 1015
	4	一般 Normal	250-350	0.05-0.08	0.08-0.1		
	6	差 Difficult	100-150	0.05-0.08	-		

- 因切削条件的不同会导致加工直径变动，请在正式加工前进行试切削。
- 实际使用设定切削参数的时候，机床主轴和工件刚性以及镗刀长度都会对加工有所影响，请完全确认后从低切削参数开始慢慢提升。
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TECHNICAL INFORMATION 技术资料

孔加工刀具 HOLE MAKING TOOLS

表面粗糙度理论计算公式

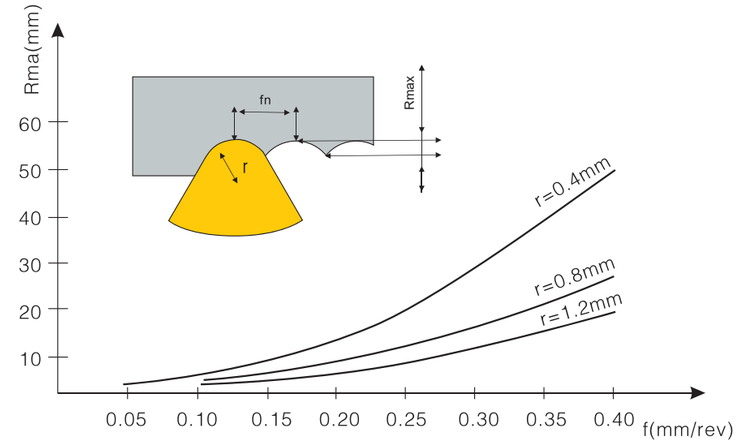
Achievable Surface Quality

$$Rmax = \frac{fn^2}{8r} \times 1000 , \mu m$$

Rmax=残留面积高度，μm
Residual area height

r=刀尖半径 ,mm
Nose radius

fn=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 Rage

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		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		0.15	0.22	0.29	0.31
Rt10	1.0-1.6	1.6	0.10	0.13	0.18	0.20

表面粗糙度
Surface Roughness

零件的表面都应该注明粗糙度的等级。如果较多的表面具有相同的表面粗糙度等级，则要集中在图样右上角标注，并加“其余”字样。
粗糙度等级的选择，一般可以根据对各表面的工作要求和尺寸精度等级来决定，在满足工作要求的条件下，不得随意提高等级。
The surface roughness should be marked for the different parts. If different parts with same roughness, then it should be marked on the upper right and plus “remainder”.
The roughness grades depend on the work requirements and size accuracy. It is not allowed to change the marked grade if everything is going well.

(1) 取样长度和评定长度的选用值 (GB/T1031-1995)(mm)
Selected value for the sample area and length (GN/T1031-1995)(mm)

Ra (μm)	Rz (μm)	取样长度 (mm) Sample length	评定长度 (mm) Evaluation length
＞0.003~0.02	＞0.025~0.10	0.08	0.40
＞0.02~0.10	＞0.1~0.50	0.25	1.25
＞0.1~2.0	＞0.50~10.0	0.80	4.00
＞2.0~10.0	＞10.0~50	2.50	12.5
＞10.0~80	＞50~320	8.00	40.0

(2) 轮廓算术平均偏差 Ra 的数值 (GB/T1031-1995)(μm)
Ra value (GB/T1031-1995)(μm)

第 1 系列　0.012, 0.025, 0.050, 0.10, 0.20, 0.40, 0.80, 1.60, 3.2, 6.3, 12.5, 25, 50, 100
第 2 系列　0.008, 0.010, 0.016, 0.020, 0.032, 0.040, 0.063, 0.080, 0.125, 0.160, 0.25, 0.32, 0.50, 0.63, 1.0, 1.25, 2.0, 2.5, 4.0, 5.0, 8.0, 10.0, 16.0, 20, 32, 40, 63, 80
注：尽量选择第 1 系列

First series　0.012, 0.025, 0.050, 0.10, 0.20, 0.40, 0.80, 1.60, 3.2, 6.3, 12.5, 25, 50, 100
Second series　0.008, 0.010, 0.016, 0.020, 0.032, 0.040, 0.063, 0.080, 0.125, 0.160, 0.25, 0.32, 0.50, 0.63, 1.0, 1.25, 2.0, 2.5, 4.0, 5.0, 8.0, 10.0, 16.0, 20, 32, 40, 63, 80
Note: first series in priority

(3) 轮廓最大高度 Rz 的数值 (GB/T1031-1995)(μm)
Rz (GB/T131-1995) (μm)

第 1 系列　0.025, 0.050, 0.100, 0.20, 0.40, 0.80, 1.60, 3.2, 6.3, 12.5, 25, 50, 100，200，400，800，1600
第 2 系列　0.032, 0.040, 0.063, 0.080, 0.125, 0.160, 0.25, 0.32, 0.50, 0.63, 1.0, 1.25, 2.0, 2.5, 4.0, 5.0, 8.0, 10.0, 16.0, 20, 32, 40, 63, 80, 125, 160, 250, 320, 500, 630

First series　0.025, 0.050, 0.100, 0.20, 0.40, 0.80, 1.60, 3.2, 6.3, 12.5, 25, 50, 100，200，400，800，1600
Second series　0.032, 0.040, 0.063, 0.080, 0.125, 0.160, 0.25, 0.32, 0.50, 0.63, 1.0, 1.25, 2.0, 2.5, 4.0, 5.0, 8.0, 10.0, 16.0, 20, 32, 40, 63, 80, 125, 160, 250, 320, 500, 630

自由公差表
Free Tolerance Table

线性尺寸的极限偏差数值 (GB/T1804-2000)(mm)
Limit deviation value of linear size (GB/TB1804-2000)(mm)

公差等级 Roughness grade	基本尺寸分段 Subsections of basic size						
	0.5~3	＞3~6	＞6~30	＞30~120	＞120~400	＞400~1000	＞1000~2000
精密 f	±0.05	±0.05	±0.1	±0.15	±0.2	±0.3	±0.5
中等 m	±0.1	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2
粗糙 e	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3
最粗 v	-	±0.5	±1	±1.5	±2.5	±4	±6

圆半径和倒角高度尺寸的极限偏差 (GB/T1804-2000)(mm)
Limit deviation value of radius and chamfering height (GB/TB1804-2000)(mm)

公差等级 Roughness grade	基本尺寸分段 Subsections of basic size			
	0.5~3	＞3~6	＞6~30	＞30
精密 f	±0.2	±0.5	±1	±2
中等 m				
粗糙 e	±0.4	±1	±2	±4
最粗 v				

自由公差表
Free Tolerance Table

角度尺寸的极限偏差数值 (GB/T1804-2000)
Limit deviation value of angle size (GB/TB1804-2000)

公差等级 Roughness grade	基本尺寸分段 Subsections of basic size				
	~10	＞10~50	＞50~120	＞120~400	＞400
精密 f	±1°	±30′	±20′	±10′	±5′
中等 m					
粗糙 e	±1°30′	±1°	±30′	±20′	±10′
最粗 v	±3°	±2°	±1°	±30′	±20′

未注形位公差按 (GB/T1184-K)
Unspecified Tolerance (GN/T1184-K)

(1) 直线度和平面度未注公差值 (GB/T1184-1996)(mm)
Unspecified tolerance between straightness and flatness (GB/T1184-1996)(mm)

公差等级 Roughness grade	基本尺寸分段 Subsections of basic size					
	⩽10	＞10~30	＞30~100	＞100~300	＞300~1000	＞1000~3000
H	0.03	0.05	0.1	0.2	0.3	0.4
K	0.05	0.1	0.2	0.4	0.6	0.8
L	0.1	0.2	0.4	0.8	1.2	1.6

(2) 垂直度未注公差值 (GB/T1184-1996)(mm)
Unspecified tolerance of perpendicularity (GB/T1184-1996)(mm)

公差等级 Roughness grade	基本尺寸分段 Subsections of basic size			
	⩽100	＞100~300	＞300~1000	＞1000~3000
H	0.2	0.3	0.4	0.5
K	0.4	0.6	0.8	1
L	0.4	1	1.5	2

(3) 对称度未注公差值 (GB/T1184-1996)(mm)
Unspecified tolerance of symmetry control (GB/T1184-1996)(mm)

公差等级 Roughness grade	基本尺寸分段 Subsections of basic size			
	⩽100	＞100~300	＞300~1000	＞1000~3000
H	0.5	-	-	-
K	0.6	0.8	1	-
L	0.6	1	1.5	2

(4) 圆跳动的未注公差值 (GB/T1184-1996)(mm)
Unspecified tolerance of run out (GB/T1184-1996)(mm)

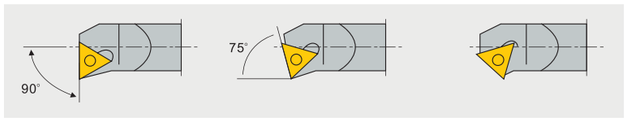
公差等级 Roughness grade	圆跳动公差值 Tolerance of run out
H	0.1
K	0.2
L	0.3

镗刀选择指南
Selection Guide for Boring Tools

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 6aS'I to be vibrated.

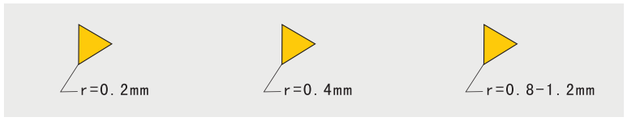


- 在选择接近 90°的主偏角，但不能小于 75°，使径向力最小
- Selecting the approach angle closed to 90" but not small than 70° when the radial force is the least.



- 选择小的刀尖半径

*Selecting the least diameter of tool nose

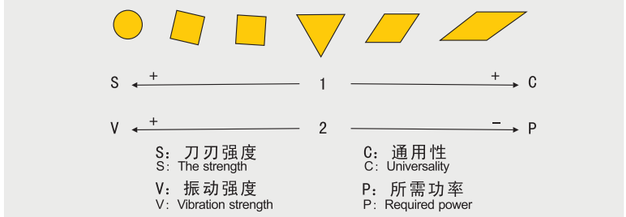


- 选择正前角刀片
  注意：避免使用后刀面过度磨损的刀片！
- Selecting the insert with front angle
  Please note: avoid the use of the insert with back. wear down



- 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°

- 图例左向刀尖角越大，刀尖强度越好，右向刀尖角越小，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.



- 图例右向刀尖强度减弱，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：
Fn=0.5× 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:
fn=0.5 x 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 fn 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

钻孔加工
Drilling

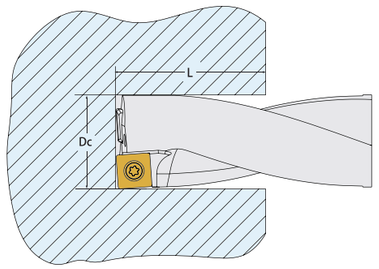
根据切削参数符号变更，依次有如下变更
Symbols of the cutting parameter were changed, see the following list

规格型号 Designation	旧符号 Old symbol	新符号 New symbol	单位 Units
切削速度 Cutting speed	Vc	V	m/min
进给速度 Feed speed	Vf	F	mm/min
进给量 Feeds	f	f	mm/rev
直径 Diameter	Dc	D(Ds)	mm
切削动力 Cutting power	Pc	PKw	kW
比较切削阻力 Comparative cutting resistance	Kc	Ks	MPa
孔 深 Hole depth	H	d	mm
转速 Rotational speed	n	N	min^{-1}

● 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 ： 主轴转数（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 ： 主轴转数［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 ： 主轴转数［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］

DAMPING TURNING TOOL

阻尼减振车刀



B

阻尼减振刀具
DAMPING TOOLS

阻尼减振车刀
Damping Turning Tool

阻尼减振车刀杆 B3
Damping Turning Tool Holder

阻尼减振车刀刀头 B11
Cartridge For Damping Turning Tool Holder

槽刀头 B30
Grooving Head

螺纹刀头 B31
Threading Tool Cartridge

中心校准块 B32
Centre Calibration Block

快换刀座 B32
Quick-Change Cartridge

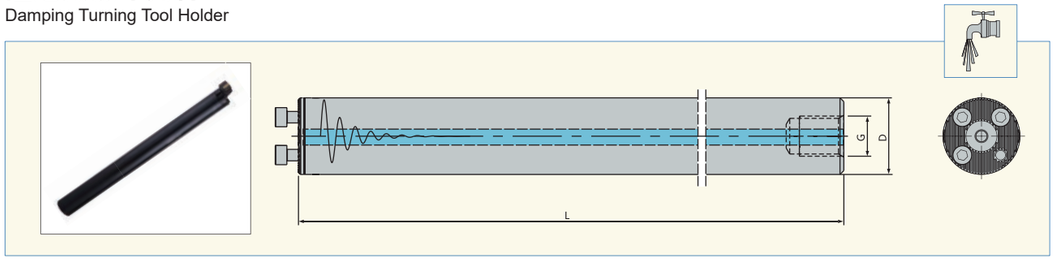
车床用变径套 B33
Reduction Sleeve for Turning Lathe

车刀转接头 B34
Adapter for Head

刀杆转接头 B34
Adapter for Tool Holder

阻尼减振车刀使用说明 B35
User Guide for Damping Turning Tool

阻尼减振车刀杆
Damping Turning Tool Holder



规格型号 Designation	D	L	G	L/D	Kg	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..	◐
VT25 C25x380VE	25	380	G1/8"	12	2.0	VT25..	○
VT25 C25x430VE	25	430	G1/8"	14	2.6	VT25..	○
VT32 C32x320V	32	320	G3/8"	7	2.1	VT32..	◐
VT32 C32x416V	32	416	G3/8"	10	2.8	VT32..	◐
VT32 C32x480VE	32	480	G1/4"	12	4.2	VT32..	○
VT32 C32x544VE	32	544	G1/4"	14	4.8	VT32..	○
VT40 C40x408V	40	408	G1/2"	7	4.6	VT40..	◐
VT40 C40x528V	40	528	G1/2"	10	5.3	VT40..	◐
VT40 C40x608VE	40	608	G3/8"	12	8.3	VT40..	○
VT40 C40x688VE	40	688	G3/8"	14	9.4	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：☞B11-B31 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 B11-B31.
- The reducing head should be ordered separately.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VT16 C16x156V.

备件
Spare Parts

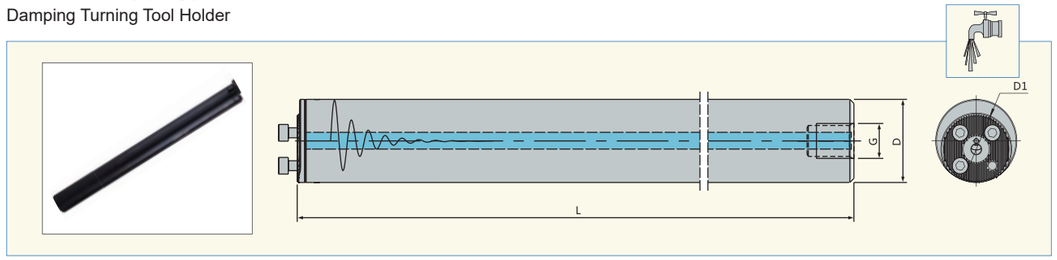
D	刀头锁紧螺钉 Clamp screw for cartridge	刀头锁紧扳手 Allen key for cartridge clamping secrew
16	SR55-2 M3x10	KEY01 M2.5
20	SR55-2 M3.5x10	KEY01 M2.5
25	SR55-2 M4x12	KEY01 M3
32	SR55-2 M5x12	KEY01 M4
40	SR55-2 M6x16	KEY01 M5

● 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)

阻尼减振车刀杆
Damping Turning Tool Holder

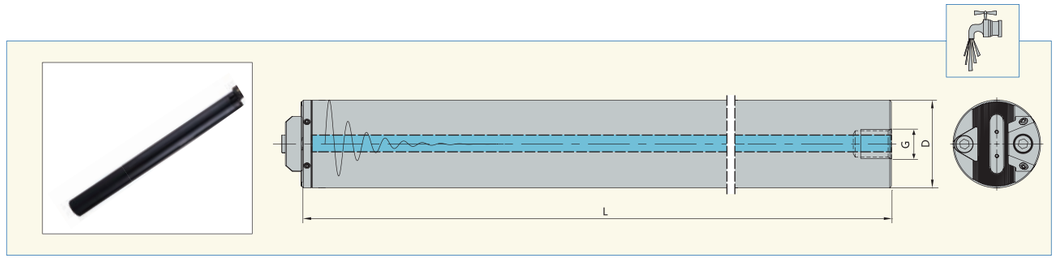


规格型号 Designation	D	D1	L	G	L/D	Dmin	Kg	适配刀头 Cartridge	在库 Stock
VT40 C50x518V	50	40	518	G1/2"	7	60	7.2	VT40..	◐
VT40 C50x668V	50	40	668	G1/2"	10	60	9.3	VT40..	◐
VT40 C50x768VE	50	40	768	G1/2"	12	60	14.4	VT40..	○
VT40 C50x868VE	50	40	868	G1/2"	14	60	16.6	VT40..	○
VT40 C60x628V	60	40	628	G3/4"	7	70	12.5	VT40..	◐
VT40 C60x808V	60	40	808	G3/4"	10	70	16.3	VT40..	◐
VT40 C60x920VE	60	40	920	G3/4"	12	70	27.1	VT40..	○
VT40 C60x1040VE	60	40	1040	G3/4"	14	70	30.9	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：☞B11-B31 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 B11-B31.
- Suggest doing 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 secrew
40	SR55-2 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..	◐
VH80 C80X1240VE	80	1240	G3/4"	12	60	VH80..	○
VH80 C80X1400VE	80	1400	G3/4"	14	70	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：☞B11-B31 页。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 VT80 C80x880V。
- Suggested min. Length is 4xD.
- With coolant hole.
- The cartridge should be ordered separately, please see page B11-B31.
- Suggest to do the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VT80 C80x880V.

备件
Spare Parts

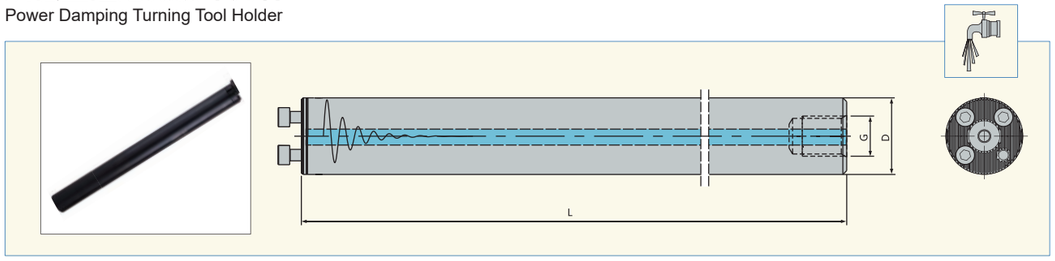
D	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	上压板 Upper clamping pad	下压板 Lower clamping pad	压板弹簧 Spring clamping pad	定位螺钉 Clamp screw for cartridge
80	SR55 M10x25	KEY01 M8	PB20 M10x16.0	PB20 M10x11	YH 12.5x0.9x18	SR55 M3x6

● 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)

加强型阻尼减振车刀杆
Power Damping Turning Tool Holder



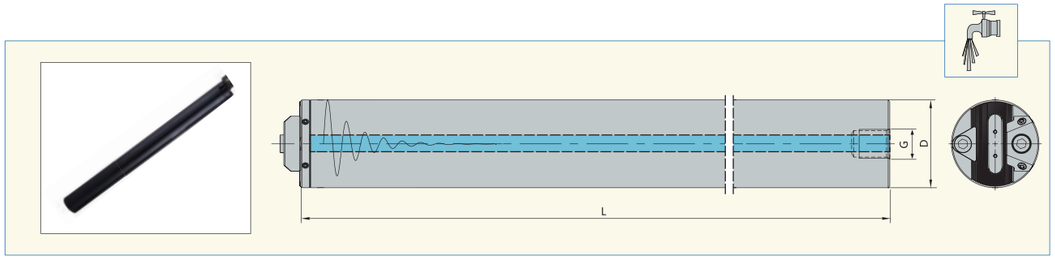
规格型号 Designation	D	L	G	L/D	Kg	适配刀头 Cartridge	在库 Stock
VT32 C32x256V.P	32	256	G3/8"	5	1.58	VT32..	●
VT40 C40x328V.P	40	328	G1/2"	5	3.01	VT40..	●
VT40 C50x418V.P	50	418	G1/2"	5	5.92	VT40..	●
VT40 C60x508V.P	60	508	G3/4"	5	10.48	VT40..	●

- 推荐最小夹紧长度为 4xD。
- 刀杆有内冷出水孔。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 VT32 C32x256V.P。

- Suggested min. Length is 4xD.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VT32 C32x256V.P.

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 secrew
32	SR55-2 M5x12	KEY01 M4
40/50/60	SR55-2 M6x16	KEY01 M5



规格型号 Designation	D	L	G	L/D	Kg	适配刀头 Cartridge	在库 Stock
VH80 C80x720V.P	80	720	G3/4"	5	27.05	VH80..	●

- 推荐最小夹紧长度为 4xD。
- 刀杆有内冷出水孔。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 VH80 C80x720V.P。

- Suggested min. Length is 4xD.
- With coolant hole.
- Suggest to do the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VH80 C80x720V.P.

备件
Spare Parts

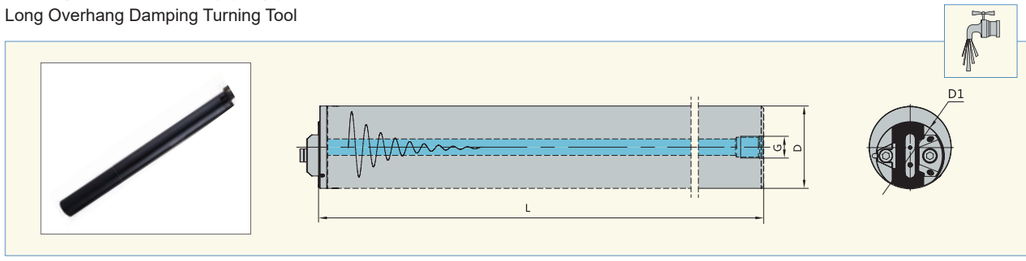
D	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	上压板 Upper clamping pad	下压板 Lower clamping pad	压板弹簧 Spring clamping pad	定位螺钉 Clamp screw for cartridge
80	SR55 M10x25	KEY01 M8	PB20 M10x16.0	PB20 M10x11	YH 12.5x0.9x18	SR55 M3x6

● 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)

大直径阻尼减振车刀杆
Long Overhang Damping Turning Tool



规格型号 Designation	D	D1	L	G	L/D	Kg	适配刀头 Cartridge	在库 Stock
VH80 C100x1100V	100	80	1100	G3/4"	7	63.4	VH80..	○
VH80 C100x1500V	100	80	1500	G3/4"	10	86.8	VH80..	○
VH80 C120x1900V.R/L	120	80	1900	G3/4"	10	134	VH80..	○
VH80 C130x2000V.R/L	130	80	2000	G3/4"	10	192.3	VH80..	○
VH80 C140x2200V.R/L	140	80	2200	G3/4"	10	241.5	VH80..	○
VH80 C150x2400V.R/L	150	80	2400	G3/4"	10	252.6	VH80..	○
VH80 C160x2600V.R/L	160	80	2600	G3/4"	10	339.3	VH80..	○
VH80 C180x2800V.R/L	180	80	2800	G3/4"	10	458.2	VH80..	○
VH80 C200x3200V.R/L	200	80	3200	G3/4"	10	657.7	VH80..	○
VH80 C220x3450V.R/L	220	80	3450	G1"	10	1059.3	VH80..	○
VH80 C250x4000V.R/L	250	80	4000	G1"	10	1229	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：☞ B11-B31 页。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 VH80 C100x1100V。
- Suggested min. Length is 4xD.
- With coolant hole.
- The cartridge should be ordered separately, please see page B11-B31.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VH80 C100x1100V.

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	定位螺钉 Clamp screw for cartridge
80	SR55 M10x25	KEY01 M8	PB20 M10x16.0	PB20 M10x11	YH 12.5x0.9x18	SR55 M3x6

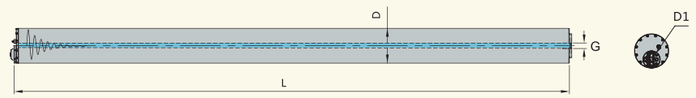
● 标准库存 Item in stock

◐ 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)

大直径阻尼减振车刀杆
Long Overhang Damping Turning Tool





规格型号 Designation	D	D1	L	G	L/D	Kg	适配刀头 Cartridge	在库 Stock
VH80 C100x1560VE	100	80	1560	G3/4"	12	117.6	VH80..	○
VH80 C100x1760VE	100	80	1760	G3/4"	14	133.3	VH80..	○
VH80 C120x1870VE.R/L	120	80	1870	G3/4"	12	215.7	VH80..	○
VH80 C120x2110VE.R/L	120	80	2110	G3/4"	14	248.6	VH80..	○
VH80 C130x2030VE.R/L	130	80	2030	G3/4"	12	271.4	VH80..	○
VH80 C130x2290VE.R/L	130	80	2290	G3/4"	14	312.3	VH80..	○
VH80 C140x2190VE.R/L	140	80	2190	G3/4"	12	336.7	VH80..	○
VH80 C140x2470VE.R/L	140	80	2470	G3/4"	14	386.8	VH80..	○
VH80 C150x2350VE.R/L	150	80	2350	G3/4"	12	397.2	VH80..	○
VH80 C150x2650VE.R/L	150	80	2650	G3/4"	14	472.4	VH80..	○
VH80 C160x2510VE.R/L	160	80	2510	G3/4"	12	497.5	VH80..	○
VH80 C160x2830VE.R/L	160	80	2830	G3/4"	14	571.2	VH80..	○
VH80 C180x2830VE.R/L	180	80	2830	G3/4"	12	559.7	VH80..	○
VH80 C180x3190VE.R/L	180	80	3190	G3/4"	14	642.6	VH80..	○
VH80 C200x3150VE.R/L	200	80	3150	G3/4"	12	621.9	VH80..	○
VH80 C200x3550VE.R/L	200	80	3550	G3/4"	14	714.3	VH80..	○
VH80 C220x3470VE.R/L	220	80	3470	G3/4"	12	684.1	VH80..	○
VH80 C220x3910VE.R/L	220	80	3910	G3/4"	14	785.7	VH80..	○
VH80 C250x3950VE.R/L	250	80	3950	G3/4"	12	777.4	VH80..	○
VH80 C250x4450VE.R/L	250	80	4450	G3/4"	14	892.8	VH80..	○

- 推荐最小夹紧长度为 4xD。
- 刀杆有内冷出水孔。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 VH80 C100x1560VE。
- Suggested min. Length is 4xD.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VH80 C100x1560VE.

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	定位螺钉 Clamp screw for cartridge
80	SR55 M10x25	KEY01 M8	PB20 M10x16.0	PB20 M10x11	YH 12.5x0.9x18	SR55 M3x6

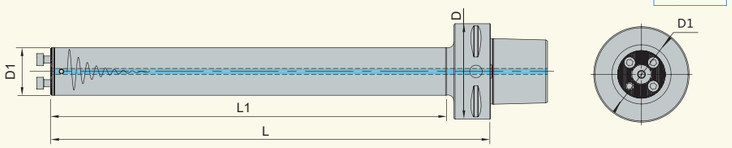
● **标准库存** Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ **无库存（订货时，请确认交货期）** Order on demand (please confirm delivery time when ordering it)

DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振刀具 DAMPING TOOLS

PSC 接口阻尼减振车刀杆
PSC Damping Turning Tool





规格型号 Designation	D	D1	L	L1	L/D	Kg	适配刀头 Cartridge	在库 Stock
C3 AT16x082V	32	16	82	63	5	0.25	VT16..	◐
C3 AT20x101V	32	20	101	82	5	0.39	VT20..	◐
C3 AT25x125V	32	25	125	107	5	0.6	VT25..	◐
C3 AT25x180V	32	25	180	161	7	0.8	VT25..	◐
C3 AT32x133V	32	32	133	133	5	1	VT32..	◐
C3 AT32x224V	32	32	224	224	8	1.8	VT32..	◐
C4 AT16x088V	40	16	88	63	5	0.4	VT16..	◐
C4 AT20x107V	40	20	107	82	5	0.54	VT20..	◐
C4 AT25x132V	40	25	132	108	5	0.8	VT25..	◐
C4 AT25x180V	40	25	180	155	7	0.96	VT25..	◐
C4 AT32x154V	40	32	154	131	5	1.29	VT32..	◐
C4 AT32x224V	40	32	224	200	7	2.08	VT32..	◐
C4 AT40x173V	40	40	173	173	5	1.75	VT40..	◐
C4 AT40x288V	40	40	288	288	8	3.42	VT40..	◐
C5 AT16x085V	50	16	85	58	5	0.63	VT16..	◐
C5 AT20x109V	50	20	109	83	5	0.74	VT20..	◐
C5 AT25x133V	50	25	133	107	5	1	VT25..	◐
C5 AT25x230V	50	25	230	201	7	1.4	VT25..	◐
C5 AT32x154V	50	32	154	129	5	1.4	VT32..	◐
C5 AT32x288V	50	32	288	261	9	2.4	VT32..	◐
C5 AT40x194V	50	40	194	170	5	2.24	VT40..	◐
C5 AT40x368V	50	40	368	344	9	4.2	VT40..	◐
C6 AT16x088V	63	16	88	58	5	1.01	VT16..	◐
C6 AT20x108V	63	20	108	73	5	1	VT20..	◐
C6 AT25x132V	63	25	132	103	5	1.35	VT25..	◐
C6 AT25x230V	63	25	230	197	9	1.7	VT25..	◐
C6 AT32x159V	63	32	159	129	5	1.8	VT32..	◐
C6 AT32x288V	63	32	288	257	9	2.7	VT32..	◐
C6 AT40x198V	63	40	198	169	5	2.6	VT40..	◐
C6 AT40x368V	63	40	368	338	9	4.2	VT40..	◐
C8 AT25x147V	80	25	147	107	5	2.3	VT25..	◐
C8 AT32x172V	80	32	172	133	5	2.8	VT32..	◐
C8 AT32x224V	80	32	224	184	6	3.62	VT32..	◐
C8 AT40x224V	80	40	224	186	5	3.7	VT40..	◐
C8 AT40x368V	80	40	368	330	9	5.4	VT40..	◐

- 刀杆有内冷出水孔。
- 适配刀头需单独订购，请参照：☞ B11-B31 页。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 C3 AT16x082V。
- With coolant hole.
- The cartridge should be ordered separately, please see page B11-B31.
- The reducing head should be ordered separately.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC C3 AT16x082V.

备件
Spare Parts

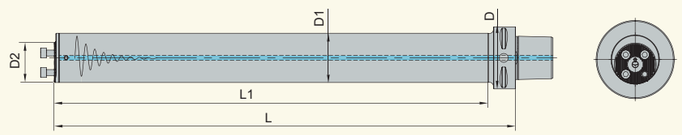
D1	刀头锁紧螺钉 Clamp screw for cartridge	刀头锁紧扳手 Allen key for cartridge clamping secrew
16	SR55-2 M3x10	KEY01 M2.5
20	SR55-2 M3.5x10	KEY01 M2.5
25	SR55-2 M4x12	KEY01 M3
32	SR55-2 M5x12	KEY01 M4
40	SR55-2 M6x16	KEY01 M5

● **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)

PSC 接口阻尼减振车刀杆

PSC Damping Turning Tool





规格型号 Designation	D	D1	D2	L	L1	L/D	Kg	适配刀头 Cartridge	在库 Stock
C5 AT40-D50x223V.R/L	50	50	40	223	223	5	3.6	VT40..	◐
C5 AT40-D50x468V.R/L	50	50	40	468	468	9	10.79	VT40..	◐
C6 AT40-D50x247V.R/L	63	50	40	247	222	5	4.2	VT40..	◐
C6 AT40-D50x468V.R/L	63	50	40	468	440	9	7.4	VT40..	◐
C6 AT40-D60x295V.R/L	63	60	40	295	273	5	6.8	VT40..	◐
C6 AT40-D60x568V.R/L	63	60	40	568	545	9	12.2	VT40..	◐
C8 AT40-D50x297V.R/L	80	50	40	297	261	5	5.8	VT40..	◐
C8 AT40-D50x468V.R/L	80	50	40	468	434	9	8.3	VT40..	◐
C8 AT40-D60x355V.R/L	80	60	40	355	320	5	8.9	VT40..	◐
C8 AT40-D60x568V.R/L	80	60	40	568	531	9	13	VT40..	◐

- 刀杆有内冷出水孔。
- 适配刀头需单独订购，请参照：☞B11-B31 页。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 C5 AT40-D50x223V.R。
- With coolant hole.
- The cartridge should be ordered separately, please see page B11-B31.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC C5 AT40-D50x223V.R.

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 secrew
16	SR55-2 M3x10	KEY01 M2.5
20	SR55-2 M3.5x10	KEY01 M2.5
25	SR55-2 M4x12	KEY01 M3
32	SR55-2 M5x12	KEY01 M4
40	SR55-2 M6x16	KEY01 M5

● 标准库存 Item in stock

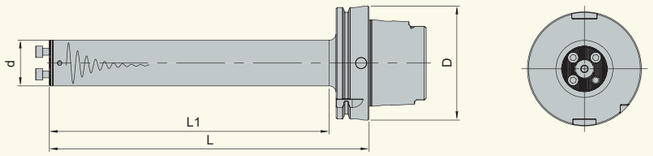
◐ 半标准库存（订货时，请确认交货期）Item of short delivery time (please confirm delivery time when ordering it)

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

HSK 减振车刀杆

Damping Turning Tool with HSK Holder

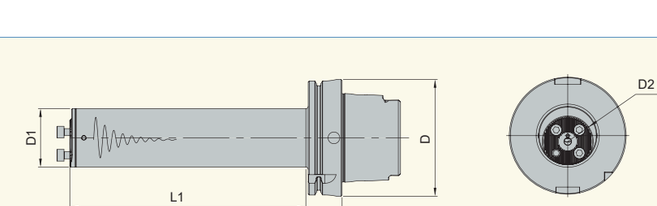




规格型号 Designation	D	d	L1	L	L/D	Bar	Kg	在库 Stock
HSK T63 VT32x172.V	63.0	32.0	143.0	172.0	5	70	1.8	◐
HSK T63 VT40x208.V	63.0	40.0	179.0	208.0	5	70	2.7	◐
HSK T100 VT40x208.V	100.0	40.0	176.0	208.0	5	70	4.0	◐

- 刀杆有内冷出水孔。
- 适配刀头需单独订购，请参照：☞B11-B31 页。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 HSK T63 VT32x172.V。
- With coolant hole.
- The cartridge should be ordered separately, please see page B11-B31.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC HSK T63 VT32x172.V.





规格型号 Designation	D	D1	D2	L1	L	L/D	Bar	Kg	在库 Stock
HSK T63 VT40-D50x268.V	63.0	50.0	40.0	239.0	268.0	5	70	4.6	◐
HSK T100 VT40-D50x268.V	100.0	50.0	40.0	236.0	268.0	5	70	5.8	◐
HSK T100 VT40-D60x328.V	100.0	60.0	40.0	296.0	328.0	5	70	8.7	◐

- 刀杆有内冷出水孔。
- 适配刀头需单独订购，请参照：☞B11-B31 页。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 HSK T63 VT40-D50x268.V。
- With coolant hole.
- The cartridge should be ordered separately, please see page B11-B31.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC HSK T63 VT40-D50x268.V.

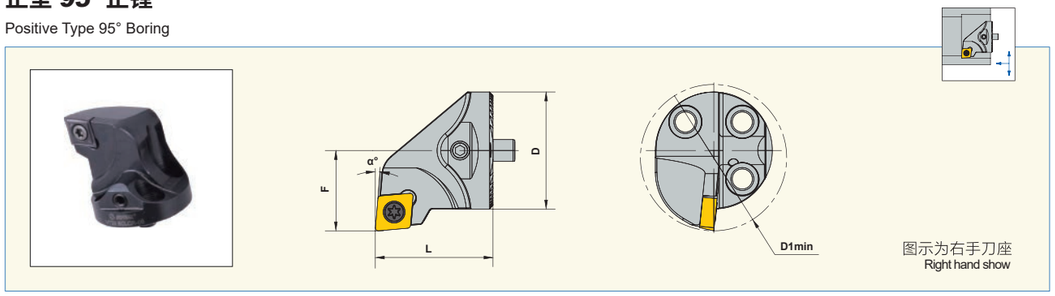
● 标准库存 Item in stock

◐ 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)

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	在库 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	20	5°	0.04	CC..09T3..	◐
VT32 SCLCR-09	32	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	20	5°	0.04	CC..09T3..	◐
VT32 SCLCL-09	32	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：☞F105 页。
- 订货示例：1 件 VT16 SCLCR-06。
- The insert should be ordered separately, please see page F105.
- 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	SR21 M2.5x5.3	KEY03 T7	-	-	-	FT39 D4-3x7
VT20 ..-09	SR21 M4x9.5	KEY03 T15	-	-	-	FT39 D6-5x8
VT25 ..-09	SR21 M4x9.5	KEY03 T15	-	-	-	FT39 D6-5x9
VT32 ..-09	SR21 M4x9.5	KEY03 T15	-	-	-	FT39 D6-5x11
VT40 ..-12T	SR21 M5x12.8	KEY03 T20	ST01 CC12x2.8	SRT M7-M5x13	KEY01 M3	FT39 D6-5x11

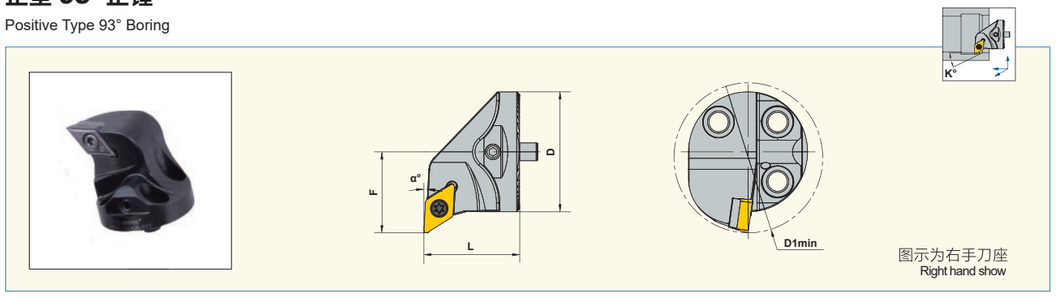
● 标准库存
Item in stock

◐ 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)

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°	K°	Kg	适配刀片 Insert	在库 Stock
VT16 SDUCR-07	16	20	11	20	3°	27°	0.02	DC..0702..	◐
VT20 SDUCR-11	20	25	13	20	3°	27°	0.03	DC..11T3..	◐
VT25 SDUCR-11	25	32	17	20	3°	27°	0.04	DC..11T3..	◐
VT32 SDUCR-11T	32	40	22	32	3°	27°	0.1	DC..11T3..	◐
VT40 SDUCR-11T	40	50	27	32	3°	27°	0.2	DC..11T3..	◐
VT16 SDUCL-07	16	20	11	20	3°	27°	0.02	DC..0702..	◐
VT20 SDUCL-11	20	25	13	20	3°	27°	0.03	DC..11T3..	◐
VT25 SDUCL-11	25	32	17	20	3°	27°	0.04	DC..11T3..	◐
VT32 SDUCL-11T	32	40	22	32	3°	27°	0.1	DC..11T3..	◐
VT40 SDUCL-11T	40	50	27	32	3°	27°	0.2	DC..11T3..	◐

- 刀片请根据不同材料单独订购，请参照：☞F107 页。
- 订货示例：1 件 VT16 SDUCR-07。
- The insert should be ordered separately, please see page F107.
- 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	SR21 M2.5x5.3	KEY03 T7	-	-	-	FT39 D4-3x7
VT20 ..-11	SR21 M4x11	KEY03 T15	-	-	-	FT39 D6-5x8
VT25 ..-11	SR21 M4x11	KEY03 T15	-	-	-	FT39 D6-5x9
VT32 ..-11T	SR21 M4x11	KEY03 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
VT40 ..-11T	SR21 M4x11	KEY03 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

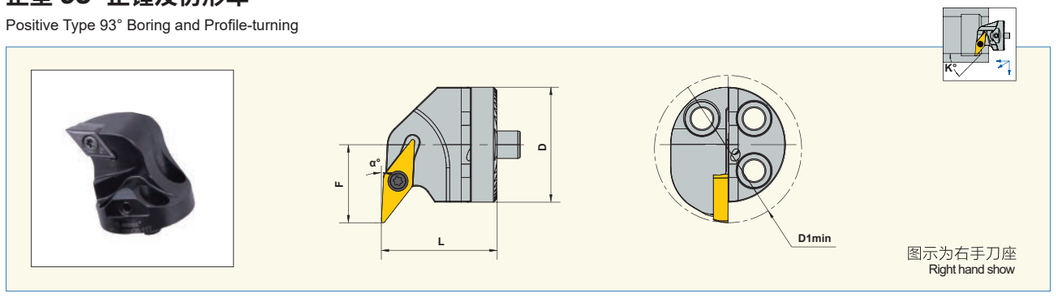
● 标准库存
Item in stock

◐ 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)

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



图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	K°	Kg	适配刀片 Insert	在库 Stock
VT20 SVUCR-11	20	27	16	20	3°	50°	0.02	VC..1103..	◐
VT25 SVUCR-11	25	31	17	25	3°	50°	0.04	VC..1103..	◐
VT20 SVUCL-11	20	27	16	20	3°	50°	0.02	VC..1103..	○
VT25 SVUCL-11	25	31	17	25	3°	50°	0.04	VC..1103..	○

- 刀片请根据不同材料单独订购，请参照：☞F113 页。
- 订货示例：1 件 VT20 SVUCR-11。
- The insert should be ordered separately, please see page F113.
- 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	KEY03 T8	FT39 D6-5x8
VT25 ..-11	SR20 M2.5x6	KEY03 T8	FT39 D6-5x9

● **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)

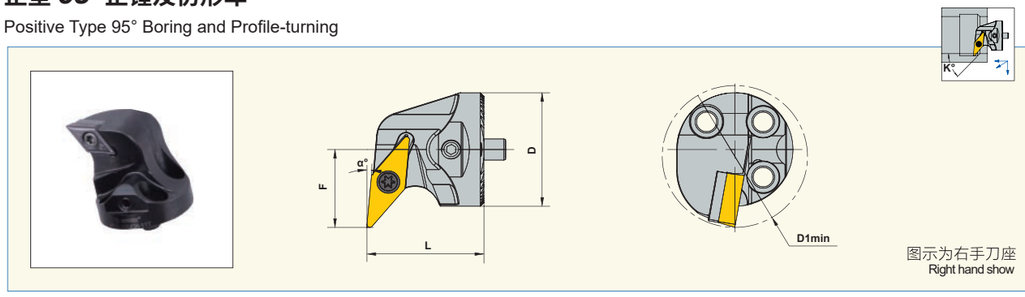
○ **无库存 (订货时，请确认交货期)**
Order on demand
(please confirm delivery time when ordering it)

DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振刀具
DAMPING TOOLS

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



图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	K°	Kg	适配刀片 Insert	在库 Stock
VT32 SVLCR-16T	32	40	22	32	5°	45°	0.1	VC..1604..	◐
VT40 SVLCR-16T	40	50	27	32	5°	45°	0.15	VC..1604..	◐
VT32 SVLCL-16T	32	40	22	32	5°	45°	0.1	VC..1604..	◐
VT40 SVLCL-16T	40	50	27	32	5°	45°	0.15	VC..1604..	◐

- 刀片请根据不同材料单独订购，请参照：☞F113 页。
- 订货示例：1 件 VT32 SVLCR-16T。
- The insert should be ordered separately, please see page F113.
- 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 ..-16T	SR21 M4x11	KEY03 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
VT40 ..-16T	SR21 M4x11	KEY03 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

● **标准库存**
Item in stock

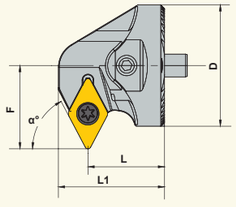
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

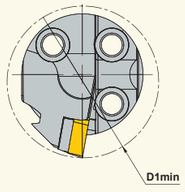
○ **无库存 (订货时，请确认交货期)**
Order on demand
(please confirm delivery time when ordering it)

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









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	L1	α°	K°	Kg	适配刀片 Insert	在库 Stock
VT16 SDPCR-07	16	22	13	15	19	62.5°	60°	0.01	DC..0702..	◐
VT20 SDPCR-07	20	27	15	15	19	62.5°	60°	0.02	DC..0702..	◐
VT25 SDPCR-07	25	33	18	15	19	62.5°	60°	0.03	DC..0702..	◐
VT32 SDPCR-11T	32	40	22	20	28	62.5°	60°	0.09	DC..11T3..	◐
VT40 SDPCR-11T	40	50	27	20	28	62.5°	60°	0.14	DC..11T3..	◐
VT16 SDPCL-07	16	22	13	15	19	62.5°	60°	0.01	DC..0702..	◐
VT20 SDPCL-07	20	27	15	15	19	62.5°	60°	0.02	DC..0702..	◐
VT25 SDPCL-07	25	33	18	15	19	62.5°	60°	0.03	DC..0702..	◐
VT32 SDPCL-11T	32	40	22	20	28	62.5°	60°	0.09	DC..11T3..	◐
VT40 SDPCL-11T	40	50	27	20	28	62.5°	60°	0.14	DC..11T3..	◐

- 刀片请根据不同材料单独订购，请参照：☞F107 页。
- 订货示例：1 件 VT16 SDPCR-07。
- The insert should be ordered separately, please see page F107.
- 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	SR21 M2.5x5.3	KEY03 T7	-	-	-	FT39 D4-3x7
VT20 ..-07	SR21 M2.5x5.3	KEY03 T7	-	-	-	FT39 D6-5x8
VT25 ..-07	SR21 M2.5x5.3	KEY03 T7	-	-	-	FT39 D6-5x9
VT32 ..-11T	SR21 M4x11	KEY03 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
VT40 ..-11T	SR21 M4x11	KEY03 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

● 标准库存
Item in stock

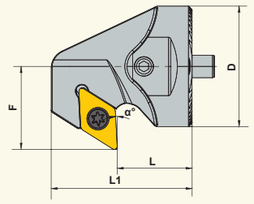
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Item of short delivery time
(please confirm delivery time when ordering it)

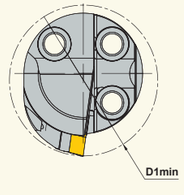
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

阻尼减振车刀刀头
Cartridge for Damping Turning Tool Holder

正型 93° 反镗
Positive Type 93° Back Boring









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	L1	α°	K°	Kg	适配刀片 Insert	在库 Stock
VT16 SDZCR-07	16	22	13	15	27	3°	27°	0.03	DC..0702..	◐
VT20 SDZCR-07	20	27	15	15	27	3°	27°	0.05	DC..0702..	◐
VT25 SDZCR-07	25	33	18	15	27	3°	27°	0.12	DC..0702..	◐
VT32 SDZCR-11T	32	40	22	20	38	3°	27°	0.14	DC..11T3..	◐
VT40 SDZCR-11T	40	50	27	20	38	3°	27°	0.19	DC..11T3..	◐
VT16 SDZCL-07	16	22	13	15	27	3°	27°	0.03	DC..0702..	◐
VT20 SDZCL-07	20	27	15	15	27	3°	27°	0.05	DC..0702..	◐
VT25 SDZCL-07	25	33	18	15	27	3°	27°	0.12	DC..0702..	◐
VT32 SDZCL-11T	32	40	22	20	38	3°	27°	0.14	DC..11T3..	◐
VT40 SDZCL-11T	40	50	27	20	38	3°	27°	0.19	DC..11T3..	◐

- 刀片请根据不同材料单独订购，请参照：☞F107 页。
- 订货示例：1 件 VT16 SDZCR-07。
- The insert should be ordered separately, please see page F107.
- 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	SR21 M2.5x5.3	KEY03 T7	-	-	-	FT39 D4-3x7
VT20 ..-07	SR21 M2.5x5.3	KEY03 T7	-	-	-	FT39 D6-5x8
VT25 ..-07	SR21 M2.5x5.3	KEY03 T7	-	-	-	FT39 D6-5x9
VT32 ..-11T	SR21 M4x11	KEY03 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
VT40 ..-11T	SR21 M4x11	KEY03 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

● 标准库存
Item in stock

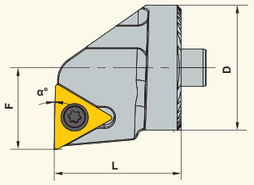
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Item of short delivery time
(please confirm delivery time when ordering it)

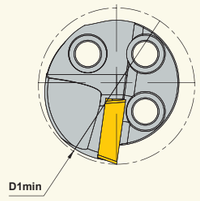
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

阻尼减振车刀刀头
Cartridge for Damping Turning Tool Holder

正型 91° 正镗
Positive Type 91° Profile-turning









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在库 Stock
VT16 STFCR-09	16	20	11	20	1°	0.02	TC..0902..	◐
VT16 STFCR-11	16	20	11	20	1°	0.02	TC..1102..	◐
VT20 STFCR-11	20	25	13	20	1°	0.03	TC..1102..	◐
VT25 STFCR-11	25	32	17	20	1°	0.04	TC..1102..	◐
VT32 STFCR-16	32	40	22	32	1°	0.10	TC..16T3..	◐
VT40 STFCR-16	40	50	27	32	1°	0.20	TC..16T3..	◐
VT16 STFCL-09	16	20	11	20	1°	0.02	TC..0902..	◐
VT16 STFCL-11	16	20	11	20	1°	0.02	TC..1102..	◐
VT20 STFCL-11	20	25	13	20	1°	0.03	TC..1102..	◐
VT25 STFCL-11	25	32	17	20	1°	0.04	TC..1102..	◐
VT32 STFCL-16	32	40	22	32	1°	0.10	TC..16T3..	◐
VT40 STFCL-16	40	50	27	32	1°	0.20	TC..16T3..	◐

- 刀片请根据不同材料单独订购，请参照：☞ A93 页。
- 订货示例：1 件 VT16 STFCR-09。
- The insert should be ordered separately, please see page A93.
- Ordering sample: 1 PC VT16 STFCR-09.

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
VT16..-09	SR20 M2.2x5.6	KEY03 T7	FT39 D4-3x7
VT16..-11	SR20 M2.5x6	KEY03 T8	FT39 D4-3x7
VT20..-11	SR20 M2.5x6	KEY03 T8	FT39 D6-5x8
VT25..-11	SR20 M2.5x6	KEY03 T8	FT39 D6-5x9
VT32..-16	SR21 M4x9.5	KEY03 T15	FT39 D6-5x11
VT40..-16	SR21 M4x9.5	KEY03 T15	FT39 D6-5x11

● 标准库存
Item in stock

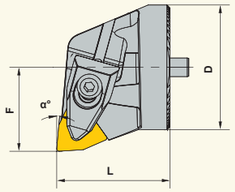
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Item of short delivery time
(please confirm delivery time when ordering it)

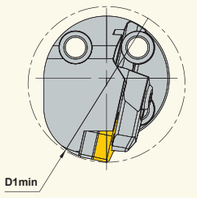
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

阻尼减振车刀刀头
Cartridge for Damping Turning Tool Holder

负型 95° 正镗
Negative Type 95° Profile-turning









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在库 Stock
VT32 DWLNR-06T	32	40	22	32	5°	0.11	WN..0604..	◐
VT32 DWLNR-08T	32	46	24	36	5°	0.12	WN..0804..	◐
VT40 DWLNR-08T	40	50	27	36	5°	0.23	WN..0804..	◐
VT32 DWLNL-06T	32	40	22	32	5°	0.11	WN..0604..	◐
VT32 DWLNL-08T	32	46	24	36	5°	0.12	WN..0804..	◐
VT40 DWLNL-08T	40	50	27	36	5°	0.23	WN..0804..	◐

- 刀片请根据不同材料单独订购。
- 订货示例：1 件 VT32 DWLNR-06T。
- The insert should be ordered separately.
- Ordering sample: 1 PC VT32 DWLNR-06T.

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..-06T	PB10 DDN11	YH 7x0.6x13	SR59 M4x16	ST01 WN06x3.18	KEY01 M2.5	SR20 M4x9.5	KEY03 T15	FT39 D6-5x11
VT32..-08T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 WN08x3.18	KEY01 M3	SR20 M5x10	KEY03 T20	FT39 D6-5x11
VT40..-08T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 WN08X3.18	KEY01 M3	SR20 M5X10	KEY03 T20	FT39 D6-5x11

● 标准库存
Item in stock

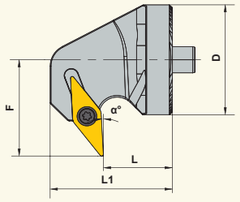
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Item of short delivery time
(please confirm delivery time when ordering it)

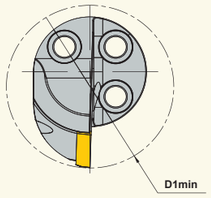
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	L1	α°	K°	KG	适配刀片 Insert	在库 Stock
VT20 SVZCR-11	20	32	20	15	27	3°	45°	0.03	VC.. 1103..	◐
VT25 SVZCR-11	25	37	22	15	27	3°	45°	0.05	VC.. 1103..	◐
VT20 SVZCL-11	20	32	20	15	27	3°	45°	0.03	VC.. 1103..	◐
VT25 SVZCL-11	25	37	22	15	27	3°	45°	0.05	VC.. 1103..	◐

- 刀片请根据不同材料单独订购，请参照：☞F113 页。
- 订货示例：1 件 VT20 SVZCR-11。
- The insert should be ordered separately, please see page F113.
- 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	KEY03 T8	FT39 D6-5x8
VT25 ..-11	SR20 M2.5x6	KEY03 T8	FT39 D6-5x9

● 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)

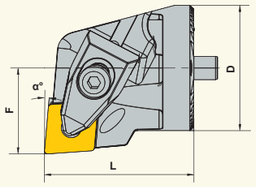
DAMPING TURNING TOOL 阻尼减振车刀

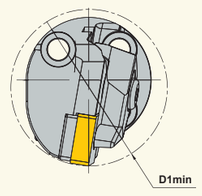
阻尼减振刀具
DAMPING TOOLS

阻尼减振车刀刀头
Cartridge for Damping Turning Tool Holder

负型 95° 正镗
Negative Type 95° Boring









图示为右手刀座
Right hand show

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，请参照：☞F106 页。
- 订货示例：1 件 VT32 DCLNR-12T。
- The insert should be ordered separately, please see page F106.
- 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 ..-12T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 CN12x3.2	KEY01 M3	SR20 M5x10	KEY03 T20	FT39 D6-5x11
VT40 ..-12T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 CN12x3.2	KEY01 M3	SR20 M5x10	KEY03 T20	FT39 D6-5x11

● 标准库存
Item in stock

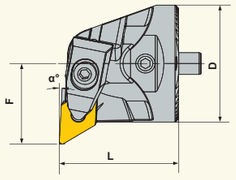
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Item of short delivery time
(please confirm delivery time when ordering it)

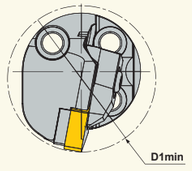
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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 95° Boring and Profile-turning









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	K°	Kg	适配刀片 Insert	在库 Stock
VT32 DDUNL-11T	32	40	22	32	3°	27°	0.11	DN.. 1104..	○
VT40 DDUNL-15T	40	50	27	38	3°	27°	0.18	DN.. 1506..	○
VT32 DDUNR-11T	32	40	22	32	3°	27°	0.11	DN.. 1104..	○
VT40 DDUNR-15T	40	50	27	38	3°	27°	0.18	DN.. 1506..	○
VT40 DVUNR-16T	40	56	34	38	3°	25°	0.2	VN.. 1604..	○
VT40 DVUNL-16T	40	56	34	38	3°	25°	0.2	VN.. 1604..	○

- 刀片请根据不同材料单独订购，请参照：☞F108 页。
- 订货示例：1 件 VT32 DDUNL-11T。
- The insert should be ordered separately, please see page F108.
- Ordering sample: 1 PC VT32 DDUNL-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	SR21 M4x9.5	KEY03 T15	FT39 D6-5x11
VT40 ..-15T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 DN15x4.76	KEY01 M3	SR20 M4x11.5	KEY03 T15	FT39 D6-5x11
VT40 ..-16T	PB10 DVN16	YH 9x0.8x14	SR59 M6x26.5	ST01 VN16x3.2	KEY01 M4	SR20 M3.5x8.5	KEY03 T10	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)

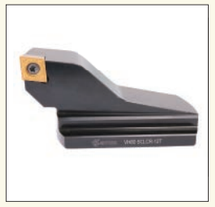
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

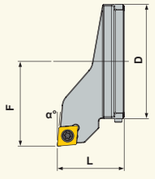
DAMPING TURNING TOOL 阻尼减振车刀

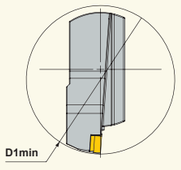
阻尼减振刀具
DAMPING TOOLS

阻尼减振车刀刀头
Cartridge for Damping Turning Tool Holder

正型 95° 正镗
Positive Type 95° Profi le-turning









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在库 Stock
VH80 SCLCR-12T	80	100	57	45	5°	0.5	CC.. 1204..	◐
VH80 SCLCL-12T	80	100	57	45	5°	0.5	CC.. 1204..	◐

- 刀片请根据不同材料单独订购，请参照：☞F108 页。
- 订货示例：1 件 VH80 SCLCR-12T。
- The insert should be ordered separately, please see page F108.
- Ordering sample: 1 PC VH80 SCLCR-12T.

备件
Spare Parts

规格型号 Designation	刀片锁紧螺钉 Clamping screw for shim	锁紧扳手 Allen key for shim	刀垫 Shim	刀垫螺套 Insert socket for knife	刀垫扳手 Allen key for shim
VH80..-12T	SR21 M5X12.8	KEY03 T20	ST01 CC12X2.8	SRT M7-M5X13	KEY01 M3

● 标准库存
Item in stock

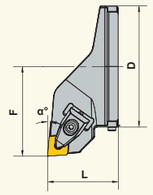
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

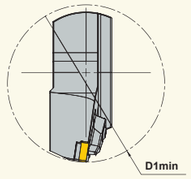
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

阻尼减振车刀刀头
Cartridge for Damping Turning Tool Holder

负型 95° 正镗
Negative Type 95° Boring









图示为右手刀座
Right hand show

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，请参照：☞F106 页。
- 订货示例：1 件 VH80 DCLNR-12T。
- The insert should be ordered separately, please see page F106.
- Ordering sample: 1 PC VH80 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	KEY03 T20

● 标准库存
Item in stock

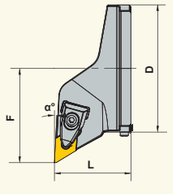
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

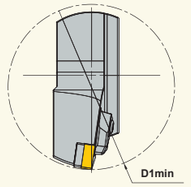
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	K°	Kg	适配刀片 Insert	在库 Stock
VH80 DDUNL-15T	80	100	57	46	3°	27°	0.5	DN.. 1506..	○
VH80 DDUNR-15T	80	100	57	46	3°	27°	0.5	DN.. 1506..	○

- 刀片请根据不同材料单独订购，请参照：☞F108 页。
- 订货示例：1 件 VH80 DDUNL-15T。
- The insert should be ordered separately, please see page F108.
- Ordering sample: 1 PC VH80 DDUNL-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	KEY03 T15

● 标准库存
Item in stock

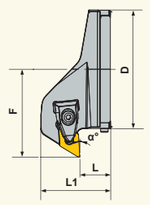
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Item of short delivery time
(please confirm delivery time when ordering it)

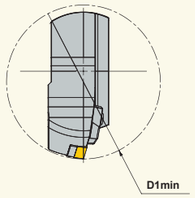
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	L1	α°	K°	Kg	适配刀片 Insert	在库 Stock
VH80 DDZNR-15T	80	100	57	20	45	3°	27°	0.55	DN.. 1506..	○
VH80 DDZNL-15T	80	100	57	20	45	3°	27°	0.55	DN.. 1506..	○

- 刀片请根据不同材料单独订购，请参照：☞F108 页。
- 订货示例：1 件 VH80 DDZNR-15T。
- The insert should be ordered separately, please see page F108.
- 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	KEY03 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)

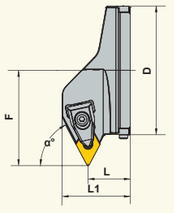
DAMPING TURNING TOOL 阻尼减振车刀

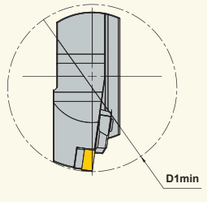
阻尼减振刀具
DAMPING TOOLS

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









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	L1	α°	K°	Kg	适配刀片 Insert	在库 Stock
VH80 DDPNR-15T	80	100	57	25	40.3	62.5°	60°	0.49	DN.. 1506..	○
VH80 DDPNL-15T	80	100	57	25	40.3	62.5°	60°	0.49	DN.. 1506..	○

- 刀片请根据不同材料单独订购，请参照：☞F108 页。
- 订货示例：1 件 VH80 DDPNR-15T。
- The insert should be ordered separately, please see page F108.
- 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	KEY03 T15

● 标准库存
Item in stock

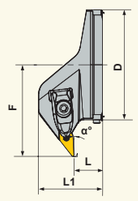
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(please confirm delivery time when ordering it)

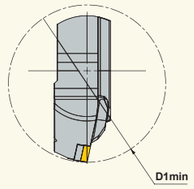
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	L1	α°	K°	Kg	适配刀片 Insert	在库 Stock
VH80 DVZNR-16T	80	110	64	20	45	3°	30°	0.49	VN.. 1604..	○
VH80 DVZNL-16T	80	110	64	20	45	3°	30°	0.49	VN.. 1604..	○

- 刀片请根据不同材料单独订购，请参照：☞F114 页。
- 订货示例：1 件 VH80 DVZNR-16T。
- The insert should be ordered separately, please see page F114.
- Ordering sample: 1 PC VH80 DVZNR-16T.

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 c lamping 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 VN16x3.2	KEY01 M4	SR20 M3.5x8.5	KEY03 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)

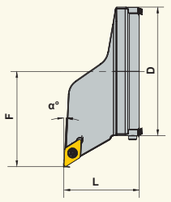
DAMPING TURNING TOOL 阻尼减振车刀

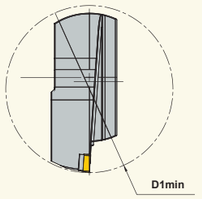
阻尼减振刀具
DAMPING TOOLS

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









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	K°	Kg	适配刀片 Insert	在库 Stock
VH80 SDUCR-11T	80	100	57	45	3°	27°	0.5	DC.. 11T3..	◐
VH80 SDUCL-11T	80	100	57	45	3°	27°	0.5	DC.. 11T3..	◐

- 刀片请根据不同材料单独订购，请参照：☞F107 页。
- 订货示例：1 件 VH80 SDUCR-11T.
- The insert should be ordered separately, please see page F107.
- 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	KEY03 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4

● 标准库存
Item in stock

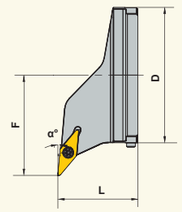
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

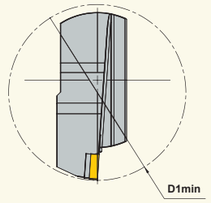
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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









图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	α°	K°	Kg	适配刀片 Insert	在库 Stock
VH80 SVLCR-16T	80	100	57	45	5°	45°	0.44	VC.. 1604..	◐
VH80 SVLCL-16T	80	100	57	45	5°	45°	0.44	VC.. 1604..	◐

- 刀片请根据不同材料单独订购，请参照：☞ F113 页。
- 订货示例：1 件 VH80 SVLCR-16T.
- The insert should be ordered separately, please see page F113.
- Ordering sample: 1 PC VH80 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
VH80 ..-16T	SR21 M4x11	KEY03 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4

● 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)

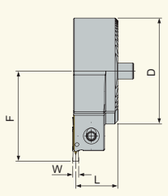
DAMPING TURNING TOOL 阻尼减振车刀

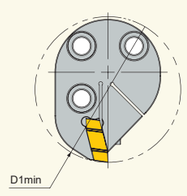
阻尼减振刀具
DAMPING TOOLS

阻尼减振车刀刀头
Cartridge for Damping Turning Tool Holder

槽刀头
Grooving Head







规格型号 Designation	D1 min	W	D	F	L	适配刀片 Insert	在库 Stock
VT25 GIR/L-2	31.00	2	25.00	17.50	14.00	HG2002...	◐
VT25 GIR/L-3	31.00	3	25.00	17.50	14.00	HG3003...	◐
VT32 GIR/L-2	37.00	2	32.00	20.00	18.00	HG2002...	◐
VT32 GIR/L-3	37.00	3	32.00	20.00	18.00	HG3003...	◐
VT40 GIR/L-2	45.00	2	40.00	24.00	18.00	HG2002...	◐
VT40 GIR/L-3	46.00	3	40.00	25.00	18.00	HG3003...	◐
VT40 GIR/L-4	49.00	4	40.00	28.00	18.00	HG4004...	◐

- 刀片咨询销售工程师。
- Inserts information please contact with sales manager.

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
VT25 GIR/L-2	SR55 M4x12	KEY01 M3	FT39 D6-5x9
VT25 GIR/L-3	SR55 M4x12	KEY01 M3	FT39 D6-5x9
VT32 GIR/L-2	SR55 M4x12	KEY01 M3	FT39 D6-5x11
VT32 GIR/L-3	SR55 M4x12	KEY01 M3	FT39 D6-5x11
VT40 GIR/L-2	SR55 M4x12	KEY01 M3	FT39 D6-5x11
VT40 GIR/L-3	SR55 M4x12	KEY01 M3	FT39 D6-5x11
VT40 GIR/L-4	SR55 M4x12	KEY01 M3	FT39 D6-5x11

● 标准库存
Item in stock

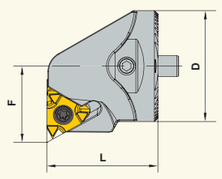
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

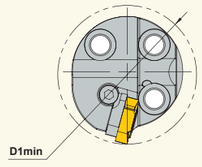
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

阻尼减振车刀刀头
Cartridge for Damping Turning Tool Holder

螺纹刀头
Threading Tool Cartridge







图示为右手刀座
Right hand show

规格型号 Designation	D	D1 min	F	L	Kg	适配刀片 Insert	在库 Stock
VT20 SIR/L-16	20	25	14	25	0.04	16IR/L	◐
VT25 SIR/L-16T	25	32	17	25	0.05	16IR/L	◐
VT32 SIR/L-16T	32	40	22	32	0.11	16IR/L	◐
VT32 SIR/L-22T	32	40	22	32	0.11	22IR/L	◐
VT40 SIR/L-16T	40	50	27	32	0.17	16IR/L	◐
VT40 SIR/L-22T	40	50	27	32	0.17	22IR/L	◐

- 刀片请根据不同材料单独订购。
- 订货示例：1 件 VT20 SIR/L-16。
- The insert should be ordered separately.
- Ordering sample: 1 PC VT20 SIR/L-16.

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	刀垫螺定 Sleeve for shim	定位销 Locating pin
VT20 SIR/L-16	SR20 M3.5x11.5	KEY02 T10	-	-	FT39 D6-5x8
VT25 SIR/L-16T	SR20 M3.5x11.5	KEY02 T10	AI16	SR55 M3x6	FT39 D6-5x9
VT32 SIR/L-16T	SR20 M3.5x11.5	KEY02 T10	AI16	SR55 M3x6	FT39 D6-5x11
VT32 SIR/L-22T	SR20 M4x15	KEY02 T15	AI22	SR55 M3x6	FT39 D6-5x11
VT40 SIR/L-16T	SR20 M3.5x11.5	KEY02 T10	AI16	SR55 M3x6	FT39 D6-5x11
VT40 SIR/L-22T	SR20 M4x15	KEY02 T15	AI22	SR55 M3x6	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)

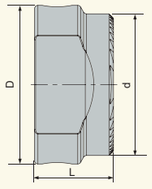
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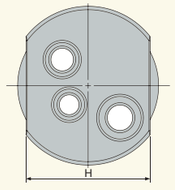
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振刀具 DAMPING TOOLS

中心校准块
Centre Calibration Block



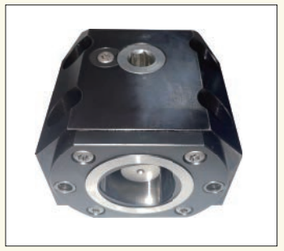


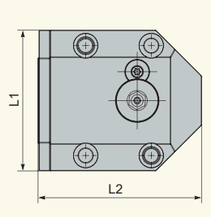


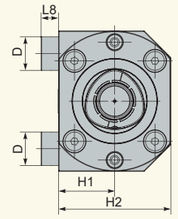
规格型号 Designation	D	d	H	L	适用刀杆 Boring bar	Kg	在库 Stock
VTXZ 16-25	28	25	22	14	VT16/VT20/VT25	0.05	◐
VTXZ 32-60	62	60	52	25	VT32/VT40/VT50/VT60	0.45	◐

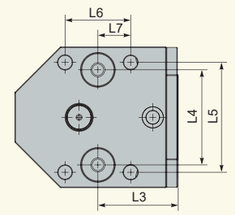
- 订货示例：1 件 VTXZ 16-25
- Ordering sample: 1 PC VTXZ 16-25

快换刀座
Quick-Change Cartridge









规格型号 Designation	接口尺寸 Size of Connection	H1	H2	L1	L2	L3	Kg	在库 Stock
MGA 42xD25-60xC6.R	C6	42	84	105	122	60	5.85	○

规格型号 Designation	安装尺寸 Assembly Size						
	D(h7)	L4	L5	L6	L7	L8	压紧螺钉 Clamping screw
MGA 42xD25-60xC6.R	25	71	82	49	24.5	20	M10

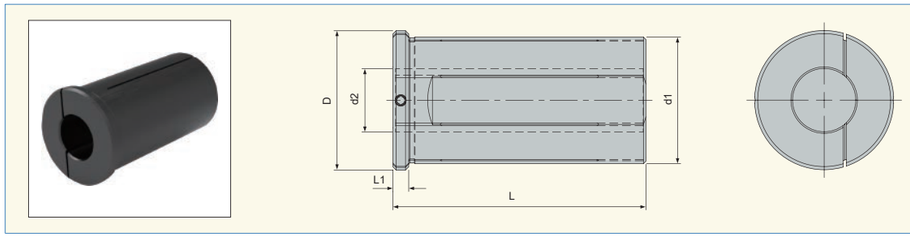
- 订货示例：1 件 MGA 42xD25-60xC6.R
- Ordering sample: 1 PC MGA 42xD25-60xC6.R

● 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)

车床用变径套
Reduction Sleeve for Turning Lathe



规格型号 Designation	D	d1	d2	L	L1	在库 Stock
RS D32-16x65	36	32	16	65	5	◐
RS D32-20x65	36	32	20	65	5	◐
RS D32-20x85	38	32	20	85	5	◐
RS D40-16x75	44	40	16	75	5	◐
RS D40-20x75	44	40	20	75	5	◐
RS D40-25x75	44	40	25	75	5	◐
RS D40-20x105	46	40	20	105	5	◐
RS D40-25x105	46	40	25	105	5	◐
RS D40-32x128	50	40	32	128	5	◐
RS D50-20x125	56	50	20	125	5	◐
RS D50-25x125	56	50	25	125	5	◐
RS D50-32x128	60	50	32	128	5	◐
RS D50-40x160	60	50	40	160	5	◐
RS D60-32x128	70	60	32	128	5	◐
RS D60-40x160	70	60	40	160	5	◐
RS D60-50x200	70	60	50	200	5	◐

- 订货示例：1 件 RS D32-16x65
- Ordering sample: 1 PC RS D32-16x65

● 标准库存
Item in stock

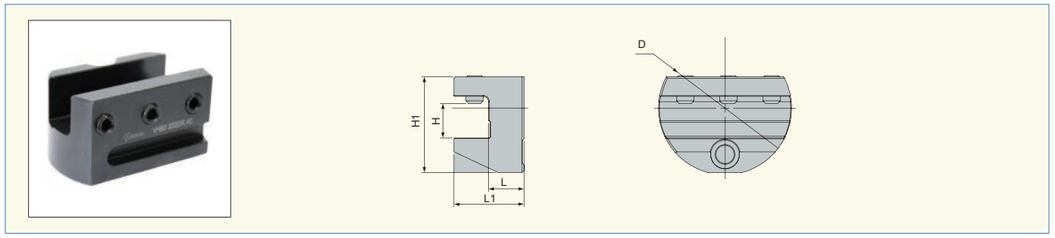
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振刀具
DAMPING TOOLS

车刀转接头
Adapter for Head



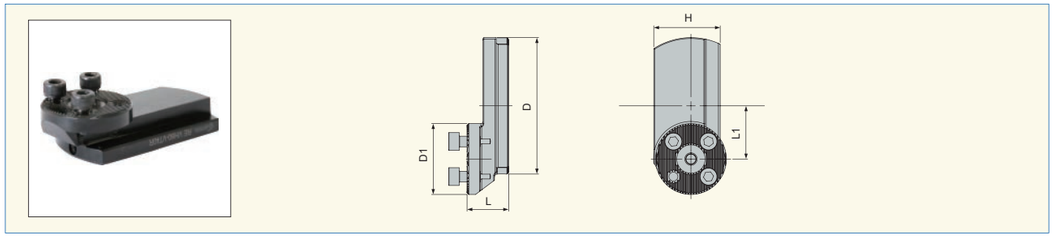
规格型号 Designation	D	H	H1	L	L1	Kg	在库 Stock
VH80 2020R.40	80	20	55	20	40	0.73	◐

- 订货示例：1 件 VH80 2020R.40
- Ordering sample: 1 PC VH80 2020R.40

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screw	锁紧扳手 Allen key for clamping
VH80 2020R.40	SR54 M10x16	KEY01 M5

刀杆转接头
Adapter for Tool Holder



规格型号 Designation	D	D1	H	L	L1	Kg	在库 Stock
RE VH80-VT40R/L	80	40	37	23	30	0.33	◐

- 订货示例：1 件 RE VH80-VT40R
- Ordering sample: 1 PC RE VH80-VT40R

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screw	调节螺钉 Adjusting screw	锁紧扳手 Allen key for clamping	调节扳手 Allen key for adjusting screw
RE VH80-VT40R/L	SR50 M5x25	SR55 M6x12	KEY01 M5	KEY01 M2.5

● 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)

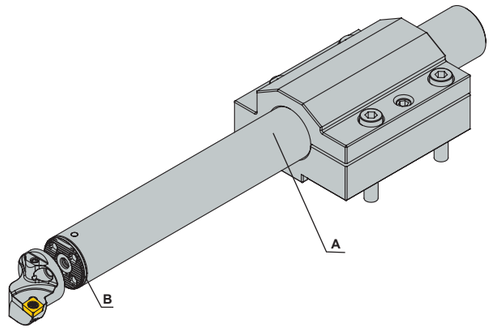
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

阻尼减振车刀使用说明
User Guide for Damping Turning Tool

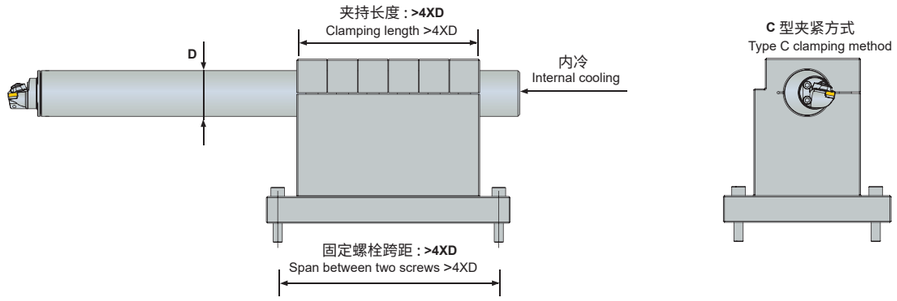
减振刀具安装及调整
Assembly and Adjusting

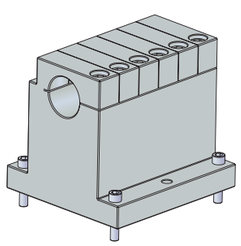
1. 准备
安装配合部位必须擦拭干净，如：减振刀杆及刀头 V 型定位槽、减振刀杆柄部外圆及安装座内孔，见下图 A、B 两处示意位置。

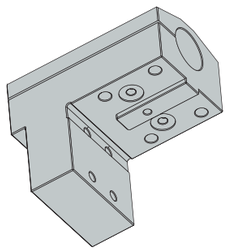
Assembly and Adjusting
Preparation
Wipe clean the positions which need to be assembled, like V geometric slot on the cartridge and shank, the end of the shank which will be connected with adaptor, and internal hole on the clamping holder. See A and B position on the following visual.



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.

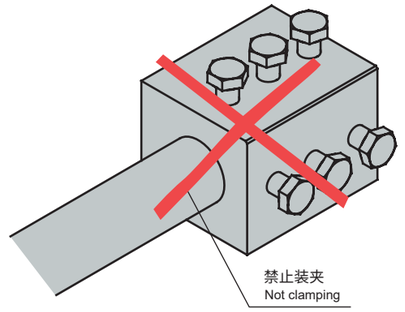


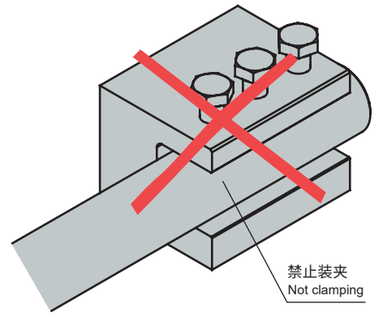




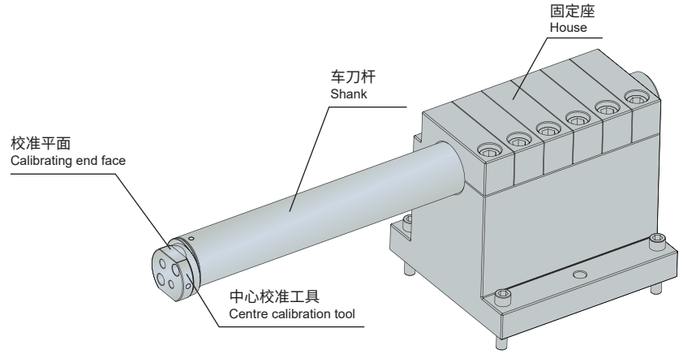
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀使用说明
User Guide for Damping Turning Tool

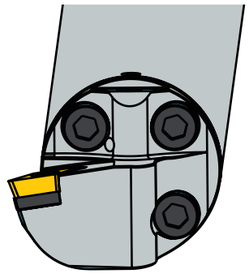


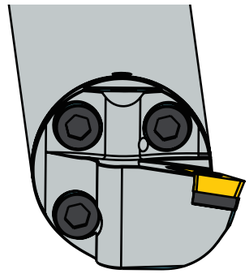


3. 中心高调整
首次安装刀杆需要使用专用中心高校准工具，安装于车刀杆齿形槽接口处，锁紧，沿机床 X 轴方向校平基准平面 0.01 以内，锁紧刀杆后拆掉校准工具 .
Adjust the Height of Centre
Exclusive calibration tool for the height of centre should be used when assembling the shank at the first time Assembly the shank into the V geometric slot firstly, then calibrate it within 0.01 tolerance on the X-axis direction.



4. 安装正确的车刀头
Assemble the right cartridge, see below figure





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

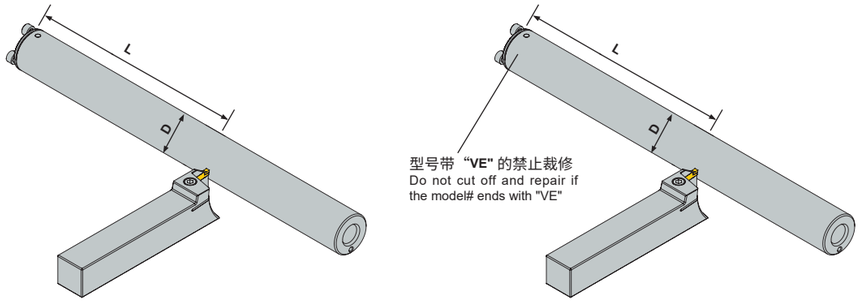
1. 推荐最小夹持长度 4xD
2. 镗杆可改制，切断后的长度如下表

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:clamping holder. See A and B position on the following visual.

产品类别 Type	切断后的最小长度 (L) Min. length after cutting off	
D(mm)	4-7xD(mm)	7-10xD(mm)
16	100	-
20	125	-
25	155	255
32	190	320
40	240	410
50	305	520
60	380	630
80	630	630
100	770	770

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:



DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀使用说明
User Guide for Damping Turning Tool

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(℃) 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

阻尼减振刀具 DAMPING TOOLS

DAMPING BORING TOOL

阻尼减振镗刀



B

阻尼减振刀具
DAMPING TOOLS

阻尼减振镗刀
Damping Boring Tool

VBR 系列阻尼减振粗镗刀 B41
VBR Damping Rough Boring Tool

VBF 系列阻尼减振微调精镗刀 B47
VBF Damping Mini Precision Boring Tool

VBF 系列阻尼减振微调精镗刀 (反精镗加工示意)..... B53
VBF Damping Precision Back Boring Tool

VLR 桥式阻尼减振粗镗刀 B54
VLR Damping Rough Boring Tool With Bridge

VLF 桥式阻尼减振微调精镗刀 B55
VLF Damping Precision Boring Tool With Bridge

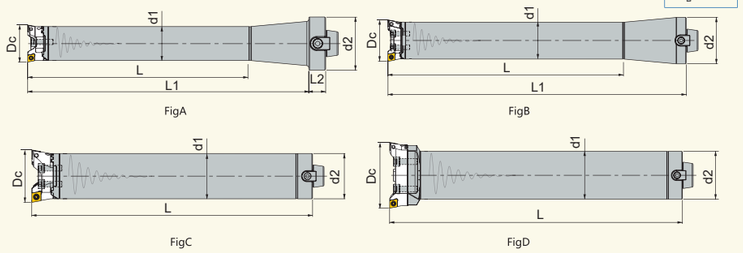
VNL 桥式阻尼减振镗刀接杆 B56
VNL Damping Adaptor For Boring Tool With Bridge

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 Φ21-Φ153，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 Φ21-Φ153.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	在库 Stock
VBR D20.E50.125	21-24	20	50	136	177	16	A	0.9	C90A D020-024.CC06	◐
	23-27	20	50	136	177	16	A	0.9	C90A D023-027.CC06	◐
	26-30	20	50	136	177	16	A	0.9	C90A D19.2630.CC06	◐
VBR D25.E50.150	26-35	25	50	162	212	16	A	1.2	C90A D026-035.CC06	◐
	33-42	25	50	162	212	16	A	1.2	C90A D25.3342.CC06	◐
VBR D32.E50.195	33-41	32	50	208	265	16	A	2.1	C90A D033-041.CC06	◐
	39-47	32	50	208	265	16	A	2.1	C90A D32.3947.CC06	◐
VBR D40.E50.240	41-55	40	50	255	331	-	B	3.8	C90A D041-055.CC09	◐
	53-67	40	50	255	331	-	B	3.8	C90A D40.5367.CC09	◐
VBR D50.E63.300	55-70	50	63	320	405	-	B	6.1	C90A D055-070.CC09	◐
	68-83	50	63	320	405	-	B	6.1	C90A D50.6883.CC09	◐
VBR D63.E63.360	70-90	63	63	390	-	-	C	8.5	C90A D070-090.CC12	◐
	88-108	63	63	390	-	-	C	8.5	C90A D63.88108.CC12	◐
VBR D80.E80.460	90-110	80	80	490	-	-	C	17.1	C90A D090-110.CC12	◐
	108-128	80	80	490	-	-	C	17.1	C90A D80.108128.CC12	◐
VBR D100.E80.460	110-133	80	80	490	-	-	D	17.2	C90A D110-133.CC12	◐
	130-153	80	80	490	-	-	D	17.2	C90A D130-153.CC12	◐

- 当 d1 ≤ 50 时，刀杆镗孔深度是镗孔直径的六倍，当 d1≥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：☞ A6-A8 页。
- 适配刀柄需单独订购，请参照：☞ A45-A47 页。
- 刀具有内冷出水孔。
- 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≤50, and hole depth is 6D(tool body diameter) when d1≥63.
- The cartridge should be ordered separately, please see page A6-A8.
- The adaptor should be ordered separately, please see page A45-A47.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: I 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
21-42mm	SR55 M4x16	GK20 D4	KEY01 M3
33-47mm	SR55 M5x16	GK20 D5	KEY01 M4
41-67mm	SR55 M6x20	GK20 D6	KEY01 M5
55-83mm	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 BORING TOOL 阻尼减振镗刀

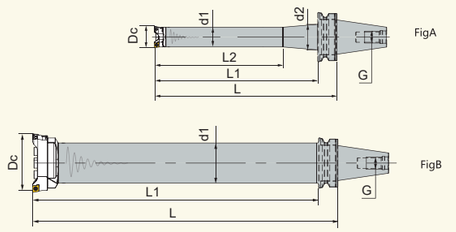
阻尼减振刀具 DAMPING TOOLS

VBR 系列阻尼减振粗镗刀（整体式 7D）

VBR Damping Rough Boring Tool (Integral 7XD)

双刃可调，镗孔加工范围 Φ21-Φ153，整体式阻尼减振镗刀，刚性足，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 Φ21-Φ153.Integral damping boring tool with high rigidity and 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	L1	L	L2	Fig	G	Kg	适配刀座 Cartridge	在库 Stock
BT50 VBR D20.215	21-24	20	27	177	215	136	A	24	3.9	C90A D020-024.CC06	◐
	23-27	20	27	177	215	136	A	24	3.9	C90A D023-027.CC06	◐
	26-30	20	27	177	215	136	A	24	3.9	C90A D19.2630.CC06	◐
BT50 VBR D25.250	26-35	25	33	212	250	166	A	24	4.4	C90A D026-035.CC06	◐
	33-42	25	33	212	250	166	A	24	4.4	C90A D25.3342.CC06	◐
FBT50 VBR D32.303	33-41	32	42	265	303	203	A	24	5.6	C90A D033-041.CC06	◐
	39-47	32	42	265	303	203	A	24	5.6	C90A D32.3947.CC06	◐
FBT50 VBR D40.369	41-55	40	52	331	369	260	A	24	7.3	C90A D041-055.CC09	◐
	53-67	40	52	331	369	260	A	24	7.3	C90A D40.5367.CC09	◐
FBT50 VBR D50.443	55-70	50	64	405	443	319	A	24	9.7	C90A D055-070.CC09	◐
	68-83	50	64	405	443	319	A	24	9.7	C90A D50.6883.CC09	◐
FBT50 VBR D63.490	70-90	63	-	452	490	-	B	24	15.6	C90A D070-090.CC12	◐
	88-108	63	-	452	490	-	B	24	15.6	C90A D63.88108.CC12	◐
FBT50 VBR D80.608	90-110	80	-	570	608	-	B	24	21.4	C90A D090-110.CC12	◐
	108-128	80	-	570	608	-	B	24	21.4	C90A D80.108128.CC12	◐
FBT50 VBR D100.608	110-133	80	-	570	608	-	B	24	21.5	C90A D110-133.CC12	◐
	130-153	80	-	570	608	-	B	24	21.5	C90A D130-153.CC12	◐

- 当 d1 ≤ 50 时，刀杆镗孔深度是镗孔直径的六倍，当 d1≥63 时，刀杆镗孔深度是镗杆直径的七倍。
- 适配刀座需单独订购，请参照：☞ A6-A8 页。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 BT50 VBR D20.215。
- Hole depth is 6D(hole diameter) when d1≤50, and hole depth is 6D(tool body diameter) when d1≥63.
- The cartridge should be ordered separately, please see page A6-A8.
- Hole depth is 10 shank diameter.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: I PC BT50 VBR D20.215.

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
21-42mm	SR55 M4x16	GK20 D4	KEY01 M3
33-47mm	SR55 M5x16	GK20 D5	KEY01 M4
41-67mm	SR55 M6x20	GK20 D6	KEY01 M5
55-83mm	SR55 M6x20	GK20 D6	KEY01 M5
70-108mm	SR55 M8x25	GK20 D8	KEY01 M6
90-153mm	SR55 M0x30	GK20 D10	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)

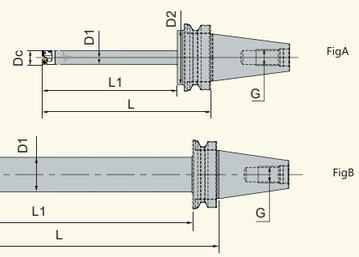
○ 无库存（订货时，请确认交货期）Order on demand (please confirm delivery time when ordering it)

VBR 系列阻尼减振粗镗刀（整体式 10D）

VBR Damping Rough Boring Tool (Integral 10XD)

双刃可调，镗孔加工范围 Φ21-Φ153，整体式阻尼减振镗刀，刚性足，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 Φ21-Φ153.Integral damping boring tool with high rigidity and 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	Fig	G	Kg	适配刀座 Cartridge	在库 Stock
FBT50 VBR D20.247.VE	21-24	20	80	247	200	A	24	4.3	C90A D020-024.CC06	◐
	23-27	20	80	247	200	A	24	4.3	C90A D023-027.CC06	◐
	26-30	20	80	247	200	A	24	4.3	C90A D19.2630.CC06	◐
FBT50 VBR D25.288.VE	26-35	25	-	288	250	B	24	4.8	C90A D026-035.CC06	◐
	33-42	25	-	288	250	B	24	4.8	C90A D25.3342.CC06	◐
FBT50 VBR D32.358.VE	33-41	32	-	358	320	B	24	6.2	C90A D033-041.CC06	◐
	39-47	32	-	358	320	B	24	6.2	C90A D32.3947.CC06	◐
FBT50 VBR D40.438.VE	41-55	40	-	438	400	B	24	8.6	C90A D041-055.CC09	◐
	53-67	40	-	438	400	B	24	8.6	C90A D40.5367.CC09	◐
FBT50 VBR D50.538.VE	55-70	50	-	538	500	B	24	12.5	C90A D055-070.CC09	◐
	68-83	50	-	538	500	B	24	12.5	C90A D50.6883.CC09	◐
FBT50 VBR D63.668.VE	70-90	63	-	668	630	B	24	22.6	C90A D070-090.CC12	◐
	88-108	63	-	668	630	B	24	22.6	C90A D63.88108.CC12	◐
FBT50 VBR D80.838.VE	90-110	80	-	838	800	B	24	40.2	C90A D090-110.CC12	◐
	108-128	80	-	838	800	B	24	40.2	C90A D80.108128.CC12	◐
FBT50 VBR D100.838.VE	110-133	80	-	838	800	B	24	40.5	C90A D110-133.CC12	◐
	130-153	80	-	838	800	B	24	40.5	C90A D130-153.CC12	◐

- 刀杆镗孔深度是镗杆直径的 10 倍径。
- 适配刀座需单独订购，请参照：☞ A6-A8 页。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 FBT50 VBR D20.247.VE。
- Hole depth is 10 shank diameter.
- The cartridge should be ordered separately, please see page A6-A8.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: I PC FBT50 VBR D20.247.VE.

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
21-42mm	SR55 M4x16	GK20 D4	KEY01 M3
33-47mm	SR55 M5x16	GK20 D5	KEY01 M4
41-67mm	SR55 M6x20	GK20 D6	KEY01 M5
55-83mm	SR55 M6x20	GK20 D6	KEY01 M5
70-108mm	SR55 M8x25	GK20 D8	KEY01 M6
90-153mm	SR55 M0x30	GK20 D10	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)

DAMPING BORING TOOL 阻尼减振镗刀

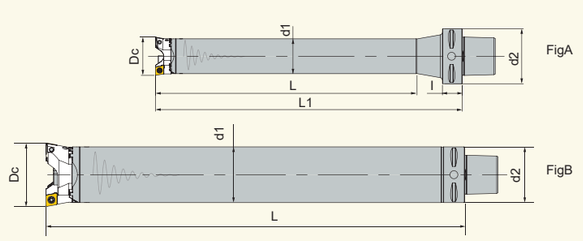
阻尼减振刀具 DAMPING TOOLS

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 Φ41-Φ108，PSC 短锥模块化接口 , 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 Φ41-Φ108.Hollow short taper modular type PSC 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	l	Fig	Kg	适配刀座 Cartridge	在库 Stock
VBR D40.C6.282	41-55	40	63	300	351	22.5	A	4.3	C90A D041-055.CC09	◐
	53-67	40	63	300	351	22.5	A	4.3	C90A D40.5367.CC09	◐
VBR D50.C6.357	55-70	50	63	375	450	22.5	A	7	C90A D055-070.CC09	◐
	68-83	50	63	375	450	22.5	A	7	C90A D50.6883.CC09	◐
VBR D63.C6.445	70-90	63	63	475	-	-	B	11	C90A D070-090.CC12	◐
	88-108	63	63	475	-	-	B	11	C90A D63.88108.CC12	◐

- 适配刀座需单独订购，请参照：☞ A6-A8 页。
- 适配刀柄需单独订购。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBR D40.C6.282。
- The cartridge should be ordered separately, please see page A6-A8.
- The adaptor should be ordered separately.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: I PC VBR D40.C6.282.

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
41-67mm	SR55 M6x20	GK20 D6	KEY01 M5
55-83mm	SR55 M6x20	GK20 D6	KEY01 M5
70-108mm	SR55 M8x25	GK20 D8	KEY01 M6

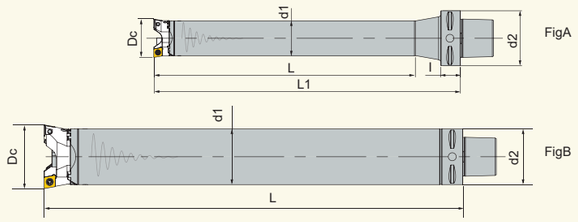
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期）Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期）Order on demand (please confirm delivery time when ordering it)

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 Φ21-Φ67，PSC 短锥模块化接口 , 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 Φ21-Φ67.Hollow short taper modular type PSC 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	l	Fig	Kg	适配刀座 Cartridge	在库 Stock
VBR D20.C4.190	21-24	20	40	130	191	20.5	A	0.69	C90A D020-024.CC06	◐
	23-27	20	40	130	191	20.5	A	0.69	C90A D023-027.CC06	◐
	26-30	20	40	130	191	20.5	A	0.69	C90A D19.2630.CC06	◐
VBR D25.C4.230	26-35	25	40	159	230	20.5	A	1.61	C90A D026-035.CC06	◐
	33-42	25	40	159	230	20.5	A	1.61	C90A D25.3342.CC06	◐
VBR D32.C3.220	33-41	32	32	221	-	-	B	1.51	C90A D033-041.CC06	◐
	39-47	32	32	221	-	-	B	1.51	C90A D32.3947.CC06	◐
VBR D32.C4.265	33-41	32	40	200	267	20.5	A	1.96	C90A D033-041.CC06	○
	39-47	32	40	200	267	20.5	A	1.96	C90A D32.3947.CC06	○
VBR D32.C6.280	33-41	32	63	200	280	22.5	A	2.57	C90A D033-041.CC06	○
	39-47	32	63	200	280	22.5	A	2.57	C90A D32.3947.CC06	○
VBR D40.C4.220	41-55	40	40	220	-	-	B	2.53	C90A D041-055.CC09	◐
	53-67	40	40	220	-	-	B	2.53	C90A D40.5367.CC09	◐
VBR D40.C5.335	41-55	40	50	255	336	20.5	A	3.94	C90A D041-055.CC09	○
	53-67	40	50	255	336	20.5	A	3.94	C90A D40.5367.CC09	○
VBR D40.C6.360	41-55	40	63	255	363	22.5	A	4.67	C90A D041-055.CC09	○
	53-67	40	63	255	363	22.5	A	4.67	C90A D40.5367.CC09	○

- 适配刀座需单独订购，请参照：☞ A6-A8 页。
- 适配刀柄需单独订购。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBR D20.C4.190。

- The cartridge should be ordered separately, please see page A6-A8.
- The adaptor should be ordered separately.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: I PC VBR D20.C4.190.

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
21-42mm	SR55 M4x16	GK20 D4	KEY01 M3
33-47mm	SR55 M5x16	GK20 D5	KEY01 M4
41-67mm	SR55 M6x20	GK20 D6	KEY01 M5
55-83mm	SR55 M6x20	GK20 D6	KEY01 M5
70-108mm	SR55 M8x25	GK20 D8	KEY01 M6
90-153mm	SR55 M0x30	GK20 D10	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)

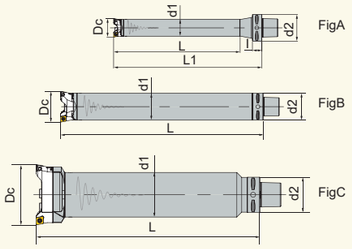
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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 Φ55-Φ153，PSC 短锥模块化接口 , 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 Φ55-Φ153.Hollow short taper modular type PSC 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	l	Fig	Kg	适配刀座 Cartridge	在库 Stock
VBR D50.C5.305	55-70	50	50	305	-	-	B	4.22	C90A D055-070.CC09	◐
	68-83	50	50	305	-	-	B	4.22	C90A D50.6883.CC09	◐
VBR D50.C6.430	55-70	50	63	305	430	22.5	A	6.87	C90A D055-070.CC09	○
	68-83	50	63	305	430	22.5	A	6.87	C90A D50.6883.CC09	○
VBR D63.C6.400	70-90	63	63	400	-	-	B	8.94	C90A D070-090.CC12	◐
	88-108	63	63	400	-	-	B	8.94	C90A D63.88108.CC12	◐
VBR D63.C8.500	70-90	63	80	385	500	30.5	A	12.53	C90A D070-090.CC12	○
	88-108	63	80	385	500	30.5	A	12.53	C90A D63.88108.CC12	○
VBR D80.C6.400	90-110	80	63	400	-	-	B	14.54	C90A D090-110.CC12	○
	108-128	80	63	400	-	-	B	14.54	C90A D80.108128.CC12	○
VBR D80.C8.410	90-110	80	80	410	-	-	B	15.86	C90A D090-110.CC12	◐
	108-128	80	80	410	-	-	B	15.86	C90A D80.108128.CC12	◐
VBR D80.C8.500	90-110	80	80	500	-	-	B	17.71	C90A D090-110.CC12	◐
	108-128	80	80	500	-	-	B	17.71	C90A D80.108128.CC12	◐
VBR D100.C6.400	110-133	80	63	400	-	-	C	15.12	C90A D110-133.CC12	○
	130-153	80	63	400	-	-	C	15.12	C90A D130-153.CC12	○
VBR D100.C8.500	110-133	80	80	500	-	-	C	17.79	C90A D110-133.CC12	◐
	130-153	80	80	500	-	-	C	17.79	C90A D130-153.CC12	◐

- 适配刀座需单独订购，请参照：☞ A6-A8 页。
- 适配刀柄需单独订购。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBF D50.C5.305。

- The cartridge should be ordered separately, please see page A6-A8.
- The adaptor should be ordered separately.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: I PC VBF D50.C5.305.

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
21-42mm	SR55 M4x16	GK20 D4	KEY01 M3
33-47mm	SR55 M5x16	GK20 D5	KEY01 M4
41-67mm	SR55 M6x20	GK20 D6	KEY01 M5
55-83mm	SR55 M6x20	GK20 D6	KEY01 M5
70-108mm	SR55 M8x25	GK20 D8	KEY01 M6
90-153mm	SR55 M0x30	GK20 D10	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)

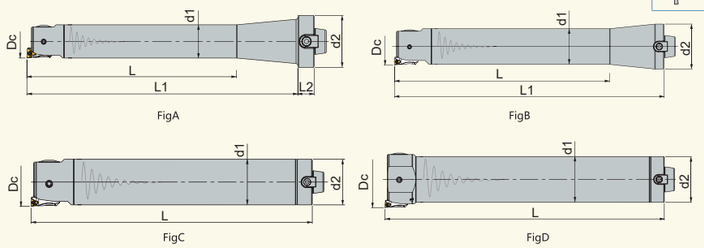
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

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 Φ21-Φ212，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 Φ21-Φ212. 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	在库 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	80	80	485	-	-	D	18.4	FRB 30A...	◐
	130-182	80	80	485	-	-	D	18.4	FRB 30B...	◐
	160-212	80	80	485	-	-	D	18.4	FRB 30C...	◐

- 当 d1≤50 时，刀杆镗孔深度是镗孔直径的六倍，当 d1≥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：☞ A15-A16 页。
- 适配刀柄需单独订购，请参照：☞ A45-A47 页。
- 刀具有内冷出水孔。
- 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≤50, and hole depth is 6D(tool body diameter) when d1≥63.
- The cartridge should be ordered separately, please see page A15-A16.
- The adaptor should be ordered separately, please see page A45-A47.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBF D20.ES0.130

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 secrew	调整扳手 Allen key for adjusting screw
VBF D20.E50.130	SR54-2 M4x4	PL04 12x9	SR55 M5x12	SR20 M4x6-X	KEY03 T15	KEY01 M2
VBF D25.E50.155	SR54-2 M4x6	PL04 12x9	SR55 M5x12	SR20 M4x8-X	KEY03 T15	KEY01 M2
VBF D32.E50.200	SR54-2 M5x8	PL04 12x9	SR55 M5x12	SR56 M5x10	KEY01 M3	KEY01 M2.5
VBF D40.E50.245	SR54 M6x10	PL04 12x9	SR55 M5x12	SR56 M5x12	KEY01 M3	KEY01 M3
VBF D50.E63.305	SR54 M6x12	PL04 14x12	SR55 M5x16	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

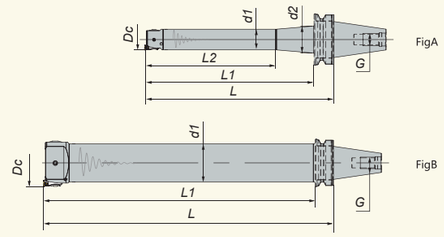
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期）Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期）Order on demand (please confirm delivery time when ordering it)

VBF 系列阻尼减振精镗刀（整体式 7D）

VBF Damping Rough Boring Tool (Integral 7XD)

单刃可微调，微调精度每格直径 0.01mm，加工范围 Φ21-Φ212，整体式阻尼减振镗刀，刚性足，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 Φ21-Φ212. Integral damping boring tool with high rigidity and mini boring 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	L1	L	L2	Fig	G	Kg	精镗刀头 Cartridge	在库 Stock
BT50 VBF D20.208	21-26	20	27	170	208	130	A	24	3.9	FRB 10A…	◐
	25-31	20	27	170	208	130	A	24	3.9	FRB 10B…	◐
	30-36	20	27	170	208	130	A	24	3.9	FRB 10C…	◐
BT50 VBF D25.243	26-34	25	34	205	243	155	A	24	4.5	FRB 12A…	◐
	33-41	25	34	205	243	155	A	24	4.5	FRB 12B…	◐
	40-48	25	34	205	243	155	A	24	4.5	FRB 12C…	◐
FBT50 VBF D32.300	33-43	32	42	262	300	200	A	24	5.5	FRB 16A…	◐
	42-52	32	42	262	300	200	A	24	5.5	FRB 16B…	◐
	51-61	32	42	262	300	200	A	24	5.5	FRB 16C…	◐
FBT50 VBF D40.363	42-54	40	52	325	363	250	A	24	7.4	FRB 20A…	◐
	53-65	40	52	325	363	250	A	24	7.4	FRB 20B…	◐
	64-76	40	52	325	363	250	A	24	7.4	FRB 20C…	◐
FBT50 VBF D50.422	53-69	50	63	384	422	305	A	24	9.6	FRB 25A…	◐
	68-84	50	63	384	422	305	A	24	9.6	FRB 25B…	◐
	83-99	50	63	384	422	305	A	24	9.6	FRB 25C…	◐
FBT50 VBF D63.490	68-100	63	/	451	489	/	B	24	14.1	FRB 30A…	◐
	98-130	63	/	451	489	/	B	24	14.1	FRB 30B…	◐
	128-160	63	/	451	489	/	B	24	14.1	FRB 30C…	◐
FBT50 VBF D80.608	88-120	80	/	570	608	/	B	24	22.3	FRB 30A…	◐
	118-150	80	/	570	608	/	B	24	22.3	FRB 30B…	◐
	148-180	80	/	570	608	/	B	24	22.3	FRB 30C…	◐
FBT50 VBF D100.606	100-152	80	/	568	606	/	B	24	22.5	FRB 30A…	◐
	130-182	80	/	568	606	/	B	24	22.5	FRB 30B…	◐
	160-212	80	/	568	606	/	B	24	22.5	FRB 30C…	◐

- 当 d1 ≤ 50 时，刀杆镗孔深度是镗孔直径的 6 倍，当 d1≥63 时，刀杆镗孔深度是镗杆直径的 7 倍。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 BT50 VBF D20.208。

- Hole depth is 6D(hole diameter) when d1≤50, and hole depth is 7D(tool body diameter) when d1≥63.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC BT50 VBF D20.208.

备件

Spare Parts

规格型号 Designation	LOCK 螺钉 Lock screw	刀头锁紧扳手 Allen key for cartridge clamping secrew	刀头锁紧螺钉 Clamp screw for cartridge	调整扳手 Allen key for adjusting screw
BT50 VBF D20.208	SR54-2 M4x4	KEY03 T15	SR20 M4x6-X	KEY01 M2
BT50 VBF D25.243	SR54-2 M4x6	KEY03 T15	SR20 M4x8-X	KEY01 M2
FBT50 VBF D32.300	SR54-2 M5x8	KEY01 M3	SR56 M5x10	KEY01 M2.5
FBT50 VBF D40.363	SR54 M6x10	KEY01 M3	SR56 M5x12	KEY01 M3
FBT50 VBF D50.422	SR54 M6x12	KEY01 M4	SR56 M6x16	KEY01 M3
FBT50 VBF D63.490	SR54 M10x16	KEY01 M5	SR56 M8x20	KEY01 M5
FBT50 VBF D80.608	SR54 M10x20	KEY01 M5	SR56 M8x25	KEY01 M5
FBT50 VBF D100.606	SR54 M10x20	KEY01 M5	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)

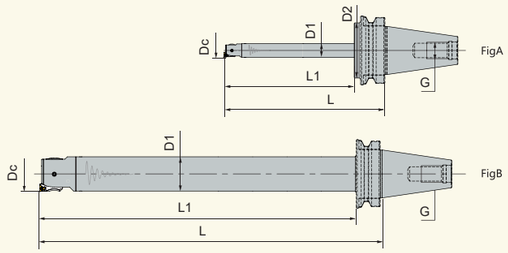
VBF 系列阻尼减振精镗刀（整体式 10D）

VBF Damping Rough Boring Tool (Integral 10XD)

单刃可微调，微调精度每格直径 0.01mm，加工范围 Φ21-Φ212，整体式阻尼减振镗刀，刚性足，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 Φ21-Φ212. Integral damping boring tool with high rigidity and mini boring 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	Fig	G	Kg	精镗刀头 Cartridge	在库 Stock
FBT50 VBF D20.247.VE	21-26	20	80	247	200	A	24	4.3	FRB 10A…	◐
	25-31	20	80	247	200	A	24	4.3	FRB 10B…	◐
	30-36	20	80	247	200	A	24	4.3	FRB 10C…	◐
FBT50 VBF D25.288.VE	26-34	25	-	288	250	B	24	4.9	FRB 12A…	◐
	33-41	25	-	288	250	B	24	4.9	FRB 12B…	◐
	40-48	25	-	288	250	B	24	4.9	FRB 12C…	◐
FBT50 VBF D32.358.VE	33-43	32	-	358	320	B	24	6.2	FRB 16A…	◐
	42-52	32	-	358	320	B	24	6.2	FRB 16B…	◐
	51-61	32	-	358	320	B	24	6.2	FRB 16C…	◐
FBT50 VBF D40.438.VE	42-54	40	-	438	400	B	24	8.7	FRB 20A…	◐
	53-65	40	-	438	400	B	24	8.7	FRB 20B…	◐
	64-76	40	-	438	400	B	24	8.7	FRB 20C…	◐
FBT50 VBF D50.538.VE	53-69	50	-	538	500	B	24	12.5	FRB 25A…	◐
	68-84	50	-	538	500	B	24	12.5	FRB 25B…	◐
	83-99	50	-	538	500	B	24	12.5	FRB 25C…	◐
FBT50 VBF D63.668.VE	68-100	63	-	668	630	B	24	23	FRB 30A…	◐
	98-130	63	-	668	630	B	24	23	FRB 30B…	◐
	128-160	63	-	668	630	B	24	23	FRB 30C…	◐
FBT50 VBF D80.838.VE	88-120	80	-	838	800	B	24	41	FRB 30A…	◐
	118-150	80	-	838	800	B	24	41	FRB 30B…	◐
	148-180	80	-	838	800	B	24	41	FRB 30C…	◐
FBT50 VBF D100.838.VE	100-152	80	-	838	800	B	24	41.2	FRB 30A…	◐
	130-182	80	-	838	800	B	24	41.2	FRB 30B…	◐
	160-212	80	-	838	800	B	24	41.2	FRB 30C…	◐

- 刀杆镗孔深度是镗杆直径的 10 倍径。
- 精镗刀头需单独订购，请参照：☞A15-A16 页。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 FBT50 VBF D20.247.VE。

- Hole depth is 10 shank diameter.
- The cartridge should be ordered separately, please see page A15-A16.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC FBT50 VBF D20.247.VE.

备件

Spare Parts

规格型号 Designation	LOCK 螺钉 Lock screw	刀头锁紧扳手 Allen key for cartridge clamping secrew	刀头锁紧螺钉 Clamp screw for cartridge	调整扳手 Allen key for adjusting screw
FBT50 VBF D20.247.VE	SR54-2 M4x4	KEY03 T15	SR20 M4x6-X	KEY01 M2
FBT50 VBF D25.288.VE	SR54-2 M4x6	KEY03 T15	SR20 M4x8-X	KEY01 M2
FBT50 VBF D32.358.VE	SR54-2 M5x8	KEY01 M3	SR56 M5x10	KEY01 M2.5
FBT50 VBF D40.438.VE	SR54 M6x10	KEY01 M3	SR56 M5x12	KEY01 M3
FBT50 VBF D50.538.VE	SR54 M6x12	KEY01 M4	SR56 M6x16	KEY01 M3
FBT50 VBF D63.668.VE	SR54 M10x16	KEY01 M5	SR56 M8x20	KEY01 M5
FBT50 VBF D80.838.VE	SR54 M10x20	KEY01 M5	SR56 M8x25	KEY01 M5
FBT50 VBF D100.838.VE	SR54 M10x20	KEY01 M5	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)

DAMPING BORING TOOL 阻尼减振镗刀

阻尼减振刀具 DAMPING TOOLS

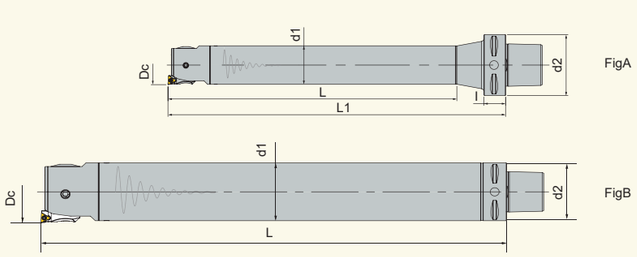
VBF 系列阻尼减振精镗刀

VBF Damping Rough Boring Tool (PSC)

单刃可微调，微调精度每格直径 0.01mm，加工范围 Φ42-Φ160，PSC 短锥模块化接口，刚性足，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 Φ42-Φ160. Hollow short taper modular type PSC 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	l	Fig	Kg	精镗刀头 Cartridge	在库 Stock
VBF D40.C6.300	42-54	40	63	300	350	22.5	A	4.3	FRB 20A…	◐
	53-65	40	63	300	350	22.5	A	4.3	FRB 20B…	◐
	64-76	40	63	300	350	22.5	A	4.3	FRB 20C…	◐
VBF D50.C6.375	53-69	50	63	375	450	22.5	A	7.1	FRB 25A…	◐
	68-84	50	63	375	450	22.5	A	7.1	FRB 25B…	◐
	83-99	50	63	375	450	22.5	A	7.1	FRB 25C…	◐
VBF D63.C6.475	68-100	63	63	475	-	-	B	11.2	FRB 30A…	◐
	98-130	63	63	475	-	-	B	11.2	FRB 30B…	◐
	128-160	63	63	475	-	-	B	11.2	FRB 30C…	◐

- 精镗刀头需单独订购，请参照：☞A15-A16 页。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBF D40.C6.300。
- The cartridge should be ordered separately, please see page A15-A16.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBF D40.C6.300

备件

Spare Parts

规格型号 Designation	LOCK 螺钉 Lock screw	刀头锁紧扳手 Allen key for cartridge clamping secrew	刀头锁紧螺钉 Clamp screw for cartridge	调整扳手 Allen key for adjusting screw
VBF D40.C6.300	SR54 M6x10	KEY01 M3	SR56 M5x12	KEY01 M3
VBF D50.C6.375	SR54 M6x12	KEY01 M4	SR56 M6x16	KEY01 M3
VBF D63.C6.475	SR54 M10x16	KEY01 M5	SR56 M8x20	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)

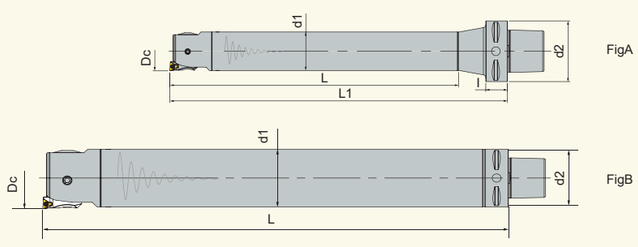
VBF 系列阻尼减振精镗刀

VBF Damping Rough Boring Tool (PSC)

单刃可微调，微调精度每格直径 0.01mm，加工范围 Φ21-Φ76，PSC 短锥模块化接口，刚性足，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 Φ21-Φ76. Hollow short taper modular type PSC 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	l	Fig	Kg	精镗刀头 Cartridge	在库 Stock
VBF D20.C4.190	21-26	20	40	130	191	20.5	A	0.7	FRB 10A…	◐
	25-31	20	40	130	191	20.5	A	0.7	FRB 10B…	◐
	30-36	20	40	130	191	20.5	A	0.7	FRB 10C…	◐
VBF D25.C4.230	26-34	25	40	159	230	20.5	A	1.21	FRB 12A…	◐
	33-41	25	40	159	230	20.5	A	1.21	FRB 12B…	◐
	40-48	25	40	159	230	20.5	A	1.21	FRB 12C…	◐
VBF D32.C3.220	33-43	32	32	221	-	-	B	1.59	FRB 16A…	◐
	42-52	32	32	221	-	-	B	1.59	FRB 16B…	◐
	51-61	32	32	221	-	-	B	1.59	FRB 16C…	◐
VBF D32.C4.265	33-43	32	40	200	268	20.5	A	2.04	FRB 16A…	○
	42-52	32	40	200	268	20.5	A	2.04	FRB 16B…	○
	51-61	32	40	200	268	20.5	A	2.04	FRB 16C…	○
VBF D32.C6.295	33-43	32	63	200	295	22.5	A	2.79	FRB 16A…	○
	42-52	32	63	200	295	22.5	A	2.79	FRB 16B…	○
	51-61	32	63	200	295	22.5	A	2.79	FRB 16C…	○
VBF D40.C4.220	42-54	40	40	220	-	-	B	2.67	FRB 20A…	◐
	53-65	40	40	220	-	-	B	2.67	FRB 20B…	◐
	64-76	40	40	220	-	-	B	2.67	FRB 20C…	◐
VBF D40.C5.335	42-54	40	50	255	336	20.5	A	4.09	FRB 20A…	○
	53-65	40	50	255	336	336	A	4.09	FRB 20B…	○
	64-76	40	50	255	336	336	A	4.09	FRB 20C…	○
VBF D40.C6.355	42-54	40	63	255	356	22.5	A	4.73	FRB 20A…	○
	53-65	40	63	255	356	22.5	A	4.73	FRB 20B…	○
	64-76	40	63	255	356	22.5	A	4.73	FRB 20C…	○

- 精镗刀头需单独订购，请参照：☞A15-A16 页。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBF D40.C6.300。

- The cartridge should be ordered separately, please see page A15-A16.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBF D40.C6.300

备件

Spare Parts

规格型号 Designation	LOCK 螺钉 Lock screw	刀头锁紧扳手 Allen key for cartridge clamping secrew	刀头锁紧螺钉 Clamp screw for cartridge	调整扳手 Allen key for adjusting screw
VBF D20.C4.190	SR54-2 M4x4	KEY03 T15	SR20 M4x6-X	KEY01 M2
VBF D25.C4.230	SR54-2 M4x6	KEY03 T15	SR20 M4x8-X	KEY01 M2
VBF D32.C3.220	SR54-2 M5x8	KEY01 M3	SR56 M5x10	KEY01 M2.5
VBF D32.C4.265	SR54-2 M5x8	KEY01 M3	SR56 M5x10	KEY01 M2.5
VBF D32.C6.295	SR54-2 M5x8	KEY01 M3	SR56 M5x10	KEY01 M2.5
VBF D40.C4.220	SR54 M6x10	KEY01 M3	SR56 M5x12	KEY01 M3
VBF D40.C5.335	SR54 M6x10	KEY01 M3	SR56 M5x12	KEY01 M3
VBF D40.C6.355	SR54 M6x10	KEY01 M3	SR56 M5x12	KEY01 M3

● 标准库存
Item in stock

◐ 半标准库存 (订货时，请确认交货期)
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DAMPING BORING TOOL 阻尼减振镗刀

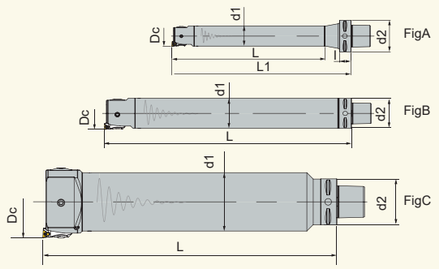
VBF 系列阻尼减振精镗刀

VBF Damping Rough Boring Tool (PSC)

单刃可微调，微调精度每格直径 0.01mm，加工范围 Φ53-Φ212，PSC 短锥模块化接口，刚性足，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 Φ53-Φ212. Hollow short taper modular type PSC 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	l	Fig	Kg	精镗刀头 Cartridge	在库 Stock
VBF D50.C5.305	53-69	50	50	305	-	-	B	4.43	FRB 25A…	◐
	68-84	50	50	305	-	-	B	4.43	FRB 25B…	◐
	83-99	50	50	305	-	-	B	4.43	FRB 25C…	◐
VBF D50.C6.425	53-69	50	63	305	424	22.5	A	6.94	FRB 25A…	○
	68-84	50	63	305	424	22.5	A	6.94	FRB 25B…	○
	83-99	50	63	305	424	22.5	A	6.94	FRB 25C…	○
VBF D63.C6.400	68-100	63	63	400	-	-	B	9.53	FRB 30A…	◐
	98-130	63	63	400	-	-	B	9.53	FRB 30B…	◐
	128-160	63	63	400	-	-	B	9.53	FRB 30C…	◐
VBF D63.C8.500	68-100	63	80	385	500	30.5	A	13.11	FRB 30A…	○
	98-130	63	80	385	500	30.5	A	13.11	FRB 30B…	○
	128-160	63	80	385	500	30.5	A	13.11	FRB 30C…	○
VBF D80.C6.400	88-120	80	63	402	-	-	C	15.49	FRB 30A…	○
	118-150	80	63	402	-	-	C	15.49	FRB 30B…	○
	148-180	80	63	402	-	-	C	15.49	FRB 30C…	○
VBF D80.C8.410	88-120	80	80	410	-	-	B	16.68	FRB 30A…	◐
	118-150	80	80	410	-	-	B	16.68	FRB 30B…	◐
	148-180	80	80	410	-	-	B	16.68	FRB 30C…	◐
VBF D80.C8.500	88-120	80	80	500	-	-	B	18.55	FRB 30A…	◐
	118-150	80	80	500	-	-	B	18.55	FRB 30B…	◐
	148-180	80	80	500	-	-	B	18.55	FRB 30C…	◐
VBF D100.C6.400	100-152	80	63	400	-	-	C	15.73	FRB 30A…	○
	130-182	80	63	400	-	-	C	15.73	FRB 30B…	○
	160-212	80	63	400	-	-	C	15.73	FRB 30C…	○
VBF D100.C8.405	100-152	80	80	408	-	-	C	16.92	FRB 30A…	◐
	130-182	80	80	408	-	-	C	16.92	FRB 30B…	◐
	160-212	80	80	408	-	-	C	16.92	FRB 30C…	◐
VBF D100.C8.500	100-152	80	80	498	-	-	C	18.79	FRB 30A…	◐
	130-182	80	80	498	-	-	C	18.79	FRB 30B…	◐
	160-212	80	80	498	-	-	C	18.79	FRB 30C…	◐

- 精镗刀头需单独订购，请参照：☞A15-A16 页。
- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBF D50.C5.305。

- The cartridge should be ordered separately, please see page A15-A16.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBF D50.C5.305.

备件

Spare Parts

规格型号 Designation	LOCK 螺钉 Lock screw	刀头锁紧扳手 Allen key for cartridge clamping secrew	刀头锁紧螺钉 Clamp screw for cartridge	调整扳手 Allen key for adjusting screw
VBF D50.C5.305	SR54 M6x12	KEY01 M4	SR56 M6x16	KEY01 M3
VBF D50.C6.425	SR54 M6x12	KEY01 M4	SR56 M6x16	KEY01 M3
VBF D63.C6.400	SR54 M10x16	KEY01 M5	SR56 M8x20	KEY01 M5
VBF D63.C8.500	SR54 M10x16	KEY01 M5	SR56 M8x20	KEY01 M5
VBF D80.C6.400	SR54 M10x20	KEY01 M5	SR56 M8x25	KEY01 M5
VBF D80.C8.410	SR54 M10x20	KEY01 M5	SR56 M8x25	KEY01 M5
VBF D80.C8.500	SR54 M10x20	KEY01 M5	SR56 M8x25	KEY01 M5
VBF D100.C6.400	SR54 M10x20	KEY01 M5	SR56 M8x25	KEY01 M5
VBF D100.C8.405	SR54 M10x20	KEY01 M5	SR56 M8x25	KEY01 M5
VBF D100.C8.500	SR54 M10x20	KEY01 M5	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)

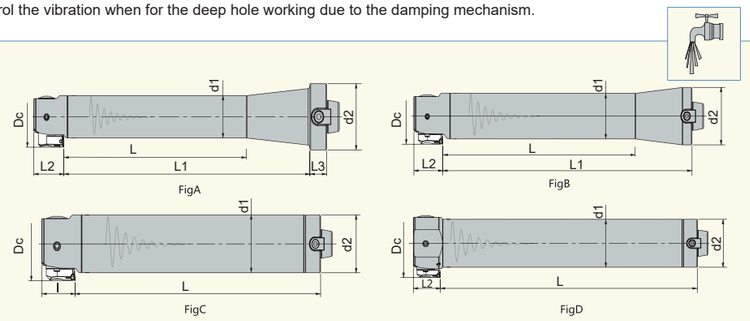
VBF 系列阻尼减振微调精镗刀（反精镗加工示意）

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 Φ30-Φ212. 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 ≥ (Dc+Dl)/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 isΦ30-Φ212 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≥(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	在库 Stock
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	80	80	435	-	46	-	D	18.4	FRB 30A...	◐
	130-182	80	80	435	-	46	-	D	18.4	FRB 30B...	◐
	160-212	80	80	435	-	46	-	D	18.4	FRB 30C...	◐

- 精镗刀头需单独订购，请参照：☞A15-A16 页。
- 适配刀柄需单独订购，请参照：☞A45-A47 页。
- 刀具有内冷出水孔。
- 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 A15-A16.
- The adaptor should be ordered separately, please see page A45-A47.
- With coolant hole.
- Suggest doing 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 secrew	调整扳手 Allen key for adjusting screw
VBF D20.E50.130	SR54-2 M4x4	PL04 12x9	SR55 M5x12	SR20 M4x6-X	KEY03 T15	KEY01 M2
VBF D25.E50.155	SR54-2 M4x6	PL04 12x9	SR55 M5x12	SR20 M4x8-X	KEY03 T15	KEY01 M2
VBF D32.E50.200	SR54-2 M5x8	PL04 12x9	SR55 M5x12	SR56 M5x10	KEY01 M3	KEY01 M2.5
VBF D40.E50.245	SR54 M6x10	PL04 12x9	SR55 M5x12	SR56 M5x12	KEY01 M3	KEY01 M3
VBF D50.E63.305	SR54 M6x12	PL04 14x12	SR55 M5x16	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)

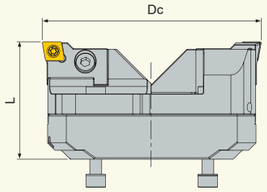
VLR 桥式阻尼减振粗镗刀

VLR Damping Rough Boring Tool with Bridge

适用于大孔加工的双刃桥式粗镗刀，加工范围 Φ148-Φ300。

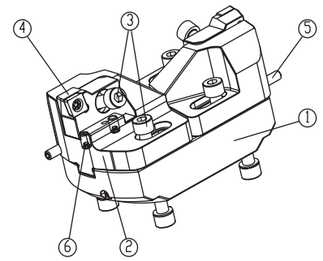
It is suitable for rough machining for large diameter hole, and the diameter range isΦ148-Φ300.





规格型号 Designation	Dc	L	主柄接口 Connection	Kg	适配刀座 Cartridge	在库 Stock
VLR D148-200	148-200	79	VNL32	1.82	V90A D148..	◐
VLR D198-250	198-250	79	VNL32	2.07	V90A D148..	◐
VLR D248-300	248-300	79	VNL32	2.33	V90A D148..	◐

- 适配刀座需单独订购。
- 适配接杆需单独订购，请参照：☞B56 页。
- 刀具有内冷出水孔。
- 订货示例：1 件 VLR D148-200。
- The cartridge should be ordered separately.
- Extension should be ordered separately, please see page B56.
- With coolant hole.
- Ordering sample: 1 PC VLR 0148-200



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 Cartidge	⑤滑块调整螺钉 Adjusting screw for cartridge holder
148-200	VNL 148-200.AL	VLR 148 2 件	SR55 M8x25 6 件	V90A D148.CC12 2 件	SR50 M6x20 2 件
198-250	VNL 198-250.AL	VLR 148 2 件	SR55 M8x25 6 件	V90A D148.CC12 2 件	SR50 M6x20 2 件
248-300	VNL 248-300.AL	VLR 148 2 件	SR55 M8x25 6 件	V90A D148.CC12 2 件	SR50 M6x20 2 件

Dc	⑥刀座调整螺钉 Adjusting screw	滑块锁紧扳手 Allen key for cartridge	刀座调整扳手 Adjustable key for cartridge
148-200	SR50 M6x10 4 件	KEY01 M6	KEY01 M2
198-250	SR50 M6x10 4 件	KEY01 M6	KEY01 M3
248-300	SR50 M6x10 4 件	KEY01 M6	KEY01 M3

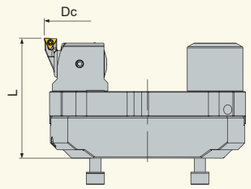
● 标准库存 Item in stock ◐ 半标准库存（订货时，请确认交货期）Item of short delivery time (please confirm delivery time when ordering it) ○ 无库存（订货时，请确认交货期）Order on demand (please confirm delivery time when ordering it)

VLF 桥式阻尼减振微调精镗刀

VLF Damping Precision Boring Tool with Bridge

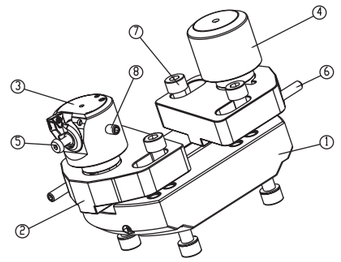
适用于大孔加工的单刃桥式微调精镗刀，调整精度高，每格直径 0.01mm, 加工范围 Φ148-Φ312.
It is suitable for the finish machining for large diameter hole, with high accuracy 0.01mm/dial. Diameter range is Φ148-Φ312.





规格型号 Designation	Dc	L	主柄接口 Connection	Kg	适配刀座 Cartridge	在库 Stock
VLF D148-212.AL	148-212	86.5	VNL32	2.02	FRB 20B..	◐
VLF D198-262.AL	198-262	86.5	VNL32	2.28	FRB 20B..	◐
VLF D248-312.AL	248-312	86.5	VNL32	2.54	FRB 20B..	◐

- 适配刀座需单独订购，请参照：☞A15-A16 页。
- 适配接杆需单独订购，请参照：☞B56 页。
- 刀具有内冷出水孔。
- 订货示例：1 件 VLF D148-212.AL。
- The cartridge should be ordered separately, please see page A15-A16.
- Extension should be ordered separately, please see page B56.
- With coolant hole.
- Ordering sample: 1 PC VLF D148-212.AL.



备件

Spare Parts

Dc	①刀桥 Bridge	②滑块 Cartridge holder	③精镗模块 Precision boring head	④配重模块 Balance block	⑤刀头锁紧螺钉 Clamping screw for cartridge
148-212	VNL 148-200.AL	VLF148.AL 2 件	VLF D40.CD25.35 1 件	VHB 40 1 件	SR56 M5x12 1 件
198-262	VNL 198-250.AL	VLF148.AL 2 件	VLF D40.CD25.35 1 件	VHB 40 1 件	SR56 M5x12 1 件
248-312	VNL 248-300.AL	VLF148.AL 2 件	VLF D40.CD25.35 1 件	VHB 40 1 件	SR56 M5x12 1 件

Dc	⑥滑块调整螺钉 Adjusting screw for cartridge holder	⑦滑块锁紧螺钉 Clamping screw for cartridge holder	⑧ LOCK 螺钉 LOCK screw
148-212	SR50 M6x20 2 件	SR55 M8x25 4 件	SR54 M6x10 1 件
198-262	SR50 M6x20 2 件	SR55 M8x25 4 件	SR54 M6x10 1 件
248-312	SR50 M6x20 2 件	SR55 M8x25 4 件	SR54 M6x10 1 件

备件 Spare parts	螺钉扳手 Allen key
SR56 M5x12	KEY01 M3
SR54 M6x10	KEY01 M3
SR50 M6x20	KEY01 M3
SR55 M8x25	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)

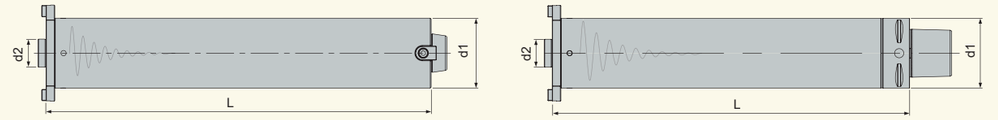
DAMPING BORING TOOL 阻尼减振镗刀

阻尼减振刀具 DAMPING TOOLS

VNL 桥式阻尼减振镗刀接杆

Extension for VNL Damping 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.

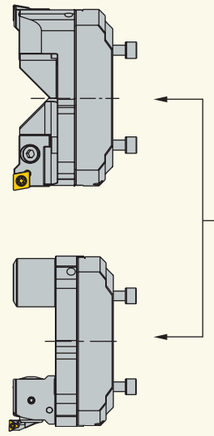


规格型号 Designation	d1	d2	L	Kg	平键 Flat key	在库 Stock
VNL32 D80.E80.440	80	32	440	16.05	PL04 12x10	◐
VNL32 D80.C8.410	80	32	410	17.9	PL04 12X10	◐

- 刀杆有内冷出水孔。
- 适配刀柄需单独订购，请参照：☞A45-A47 页。
- 订货示例：1 件 VNL32 D80.E80.440。
- With coolant hole.
- The adaptor should be ordered separately, please see page A45-A47.
- Ordering sample: 1 PC VNL32 D80.E80.440.

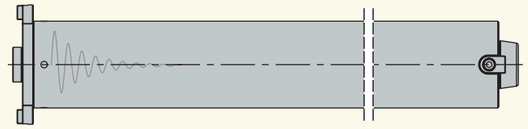
VLR 桥式阻尼减振粗镗刀

VLR Damping Rough Boring Tool with Bridge



VNL 桥式阻尼减振镗刀接杆

Extension for VNL Damping Boring Tool with Bridge



VLF 桥式阻尼减振微调精镗刀

VLF Damping Precision Boring Tool with Bridge

● 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 FACE MILLING CUTTER ADAPTOR

阻尼减振铣刀柄



B

阻尼减振刀具
DAMPING TOOLS

阻尼减振铣刀柄
Damping Face Milling Cutter Adaptor

阻尼减振铣刀柄 B59
Damping Face Milling Cutter Adaptor

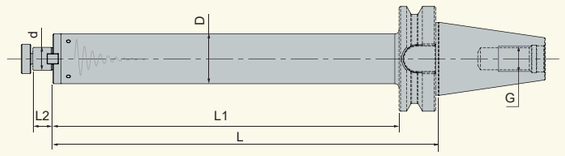
PSC 接口减振铣刀杆 B60
Damping Milling Tool Holder with Type PSC Connection

非标阻尼减振刀具
Special Damping Tools

非标阻尼减振刀具 B64
Special Damping Tools

阻尼减振铣刀杆
Damping Face Milling Cutter Adaptor





规格型号 Designation	L	D	d	L1	L2	G	Bar	Kg	适配刀盘 Insert	在库 Stock
FBT50 FM22xD48x300.V	300	47.5	22	262	19	24	70	7.15	50	◐
FBT50 FM22xD48x370.V	371	47.5	22	333	19	24	70	8.16	50	◐
FBT50 FM22xD60x360.V	360	60	22	322	19	24	70	10.19	63	◐
FBT50 FM22xD60x460.V	460	60	22	422	19	24	70	12.39	63	◐
FBT50 FM27xD76x470.V	470	76	27	432	21	24	70	17.94	80	◐
FBT50 FM27xD76x570.V	572	76	27	534	21	24	70	21.2	80	◐

- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 FBT50 FM22xD48x300.V。
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC FBT50 FM22xD48x300.V.



● **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)

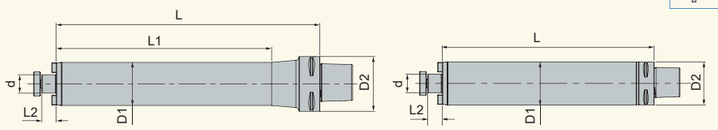
○ **无库存 (订货时，请确认交货期)**
Order on demand
(please confirm delivery time when ordering it)

DAMPING FACE MILLING CUTTER ADAPTOR 阻尼减振铣刀柄

阻尼减振刀具
DAMPING TOOLS

PSC 接口减振铣刀杆
Damping Milling Tool Holder with Type PSC Connection





规格型号 Designation	L	L1	L2	d	D1	D2	Bar	Fig	Kg	在库 Stock
C4 SEM16xD38x130.V	130.0	107.8	17	16.0	38.0	40.0	70	A	1.62	◐
C4 SEM16xD38x200.V	200.0	177.8	17	16.0	38.0	40.0	70	A	2.32	◐
C5 SEM22xD48x180.V	180.0	157.6	19	22.0	47.5	50.0	70	A	3.22	◐
C5 SEM22xD48x220.V	220.0	197.6	19	22.0	47.5	50.0	70	A	6.04	◐
C5 SEM22xD48x270.V	270.0	247.6	19	22.0	47.5	50.0	70	A	6.85	◐
C6 SEM22xD60x200.V	200.0	175.4	19	22.0	60.0	63.0	70	A	8.05	◐
C6 SEM22xD60x260.V	260.0	235.4	19	22.0	60.0	63.0	70	A	9.29	◐
C6 SEM22xD60x310.V	310.0	285.4	19	22.0	60.0	63.0	70	A	10.86	◐
C6 SEM27xD63x200.V	200.0	200.0	21	27.0	63.0	63.0	70	B	8.54	◐
C6 SEM27xD63x260.V	260.0	260.0	21	27.0	63.0	63.0	70	B	9.88	◐
C6 SEM27xD63x310.V	310.0	310.0	21	27.0	63.0	63.0	70	B	11.57	◐
C8 SEM27xD76x220.V	220.0	187.2	21	27.0	76.0	80.0	70	A	12.92	◐
C8 SEM27xD76x320.V	320.0	287.2	21	27.0	76.0	80.0	70	A	13.40	◐
C8 SEM27xD80x360.V	360.0	327.2	21	27.0	76.0	80.0	70	A	18.20	◐
C8 SEM32xD80x220.V	220.0	220.0	24	32.0	80.0	80.0	70	B	13.73	◐
C8 SEM32xD80x320.V	320.0	320.0	24	32.0	80.0	80.0	70	B	18.00	◐
C8 SEM32xD80x360.V	360.0	360.0	24	32.0	80.0	80.0	70	B	19.60	◐

- 刀具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 C4 SEM16xD38x130.V。
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC C4 SEM16xD38x130.V.

● **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)

阻尼减振铣刀柄
Damping Face Milling Cutter Adaptor

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，但是车铣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.

DAMPING FACE MILLING CUTTER ADAPTOR 阻尼减振铣刀柄

阻尼减振刀具
DAMPING TOOLS

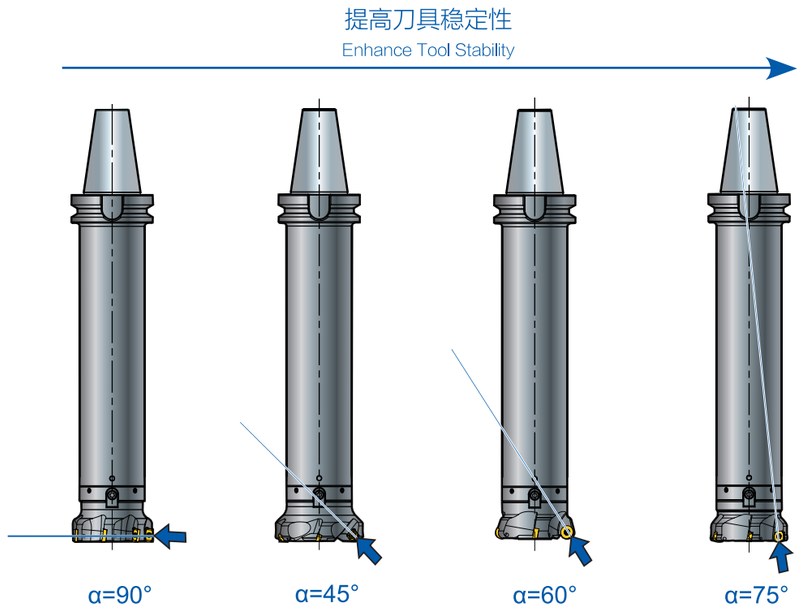
阻尼减振铣刀柄
Damping Face Milling Cutter Adaptor

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

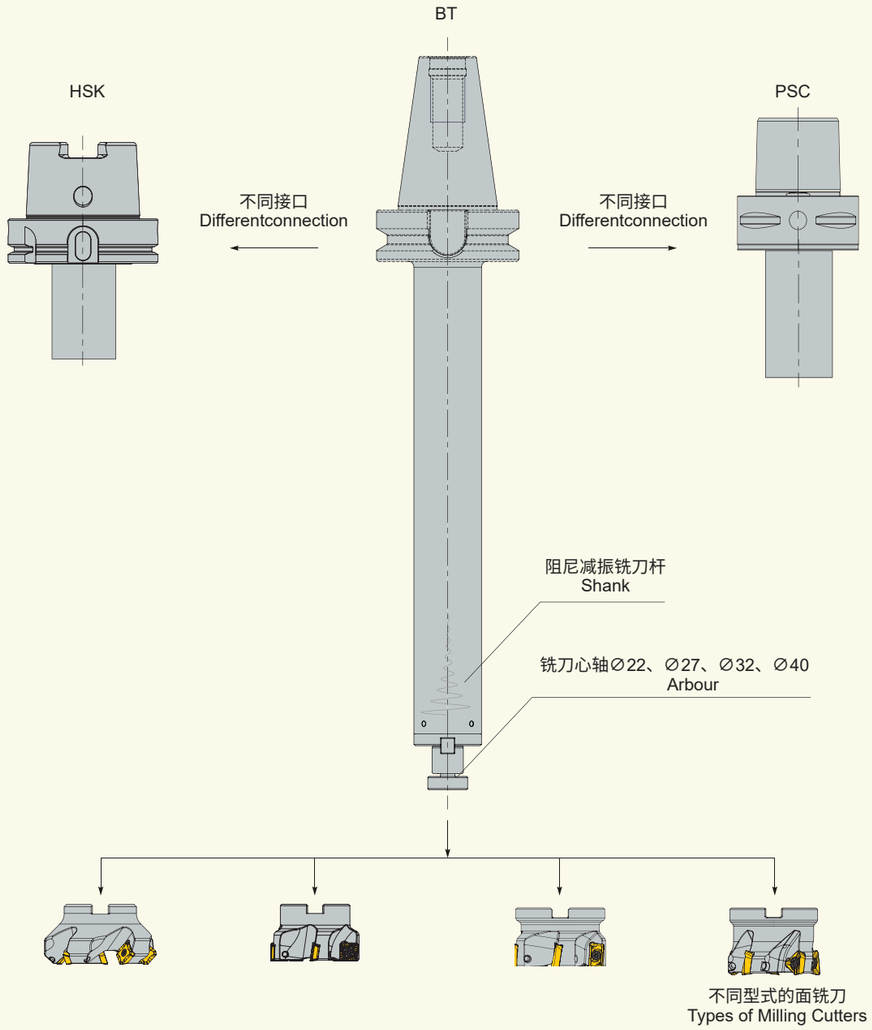
The Influence Facts of Vibration
There are 4 facts will affect the vibration condition mainly, please see below:
- The approach angle will affect the working direction of the cutting force
- Tool diameter which is relative to the radial cutting depth
- Insert groove
- Pitch

Approach Angle
The approach angle decides the direction of cutting force, so it is very important. The approach angle (a) 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.



DAMPING FACE MILLING CUTTER ADAPTOR 阻尼减振铣刀柄

阻尼减振铣刀杆
Cartridge for Damping Turning Tool Holder

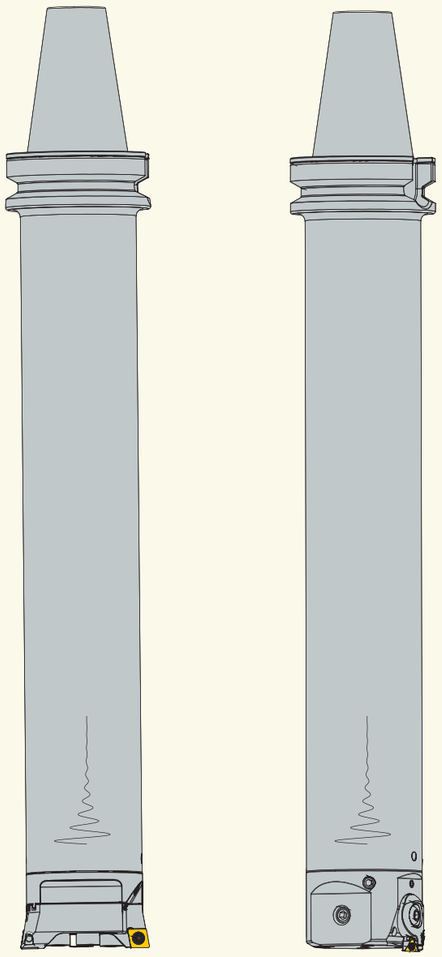


当您需要时 .....

一切为了满足您的需求，当您需要符合解决深孔 / 深腔的阻尼减振镗刀或铣刀杆时，
请向松德刀具销售工程师咨询有关情况。
Please do not hesitate to contact us if you need more solutions for deep-hole machining.

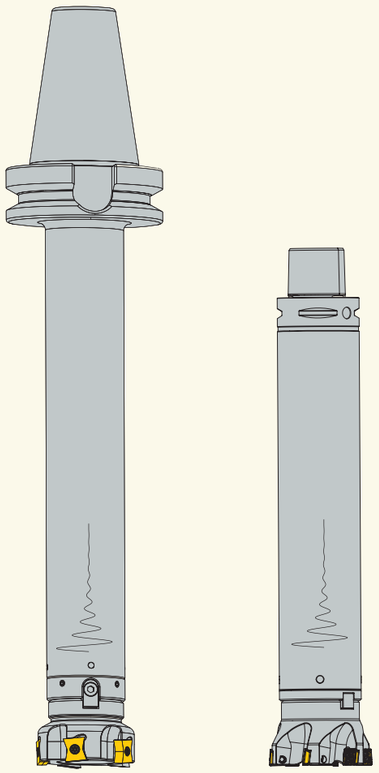
DAMPING FACE MILLING CUTTER ADAPTOR 阻尼减振铣刀柄

非标阻尼减振刀具
Special Damping Tools



当您需要时 .....
一切为了满足您的需求，当您需要符合解决深孔 / 深腔的阻尼减振车刀杆时，
请向松德刀具销售工程师咨询有关情况。
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非标阻尼减振刀具
Special Damping Tools



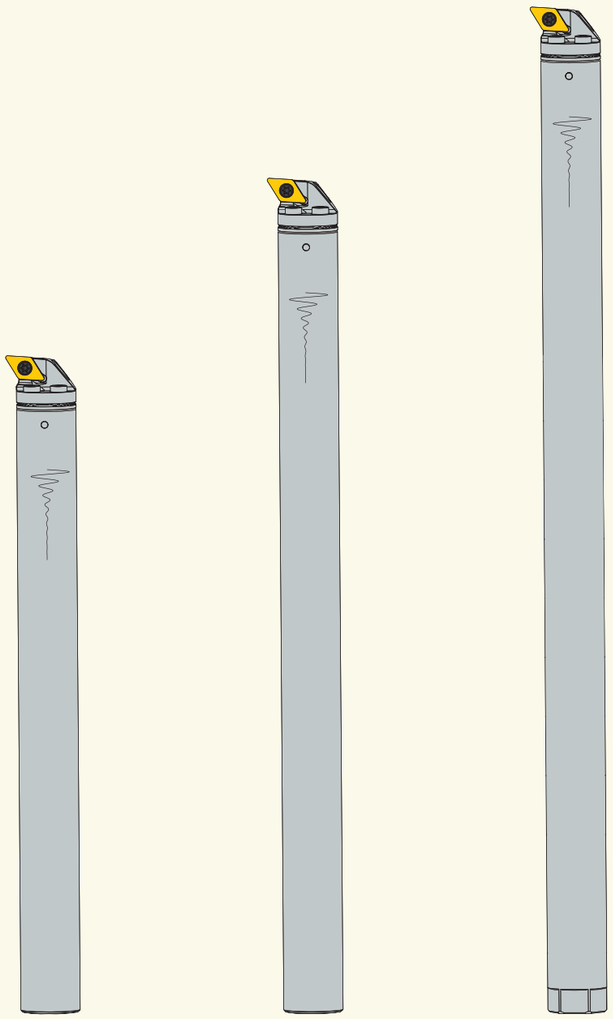
当您需要时 .....

一切为了满足您的需求，当您需要符合解决深孔 / 深腔的阻尼减振镗刀或铣刀杆时，
请向松德刀具销售工程师咨询有关情况。
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SPECIAL DAMPING TOOLS 非标阻尼减振刀具

阻尼减振刀具
DAMPING TOOLS

非标阻尼减振刀具
Special Damping Tools



当您需要时 .....

一切为了满足您的需求，当您需要符合解决深孔 / 深腔的阻尼减振车刀杆时，
请向松德刀具销售工程师咨询有关情况。
Please do not hesitate to contact us if you need more solutions for deep-hole machining.

INDEXABLE INSERT SHOULDER MILLING CUTTER

可转位铣刀



C
铣削刀具
MILLING CUTTERS

可转位立铣刀
Indexable Insert Shoulder Milling Cutter

MF90AP..1135..... C3
MF90AP..1604..... C4
ME90AD..1204..... C5
ME90TP..1003..... C6
ME90WN..0403..... C7

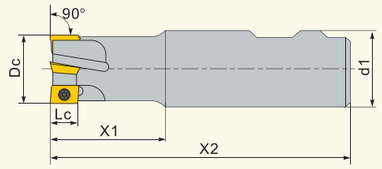
可转位面铣刀
Indexable Insert Face Milling Cutter

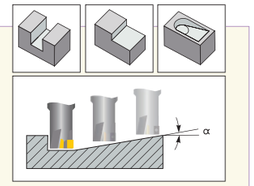
MF90TD..1505..... C8
MF90AN..1706..... C9
MF90AP..1135..... C10
MF90AP..1604..... C11
MF90SP..1004..... C12
MF90LN..1106..... C13
MF90LN..1506..... C14
MF90SD..1205..... C15
MF90SD..1204..... C16
MF90WN..0807..... C17
MF89SN..1305..... C18
MF45SN..1306..... C19
MF45SN..1606..... C20
MF45ON..0506..... C21
MF45SE..12T3..... C22
MF45SET..12T3..... C23
MF45HN..0906..... C24
FFSD.. 快进给铣刀盘 C25
Fast Feed Milling Cutter
FF WX.. 快进给刀盘 C26
Dampening Helical Milling Cutter
精铣刀盘 C27
Fine Milling Cutter
超精铣刀盘 C28
Super Fine Milling Cutter
MM90SD 杆式玉米铣刀 C29
Bar Type of Helical Milling Cutter
MM90SD..1204.. 阻尼减振玉米铣刀 C30
Dampening Helical Milling Cutter
整体式减振玉米铣刀 C31
Integral Type of Anti-vibration Helical Milling Tool
分体式玉米铣刀 C32
Spilt Tpye of Helical Milling Tool

ME90AP..1135..

Kr=90°





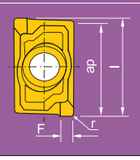


规格型号 Designation	Dc	d1	X1	X2	Lc	齿数 z	α°	Kg	刀片型号 Insert	在库 Stock
ME90AP D016.C16.Z02.11.90	16	C16	26	90	9.52	2	15	0.13	AP..1135..	●
ME90AP D016.W16.Z02.11.85	16	W16	26	85	9.52	2	15	0.13	AP..1135..	●
ME90AP D020.C20.Z02.11.110	20	C20	30	110	9.52	2	7.5	0.25	AP..1135..	●
ME90AP D020.W20.Z02.11.90	20	W20	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。
- 加工不同的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 ME90AP D016.C16.Z02.11.90。
- Inserts should be ordered separately .
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC ME90AP D016.C16.Z02.11 .90

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 claming screw
AP..1135..	SR20 M2.5x6	KEY03 T8

图例 Diagram	刀片型号 Insert	尺寸 Size			加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		r	F	l		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	APMT 113508TR-M8P 2235	0.8	1.2	11.1	中型 Medium duty	●	●	●				2.0-8.0	0.08-0.15
	APMT 113504TR-M9N 2020	0.4	1.2	11.3	中型 Medium duty				●			2.0-8.0	0.10-0.30

● 标准库存 Item in stock

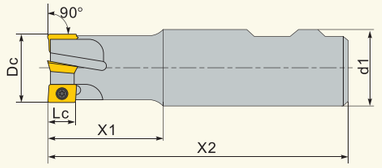
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)

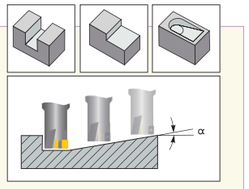
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

ME90AP..1604..

Kr=90°





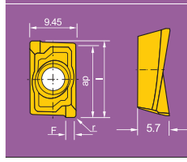


规格型号 Designation	Dc	d1	X1	X2	Lc	齿数 z	α°	Kg	刀片型号 Insert	在库 Stock
ME90AP D025.C25.Z02.16.120	25	C25	26	120	15	2	11.5	0.46	AP..1604..	●
ME90AP D025.W25.Z02.16.95	25	W25	26	95	15	2	11.5	0.4	AP..1604..	●
ME90AP D032.C32.Z03.16.130	32	C32	30	130	15	3	10	0.42	AP..1604..	●
ME90AP D032.W32.Z03.16.110	32	W32	30	110	15	3	10	0.62	AP..1604..	●
ME90AP D040.C40.Z03.16.150	40	C40	45	150	15	3	10	0.86	AP..1604..	●
ME90AP D040.W40.Z03.16.130	40	W40	45	130	15	3	10	0.75	AP..1604..	●

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 ME90AP D025.C25.Z02.16.120
- Insert should be ordered separately .
- Recommended cutting data please see page C47.
- 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 claming screw
AP..1604..	SR20 M4x9.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size			加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		r	F	l		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	APKT 1604TR-R4P 2235	0.8	1.8	17.3	重型 Heavy duty	●	●	●				6.0-14.0	0.10-0.20
	APKT 1604PDER-R5N 2020	0.8	1.7	17.92	中型 Medium duty				●			6.0-14.0	0.15-0.25

● 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)

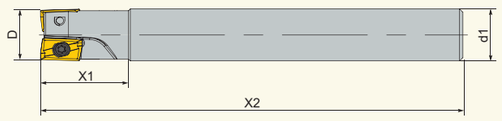
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

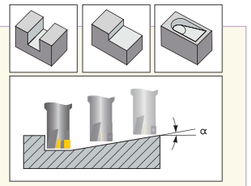
INDEXABLE INSERT SHOULDER MILLING CUTTER 可转位立铣刀

ME90AD..1204..

Kr=90°





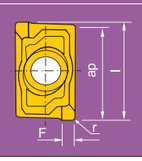


规格型号 Designation	D	d1	X1	X2	刀片数 z	Kg	刀片型号 Insert	在库 Stock
ME90AD D016.C16.Z02.12.120.C	16	C16	25	120	2	0.18	ADKT 120408	●
ME90AD D020.C20.Z03.12.150.C	20	C20	30	150	3	0.22	ADKT 120408	●
ME90AD D025.C25.Z04.12.170.C	25	C25	35	170	4	0.5	ADKT 120408	●

- 刀片请根据不同材料单独订购。
- 订货示例：1 件 ME90AD D016.C16.Z02.12.120.C。
- Inserts should be ordered separately .
- Ordering sample: 1 PC ME90AD D016.C16.Z02.12.120.C.

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 claming screw
ADKT 120408	SR20 M2.5x6	KEY03 T8

图例 Diagram	刀片型号 Insert	尺寸 Size			适配加工材质 Material						切削参数推荐 Cutting parameter	
		l	S	r	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	ADKT 120408PDR-R3S 2135	12.24	13.6	0.8	●				●		1.0-4.0	0.08-0.15

● 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)

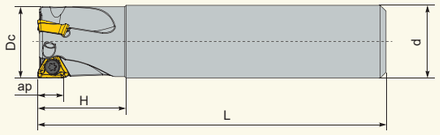
铣削刀具 MILLING CUTTERS

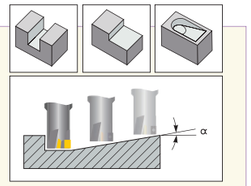
INDEXABLE INSERT SHOULDER MILLING CUTTER 可转位立铣刀

ME90TP..1003..

Kr=90°





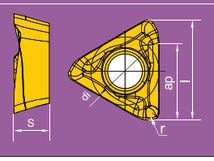


规格型号 Designation	D	ap	Z	L	H	d	Rdº	Kg	刀片型号 Insert	在库 Stock
ME90TP D25.C25.Z03.10.120.C	25	8	3	120	25	25	2.9	0.382	TP..1003..	●
ME90TP D25.C25.Z03.10.200.C	25	8	3	200	40	25	2.9	0.653	TP..1003..	●
ME90TP D32.C32.Z04.10.130.C	32	8	4	130	30	32	2.1	0.703	TP..1003..	●
ME90TP D32.C32.Z04.10.200.C	32	8	4	200	40	32	2.1	1.1	TP..1003..	●
ME90TP D40.C32.Z05.10.130.C	40	8	5	130	30	32	1.6	0.764	TP..1003..	●

- 刀片请根据不同材料单独订购。
- 订货示例：1 件 ME90TP D25.C25.Z03.10.120.C。
- Inserts should be ordered separately .
- Ordering sample: 1 PC ME90TP D25.C25.Z03.10.120.C.

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 claming screw
TP..1003..	SR20 M3.5x6.5	KEY03 T10

图例 Diagram	刀片型号 Insert	尺寸 Size					适配加工材质 Material						切削参数推荐 Cutting parameter	
		l	di	S	r	F	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	TPKT 1003PDR-R3S 4305	10.9	7.5	3.85	0.8	0.7					●		1.2-8.0	0.08-0.20
	TPKT 1003PDR-R3P 2130	10.9	7.5	3.85	0.8	0.7	●	●					1.2-8.0	0.08-0.20
	TPKT 1003PDR-R3K 2130	10.9	7.5	3.85	0.8	0.7			●				1.2-8.0	0.08-0.20

● 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)

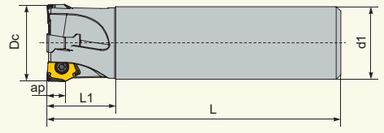
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

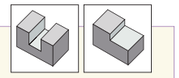
INDEXABLE INSERT SHOULDER MILLING CUTTER 可转位立铣刀

ME90WN..0403..

Kr=90°





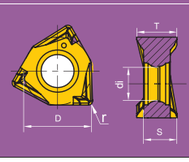


规格型号 Designation	Dc	ap	d1	L	L1	Z	内冷	刀片型号 Insert	在库 Stock
ME90WN D020.C20.Z03.04.150	20	4	20	150	30	3	Y	WN..0403..	◐
ME90WN D025.C25.Z04.04.170	25	4	25	170	30	4	Y	WN..0403..	◐
ME90WN D032.C32.Z05.04.195	32	4	32	195	30	5	Y	WN..0403..	◐
ME90WN D035.C32.Z05.04.195	35	4	32	195	30	5	Y	WN..0403..	◐
ME90WN D040.C32.Z06.04.195	40	4	32	195	30	6	Y	WN..0403..	◐
ME90WN D040.C32.Z03.08.160	40	7.5	32	160	60	3	N	WN..0807..	◐

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 ME90WN D020.C20.Z03.04.150。
- Insert should be ordered separately .
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC ME90WN D020.C20.Z03.04.150.

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 claming screw
WN..0403..	SR20 M2.5x6.5	KEY03 T07
WN..0807..	SR20 M4x11.5	KEY03 T07

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material					切削参数推荐 Cutting parameter		
		D	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	fz(mm/z)
	WNEX 040304-M5G 2230	6.7	3.25	3.3	0.4	●	●	●		●		120-200	4	0.1-0.2
	WNEX 040308-M5G 2230	6.7	3.25	3.3	0.8	●	●	●		●		120-200	4	0.1-0.2
	WNEX 040308-M5G 2240	6.7	3.25	3.3	0.8		●	●		●		120-200	4	0.1-0.2
	WNEX 080708-M5G 2230	12.48	4.6	6.45	0.8	●	●					120-200	7.5	0.1-0.2
	WNEX 080708-M5K 2225	12.48	4.6	6.45	0.8			●				120-200	7.5	0.1-0.2
	WNEX 080708-M7K 2115	12.48	4.6	6.45	0.8			●				120-200	7.5	0.1-0.2
	WNEX 080708-M5G 2240	12.48	4.6	6.45	0.8		●	●		●		120-200	7.5	0.1-0.2

● 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)

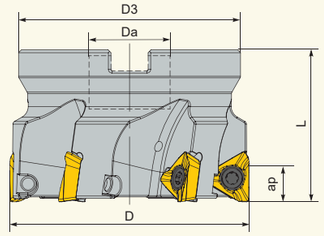
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

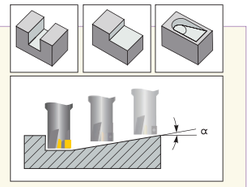
INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90TD..1505..

Kr=90°





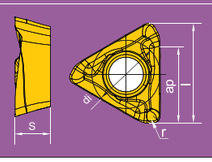


规格型号 Designation	D	ap	Z	L	D3	Da	Rd°	内冷 Coolant	Kg	刀片型号 Insert	在库 Stock
MF90TD D050.B22.Z04.15.C	50	13	4	40	46	22	1.6	Y	0.278	TD..1505..	●
MF90TD D063.B22.Z05.15.C	63	13	5	50	59	22	1.2	Y	0.523	TD..1505..	●
MF90TD D080.B27.Z06.15.C	80	13	6	50	74	27	0.9	Y	1.17	TD..1505..	●
MF90TD D100.B32.Z06.15.C	100	13	6	50	80	32	0.7	Y	1.45	TD..1505..	●
MF90TD D125.B40.Z07.15.C	125	13	7	63	82	40	0.5	Y	2.294	TD..1505..	●
MF90TD D160.B40.Z10.15	160	13	10	63	105	40	0.3	N	3.996	TD..1505..	●
MF90TD D200.B60.Z11.15	200	13	11	63	135	60	0.2	N	5.219	TD..1505..	●

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MF90TD D050.B22.Z04.15.C。
- Insert should be ordered separately .
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF90TD D050.B22.Z04.15.C.

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 claming screw
TD..1505..	SR21 M5x12	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size					适配加工材质 Material						切削参数推荐 Cutting parameter	
		l	di	S	r	F	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	TDKT 1505PDR-R3P 2130	16.7	11.4	5.85	0.8	1.4	●	●					1.5-13.0	0.08-0.15
	TDKT 1505PDR-R3K 2130	16.7	11.4	5.85	0.8	1.4			●				1.5-13.0	0.08-0.15
	TDKT 1505PDR-R3S 4305	16.7	11.4	5.85	0.8	1.4		●			●		1.5-5.0	0.08-0.15

● 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)

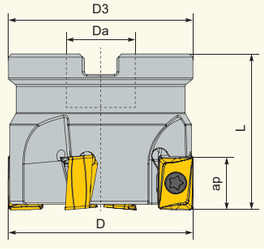
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

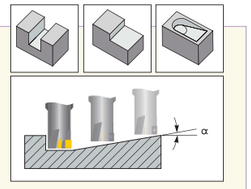
INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90AN..1706..

Kr=90°





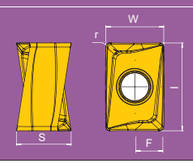


规格型号 Designation	D	ap	Z	L	D3	Da	Rd°	内冷 Coolant	Kg	刀片型号 Insert	在库 Stock
MF90AN D050.B22.Z04.17.C	50	16.3	4	40	48	22	3.8	Y	0.304	AN..1706..	●
MF90AN D063.B27.Z04.17.C	63	16.3	4	50	59.2	27	2	Y	0.669	AN..1706..	●
MF90AN D080.B27.Z05.17.C	80	16.3	5	50	63	27	1.5	Y	0.8	AN..1706..	●
MF90AN D100.B32.Z08.17.C	100	16.3	8	50	80	32	1	Y	1.474	AN..1706..	●
MF90AN D125.B40.Z07.17.C	125	16.3	7	63	82	40	0	Y	2.41	AN..1706..	●
MF90AN D160.B40.Z08.17	160	16.3	8	63	105	40	0	N	4.1	AN..1706..	●
MF90AN D200.B60.Z10.17	200	16.3	10	63	135	60	0	N	5.988	AN..1706..	●
MF90AN D250.B60.Z12.17	250	16.3	12	63	144	60	0	N	9.338	AN..1706..	●

- 刀片请根据不同材料单独订购。
- 加工不同的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MF90AN D050.B22.Z04.17.C。
- Inserts should be ordered separately .
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF90AN D050.B22.Z04.17.C.

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 claming screw
AN..1706..	SR20 M5x14	KEY03 T20

图例 Diagram	刀片型号 Insert	尺寸 Size					适配加工材质 Material						切削参数推荐 Cutting parameter	
		I	W	S	r	F	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	ANKX 170608PNTR-R3P 2130	16.7	11.2	10.4	0.8	4.7	●	●	○				5.00-15.0	0.15-0.3

● 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)

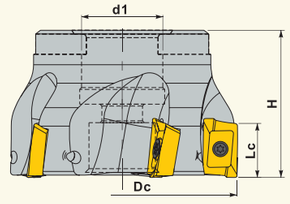
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

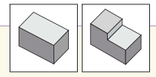
INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90AP..1135..

Kr=90°





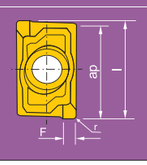


规格型号 Designation	Dc	d1	H	Lc	刀片数 z	α°	Kg	刀片型号 Insert	在库 Stock
MF90AP D040.B16.Z04.11	40	16	40	11	4	1.85	0.25	AP..1135..	●
MF90AP D050.B22.Z05.11	50	22	40	11	5	1.4	0.35	AP..1135..	●
MF90AP D063.B22.Z06.11	63	22	40	11	6	1	0.53	AP..1135..	●
MF90AP D080.B27.Z08.11	80	27	50	11	8	0.9	0.87	AP..1135..	●

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MF90AP D040.B16.Z04.11。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF90AP D040.B16.Z04.11.

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 claming screw
AP..1135..	SR20 M2.5x6	KEY03 T8

图例 Diagram	刀片型号 Insert	尺寸 Size			加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		r	F	I		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	APMT 113508TR-M8P 2235	0.8	1.2	11.1	中型 Medium duty	●	●	●				2.0-8.0	0.08-0.15
	APMT 113504TR-M9N 2020	0.4	1.2	11.3	中型 Medium duty				●			2.0-8.0	0.10-0.30

● 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)

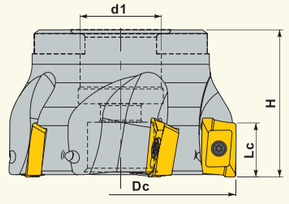
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90AP..1604..

Kr=90°



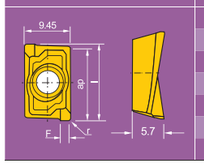


规格型号 Designation	Dc	d1	H	Lc	刀片数 z	α°	Kg	刀片型号 Insert	在库 Stock
MF90AP D040.B16.Z03.16	40	16	40	15	3	4	0.2	AP..1604..	●
MF90AP D050.B22.Z04.16	50	22	40	15	4	2.6	0.33	AP..1604..	●
MF90AP D063.B22.Z05.16	63	22	40	15	5	2	0.44	AP..1604..	●
MF90AP D080.B27.Z06.16	80	27	50	15	6	0.8	0.94	AP..1604..	●
MF90AP D100.B32.Z07.16	100	32	50	15	7	0.7	1.48	AP..1604..	●
MF90AP D125.B40.Z08.16	125	40	63	15	8	0.5	2.92	AP..1604..	●

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MF90AP D040.B16.Z03.16。
- Insert should be ordered separately .
- Recommended cutting data please see page C47.
- 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 claming screw
AP..1604..	SR20 M4x11.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size r	F	l	加工类型 Machine type	适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	APKT 1604TR-R4P 2135	0.8	1.8	17.3	重型 Heavy duty	●	●	●				6.0-14.0	0.10-0.20
	APKT 1604PDER-R5N 2020	0.8	1.7	17.92	中型 Medium duty				●			6.0-14.0	0.15-0.25

● 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)

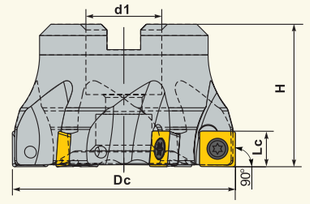
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90SP..1004..

Kr=90°



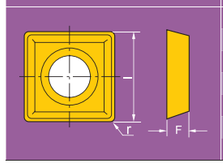


规格型号 Designation	Dc	d1	H	Lc	刀片数 z	α°	Kg	刀片型号 Insert	在库 Stock
MF90SP D040.B16.Z03.10	40	16	40	9.6	3	-	0.19	SP..1004..	●
MF90SP D050.B22.Z04.10	50	22	40	9.6	4	2	0.33	SP..1004..	●
MF90SP D063.B22.Z05.10	63	22	40	9.6	5	0.8	0.45	SP..1004..	●
MF90SP D080.B27.Z05.10	80	27	50	9.6	5	1.25	0.88	SP..1004..	●
MF90SP 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。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MF90SP D040.B16.Z03.10。
- Insert should be ordered separately .
- Recommended cutting data please see page C47.
- 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 claming screw
SP..1004..	SR21 M4x9.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size r	F	l	加工类型 Machine type	适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	SPMT 100408-M8P 2235	10.2	4.23	0.7	中型 Medium duty	●	●					4.0-8.0	0.08-0.15
	SPMT 100408-M8K 2215	10.2	4.23	0.7	中型 Medium duty			●				4.0-8.0	0.08-0.15

● 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)

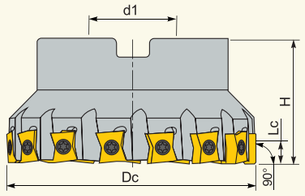
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90LN..1106..

Kr=90°



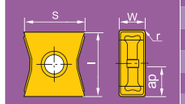


规格型号 Designation	Dc	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在库 Stock
MF90LN D040.B16.Z04.11.R/L	40	16	40	5	4	0.22	LN..1106..	●
MF90LN D050.B22.Z05.11.R/L	50	22	40	5	5	0.32	LN..1106..	●
MF90LN D063.B22.Z06.11.R/L	63	22	40	5	6	0.47	LN..1106..	●
MF90LN D080.B27.Z11.11.R/L	80	27	50	5	11	1.02	LN..1106..	○
MF90LN D100.B32.Z09.11.R/L	100	32	50	5	9	1.38	LN..1106..	●
MF90LN D125.B40.Z10.11.R/L	125	40	63	5	10	2.71	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。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MF90LN D040.B16.Z04.11.R。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- 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 claming screw
LN..1106..	SR20 M3.5x11.5	KEY03 T10

图例 Diagram	刀片型号 Insert	尺寸 Size W	l	S	r	加工类型 Machine type	适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	LNAR 1106F-M8N 2020	6	11	11	0.8	轻型 Light duty				●			1.5-5.0	0.15-0.30
	LNMT 110608-M5G 2230	6	11	11	0.8	中型 Medium duty	●	●	●		●		1.5-5.0	0.10-0.25
	LNMT 110608-M5K 2115	6	11	11	0.8	中型 Medium duty			●				1.5-5.0	0.12-0.30
	LNKX 1106T-R4P 2230	6	11	11	0.8	中型 Medium duty	●	●					1.5-5.0	0.17-0.25

● 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)

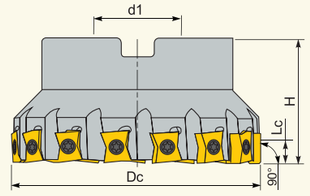
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90LN..1506..

Kr=90°



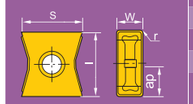


规格型号 Designation	Dc	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在库 Stock
MF90LN D050.B22.Z05.15.R/L	50	22	40	7	5	0.4	LN..1506..	●
MF90LN D063.B22.Z05.15.R/L	63	22	40	7	5	0.5	LN..1506..	●
MF90LN D063.B22.Z08.15.R/L	63	22	40	7	8	0.5	LN..1506..	○
MF90LN D080.B27.Z07.15.R/L	80	27	40	7	7	0.85	LN..1506..	●
MF90LN D080.B27.Z10.15.R/L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

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MF90LN D050.B22.Z05.15.R。
- Insert should be ordered separately .
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF90LN D050.B22.Z05.15.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 claming screw
LN..1506..	SR20 M4x11.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size W	l	S	r	加工类型 Machine type	适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	LNMT 150608-F2K 4125	6	15	13.9	0.8	中型 Medium duty			●				2.0-7.0	0.20-0.30
	LNMT 150608-F2G 2230	6	15	13.9	0.8	中型 Medium duty	●	●	●				2.0-7.0	0.30-0.40
	LNAR 1506F-M8N 2020	6	15	13.9	0.8	轻型 Light duty				●			2.0-7.0	0.10-0.15
	LNMT 150608-F2P 2225	6	15	13.9	0.8	中型 Medium duty	●						1.5-5.0	0.10-0.25
	LNMT 150608-R4P 2235	6	15	13.9	0.8	中型 Medium duty 重型 Heavy duty	●	●					1.5-5.0	0.12-0.30

● 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)

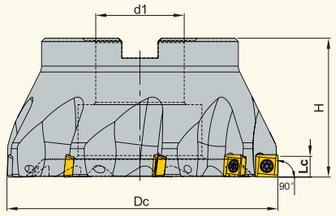
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90SD..1205..

Kr=90°



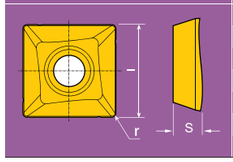


规格型号 Designation	Dc	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在库 Stock
MF90SD D050.B22.Z04.12	50	22	40	11.8	4	0.26	SD..1205..	◐
MF90SD D063.B22.Z05.12	63	22	40	11.8	5	0.42	SD..1205..	◐
MF90SD D080.B27.Z06.12	80	27	50	11.8	6	0.86	SD..1205..	◐
MF90SD D100.B32.Z07.12	100	32	50	11.8	7	1.42	SD..1205..	◐
MF90SD D125.B40.Z08.12	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。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MF90SD D050.B22.Z04.12。
- Insert should be ordered separately.
- Recommended cutting data plsase sea page C47.
- Ordering sample: 1 PC MF90SD 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 claming screw
SD..1205..	SR20 M4x11.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size			加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		l	S	r		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	SDMX 1205-M8P 2230	12.7	5.1	0.8	中型 Medium duty	●	●					4.0-10.0	0.07-0.12
	SDMX 1205-M8K 2215	12.7	5.1	0.8	中型 Medium duty			●				4.0-10.0	0.07-0.12

● 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)

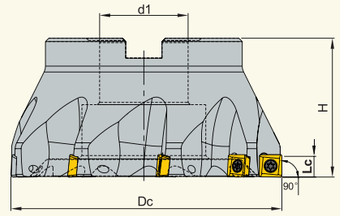
铣削刀具 MILLING CUTTERS

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90SD..1204..

Kr=90°



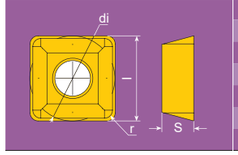


规格型号 Designation	Dc	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在库 Stock
MF90SD D050.B22.Z04.S12.C	50	22	40	11.3	4	0.30	SD..1204	◐
MF90SD D063.B22.Z05.S12.C	63	22	40	11.3	5	0.45	SD..1204	◐
MF90SD D080.B27.Z06.S12.C	80	27	50	11.3	6	0.78	SD..1204	◐
MF90SD D100.B32.Z07.S12.C	100	32	50	11.3	7	1.44	SD..1204	◐
MF90SD D125.B40.Z08.S12.C	125	40	63	11.3	8	2.61	SD..1204	◐

- 刀片请根据不同材料单独订购。
- 订货示例：1 件 MF90SD D050.B22.Z04.S12.C。
- Insert should be ordered separately.
- Ordering sample: 1 PC MF90SD D050.B22.Z04.S12.C.

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 claming screw
SD..1204..	SR21 M4x11.7	KEY03 T20

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter	
		l	di	S	r	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	SDGT 120412-R3S 4305	12.7	12.7	4.75	1.2		●			●		1.0-5.0	0.08-0.2
	SDGT 120412-R3P 1220	12.7	12.7	4.75	1.2	●		●				1.0-5.0	0.08-0.2

● 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)

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF90WN..0807..

Kr=90°



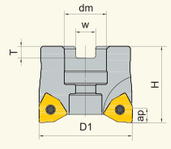


Fig1

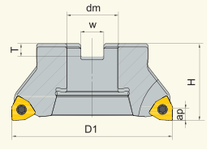


Fig2

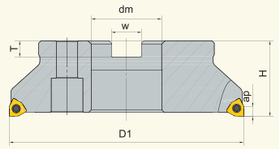


Fig3

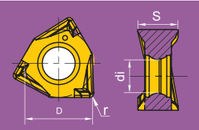
规格型号 Designation	D1	齿数 z	dm	H	W	T	ap	内冷 Coolant	图示 z	刀片型号 Insert	在库 Stock
MF90WN D050.B22.Z05.08	50	5	22	40	10.4	6.3	7.5	N	Fig1	WN..0807..	◐
MF90WN D063.B22.Z06.08	63	6	22	40	10.4	6.3	7.5	N	Fig1	WN..0807..	◐
MF90WN D080.B27.Z07.08	80	7	27	50	12.4	7	7.5	N	Fig1	WN..0807..	◐
MF90WN D100.B32.Z08.08	100	8	32	50	14.4	8	7.5	N	Fig2	WN..0807..	◐
MF90WN D125.B40.Z11.08	125	11	40	63	16.4	9	7.5	N	Fig2	WN..0807..	◐
MF90WN D160.B40.Z12.08	160	12	40	63	16.4	9	7.5	N	Fig3	WN..0807..	◐
MF90WN D200.B60.Z16.08	200	16	60	63	25.7	14	7.5	N	Fig3	WN..0807..	◐

- 刀片请根据不同材料单独订购。
- 加工不同的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MF90WN D050.B22.Z05.08。
- Inserts should be ordered separately .
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF90WN D050.B22.Z05.08.

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 claming screw
WN..0807..	SR20 M4x11.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		
		D	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	fz(mm/rev)
	WNEX 080708-M5G 2230	12.48	4.6	6.45	0.8	●	●					120-200	7.5	0.1-0.2
	WNEX 080708-M5K 2225	12.48	4.6	6.45	0.8			●				120-200	7.5	0.1-0.2
	WNEX 080708-M7K 2115	12.48	4.6	6.45	0.8			●				120-200	7.5	0.1-0.2
	WNEX 080708-M5G 2240	12.48	4.6	6.45	0.8		●	●		●		120-200	7.5	0.1-0.2

● 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)

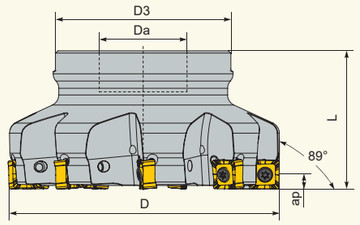
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF89SN..1305..

Kr=89°





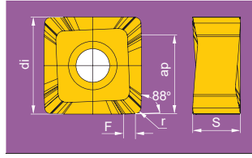
规格型号 Designation	D	ap	齿数 z	L	D3	Da	内冷 Coolant	Kg	刀片型号 Insert	在库 Stock
MF89SN D040.B16.Z04.13.C	40	9	4	40	40	16	Y	0.184	S890 SN..1305..	◐
MF89SN D050.B22.Z04.13.C	50	9	4	40	48	22	Y	0.281	S890 SN..1305..	◐
MF89SN D063.B22.Z05.13.C	63	9	5	40	48	22	Y	0.385	S890 SN..1305..	◐
MF89SN D080.B27.Z07.13.C	80	9	7	50	60	27	Y	0.74	S890 SN..1305..	◐
MF89SN D100.B32.Z08.13.C	100	9	8	50	70	32	Y	1.267	S890 SN..1305..	◐
MF89SN D125.B40.Z09.13.C	125	9	9	63	82	40	Y	2.303	S890 SN..1305..	◐
MF89SN D160.B40.Z10.13	160	9	10	63	106	40	N	4.282	S890 SN..1305..	◐

- 刀片请根据不同材料单独订购。
- 加工不同的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MF89SN D040 B16.Z04.13.C。
- Inserts should be ordered separately .
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF89SN D040 B16.Z04.13.C.

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 claming screw
S890 SN..1305..	SR26 M4x12.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size					适配加工材质 Material						切削参数推荐 Cutting parameter	
		di	S	ap	F	r	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	S890 SNMU 1305PNR-R3P 2130	13	6.45	2.00-9.00	1.8	0.8	●	●					5.0-15.0	0.15-0.3
	S890 SNMU 1305PNR-R3K 2130	13	6.45	2.00-9.00	1.8	0.8			●				5.0-15.0	0.15-0.3

● 标准库存
Item in stock

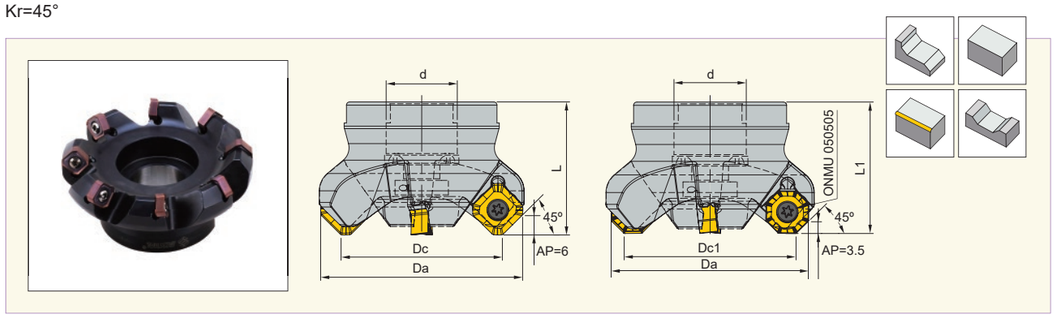
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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 可转位面铣刀

MF45SN..1306..

Kr=45°

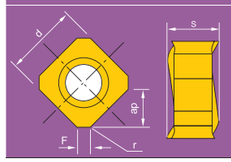


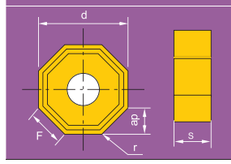
规格型号 Designation	Dc	Dc1	Da	d	ap	L	L1	刀片数 z	Kg	在库 Stock
MF45SN D040.B22.Z04.13	40	42.35	50.4	22	6	41.2	40	4	0.3	◐
MF45SN D050.B22.Z04.13	50	52.35	60.4	22	6	41.2	40	4	0.4	◐
MF45SN D063.B22.Z06.13	63	65.35	73.4	22	6	41.2	40	6	0.5	◐
MF45SN D080.B27.Z07.13	80	82.35	90.4	27	6	51.2	50	7	1	◐
MF45SN D100.B32.Z08.13	100	102.35	110.4	32	6	51.2	50	8	1.4	◐
MF45SN D125.B40.Z10.13	125	125.35	135.4	40	6	64.2	63	10	2.7	◐
MF45SN D160.B40.Z12.13	160	162.35	170.4	40	6	63.0	61.8	12	3.33	◐
MF45SN D200.B60.Z14.13	200	202.35	210.4	60	6	63.0	61.8	14	5.78	◐
MF45SN D250.B60.Z16.13	250	252.35	260.4	60	6	63.0	61.8	16	8.08	◐

- 刀片请根据不同材料单独订购。
- 加工不同的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MF45SN D040.B22.Z04.13。
- Inserts should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF45SN D040.B22.Z04.13.

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 claming screw
SN..1306..	SR26 M4x12.5	KEY03 T15
0N..0505..	SR26 M4x12.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size					加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		d	ap	s	F	r		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	SNMU 1306T-R4P 2235	13	6	6.2	3	0.5	重型 Heavy duty	●	●					2.0-6.0	0.20-0.40
	SNMU 1306F-R4K 2215	13	6	6.2	3	0.5	重型 Heavy duty			●				2.0-6.0	0.15-0.40

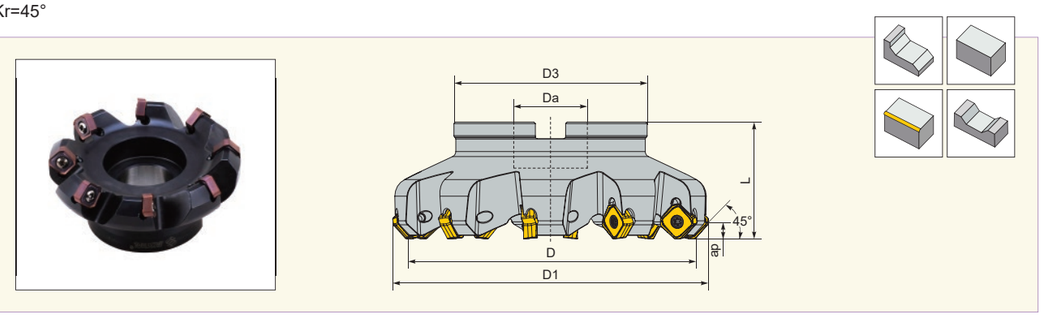
图例 Diagram	刀片型号 Insert	尺寸 Size					加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		d	ap	s	F	r		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	ONEG 050605T-R4P 2235	13	3.5	5.5	5	0.5	重型 Heavy duty	●	●					1.5-3.0	0.3-0.4
	ONEG 050605T-R4K 2215	13	3.5	5.5	5	0.5	重型 Heavy duty			●				1.5-3.0	0.3-0.4

- ● 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 可转位面铣刀

MF45SN..1606..

Kr=45°

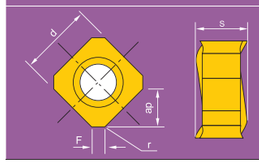


规格型号 Designation	D	D1	Z	ap	L	D3	Da	内冷 Coolant	Kg	刀片型号 Insert	在库 Stock
MF45SN D063.B22.Z05.16.C	63	77.8	5	7.15	45	60	22	Y	0.727	SN..1606..	◐
MF45SN D080.B27.Z09.16.C	80	93.1	9	7.15	50	63	27	Y	1.011	SN..1606..	◐
MF45SN D100.B32.Z07.16.C	100	114.6	7	7.15	50	80	32	Y	1.626	SN..1606..	◐
MF45SN D125.B40.Z08.16.C	125	139.8	8	7.15	63	82	40	Y	2.686	SN..1606..	◐
MF45SN D160.B40.Z10.16	160	174.8	10	7.15	63	105	40	N	4.16	SN..1606..	◐
MF45SN D200.B60.Z12.16	200	214.8	12	7.15	63	135	60	N	5.847	SN..1606..	◐
MF45SN D250.B60.Z15.16	250	264.8	15	7.15	63	144	60	N	8.581	SN..1606..	◐

- 刀片请根据不同材料单独订购。
- 加工不同的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MF45SN D063.B22.Z05.16.C。
- Inserts should be ordered separately .
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF45SN D063.B22.Z05.16.C.

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..1606..	SR20 M5x14	KEY03 T20

图例 Diagram	刀片型号 Insert	尺寸 Size					适配加工材质 Material						切削参数推荐 Cutting parameter	
		di	S	F	r	ap	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	SNGU 1606ADTR-R3P 2130	16.2	7.63	2.84	0.8	7.15	●	●					3.0-7.0	0.3-0.5
	SNGU 1606ADTR-R3K 2130	16.2	7.63	2.84	0.8	7.15			●				3.0-7.0	0.3-0.5

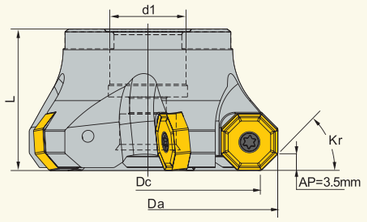
- ● 标准库存 Item in stock
- ◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
- ○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

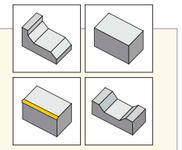
INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF45ON..0506..

Kr=45°





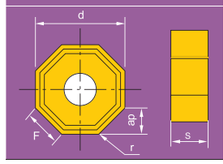


规格型号 Designation	Dc	Da	d1	ap	L	刀片数 z	Kr	Kg	刀片型号 Insert	在库 Stock
MF45ON D040.B22.Z04.05	40	50.4	22	3.5	40	4	44°	0.32	ON..0506..	◐
MF45ON D050.B22.Z05.05	50	60.4	22	3.5	40	5	44°	0.41	ON..0506..	◐
MF45ON D063.B22.Z05.05	63	73.4	22	3.5	40	5	44°	0.45	ON..0506..	◐
MF45ON D080.B27.Z06.05	80	90.4	27	3.5	50	6	44°	0.89	ON..0506..	◐
MF45ON D100.B32.Z07.05	100	110.4	32	3.5	50	7	44°	1.45	ON..0506..	◐
MF45ON D125.B40.Z08.05	125	135.6	40	3.5	63	8	44°	2.54	ON..0506..	◐
MF45ON D160.B40.Z12.05	160	170.4	40	3.5	63	12	44°	3.33	ON..0506..	◐

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MF45ON D040.B22.Z04.05。
- Insert should be ordered separately.
- Raoommended cutting data please sea page C47.
- Ordering sarrple: 1 PC MF45ON D040.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 claming screw
ON..0506..	SR20 M5x11	KEY03 T20

图例 Diagram	刀片型号 Insert	尺寸 Size					加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		d	ap	s	F	r		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	ONEG 050605T-R4P 2235	13	3.5	5.5	5	0.5	重型 Heavy duty	●	●					1.5-3.0	0.3-0.4
	ONEG 050605T-R4K 2215	13	3.5	5.5	5	0.5	重型 Heavy duty			●				1.5-3.0	0.3-0.4

● 标准库存
Item in stock

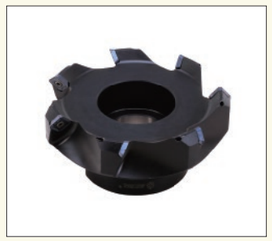
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

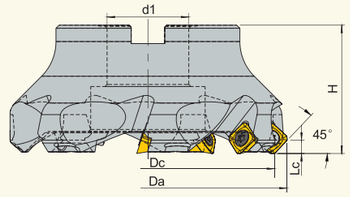
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

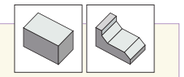
INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF45SE..12T3..

Kr=45°





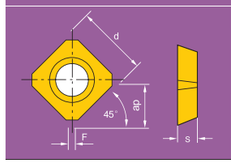


规格型号 Designation	Dc	Da	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在库 Stock
MF45SE D050.B22.Z04.12	50	63	22	40	6.5	4	0.40	SE..12T3..	◐
MF45SE D063.B22.Z05.12	63	75.9	22	40	6.5	5	0.54	SE..12T3..	◐
MF45SE D080.B27.Z06.12	80	93.2	27	50	6.5	6	1.08	SE..12T3..	◐
MF45SE D100.B32.Z06.12	100	113.2	32	50	6.5	6	1.54	SE..12T3..	◐
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。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MF45SE D050.B22.Z04.12。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- 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 claming screw
SE..12T3..	SR20 M3.5x11	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size			加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		F	S	d		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	SEHT 12T3-M9N 2025	2.2	4.76	12.7	中型 Medium duty				●			2.0-6.0	0.15-0.30
	SEMT 12T3-M8P 2230	2.2	3.81	12.7	中型 Medium duty	●	●					2.0-6.0	0.12-0.20
	SEMT 12T3-M8K 2215	2.2	3.81	12.7	中型 Medium duty			●				2.0-6.0	0.12-0.20

● 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)

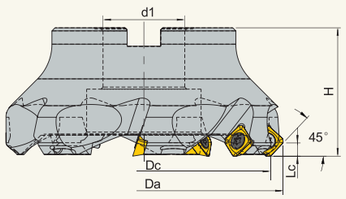
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

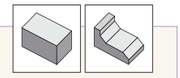
INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF45SET..12T3..

Kr=45°







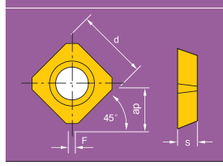
规格型号 Designation	Dc	Da	d1	H	Lc	刀片数 z	Kg	刀片型号 Insert	在库 Stock
MF45SET D050.B22.Z04.12	50	63	22	40	6.5	4	0.4	SE..12T3..	◐
MF45SET D063.B22.Z05.12	63	75.9	22	40	6.5	5	0.54	SE..12T3..	◐
MF45SET D080.B27.Z06.12	80	93.2	27	50	6.5	6	1.08	SE..12T3..	◐
MF45SET D100.B32.Z06.12	100	113.2	32	50	6.5	6	1.54	SE..12T3..	◐
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。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MF45SE D050.B22.Z04.12。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- 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 claming 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	KEY03 T15	ST02 S12x0.8	SR28 M5x11	KEY01 M3.5

图例 Diagram	刀片型号 Insert	尺寸 Size			加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		F	S	d		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	SEHT 12T3-M9N 2025	2.2	4.76	12.7	中型 Medium duty				●			2.0-6.0	0.15-0.30
	SEMT 12T3-M8P 2230	2.2	3.81	12.7	中型 Medium duty	●	●					2.0-6.0	0.12-0.20
	SEMT 12T3-M8K 2215	2.2	3.81	12.7	中型 Medium duty			●				2.0-6.0	0.12-0.20

● 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)

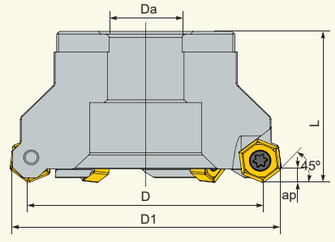
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

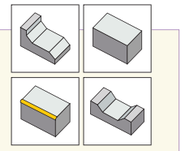
INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

MF45HN..0906..

Kr=45°







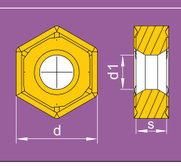
规格型号 Designation	D	ap	齿数 z	L	Da	刀片型号 Insert	在库 Stock
MF45HN D063.B22.Z06.09	63	5	6	50	22	HN..0906..	◐
MF45HN D080.B27.Z06.09	80	5	6	50	27	HN..0906..	◐
MF45HN D100.B32.Z08.09	100	5	8	63	32	HN..0906..	◐
MF45HN D125.B40.Z10.09	125	5	10	63	40	HN..0906..	◐
MF45HN D160.B40.Z12.09	160	5	12	63	40	HN..0906..	◐
MF45HN D200.B60.Z12.09	200	5	12	63	60	HN..0906..	◐

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MF45HN D063 B22.Z06.09。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MF45HN D063 B22.Z06.09.

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 claming screw
HN..0906..	SR10 M4.5x12	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size			适配加工材质 Material						切削参数推荐 Cutting parameter	
		d	S	d1	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	HNGX 0906ANEN-M7M 2110	16.5	6.35	4.9	●	●	●				0.5-5.0	0.05-0.20

● 标准库存 Item in stock

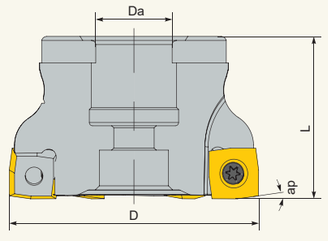
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

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

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

FFSD.. 快进给铣刀盘
Fast Feed Milling Cutter



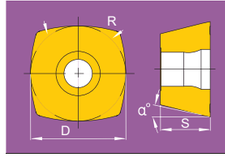


规格型号 Designation	D	ap	齿数 z	L	Da	刀片型号 Insert	在库 Stock
FFSD D050.B22.Z04.12	50	2	4	40	22	SDMT 120512	◐
FFSD D063.B22.Z05.12	63	2	5	50	22	SDMT 120512	◐
FFSD D080.B27.Z06.12	80	2	6	50	27	SDMT 120512	◐
FFSD D100.B32.Z07.12	100	2	7	50	32	SDMT 120512	◐

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 FFSD D050 B22.Z04.12。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC FFSD 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 claming screw
SDMT 120512	SR26 M4x11	KEY03 T15
SDMT 120512	SR26 M4x11	KEY03 T15
SDMT 120512	SR26 M4x11	KEY03 T15
SDMT 120512	SR26 M4x11	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size			适配加工材质 Material						切削参数推荐 Cutting parameter	
		d	S	R	P	M	K	N	S	H	ap(mm)	f(mm/z)
	SDMT 120512-M5G 2230	12.7	5.56	1.2	●	●	●				0.5-2.0	0.50-1.50
	SDMT 120512-M5G 2240	12.7	5.56	1.2		●					0.5-2.0	0.50-1.50

● 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)

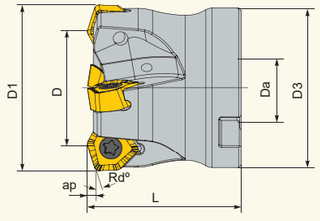
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MILLING CUTTERS 铣削刀具

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

FF WX.. 快进给刀盘
Dampening Helical Milling Cutter



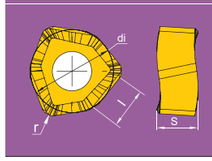


规格型号 Designation	D	D1	Da	L	ap	D3	Rd°	刀片数 z	Kg	刀片型号 Insert	在库 Stock
FF MF17WX D050.B22.Z04.08.C	34	50	22	45	2	48	4.8	4	0.35	FF WXGU 08..	◐
FF MF17WX D063.B22.Z05.08.C	47	63	22	45	2	61	3.3	5	0.61	FF WXGU 08..	◐
FF MF17WX D063.B27.205.08.C	47	63	27	50	2	61	3.3	5	0.65	FF WXGU 08..	◐
FF MF17WX D080.B32.Z06.08.C	64	80	32	55	2	76	2.3	6	1.25	FF WXGU 08..	◐

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 FF MF17WX D050.B22.Z04.08.C。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC FF MF17WX D050.B22.Z04.08.C.

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 claming screw
FF WXGU 08..	SR20 M5x13.5	KEY03 T20

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter	
		l	di	S	r	P	M	K	N	S	H	ap(mm)	fz(mm/z)
	FF WXGU 080612-R3S 1220	8.8	13.65	6.8	1.2					●		1.8-3.0	0.4-0.80
	FF WXGU 080612-R3P 1120	8.8	13.65	6.8	1.2	●	●	●				1.8-3.0	0.4-0.80

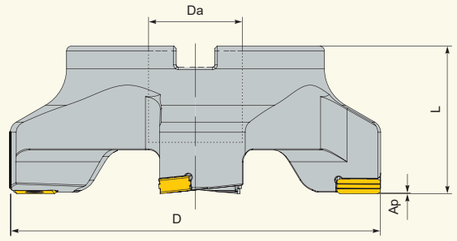
● 标准库存
Item in stock

◐ 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)

精铣刀盘
Fine Milling Cutter

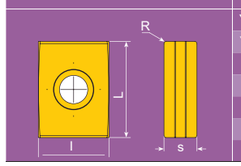




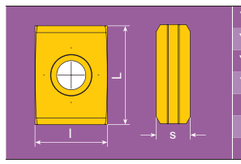
规格型号 Designation	D	Ap	Z	L	Da	接口结构 Insert	在库 Stock
FM D080.B27.Z02	80	0.05-0.3	2	50	27	A	◐
FM D100.B32.Z02	100	0.05-0.3	2	50	32	B	◐
FM D125.B40.Z04	125	0.05-0.3	4	63	40	C	◐
FM D160.B40.Z04	160	0.05-0.3	4	63	40	C	◐
FM D200.B60.Z06	200	0.05-0.3	6	63	60	C	◐
FM D250.B60.Z06	250	0.05-0.3	6	63	60	C	◐
FM D315.B60.Z08	315	0.05-0.3	8	63	60	C	◐
FM D400.B60.Z12	400	0.05-0.3	12	80	60	C	◐
FM D500.B60.Z12	500	0.05-0.3	12	80	60	C	◐

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 claming screw
YCE434	SR20 M5x13.5	KYE03 T20
YCE434	SR20 M5x13.5	KYE03 T20
YCE434	SR20 M5x13.5	KYE03 T20
YCE434	SR20 M5x13.5	KYE03 T20
YCE434	SR20 M5x13.5	KYE03 T20
YCE434	SR20 M5x13.5	KYE03 T20
YCE434	SR20 M5x13.5	KYE03 T20
YCE434	SR20 M5x13.5	KYE03 T20
YCE434	SR20 M5x13.5	KYE03 T20

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		材质 Grade
		L	S	I	R	P	M	K	N	S	H	ap(mm)	fz(mm/z)	
	YCE434A-W 1305	18.5	6.35	13.6	0.4	●						0.05-0.3	0-4	金属陶瓷 Cermet
	YCE434A-W 3115	18.5	6.35	13.6	0.4			●				0.05-0.3	0-4	硬质合金 Carbide

● 适用于方肩底面精铣
● It is suitable for fine milling the bottom of square shoulder.

	YCE434B-W 1105	18.5	6.35	13.6	1.25x30°	●						0.05-0.3	0-4.00	硬质合金 Carbide
	YCE434B-W 1305	18.5	6.35	13.6	1.25x30°	●						0.05-0.3	0-4.00	金属陶瓷 Cermet
	YCE434B-W 3105	18.5	6.35	13.6	1.25x30°			●				0.05-0.3	0-4.00	硬质合金 Carbide
	YCE434B-W 3115	18.5	6.35	13.6	1.25x30°			●				0.05-0.3	0-4.00	硬质合金 Carbide

● 适用于大平面精铣
● It is suitable for fine milling the large flat.

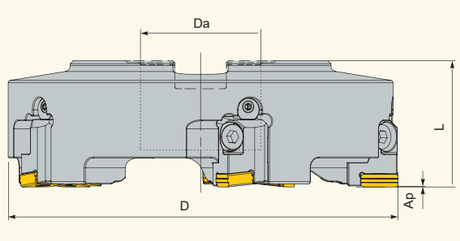
● 标准库存
Item in stock

◐ 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)

超精铣刀盘
Super Fine Milling Cutter

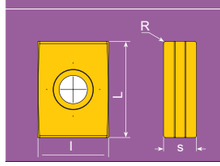




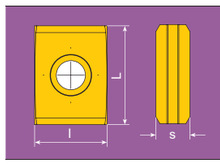
规格型号 Designation	D	Ap	Z	L	Da	接口结构 Insert	在库 Stock
FFM D100.B32.Z02	100	0.05-0.3	2	50	32	A	◐
FFM D125.B40.Z03	125	0.05-0.3	3	63	40	B	◐
FFM D160.B40.Z03	160	0.05-0.3	3	63	40	C	◐
FFM D200.B60.Z05	200	0.05-0.3	5	63	60	C	◐
FFM D250.B60.Z05	250	0.05-0.3	5	63	60	C	◐
FFM D315.B60.Z07	315	0.05-0.3	7	63	60	C	◐
FFM D400.B60.Z11	400	0.05-0.3	11	80	60	C	◐
FFM D500.B60.Z11	500	0.05-0.3	11	80	60	C	◐

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 claming screw	刀座 Cartridge	刀座锁紧扳手 Allen key for catridge	刀座调整扳手 Adjusting wrench for catridge
YCE434	SR20 M5x13.5	KYE03 T20	FF YCE434	KEY01 M6	KEY01 M3
YCE434	SR20 M5x13.5	KYE03 T20	FF YCE434	KEY01 M6	KEY01 M3
YCE434	SR20 M5x13.5	KYE03 T20	FF YCE434	KEY01 M6	KEY01 M3
YCE434	SR20 M5x13.5	KYE03 T20	FF YCE434	KEY01 M6	KEY01 M3
YCE434	SR20 M5x13.5	KYE03 T20	FF YCE434	KEY01 M6	KEY01 M3
YCE434	SR20 M5x13.5	KYE03 T20	FF YCE434	KEY01 M6	KEY01 M3
YCE434	SR20 M5x13.5	KYE03 T20	FF YCE434	KEY01 M6	KEY01 M3
YCE434	SR20 M5x13.5	KYE03 T20	FF YCE434	KEY01 M6	KEY01 M3

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		材质 Grade
		L	S	I	R	P	M	K	N	S	H	ap(mm)	fz(mm/z)	
	YCE434A-W 1305	18.5	6.35	13.6	0.4	●						0.05-0.3	0-4	金属陶瓷 Cermet
	YCE434A-W 3115	18.5	6.35	13.6	0.4			●				0.05-0.3	0-4	硬质合金 Carbide

● 适用于方肩底面精铣
● It is suitable for fine milling the bottom of square shoulder.

	YCE434B-W 1105	18.5	6.35	13.6	1.25x30°	●						0.05-0.3	0-4.00	硬质合金 Carbide
	YCE434B-W 1305	18.5	6.35	13.6	1.25x30°	●						0.05-0.3	0-4.00	金属陶瓷 Cermet
	YCE434B-W 3105	18.5	6.35	13.6	1.25x30°			●				0.05-0.3	0-4.00	硬质合金 Carbide
	YCE434B-W 3115	18.5	6.35	13.6	1.25x30°			●				0.05-0.3	0-4.00	硬质合金 Carbide

● 适用于大平面精铣
● It is suitable for fine milling the large flat.

● 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)

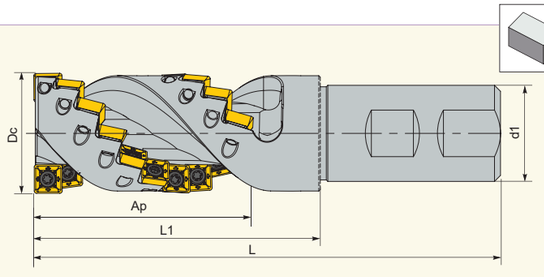
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

MM90SD 杆式玉米铣刀

Bar Type of Helical Milling Cutter

Kr=90°





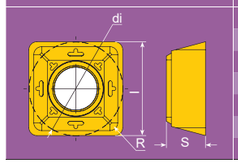
规格型号 Designation	Dc	Ap	Zeff	Z	L1	L	d1	柄部类型 Type	Kg	内冷 Coolant	在库 Stock
MM90SD D032.W32.Z10-02.09	32	35	2	10	55	131	32	W	0.61	Y	◐
MM90SD D040.W32.Z18-03.09	40	43	3	18	60	125	32	W	0.70	Y	◐
MM90SD D040.W32.Z14-02.09	40	52	2	14	67	131	32	W	0.76	Y	◐

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MM90SD D032.W32.Z10-02.09。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MM90SD D032.W32.Z10-02.09.

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 claming screw
SD..09T3..	SR21 M3.5x8	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material					切削参数推荐 Cutting parameter		
		l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	fz(mm/z)
	SDGT 09T308-R3S 4305	9.52	9.52	3.18	0.8		●			●		50-200	1.0-4.0	0.08-0.15
	SDGT 09T308-R3P 1220	9.52	9.52	3.18	0.8	●	●	●				50-200	1.0-4.0	0.08-0.15

● 标准库存 Item in stock

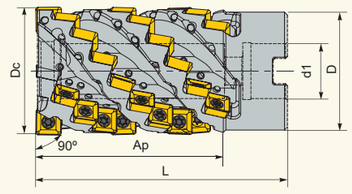
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)

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

MM90SD..1204 阻尼减振玉米铣刀

Dampening Helical Milling Cutter





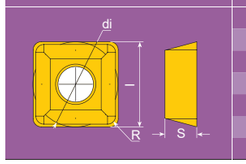
规格型号 Designation	Dc	Ap	Zeff	Z	L	D	d1	刀片型号 Insert	内冷 Coolant	在库 Stock
MM90SD D050.B27.Z28-04.09	50	51	7	28	76	47.8	27	SD..09T3..	Y	◐
MM90SD D050.B27.Z44-04.09	50	80	11	44	106	47.8	27	SD..09T3..	Y	◐
MM90SD D063.B27.Z24-04.12	63	57	4	24	85	58	27	SD..1204..	Y	◐
MM90SD D063.B27.Z40-04.12	63	94	4	40	124	58	27	SD..1204..	Y	◐
MM90SD D080.B32.Z35-05.12	80	65	5	35	98	74	32	SD..1204..	Y	◐
MM90SD D080.B32.Z60-05.12	80	110	5	60	143	74	32	SD..1204..	Y	◐
MM90SD D100.B40.Z48-06.12	100	76	6	48	106	94	40	SD..1204..	Y	◐
MM90SD D100.B40.Z84-06.12	100	133	6	84	165	94	40	SD..1204..	Y	◐

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MM90SD D050.B27.Z28-04.09。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MM90SD D050.B27.Z28-04.09.

备件

Spare Parts

规格型号 Designation	刀片型号 Insertt	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for claming screw	分体扳手头 Wrench head	锁紧塞 Locking plug	防松垫圈 Check washer
MM90SD D050.B27.Z28-04.09	SD..09T3..	SR21 M3.5x8	KEY03 T15	-	SR M24.L45-X	DH-16.6x10.3
MM90SD D050.B27.Z44-04.09	SD..09T3..	SR21 M3.5x8	KEY03 T15	-	SR M24.L70-X	DH-16.6x10.3
MM90SD D063.B27.Z24-04.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L	SR M30.L53-X	DH-16.6x10.3
MM90SD D063.B27.Z40-04.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L	SR M30.L90-X	DH-16.6x10.3
MM90SD D080.B32.Z35-05.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L	SR M42.L57-X	DH-23x15.2
MM90SD D080.B32.Z60-05.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L	SR M42.L105-X	DH-23x15.2
MM90SD D100.B40.Z48-06.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L	SR M52.L66-X	DH-30.7x15.2
MM90SD D100.B40.Z84-06.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L	SR M52.L125-X	DH-30.7x15.2

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		
		l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	fz(mm/z)
	SDGT 09T308-R3S 4305	9.52	9.52	3.18	0.8		●			●		50-200	1.0-4.0	0.08-0.15
	SDGT 09T308-R3P 1220	9.52	9.52	3.18	0.8	●	●					-	1.0-4.0	0.08-0.15
	SDGT 120412-R3S 4305	12.7	12.7	4.75	1.2		●			●		-	1.0-5.0	0.08-0.2
	SDGT 120412-R3P 1220	12.7	12.7	4.75	1.2	●	●					-	1.0-5.0	0.08-0.2

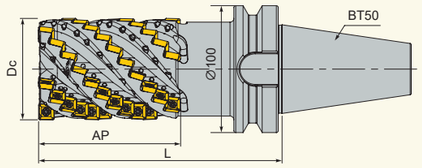
● 标准库存 Item in stock

◐ 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)

整体式减振玉米铣刀
Integral Type of Anti-vibration Helical Milling Tool



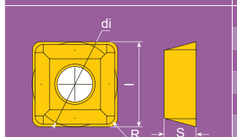


规格型号 Designation	品名 Name of product	Dc	AP	Zeff	Z	L	kg	内冷 Coolant	在库 Stock
BT50 MM90SD D063.Z24-04.12	整体式减振玉米铣刀 Integral Type of Anti-vibration Helical Milling Tool	63	57	4	24	136	5.09	Y	●
BT50 MM90SD D063.Z40-04.12	整体式减振玉米铣刀 Integral Type of Anti-vibration Helical Milling Tool	63	94	4	40	173	5.36	Y	●
BT50 MM90SD D080.Z35-05.12	整体式减振玉米铣刀 Integral Type of Anti-vibration Helical Milling Tool	80	65	5	35	147	6.40	Y	●
BT50 MM90SD D080.Z60-05.12	整体式减振玉米铣刀 Integral Type of Anti-vibration Helical Milling Tool	80	110	5	60	192	7.43	Y	●
BT50 MM90SD D100.Z48-06.12	整体式减振玉米铣刀 Integral Type of Anti-vibration Helical Milling Tool	100	76	6	48	145	7.92	Y	●
BT50 MM90SD D100.Z84-06.12	整体式减振玉米铣刀 Integral Type of Anti-vibration Helical Milling Tool	100	133	6	84	202	9.98	Y	●

- 刀片请根据不同材料单独订购。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 BT50 MM90SD D063.Z24-04.12。
- Insert should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC BT50 MM90SD D063.Z24-04.12.

备件
Spare Parts

规格型号 Designation	刀片型号 Insertt	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for claming screw	分体扳手头 Wrench head
BT50 MM90SD D063.Z24-04.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D063.Z40-04.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D080.Z35-05.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D080.Z60-05.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D100.Z48-06.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D100.Z84-06.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L

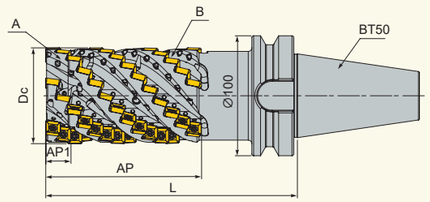
图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		
		l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	fz(mm/z)
	SDGT 120412-R3S 4305	12.7	12.7	4.75	1.2		●			●		50-200	1.0-11.5	0.08-0.3
	SDGT 120412-R3P 1220	12.7	12.7	4.75	1.2	●		●				-	1.0-5.0	0.08-0.2

● 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)

INDEXABLE INSERT FACE MILLING CUTTER 可转位面铣刀

分体式玉米铣刀
Spilt Tpye of Helical Milling Tool

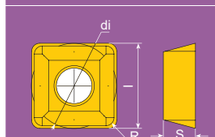




规格型号 Designation	品名 Name of product	Dc	AP	AP1	Zeff	Z	L	接口类型 Type of Connection	Fig	kg	内冷 Coolant	在库 Stock
MM90SD D063.TS20.Z08-04.12	玉米铣刀模块 Modular Helical Milling Tool	63	-	21	4	8	-	TS20	A	0.34	Y	●
BT50 MM90SD D063.TS20.Z24-04.12	分体式减振玉米铣刀主体 Spilt Type of Anti-vibration Helical Milling Tool	63	78	-	4	24	166	TS20-B	B	5.09	Y	●
BT50 MM90SD D063.TS20.Z40-04.12	分体式减振玉米铣刀主体 Spilt Type of Anti-vibration Helical Milling Tool	63	113	-	4	40	194	TS20-B	B	5.54	Y	●
MM90SD D080.TS32.Z10-05.12	玉米铣刀模块 Modular Helical Milling Tool	80	-	21	5	10	-	TS32	A	0.67	Y	●
BT50 MM90SD D080.TS32.Z35-05.12	分体式减振玉米铣刀主体 Spilt Type of Anti-vibration Helical Milling Tool	80	84	-	5	35	175	TS32-B	B	7.39	Y	●
BT50 MM90SD D080.TS32.Z60-05.12	分体式减振玉米铣刀主体 Spilt Type of Anti-vibration Helical Milling Tool	80	129	-	5	60	212	TS32-B	B	8.42	Y	●
MM90SD D100.TS40.Z12-06.12	玉米铣刀模块 Modular Helical Milling Tool	100	-	21	6	12	-	TS40	A	1.07	Y	●
BT50 MM90SD D100.TS40.Z48-06.12	分体式减振玉米铣刀主体 Spilt Type of Anti-vibration Helical Milling Tool	100	97	-	6	48	165	TS40-B	B	7.68	Y	●
BT50 MM90SD D100.TS40.Z84-06.12	分体式减振玉米铣刀主体 Spilt Type of Anti-vibration Helical Milling Tool	100	154	-	6	84	222	TS40-B	B	9.98	Y	●

备件
Spare Parts

规格型号 Designation	刀片型号 Insertt	刀片锁紧螺钉 Clamping screw for insert	刀片锁紧扳手 Allen key for claming screw	分体扳手头 Wrench head
MM90SD D063.TS20.Z08-04.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D063.TS20.Z24-04.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D063.TS20.Z40-04.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
MM90SD D080.TS32.Z10-05.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D080.TS32.Z35-05.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D080.TS32.Z60-05.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
MM90SD D100.TS40.Z12-06.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D100.TS40.Z48-06.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L
BT50 MM90SD D100.TS40.Z84-06.12	SD..1204..	SR21 M4x11.7	KEY30 S4-T	BLD T20/S4-L

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		
		l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	fz(mm/z)
	SDGT 120412-R3S 4305	12.7	12.7	4.75	1.2		●			●		50-200	1.0-11.5	0.08-0.3
	SDGT 120412-R3P 1220	12.7	12.7	4.75	1.2	●		●				-	1.0-5.0	0.08-0.2

● 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)

铣削刀具 MILLING CUTTERS

SIDE AND FACE MILLING CUTTER

三面刃铣刀



C

铣削刀具
MILLING CUTTERS

三面刃铣刀
Side and Face Milling Cutter

可调式三面刃铣刀 C35
Adjustable Side and Face Milling Cutter

LN11 三面刃铣刀 C36
LN11 Side And Face Milling Cutter

LN15 三面刃铣刀 C38
LN15 Side And Face Milling Cutter

可转位倒角刀
Indexable Insert Chamfer Cutter

长刃倒角刀 C40
Chamfering Cutter With Long Cutting Edge

杆式倒角刀 C41
Chamfer Cutter With Cylindrical Shank

盘式倒角刀 C42
Face Chamfering Cutter

可调式端面槽铣刀
API Ring Grooving Cutter

可调式端面槽铣刀 C43
API Ring Grooving Cutter

可调式端面槽铣刀刀座 C44
The Cartridges For Adjustable API Ring Groover

简易可调式槽铣刀刀座 C45
Simple Adjustable Cartridge

可调式端面槽铣刀使用说明 C46
The Instrution Manual For API Ring Groover

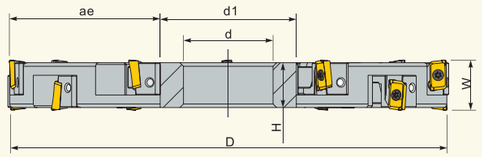
技术资料
Technical Information

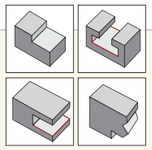
技术资料 C47
Technical Information

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.



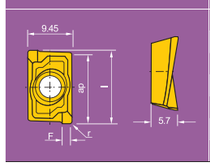
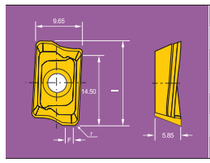




规格型号 Designation	D	W	ae	d	d1	H	Z	Kg	适配刀座 Cartridge	在库 Stock
MSSB D200.B40.W28.Z12.15	200	28	60	40	80	25	2x6	4.8		◐
MSSB D250.B50.W28.Z14.15	250	28	75	50	100	25	2x7	7.8	MSR 905 MSL 905	◐
MSSB D315.B50.W30.Z16.15	315	30	107	50	100	27	2x8	11.4		◐
MSSB D400.B50.W30.Z20.15	400	30	150	50	100	27	2x10	19.3		◐
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。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 铣槽时请根据具体情况选择较小的切削尝试。
- 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.
- Recommended cutting data please see page C47 页 .
- Please choose the samller 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	刀锁紧扳手 Allken key for clamping screw
刀座 Cartridge	MSR/L 902	AP..1604..	SR20 M4x11.5	KEY03 T15
刀座 Cartridge	MSR/L 905	AD..1505..	SR20 M4x11.5	KEY03 T15
锁紧楔块 Lock wedge	XKM6-01	-	-	-
锁紧螺柱 Locek bolt	SR58 M6x21	-	-	KEY01 M3

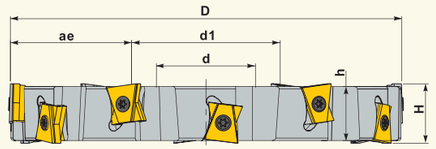
图例 Diagram	刀片型号 Insert	尺寸 Size r	F	l	加工类型 Machine type	适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	APKT 1604TR-R4P 2235	0.8	1.8	17.3	重型 Heavy duty	●	●					6.0-14	0.1-0.2
	APKT 1604TL-M8P 2125(1)	0.8	1.7	17.7	中型 Medium duty	●	●	●				6.0-14	0.08-0.15
	APKT 1604TR-M8K 2215	0.8	1.7	17.92	中型 Medium duty			●				6.0-14	0.08-0.15
	HM90 ADKT 1505TR-M8K 2215	0.8	2.16	16.18	中型 Medium duty			●				5.0-12.0	0.08-0.15
	HM90 ADKT 1505TR-M8P 2235	0.8	2.16	16.18	中型 Medium duty	●	●					5.0-12.0	0.08-0.15
	ADKT 1505TL-M8P 2125(1)	0.8	1.6	15.7	中型 Medium duty	●	●	●				5.0-12.0	0.07-0.15

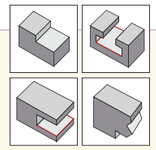
- (1) 左手刀片
- Insert for left handease use the coolant oil as far as possible.

● 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)

LN11 三面刃铣刀
LN11 Side and Face Milling Cutter





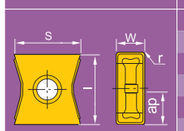
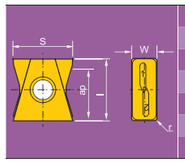


规格型号 Designation	D	H	ae	d	d1	h	Z	Kg	刀片型号 Insert	在库 Stock
MSSB D080.B27.H18.Z06.LN11	80	18	20	27	40	16	2x3	0.75	LN..1106..	◐
MSSB D100.B27.H18.Z08.LN11	100	18	30	27	40	16	2x4	1.13	LN..1106..	◐
MSSB D125.B32.H18.Z10.LN11	125	18	39	32	46	16	2x5	1.67	LN..1106..	◐
MSSB D160.B40.H18.Z12.LN11	160	18	50	40	60	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。
- 加工不同材料刀具的切削参数，请参照：☞ C47 页。
- 订货示例：1 件 MSSB D080.B27.H18.Z06.LN11。
- Insert with different materials should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MSSB D080.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 claming screw
LN..1106..	SR20 M3.5x11.5	KEY03 T10

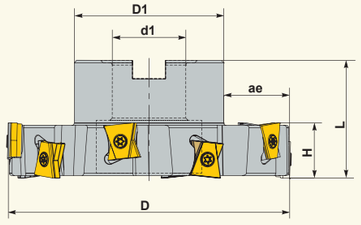
图例 Diagram	刀片型号 Insert	尺寸 Size W	l	S	r	加工类型 Machine type	适适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	LNAR 1106F-M8N 2020	6	11	11	0.8	轻型 Light duty				●			1.5-5.0	0.15-0.30
	LNMT 110608-M5G 2230	6	11	11	0.8	中型 Medium duty	●	●	●		●		1.5-5.0	0.10-0.25
	LNMT 110608-M5K 2115	6	11	11	0.8	中型 Medium duty			●				1.5-5.0	0.12-0.30
	LNKX 1106T-R4P 2230	6	11	11	0.8	中型 Medium duty	●	●					1.5-5.0	0.17-0.25
	LNHT 1106T-M8K 2215(1)	5.97	11.16	11	0.8	中型 Medium duty			●				1.5-5.0	0.15-0.25
	LNHT 1106T-M8P 2235(1)	5.97	11.16	11	0.8	中型 Medium duty	●	●					1.5-5.0	0.15-0.25

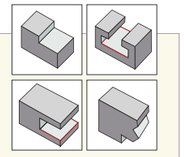
- (1) 刀片有两个右手切削刃，两个左手切削刃，适用于三面刃铣槽
- Two right hand cutting lips and two and left cutting lips, suitable for side and face milling cutter as well.

● 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)

LN11 三面刃铣刀
LN11 Side and Face Milling Cutter





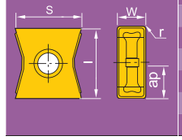
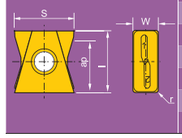


规格型号 Designation	D	D1	d1	H	L	ae	Z	Kg	刀片型号 Insert	在库 Stock
MSSB D080.SEM22.H18.Z06.LN11	80	48	22	18	50	16	2x3	0.89	LN..1106..	◐
MSSB D100.SEM22.H18.Z08.LN11	100	48	22	18	50	26	2x4	1.88	LN..1106..	◐
MSSB D125.SEM27.H18.Z10.LN11	125	60	27	18	63	32	2x5	2.22	LN..1106..	◐
MSSB D160.SEM32.H18.Z12.LN11	160	78	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。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MSSB D080.SEM22.H24.Z06.LN11。
- Insert should be ordered separately.
- Recommended cutting date please see page C47.
- Ordering sample: 1 PC MSSB D080.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 claming screw
LN..1106..	SR20 M3.5x11.5	KEY03 T10

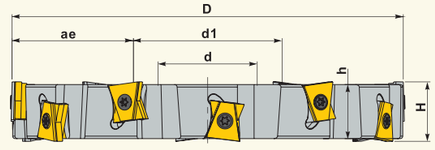
图例 Diagram	刀片型号 Insert	尺寸 Size W	l	S	r	加工类型 Machine type	适适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	LNAR 1106F-M8N 2020	6	11	11	0.8	轻型 Light duty				●			1.5-5.0	0.15-0.30
	LNMT 110608-M5G 2230	6	11	11	0.8	中型 Medium duty	●	●	●		●		1.5-5.0	0.10-0.25
	LNMT 110608-M5K 2115	6	11	11	0.8	中型 Medium duty			●				1.5-5.0	0.12-0.30
	LNKX 1106T-R4P 2230	6	11	11	0.8	中型 Medium duty	●	●					1.5-5.0	0.17-0.25
	LNHT 1106T-M8K 2215(1)	5.97	11.16	11	0.8	中型 Medium duty			●				1.5-5.0	0.15-0.25
	LNHT 1106T-M8P 2235(1)	5.97	11.16	11	0.8	中型 Medium duty	●	●					1.5-5.0	0.15-0.25

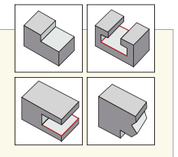
- (1) 刀片有两个右手切削刀，两个左手切削刀，适用于三面刃铣槽
- Two right hand cutting lips and two and left cutting lips, suitable for side and face milling cutter as well.

● 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)

LN15 三面刃铣刀
LN15 Side and Face Milling Cutter





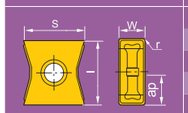
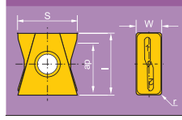


规格型号 Designation	D	H	ae	d	d1	h	Z	Kg	刀片型号 Insert	在库 Stock
MSSB D080.B27.H24.Z06.LN15	80	24	20	27	40	21.8	2x3	0.64	LN..1506..	◐
MSSB D100.B27.H24.Z08.LN15	100	24	30	27	40	21.8	2x4	1.03	LN..1506..	◐
MSSB D125.B32.H24.Z10.LN15	125	24	39	32	46	21.8	2x5	1.57	LN..1506..	◐
MSSB D160.B40.H24.Z12.LN15	160	24	50	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。
- 加工不同材料刀具的切削参数，请参照：☞C47 页。
- 订货示例：1 件 MSSB D080.B27.H24.Z06.LN15。
- Insert with different materials should be ordered separately.
- Recommended cutting data please see page C47.
- Ordering sample: 1 PC MSSB D080.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 claming screw
LN..1506..	SR20 M4x11.5	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size W	l	S	r	加工类型 Machine type	适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	LNMT 150608-F2K 4125	6	15	13.9	0.8	中型 Medium duty			●				1.5-5.0	0.10-0.25
	LNMT 150608-F2G 2230	6	15	13.9	0.8	中型 Medium duty	●	●	●				1.5-5.0	0.10-0.25
	LNAR 1506F-M8N 2020	6	15	13.9	0.8	轻型 Light duty				●			1.5-5.0	0.10-0.30
	LNMT 150608-F2P 2225	6	15	13.9	0.8	中型 Medium duty	●						1.5-5.0	0.10-0.25
	LNMT 150608-R4P 2235	6	15	13.9	0.8	中型 Medium duty 重型 Heavy duty	●	●					1.5-5.0	0.10-0.30
	LNMT 1506T-M8P 2235(1)	6	15	13.9	0.8	中型 Medium duty	●	●					3-12	0.15-0.25
	LNMT 1506T-M8K 2215(1)	6	15	13.9	0.8	中型 Medium duty			●				3-12	0.15-0.25

- (1) 刀片有两个右手切削刀，两个左手切削刀，适用于三面刃铣槽
- Two right hand cutting lips and two and left cutting lips, suitable for side and face milling cutter as well.

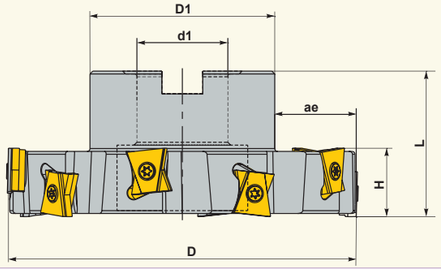
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

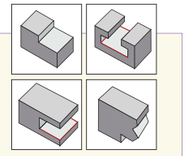
SIDE AND FACE MILLING CUTTER 三面刃铣刀

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	在库 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 D125.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。
- 订货示例：1 件 MSSB D080.SEM22.H24.Z06.LN15。
- Insert should be ordered separately.
- Ordering sample: 1 PC MSSB D080.SEM22.H24.Z06.LN15.

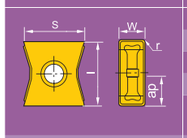
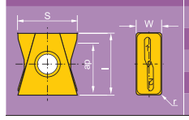
备件

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	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size W	l	S	r	加工类型 Machine type	适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	LNMT 150608-F2K 4125	6	15	13.9	0.8	中型 Medium duty			●				1.5-5.0	0.10-0.25
	LNMT 150608-F2G 2230	6	15	13.9	0.8	中型 Medium duty	●	●	●				1.5-5.0	0.10-0.25
	LNAR 1506F-M8N 2020	6	15	13.9	0.8	轻型 Light duty				●			1.5-5.0	0.10-0.30
	LNMT 150608-F2P 2225	6	15	13.9	0.8	中型 Medium duty	●						1.5-5.0	0.10-0.25
	LNMT 150608-R4P 2235	6	15	13.9	0.8	中型 Medium duty 重型 Heavy duty	●	●					1.5-5.0	0.10-0.30
	LNMT 1506T-M8P 2235(1)	6	15	13.9	0.8	中型 Medium duty	●	●					3-12	0.15-0.25
	LNMT 1506T-M8K 2215(1)	6	15	13.9	0.8	中型 Medium duty			●				3-12	0.15-0.25

- (1) 刀片有两个右手切削刃，两个左手切削刃，适用于三面刃铣槽
- Two right hand cutting lips and two and left cutting lips, suitable for side and face milling cutter as well.

● 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)

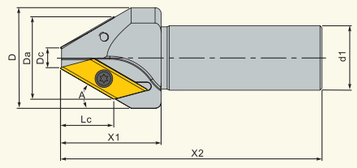
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

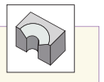
CHAMFERING MILLING CUTTER 可转位倒角刀

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	在库 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 .
- 订货示例：1 件 ME30XE D034.W32.Z01.31.130。
- Insert should be ordered separately .
- Ordering sample: 1 PC ME30XE D034.W32.Z01.31.130.

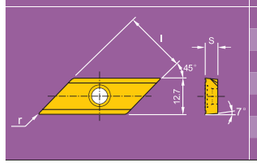
备件

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	KEY03 T20

图例 Diagram	刀片型号 Insert	尺寸 Size l	s	r	加工类型 Machine type	适配加工材质 Material P	M	K	N	S	H	切削参数推荐 Cutting parameter ap(mm)	fz(mm/z)
	XCET 220404T-M8G 2230	22	4.5	0.4	中型 Medium duty	●	●	●	●	●	●	2.0-20.0	0.12-0.15

● 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)

CHAMFERING MILLING CUTTER 可转位倒角刀

杆式倒角刀
Chamfer Cutter with Cylindrical Shank



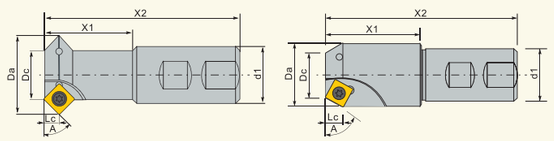


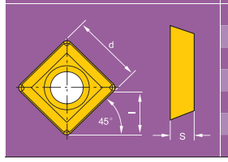
Fig A　　Fig B

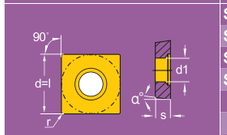
规格型号 Designation	A	Dc	Da	d1	X1	X2	Lc	刀片数 Z	Fig	Kg	刀片型号 Insert	在库 Stock
ME30SC D012.W16.Z01.12.100	30°	12	32	16	50	98	7	1	B	0.17	SC..1204..	●
ME30SC D028.W32.Z02.12.120	30°	28	48	32	60	120	7	2	B	0.70	SC..1204..	●
ME45SD D006.W16.Z01.09.90	45°	6	16	16	40	90	6	1	B	0.12	SD..0903..	●
ME45SD D012.W16.Z01.09.100	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	60°	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。
- 订货示例：1 件 ME30SC D012.W16.Z01.12.100。
- Insert should be ordered separately.
- 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 claming screw
SC..1204..	SR21 M5x12.8	KEY03 T20
SD..0903..	SR20 M4x7.8	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size			加工类型 Machine type	适配加工材质 Material						切削参数推荐 Cutting parameter	
		l	S	d		P	M	K	N	S	H	ap(mm)	fz(mm/z)
	SDMT 0903T-M8N 2020	5.6	3.18	9.53	中型 Medium duty				●			5.0-12.0	0.08-0.15
	SDMT 0903T-M8P 2125	5.6	3.18	9.53	中型 Medium duty	●	●	●				5.0-12.0	0.08-0.15

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		
		l	r	s	d1	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
	SCMT 120408-M2P 1115	12.7	0.8	4.76	5.5	●						200-300	0.5-2.5	0.1-0.30
	SCMT 120408-M2M 2210	12.7	0.8	4.76	5.5		●					200-300	0.5-2.5	0.1-0.30
	SCMT 120408-M2K 1115	12.7	0.8	4.76	5.5			●				200-300	0.5-2.5	0.1-0.30
	SCGT 120408-F9N 2020	12.7	0.8	4.76	5.5				●			200-300	0.5-3.0	0.15-0.30

● 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)

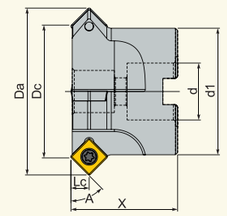
○ 无库存（订货时，请确认交货期）
Order on demand
(please confirm delivery time when ordering it)

MILLING CUTTERS 铣削刀具

CHAMFERING MILLING CUTTER 可转位倒角刀

盘式倒角刀
Face Chamfering Cutter



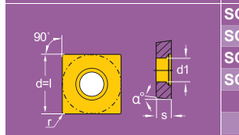


规格型号 Designation	A	Dc	Da	d	d1	X	Lc	刀片数 Z	Kg	刀片型号 Insert	在库 Stock
MF45SC D040.B16.Z03.12.40	45°	40	56.6	16	38	40	7	3	0.26	SC..1204..	●
MF45SC D050.B22.Z04.12.40	45°	50	66.62	22	48	40	7	4	0.37	SC..1204..	●
MF45SC D063.B27.Z04.12.50	45°	63	79.6	27	60	50	7	4	0.75	SC..1204..	●
MF45SC D080.B32.Z05.12.50	45°	80	96.6	32	78	50	7	5	1.17	SC..1204..	●
MF45SC D100.B40.Z06.12.60	45°	100	116.6	40	89	60	7	6	1.93	SC..1204..	●

- 刀片请根据不同材料单独订购。
- 订货示例：1 件 MF45SC D040.B16.Z03.12.40。
- Insert should be ordered separately.
- Ordering sample: 1 PC MF45SC D040.816.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 claming screw
SC..1204..	SR21 M5x12.8	KEY03 T20

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		
		l	r	s	d1	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
	SCMT 120408-M2P 1115	12.7	0.8	4.76	5.5	●						200-300	0.5-2.5	0.1-0.30
	SCMT 120408-M2M 2210	12.7	0.8	4.76	5.5		●					200-300	0.5-2.5	0.1-0.30
	SCMT 120408-M2K 1115	12.7	0.8	4.76	5.5			●				200-300	0.5-2.5	0.1-0.30
	SCGT 120408-F9N 2020	12.7	0.8	4.76	5.5				●			200-300	0.5-3.0	0.15-0.30

● 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 RING GROOVING CUTTER 可调式端面槽铣刀

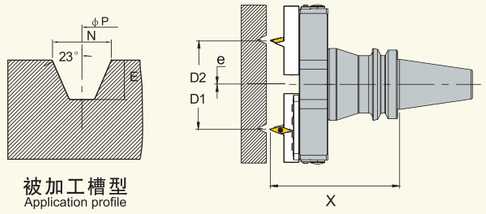
可调式端面槽铣刀

API Ring Grooving Cutter

松德可调式端面槽刀吸取国外端面槽刀优点，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.





被加工槽型
Application profile

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：☞C44 页。
- 如没有匹配的刀体，需提供机床对应的刀柄大小非标订制刀体。
- 订货示例：1 件 BT50 MSD215x140.
- The suitable cartridge should be ordered separately, please see page C44.
- 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.

● 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 RING GROOVING CUTTER 可调式端面槽铣刀

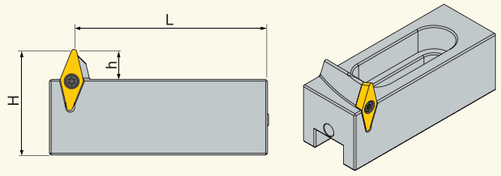
可调式端面槽铣刀刀座

The Cartridges for Adjustable API Ring Groover

适配可调式端面槽刀刀体任意规格，安装方便，调整自如、稳定，内外径刀座一一对应。

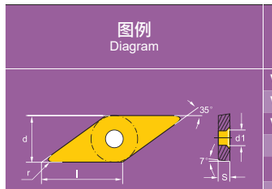
It is suitable for any size of main body, and it can be assembled freely and stably. The ID and OD are one-to-one correspondence and with different inserts.





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	SR21 M4x11	KEY03 T15	0.19	◐
L23N P104-136.H18.VC16	48	40	18.5	VCMT 160408	SR21 M4x11	KEY03 T15	0.26	◐
L23N P127-225.H18.VC16	62.5	40	18.5	VCMT 160408	SR21 M4x11	KEY03 T15	0.20	◐
L23W P47-116.H18.VC16	63.5	40	18.5	VCMT 160408	SR21 M4x11	KEY03 T15	0.19	◐
L23W P108-140.H18.VC16	46	40	18.5	VCMT 160408	SR21 M4x11	KEY03 T15	0.26	◐
L23W P131-229.H18.VC16	64.5	40	18.5	VCMT 160408	SR21 M4x11	KEY03 T15	0.20	◐

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



图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		
		l	d	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
	VCMT 160408-M2P 2125	16.6	9.525	4.76	0.8	●						120-280	1.00-3.50	0.15-0.40
	VCMT 160408-M2M 1225	16.6	9.525	4.76	0.8		●					80-180	0.50-2.50	0.08-0.30
	VCMT 160408-M2K 1115	16.6	9.525	4.76	0.8			●				150-350	0.50-2.50	0.08-0.30

● 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)

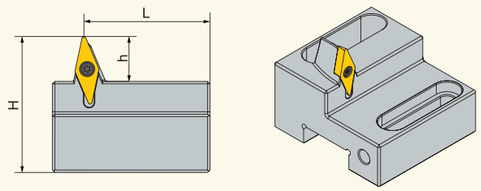
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

API RING 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，内外径刀座一一对应
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.



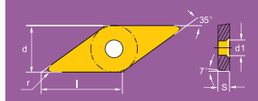


刀座型号 Designation	L	H	h	刀片型号 Insert	Kg	P 值范围 P value	适配刀体 Main body	在库 Stock
R23N P45-65.H18.VC16	46.5	40	18.5	VCMT 160408	0.17	45-60	BR D070-090.E63.Z2.75.C	◐
R23W P45-65.H18.VC16								
R23N P56-108.H18.VC16	28	56	18.5	VCMT 160408	0.69	60-108	SNL 150-210..	◐
R23W P56-108.H18.VC16								
R23N P104-156.H18.VC16	52	56	18.5	VCMT 160408	0.69	104-155	SNL 150-210..	◐
R23W P104-156.H18.VC16								
R23N P56-108.H18.VC16	28	56	18.5	VCMT 160408	0.69	155-175	SNL 210-290	◐
R23W P56-108.H18.VC16								
R23N P104-156.H18.VC16	52	56	18.5	VCMT 160408	0.69	175-220	SNL 210-290	◐
R23W P104-156.H18.VC16								

● 刀片请根据不同材料单独订购。
● 订货示例：1 件 R23N P45-65.H18.VC16。
● Insert should be ordered separately.
● 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 claming screw
VCMT 160408	SR21 M4x11	KEY03 T15

图例 Diagram	刀片型号 Insert	尺寸 Size				适配加工材质 Material						切削参数推荐 Cutting parameter		
		l	d	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
	VCMT 160408-M2P 2125	16.6	9.525	4.76	0.8	●						120-280	1.00-3.50	0.15-0.40
	VCMT 160408-M2M 1225	16.6	9.525	4.76	0.8		●					80-180	0.50-2.50	0.08-0.30
	VCMT 160408-M2K 1115	16.6	9.525	4.76	0.8			●				150-350	0.50-2.50	0.08-0.30

● 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)

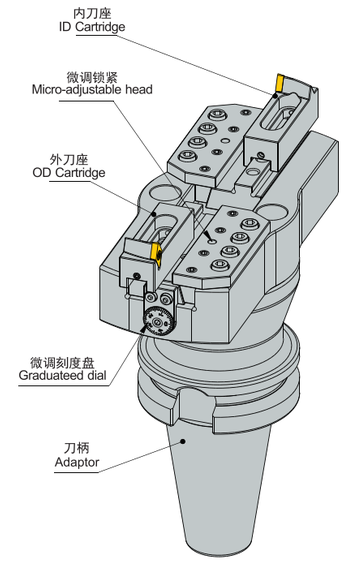
API RING GROOVING CUTTER 可调式端面槽铣刀

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

● 刀体包括刀柄、刀桥及两端微调机构
● 外径刀座
● 内径刀座

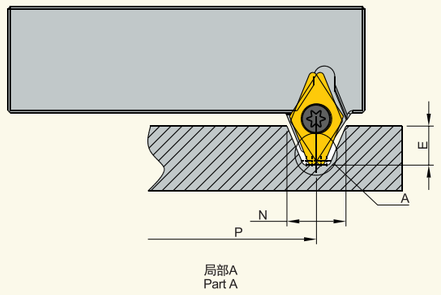
● The main body includes tool holder, connection, and the two micro-adjustable head
● OD cartridge
● IDcartridgeorrespondence.



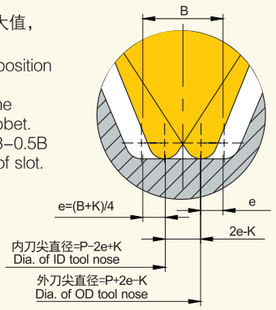
特点：
● 适用于石油阀门类 API 标准的端面密封槽铣削加工；
● 解决了由传统工艺无法达到加工要求或不能加工密封槽等问题；
● 一把刀具配备不同的内外径刀座，可覆盖 API 标准全系列槽的加工；
● 两端带有微调机构，调整精度 0.01mm/ 格；
● 加工效率高，加工稳定性好；

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



K为刀尖重合量，
槽口不过切的情况下可选取较大值，
推荐值0.3–0.5B槽底平面宽度。
The K indicates that the superposition amount of tool nose,
The value of K will be larger one when there is no overcut of rabbet.
The recommended value is 0.3–0.5B based on the width of bottom of slot.



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°

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 Cutting speed	Vc	V	m/min
进给速度 Feed speed	Vf	F	mm/min
每齿进给量 Single edge feed	fz	f	mm/ 齿
进给量 Feeds	f	f	mm/rev
刃 数 Tooth number	Z	Z	(枚)
轴方向切深 Axial cutting depth	ap	d	mm
半径方向切深 Radius cutting depth	ae	W	mm
大进给 Deep feed	Pf	Pf	mm
切削动力 Cutting power	Pc	PKw	KW
比较切削阻力 Comparative cutting resistance	Kc	Ks	MPa
切屑排出量 Chips	Q	Q	cm^3/min
转速 Spindle speed	n	N	min^{-1}

TECHNICAL INFORMATION 技术资料

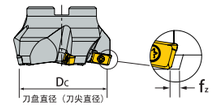
铣削加工
Milling

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

$$Vc=\frac{\pi \times Dc\times n}{1,000}$$

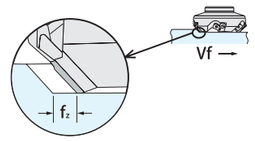
Vc：切削速度［m/min］
Dc：刀盘直径［mm］
n ：主轴转数［min^{-1}］



● 工作台进给量与每齿进给量

$$f_z=\frac{Vf}{Z\times n}$$

f_z ：每齿进给量 （mm/齿）
Vf：工作台进给速度［mm/min］
Z ：刀盘刃数［片］
n ：主轴转数［min^{-1}］



● 所需动力

$$Pc=\frac{K_s\times Q}{6,120\times \eta}=\frac{K_s\times ae\times Vf\times ap}{6,120,000\times \eta}$$
$$=\frac{K_s\times ae\times f_z\times Z\times n\times ap}{6,120,000\times \eta}$$

$$P_{HP}=\frac{6,120}{4,500}\times Pc$$

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］
f_z ：每刀进给量［mm/t］
Z ：刀盘刃数［片］
n ：主轴转数［min^{-1}］
ap：切深［mm］
K_s：比切削阻力值［kgf/mm^2］
η ：机械效率（0.7～0.8）
Q ：切屑排出量［cm^3/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

● 切屑排出量

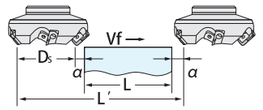
$$Q=\frac{ae\times Vf\times ap}{1,000}=\frac{ae\times f_z\times Z\times n\times ap}{1,000}$$

Q ：切屑排出量［cm^3/min=cc/min］
ae：切削宽度［mm］
Vf：工作台进给速度［mm/min］
f_z ：每刀进给量［mm/t］
Z ：刀盘刃数［片］
n ：主轴转数［min^{-1}］
ap：切深［mm］

● 加工时间

$$T=\frac{60\times L'}{Vf}=\frac{60\times L'}{f_z\times Z\times n}$$

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］
f_z ：每刀进给量［mm/t］
Z ：刀盘刃数［片］
n ：主轴转数［min^{-1}］



铣削刀具 MILLING CUTTERS



D
刀柄系统
ADAPTORS

MAS403 BT

ER 筒夹刀柄 D3
ER Collet Chuck Adaptor

高精度 ER 筒夹刀柄 D5
High Precision ER Collet Chuck Adaptor

液压刀柄 D7
Hydraulic Chuck Adaptor

强力铣夹头刀柄 D10
Power Chuck Adaptor

侧固式刀柄（DIN 1835-B） D11
Weldon Adaptor

2° 侧固式刀柄（DIN 1835-E） D12
2° Weldon Adaptor

热缩刀柄 D13
Shrink Fit Adaptor

微补偿同步攻丝刀柄 D16
Micro Compensation Tapping Chuck

弹性筒夹伸缩攻丝刀柄 D17
Flexible Tapping Chuck

攻丝刀柄 D18
Tapping Chuck Adaptor

面铣刀刀柄 D19
Face Mill Adaptor

侧铣刀刀柄 D21
Side Mill Adaptor

带扁尾莫氏锥孔刀柄 D22
Morse Taper Wtih Tang Adaptor

无扁尾莫氏锥孔刀柄 D23
Morse Taper With Draw Thread Adaptor

钻夹头刀柄 D24
Drill chuck adaptor

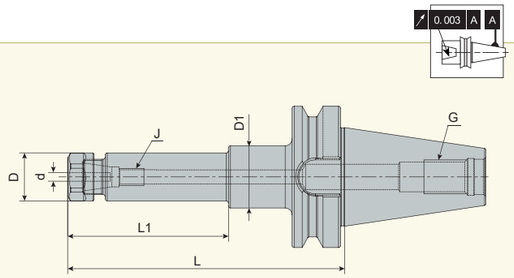
可调刀柄 D25
Adjustable Adaptor

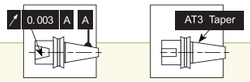
BT-C 刀柄 D26
BT-C Adaptor

MAS403 BT

ER 筒夹刀柄
ER Collet Chuck Adaptor



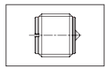


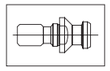


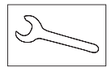
规格型号 Designation	L	D	d	D1	L1	J	G	Kg	在库 Stock
BT30 ER16x70	70	28	0.5-10	-	-	M10	M12	0.55	●
BT30 ER16x100	100	28	0.5-10	-	-	M10	M12	0.71	●
BT30 ER20x70	70	34	1-13	-	-	M12	M12	0.63	●
BT30 ER20x100	100	34	1-13	-	-	M12	M12	0.83	●
BT30 ER25x60	60	42	1-16	-	-	M16	M12	0.64	●
BT30 ER25x100	100	42	1-16	-	-	M16	M12	1.06	●
BT30 ER32x60	60	50	2-20	-	-	M18x1.5	M12	0.70	●
BT30 ER32x100	100	50	2-20	-	-	M22x1.5	M12	1.05	●
BT40 ER16x70	70	28	0.5-10	-	-	M10	M16	1.12	●
BT40 ER16x100	100	28	0.5-10	-	-	M10	M16	1.27	●
BT40 ER16x150	150	28	0.5-10	40	85	M10	M16	1.64	●
BT40 ER16x200	200	28	0.5-10	40	110	M10	M16	1.98	●
BT40 ER20x70	70	34	1-13	-	-	M12	M16	1.17	●
BT40 ER20x100	100	34	1-13	-	-	M12	M16	1.35	●
BT40 ER20x120	120	34	1-13	-	-	M12	M16	1.47	●
BT40 ER20x150	150	34	1-13	-	-	M12	M16	1.66	●
BT40 ER25x60	60	42	1-16	-	-	M16	M16	1.17	●
BT40 ER25x100	100	42	1-16	-	-	M16	M16	1.56	●
BT40 ER25x150	150	42	1-16	-	-	M16	M16	1.96	●
BT40 ER32x60	60	50	2-20	-	-	M22x1.5	M16	1.20	●
BT40 ER32x100	100	50	2-20	-	-	M22x1.5	M16	1.75	●
BT40 ER32x120	120	50	2-20	-	-	M22x1.5	M16	2.04	●
BT40 ER32x150	150	50	2-20	-	-	M22x1.5	M16	2.48	●
BT40 ER32x200	200	50	2-20	57	113	M22x1.5	M16	3.45	●
BT40 ER40x80	80	63	3-26	-	-	M28x1.5	M16	1.60	●
BT40 ER40x100	100	63	3-26	-	-	M28x1.5	M16	1.88	●
BT40 ER40x150	150	63	3-26	-	-	M28x1.5	M16	3.20	●

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT30 ER16x7
- If needing the hole for data chip, please add "X" at the end of the designation
- Ordering sample: 1 PC BT30 ER16x70


☞ G3-H9


☞ G20


☞ G22-G26


☞ G29

备件
Spare Parts



规格型号 Designation	螺帽 ER NUT
ER16	NUT ER16
ER20	NUT ER20
ER25	NUT ER25
ER32	NUT ER32
ER40	NUT ER40

● 标准库存 Item in stock

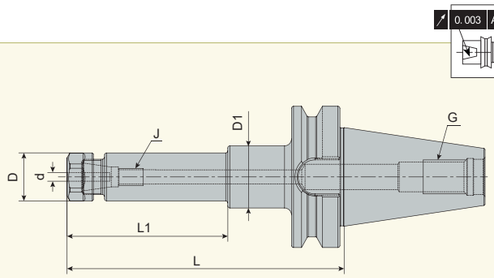
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)

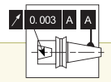
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

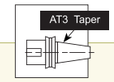
MAS403 BT

ER 筒夹刀柄
ER Collet Chuck Adaptor









规格型号 Designation	L	D	d	D1	L1	J	G	Kg	在库 Stock
BT50 ER16x100	100	28	0.5-10	-	-	M10	M24	3.82	●
BT50 ER16x125	125	28	0.5-10	-	-	M10	M24	4.07	●
BT50 ER16x150	150	28	0.5-10	-	-	M10	M24	4.08	●
BT50 ER16x200	200	28	0.5-10	40	85	M10	M24	4.57	●
BT50 ER20x100	100	34	1-13	-	-	M12	M24	3.83	●
BT50 ER20x125	125	34	1-13	-	-	M12	M24	3.99	●
BT50 ER20x150	150	34	1-13	-	-	M12	M24	4.15	●
BT50 ER20x200	200	34	1-13	50	85	M12	M24	4.69	●
BT50 ER25x100	100	42	1-16	-	-	M16	M24	4.07	●
BT50 ER25x150	150	42	1-16	-	-	M16	M24	4.56	●
BT50 ER25x200	200	42	1-16	55	87	M16	M24	5.63	●
BT50 ER32x100	100	50	2-20	-	-	M22x1.5	M24	4.20	●
BT50 ER32x125	125	50	2-20	-	-	M22x1.5	M24	4.60	●
BT50 ER32x150	150	50	2-20	-	-	M22x1.5	M24	4.87	●
BT50 ER32x200	200	50	2-20	63	88	M22x1.5	M24	6.20	●
BT50 ER40x100	100	63	3-26	-	-	M28x1.5	M24	4.48	●
BT50 ER40x150	150	63	3-26	-	-	M28x1.5	M24	5.57	●
BT50 ER40x200	200	63	3-26	-	-	M28x1.5	M24	6.67	●

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT50 ER16x100
- If needing the hole for data chip, please add "X" at the end of the designation
- Ordering sample: 1 PC BT50 ER16x100

☞ G3-H9

☞ G20


☞ G22-G26

☞ G29

备件
Spare Parts



规格型号 Designation	螺帽 ER NUT
ER16	NUT ER16
ER20	NUT ER20
ER25	NUT ER25
ER32	NUT ER32
ER40	NUT ER40

● 标准库存 Item in stock

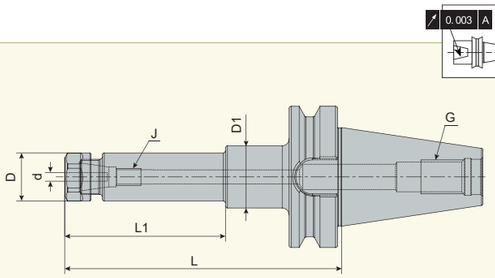
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)

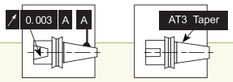
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

MAS403 BT

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



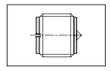


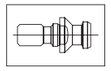


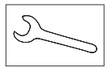
规格型号 Designation	L	D	d	D1	L1	J	G	Kg	在库 Stock
BT30 ER16x70.TOP	70	28	0.5-10	-	-	M10	M12	0.55	●
BT30 ER16x100.TOP	100	28	0.5-10	-	-	M10	M12	0.71	●
BT30 ER20x70.TOP	70	34	1-13	-	-	M12	M12	0.63	●
BT30 ER20x100.TOP	100	34	1-13	-	-	M12	M12	0.83	●
BT30 ER25x60.TOP	60	42	1-16	-	-	M16	M12	0.64	●
BT30 ER25x100.TOP	100	42	1-16	-	-	M16	M12	1.06	●
BT30 ER32x60.TOP	60	50	2-20	-	-	M18x1.5	M12	0.70	●
BT30 ER32x100.TOP	100	50	2-20	-	-	M22x1.5	M12	1.05	●
BT40 ER16x70.TOP	70	28	0.5-10	-	-	M10	M16	1.12	●
BT40 ER16x100.TOP	100	28	0.5-10	-	-	M10	M16	1.27	●
BT40 ER16x150.TOP	150	28	0.5-10	40	85	M10	M16	1.64	●
BT40 ER16x200.TOP	200	28	0.5-10	40	110	M10	M16	1.98	●
BT40 ER20x70.TOP	70	34	1-13	-	-	M12	M16	1.17	●
BT40 ER20x100.TOP	100	34	1-13	-	-	M12	M16	1.35	●
BT40 ER20x120.TOP	120	34	1-13	-	-	M12	M16	1.47	●
BT40 ER20x150.TOP	150	34	1-13	-	-	M12	M16	1.66	●
BT40 ER25x60.TOP	60	42	1-16	-	-	M16	M16	1.17	●
BT40 ER25x100.TOP	100	42	1-16	-	-	M16	M16	1.56	●
BT40 ER25x150.TOP	150	42	1-16	-	-	M16	M16	1.96	●
BT40 ER32x60.TOP	60	50	2-20	-	-	M22x1.5	M16	1.20	●
BT40 ER32x100.TOP	100	50	2-20	-	-	M22x1.5	M16	1.75	●
BT40 ER32x120.TOP	120	50	2-20	-	-	M22x1.5	M16	2.04	●
BT40 ER32x150.TOP	150	50	2-20	-	-	M22x1.5	M16	2.48	●
BT40 ER32x200.TOP	200	50	2-20	57	113	M22x1.5	M16	3.45	●
BT40 ER40x80.TOP	80	63	3-26	-	-	M28x1.5	M16	1.60	●
BT40 ER40x100.TOP	100	63	3-26	-	-	M28x1.5	M16	1.88	●
BT40 ER40x150.TOP	150	63	3-26	-	-	M28x1.5	M16	3.20	●

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT30 ER16x70.TOP
- If needing the hole for data chip, please add "X" at the end of the designation
- Ordering sample: 1 PC BT30 ER16x70.TOP


G3-G9


G20


G22-G26


G29

备件
Spare Parts



规格型号 Designation	螺帽 ER NUT
ER16.TOP	NUT ER16.TOP
ER20.TOP	NUT ER20.TOP
ER25.TOP	NUT ER25.TOP
ER32.TOP	NUT ER32.TOP
ER40.TOP	NUT ER40.TOP

● 标准库存 Item in stock

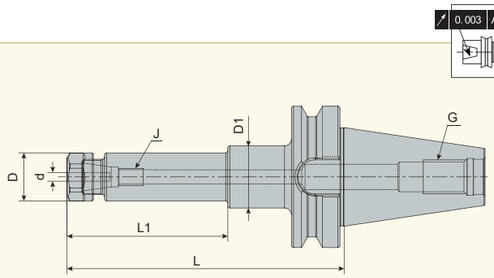
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

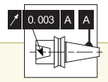
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

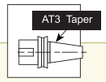
MAS403 BT

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





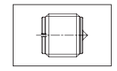


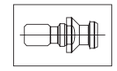


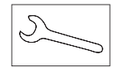
规格型号 Designation	L	D	d	D1	L1	J	G	Kg	在库 Stock
BT50 ER16x100.TOP	100	28	0.5-10	-	-	M10	M24	3.82	●
BT50 ER16x125.TOP	125	28	0.5-10	-	-	M10	M24	4.07	●
BT50 ER16x150.TOP	150	28	0.5-10	-	-	M10	M24	4.08	●
BT50 ER16x200.TOP	200	28	0.5-10	40	85	M10	M24	4.57	●
BT50 ER20x100.TOP	100	34	1-13	-	-	M12	M24	3.83	●
BT50 ER20x125.TOP	125	34	1-13	-	-	M12	M24	3.99	●
BT50 ER20x150.TOP	150	34	1-13	-	-	M12	M24	4.15	●
BT50 ER20x200.TOP	200	34	1-13	50	85	M12	M24	4.69	●
BT50 ER25x100.TOP	100	42	1-16	-	-	M16	M24	4.07	●
BT50 ER25x150.TOP	150	42	1-16	-	-	M16	M24	4.56	●
BT50 ER25x200.TOP	200	42	1-16	55	87	M16	M24	5.63	●
BT50 ER32x100.TOP	100	50	2-20	-	-	M22x1.5	M24	4.20	●
BT50 ER32x125.TOP	125	50	2-20	-	-	M22x1.5	M24	4.60	●
BT50 ER32x150.TOP	150	50	2-20	-	-	M22x1.5	M24	4.87	●
BT50 ER32x200.TOP	200	50	2-20	63	88	M22x1.5	M24	6.20	●
BT50 ER40x100.TOP	100	63	3-26	-	-	M28x1.5	M24	4.48	●
BT50 ER40x150.TOP	150	63	3-26	-	-	M28x1.5	M24	5.57	●
BT50 ER40x200.TOP	200	63	3-26	-	-	M28x1.5	M24	6.67	●

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT50 ER16x100.TOP
- If needing the hole for data chip, please add "X" at the end of the designation
- Ordering sample: 1 PC BT50 ER16x100.TOP


G3-G9


G20


G22-G26


G29

备件
Spare Parts



规格型号 Designation	螺帽 ER NUT
ER16.TOP	NUT ER16.TOP
ER20.TOP	NUT ER20.TOP
ER25.TOP	NUT ER25.TOP
ER32.TOP	NUT ER32.TOP
ER40.TOP	NUT ER40.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)

MAS403 BT

液压刀柄
Hydraulic Chuck Adaptor



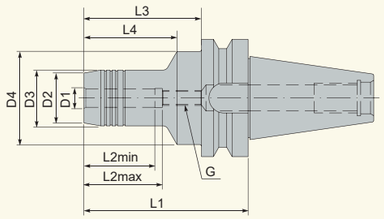


Fig A

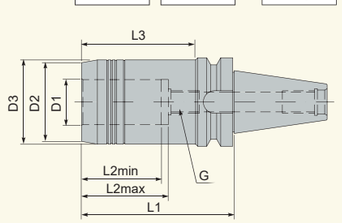
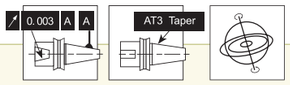
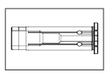


Fig B

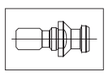


规格型号 Designation	D1	D2	D3	D4	L1	L2max	L2min	L3	L4	G	Fig	在库 Stock
BT30 HYDRO 6x60	6	23	26	45	60	37	27	38	33	M5	FigA	●
BT30 HYDRO 8x64	8	25	28	45	64	37	27	42	29	M6	FigA	●
BT30 HYDRO 10x64	10	27	30	45	64	42	32	42	37	M8x1.0	FigA	●
BT30 HYDRO 12x72	12	29	32	45	72	47	37	50	43	M10×1.0	FigA	●
BT30 HYDRO 14x70	14	30	34	45	70	47	37	48	33	M10×1.0	FigA	●
BT30 HYDRO 16x90	16	34	38	45	90	52	42	68	52	M12×1.0	FigA	●
BT30 HYDRO 18x90	18	36	40	42	90	52	42	68	52	M12×1.0	FigA	●
BT30 HYDRO 20x90	20	38	42	-	90	52	42	68	-	M12×1.0	FigB	●

- 刀在 2.5 x D 处回转精度 < 0.003 mm
- 转速为 25,000 RPM 时动平衡等级达到 G2.5 或 Umax < 1g mm
- 用于自动换刀
- 使用减径套可夹持更多直径尺寸
- 订货示例：1 件 BT40 HYDRO 32x110
- Run-out accuracy < 0.003 mm at 2.5 x D
- Balancing grade G2.5 at 25,000 RPM or Umax < 1g mm
- For automatic tool change
- Additional shank diameters can be clamped using intermediatesleeves
- Ordering sample: 1 PC BT40 HYDRO 32x110



☞ G15



☞ G22-G26

备件
Spare Parts

中心螺孔 Central screw hole	调节螺丝 Adjusting screw
M5	SR50 M5x15.HC
M6	SR50 M6x15.HC
M8x1.0	SR50 M8x1x15.HC
M10x1.0	SR50 M10x1x15.HC
M12x1.0	SR50 M12x1x15.HC
M16x1.0	SR50 M16x1x15.HC

● 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)

MAS403 BT

液压刀柄
Hydraulic Chuck Adaptor



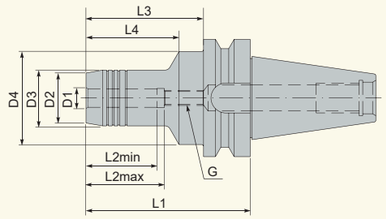


Fig A

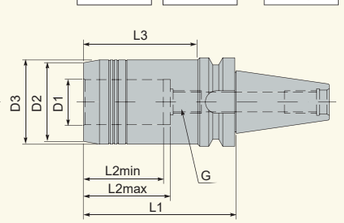
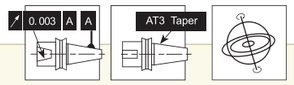
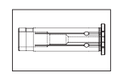


Fig B

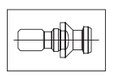


规格型号 Designation	D1	D2	D3	D4	L1	L2max	L2min	L3	L4	G	Fig	在库 Stock
BT40 HYDRO 6x90	6	23	26	50	90	37	27	63	43	M5	FigA	●
BT40 HYDRO 8x90	8	25	28	50	90	37	27	63	43.5	M6	FigA	●
BT40 HYDRO 10x90	10	27	30	50	90	42	32	63	44	M8x1.0	FigA	●
BT40 HYDRO 12x90	12	29	32	50	90	47	37	63	44.5	M10×1.0	FigA	●
BT40 HYDRO 14x90	14	30	34	50	90	47	37	63	47.5	M10×1.0	FigA	●
BT40 HYDRO 16x90	16	34	38	50	90	52	42	63	47.5	M12×1.0	FigA	●
BT40 HYDRO 18x90	18	36	40	50	90	52	42	63	47.5	M12×1.0	FigA	●
BT40 HYDRO 20x90	20	38	42	50	90	52	42	63	47.5	M12×1.0	FigA	●
BT40 HYDRO 25x90	25	46	50	-	90	58	48	55	-	M12×1.0	FigB	●
BT40 HYDRO 32x110	32	56	60	-	110	62	52	83	-	M16×1.0	FigB	●

- 刀在 2.5 x D 处回转精度 < 0.003 mm
- 转速为 25,000 RPM 时动平衡等级达到 G2.5 或 Umax < 1g mm
- 用于自动换刀
- 使用减径套可夹持更多直径尺寸
- 订货示例：1 件 BT40 HYDRO 32x110
- Run-out accuracy < 0.003 mm at 2.5 x D
- Balancing grade G2.5 at 25,000 RPM or Umax < 1g mm
- For automatic tool change
- Additional shank diameters can be clamped using intermediatesleeves
- Ordering sample: 1 PC BT40 HYDRO 32x110



☞ G15



☞ G22-G26

备件
Spare Parts

中心螺孔 Central screw hole	调节螺丝 Adjusting screw
M5	SR50 M5x15.HC
M6	SR50 M6x15.HC
M8x1.0	SR50 M8x1x15.HC
M10x1.0	SR50 M10x1x15.HC
M12x1.0	SR50 M12x1x15.HC
M16x1.0	SR50 M16x1x15.HC

● 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)

液压刀柄
Hydraulic Chuck Adaptor



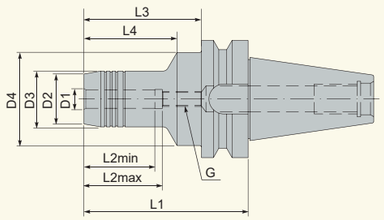


Fig A

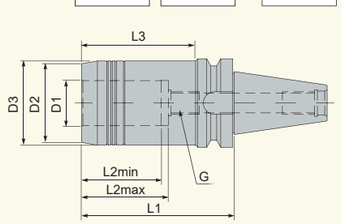
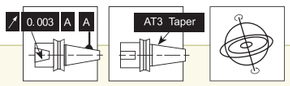
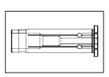


Fig B

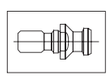


规格型号 Designation	D1	D2	D3	D4	L1	L2max	L2min	L3	L4	G	Fig	在库 Stock
BT50 HYDRO 6x110	6	23	26	80	110	37	27	72	43	M5	FigA	●
BT50 HYDRO 8x110	8	25	28	80	110	37	27	72	43.5	M6	FigA	●
BT50 HYDRO 10x110	10	27	30	80	110	42	32	72	44	M8×1.0	FigA	●
BT50 HYDRO 12x110	12	29	32	80	110	47	37	72	42	M10×1.0	FigA	●
BT50 HYDRO 14x110	14	30	34	80	110	47	37	72	42	M10×1.0	FigA	●
BT50 HYDRO 16x110	16	34	38	80	110	52	42	72	45	M12×1.0	FigA	●
BT50 HYDRO 18x110	18	36	40	80	110	52	42	72	45	M12×1.0	FigA	●
BT50 HYDRO 20x110	20	28	42	80	110	52	42	72	47.5	M12×1.0	FigA	●
BT50 HYDRO 25x110	25	46	50	80	110	58	48	72	47.5	M12×1.0	FigA	●
BT50 HYDRO 32x110	32	56	60	80	110	64	54	72	47.5	M12×1.0	FigA	●

- 刀在 2.5 x D 处回转精度 < 0.003 mm
- 转速为 25,000 RPM 时动平衡等级达到 G2.5 或 Umax < 1g mm
- 用于自动换刀
- 使用减径套可夹持更多直径尺寸
- 订货示例：1 件 BT40 HYDRO 32x110
- Run-out accuracy < 0.003 mm at 2.5 x D
- Balancing grade G2.5 at 25,000 RPM or Umax < 1g mm
- For automatic tool change
- Additional shank diameters can be clamped using intermediatesleeves
- Ordering sample: 1 PC BT40 HYDRO 32x110



☞ G15



☞ G22-G26

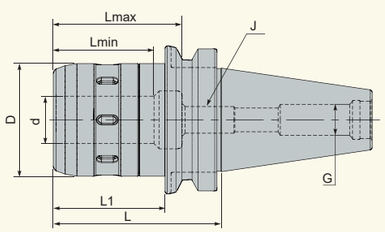
备件
Spare Parts

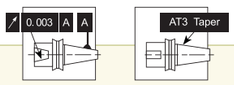
中心螺孔 Central screw hole	调节螺丝 Adjusting screw
M5	SR50 M5x15.HC
M6	SR50 M6x15.HC
M8x1.0	SR50 M8x1x15.HC
M10x1.0	SR50 M10x1x15.HC
M12x1.0	SR50 M12x1x15.HC
M16x1.0	SR50 M16x1x15.HC

MAS403 BT

强力铣夹头刀柄
Power Chuck Adaptor

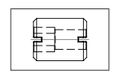




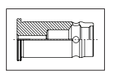


规格型号 Designation	D	d	L	L1	Lmin	Lmax	J	G	KG	在库 Stock
BT40 DMG32X105	75	32	105	78	-	95	M16	M16	2.9	○
BT40 DMG32X110.C	76	32	110	83	68	87	M16	M16	2.95	○
BT50 DMG32X105	75	32	105	67	-	95	M24	M24	5.0	○
BT50 DMG32X110.C	76	32	113.5	75.5	68	87	M20x2	M24	5.33	○

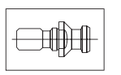
- 刀柄若需数据芯片孔，请在型号后加 “.X”
- 订货示例：1 件 BT40 DMG32X105
- 强力直柄筒夹，请参照：☞ H17 页
- 选配轴向调节螺钉，请参照：☞ H23 页
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC BT40 DMG32X105.
- Power straight shank collet, please see page H17
- The optional axial adjusting screw, please see page H23



☞ G20



☞ G22-G26



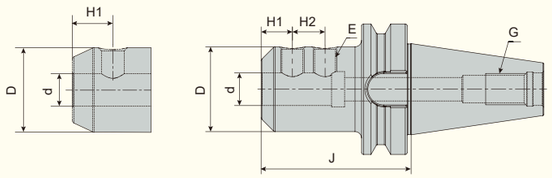
☞ G22-G26

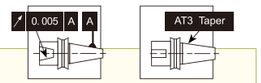
刀柄系统 ADAPTORS

侧固式刀柄 *(DIN 1835-B)*

Weldon Adaptor

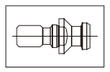






规格型号 Designation	d	D	L	H1	H2	E	G	Kg	在库 Stock
BT30 EM16x60	16	46	60	24	-	M14	M12	0.79	●
BT30 EM20x80	20	52	80	25	-	M16	M12	1.04	●
BT40 EM16x65	16	48	65	24	-	M14	M16	1.35	●
BT40 EM20x75	20	52	75	25	-	M16	M16	1.54	●
BT40 EM25x105	25	65	105	24	25	M18x2	M16	2.5	●
BT40 EM32x110	32	72	110	24	28	M20x2	M16	2.84	●
BT50 EM16x100	16	48	100	24	-	M14	M24	4.21	●
BT50 EM20x100	20	52	100	25	-	M16	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	●

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT30 EM16×60
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC BT30 EM16x60



☞G22-G26

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screwscrew	锁紧扳手（选配） 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

● 标准库存 Item in stock

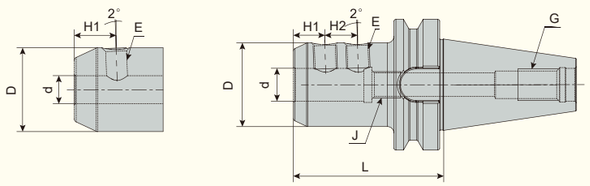
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)

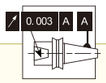
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

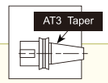
2° 侧固式刀柄 *(DIN 1835-E)*

2° Weldon Adaptor



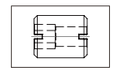


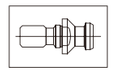




规格型号 Designation	d	D	L	H1	H2	E	J	G	Kg	在库 Stock
BT40 EM16x65E	16	48	65	24	-	M14	M12	M16	1.38	●
BT40 EM20x75E	20	52	75	25	-	M16	M16	M16	1.55	●
BT40 EM25x105E	25	65	105	24	22	M18x2	M20X2	M16	2.47	●
BT40 EM32x110E	32	72	110	24	24	M20x2	M20X2	M16	2.80	●
BT50 EM16x100E	16	48	100	24	-	M14	M12	M24	4.27	●
BT50 EM20x100E	20	52	100	25	-	M16	M16	M24	4.36	●
BT50 EM25x115E	25	65	115	24	22	M18x2	M20X2	M24	5.08	●
BT50 EM32x115E	32	72	115	24	24	M20x2	M20X2	M24	5.25	●
BT50 EM40x115E	40	90	115	30	30	M20x2	M20X2	M24	6.19	●
BT50 EM50x125E	50	98	125	35	33	M24x2	M20X2	M24	6.94	●

- 中心调节螺钉非产品标配螺钉，若有需要请查看：☞G20 页选配
- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT40 EM16x65E
- The center adjustable screw should be ordered separately□if needed, please see page G20.
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC BT40 EM16x65E





☞G20 ☞G22-G26

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screwscrew	锁紧扳手（选配） 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

● 标准库存 Item in stock

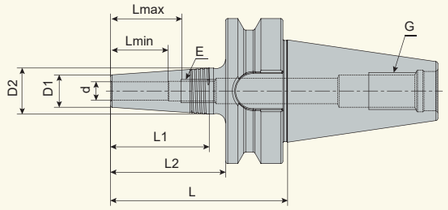
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)

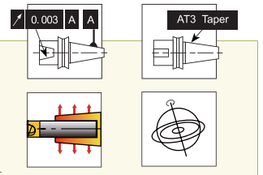
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

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

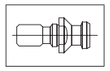






规格型号 Designation	d	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
BT40 SRK3x77	3	10	15	35.55	50	77	10	16	M6	M16	1.0	○
BT40 SRK3x112	3	10	19	64.15	85	112	10	16	M6	M16	1.0	○
BT40 SRK4x77	4	10	15	35.55	50	77	12	18	M6	M16	1.0	○
BT40 SRK4x112	4	10	19	64.15	85	112	12	18	M6	M16	1.0	○
BT40 SRK5x77	5	10	15	35.55	50	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
● 刀柄若需数据芯片孔，请在型号后加“.X”
● 订货示例：1 件 BT40 SRK3x77
● The collet should be ordered separately.
● If needing the hole for data chip, please add "X" at the end of the designation.
● Ordering sample: 1 PC BT40 SRK3x77.



☞ G22-G26

备件
Spare Parts

E	轴向调节螺钉 Clamping screw	锁紧扳手（选配） Allen key for clamping screw
M6	SR50 M6x20.DC	KEY01 M3
M8	SR50 M8x20.DC	KEY01 M4
M10	SR50 M10x18.DC	KEY01 M5
M12	SR50 M12x18.DC	KEY01 M6
M10(SRK12)	SR50B M10X18.BC	KEY01 M5

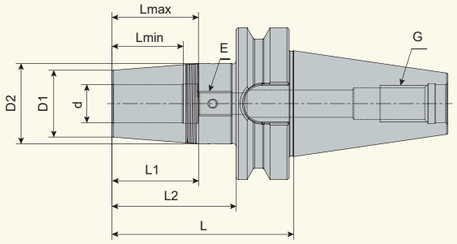
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

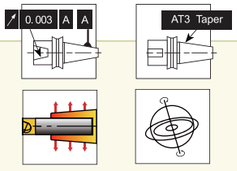
MAS403 BT

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 SRKIN6x90	6	21	27	38.0	63	90	25	36	M5	M16	1.13	●
BT40 SRKIN6x120	6	21	27	38.0	93	120	25	36	M5	M16	1.30	○
BT40 SRKIN6x160	6	21	27	38.0	133	160	25	36	M5	M16	1.50	○
BT40 SRKIN8x90	8	21	27	38.0	63	90	25	36	M6	M16	1.10	●
BT40 SRKIN8x120	8	21	27	38.0	93	120	25	36	M6	M16	1.30	○
BT40 SRKIN8x160	8	21	27	38.0	133	160	25	36	M6	M16	1.40	○
BT40 SRKIN10x90	10	24	32	50.5	63	90	31	42	M8	M16	1.23	●
BT40 SRKIN10x120	10	24	32	50.5	93	120	31	42	M8	M16	1.40	○
BT40 SRKIN10x160	10	24	32	50.5	133	160	31	42	M8	M16	1.60	○
BT40 SRKIN12x90	12	24	32	50.5	63	90	36	47	M10	M16	1.13	●
BT40 SRKIN12x120	12	24	32	50.5	93	120	36	47	M10	M16	1.40	○
BT40 SRKIN12x160	12	24	32	50.5	133	160	36	47	M10	M16	1.60	○
BT40 SRKIN14x90	14	27	34	44.5	63	90	36	47	M10	M16	1.26	●
BT40 SRKIN14x120	14	27	34	44.5	93	120	36	47	M10	M16	1.50	○
BT40 SRKIN14x160	14	27	34	44.5	133	160	36	47	M10	M16	1.70	○
BT40 SRKIN16x90	16	27	34	44.5	63	90	39	50	M12	M16	1.23	●
BT40 SRKIN16x120	16	27	34	44.5	93	120	39	50	M12	M16	1.50	○
BT40 SRKIN16x160	16	27	34	44.5	133	160	39	50	M12	M16	1.70	○
BT40 SRKIN18x90	18	33	42	57.0	63	90	39	50	M12	M16	1.40	●
BT40 SRKIN18x120	18	33	42	57.0	93	120	39	50	M12	M16	1.70	○
BT40 SRKIN18x160	18	33	42	57.0	133	160	39	50	M12	M16	2.10	○
BT40 SRKIN20x90	20	33	42	57.0	63	90	41	52	M16	M16	1.30	●
BT40 SRKIN20x120	20	33	42	57.0	93	120	41	52	M16	M16	1.65	○
BT40 SRKIN20x160	20	33	42	57.0	133	160	41	52	M16	M16	2.00	○
BT40 SRKIN25x110	25	44	53	57.0	83	110	47	58	M16	M16	1.84	●
BT40 SRKIN25x160	25	44	53	57.0	133	160	47	58	M16	M16	2.80	○

● 当工作转速 N=25,000RPM 时，刀柄的平衡等级为 G2.5
● 刀柄若需数据芯片孔，请在型号后加“.X”
● 订货示例：1 件 BT40 SRKIN6×80
● It is with G2.5/25,000 RPM.
● If needing the hole for data chip, please add "X" at the end of the designation.
● Ordering sample: 1 PC BT40 SRKIN6x80.



☞ G22-G26

备件
Spare Parts

E	轴向调节螺钉 Clamping screw	锁紧扳手（选配） Allen key for clamping screw
M5	SR50B M5x20.BC	KEY01 M2.5
M6	SR50B M6x20.BC	KEY01 M3
M8	SR50B M8x20.BC	KEY01 M4
M10	SR50B M10x18.BC	KEY01 M5
M12	SR50B M12x18.BC	KEY01 M6
M16	SR50B M16x20.BC	KEY01 M8

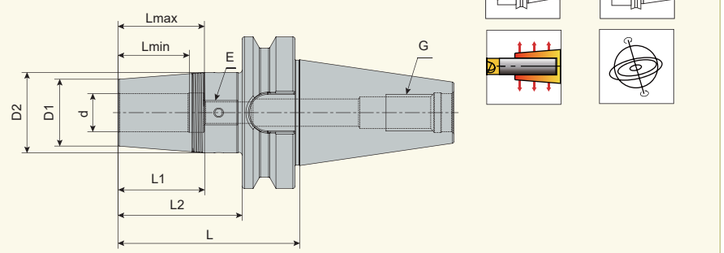
刀柄系统 ADAPTORS

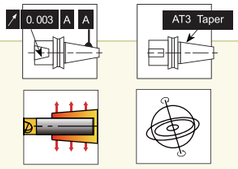
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

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。

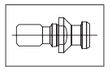






规格型号 Designation	d	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
BT50 SRKIN6x100	6	21	26	38.0	62	100	25	36	M5	M24	3.67	●
BT50 SRKIN6x120	6	21	26	38.0	82	120	25	36	M5	M24	3.90	○
BT50 SRKIN6x160	6	21	26	38.0	122	160	25	36	M5	M24	4.10	○
BT50 SRKIN8x100	8	21	27	38.0	62	100	25	36	M6	M24	3.78	●
BT50 SRKIN8x120	8	21	27	38.0	82	120	25	36	M6	M24	3.90	○
BT50 SRKIN8x160	8	21	27	38.0	122	160	25	36	M6	M24	4.10	○
BT50 SRKIN10x100	10	24	32	50.5	62	100	31	42	M8	M24	3.78	●
BT50 SRKIN10x120	10	24	32	50.5	82	120	31	42	M8	M24	4.00	○
BT50 SRKIN10x160	10	24	32	50.5	122	160	31	42	M8	M24	4.20	○
BT50 SRKIN12x100	12	24	32	50.5	62	100	36	47	M10	M24	3.80	●
BT50 SRKIN12x120	12	24	32	50.5	82	120	36	47	M10	M24	4.00	○
BT50 SRKIN12x160	12	24	32	50.5	122	160	36	47	M10	M24	4.20	○
BT50 SRKIN14x100	14	27	34	44.5	62	100	36	47	M10	M24	3.90	●
BT50 SRKIN14x120	14	27	34	44.5	82	120	36	47	M10	M24	4.00	○
BT50 SRKIN14x160	14	27	34	44.5	122	160	36	47	M10	M24	4.30	○
BT50 SRKIN16x100	16	27	34	44.5	62	100	39	50	M12	M24	3.85	●
BT50 SRKIN16x120	16	27	34	44.5	82	120	39	50	M12	M24	4.00	○
BT50 SRKIN16x160	16	27	34	44.5	122	160	39	50	M12	M24	4.20	○
BT50 SRKIN18x100	18	33	42	57.0	62	100	39	50	M12	M24	3.92	●
BT50 SRKIN18x120	18	33	42	57.0	82	120	39	50	M12	M24	4.20	○
BT50 SRKIN18x160	18	33	42	57.0	122	160	39	50	M12	M24	4.60	○
BT50 SRKIN20x100	20	33	42	57.0	62	100	41	52	M16	M24	3.90	●
BT50 SRKIN20x120	20	33	42	57.0	82	120	41	52	M16	M24	4.10	○
BT50 SRKIN20x160	20	33	42	57.0	122	160	41	52	M16	M24	4.45	○
BT50 SRKIN25x120	25	44	53	57.0	82	120	47	58	M16	M24	4.50	●
BT50 SRKIN25x160	25	44	53	57.0	122	160	47	58	M16	M24	5.10	○
BT50 SRKIN32x120	32	44	53	57.0	82	120	47	58	M16	M24	4.34	●
BT50 SRKIN32x160	32	44	53	57.0	122	160	47	58	M16	M24	5.10	○

- 当工作转速 N=25,000RPM 时，刀柄的平衡等级为 G2.5
- 刀柄若需数据芯片孔，请在型号后加 “.X”
- 订货示例：1 件 BT40 SRKIN6×80
- It is with G2.5/25,000 RPM.
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC BT40 SRKIN6x80.



G22-G26

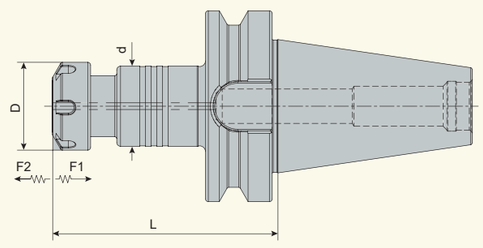
备件
Spare Parts

E	轴向调节螺钉 Clamping screw	锁紧扳手（选配） Allen key for clamping screw
M5	SR50B M5x20.BC	KEY01 M2.5
M6	SR50B M6x20.BC	KEY01 M3
M8	SR50B M8x20.BC	KEY01 M4
M10	SR50B M10x18.BC	KEY01 M5
M12	SR50B M12x18.BC	KEY01 M6
M16	SR50B 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)

微补偿同步攻丝刀柄
Micro Compensation Tapping Chuck

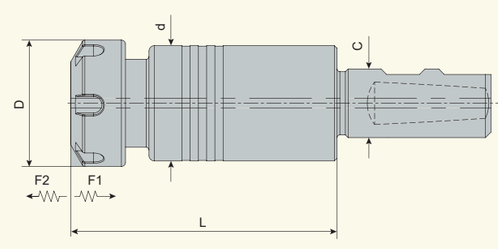




规格型号 Designation	D	d	L	Fl	F2	攻丝范围 Tap	筒夹 Collet Chuck	在库 Stock
BT30 VER16x85	28	45	85	0.1-0.5	0.5	M2-M12	ER16-G	◐
BT30 VER20x85	34	45	85	0.1-0.5	0.5	M3-M12	ER20-G	◐
BT30 VER25x85	42	48	85	0.1-0.5	0.5	M2-M16	ER25-G	◐
BT30 VER32x100	50	48	100	0.1-0.5	0.5	M4-M22	ER32-G	◐
BT40 VER16x85	28	45	85	0.1-0.5	0.5	M2-M12	ER16-G	◐
BT40 VER20x90	34	45	90	0.1-0.5	0.5	M3-M12	ER20-G	◐
BT40 VER25x100	42	48	100	0.1-0.5	0.5	M2-M16	ER25-G	◐
BT40 VER32x100	50	48	100	0.1-0.5	0.5	M4-M22	ER32-G	●
BT50 VER20x100	34	45	100	0.1-0.5	0.5	M3-M12	ER20-G	◐
BT50 VER32x110	50	48	110	0.1-0.5	0.5	M4-M22	ER32-G	●
BT50 VER32x160	50	48	160	0.1-0.5	0.5	M4-M22	ER32-G	◐

- 订货示例：1 件 BT30 VER16x85
- Ordering sample: 1 PC BT30 VER16x85





规格型号 Designation	C	D	d	L	Fl	F2	攻丝范围 Tap	筒夹 Collet Chuck	在库 Stock
C16 VER20x75	16	34	45	75	0.1-0.5	0.5	M3-M12	ER20-G	◐
C20 VER20x80	20	34	45	80	0.1-0.5	0.5	M2-M12	ER16-G	◐
C25 VER20x80	25	34	45	80	0.1-0.5	0.5	M2-M12	ER16-G	◐
C25 VER32x95	25	50	48	95	0.1-0.5	0.5	M4-M22	ER32-G	◐
C32 VER32x95	32	50	48	95	0.1-0.5	0.5	M4-M22	ER16-G	◐

- 订货示例：1 件 C16 VER20x75
- Ordering sample: 1 PC C16 VER20x75

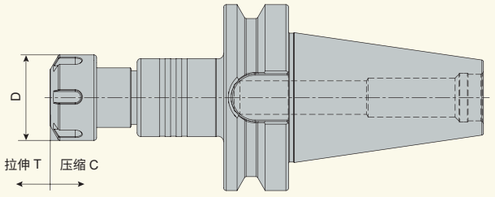
- SEM40 平键的选用请联系销售工程师
- Selecting for flat key, please check with sales technologist

● 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)

ADAPTORS 刀柄系统

弹性筒夹伸缩攻丝刀柄
Flexible Tapping Chuck





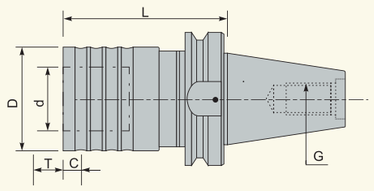
规格型号 Designation	攻丝范围 Tap	C	T	D	在库 Stock
BT30 TER20	M3-M12	5	7.5	34	◐
BT40 TER25	M3-M20	6	10	42	●
BT40 TER32	M4-M30	7.5	12.5	50	◐
BT50 TER25	M3-M20	6	10	42	◐
BT50 TER32	M4-M30	7.5	12	50	●
BT50 TER40	M4-M36	10.5	15	63	◐

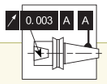
- 订货示例：1 件 BT30 TER20
- Ordering sample: 1 PC BT30 TER20

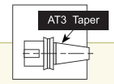
MAS403 BT

攻丝刀柄
Tapping Chuck Adaptor



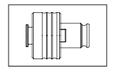




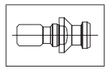


规格型号 Designation	d	D	L	长度补偿 Length compensation T	长度补偿 Length compensation C	攻丝范围 Tap	G	Kg	在库 Stock
BT40 TAP412x85	19	36	85	9	5	M4-M12	M16	1.2	○
BT40 TAP820x100	31	53.5	100	16	9	M8-M20	M16	1.8	○
BT50 TAP412x95	19	36.0	95	9	5	M4-M12	M24	3.8	○
BT50 TAP820x110	31	53.5	110	16	9	M8-M20	M24	4.3	○
BT50 TAP1433x140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

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT40 TAP412×85
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC BT40 TAP412x85.



☞G12



☞G22-G26

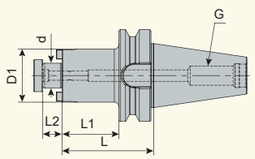
刀柄系统 ADAPTORS

● **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)

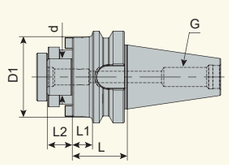
● **标准库存** Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ **无库存 (订货时，请确认交货期)** Order on demand (please confirm delivery time when ordering it)

面铣刀刀柄
Face Mill Adaptor

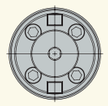


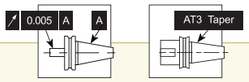


FigA



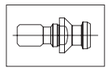
FigB





规格型号 Designation	d	D1	L	L2	L1	Fig	G	在库 Stock
BT30 SEM16x50	16	38	50	17	28	A	M12	◐
BT30 SEM22x50	22	47	50	19	28	A	M12	◐
BT40 SEM16x60	16	38	60	17	33	A	M16	◐
BT40 SEM16x60.C	16	38	60	17	33	A	M16	◐
BT40 SEM22x60	22	47	60	19	33	A	M16	◐
BT40 SEM22x60.C	22	47	60	19	33	A	M16	◐
BT40 SEM22x100	22	47	100	19	73	A	M16	◐
BT40 SEM22x150	22	47	150	19	123	A	M16	◐
BT40 SEM27x45	27	58	45	21	18	A	M16	◐
BT40 SEM27x60	27	58	60	21	33	A	M16	◐
BT40 SEM27x60.C	27	58	60	21	33	A	M16	◐
BT40 SEM27x100	27	58	100	21	73	A	M16	◐
BT40 SEM32x60	32	66	60	24	33	A	M16	◐
BT40 SEM32x60.C	32	66	60	24	33	A	M16	◐
BT40 SEM40x60	40	88	60	27	33	B	M16	◐
BT40 SEM40x60.C	40	88	60	27	33	B	M16	◐
BT40 SEM40x100	40	80	100	27	73	A	M16	◐

● 刀柄若需数据芯片孔，请在型号后加“.X”
● 订货示例：1 件 BT40 SEM16x60
● If needing the hole for data chip, please add "X" at the end of the designation.
● Ordering sample: 1 PC BT40 SEM16x60



G22-G26

备件
Spare Parts

规格型号 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	大头螺钉 Clamping screw	压紧螺钉 Flat key
SEM16	PL10 8x6	SR55 M3x10	-	SR55 M8x25
SEM22	PL10 10x9	SR55 M5x12	SRB22-M10	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	SRB27-M12	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	SRB32-M16	SR55 M16x40
SEM40	PL10 16x12	SR55 M6x16	SRB40-M20	SR55 M12x50
SEM60	PL10 25x18	SR55 M10x20	-	SR55 M16x60

● **标准库存**
Item in stock

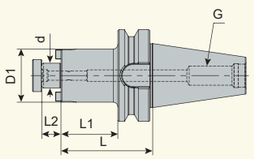
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

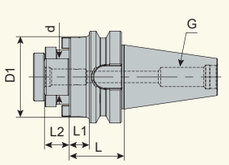
MAS403 BT

面铣刀刀柄
Face Mill Adaptor

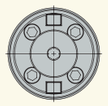


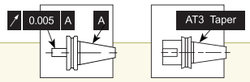


FigA



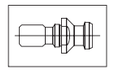
FigB





规格型号 Designation	d	D1	L	L2	L1	Fig	G	在库 Stock
BT50 SEM16x100	16	38	100	17	62	A	M24	◐
BT50 SEM16x100.C	16	38	100	17	62	A	M24	◐
BT50 SEM22x60	22	47	60	19	22	A	M24	◐
BT50 SEM22x100	22	47	100	19	62	A	M24	◐
BT50 SEM22x100.C	22	47	100	19	62	A	M24	◐
BT50 SEM22x120	22	47	120	19	82	A	M24	◐
BT50 SEM22x150	22	47	150	19	112	A	M24	◐
BT50 SEM27x100	27	58	100	21	62	A	M24	◐
BT50 SEM27x100.C	27	58	100	21	62	A	M24	◐
BT50 SEM32x60	32	66	60	24	22	A	M24	◐
BT50 SEM32x75	32	66	75	24	37	A	M24	◐
BT50 SEM32x100	32	66	100	24	62	A	M24	◐
BT50 SEM32x100.C	32	66	100	24	62	A	M24	◐
BT50 SEM32xD78x100.C	32	78	100	24	62	A	M24	○
BT50 SEM32x150	32	66	150	24	112	A	M24	◐
BT50 SEM32xD78x150	32	78	150	24	112	A	M24	○
BT50 SEM32xD78x200	32	78	200	24	162	A	M24	○
BT50 SEM32xD78x300	32	78	300	24	262	A	M24	○
BT50 SEM40x60	40	88	60	27	22	B	M24	◐
BT50 SEM40x75	40	88	75	27	37	B	M24	◐
BT50 SEM40x100	40	88	100	27	62	B	M24	◐
BT50 SEM40x100.C	40	88	100	27	62	B	M24	◐
BT50 SEM40x150	40	88	150	27	112	B	M24	◐
BT50 SEM60x75	60	128	75	40	37	B	M24	◐

● 刀柄若需数据芯片孔，请在型号后加“.X”
● 订货示例：1 件 BT50 SEM16x100
● If needing the hole for data chip, please add "X" at the end of the designation.
● Ordering sample: 1 PC BT50 SEM16x100



G22-G26

备件
Spare Parts

规格型号 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	大头螺钉 Clamping screw	压紧螺钉 Flat key
SEM16	PL10 8x6	SR55 M3x10	-	SR55 M8x25
SEM22	PL10 10x9	SR55 M5x12	SRB22-M10	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	SRB27-M12	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	SRB32-M16	SR55 M16x40
SEM40	PL10 16x12	SR55 M6x16	SRB40-M20	SR55 M12x50
SEM60	PL10 25x18	SR55 M10x20	-	SR55 M16x60

● **标准库存**
Item in stock

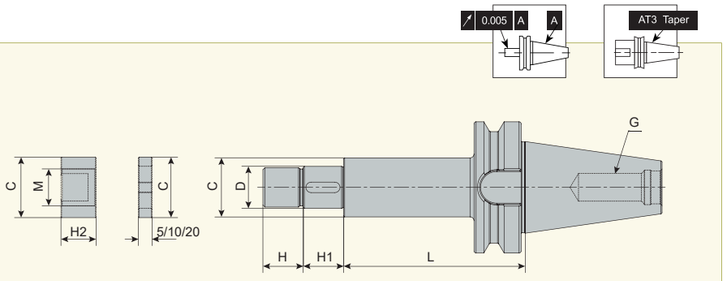
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

刀柄系统 ADAPTORS

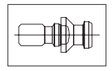
侧铣刀刀柄
Side Mill Adaptor





规格型号 Designation	D	L	H	C	H1	H2	M	G	Kg	在库 Stock
BT40 SEMC13x105	13	105	15	20	30	12	M12	M16	1.4	○
BT40 SEMC16x105	16	105	16	26	30	13	M14x1.5	M16	1.5	○
BT40 SEMC22x105	22	105	21	34	30	18	M20x1.5	M16	1.9	○
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 SEMC13x105	13	105	15	20	30	12	M12	M24	3.8	○
BT50 SEMC16x120	16	120	16	26	30	13	M14x1.5	M24	4.1	○
BT50 SEMC22x135	22	135	21	34	30	18	M20x1.5	M24	4.6	○
BT50 SEMC27x135	27	135	25	40	30	21	M24x2.0	M24	5.1	○
BT50 SEMC32x135	32	135	30	46	30	26	M30x2.0	M24	5.7	○
BT50 SEMC40x135	40	135	36	55	30	31	M36x2.0	M24	6.8	○
BT50 SEMC50x150	50	150	40	90	40	36	M48x2.0	M24	11.1	○

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT40 SEMC13×75
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC BT40 SEMC13x75



G22-G26

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 M12	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 M24x2	FJ SEMC27x5/10/20
SEMC32	PL08 8x7x25	LM M30x2	FJ SEMC32x5/10/20
SEMC40	PL08 10x8x25	LM M36x2	FJ SEMC40x5/10/20
SEMC50	PL08 12x8x30	LM M48x2	FJ SEMC50x5/10/20

● 标准库存
Item in stock

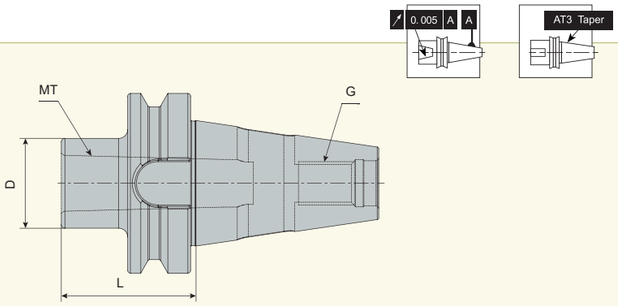
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

MAS403 BT

带扁尾莫氏锥孔刀柄
Morse Taper wtih Tang Adaptor





规格型号 Designation	MT	L	D	G	Kg	在库 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	70	M24	4.08	○

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 BT30 MTA1×45
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC BT30 MTA1x45

G22-G26

刀柄系统 ADAPTORS

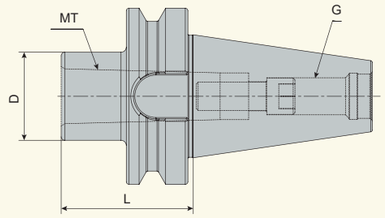
● 标准库存
Item in stock

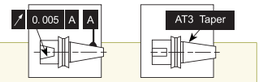
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

无扁尾莫氏锥孔刀柄
Morse Taper with Draw Thread Adaptor

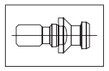




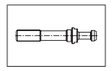


规格型号 Designation	MT	L	D	G	Kg	在库 Stock
BT40 MTB1x45	1	45	25	M16	1.01	●
BT40 MTB2x60	2	60	32	M16	1.09	●
BT40 MTB3x75	3	75	40	M16	1.22	●
※ BT40 MTB4x90	4	90	50	M16	1.26	●
BT50 MTB1x45	1	45	25	M24	3.54	●
BT50 MTB2x45	2	45	32	M24	3.56	●
BT50 MTB3x60	3	60	40	M24	3.61	●
BT50 MTB4x75	4	75	50	M24	3.73	●
※ BT50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

- 刀柄若需数据芯片孔，请在型号后加 “.X”
- 订货示例：1 件 BT40 MTB1×45
- “※” 需配专用拉钉
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC BT40 MTB1x45
- “※” It indicates that special pull stud needed.



☞ G22-G26



☞ G26

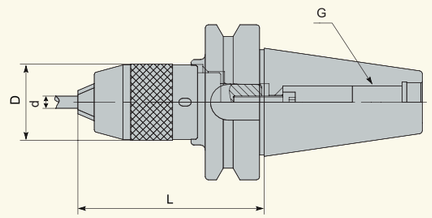
备件
Spare Parts

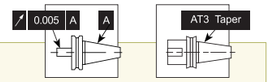


规格型号 Designation	锁紧螺钉 Clamping screw
BT40 MTB1x45	SR22 M6x25
BT40 MTB2x60	SR155 M10x35
BT40 MTB3x75	SR155 M12x30
BT40 MTB4x90	-
BT50 MTB1x45	SR55 M6x25
BT50 MTB2x45	SR55 M10x35
BT50 MTB3x60	SR55 M12x35
BT50 MTB4x75	SR155 M16x40
BT50 MTB5x120	-

钻夹头刀柄
Drill chuck adaptor

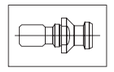






规格型号 Designation	L	D	夹持范围 clamping range	G	Kg	在库 Stock
BT40 APU08	80	36	0.5-8	M16	1.3	○
BT40 APU13	95	50	0.5-13	M16	1.8	○
BT40 APU16	113	57	3-16	M16	2.3	○
BT50 APU13	105	50	0.5-13	M24	4.4	○
BT50 APU16	110	57	3-16	M24	4.7	○

- 刀柄若需数据芯片孔，请在型号后加 “.X”
- 订货示例：1 件 BT40 APU08
- If needing the hole for data chip, please add "X" at the end of the designation
- Ordering sample: 1 PC BT40 APU08

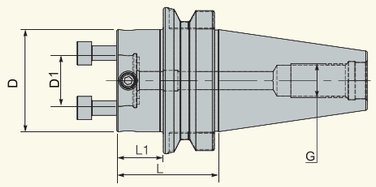


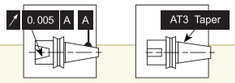
☞ G22-G26

● 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)

可调刀柄
Adjustable Adaptor

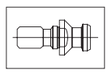






规格型号 Designation	ISO	D	D1	L	L1	G	kg	在库 Stock
BT40 SL70x55	40	70	35	55	28	M16	1.56	○
BT50 SL70x70	50	70	35	70	32	M24	4.34	○

- 适配接杆需单独订购，请参照：☞D70-D72 页
- 刀柄若需数据芯片孔，请在型号后加 ".X"
- 订货示例：1 件 BT40 SL70x55
- Extension should be ordered separately, please see page D70-D72
- If needing the hole for data chip, please add "X" at the end of the designation
- Ordering sample: 1 PC BT40 SL70x55



☞ G22-G26

备件
Spare Parts

规格型号 Designation	径向调整螺钉 Radial adjusting screw	调整螺钉扳手 Adjusting screw	轴向压紧螺钉 Axial tensioning screw	压紧螺钉扳手 Compression screw spanner	密封圈 Sealing ring
D=70	SR54 M8x16	KEY01 M4	SR55 M6x25	KEY01 M5	FT91 D25x4

● 标准库存
Item in stock

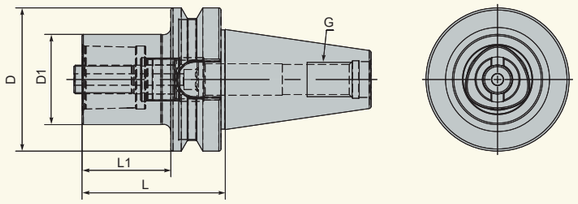
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

MAS403 BT

BT-C 刀柄
BT-C Adaptor





规格型号 Designation	D	D1	L	L1	G	kg	在库 Stock
BT40 C3x30	63	32	30	3	M16	1.00	○
BT40 C3x60	63	32	60	33	M16	1.20	○
BT40 C4x30	63	40	30	3	M16	1.00	○
BT40 C4x60	63	40	60	33	M16	1.25	○
BT40 C5x50	63	50	50	23	M16	1.20	○
BT40 C5x90	63	50	90	63	M16	1.72	○
BT40 C6x75	63	63	75	-	M16	1.74	○
BT50 C3x40	100	32	40	2	M24	3.70	○
BT50 C3x70	100	32	70	32	M24	3.80	○
BT50 C4x40	100	40	40	2	M24	3.70	○
BT50 C4x70	100	40	70	32	M24	3.90	○
BT50 C5x40	100	50	40	2	M24	3.60	○
BT50 C5x80	100	50	80	42	M24	4.10	○
BT50 C6x50	100	63	50	12	M24	3.70	○
BT50 C6x100	100	63	100	62	M24	4.80	○
BT50 C8x70	100	80	70	32	M24	4.20	○
BT50 C8x120	100	80	120	82	M24	6.00	○

- 订货示例：1 件 BT40 C3x30
- Ordering sample: 1 PC BT40 C3x30

备件
Spare Parts

接口 Interface	螺纹环 Threading ring	锁紧螺钉 Clamping screw
C3	RG05L M18x15xC3	SR61 M12x50-X.C
C4	RG05L M22x17xC4	SR61 M14x58-X.C
C5	RG05L M25x20xC5	SR61 M16x70-X.C
C6	RG05L M30x24xC6/8	SR61 M20x87-X.C
C8	RG05L M30x24xC6/8	SR61 M20x87-X.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)



D
刀柄系统
ADAPTORS

DIN69871-A

ER 筒夹刀柄 D29
ER Collet Chuck Adaptor

高精度 ER 筒夹刀柄 D30
High Precision ER Collet Chuck Adaptor

强力铣夹头刀柄 D31
Power Chuck Adaptor

侧固式刀柄（DIN 1835-B） D32
Weldon Adaptor

2° 侧固式刀柄（DIN 1835-E） D33
2° Weldon Adaptor

热缩刀柄 D34
Shrink Fit Adaptor

攻丝刀柄 D36
Tapping Chuck Adaptor

面铣刀刀柄 D37
Face Mill Adaptor

侧铣刀刀柄 D38
Side Mill Adaptor

带扁尾莫氏锥孔刀柄 D39
Morse Taper Wtih Tang Adaptor

无扁尾莫氏锥孔刀柄 D40
Morse Taper With Draw Thread Adaptor

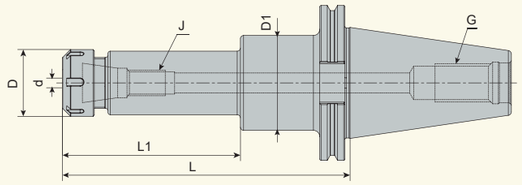
钻夹头刀柄 D41
Drill chuck adaptor

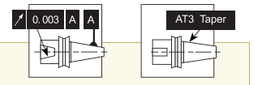
可调刀柄 D42
Adjustable Adaptor

DIN69871-A

ER 筒夹刀柄
ER Collet Chuck Adaptor



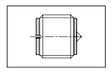


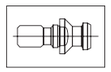


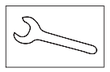
规格型号 Designation	L	D	d	D1	L1	J	G	Kg	在库 Stock
DIN69871 40 ER16x63	63	28	0.5-10	-	-	M10	M16	0.86	●
DIN69871 40 ER16x100	100	28	0.5-10	-	-	M10	M16	1.05	●
DIN69871 40 ER16x160	160	28	0.5-10	40	85	M10	M16	1.52	●
DIN69871 40 ER20x63	63	34	1-13	-	-	M12	M16	0.91	●
DIN69871 40 ER20x100	100	34	1-13	-	-	M12	M16	1.16	●
DIN69871 40 ER20x160	160	34	1-13	44	91	M12	M16	1.89	●
DIN69871 40 ER25x65	65	42	1-16	-	28	M16	M16	0.90	●
DIN69871 40 ER25x100	100	42	1-16	-	-	M16	M16	1.32	●
DIN69871 40 ER25x150	150	42	1-16	-	-	M16	M16	1.81	●
DIN69871 40 ER32x65	65	50	2-20	40.4	32	M22x1.5	M16	0.45	●
DIN69871 40 ER32x100	100	50	2-20	49	35	M22x1.5	M16	1.38	●
DIN69871 40 ER32x150	150	50	2-20	49	35	M22x1.5	M16	2.17	●
DIN69871 40 ER40x70	70	63	3-26	50.4	32	M28x1.5	M16	0.89	●
DIN69871 40 ER40x100	100	63	3-26	50.4	32	M28x1.5	M16	1.22	●
DIN69871 50 ER16x100	100	28	0.5-10	-	-	M10	M24	2.6	●
DIN69871 50 ER16x160	160	28	0.5-10	40	85	M10	M24	3.34	●
DIN69871 50 ER16x200	200	28	0.5-10	40	110	M10	M24	3.52	●
DIN69871 50 ER20x100	100	34	1-13	-	-	M12	M24	2.89	●
DIN69871 50 ER20x160	160	34	1-13	45	86	M12	M24	3.5	●
DIN69871 50 ER25x100	100	42	1-16	-	-	M16	M24	3.08	●
DIN69871 50 ER25x150	150	42	1-16	50	80.9	M16	M24	3.75	●
DIN69871 50 ER25x200	200	42	1-16	55	85	M16	M24	4.70	●
DIN69871 50 ER32x100	100	50	2-20	-	-	M22x1.5	M24	3.2	●
DIN69871 50 ER32x150	150	50	2-20	-	-	M22x1.5	M24	3.83	●
DIN69871 50 ER32x200	200	50	2-20	-	-	M22x1.5	M24	4.51	●
DIN69871 50 ER40x100	100	63	3-26	-	-	M28x1.5	M24	3.45	●
DIN69871 50 ER40x150	150	63	3-26	-	-	M28x1.5	M24	4.54	●
DIN69871 50 ER40x200	200	63	3-26	-	-	M28x1.5	M24	5.6	●

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 DIN69871 40 ER16×63
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 ER16x63


☞ G3-G9


☞ G20


☞ G22-G26


☞ G29

备件
Spare Parts

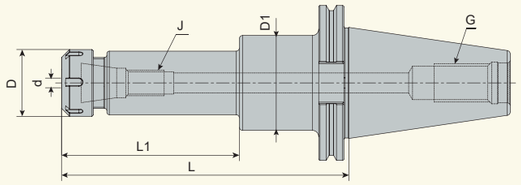


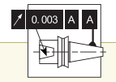
规格型号 Designation	螺帽 ER NUT
ER16	NUT ER16
ER20	NUT ER20
ER25	NUT ER25
ER32	NUT ER32
ER40	NUT ER40

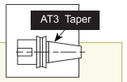
DIN69871-A

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





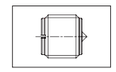


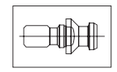


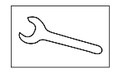
规格型号 Designation	L	D	d	D1	L1	J	G	Kg	在库 Stock
DIN69871 40 ER16x63.TOP	63	28	0.5-10	-	-	M10	M16	0.86	●
DIN69871 40 ER16x100.TOP	100	28	0.5-10	-	-	M10	M16	1.05	●
DIN69871 40 ER16x160.TOP	160	28	0.5-10	85	40	M10	M16	1.52	●
DIN69871 40 ER20x63.TOP	63	34	1-13	-	-	M12	M16	0.91	●
DIN69871 40 ER20x100.TOP	100	34	1-13	-	-	M12	M16	1.16	●
DIN69871 40 ER20x160.TOP	160	34	1-13	91	44	M12	M16	1.89	●
DIN69871 40 ER25x65.TOP	65	42	1-16	28	-	M16	M16	0.90	●
DIN69871 40 ER25x100.TOP	100	42	1-16	-	-	M16	M16	1.32	●
DIN69871 40 ER25x150.TOP	150	42	1-16	-	-	M16	M16	1.81	●
DIN69871 40 ER32x65.TOP	65	50	2-20	32	40.4	M22x1.5	M16	0.45	●
DIN69871 40 ER32x100.TOP	100	50	2-20	35	49	M22x1.5	M16	1.38	●
DIN69871 40 ER32x150.TOP	150	50	2-20	35	49	M22x1.5	M16	2.17	●
DIN69871 40 ER40x70.TOP	70	63	3-26	32	50.4	M28x1.5	M16	0.89	●
DIN69871 40 ER40x100.TOP	100	63	3-26	32	50.4	M28x1.5	M16	1.22	●
DIN69871 50 ER16x100.TOP	100	28	0.5-10	-	-	M10	M24	2.6	●
DIN69871 50 ER16x160.TOP	160	28	0.5-10	85	40	M10	M24	3.34	●
DIN69871 50 ER16x200.TOP	200	28	0.5-10	110	40	M10	M24	3.52	●
DIN69871 50 ER20x100.TOP	100	34	1-13	-	-	M12	M24	2.89	●
DIN69871 50 ER20x160.TOP	160	34	1-13	86	45	M12	M24	3.5	●
DIN69871 50 ER25x100.TOP	100	42	1-16	-	-	M16	M24	3.08	●
DIN69871 50 ER25x150.TOP	150	42	1-16	80.9	50	M16	M24	3.75	●
DIN69871 50 ER25x200.TOP	200	42	1-16	85	55	M16	M24	4.70	●
DIN69871 50 ER32x100.TOP	100	50	2-20	-	-	M22x1.5	M24	3.20	●
DIN69871 50 ER32x150.TOP	150	50	2-20	-	-	M22x1.5	M24	3.83	●
DIN69871 50 ER32x200.TOP	200	50	2-20	-	-	M22x1.5	M24	4.51	●
DIN69871 50 ER40x100.TOP	100	63	3-26	-	-	M28x1.5	M24	3.45	●
DIN69871 50 ER40x150.TOP	150	63	3-26	-	-	M28x1.5	M24	4.54	●
DIN69871 50 ER40x200.TOP	200	63	3-26	-	-	M28x1.5	M24	5.60	●

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 DIN69871 40 ER16×63.TOP
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 ER16x63.TOP


☞ G3-G9


☞ G20


☞ G22-G26


☞ G29

备件
Spare Parts



规格型号 Designation	螺帽 ER NUT
ER16.TOP	NUT ER16.TOP
ER20.TOP	NUT ER20.TOP
ER25.TOP	NUT ER25.TOP
ER32.TOP	NUT ER32.TOP
ER40.TOP	NUT ER40.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)

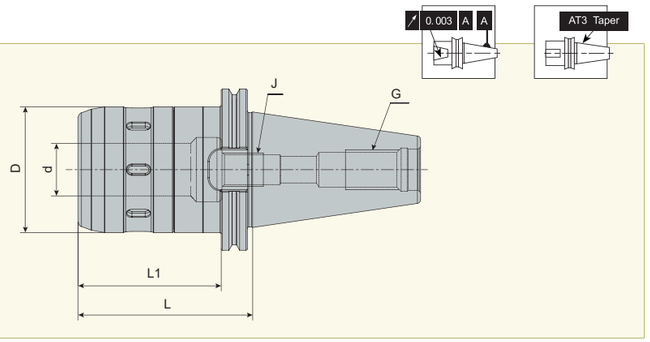
● 标准库存 Item in stock

◐ 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)

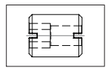
强力铣夹头刀柄
Power Chuck Adaptor

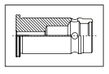


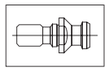


规格型号 Designation	D	d	L	L1	Lmin	Lmax	J	G	KG	在库 Stock
DIN69871 40 DMG32X110	75	32	110	91	-	95	M16	M16	2.9	○
DIN69871 50 DMG32X100	75	32	100	81	-	105	M24	M24	5.0	○

- 强力直柄筒夹订购，请参照：☞ H17 页
- 刀柄若需数据芯片孔，请在型号后加 ".X"
- 选配轴向调节螺钉，请参照：☞ H23 页
- 订货示例：1 件 DIN69871 40 DMG32×110
- Straight shank collet should be ordered separately, please see page H17.
- If needing the hole for data chip, please add "X" at the end of the designation.
- The optional axial adjusting screw, please see page H23.
- Ordering sample: 1 PC DIN69871 40 DMG32x110.

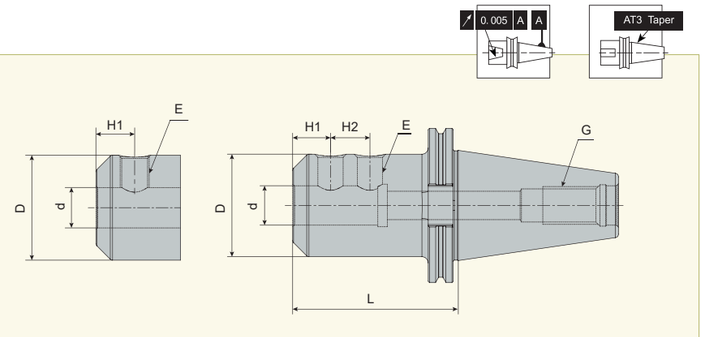

☞ G20


☞ G14


☞ G22-G26

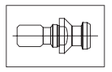
侧固式刀柄 *(DIN 1835-B)*
Weldon Adapptor





规格型号 Designation	d	D	L	H1	H2	E	G	Kg	在库 Stock
DIN69871 40 EM16x63	16	48	63	24	-	M14	M16	1.20	●
DIN69871 40 EM20x63	20	52	63	25	-	M16	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	-	M14	M24	3.02	●
DIN69871 50 EM20x63	20	52	63	25	-	M16	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	125	35	35	M24x2	M24	6.64	●

- 刀柄若需数据芯片孔，请在型号后加 ".X"
- 订货示例：1 件 DIN69871 40 EM16×63
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 EM16x63


☞ G22-G26

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screw	锁紧扳手 (选配) 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

● **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)

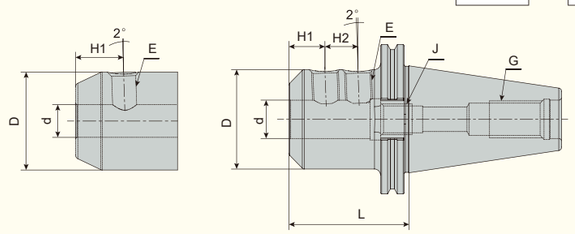
● **标准库存** Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ **无库存 (订货时，请确认交货期)** Order on demand (please confirm delivery time when ordering it)

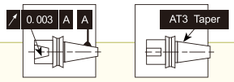
刀柄系统 ADAPTORS

2° 侧固式刀柄 (DIN 1835-E)

2° Weldon Adaptor

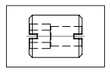


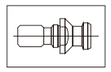




规格型号 Designation	d	D	L	H1	H2	E	J	G	Kg	在库 Stock
DIN69871 40 EM16x63E	16	48	63	24	-	M14	M12	M16	1.28	●
DIN69871 40 EM20x63E	20	52	63	25	-	M16	M16	M16	1.25	●
DIN69871 40 EM25x100E	25	65	100	24	22	M18x2	M20X2	M16	2.18	●
DIN69871 40 EM32x100E	32	72	100	24	24	M20x2	M20X2	M16	2.40	●
DIN69871 50 EM16x63E	16	48	63	24	-	M14	M12	M24	3.07	●
DIN69871 50 EM20x63E	20	52	63	25	-	M16	M16	M24	3.11	●
DIN69871 50 EM25x80E	25	65	80	24	22	M18x2	M20X2	M24	3.67	●
DIN69871 50 EM32x100E	32	72	100	24	24	M20x2	M20X2	M24	4.50	●
DIN69871 50 EM40x100E	40	90	100	30	30	M20x2	M20X2	M24	5.05	●

- 中心调节螺钉非产品标配螺钉，若有需要请查看：☞ G20 页选配
- 刀柄若需数据芯片孔，请在型号后加 “.X”
- 订货示例：1 件 DIN69871 40 EM16×63E
- The center adjustable screw should be ordered separately□if needed, please see page G20.
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 EM16x63E





☞ G20 ☞ G22-G26

备件

Spare Parts

规格型号 Designation	锁紧螺钉 Clamping screw	锁紧扳手（选配） 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

● 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)

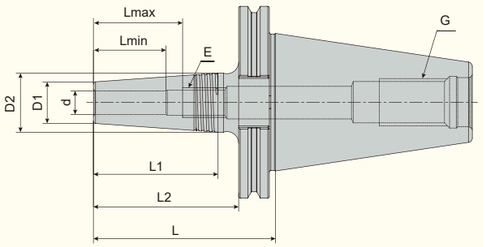
热缩刀柄

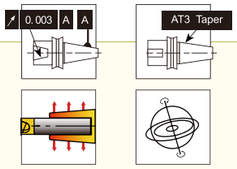
Shrink Fit Adaptor

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

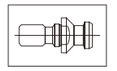






规格型号 Designation	d	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
DIN69871 40 SRK3x69	3	10	15.0	35.55	50	69.1	10	16	M6	M16	0.8	○
DIN69871 40 SRK3x104	3	10	19.0	64.15	85	104.1	10	16	M6	M16	1.0	○
DIN69871 40 SRK4x69	4	10	15.0	35.55	50	69.1	12	18	M6	M16	0.8	○
DIN69871 40 SRK4x104	4	10	19.0	64.15	85	104.1	12	18	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	63.90	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	60.30	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
- 刀柄若需数据芯片孔，请在型号后加 “.X”
- 订货示例：DIN69871 40 SRK3×69
- It is with G2.5/25,000 RPM.
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: DIN69871 40 SRK3x69.



☞ G22-G26

备件

Spare Parts

E	轴向调节螺钉 Clamping screw	锁紧扳手（选配） Allen key for clamping screw
M6	SR50 M6x20.DC	KEY01 M3
M8	SR50 M8x20.DC	KEY01 M4
M10	SR50 M10x18.DC	KEY01 M5
M12	SR50 M12x18.DC	KEY01 M6
M10(SRK12)	SR50B M10X18.BC	KEY01 M5

● 标准库存 Item in stock

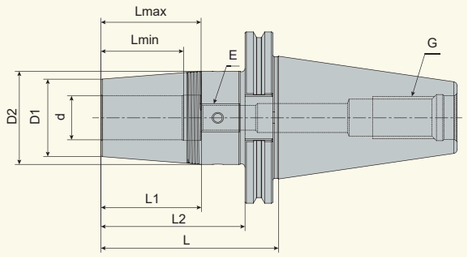
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)

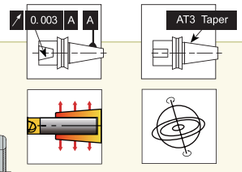
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

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.

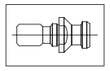






规格型号 Designation	d	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
DIN69871 40 SRKIN6x80	6	21	27	38.0	60.9	80	25	36	M5	M16	1.0	●
DIN69871 40 SRKIN8x80	8	21	27	38.0	60.9	80	25	36	M6	M16	1.1	●
DIN69871 40 SRKIN10x80	10	24	32	50.5	60.9	80	31	42	M8	M16	1.0	●
DIN69871 40 SRKIN12x80	12	24	32	50.5	60.9	80	36	47	M10	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	27	38.0	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
- 刀柄若需数据芯片孔，请在型号后加 “.X”
- 订货示例：DIN69871 40 SRKIN6×80
- It is with G2.5/25,000 RPM.
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: DIN69871 40 SRKIN6x80.



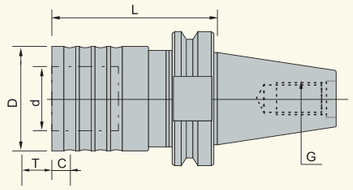
☞G22-G26

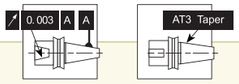
备件
Spare Parts

E	轴向调节螺钉 Clamping screw	锁紧扳手（选配） Allen key for clamping screw
M5	SR50B M5x20.BC	KEY01 M2.5
M6	SR50B M6x20.BC	KEY01 M3
M8	SR50B M8x20.BC	KEY01 M4
M10	SR50B M10x18.BC	KEY01 M5
M12	SR50B M12x18.BC	KEY01 M6
M16	SR50B M16x20.BC	KEY01 M8

攻丝刀柄
Tapping Chuck Adaptor

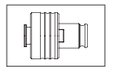




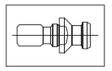


规格型号 Designation	d	D	L	长度补偿 Length compensation T	长度补偿 Length compensation C	攻丝范围 Tap	G	Kg	在库 Stock
DIN69871 40 TAP412x75	19	36.0	75	9	5	M4-M12	M16	1.1	○
DIN69871 40 TAP820x100	31	53.5	100	16	9	M8-M20	M16	1.7	○
DIN69871 50 TAP412x75	19	36.0	75	9	5	M4-M12	M24	2.9	○
DIN69871 50 TAP820x100	31	53.5	100	16	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	○

- 刀柄若需数据芯片孔，请在型号后加 “.X”
- 订货示例：1 件 DIN69871 40 TAP412×75
- 每种规格的攻丝刀柄均有对应的攻丝快换夹头，请参照：☞H12 页
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 TAP412x75
- Multiple quick change chucks for corresponding adaptors, please see page H12



☞G12



☞G22-G26

● 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

面铣刀刀柄
Face Mill Adaptor



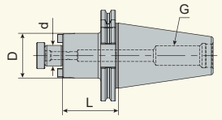


Fig A

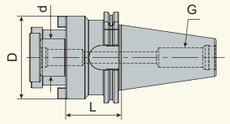
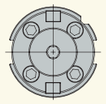
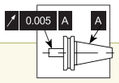
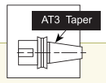


Fig B

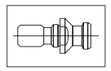






规格型号 Designation	d	D	L	Fig	G	Kg	在库 Stock
DIN69871 40 SEM16x35	16	38	35	A	M16	0.92	●
DIN69871 40 SEM22x35	22	47	35	A	M16	1.02	●
DIN69871 40 SEM27x60	27	58	60	A	M16	1.60	●
DIN69871 40 SEM32x60	32	66	60	A	M16	1.78	●
DIN69871 40 SEM40x60	40	88	60	B	M16	2.25	●
DIN69871 50 SEM16x60	16	38	60	A	M24	2.95	●
DIN69871 50 SEM22x60	22	47	60	A	M24	3.24	●
DIN69871 50 SEM27x60	27	58	60	A	M24	3.65	●
DIN69871 50 SEM32x60	32	66	60	A	M24	4.00	●
DIN69871 50 SEM40x60	40	88	60	B	M24	4.85	●
DIN69871 50 SEM60x75	60	128	75	B	M24	7.53	●

- 刀柄若需数据芯片孔，请在型号后加“X”
- 订货示例：1 件 DIN69871 40 SEM16×35
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 SEM16x35



☞ G22-G26

备件
Spare Parts









规格型号 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	大头螺钉 Clamping screw	压紧螺钉 Clamping screw
SEM16	PL10 8x6	SR55 M3x10	-	SR55 M8x25
SEM22	PL10 10x9	SR55 M5x12	SRB22-M10	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	SRB27-M12	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	SRB32-M16	SR55 M16x40
SEM40	PL10 16x12	SR55 M6x16	SRB40-M20	SR55 M12x50
SEM60	PL10 25x18	SR55 M10x20	-	SR55 M16x60

- SEM40 平键的选用请联系销售工程师
- Selecting for flat key, please check with sales technologist

● **标准库存**
Item in stock

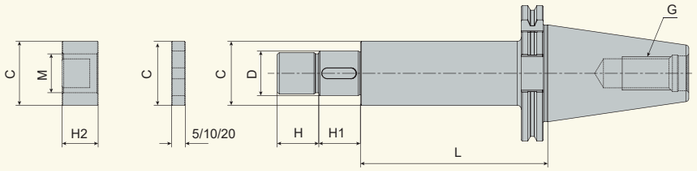
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Item of short delivery time
(please confirm delivery time when ordering it)

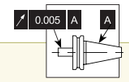
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Order on demand
(please confirm delivery time when ordering it)

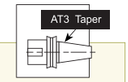
DIN69871-A

侧铣刀刀柄
Side Mill Adaptor



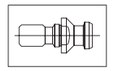






规格型号 Designation	D	L	H	C	H1	H2	M	G	Kg	在库 Stock
DIN69871 40 SEMC13x105	13	105	15	20	30	12	M12	M16	1.4	○
DIN69871 40 SEMC16x105	16	105	16	26	30	13	M14x1.5	M16	1.5	○
DIN69871 40 SEMC22x105	22	105	21	34	30	18	M20x1.5	M16	1.9	○
DIN69871 40 SEMC27x120	27	120	25	40	30	21	M24x2.0	M16	2.5	○
DIN69871 40 SEMC32x90	32	90	30	46	30	26	M30x2.0	M16	2.6	○
DIN69871 50 SEMC13x105	13	105	15	20	30	12	M12	M24	3.8	○
DIN69871 50 SEMC16x120	16	120	16	26	30	13	M14x1.5	M24	4.1	○
DIN69871 50 SEMC22x135	22	135	21	34	30	18	M20x1.5	M24	4.6	○
DIN69871 50 SEMC27x135	27	135	25	40	30	21	M24x2.0	M24	5.1	○
DIN69871 50 SEMC32x135	32	135	30	46	30	26	M30x2.0	M24	5.7	○
DIN69871 50 SEMC40x135	40	135	36	55	30	31	M36x2.0	M24	6.8	○
DIN69871 50 SEMC50x150	50	150	40	90	40	36	M48x2.0	M24	9.59	○

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 DIN69871 40 SEMC13x105
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 SEMC13x105



☞ G22-G26

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 M12	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)

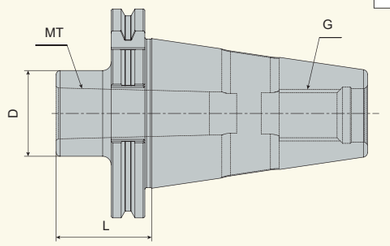
○ **无库存 (订货时，请确认交货期)**
Order on demand
(please confirm delivery time when ordering it)

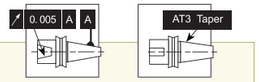
DIN69871-A

带扁尾莫氏锥孔刀柄

Morse Taper wtih Tang Adaptor

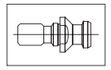






规格型号 Designation	MT	L	D	G	Kg	在库 Stock
DIN69871 40 MTA1x45	1	45	25	M16	1	○
DIN69871 40 MTA1x120	1	120	25	M16	1.2	○
DIN69871 40 MTA2x45	2	45	32	M16	1	○
DIN69871 40 MTA2x120	2	120	32	M16	1.2	○
DIN69871 40 MTA3x75	3	75	40	M16	1.1	○
DIN69871 40 MTA3x135	3	135	40	M16	1.7	○
DIN69871 40 MTA4x90	4	90	50	M16	1.3	○
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	32	M24	3.2	○
DIN69871 50 MTA3x45	3	45	40	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	63	M24	3.65	○

- 刀柄若需数据芯片孔，请在型号后加“X”
- 订货示例：1 件 DIN69871 40 MTA1×45
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 MTA1x45



☞ G22-G26

● **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)

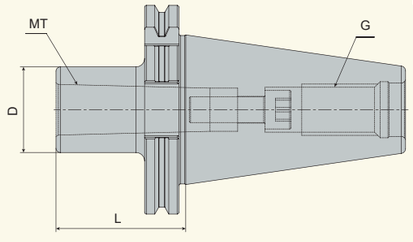
○ **无库存 (订货时，请确认交货期)** Order on demand (please confirm delivery time when ordering it)

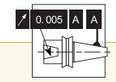
DIN69871-A

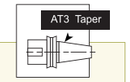
无扁尾莫氏锥孔刀柄

Morse Taper with Draw Thread Adaptor



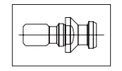




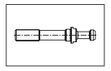


规格型号 Designation	MT	L	D	G	Kg	在库 Stock
DIN69871 40 MTB1x45	1	45	25	M16	1.20	○
DIN69871 40 MTB2x60	2	60	32	M16	1.30	○
DIN69871 40 MTB3x75	3	75	40	M16	1.40	○
※ DIN69871 40 MTB4x90	4	90	50	M16	1.50	○
DIN69871 50 MTB1x45	1	45	25	M24	2.66	○
DIN69871 50 MTB2x45	2	45	32	M24	2.66	○
DIN69871 50 MTB3x60	3	60	40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

- 刀柄若需数据芯片孔，请在型号后加“X”
- 订货示例：1 件 DIN69871 40 MTB1×45
- “※”需配专用拉钉
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 MTB1x45
- “※” It indicates that the special pull stud needed



☞ G22-G26



☞ G26

备件

Spare Parts



规格型号 Designation	锁紧螺钉 Clamping screw
DIN69871 40 MTB1x45	SR22 M6x25
DIN69871 40 MTB2x60	SR155 M10x35
DIN69871 40 MTB3x75	SR155 M12x30
※ DIN69871 40 MTB4x90	-
DIN69871 50 MTB1x45	SR55 M6x25
DIN69871 50 MTB2x45	SR55 M10x35
DIN69871 50 MTB3x60	SR55 M12x35
DIN69871 50 MTB4x75	SR155 M16x40
※ DIN69871 50 MTB5x120	-

● **标准库存** Item in stock

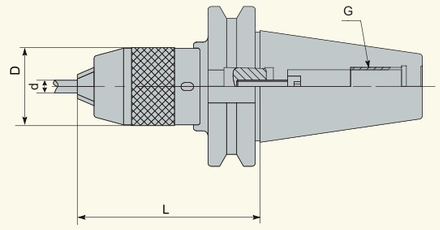
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

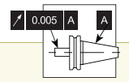
○ **无库存 (订货时，请确认交货期)** Order on demand (please confirm delivery time when ordering it)

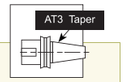
DIN69871-A

钻夹头刀柄
Drill chuck adaptor



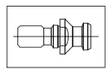






规格型号 Designation	L	D	夹持范围 clamping range	G	Kg	在库 Stock
DIN69871 40 APU13	82	50	0.5-13	M16	1.7	○
DIN69871 40 APU16	105	57	3-16	M16	2.4	○
DIN69871 50 APU13	85	50	0.5-13	M24	3.6	○
DIN69871 50 APU16	90	57	3-16	M24	3.9	○

- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 DIN69871 40 APU13
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 APU13

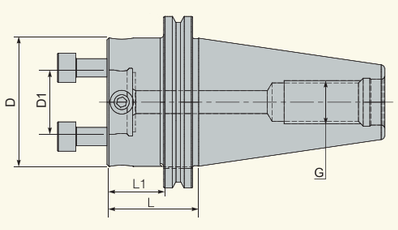


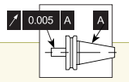
☞ G22-G26

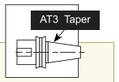
DIN69871-A

可调刀柄
Adjustable Chuck



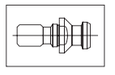






规格型号 Designation	ISO	D	D1	L	L1	G	kg	在库 Stock
DIN69871 40 SL70x50	40	70	35	50	31	M16	1.28	○
DIN69871 50 SL70x50	50	70	35	50	31	M24	3.32	○

- 刀柄配件，请参照：☞ D70-D72 页
- 刀柄若需数据芯片孔，请在型号后加“.X”
- 订货示例：1 件 DIN69871 40 SL70x55
- Spare parts,please see page D70-D72.
- If needing the hole for data chip, please add "X" at the end of the designation.
- Ordering sample: 1 PC DIN69871 40 SL70x55



☞ G22-G26

● **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)



D
刀柄系统
ADAPTORS

HSK-A

热缩刀柄 D45
Shrink Fit Adaptor

ER 筒夹刀柄 D48
ER Collet Chuck Adaptor

高精度 ER 筒夹刀柄 D49
High Precision ER Collet Chuck Adaptor

侧固式刀柄 (DIN 1835-B)..... D50
Weldon Adaptor

2° 侧固式刀柄（DIN 1835-E） D51
2° Weldon Adaptor(DIN1835-E)

强力铣夹头刀柄 D52
Power Chuck Adaptor

面铣刀刀柄 D53
Face Mill Adaptor

液压刀柄 D55
Hydraulic Chuck Adaptor

微补偿同步攻丝刀柄 D57
Micro Compensation Tapping Chuck

HSK-C 刀柄 D57
HSK-C Adaptor

可调刀柄 D58
Adjustable Chuck

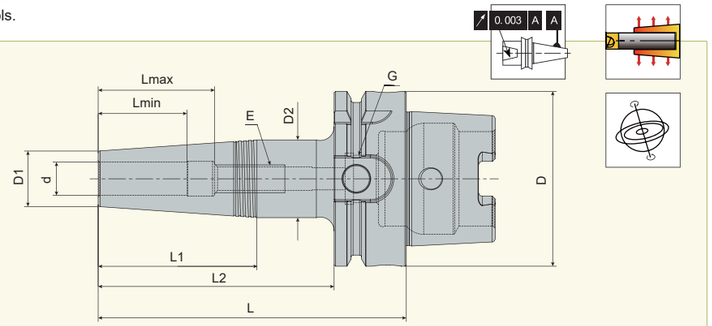
DIN 69893 HSK A 型半成品刀柄 D58
DIN 69893 HSK A Semifinished Adaptor

HSK-T 车刀柄 D59
HSK-T Turning Tool Adaptor

热缩刀柄
Shrink Fit Adaptor

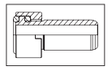
DIN69871 HSK-A 型热缩刀柄，仅用于夹持硬质合金刀具。
It is for clamping the solid carbide tools or HSS tools.





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	M10	M18x1	0.8	●
HSK A63 SRK12x111	12	63	20	30.0	72	85	111	32	43	M10	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 SRK3×76
- Inner coolant tube should be ordered separately.
- It is with G2.5/25,000 RPM.
- Ordering sample: 1 PC HSK A63 SRK3×76



☞ G21

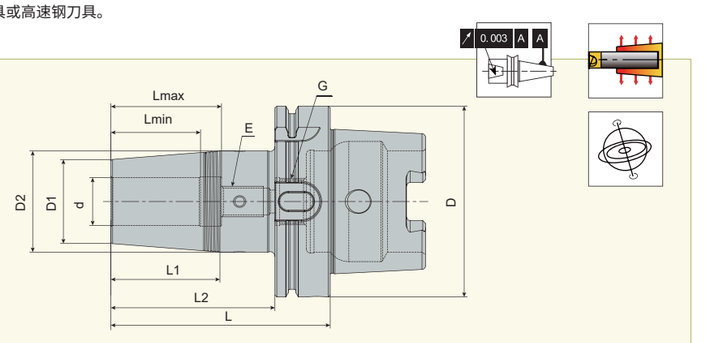
备件
Spare Parts

E	锁紧螺钉 Clamping screw	锁紧扳手（选配） Allen key for clamping screw
M6	SR50 M6X20.DC	SRK3/4/5
M8	SR50 M8X20.DC	SRK6
M6	SR50B M6x20.BC	KEY01 M3
M8	SR50B M8x20.BC	KEY01 M4
M10	SR50B M10x18.BC	KEY01 M5

热缩刀柄
Shrink Fit Adaptor

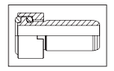
DIN69893 HSK A 型热缩刀柄，夹持整体硬质合金刀具或高速钢刀具。
It is for clamping the solid carbide tools or HSS tools.





规格型号 Designation	d	D	D1	D2	L1	L2	L	Lmin	Lmax	E	G	Kg	在库 Stock
HSK A50 SRKIN6x80	6	50	21	27	38	54	80	25	36	M5	M16x1	0.57	○
HSK A50 SRKIN8x80	8	50	21	27	38	54	80	25	36	M6	M16x1	0.57	○
HSK A50 SRKIN10x85	10	50	24	32	51	59	85	31	42	M8	M16x1	0.64	○
HSK A50 SRKIN12x90	12	50	24	32	51	64	90	36	47	M10	M16x1	0.65	○
HSK A50 SRKIN14x90	14	50	27	34	45	64	90	36	47	M10	M16x1	0.7	○
HSK A50 SRKIN16x95	16	50	27	34	45	69	95	39	50	M10	M16x1	0.71	○
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	3.1	●
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	50.5	62	M16	M18x1	1.7	●

- 刀柄配件，请参照：☞ D39 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 A50 SRKIN6×80
- Spare parts,please see page D39.
- Inner coolant tube should be ordered separately.
- It is with G2.5/25,000 RPM.
- Ordering sample: 1 PC HSK A50 SRKIN6x80.



☞ G21

● 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)

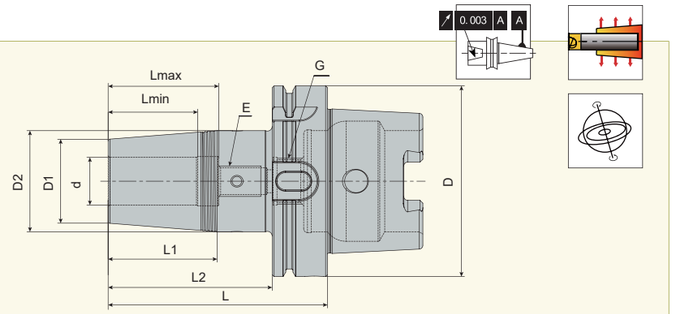
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

刀柄系统 ADAPTORS

热缩刀柄
Shrink Fit Adaptor

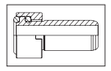
DIN69893 HSK A 型热缩刀柄，夹持整体硬质合金刀具或高速钢刀具。
It is for clamping the solid carbide tools or HSS tools.





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	47	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	1.1	●
HSK A100 SRKIN25x115	25	100	44	53.0	57.0	86	115	47	58	M16	M24x1.5	3.0	●
HSK A100 SRKIN32x120	32	100	44	53.0	57.0	91	120	50.5	62	M16	M24x1.5	3.0	●

- 内冷却管需单独订购
- 当工作转速 N=20000RPM 时，刀柄的平衡等级为 G2.5
- 订货示例：HSK A100 SRKIN6×85
- Inner coolant tube should be ordered separately.
- It is with G2.5/20000 RPM.
- Ordering sample: 1 PC HSK A100 SRKIN6x85.



☞ G21

备件
Spare Parts





E	轴向调节螺钉 Clamping screw	锁紧扳手（选配） Allen key for clamping screw
M5	SR50B M5x20.BC	KEY01 M2.5
M6	SR50B M6x20.BC	KEY01 M3
M8	SR50B M8x20.BC	KEY01 M4
M10	SR50B M10x18.BC	KEY01 M5
M12	SR50B M12x18.BC	KEY01 M6
M16	SR50B 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)

ER 筒夹刀柄
ER Collet Chuck Adaptor



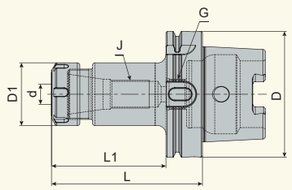


Fig A

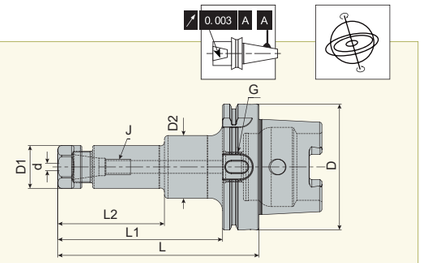


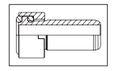
Fig B

规格型号 Designation	L	L1	L2	D	D1	D2	d	J	Fig	G	Kg	在库 Stock
HSK A50 ER16x100(1)	100	74	-	50	28	-	0.5-10	M10	A	M16x1	0.62	○
HSK A50 ER20x100(1)	100	74	-	50	34	-	1-13	M12	A	M16x1	0.7	○
HSK A50 ER25x100(1)	100	74	28.5	50	42	41.8	1-16	M16	B	M16x1	0.84	○
HSK A50 ER32x100(1)	100	74	31	50	50	40.4	2-20	M22x1.5	B	M16x1	0.76	○
HSK A63 ER16x100(1)	100	74	-	63	28	-	0.5-10	M10	A	M18x1.0	0.8	○
HSK A63 ER16x120(1)	120	94	-	63	28	-	0.5-10	M10	A	M18x1.0	1.0	○
HSK A63 ER16x160(1)	160	134	85.6	63	28	40	0.5-10	M10	B	M18x1.0	1.4	○
HSK A63 ER20x100(1)	100	74	-	63	34	-	1-13	M12	A	M18x1.0	0.9	○
HSK A63 ER20x120(1)	120	94	-	63	34	-	1-13	M12	A	M18x1.0	1.1	○
HSK A63 ER20x160(1)	160	134	85	63	34	45	1-13	M12	B	M18x1.0	1.6	○
HSK A63 ER25x80(1)	80	54	-	63	42	-	1-16	M8	A	M18x1.0	0.9	○
HSK A63 ER25x100(1)	100	74	-	63	42	-	1-16	M16	A	M18x1.0	1.1	○
HSK A63 ER25x120(1)	120	94	-	63	42	-	1-16	M16	A	M18x1.0	1.3	○
HSK A63 ER25x160(1)	160	134	-	63	42	-	1-16	M16	A	M18x1.0	1.7	○
HSK A63 ER32x80(1)	80	54	31	63	50	40.4	2-20	M22x1.5	B	M18x1.0	0.8	○
HSK A63 ER32x100(1)	100	74	-	63	50	-	2-20	M22x1.5	A	M18x1.0	1.2	○
HSK A63 ER32x120(1)	120	94	-	63	50	-	2-20	M22x1.5	A	M18x1.0	1.5	○
HSK A63 ER32x160(1)	160	134	-	63	50	-	2-20	M22x1.5	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	M28x1.5	B	M18x1.0	1.2	○
HSK A63 ER40x120(1)	120	94	34	63	63	50.4	3-26	M28x1.5	B	M18x1.0	1.4	○
HSK A100 ER16x100(2)	100	71	-	100	28	-	0.5-10	M10	A	M24x1.5	2.2	○
HSK A100 ER16x160(2)	160	131	85	100	28	40	0.5-10	M10	B	M24x1.5	2.7	○
HSK A100 ER20x100(2)	100	71	-	100	34	-	1-13	M12	A	M24x1.5	2.3	○
HSK A100 ER20x160(2)	120	131	85	100	34	50	1-13	M12	B	M24x1.5	3.1	○
HSK A100 ER25x100(2)	100	71	-	100	42	-	1-16	M16	A	M24x1.5	2.5	○
HSK A100 ER25x120(2)	120	91	-	100	42	-	1-16	M16	A	M24x1.5	2.7	○
HSK A100 ER25x160(2)	160	131	-	100	42	-	1-16	M16	A	M24x1.5	3.1	○
HSK A100 ER32x100(2)	100	71	-	100	50	-	2-20	M22x1.5	A	M24x1.5	2.5	○
HSK A100 ER32x120(2)	120	91	-	100	50	-	2-20	M22x1.5	A	M24x1.5	2.8	○
HSK A100 ER32x160(2)	160	131	-	100	50	-	2-20	M22x1.5	A	M24x1.5	3.3	○
HSK A100 ER40x100(2)	100	71	-	100	63	-	3-26	M28x1.5	A	M24x1.5	2.8	○
HSK A100 ER40x120(2)	120	91	-	100	63	-	3-26	M28x1.5	A	M24x1.5	3.2	○
HSK A100 ER40x160(2)	160	131	-	100	63	-	3-26	M28x1.5	A	M24x1.5	4.1	○

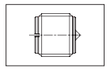
- 内冷却管需单独订购
- (1)当工作转速 N=20000RPM 时，刀柄的平衡等级为 G2.5，
  (2)当工作转速 N=12000RPM 时，刀柄的平衡等级为 G6.3
- 订货示例：一件 HSK A50 ER16×100
- Inner coolant tube should be ordered separately.
- It is with G2.5/25,000 RPM, and G6.3/12,000 RPM.
- Ordering sample: 1 PC HSK A50 ER16x100.



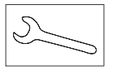
☞ G3-G9



☞ G21



☞ G20



☞ G29

备件
Spare Parts



规格型号 Designation	螺帽 ER NUT
ER16	NUT ER16
ER20	NUT ER20
ER25	NUT ER25
ER32	NUT ER32
ER40	NUT ER40

● 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)

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



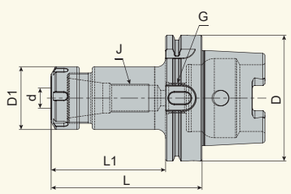


Fig A

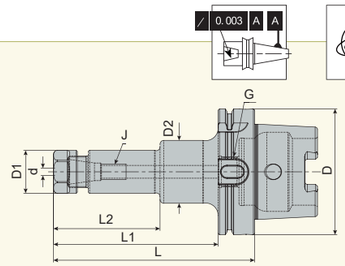
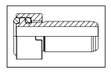


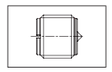
Fig B

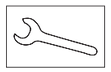
规格型号 Designation	L	L1	L2	D	D1	D2	d	J	Fig	G	Kg	在库 Stock
HSK A50 ER16x100.TOP(1)	100	74	-	50	28	-	0.5-10	M10	A	M16x1	0.62	○
HSK A50 ER20x100.TOP(1)	100	74	-	50	34	-	1-13	M12	A	M16x1	0.7	○
HSK A50 ER25x100.TOP(1)	100	74	28.5	50	42	41.8	1-16	M16	B	M16x1	0.84	○
HSK A50 ER32x100.TOP(1)	100	74	31	50	50	40.4	2-20	M22x1.5	B	M16x1	0.76	○
HSK A63 ER16x100.TOP(1)	100	74	-	63	28	-	0.5-10	M10	A	M18x1.0	0.8	○
HSK A63 ER16x120.TOP(1)	120	94	-	63	28	-	0.5-10	M10	A	M18x1.0	1.0	○
HSK A63 ER16x160.TOP(1)	160	134	85.6	63	28	40	0.5-10	M10	B	M18x1.0	1.4	○
HSK A63 ER20x100.TOP(1)	100	74	-	63	34	-	1-13	M12	A	M18x1.0	0.9	○
HSK A63 ER20x120.TOP(1)	120	94	-	63	34	-	1-13	M12	A	M18x1.0	1.1	○
HSK A63 ER20x160.TOP(1)	160	134	85	63	34	45	1-13	M12	B	M18x1.0	1.6	○
HSK A63 ER25x80.TOP(1)	80	54	-	63	42	-	1-16	M8	A	M18x1.0	0.9	○
HSK A63 ER25x100.TOP(1)	100	74	-	63	42	-	1-16	M16	A	M18x1.0	1.1	○
HSK A63 ER25x120.TOP(1)	120	94	-	63	42	-	1-16	M16	A	M18x1.0	1.3	○
HSK A63 ER25x160.TOP(1)	160	134	-	63	42	-	1-16	M16	A	M18x1.0	1.7	○
HSK A63 ER32x80.TOP(1)	80	54	31	63	50	40.4	2-20	M22x1.5	B	M18x1.0	0.8	○
HSK A63 ER32x100.TOP(1)	100	74	-	63	50	-	2-20	M22x1.5	A	M18x1.0	1.2	○
HSK A63 ER32x120.TOP(1)	120	94	-	63	50	-	2-20	M22x1.5	A	M18x1.0	1.5	○
HSK A63 ER32x160.TOP(1)	160	134	-	63	50	-	2-20	M22x1.5	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	M28x1.5	B	M18x1.0	1.2	○
HSK A63 ER40x120.TOP(1)	120	94	34	63	63	50.4	3-26	M28x1.5	B	M18x1.0	1.4	○
HSK A100 ER16x100.TOP(2)	100	71	-	100	28	-	0.5-10	M10	A	M24x1.5	2.2	○
HSK A100 ER16x160.TOP(2)	160	131	85	100	28	40	0.5-10	M10	B	M24x1.5	2.7	○
HSK A100 ER20x100.TOP(2)	100	71	-	100	34	-	1-13	M12	A	M24x1.5	2.3	○
HSK A100 ER20x160.TOP(2)	120	131	85	100	34	50	1-13	M12	B	M24x1.5	3.1	○
HSK A100 ER25x100.TOP(2)	100	71	-	100	42	-	1-16	M16	A	M24x1.5	2.5	○
HSK A100 ER25x120.TOP(2)	120	91	-	100	42	-	1-16	M16	A	M24x1.5	2.7	○
HSK A100 ER25x160.TOP(2)	160	131	-	100	42	-	1-16	M16	A	M24x1.5	3.1	○
HSK A100 ER32x100.TOP(2)	100	71	-	100	50	-	2-20	M22x1.5	A	M24x1.5	2.5	○
HSK A100 ER32x120.TOP(2)	120	91	-	100	50	-	2-20	M22x1.5	A	M24x1.5	2.8	○
HSK A100 ER32x160.TOP(2)	160	131	-	100	50	-	2-20	M22x1.5	A	M24x1.5	3.3	○
HSK A100 ER40x100.TOP(2)	100	71	-	100	63	-	3-26	M28x1.5	A	M24x1.5	2.8	○
HSK A100 ER40x120.TOP(2)	120	91	-	100	63	-	3-26	M28x1.5	A	M24x1.5	3.2	○
HSK A100 ER40x160.TOP(2)	160	131	-	100	63	-	3-26	M28x1.5	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 ER16×100.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.


☞ G3-G9


☞ G21


☞ G20


☞ G29

备件
Spare Parts

规格型号 Designation	螺帽 ER NUT
ER16.TOP	NUT ER16.TOP
ER20.TOP	NUT ER20.TOP
ER25.TOP	NUT ER25.TOP
ER32.TOP	NUT ER32.TOP
ER40.TOP	NUT ER40.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)

侧固式刀柄 *(DIN 1835-B)*
Weldon Adaptor



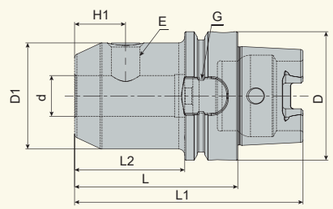


Fig A

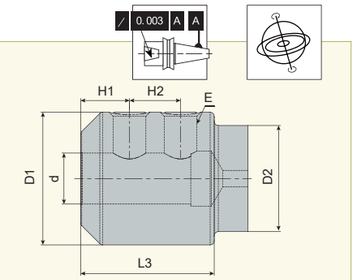
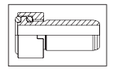


Fig B

规格型号 Designation	d	D	D1	D2	L	L1	L2	L3	H1	H2	Fig	G	E	Kg	在库 Stock
HSK A50 EM16x80	16	50	48	41.5	80	105	54	37	24	-	A	M16x1	M14	0.96	○
HSK A50 EM20x80	20	50	52	41.5	80	105	54	37	25	-	A	M16x1	M16	0.99	○
HSK A63 EM16x80	16	63	48	-	80	112	54	-	24	-	A	M18x1	M14	1.20	○
HSK A63 EM20x80	20	63	52	-	80	112	54	-	25	-	A	M18x1	M16	1.30	○
HSK A63 EM25x110	25	63	65	52	110	142	84	66	24	25	B	M18x1	M18x2	2.24	○
HSK A63 EM32x110	32	63	72	52	110	142	84	66	24	28	B	M18x1	M20x2	2.24	○
HSK A100 EM16x100	16	100	48	-	100	150	71	-	24	-	A	M24x1.5	M14	2.82	○
HSK A100 EM20x100	20	100	52	-	100	150	71	-	25	-	A	M24x1.5	M16	2.93	○
HSK A100 EM25x100	25	100	65	-	100	150	71	-	24	25	B	M24x1.5	M18x2	3.50	○
HSK A100 EM32x100	32	100	72	-	100	150	71	-	24	28	B	M24x1.5	M20x2	3.70	○
HSK A100 EM40x110	40	100	85	-	110	160	81	-	30	32	B	M24x1.5	M20x2	4.52	○
HSK A100 EM50x140	50	100	98	85	140	190	111	93	35	35	B	M24x1.5	M24x2	6.70	○

- 内冷却管需单独订购
- 订货示例：一件 HSK A50 EM16x80
- Inner coolant tube should be ordered separately.
- Ordering sample: 1 PC HSK A50 EM16x80.


☞ G21

备件
Spare Parts

规格 Designation	锁紧螺钉 Lock screw	锁紧扳手（选配） 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)

ADAPTORS 刀柄系统

2° 侧固式刀柄 (DIN 1835-E)

2° Weldon Adaptor (DIN1835-E)



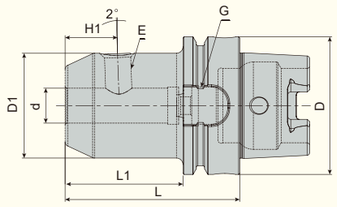


Fig A

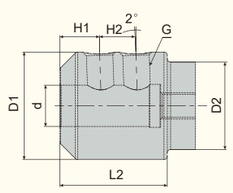
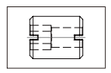


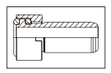
Fig B

规格型号 Designation	D	D1	D2	D	L	L1	L2	H1	H2	Fig	E	J	G	Kg	在库 Stock
HSK A50 EM16x90E	50	16	-	48	90	64	-	24	-	A	M14	M12	M16x1	1.08	○
HSK A50 EM20x100E	50	20	-	52	100	74	-	25	-	A	M16	M16	M16x1	1.3	○
HSK A63 EM16x100E	63	16	-	48	100	74	-	24	-	A	M14	M12	M18x1	1.51	○
HSK A63 EM20x100E	63	20	-	52	100	74	-	25	-	A	M16	M16	M18x1	1.65	○
HSK A63 EM25x110E	63	25	52	65	110	84	65.5	24	22	B	M18x2	M16	M18x1	2.23	○
HSK A63 EM32x110E	63	32	52	72	110	84	65.5	24	24	B	M20x2	M20x2	M18x1	2.43	○
HSK A100 EM16x100E	100	16	-	48	100	71	-	24	-	A	M14	M12	M24x1.5	2.88	○
HSK A100 EM20x110E	100	20	-	52	110	81	-	25	-	A	M16	M16	M24x1.5	3.1	○
HSK A100 EM25x120E	100	25	-	65	120	91	-	24	22	B	M18x2	M20x2	M24x1.5	3.91	○
HSK A100 EM32x120E	100	32	-	72	120	91	-	24	24	B	M20x2	M20x2	M24x1.5	4.32	○

- 中心调节螺钉非产品标配螺钉，若有需要请查看：☞ G20 页选配
- 侧固刀柄锁紧螺钉，请参照：☞ D44 页
- 订货示例：一件 HSK A50 EM16x90E
- The center adjustable screw should be ordered separately□if needed, please see page G20.
- Inner coolant tube should ,please see page D44.
- Ordering sample: 1 PC HSK A50 EM16x90E.



☞ G20



☞ G21

备件

Spare Parts

规格 Designation	锁紧螺钉 Lock screw	锁紧扳手（选配） 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

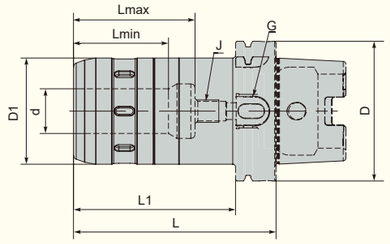
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

强力铣夹头刀柄

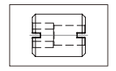
Power Chuck Adaptor



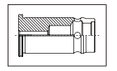


规格型号 Designation	D	D1	d	L	L1	Lmin	Lmax	G	J	Kg	在库 Stock
HSK A63 DMG32x110	63	75	32	110	84	-	90	M18x1	-	2.90	○
HSK A63 DMG32x140.C	63	76	32	140	114	68	87	M18x1	M16	3.43	○
HSK A100 DMG32x130	100	75	32	130	101	-	90	M24x1.5	-	4.00	○
HSK A100 DMG32x145.C	100	76	32	145	116	68	87	M24x1.5	M16	5.14	○

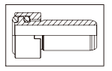
- 强力直柄筒夹，请参照：☞ H17 页
- 内冷却管需单独订购
- 订货示例：1 件 HSK A63 DMG20x110
- Spare parts,please see page H17.
- Inner coolant tube should be ordered separately.
- Ordering sample: 1 HSK A63 DMG20x110.



☞ G20



☞ G14



☞ G21

● 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)

面铣刀刀柄
Face Mill Adaptor



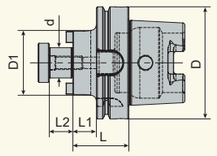


Fig A

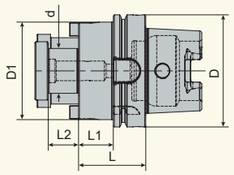
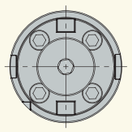
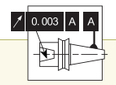


Fig B

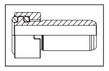






规格型号 Designation	D	D1	d	L	L1	L2	Fig	Kg	在库 Stock
HSK A50 SEM16x50(1)	50	38	16	50	24	17	A	0.6	○
HSK A50 SEM22x60(1)	50	47	22	60	34	19	A	0.8	○
HSK A50 SEM27x60(1)	50	58	27	60	34	21	A	0.96	○
HSK A63 SEM16x50(1)	63	38	16	50	24	17	A	0.87	○
HSK A63 SEM22x50 (1)	63	47	22	50	24	19	A	1.07	○
HSK A63 SEM27x60(1)	63	58	27	60	34	21	A	1.45	○
HSK A63 SEM32x60(1)	63	66	32	60	34	24	A	1.72	○
HSK A63 SEM40x60(1)	63	89	40	60	34	27	B	2.37	○
HSK A100 SEM16x50(2)	100	38	16	50	21	17	A	2.20	○
HSK A100 SEM22x50(2)	100	47	22	50	21	19	A	2.36	○
HSK A100 SEM27x50(2)	100	58	27	50	21	21	A	2.59	○
HSK A100 SEM32x50(2)	100	66	32	50	21	24	A	2.91	○
HSK A100 SEM40x60(2)	100	87	40	60	31	27	B	3.96	○
HSK A100 SEM60x70	100	128	60	70	41	40	B	6.4	○

- 内冷却管需单独订购
- (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：一件 HSK A63 SEM22x60
- 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 SEM22x60.



☞ G21

备件
Spare Parts

规格 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	大头螺钉 Clamping screw	压紧螺钉 Clamping screw
SEM16	PL10 8x6	SR55 M3x10	-	SR55 M8x25
SEM22	PL10 10x9	SR55 M5x12	SRB22-M10	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	SRB27-M12	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	SRB32-M16	SR55 M16x40
SEM40 (HSK A63)	PL10 16x14	SR55 M6x16	SRB40-M20	SR55 M12x40
SEM40 (HSK A100)	PL10 16x12	SR55 M6x16	SRB40-M20	SR55 M12x45
SEM60	PL10 25x18	SR55 M10x20	-	SR55 M16x60

- SEM40 平键的选用请联系销售工程师
- Selecting for flat key, please check with sales technologist

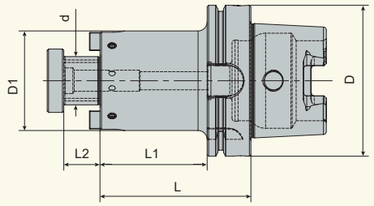
● 标准库存
Item in stock

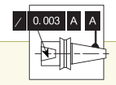
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

面铣刀刀柄
Face Mill Adaptor



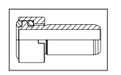






规格型号 Designation	D	d	D1	L	L1	L2	Kg	在库 Stock
HSK A63 SEM16x50.C(1)	63	16	38	50	24	17	0.84	○
HSK A63 SEM22x50.C(1)	63	22	47	50	24	19	0.97	○
HSK A63 SEM27x60.C(1)	63	27	58	60	34	21	1.28	○
HSK A63 SEM32x60.C(1)	63	32	66	60	34	24	1.38	○
HSK A100 SEM16x100.C(2)	100	16	38	100	71	17	2.60	○
HSK A100 SEM22x100.C(2)	100	22	47	100	71	19	2.94	○
HSK A100 SEM27x100.C(2)	100	27	58	100	71	21	3.60	○
HSK A100 SEM32x100.C(2)	100	32	66	100	71	24	4.62	○

- 内冷却管需单独订购
- (1)当工作转速 N=20,000RPM 时，刀柄的平衡等级为 G2.5；(2)当工作转速 N=15,000RPM 时，刀柄的平衡等级为 G2.5
- 订货示例：1 件 HSK A63 SEM16x50.C
- Inner coolant tube should be ordered separately.
- It is with G2.5/20,000 RPM, and G2.5/15,000 RPM.
- Ordering sample: 1 PC HSK A63 SEM16x50.C.



☞ G21

备件
Spare Parts

规格 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	大头螺钉 Clamping screw	压紧螺钉 Clamping screw
SEM16	PL10 8x6	SR55 M3x10	-	SR55 M8x25
SEM22	PL10 10x9	SR55 M5x12	SRB22-M10	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	SRB27-M12	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	SRB32-M16	SR55 M16x40

● 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)

液压刀柄
Hydraulic Chuck Adaptor



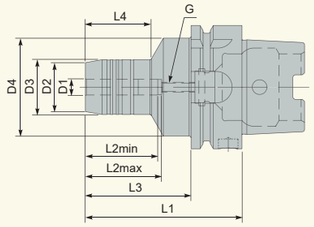


Fig A

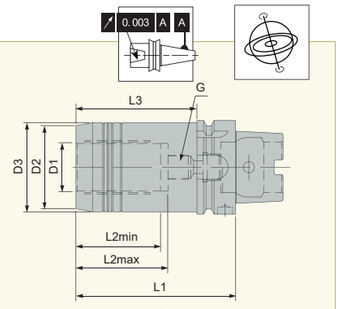
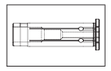


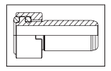
Fig B

规格型号 Designation	D1	D2	D3	D4	L1	L2max	L2min	L3	L4	G	Fig	在库 Stock
HSK A50 HYDRO 6x80	6	23	26	42	80	37	27	54	35	M5	FigA	◐
HSK A50 HYDRO 8x80	8	25	28	42	80	37	27	54	36	M6	FigA	◐
HSK A50 HYDRO 10x85	10	27	30	42	85	42	32	59	41	M8×1.0	FigA	◐
HSK A50 HYDRO 12x90	12	29	32	42	90	47	37	64	47	M10×1.0	FigA	◐
HSK A50 HYDRO 14x90	14	30	34	42	90	47	37	64	49	M10×1.0	FigA	◐
HSK A50 HYDRO 16x95	16	34	38	42	95	52	42	69	52	M12×1.0	FigA	◐
HSK A50 HYDRO 18x95	18	36	40	42	95	52	42	69	52	M12×1.0	FigA	◐
HSK A50 HYDRO 20x100	20	38	42	-	100	52	42	74	-	M10×1.0	FigB	◐
HSK A63 HYDRO 6x80	6	23	26	50	80	37	27	54	33	M5	FigA	◐
HSK A63 HYDRO 6x150	6	23	26	50	150	37	27	124	103	M5	FigA	◐
HSK A63 HYDRO 6x200	6	23	26	50	200	37	27	174	153	M5	FigA	◐
HSK A63 HYDRO 8x80	8	25	28	50	80	37	27	54	33	M6	FigA	◐
HSK A63 HYDRO 8x150	8	25	28	50	150	37	27	124	104	M6	FigA	◐
HSK A63 HYDRO 8x200	8	25	28	50	200	37	27	174	154	M6	FigA	◐
HSK A63 HYDRO 10x85	10	27	30	50	85	42	32	59	39	M8×1.0	FigA	◐
HSK A63 HYDRO 10x150	10	27	30	50	150	42	32	124	104	M8×1.0	FigA	◐
HSK A63 HYDRO 10x200	10	27	30	50	200	42	32	174	154	M8×1.0	FigA	◐
HSK A63 HYDRO 12x90	12	29	32	50	90	47	37	64	44	M10×1.0	FigA	◐
HSK A63 HYDRO 12x150	12	29	32	50	150	47	37	124	105	M10×1.0	FigA	◐
HSK A63 HYDRO 12x200	12	29	32	50	200	47	37	174	155	M10×1.0	FigA	◐
HSK A63 HYDRO 14x90	14	30	34	50	90	47	37	64	46	M10×1.0	FigA	◐
HSK A63 HYDRO 14x150	14	30	34	50	150	47	37	124	105	M10×1.0	FigA	◐
HSK A63 HYDRO 14x200	14	30	34	50	200	47	37	174	155	M10×1.0	FigA	◐
HSK A63 HYDRO 16x95	16	34	38	50	95	52	42	69	52	M12×1.0	FigA	◐
HSK A63 HYDRO 16x150	16	34	38	50	150	52	42	124	106.5	M12×1.0	FigA	◐
HSK A63 HYDRO 16x200	16	34	38	50	200	52	42	174	156.5	M12×1.0	FigA	◐
HSK A63 HYDRO 18x95	18	36	40	50	95	52	42	69	52	M12×1.0	FigA	◐
HSK A63 HYDRO 18x150	18	36	40	50	150	52	42	124	107	M12×1.0	FigA	◐
HSK A63 HYDRO 18x200	18	36	40	50	200	52	42	174	157	M12×1.0	FigA	◐
HSK A63 HYDRO 20x100	20	38	42	50	100	52	42	74	58	M16×1.0	FigA	◐

- 在 2.5 x D 处回转精度 < 0.003 mm
- 转速为 25,000 RPM 时动平衡等级达到 G2.5 或 Umax < 1g mm
- 用于自动换刀
- 使用减径套可夹持更多直径尺寸
- 订货示例：1 件 HSK A63 HYDRO 10x85
- Run-out accuracy < 0.003 mm at 2.5 x D
- Balancing grade G2.5 at 25,000 RPM or Umax < 1g mm
- For automatic tool change
- Additional shank diameters can be clamped using intermediatesleeves
- Ordering sample: 1 PC HSK A63 HYDRO 10x85



☞ G15



☞ G21

备件
Spare Parts

中心螺孔 Central screw hole	调节螺丝 Adjusting screw
M5	SR50 M5x15.HC
M6	SR50 M6x15.HC
M8x1.0	SR50 M8x1x15.HC
M10x1.0	SR50 M10x1x15.HC
M12x1.0	SR50 M12x1x15.HC
M16x1.0	SR50 M16x1x15.HC

● 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

液压刀柄
Hydraulic Chuck Adaptor



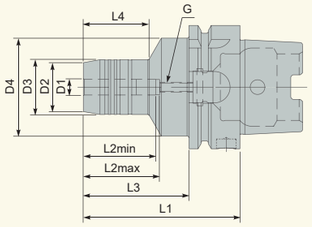


Fig A

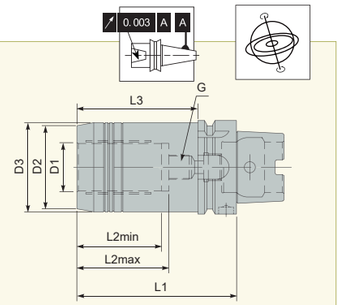
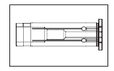


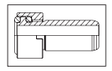
Fig B

规格型号 Designation	D1	D2	D3	D4	L1	L2max	L2min	L3	L4	G	Fig	在库 Stock
HSK A63 HYDRO 20x150	20	38	42	50	150	52	42	124	108	M12×1.0	FigA	◐
HSK A63 HYDRO 20x200	20	38	42	50	200	52	42	174	158	M12×1.0	FigA	◐
HSK A63 HYDRO 25x120	25	46	50	-	120	58	48	94	-	M16×1.0	FigB	◐
HSK A63 HYDRO 25x150	25	46	50	-	150	58	48	124	-	M16×1.0	FigB	◐
HSK A63 HYDRO 25x200	25	46	50	-	200	58	48	174	-	M16×1.0	FigB	◐
HSK A63 HYDRO 32x125	32	56	60	53	125	62	52	99	83	M16×1.0	FigA	◐
HSK A100 HYDRO 6x85	6	23	26	50	85	37	27	56	29	M5	FigA	◐
HSK A100 HYDRO 6x150	6	23	26	50	150	37	27	121	100	M5	FigA	◐
HSK A100 HYDRO 6x200	6	23	26	63	200	37	27	171	144	M5	FigA	◐
HSK A100 HYDRO 8x85	8	25	28	50	85	37	27	56	29	M6	FigA	◐
HSK A100 HYDRO 8x150	8	25	28	63	150	37	28	121	94.5	M6	FigA	◐
HSK A100 HYDRO 8x200	8	25	28	63	200	37	27	171	144.5	M6	FigA	◐
HSK A100 HYDRO 10x90	10	27	30	50	90	42	32	61	35	M8×1.0	FigA	◐
HSK A100 HYDRO 10x150	10	27	30	63	150	42	32	121	95	M8×1.0	FigA	◐
HSK A100 HYDRO 10x200	10	27	30	50	200	42	32	171	151	M8×1.0	FigA	◐
HSK A100 HYDRO 12x95	12	29	32	50	95	47	37	66	40	M10×1.0	FigA	◐
HSK A100 HYDRO 12x150	12	29	32	63	150	47	37	121	95.5	M10×1.0	FigA	◐
HSK A100 HYDRO 12x200	12	29	32	63	200	47	37	171	145.5	M10×1.0	FigA	◐
HSK A100 HYDRO 14x95	14	30	34	63	95	47	37	66	42	M10×1.0	FigA	◐
HSK A100 HYDRO 14x150	14	30	34	50	150	47	37	121	97	M10×1.0	FigA	◐
HSK A100 HYDRO 14x200	14	30	34	50	200	47	37	171	147	M10×1.0	FigA	◐
HSK A100 HYDRO 16x150	16	34	38	63	150	52	42	121	97.5	M12×1.0	FigA	◐
HSK A100 HYDRO 16x200	16	34	38	63	200	52	42	171	147.5	M12×1.0	FigA	◐
HSK A100 HYDRO 18x200	18	36	40	63	200	52	42	171	148	M12×1.0	FigA	◐
HSK A100 HYDRO 20x150	20	38	42	63	150	52	42	121	99	M12×1.0	FigA	◐
HSK A100 HYDRO 20x200	20	38	42	63	200	52	42	171	149	M12×1.0	FigA	◐
HSK A100 HYDRO 25x200	25	46	50	63	200	58	48	171	136	M16×1.0	FigA	◐
HSK A100 HYDRO 32x150	32	56	60	-	150	62	52	121	-	M16×1.0	FigB	◐
HSK A100 HYDRO 32x200	32	56	60	-	200	62	52	171	-	M16×1.0	FigB	◐

- 在 2.5 x D 处回转精度 < 0.003 mm
- 转速为 25,000 RPM 时动平衡等级达到 G2.5 或 Umax < 1g mm
- 用于自动换刀
- 使用减径套可夹持更多直径尺寸
- 订货示例：1 件 HSK A63 HYDRO 10x85
- Run-out accuracy < 0.003 mm at 2.5 x D
- Balancing grade G2.5 at 25,000 RPM or Umax < 1g mm
- For automatic tool change
- Additional shank diameters can be clamped using intermediatesleeves
- Ordering sample: 1 PC HSK A63 HYDRO 10x85



☞ G15



☞ G21

备件
Spare Parts

中心螺孔 Central screw hole	调节螺丝 Adjusting screw
M5	SR50 M5x15.HC
M6	SR50 M6x15.HC
M8x1.0	SR50 M8x1x15.HC
M10x1.0	SR50 M10x1x15.HC
M12x1.0	SR50 M12x1x15.HC
M16x1.0	SR50 M16x1x15.HC

● 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)

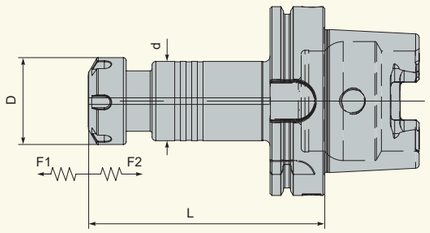
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

ADAPTORS 刀柄系统

HSK-A

微补偿同步攻丝刀柄
Micro Compensation Tapping Chuck





规格型号 Designation	D	d	L	Fl	F2	攻丝范围 Tap	筒夹 Collet Chuck	在库 Stock
HSK A63 VER20x100	34	45	100	0.1-0.5	0.5	M3-M12	ER20-G	◐
HSK A63 VER32x120	50	48	120	0.1-0.5	0.5	M4-M22	ER32-G	◐
HSK A100 VER20x110	34	45	110	0.1-0.5	0.5	M3-M12	ER20-G	◐
HSK A100 VER32x130	50	48	130	0.1-0.5	0.5	M4-M22	ER32-G	◐

- 订货示例：1 件 HSK A63 VER20x100
- Ordering sample: 1 PC HSK A63 VER20x100

HSK-C 刀柄
HSK-C Adaptor



规格型号 Designation	D	D1	L	L1	kg	在库 Stock
HSK A63 C3x75	63	32	75	49	1.00	○
HSK A63 C4x80	63	40	80	54	1.20	○
HSK A63 C5x90	63	50	90	64	1.50	○
HSK A100 C3x80	100	32	80	51	2.50	○
HSK A100 C4x90	100	40	90	61	2.70	○
HSK A100 C5x100	100	50	100	71	3.10	○
HSK A100 C6x110	100	63	110	81	3.70	○
HSK A100 C8x120	100	80	120	91	4.90	○

- 若 HSK A100 C3/C4 需内冷，订单请配备标准冷却管 LQG-HSK A100
- 其余规格已配备专用冷却管
- 注意：组装连接件时需先拆下冷却管
- 订货示例：1 件 HSK A63 C3x75
- Please remark coolant tube LQG-HSK A100 if inner-cooling needed for item HSK A100 C3/C4
- There are coolant tube for other items
- Notice: It is no need to disassemble the tube when assembling the connections
- Ordering sample: 1 PC HSK A63 C3x75

备件
Spare Parts

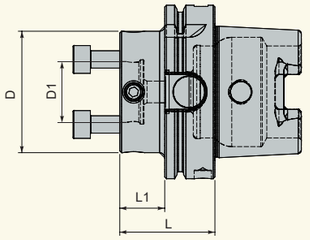
接口 Interface	螺纹环 Threading ring	锁紧螺钉 Clamping screw	专用冷却管 Specialised cooling tubes	
			HSK A63	HSK A100
C3	RG05L M18x15xC3	SR61 M12x50-X.C	LQG-HSK A63-C	-
C4	RG05L M22x17xC4	SR61 M14x58-X.C	LQG-HSK A63-C	-
C5	RG05L M25x20xC5	SR61 M16x70-X.C	LQG-HSK A63-C	LQG-HSK A100-C
C6	RG05L M30x24xC6/8	SR61 M20x87-X.C	LQG-HSK A63-C	LQG-HSK A100-C
C8	RG05L M30x24xC6/8	SR61 M20x87-X.C	-	LQG-HSK A100-C

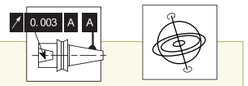
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

HSK-A

可调刀柄
Adjustable Chuck





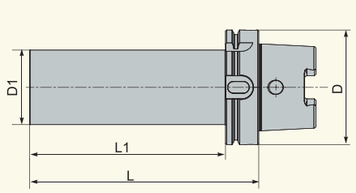


规格型号 Designation	ISO	D	D1	L	L1	kg	在库 Stock
HSK A63 SL70x60	63	70	35	60	34	1.24	○
HSK A100 SL70x55	100	70	35	55	26	2.63	○

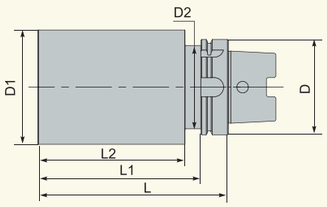
- 适配接杆需单独订购，请参照：☞ D70-D72 页
- 刀柄配件，请参照：☞ D25 页
- 订货示例：1 件 HSK A63 SL70x60
- Extension should be ordered separately, please see page D70-D72.
- Spare parts,please see page D25.
- Ordering sample: 1 PC HSK A63 SL70x60

DIN 69893 HSK A 型半成品刀柄
DIN 69893 HSK A Semifinished Adaptor





FigA



FigB

规格型号 Designation	D	D1	D2	L	L1	L2	Fig	kg	在库 Stock
HSK A63 B 64x250	63	64	52.5	250	224	207.5	B	7	○
HSK A63 B 80x200	63	80	52.5	200	174	157.5	B	7	○
HSK A63 B 100x300	63	100	52.5	300	274	257.5	B	7.4	○
HSK A63 B 130x150	63	130	52.5	150	124	107.5	B	10.42	○
HSK A63 B 150x170	63	150	52.5	170	144	127.5	B	10.42	○
HSK A100 B 65x200	100	65	-	200	171	-	A	6.32	○
HSK A100 B 80x200	100	80	-	200	171	-	A	8.57	○
HSK A100 B 104x250	100	104	87.5	250	221	205	B	12.06	○
HSK A100 B 145x200	100	145	87.5	200	171	155	B	11.81	○
HSK A100 B 100x300	100	100	87.5	300	271	255	B	18.1	○

- 柄材质 : 合金钢 柄部硬度 46-50HRC 头部硬度 36-40HRC
- 柄部接口内具有连接冷却液套管的螺纹接口
- Material: alloy steel, hardness 46-50HRC
- The shank connector has a threaded connection to the coolant casing pipe

● 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)



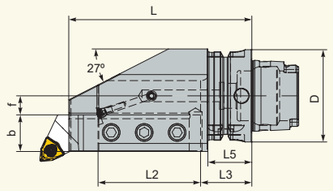
D
刀柄系统
ADAPTORS

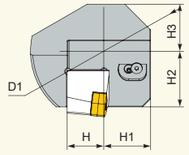
HSK-T

HSK-T 车铣复合刀柄 D61
HSK-T Turn-milling Combined Adaptor

HSK-T 车铣复合刀柄
HSK-T Turn-milling Combined Adaptor







图示为右手刀
Right hand show

规格型号 Designation	D	H	b	f	L	L2	L3	L5	H1	H2	H3	D1	在库 Stock
HSK T63 ASH25Rx125	63	25	25	13	125	70	35	30	32	38	32	100	◐
HSK T63 ASH25Lx125	63	25	25	13	125	70	35	30	32	38	32	100	◐
HSK T100 ASH32Rx145	100	32	32	8	145	90	45	38	35	40	44	120	◐
HSK T100 ASH32Lx145	100	32	32	8	145	90	45	38	35	40	44	120	◐

- 订货示例：1 件 HSK T63 ASH25Rx125
- Ordering sample: 1 PC HSK T63 ASH25Rx125

备件
Spare Parts

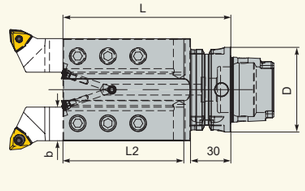
规格型号 Designation	压紧螺钉 Clamping screw
HSK T63 ASH25Rx125	SR50 M12x20
HSK T63 ASH25Lx125	SR50 M12x20
HSK T100 ASH32Rx145	SR50 M12x20
HSK T100 ASH32Lx145	SR50 M12x20

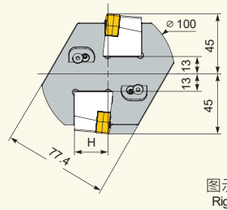
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

HSK-T

HSK-T 车铣复合刀柄
HSK-T Turn-milling Combined Adaptor







图示为右手刀
Right hand show

规格型号 Designation	D	h1	b	L	L2	在库 Stock
HSK T63 ASH25Rx125-2	63	25	25	125	90	◐
HSK T63 ASH25Lx125-2	63	25	25	125	90	◐

- 订货示例：1 件 HSK T63 ASH25Rx125-2
- Ordering sample: 1 PC HSK T63 ASH25Rx125-2

备件
Spare Parts

规格型号 Designation	压紧螺钉 Clamping screw
HSK T63 ASH25Rx125-2	SR50 M12x20
HSK T63 ASH25Lx125-2	SR50 M12x20

● 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)



D
刀柄系统
ADAPTORS

PSC

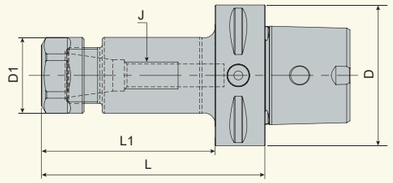
ER 筒夹刀柄 D65
ER Collet Chuck Adaptor

侧固式刀柄 (DIN 1835-B)..... D67
Weldon Adaptor

面铣刀刀柄 D68
Face Mill Adaptor

ER 筒夹刀柄
ER Collet Chuck Adaptor

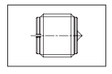


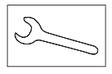


规格型号 Designation	D	D1	L	L1	J	在库 Stock
C6 ER16x100	63	28	100	77.5	M10	◐
C6 ER20x100	63	34	100	77.5	M12	◐
C6 ER25x100	63	42	100	77.5	M16	◐
C6 ER32x100	63	50	100	77.5	M22x1.5	◐
C6 ER40x100	63	60	100	77.5	M28x1.5	◐

- 订货示例：一件 C6 ER16x100
- Ordering sample: 1 PC C6 ER16x100.


☞ G3-G9


☞ G20


☞ G29

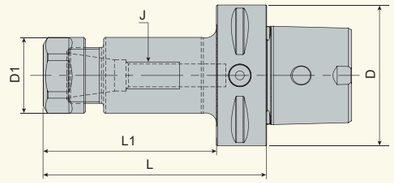
备件
Spare Parts



规格型号 Designation	螺帽 ER NUT
ER16	NUT ER16
ER20	NUT ER20
ER25	NUT ER25
ER32	NUT ER32
ER40	NUT ER40

ER 筒夹刀柄
ER Collet Chuck Adaptor

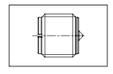


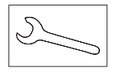


规格型号 Designation	D	D1	L	L1	J	在库 Stock
C6 ER16x100.TOP	63	28	100	77.5	M10	◐
C6 ER20x100.TOP	63	34	100	77.5	M12	◐
C6 ER25x100.TOP	63	42	100	77.5	M16	◐
C6 ER32x100.TOP	63	50	100	77.5	M22x1.5	◐
C6 ER40x100.TOP	63	60	100	77.5	M28x1.5	◐

- 订货示例：一件 C6 ER16x100.TOP.
- Ordering sample: 1 PC C6 ER16x100.TOP.


☞ G3-G9


☞ G20


☞ G29

备件
Spare Parts

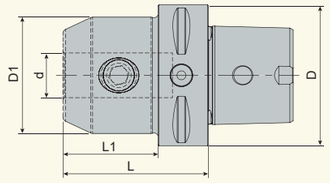


规格型号 Designation	螺帽 ER NUT
ER16.TOP	NUT ER16.TOP
ER20.TOP	NUT ER20.TOP
ER25.TOP	NUT ER25.TOP
ER32.TOP	NUT ER32.TOP
ER40.TOP	NUT ER40.TOP

侧固式刀柄 *(DIN 1835-B)*

Weldon Adaptor





规格型号 Designation	D	d	D1	L	L1	在库 Stock
C6 EM20x65	63	20	52	65	42.5	◐
C6 EM25x80	63	25	65	80	57.5	◐
C6 EM32x90	63	32	72	90	67.5	◐

- 订货示例：一件 C6 EM20x65
- Ordering sample: 1 PC C6 EM20x65.

备件

Spare Parts

规格 Designation	锁紧螺钉 Lock screw	锁紧扳手（选配） Allen key
EM20	SR54 M16x16	KEY01 M8
EM25	SR54 M18x20-X	KEY01 M8
EM32	SR54 M20x20-X	KEY01 M10

● **标准库存** Item in stock

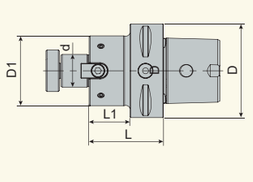
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

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

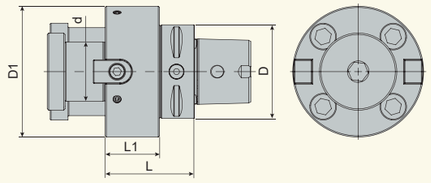
面铣刀刀柄

Face Mill Adaptor





FigA



FigB

规格型号 Designation	D	D1	d	L	L1	Fig	在库 Stock
C6 SEM22x50.C	63	47	22	50	27.5	A	◐
C6 SEM27x60.C	63	58	27	60	37.5	A	◐
C6 SEM32x60.C	63	66	32	60	37.5	A	◐
C6 SEM40x60.C	63	88	40	60	37.5	B	◐

- 订货示例：一件 C6 SEM22x50.C
- Ordering sample: 1 PC C6 SEM22x50.C.

备件

Spare Parts

规格 Designation	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key	大头螺钉 Clamping screw	压紧螺钉 Clamping screw
SEM22	PL10 10x9	SR55 M5x12	SRB22-M10	SR55 M10x30
SEM27	PL10 12x10	SR55 M6x12	SRB27-M12	SR55 M12x35
SEM32	PL10 14x12	SR55 M6x16	SRB32-M16	SR55 M16x40
SEM40	PL10 16x12	SR55 M6x16	SRB40-M20	SR55 M12x45

- SEM40 平键的选用请联系销售工程师
- Selecting for flat key, please check with sales technologist

● **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



D

刀柄系统
ADAPTORS

模块式刀柄接杆
Modular Extensions for Adaptors

攻丝刀柄接杆 D71
Extension for Tapping Chuck Adaptor

液压刀柄接杆 D72
Extension for Hydraulic Chuck Adaptor

ER 刀柄接杆 D72
Extension for ER Collet Chuck Adaptor

热缩刀柄接杆 D73
Extension for Shrink Fit Adaptor

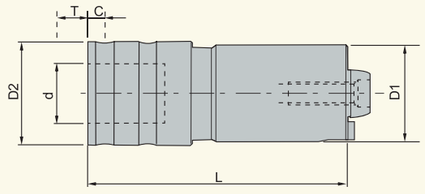
PSC 接长杆 D74
Extension with PSC

PSC 缩径杆 D75
Reduction with PSC

模块式刀柄接杆组合示意图 D76
Combinational Figure

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：☞ A45-A47 页
- 订货示例：1 件 TAP412.E40.110
- 种规格的攻丝刀柄接杆均有对应的攻丝快换夹头，请参照：☞ G12 页
- The adaptor should be ordered separately, please see page A45-A47.
- Ordering sample: 1 PC TAP412.E40.110
- Multiple quick change chucks for corresponding tool holder, please see page G12

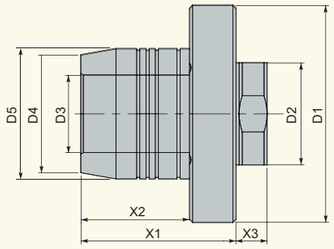
备件
Spare Parts

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 M4x10	KEY01 M2.5
D1=50	PL04 12x9	SR55 M5x12	KEY01 M4
D1=63	PL04 14x12	SR55 M5x12	KEY01 M4

● 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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液压刀柄接杆
Extension for Hydraulic Chuck Adaptor



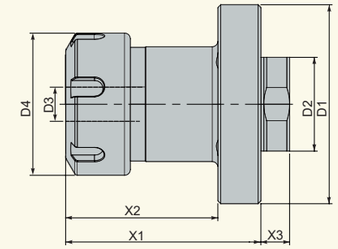


规格型号 Designation	D1	D2	D3	D4	D5	X1	X2	X3	在库 Stock
HYDRO 20.SL70.50	70	35	20	38	42	50	35	10	○

- 适配刀柄需单独订购，请参照：☞ D25 页 ,D42 页 ,D58 页
- 订货示例：1 件 HYDRO 20.SL70.50
- The adaptor should be ordered separately, please see page D25,D42,D58.
- Ordering sample: 1 PC HYDRO 20.SL70.50

ER 刀柄接杆
Extension for ER Collet Chuck Adaptor

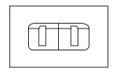


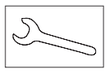


规格型号 Designation	D1	D2	D3	D4	X1	X2	X3	在库 Stock
ER32.SL70.75	70	35	2-20	50	75	53	10	○

- 适配刀柄需单独订购，请参照：☞ D25 页 ,D42 页 ,D58 页
- 订货示例：1 件 ER32.SL70.75
- The adaptor should be ordered separately, please see page D25,D42,D58.
- Ordering sample: 1 PC ER32.SL70.75


☞ G3-G9

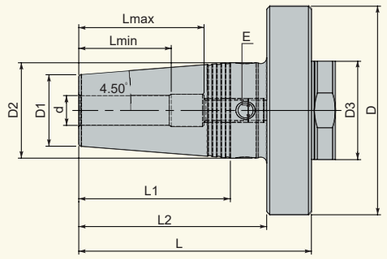

☞ G10


☞ G29

● 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)

热缩刀柄接杆
Extension for Shrink Fit Adaptor





规格型号 Designation	d	D	D1	D2	D3	L1	L2	L	Lmin	Lmax	E	Kg	在库 Stock
SRKIN6.SL70.80	6	70	21	27.0	35	38.0	65	80	25	36	M5	0.7	○
SRKIN8.SL70.80	8	70	21	27.0	35	38.0	65	80	25	36	M6	0.7	○
SRKIN10.SL70.80	10	70	24	32.0	35	51.0	65	80	31	42	M8	0.8	○
SRKIN12.SL70.80	12	70	24	32.0	35	51.0	65	80	36	47	M8	0.8	○
SRKIN14.SL70.80	14	70	27	34.0	35	45.0	65	80	36	47	M10	0.9	○

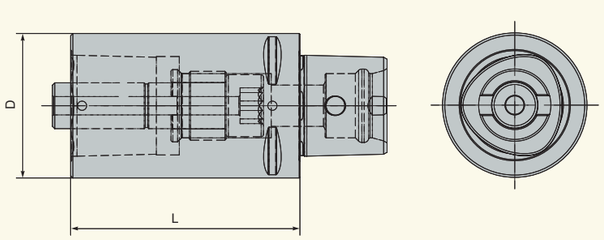
- 适配刀柄需单独订购，请参照：☞ D25 页 ,D42 页 ,D58 页
- 订货示例：1 件 SRKIN6.SL70.80
- The adaptor should be ordered separately, please see page D25,D42,D58.
- Ordering sample: 1 PC SRKIN6.SL70.80

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

PSC 接长杆
Extension with PSC





规格型号 Designation	D	L	Kg	在库 Stock
EX C3x60	32	60	0.40	○
EX C3x80	32	80	0.50	○
EX C3x95	32	95	0.60	○
EX C4x60	40	60	0.60	○
EX C4x80	40	80	0.70	○
EX C4x120	40	120	1.20	○
EX C5x80	50	80	1.20	○
EX C5x100	50	100	1.40	○
EX C5x150	50	150	2.20	○
EX C6x100	63	100	2.30	○
EX C6x140	63	140	3.20	○
EX C6x185	63	185	4.20	○
EX C8x100	80	100	3.70	○
EX C8x125	80	125	4.70	○
EX C8x200	80	200	7.50	○

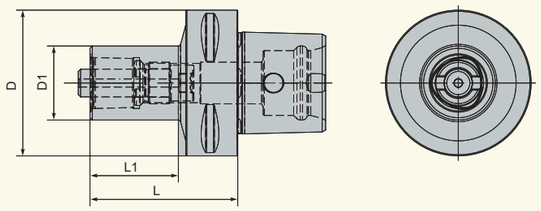
- 订货示例：1 件 EX C3x60
- Ordering sample: 1 PC EX C3x60

备件
Spare Parts

接口 Interface	螺纹环 Threading ring	锁紧螺钉 Clamping screw
C3	RG05L M18x15xC3	SR61 M12x50-X.C
C4	RG05L M22x17xC4	SR61 M14x58-X.C
C5	RG05L M25x20xC5	SR61 M16x70-X.C
C6	RG05L M30x24xC6/8	SR61 M20x87-X.C
C8	RG05L M30x24xC6/8	SR61 M20x87-X.C

PSC 缩径杆
Reduction with PSC





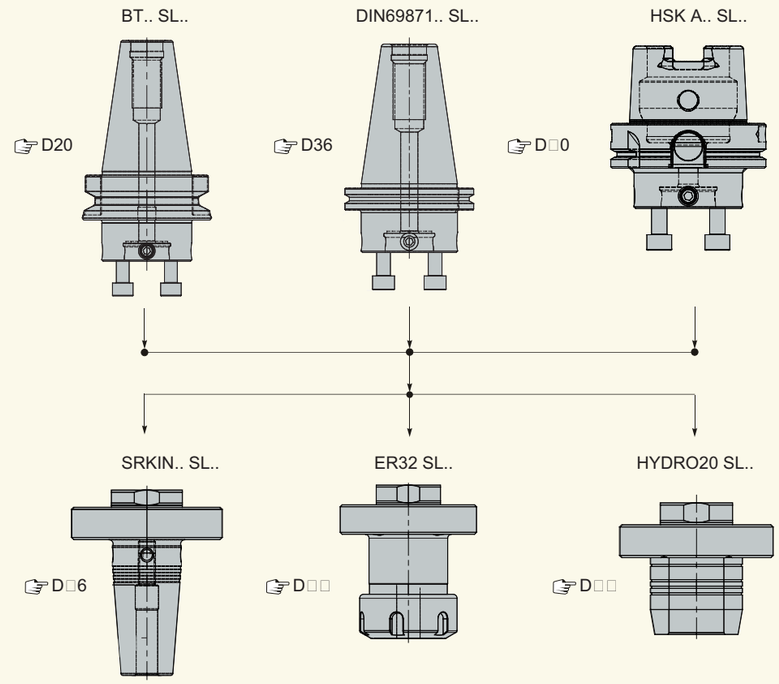
规格型号 Designation	D	D1	L	L1	Kg	在库 Stock
RE C4-C3x55	40	32	55	31	0.50	○
RE C4-C3x120	40	32	120	95.7	0.90	○
RE C5-C3x60	50	32	60	34.8	0.70	○
RE C5-C3x120	50	32	120	94.4	1.00	○
RE C5-C4x65	50	40	65	40	0.80	○
RE C5-C4x140	50	40	140	115.5	1.50	○
RE C6-C3x70	63	32	70	39	1.20	○
RE C6-C3x125	63	32	125	95.6	1.50	○
RE C6-C4x80	63	40	80	51.4	1.40	○
RE C6-C4x145	63	40	145	116.7	1.90	○
RE C6-C5x80	63	50	80	51.5	1.60	○
RE C6-C5x175	63	50	175	148.1	2.80	○
RE C8-C3x60	80	32	60	20.7	2.10	○
RE C8-C3x135	80	32	135	95.7	2.60	○
RE C8-C4x70	80	40	70	31.4	2.20	○
RE C8-C4x155	80	40	155	116.4	3.00	○
RE C8-C5x80	80	50	80	42.8	2.50	○
RE C8-C5x185	80	50	185	147.8	3.90	○
RE C8-C6x80	80	63	80	44.5	2.70	○
RE C8-C6x200	80	63	200	164.5	5.40	○

● 订货示例：1 件 RE C4-C3x55
● Ordering sample: 1 PC RE C4-C3x55

备件
Spare Parts

头部接口 Header interface	螺纹环 Threading ring	锁紧螺钉 Clamping screw
C3	RG05L M18x15xC3	SR61 M12x50-X.C
C4	RG05L M22x17xC4	SR61 M14x58-X.C
C5	RG05L M25x20xC5	SR61 M16x70-X.C
C6	RG05L M30x24xC6/8	SR61 M20x87-X.C

模块式刀柄接杆组合示意图
Combinational Figure



● 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)

TECHNICAL INFORMATION

技术资料



D

刀柄系统
ADAPTORS

技术资料
Technical Information

BT MAS403 锥柄标准 D79
BT MAS403 Taper-shank Standard

DIN69871 锥柄标准 D80
DIN69871 Taper-shank Standard

HSK 锥柄标准 D81
HSK Taper-shank Standard

其它技术资料 D83
Additional Technical Information

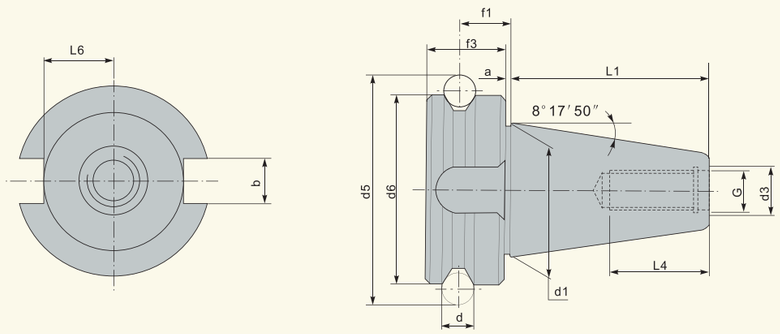
换算表 D89
Conversion Table

螺纹攻牙钻孔径对照表 D92
Thread Tapping Hole Diameter Comparison Table

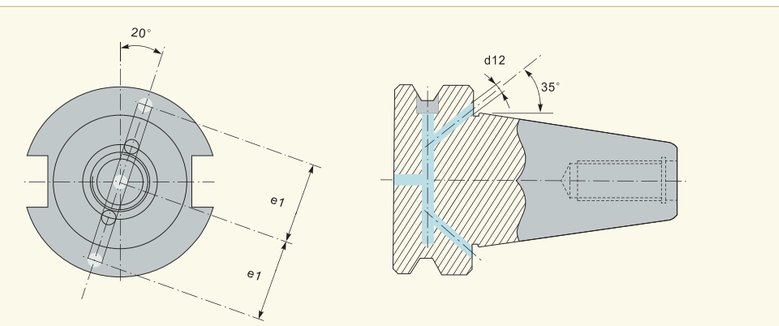
BT MAS403

BT MAS403 锥柄标准
BT MAS403 Taper-shank Standard

BT MAS403-A 型 /TypeA



BT MAS403-B 型 /TypeB



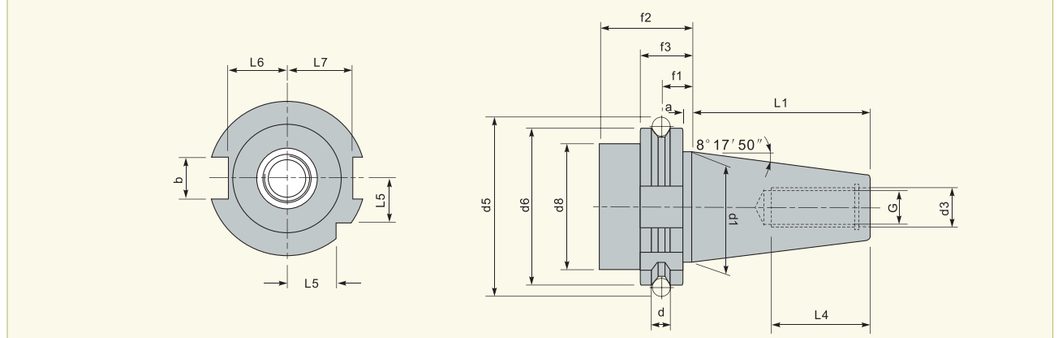
规格型号 Designation	a	b(H12)	d	d1	G	d3(H8)	d5	d6(h8)	f1±0.1
BT 30	2	16.19	8	31.75	M12	12.5	56.12	46	13.6
BT 40	2	16.2	10	44.45	M16	17	75.656	63	16.6
BT 50	3	25.8	15	69.85	M24	25	118.99	100	23.2

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

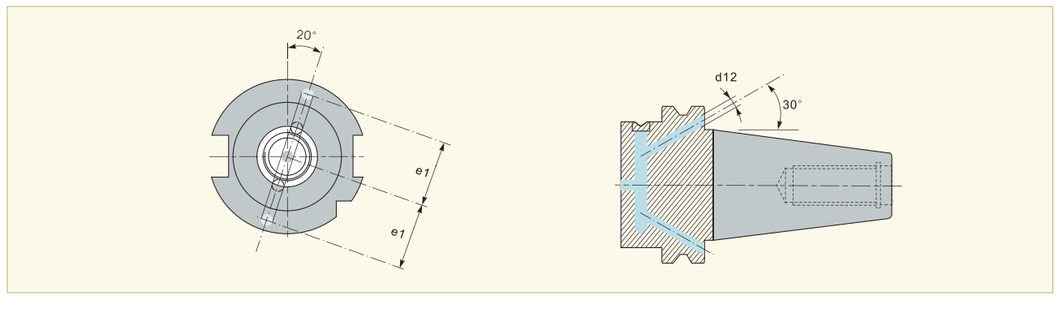
DIN69871-A

DIN69871 锥柄标准
DIN69871 Taper-shank Standard

DIN69871-A 型 /TypeA



DIN69871-B 型 /TypeB



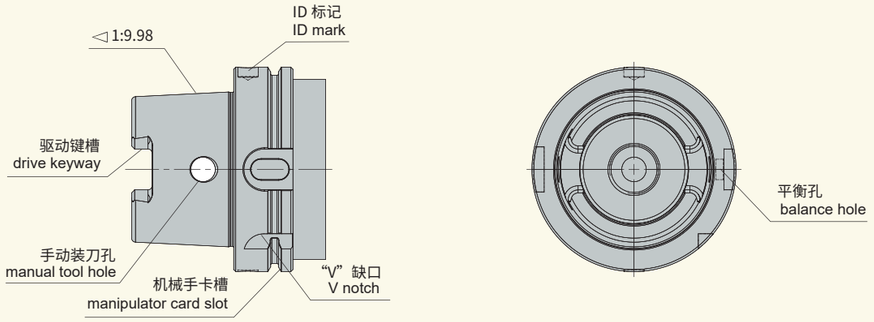
规格型号 Designation	a±0.1	b(H12)	d	d1	G	d3(H7)	d5±0.05	d6	d8max	f1±0.1
DIN69871 30	3.2	16.1	7	31.75	M12	13	59.3	50	45	11.1
DIN69871 40	3.2	16.1	7	44.45	M16	17	72.3	63.55	50	11.1
DIN69871 50	3.2	25.7	7	69.85	M24	25	107.25	97.5	80	11.1

规格型号 Designation	f2min	f3-0.1	L1-0.3	L4min	L5-0.3	L6-0.4	L7-0.4	e1±0.1	d12	TAPER AT3
DIN69871 30	35	19.1	47.8	24	15	16.4	19	21	4	0.002
DIN69871 40	35	19.1	68.4	32	18.5	22.8	25	27	4	0.003
DIN69871 50	35	19.1	101.75	48	30	35.5	37.7	42	6	0.004

HSK-A

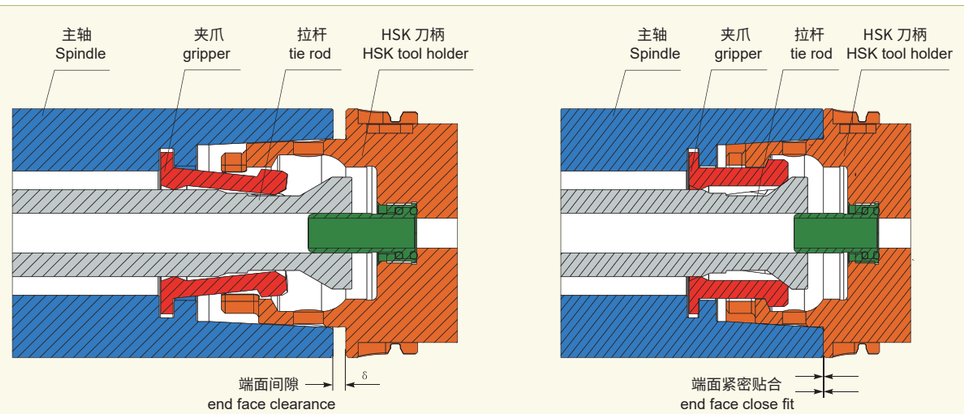
HSK 短锥刀柄特征说明

the feature of HSK short taper



HSK 短锥刀柄工作原理

Working principle of HSK short taper



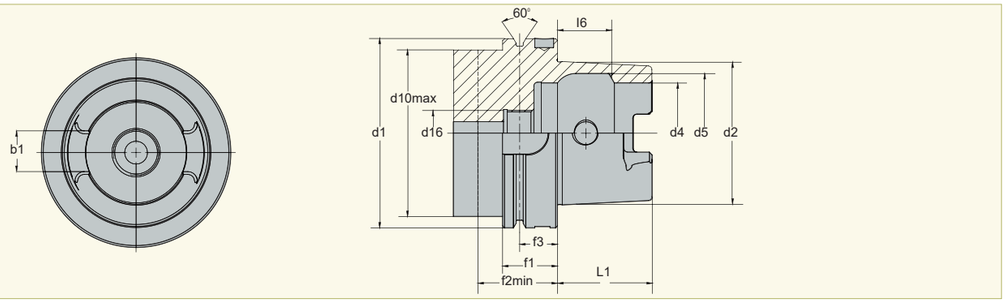
HSK 刀柄的空心锥柄与主轴孔完全接触时，HSK 刀柄端面与主轴端面有约 0.1mm 间隙（图示 A)
在夹紧机构作用下，拉杆向左移动，夹爪胀开，夹爪外锥面顶在空心锥柄 30°锥面上，拉动 HSK 刀柄向左移动，空心锥柄产生变形，刀柄端面与主轴端面靠紧，实现了刀柄与主轴锥面和端面两面同时定位和夹紧（图示 B)

When the hollow taper shank of the HSK tool holder is in full contact with the spindle hole, there is a gap of about 0.1mm between the end face of the HSK tool holder and the spindle end (Figure A)
Under the action of the clamping mechanism, the pull rod moves to the left, the clamping jaw expands, and the outer cone of the clamping jaw is on the 30° cone surface of the hollow taper shank, pulling the HSK tool holder to move to the left, and the hollow taper shank is deformed. The end face of the tool holder is close to the end face of the spindle, which realizes the simultaneous positioning and clamping of the tool holder, the tapered surface and the end face of the spindle (Figure B)

HSK-A

HSK-A 锥柄标准 (DIN 69893)

Standard



HSK-A	d1 (h10)	d2	d4 (H10)	d5 (H11)	d10 max	d16
50	50	38.009	26	32	42	M16x1
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	L1-0.2	l6 (Js10)	b1±0.04	f1-0.1	f2 min	f3 ±0.1
50	25	14.13	10.54	26	42	18
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

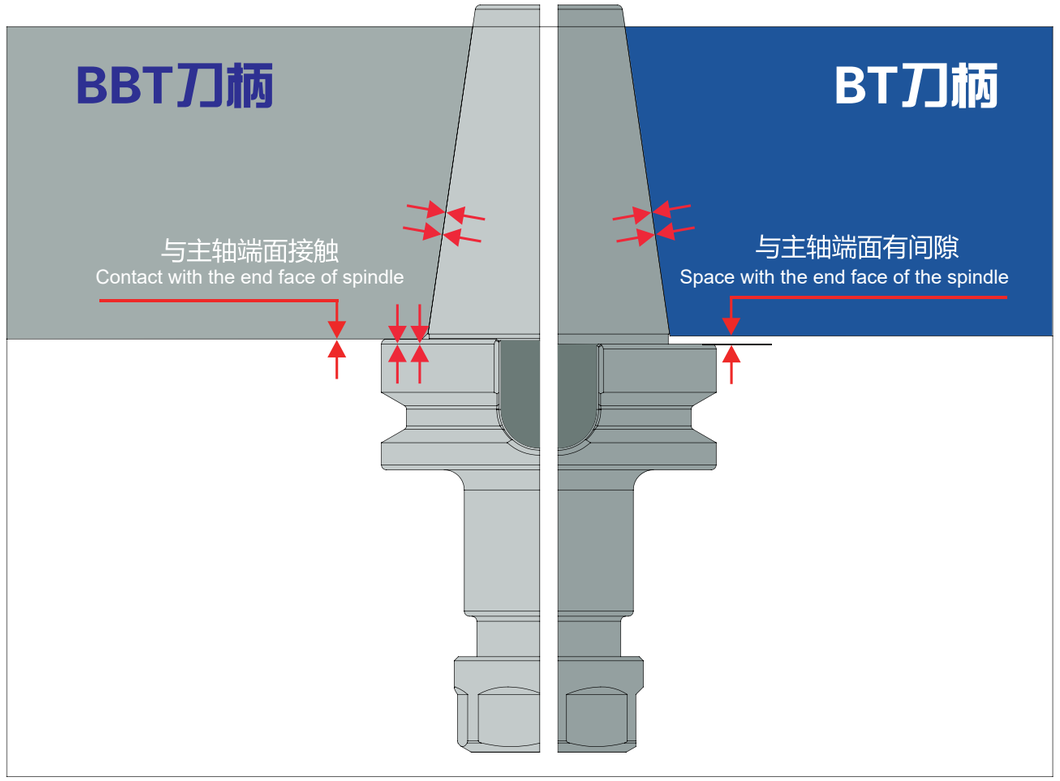
BBT 刀柄
BBT Adaptor

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。
With the structure of two sides, including the end face of spindle contacted. Also it can be replaced by standard BT adaptor but with higher rigidity and accuracy. Special ones can be made as customers' requirements as well.

特 点 Features

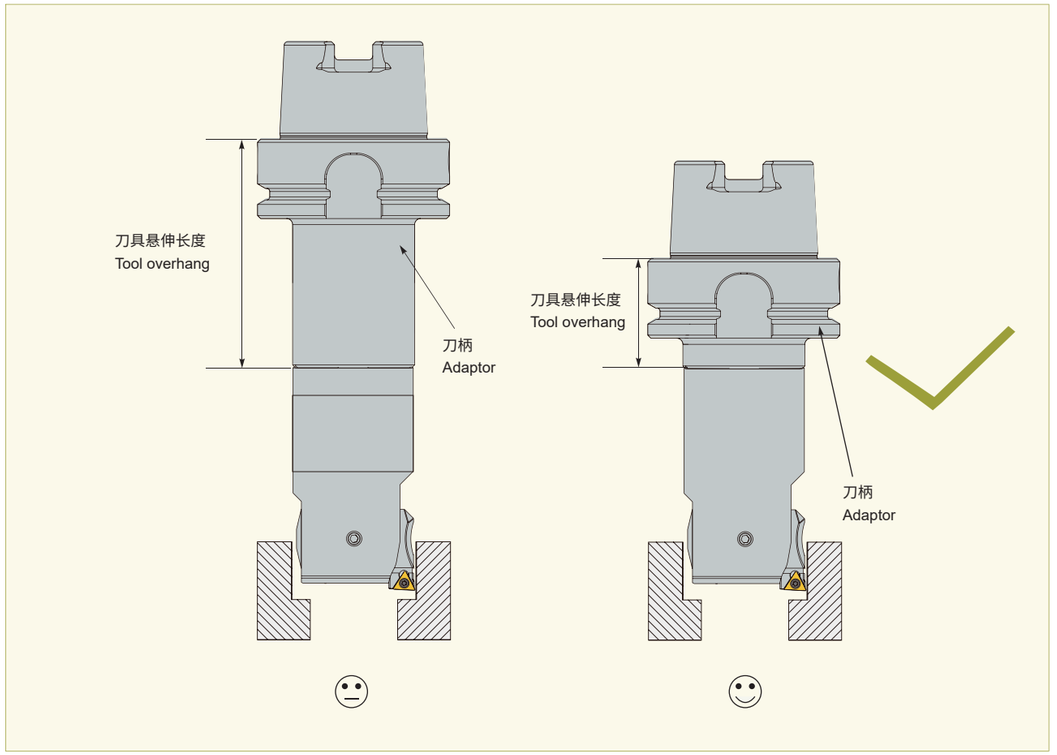
1、增大定位基准，增强刚性。
2、提高加工尺寸稳定性。
3、提高轴向定位精度。
4、可有效控制刀具振动。
5、刀具寿命延长。
6、高速运转时更安全。

1. Higher rigidity and location datumt
2. Higher stability
3. Higher accuracy of axia I direction
4. Reduce the vibration situation
5. Longer tool life
6. Much safer when with high speed condition



刀柄及刀具的长度选择
Selection for the Tool Length

刀柄及刀具通常为了达到最好的使用刚性，选择短系列产品通常是最好的。
但是深孔 / 深腔的加工中往往需要长刀柄或减振刀具，在这时降低主轴转速，进给，切深可以减小切削过程中所产生的振动。
注意：优先使用短系列产品
For better rigidity, we suggest selecting the shorter ones. But for the deep hole machining, tools with longer overhang needed. On the other hand, lower down the spindle speed, feed, and cutting depth that will good for the anti-vibration.
Note: tools with shorter length priority

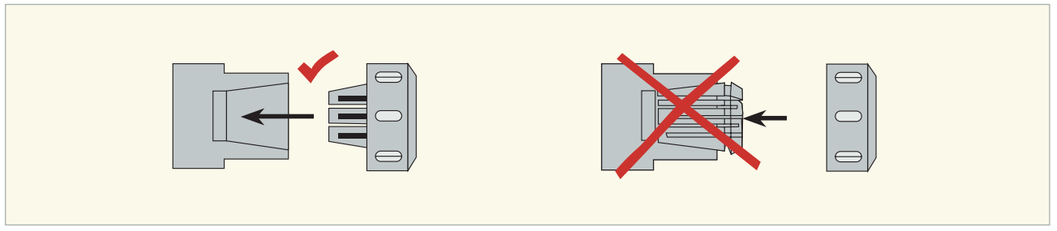


刀柄存放
Storage

刀柄需存放在干燥的环境中，长期保存时，锥柄及工作部位需涂抹防锈油。
Adaptors should be kept in a dry, and spread on anti-rush oil if they will be stored for a long time.

弹簧夹头的安装
Instruction for ER Collet

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!



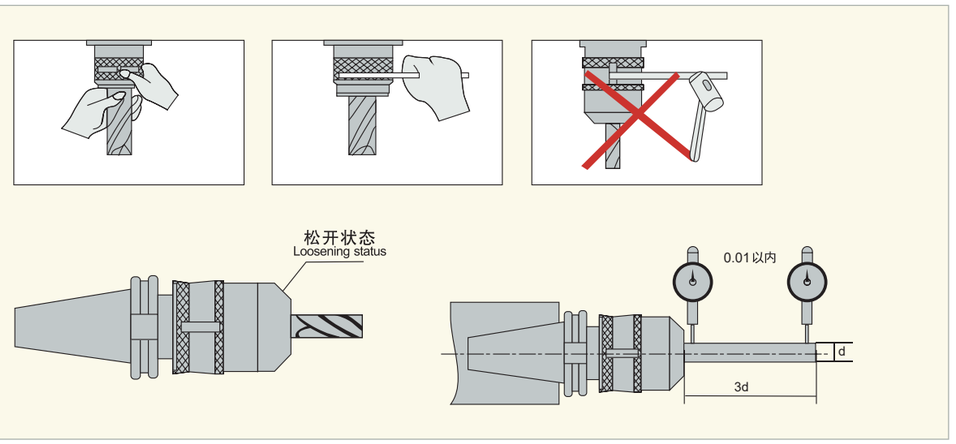
ER 夹紧螺母推荐使用扭矩：
Recommended Torque for ER Nut Clamping

规格型号 Designation	ER11-M	ER11	ER16-M	ER16	ER20-M	ER20	ER25	ER32	ER40
扭矩 (Kgf•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 1orque 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 griping force and simple operation which Is for the safe and reliable clamping



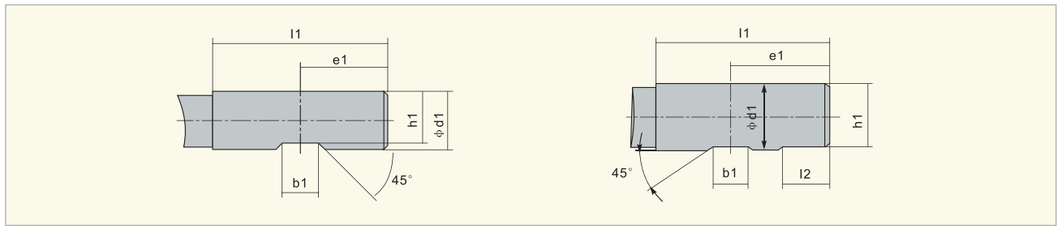
- 精度高，寿命长—更有利于保护刀具，延长刀具寿命
- 刚性高—适于大切削量加工
- 优良的耐久性—压力分散于保持架的滚针上
- Higher precision and longer tool life which is for protecting the tool and
- Higher rigidity which is suitable tor large cutting amount machining
- Superior durability due to the reason that the pressure can be afforded by the needle roller

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

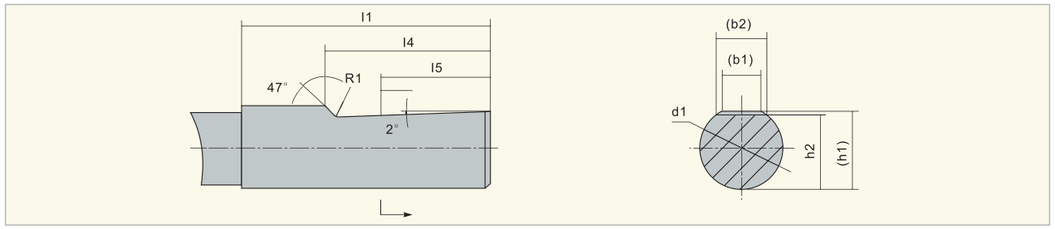
侧固刀柄接口尺寸 *(DIN 1835-B)*
Dimensions of DIN1835-B Weldon Adaptor



d1 (h6)	l1	b1	l2	e1	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

2° 削平柄尺寸 *(DIN 1835-E)*

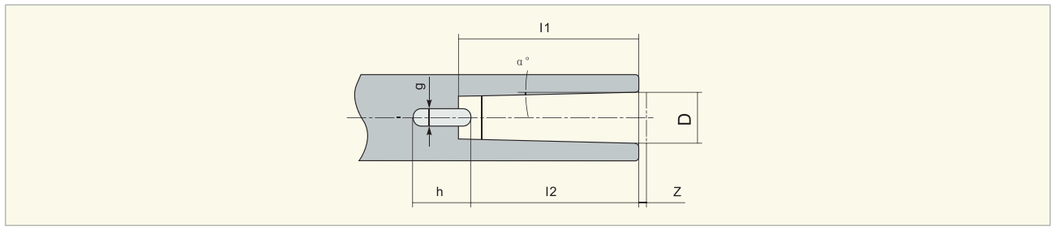
2° Dimension of flatted shank(DIN1835-E)



d1 (h6)	(b1)≈	(b2)	(h1)	h2 (h13)	l1 (±0.5)	l4 (±0.1)	l5	R1 min
6	3.5	4.8	5.4	4.8	36	25	18	1.2
8	4.7	6.1	7.2	6.6	36	25	18	1.2
10	5.7	7.3	9.1	8.4	40	28	20	1.2
12	6.0	8.2	11.2	10.4	45	33	22.5	1.2
16	7.6	10.1	15.0	14.2	48	36	24	1.6
20	8.4	11.5	19.1	18.2	50	38	25	1.6
25	9.3	13.6	24.1	23.0	56	44	32	1.6
32	9.9	15.5	31.2	30	60	48	35	1.6

扁尾型莫氏锥柄连接尺寸 *(DIN 228-D)*

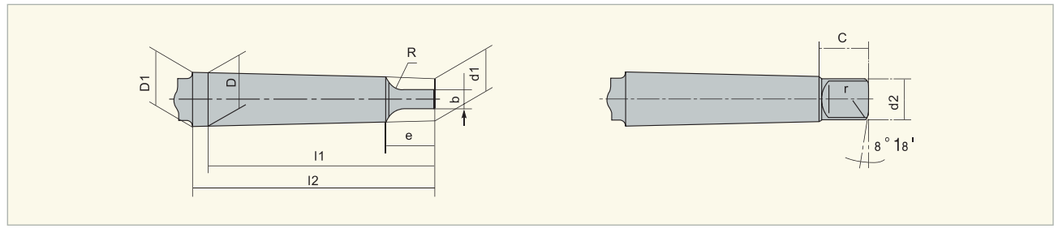
Dimensions of DIN228-D Morse Taper with Tang Adaptor



锥度号 Taper	锥度 Taper		锥角 (a°) Tngle	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	-

有扁尾莫氏锥柄 *(DIN 1838-B)*

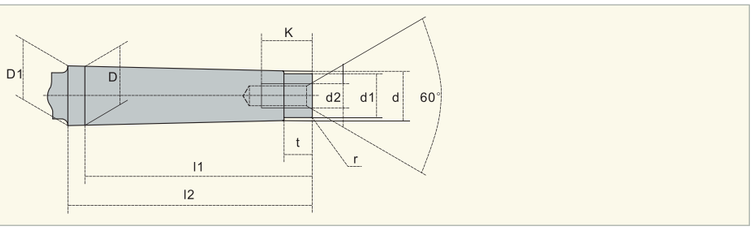
Morse taper with tang (DIN1838-B)



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	-

国际单位换算表
Conversion for International Units

压力
Pressure

Pa	Kpa	Mpa	bar	Kgf/cm	atm	mmH_2O	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/mm2)	Kgf/mm2	Kgf/cm2
1	1×10^{-6}	1.01972×10^{-3}	1.01972×10^{-5}
1×10^{6}	1	1.01972×10^{-1}	1.01972×10
9.80665×10^{6}	9.80665	1	1×10^{2}
9.80665×10^{4}	9.80665×10^{-2}	1×10^{-2}	1

注：$1Pa=1N/M^2$

CONVERSION TABLE 换算表

强度 \ 硬度换算表
Conversion Tabla for Hardness and Tensile strength

序号 SN	洛氏硬度 Rockwell hardness HRC	洛氏硬度 Rockwell hardness HRA	维氏硬度 Vickers hardness HV	布氏硬度 Brinell hardness Hb30 D2	布氏硬度 Brinell hardness D102 d54 d2.5 mm	抗拉强度 σ bMPa Intensity of tension 碳钢 Carbon steel	抗拉强度 σ bMPa Intensity of tension 铬钢 Chrome steel	抗拉强度 σ bMPa Intensity of tension 铬钒钢 Chrome-vanadium steel	抗拉强度 σ bMPa Intensity of tension 铬镍钢 Chromium nickel steel	抗拉强度 σ bMPa Intensity of tension 铬钼钢 Chrome molybdenum steel	抗拉强度 σ bMPa Intensity of tension 铬镍钼钢 Chromium nickel molyb denum steel	抗拉强度 σ bMPa Intensity of tension 铬锰硅钢 Chromansil	抗拉强度 σ bMPa Intensity oftension 超强度钢 Super tough steel	抗拉强度 σ bMPa Intensity of tension 不锈钢 Stainless steel	抗拉强度 σ bMPa Intensity of tensionz 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

刀柄系统 ADAPTORS

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 HRC	洛氏硬度 Rockwell hardness HRA	维氏硬度 Vickers hardness HV	布氏硬度 Brinell hardness Hb30 D2	布氏硬度 Brinell hardness D10 2d5 4d2.5 mm	抗拉强度 σ bMPa Intensity of tension 碳钢 Carbon steel	抗拉强度 σ bMPa Intensity of tension 铬钢 Chrome steel	抗拉强度 σ bMPa Intensity of tension 铬钒钢 Chrome-vanadium steel	抗拉强度 σ bMPa Intensity of tension 铬镍钢 Chromium nickel steel	抗拉强度 σ bMPa Intensity of tension 铬钼钢 Chrome molybdenum steel	抗拉强度 σ bMPa Intensity of tension 铬镍钼钢 Chromium nickel molyb denum steel	抗拉强度 σ bMPa Intensity of tension 铬锰硅钢 Chromansil	抗拉强度 σ bMPa Intensity oftension 超强度钢 Super tough steel	抗拉强度 σ bMPa Intensity of tension 不锈钢 Stainless steel	抗拉强度 σ bMPa Intensity of tensionz 不分钢种 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	417	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	-	-	-	-	7906	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	-	-	-	-	-	-	-	-	-	-	-	-

THREAD TAPPING HOLE DIAMETER COMPARISON

螺纹攻牙钻孔径对照表

公制粗螺纹 Metric coarse thread				
规格 Specfication		标准径 Standard diameter	2 级牙钻孔径 2nd. accuracy tapping hole diameter	
			最大 Max	最小 Min
M1.0	0.25	0.75	0.785	0.729
M1.1	0.25	0.85	0.885	0.829
M1.2	0.25	0.95	0.985	0.929
M1.4	0.3	1.10	1.142	1.075
M1.6	0.35	1.25	1.321	1.221
M1.7	0.35	1.35	1.421	1.321
M1.8	0.35	1.45	1.521	1.421
M2.0	0.4	1.60	1.679	1.567
M2.2	0.45	1.75	1.838	1.713
M2.3	0.4	1.90	1.979	1.867
M2.5	0.45	2.10	2.138	2.013
M2.6	0.45	2.20	2.238	2.113
M3.0	0.5	2.50	2.599	2.459
M3.5	0.6	2.90	3.010	2.850
M4.0	0.7	3.30	3.422	3.242
M4.5	0.75	3.80	3.878	3.688
M5.0	0.8	4.20	4.334	4.134
M6.0	1.0	5.00	5.153	4.917
M7.0	1.0	6.00	6.153	5.917
M8.0	1.25	6.80	6.912	6.647
M9.0	1.25	7.80	7.912	7.647
M10	1.5	8.50	8.676	8.376
M11	1.5	9.50	9.676	9.376
M12	1.75	10.30	10.441	10.106
M14	2.0	12.00	12.210	11.835
M16	2.0	14.00	14.210	13.835
M18	2.5	15.50	15.744	15.294
M20	2.5	17.50	17.744	17.294
M22	2.5	19.50	19.744	19.294
M24	3.0	21.00	21.252	20.752
M27	3.0	24.00	24.252	23.752
M30	3.5	26.50	26.771	26.211
M33	3.5	29.50	29.771	29.211
M36	4.0	32.00	32.270	31.670
M39	4.0	35.00	35.270	34.670
-		-	-	-
-		-	-	-
-		-	-	-
-		-	-	-
-		-	-	-

公制粗螺纹 Metric coarse thread				
规格 Specfication		标准径 Standard diameter	2 级牙钻孔径 2nd. accuracy tapping hole diameter	
			最大 Max	最小 Min
M1.0	0.2	0.80	0.821	0.783
M1.1	0.2	0.90	0.921	0.883
M1.2	0.2	1.00	1.021	0.983
M1.4	0.2	1.20	1.221	1.183
M1.6	0.2	1.40	1.421	1.383
M1.7	0.2	1.45	1.500	1.460
M1.8	0.2	1.60	1.621	1.583
M2.0	0.25	1.75	1.785	1.729
M2.2	0.25	1.95	1.985	1.929
M2.3	0.25	2.05	2.061	2.001
M2.5	0.35	2.20	2.221	2.121
M2.6	0.35	2.20	2.246	2.186
M3.0	0.35	2.70	2.721	2.621
M3.5	0.35	3.20	3.221	3.121
M4.0	0.5	3.50	3.599	3.459
M4.5	0.5	4.00	4.099	3.959
M5.0	0.5	4.50	4.599	4.459
M5.5	0.5	5.00	5.099	4.959
M6.0	0.75	5.30	5.378	5.188
M6.0	0.5	5.50	5.550	5.400
M7.0	0.75	6.30	6.378	6.188
M7.0	0.5	6.50	6.550	6.400
M8.0	1.0	7.00	7.153	6.917
M8.0	0.75	7.30	7.378	7.188
M8.0	0.5	7.50	7.520	7.400
M9.0	1.0	8.00	8.153	7.917
M9.0	0.75	8.30	8.378	8.188
M10	1.25	8.80	8.921	8.647
M10	1.0	9.00	9.153	8.917
M10	0.75	9.30	9.378	9.188
M10	0.5	9.50	9.520	9.400
M11	1.0	10.00	10.153	9.917
M11	0.75	10.30	10.378	10.188
M12	1.5	10.50	10.676	10.376
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

规格 Specfication	标准径 Standard diameter	2 级牙钻孔径 2nd. accuracy tapping hole diameter	
		最大 Max	最小 Min
M15 1.0	14.00	14.153	13.917
M16 1.5	14.50	14.676	14.376
M16 1.0	15.00	15.153	14.917
M17 1.5	15.50	15.676	15.376
M17 1.0	16.00	16.153	15.917
M18 2.0	16.00	16.210	15.835
M18 1.5	16.50	16.676	16.376
M18 1.0	17.00	17.153	16.917
M20 2.0	18.00	18.210	17.835
M20 1.5	18.50	18.676	18.376
M20 1.0	19.00	19.153	18.917
M22 2.0	20.00	20.210	19.835
M22 1.5	20.50	20.676	20.376
M22 1.0	21.00	21.153	20.917
M24 2.0	22.00	22.210	21.835
M24 1.5	22.50	22.676	22.376
M24 1.0	23.00	23.153	22.917
M25 2.0	23.00	23.210	22.835
M25 1.5	23.50	23.676	23.376
M25 1.0	24.00	24.153	23.917
M26 1.5	24.50	24.676	24.376
M27 2.0	25.00	25.210	24.835
M27 1.5	25.50	25.676	25.376
M27 1.0	26.00	26.153	25.917
M28 2.0	26.00	26.210	25.835
M28 1.5	26.50	26.676	26.376
M28 1.0	27.00	27.153	26.917
M30 3.0	27.00	27.252	26.752
M30 2.0	28.00	28.210	27.835
M30 1.5	28.50	28.676	28.376
M30 1.0	29.00	29.153	28.917
M32 2.0	30.00	30.210	29.835
M32 1.5	30.50	30.676	30.376
M33 3.0	30.00	30.252	29.752
M33 2.0	31.00	31.210	30.835
M33 1.5	31.50	31.676	31.376
M35 1.5	33.50	33.676	33.376
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

美制细螺纹 UNF

规格 Specfication	标准径 Standard diameter	2 级牙钻孔径 2nd. accuracy tapping hole diameter	
		最大 Max	最小 Min
（螺丝牙外径） Tooth diameter			
No.0 -80(1.542)	1.25	1.305	1.182
No.1 -72(1.854)	1.55	1.612	1.474
No.2 -64(2.184)	1.85	1.912	1.756
No.3 -56(2.515)	2.10	2.197	2.025
No.4 -48(2.845)	2.40	2.458	2.271
No.5 -44(3.175)	2.70	2.740	2.551
No.6 -40(3.505)	2.90	3.022	2.82
No.8 -36(4.166)	3.50	3.606	3.404
No.10-32(4.826)	4.10	4.165	3.963
No.12-28(5.486)	4.60	4.724	4.496
1/4 -28	5.50	5.588	5.360
5/16 -24	6.90	7.035	6.782
3/8 -24	8.50	8.636	8.382
7/16 -20	9.90	10.033	9.729
1/2 -20	11.50	11.607	11.329
9/16 -18	12.90	13.081	12.751
5/8 -18	14.50	14.681	14.351
3/4 -16	17.50	17.678	17.323
7/8 -14	20.50	20.675	20.270
1 -12	23.30	23.571	23.114
1-1/8 -12	26.50	26.746	26.289
1-1/4 -12	29.60	29.921	29.464
1-3/8 -12	32.80	33.096	32.639
1-1/2 -12	36.00	36.271	35.814

美制迫牙丝攻钻孔径 American system extrusion tapping hole diameter

规格 Specfication	精度 Accuracy	最大 Max	最小 Min
1 -64UNC	G5	1.76	1.68
2 -56	G4	2.04	1.96
3 -48	G4	2.35	2.25
4 -40	G5	2.64	2.54
5 -40	G5	2.97	2.87
6 -32	G5	3.22	3.11
8 -32	G6	3.89	3.78
10 -24	G6	4.44	4.30
12 -24	G6	5.07	4.96
1/4" -20	G7	5.86	5.73
-	-	-	-

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

规格 Specfication	精度 Accuracy	最大 Max	最小 Min
5/16" -18	G7	7.38	7.23
3/8" -16	G7	8.89	8.72
7/16"-14	G8	10.40	10.02
1/2" -13	G8	11.92	11.70
0 -80UNF	G5	1.45	1.39
1 -72	G5	1.77	1.70
2 -64	G4	2.06	1.98
3 -56	G4	2.37	2.29
4 -48	G5	2.68	2.59
5 -44	G5	2.99	2.90
6 -40	G5	3.29	3.19
8 -36	G5	3.91	3.81
10 -32	G6	4.53	4.44
12 -28	G6	5.13	5.03
1/4" -28	G7	6.00	5.91
5/16" -24	G7	7.53	7.42
3/8" -24	G7	9.10	8.99
7/16" -20	G8	10.62	10.48
1/2" -20	G8	12.20	12.06
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

美制特细螺纹 UNEF

规格 Specfication	标准径 Standard diameter	2 级牙钻孔径 2nd. accuracy tapping hole diameter	
		最大 Max	最小 Min
No.12 -32	4.70	4.826	4.623
1/4 -32	5.60	5.689	5.487
5/16 -32	7.10	7.264	7.087
3/8 -32	8.70	8.864	8.662
7/16 -28	10.20	10.337	10.135
1/2 -28	11.80	11.938	11.710
9/16 -24	13.20	13.385	13.132
5/8 -24	14.80	14.968	14.732
3/4 -20	17.80	17.957	17.679
7/8 -20	21.00	21.132	20.854
1 -20	24.10	24.307	24.029
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

公制粗螺纹 Metric coarse thread

规格 Specfication	标准径 Standard diameter	2 级牙钻孔径 2nd. accuracy tapping hole diameter	
		最大 Max	最小 Min
（螺丝牙外径） Tooth diameter			
No.1 -64(1.854)	1.55	1.582	1.425
No.2 -56(2.184)	1.80	1.871	1.695
No.3 -48(2.515)	2.10	2.146	1.941
No.4 -40(2.845)	2.30	2.385	2.157
No.5 -40(3.175)	2.60	2.697	2.487
No.6 -32(3.505)	2.80	2.895	2.642
No.8 -32(4.166)	3.40	3.530	3.302
No.10-24(4.826)	3.90	3.962	3.683
No.12-24(5.486)	4.50	4.597	4.344
1/4 -20	5.10	5.257	4.979
5/16 -18	6.60	6.731	6.401
3/8 -16	8.00	8.153	7.798
7/16 -14	9.40	9.550	9.144
1/2 -13	10.90	11.023	10.592
9/16 -12	12.20	12.446	11.989
5/8 -11	13.60	13.868	13.386
3/4 -10	16.60	16.840	16.307
7/8 -9	19.60	19.761	19.177
1 -8	22.30	22.606	21.971
1-1/8 -7	25.00	25.349	24.638
1-1/4 -7	28.20	28.524	27.813
1-3/8 -6	30.80	31.115	30.353
1-1/2 -6	34.00	34.290	33.528
1-3/4 -5	39.50	39.827	38.964
2 -4-1/2	45.20	45.593	44.679

公制迫牙丝攻钻孔径 Metric extrusion tapping hole diameter

规格 Specfication	精度 Accuracy	最大 Max	最小 Min
M1.0 0.25	G4	0.92	0.89
M1.2 0.25	G4	1.11	1.09
M1.4 0.30	G4	1.30	1.26
M1.6 0.35	G4	1.47	1.43
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

刀柄系统 ADAPTORS



E

硬质合金刀具
SOLID CARBIDE TOOLS

整体硬质合金钻头系列
Solid Carbide Drills

整体硬质合金定心钻 E3
Solid Carbide Pilot Drill

DF 硬质合金外冷钻头（3xD)..... E4
Solid Carbide Drill with External Coolant (3xD)

DF 硬质合金内冷钻头（3xD)..... E6
Solid Carbide Drill with Internal Coolant (3xD)

DF 硬质合金外冷钻头（5xD)..... E8
Solid Carbide Drill with External Coolant (5xD)

DF 硬质合金内冷钻头（5xD)..... E10
Solid Carbide Drill with Internal Coolant (5xD)

DF 硬质合金外冷三刃钻 E12
Solid Carbide Drill with External Coolant / 3 Flutes

DF 硬质合金内冷三刃钻 E14
Solid Carbide Drill with Internal Coolant / 3 Flutes

整体硬质合金外冷钻头 (3xD)..... E16
Solid Carbide Drill with External Coolant (3xD)

整体硬质合金内冷钻头 (3xD)..... E18
Solid Carbide Drill with Internal Coolant (3xD)

整体硬质合金外冷钻头 (5xD)..... E20
Solid Carbide Drill with External Coolant (5xD)

整体硬质合金内冷钻头 (5xD)..... E22
Solid Carbide Drill with Internal Coolant (5xD)

整体硬质合金内冷钻头 (8xD)..... E24
Solid Carbide Drill with Internal Coolant (8xD)

整体硬质合金内冷钻头 (12xD)..... E26
Solid Carbide Drill with Internal Coolant (12xD)

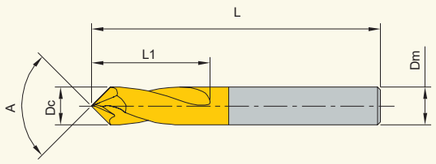
整体硬质合金内冷钻头 (20xD)..... E27
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Recommended Drilling Conditions for Solid Carbide Drills (20xD)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

整体硬质合金定心钻
Solid Carbide Pilot Drill



规格型号 Designation	基本尺寸 Dimension					在库 Stock
	刃径 Diameter	顶角 Apical angle	槽长 Slot length	总长 Total length	柄径 Shank diameter	
	Dc	A	L1	L	Dm	SG830
DXA D050.012.062.C05	5	90	12	62	5	◐
DXB D050.012.062.C05	5	120	12	62	5	◐
DXA D060.015.066.C06	6	90	15	66	6	◐
DXB D060.015.066.C06	6	120	15	66	6	◐
DXA D080.020.079.C08	8	90	20	79	8	◐
DXB D080.020.079.C08	8	120	20	79	8	◐
DXA D100.025.089.C10	10	90	25	89	10	◐
DXB D100.025.089.C10	10	120	25	89	10	◐
DXA D120.030.102.C12	12	90	30	102	12	◐
DXB.D120.030.102.C12	12	120	30	102	12	◐
DXA D140.035.107.C14	14	90	35	107	14	◐
DXB D140.035.107.C14	14	120	35	107	14	◐
DXA D160.040.115.C16	16	90	40	115	16	◐
DXB D160.040.115.C16	16	120	40	115	16	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

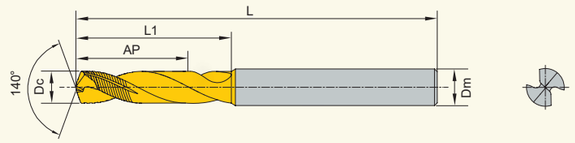
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SOLID CARBID TOOLS 硬质合金刀具

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金外冷钻头 (3×D)
Solid Carbide Drill with External Coolant (3xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DF170 D030.014.062.C06	3	20	14	62	6	◐	◐
DF170 D033.014.062.C06	3.3	20	14	62	6	◐	◐
DF170 D037.014.062.C06	3.7	20	14	62	6	◐	◐
DF170 D038.017.066.C06	3.8	24	17	66	6	◐	◐
DF170 D040.017.066.C06	4	24	17	66	6	◐	◐
DF170 D042.017.066.C06	4.2	24	17	66	6	◐	◐
DF170 D047.017.066.C06	4.7	24	17	66	6	◐	◐
DF170 D050.020.066.C06	5	28	20	66	6	◐	◐
DF170 D056.020.066.C06	5.6	28	20	66	6	◐	◐
DF170 D057.020.066.C06	5.7	28	20	66	6	◐	◐
DF170 D060.020.066.C06	6	28	20	66	6	◐	◐
DF170 D068.024.079.C08	6.8	34	24	79	8	◐	◐
DF170 D070.024.079.C08	7	34	24	79	8	◐	◐
DF170 D075.029.079.C08	7.5	41	29	79	8	◐	◐
DF170 D077.029.079.C08	7.7	41	29	79	8	◐	◐
DF170 D080.029.079.C08	8	41	29	79	8	◐	◐
DF170 D085.035.089.C10	8.5	47	35	89	10	◐	◐
DF170 D090.035.089.C10	9	47	35	89	10	◐	◐
DF170 D094.035.089.C10	9.4	47	35	89	10	◐	◐
DF170 D096.035.089.C10	9.6	47	35	89	10	◐	◐
DF170 D100.035.089.C10	10	47	35	89	10	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

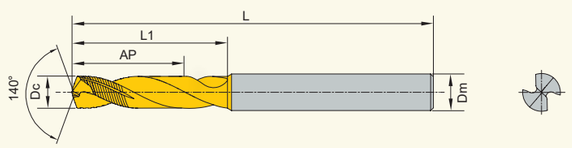
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金外冷钻头 (3×D)

Solid Carbide Drill with External Coolant (3xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DF170 D102.040.102.C12	10.2	55	40	102	12	◐	◐
DF170 D105.040.102.C12	10.5	55	40	102	12	◐	◐
DF170 D110.040.102.C12	11	55	40	102	12	◐	◐
DF170 D113.040.102.C12	11.3	55	40	102	12	◐	◐
DF170 D114.040.102.C12	11.4	55	40	102	12	◐	◐
DF170 D116.040.102.C12	11.6	55	40	102	12	◐	◐
DF170 D120.040.102.C12	12	55	40	102	12	◐	◐
DF170 D125.043.107.C14	12.5	60	43	107	14	◐	◐
DF170 D128.043.107.C14	12.8	60	43	107	14	◐	◐
DF170 D130.043.107.C14	13	60	43	107	14	◐	◐
DF170 D131.043.107.C14	13.1	60	43	107	14	◐	◐
DF170 D134.043.107.C14	13.4	60	43	107	14	◐	◐
DF170 D136.043.107.C14	13.6	60	43	107	14	◐	◐
DF170 D140.043.107.C14	14	60	43	107	14	◐	◐
DF170 D145.045.115.C16	14.5	65	45	115	16	◐	◐
DF170 D150.045.115.C16	15	65	45	115	16	◐	◐
DF170 D151.045.115.C16	15.1	65	45	115	16	◐	◐
DF170 D154.045.115.C16	15.4	65	45	115	16	◐	◐
DF170 D156.045.115.C16	15.6	65	45	115	16	◐	◐
DF170 D160.045.115.C16	16	65	45	115	16	◐	◐
DF170 D165.051.123.C18	16.5	73	51	123	18	◐	◐
DF170 D169.051.123.C18	16.9	73	51	123	18	◐	◐
DF170 D170.051.123.C18	17	73	51	123	18	◐	◐
DF170 D171.051.123.C18	17.1	73	51	123	18	◐	◐
DF170 D175.051.123.C18	17.5	73	51	123	18	◐	◐
DF170 D176.051.123.C18	17.6	73	51	123	18	◐	◐
DF170 D180.051.123.C18	18	73	51	123	18	◐	◐
DF170 D185.055.131.C20	18.5	79	55	131	20	◐	◐
DF170 D189.055.131.C20	18.9	79	55	131	20	◐	◐
DF170 D190.055.131.C20	19	79	55	131	20	◐	◐
DF170 D200.055.131.C20	20	79	55	131	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

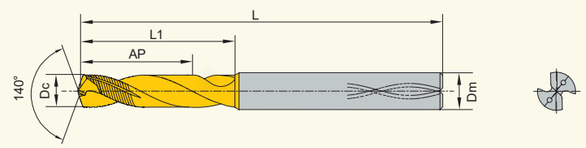
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金内冷钻头 (3×D)

Solid Carbide Drill with Internal Coolant (3xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DFC170 D030.014.062.C06	3	20	14	62	6	◐	◐
DFC170 D033.014.062.C06	3.3	20	14	62	6	◐	◐
DFC170 D037.014.062.C06	3.7	20	14	62	6	◐	◐
DFC170 D038.017.066.C06	3.8	24	17	66	6	◐	◐
DFC170 D040.017.066.C06	4	24	17	66	6	◐	◐
DFC170 D042.017.066.C06	4.2	24	17	66	6	◐	◐
DFC170 D047.017.066.C06	4.7	24	17	66	6	◐	◐
DFC170 D050.020.066.C06	5	28	20	66	6	◐	◐
DFC170 D056.020.066.C06	5.6	28	20	66	6	◐	◐
DFC170 D057.020.066.C06	5.7	28	20	66	6	◐	◐
DFC170 D060.020.066.C06	6	28	20	66	6	◐	◐
DFC170 D068.024.079.C08	6.8	34	24	79	8	◐	◐
DFC170 D070.024.079.C08	7	34	24	79	8	◐	◐
DFC170 D075.029.079.C08	7.5	41	29	79	8	◐	◐
DFC170 D077.029.079.C08	7.7	41	29	79	8	◐	◐
DFC170 D080.029.079.C08	8	41	29	79	8	◐	◐
DFC170 D085.035.089.C10	8.5	47	35	89	10	◐	◐
DFC170 D090.035.089.C10	9	47	35	89	10	◐	◐
DFC170 D094.035.089.C10	9.4	47	35	89	10	◐	◐
DFC170 D096.035.089.C10	9.6	47	35	89	10	◐	◐
DFC170 D100.035.089.C10	10	47	35	89	10	◐	◐
DFC170 D102.040.102.C12	10.2	55	40	102	12	◐	◐
DFC170 D105.040.102.C12	10.5	55	40	102	12	◐	◐
DFC170 D110.040.102.C12	11	55	40	102	12	◐	◐
DFC170 D113.040.102.C12	11.3	55	40	102	12	◐	◐
DFC170 D114.040.102.C12	11.4	55	40	102	12	◐	◐
DFC170 D116.040.102.C12	11.6	55	40	102	12	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

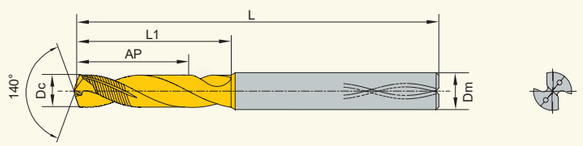
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金内冷钻头 *(3×D)*

Solid Carbide Drill with Internal Coolant (3xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DFC170 D120.040.102.C12	12	55	40	102	12	◐	◐
DFC170 D125.043.107.C14	12.5	60	43	107	14	◐	◐
DFC170 D128.043.107.C14	12.8	60	43	107	14	◐	◐
DFC170 D130.043.107.C14	13	60	43	107	14	◐	◐
DFC170 D131.043.107.C14	13.1	60	43	107	14	◐	◐
DFC170 D134.043.107.C14	13.4	60	43	107	14	◐	◐
DFC170 D136.043.107.C14	13.6	60	43	107	14	◐	◐
DFC170 D140.043.107.C14	14	60	43	107	14	◐	◐
DFC170 D145.045.115.C16	14.5	65	45	115	16	◐	◐
DFC170 D150.045.115.C16	15	65	45	115	16	◐	◐
DFC170 D151.045.115.C16	15.1	65	45	115	16	◐	◐
DFC170 D154.045.115.C16	15.4	65	45	115	16	◐	◐
DFC170 D156.045.115.C16	15.6	65	45	115	16	◐	◐
DFC170 D160.045.115.C16	16	65	45	115	16	◐	◐
DFC170 D165.051.123.C18	16.5	73	51	123	18	◐	◐
DFC170 D169.051.123.C18	16.9	73	51	123	18	◐	◐
DFC170 D170.051.123.C18	17	73	51	123	18	◐	◐
DFC170 D171.051.123.C18	17.1	73	51	123	18	◐	◐
DFC170 D175.051.123.C18	17.5	73	51	123	18	◐	◐
DFC170 D176.051.123.C18	17.6	73	51	123	18	◐	◐
DFC170 D180.051.123.C18	18	73	51	123	18	◐	◐
DFC170 D185.055.131.C20	18.5	79	55	131	20	◐	◐
DFC170 D189.055.131.C20	18.9	79	55	131	20	◐	◐
DFC170 D190.055.131.C20	19	79	55	131	20	◐	◐
DFC170 D200.055.131.C20	20	79	55	131	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

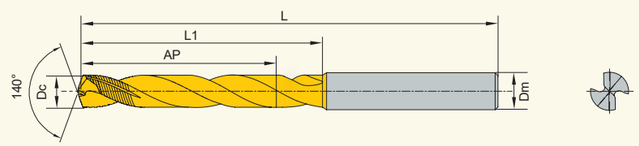
SOLID CARBID TOOLS 硬质合金刀具

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金外冷钻头 *(5×D)*

Solid Carbide Drill with External Coolant (5xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DF170 D030.023.066.C06	3	28	23	66	6	◐	◐
DF170 D033.023.066.C06	3.3	28	23	66	6	◐	◐
DF170 D037.023.066.C06	3.7	28	23	66	6	◐	◐
DF170 D038.029.074.C06	3.8	36	29	74	6	◐	◐
DF170 D040.029.074.C06	4	36	29	74	6	◐	◐
DF170 D042.029.074.C06	4.2	36	29	74	6	◐	◐
DF170 D047.029.074.C06	4.7	36	29	74	6	◐	◐
DF170 D050.035.082.C06	5	44	35	82	6	◐	◐
DF170 D056.035.082.C06	5.6	44	35	82	6	◐	◐
DF170 D057.035.082.C06	5.7	44	35	82	6	◐	◐
DF170 D060.035.082.C06	6	44	35	82	6	◐	◐
DF170 D068.043.091.C08	6.8	53	43	91	8	◐	◐
DF170 D070.043.091.C08	7	53	43	91	8	◐	◐
DF170 D075.043.091.C08	7.5	53	43	91	8	◐	◐
DF170 D077.043.091.C08	7.7	53	43	91	8	◐	◐
DF170 D080.043.091.C08	8	53	43	91	8	◐	◐
DF170 D085.049.103.C10	8.5	61	49	103	10	◐	◐
DF170 D090.049.103.C10	9	61	49	103	10	◐	◐
DF170 D094.049.103.C10	9.4	61	49	103	10	◐	◐
DF170 D096.049.103.C10	9.6	61	49	103	10	◐	◐
DF170 D100.049.103.C10	10	61	49	103	10	◐	◐
DF170 D102.056.118.C12	10.2	71	56	118	12	◐	◐
DF170 D105.056.118.C12	10.5	71	56	118	12	◐	◐
DF170 D110.056.118.C12	11	71	56	118	12	◐	◐
DF170 D113.056.118.C12	11.3	71	56	118	12	◐	◐
DF170 D114.056.118.C12	11.4	71	56	118	12	◐	◐
DF170 D116.056.118.C12	11.6	71	56	118	12	◐	◐
DF170 D120.056.118.C12	12	71	56	118	12	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

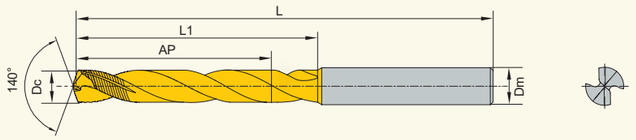
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金外冷钻头 *(5×D)*

Solid Carbide Drill with External Coolant (5xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DF170 D125.060.124.C14	12.5	77	60	124	14	◐	◐
DF170 D128.060.124.C14	12.8	77	60	124	14	◐	◐
DF170 D130.060.124.C14	13	77	60	124	14	◐	◐
DF170 D131.060.124.C14	13.1	77	60	124	14	◐	◐
DF170 D134.060.124.C14	13.4	77	60	124	14	◐	◐
DF170 D136.060.124.C14	13.6	77	60	124	14	◐	◐
DF170 D140.060.124.C14	14	77	60	124	14	◐	◐
DF170 D145.063.133.C16	14.5	83	63	133	16	◐	◐
DF170 D150.063.133.C16	15	83	63	133	16	◐	◐
DF170 D151.063.133.C16	15.1	83	63	133	16	◐	◐
DF170 D154.063.133.C16	15.4	83	63	133	16	◐	◐
DF170 D156.063.133.C16	15.6	83	63	133	16	◐	◐
DF170 D160.063.133.C16	16	83	63	133	16	◐	◐
DF170 D165.071.143.C18	16.5	93	71	143	18	◐	◐
DF170 D169.071.143.C18	16.9	93	71	143	18	◐	◐
DF170 D170.071.143.C18	17	93	71	143	18	◐	◐
DF170 D171.071.143.C18	17.1	93	71	143	18	◐	◐
DF170 D175.071.143.C18	17.5	93	71	143	18	◐	◐
DF170 D176.071.143.C18	17.6	93	71	143	18	◐	◐
DF170 D180.071.143.C18	18	93	71	143	18	◐	◐
DF170 D185.077.153.C20	18.5	101	77	153	20	◐	◐
DF170 D189.077.153.C20	18.9	101	77	153	20	◐	◐
DF170 D190.077.153.C20	19	101	77	153	20	◐	◐
DF170 D200.077.153.C20	20	101	77	153	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

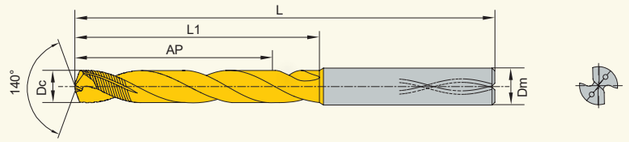
SOLID CARBID TOOLS 硬质合金刀具

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金内冷钻头 *(5×D)*

Solid Carbide Drill with Internal Coolant (5xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DFC170 D030.023.066.C06	3	28	23	66	6	◐	◐
DFC170 D033.023.066.C06	3.3	28	23	66	6	◐	◐
DFC170 D037.023.066.C06	3.7	28	23	66	6	◐	◐
DFC170 D038.029.074.C06	3.8	36	29	74	6	◐	◐
DFC170 D040.029.074.C06	4	36	29	74	6	◐	◐
DFC170 D042.029.074.C06	4.2	36	29	74	6	◐	◐
DFC170 D047.029.074.C06	4.7	36	29	74	6	◐	◐
DFC170 D050.035.082.C06	5	44	35	82	6	◐	◐
DFC170 D056.035.082.C06	5.6	44	35	82	6	◐	◐
DFC170 D057.035.082.C06	5.7	44	35	82	6	◐	◐
DFC170 D060.035.082.C06	6	44	35	82	6	◐	◐
DFC170 D068.043.091.C08	6.8	53	43	91	8	◐	◐
DFC170 D070.043.091.C08	7	53	43	91	8	◐	◐
DFC170 D075.043.091.C08	7.5	53	43	91	8	◐	◐
DFC170 D077.043.091.C08	7.7	53	43	91	8	◐	◐
DFC170 D080.043.091.C08	8	53	43	91	8	◐	◐
DFC170 D085.049.103.C10	8.5	61	49	103	10	◐	◐
DFC170 D090.049.103.C10	9	61	49	103	10	◐	◐
DFC170 D094.049.103.C10	9.4	61	49	103	10	◐	◐
DFC170 D096.049.103.C10	9.6	61	49	103	10	◐	◐
DFC170 D100.049.103.C10	10	61	49	103	10	◐	◐
DFC170 D102.056.118.C12	10.2	71	56	118	12	◐	◐
DFC170 D105.056.118.C12	10.5	71	56	118	12	◐	◐
DFC170 D110.056.118.C12	11	71	56	118	12	◐	◐
DFC170 D113.056.118.C12	11.3	71	56	118	12	◐	◐
DFC170 D114.056.118.C12	11.4	71	56	118	12	◐	◐
DFC170 D116.056.118.C12	11.6	71	56	118	12	◐	◐
DFC170 D120.056.118.C12	12	71	56	118	12	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 标准库存
Item in stock

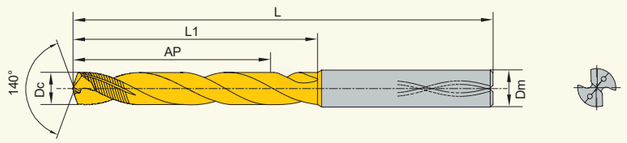
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

DF 硬质合金内冷钻头 (5×D)

Solid Carbide Drill with Internal Coolant (5xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DFC170 D125.060.124.C14	12.5	77	60	124	14	◐	◐
DFC170 D128.060.124.C14	12.8	77	60	124	14	◐	◐
DFC170 D130.060.124.C14	13	77	60	124	14	◐	◐
DFC170 D131.060.124.C14	13.1	77	60	124	14	◐	◐
DFC170 D134.060.124.C14	13.4	77	60	124	14	◐	◐
DFC170 D136.060.124.C14	13.6	77	60	124	14	◐	◐
DFC170 D140.060.124.C14	14	77	60	124	14	◐	◐
DFC170 D145.063.133.C16	14.5	83	63	133	16	◐	◐
DFC170 D150.063.133.C16	15	83	63	133	16	◐	◐
DFC170 D151.063.133.C16	15.1	83	63	133	16	◐	◐
DFC170 D154.063.133.C16	15.4	83	63	133	16	◐	◐
DFC170 D156.063.133.C16	15.6	83	63	133	16	◐	◐
DFC170 D160.063.133.C16	16	83	63	133	16	◐	◐
DFC170 D165.071.143.C18	16.5	93	71	143	18	◐	◐
DFC170 D169.071.143.C18	16.9	93	71	143	18	◐	◐
DFC170 D170.071.143.C18	17	93	71	143	18	◐	◐
DFC170 D171.071.143.C18	17.1	93	71	143	18	◐	◐
DFC170 D175.071.143.C18	17.5	93	71	143	18	◐	◐
DFC170 D176.071.143.C18	17.6	93	71	143	18	◐	◐
DFC170 D180.071.143.C18	18	93	71	143	18	◐	◐
DFC170 D185.077.153.C20	18.5	101	77	153	20	◐	◐
DFC170 D189.077.153.C20	18.9	101	77	153	20	◐	◐
DFC170 D190.077.153.C20	19	101	77	153	20	◐	◐
DFC170 D200.077.153.C20	20	101	77	153	20	◐	◐

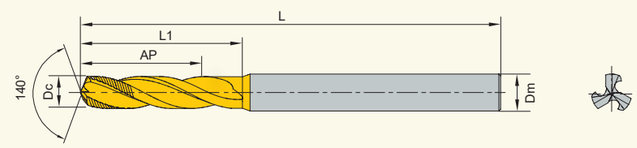
● 可根据用户的加工要求制造。
● Provide customized service.

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金外冷三刃钻

Solid Carbide Drill with External Coolant / 3 Flutes

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DF173 D060.035.082.C06	6	44	35	82	6	◐	◐
DF173 D065.043.091.C08	6.5	53	43	91	8	◐	◐
DF173 D068.043.091.C08	6.8	53	43	91	8	◐	◐
DF173 D070.043.091.C08	7	53	43	91	8	◐	◐
DF173 D075.043.091.C08	7.5	53	43	91	8	◐	◐
DF173 D078.043.091.C08	7.8	53	43	91	8	◐	◐
DF173 D080.043.091.C08	8	53	43	91	8	◐	◐
DF173 D085.049.103.C10	8.5	61	49	103	10	◐	◐
DF173 D090.049.103.C10	9	61	49	103	10	◐	◐
DF173 D094.049.103.C10	9.4	61	49	103	10	◐	◐
DF173 D096.049.103.C10	9.6	61	49	103	10	◐	◐
DF173 D100.049.103.C10	10	61	49	103	10	◐	◐
DF173 D102.056.118.C12	10.2	71	56	118	12	◐	◐
DF173 D105.056.118.C12	10.5	71	56	118	12	◐	◐
DF173 D110.056.118.C12	11	71	56	118	12	◐	◐
DF173 D113.056.118.C12	11.3	71	56	118	12	◐	◐
DF173 D116.056.118.C12	11.6	71	56	118	12	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

硬质合金刀具 SOLID CARBID TOOLS

● 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)

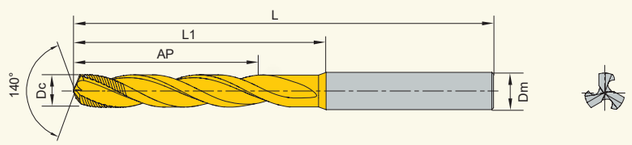
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金外冷三刃钻

Solid Carbide Drill with External Coolant / 3 Flutes

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DF173 D120.056.118.C12	12	71	56	118	12	◐	◐
DF173 D125.060.124.C14	12.5	77	60	124	14	◐	◐
DF173 D128.060.124.C14	12.8	77	60	124	14	◐	◐
DF173 D130.060.124.C14	13	77	60	124	14	◐	◐
DF173 D131.060.124.C14	13.1	77	60	124	14	◐	◐
DF173 D134.060.124.C14	13.4	77	60	124	14	◐	◐
DF173 D136.060.124.C14	13.6	77	60	124	14	◐	◐
DF173 D140.060.124.C14	14	77	60	124	14	◐	◐
DF173 D145.063.133.C16	14.5	83	63	133	16	◐	◐
DF173 D150.063.133.C16	15	83	63	133	16	◐	◐
DF173 D151.063.133.C16	15.1	83	63	133	16	◐	◐
DF173 D154.063.133.C16	15.4	83	63	133	16	◐	◐
DF173 D156.063.133.C16	15.6	83	63	133	16	◐	◐
DF173 D160.063.133.C16	16	83	63	133	16	◐	◐
DF173 D165.071.143.C18	16.5	93	71	143	18	◐	◐
DF173 D169.071.143.C18	16.9	93	71	143	18	◐	◐
DF173 D170.071.143.C18	17	93	71	143	18	◐	◐
DF173 D175.071.143.C18	17	93	71	143	18	◐	◐
DF173 D176.071.143.C18	17.6	93	71	143	18	◐	◐
DF173 D180.071.143.C18	18	93	71	143	18	◐	◐
DF173 D185.077.153.C20	18.5	101	77	153	20	◐	◐
DF173 D189.077.153.C20	18.9	101	77	153	20	◐	◐
DF173 D190.077.153.C20	19	101	77	153	20	◐	◐
DF173 D200.077.153.C20	20	101	77	153	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

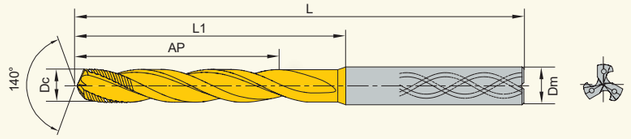
SOLID CARBID TOOLS 硬质合金刀具

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金内冷三刃钻

Solid Carbide Drill with Internal Coolant / 3 Flutes

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DFC173 D060.035.082.C06	6	44	35	82	6	◐	◐
DFC173 D065.043.091.C08	6.5	53	43	91	8	◐	◐
DFC173 D068.043.091.C08	6.8	53	43	91	8	◐	◐
DFC173 D070.043.091.C08	7	53	43	91	8	◐	◐
DFC173 D075.043.091.C08	7.5	53	43	91	8	◐	◐
DFC173 D078.043.091.C08	7.8	53	43	91	8	◐	◐
DFC173 D080.043.091.C08	8	53	43	91	8	◐	◐
DFC173 D085.049.103.C10	8.5	61	49	103	10	◐	◐
DFC173 D090.049.103.C10	9	61	49	103	10	◐	◐
DFC173 D094.049.103.C10	9.4	61	49	103	10	◐	◐
DFC173 D096.049.103.C10	9.6	61	49	103	10	◐	◐
DFC173 D100.049.103.C10	10	61	49	103	10	◐	◐
DFC173 D102.056.118.C12	10.2	71	56	118	12	◐	◐
DFC173 D105.056.118.C12	10.5	71	56	118	12	◐	◐
DFC173 D110.056.118.C12	11	71	56	118	12	◐	◐
DFC173 D113.056.118.C12	11.3	71	56	118	12	◐	◐
DFC173 D116.056.118.C12	11.6	71	56	118	12	◐	◐
DFC173 D120.056.118.C12	12	71	56	118	12	◐	◐
DFC173 D125.060.124.C14	12.5	77	60	124	14	◐	◐
DFC173 D128.060.124.C14	12.8	77	60	124	14	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

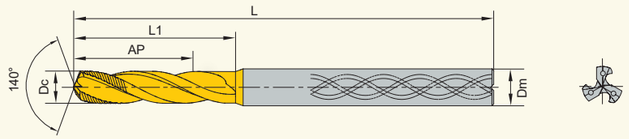
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

DF 硬质合金内冷三刃钻

Solid Carbide Drill with Internal Coolant / 3 Flutes

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	钻深 Hole depth	总长 Total length	柄径 Shank diameter		
	Dc	L1	AP	L	Dm	SG830	SG330
DFC173 D130.060.124.C14	13	77	60	124	14	◐	◐
DFC173 D131.060.124.C14	13.1	77	60	124	14	◐	◐
DFC173 D134.060.124.C14	13.4	77	60	124	14	◐	◐
DFC173 D136.060.124.C14	13.6	77	60	124	14	◐	◐
DFC173 D140.060.124.C14	14	77	60	124	14	◐	◐
DFC173 D145.063.133.C16	14.5	83	63	133	16	◐	◐
DFC173 D150.063.133.C16	15	83	63	133	16	◐	◐
DFC173 D151.063.133.C16	15.1	83	63	133	16	◐	◐
DFC173 D154.063.133.C16	15.4	83	63	133	16	◐	◐
DFC173 D156.063.133.C16	15.6	83	63	133	16	◐	◐
DFC173 D160.063.133.C16	16	83	63	133	16	◐	◐
DFC173 D165.071.143.C18	16.5	93	71	143	18	◐	◐
DFC173 D169.071.143.C18	16.9	93	71	143	18	◐	◐
DFC173 D170.071.143.C18	17	93	71	143	18	◐	◐
DFC173 D175.071.143.C18	17	93	71	143	18	◐	◐
DFC173 D176.071.143.C18	17.6	93	71	143	18	◐	◐
DFC173 D180.071.143.C18	18	93	71	143	18	◐	◐
DFC173 D185.077.153.C20	18.5	101	77	153	20	◐	◐
DFC173 D189.077.153.C20	18.9	101	77	153	20	◐	◐
DFC173 D190.077.153.C20	19	101	77	153	20	◐	◐
DFC173 D200.077.153.C20	20	101	77	153	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

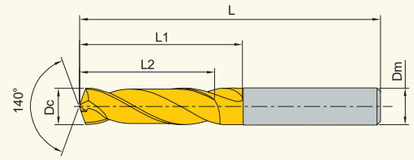
SOLID CARBID TOOLS 硬质合金刀具

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

整体硬质合金外冷钻头 *(3×D)*

Solid Carbide Drill with External Coolant (3xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSD D030.014.062.C06	3	20	14	62	6	◐	◐
CSD D033.014.062.C06	3.3	20	14	62	6	◐	◐
CSD D037.014.062.C06	3.7	20	14	62	6	◐	◐
CSD D038.017.066.C06	3.8	24	17	66	6	◐	◐
CSD D040.017.066.C06	4	24	17	66	6	◐	◐
CSD D042.017.066.C06	4.2	24	17	66	6	◐	◐
CSD D047.017.066.C06	4.7	24	17	66	6	◐	◐
CSD D050.020.066.C06	5	28	20	66	6	◐	◐
CSD D056.020.066.C06	5.6	28	20	66	6	◐	◐
CSD D057.020.066.C06	5.7	28	20	66	6	◐	◐
CSD D060.020.066.C06	6	28	20	66	6	◐	◐
CSD D068.024.079.C08	6.8	34	24	79	8	◐	◐
CSD D070.024.079.C08	7	34	24	79	8	◐	◐
CSD D075.029.079.C08	7.5	41	29	79	8	◐	◐
CSD D077.029.079.C08	7.7	41	29	79	8	◐	◐
CSD D080.029.079.C08	8	41	29	79	8	◐	◐
CSD D085.035.089.C10	8.5	47	35	89	10	◐	◐
CSD D090.035.089.C10	9	47	35	89	10	◐	◐
CSD D094.035.089.C10	9.4	47	35	89	10	◐	◐
CSD D096.035.089.C10	9.6	47	35	89	10	◐	◐
CSD D100.035.089.C10	10	47	35	89	10	◐	◐
CSD D102.040.102.C12	10.2	55	40	102	12	◐	◐
CSD D105.040.102.C12	10.5	55	40	102	12	◐	◐
CSD D110.040.102.C12	11	55	40	102	12	◐	◐
CSD D113.040.102.C12	11.3	55	40	102	12	◐	◐
CSD D114.040.102.C12	11.4	55	40	102	12	◐	◐
CSD D116.040.102.C12	11.6	55	40	102	12	◐	◐
CSD D120.040.102.C12	12	55	40	102	12	◐	◐
CSD D125.043.107.C14	12.5	60	43	107	14	◐	◐
CSD D128.043.107.C14	12.8	60	43	107	14	◐	◐
CSD D130.043.107.C14	13	60	43	107	14	◐	◐
CSD D131.043.107.C14	13.1	60	43	107	14	◐	◐
CSD D134.043.107.C14	13.4	60	43	107	14	◐	◐
CSD D136.043.107.C14	13.6	60	43	107	14	◐	◐
CSD D140.043.107.C14	14	60	43	107	14	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

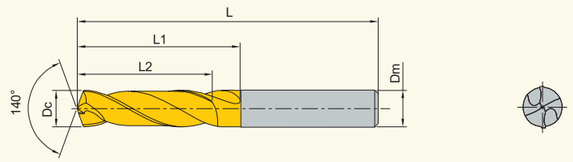
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

整体硬质合金外冷钻头 (3×D)

Solid Carbide Drill with External Coolant (3xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSD D145.045.115.C16	14.5	65	45	115	16	◐	◐
CSD D150.045.115.C16	15	65	45	115	16	◐	◐
CSD D151.045.115.C16	15.1	65	45	115	16	◐	◐
CSD D154.045.115.C16	15.4	65	45	115	16	◐	◐
CSD D156.045.115.C16	15.6	65	45	115	16	◐	◐
CSD D160.045.115.C16	16	65	45	115	16	◐	◐
CSD D165.051.123.C18	16.5	73	51	123	18	◐	◐
CSD D169.051.123.C18	16.9	73	51	123	18	◐	◐
CSD D170.051.123.C18	17	73	51	123	18	◐	◐
CSD D171.051.123.C18	17.1	73	51	123	18	◐	◐
CSD D175.051.123.C18	17.5	73	51	123	18	◐	◐
CSD D176.051.123.C18	17.6	73	51	123	18	◐	◐
CSD D180.051.123.C18	18	73	51	123	18	◐	◐
CSD D185.055.131.C20	18.5	79	55	131	20	◐	◐
CSD D189.055.131.C20	18.9	79	55	131	20	◐	◐
CSD D190.055.131.C20	19	79	55	131	20	◐	◐
CSD D200.055.131.C20	20	79	55	131	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

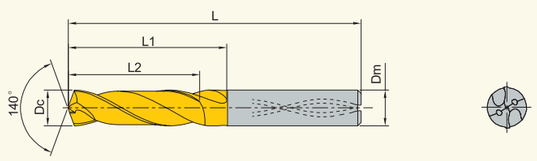
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

整体硬质合金内冷钻头 (3×D)

Solid Carbide Drill with Internal Coolant (3xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSDC D030.014.062.C06	3	20	14	62	6	◐	◐
CSDC D033.014.062.C06	3.3	20	14	62	6	◐	◐
CSDC D037.014.062.C06	3.7	20	14	62	6	◐	◐
CSDC D038.017.066.C06	3.8	24	17	66	6	◐	◐
CSDC D040.017.066.C06	4	24	17	66	6	◐	◐
CSDC D042.017.066.C06	4.2	24	17	66	6	◐	◐
CSDC D047.017.066.C06	4.7	24	17	66	6	◐	◐
CSDC D050.020.066.C06	5	28	20	66	6	◐	◐
CSDC D056.020.066.C06	5.6	28	20	66	6	◐	◐
CSDC D057.020.066.C06	5.7	28	20	66	6	◐	◐
CSDC D060.020.066.C06	6	28	20	66	6	◐	◐
CSDC D068.024.079.C08	6.8	34	24	79	8	◐	◐
CSDC D070.024.079.C08	7	34	24	79	8	◐	◐
CSDC D075.029.079.C08	7.5	41	29	79	8	◐	◐
CSDC D077.029.079.C08	7.7	41	29	79	8	◐	◐
CSDC D080.029.079.C08	8	41	29	79	8	◐	◐
CSDC D085.035.089.C10	8.5	47	35	89	10	◐	◐
CSDC D090.035.089.C10	9	47	35	89	10	◐	◐
CSDC D094.035.089.C10	9.4	47	35	89	10	◐	◐
CSDC D096.035.089.C10	9.6	47	35	89	10	◐	◐
CSDC D100.035.089.C10	10	47	35	89	10	◐	◐
CSDC D102.040.102.C12	10.2	55	40	102	12	◐	◐
CSDC D105.040.102.C12	10.5	55	40	102	12	◐	◐
CSDC D110.040.102.C12	11	55	40	102	12	◐	◐
CSDC D113.040.102.C12	11.3	55	40	102	12	◐	◐
CSDC D114.040.102.C12	11.4	55	40	102	12	◐	◐
CSDC D116.040.102.C12	11.6	55	40	102	12	◐	◐
CSDC D120.040.102.C12	12	55	40	102	12	◐	◐
CSDC D125.043.107.C14	12.5	60	43	107	14	◐	◐
CSDC D128.043.107.C14	12.8	60	43	107	14	◐	◐
CSDC D130.043.107.C14	13	60	43	107	14	◐	◐
CSDC D131.043.107.C14	13.1	60	43	107	14	◐	◐
CSDC D134.043.107.C14	13.4	60	43	107	14	◐	◐
CSDC D136.043.107.C14	13.6	60	43	107	14	◐	◐
CSDC D140.043.107.C14	14	60	43	107	14	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 标准库存 Item in stock

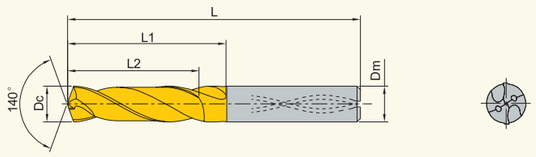
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

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

整体硬质合金内冷钻头 (3×D)

Solid Carbide Drill with Internal Coolant (3xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



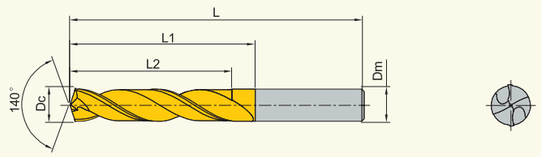
规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSDC D145.045.115.C16	14.5	65	45	115	16	◐	◐
CSDC D150.045.115.C16	15	65	45	115	16	◐	◐
CSDC D151.045.115.C16	15.1	65	45	115	16	◐	◐
CSDC D154.045.115.C16	15.4	65	45	115	16	◐	◐
CSDC D156.045.115.C16	15.6	65	45	115	16	◐	◐
CSDC D160.045.115.C16	16	65	45	115	16	◐	◐
CSDC D165.051.123.C18	16.5	73	51	123	18	◐	◐
CSDC D169.051.123.C18	16.9	73	51	123	18	◐	◐
CSDC D170.051.123.C18	17	73	51	123	18	◐	◐
CSDC D171.051.123.C18	17.1	73	51	123	18	◐	◐
CSDC D175.051.123.C18	17.5	73	51	123	18	◐	◐
CSDC D176.051.123.C18	17.6	73	51	123	18	◐	◐
CSDC D180.051.123.C18	18	73	51	123	18	◐	◐
CSDC D185.055.131.C20	18.5	79	55	131	20	◐	◐
CSDC D190.055.131.C20	19	79	55	131	20	◐	◐
CSDC D200.055.131.C20	20	79	55	131	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

整体硬质合金外冷钻头 (5×D)

Solid Carbide Drill with External Coolant (5xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSD D030.023.066.C06	3	28	23	66	6	◐	◐
CSD D033.023.066.C06	3.3	28	23	66	6	◐	◐
CSD D037.023.066.C06	3.7	28	23	66	6	◐	◐
CSD D038.029.074.C06	3.8	36	29	74	6	◐	◐
CSD D040.029.074.C06	4	36	29	74	6	◐	◐
CSD D042.029.074.C06	4.2	36	29	74	6	◐	◐
CSD D047.029.074.C06	4.7	36	29	74	6	◐	◐
CSD D050.035.082.C06	5	44	35	82	6	◐	◐
CSD D056.035.082.C06	5.6	44	35	82	6	◐	◐
CSD D057.035.082.C06	5.7	44	35	82	6	◐	◐
CSD D060.035.082.C06	6	44	35	82	6	◐	◐
CSD D068.043.091.C08	6.8	53	43	91	8	◐	◐
CSD D070.043.091.C08	7	53	43	91	8	◐	◐
CSD D075.043.091.C08	7.5	53	43	91	8	◐	◐
CSD D077.043.091.C08	7.7	53	43	91	8	◐	◐
CSD D080.043.091.C08	8	53	43	91	8	◐	◐
CSD D085.049.103.C10	8.5	61	49	103	10	◐	◐
CSD D090.049.103.C10	9	61	49	103	10	◐	◐
CSD D094.049.103.C10	9.4	61	49	103	10	◐	◐
CSD D096.049.103.C10	9.6	61	49	103	10	◐	◐
CSD D100.049.103.C10	10	61	49	103	10	◐	◐
CSD D102.056.118.C12	10.2	71	56	118	12	◐	◐
CSD D105.056.118.C12	10.5	71	56	118	12	◐	◐
CSD D110.056.118.C12	11	71	56	118	12	◐	◐
CSD D113.056.118.C12	11.3	71	56	118	12	◐	◐
CSD D114.056.118.C12	11.4	71	56	118	12	◐	◐
CSD D116.056.118.C12	11.6	71	56	118	12	◐	◐
CSD D120.056.118.C12	12	71	56	118	12	◐	◐
CSD D125.060.124.C14	12.5	77	60	124	14	◐	◐
CSD D128.060.124.C14	12.8	77	60	124	14	◐	◐
CSD D130.060.124.C14	13	77	60	124	14	◐	◐
CSD D131.060.124.C14	13.1	77	60	124	14	◐	◐
CSD D134.060.124.C14	13.4	77	60	124	14	◐	◐
CSD D136.060.124.C14	13.6	77	60	124	14	◐	◐
CSD D140.060.124.C14	14	77	60	124	14	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

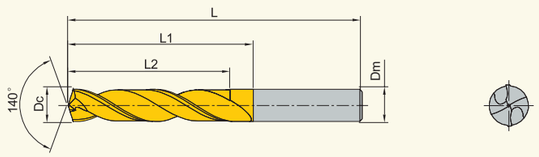
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

硬质合金刀具 SOLID CARBID TOOLS

整体硬质合金外冷钻头 (5×D)

Solid Carbide Drill with External Coolant (5xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSD D145.063.133.C16	14.5	83	63	133	16	◐	◐
CSD D150.063.133.C16	15	83	63	133	16	◐	◐
CSD D151.063.133.C16	15.1	83	63	133	16	◐	◐
CSD D154.063.133.C16	15.4	83	63	133	16	◐	◐
CSD D156.063.133.C16	15.6	83	63	133	16	◐	◐
CSD D160.063.133.C16	16	83	63	133	16	◐	◐
CSD D165.071.143.C18	16.5	93	71	143	18	◐	◐
CSD D169.071.143.C18	16.9	93	71	143	18	◐	◐
CSD D170.071.143.C18	17	93	71	143	18	◐	◐
CSD D171.071.143.C18	17.1	93	71	143	18	◐	◐
CSD D175.071.143.C18	17.5	93	71	143	18	◐	◐
CSD D176.071.143.C18	17.6	93	71	143	18	◐	◐
CSD D180.071.143.C18	18	93	71	143	18	◐	◐
CSD D185.077.153.C20	18.5	101	77	153	20	◐	◐
CSD D189.077.153.C20	18.9	101	77	153	20	◐	◐
CSD D190.077.153.C20	19	101	77	153	20	◐	◐
CSD D200.077.153.C20	20	101	77	153	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

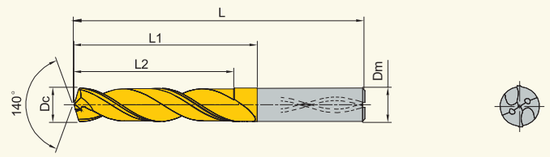
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

整体硬质合金内冷钻头 (5×D)

Solid Carbide Drill with Internal Coolant (5xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 FSlot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSDC D030.023.066.C06	3	28	23	66	6	◐	◐
CSDC D033.023.066.C06	3.3	28	23	66	6	◐	◐
CSDC D037.023.066.C06	3.7	28	23	66	6	◐	◐
CSDC D038.029.074.C06	3.8	36	29	74	6	◐	◐
CSDC D040.029.074.C06	4	36	29	74	6	◐	◐
CSDC D042.029.074.C06	4.2	36	29	74	6	◐	◐
CSDC D047.029.074.C06	4.7	36	29	74	6	◐	◐
CSDC D050.035.082.C06	5	44	35	82	6	◐	◐
CSDC D056.035.082.C06	5.6	44	35	82	6	◐	◐
CSDC D057.035.082.C06	5.7	44	35	82	6	◐	◐
CSDC D060.035.082.C06	6	44	35	82	6	◐	◐
CSDC D068.043.091.C08	6.8	53	43	91	8	◐	◐
CSDC D070.043.091.C08	7	53	43	91	8	◐	◐
CSDC D075.043.091.C08	7.5	53	43	91	8	◐	◐
CSDC D077.043.091.C08	7.7	53	43	91	8	◐	◐
CSDC D080.043.091.C08	8	53	43	91	8	◐	◐
CSDC D085.049.103.C10	8.5	61	49	103	10	◐	◐
CSDC D090.049.103.C10	9	61	49	103	10	◐	◐
CSDC D094.049.103.C10	9.4	61	49	103	10	◐	◐
CSDC D096.049.103.C10	9.6	61	49	103	10	◐	◐
CSDC D100.049.103.C10	10	61	49	103	10	◐	◐
CSDC D102.056.118.C12	10.2	71	56	118	12	◐	◐
CSDC D105.056.118.C12	10.5	71	56	118	12	◐	◐
CSDC D110.056.118.C12	11	71	56	118	12	◐	◐
CSDC D113.056.118.C12	11.3	71	56	118	12	◐	◐
CSDC D114.056.118.C12	11.4	71	56	118	12	◐	◐
CSDC D116.056.118.C12	11.6	71	56	118	12	◐	◐
CSDC D120.056.118.C12	12	71	56	118	12	◐	◐
CSDC D125.060.124.C14	12.5	77	60	124	14	◐	◐
CSDC D128.060.124.C14	12.8	77	60	124	14	◐	◐
CSDC D130.060.124.C14	13	77	60	124	14	◐	◐
CSDC D131.060.124.C14	13.1	77	60	124	14	◐	◐
CSDC D134.060.124.C14	13.4	77	60	124	14	◐	◐
CSDC D136.060.124.C14	13.6	77	60	124	14	◐	◐
CSDC D140.060.124.C14	14	77	60	124	14	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

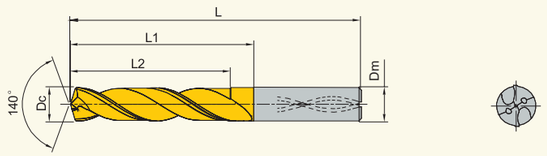
硬质合金刀具 CARBID TOOLS

● 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)

整体硬质合金内冷钻头 *(5×D)*

Solid Carbide Drill with Internal Coolant (5xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



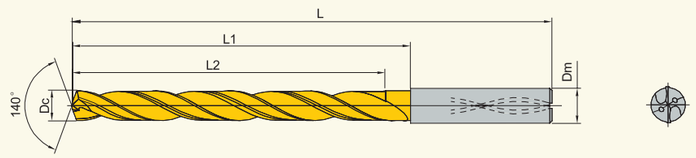
规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSDC D145.063.133.C16	14.5	83	63	133	16	◐	◐
CSDC D150.063.133.C16	15	83	63	133	16	◐	◐
CSDC D154.063.133.C16	15.4	83	63	133	16	◐	◐
CSDC D156.063.133.C16	15.6	83	63	133	16	◐	◐
CSDC D160.063.133.C16	16	83	63	133	16	◐	◐
CSDC D165.071.143.C18	16.5	93	71	143	18	◐	◐
CSDC D169.071.143.C18	16.9	93	71	143	18	◐	◐
CSDC D170.071.143.C18	17	93	71	143	18	◐	◐
CSDC D171.071.143.C18	17.1	93	71	143	18	◐	◐
CSDC D175.071.143.C18	17.5	93	71	143	18	◐	◐
CSDC D176.071.143.C18	17.6	93	71	143	18	◐	◐
CSDC D180.071.143.C18	18	93	71	143	18	◐	◐
CSDC D185.077.153.C20	18.5	101	77	153	20	◐	◐
CSDC D189.077.153.C20	18.9	101	77	153	20	◐	◐
CSDC D190.077.153.C20	19	101	77	153	20	◐	◐
CSDC D200.077.153.C20	20	101	77	153	20	◐	◐

- 可根据用户的加工要求制造。
- Provide customized service.

整体硬质合金内冷钻头 *(8×D)*

Solid Carbide Drill with Internal Coolant (8xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 DFlute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSDC D030.028.074.C06	3	34	28	74	6	◐	◐
CSDC D033.028.074.C06	3.3	34	28	74	6	◐	◐
CSDC D037.028.074.C06	3.7	34	28	74	6	◐	◐
CSDC D038.037.085.C06	3.8	45	37	85	6	◐	◐
CSDC D040.037.085.C06	4	45	37	85	6	◐	◐
CSDC D042.037.085.C06	4.2	45	37	85	6	◐	◐
CSDC D047.037.085.C06	4.7	45	37	85	6	◐	◐
CSDC D050.048.097.C06	5	57	48	97	6	◐	◐
CSDC D056.048.097.C06	5.6	57	48	97	6	◐	◐
CSDC D057.048.097.C06	5.7	57	48	97	6	◐	◐
CSDC D060.048.097.C06	6	57	48	97	6	◐	◐
CSDC D068.055.106.C08	6.8	66	55	106	8	◐	◐
CSDC D070.055.106.C08	7	66	55	106	8	◐	◐
CSDC D075.064.116.C08	7.5	76	64	116	8	◐	◐
CSDC D077.064.116.C08	7.7	76	64	116	8	◐	◐
CSDC D080.064.116.C08	8	76	64	116	8	◐	◐
CSDC D085.080.139.C10	8.5	95	80	139	10	◐	◐
CSDC D090.080.139.C10	9	95	80	139	10	◐	◐
CSDC D094.080.139.C10	9.4	95	80	139	10	◐	◐
CSDC D096.080.139.C10	9.6	95	80	139	10	◐	◐
CSDC D100.080.139.C10	10	95	80	139	10	◐	◐
CSDC D102.096.163.C12	10.2	114	96	163	12	◐	◐
CSDC D105.096.163.C12	10.5	114	96	163	12	◐	◐
CSDC D110.096.163.C12	11	114	96	163	12	◐	◐
CSDC D113.096.163.C12	11.3	114	96	163	12	◐	◐
CSDC D114.096.163.C12	11.4	114	96	163	12	◐	◐
CSDC D116.096.163.C12	11.6	114	96	163	12	◐	◐
CSDC D120.096.163.C12	12	114	96	163	12	◐	◐
CSDC D125.119.182.C14	12.5	133	119	182	14	◐	◐
CSDC D127.119.182.C14	12.7	133	119	182	14	◐	◐
CSDC D130.119.182.C14	13	133	119	182	14	◐	◐
CSDC D135.119.182.C14	13.5	133	119	182	14	◐	◐
CSDC D140.119.182.C14	14	133	119	182	14	◐	◐

- 可根据用户的加工要求制造。
- Provide customized service.

● 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

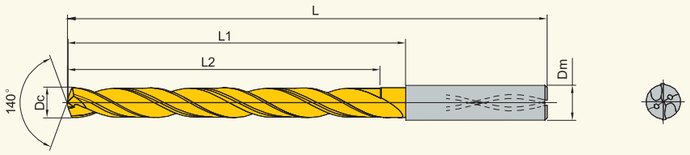
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

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

整体硬质合金内冷钻头 *(8×D)*

Solid Carbide Drill with Internal Coolant (8xD)

D	Tolerance m7
3.00-6	0.004-0.016
6.01-10	0.006-0.021
10.01-18	0.007-0.025
18.01-21	0.008-0.029



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSDC D145.136.204.C16	14.5	152	136	204	16	◐	◐
CSDC D150.136.204.C16	15	152	136	204	16	◐	◐
CSDC D155.136.204.C16	15.5	152	136	204	16	◐	◐
CSDC D160.136.204.C16	16	152	136	204	16	◐	◐
CSDC D165.153.223.C18	16.5	171	153	223	18	◐	◐
CSDC D170.153.223.C18	17	171	153	223	18	◐	◐
CSDC D175.153.223.C18	17.5	171	153	223	18	◐	◐
CSDC D180.153.223.C18	18	171	153	223	18	◐	◐
CSDC D185.170.244.C20	18.5	190	170	244	20	◐	◐
CSDC D190.170.244.C20	19	190	170	244	20	◐	◐
CSDC D200.170.244.C20	20	190	170	244	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

● 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)

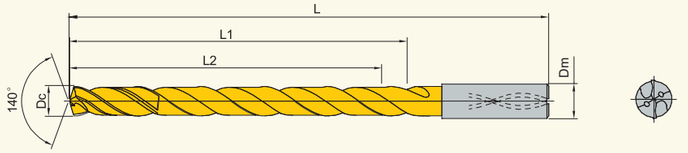
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SOLID CARBIDE DRILLS 整体硬质合金钻头系列

整体硬质合金内冷钻头 *(12×D)*

Solid Carbide Drill with Internal Coolant (12xD)

D	Tolerance h7
3.00-6	0-0.012
6.01-10	0-0.015
10.01-18	0-0.018
18.01-21	0-0.021



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSDC D030.048.092.C06	3	54	48	92	6	◐	◐
CSDC D033.048.092.C06	3.3	54	48	92	6	◐	◐
CSDC D037.048.092.C06	3.7	54	48	92	6	◐	◐
CSDC D038.056.102.C06	3.8	64	56	102	6	◐	◐
CSDC D040.056.102.C06	4	64	56	102	6	◐	◐
CSDC D042.056.102.C06	4.2	64	56	102	6	◐	◐
CSDC D047.056.102.C06	4.7	64	56	102	6	◐	◐
CSDC D050.074.121.C06	5	83	74	121	6	◐	◐
CSDC D056.074.121.C06	5.6	83	74	121	6	◐	◐
CSDC D057.074.121.C06	5.7	83	74	121	6	◐	◐
CSDC D060.074.121.C06	6	83	74	121	6	◐	◐
CSDC D068.098.148.C08	6.8	110	98	148	8	◐	◐
CSDC D070.098.148.C08	7	110	98	148	8	◐	◐
CSDC D075.098.148.C08	7.5	110	98	148	8	◐	◐
CSDC D077.098.148.C08	7.7	110	98	148	8	◐	◐
CSDC D080.098.148.C08	8	110	98	148	8	◐	◐
CSDC D085.123.180.C10	8.5	138	123	180	10	◐	◐
CSDC D090.123.180.C10	9	138	123	180	10	◐	◐
CSDC D094.123.180.C10	9.4	138	123	180	10	◐	◐
CSDC D096.123.180.C10	9.6	138	123	180	10	◐	◐
CSDC D100.123.180.C10	10	138	123	180	10	◐	◐
CSDC D102.140.206.C12	10.2	158	140	206	12	◐	◐
CSDC D105.140.206.C12	10.5	158	140	206	12	◐	◐
CSDC D110.140.206.C12	11	158	140	206	12	◐	◐
CSDC D113.140.206.C12	11.3	158	140	206	12	◐	◐
CSDC D114.140.206.C12	11.4	158	140	206	12	◐	◐
CSDC D116.140.206.C12	11.6	158	140	206	12	◐	◐
CSDC D120.140.206.C12	12	158	140	206	12	◐	◐
CSDC D125.168.230.C14	12.5	182	168	230	14	◐	◐
CSDC D127.168.230.C14	12.7	182	168	230	14	◐	◐
CSDC D130.168.230.C14	13	182	168	230	14	◐	◐
CSDC D135.168.230.C14	13.5	182	168	230	14	◐	◐
CSDC D140.168.230.C14	14	182	168	230	14	◐	◐
CSDC D145.192.260.C16	14.5	208	192	260	16	◐	◐
CSDC D150.192.260.C16	15	208	192	260	16	◐	◐
CSDC D155.192.260.C16	15.5	208	192	260	16	◐	◐
CSDC D160.192.260.C16	16	208	192	260	16	◐	◐
CSDC D165.216.285.C18	16.5	234	216	285	18	◐	◐
CSDC D170.216.285.C18	17	234	216	285	18	◐	◐
CSDC D175.216.285.C18	17.5	234	216	285	18	◐	◐
CSDC D180.216.285.C18	18	234	216	285	18	◐	◐
CSDC D185.238.310.C20	18.5	258	238	310	20	◐	◐
CSDC D190.238.310.C20	19	258	238	310	20	◐	◐
CSDC D200.238.310.C20	20	258	238	310	20	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

硬质合金刀具 SOLID CARBID TOOLS

● 标准库存 Item in stock

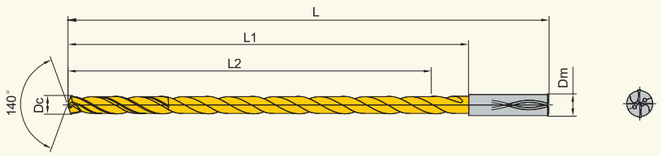
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

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

整体硬质合金内冷钻头 (20×D)

Solid Carbide Drill with Internal Coolant (20xD)

D	Tolerance h7
3.00-6	0-0.012
6.01-10	0-0.015
10.01-18	0-0.018
18.01-21	0-0.021



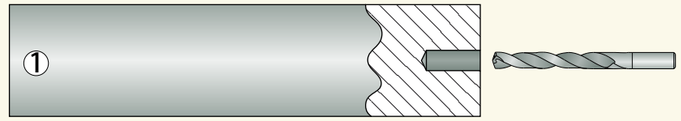
规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	槽长 Slot length	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L2	L	Dm	SG830	SG430
CSDC D030.060.107.C06	3	65	60	107	6	◐	◐
CSDC D035.086.134.C06	3.5	92	86	134	6	◐	◐
CSDC D040.086.134.C06	4	92	86	134	6	◐	◐
CSDC D045.110.158.C06	4.5	118	110	158	6	◐	◐
CSDC D050.110.158.C06	5	118	110	158	6	◐	◐
CSDC D055.123.170.C06	5.5	132	123	170	6	◐	◐
CSDC D058.135.182.C06	5.8	144	135	182	6	◐	◐
CSDC D060.135.182.C06	6	144	135	182	6	◐	◐
CSDC D065.151.200.C08	6.5	162	151	200	8	◐	◐
CSDC D068.151.200.C08	6.8	162	151	200	8	◐	◐
CSDC D070.151.200.C08	7	162	151	200	8	◐	◐
CSDC D074.172.222.C08	7.4	184	172	222	8	◐	◐
CSDC D075.172.222.C08	7.5	184	172	222	8	◐	◐
CSDC D080.172.222.C08	8	184	172	222	8	◐	◐
CSDC D083.184.240.C10	8.3	198	184	240	10	◐	◐
CSDC D085.184.240.C10	8.5	198	184	240	10	◐	◐
CSDC D090.184.240.C10	9	198	184	240	10	◐	◐
CSDC D098.205.262.C10	9.8	220	205	262	10	◐	◐
CSDC D100.205.262.C10	10	220	205	262	10	◐	◐

● 可根据用户的加工要求制造。
● Provide customized service.

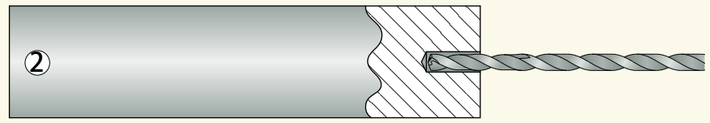
深孔加工推荐钻削步骤 (20×D)

Recommended Drilling Procedure for Deep Hole Drilling (20xD)

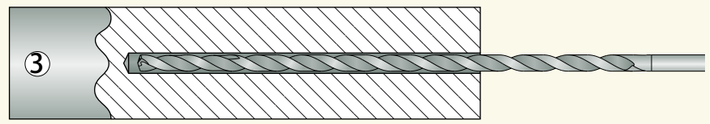
采用小钻深钻头加工 1-2*D 钻深的预钻孔。预钻孔钻头直径应比长钻头直径大 0.03-0.05mm, 锋角也应大于长钻头的锋角（大于 140°）
Drill a pilot hole 1-2*D deep with a short drill. The pilot drill should be 0.03-0.05 mm larger than the long drill and its point angle should also be larger (over 140°).



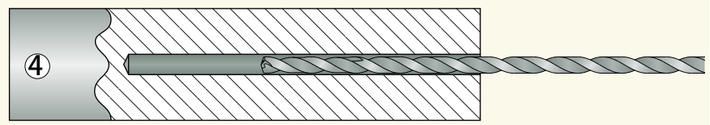
长钻头以低速低进给进入预钻孔，直到接近孔底。
Enter the pre-hole using low speed and feed, until it engages the material.



提高切削速度和进给到推荐值 -- 不要进行啄钻!
Increase cutting speed and feed to recommended conditions – no pecking is required!



加工到所需深度后，退刀时，切削速度降低 50%
After having reached the required depth, reduce speed by more than 50% while retracting from the hole.



(20×D) 整体硬质合金钻头推荐钻削参数

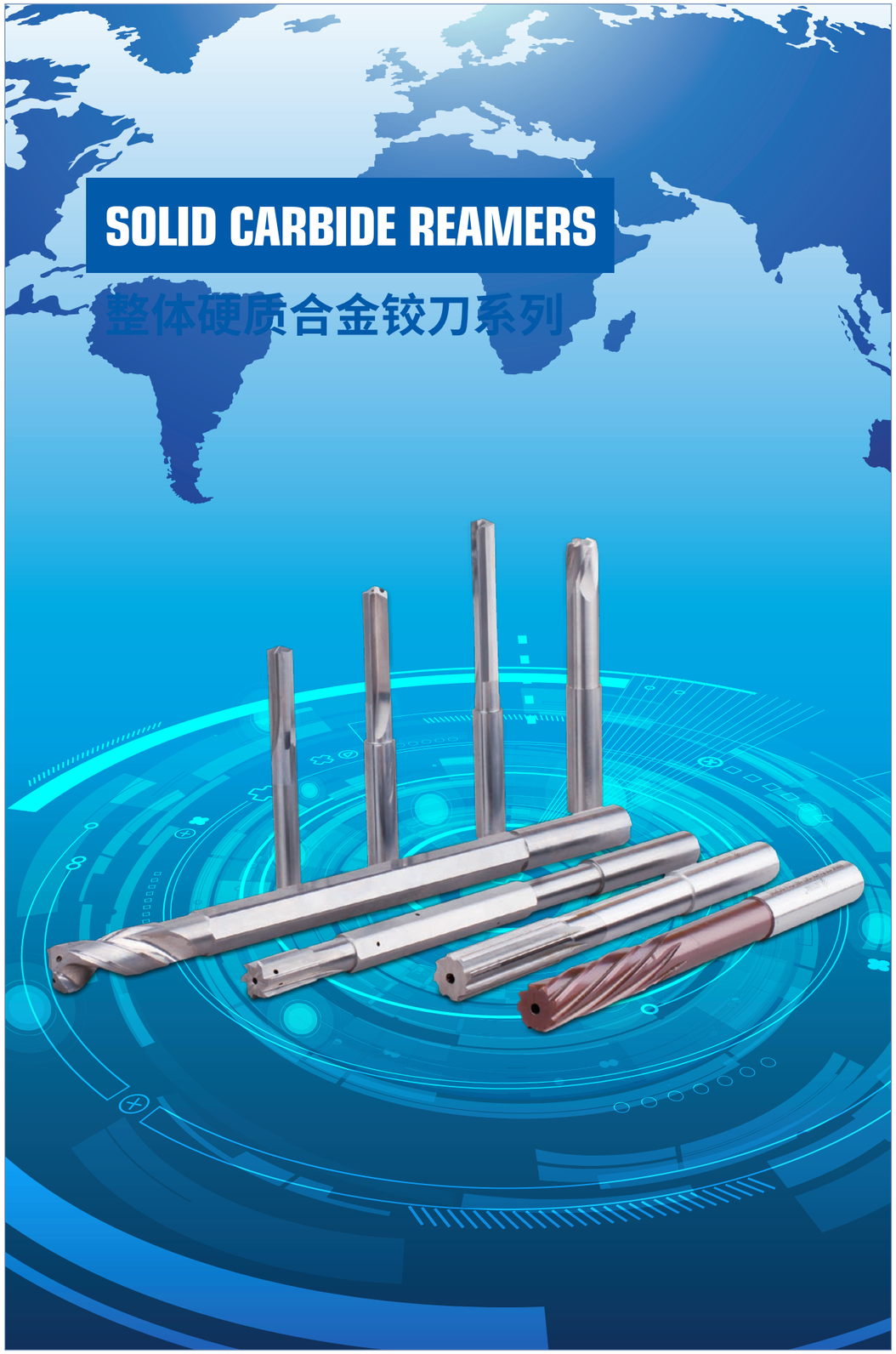
Recommended Drilling Conditions for Solid Carbide Drills (20xD)

钻头直径 Drill Dia. (mm)	碳钢 Carbon Steel (30 HRc)		合金钢 Alloy Steel (45 HRc)		不锈钢 Stainless Steel		铸铁 Cast Iron (GG25)		难加工铸铁 Ductile Cast Iron (GG45)	
	V(m/min)	f(mm/rev)	V(m/min)	f(mm/rev)	V(m/min)	f(mm/rev)	V(m/min)	f(mm/rev)	V(m/min)	f(mm/rev)
5	60-120	0.12-0.25	50-100	0.1-0.20	30-60	0.08-0.15	60-120	0.15-0.30	40-80	0.15-0.25
6	60-120	0.14-0.25	50-100	0.14-0.25	30-60	0.10-0.18	60-120	0.14-0.25	40-80	0.14-0.25
7-8	60-120	0.16-0.30	50-100	0.16-0.30	30-60	0.10-0.20	60-120	0.16-0.30	40-80	0.16-0.30
9-10	60-120	0.16-0.30	50-100	0.10-0.20	30-60	0.08-0.115	60-120	0.20-0.35	40-80	0.20-0.35

● 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)



E
硬质合金刀具
SOLID CARBIDE TOOLS

整体硬质合金铰刀系列
Solid Carbide Reamers

整体硬质合金直槽铰刀（通用型加工）..... E31
Straight Flute Solid Carbide Reamer (for General Machining)

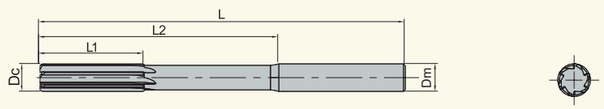
整体硬质合金直槽内冷铰刀（中心出水，适合盲孔加工）..... E32
Straight Flute Solid Carbide Reamer with Center Internal Coolant (for Blind Hole)

整体硬质合金左旋外冷铰刀（适合通孔加工）..... E33
Left-Hand Flute Solid Carbide Reamer with External Coolant (for Through Hole)

整体硬质合金左旋内冷铰刀（发散出水，适合通孔加工）..... E34
Left-Hand Flute Solid Carbide Reamer with Radial Internal Coolant (for Through Hole)

整体硬质合金直槽铰刀（通用型加工）

Straight Flute Solid Carbide Reamer (for General Machining)

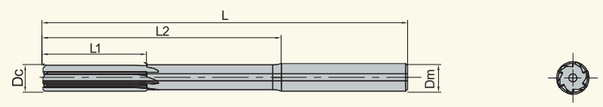


规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	颈长 Neck Length	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数 Z	
	Dc	L2	L1	L	Dm	Z	SG820
6RM7 D0400.019.075.C04	4	44	19	75	4	6	◐
6RM7 D0500.023.086.C05	5	53	23	86	5	6	◐
6RM7 D0600.026.093.C06	6	56	26	93	6	6	◐
6RM7 D0700.031.109.C06	7	69	31	109	6	6	◐
6RM7 D0800.033.117.C08	8	75	33	117	8	6	◐
6RM7 D0900.036.125.C08	9	81	36	125	8	6	◐
6RM7 D1000.038.133.C10	10	87	38	133	10	6	◐
6RM7 D1100.041.142.C10	11	96	41	142	10	6	◐
6RM7 D1200.044.151.C12	12	105	44	151	12	6	◐
6RM7 D1300.044.151.C12	13	105	44	151	12	6	◐
8RM7 D1400.047.160.C14	14	110	47	160	14	8	◐
8RM7 D1500.050.162.C14	15	112	50	162	14	8	◐
8RM7 D1600.052.170.C16	16	120	52	170	16	8	◐

- 大于 10 为焊接结构
- 公差适用于 H7 孔径
- It will be tipped if diameter over than 10.
- Tolerance for H7 hole diameter.

整体硬质合金直槽内冷铰刀（中心出水，适合盲孔加工）

Straight Flute Solid Carbide Reamer with Center Internal Coolant (for Blind Hole)



规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	颈长 Neck Length	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数 Z	
	Dc	L2	L1	L	Dm	Z	SG820
6RMC7 D0500.023.086.C05	5	53	23	86	5	6	◐
6RMC7 D0600.026.093.C06	6	56	26	93	6	6	◐
6RMC7 D0700.031.109.C06	7	69	31	109	6	6	◐
6RMC7 D0800.033.117.C08	8	75	33	117	8	6	◐
6RMC7 D0900.036.125.C08	9	81	36	125	8	6	◐
6RMC7 D1000.038.133.C10	10	87	38	133	10	6	◐
6RMC7 D1100.041.142.C10	11	96	41	142	10	6	◐
6RMC7 D1200.044.151.C12	12	105	44	151	12	6	◐
6RMC7 D1300.044.151.C12	13	105	44	151	12	6	◐
8RMC7 D1400.047.160.C14	14	110	47	160	14	8	◐
8RMC7 D1500.050.162.C14	15	112	50	162	14	8	◐
8RMC7 D1600.052.170.C16	16	120	52	170	16	8	◐

- 大于 10 为焊接结构
- 公差适用于 H7 孔径
- It will be tipped if diameter over than 10.
- Tolerance for H7 hole diameter.

● 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

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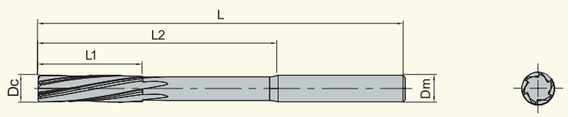
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

硬质合金刀具 SOLID CARBID TOOLS

SOLID CARBIDE REAMERS 整体硬质合金铰刀系列

整体硬质合金左旋外冷铰刀（适合通孔加工）

Left-Hand Flute Solid Carbide Reamer with External Coolant (for Through Hole)



规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	颈长 Neck Length	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数 Z	
	Dc	L2	L1	L	Dm	Z	SG820
6RML7 D0400.019.075.C04	4	44	19	75	4	6	◐
6RML7 D0500.023.086.C05	5	53	23	86	5	6	◐
6RML7 D0600.026.093.C06	6	56	26	93	6	6	◐
6RML7 D0700.031.109.C06	7	69	31	109	6	6	◐
6RML7 D0800.033.117.C08	8	75	33	117	8	6	◐
6RML7 D0900.036.125.C08	9	81	36	125	8	6	◐
6RML7 D1000.038.133.C10	10	87	38	133	10	6	◐
6RML7 D1100.041.142.C10	11	96	41	142	10	6	◐
6RML7 D1200.044.151.C12	12	105	44	151	12	6	◐
6RML7 D1300.044.151.C12	13	105	44	151	12	6	◐
8RML7 D1400.047.160.C14	14	110	47	160	14	8	◐
8RML7 D1500.050.162.C14	15	112	50	162	14	8	◐
8RML7 D1600.052.170.C16	16	120	52	170	16	8	◐

- 大于 10 为焊接结构
- 公差适用于 H7 孔径
- It will be tipped if diameter over than 10.
- Tolerance for H7 hole diameter.

● 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)

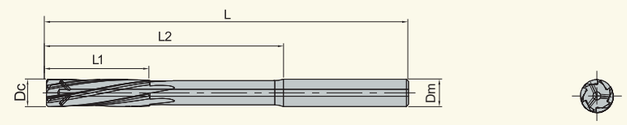
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

SOLID CARBID TOOLS 硬质合金刀具

SOLID CARBIDE REAMERS 整体硬质合金铰刀系列

整体硬质合金左旋内冷铰刀（发散出水，适合通孔加工）

Left-Hand Flute Solid Carbide Reamer with Radial Internal Coolant (for Through Hole)



规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	颈长 Neck Length	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数 Z	
	Dc	L2	L1	L	Dm	Z	SG820
6RMLC7 D0600.026.093.C06	6	56	26	93	6	6	◐
6RMLC7 D0700.031.109.C07	7	69	31	109	6	6	◐
6RMLC7 D0800.033.117.C08	8	75	33	117	8	6	◐
6RMLC7 D0900.036.125.C09	9	81	36	125	8	6	◐
6RMLC7 D1000.038.133.C10	10	87	38	133	10	6	◐
6RMLC7 D1100.041.142.C11	11	96	41	142	10	6	◐
6RMLC7 D1200.044.151.C12	12	105	44	151	12	6	◐
6RMLC7 D1300.044.151.C13	13	105	44	151	12	6	◐
6RMLC7 D1400.047.160.C14	14	110	47	160	14	8	◐
6RMLC7 D1500.050.162.C15	15	112	50	162	14	8	◐
6RMLC7 D1600.052.170.C16	16	120	52	170	16	8	◐

- 大于 10 为焊接结构
- 公差适用于 H7 孔径
- It will be tipped if diameter over than 10.
- Tolerance for H7 hole diameter.

● 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)



E

硬质合金刀具
SOLID CARBIDE TOOLS

整体硬质合金立铣刀系列
Solid Carbide End Mills

整体硬质合金立铣刀（二刃）..... E37
Solid Carbide End Mill /2 Flutes

整体硬质合金立铣刀（三刃）..... E37
Solid Carbide End Mill /3 Flutes

整体硬质合金立铣刀（四刃）..... E38
Solid Carbide End Mill /4 Flutes

整体硬质合金圆角铣刀（二刃 / 四刃）..... E39
Solid Carbide Corner Radius End Mill 2/4 Flutes

整体硬质合金圆角铣刀（难加工材料适用）..... E41
Solid Carbide Corner Radius End Mill (for Tough Material)

整体硬质合金球头铣刀（二刃 / 四刃）..... E45
Solid Carbide Ball End Mill 2/4 Flutes

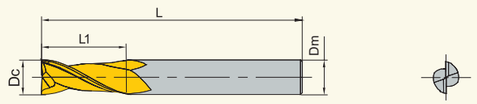
整体硬质合金铝加工铣刀（二刃 / 三刃 / 四刃）..... E46
Solid Carbide End Mill for Aluminum /2 Flutes

整体硬质合金快进给铣刀（四刃）..... E47
Fast Feed Solid Carbide End Mill /4 Flutes

整体硬质合金快进给铣刀（难加工材料适用）..... E48
Fast Feed Solid Carbide End Mill (for Tough Material)

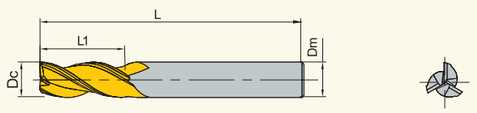
SOLID CARBIDE END MILLS 整体硬质合金立铣刀系列

整体硬质合金立铣刀（二刃）
Solid Carbide End Mill /2 Flutes



规格型号 Designation	基本尺寸 Dimension				在库 Stock	
	刃径 Diameter	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L	Dm	SG830	SG330
2EM D030.008.50.C03	3	8	50	3	◐	◐
2EM D040.011.50.C04	4	11	50	4	◐	◐
2EM D050.013.50.C05	5	13	50	5	◐	◐
2EM D060.016.50.C06	6	16	50	6	◐	◐
2EM D080.020.60.C08	8	20	60	8	◐	◐
2EM D100.025.75.C10	10	25	75	10	◐	◐
2EM D120.030.75.C12	12	30	75	12	◐	◐
2EM D140.035.80.C14	14	35	80	14	◐	◐
2EM D160.040.100.C16	16	40	100	16	◐	◐
2EM D180.040.100.C18	18	40	100	18	◐	◐
2EM D200.045.100.C20	20	45	100	20	◐	◐

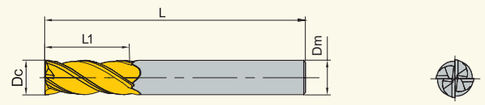
整体硬质合金立铣刀（三刃）
Solid Carbide End Mill /3 Flutes



规格型号 Designation	基本尺寸 Dimension				在库 Stock	
	刃径 Diameter	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	L1	L	Dm	SG830	SG330
3EM D030.008.50.C03	3	8	50	3	◐	◐
3EM D040.011.50.C04	4	11	50	4	◐	◐
3EM D050.013.50.C05	5	13	50	5	◐	◐
3EM D060.016.50.C06	6	16	50	6	◐	◐
3EM D080.020.60.C08	8	20	60	8	◐	◐
3EM D100.025.75.C10	10	25	75	10	◐	◐
3EM D120.030.75.C12	12	30	75	12	◐	◐
3EM D140.035.80.C14	14	35	80	14	◐	◐
3EM D160.040.100.C16	16	40	100	16	◐	◐
3EM D180.040.100.C18	18	40	100	18	◐	◐
3EM D200.045.100.C20	20	45	100	20	◐	◐

SOLID CARBIDE END MILLS 整体硬质合金立铣刀系列

整体硬质合金立铣刀（四刃）
Solid Carbide End Mill /4 Flutes



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数 Z		
	Dc	L1	L	Dm	Z	SG330	SG830
4EM D030.008.50.C03	3	8	50	3	4	◐	◐
4EM D040.011.50.C04	4	11	50	4	4	◐	◐
4EM D050.013.50.C05	5	13	50	5	4	◐	◐
4EM D060.016.50.C06	6	16	50	6	4	◐	◐
4EM D080.020.60.C08	8	20	60	8	4	◐	◐
4EM D100.025.75.C10	10	25	75	10	4	◐	◐
4EM D120.030.75.C12	12	30	75	12	4	◐	◐
4EM D140.035.80.C14	14	35	80	14	4	◐	◐
4EM D160.040.100.C16	16	40	100	16	4	◐	◐
4EM D180.040.100.C18	18	40	100	18	4	◐	◐
4EM D200.045.100.C20	20	45	100	20	4	◐	◐

● 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)

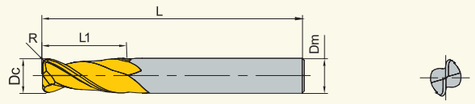
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

● 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)

整体硬质合金圆角铣刀（二刃）
Solid Carbide Corner Radius End Mill /2 Flutes



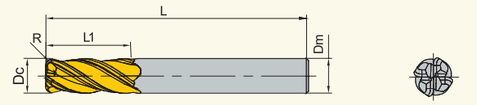
规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	圆角 Round corner	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	R	L1	L	Dm	SG830	SG330
2EMR D030.02.008.50.C03	3	0.2	8	50	3	◐	◐
2EMR D030.03.008.50.C03	3	0.3	8	50	3	◐	◐
2EMR D030.05.008.50.C03	3	0.5	8	50	3	◐	◐
2EMR D040.03.011.50.C04	4	0.3	11	50	4	◐	◐
2EMR D040.05.011.50.C04	4	0.5	11	50	4	◐	◐
2EMR D040.10.011.50.C04	4	1	11	50	4	◐	◐
2EMR D050.03.013.50.C05	5	0.3	13	50	5	◐	◐
2EMR D050.05.013.50.C05	5	0.5	13	50	5	◐	◐
2EMR D050.10.013.50.C05	5	1	13	50	5	◐	◐
2EMR D060.03.016.50.C06	6	0.3	16	50	6	◐	◐
2EMR D060.05.016.50.C06	6	0.5	16	50	6	◐	◐
2EMR D060.10.016.50.C06	6	1	16	50	6	◐	◐
2EMR D080.03.020.60.C08	8	0.3	20	60	8	◐	◐
2EMR D080.05.020.60.C08	8	0.5	20	60	8	◐	◐
2EMR D080.10.020.60.C08	8	1	20	60	8	◐	◐
2EMR D100.05.025.75.C10	10	0.5	25	75	10	◐	◐
2EMR D100.10.025.75.C10	10	1	25	75	10	◐	◐
2EMR D100.15.025.75.C10	10	1.5	25	75	10	◐	◐
2EMR D120.05.030.75.C12	12	0.5	30	75	12	◐	◐
2EMR D120.10.030.75.C12	12	1	30	75	12	◐	◐
2EMR D120.15.030.75.C12	12	1.5	30	75	12	◐	◐
2EMR D120.20.030.75.C12	12	2	30	75	12	◐	◐
2EMR D140.05.035.80.C14	14	0.5	35	80	14	◐	◐
2EMR D140.10.035.80.C14	14	1	35	80	14	◐	◐
2EMR D140.15.035.80.C14	14	1.5	35	80	14	◐	◐
2EMR D140.20.035.80.C14	14	2	35	80	14	◐	◐
2EMR D160.05.040.100.C16	16	0.5	40	100	16	◐	◐
2EMR D160.10.040.100.C16	16	1	40	100	16	◐	◐
2EMR D160.15.040.100.C16	16	1.5	40	100	16	◐	◐
2EMR D160.20.040.100.C16	16	2	40	100	16	◐	◐
2EMR D180.05.040.100.C18	18	0.5	40	100	18	◐	◐
2EMR D180.10.040.100.C18	18	1	40	100	18	◐	◐
2EMR D180.15.040.100.C18	18	1.5	40	100	18	◐	◐
2EMR D180.20.040.100.C18	18	2	40	100	18	◐	◐
2EMR D200.05.045.100.C20	20	0.5	45	100	20	◐	◐
2EMR D200.10.045.100.C20	20	1	45	100	20	◐	◐
2EMR D200.15.045.100.C20	20	1.5	45	100	20	◐	◐
2EMR D200.20.045.100.C20	20	2	45	100	20	◐	◐

● 可根据用户的加工要求制造。
● Providing customized requirements.

● 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 CARBIDE END MILLS 整体硬质合金立铣刀系列

整体硬质合金圆角铣刀（四刃）
Solid Carbide Corner Radius End Mill /4 Flutes



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	圆角 Round corner	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	R	L1	L	Dm	SG830	SG330
4EMR D030.020.008.50.C03	3	0.2	8	50	3	◐	◐
4EMR D030.030.008.50.C03	3	0.3	8	50	3	◐	◐
4EMR D030.050.008.50.C03	3	0.5	8	50	3	◐	◐
4EMR D040.03.011.50.C04	4	0.3	11	50	4	◐	◐
4EMR D040.05.011.50.C04	4	0.5	11	50	4	◐	◐
4EMR D040.10.011.50.C04	4	1	11	50	4	◐	◐
4EMR D050.03.013.50.C05	5	0.3	13	50	5	◐	◐
4EMR D050.05.013.50.C05	5	0.5	13	50	5	◐	◐
4EMR D050.10.013.50.C05	5	1	13	50	5	◐	◐
4EMR D060.03.016.50.C06	6	0.3	16	50	6	◐	◐
4EMR D060.05.016.50.C06	6	0.5	16	50	6	◐	◐
4EMR D060.10.016.50.C06	6	1	16	50	6	◐	◐
4EMR D080.03.020.60.C08	8	0.3	20	60	8	◐	◐
4EMR D080.05.020.60.C08	8	0.5	20	60	8	◐	◐
4EMR D080.10.020.60.C08	8	1	20	60	8	◐	◐
4EMR D100.05.025.75.C10	10	0.5	25	75	10	◐	◐
4EMR D100.10.025.75.C10	10	1	25	75	10	◐	◐
4EMR D100.15.025.75.C10	10	1.5	25	75	10	◐	◐
4EMR D120.05.030.75.C12	12	0.5	30	75	12	◐	◐
4EMR D120.10.030.75.C12	12	1	30	75	12	◐	◐
4EMR D120.15.030.75.C12	12	1.5	30	75	12	◐	◐
4EMR D120.20.030.75.C12	12	2	30	75	12	◐	◐
4EMR D140.05.035.80.C14	14	0.5	35	80	14	◐	◐
4EMR D140.10.035.80.C14	14	1	35	80	14	◐	◐
4EMR D140.15.035.80.C14	14	1.5	35	80	14	◐	◐
4EMR D140.20.035.80.C14	14	2	35	80	14	◐	◐
4EMR D160.05.040.100.C16	16	0.5	40	100	16	◐	◐
4EMR D160.10.040.100.C16	16	1	40	100	16	◐	◐
4EMR D160.15.040.100.C16	16	1.5	40	100	16	◐	◐
4EMR D160.20.040.100.C16	16	2	40	100	16	◐	◐
4EMR D180.05.040.100.C18	18	0.5	40	100	18	◐	◐
4EMR D180.10.040.100.C18	18	1	40	100	18	◐	◐
4EMR D180.15.040.100.C18	18	1.5	40	100	18	◐	◐
4EMR D180.20.040.100.C18	18	2	40	100	18	◐	◐
4EMR D200.05.045.100.C20	20	0.5	45	100	20	◐	◐
4EMR D200.10.045.100.C20	20	1	45	100	20	◐	◐
4EMR D200.15.045.100.C20	20	1.5	45	100	20	◐	◐
4EMR D200.20.045.100.C20	20	2	45	100	20	◐	◐

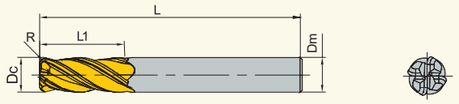
● 可根据用户的加工要求制造。
● Providing customized requirements.

硬质合金刀具 SOLID CARBID TOOLS

● 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)

硬质合金圆角立铣刀（四刃、难加工材料适用、2 倍径刃长）

Solid Carbide Corner Radius End Mill / 4 Flutes (for Tough Material)



规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	圆角 Round corner	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数	
	Dc	R	L1	L	Dm	Z	SG530
4EMR D040.030.008.50.C04	4	0.3	8	50	4	4	○
4EMR D040.050.008.50.C04	4	0.5	8	50	4	4	○
4EMR D050.030.010.50.C05	5	0.3	10	50	5	4	○
4EMR D050.050.010.50.C05	5	0.5	10	50	5	4	○
4EMR D060.030.012.60.C06	6	0.3	12	60	6	4	○
4EMR D060.050.012.60.C06	6	0.5	12	60	6	4	○
4EMR D080.050.016.65.C08	8	0.5	16	65	8	4	○
4EMR D100.050.020.75.C10	10	0.5	20	75	10	4	○
4EMR D100.080.020.75.C10	10	0.8	20	75	10	4	○
4EMR D120.050.024.90.C12	12	0.5	24	90	12	4	○
4EMR D120.080.024.90.C12	12	0.8	24	90	12	4	○
4EMR D120.25.024.90.C12	12	2.5	24	90	12	4	○
4EMR D140.050.028.95.C14	14	0.5	28	95	14	4	○
4EMR D160.040.032.100.C16	16	0.5	32	100	16	4	○
4EMR D160.080.032.100.C16	16	0.8	32	100	16	4	○
4EMR D160.25.032.100.C16	16	2.5	32	100	16	4	○
4EMR D160.30.032.100.C16	16	3	32	100	16	4	○
4EMR D200.050.040.110.C20	20	0.5	40	110	20	4	○
4EMR D200.080.040.110.C20	20	0.8	40	110	20	4	○
4EMR D200.25.040.110.C20	20	2.5	40	110	20	4	○
4EMR D200.30.040.110.C20	20	3	40	110	20	4	○
4EMR D200.40.040.110.C20	20	4	40	110	20	4	○

● 可根据用户的加工要求制造。
● Providing customized requirements.

● 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 CARBIDE END MILLS 整体硬质合金立铣刀系列

硬质合金圆角立铣刀（五刃、难加工材料适用、高性能、2 倍径刃长）

High Performance Solid Carbide Corner Radius End Mill / 5 Flutes (for Tough Material)



规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	圆角 Round corner	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数	
	Dc	R	L1	L	Dm	Z	SG530P
5EMR D040.030.008.50.C04	4	0.3	8	50	4	5	○
5EMR D040.050.008.50.C04	4	0.5	8	50	4	5	○
5EMR D050.030.010.50.C05	5	0.3	10	50	5	5	○
5EMR D050.050.010.50.C05	5	0.5	10	50	5	5	○
5EMR D060.030.012.60.C06	6	0.3	12	60	6	5	○
5EMR D060.050.012.60.C06	6	0.5	12	60	6	5	○
5EMR D080.050.016.65.C08	8	0.5	16	65	8	5	○
5EMR D100.050.020.75.C10	10	0.5	20	75	10	5	○
5EMR D100.080.020.75.C10	10	0.8	20	75	10	5	○
5EMR D120.050.024.90.C12	12	0.5	24	90	12	5	○
5EMR D120.080.024.90.C12	12	0.8	24	90	12	5	○
5EMR D120.25.024.90.C12	12	2.5	24	90	12	5	○
5EMR D140.050.028.95.C14	14	0.5	28	95	14	5	○
5EMR D160.040.032.100.C16	16	0.5	32	100	16	5	○
5EMR D160.080.032.100.C16	16	0.8	32	100	16	5	○
5EMR D160.25.032.100.C16	16	2.5	32	100	16	5	○
5EMR D160.30.032.100.C16	16	3	32	100	16	5	○
5EMR D200.050.040.110.C20	20	0.5	40	110	20	5	○
5EMR D200.080.040.110.C20	20	0.8	40	110	20	5	○
5EMR D200.25.040.110.C20	20	2.5	40	110	20	5	○
5EMR D200.30.040.110.C20	20	3	40	110	20	5	○
5EMR D200.40.040.110.C20	20	4	40	110	20	5	○

● 可根据用户的加工要求制造。
● Providing customized requirements.

硬质合金刀具 SOLID CARBID TOOLS

● 标准库存
Item in stock

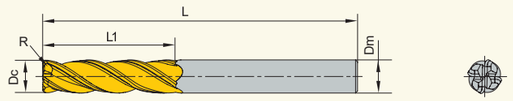
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

SOLID CARBIDE END MILLS 整体硬质合金立铣刀系列

硬质合金圆角立铣刀（四刃、难加工材料适用、加长 4 倍径）

Solid Carbide Corner Radius End Mill / 4 Flutes (for Tough Material)

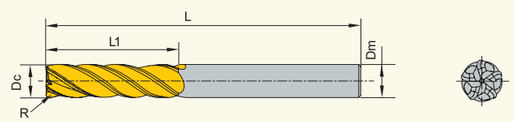


规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	圆角 Round corner	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数	
	Dc	R	L1	L	Dm	Z	SG530
4EMR D060.030.024.68.C06	6	0.3	24	68	6	4	○
4EMR D080.050.032.80.C08	8	0.5	32	80	8	4	○
4EMR D100.050.040.95.C10	10	0.5	40	95	10	4	○
4EMR D100.080.040.95.C10	10	0.8	40	95	10	4	○
4EMR D120.050.048.107.C12	12	0.5	48	107	12	4	○
4EMR D120.080.048.107.C12	12	0.8	48	107	12	4	○
4EMR D120.25.048.107.C12	12	2.5	48	107	12	4	○
4EMR D140.050.056.119.C14	14	0.5	56	119	14	4	○
4EMR D160.050.064.128.C16	16	0.5	64	128	16	4	○
4EMR D160.080.064.128.C16	16	0.8	64	128	16	4	○
4EMR D160.25.064.128.C16	16	2.5	64	128	16	4	○
4EMR D160.30.064.128.C16	16	3	64	128	16	4	○
4EMR D200.050.080.150.C20	20	0.5	80	150	20	4	○
4EMR D200.080.080.150.C20	20	0.8	80	150	20	4	○
4EMR D200.25.080.150.C20	20	2.5	80	150	20	4	○
4EMR D200.30.080.150.C20	20	3	80	150	20	4	○
4EMR D200.40.080.140.C20	20	4	80	150	20	4	○

- 可根据用户的加工要求制造。
- Providing customized requirements.

硬质合金圆角立铣刀（难加工材料适用、高性能、加长 4 倍径）

High Performance Solid Carbide Corner Radius End Mill (for Tough Material, 4XD)



规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	圆角 Round corner	刃长 Flute length	总长 Total length	柄径 Shank diameter	齿数	
	Dc	R	L1	L	Dm	Z	SG530P
5EMR D060.030.024.68.C06	6	0.3	24	68	6	5	○
5EMR D080.050.032.80.C08	8	0.5	32	80	8	5	○
5EMR D100.050.040.95.C10	10	0.5	40	95	10	5	○
5EMR D100.080.040.95.C10	10	0.8	40	95	10	5	○
5EMR D120.050.048.107.C12	12	0.5	48	107	12	5	○
5EMR D120.080.048.107.C12	12	0.8	48	107	12	5	○
5EMR D120.25.048.107.C12	12	2.5	48	107	12	5	○
5EMR D140.050.056.119.C14	14	0.5	56	119	14	5	○
5EMR D160.050.064.128.C16	16	0.5	64	128	16	5	○
5EMR D160.080.064.128.C16	16	0.8	64	128	16	5	○
5EMR D160.25.064.128.C16	16	2.5	64	128	16	5	○
5EMR D160.30.064.128.C16	16	3	64	128	16	5	○
5EMR D200.050.080.150.C20	20	0.5	80	150	20	5	○
5EMR D200.080.080.150.C20	20	0.8	80	150	20	5	○
5EMR D200.25.080.150.C20	20	2.5	80	150	20	5	○
5EMR D200.30.080.150.C20	20	3	80	150	20	5	○
5EMR D200.40.080.140.C20	20	4	80	140	20	5	○

- 可根据用户的加工要求制造。
- Providing customized requirements.

● 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)

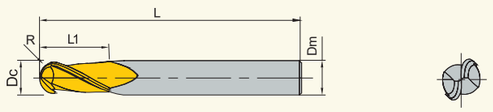
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

● 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)

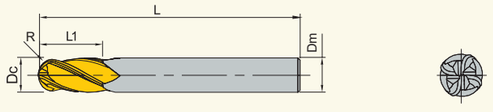
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

整体硬质合金球头铣刀（二刃）
Solid Carbide Ball End Mill /2 Flutes



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	圆角 Round corner	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	R	L1	L	Dm	SG830	SG230
2EMB R015.006.50.C03	3	1.5	6	50	3	◐	◐
2EMB R020.008.50.C04	4	2	8	50	4	◐	◐
2EMB R025.010.50.C05	5	2.5	10	50	5	◐	◐
2EMB R030.012.50.C06	6	3	12	50	6	◐	◐
2EMB R035.014.60.C08	7	3.5	14	60	8	◐	◐
2EMB R040.016.60.C08	8	4	16	60	8	◐	◐
2EMB R045.018.75.C10	9	4.5	18	75	10	◐	◐
2EMB R050.020.75.C10	10	5	20	75	10	◐	◐
2EMB R060.024.75.C12	12	6	24	75	12	◐	◐
2EMB R070.028.75.C14	14	7	28	75	14	◐	◐
2EMB R080.032.100.C16	16	8	32	100	16	◐	◐
2EMB R100.040.100.C20	20	10	40	100	20	◐	◐

整体硬质合金球头铣刀（四刃）
Solid Carbide Ball End Mill /4 Flutes



规格型号 Designation	基本尺寸 Dimension					在库 Stock	
	刃径 Diameter	圆角 Round corner	刃长 Flute length	总长 Total length	柄径 Shank diameter		
	Dc	R	L1	L	Dm	SG830	SG230
4EMB R015.006.50.C03	3	1.5	6	50	3	◐	◐
4EMB R020.008.50.C04	4	2	8	50	4	◐	◐
4EMB R025.010.50.C05	5	2.5	10	50	5	◐	◐
4EMB R030.012.50.C06	6	3	12	50	6	◐	◐
4EMB R040.016.60.C08	8	4	16	60	8	◐	◐
4EMB R050.020.75.C10	10	5	20	75	10	◐	◐
4EMB R060.024.75.C12	12	6	24	75	12	◐	◐
4EMB R070.028.75.C14	14	7	28	75	14	◐	◐
4EMB R080.032.100.C16	16	8	32	100	16	◐	◐
4EMB R090.036.100.C18	18	9	36	100	18	◐	◐
4EMB R100.040.100.C20	20	10	40	100	20	◐	◐

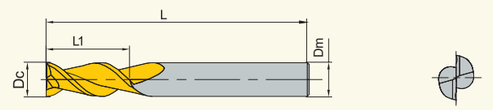
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○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

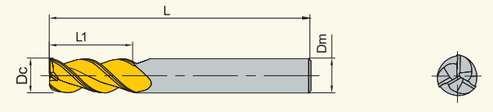
SOLID CARBIDE END MILLS 整体硬质合金立铣刀系列

整体硬质合金铝加工铣刀（二刃）
Solid Carbide End Mill for Aluminum /2 Flutes



规格型号 Designation	基本尺寸 Dimension				在库 Stock
	刃径 Diameter	刃长 Flute length	总长 Total length	柄径 Shank diameter	
	Dc	L1	L	Dm	SG430
2EM D030.008.50.C03	3	8	50	3	◐
2EM D040.011.50.C04	4	11	50	4	◐
2EM D050.013.50.C05	5	13	50	5	◐
2EM D060.016.50.C06	6	16	50	6	◐
2EM D080.020.60.C08	8	20	60	8	◐
2EM D100.025.75.C10	10	25	75	10	◐
2EM D120.030.75.C12	12	30	75	12	◐
2EM D140.035.80.C14	14	35	80	14	◐
2EM D160.040.100.C16	16	40	100	16	◐
2EM D180.040.100.C18	18	40	100	18	◐
2EM D200.045.100.C20	20	45	100	20	◐

整体硬质合金铝加工铣刀（三刃）
Solid Carbide End Mill for Aluminum /3 Flutes



规格型号 Designation	基本尺寸 Dimension				在库 Stock
	刃径 Diameter	刃长 Flute length	总长 Total length	柄径 Shank diameter	
	Dc	L1	L	Dm	SG430
3EM D030.008.50.C03	3	8	50	3	◐
3EM D040.011.50.C04	4	11	50	4	◐
3EM D050.013.50.C05	5	13	50	5	◐
3EM D060.016.50.C06	6	16	50	6	◐
3EM D080.020.60.C08	8	20	60	8	◐
3EM D100.025.75.C10	10	25	75	10	◐
3EM D120.030.75.C12	12	30	75	12	◐
3EM D140.035.80.C14	14	35	80	14	◐
3EM D160.040.100.C16	16	40	100	16	◐
3EM D180.040.100.C18	18	40	100	18	◐
3EM D200.045.100.C20	20	45	100	20	◐

● 标准库存 Item in stock

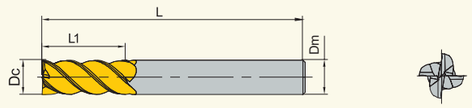
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)

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

硬质合金刀具 SOLID CARBID TOOLS

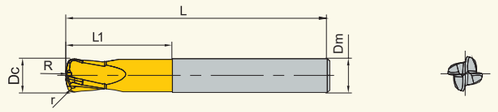
SOLID CARBIDE END MILLS 整体硬质合金立铣刀系列

整体硬质合金铝加工铣刀（四刃）
Solid Carbide End Mill for Aluminum /4 Flutes



规格型号 Designation	基本尺寸 Dimension				在库 Stock
	刃径 Diameter	刃长 Drilling depth	总长 Total length	柄径 Shank diameter	
	Dc	L1	L	Dm	SG430
4EM D030.008.50.C03	3	8	50	3	◐
4EM D040.011.50.C04	4	11	50	4	◐
4EM D050.013.50.C05	5	13	50	5	◐
4EM D060.016.50.C06	6	16	50	6	◐
4EM D080.020.60.C08	8	20	60	8	◐
4EM D100.025.75.C10	10	25	75	10	◐
4EM D120.030.75.C12	12	30	75	12	◐
4EM D140.035.80.C14	14	35	80	14	◐
4EM D160.040.100.C16	16	40	100	16	◐
4EM D180.040.100.C18	18	40	100	18	◐
4EM D200.045.100.C20	20	45	100	20	◐

整体硬质合金快进给铣刀（四刃）
Fast Feed Solid Carbide End Mill /4 Flutes



规格型号 Designation	基本尺寸 Dimension						在库 Stock
	刃径 Diameter	底部圆弧 Bottom of arc	倒圆角 Rounding	颈长 Neck length	总长 Total length	柄径 Shank diameter	
	Dc	R	r	L1	L	Dm	SG830
4EMH D060.R090.r122.020.57.C06	6	9	1.22	20	57	6	◐
4EMH D080.R120.r162.026.65.C08	8	12	1.62	26	65	8	◐
4EMH D100.R135.r201.030.75.C10	10	13.58	2.01	30	75	10	◐
4EMH D120.R160.r247.034.85.C12	12	16	2.47	34	85	12	◐
4EMH D140.R200.r288.038.85.C14	14	20	2.88	38	85	14	◐
4EMH D160.R268.r325.042.90.C16	16	26.84	3.25	42	90	16	◐
4EMH D180.R302.r366.045.95.C18	18	30.2	3.66	45	95	18	◐
4EMH D200.R177.r402.046.105.C20	20	17.7	4.02	46	105	20	◐

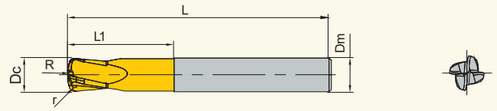
● 标准库存
Item in stock

◐ 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
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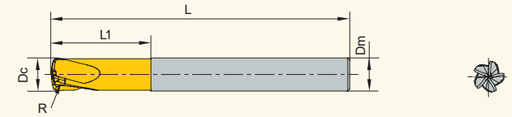
SOLID CARBIDE END MILLS 整体硬质合金立铣刀系列

硬质合金快速进给铣刀（四刃、难加工材料适用）
Fast Feed Solid Carbide End Mill /4 Flutes (for Tough Material)



规格型号 Designation	基本尺寸 Dimension							在库 Stock
	刃径 Diameter	底部圆弧 Bottom of arc	倒圆角 Rounding	颈长 Neck length	总长 Total length	柄径 Shank diameter	齿数	
	Dc	R	r	L1	L	Dm	Z	SG530
4EMH D060.R090.r122.020.57.C06	6	9	1.22	20	57	6	4	○
4EMH D080.R120.r162.026.65.C08	8	12	1.62	26	65	8	4	○
4EMH D100.R135.r201.030.75.C10	10	13.58	2.01	30	75	10	4	○
4EMH D120.R160.r247.034.85.C12	12	16	2.47	34	85	12	4	○
4EMH D140.R200.r288.038.85.C14	14	20	2.88	38	85	14	4	○
4EMH D160.R268.r325.042.90.C16	16	26.84	3.25	42	90	16	4	○
4EMH D180.R302.r366.045.95.C18	18	30.2	3.66	45	95	18	4	○
4EMH D200.R177.r402.046.105.C20	20	17.7	4.02	46	105	20	4	○

硬质合金快速进给铣刀（五刃、高性能、难加工材料适用）
High Performance Fast Feed Solid Carbide End Mill /5 Flutes (for Tough Material)



规格型号 Designation	基本尺寸 Dimension							在库 Stock
	刃径 Diameter	底部圆弧 Bottom of arc	倒圆角 Rounding	颈长 Neck length	总长 Total length	柄径 Shank diameter	齿数	
	Dc	R	r	L1	L	Dm	Z	SG530P
5EMH D060.R090.r122.020.57.C06	6	9	1.22	20	57	6	5	○
5EMH D080.R120.r162.026.65.C08	8	12	1.62	26	65	8	5	○
5EMH D100.R135.r201.030.75.C10	10	13.58	2.01	30	75	10	5	○
5EMH D120.R160.r247.034.85.C12	12	16	2.47	34	85	12	5	○
5EMH D140.R200.r288.038.85.C14	14	20	2.88	38	85	14	5	○
5EMH D160.R268.r325.042.90.C16	16	26.84	3.25	42	90	16	5	○
5EMH D180.R302.r366.045.95.C18	18	30.2	3.66	45	95	18	5	○
5EMH D200.R177.r402.046.105.C20	20	17.7	4.02	46	105	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)



E
硬质合金刀具
SOLID CARBIDE TOOLS

技术资料
Technical Information

被加工材料适用表 E47
Work Piece

铁削加工的切削参数与通用计算公式 E47
Cutting Parameter and General Formula

推荐的冷却液压力和流量 E48
Coolant Pressure and Volume Recommendations

硬质合金钻头正确使用 E49
Proper Using of Solid Carbide Tools

工件材料表 E50
Workpiece Material Table

根据螺纹尺寸推荐的钻头直径 E51
Recommendation Drill Diameter Based on Thread

被加工材料适用表
Work Piece

牌号 Carbide grade	被加工材料 Recommended applicaion									
	软钢 HB<180 Soft steel	碳钢合金钢 Unalloyed steel Alloyed steel	预硬钢 HRC<40 Hardened and tempered steel	不锈钢 Stainless steel	铸铁 Gray cast iron	球墨铸铁 Spheroidal graphite cast iron	铝合金 Aluminium alloys	铜合金 Cooper alloys	难加工材料 Heat reistant alloys	淬硬钢 Hardened steel
SG830	★	★	★	★	☆	☆	☆	☆	☆	☆
SG230	☆	★	★	★			☆	☆	☆	
SG430	★	☆		☆	☆	☆	★	★	★	
SG330			★		★	★				★
SG530	★难加工材料，不锈钢。☆的是软钢、合金钢。其它不用。									

备注：★非常适合☆适合
SG830 SG330 涂层硬质合金材料
SG820 SG430 为非涂层硬质合金材料

Remarks: ★ Recommended ☆ optional
SG830 SG330 Coated
SG820 SG430 Uncoated

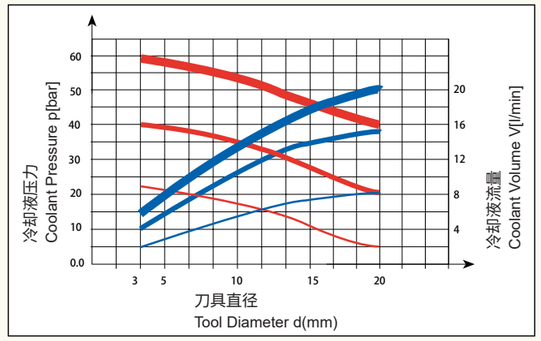
铁削加工的切削参数与通用计算公式
Cutting Parameter and General Formula

常用参数及其单位 Parameter and Unit			
D 铣刀直径 Diameter	(mm)	fn 每转进给量 Feeding per Revolution	(mm/rev)
ap 切削深度 Cutting Depth	(mm)	fz 每刃进给量 Feeding per Tooth	(mm/tooth)
ae 切削宽度 Cutting Width	(mm)	Z 刀刃数 Teeth Number	
Vf 进给速度 Feed Speed	(mm/min)	n 主轴转速 Spindle Speed	(rev/min)
Vc 切削速度 Cutting Speed	(m/min)	L 工作台总进给长度 Length:（工件长度 + 铣刀直径：l+D)	(mm)
Tc 加工时间 Processing Time	(min)	Q 金属切削率 Metal Removal Rate	(cm^3/min)

通用计算公式 General Formula	
n 主轴转速 Spindle Speed	$n=\frac{Vc \times 1000}{D \times \pi}$ (r/min)
Vc 切削速度 Cutting Speed	$Vc=\frac{n \times D \times \pi}{1000}$ (m/min)
fz 每刃进给量 Feeding per Tooth	$fz=\frac{Vf}{Z \times n}$ (mm)
Vf 进给速度 Feed Speed	$Vf=n \times fz \times Z$(mm/min)
Q 金属切削率 Metal Removal Rate	$Q=\frac{ae \times ap \times Vf}{1000}$
Tc 加工时间 Processing Time	$Tc=\frac{L}{Vf}$ (min)

TECHNICAL INFORMATION 技术资料

推荐的冷却液压力和流量
Coolant Pressure and Volume Recommendations



冷却液压力和流量的要求，适用于带螺旋状内冷却通孔的 CSDC 整体硬质合金钻头
Required coolant pressure and volume for CSDC drills with internal coolant spiral nozzles.

要求的冷却液压力
Required Coolant Pressure

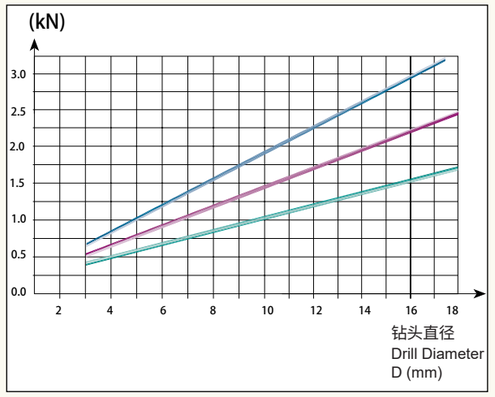
- 最佳压力Optimum pressure
- 恰当压力 Good pressure
- 最小压力 Minimum pressure

要求的冷却液流量
Required Coolant Volume

- 最佳流量 Optimum volume
- 恰当流量 Good volume
- 最小流量 Minimum volume

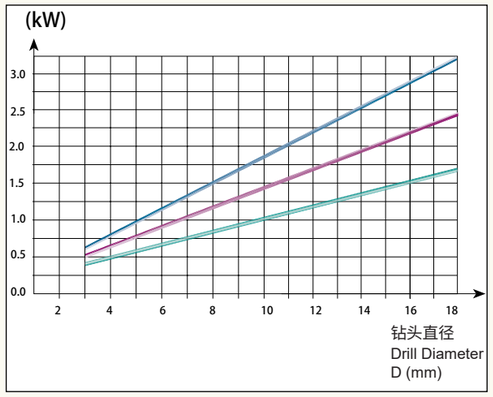
切削力和功率特性
force and Power c haracteristics

切削力
Feed Force



- f=0.30 mm/rev
- f=0.25 mm/rev
- f=0.20 mm/rev

单位功率消耗
Net Power Consumption



- f=0.30 mm/rev
- f=0.25 mm/rev
- f=0.20 mm/rev

被加工材料 Material: SAE 4340
切削速度 Speed: 100 m/min
图表中数值根据被加工材料和加工条件不同而变化。
Values may change for different materials and drilling conditions.

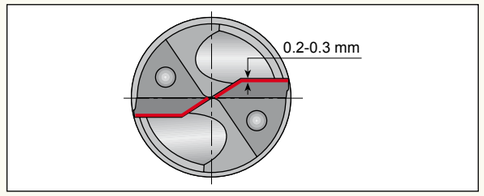
硬质合金钻头正确使用
Proper Using of Solid Carbide Tools

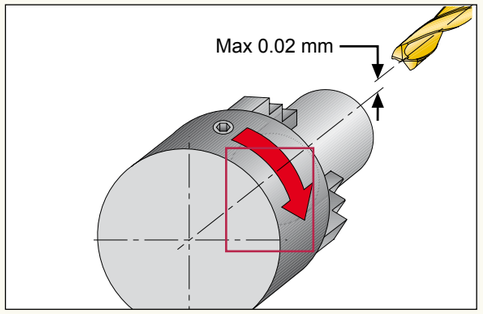
稳定性
稳定的加工工况对刀具的寿命和钻孔精度至关重要。加工前，需检查机床状况和工件的装夹，以确保最佳的工件夹持刚性和可靠性。
不稳定的切削状况，极有可能导致刀具的提前破损。

Stability
The stability of the volume of the application is important in order to obtain the best tool life and hole accuracy. Check the condition of the machine spindle, fixture and fixturing of the component to secure maximum stability and rigidity.
Unstable conditions can cause tool breakage.

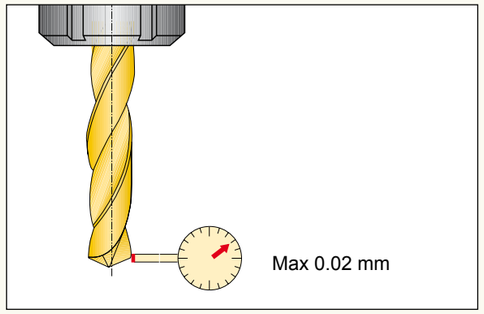
刀具寿命
当刀刃后刀面磨损超过 0.2-0.3mm 时，建议更换刀具。

Tool Life
Drills should not be used with flank wear exceeding 0.2-0.3 mm.

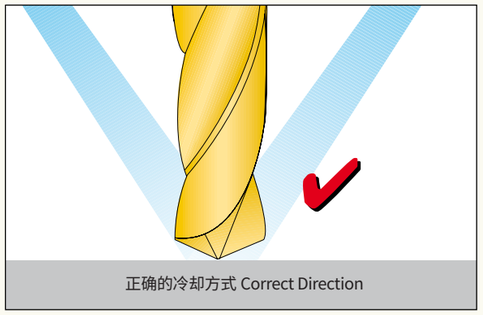




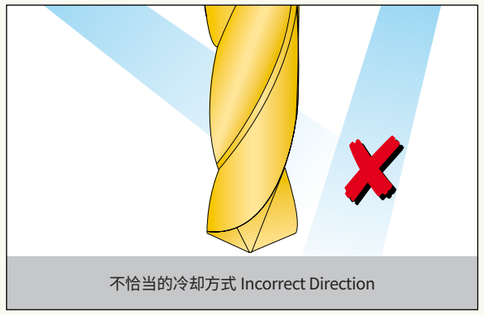
钻头不旋转 Stationary Drill



钻头旋转 Rotating Drill



外冷 External Coolant



外冷 External Coolant

工件材料表
Workpiece Material Table

材料组 ISO Material Group	Mc GEASC	工件材料 Workpiece Material	含量 Carbon Content	抗拉强度 Tensile Strength N/MM²	布氏硬度 Brinsell Hardness HB	洛氏硬度 Rockwell Hardness HRC
P 钢 Steel	P1	低碳钢，长切切屑 Mild steel, larger cutting	C<0.25%	<530	<125	
	P2	低碳钢，短切屑，易切钢 Mild steel, shorter cutting, free-cutting steel	C<0.25%	<530	<125	
	P3	高碳钢及中碳钢 High-carbon steel, medium carbon steel	C>0.25%	>530	<220	<25
	P4	合金钢，工具钢 Alloy steel, tool steel	C>0.25%	600-850	<330	<35
	P5	合金钢，工具钢 Alloy steel, tool steel	C>0.25%	850-1400	340-450	35-48
	P6	铁素体不锈钢，马氏体不锈钢，PH 不锈钢 Ferritic & Martensitic stainless steel, PH stainless steel	C=(0-0.4)%	600-900	<330	<35
	P7	高强度铁素体不锈钢，马氏体不锈钢，PH 不锈钢 High strength Ferritic stainless steel, Martensitic stainless steel, PH stainless	C=(0.1-0.6)%	900-1350	330-450	35-48
M 不锈钢 Stainless steel	M1	奥氏体不锈钢 Austenitic stainless steel	C=(0.05-0.15)%	<600	130-200	
	M2	高强度的奥氏体和铸造不锈钢 High strength austenitic & cast stainless steel	C=(0.05-0.15)%	600-800	150-230	<25
	M3	双相不锈钢 Duplex stainless steel	C=(0.05-0.20)%	<800	135-275	<30
K 铸铁 Cast iron	K1	灰铸铁 Grey cast iron		125-500	120-290	<32
	K2	中等加工难度的合金铸铁，球墨铸铁 Medium difficulty alloy steel, ductile cast iron		<600	130-260	<28
	K3	难加工的高合金铸铁，球墨铸铁 Hard-to-work high alloy cast iron, ductile cast iron		>600	180-350	<43
N 有色金属 Nonferrous metals	N1	锻造铝合金 Reflectal		<520	60-90	
	N2	铸造铝合金 Casting aluminum alloy	Si≤12%	<350	70-100	
	N3	铸造铝合金 Casting aluminum alloy	Si>12%	200-320	60-120	
	N4	铜，铜合金 Copper, copper alloy		200-650	60-200	
	N5	石墨，复合材料 Graphite, composite materials		600-1500		
	N6	铝基复合材料 Aluminum matrix composites		<700	<210	
S 耐热合金、钛合金 Heat resisting alloy, titanium alloy	S1	铁基高温合金 Iron-base superalloy		500-1200	160-260	25-48
	S2	钴基高温合金 Titanium-base superalloy		1000-1450	250-450	25-48
	S3	镍基高温合金 Nickel-base superalloy		600-1700	160-450	<48
	S4	钛及钛合金 Titanium & titanium alloy		900-1600	300-400	33-48
H 高硬度材料 Superhard material	H1	淬硬钢 Quenched steel				45-55
	H2	淬硬钢 Quenched steel				55-60
	H3	淬硬钢 Quenched steel				60-65
	H4	淬硬钢 Quenched steel				>65

根据螺纹尺寸推荐的钻头直径
Recommendation Drill Diameter Based on Thread

螺纹直径 Dia. of thread	钻头直径 Dia.of drill mm	螺距 Pitch mm	螺纹直径 Dia.of thread	钻头直径 Dia.of drill mm	螺距 Pitch mm	螺纹直径 Dia.of thread	钻头直径 Dia.of drill mm	螺距 Pitch mm
M 公制粗牙螺纹 M Metric coarse thread			UNF 美制统一细牙螺纹 UNF Fine thread			Rc 英制圆锥管螺纹 Rc Inch taper thread		
M4	3.30	0.7	UNF NO.6	3.00	40	Rc 1/8"	8.40	28
M4.5	3.70	0.75	UNF NO.8	3.50	36	Rc 1/4"	11.20	19
M5	4.20	0.8	UNF NO.10	4.10	32	Rc 3/8"	14.75	19
M6	5.00	1	UNF NO.12	4.65	28	Rc 1/2"	18.25	14
M7	6.00	1	UNF 1/4"	5.50	28	Rc 3/4"	23.75	14
M8	6.80	1.25	UNF 5/16"	6.90	24	Rc 1"	30.00	11
M9	7.80	1.25	UNF 3/8"	8.50	24	G 英制圆锥管螺纹 G Inch taper thread		
M10	8.50	1.5	UNF 7/16"	9.90	20	G 1/8"	8.80	28
M11	9.50	1.5	UNF 1/2"	11.50	20	G 1/4"	11.80	19
M12	10.20	1.75	UNF 9/16"	12.90	18	G 3/8"	15.25	19
M14	12.00	2	UNF 5/8"	14.50	18	G 1/2"	19.00	14
M16	14.00	2	UNF 3/4"	17.50	16	G 5/8"	21.00	14
M18	15.50	2.5	UNF 7/8"	20.50	14	G 3/4"	24.50	14
M20	17.50	2.5	UNF 1"	23.25	12	G 7/8"	28.25	14
M22	19.50	2.5	UNF 1-1/8"	26.50	12	G 1"	30.75	11
M24	21.00	3	UNF 1-1/4"	29.75	12	G 1-1 /4"	39.50	11
M27	24.00	3	UNF 1-3/8"	33.00	12	G 1-1 /2"	45.50	11
M30	26.50	3.5	UNF 1-1/2"	36.00	12	G 1-3 /4"	51.40	11
M33	29.50	3.5	UNF 美制统一粗牙螺纹 UNF Coarse Thread			G 2"	57.20	11
M36	32.00	4	UNC NO.6	2.85	32	NPT 60° 全牙形锥管螺纹 NPT 60 Taper thread		
M39	35.00	4	UNC NO.8	3.50	32	NPT 1/16"	6.10	27
M42	37.50	4.5	UNC NO.10	3.90	24	NPT 1/8"	8.50	27
M45	40.50	4.5	UNC NO.12	4.50	24	NPT 1/4"	11.00	18
M48	43.00	5	UNC 1/4"	5.20	20	NPT 3/8"	14.50	18
M52	47.00	5	UNC 5/16"	6.60	18	NPT 1/2"	17.80	14
M 公制挤压螺纹 M Metric extrusion thread			UNC 3/8"	8.00	16	NPT 3/4"	23.00	14
M4	3.70	0.7	UNC 7/16"	9.40	14	NPT 1 "	29.00	11-1 / 2
M5	4.63	0.8	UNC 1/2"	10.75	13	NPT 1-1 /4"	37.50	11-1 / 2
M6	5.50	1	UNC 9/16"	12.25	12	NPT 1-1 /2"	44.00	11-1 / 2
M7	6.51	1	UNC 5/8"	13.50	11	NPT 2 "	56.00	11-1 / 2
M8	7.40	1.25	UNC 3/4"	16.50	10	NPTF 60° 全牙形锥管螺纹 NPTF 60 Taper thread		
M10	9.25	1.5	UNC 7/8"	19.50	9	NPTF 1/16"	6.00	27
M12	11.12	1.75	UNC 1"	22.25	8	NPTF 1/8"	8.40	27
M14	13.00	2	UNC 1-1/8"	25.00	7	NPTF 1/4"	10.90	18
M16	15.00	2	UNC 1-1/4"	28.25	7	NPTF 3/8"	14.25	18
M 公制红牙螺纹 M metric thread			UNC 1-3/8"	31.00	6	NPTF 1/2"	17.75	14
钻头直径＝丝锥直径 - 螺距 Dia of drill= Dia of tap - Pitch			UNC 1-1/2"	34.00	6	NPTF 3/4"	23.00	14
			UNC 1-3/4"	39.50	5	NPTF 1 "	29.00	11-1 / 2
			UNC 2"	45.25	4-1/2	NPTF 1-1 /4"	37.75	11-1 / 2
						NPTF 1-1 /2"	43.74	11-1 / 2
						NPTF 2 "	55.75	11-1 / 2





F
车削刀具
TURNING TOOLS

普通车削
General Turning

外圆车削刀具
External Turning Tool Series

正型外圆车刀 F7
Positive External Turning Tool

负型外圆车刀 F32
Negative External Turning Tool

内孔车削刀具
Boring Bar Series

正型内孔车刀 F53
Positive Internal Turning Tool

负型内孔车刀 F88
Negative Internal Turning Tool

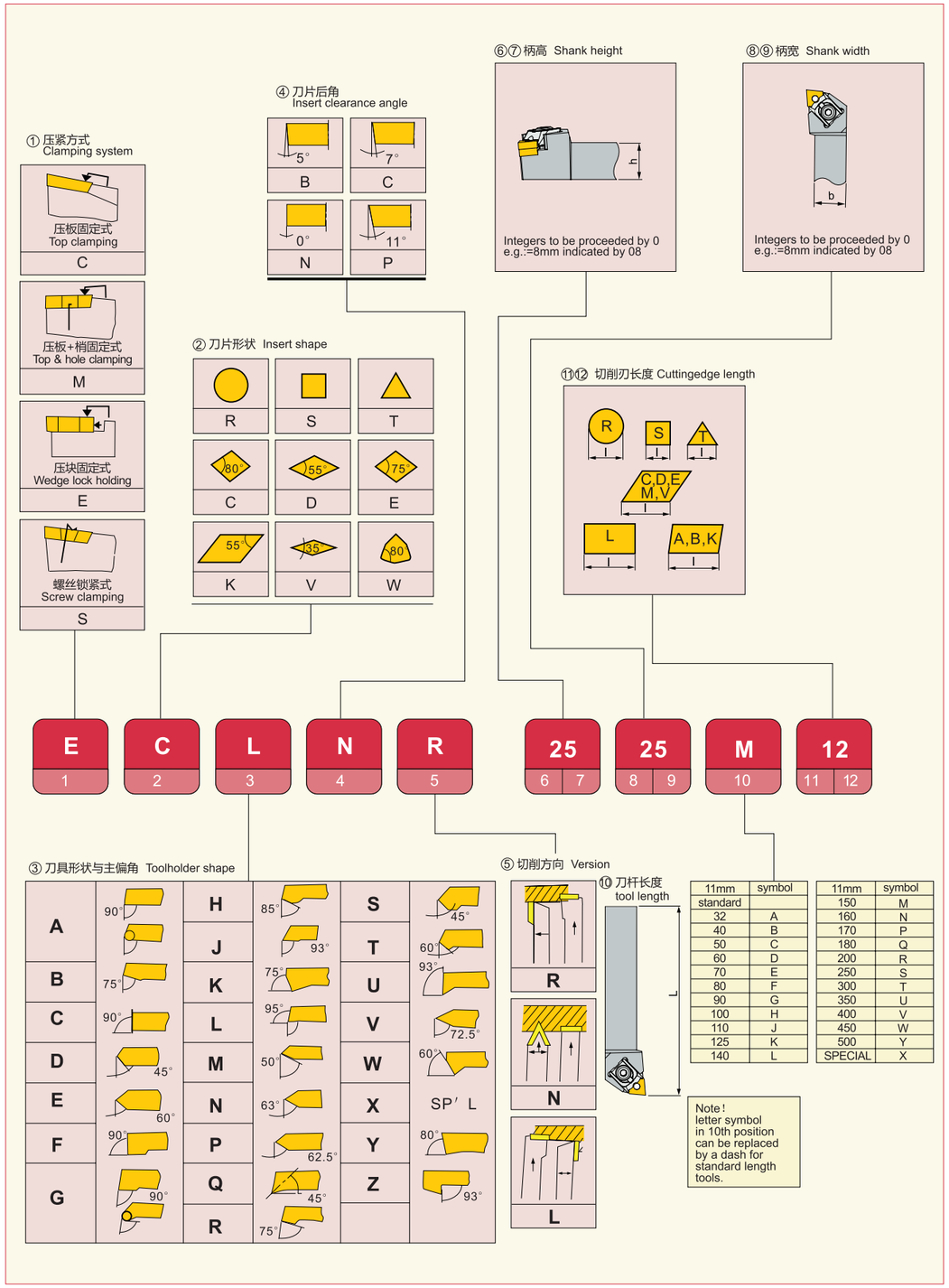
内孔车刀定位座 F102
Position Holder

套筒 F103
Sleeve

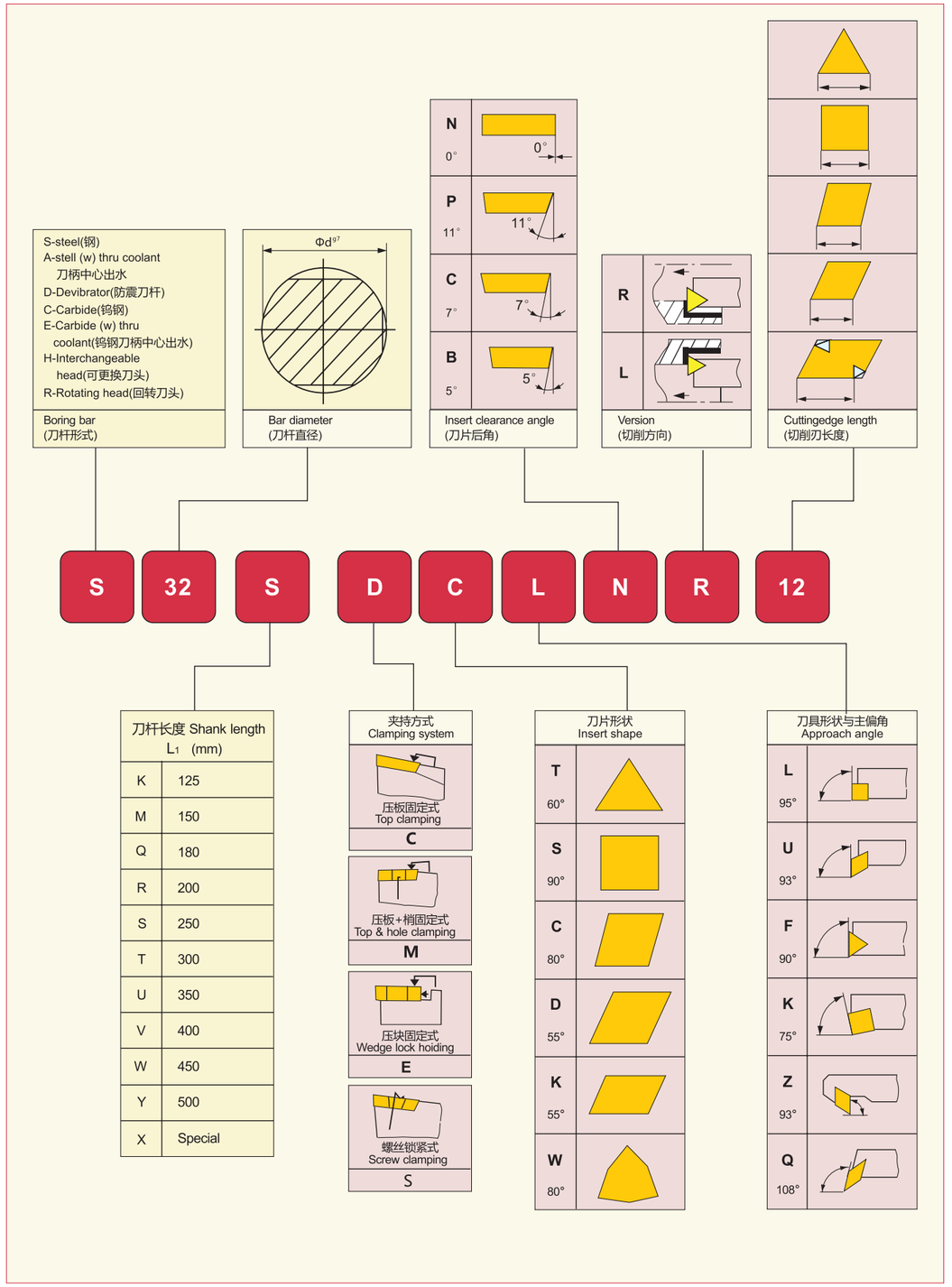
车刀片
Inserts for Turning

车刀片 F105
Inserts for Turning

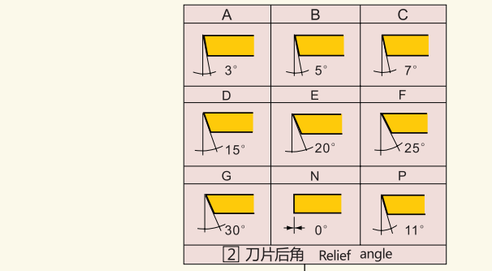
ISO DESIGNATION KEY FOR EXTERNAL TURNING T00L
外圆车刀杆识别系统



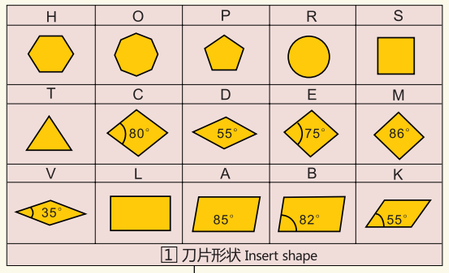
ISO DESIGNATION KEY FOR BORING BAR
内圆车刀杆识别系统



ISO DESIGNATION KEY FOR INDEXABLE INSERT
刀片识别系统



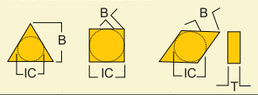
2 刀片后角 Relief angle



1 刀片形状 Insert shape

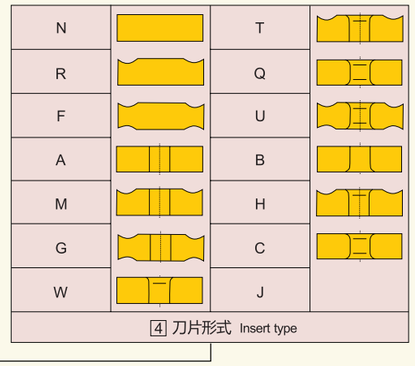
Tolerances

Ic: theoretical diameter of the insert inseribed circle
T: thickness
B: see figure below



tolerance class	tolerance on "IC"		tolerance on "B"		tolerance on "T"	
	in	mm	in	mm	in	mm
C	±0.010	±0.025	±0.0005	±0.013	±0.001	±0.025
H	±0.005	±0.013	±0.0005	±0.013	±0.001	±0.025
E	±0.010	±0.025	±0.0010	±0.025	±0.001	±0.025
G	±0.010	±0.025	±0.0010	±0.025	±0.005	±0.13
M	See tables at right		See tables at right		±0.005	±0.13
U	See tables at right		See tables at right		±0.005	±0.13

3 公差等级 Toterance



4 刀片形式 Insert type

inch	C	N	M	G	—	4	3	2	□	□	□
(Metric)	C	N	M	G		12	04	08	□	□	□
Position	1	2	3	4		5	6	7	8	9	10

切削刃长度 5 尺寸 Size

Inch	IC		Metric Cutting edge length						
	In	mm	C	D	R	S	T	V	W
1.2 (5)	5/22	3.97	–	04	03	03	06	–	–
1.5 (6)	3/16	4.76	04	05	04	04	08	08	–
1.8 (7)	7/22	5.56	05	06	05	05	09	09	03
–	0.236	6.00	–	–	06	–	–	–	–
2	1/4	6.35	06	07	06	06	11	11	04
2.5	5/16	7.94	08	09	07	07	13	13	05
–	0.315	8.00	–	–	08	–	–	–	–
3	3/8	9.52	09	11	09	09	16	16	06
–	0.394	10.00	–	–	10	–	–	–	–
3.5	1/16	11.11	11	13	11	11	19	19	07
–	0.472	12.00	–	–	12	–	–	–	–
4	1/2	12.70	12	15	12	12	22	22	08
4.5	9/16	14.29	14	17	14	14	24	24	09
5	5/8	15.88	16	19	15	15	27	27	10
–	0.630	16.00	–	–	16	–	–	–	–
5.5	11/16	17.46	17	21	17	17	30	30	11
6	3/4	19.05	19	23	19	19	33	33	13
–	0.787	20.00	–	–	20	–	–	–	–
7	7/8	22.22	22	27	22	22	38	38	15
–	0.984	25.00	–	–	25	–	–	–	–
8	1	25.40	25	31	25	25	44	44	17
10	1-1/4	31.75	32	31	38		54	54	21
–	1.260	32.00	–	–	32	–	–	–	–

NOTE: Inch sizes in parenthesis for "altermate sizes" D or E (under 1/4 inch IC.)

6 刀片厚度 Thickness

Thickness		Symbol	
in	mm	inch	metric
1/32	0.79	0.5(1)	–
1/16	1.59	1(2)	01
5/64	1.98	1.2	T1
3/32	2.38	1.5(3)	02
1/8	3.18	2	03
5/32	3.97	2.5	T3
3/16	4.76	3	04
7/32	5.56	3.5	05
1/4	6.35	4	06
5/16	7.94	5	07
3/8	9.52	6	09
7/16	11.11	7	11
1/2	12.70	8	12

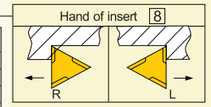
NOTE: Inch sizes in parenthesis for "altermate sizes" D or E (under 1/4 inch IC.)

7 刀片圆角 Corner Radius

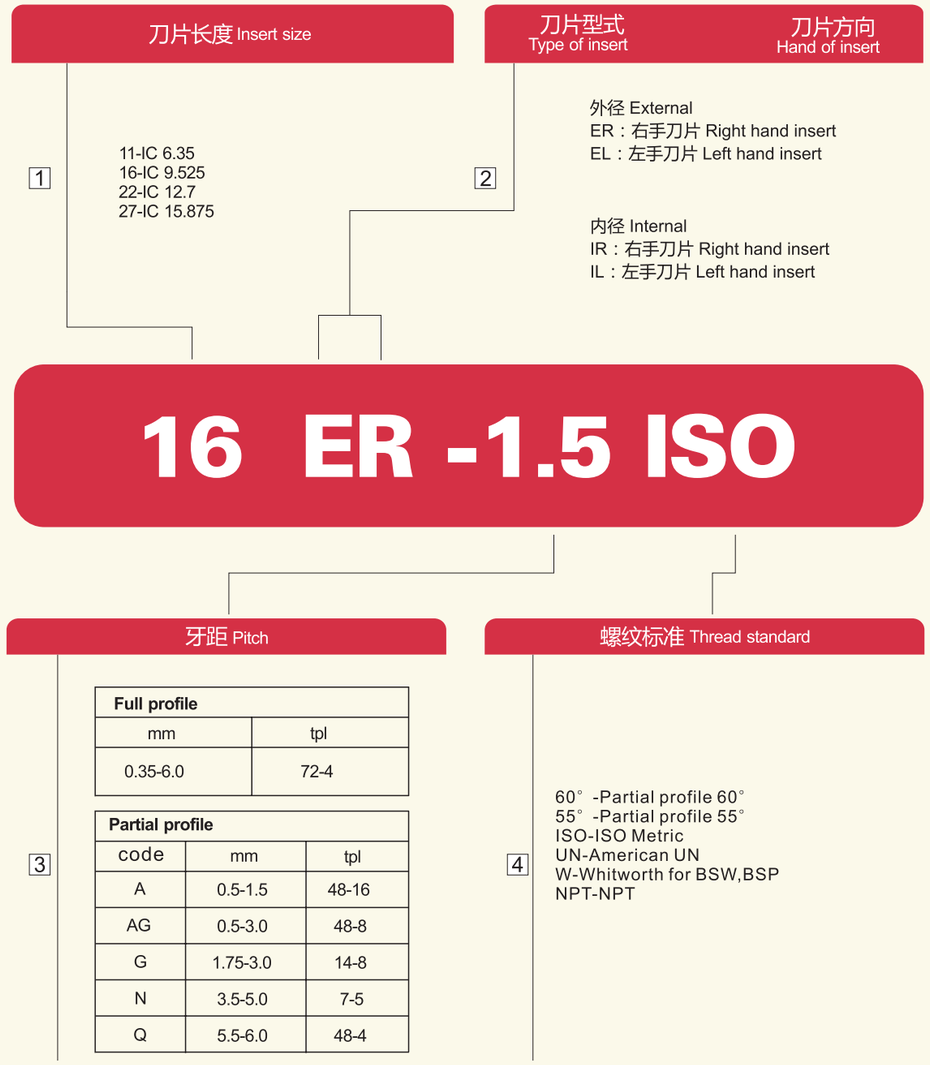
Corner radius		symbol	
in	mm	inch	metric
.004	0.1	0	01
.008	0.2	0.5	02
1/64	0.4	1	04
1/32	0.8	2	08
3/64	1.2	3	12
1/16	1.6	4	16
5/64	2.0	5	20
3/32	2.4	6	24
7/64	2.8	7	28
1/8	3.2	8	32
Round insert (inch)		–	00
Round insert (metric)		–	M0

9 & 10 刀刃形状及排屑槽形 Cutting edge condition & chip control

Hand of insert 8

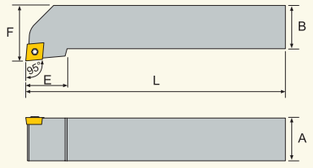


DESIGNATION KEY FOR THRFAD INSERT
螺纹刀片识别系统



SCLC 95°

CC □□刀片
外圆加工





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	16	16	CC..09T3..	●	●
SCLCR/L-1616K09	16	16	125	16	20	CC..09T3..	●	●
SCLCR/L-2020K09	20	20	125	22	25	CC..09T3..	●	●
SCLCR/L-2525M09	25	25	150	22	32	CC..09T3..	●	●
SCLCR/L-2020K12	20	20	125	30	25	CC..1204..	●	●
SCLCR/L-2525M12	25	25	150	22	32	CC..1204..	●	●

- 订货示例：1 件 SCLCR-0808K06
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC SCLCR-0808K06
- Insert should be ordered separately, please see page F105-F114

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

● 标准库存
Item in stock

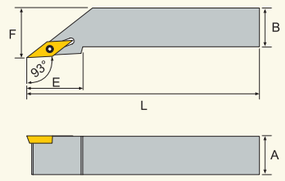
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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

SVJB 93°

VB □□刀片
外圆加工





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	20	20	VB..1103..	●	●
SVJBR/L-2020K11	20	20	125	22	25	VB..1103..	●	●
SVJBR/L-2525M11	25	25	150	30	32	VB..1103..	●	●
SVJBR/L-1616K16	16	16	125	30	20	VB..1604..	●	●
SVJBR/L-2020K16	20	20	125	39	25	VB..1604..	●	●
SVJBR/L-2525M16	25	25	150	42	32	VB..1604..	●	●

- 订货示例：1 件 SVJBR-1010K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC SVJBR-1010K11
- Insert should be ordered separately, please see page F105-F114

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-2525M11	CS25	T-8
SVJBR/L-1616K16	CS35	T-15
SVJBR/L-2020K16	CS35	T-15
SVJBR/L-2525M16	CS35	T-15

车削刀具 TURNING TOOLS

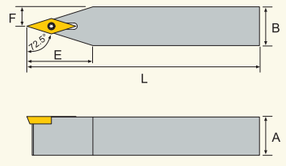
● 标准库存
Item in stock

◐ 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)

SVVB 72.5°

VB□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
SVVBN-1010K11	10	10	125	18	5	VB..1103..	●
SVVBN-1212K11	12	12	125	18	6	VB..1103..	●
SVVBN-1616K11	16	16	125	30	8	VB..1103..	●
SVVBN-2525M11	25	25	150	30	15.8	VB..1103..	●
SVVBN-2020K16	20	20	125	30	10	VB..1604..	●
SVVBN-2525M16	25	25	150	30	12.5	VB..1604..	●
SVVBN-2020M16N	20	20	150	30	19.5	VB..1604..	●

- 订货示例：1 件 SVVBN-1010K11
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC SVVBN-1010K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVVBN-1010K11	CS25	T-8
SVVBN-1212K11	CS25	T-8
SVVBN-1616K11	CS25	T-8
SVVBN-2525M11	CS25	T-8
SVVBN-2020K16	CS35	T-15
SVVBN-2525M16	CS35	T-15
SVVBN-2020M16N	CS35	T-15

● 标准库存
Item in stock

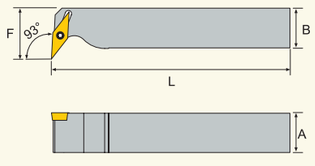
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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

SVUB 93°

VB□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
	A	B	L	F		R	L
SVUBR/L-1616K11	16	16	125	25	VB..1103..	●	●
SVUBR/L-2020K11	20	20	125	30	VB..1103..	●	●
SVUBR/L-2020K16	20	20	125	30	VB..1103..	●	●
SVUBR/L-2525M16	25	25	150	35	VB..1103..	●	●

- 订货示例：1 件 SVUBR-1616K11
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC SVUBR-1616K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVUBR/L-1616K11	CS25	T-8
SVUBR/L-2020K11	CS25	T-8
SVUBR/L-2020K16	CS35	T-15
SVUBR/L-2525M16	CS35	T-15

车削刀具 TURNING TOOLS

● 标准库存
Item in stock

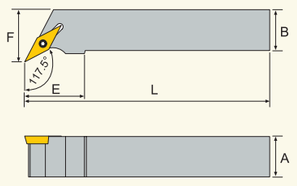
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

SVQB 117.5°

VB□□刀片 外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 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，请参照：☞ F105-F114 页
- Ordering sample: 1 PC SVQBR-1010K11
- Insert should be ordered separately, please see page F105-F114

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

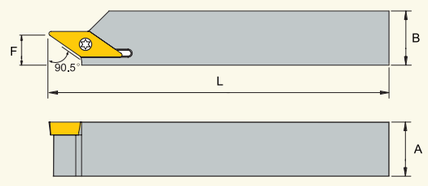
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SVKB 55°

VB□□刀片 外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
	A	B	L	F		R	L
SVKBR/L-1010K11	10	10	125	9	VB..1103..	●	●
SVKBR/L-1212K11	12	12	125	9	VB..1103..	●	●
SVKBR/L-1616K11	16	16	125	9	VB..1103..	●	●
SVKBR/L-2020K11	20	20	125	9	VB..1103..	●	●
SVKBR/L-2020K16	20	20	125	12	VB..1604..	●	●
SVKBR/L-2525M16	25	25	150	12	VB..1604..	●	●
SVKBR/L-1616K16	16	16	125	9	VB..1604..	●	●

- 订货示例：1 件 SVKBR-1010K11 或 SVKBL-1010K11
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC SVKBR-1010K11
- Insert should be ordered separately, please see page F105-F114

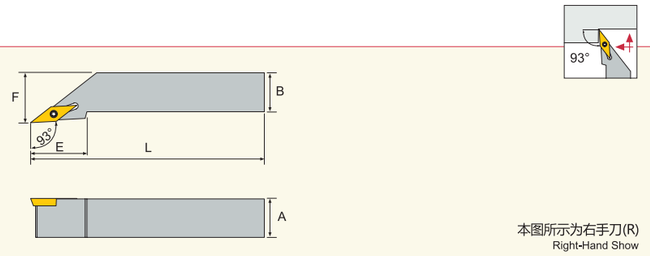
备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVKBR/L-1010K11	CS25	T-8
SVKBR/L-1212K11	CS25	T-8
SVKBR/L-1616K11	CS25	T-8
SVKBR/L-2020K11	CS25	T-8
SVKBR/L-2020K16	CS35	T15
SVKBR/L-2525M16	CS35	T15
SVKBR/L-1616K16	CS35	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)

SVJC 93°

VC□□刀片 外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 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	22	25	VC..1103..	●	●
SVJCR/L-1616K16	16	16	125	30	20	VC..1604..	●	●
SVJCR/L-2020K16	20	20	125	40	25	VC..1604..	●	●
SVJCR/L-2525M16	25	25	150	40	32	VC..1604..	●	●

- 订货示例：1 件 SVJCR-1010K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC SVJCR-1010K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

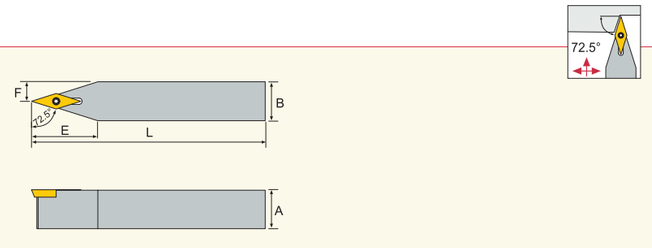
规格型号 Designation	螺钉 Screw	扳手 Wrench
SVJCR/L-1010K11	CS25	T-8
SVJCR/L-1212K11	CS25	T-8
SVJCR/L-1616K11	CS25	T-8
SVJCR/L-2020K11	CS25	T-8
SVJCR/L-1616K16	CS35	T-15
SVJCR/L-2020K16	CS35	T-15
SVJCR/L-2525M16	CS35	T-15

● 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

SVVC 72.5°

VC□□刀片 外圆加工



规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
SVVCN-1010K11	10	10	125	18	5	VC..1103..	●
SVVCN-1212K11	12	12	125	18	6	VC..1103..	●
SVVCN-1616K11	16	16	125	30	8	VC..1103..	●
SVVCN-2525M11	25	25	150	35	12.5	VC..1103..	●
SVVCN-2020K16	20	20	125	30	10	VC..1604..	●
SVVCN-2525M16	25	25	150	30	12.5	VC..1604..	●

- 订货示例：1 件 SVVCN-1010K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC SVVCN-1010K11
- Insert should be ordered separately, please see page F105-F114

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-2525M11	CS25	T-8
SVVCN-2020K16	CS35	T-15
SVVCN-2525M16	CS35	T-15

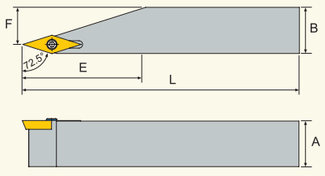
车削刀具 TURNING TOOLS

● 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)

SVVC 72.5°

VC□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
SVVCR-2020K11	20	20	125	30	16	VC..1103..	●
SVVCR-2525M11	25	25	150	25	21	VC..1103..	●
SVVCR-2020K16	20	20	125	30	5	VC..1604..	●
SVVCR-2525M16	25	25	150	30	20	VC..1604..	●

- 订货示例：1 件 SVVCR-2020K16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC SVVCR-2020K16
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 wrench
SVVCR-2020K11	CS25	T-8
SVVCR-2525M11	CS25	T-8
SVVCR-2020K16	CS35	T-15
SVVCR-2525M16	CS35	T-15

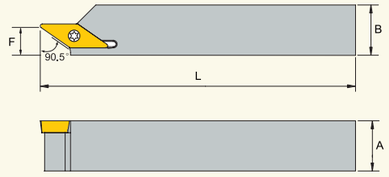
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SVKC 55°

VC□□刀片
外圆加工





规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
SVKCR/L-1010K11	10	10	125	14	9	VC..1103..	○
SVKCR/L-1212K11	12	12	125	15	9	VC..1103..	●
SVKCR/L-1616K11	16	16	125	15	9	VC..1103..	●
SVKCR/L-2020K11	20	20	125	15	9	VC..1103..	●
SVKCR/L-2525M11	25	25	150	30	12	VC..1103..	○
SVKCR/L-1616K16	16	16	125	15	9	VC..1604..	●
SVKCR/L-2020K16	20	20	125	25	9	VC..1604..	●
SVKCR/L-2525M16	25	25	150	25	12	VC..1604..	●

- 订货示例：1 件 SVKCR/L-1010K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC SVKCR/L-1010K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

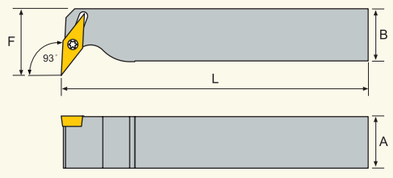
规格型号 Designation	螺钉 Screw	扳手 Wrench
SVKCR/L-1010K11	CS25	T-8
SVKCR/L-1212K11	CS25	T-8
SVKCR/L-1616K11	CS25	T-8
SVKCR/L-2020K11	CS25	T-8
SVKCR/L-2525M11	CS25	T-8
SVKCR/L-1616K16	CS35	T-15
SVKCR/L-2020K16	CS35	T-15
SVKCR/L-2525M16	CS35	T-15

● 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)

SVUC 93°

VC□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
	A	B	L	F		R	L
SVUCR/L-1616K11	16	16	125	25	VC..1103..	●	●
SVUCR/L-2020K11	20	20	125	30	VC..1103..	●	●
SVUCR/L-2020K16	20	20	125	30	VC..1604..	●	●
SVUCR/L-2525M16	25	25	150	35	VC..1604..	●	●

- 订货示例：1 件 SVUCR/L-1616K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC SVUCR/L-1616K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 wrench
SVUCR/L-1616K11	CS25	T-8
SVUCR/L-2020K11	CS25	T-8
SVUCR/L-2020K16	CS35	T-15
SVUCR/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)

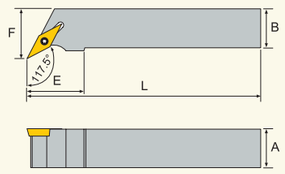
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

SVQC 117.5°

VC□□刀片
外圆加工





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，请参照：☞F105-F114 页
- Ordering sample: 1 PC SVQCR-1010K11
- Insert should be ordered separately, please see page F105-F114

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

车削刀具 TURNING TOOLS

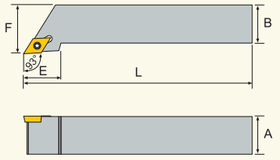
● 标准库存
Item in stock

◐ 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)

SDJC 93°

DC □□刀片
外圆加工



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	22	25	DC..11T3..	●	●
SDJCR/L-2525M11	25	25	150	22	32	DC..11T3..	●	●

- 订货示例：1 件 SDJCR-0808K07
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC SDJCR-0808K07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

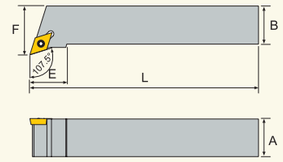
规格型号 Designation	螺钉 Screw	扳手 Wrench
SDJCR/L-0808K07	CS25	T-8
SDJCR/L-1010K07	CS25	T-8
SDJCR/L-1212K07	CS25	T-8
SDJCR/L-1212K11	CS35	T-15
SDJCR/L-1616K11	CS35	T-15
SDJCR/L-2020K11	CS35	T-15
SDJCR/L-2525M11	CS35	T-15

● 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

SDQC 107.5°

DC □□刀片
外圆加工



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，请参照：☞ F105-F114 页
- Ordeting sample: 1 PC SDQCR-1010K07
- Insert should be ordered separately, please see page F105-F114

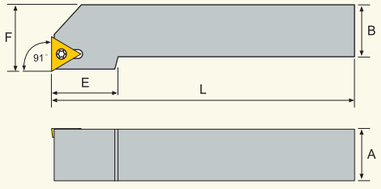
备件
Spare Parts

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	CS35	T-15
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)

STFC 91°

TC □□刀片 外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
STFCR/L-1212K11	12	12	125	14	16	TC..1102..	●	●
STFCR/L-1616K11	16	16	125	14	20	TC..1102..	●	●
STFCR/L-2020K16	20	20	125	30	25	TC..16T3..	●	●
STFCR/L-2525M16	25	25	150	30	32	TC..16T3..	●	●

- 订货示例：1 件 STFCR/L-1212K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordeting sample: 1 PC STFCR/L-1212K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

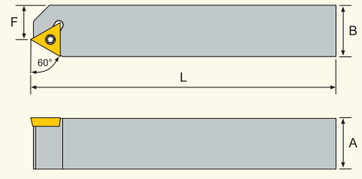
规格型号 Designation	螺钉 Screw	扳手 Wrench
STFCR/L-1212K11	CS25	T-8
STFCR/L-1616K11	CS25	T-8
STFCR/L-2020K16	CS40	T-15
STFCR/L-2525M16	CS40	T-15

● 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

STEC 60°

TC □□刀片 外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
	A	B	L	F		R	L
STECR/L-2020K11	20	20	125	14.5	TC..1102..	●	●
STECR/L-2525M11	25	25	150	19.5	TC..1102..	●	●
STECR/L-2020K16	20	20	125	12	TC..16T3..	●	●
STECR/L-2525M16	25	25	150	17	TC..16T3..	●	●

- 订货示例：1 件 STECR/L-2020K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordeting sample: 1 PC STECR/L-2020K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

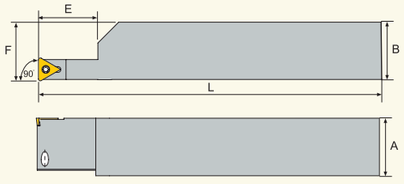
规格型号 Designation	螺钉 Screw	扳手 Wrench
STECR/L-2020K11	CS25	T-8
STECR/L-2525M11	CS25	T-8
STECR/L-2020K16	CS40	T-15
STECR/L-2525M16	CS40	T-15

● 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

STFP 90°

TP □□刀片 外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
STFPR/L-2525M09-R40	25	25	150	25	26	TP..0902..	●	●
STFPR/L-2525M11-R40	25	25	150	25	26	TP..1103..	●	●
STFPR/L-3232P11-R40	32	32	170	25	31	TP..1103..	●	●

- 订货示例：1 件 STFPR/L-2525M09-R40
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordeting sample: 1 PC STFPR/L-2525M09-R40
- Insert should be ordered separately, please see page F105-F114

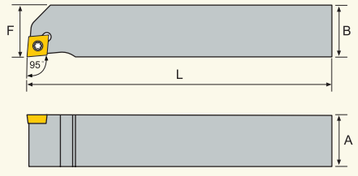
备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
STFPR/L-2525M09-R40	CS25	T-8
STFPR/L-2525M11-R40	CS30	T-10
STFPR/L-3232P11-R40	CS30	T-10

EXTERNAL TURNING TOOL FOR SWISS TYPE MACHINE TOOL
走心式外圆车削刀具

SCLC-N 95°

CC □□刀片 外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
	A	B	L	F		R	L
SCLCR/L-0808K06N	8	8	125	8	CC..0602..	●	●
SCLCR/L-1010K06N	10	10	125	10	CC..0602..	●	●
SCLCR/L-1212K09N	12	12	125	12	CC..09T3..	●	●
SCLCR/L-1616K09N	16	16	125	16	CC..09T3..	●	●

- 订货示例：1 件 SCLCR/L-0808K06N
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordeting sample: 1 PC SCLCR/L-0808K06N
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SCLCR/L-0808K06N	CS25	T-8
SCLCR/L-1010K06N	CS25	T-8
SCLCR/L-1212K09N	CS35	T-15
SCLCR/L-1616K09N	CS35	T-15

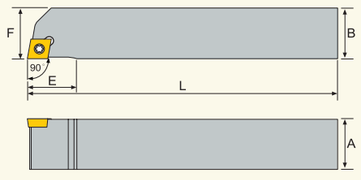
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

● 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)

SCAC-N 90°

CC□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SCACR/L-0808K06N	8	8	125	14	8	CC..0602..	●	●
SCACR/L-1010K06N	10	10	125	10	10	CC..0602..	●	●
SCACR/L-1212K09N	12	12	125	13	12	CC..09T3..	●	●

- 订货示例：1 件 SCACR/L-0808K06N
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordeting sample: 1 PC SCACR/L-0808K06N
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SCACR/L-0808K06N	CS25	T-8
SCACR/L-1010K06N	CS25	T-8
SCACR/L-1212K09N	CS35	T-15

● 标准库存
Item in stock

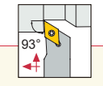
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

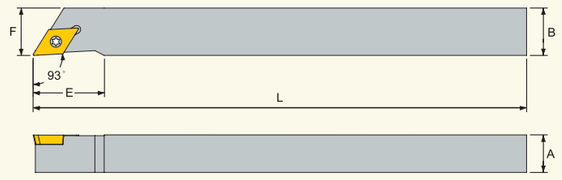
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL FOR SWISS TYPE MACHINE TOOL
走心式外圆车削刀具

SDJC-N 93°

DC□□刀片
外圆加工





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/L-1010K07N
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordeting sample: 1 PC SDJCR/L-1010K07N
- Insert should be ordered separately, please see page F105-F114

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

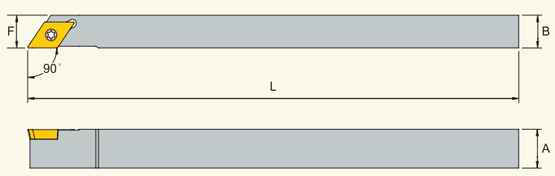
● 标准库存
Item in stock

◐ 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)

SDAC-N 90°

DC□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
	A	B	L	F		R	L
SDACR/L-0808K07N	8	8	125	8	DC..0702..	●	●
SDACR/L-1010K07N	10	10	125	10	DC..0702..	●	●
SDACR/L-1212K07N	12	12	125	12	DC..0702..	●	●
SDACR/L-1212K11N	12	12	125	12	DC..11T3..	●	●
SDACR/L-1616K11N	16	16	125	16	DC..11T3..	●	●

- 订货示例：1 件 SDACR/L-0808K07N
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordeting sample: 1 PC SDACR/L-0808K07N
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SDACR/L-0808K07N	CS25	T-8
SDACR/L-1010K07N	CS25	T-8
SDACR/L-1212K07N	CS25	T-8
SDACR/L-1212K11N	CS35	T-15
SDACR/L-1616K11N	CS35	T-15

● 标准库存
Item in stock

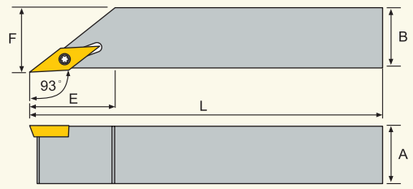
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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 FOR SWISS TYPE MACHINE TOOL
走心式外圆车削刀具

SVJB-N 93°

VB□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SVJBR/L-1010K11N	10	10	125	18	10	VB..1103..	●	●
SVJBR/L-1212K11N	12	12	125	18	12	VB..1103..	●	●
SVJBR/L-1616K11N	16	16	125	30	16	VB..1103..	●	●
SVJBR/L-1616K16N	16	16	125	30	16	VB..1604..	●	●

- 订货示例：1 件 SVJBR/L-1010K11N
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordeting sample: 1 PC SVJBR/L-1010K11N
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVJBR/L-1010K11N	CS25	T-8
SVJBR/L-1212K11N	CS25	T-8
SVJBR/L-1616K11N	CS25	T-8
SVJBR/L-1616K16N	CS35	T-15

● 标准库存
Item in stock

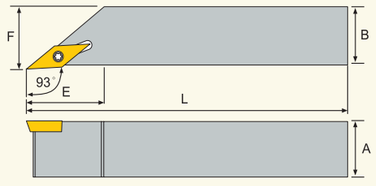
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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 FOR SWISS TYPE MACHINE TOOL
走心式外圆车削刀具

SVJC-N 93°

VC□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SVJCR/L-1010K11N	10	10	125	18	10	VC..1103..	●	●
SVJCR/L-1212K11N	12	12	125	18	12	VC..1103..	●	●
SVJCR/L-1616K11N	16	16	125	30	16	VC..1103..	●	●
SVJCR/L-1616K16N	16	16	125	30	16	VC..1604..	●	●
SVJCR/L-2020K16N	20	20	125	30	25	VC..1604..	●	●

- 订货示例：1 件 SVJCR/L-1010K11N
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordeting sample: 1 PC SVJCR/L-1010K11N
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVJCR/L-1010K11N	CS25	T-8
SVJCR/L-1212K11N	CS25	T-8
SVJCR/L-1616K11N	CS25	T-8
SVJCR/L-1616K16N	CS35	T-15
SVJCR/L-2020K16N	CS35	T-15

● 标准库存
Item in stock

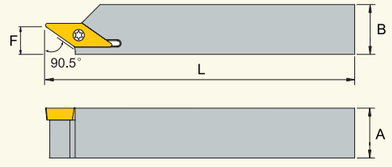
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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 FOR SWISS TYPE MACHINE TOOL
走心式外圆车削刀具

SVKB-N 55°

VB□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)				刀片 Insert	在库 Stock	
	A	B	L	F		R	L
SVKBR/L-1212K11	12	12	125	9	VB..1103..	●	●
SVKBR/L-1616K11	16	16	125	9	VB..1103..	●	●

- 订货示例：1 件 SVKBR/L-1212K11
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordeting sample: 1 PC SVKBR/L-1212K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVKBR/L-1212K11	CS25	T-8
SVKBR/L-1616K11	CS25	T-8

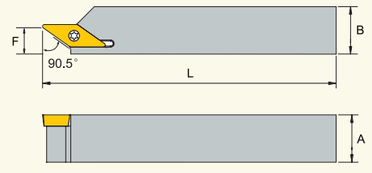
● 标准库存
Item in stock

◐ 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)

SVKC-N 55°

VC □□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SVKCR/L-1212K11	12	12	125	15	9	VC..1103..	●	●
SVKCR/L-1616K11	16	16	125	15	9	VC..1103..	●	●

- 订货示例：1 件 SVKCR/L-1212K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordeting sample: 1 PC SVKCR/L-1212K11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
SVKCR/L-1212K11	CS25	T-8
SVKCR/L-1616K11	CS25	T-8

● 标准库存
Item in stock

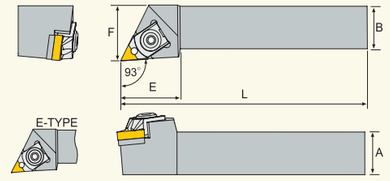
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

EXTERNAL TURNING TOOL FOR SWISS TYPE MACHINE TOOL
走心式外圆车削刀具

ETJN 93°

TN □□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ETJNR/L-1616K16	16	16	125	32	20	TN..1604..	●	●

- 订货示例：1 件 ETJNR/L-1616K16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordeting sample: 1 PC ETJNR/L-1616K16
- Insert should be ordered separately, please see page F105-F114

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 LW030

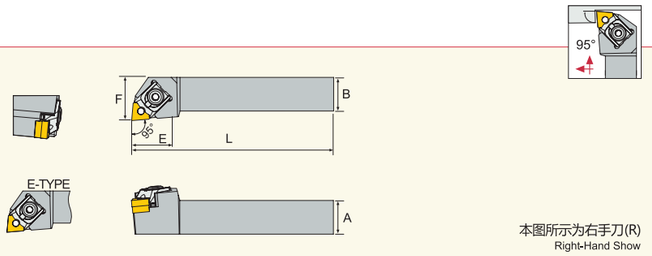
● 标准库存
Item in stock

◐ 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)

ECLN 95°

CN□□刀片
外圆加工



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	44	32	CN..1606..	●	●
ECLNR/L-3232P16	32	32	170	32	40	CN..1606..	●	●

- 订货示例：1 件 ECLNR-2020K12
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC ECLNR-2020K12
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

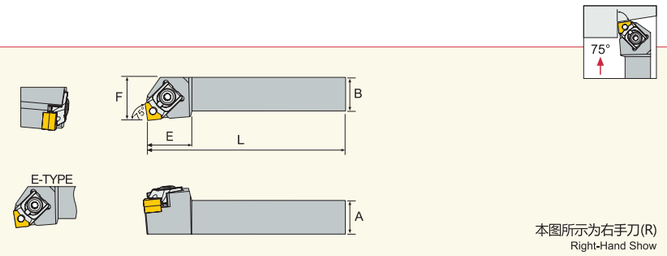
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ECLNR/L-2020K12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040
ECLNR/L-2525M12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040
ECLNR/L-3232P12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040
ECLNR/L-2525M16	SMC-416	LW-5	CN12-2	CS80	C-6	LW040
ECLNR/L-3232P16	SMC-416	LW-5	CN12-2	CS80	C-6	LW040

● 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

ECKN 75°

CN□□刀片
外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 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，请参照：☞F105-F114 页
- Ordering sample: 1 PC ECKNR-2020K12
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

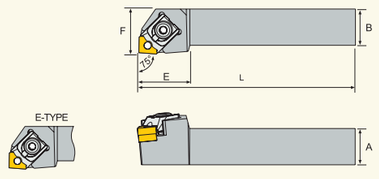
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ECKNR/L-2020K12	SMC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECKNR/L-2525M12	SMC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECKNR/L-3232P12	SMC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040

● 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)

ECRN 75°

CN □□刀片 外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 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，请参照：☞ F105-F114 页
- Ordering sample: 1 PC ECRNR-2020K12
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

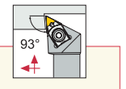
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ECRNR/L-2020K12	SMC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECRNR/L-2525M12	SMC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040
ECRNR/L-3232P12	SMC-432	LW-4	CN12-4	CS80	C-6	LW030 LW040

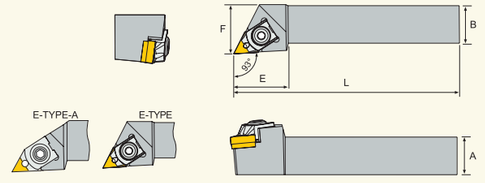
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

ETJN 93°

TN □□刀片 外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ETJNR/L-1616K16	16	16	125	32	20	TN..1604..	●	●
ETJNR/L-2020K16	20	20	125	32	25	TN..1604..	●	●
ETJNR/L-2525M16	25	25	125	32	32	TN..1604..	●	●
ETJNR/L-3232P16	32	32	170	32	40	TN..1604..	●	●
ETJNR/L-2020K16A	20	20	125	32	25	TN..1604..	●	●
ETJNR/L-2525M16A	25	25	150	32	32	TN..1604..	●	●
ETJNR/L-3232P16A	32	32	170	32	40	TN..1604..	●	●

- 订货示例：1 件 ETJNR-1616K16
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC ETJNR-1616K16
- Insert should be ordered separately, please see page F105-F114

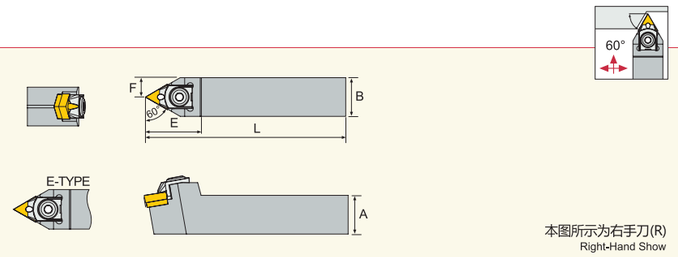
备件
Spare Parts

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 LW030
ETJNR/L-2020K16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
ETJNR/L-2525M16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
ETJNR/L-3232P16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
ETJNR/L-2020K16A	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
ETJNR/L-2525M16A	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
ETJNR/L-3232P16A	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040

● 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)

ETEN 60°

TN □□刀片
外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
ETENN-2020K16	20	20	125	32	10	TN..1604..	●
ETENN-2525M16	25	25	150	42	12.5	TN..1604..	●

- 订货示例：1 件 ETENN-2020K16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC ETENN-2020K16
- Insert should be ordered separately, please see page F105-F114

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

● 标准库存
Item in stock

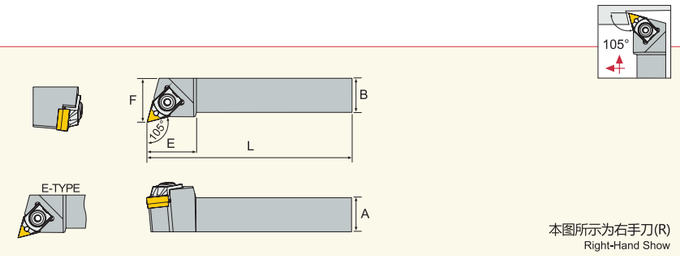
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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

ETQN 105°

TN □□刀片
外圆加工



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，请参照：☞F105-F114
- Ordering sample: 1 PC ETQNR-2020K16
- Insert should be ordered separately, please see page F105-F114

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

车削刀具 TURNING TOOLS

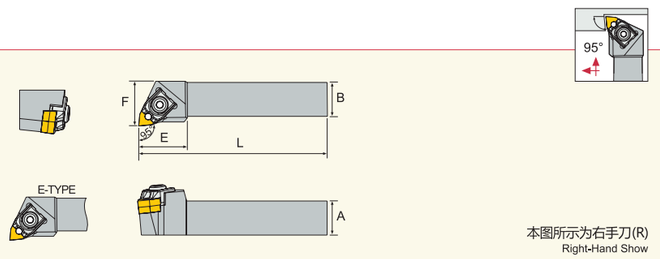
● 标准库存
Item in stock

◐ 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)

EWLN 95°

WN□□刀片
外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 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..0804..	●	●
EWLNR/L-2525M08	25	25	150	32	32	WN..0804..	●	●
EWLNR/L-3232P08	32	32	170	32	40	WN..0804..	●	●

- 订货示例：1 件 EWLNR-2020K06
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC EWLNR-2020K06
- Insert should be ordered separately, please see page F105-F114

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-422	LW-4	WN08-4	CS80	C-6	LW030 LW040
EWLNR/L-2525M08	SMW-422	LW-4	WN08-4	CS80	C-6	LW030 LW040
EWLNR/L-3232P08	SMW-422	LW-4	WN08-4	CS80	C-6	LW030 LW040

● 标准库存
Item in stock

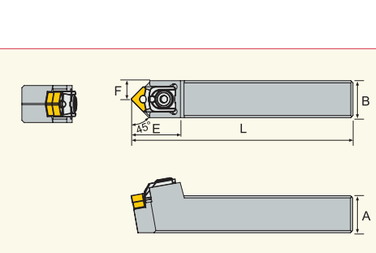
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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

ESDN 45°

SN□□刀片
外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
ESDNN-2020K12	20	20	125	48	10	SN..1204..	●
ESDNN-2525M12	25	25	150	48	12.5	SN..1204..	●
ESDNN-3232P12	32	32	170	48	16	SN..1204..	●

- 订货示例：1 件 ESDNN-2020K12
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC ESDNN-2020K12
- Insert should be ordered separately, please see page F105-F114

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-432	LW-4	SN12	CS80	C-6	LW030 LW040
ESDNN-2525M12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040
ESDNN-3232P12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040

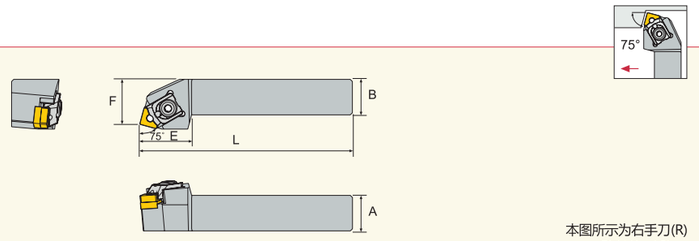
● 标准库存
Item in stock

◐ 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)

ESBN 75°

SN □□刀片 外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ESBNR/L-2020K12	20	20	125	32	25	SN..1204..	●	●
ESBNR/L-2525M12	25	25	150	32	32	SN..1204..	●	●
ESBNR/L-3232P12	32	32	170	32	40	SN..1204..	●	●

- 订货示例：1 件 ESBNR-2020K12
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC ESBNR-2020K12
- Insert shoukJ be ordered separately, please see page F105-F114

备件
Spare Parts

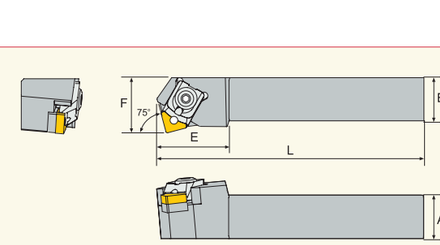
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ESBNR/L-2020K12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040
ESBNR/L-2525M12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040
ESBNR/L-3232P12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040

● 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

ESKN 75°

SN □□刀片 外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ESKNR/L-2020K12	20	20	125	32	25	SN..1204..	●	●
ESKNR/L-2525M12	25	25	150	32	32	SN..1204..	●	●
ESKNR/L-3232P12	32	32	170	32	40	SN..1204..	●	●

- 订货示例：1 件 ESKNR/L-2020K12
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC ESKNR/L-2020K12
- Insert shoukJ be ordered separately, please see page F105-F114

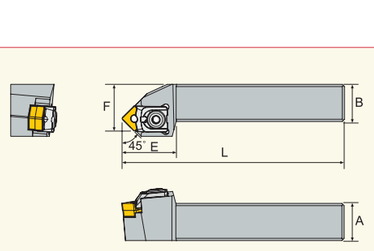
备件
Spare Parts

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
ESKNR/L-2020K12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040
ESKNR/L-2525M12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040
ESKNR/L-3232P12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040

● 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)

ESSN 45°

SN□□刀片
外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
ESSNR/L-2020K12	20	20	125	32	25	SN..1204..	●	●
ESSNR/L-2525M12	25	25	150	32	32	SN..1204..	●	●
ESSNR/L-3232P12	32	32	170	32	40	SN..1204..	●	●

- 订货示例：1 件 ESSNR-2020K12
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC ESSNR-2020K12
- Insert si'Kluld be ordered separately, please see page F105-F114

备件
Spare Parts

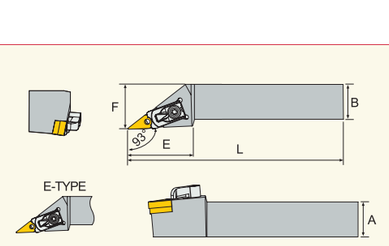
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
ESSNR/L-2020K12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040
ESSNR/L-2525M12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040
ESSNR/L-3232P12	SMS-432	LW-4	SN12	CS80	C-6	LW030 LW040

● 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

EVJN 93°

VN□□刀片
外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EVJNR/L-2020K12	20	20	125	44	25	VN..12T3..	●	●
EVJNR/L-2525M12	25	25	150	44	32	VN..12T3..	●	●
EVJNR/L-2020K16	20	20	125	44	25	VN..1604..	●	●
EVJNR/L-2525M16	25	25	150	44	32	VN..1604..	●	●
EVJNR/L-3232P16	32	32	170	47	40	VN..1604..	●	●

- 订货示例：1 件 EVJNR-2020K12
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC EVJNR-2020K12
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

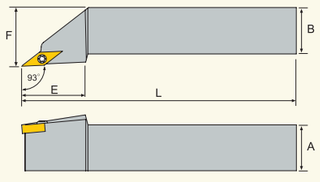
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EVJNR/L-2020K12	-	LT-1	VN12	CS60E	C-5	LW025 LW030
EVJNR/L-2525M12	-	LT-1	VN12	CS60E	C-5	LW025 LW030
EVJNR/L-2020K16	SMV-322	LW-3	VN16	CS60E	C-5	LW025 LW030
EVJNR/L-2525M16	SMV-322	LW-3	VN16	CS60E	C-5	LW025 LW030
EVJNR/L-3232P16	SMV-322	LW-3	VN16	CS60E	C-5	LW025 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)

SVJN 93°

VN□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SVJNR/L-2020K12	20	20	125	37	25	VN..12T3..	●	●
SVJNR/L-2525M12	25	25	150	37	32	VN..12T3..	●	●

- 订货示例：1 件 SVJNR-2020K12
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC SVJNR-2020K12
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 wrench
SVJNR/L-2020K12	CS30	T-10
SVJNR/L-2525M12	CS30	T-10

● 标准库存
Item in stock

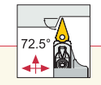
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

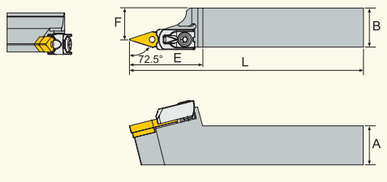
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

EVVN 72.5°

VN□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EVVNR/L-2020K16	20	20	125	48	25	VN..1604..	●	●
EVVNR/L-2525M16	25	25	150	48	32	VN..1604..	●	●

- 订货示例：1 件 EVVNR/L-2020K12
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC EVVNR/L-2020K12
- Insert should be ordered separately, please see page F105-F114

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
EVVNR-2020K16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVVNR-2525M16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

● 标准库存
Item in stock

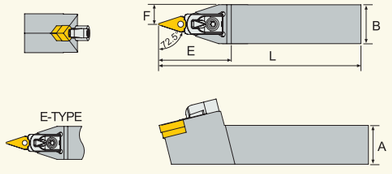
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

EVVN 72.5°

VN□□刀片
外圆加工





本图所示为右手刀(R)
Right Hend Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock
	A	B	L	E	F		
EVVNN-2020K16	20	20	125	48	10	VN..1604..	●
EVVNN-2525M16	25	25	150	48	12.5	VN..1604..	●
EVVNN-3232P16	32	32	170	48	16	VN..1604..	●

- 订货示例：1 件 EVVNN-2020K16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC EVVNN-2020K16
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

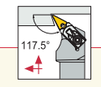
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EVVNN-2020K16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVVNN-2525M16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVVNN-3232P16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

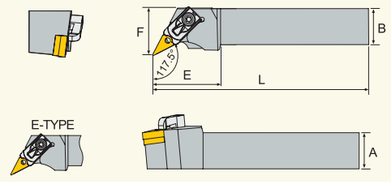
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

EXTERNAL TURNING TOOL SERIES 外圆车削刀具

EVQN 117.5°

VN□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EVQNR/L-2525M16	25	25	150	44	32	VN..1604..	●	●
EVQNR/L-3232P16	32	32	170	44	40	VN..1604..	●	●

- 订货示例：1 件 EVQNR-2525M16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC EVQNR-2525M16
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

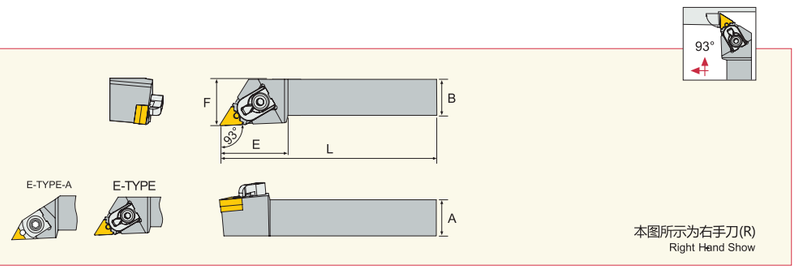
规格型号 Designation	垫片 Shim	中心销 Screw of shim	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
EVQNR/L-2525M16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030
EVQNR/L-3232P16	SMV-322	LT-3	VN16	CS60E	C-5	LW025 LW030

车削刀具 TURNING TOOLS

● 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)

EDJN 93°

DN□□刀片
外圆加工



本图所示为右手刀(R)
Right Hend Show

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	44	25	DN..1504..	●	●
EDJNR/L-2525M15	25	25	150	44	32	DN..1504..	●	●
EDJNR/L-3232P15	32	32	170	44	40	DN..1504..	●	●
EDJNR/L-2020K15A	20	20	125	44	25	DN..1506..	●	●
EDJNR/L-2525M15A	25	25	150	44	32	DN..1506..	●	●
EDJNR/L-3232P15A	32	32	170	44	40	DN..1506..	●	●

- 订货示例：1 件 EDJNR-2020K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC EDJNR-2020K11
- Insert should be ordered separately, please see page F105-F114

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	CS80	C-6	LW025 LW040
EDJNR/L-2525M15	SMD-463	LD-1	DN15	CS80	C-6	LW025 LW040
EDJNR/L-3232P15	SMD-463	LD-1	DN15	CS80	C-6	LW025 LW040
EDJNR/L-2020K15A	SMD-466	LW-4	DN15	CS80	C-6	LW025 LW040
EDJNR/L-2525M15A	SMD-466	LW-4	DN15	CS80	C-6	LW025 LW040
EDJNR/L-3232P15A	SMD-466	LW-4	DN15	CS80	C-6	LW025 LW040

● 标准库存
Item in stock

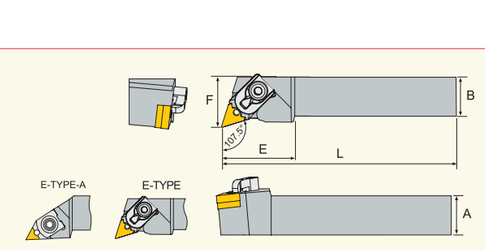
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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

EDQN 107.5°

DN□□刀片
外圆加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EDQNR/L-2020K11	20	20	125	36	25	DN..1104..	●	●
EDQNR/L-2525M11	25	25	150	36	32	DN..1104..	●	●
EDQNR/L-2525M15	25	25	150	44	32	DN..1504..	●	●
EDQNR/L-3232P15	32	32	170	44	40	DN..1504..	●	●
EDQNR/L-2525M15A	25	25	150	44	32	DN..1506..	●	●
EDQNR/L-3232P15A	32	32	170	36	40	DN..1506..	●	●

- 订货示例：1 件 EDQNR/L-2020K11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC EDQNR/L-2020K11
- Insert should be ordered separately, please see page F105-F114

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
EDQNR/L-2020K11	SMD-363	LT-3	DN11	CS60E	C-5	LW025 LW030
EDQNR/L-2525M11	SMD-363	LT-3	DN11	CS60E	C-5	LW025 LW030
EDQNR/L-2525M15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
EDQNR/L-3232P15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
EDQNR/L-2525M15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040
EDQNR/L-3232P15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040

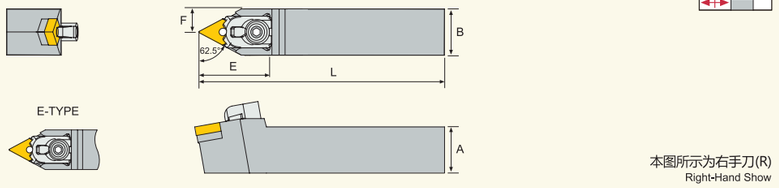
● 标准库存
Item in stock

◐ 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)

EDNN 62.5°

DN□□刀片
外圆加工





本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
EDNNN-2020K15	20	20	125	48	10	DN..1504..	●	●
EDNNN-2525M15	25	25	150	48	12.5	DN..1504..	●	●
EDNNN-3232P15	32	32	170	48	16	DN..1504..	●	●
EDNNN-2020K15A	20	20	125	48	10	DN..1506..	●	●
EDNNN-2525M15A	25	25	150	48	12.5	DN..1506..	●	●
EDNNN-3232P15A	32	32	170	48	16	DN..1506..	●	●

- 订货示例：1 件 EDNNN-2020K15
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC EDNNN-2020K15
- Insert should be ordered separately, please see page F105-F114

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
EDNNN-2020K15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
EDNNN-2525M15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
EDNNN-3232P15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
EDNNN-2020K15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040
EDNNN-2525M15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040
EDNNN-3232P15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040

● 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)

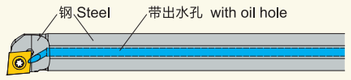


车削刀具 TURNING TOOLS

内孔刀杆
Boring bar

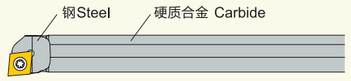
钢制刀杆（带内冷出水）
Steel shank with coolant supply

A.....



硬质合金杆
Carbide shank

C.....

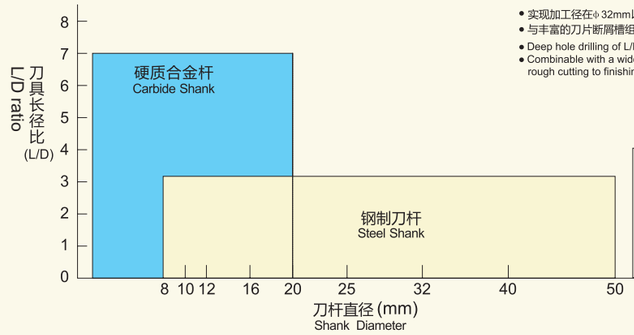


钢制刀杆
Steel shank

S.....



刀杆类型选择推荐
Recommended Shank Type Selection



- 实现加工径在φ32mm以上，L/D=6 的深孔加工。
- 与丰富的刀片断屑槽组合，广泛对应从粗~精加工
- Deep hole drilling of L/D = 6 with work diameters of φ32 mm and above.
- Combinable with a wide range of chipbreakers for use in everything from rough cutting to finishing.

切削速度	Cutting Speed Vc=20~200m/min
切　深	Depth-of-cut a_p=0.1~2.0mm
进 给 量	Feed Rate f=0.1~0.3mm/rev

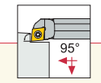
※根据被削材，刀具形状，加工条件等，可实际加工的突出量发生了变化
※Actual amount of overhang may differ according to work material, tool shape, and machining conditions.

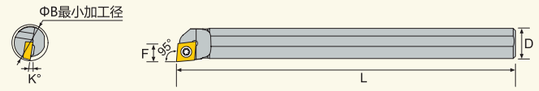
刀具材质选定
Shank Material Selection

加工方法 Application ＼ 镗刀种类 Type		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 econmical)	
	深孔加工（L/D>3） Deep hole		◎
利用修光刃刀片的高效率加工 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			◎

SCLC 95°

CC □□刀片 内圆加工





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	S08K-SCLCR/L06-09	9	8	4.5	125	15	CC..0602..	●	●
	S08K-SCLCR/L06-10	10	8	5.5	125	9	CC..0602..	●	●
	S10K-SCLCR/L06-12	12	10	6	125	12	CC..0602..	●	●
	S12M-SCLCR/L06-14	14	12	7	150	12	CC..0602..	●	●
	S16Q-SCLCR/L06-18	18	16	9	180	7	CC..0602..	●	●
	S12M-SCLCR/L09-14	14	12	7	150	7	CC..09T3..	●	●
	S12M-SCLCR/L09-16	16	12	8.5	150	13	CC..09T3..	●	●
	S14M-SCLCR/L09-16	16	14	8	150	7	CC..09T3..	●	●
	S16Q-SCLCR/L09-18	18	16	9	180	9	CC..09T3..	●	●
	S18Q-SCLCR/L09-20	20	18	10	180	7	CC..09T3..	●	●
	S20R-SCLCR/L09-22	22	20	11	200	10	CC..09T3..	●	●
	S25R-SCLCR/L09	32	25	17	200	7	CC..09T3..	●	●
	S32S-SCLCR/L09	39	32	18	250	6	CC..09T3..	●	●
	S40T-SCLCR/L09	42	40	22	300	4	CC..09T3..	●	●
	S20R-SCLCR/L12-22	22	20	12	200	8	CC..1204..	●	●
	S25R-SCLCR/L12	32	25	14	200	8	CC..1204..	●	●
	S32S-SCLCR/L12	39	32	18	250	6	CC..1204..	●	●
	S40T-SCLCR/L12	44	40	22	300	4	CC..1204..	●	●
钢（带出水孔） Steel(with oil hole)	A08K-SCLCR/L06-10	10	8	5.5	125	9	CC..0602..	●	○
	A10K-SCLCR/L06-12	12	10	6	125	12	CC..0602..	●	○
	A12M-SCLCR/L06-14	14	12	7	150	12	CC..0602..	●	○
	A16Q-SCLCR/L09-18	18	16	9	180	9	CC..09T3..	●	○
	A20R-SCLCR/L09-22	22	20	11	200	10	CC..09T3..	●	○
	A25R-SCLCR/L09	32	25	17	200	7	CC..09T3..	●	○
硬质合金 Carbide	C08K-SCLCR06-09	9	8	4.3	125	13	CC..0602..	●	○
	C08K-SCLCR/L06-10	10	8	5.5	125	9	CC..0602..	●	○
	C10M-SCLCR/L06-12	12	10	6	150	12	CC..0602..	●	○
	C12Q-SCLCR/L06-14	14	12	7	180	12	CC..0602..	●	○
	C12Q-SCLCR/L09-16	16	12	7	180	6	CC..09T3..	●	○
	C16R-SCLCR/L09-18	18	16	9	200	9	CC..09T3..	●	○
	C20S-SCLCR/L09-22	22	20	11	250	10	CC..09T3..	●	○
	C25T-SCLCR/L09	32	25	17	300	7	CC..09T3..	●	○

- 订货示例：1 件 S08K-SCLCR/L06-09
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S08K-SCLCR/L06-09
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-SCLCR/L06-09	CS25	T-8
S08K-SCLCR/L06-10	CS25	T-8
S10K-SCLCR/L06-12	CS25	T-8
S12M-SCLCR/L06-14	CS25	T-8
S16Q-SCLCR/L06-18	CS25	T-8
S12M-SCLCR/L09-14	CS35	T-15
S12M-SCLCR/L09-16	CS35	T-15
S14M-SCLCR/L09-16	CS35	T-15
S16Q-SCLCR/L09-18	CS35	T-15
S18Q-SCLCR/L09-20	CS35	T-15
S20R-SCLCR/L09-22	CS35	T-15
S25R-SCLCR/L09	CS35	T-15
S32S-SCLCR/L09	CS35	T-15
S40T-SCLCR/L09	CS35	T-15
S20R-SCLCR/L12-22	CS45	T-15
S25R-SCLCR/L12	CS45	T-15
S32S-SCLCR/L12	CS45	T-15
S40T-SCLCR/L12	CS45	T-15

规格型号 Designation	螺钉 Screw	扳手 Wrench
A08K-SCLCR/L06-10	CS25	T-8
A10K-SCLCR/L06-12	CS25	T-8
A12M-SCLCR/L06-14	CS25	T-8
A16Q-SCLCR/L09-18	CS35	T-15
A20R-SCLCR/L09-22	CS35	T-15
A25R-SCLCR/L09	CS35	T-15
C08K-SCLCR06-09	CS25	T-8
C08K-SCLCR/L06-10	CS25	T-8
C10M-SCLCR/L06-12	CS25	T-8
C12Q-SCLCR/L06-14	CS25	T-8
C12Q-SCLCR/L09-16	CS35	T-15
C16R-SCLCR/L09-18	CS35	T-15
C20S-SCLCR/L09-22	CS35	T-15
C25T-SCLCR/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)

SCZC 93°



CC □□刀片
内圆加工



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	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，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S08K-SCZCR06
- Insert should be ordered separately, please see page F105-F114

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

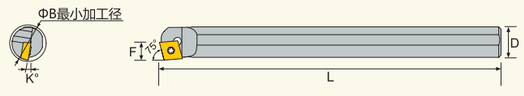
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

SCKC 75°



CC □□刀片
内圆加工



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	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	9	180	7	CC..09T3..	●	●
	S20R-SCKCR/L09-22	22	20	11	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，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S08K-SCKCR06-10
- Insert should be ordered separately, please see page F105-F114

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

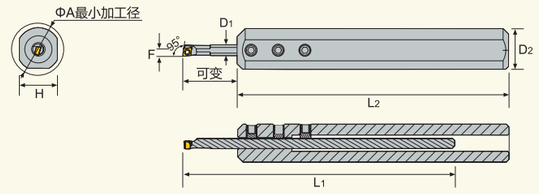
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SCLC 95°



CC □□刀片
内圆加工

小径内孔车刀
Mini Boring Bar



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	
		ΦA	D_1	H	L_1	L_2	F	D_2		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 C04G-SCLCR03-05
- 刀片需单独订购，请参照：☞ F105-F114 页
- 套筒需另购，请参照：☞ F103-F104 页
- Ordering sample: 1 PC C04G-SCLCR03-05
- Insert should be ordered separately, please see page F105-F114
- Sleeve please see Page F103-F104

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

● 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)

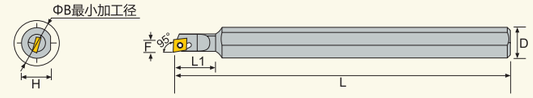
BORING BAR SERIES 内孔车削刀具

SCLC 95°



CC □□刀片
内圆加工

小径内孔车刀
Mini Boring Bar



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	L	L_1	H	F		R	L
钢 Steel	S0807K-SCLCR/L06	8	8	125	27	7	4	CC..0602..	●	○
	S1004K-SCLCR/L03	5	10	125	12	10	2.4	CC..0301..	●	○
	S1204H-SCLCR/L03	5	12	100	9	11	2.5	CC..0301..	●	○
	S1206K-SCLCR/L04	7	12	125	15	11	3.5	CC..0401..	●	○
	S1607K-SCLCR/L06-08	8	16	125	15	15	4	CC..0602..	●	○
	S1608K-SCLCR/L06-09	9	16	125	15	15	4.5	CC..0602..	●	○
	S1609K-SCLCR/L06-10	10	16	125	15	15	5	CC..0602..	●	○
	S1610K-SCLCR/L06-12	12	16	125	15	15	6	CC..0602..	●	○

- 订货示例：1 件 S1004K-SCLCR03
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S1004K-SCLCR03
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S0807K-SCLCR/L06	CS25	T-8
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

车削刀具 TURNING TOOLS

● 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)

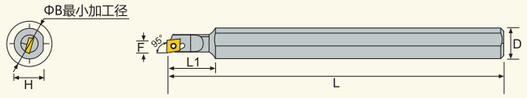
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SET-SCLC 95°



CC □□刀片
内圆加工

小径内孔车刀
Mini Boring Bar



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	d	L	L_1	F	H		R	L
钢（带出水孔） Steel(with oil hole)	A0608H-SCLCR/L06	10	8	6	100	25	4	7	CC..0602..	●	●
	A0810J-SCLCR/L06	12	10	8	110	32	6	9	CC..0602..	●	●
	A1012K-SCLCR/L06	14	12	10	125	38	7	11	CC..0602..	●	●
	A1216M-SCLCR/L06	18	16	12	150	50	9	15	CC..0602..	●	●

- 订货示例：1 件 A0608H-SCLCR06
- 刀片需单独订购，请参照：☞ F105-F114 页
- 规格型号后带有 *，为组合套装
- Ordering sample: 1 PC A0608H-SCLCR06
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

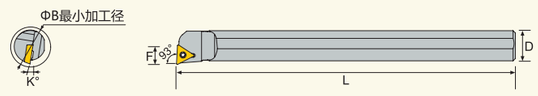
规格型号 Designation	螺钉 Screw	扳手 Wrench
A0608H-SCLCR/L06	CS25	T-8
A0810J-SCLCR/L06	CS25	T-8
A1012K-SCLCR/L06	CS25	T-8
A1216M-SCLCR/L06	CS25	T-8

● 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)

STUC 93°



TC □□刀片
内圆加工



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	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 carbide	C08K-STUCR/L09-10	10	8	5.5	125	12	TC..0902..	●	○
	C10M-STUCR/L09-12	12	10	6	150	15	TC..0902..	●	○
	C10M-STUCR/L11-12	12	10	6	150	15	TC..1102..	●	○
	C12Q-STUCR/L11-14	14	12	7	180	10	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，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S08K-STUCR09-10
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

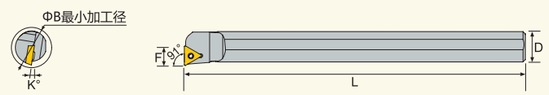
规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-STUCR/L09-10	CS22	T-7
S10K-STUCR/L09-12	CS22	T-7
S10K-STUCR/L11-12	CS25	T-8
S12M-STUCR/L11-14	CS25	T-8
S14M-STUCR/L11-16	CS25	T-8
S16Q-STUCR/L11-18	CS25	T-8
S20R-STUCR/L11-22	CS25	T-8
S20R-STUCR/L16-22	CS35	T-15
S25R-STUCR/L16	CS35	T-15
S32S-STUCR/L16	CS35	T-15
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)

STFC 91°



TC □□刀片 内圆加工



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	S08K-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	12	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..	●	●
硬质合金 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..	●	○
	A10K-STFCR/L11-12	12	10	6	125	12	TC..1102..	●	○
	A12M-STFCR/L11-14	14	12	7	150	10	TC..1102..	●	○
	A16Q-STFCR/L11-18	18	16	9	180	6	TC..1102..	●	○

- 订货示例：1 件 S08K-STFCR09-10
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S08K-STFCR09-10
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

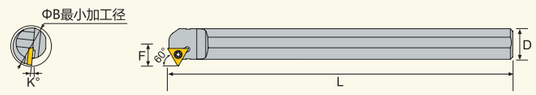
规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-STFCR/L09-10	CS22	T-7
S10K-STFCR/L09-12	CS22	T-7
S12M-STFCR/L09-14	CS22	T-7
S10K-STFCR/L11-12	CS25	T-8
S12M-STFCR/L11-14	CS25	T-8
S16Q-STFCR/L11-18	CS25	T-8
S20R-STFCR/L11-22	CS25	T-8
S20R-STFCR/L16-22	CS35	T-15
S25R-STFCR/L16	CS35	T-15
C08K-STFCR/L09-10	CS22	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
A10K-STFCR/L11-12	CS25	T-8
A12M-STFCR/L11-14	CS25	T-8
A16Q-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)

STWC 60°



TB/TC □□刀片 内圆加工



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	S0806K-STWBR/L06	7	8	10	125	7	TB..0601..	●	●
	S08K-STWCR/09	11	8	6.5	125	15	TC..0902..	●	●
	S10K-STWCR/09	12	10	6	125	15	TC..0902..	●	●
	S10K-STWCR/11	12	10	7.5	125	15	TC..1102..	●	●
	S12M-STWCR/11	16	12	7	150	13	TC..1102..	●	●
	S16Q-STWCR/11	20	16	9	180	10	TC..1102..	●	●
	S20R-STWCR/11	25	20	13	200	7	TC..1102..	●	●
	S25R-STWCR/16	30	25	17	200	7	TC.16T3..	●	●
	S32S-STWCR/16	40	32	20	250	6	TC..16T3..	●	●
	S40T-STWCR/16	48	40	24	300	0	TC.16T3..	●	●

- 订货示例：1 件 S0806K-STWBR06
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S0806K-STWBR06
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S0806K-STWBR/L06	CS20	T-6
S08K-STWCR/09	CS22	T-7
S10K-STWCR/09	CS22	T-7
S10K-STWCR/11	CS25	T-8
S12M-STWCR/11	CS25	T-8
S16Q-STWCR/11	CS25	T-8
S20R-STWCR/11	CS25	T-8
S25R-STWCR/16	CS35	T-15
S32S-STWCR/16	CS35	T-15
S40T-STWCR/16	CS35	T-15

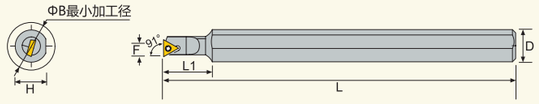
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SET-STFC 91°



TC □□刀片 内圆加工

小径内孔车刀
Mini Boring Bar



本图所示为右手刀(R)
Right-Hand Show

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	L1	F	H		R	L
钢（带出水孔） Steel(with oil hole)	A0810J-STFCR/L11	14	7	8	110	32	7	9	TC..1102..	●	●
	A1012K-STFCR/L11	18	9	10	125	38	9	11	TC..1102..	●	●
	A1216M-STFCR/L11	22	11	12	150	50	11	15	TC..1102..	●	●
	A1016SET-STFCR/L*	A0810J-STFCR11*1, A1012K-STFCR11*1, A1216M-STFCR11*1							CS25*6, T-8*1		

- 订货示例：1 件 A0810J-STFCR11
- 刀片需单独订购，请参照：☞ F105-F114 页
- 规格型号后带有 *，为组合套装
- Ordering sample: 1 PC A0810J-STFCR11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
A0810J-STFCR/L11	CS25	T-8
A1012K-STFCR/L11	CS25	T-8
A1216M-STFCR/L11	CS25	T-8

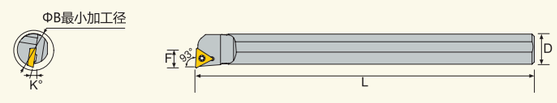
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

STUP 93°



TB/TP □□刀片 内圆加工



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	S08K-STUBR/L06-08	8	8	4	125	12	TB..0601..	●	●
	S08K-STUBR/L06-09	9	8	4.5	125	15	TB..0601..	●	○
	S08K-STUPR/L08-10	10	8	5.5	125	10	TP..0802..	●	●
	S08K-STUPR/L09-10	10	8	5.5	125	10	TP..0902..	●	●
	S10K-STUPR/L09-12	12	10	6	125	8	TP..0902..	●	●
	S12M-STUPR/L09-14	14	12	7	150	5	TP..0902..	●	●
	S10K-STUPR/L11-12	12	10	6	125	8	TP..1103..	●	●
	S12M-STUPR/L11-14	14	12	7	150	7	TP..1103..	●	●
	S14M-STUPR/L11-16	16	14	8.5	150	6	TP..1103..	●	●
	S16Q-STUPR/L11-18	18	16	9	180	4	TP..1103..	●	●
	S18Q-STUPR/L11-20	20	18	10	180	4	TP..1103..	●	●
	S20R-STUPR/L11-22	22	20	11	200	2	TP..1103..	●	●
	S25R-STUPR/L11-28	28	25	14	200	5	TP..1103..	●	●
硬质合金 Carbide	C08K-STUPR/L08-10	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..	●	○
	C10M-STUPR/L11-12	12	10	6	150	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..	●	○
钢（带出水孔） Steel(with oil hole)	A08K-STUPR/L09-10	10	8	5.5	125	10	TP..0902..	●	●
	A10K-STUPR/L09-12	12	10	6	125	8	TP..0902..	●	○
	A12M-STUPR/L09-14	14	12	7	150	5	TP..0902..	●	●
	A12M-STUPR/L11-14	14	12	7	150	7	TP..1103..	●	●
	A16Q-STUPR/L11-18	18	16	9	180	4	TP..1103..	●	●
	A20R-STUPR/L11-22	22	20	11	200	2	TP..1103..	●	●

- 订货示例：1 件 S08K-STUBR/L06-08
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sarrpla: 1 PC S08K-STUBR/L06-08
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-STUBR/L06-08	CS20	T-6
S08K-STUBR/L06-09	CS20	T-6
S08K-STUPR/L08-10	CS22	T-7
S08K-STUPR/L09-10	CS25	T-8
S10K-STUPR/L09-12	CS25	T-8
S12M-STUPR/L09-14	CS25	T-8
S10K-STUPR/L11-12	CS30	T-10
S12M-STUPR/L11-14	CS30	T-10
S14M-STUPR/L11-16	CS30	T-10
S16Q-STUPR/L11-18	CS30	T-10
S18Q-STUPR/L11-20	CS30	T-10
S20R-STUPR/L11-22	CS30	T-10
S25R-STUPR/L11-28	CS30	T-10

规格型号 Designation	螺钉 Screw	扳手 Wrench
C08K-STUPR/L08-10	CS22	T-7
C08K-STUPR/L09-10	CS25	T-8
C10M-STUPR/L09-12	CS25	T-8
C12Q-STUPR/L09-14	CS25	T-8
C10M-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
A12M-STUPR/L11-14	CS30	T-10
A16Q-STUPR/L11-18	CS30	T-10
A20R-STUPR/L11-22	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)

车削刀具 TURNING TOOLS

STFP 91°



TP□□刀片
内圆加工



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-STFPR/L09-12	12	10	6	125	8	TP..0902..	●	●
	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..	●	●
	S20R-STFPR/L11-22	22	20	11	200	4	TP..1103..	●	●
硬质合金 Carbide	C08K-STFPR/L09-10	10	8	5	125	8	TP..0902..	●	○
	C10M-STFPR/L11-12	12	10	6	150	9	TP..1103..	●	○
	C12Q-STFPR/L11-14	14	12	7	180	8	TP..1103..	●	○

- 订货示例：1 件 S10K-STFPR/L09-12
- 刀片需单独订购，请参照：F105-F114 页
- Ordering sample: 1 PC S10K-STFPR/L09-12
- Insert should b& ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-STFPR/L09-12	CS25	T-8
S10K-STFPR/L11-12	CS30	T-10
S12M-STFPR/L11-14	CS30	T-10
S16Q-STFPR/L11-18	CS30	T-10
S20R-STFPR/L11-22	CS30	T-10
C08K-STFPR/L09-10	CS25	T-8
C10M-STFPR/L11-12	CS30	T-10
C12Q-STFPR/L11-14	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)

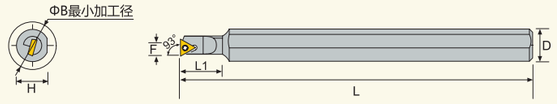
BORING BAR SERIES 内孔车削刀具

STUP 93°



TP□□刀片
内圆加工

小径内孔车刀
Mini Boring Bar



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	L_1	H		R	L
钢 Steel	S1609J-STUPR/L08-10	10	16	5	110	15	15	TP..0802..	●	●
	S1610K-STUPR/L11-12	12	16	6	120	15	15	TP..1103..	●	●

- 订货示例：1 件 S1609J-STUPR08-10
- 刀片需单独订购，请参照：F105-F114 页
- Ordering sample: t PC S1609J-STUPR08-10
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S1609J-STUPR/L08-10	CS22	T-7
S1610K-STUPR/L11-12	CS30	T-10

车削刀具 TURNING TOOLS

● 标准库存
Item in stock

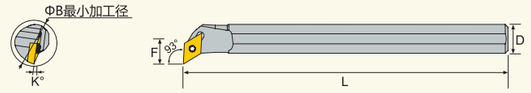
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

SDUC 93°



DC □□刀片 内圆加工



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-SDUCR/L07	13	10	7	125	9	DC..0702..	●	●
	S12M-SDUCR/L07	16	12	9	150	8	DC..0702..	●	●
	S16Q-SDUCR/L07	20	16	11	180	6	DC..0702..	●	●
	S16Q-SDUCR/L11	20	16	11	180	6	DC..11T3..	●	●
	S20R-SDUCR/L11	25	20	13	200	8	DC..11T3..	●	●
	S25R-SDUCR/L11	32	25	17	200	6	DC..11T3..	●	●
	S32S-SDUCR/L11	39	32	20	250	4	DC..11T3..	●	●
	S40T-SDUCR/L11	45	40	24	300	2	DC..11T3..	●	●
	S50U-SDUCR/L11	64	50	32	350	6	DC..11T3..	●	●
硬质合金 Carbide	C10M-SDUCR/L07	13	10	7	150	9	DC..0702..	●	○
	C12Q-SDUCR/L07	16	12	9	180	8	DC..0702..	●	○
	C16R-SDUCR/L07	20	16	11	200	6	DC..0702..	●	○
	C20S-SDUCR/L11	25	20	13	250	8	DC..11T3..	●	○
	C25T-SDUCR/L11	32	25	17	300	4	DC..11T3..	●	○
钢（带出水孔） Steel□with oil hole□	A10K-SDUCR/L07	13	10	7	125	10	DC..0702..	●	○
	A12M-SDUCR/L07	16	12	9	150	8	DC..0702..	●	○
	A16Q-SDUCR/L07	20	16	11	180	6	DC..0702..	●	○
	A16Q-SDUCR/L11	20	16	11	180	6	DC..11T3..	●	○
	A20R-SDUCR/L11	25	20	13	200	8	DC..11T3..	●	○

- 订货示例：1 件 S10K-SDUCR/L07
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S10K-SDUCR/L07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

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
S16Q-SDUCR/L11	CS35	T-15
S20R-SDUCR/L11	CS35	T-15
S25R-SDUCR/L11	CS35	T-15
S32S-SDUCR/L11	CS35	T-15
S40T-SDUCR/L11	CS35	T-15
S50U-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
A16Q-SDUCR/L11	CS35	T-15
A20R-SDUCR/L11	CS35	T-15

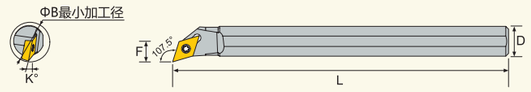
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

SDQC 107.5°



DC □□刀片 内圆加工



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-SDQCR/L07	13	10	7	125	10	DC..0702..	●	●
	S12M-SDQCR/L07	16	12	9	150	8	DC..0702..	●	●
	S16Q-SDQCR/L07	20	16	11	180	5	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	17	200	4	DC..11T3..	●	●
	S32S-SDQCR/L11	39	32	20	250	4	DC..11T3..	●	●
硬质合金 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..	●	○
	C16R-SDQCR/L11	20	16	11	200	6	DC..11T3..	●	●
	C20S-SDQCR/L11	25	20	13	250	8	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..	●	○
	A16Q-SDQCR/L11	20	16	11	180	6	DC..11T3..	●	○

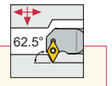
- 订货示例：1 件 S10K-SDQCR/L07
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S10K-SDQCR/L07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

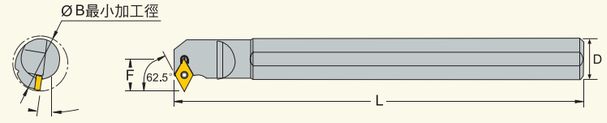
规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SDQCR/L07	CS25	T-8
S12M-SDQCR/L07	CS25	T-8
S16Q-SDQCR/L07	CS25	T-8
S16Q-SDQCR/L11	CS35	T-15
S20R-SDQCR/L11	CS35	T-15
S25R-SDQCR/L11	CS35	T-15
S32S-SDQCR/L11	CS35	T-15
C10M-SDQCR/L07	CS25	T-8
C12Q-SDQCR/L07	CS25	T-8
C16R-SDQCR/L07	CS25	T-8
C16R-SDQCR/L11	CS35	T-15
C20S-SDQCR/L11	CS35	T-15
A10K-SDQCR/L07	CS25	T-8
A12M-SDQCR/L07	CS25	T-8
A16Q-SDQCR/L07	CS25	T-8
A16Q-SDQCR/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)

SDWC 62.5°



DC □□刀片
内圆加工



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	S12M-SDWCR/L07	19	12	10.5	150	10	DC..0702..	●	●
	S16Q-SDWCR/L07	23	16	12.5	180	8	DC..0702..	●	●
	S20R-SDWCR/L07	27	20	14.5	200	6	DC..0702..	●	●
	S20R-SDWCR/L11	27	20	14.5	200	6	DC..11T3..	●	●
	S25R-SDWCR/L11	32	25	17	200	4	DC..11T3..	●	●
	S32S-SDWCR/L11	40	32	20	250	2	DC..11T3..	●	●

- 订货示例：1 件 S12M-SDWCR/L07
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S12M-SDWCR/L07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S12M-SDWCR/L07	CS25	T-8
S16Q-SDWCR/L07	CS25	T-8
S20R-SDWCR/L07	CS25	T-8
S20R-SDWCR/L11	CS35	T-15
S25R-SDWCR/L11	CS35	T-15
S32S-SDWCR/L11	CS35	T-15

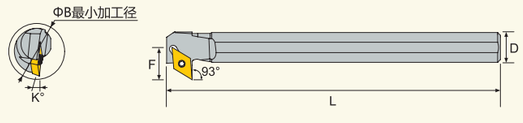
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

SDZC 93°



DC □□刀片
内圆加工



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-SDZCR/L07	15	10	8.5	125	12	DC..0702..	●	●
	S12M-SDZCR/L07	17	12	10.5	150	9	DC..0702..	●	●
	S16Q-SDZCR/L07	21	16	12.5	180	8	DC..0702..	●	●
	S20R-SDZCR/L11	26	20	16.5	200	8	DC..11T3..	●	●
	S25R-SDZCR/L11	32	25	19	200	6	DC..11T3..	●	●
	S32S-SDZCR/L11	39	32	22.5	250	4	DC..11T3..	●	●
	S40T-SDZCR/L11	47	40	26.5	300	4	DC..11T3..	●	●

- 订货示例：1 件 S10K-SDZCR/L07
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S10K-SDZCR/L07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

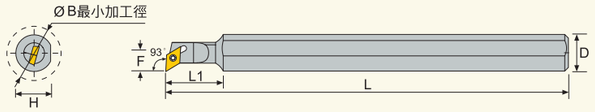
规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SDZCR/L07	CS25	T-8
S12M-SDZCR/L07	CS25	T-8
S16Q-SDZCR/L07	CS25	T-8
S20R-SDZCR/L11	CS35	T-15
S25R-SDZCR/L11	CS35	T-15
S32S-SDZCR/L11	CS35	T-15
S40T-SDZCR/L11	CS35	T-15

● 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)

SDUC 95°

DC □□刀片
内圆加工





本图所示为右手刀(R)
Right-Hand Show

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	L1	F	H		R	L
钢（带出水孔） Steel(with oil hole)	A0810J-SDUCR/L07	12.5	10	8	110	22	5	9	DC..0702..	●	●
	A1012K-SDUCR/L07	15.5	12	10	125	28	9	11	DC..0702..	●	●
	A1216M-SDUCR/L07	19.5	16	12	150	36	5	15	DC..0702..	●	●
	A1016SET-SDUCR/L	A0810J-SDUCR07*1, A1012K-SDUCR07*1,A1216M-SDUCR07*1, CS25*6, T-8*1									

- 订货示例：1 件 A0810J-SDUCR/L07
- A1016SET-SDUCR/L 为组合套装
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC A0810J-SDUCR/L07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
A0810J-SDUCR/L07	CS25	T-8
A1012K-SDUCR/L07	CS25	T-8
A1216M-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)

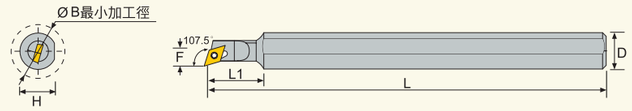
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

SDQC 107.5°

DC □□刀片
内圆加工





本图所示为右手刀(R)
Right-Hand Show

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	L1	F	H		R	L
钢（带出水孔） Steel(with oil hole)	A0810J-SDQCR/L07	14	10	8	110	22	7	9	DC..0702..	●	●
	A1012K-SDQCR/L07	18	12	10	125	28	9	11	DC..0702..	●	●
	A1216M-SDQCR/L07	22	16	12	150	36	11	15	DC..0702..	●	●
	A1016SET-SDQCR/L	A0810J-SDQCR07*1, A1012K-SDQCR07*1,A1216M-SDQCR07*1, CS25*6, T-8*1									

- 订货示例：1 件 A0810J-SDQCR/L07
- A1016SET-SDQCR/L 为组合套装
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC A0810J-SDQCR/L07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
A0810J-SDQCR/L07	CS25	T-8
A1012K-SDQCR/L07	CS25	T-8
A1216M-SDQCR/L07	CS25	T-8

车削刀具 TURNING TOOLS

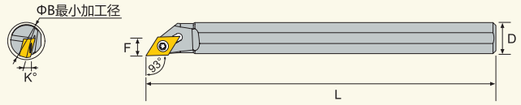
● 标准库存
Item in stock

◐ 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)

SDJC 93°

DC □□刀片 内圆加工



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	S08K-SDJCR/L07	10	8	5	125	10	DC..0702..	●	●
	S10K-SDJCR/L07	12	10	6	125	13	DC..0702..	●	●
	S12M-SDJCR/L07	14	12	7	150	12	DC..0702..	●	●
	S16Q-SDJCR/L07	19	16	9	180	12	DC..0702..	●	●
	S16Q-SDJCR/L11	19	16	9	180	12	DC..11T3..	●	●
	S20R-SDJCR/L11	24	20	10.5	200	10	DC..11T3..	●	●
	S25R-SDJCR/L11	30	25	13.5	200	8	DC..11T3..	●	●

- 订货示例：1 件 S08K-SDJCR07
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S08K-SDJCR07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

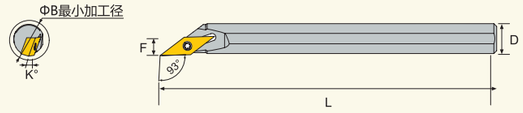
规格型号 Designation	螺钉 Screw	扳手 Wrench
S08K-SDJCR/L07	CS25	T-8
S10K-SDJCR/L07	CS25	T-8
S12M-SDJCR/L07	CS25	T-8
S16Q-SDJCR/L07	CS25	T-8
S16Q-SDJCR/L11	CS35	T-15
S20R-SDJCR/L11	CS35	T-15
S25R-SDJCR/L11	CS35	T-15

● 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 内孔车削刀具

SVJC 93°

VC □□刀片 内圆加工



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-SVJCR/L11	12	10	6	125	13	VC..1103..	●	●
	S12M-SVJCR/L11	14	12	7	150	15	VC..1103..	●	●
	S16Q-SVJCR/L11	18	16	9	180	14	VC..1103..	●	●
	S20R-SVJCR/L11	25	20	10.5	180	10	VC..1103..	●	●
	S16Q-SVJCR/L16	18	16	9	180	14	VC..1604..	●	●
	S20R-SVJCR/L16	25	20	10.5	200	10	VC..1604..	●	●
	S25R-SVJCR/L16	32	25	13.5	200	7	VC..1604..	●	●
	S32S-SVJCR/L16	40	32	17	250	7	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，请参照：☞F105-F114 页
- Ordering sample: 1 PC S10K-SVJCR11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

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

车削刀具 TURNING TOOLS

● 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)

SVUC 93°

VC □□刀片
内圆加工





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-SVUCR/L11	22	16	13	180	10	VC..1103..	●	●
	S20R-SVUCR/L11	27	20	15	200	10	VC..1103..	●	●
	S25R-SVUCR/L11	33	25	17	200	8	VC..1103..	●	●
	S25R-SVUCR/L16	33	25	20	200	8	VC..1604..	●	●
	S32S-SVUCR/L16	44	32	22	250	10	VC..1604..	●	●
	S32T-SVUCR/L16	44	32	22	300	10	VC..1604..	●	●
	S40T-SVUCR/L16	54	40	27	300	8	VC..1604..	●	●

- 订货示例：1 件 S16Q-SVUCR11
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S16Q-SVUCR11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

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
S32S-SVUCR/L16	CS35	T-15
S32T-SVUCR/L16	CS35	T-15
S40T-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)

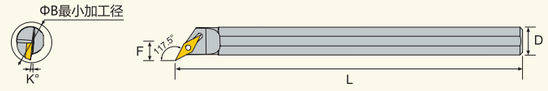
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

SVQC 117.5°

VC □□刀片
内圆加工





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-SVQCR/L11	20	16	11	180	10	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..	●	●
	S32S-SVQCR/L16	40	32	14	250	5	VC..1604..	●	●
	S40T-SVQCR/L16	54	40	27	300	7	VC..1604..	●	●

- 订货示例：1 件 S16Q-SVQCR11
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S16Q-SVQCR11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

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
S32S-SVQCR/L16	CS35	T-15
S40T-SVQCR/L16	CS35	T-15

车削刀具 TURNING TOOLS

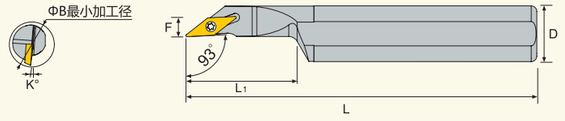
● 标准库存 Item in stock

◐ 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)

FSVJC 93°

VC □□刀片 内圆加工





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	L_1	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..	●	●

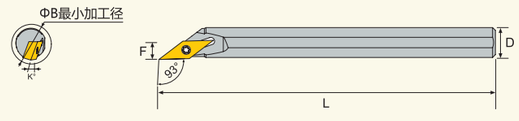
- 订货示例：1 件 S16K-FSVJCR11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S16K-FSVJCR11
- Insert should be ordered separately, please see page F105-F114

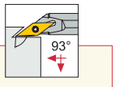
备件
Spare Parts

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

SVJB 93°

VB □□刀片 内圆加工





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	VB..1103..	●	●
	S12M-SVJBR/L11	14	12	7	150	10	VB..1103..	●	●
	S16Q-SVJBR/L11	18	16	9	180	14	VB..1103..	●	●
	S20R-SVJBR/L11	25	20	10.5	200	10	VB..1103..	●	●
	S16Q-SVJBR/L16	18	16	9	180	7	VB..1604..	●	●
	S20R-SVJBR/L16	25	20	9	200	7	VB..1604..	●	●
	S25R-SVJBR/L16	32	25	11	200	7	VB..1604..	●	●
	S32S-SVJBR/L16	40	32	14	250	5	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，请参照：☞F105-F114 页
- Ordering sample: 1 PC S10K-SVJBR11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S10K-SVJBR/L11	CS25	T-8
S12M-SVJBR/L11	CS25	T-8
S16Q-SVJBR/L11	CS25	T-8
S20R-SVJBR/L11	CS25	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

● 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)

车削刀具 TURNING TOOLS

SVUB 93°



VB □□刀片
内圆加工



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	13	180	10	VB..1103..	●	●
	S20R-SVUBR/L11	27	20	15	200	10	VB..1103..	●	●
	S25R-SVUBR/L11	33	25	20	200	8	VB..1103..	●	●
	S25R-SVUBR/L16	33	25	17	200	5	VB..1604..	●	●
	S32S-SVUBR/L16	44	32	22	250	10	VB..1604..	●	●
	S40T-SVUBR/L16	51	40	27	300	8	VB..1604..	●	●

- 订货示例：1 件 S16Q-SVUBR11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S16Q-SVUBR11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S16Q-SVUBR/L11	CS25	T-8
S20R-SVUBR/L11	CS25	T-8
S25R-SVUBR/L11	CS25	T-8
S25R-SVUBR/L16	CS35	T-15
S32S-SVUBR/L16	CS35	T-15
S40T-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)

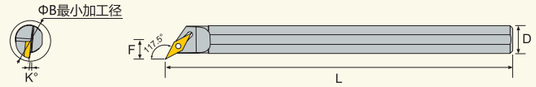
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

SVQB 117.5°



VB □□刀片
内圆加工



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..	●	●
	S32S-SVQBR/L16	40	32	14	250	5	VB..1604..	●	●
	S40T-SVQBR/L16	54	40	27	300	7	VB..1604..	●	●

- 订货示例：1 件 S16Q-SVQBR11
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S16Q-SVQBR11
- Insert should be ordered separately, please see page F105-F114

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
S32S-SVQBR/L16	CS35	T-15
S40T-SVQBR/L16	CS35	T-15

车削刀具 TURNING TOOLS

● 标准库存 Item in stock

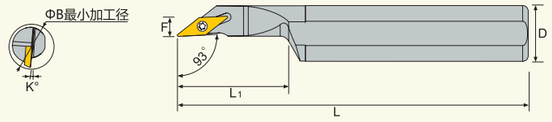
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

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

FSVJB 93°



VB □□刀片
内圆加工



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	L_1	K°		R	L
钢 Steel	S16K-FSVJBR/L11	20	16	2	125	36	5	VB..1103..	●	●
	S20M-FSVJBR/L11	25	20	2	150	37.5	5	VB..1103..	●	●
	S25M-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，请参照：☞F105-F114 页
- Ordering sample: 1 PC S16K-FSVJBR11
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S16K-FSVJBR/L11	CS25	T-8
S20M-FSVJBR/L11	CS25	T-8
S25M-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 内孔车削刀具

SSSC 45°



SC □□刀片
内圆加工



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 nsert	在库 Stock	
		ΦB	D	F	L	K°		R	L
钢 Steel	S12M-SSSCR/L09	16	12	9.5	150	12	SC..09T3..	●	●
	S16Q-SSSCR/L09	22	16	12.5	180	10	SC..09T3..	●	●
	S20R-SSSCR/L09	26	20	14.5	200	8	SC..09T3..	●	●
	S25R-SSSCR/L09	31	25	17	200	6	SC..09T3..	●	●
	S32S-SSSCR/L09	37	32	20.5	250	4	SC..09T3..	●	●

- 订货示例：1 件 S12M-SSSCR09
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S12M-SSSCR09
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S12M-SSSCR/L09	CS35	T-15
S16Q-SSSCR/L09	CS35	T-15
S20R-SSSCR/L09	CS35	T-15
S25R-SSSCR/L09	CS35	T-15
S32S-SSSCR/L09	CS35	T-15

车削刀具 TURNING TOOLS

● 标准库存
Item in stock

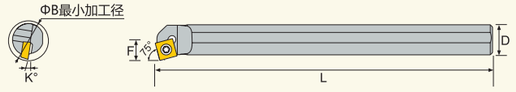
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

SSKC 75°



SC □□刀片
内圆加工



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	S12M-SSKCR/L09	16	12	8.5	150	12	SC..09T3..	●	●
	S16N-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	17	200	6	SC..09T3..	●	●

- 订货示例：1 件 S12M-SSKCR09
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S12M-SSKCR09
- Insert should be ordered separately, please see page F105-F114

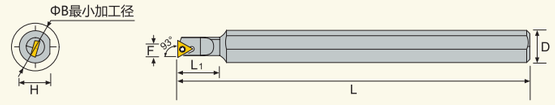
备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S12M-SSKCR/L09	CS35	T-15
S16N-SSKCR/L09	CS35	T-15
S16Q-SSKCR/L09	CS35	T-15
S20R-SSKCR/L09	CS35	T-15
S25R-SSKCR/L09	CS35	T-15

STUB 93°



TB □□刀片
内圆加工
小径内孔车刀
Mini Boring Bar



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	L	L_1	H	F		R	L
钢 Steel	S0806K-STUBR/L06-07	7	8	125	20	7	3.5	TB..0601..	●	○
	S1606J-STUBR/L06-07	7	16	110	15	15	3.5	TB..0601..	●	○
	S1607J-STUBR/L06-08	8	16	110	15	15	4	TB..0601..	●	○
	S1608J-STUBR/L06-09	9	16	110	15	15	4.5	TB..0601..	●	○
	S1609J-STUBR/L06-10	10	16	110	15	15	5	TB..0601..	●	○

- 订货示例：1 件 S0806K-STUBR06-07
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S0806K-STUBR06-07
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S0806K-STUBR/L06-07	CS20	T-6
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

● 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)

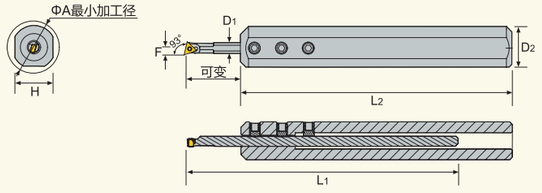
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

车削刀具 TURNING TOOLS

STUB 93°

TB □□刀片 内圆加工

小径内孔车刀
Mini Boring Bar





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	
		ΦA	D_1	H	L	L_1	F	D_2		R	L
钢 Steel	S06J-STUBR06-08	8	8	15	110	100	4	16	TB..0601..	●	●
硬质合金 Carbide	C06J-STUBR/L06-07	7	7	15	110	100	3.5	16	TB..0601..	●	●
	C0807K-STUBR/L06-08	6	6	7.4	125	100	4	20	TB..0601..	●	●

- 订货示例：1 件 C06J-STUBR06-07
- 刀片需单独订购，请参照：☞ F105-F114 页
- 套筒需另购，请参照：☞ F103-F104 页
- Ordering sample: 1 PC C06J-STUBR06-07
- Insert should be ordered separately, please see page F105-F114
- Sleeve please see Page F103-F104

备件
Spare Parts

规格型号 Designation	螺钉 Screw	扳手 Wrench
S06J-STUBR06-08	CS20	T-6
C06J-STUBR/L06-07	CS20	T-6
C0807K-STUBR/L06-08	CS20	T-6

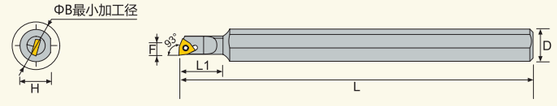
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

SWUB 93°

WB □□刀片 内圆加工

小径内孔车刀
Mini Boring Bar





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	L	L_1	H	F		R	L
钢 Steel	S1005J-SWUBR/L06-06	6	10	110	15	9	3	WB..0601..	●	○
	S1006J-SWUBR/L06-07	7	10	110	15	9	3.5	WB..0601..	●	○
	S1205J-SWUBR/L06-06	6	12	110	15	11	3	WB..0601..	●	○
	S1605J-SWUBR/L06-06	6	16	110	15	15	3	WB..0601..	●	○
	S1606J-SWUBR/L06-07	7	16	110	15	15	3.5	WB..0601..	●	○
	S1607J-SWUBR/L06-08	8	16	110	15	15	4	WB..0601..	●	○
	S1608J-SWUBR/L06-09	9	16	110	15	15	4.5	WB..0601..	●	○

- 订货示例：1 件 S1005J-SWUBR06-06
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S1005J-SWUBR06-06
- Insert should be ordered separately, please see page F105-F114

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
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

车削刀具 TURNING TOOLS

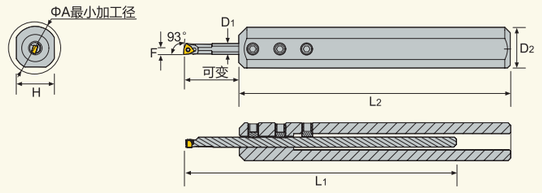
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SWUB 93°



WB □□刀片 内圆加工

小径内孔车刀
Mini Boring Bar



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	
		ΦA	D_1	H	L_1	L_2	F	D_2		R	L
硬质合金 Carbide	C05H-SWUBR/L06-06	6	5	15	100	100	2.75	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，请参照：☞ F105-F114 页
- 套筒需另购，请参照：☞ F103-F104 页
- Ordering sample: 1 PC C05H-SWUBR06-06
- Insert should be ordered separately, please see page F105-F114
- Sleeve please see Page F103-F104

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)

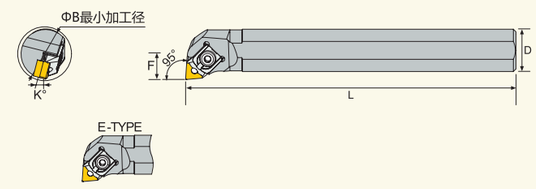
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

ECLN 95°



CN □□刀片 内圆加工



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	S32S-ECLNR/L12	40	32	22	250	14	CN..1204..	●	●
	S32U-ECLNR/L12	40	32	22	350	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	12	CN..1204..	●	●
	S60V-ECLNR/L12	72	60	36	400	10	CN..1204..	●	●
	S60X-ECLNR/L12	72	60	36	600	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，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S32S-ECLNR12
- Insert should be ordered separately, please see page F105-F114

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
S60V-ECLNR/L12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040
S60X-ECLNR/L12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040
S63Y-ECLNR/L12	SMC-432	LW-4	CN12-2	CS80	C-6	LW030 LW040

车削刀具 TURNING TOOLS

● 标准库存 Item in stock

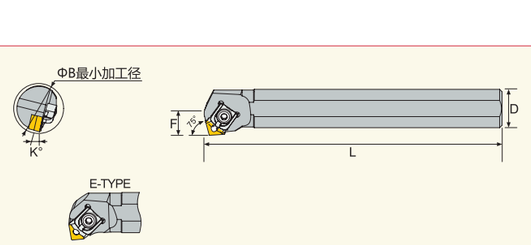
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

○ 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 内孔车削刀具

ECKN 75°

CN □□刀片 内圆加工





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	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	350	12	CN..1204..	●	●

- 订货示例：1 件 S32S-ECKNR12
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S32S-ECKNR12
- Insert should be ordered separately, please see page F105-F114

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-ECKNR/L12	SMC-432	LW-4B	CN12-4	CS80	C-6	LW030 LW040
S40T-ECKNR/L12	SMC-432	LW-4B	CN12-4	CS80	C-6	LW030 LW040
S50U-ECKNR/L12	SMC-432	LW-4B	CN12-4	CS80	C-6	LW030 LW040

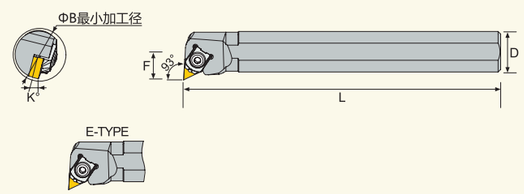
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

车削刀具 TURNING TOOLS

BORING BAR SERIES 内孔车削刀具

ETUN 93°

TN □□刀片 内圆加工





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	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..	●	●
	S60V-ETUNR/L16	72	60	36	400	10	TN..1604..	●	●
	S60X-ETUNR/L16	76	63	36	600	10	TN..1604..	●	●
	S63Y-ETUNR/L16	76	63	38	500	10	TN..1604..	●	●

- 订货示例：1 件 S25R-ETUNR16
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S25R-ETUNR16
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

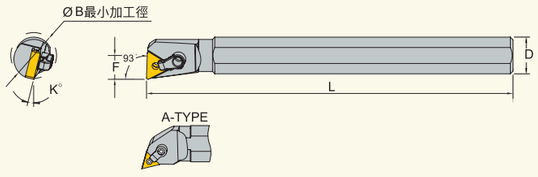
规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S25R-ETUNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S25T-ETUNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S32S-ETUNR/L16	SMT-322	LT-4	TN16-3	CS80	C-6	LW025 LW040
S32U-ETUNR/L16	SMT-322	LT-4	TN16-3	CS80	C-6	LW025 LW040
S40T-ETUNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S40W-ETUNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S50U-ETUNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S50Y-ETUNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S60V-ETUNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S60X-ETUNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S63Y-ETUNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040

● 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)

MTUN 93°

TN □□刀片 内圆加工





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-MTUNR/L16	22	16	11	180	17	TN..1604..	●	●
	S20R-MTUNR/L16	25	20	13	200	17	TN..1604..	●	●
	S20R-MTUNR/L16A	25	20	13	200	17	TN..1604..	●	●
	S25R-MTUNR/L16	32	25	17	200	12	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-MTUNR/L16
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S16Q-MTUNR/L16
- Insert should be ordered separately, please see page F105-F114

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/L16	-	LCS-510	CP50-21	CS70-20	LW020 LW025
S20R-MTUNR/L16	-	LCS-510	CP50-21	CS70-20	LW020 LW025
S20R-MTUNR/L16A	-	LCS-510	CP50-21	CS70-20	LW020 LW025
S25R-MTUNR/L16	-	LCS-510	CP50-22	CS70-21	LW020 LW030
S25R-MTUNR/L16A	-	LCS-510	CP50-22	CS70-21	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
S50U-MTUNR/L16A	SMT-322	LCS-513	CP50-22	CS70-22	LW020 LW030

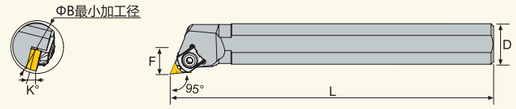
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

ETIN 95°

TN □□刀片 内圆加工





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	S20R-ETLNR/L16	25	20	13	200	17	TN..1604..	●	●
	S25R-ETLNR/L16	32	25	17	200	12	TN..1604..	●	●

- 订货示例：1 件 S20R-ETLNR16
- 刀片需单独订购，请参照：☞ F105-F114 页
- Ordering sample: 1 PC S20R-ETLNR16
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

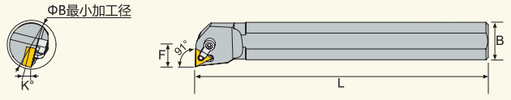
规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S20R-ETLNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S25R-ETLNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030

● 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)

MTFN 91°



TN □□刀片
内圆加工



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	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-MTFNR16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S20R-MTFNR16
- Insert should be ordered separately, please see page F105-F114

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-MTFNR/L16	-	LCS-510	CP50-21	CS70-20	LW020 LW025
S25R-MTFNR/L16	-	LCS-510	CP50-22	CS70-21	LW020 LW030
S32S-MTFNR/L16	SMC-322	LCS-513	CP50-22	CS70-21	LW020 LW030
S40T-MTFNR/L16	SMC-322	LCS-513	CP50-22	CS70-22	LW020 LW030
S50U-MTFNR/L16	SMC-322	LCS-513	CP50-22	CS70-22	LW020 LW030

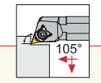
● 标准库存
Item in stock

◐ 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)

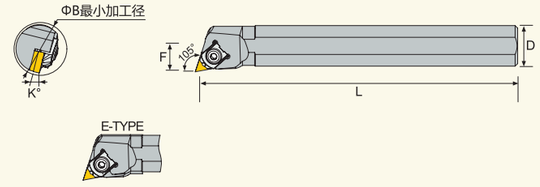
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

BORING BAR SERIES 内孔车削刀具

ETQN 105°



TN □□刀片
内圆加工



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	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，请参照：☞F105-F114 页
- Ordering sample: 1 PC S20R-ETQNR16
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

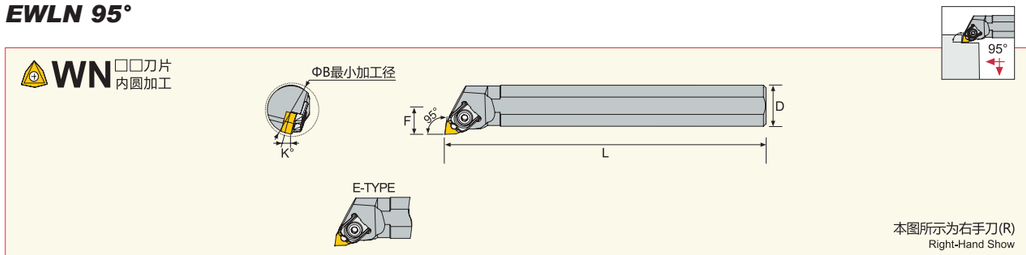
规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	螺钉 Screw	C 扣环 Clasp	L 型扳手 Allen key
S20R-ETQNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S25T-ETQNR/L16	-	LT-2	TN16-2	CS60E	C-5	LW025 LW030
S32S-ETQNR/L16	SMT-322	LT-4	TN16-3	CS80	C-6	LW025 LW040
S40T-ETQNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040
S50U-ETQNR/L16	SMT-322	LT-3	TN16-3	CS80	C-6	LW025 LW040

● 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)

EWLN 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	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，请参照：☞F105-F114 页
- Ordering sample: 1 PC S20R-EWINR06
- Insert should be ordered separately, please see page F105-F114

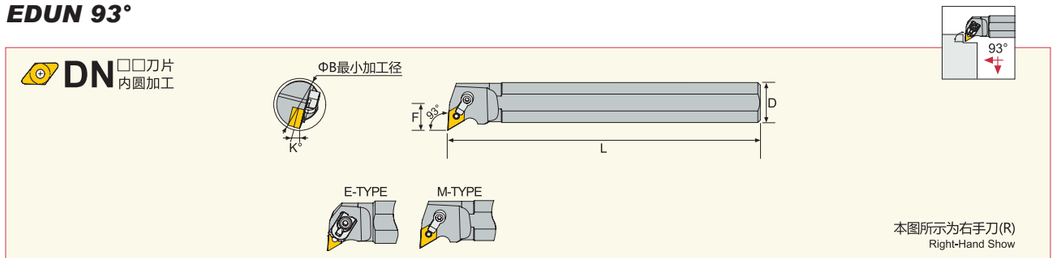
备件
Spare Parts

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	WN08-3	CS60E	C-5	LW025 LW030
S25T-EWLNR/L08	-	LW-3	WN08-3	CS60E	C-5	LW025 LW030
S32S-EWLNR/L08	SMW-422	LW-4B	WN08-4	CS80	C-6	LW030 LW040
S32U-EWLNR/L08	SMW-422	LW-4B	WN08-4	CS80	C-6	LW030 LW040
S40T-EWLNR/L08	SMW-422	LW-4B	WN08-4	CS80	C-6	LW030 LW040
S40W-EWLNR/L08	SMW-422	LW-4B	WN08-4	CS80	C-6	LW030 LW040
S50U-EWLNR/L08	SMW-422	LW-4B	WN08-4	CS80	C-6	LW030 LW040
S50Y-EWLNR/L08	SMW-422	LW-4B	WN08-4	CS80	C-6	LW030 LW040

● 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 内孔车削刀具

EDUN 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	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，请参照：☞F105-F114 页
- Ordering sample: 1 PC S40T -EDUNR15
- Insert should be ordered separately, please see page F105-F114

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

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..	●	●

- 订货示例：1 件 S25R-MDUNR15
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S25R-MDUNR15
- Insert should be ordered separately, please see page F105-F114

备件
Spare Parts

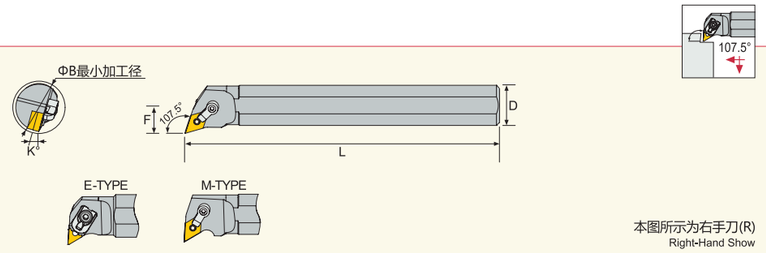
规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S25R-MDUNR/L15	-	LCS-511	CP50-24	CS70-21	LW025 LW030
S32S-MDUNR/L15	SMD-463	LCS-619	CP50-24	CS70-21	LW030

● 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 内孔车削刀具

EDQN 107.5°

DN □□刀片 内圆加工



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	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-EDQNR15
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S40T -EDQNR15
- Insert should be ordered separately, please see page F105-F114

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-EDQNR/L15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
S50U-EDQNR/L15	SMD-463	LD-1	DN15	CS80	C-6	LW030 LW040
S40T-EDQNR/L15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040
S50U-EDQNR/L15A	SMD-466	LW-4	DN15	CS80	C-6	LW030 LW040

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..	●	●

- 订货示例：1 件 S25R-MDQNR15
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S25R-MDQNR15
- Insert should be ordered separately, please see page F105-F114

备件 Spare Parts

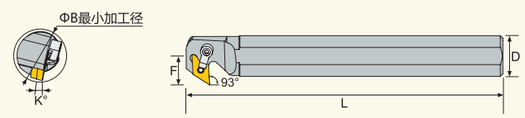
规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S25R-MDQNR/L15	-	LCS-511	CP50-24	CS70-21	LW025 LW030
S32S-MDQNR/L15	SMD-463	LCS-619	CP50-24	CS70-21	LW030

● 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 内孔车削刀具

MDZN 93°

DN □□刀片 内圆加工





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	S32S-MDZNR/L15	40	32	23	250	17	DN..1504..	●	●
	S40T-MDZNR/L15	50	40	27	300	15	DN..1504..	●	●
	S50U-MDZNR/L15	63	50	35	350	12	DN..1504..	●	●

- 订货示例：1 件 S32S-MDZNR15
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S32S-MDZNR15
- Insert should be ordered separately, please see page F105-F114

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
S32S-MDZNR/L15	SMD-463	LCS-619	CP50-24	CS70-21	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

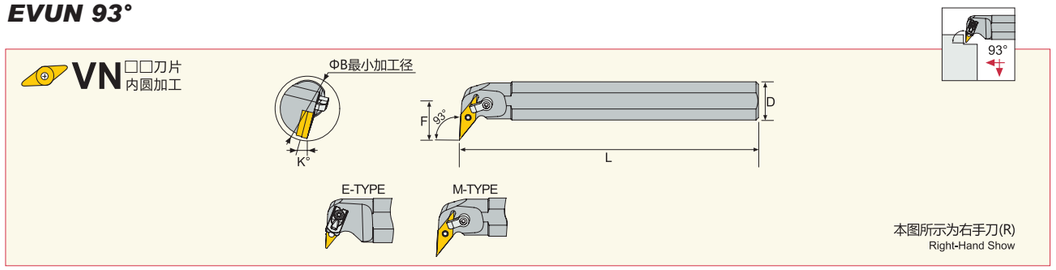
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

车削刀具 TURNING TOOLS

BORING BAR SERIES 内孔车削刀具

EVUN 93°

VN □□刀片 内圆加工



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-EVUNR/L16	50	40	26	300	15	VN..1604..	●	●
	S50U-EVUNR/L16	63	50	32	350	12	VN..1604..	●	●

- 订货示例：1 件 S40T-EVUNR16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S40T -EVUNR16
- Insert should be ordered separately, please see page F105-F114

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-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

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-MVUNR/L16	36	25	20	200	12	VN..1604..	●	●
	S32S-MVUNR/L16	42	32	22	250	17	VN..1604..	●	●

- 订货示例：1 件 S25R-MVUNR16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S25R-MVUNR16
- Insert should be ordered separately, please see page F105-F114

备件 Spare Parts

规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	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

● 标准库存 Item in stock

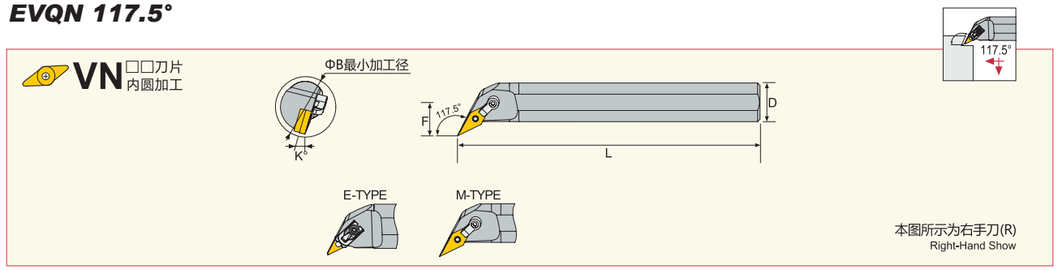
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

○ 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 内孔车削刀具

EVQN 117.5°

VN □□刀片 内圆加工



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-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，请参照：☞F105-F114 页
- Ordering sample: 1 PC S40T -EVQNR16
- Insert should be ordered separately, please see page F105-F114

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

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-MVQNR/L16	36	25	20	200	12	VN..1604..	●	●
	S32S-MVQNR/L16	42	32	22	250	17	VN..1604..	●	●

- 订货示例：1 件 S25R-MVQNR16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample: 1 PC S25R-MVQNR16
- Insert should be ordered separately, please see page F105-F114

备件 Spare Parts

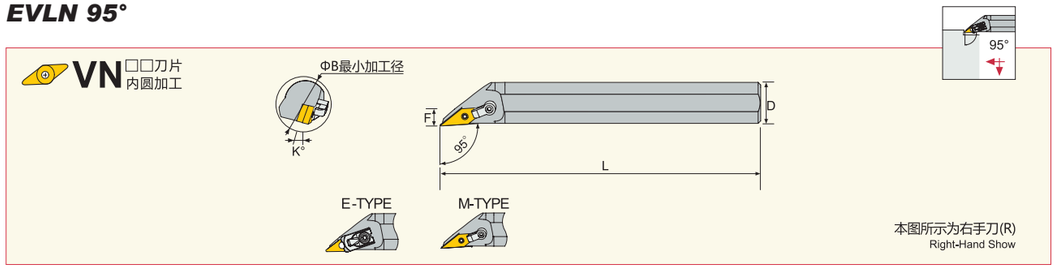
规格型号 Designation	垫片 Shim	中心销 Centre pin	压板 Clamp	双头螺钉 Screw	L 型扳手 Allen key
S25R-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030
S32S-MVUNR/L16	SMV-322	LCS-513	CP50-22	CS70-21	LW020 LW030

● 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)

EVLN 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	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，请参照：☞F105-F114 页
- Ordering sample: 1 PC S40T -EVLNR16
- Insert should be ordered separately, please see page F105-F114

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

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-MVLNR/L16	36	25	20	200	12	VN..1604..	●	●
	S32S-MVLNR/L16	42	32	22	250	17	VN..1604..	●	●

- 订货示例：1 件 S25R-MVLNR16
- 刀片需单独订购，请参照：☞F105-F114 页
- Ordering sample:: 1 PC S25R-MVLNR16
- Insert should be ordered separately, please see page F105-F114

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

● 标准库存
Item in stock

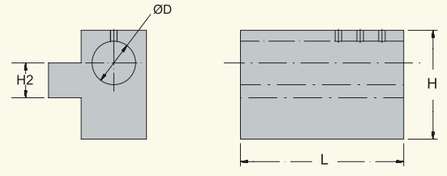
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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 内孔车削刀具

内孔车刀定位座
Center Block Tool Holder

ETHR



规格型号 Designation	尺寸 Dimensions(mm)				在库 Stock
	D	L	H	H2	
ETHR2032	32	80	64	20	●
ETHR2532	32	80	64	25	●
ETHR2540	40	90	76	25	●
ETHR3240	40	90	76	32	●
ETHR2040	40	90	76	20	●

- 订货示例：1 件 ETHR2032
- Ordering sample: 1 PC ETHR2032

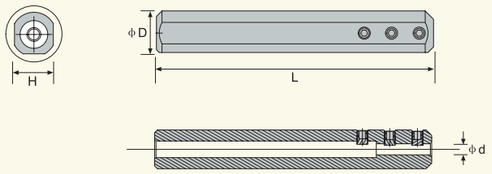
● 标准库存
Item in stock

◐ 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)

套筒
Sleeve

SHB



材质 Material	规格型号 Designation	尺寸 Dimensions(mm) ΦD	Φd	L	H	适用刀具 Adapted tools	在库 Stock
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	19	C04	●
	SHB-0520	20	5	100	19	C05	●
	SHB-0620	20	6	100	19	C06	●
	SHB-0820	20	8	100	19	C08/S08	●
	SHB-1020	20	10	100	19	C10/S10	●
	SHB-1220	20	12	100	19	C12/S12	●
	SHB-0422	22	4	100	21	C04	●
	SHB-0522	22	5	100	21	C05	●
	SHB-0622	22	6	100	21	C06	●
	SHB-0822	22	8	100	21	C08/S08	●
	SHB-1022	22	10	100	21	C10/S10	●
	SHB-1222	22	12	100	21	C12/S12	●
	SHB-1622	22	16	100	21	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	ES404	LW020
SHB-0516	ES404	LW020
SHB-0616	ES404	LW020
SHB-0816	ES606	LW020
SHB-1016	ES606	LW020
SHB-0420	ES404	LW020
SHB-0520	ES406	LW020
SHB-0620	ES406	LW020
SHB-0820	ES606	LW030
SHB-1020	ES606	LW030
SHB-1220	ES606	LW030
SHB-0422	ES406	LW020
SHB-0522	ES404	LW020
SHB-0622	ES406	LW020
SHB-0822	ES606	LW030
SHB-1022	ES606	LW030
SHB-1222	ES606	LW030
SHB-1622	ES606	LW030

● 标准库存
Item in stock

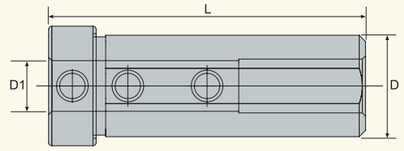
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

SLEEVE 套筒

套筒
Sleeve

EHR



材质 Material	规格型号 Designation	尺寸 Dimensions(mm) D1	D	L	在库 Stock
钢 Steel	EHR-0625	6	25	64	●
	EHR-0825	8	25	64	●
	EHR-1025	10	25	64	●
	EHR-1225	12	25	64	●
	EHR-1625	16	25	64	●
	EHR-2025	20	25	64	●
	EHR-0632	6	32	100	●
	EHR-0832	8	32	100	●
	EHR-1032	10	32	100	●
	EHR-1232	12	32	100	●
	EHR-1632	16	32	100	●
	EHR-2032	20	32	100	●
	EHR-2532	25	32	100	●
	EHR-0640	6	40	100	●
	EHR-0840	8	40	100	●
	EHR-1040	10	40	100	●
	EHR-1240	12	40	100	●
	EHR-1440	14	40	100	●
	EHR-1640	16	40	100	●
	EHR-2040	20	40	100	●
	EHR-2540	25	40	100	●
	EHR-3240	32	40	100	●
	EHR-0650	6	50	100	●
	EHR-0850	8	50	100	●
	EHR-1050	10	50	100	●
	EHR-1250	12	50	100	●
	EHR-1650	16	50	100	●
	EHR-2050	20	50	100	●
	EHR-2550	25	50	100	●
	EHR-3250	32	50	100	●
	EHR-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
EHR-0625	ES606
EHR-0825	ES606
EHR-1025	ES606
EHR-1225	ES606
EHR-1625	-
EHR-2025	-
EHR-0632	ES610
EHR-0832	ES610
EHR-1032	ES810
EHR-1232	ES810
EHR-1632	ES806
EHR-2032	ES810
EHR-2532	ES806
EHR-0640	ES610
EHR-0840	ES610
EHR-1040	ES810

规格型号 Designation	螺钉 Screw
EHR-1240	ES810
EHR-1440	ES810
EHR-1640	ES810
EHR-2040	ES810
EHR-2540	ES806
EHR-3240	ES610
EHR-0650	ES810
EHR-0850	ES810
EHR-1050	ES810
EHR-1250	ES810
EHR-1650	ES810
EHR-2050	ES810
EHR-2550	ES810
EHR-3250	ES808
EHR-4050	ES808

● 标准库存
Item in stock

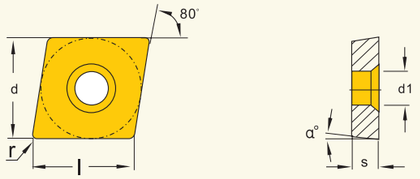
◐ 半标准库存 (订货时，请确认交货期)
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○ 无库存 (订货时，请确认交货期)
Order on demand
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CC 型刀片

CC..



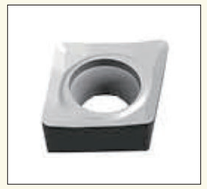


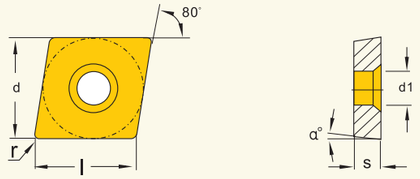
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
CCMT 060204-F2P 1115	6.5	6.35	2.38	0.4	●						150-300	0.20-1.50	0.03-0.20
CCMT 060204-M2P 1115	6.5	6.35	2.38	0.4	●						150-300	0.50-2.50	0.08-0.30
CCMT 060204-M2M 1220	6.5	6.35	2.38	0.4		●					80-180	0.50-2.50	0.08-0.30
CCMT 060204-M2K 1115	6.5	6.35	2.38	0.4			●				200-350	0.50-2.50	0.08-0.30
CCMT 060204-F2S 1215	6.5	6.35	2.38	0.4					●		40-70	0.20-1.50	0.03-0.20
CCMT 060208-M2P 1125	6.5	6.35	2.38	0.8	●						120-280	0.50-2.50	0.08-0.30
CCMT 060208-M2K 1115	6.5	6.35	2.38	0.8			●				200-350	0.50-2.50	0.08-0.30
CCMT 09T304-F2P 1115	9.7	9.525	3.97	0.4	●						150-300	0.20-1.50	0.03-0.20
CCMT 09T304-M2P 1125	9.7	9.525	3.97	0.4	●						180-280	0.50-2.50	0.08-0.30
CCMT 09T304-M2M 1220	9.7	9.525	3.97	0.4		●					120-250	0.50-2.50	0.08-0.30
CCMT 09T304-M2K 1115	9.7	9.525	3.97	0.4			●				200-350	0.50-2.50	0.08-0.30
CCMT 09T304-F2S 1215	9.7	9.525	3.97	0.4					●		40-70	0.20-1.50	0.03-0.20
CCMT 09T308-R1P 1125	9.7	9.525	3.97	0.8	●						120-280	1.00-3.50	0.15-0.40
CCMT 09T308-M2M 1220	9.7	9.525	3.97	0.8		●					80-180	0.50-2.50	0.08-0.30
CCMT 09T308-M2K 1115	9.7	9.525	3.97	0.8			●				200-350	0.50-2.50	0.08-0.30
CCMT 120404-M2P 1125	12.9	12.7	4.76	0.4	●						120-280	0.50-2.50	0.08-0.30
CCMT 120404-M2M 1220	12.9	12.7	4.76	0.4		●					200-300	0.50-2.50	0.08-0.30
CCMT 120404-M2K 1115	12.9	12.7	4.76	0.4			●				200-350	0.50-2.50	0.08-0.30
CCMT 120408-M2P 1125	12.9	12.7	4.76	0.8	●						120-280	0.50-2.50	0.08-0.30
CCMT 120408-R1P 1125	12.9	12.7	4.76	0.8	●						120-280	1.00-3.50	0.15-0.40
CCMT 120408-M2M 1220	12.9	12.7	4.76	0.8		●					120-250	0.50-3.00	0.08-0.30
CCMT 120408-M2K 1115	12.9	12.7	4.76	0.4			●				200-350	0.50-3.00	0.08-0.30

INSERTS FOR TURNING 车削刀片

CC 型刀片

CC..

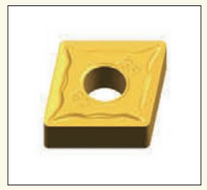


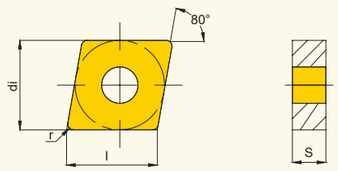


规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
CCGT 060204-F4N 1015	6.5	6.35	2.38	0.4				●			300-1000	0.50-2.00	0.10-0.25
CCGT 060204-F5N 1010	6.5	6.35	2.38	0.4				●			300-1000	0.50-2.00	0.10-0.25
CCGT 09T304-F4N 1015	9.7	9.525	3.97	0.4				●			300-1000	0.50-3.00	0.10-0.25
CCGT 09T304-F5N 1010	9.7	9.525	3.97	0.4				●			300-1000	0.50-3.00	0.10-0.25
CCGT 09T308-F4N 1015	9.7	9.525	3.97	0.8				●			300-1000	0.80-3.50	0.10-0.30
CCGT 09T308-F5N 1010	9.7	9.525	3.97	0.8				●			300-1000	0.80-3.50	0.10-0.30
CCGT 120404-F4N 1015	12.9	12.7	4.76	0.4				●			300-1000	0.50-3.00	0.10-0.25
CCGT 120408-F5N 1010	12.9	12.7	4.76	0.8				●			300-1000	0.50-3.00	0.10-0.25
CCGT 120408-F4N 1015	12.9	12.7	4.76	0.8				●			300-1000	0.80-4.00	0.10-0.30

CN 型刀片

CN..





规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
CNMG 120404-M6P 1105	12.9	12.7	4.76	0.4	●						150-380	0.50-3.50	0.15-0.40
CNMG 120404-M6P 1115	12.9	12.7	4.76	0.4	●						150-350	0.30-2.00	0.08-0.30
CNMG 120404-F1P 1115	12.9	12.7	4.76	0.4	●						150-380	0.50-3.00	0.15-0.30
CNMG 120404-M1M 1125	12.9	12.7	4.76	0.4		●					120-250	0.50-3.50	0.15-0.40
CNMG 120404-M4K 1115	12.9	12.7	4.76	0.4			●				150-350	0.50-3.50	0.1-0.40
CNMG 120404-F3S 1215	12.9	12.7	4.76	0.4		●			●		40-70	0.50-2.00	0.05-0.30
CNMG 120408-M6P 1115	12.9	12.7	4.76	0.8	●						150-380	1.20-3.50	0.15-0.35
CNMG 120408-R2P 2125	12.9	12.7	4.76	0.8	●						120-280	1.20-3.50	0.15-0.35
CNMG 120408-M1M 1225	12.9	12.7	4.76	0.8		●					80-180	1.00-4.00	0.15-0.40
CNMG 120408-M1M 1115	12.9	12.7	4.76	0.8		●					120-280	1.00-4.00	0.15-0.40
CNMG 120408-M4K 1115	12.9	12.7	4.76	0.8			●				150-350	0.50-3.50	0.1-0.40
CNMG 120408-F3S 1215	12.9	12.7	4.76	0.8		●			●		40-70	0.50-2.00	0.05-0.30
CNMG 120412-R2P 1125	12.9	12.7	4.76	1.2	●						120-280	2.00-6.50	0.25-0.60
CNMG 160608-M6P 2125	16.1	15.875	6.35	0.8	●						152-280	1.20-3.50	0.15-0.35
CNMG 160612-R2P 2125	16.1	15.875	6.35	1.2	●						120-280	2.00-6.50	0.25-0.60

车削刀具 TURNING TOOLS

● 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)

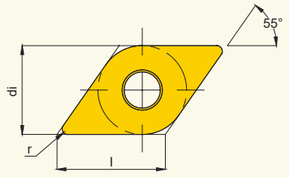
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

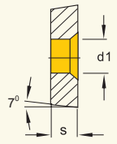
INSERTS FOR TURNING 车削刀片

DC 型刀片

DC..



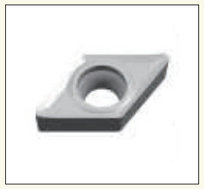


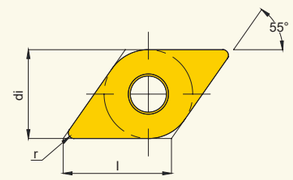


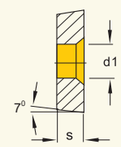
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
DCMT 070204-F2P 1115	7.8	6.35	2.38	0.4	●						150-360	0.30-1.50	0.05-0.20
DCMT 070204-F2M 1115	7.8	6.35	2.38	0.4		●					200-300	0.30-1.50	0.05-0.20
DCMT 11T304-F2P 2125	11.6	9.525	3.97	0.4	●						150-360	0.50-2.50	0.08-0.30
DCMT 11T304-M2M 1115	11.6	9.525	3.97	0.4		●					200-300	0.50-2.50	0.08-0.30
DCMT 11T304-M2K 1115	11.6	9.525	3.97	0.4			●				150-350	0.50-2.50	0.08-0.30
DCMT 11T308-M2P 1115	11.6	9.525	3.97	0.8	●						150-360	0.50-2.50	0.08-0.30
DCMT 11T308-M2M 1115	11.6	9.525	3.97	0.8		●					200-300	0.50-2.50	0.08-0.30

DC 型刀片

DC..







规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
DCGT 070204-F4N 1020	7.8	6.35	2.38	0.4				●			300-1000	0.50-2.50	0.05-0.40
DCGT 11T304-F4N 1015	11.6	9.525	3.97	0.8				●			300-1000	0.50-3.50	0.05-0.50

● 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)

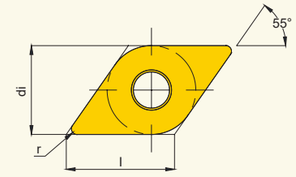
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

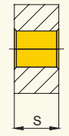
INSERTS FOR TURNING 车削刀片

DN 型刀片

DN..







规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
DNMG 110404-M6P 2125	11.6	9.525	4.76	0.4	●						120-280	0.40-2.00	0.08-0.35
DNMG 110404-M1M 1115	11.6	9.525	4.76	0.4		●					120-280	0.50-3.50	0.15-0.40
DNMG 110404-F3S 1215	11.6	9.525	4.76	0.4		●			●		40-70	0.50-1.20	0.05-0.15
DNMG 150604-F1P 1115	15.5	12.7	6.35	0.4	●						150-350	0.40-2.00	0.08-0.35
DNMG 150604-M6P 1105	15.5	12.7	6.35	0.4	●						150-380	1.00-4.00	0.15-0.40
DNMG 150604-M3M 1125	15.5	12.7	6.35	0.4		●					120-250	0.50-3.50	0.15-0.40
DNMG 150608-M6P 1105	15.5	12.7	6.35	0.8	●						120-280	1.00-4.00	0.15-0.40
DNMG 150608-M3M 1225	15.5	12.7	6.35	0.8		●					80-180	1.00-4.00	0.15-0.40
DNMG 150608-M4K 1115	15.5	12.7	6.35	0.8			●				150-350	0.50-3.50	0.10-0.40
DNMG 150404-F1P 1115	15.5	12.7	4.76	0.4	●						150-350	0.40-2.00	0.08-0.35
DNMG 150404-M3M 1225	15.5	12.7	4.76	0.4		●					80-180	1.00-4.00	0.15-0.40
DNMG 150408-M6P 1115	15.5	12.7	4.76	0.8	●						150-350	1.00-4.00	0.15-0.40
DNMG 150408-M1M 1225	15.5	12.7	4.76	0.8		●					80-180	1.00-4.00	0.15-0.40

● 标准库存 Item in stock

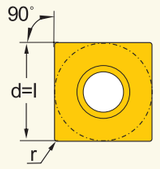
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)

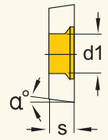
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

SC 型刀片

SC..



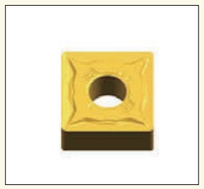


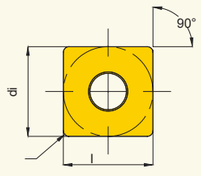


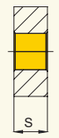
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	L	D	S	R	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
SCMT 09T304-M2P 1125	9.525	9.525	3.97	0.4	●						120-280	0.40-2.40	0.08-0.30
SCMT 09T304-M2M 1115	9.525	9.525	3.97	0.4		●					200-300	0.40-2.40	0.08-0.30
SCMT 09T304-M2K 1115	9.525	9.525	3.97	0.4			●				200-300	0.40-2.40	0.08-0.30
SCMT 09T308-M2P 1125	9.525	9.525	3.97	0.8	●						120-280	0.50-2.50	0.10-0.30
SCMT 09T308-M2M 1125	9.525	9.525	3.97	0.8		●					180-280	0.50-2.50	0.10-0.30
SCMT 09T308-M2K 1115	9.525	9.525	3.97	0.8			●				200-300	0.50-2.50	0.10-0.30

SN 型刀片

SN..







规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
SNMG 120404-F1P 1115	12.7	12.7	4.76	0.4	●						150-350	0.40-2.00	0.08-0.35
SNMG 120404-M1M 1125	12.7	12.7	4.76	0.4		●					120-250	0.50-3.50	0.15-0.40
SNMG 120408-M6P 2125	12.7	12.7	4.76	0.8	●						120-280	0.50-3.50	0.15-0.40
SNMG 120408-M3M 1225	12.7	12.7	4.76	0.8		●					80-180	0.50-3.50	0.15-0.40
SNMG 120408-M4K 1115	12.7	12.7	4.76	0.8			●				150-350	0.50-3.50	0.10-0.40

● 标准库存
Item in stock

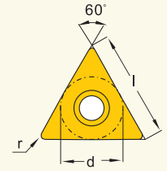
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

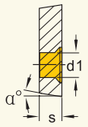
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

TC 型刀片

TC..



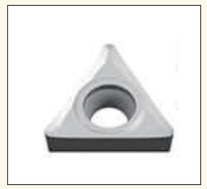


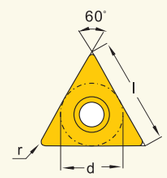


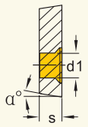
规格型号 Designation	尺寸 Size				加工材质4 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TCMT 110204-M2P 1115	11	6.35	2.38	0.4	●						120-300	0.50-2.50	0.08-0.30
TCMT 110204-F2M 1225	11	6.35	2.38	0.4		●					100-220	0.20-1.50	0.03-0.20
TCMT 110204-F2K 1115	11	6.35	2.38	0.4			●				150-350	0.50-2.50	0.08-0.30
TCMT 16T304-M2P 1125	16.5	9.525	3.97	0.4	●						120-280	0.50-2.50	0.08-0.30
TCMT 16T304-M2M 1215	16.5	9.525	3.97	0.4		●					120-300	0.50-2.50	0.08-0.30
TCMT 16T304-M2K 1115	16.5	9.525	3.97	0.4			●				150-350	0.50-2.50	0.08-0.30
TCMT 16T308-M2P 1125	16.5	9.525	3.97	0.8	●						120-280	0.50-2.50	0.10-0.30
TCMT 16T308-M2M 1225	16.5	9.525	3.97	0.8		●					120-280	0.50-2.50	0.10-0.30
TCMT 16T308-M2K 1115	16.5	9.525	3.97	0.8			●				150-350	0.50-2.50	0.10-0.30

TC 型刀片

TC..







规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TCGT 110204-F4N 1025	11	6.35	2.38	0.4				●			300-1000	0.20-3.00	0.05-0.30
TCGT 110204-F5N 1010	11	6.35	2.38	0.4				●			300-1000	0.20-3.00	0.05-0.30
TCGT 110208-F5N 1010	11	6.35	2.38	0.8				●			300-1000	0.20-3.00	0.05-0.30
TCGT 16T304-F5N 1010	16.5	9.525	3.97	0.4				●			300-1000	0.50-3.00	0.10-0.30
TCGT 16T304-F4N 1015	16.5	9.525	3.97	0.4				●			300-1000	0.50-3.00	0.10-0.30
TCGT 16T308-F5N 1010	16.5	9.525	3.97	0.8				●			300-1000	0.50-3.00	0.10-0.30

● 标准库存
Item in stock

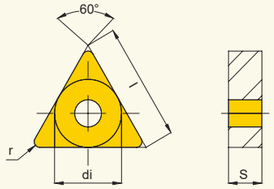
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

TN 型刀片

TN..

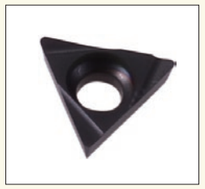


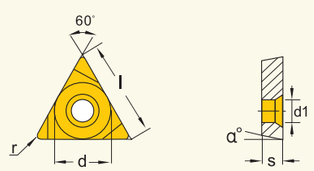


规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TNMG 160404-F3P 1115	16.5	9.525	4.76	0.4	●						150-350	0.40-2.00	0.08-0.35
TNMG 160404-M3M 1125	16.5	9.525	4.76	0.4		●					120-250	0.50-3.50	0.15-0.40
TNMG 160404-M4K 1115	16.5	9.525	4.76	0.4			●				150-350	0.50-3.50	0.10-0.40
TNMG 160408-M5P 1115	16.5	9.525	4.76	0.8	●						150-350	1.00-4.00	0.15-0.40
TNMG 160408-R2P 1125	16.5	9.525	4.76	0.8	●						120-280	2.00-6.00	0.25-0.60
TNMG 160408-M1M 1225	16.5	9.525	4.76	0.8		●					120-250	1.00-4.00	0.15-0.40
TNMG 160408-M4K 1115	16.5	9.525	4.76				●				150-350	0.50-3.50	0.10-0.40

TP 型刀片

TP..





规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
TPGX 090202-F6G 1310	9.6	5.56	2.38	0.2	●						120-300	1.00-2.00	0.05-0.12
TPGX 090202-F5S 2125	9.6	5.56	2.38	0.2	●	●			●		90-300	1.00-2.00	0.05-0.12
TPGX 090202-F7P 1225	9.6	5.56	2.38	0.2	●						120-300	1.00-2.50	0.08-0.15
TPGX 090202-F5K 1115	9.6	5.56	2.38	0.2			●				120-300	1.00-2.50	0.08-0.15
TPGX 090204-F6G 1310	9.6	5.56	2.38	0.4	●						120-300	1.00-2.50	0.08-0.15
TPGX 090204-F5K 1115	9.6	5.56	2.38	0.4			●				120-300	1.00-2.50	0.08-0.15
TPGX 090204-F5S 2125	9.6	5.56	2.38	0.4	●	●			●		120-300	1.00-2.50	0.08-0.15
TPGX 090204-F1N 1010	9.6	5.56	2.38	0.4				●			300-1000	1.00-3.00	0.08-0.15
TPGX 090204-F7P 1225	9.6	5.56	2.38	0.4	●						120-300	1.00-2.50	0.08-0.15
TPGX 110302-F6G 1310	11	6.35	3.18	0.2	●						120-300	1.00-2.00	0.05-0.12
TPGX 110302-F5S 2125	11	6.35	3.18	0.2	●	●			●		120-300	1.00-2.00	0.05-0.12
TPGX 110302-F7P 1225	11	6.35	3.18	0.2	●						120-300	1.00-2.00	0.05-0.12
TPGX 110302-F5K 1115	11	6.35	3.18	0.2			●				120-300	1.00-2.00	0.05-0.12
TPGX 110304-F6G 1310	11	6.35	3.18	0.4	●						120-300	1.00-3.00	0.08-0.15
TPGX 110304-F5K 1115	11	6.35	3.18	0.4			●				120-300	1.00-2.00	0.08-0.15
TPGX 110304-F5S 2125	11	6.35	3.18	0.4	●	●			●		120-300	1.00-3.00	0.08-0.15
TPGX 110304-F1N 1010	11	6.35	3.18	0.4				●			300-1000	1.00-3.00	0.08-0.15
TPGX 110304-F7P 1225	11	6.35	3.18	0.4							120-300	1.00-3.00	0.08-0.15
TPGX 090204-C1 CD05 ①	9.6	5.56	2.38	0.4				●			600-2000	1.00-2.50	0.05-0.25
TPGX 110304-C1 CD05 ①	11	6.35	3.18	0.4				●			600-2500	1.00-3.00	0.05-0.30
TPGX 090204-C1 CB05 ②	9.6	5.56	2.38	0.4			●				150-400	1.00-2.50	0.05-0.25
TPGX 110304-C1 CB05 ②	11	6.35	3.18	0.4			●				150-400	1.00-3.00	0.05-0.30

● 带①为 PCD 刀片
● 带②为 CBN 刀片

● 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)

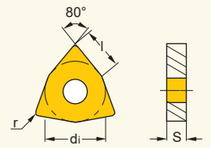
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

INSERTS FOR TURNING 车削刀片

WN 型刀片

WN..



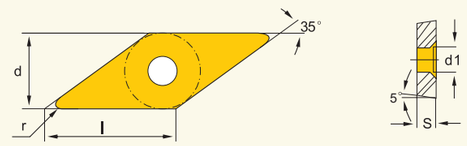


规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
WNMG 080404-F1P 1115	8.7	5.16	4.76	0.4	●						150-360	0.30-2.00	0..08-0.35
WNMG 080404-F3S 1215	8.7	5.16	4.76	0.4		●			●		40-70	0.50-1.20	0.05-0.15
WNMG 080404-M4K 1115	8.7	5.16	4.76	0.4			●				150-350	0.50-3.50	0.10-0.40
WNMG 080408-R2P 2125	8.7	5.16	4.76	0.8	●						120-280	2.00-6.50	0.25-0.60
WNMG 080408-M1M 1225	8.7	5.16	4.76	0.8		●					80-200	0.80-3.50	0.08-0.40
WNMG 080408-M4K 1115	8.7	5.16	4.76	0.8			●				150-350	0.50-3.50	0.10-0.40

VB 型刀片

VB..





规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
VBMT 160404-F2P 2125	16.6	9.525	4.76	0.4	●						120-280	0.40-1.50	0.05-0.20
VBMT 160404-F2M 1225	16.6	9.525	4.76	0.4		●					120-280	0.40-1.50	0.05-0.20

车削刀具 TURNING TOOLS

● 标准库存
Item in stock

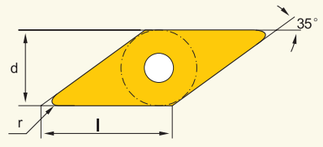
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

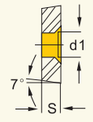
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

VC 型刀片

VC..





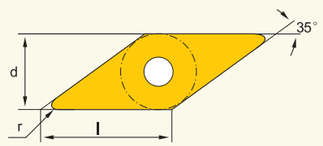


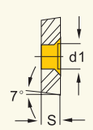
规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
VCMT 110304-M2P 1115	11.2	6.35	3.18	0.4	●						125-350	0.50-2.50	0.08-0.30
VCMT 110304-M2M 1125	11.2	6.35	3.18	0.4		●					120-250	0.50-2.50	0.08-0.30
VCMT 160404-M2P 2125	16.6	9.525	4.76	0.4	●						120-280	0.50-2.50	0.10-0.30
VCMT 160404-M2M 1225	16.6	9.525	4.76	0.4		●					80-180	0.50-2.50	0.10-0.30
VCMT 160404-M2K 1115	16.6	9.525	4.76	0.4			●				150-350	0.50-2.50	0.10-0.30
VCMT 160408-M2P 2125	16.6	9.525	4.76	0.8	●						120-280	1.00-3.50	0.15-0.40
VCMT 160408-M2M 1225	16.6	9.525	4.76	0.8		●					80-180	0.50-2.50	0.08-0.30
VCMT 160408-M2K 1115	16.6	9.525	4.76	0.8			●				150-350	0.50-2.50	0.08-0.30

VC 型刀片

VC..







规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
VCGT 110304-F5N 1010	11.2	6.35	3.18	0.4				●			300-1000	0.5-3.00	0.05-0.25
VCGT 160404-F5N 1010	16.6	9.525	4.76	0.4				●			300-1000	0.5-3.00	0.05-0.25
VCGT 160408-F5N 1010	16.6	9.525	4.76	0.8				●			300-1000	0.5-3.00	0.10-0.25

● 标准库存
Item in stock

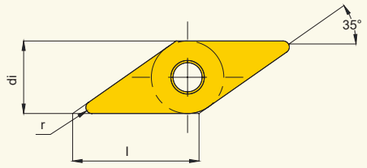
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

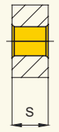
○ 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

VN 型刀片

VN..







规格型号 Designation	尺寸 Size				加工材质 Material						切削参数推荐 Cutting parameter		
	l	di	S	r	P	M	K	N	S	H	VC(m/min)	ap(mm)	f(mm/rev)
VNMG 160404-F1P 1115	16.6	9.525	4.76	0.4	●						150-350	0.40-2.00	0.08-0.35
VNMG 160404-F3S 1215	16.6	9.525	4.76	0.4		●			●		40-70	0.50-3.50	0.15-0.40
VNMG 160404-M4K 1115	16.6	9.525	4.76	0.4			●				150-350	0.50-3.50	0.10-0.40
VNMG 160408-M6P 2125	16.6	9.525	4.76	0.8	●						100-280	1.00-4.00	0.15-0.40
VNMG 160408-M3M 1225	16.6	9.525	4.76	0.8		●					80-180	1.00-4.00	0.15-0.40
VNMG 160408-M4K 1115	16.6	9.525	4.76	0.8			●				150-350	0.50-3.50	0.10-0.40

● 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)



F

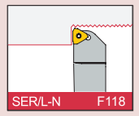
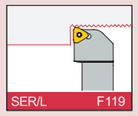
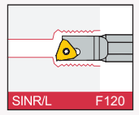
车削刀具
TURNING TOOLS

螺纹车削
Threading Turning

外螺纹车刀 F117
External Threading Turning Tool

内螺纹车刀 F120
Internal Threading Turning Tool

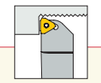
THREADING TURNING TOOL SERIES 螺纹车削刀具索引

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 F118  SER/L F119
IR/IL 内螺纹刀片 Internal thread insert	螺丝锁紧式 Screw clamping	 SINR/L F120

EXTERNAL THREADING TURNING TOOL 外螺纹车刀

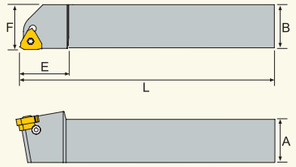
SER/L-N (外螺纹刀)

External Threading Turning Tool



ER□□刀片 外螺纹加工





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
- 此螺纹刀为走心式螺纹车刀杆
- 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(lift)	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	AI16	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)

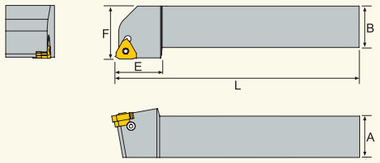
EXTERNAL THREADING TURNING TOOL 外螺纹车刀

SER/L（外螺纹刀）

External Threading Turning Tool



ER□□刀片
外螺纹加工



本图所示为右手刀(R)
Right-Hand Show

规格型号 Designation	尺寸 Dimensions(mm)					刀片 Insert	在库 Stock	
	A	B	L	E	F		R	L
SER/L-1010K16	10	10	125	20	14	16ER/L..	●	●
SER/L-1212K11	12	12	125	20	16	16ER/L..	●	●
SER/L-1212K16	12	12	125	20	16	16ER/L..	●	●
SER/L-1616K16	16	16	125	25	20	16ER/L..	●	●
SER/L-2020K16	20	20	125	25	25	16ER/L..	●	●
SER/L-2525M16	25	25	150	27	32	16ER/L..	●	●
SER/L-3232P16	32	32	170	27	40	16ER/L..	●	●
SER/L-2525M22	25	25	150	27	32	22ER/L..	●	●
SER/L-3232P22	32	32	170	27	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(lift)	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-1212K11	-	-	CS30	-	T-10	-
SER/L-1212K16	-	-	CS35	-	T-15	LW025
SER/L-1616K16	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

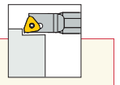
◐ 半标准库存（订货时，请确认交货期）
Item of short delivery time
(please confirm delivery time when ordering it)

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

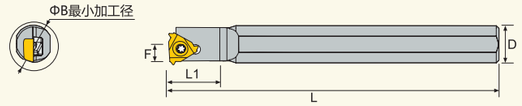
INTERNAL THREADING TURNING TOOL 内螺纹车刀

SINR/L（内螺纹刀）

Internal Threading Turning Tool



IR□□刀片
内螺纹加工



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		R	L
钢 Steel	SNR0005H-06	6.4	12	3.2	100	10	06IR..	●	○
	SNR0008K-08	9	16	4.2	125	15	08IR..	●	○
	SINR/L-1012-11	10	12	5.8	150	25	11IR/L..	●	●
	SINR/L-1210-11	12	10	6	150	25	11IR/L..	●	●
	SINR/L-1216-11	12	16	6	150	25	11IR/L..	●	●
	SINR/L-1516-11	15	16	7.5	150	30	11IR/L..	●	●
	SINR/L-1616-16	16	16	8	150	20	16IR/L..	●	●
	SINR/L-2016-16	20	16	10	150	20	16IR/L..	●	●
	SINR/L-2420S-16	24	20	12.3	180	40	16IR/L..	●	●
	SINR/L-3025S-16	30	25	15	200	40	16IR/L..	●	●
	SINR/L-3732S-16	37	32	18.5	250	45	16IR/L..	●	●
	SINR/L-3025S-22	30	25	16.2	200	40	22IR/L..	●	●
	SINR/L-3732S-22	37	32	19	250	45	22IR/L..	●	●
	SINR/L-0012-11-125	15	12	8	125	-	11IR/L..	●	●
	SINR/L-0016-16-150	19	16	10.9	150	-	16IR/L..	●	●
硬质合金 Carbide	CINR/L--0010-11	12	10	7	150	-	11IR/L..	●	●
	CINR/L-0012-11	15	12	8	150	-	11IR/L..	●	●
	CINR/L-0016-16	15	16	10.9	150	-	16IR/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
SNR0005H-06	-	-	CS20	-	T-6	-
SNR0008K-08	-	-	CS22	-	T-7	-
SINR/L-1012-11	-	-	CS30	-	T-10	-
SINR/L-1210-11	-	-	CS30	-	T-10	-
SINR/L-1216-11	-	-	CS30	-	T-10	-
SINR/L-1516-11	-	-	CS30	-	T-10	-
SINR/L-1616-16	-	-	CS35	-	T-15	-
SINR/L-2016-16	-	-	CS35	-	T-15	-
SINR/L-2420S-16	AI16	AE16	CS35115	CS6-0306	T-15	LW025
SINR/L-3025S-16	AI16	AE16	CS35115	CS6-0306	T-15	LW025
SINR/L-3732S-16	AI16	AE16	CS35115	CS6-0306	T-15	LW025
SINR/L-3025S-22	AI22	AE22	CS45115	CS6-0406	T-15	LW030
SINR/L-3732S-22	AI22	AE22	CS45115	CS6-0406	T-15	LW030
SINR/L-0012-11-125	-	-	CS30	-	T-10	-
SINR/L-0016-16-150	-	-	CS35	-	T-15	-
CINR/L--0010-11	-	-	CS30	-	T-10	-
CINR/L-0012-11	-	-	CS30	-	T-10	-
CINR/L-0016-16	-	-	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)



F

车削刀具
TURNING TOOLS

切槽刀
Grooving Turning Tool

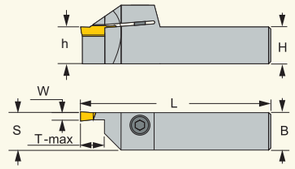
外圆切槽刀 F123
External Grooving Turning Tool

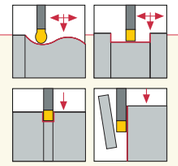
内孔切槽刀 F129
Internal Grooving Turning Tool

端面切槽刀 F132
Axial Grooving Tool

外圆切槽刀
External Grooving Turning Tool

外圆切断切槽刀杆
External Parting and Grooving Tool





本图所示为左手刀（R）
Left-hand shown

规格型号 Designation	尺寸 Dimensions(mm)						刀片 Insert	在库 Stock	
	W	T-max	H=h	B	L	S		R	L
HAER/L1616-2T14	2	14	16	16	100	17	HA20..	●	●
HAER/L2020-2T14	2	14	20	20	125	21	HA20..	●	●
HAER/L2525-2T14	2	14	25	25	150	26	HA20..	●	●
HAER/L1616-2.5T16	2.5	16	16	16	100	17	HA25..	●	●
HAER/L2020-2.5T16	2.5	16	20	20	125	21	HA25..	●	●
HAER/L2525-2.5T16	2.5	16	25	25	150	26	HA25..	●	●

- 16ER: 右手刀片　16EL: 左手刀片
- 订货示例：1 件 HAER/L1616-2T14
- 刀片需单独订购
- 16ER: right-hand insert　16EL: left-hand Insert
- Ordering sample: 1 PC HAER/L1616-2T14
- Insert should be ordered separately

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HAER/L1616-2T14	SCAM5x12	TH40L
HAER/L2020-2T14	SCAM5x20	TH40L
HAER/L2525-2T14	SCAM6x20	TH50L
HAER/L1616-2.5T16	SCAM5x12	TH40L
HAER/L2020-2.5T16	SCAM5x20	TH40L
HAER/L2525-2.5T16	SCAM6x20	TH50L

M3G 外圆切槽刀片
with T Insert

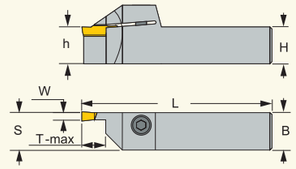
规格型号 Designation	尺寸 Dimensions(mm)					切削参数推荐 Cutting parameter
	W	R	L	D	S	VC(m/min)
HA2002C2-M3G 1230	2.0	0.2	16.0	1.2	3.5	110
HA2502C2-M3G 1230	2.5	0.2	18.5	2.0	3.9	110

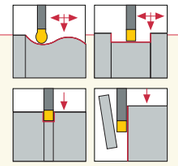
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

GROOVING TOOLS SERIES 切槽刀

外圆切槽刀
External Grooving Turning Tool

外圆切断切槽刀杆
External Parting and Grooving Tool





本图所示为左手刀（R）
Left-hand shown

规格型号 Designation	尺寸 Dimensions(mm)						刀片 Insert	在库 Stock	
	W	T-max	H=h	B	L	S		R	L
HAER/L1616-3T18	3	18	16	16	100	17	HA30..	●	●
HAER/L2020-3T18	3	18	20	20	125	21	HA30..	●	●
HAER/L2525-3T18	3	18	25	25	150	26	HA30..	●	●
HAER/L3225-3T18	3	18	32	25	170	26	HA30..	●	●
HAER/L3232-3T18	3	18	32	32	170	33	HA30..	●	●
HAER/L2020-4T18	4	18	20	20	125	21	HA40..	●	●
HAER/L2525-4T18	4	18	25	25	150	26	HA40..	●	●
HAER/L3225-4T18	4	18	32	25	170	26	HA40..	●	●
HAER/L3232-4T18	4	18	32	32	170	33	HA40..	●	●

- 16ER: 右手刀片　16EL: 左手刀片
- 订货示例：1 件 HAER/L1616-3T18
- 刀片需单独订购
- 16ER: right-hand insert　16EL: left-hand Insert
- Ordering sample: 1 PC HAER/L1616-3T18
- Insert should be ordered separately

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HAER/L1616-3T18	SCAM5x12	TH40L
HAER/L2020-3T18	SCAM5x20	TH40L
HAER/L2525-3T18	SCAM6x20	TH50L
HAER/L3225-3T18	SCAM6x20	TH50L
HAER/L3232-3T18	SCAM6x20	TH50L
HAER/L2020-4T18	SCAM5x20	TH40L
HAER/L2525-4T18	SCAM6x20	TH50L
HAER/L3225-4T18	SCAM6x20	TH50L
HAER/L3232-4T18	SCAM6x20	TH50L

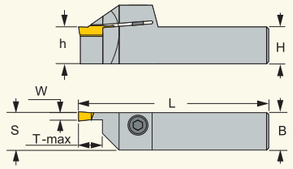
M3G 外圆切槽刀片
with T Insert

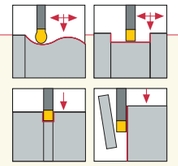
规格型号 Designation	尺寸 Dimensions(mm)					切削参数推荐 Cutting parameter
	W	R	L	D	S	VC(m/min)
HA3004C2-M3G 1230	3.0	0.4	21.2	2.35	4.8	110
HA4004C2-M3G 1230	4.0	0.4	21.0	3.3	4.8	110

● 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)

外圆切槽刀
External Grooving Turning Tool

外圆切断切槽刀杆
External Parting and Grooving Tool





本图所示为左手刀（R）
Left-hand shown

规格型号 Designation	尺寸 Dimensions(mm)						刀片 Insert	在库 Stock	
	W	T-max	H=h	B	L	S		R	L
HAER/L2020-5T23	5	23	20	20	125	21	HA50..	●	●
HAER/L2525-5T23	5	23	25	25	150	26	HA50..	●	●
HAER/L3225-5T23	5	23	32	25	170	26	HA50..	●	●
HAER/L3232-5T23	5	23	32	32	170	33	HA50..	●	●
HAER/L2020-6T23	6	23	20	20	125	21	HA60..	●	●
HAER/L2525-6T23	6	23	25	25	150	26	HA60..	●	●
HAER/L3225-6T23	6	23	32	25	170	26	HA60..	●	●
HAER/L3232-6T23	6	23	32	32	170	33	HA60..	●	●
HAER/L2525-8T28	8	28	25	25	150	26.5	HA80..	●	●
HAER/L3232-8T28	8	28	32	32	170	33.5	HA80..	●	●

- 16ER: 右手刀片　16EL: 左手刀片
- 订货示例：1 件 HAER/L2020-5T23
- 刀片需单独订购
- 16ER: right-hand insert　16EL: left-hand Insert
- Ordering sample: 1 PC HAER/L2020-5T23
- Insert should be ordered separately

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HAER/L2020-5T23	SCAM5x20	TH40L
HAER/L2525-5T23	SCAM6x20	TH50L
HAER/L3225-5T23	SCAM6x20	TH50L
HAER/L3232-5T23	SCAM6x20	TH50L
HAER/L2020-6T23	SCAM5x20	TH40L
HAER/L2525-6T23	SCAM6x20	TH50L
HAER/L3225-6T23	SCAM6x20	TH50L
HAER/L3232-6T23	SCAM6x20	TH50L
HAER/L2525-8T28	SCAM6x20	TH50L
HAER/L3232-8T28	SCAM6x20	TH50L

M3G 外圆切槽刀片
with T Insert

规格型号 Designation	尺寸 Dimensions(mm)					切削参数推荐 Cutting parameter
	W	R	L	D	S	VC(m/min)
HA5004C2-M3G 1230	5.0	0.4	26.0	4.1	5.8	110
HA5008C2-M3G 1230	5.0	0.8	26.0	4.1	5.8	110
HA6004C2-M3G 1230	6.0	0.4	26.0	5.0	5.8	110
HA6008C2-M3G 1230	6.0	0.8	26.0	5.0	5.8	110
HA8008C2-M3G 1230	8.0	0.8	31.0	6.0	6.5	110

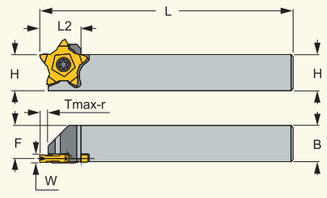
● 标准库存 Item in stock
◐ 半标准库存（订货时，请确认交货期） Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存（订货时，请确认交货期） Order on demand (please confirm delivery time when ordering it)

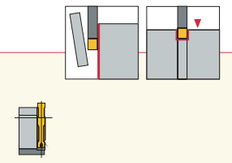
GROOVING TOOLS SERIES 切槽刀

外圆切槽刀
External Grooving Turning Tool

PCHR/L







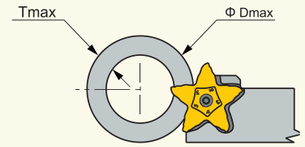
本图所示为右手刀
Right-hand shown

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	12x12	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…	●

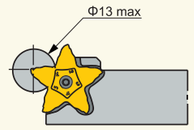
- 订货示例：1 件 PCHR 10-24
- Ordering sample: 1 PC PCHR 10-24

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
PCHR/L 10-24	SR 16-212-01397 SR 16-212-01397L	T2010/5
PCHR/L 12-24	SR 16-212-01397 SR 16-212-01397L	T2010/5
PCHR/L 16-24	SR 16-212-01397 SR 16-212-01397L	T2010/5
PCHR/L 20-24	SR 16-212-01397 SR 16-212-01397L	T2010/5
PCHR/L 252-24	SR 16-212-01397 SR 16-212-01397L	T2010/5



管件类切断尺寸
Parting demension



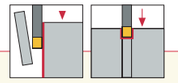
实心件切断尺寸
Parting demension

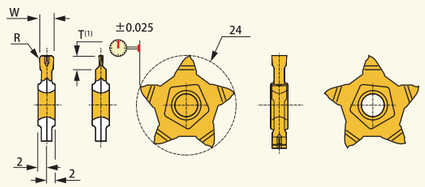
管件类最大切断直径与最大壁厚对应值								
Tmax	3.0	3.5	4.0	4.5	5.0	5.5	6	6.5
Dmax	NO limit	470	210	135	100	80	67	58

● 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)

外圆切槽刀片
Insert for External Grooving Turning Tool

PENTA-24N-J





规格型号 Designation	$W^{\pm 0.02}$	R	Tmax	在库 Stock
PENTA24N050J000	0.50	0.00	1.0	●
PENTA24N050J004	0.50	0.04	2.5	●
PENTA24N080J000	0.80	0.00	1.6	●
PENTA24N100J006	1.00	0.06	3.5	●
PENTA24N104J000	1.04	0.00	2.0	●
PENTA24N120J000	1.20	0.00	2.0	●
PENTA24N140J000	1.40	0.00	2.0	●
PENTA24N147J000	1.47	0.00	2.5	●
PENTA24N150J010	1.50	0.10	5.0	●
PENTA24N157J015	1.57	0.15	3.0	●
PENTA24N170J010	1.70	0.10	3.0	●
PENTA24N178J018	1.78	0.18	3.0	●
PENTA24N196J015	1.96	0.15	3.0	●
PENTA24N200J020	2.00	0.20	6.0	●
PENTA24N222J015	2.22	0.15	3.5	●
PENTA24N230J020	2.30	0.20	3.5	●
PENTA24N239J015	2.39	0.15	5.0	●
PENTA24N247J020	2.47	0.20	5.0	●
PENTA24N270J010	2.70	0.10	5.0	●
PENTA24N287J020	2.87	0.20	6.5	●
PENTA24N300J000	3.00	0.00	6.5	●
PENTA24N300J020	3.00	0.20	6.5	●
PENTA24N300J040	3.00	0.40	6.5	●
PENTA24N315J015	3.15	0.15	6.5	●
PENTA24N318J020	3.18	0.20	6.5	●

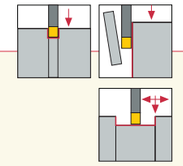
- (1) 当刀片 ≥2.39 时，方能精整车
- 订货示例：1 件 PENTA24N050 J004 IC1008
- (1) it can be finish turning if the insert width ≥ 2.39
- Ordering sample: 1 PC PENTA24N050 J004 IC1008

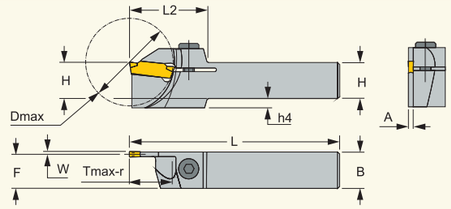
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

GROOVING TOOLS SERIES 切槽刀

外圆切槽刀
External Grooving Turning Tool

ETGDR





本图所示为左手刀（R）
Left-hand shown

规格型号 Designation	尺寸 Dimensions(mm)						刀片 Insert	在库 Stock	
	H	B	L	E	W	F		R	L
ETGDR/L-16-3M	16	16	125	16	3	16	TGMF..	●	●
ETGDR/L-20-3M	20	20	125	18	3	20	TGMF..	●	●
ETGDR/L-20-4M	20	20	125	18	4-5	20	TGMF..	●	●
ETGDR/L-25-3M	25	25	150	18	3	25	TGMF..	●	●
ETGDR/L-25-4M	25	25	150	18	4-5	25	TGMF..	●	●
ETGDR/L-25-5M	25	25	150	18	5-6.4	25	TGMF..	●	●

备件
Spare Parts

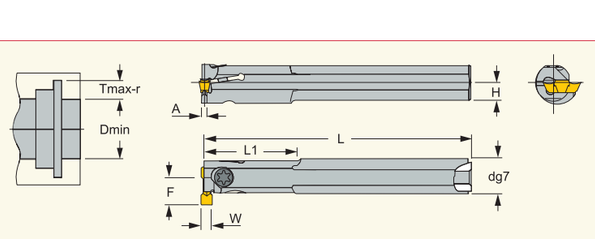
规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
ETGDR/L-16-3M	CS6-50	LW040
ETGDR/L-20-3M	CS6-60	LW050
ETGDR/L-20-4M	CS6-60	LW050
ETGDR/L-25-3M	CS6-60	LW050
ETGDR/L-25-4M	CS6-60	LW050
ETGDR/L-25-5M	CS6-60	LW050

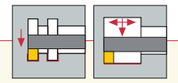
- 订货示例：1 件 ETGDR/L-16-3M
- 刀片订购请与销售工程师联系
- Ordering sample: ETGDR/L-16-3M
- Insert should be ordered separately

车削刀具 TURNING TOOLS

● 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)

内孔切槽刀
Internal Grooving Turning Tool





本图所示为右手刀（R）
Right-hand shown

规格型号 Designation	尺寸 Dimensions(mm)								刀片 Insert	在库 Stock	
	W	T-max	ØDmin	Ød	S	L	L1	H		R	L
HAIR/L2016-2T04	2	4	20	16	12	125	35	15	HA20..	●	●
HAIR/L2520-2T05	2	5	25	20	14.5	150	45	18	HA20..	●	●
HAIR/L2925-2T05	2	5	29	25	17	200	45	23	HA20..	●	●
HAIR/L2520-2.5T05	2.5	5	25	20	14.5	150	45	18	HA25..	●	●
HAIR/L2925-2.5T05	2.5	5	29	25	17	200	45	23	HA25..	●	●
HAIR/L2520-3T06	3	6	25	20	15.5	150	45	18	HA30..	●	●
HAIR/L3125-3T06	3	6	31	25	18.5	200	45	23	HA30..	●	●
HAIR/L3732-3T06	3	6	37	32	21.5	250	65	30	HA30..	●	●
HAIR/L2520-4T06	4	6	25	20	15.5	150	45	18	HA40..	●	●
HAIR/L3125-4T06	4	6	31	25	18.5	200	45	23	HA40..	●	●
HAIR/L3732-4T06	4	6	37	32	21.5	250	65	30	HA40..	●	●

- 16ER: 右手刀片　16EL: 左手刀片
- 订货示例：1 件 HAIR/L2016-2T04
- 刀片需单独订购
- 16ER: right-hand insert 16EL: left-hand Insert
- Ordering sample: 1 PC HAIR/L2016-2T04
- Insert should be ordered separately

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HAIR/L2016-2T04	SCAM4x12	TH30L
HAIR/L2520-2T05	SCAM4x12	TH30L
HAIR/L2925-2T05	SCAM5x12	TH40L
HAIR/L2520-2.5T05	SCAM4x12	TH30L
HAIR/L2925-2.5T05	SCAM5x12	TH40L
HAIR/L2520-3T06	SCAM4x12	TH30L
HAIR/L3125-3T06	SCAM5x12	TH40L
HAIR/L3732-3T06	SCAM5x20	TH40L
HAIR/L2520-4T06	SCAM4x12	TH30L
HAIR/L3125-4T06	SCAM5x12	TH40L
HAIR/L3732-4T06	SCAM5x20	TH40L

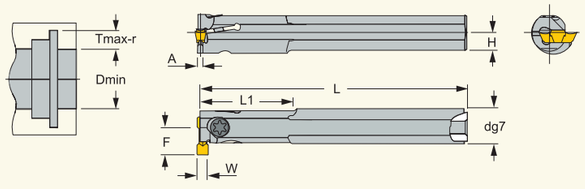
M3G 内孔切槽刀片
with T Insert

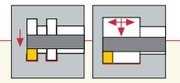
规格型号 Designation	尺寸 Dimensions(mm)					切削参数推荐 Cutting parameter
	W	R	L	D	S	VC(m/min)
HA2002C2-M3G 1230	2.0	0.2	16.0	1.2	3.5	110
HA2502C2-M3G 1230	2.5	0.2	18.5	2.0	3.9	110
HA3004C2-M3G 1230	3.0	0.4	21.2	2.35	4.8	110
HA4004C2-M3G 1230	4.0	0.4	21.0	3.3	4.8	110

● 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 TOOLS SERIES 切槽刀

内孔切槽刀
Internal Grooving Turning Tool





本图所示为右手刀（R）
Right-hand shown

规格型号 Designation	尺寸 Dimensions(mm)								刀片 Insert	在库 Stock	
	W	T-max	ØDmin	Ød	S	L	L1	H		R	L
HAIR/L3125-5T08	5	8	31	25	19.5	200	45	23	HA50..	●	●
HAIR/L3732-5T08	5	8	37	32	21.5	250	65	30	HA50..	●	●
HAIR/L3125-6T08	6	8	31	25	19.5	200	45	23	HA60..	●	●
HAIR/L3732-6T08	6	8	37	32	21.5	250	65	30	HA60..	●	●
HAIR/L3732-8T10	8	10	37	32	23.4	250	65	30	HA80..	●	●
HAIR/L4540-8T10	8	10	45	40	27.2	300	70	37	HA80..	●	●

- 16ER: 右手刀片　16EL: 左手刀片
- 订货示例：1 件 HAIR/L2016-2T04
- 刀片需单独订购
- 16ER: right-hand insert 16EL: left-hand Insert
- Ordering sample: 1 PC HAIR/L2016-2T04
- Insert should be ordered separately

备件
Spare Parts

规格型号 Designation	锁紧螺钉 Screw	扳手 Allen key
HAIR/L3125-5T08	SCAM5x12	TH40L
HAIR/L3732-5T08	SCAM5x20	TH40L
HAIR/L3125-6T08	SCAM5x12	TH40L
HAIR/L3732-6T08	SCAM5x20	TH40L
HAIR/L3732-8T10	SCAM5x20	TH40L
HAIR/L4540-8T10	SCAM5x20	TH40L

M3G 内孔切槽刀片
with T Insert

规格型号 Designation	尺寸 Dimensions(mm)					切削参数推荐 Cutting parameter
	W	R	L	D	S	VC(m/min)
HA5004C2-M3G 1230	5.0	0.4	26.0	4.1	5.8	110
HA5008C2-M3G 1230	5.0	0.8	26.0	4.1	5.8	110
HA6004C2-M3G 1230	6.0	0.4	26.0	5.0	5.8	110
HA6008C2-M3G 1230	6.0	0.8	26.0	5.0	5.8	110
HA8008C2-M3G 1230	8.0	0.8	31.0	6.0	6.5	110

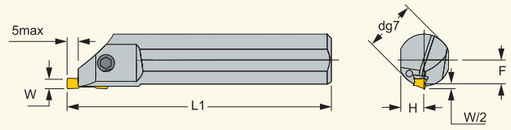
● 标准库存 Item in stock
◐ 半标准库存 (订货时，请确认交货期) Item of short delivery time (please confirm delivery time when ordering it)
○ 无库存 (订货时，请确认交货期) Order on demand (please confirm delivery time when ordering it)

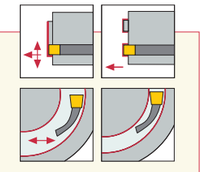
切削速度推荐值
Recommended Cutting Speed

工件材质 Workpiece material		硬度（HB） Hardness	切削速度 Vc （m/min） Cutting speed
P	低碳钢 Soft steel	80 – 170	110 (70-180)
	高碳钢 High-carbon steel	170 –250	110 (70-150)
	低合金钢 Low alloy steel	140– 260	110 (40-150)
	高合金钢 High alloy steel	180– 300	110 (40-150)
	铸钢 Cast steel	180– 300	110 (40-150)
M	铁素体 / 马氏体 Ferritic/ martensitic	150– 270	110 (40-180)
	奥氏体 Austenitic	150– 270	110 (40-180)
K	可锻铸铁 Malleable cast iron	150– 230	110 (50-180)
	灰口铸铁 Grey cast iron	150– 230	110 (50-180)
	球墨铸铁 Ductile cast iron	160– 260	100 (50-150)

端面切槽刀
Axial Grooving Tool

HFIR/L-MC





本图所示为右手刀（R）
Right-hand shown

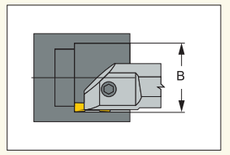
规格型号 Designation	Wmax	HxB	L	F±0.1	H	Tmax-a	适用刀片 Insert	在库 Stock
HFIR/L 25MC	3-6	25	200	11.14	11.5	5	HFPR/L	●
HFIR/L 32MC	3-6	32	250	16.68	14.5	5	HFPR/L	●
HFIR/L 40MC	3-6	40	300	18.73	18.0	5	HFPR/L	●

- 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 HFIL 32MC
- Insert should be ordered separately

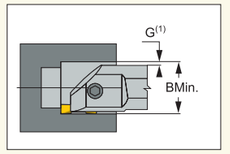
备件
Spare Parts

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

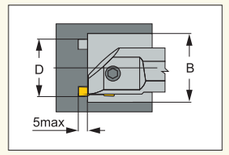
扩孔加工
Boring



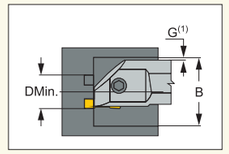
B Min.=f+d/2+W/2+W2+2G



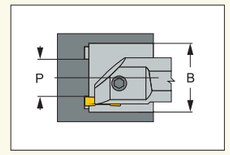
内孔端面切槽加工
Internal Axial Grooving



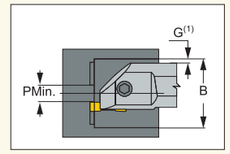
D Min.=2F+d+W+B+2G



内孔端面切槽带扩孔加工
Internal Axial Grooving/Boring



P Min.=2F+d-W-B+2G G1=0.5MM



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)



G
附件
ACCESSORIES

附件
Accessories

ER 筒夹 G3
ER Collet

螺帽 G10
Nut

丝锥快换夹头 G12
Quick Change Chuck

强力刀柄直筒夹 G14
Straight Collet for Power Chuck Adaptor

液压刀柄变径套 G15
Reduction Sleeve for Hydraulic Chuck Adaptor

大圆头螺钉 G17
Truss Head Screw

扳手 G18
Wrench

方头螺栓 G19
Coach Bolt

ER 刀柄后定位螺钉 G20
Backstop Screw for ER Collet Chuck

轴向调节螺钉 G20
Axial adjusting screw

HSK-A 型冷却管 G21
HSK Type A Coolant Tube

HSK-A 型冷却管扳手 G21
Wrench for HSK Type A Coolant Tube

拉钉 G22
Pull Stud

标准测量棒 G26
Standard Measuring Bar

寻边器 G27
Edge Sensor

Z 轴设定器 G28
Z-Axial Setter

主轴清洁棒 G29
Spindle Taper Cleaner

ER 扳手 G29
ER Wrench

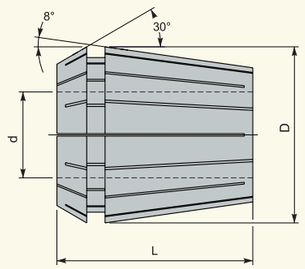
强力夹头刀柄专用钩形扳手 G30
Wrench for Power Chuck Adaptor

立卧两用锁刀座 G30
Assembly Device

刀具管理车 G30
Trolley for Tools

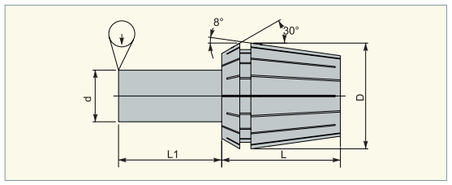
标准 ER 筒夹
Standard ER Collet





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	2-1.5	ER25-D2	2-1.5	ER32-D3	3-2	ER40-4	4-3
ER16-D1.5	1.5-1	ER20-D2.5	2.5-2	ER25-D2.5	2.5-2	ER32-D4	4-3	ER40-5	5-4
ER16-D2	2-1.5	ER20-D3	3-2	ER25-D3	3-2	ER32-D5	5-4	ER40-6	6-5
ER16-D2.5	2.5-2	ER20-D4	4-3	ER25-D4	4-3	ER32-D6	6-5	ER40-7	7-6
ER16-D3	3-2	ER20-D5	5-4	ER25-D5	5-4	ER32-D7	7-6	ER40-8	8-7
ER16-D4	4-3	ER20-D6	6-5	ER25-D6	6-5	ER32-D8	8-7	ER40-9	9-8
ER16-D5	5-4	ER20-D7	7-6	ER25-D7	7-6	ER32-D9	9-8	ER40-10	10-9
ER16-D6	6-5	ER20-D8	8-7	ER25-D8	8-7	ER32-D10	10-9	ER40-11	11-10
ER16-D7	7-6	ER20-D9	9-8	ER25-D9	9-8	ER32-D11	11-10	ER40-12	12-11
ER16-D8	8-7	ER20-D10	10-9	ER25-D10	10-9	ER32-D12	12-11	ER40-13	13-12
ER16-D9	9-8	ER20-D11	11-10	ER25-D11	11-10	ER32-D13	13-12	ER40-14	14-13
ER16-D10	10-9	ER20-D12	12-11	ER25-D12	12-11	ER32-D14	14-13	ER40-15	15-14
-	-	ER20-D13	13-12	ER25-D13	13-12	ER32-D15	15-14	ER40-16	16-15
-	-	-	-	ER25-D14	14-13	ER32-D16	16-15	ER40-17	17-16
-	-	-	-	ER25-D15	15-14	ER32-D17	17-16	ER40-18	18-17
-	-	-	-	ER25-D16	16-15	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

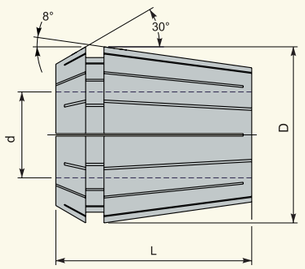
- 标准 ER 筒夹分普通 ER 筒夹和高精度 ER 筒夹；
- 高精度 ER 筒夹在规格型号后加“AA”；
- 订购示例：1 件 ER16-D10；5 件 ER32-D8 AA。
- There are two styles of standard ER collet, one is general and the other is with high precision.
- There is "AA" at the end of the model# shows that if it is high precision ER collet.
- Ordering sample: 1 PC ER16-D10; 5 PCS ER32-DB 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	0.015	0.01
ER20	21	3.0-6.0	31	16	0.015	0.005
ER25	26	6.0-10.0	35	25	0.015	0.005
ER32	33	10.0-18.0	40	40	0.015	0.005
ER40	40	18.0-26.0	46	50	0.015	0.005

内冷式 ER 筒夹
ER Collet with Coolant



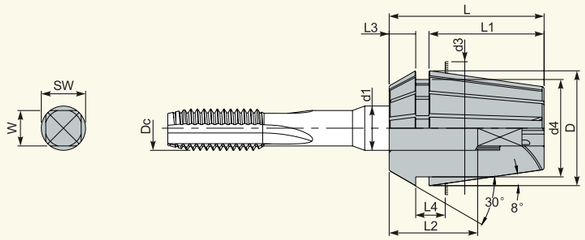


ER16C		ER20C		ER25C		ER32C		ER40C	
规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range	规格型号 Designation	夹持范围 Clamping range
ER16-D3.C	3-2.9	ER20-D3.C	3-2.9	ER25-D3.C	3-2.9	ER32-D3.C	3-2.9	ER40-D4.C	4-3.9
ER16-D4.C	4-3.9	ER20-D4.C	4-3.9	ER25-D4.C	4-3.9	ER32-D4.C	4-3.9	ER40-D5.C	5-4.9
ER16-D5.C	5-4.9	ER20-D5.C	5-4.9	ER25-D5.C	5-4.9	ER32-D5.C	5-4.9	ER40-D6.C	6-5.9
ER16-D6.C	6-5.5	ER20-D6.C	6-5.5	ER25-D6.C	6-5.5	ER32-D6.C	6-5.9	ER40-D7.C	7-6.9
ER16-D7.C	7-6.5	ER20-D7.C	7-6.5	ER25-D7.C	7-6.5	ER32-D7.C	7-6.9	ER40-D8.C	8-7.9
ER16-D8.C	8-7.5	ER20-D8.C	8-7.5	ER25-D8.C	8-7.5	ER32-D8.C	8-7.5	ER40-D9.C	9-8.9
ER16-D9.C	9-8.5	ER20-D9.C	9-8.5	ER25-D9.C	9-8.5	ER32-D9.C	9-8.5	ER40-D10.C	10-9.5
ER16-D10.C	10-9.5	ER20-D10.C	10-9.5	ER25-D10.C	10-9.5	ER32-D10.C	10-9.5	ER40-D11.C	11-10.5
-	-	ER20-D11.C	11-10.5	ER25-D11.C	11-10.5	ER32-D11.C	11-10.5	ER40-D12.C	12-11.5
-	-	ER20-D12.C	12-11.5	ER25-D12.C	12-11.5	ER32-D12.C	12-11.5	ER40-D13.C	13-12.5
-	-	ER20-D13.C	13-12.5	ER25-D13.C	13-12.5	ER32-D13.C	13-12.5	ER40-D14.C	14-13.5
-	-	-	-	ER25-D14.C	14-13.5	ER32-D14.C	14-13.5	ER40-D15.C	15-14.5
-	-	-	-	ER25-D15.C	15-14.5	ER32-D15.C	15-14.5	ER40-D16.C	16-15.5
-	-	-	-	ER25-D16.C	16-15.5	ER32-D16.C	16-15.5	ER40-D17.C	17-16.5
-	-	-	-	-	-	ER32-D17.C	17-16.5	ER40-D18.C	18-17.5
-	-	-	-	-	-	ER32-D18.C	18-17.5	ER40-D19.C	19-18.5
-	-	-	-	-	-	ER32-D19.C	19-18.5	ER40-D20.C	20-19.5
-	-	-	-	-	-	ER32-D20.C	20-19.5	ER40-D21.C	21-20.5
-	-	-	-	-	-	-	-	ER40-D22.C	22-21.5
-	-	-	-	-	-	-	-	ER40-D23.C	23-22.5
-	-	-	-	-	-	-	-	ER40-D24.C	24-23.5
-	-	-	-	-	-	-	-	ER40-D25.C	25-24.5
-	-	-	-	-	-	-	-	ER40-D26.C	26-25.5

- 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 if it is high precision ER collet.
- Ordering sample: 1 PC ER16-D10.C; 5 PCS ER32-DB.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.
- Canwithstand water pressure 7Mpa.

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

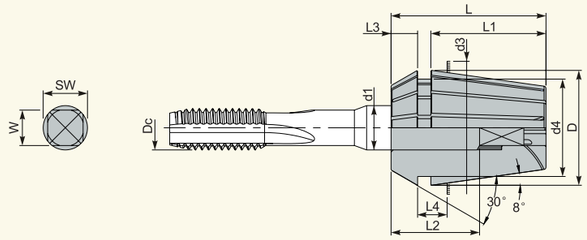
ER16-G

规格型号 Designation	d1	SW	W	通用标准 Dc General Standard				L2	在库 Stock
				ISO	JIS	DIN371	DIN376		
ER16-G2.24x1.8	2.24	2	1.8	M3	-	-	-	15	○
ER16-G2.5x2.1	2.5	2.2	2.1	-	-	-	M3.5	15	○
	2.5	2.2	2	M3.5	-	-	-	15	○
ER16-G2.8x2.1	2.8	2.6	2.1	-	-	-	M4	15	○
ER16-G3x2.5	3	2.8	2.5	-	M2	-	-	15	○
ER16-G3.15x2.5	3.15	2.9	2.5	M3,M4	-	-	-	15	○
ER16-G3.5x2.7	3.5	3.3	2.7	-	-	M3	M5	15	○
ER16-G3.55x2.8	3.55	3.3	2.8	M3.5,M4.5	-	-	-	15	○
ER16-G4x3	4	3.8	3	-	-	M3.5	-	18	○
ER16-G4x3.15	4	3.8	3.1	-	M3	-	-	18	○
	4	3.8	3.15	M4,M5	-	-	-	18	○
ER16-G4.5x3.4	4.5	4.3	3.4	-	-	M4	M6	18	○
ER16-G4.5x3.55	4.5	4.3	3.55	M6	-	-	-	18	○
ER16-G5x4	5	4.7	4	M5	M4,M4.5	-	-	18	○
ER16-G5.5x4.3	5.5	4.37	4.3	-	-	-	M7	18	○
ER16-G5.5x4.5	5.5	4.37	4.5	-	M5	-	-	18	○
ER16-G6x4.5	6	5.09	4.5	-	M6	-	-	18	○
ER16-G6x4.9	6	5.09	4.9	-	-	M5,M6	M8	18	○
ER16-G6.2x5	6.2	5.21	5	-	M7,M8	-	-	18	○
ER16-G6.3x5	6.3	5.21	5	M6,M8	-	-	-	18	○
ER16-G7x5.5	7	5.84	5.5	-	M9,M10	-	M10	18	○
ER16-G8x6	8	6.88	6	-	M11	-	-	22	○
ER16-G8x6.3	8	6.88	6.2	-	-	M8	M11	22	○
	8	6.88	6.3	M8,M10	-	-	-	22	○
ER16-G8.5x6.5	8.5	7.14	6.5	-	M12	-	-	22	○
ER16-G9x7.1	9	7.95	7	-	-	-	M12	22	○
	9	7.95	7.1	M12	-	-	-	22	○
ER16-G10x8	10	9.16	8	M10	-	M10	-	22	○

- 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 ER16-G2.24x1.8
- Select the proper ER collet for tapping chuck according to the size of D.d1.W
- Ordering sample: 1 PC ER16-G2.24x1.8

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 General Standard				L2	在库 Stock
				ISO	JIS	DIN371	DIN376		
ER20-G2.24x1.8	2.24	2	1.8	M3	-	-	-	15	○
ER20-G2.5x2.1	2.5	2.2	2.1	-	-	-	M3.5	15	○
	2.5	2.2	2	M3.5	-	-	-	15	○
ER20-G2.8x2.1	2.8	2.6	2.1	-	-	-	M4	15	○
ER20-G3x2.5	3	2.8	2.5	-	M2	-	-	15	○
ER20-G3.15x2.5	3.15	2.9	2.5	M3,M4	-	-	-	15	○
ER20-G3.5x2.7	3.5	3.3	2.7	-	-	M3	M5	15	○
ER20-G3.55x2.8	3.55	3.3	2.8	M3.5,M4.5	-	-	-	15	○
ER20-G4x3	4	3.8	3	-	-	M3.5	-	18	○
ER20-G4x3.15	4	3.8	3.1	-	M3	-	-	18	○
	4	3.8	3.15	M4,M5	-	-	-	18	○
ER20-G4.5x3.4	4.5	4.3	3.4	-	-	M4	M6	18	○
ER20-G4.5x3.55	4.5	4.3	3.55	M6	-	-	-	18	○
ER20-G5x4	5	4.7	4	M5	M4,M4.5	-	-	20	○
ER20-G5.5x4.3	5.5	4.37	4.3	-	-	-	M7	20	○
ER20-G5.5x4.5	5.5	4.37	4.5	-	M5	-	-	20	○
ER20-G6x4.5	6	5.09	4.5	-	M6	-	-	20	○
ER20-G6x4.9	6	5.09	4.9	-	-	M5,M6	M8	20	○
ER20-G6.2x5	6.2	5.21	5	-	M7,M8	-	-	20	○
ER20-G6.3x5	6.3	5.21	5	M6,M8	-	-	-	20	○
ER20-G7x5.5	7	5.84	5.5	-	M9,M10	-	M10	20	○
ER20-G8x6	8	6.88	6	-	M11	-	-	22	○
ER20-G8x6.3	8	6.88	6.2	-	-	M8	M11	22	○
	8	6.88	6.3	M8,M10	-	-	-	22	○
ER20-8.5x6.5	8.5	7.14	6.5	-	M12	-	-	22	○
ER20-G9x7.1	9	7.95	7	-	-	-	M12	22	○
	9	7.95	7.1	M12	-	-	-	22	○
ER20-G10x8	10	9.16	8	M10	-	M10	-	25	○
ER20-G10.5x8	10.5	9.16	8	-	M14,M15	-	-	25	○
ER20-G11x9	11	10.53	9	-	-	-	M14	25	○
ER20-G11.2x9	11.2	10.53	9	M14	-	-	-	25	○
ER20-G12x9	12	10.53	9	-	-	-	M16	25	○
ER20-G12.5x10	12.5	11.91	10	M16	M16	-	-	25	○
ER20-G13X10	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-G2.24x1.8
- Select the proper ER collet for tapping chuck according to the size of D.d1.W
- Ordering sample: 1 PC ER20-G2.24x1.8

● 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

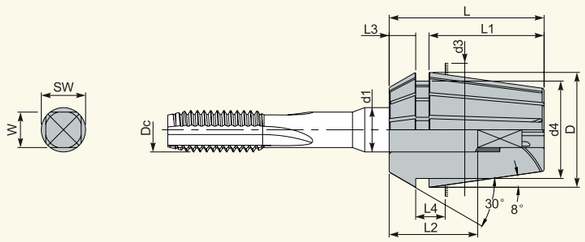
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

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

附件 ACCESSORIES

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 General Standard				L2	在库 Stock
				ISO	JIS	DIN371	DIN376		
ER25-G2.24x1.8	2.24	2	1.8	M3	-	-	-	15	○
ER25-G2.5x2.1	2.5	2.2	2.1	-	-	-	M3.5	15	○
	2.5	2.2	2	M3.5	-	-	-	15	○
ER25-G2.8x2.1	2.8	2.6	2.1	-	-	-	M4	15	○
ER25-G3x2.5	3	2.8	2.5	-	M2	-	-	15	○
ER25-G3.15x2.5	3.15	2.9	2.5	M3,M4	-	-	-	15	○
ER25-G3.5x2.7	3.5	3.3	2.7	-	-	M3	M5	15	○
ER25-G3.55x2.8	3.55	3.3	2.8	M3.5,M4.5	-	-	-	15	○
ER25-G4x3	4	3.8	3	-	-	M3.5	-	18	○
ER25-G4x3.15	4	3.8	3.1	-	M3	-	-	18	○
	4	3.8	3.15	M4,M5	-	-	-	18	○
ER25-G4.5x3.4	4.5	4.3	3.4	-	-	M4	M6	18	○
ER25-G4.5x3.55	4.5	4.3	3.55	M6	-	-	-	18	○
ER25-G5x4	5	4.7	4	M5	M4,M4.5	-	-	20	○
ER25-G5.5x4.3	5.5	4.37	4.3	-	-	-	M7	20	○
ER25-G5.5x4.5	5.5	4.37	4.5	-	M5	-	-	20	○
ER25-G6x4.5	6	5.09	4.5	-	M6	-	-	20	○
ER25-G6x4.9	6	5.09	4.9	-	-	M5,M6	M8	20	○
ER25-G6.2x5	6.2	5.21	5	-	M7,M8	-	-	20	○
ER25-G6.3x5	6.3	5.21	5	M6,M8	-	-	-	20	○
ER25-G7x5.5	7	5.84	5.5	-	M9,M10	-	M10	20	○
ER25-G8x6	8	6.88	6	-	M11	-	-	22	○
ER25-G8x6.3	8	6.88	6.2	-	-	M8	-	22	○
	8	6.88	6.3	M8,M10	-	-	-	22	○
ER25-G8.5x6.5	8.5	7.14	6.5	-	M12	-	-	22	○
ER25-G9x7.1	9	7.95	7	-	-	-	M12	22	○
	9	7.95	7.1	M12	-	-	-	22	○
ER25-G10x8	10	9.16	8	M10	-	M10	-	26	○
ER25-G10.5x8	10.5	9.16	8	-	M14,M15	-	-	26	○
ER25-G11x9	11	10.53	9	-	-	-	M14	26	○
ER25-G11.2x9	11.2	10.53	9	M14	-	-	-	26	○
ER25-G12x9	12	10.53	9	-	-	-	M16	26	○
ER25-G12.5x10	12.5	11.91	10	M16	M16	-	-	26	○
ER25-G13x10	13	11.91	10	-	M17	-	-	26	○
ER25-G14x11	14	12.97	11	-	M18	-	M18	26	○
ER25-G14x11.2	14	12.97	11.2	M18,M20	-	-	-		○
ER25-G15x12	15	14.06	12	-	M20	-	-	26	○
ER25-G16x12	16	14.06	12	-	-	-	M20	26	○
ER25-G16x12.5	16	14.06	12.5	M22	-	-	-		○

- 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-G2.24x1.8
- Select the proper ER collet for tapping chuck according to the size of D.d1.W
- Ordering sample: 1 PC ER25-G2.24x1.8

● 标准库存 Item in stock

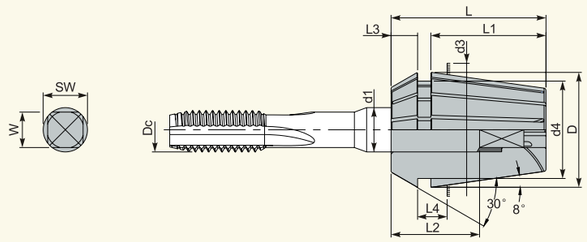
◐ 半标准库存（订货时，请确认交货期）Item of short delivery time (please confirm delivery time when ordering it)

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

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 General Standard				L2	在库 Stock
				ISO	JIS	DIN371	DIN376		
ER32-G2.24x1.8	2.24	2	1.8	M3	-	-	-	15	○
ER32-G2.5x2.1	2.5	2.2	2.1	-	-	-	M3.5	15	○
	2.5	2.2	2	M3.5	-	-	-	15	○
ER32-G2.8x2.1	2.8	2.6	2.1	-	-	-	M4	15	○
ER32-G3x2.5	3	2.8	2.5	-	M2	-	-	15	○
ER32-G3.15x2.5	3.15	2.9	2.5	M3,M4	-	-	-	15	○
ER32-G3.5x2.7	3.5	3.3	2.7	-	-	M3	M5	15	○
ER32-G3.55x2.8	3.55	3.3	2.8	M3.5,M4.5	-	-	-	15	○
ER32-G4x3	4	3.8	3	-	-	M3.5	-	18	○
ER32-G4x3.15	4	3.8	3.1	-	M3	-	-	18	○
	4	3.8	3.15	M4,M5	-	-	-	18	○
ER32-G4.5x3.4	4.5	4.3	3.4	-	-	M4	M6	18	○
ER32-G4.5x3.55	4.5	4.3	3.55	M6	-	-	-	18	○
ER32-G5x4	5	4.7	4	M5	M4,M4.5	-	-	20	○
ER32-G5.5x4.3	5.5	4.37	4.3	-	-	-	M7	20	○
ER32-G5.5x4.5	5.5	4.37	4.5	-	M5	-	-	20	○
ER32-G6x4.5	6	5.09	4.5	-	M6	-	-	20	○
ER32-G6x4.9	6	5.09	4.9	-	-	M5,M6	M8	20	○
ER32-G6.2x5	6.2	5.21	5	-	M7,M8	-	-	20	○
ER32-G6.3x5	6.3	5.21	5	M6,M8	-	-	-	20	○
ER32-G7x5.5	7	5.84	5.5	-	M9,M10	-	M10	20	○
ER32-G8x6	8	6.88	6	-	M11	-	-	22	○
ER32-G8x6.3	8	6.88	6.2	-	-	M8	-	22	○
	8	6.88	6.3	M8,M10	-	-	-	22	○
ER32-G8.5x6.5	8.5	7.14	6.5	-	M12	-	-	22	○
ER32-G9x7.1	9	7.95	7	-	-	-	M12	22	○
	9	7.95	7.1	M12	-	-	-	22	○
ER32-G10x8	10	9.16	8	M10	-	M10	-	25	○
ER32-G10.5x8	10.5	9.16	8	-	M14,M15	-	-	25	○
ER32-G11x9	11	10.53	9	-	-	-	M14	25	○
ER32-G11.2x9	11.2	10.53	9	M14	-	-	-	25	○
ER32-G12x9	12	10.53	9	-	-	-	M16	25	○
ER32-G12.5x10	12.5	11.91	10	M16	M16	-	-	25	○
ER32-G13x10	13	11.91	10	-	M17	-	-	25	○
ER32-G14x11	14	12.97	11	-	M18	-	M18	25	○
ER32-G14x11.2	14	12.97	11.2	M18,M20	-	-	-		○
ER32-G15x12	15	14.06	12	-	M20	-	-	25	○
ER32-G16x12	16	14.06	12	-	-	-	M20	25	○
ER32-G16x12.5	16	14.06	12.5	M22	-	-	-		○
ER32-G17x13	17	15.44	13	-	M22	-	-	25	○
ER32-G18x14.5	18	17.52	14.5	-	-	-	M22,M24	25	○
ER32-G18x14	18	17.52	14	M24	-	-	-		○
ER32-G19x15	19	18.22	15	-	M24,M25	-	-	25	○
ER32-G20x15	20	19.61	15	-	M26,M27	-	-	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 ER32-G2.24x1.8
- Select the proper ER collet for tapping chuck according to the size of D.d1.W
- Ordering sample: 1 PC ER32-G2.24x1.8

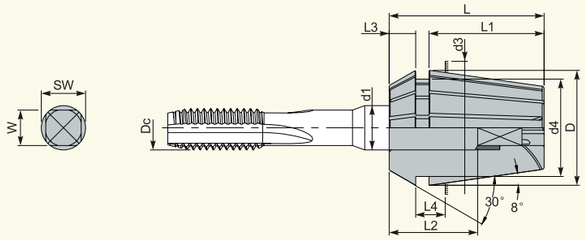
● 标准库存 Item in stock

◐ 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)

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 General Standard				L2	在库 Stock
				ISO	JIS	DIN371	DIN376		
ER40-G2.24x1.8	2.24	2	1.8	M3	-	-	-	15	○
ER40-G2.5x2.1	2.5	2.2	2.1	-	-	-	M3.5	15	○
	2.5	2.2	2	M3.5	-	-	-	15	○
ER40-G2.8x2.1	2.8	2.6	2.1	-	-	-	M4	15	○
ER40-G3x2.5	3	2.8	2.5	-	M2	-	-	15	○
ER40-G3.15x2.5	3.15	2.9	2.5	M3,M4	-	-	-	15	○
ER40-G3.5x2.7	3.5	3.3	2.7	-	-	M3	M5	15	○
ER40-G3.55x2.8	3.55	3.3	2.8	M3.5,M4.5	-	-	-	15	○
ER40-G4x3	4	3.8	3	-	-	M3.5	-	18	○
ER40-G4x3.15	4	3.8	3.1	-	M3	-	-	18	○
	4	3.8	3.15	M4,M5	-	-	-	18	○
ER40-G4.5x3.4	4.5	4.3	3.4	-	-	M4	M6	18	○
ER40-G4.5x3.55	4.5	4.3	3.55	M6	-	-	-	18	○
ER40-G5x4	5	4.7	4	M5	M4,M4.5	-	-	20	○
ER40-G5.5x4.3	5.5	4.37	4.3	-	-	-	M7	20	○
ER40-G5.5x4.5	5.5	4.37	4.5	-	M5	-	-	20	○
ER40-G6x4.5	6	5.09	4.5	-	M6	-	-	20	○
ER40-G6x4.9	6	5.09	4.9	-	-	M5,M6	M8	20	○
ER40-G6.2x5	6.2	5.21	5	-	M7,M8	-	-	20	○
ER40-G6.3x5	6.3	5.21	5	M6,M8	-	-	-	20	○
ER40-G7x5.5	7	5.84	5.5	-	M9,M10	-	M10	20	○
ER40-G8x6	8	6.88	6	-	M11	-	-	22	○
ER40-G8x6.3	8	6.88	6.2	-	-	M8	-	22	○
	8	6.88	6.3	M8,M10	-	-	-	22	○
ER40-G8.5x6.5	8.5	7.14	6.5	-	M12	-	-	22	○
ER40-G9x7.1	9	7.95	7	-	-	-	M12	22	○
	9	7.95	7.1	M12	-	-	-	22	○
ER40-G10x8	10	9.16	8	M10	-	M10	-	28	○
ER40-G10.5x8	10.5	9.16	8	-	M14,M15	-	-	28	○
ER40-G11x9	11	10.53	9	-	-	-	M14	28	○
ER40-G11.2x9	11.2	10.53	9	M14	-	-	-	28	○
ER40-G12x9	12	10.53	9	-	-	-	M16	28	○
ER40-G12.5x10	12.5	11.91	10	M16	M16	-	-	28	○
ER40-G13x10	13	11.91	10	-	M17	-	-	28	○
ER40-G14x11.2	14	12.97	11	-	M18	-	M18	28	○
	14	12.97	11.2	M18,M20	-	-	-		○
ER40-G15x12	15	14.06	12	-	M20	-	-	28	○
ER40-G16x12	16	14.06	12	-	-	-	M20	28	○
ER40-G16x12.5	16	14.06	12.5	M22	-	-	-		○
ER40-G17x13	17	15.44	13	-	M22	-	-	28	○
ER40-G18x14.5	18	17.52	14.5	-	-	-	M22,M24	28	○
ER40-G18x14	18	17.52	14	M24	-	-	-		○
ER40-G19x15	19	18.22	15	-	M24,M25	-	-	28	○
ER40-G20x15	20	19.61	15	-	M26,M27	-	-	28	○

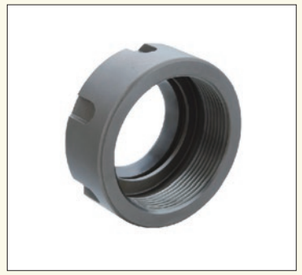
- 请根据 D,d1,W 尺寸选择相对应的攻丝 ER 筒夹
- 订货示例：1 件 ER40-G2.24x1.8
- Select the proper ER collet for tapping chuck according to the size of D.d1.W
- Ordering sample: 1 PC ER40-G2.24x1.8

● 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)

ER 螺帽
ER NUT



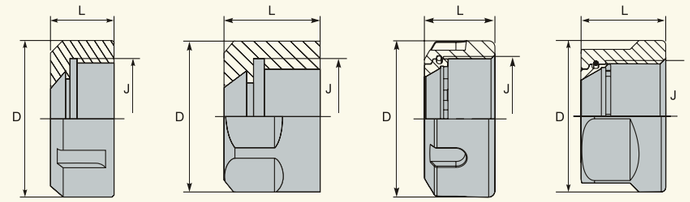


Fig A　Fig B　Fig C　Fig D

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	17.5	M22x1.5	B
		NUT ER20	34	19	M25x1.5	
	标准型 Standard style	NUT ER25	42	20	M32x1.5	A
		NUT ER32	50	22.5	M40x1.5	
		NUT ER40	63	25.5	M50x1.5	
高精度型 High precision (Standard style & Hexagon style)	六角型 Hex style	NUT ER16.TOP	28	17.5	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	22.5	M40x1.5	
		NUT ER40.TOP	63	25.5	M50x1.5	

- TOP 螺帽不推荐装夹攻丝 ER 筒夹
- Select the proper ER collet for tapping chuck according to the size

小径 ER 螺母
ER Nut with Small Diameter

形式 Style		规格型号 Designation	D	L	J	Fig
普通型 General style (Standard style & Hexagon style)	标准型 Hex style	NUT ER16-M	22	18	M19x1.0	A
		NUT ER20-M	28	19	M24x1.0	
	标准型 Standard style	NUT ER25-M	35	20	M30x1.0	A

高精度型 ER 螺帽
High Precision ER Nut

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定心功能。
Friction bearing ER nut with a unique two piece exclusive friction mechanism,combining radial and angular self-centering movements.

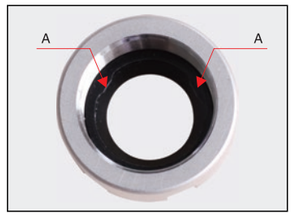
特征 Features

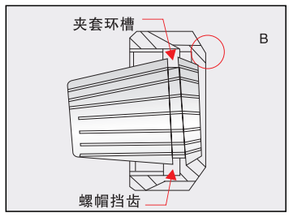
- 独特的双摩擦轴承；
- 径向和角度的浮动设计，可获得更好的同心度；
- 独特的摩擦轴承结构可获得具有更高的夹持力，对比于标准 ER 螺帽其夹持力可增加 50-100%；
- 螺帽内端面其独特的挡齿设计，在高的转速下保持更好的平稳性；
- 紧凑结构设计—与标准螺帽一致的尺寸规格；
- 可装夹密封型筒夹；
- Unique two-piece friction bearing.
- Radial and angular float for better concentricity.
- Powerful gripping force, 50-100% higher than the standard 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 th ecollet' 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).

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.

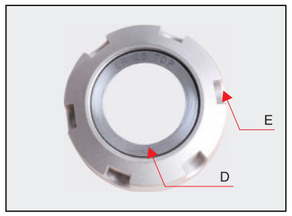






注意 Notes

- 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 parade 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).



注释 Remarks

- 为达到最佳性能 ，在使用前，螺帽的螺纹和筒夹锥面需洁净，并涂上润滑油。
- For maximum performance the clamping nut thread and collet taper must be cleaned and oiled before use.

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.

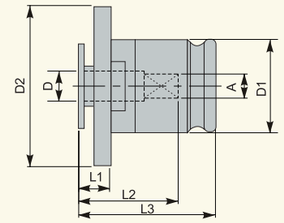
规格型号 Designation	Kg.m
ER16	7
ER20	12
ER25	20
ER32	22
ER40	25

注意 Important

- 推荐的扭矩值是安装夹最大柄径（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 capa city per collet which should be gradually reduced when used with a smaller shank size.

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	A ISO529	B ISO529/ISO2283	C JISNB4430	D DIN371	E DIN374/DIN376	在库 Stock
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	○

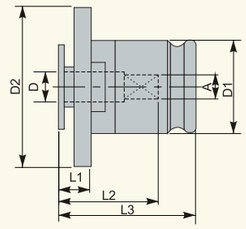
● 标准库存
Item in stock

◐ 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)

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	A	B	C	D	E	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	26	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.

● 标准库存
Item in stock

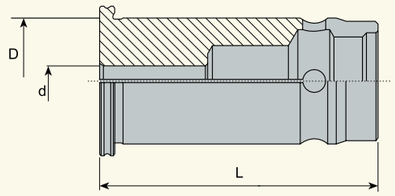
◐ 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)

○ 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

强力刀柄直筒夹
Straight Collet for Power Chuck Chuck Adaptor

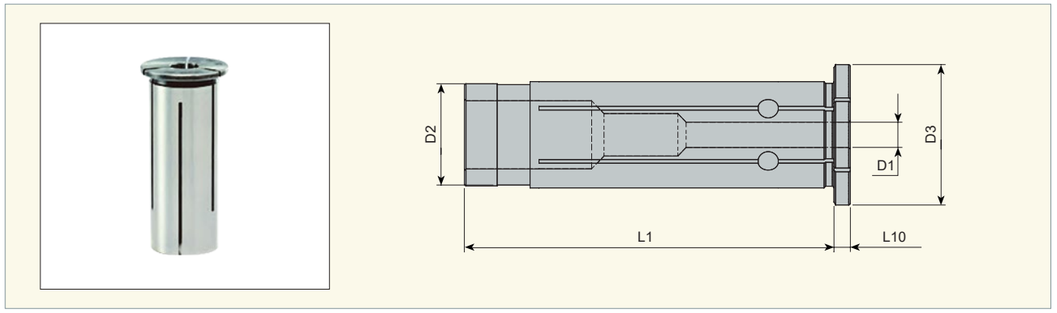




规格型号 Designation	D	d	L
C32-D4	32	4	70
C32-D6	32	6	70
C32-D8	32	8	70
C32-D10	32	10	70
C32-D12	32	12	70
C32-D15	32	15	70
C32-D16	32	16	70
C32-D19	32	19	70
C32-D20	32	20	70
C32-D22	32	22	70
C32-D24	32	24	70
C32-D25	32	25	70

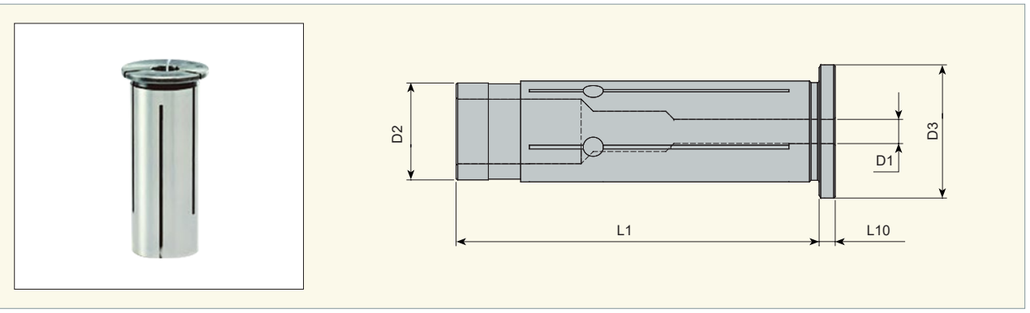
附件 ACCESSORIES

液压刀柄变径套
Reduction Sleeve for Hydraulic Chuck Adaptor



规格型号 Designation	D1	D2	D3	L1	L10	kg
HC12-3	3	12	16.5	45	2	0.1
HC12-4	4	12	16.5	45	2	0.1
HC12-5	5	12	16.5	45	2	0.1
HC12-6	6	12	16.5	45	2	0.1
HC12-8	8	12	16.5	45	2	0.1
HC20-3	3	20	24.5	50.5	2	0.1
HC20-4	4	20	24.5	50.5	2	0.1
HC20-5	5	20	24.5	50.5	2	0.1
HC20-6	6	20	24.5	50.5	2	0.1
HC20-8	8	20	24.5	50.5	2	0.1
HC20-10	10	20	24.5	50.5	2	0.1
HC20-12	12	20	24.5	50.5	2	0.1
HC20-14	14	20	24.5	50.5	2	0.1
HC20-16	16	20	24.5	50.5	2	0.1
HC32-6	6	32	36.5	60.5	3	0.3
HC32-8	8	32	36.5	60.5	3	0.3
HC32-10	10	32	36.5	60.5	3	0.3
HC32-12	12	32	36.5	60.5	3	0.3
HC32-16	16	32	36.5	60.5	3	0.3
HC32-20	20	32	36.5	60.5	3	0.3
HC32-25	25	32	36.5	60.5	3	0.3

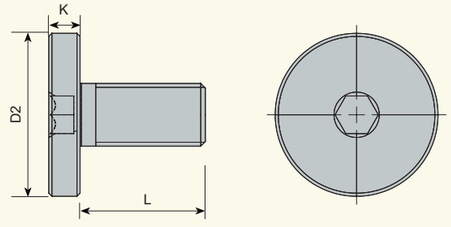
液压刀柄变径套 - 内冷型
Reduction Sleeve with Coolant for Hydraulic Chuck Adaptor



规格型号 Designation	D1	D2	D3	L1	L10	kg
HC12-3.C	3	12	16.5	45	2	0.1
HC12-4.C	4	12	16.5	45	2	0.1
HC12-5.C	5	12	16.5	45	2	0.1
HC12-6.C	6	12	16.5	45	2	0.1
HC12-8.C	8	12	16.5	45	2	0.1
HC20-3.C	3	20	24.5	50.5	2	0.1
HC20-4.C	4	20	24.5	50.5	2	0.1
HC20-5.C	5	20	24.5	50.5	2	0.1
HC20-6.C	6	20	24.5	50.5	2	0.1
HC20-8.C	8	20	24.5	50.5	2	0.1
HC20-10.C	10	20	24.5	50.5	2	0.1
HC20-12.C	12	20	24.5	50.5	2	0.1
HC20-14.C	14	20	24.5	50.5	2	0.1
HC20-16.C	16	20	24.5	50.5	2	0.1
HC32-6.C	6	32	36.5	60.5	3	0.3
HC32-8.C	8	32	36.5	60.5	3	0.3
HC32-10.C	10	32	36.5	60.5	3	0.3
HC32-12.C	12	32	36.5	60.5	3	0.3
HC32-16.C	16	32	36.5	60.5	3	0.3
HC32-20.C	20	32	36.5	60.5	3	0.3
HC32-25.C	25	32	36.5	60.5	3	0.3

大圆头螺钉
Truss Head Screw

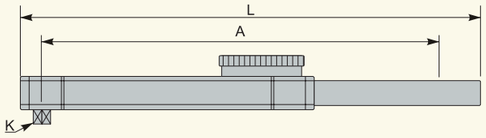




规格型号 Designation	D1	D2	K	L
SRB22-M10	M10	28	9	25
SRB27-M12	M12	35	10	30
SRB32-M16	M16	42	11	35
SRB40-M20	M20	52	12	40

单臂扭矩扳手
Torque Wrench

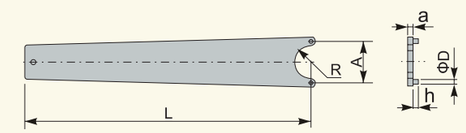




规格型号 Designation	扭矩 (N.M) Torque	测量范围 Range	K	L	A	附带转换套筒 Sleeve
KEY50 N12	1-12	M4-M6	6.3	305	260	S6-6.3A 型
KEY50 N50	5-50	M8-M12	9.5	355	290	S10-10A 型
KEY50 N200	20-200	M14-M22	12.5	495	420	S18-12.5A 型
KEY50 N1000	100-1000	M24-M48	25.4	1330	1260	S27-25/S34-25

调节扳手
Adjustable Wrench

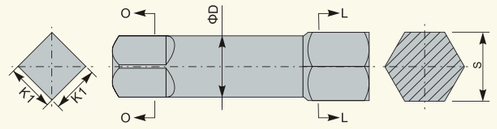




规格型号 Designation	R mm	ΦD mm	A mm	L mm	a mm	h mm	用于快换件 Quick change chuck	重量 kg
KEY51 A412	9	3	23	200	5	5	TPS412	0.18
KEY51 A820	14.5	4	37	260	5	5	TPS820	0.36
KEY51 A1433	22	5	55	260	5	5	TPS1433	0.45
KEY51 A2248	30	6	72	260	5	5	TPS2248	0.53

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 D6.4.9	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 D15x12	KEY50 N200	S18-12.5	18	15	12
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

ER 刀柄后定位螺钉
Backstop Screw for ER Collet Chuck



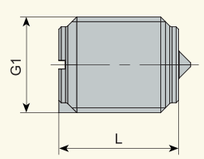


Fig1

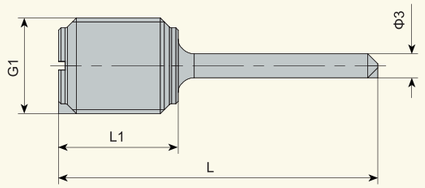
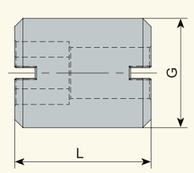


Fig2

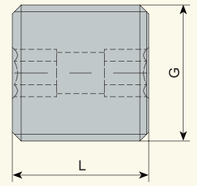
规格型号 Designation	G1	L	G	Fig
SRB ER-M8	M8	15	-	Fig1
SRB ER-M10	M10	15	-	Fig1
SRB ER-M12	M12	15	-	Fig1
SRB ER-M12L	M12	40	15	Fig2
SRB ER-M16	M16	15	-	Fig1
SRB ER-M16L	M16	40	15	Fig2
SRB ER-M18x1.5	M18x1.5	15	-	Fig1
SRB ER-M18x1.5L	M18x1.5	40	15	Fig2
SRB ER-M22x1.5	M22x1.5	15	-	Fig1
SRB ER-M22x1.5L	M22x1.5	40	15	Fig2
SRB ER-M28x1.5	M28x1.5	15	-	Fig1

轴向调节螺钉
Axial adjusting screw





A

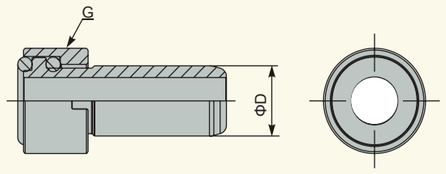


B

规格型号 Designation	G	L	适配扳手 Wrench	Fig
SR50B M12x18.BC	M12	18	KEY01 M6	A
SR50B M16x20.BC	M16	20	KEY01 M8	A
SR50B M20x20-X.BC	M20x2	20	KEY01 M6	B

HSK-A 型冷却管
HSK Type A Coolant Tube



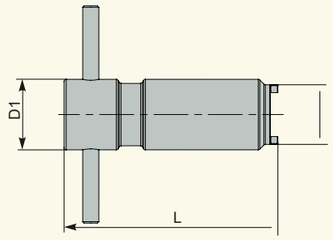


规格型号 Designation	D	G	O 型圈（内径 x 线径） Size
LQG-HSK A63	12	M18x1	FT91 D10x2.5
LQG-HSK A100	16	M24x1.5	FT91 D15x3

- 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



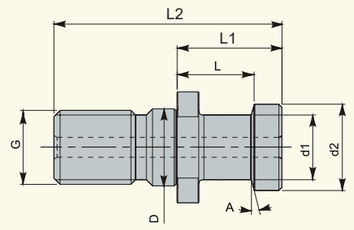


规格型号 Designation	D	D1	L
LQG-HSK A63-T	16.5	20	70
LQG-HSK A100-T	22	26	80

- 订货示例：1 件 LQG-HSK A63-T
- Ordering sample: 1 PC LQG-HSK A63-T

IS07388/2 A 型 / GB10945 A 型
1507388/2 A style /GB10945 A style



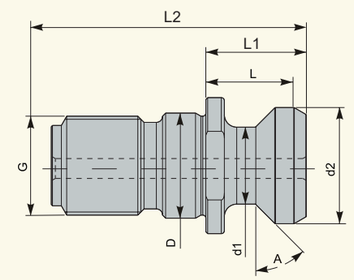


规格型号 Designation	尺寸 (mm) Dimension								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS SK30 15 ISO7388-A.C	M12	13	8	12	19	24	44	15°	0.04
PS SK40 15 ISO7388-A.C	M16	17	14	19	20	26	54	15°	0.08
PS SK50 15 ISO7388-A.C	M24	25	21	28	25	34	74	15°	0.25

- 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 stu

IS07388/2 B 型 /GB10945 B 型
1507388/2 B style /GN10945 B style



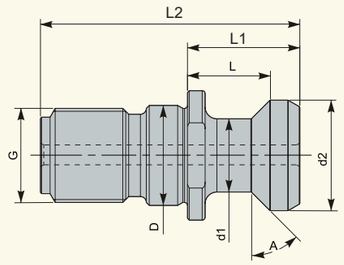


规格型号 Designation	尺寸 (mm) Dimension								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS SK30 45 ISO7388-B.C	M12	13	9.3	13.3	8.15	11.8	27	45°	0.04
PS SK40 45 ISO7388-B.C	M16	17	12.95	18.95	11.15	16.4	44.5	45°	0.07
PS SK50 45 ISO7388-B.C	M24	25	19.6	29.1	17.95	25.55	65.5	45°	0.22

- 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 stu

MAZAK-BT/JIS 6339





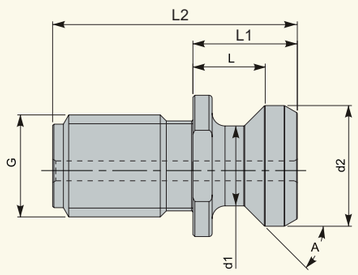
规格型号 Designation	尺寸 (mm) Dimension								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS BT40 45 MAZAK.C	M16	17	12.45	18.8	14.02	19.1	44.1	45°	0.05
PS BT50 45 MAZAK.C	M24	25	20.83	29	17.7	25.2	65.2	45°	0.19
PS BT30 15 JIS B	M12	12.5	8	12	18.4	23.4	43	15°	0.04
PS BT40 15 JIS B	M16	17	14	19	23	29	54	15°	0.08
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 stu

ANSI B5.50 标准

ANSI B5.50 Standard





规格型号 Designation	尺寸 (mm) Dimension								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

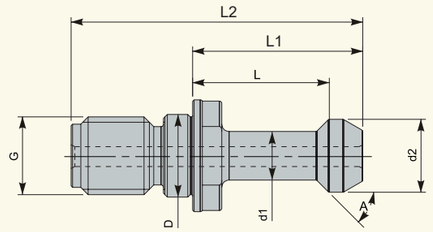
- 型号尾部带有 .C 字样的表示带有冷孔
- Code 'C' at the end of designation indicates internal coolant hole with pull stu

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) Dimension								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

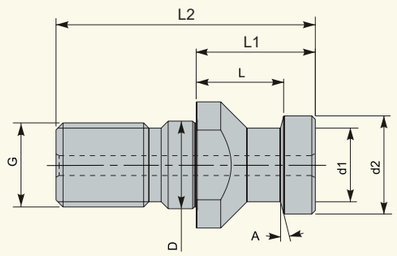
- 型号尾部带有 .C 字样的表示带有冷孔
- Code 'C' at the end of designation indicates internal coolant hole with pull stu

附件 ACCESSORIES

DIN69872 标准

DIN69872 Standard





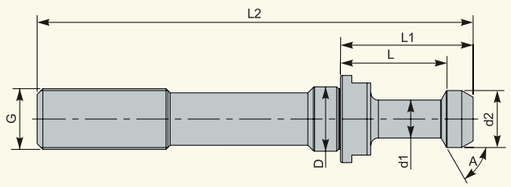
规格型号 Designation	尺寸 (mm) Dimension								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS SK30 15 DIN69872	M12	13	9	13	19	24	44	15°	0.05
PS SK30 15 DIN69872.C	M12	13	9	13	19	24	44	15°	0.04
PS SK30 15 DIN69872.BC	M12	13	9	13	19	24	44	15°	0.04
PS SK40 15 DIN69872	M16	17	14	19	20	26	54	15°	0.07
PS SK40 15 DIN69872.C	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.

MTB 刀柄用拉钉

Pull Stud for MTB Adaptor



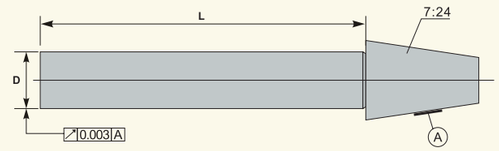


规格型号 Designation	尺寸 (mm) Dimension								重量 (kg) Weight
	G	D	d1	d2	L	L1	L2	A	
PS BT40 45 MAS1.MTB4	M16	17	10	15	28	35	115	45°	0.15
PS BT40 45 MAS1.MTB4.C	M16	17	10	15	28	35	115	45°	0.15
PS BT40 60 MAS2.MTB4	M16	17	10	15	28	35	115	60°	0.15
PS BT40 60 MAS2.MTB4.C	M16	17	10	15	28	35	115	60°	0.15
PS BT40 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 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

- 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

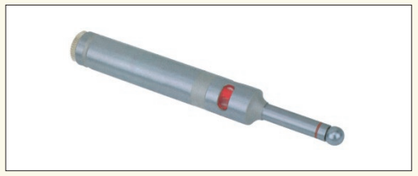
Standard Measuring Bar



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

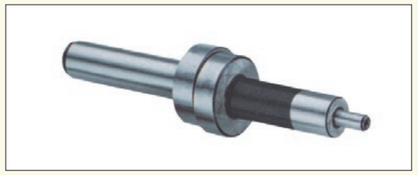
寻边器
Edge Sensor

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

ACCESSORIES 附件

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

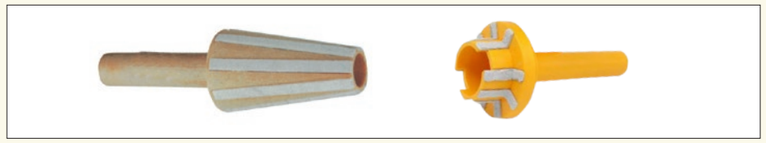
机械式 Z 轴设定器
Mechanical Z-Axial Setter



规格 Designation	形式 Style	总长度 Chief height
SD GD008	机械式 Mechanical	50

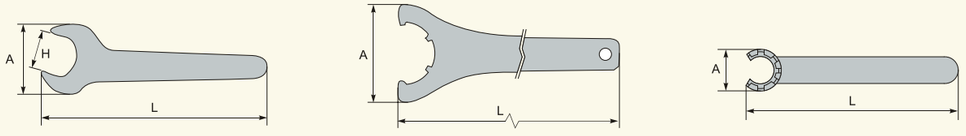
附件 ACCESSORIES

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

ER 扳手
ER Wrench



六角型 ER16/ER20 (A-WR) Hex style

标准型 (WR) Standard style

小径型 ER11/ER16/ER20/ER25 (M-WR) Small diameter style

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

ACCESSORIES 附件

强力夹头刀柄专用钩形扳手
Wrench for Power Chuck Adaptor



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-Fugure A



图 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



图 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

附件 ACCESSORIES