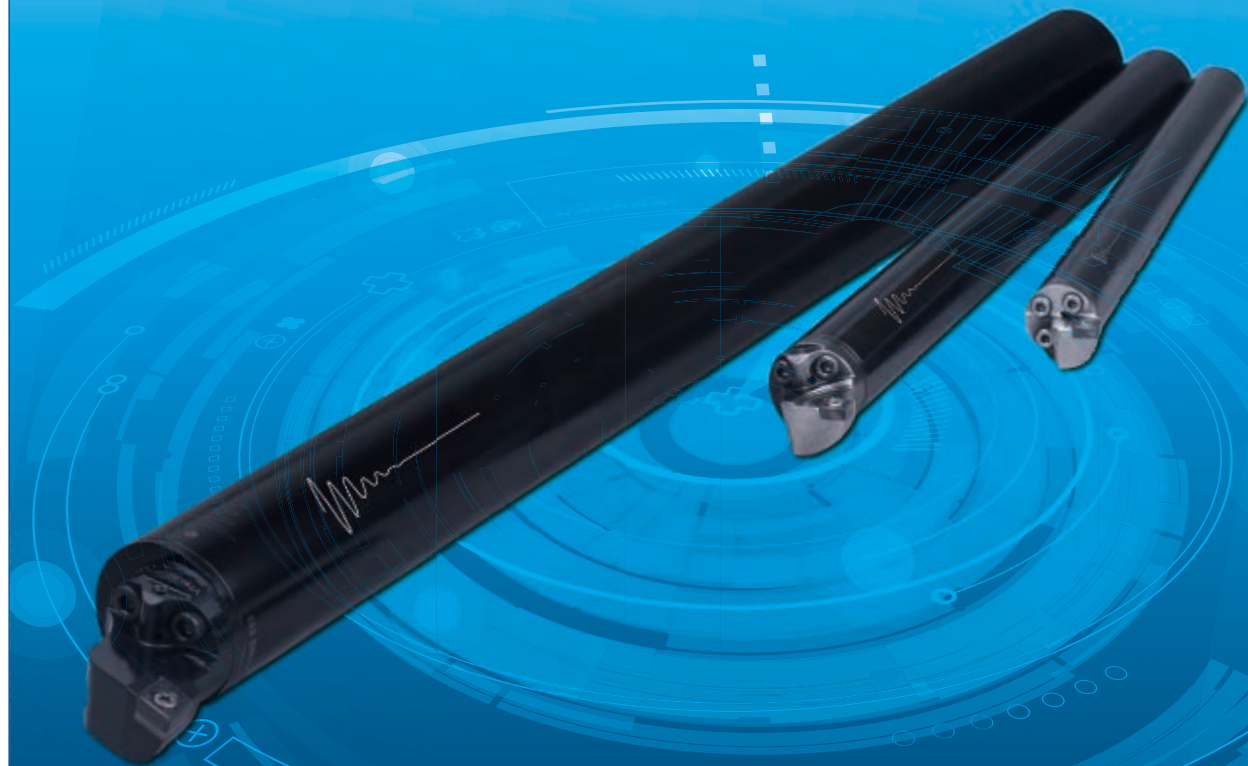


DAMPING TURNING TOOL

阻尼减振车刀



B

阻尼减振刀具 DAMPING TOOLS

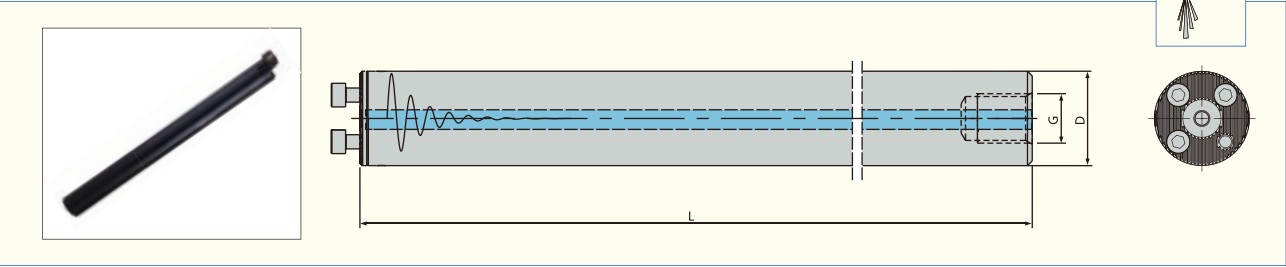
阻尼减振车刀 Damping Turning Tool

阻尼减振车刀杆	B3
Damping Turning Tool Holder	
阻尼减振车刀刀头	B7
Cartridge For Damping Turning Tool Holder	
中心校准块	B24
Centre Calibration Block	
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DAMPING TURNING TOOL 阻尼减振车刀

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	在庫 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： B7-B24 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 B7-B24.
- 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

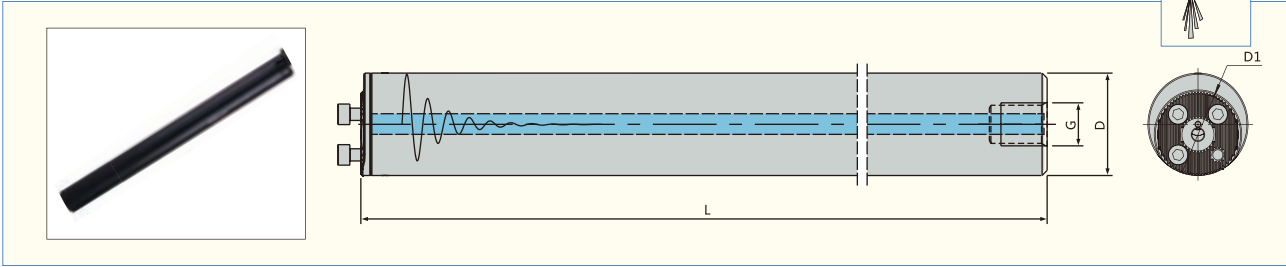
D	刀头锁紧螺钉 Clamp screw for cartridge	刀头锁紧扳手 Allen key for cartridge clamping secrow
16	SR55-2 M3x10	KEY01 M2.5
20	SR55-2 M3.5x10	KEY01 M2.5
25	SR55-2 M4x12	KEY01 M3
32	SR55-2 M5x12	KEY01 M4
40	SR55-2 M6x16	KEY01 M5

- 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)

DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀杆

Damping Turning Tool Holder



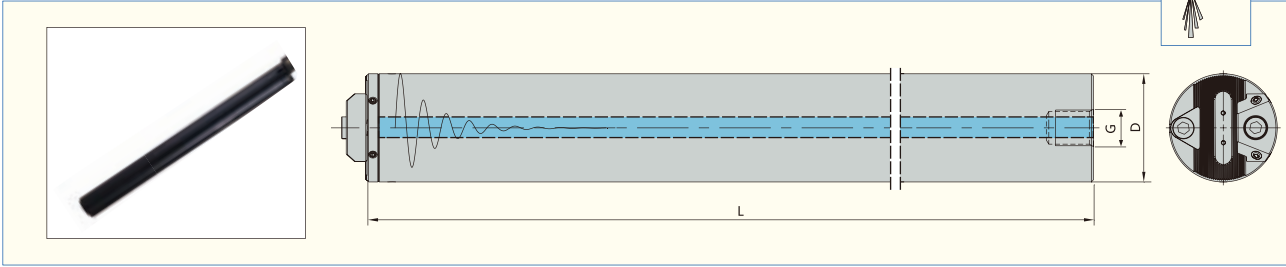
规格型号 Designation	D	D1	L	G	L/D	Dmin	Kg	适配刀头 Cartridge	在庫 Stock
VT40 C50x518V	50	40	518	G1/2"	7	60	7.2	VT40..	●
VT40 C50x668V	50	40	668	G1/2"	10	60	9.3	VT40..	●
VT40 C50x768VE	50	40	768	G1/2"	12	60	14.4	VT40..	○
VT40 C50x868VE	50	40	868	G1/2"	14	60	16.6	VT40..	○
VT40 C60x628V	60	40	628	G3/4"	7	70	12.5	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： B7-B24 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 B7-B24.
 - 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 secrow
40	SR55-2 M6X16	KEY01 M5



规格型号 Designation	D	L	G	L/D	Kg	适配刀头 Cartridge	在庫 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	50	VH80..	○
VH80 C80X1400VE	80	1400	G3/4"	14	63	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： B7-B24 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 B7-B24.
 - Suggest to do the maintenance when damping capacity is weaker than before.
 - Ordering sample: 1 PC VT80 C80x880V.

备件

Spare Parts

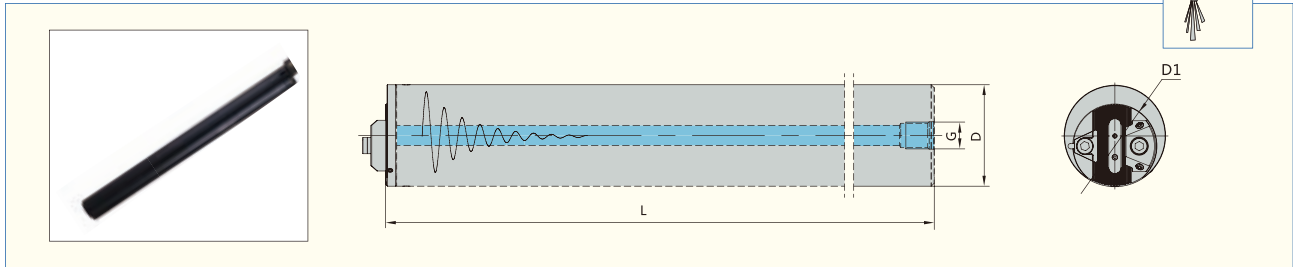
D	刀片锁紧螺钉 Clamping screw for insert	锁紧扳手 Allen key for clamping	上压板 Upper clamping pad	下压板 Lower clamping pad	压板弹簧 Spring clamping pad	定位螺钉 Clamp screw for cartridge
80	SR55 M10x25	KEY01 M8	PB20 M10x16	PB20 M10x11	YH 12.5x0.9x18	SR55 M3x6

- 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

大直径阻尼减振车刀杆

Long Overhang Damping Turning Tool



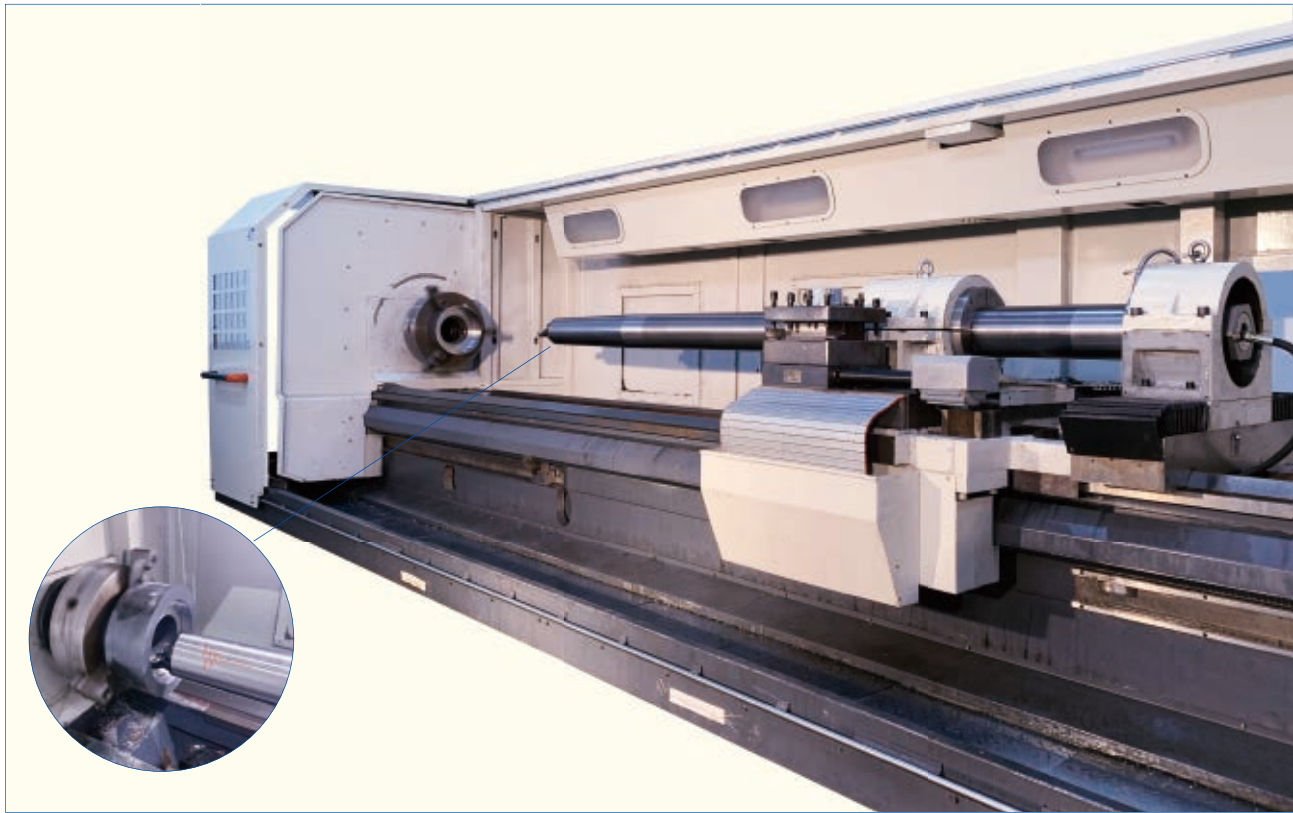
规格型号 Designation	D	D1	L	G	L/D	Kg	适配刀头 Cartridge	在庫 Stock
VH80 C100X1100V	100	80	1100	G3/4"	7	63.4	VH80	●
VH80 C100X1500V	100	80	1500	G3/4"	10	86.8	VH80	●
VH80 C120X1900V	120	80	1900	G3/4"	10	134	VH80	●
VH80 C130X2000V	130	80	2000	G3/4"	10	192.3	VH80	●
VH80 C140X2200V	140	80	2200	G3/4"	10	241.5	VH80	●
VH80 C150X2400V	150	80	2400	G3/4"	10	252.6	VH80	●
VH80 C160X2600V	160	80	2600	G3/4"	10	339.3	VH80	○

- 推荐最小夹紧长度为 4xD。
 - 刀杆有内冷出水孔。
 - 适配刀头需单独订购，请参照：☞ B7-B24 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 B7-B24.
 - Suggest to do 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	PB20 M10x11	YH 12.5x0.9x18	SR55 M3x6

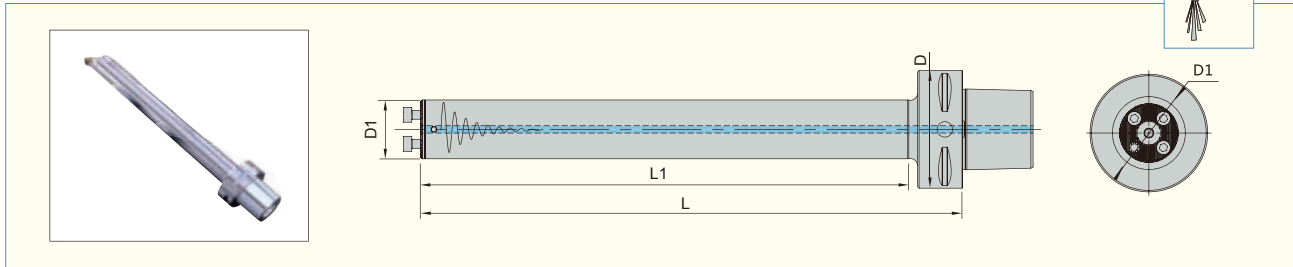


- 标准库存
Item in stock
- 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when ordering it)
- 无库存 (订货时，请确认交货期)
Order on demand
(please confirm delivery time when ordering it)

DAMPING TURNING TOOL 阻尼减振车刀

PSC 接口阻尼减振车刀杆

PSC Damping Turning Tool



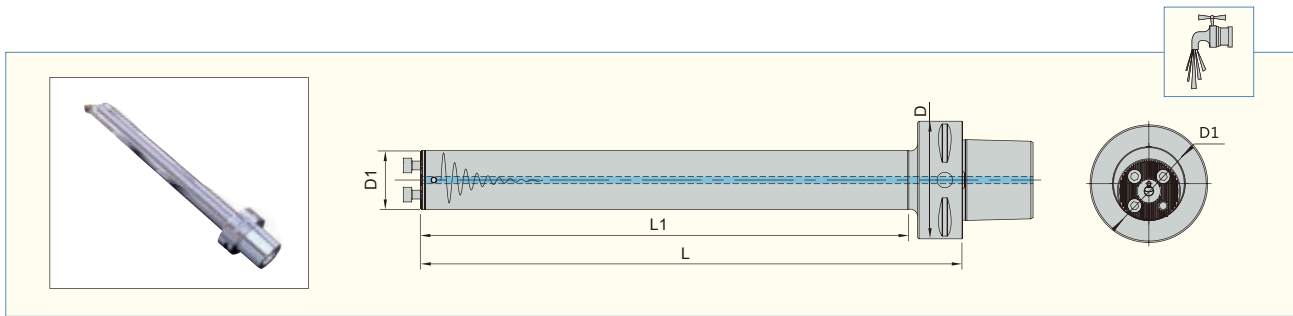
规格型号 Designation	D	D1	L	L1	KG	适配刀头 Cartridge	在庫 Stock
C6 AT16X088V	63	16	88	58	1.01	VT16..	●
C6 AT20X108V	63	20	108	73	1	VT20..	●
C6 AT25X132V	63	25	132	103	1.35	VT25..	○
C6 AT25X230V	63	25	230	197	1.7	VT25..	○
C6 AT32X159V	63	32	159	129	1.8	VT32..	●
C6 AT32X288V	63	32	288	257	2.7	VT32..	●
C6 AT40X198V	63	40	198	169	2.6	VT40..	○
C6 AT40X368V	60	40	368	338	4.2	VT40..	○

- 刀杆有内冷出水孔。
- 适配刀头需单独订购，请参照：☞ B7-B24 页。
- 若出现减振性能下降时，建议维修保养。
- 订货示例：1 件 C6 AT16X088V。
- With coolant hole.
- The cartridge should be ordered separately, please see page B7-B24.
- The reducing head should be ordered separately.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC C6 AT16X088V.

备件

Spare Parts

D1	刀头锁紧螺钉 Clamp screw for cartridge	刀头锁紧扳手 Allen key for cartridge clamping screw
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



规格型号 Designation	D	D1	D2	L	L1	KG	适配刀头 Cartridge	在庫 Stock
C6 AT40-D50x247V.R/L	63	50	40	247	222	4.2	VT40..	●
C6 AT40-D50x468V.R/L	63	50	40	468	440	7.4	VT40..	●
C6 AT40-D60x295V.R/L	63	60	40	295	273	6.8	VT40..	○
C6 AT40-D60x568V.R/L	60	60	40	568	545	12.2	VT40..	○

- 刀杆有内冷出水孔。
 - 适配刀头需单独订购，请参照：☞ B5-B22 页。
 - 若出现减振性能下降时，建议维修保养。
 - 订货示例：1 件 C6 AT40-D50X247V.R。
- With coolant hole.
 - The cartridge should be ordered separately, please see page B5-B22.
 - Suggest doing the maintenance when damping capacity is weaker than before.
 - Ordering sample: 1 PC C6 AT40-D50X247V.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)

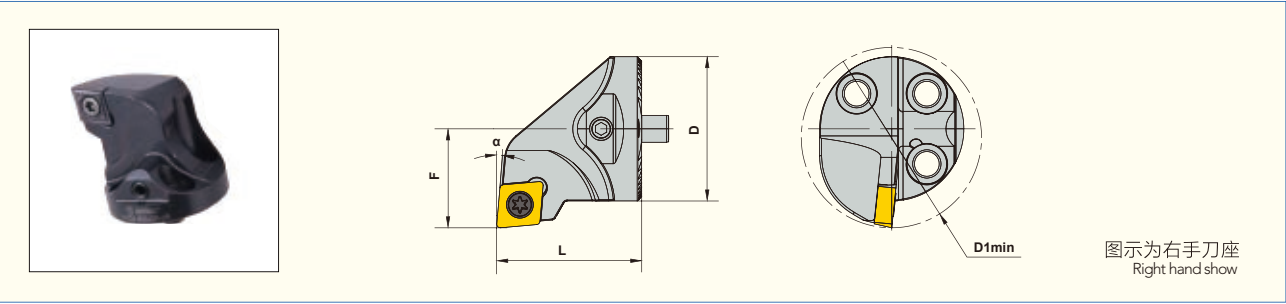
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 95° 正镗

Positive Type 95° Boring



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VT16 SCLCR-06	16	20	11	20	5°	0.02	CC..0602..	●
VT20 SCLCR-09	20	25	13	20	5°	0.03	CC..09T3..	●
VT25 SCLCR-09	25	32	17	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：☞ A91 页。
- 订货示例：1 件 VT16 SCLCR-06。
- The insert should be ordered separately, please see page A91.
- Ordering sample: 1 PC VT16 SCLCR-06.

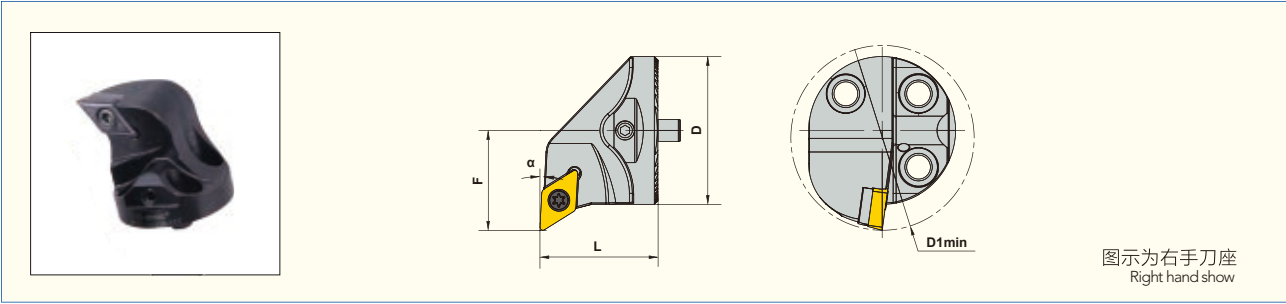
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 正镗

Positive Type 93° Boring



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VT16 SDUCR-07	16	20	11	20	3°	0.02	DC..0702..	●
VT20 SDUCR-11	20	25	13	20	3°	0.03	DC..11T3..	●
VT25 SDUCR-11	25	32	17	20	3°	0.04	DC..11T3..	●
VT32 SDUCR-11T	32	40	22	32	3°	0.1	DC..11T3..	●
VT40 SDUCR-11T	40	50	27	32	3°	0.2	DC..11T3..	●
VT16 SDUCL-07	16	20	11	20	3°	0.02	DC..0702..	●
VT20 SDUCL-11	20	25	13	20	3°	0.03	DC..11T3..	●
VT25 SDUCL-11	25	32	17	20	3°	0.04	DC..11T3..	●
VT32 SDUCL-11T	32	40	22	32	3°	0.1	DC..11T3..	●
VT40 SDUCL-11T	40	50	27	32	3°	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 ...06	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D4-3x7
VT20 ...09	SR21 M4x9.5	KEY02 T15	-	-	-	FT39 D6-5x8
VT25 ...09	SR21 M4x9.5	KEY02 T15	-	-	-	FT39 D6-5x9
VT32 ...09	SR21 M4x9.5	KEY02 T15	-	-	-	FT39 D6-5x11
VT40 ...12T	SR21 M5x12.8	KEY02 T20	ST01 CC12x2.8	SRT M7-M5x13	KEY01 M3	FT39 D6-5x11

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	KEY02 T7	-	-	-	FT39 D4-3x7
VT20 ...11	SR21 M4x11	KEY02 T15	-	-	-	FT39 D6-5x8
VT25 ...11	SR21 M4x11	KEY02 T15	-	-	-	FT39 D6-5x9
VT32 ...11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
VT40 ...11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

● 标准库存
Item in stock

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

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

● 标准库存
Item in stock

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

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

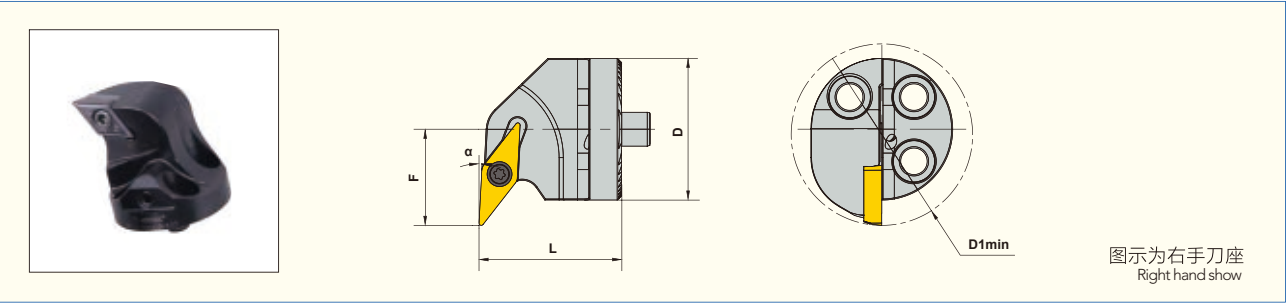
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 正镗及仿形车

Positive Type 93° Boring and Profile-turning



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

- 刀片请根据不同材料单独订购，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	KEY02 T8	FT39 D6-5x8
VT25 ...-11	SR20 M2.5x6	KEY02 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)

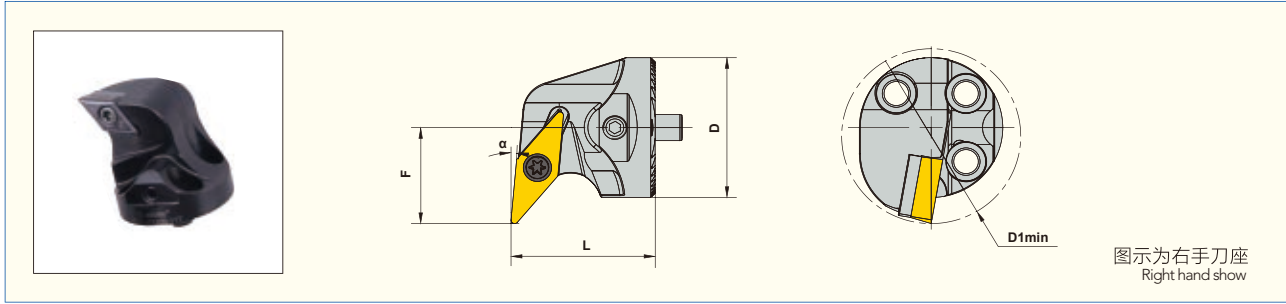
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 95° 正镗及仿形车

Positive Type 95° Boring and Profile-turning



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

- 刀片请根据不同材料单独订购，请参照： 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	KEY02 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
VT40 ...-16T	SR21 M4x11	KEY02 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)

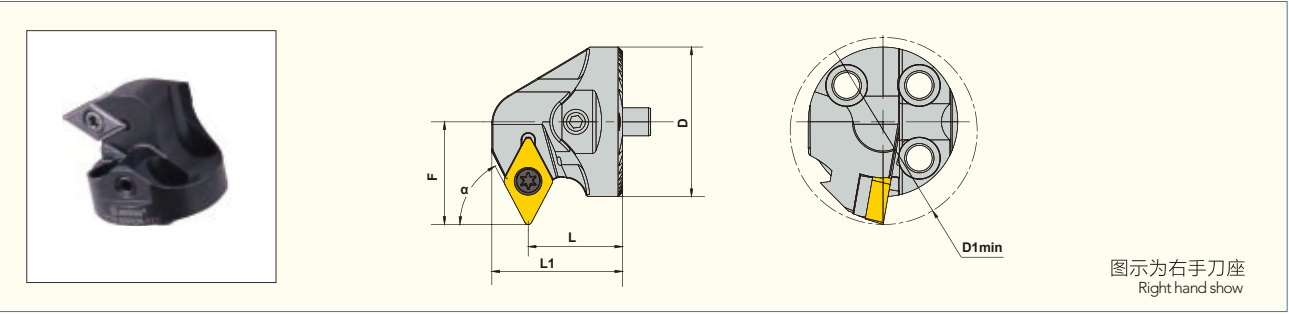
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 62.5° 仿形车

Positive Type 62.5° Profile-turning



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

- 刀片请根据不同材料单独订购，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	KEY02 T7	-	-	-	FT39 D4-3x7
VT20 ...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D6-5x8
VT25 ...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D6-5x9
VT32 ...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
VT40 ...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

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

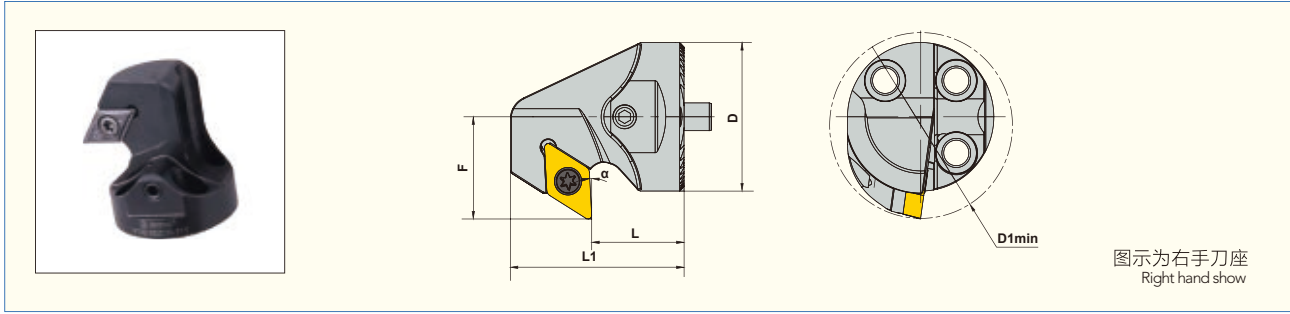
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 反镗

Positive Type 93° Back Boring



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

- 刀片请根据不同材料单独订购，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	KEY02 T7	-	-	-	FT39 D4-3x7
VT20 ...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D6-5x8
VT25 ...-07	SR21 M2.5x5.3	KEY02 T7	-	-	-	FT39 D6-5x9
VT32 ...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11
VT40 ...-11T	SR21 M4x11	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4	FT39 D6-5x11

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

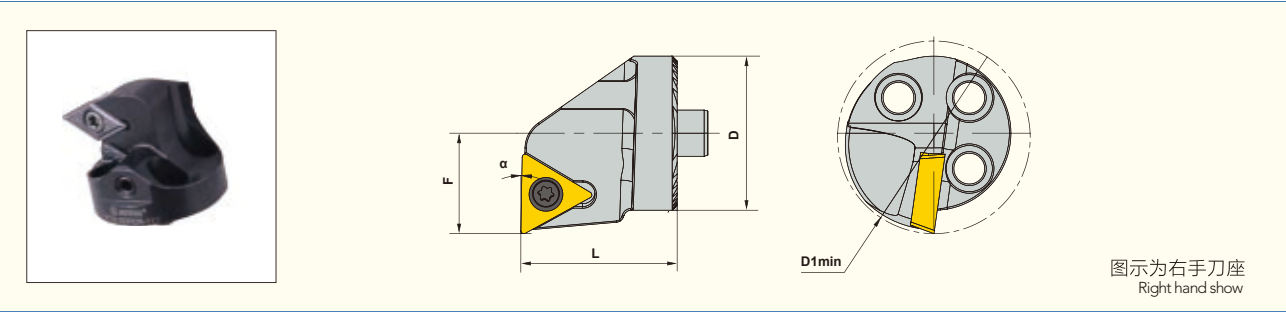
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 91° 正镗

Positive Type 91° Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 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	KEY02 T7	FT39 D4-3x7
VT16...-11	SR20 M2.5x6	KEY02 T8	FT39 D4-3x7
VT20...-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x8
VT25...-11	SR20 M2.5x6	KEY02 T8	FT39 D6-5x9
VT32...-16	SR21 M4x9.5	KEY02 T15	FT39 D6-5x11
VT40...-16	SR21 M4x9.5	KEY02 T15	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)

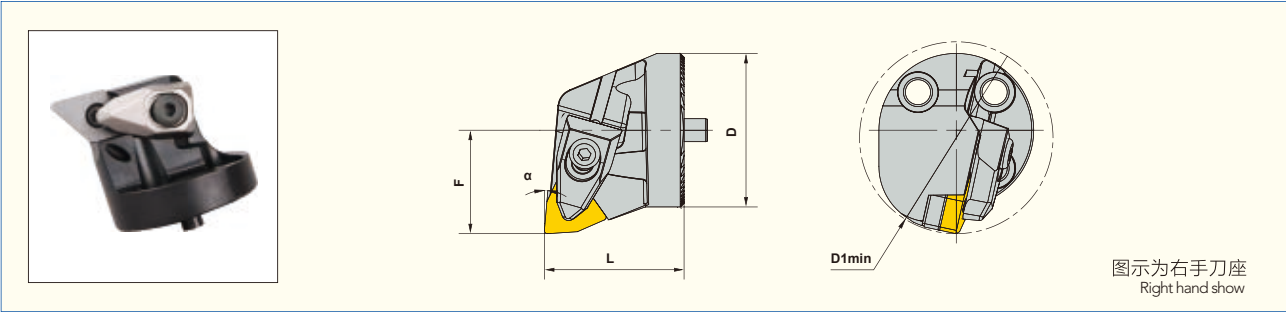
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 95° 正镗

Positive Type 95° Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 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	KEY02 T15	FT39 D6-5x11
VT32...-08T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 WN08x3.18	KEY01 M3	SR20 M5x10	KEY02 T20	FT39 D6-5x11
VT40...-08T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 WN08x6.35	KEY01 M3	SR20 M4x9.5	KEY02 T15	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)

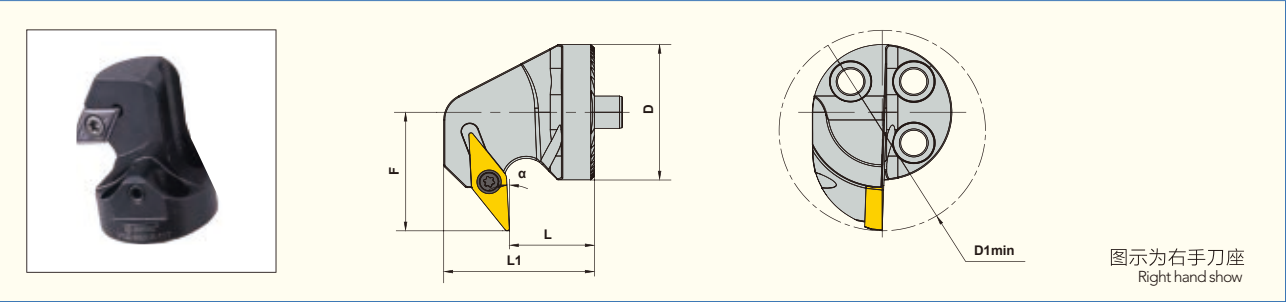
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 反镗及仿形车

Positive Type 93° Back Boring and Profile-turning



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

- 刀片请根据不同材料单独订购，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	KEY02 T8	FT39 D6-5x8
VT25 ...-11	SR20 M2.5x6	KEY02 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)

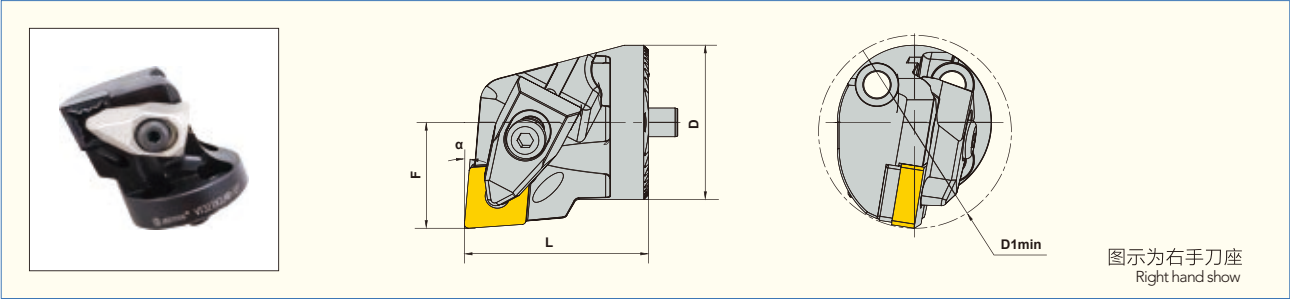
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 95° 正镗

Negative Type 95° Boring



规格型号 Designation	D	D1 min	F	L	α°	kg	适配刀片 Insert	在庫 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	KEY02 T20	FT39 D6-5x11
VT40 ...-12T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 CN12x3.2	KEY01 M3	SR20 M5x10	KEY02 T20	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)

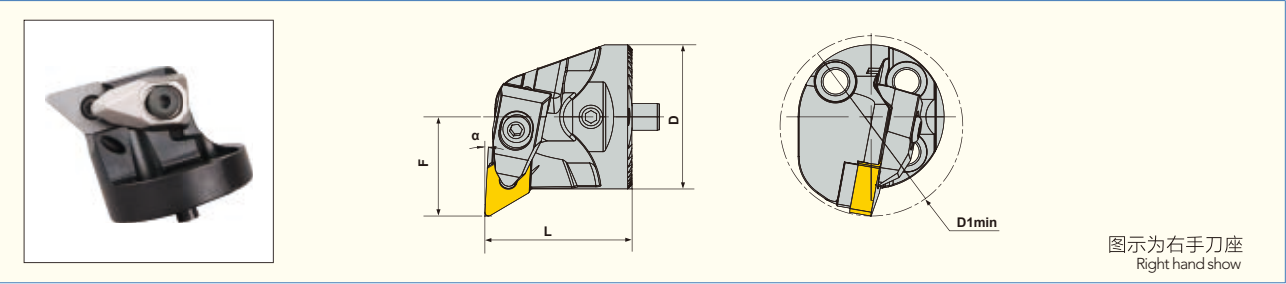
DAMPING TURNING TOOL 阻尼减振车刀

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



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VT32 DDUNL-11T	32	40	22	32	3°	0.11	DN.. 1104..	○
VT40 DDUNL-15T	40	50	27	38	3°	0.18	DN.. 1506..	○
VT32 DDUNR-11T	32	40	22	32	3°	0.11	DN.. 1104..	○
VT40 DDUNR-15T	40	50	27	38	3°	0.18	DN.. 1506..	○
VT40 DVUNR-16T	40	56	34	38	3°	0.2	VN.. 1604..	○
VT40 DVUNL-16T	40	56	34	38	3°	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	KEY02 T15	FT39 D6-5x11
VT40 ...15T	PB10 DCN12	YH 8x0.6x13	SR59 M5x20	ST01 DN15x4.76	KEY01 M3	SR20 M4x11.5	KEY02 T15	FT39 D6-5x11
VT40 ...16T	PB10 DVN16	YH 9x0.8x14	SR59 M6x26.5	ST01 VN16x3.2	KEY01 M4	SR20 M3.5x8.5	KEY02 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)

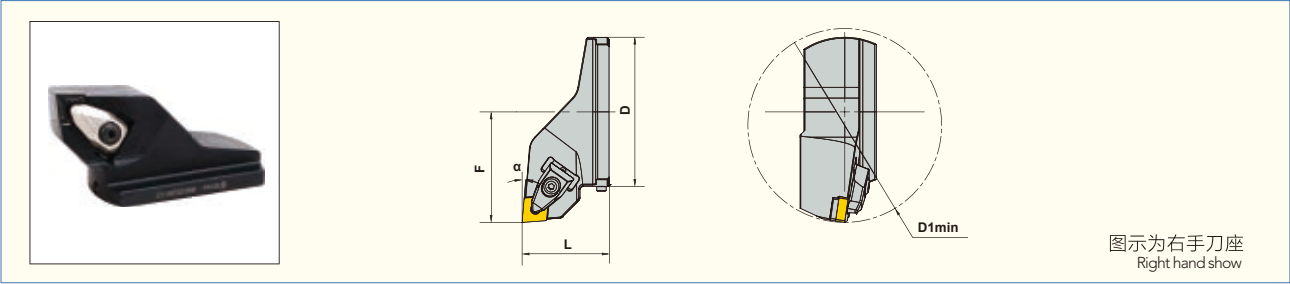
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 95° 正镗

Negative Type 95° Boring



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 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	KEY02 T20

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

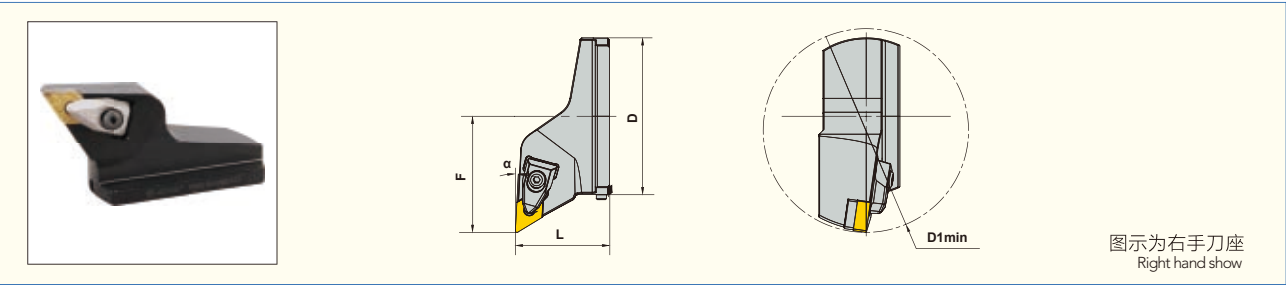
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 93° 正镗及仿形车

Negative Type 93° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VH80 DDUNL-15T	80	100	57	46	3°	0.5	DN.. 1506..	○
VH80 DDUNR-15T	80	100	57	46	3°	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	KEY02 T15

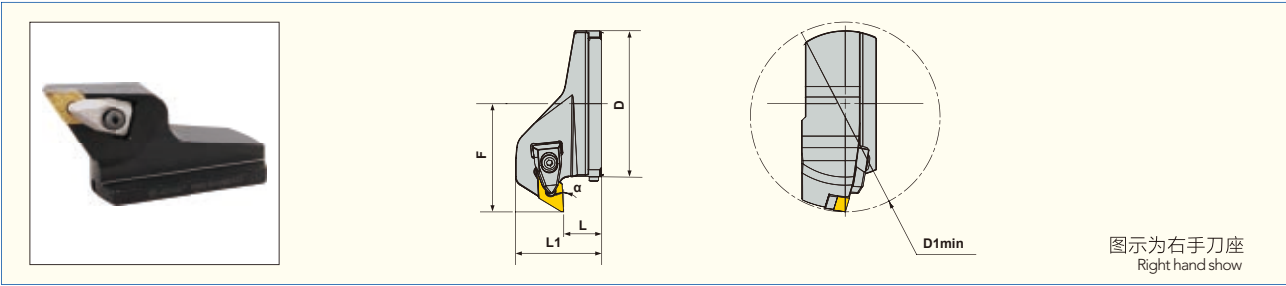
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 93° 反镗及仿形车

Negative Type 93° Back Boring and Profile-turning



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

- 刀片请根据不同材料单独订购，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	KEY02 T15

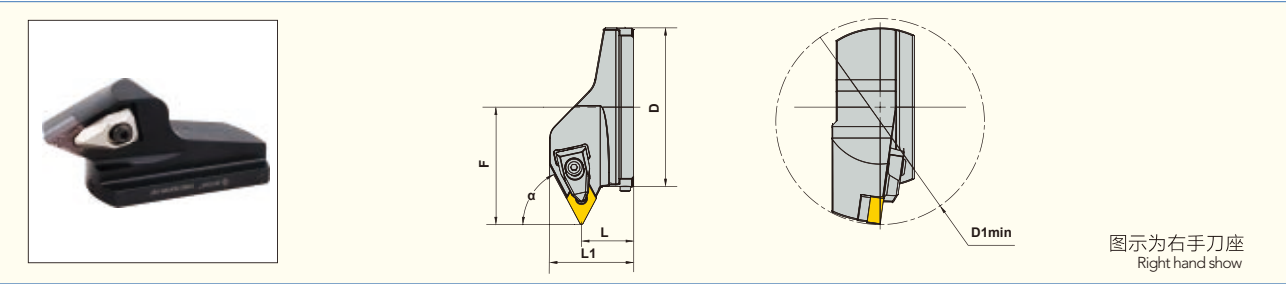
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 62.5° 仿形车

Negative Type 62.5° Boring and Profile-turning



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

- 刀片请根据不同材料单独订购，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	KEY02 T15

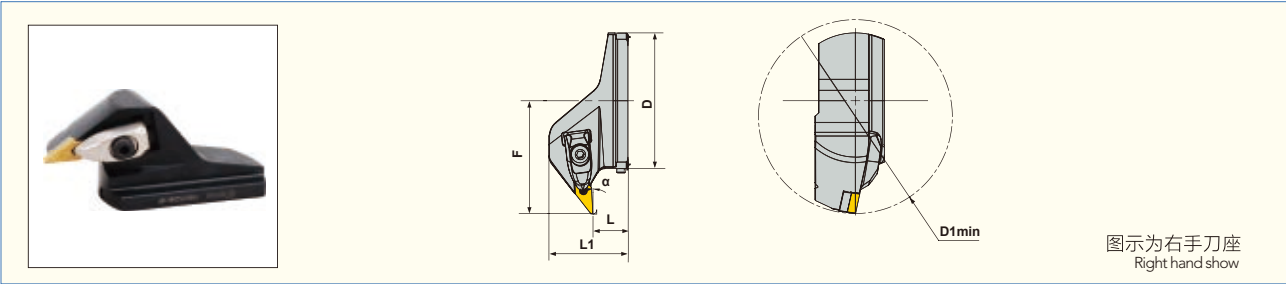
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

负型 93° 反镗及仿形车

Negative Type 93° Boring and Profile-turning



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

- 刀片请根据不同材料单独订购，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	KEY02 T10

● 标准库存
Item in stock

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

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

● 标准库存
Item in stock

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

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

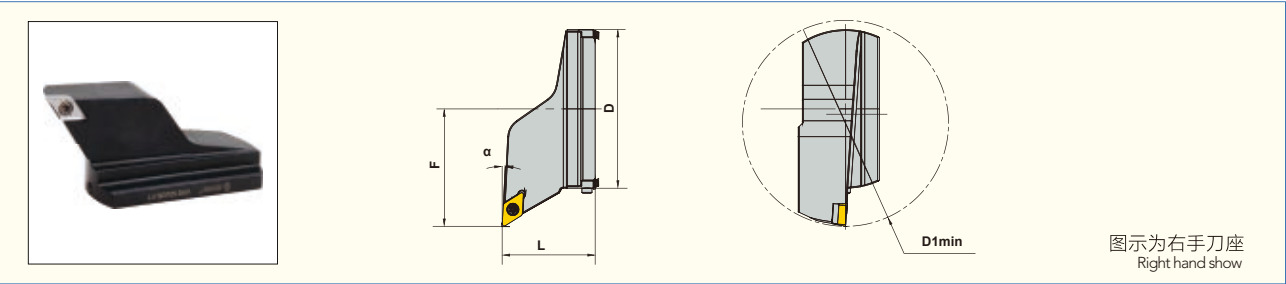
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 93° 正镗及仿形车

Positive Type 93° Boring and Profile-turning



规格型号 Designation	D	D1 min	F	L	α°	Kg	适配刀片 Insert	在庫 Stock
VH80 SDUCR-11T	80	100	57	45	3°	0.5	DC.. 11T3..	●
VH80 SDUCL-11T	80	100	57	45	3°	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	KEY02 T15	ST01 DC11x2.82	SRT M6-M4x6.9	KEY01 M4

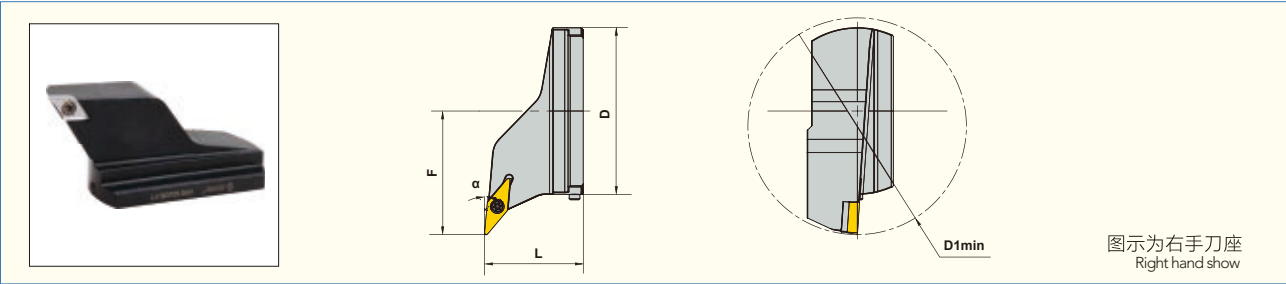
DAMPING TURNING TOOL 阻尼减振车刀

阻尼减振车刀刀头

Cartridge for Damping Turning Tool Holder

正型 95° 正镗及仿形车

Positive Type 95° Boring and Profile-turning



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

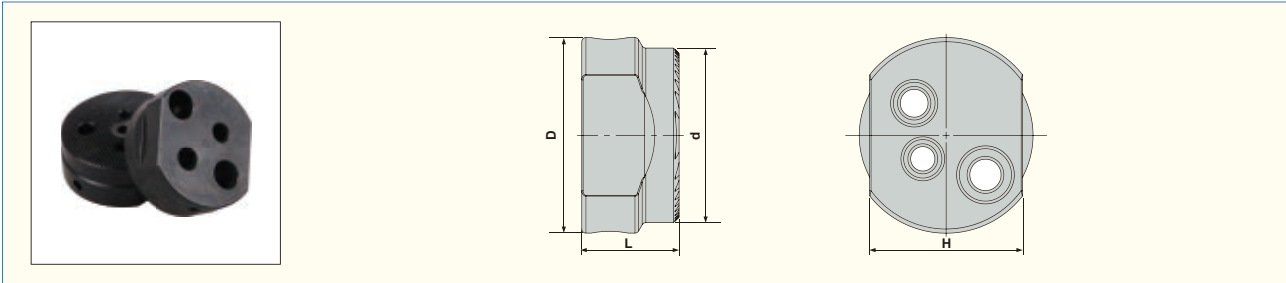
备件

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	KEY02 T15	ST01 VC16x2.82	SRT M6-M4x6.9	KEY01 M4

中心校准块

Centre Calibration Block



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

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

● 标准库存
Item in stock

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

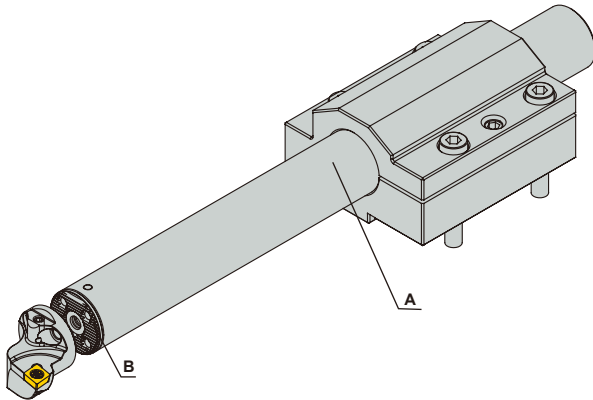
DAMPING TURNING TOOL 阻尼减振车刀

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

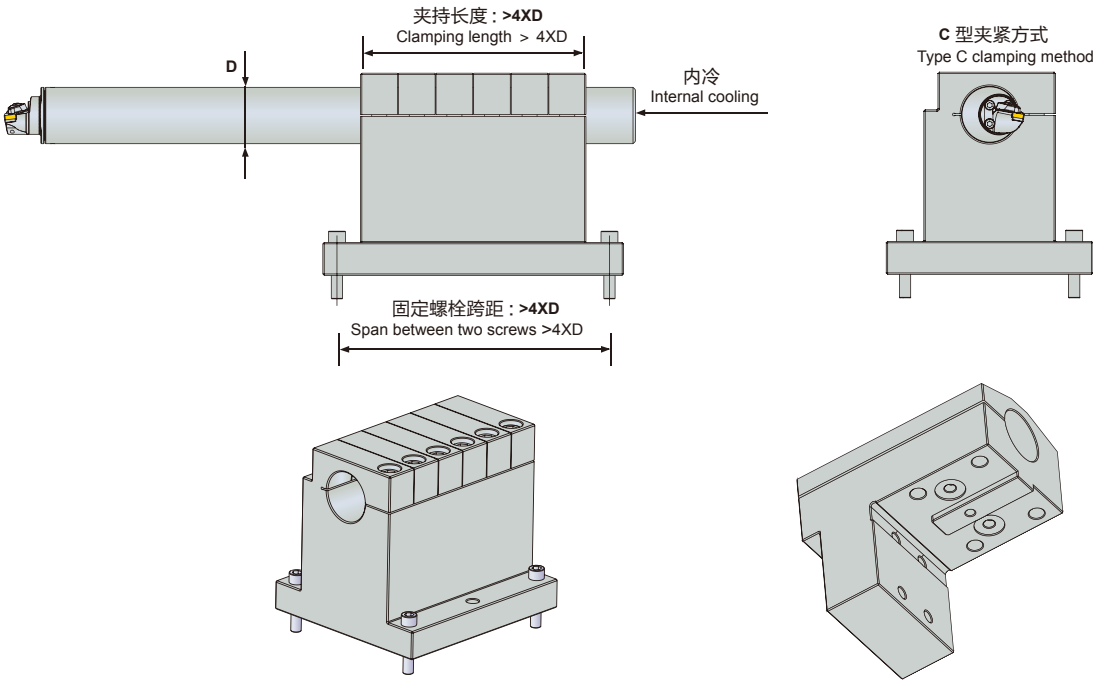
减振刀具安装及调整
Assembly and Adjusting

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.

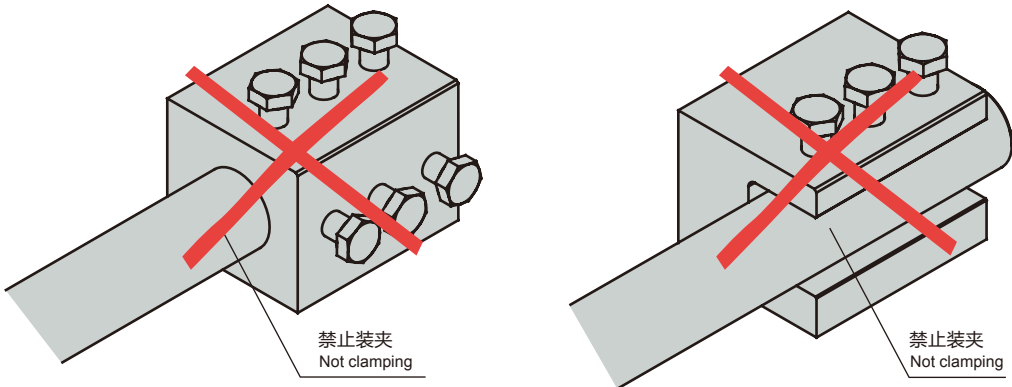


2. 刀杆的安装
安装夹持长度不少于刀杆径的 4 倍，使用开口夹套等抱紧装夹方式，禁止使用螺钉直压等锁紧方式，长时间使用必须使用内冷却，如下图所示。
Assembly for the Shank
The clamping length should not be less than 4 L/D ratio. Suggest using the clamping cover with opening method and other holding clamping methods. Do not use screw clamping method. Use inner cooling please when working a long time.

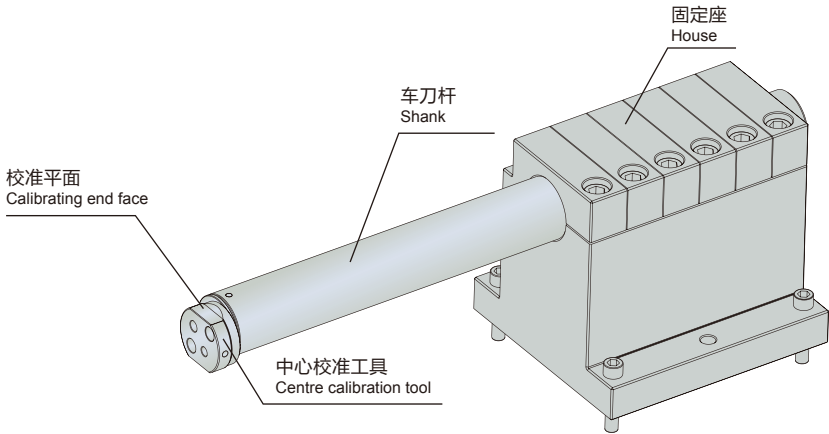


DAMPING TURNING TOOL 阻尼减振车刀

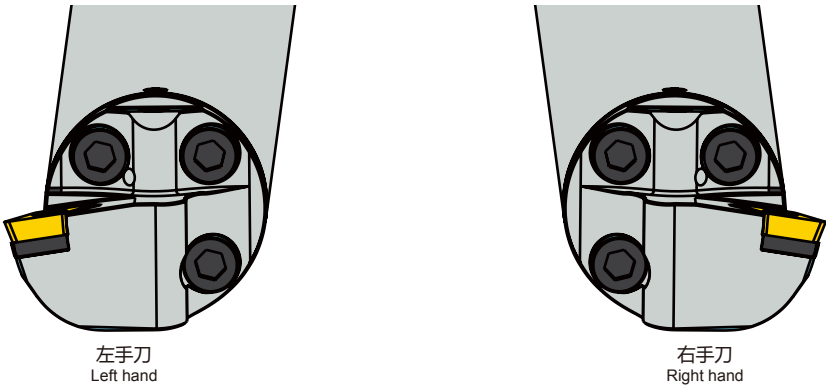
阻尼减振车刀使用说明
User Guide for Damping Turning Tool



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 轴方向校准基准平面 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



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

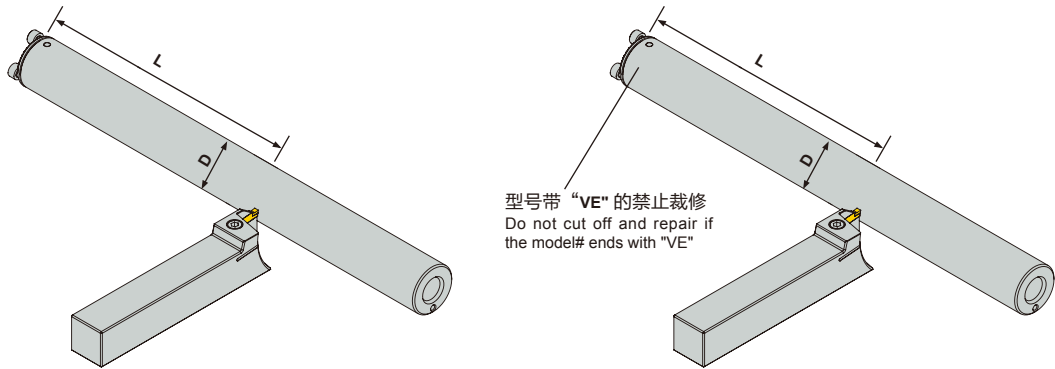
- 1. 推荐最小夹持长度 4xD
- 2. 镗杆可改制，切断后的长度如下表

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	

- 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(°C) Operating temperature
VT16 C16x156V	7	30	100
VT16 C16x204VE	10	30	100
VT20 C20x200V	7	30	100
VT20 C20x260VE	10	30	100
VT25 C25x255V	7	40	100
VT25 C25x330V	10	40	100
VT32 C32x320V	7	50	100
VT32 C32x416V	10	50	100
VT40 C40x408V	7	70	100
VT40 C40x528V	10	70	100
VT50 C50x518V	7	70	100
VT50 C50x668V	10	70	100
VT60 C60x628V	7	70	100
VT60 C60x808V	10	70	100
VH80 C80x880V	7	70	100
VH80 C80x1200V	10	70	100

DAMPING 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

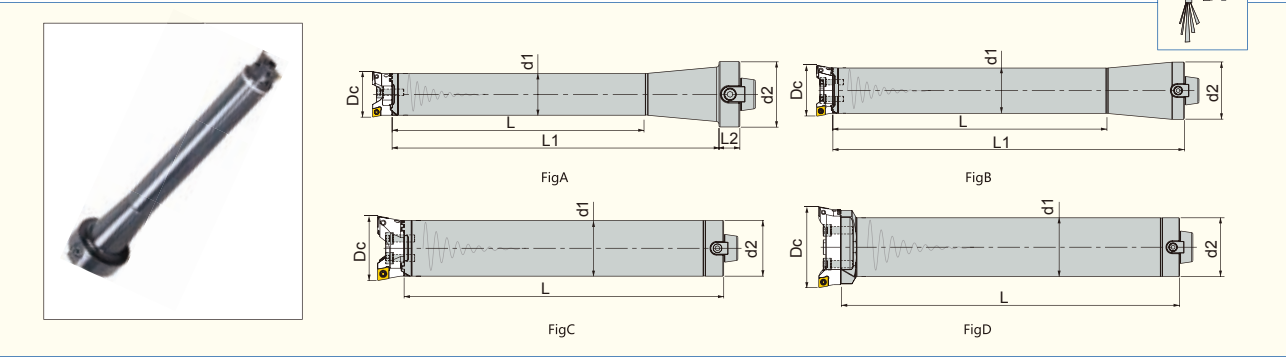
VBR 系列阻尼减振粗镗刀	B31
VBR Damping Rough Boring Tool	
VPF 系列阻尼减振微调精镗刀	B34
VPF Damping Mini Precision Boring Tool	
VPF 系列阻尼减振微调精镗刀 (反精镗加工示意).....	B37
VPF Damping Precision Back Boring Tool	
VLR 桥式阻尼减振粗镗刀	B38
VLR Damping Rough Boring Tool With Bridge	
VLF 桥式阻尼减振微调精镗刀	B39
VLF Damping Precision Boring Tool With Bridge	
VNL 桥式阻尼减振镗刀接杆	B40
VNL Damping Adaptor For Boring Tool With Bridge	

DAMPING BORING TOOL 阻尼减振镗刀

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－Φ 153，短锥模块式 E 接口，矩形槽刀座接口，内置减振机构，可有效抑制深孔加工时所产生的振动。
Two teeth rough boring tool, diameter range is 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	在庫 Stock
VBR D20.E50.125	21-24	20	50	125	165	16	A	0.9	C90A D020-024.CC06	☛
	23-27	20	50	125	165	16	A	0.9	C90A D023-027.CC06	☛
	26-30	20	50	125	165	16	A	0.9	C90A D19.2630.CC06	☛
VBR D25.E50.150	26-35	25	50	150	200	16	A	1.2	C90A D026-035.CC06	☛
	33-42	25	50	150	200	16	A	1.2	C90A D25.3342.CC06	☛
VBR D32.E50.195	33-41	32	50	195	252	16	A	2.1	C90A D033-041.CC06	☛
	39-47	32	50	195	252	16	A	2.1	C90A D32.3947.CC06	☛
VBR D40.E50.240	41-55	40	50	240	315	-	B	3.8	C90A D041-055.CC09	☛
	53-67	40	50	240	315	-	B	3.8	C90A D40.5367.CC09	☛
VBR D50.E63.300	55-70	50	63	300	389	-	B	6.1	C90A D055-070.CC09	☛
	68-83	50	63	300	389	-	B	6.1	C90A D50.6883.CC09	☛
VBR D63.E63.360	70-90	63	63	360	-	-	C	8.5	C90A D070-090.CC12	☛
	88-108	63	63	360	-	-	C	8.5	C90A D63.88108.CC12	☛
VBR D80.E80.460	90-110	80	80	460	-	-	C	17.1	C90A D090-110.CC12	☛
	108-128	80	80	460	-	-	C	17.1	C90A D80.108128.CC12	☛
VBR D100.E80.460	110-133	80	80	460	-	-	D	17.2	C90A D110-133.CC12	☛
	130-153	80	80	460	-	-	D	17.2	C90A D130-153.CC12	☛

- 当 d1 ≤ 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：☞ A41-A42 页。
- 刀具具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBR D20.E50.125。
- Hole depth is 6D(hole diameter) when d1≤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 A41-A42.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBR D20.E50.125

备件

Spare Parts

Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	调整扳手 Allen key for adjusting screw
21-42mm	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

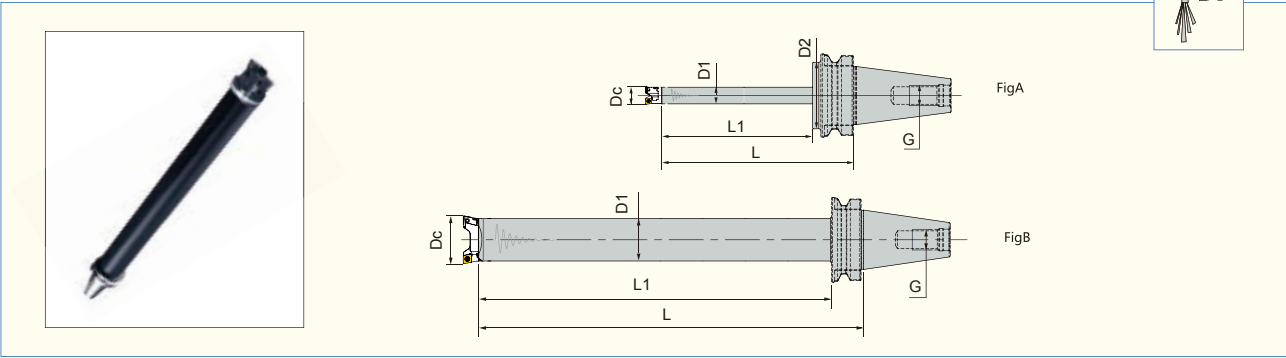
D2	平键 Flat key	平键锁紧螺钉 Clamping screw for flat key
D2=50	PL04 12x9	SR55 M5x12
D2=63	PL04 14x12	SR55 M5x16
D2=80	PL04 16x14	SR55 M6x16

DAMPING BORING TOOL 阻尼减振镗刀

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－Φ 153，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	在庫 Stock
FBT50 VBR D20.247.VE	21-24	20	80	234	187	A	24	4.3	C90A D020-024.CC06	☛
	23-27	20	80	234	187	A	24	4.3	C90A D023-027.CC06	☛
	26-30	20	80	234	187	A	24	4.3	C90A D19.2630.CC06	☛
FBT50 VBR D25.288.VE	26-35	25	/	275	237	B	24	4.8	C90A D026-035.CC06	☛
	33-42	25	/	275	237	B	24	4.8	C90A D25.3342.CC06	☛
FBT50 VBR D32.358.VE	33-41	32	/	343	305	B	24	6.2	C90A D033-041.CC06	☛
	39-47	32	/	343	305	B	24	6.2	C90A D32.3947.CC06	☛
FBT50 VBR D40.438.VE	41-55	40	/	420	382	B	24	8.6	C90A D041-055.CC09	☛
	53-67	40	/	420	382	B	24	8.6	C90A D40.5367.CC09	☛
FBT50 VBR D50.538.VE	55-70	50	/	520	482	B	24	12.5	C90A D055-070.CC09	☛
	68-83	50	/	520	482	B	24	12.5	C90A D50.6883.CC09	☛
FBT50 VBR D63.668.VE	70-90	63	/	638	600	B	24	22.6	C90A D070-090.CC12	☛
	88-108	63	/	638	600	B	24	22.6	C90A D63.88108.CC12	☛
FBT50 VBR D80.838.VE	90-110	80	/	808	770	B	24	40.2	C90A D090-110.CC12	☛
	108-128	80	/	808	770	B	24	40.2	C90A D80.108128.CC12	☛
FBT50 VBR D100.838.VE	110-133	80	/	808	770	B	24	40.5	C90A D110-133.CC12	☛
	130-153	80	/	808	770	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 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: 1 PC VBR D20.E50.125

备件

Spare Parts

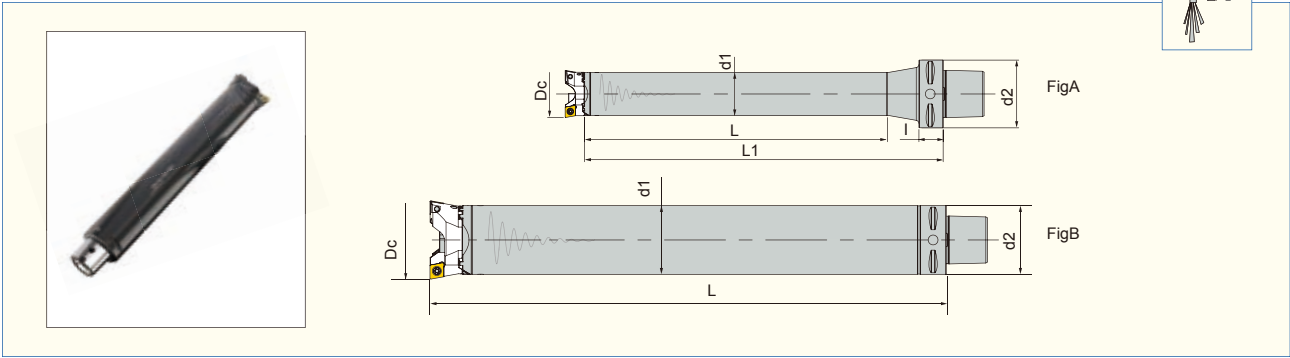
Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	调整扳手 Allen key for adjusting screw
21-42mm	SR55 M4x16	GK20 D4	KEY01 M3
33-47mm	SR55 M5x16	GK20 D5	KEY01 M4
41-67mm	SR55 M6x20	GK20 D6	KEY01 M5
55-83mm	SR55 M6x20	GK20 D6	KEY01 M5
70-108mm	SR55 M8x25	GK20 D8	KEY01 M6
90-153mm	SR55 M0x30	GK20 D10	KEY01 M8

DAMPING BORING TOOL 阻尼减振镗刀

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，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-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	I	Fig	Kg	适配刀座 Cartridge	在庫 Stock
VBR D40.C6.282	41-55	40	63	282	333	22.5	A	4.3	C90A D041-055.CC09	●
	53-67	40	63	282	333	22.5	A	4.3	C90A D40.5367.CC09	●
VBR D50.C6.357	55-70	50	63	357	432	22.5	A	7	C90A D055-070.CC09	●
	68-83	50	63	357	432	22.5	A	7	C90A D50.6883.CC09	●
VBR D63.C6.445	70-90	63	63	445	/	/	B	11	C90A D070-090.CC12	●
	88-108	63	63	445	/	/	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: 1 PC VBR D40.C6.282.

备件

Spare Parts

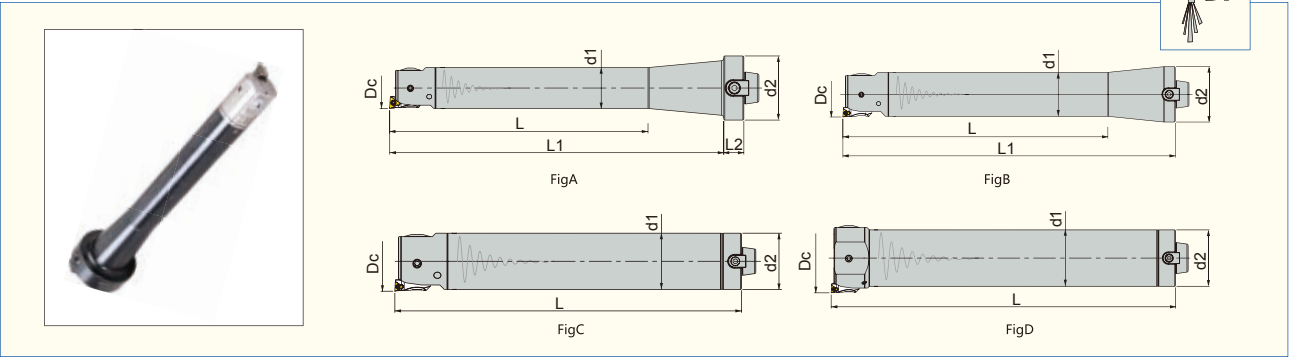
Dc	刀座锁紧螺钉 Clamping screw for cartridge	碟形垫片 Disk spring	调整扳手 Allen key for adjusting screw
41-67mm	SR55 M6x20	GK20 D6	KEY01 M5
55-83mm	SR55 M6x20	GK20 D6	KEY01 M5
70-108mm	SR55 M8x25	GK20 D8	KEY01 M6

DAMPING BORING TOOL 阻尼减振镗刀

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	在庫 Stock
VBF D20.E50.130	21-26	20	50	130	170	16	A	1.0	FRB 10A...	●
	25-31	20	50	130	170	16	A	1.0	FRB 10B...	●
	30-36	20	50	130	170	16	A	1.0	FRB 10C...	●
VBF D25.E50.155	26-34	25	50	155	205	16	A	1.2	FRB 12A...	●
	33-41	25	50	155	205	16	A	1.2	FRB 12B...	●
	40-48	25	50	155	205	16	A	1.2	FRB 12C...	●
VBF D32.E50.200	33-43	32	50	200	262	16	A	2.2	FRB 16A...	●
	42-52	32	50	200	262	16	A	2.2	FRB 16B...	●
	51-61	32	50	200	262	16	A	2.2	FRB 16C...	●
VBF D40.E50.245	42-54	40	50	245	325	-	B	3.8	FRB 20A...	●
	53-65	40	50	245	325	-	B	3.8	FRB 20B...	●
	64-76	40	50	245	325	-	B	3.8	FRB 20C...	●
VBF D50.E63.305	53-69	50	63	305	380	-	B	6.0	FRB 25A...	●
	68-84	50	63	305	380	-	B	6.0	FRB 25 B...	●
	83-99	50	63	305	380	-	B	6.0	FRB 25C...	●
VBF D63.E63.385	68-100	63	63	385	-	-	C	8.9	FRB 30A...	●
	98-130	63	63	385	-	-	C	8.9	FRB 30B...	●
	128-160	63	63	385	-	-	C	8.9	FRB 30C...	●
VBF D80.E80.485	88-120	80	80	485	-	-	C	18.1	FRB 30A...	●
	118-150	80	80	485	-	-	C	18.1	FRB 30B...	●
	148-180	80	80	485	-	-	C	18.1	FRB 30C...	●
VBF D100.E80.485	100-152	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：🔗 A13-A14 页。
- 适配刀柄需单独订购，请参照：🔗 A41-A42 页。
- 刀具具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBF D20.E50.130。
- Hole depth is 6D(hole diameter) when d1≤50, and hole depth is 6D(tool body diameter) when d1≥63.
- The cartridge should be ordered separately, please see page A13-A14.
- The adaptor should be ordered separately, please see page A41-A42.
- 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 screw	调整扳手 Allen key for adjusting screw
VBF D20.E50.130	SR54-2 M4x4	PL04 12x9	SR55 M5x12	SR20 M4x6-X	KEY02 T15	KEY01 M2
VBF D25.E50.155	SR54-2 M4x6	PL04 12x9	SR55 M5x12	SR20 M4x8-X	KEY02 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)

● 标准库存
Item in stock

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

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

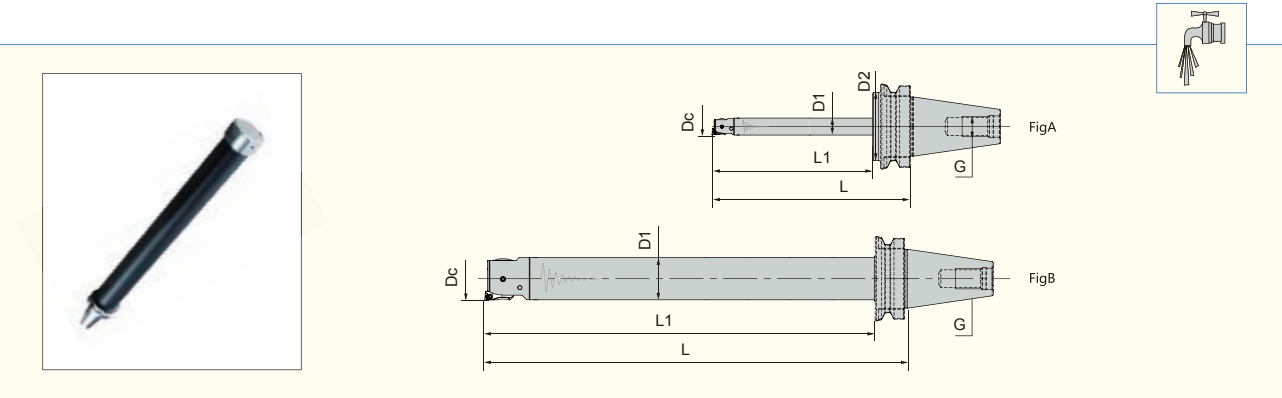
DAMPING BORING TOOL 阻尼减振镗刀

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...	●
	64-76	40	/	438	400	B	24	8.7	FRB 20C...	●
	53-69	50	/	538	500	B	24	12.5	FRB 25A...	●
FBT50 VBF D50.538.VE	68-84	50	/	538	500	B	24	12.5	FRB 25B...	●
	83-99	50	/	538	500	B	24	12.5	FRB 25C...	●
	68-100	63	/	668	630	B	24	23	FRB 30A...	●
FBT50 VBF D63.668.VE	98-130	63	/	668	630	B	24	23	FRB 30B...	●
	128-160	63	/	668	630	B	24	23	FRB 30C...	●
	88-120	80	/	838	800	B	24	41	FRB 30A...	●
FBT50 VBF D80.838.VE	118-150	80	/	838	800	B	24	41	FRB 30B...	●
	148-180	80	/	838	800	B	24	41	FRB 30C...	●
	100-152	80	/	838	800	B	24	41.2	FRB 30A...	●
FBT50 VBF D100.838.VE	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： A13-A14 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 A13-A14.
 - 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 screw	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	KEY02 T15	SR20 M4x6-X	KEY01 M2
FBT50 VBF D25.288.VE	SR54-2 M4x6	KEY02 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

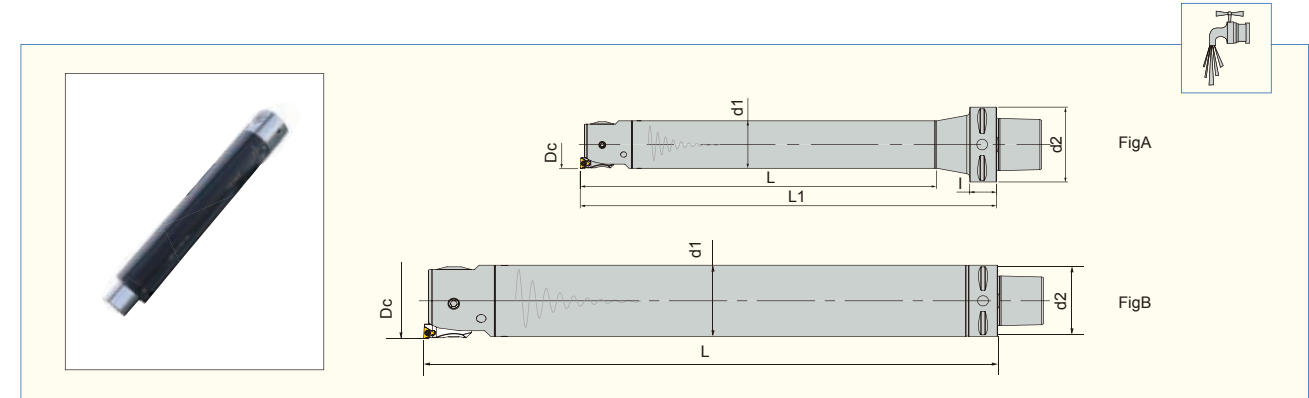
DAMPING BORING TOOL 阻尼减振镗刀

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 Φ42~Φ106，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-Φ106. 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	I	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： A13-A14 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 A13-A14.
- 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 screw	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

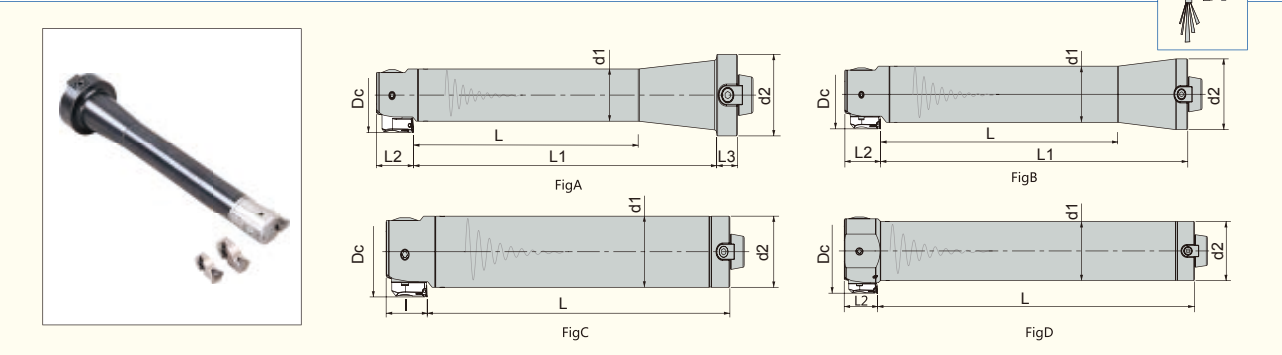
DAMPING BORING TOOL 阻尼减振镗刀

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+D1)/2+1”要求。内置减振机构，可有效抑制深孔加工时所产生的振动。

Please assemble the cartridge as its reverse direction. Which is for back boring. And the back boring range 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	在庫 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...	●
VBF D32.E50.200	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...	●
VBF D32.E50.200	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...	●
VBF D40.E50.245	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...	●
VBF D50.E63.305	68-84	50	63	260	335	40	-	B	6.0	FRB 25B...	●
VBF D50.E63.305	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...	●
VBF D63.E63.385	98-130	63	63	335	-	46	-	C	8.9	FRB 30B...	●
VBF D63.E63.385	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...	●
VBF D80.E80.485	118-150	80	80	435	-	46	-	C	18.1	FRB 30B...	●
VBF D80.E80.485	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...	●
VBF D100.E80.485	130-182	80	80	435	-	46	-	D	18.4	FRB 30B...	●
VBF D100.E80.485	160-212	80	80	435	-	46	-	D	18.4	FRB 30C...	●

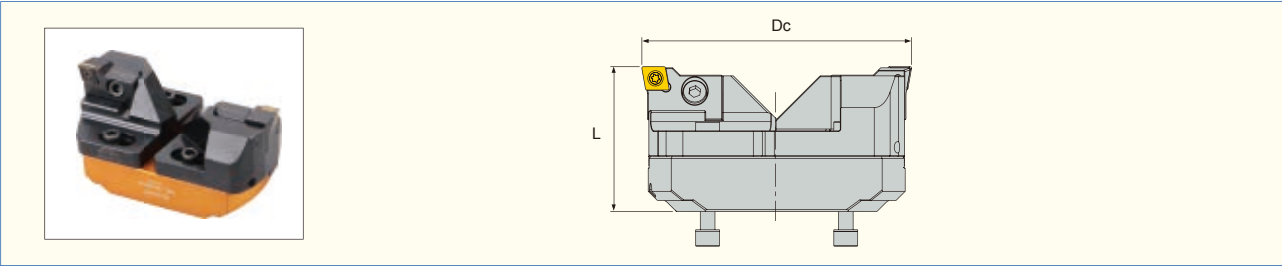
- 精镗刀头需单独订购，请参照：  A13-A14 页。
- 适配刀柄需单独订购，请参照：  A41-A42 页。
- 刀具具有内冷出水孔。
- 若出现减振能力下降时，建议维修保养。
- 订货示例：1 件 VBF D20.E50.130。
- The cartridge should be ordered separately, please see page A13-A14.
- The adaptor should be ordered separately, please see page A41-A42.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC VBF D20.E50.130

DAMPING BORING TOOL 阻尼减振镗刀

VLR 桥式阻尼减振粗镗刀

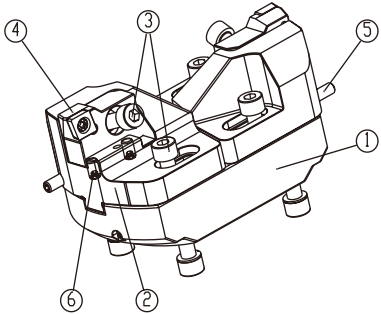
VLR Damping Rough Boring Tool with Bridge

适用于大孔加工的双刀桥式粗镗刀，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	手柄接口 Connection	Kg	适配刀座 Cartridge	在庫 Stock
VLR D148-200	148-200	79	VNL32	2.99	V90A D148..	●
VLR D198-250	198-250	79	VNL32	3.25	V90A D148..	●
VLR D248-300	248-300	79	VNL32	3.51	V90A D148..	●

- 适配刀座需单独订购。
- 适配接杆需单独订购，请参照：  B32 页。
- 刀具具有内冷出水孔。
- 订货示例：1 件 VLR D148-200。
- The cartridge should be ordered separately.
- Extension should be ordered separately, please see page B32.
- 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 Cartridge	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

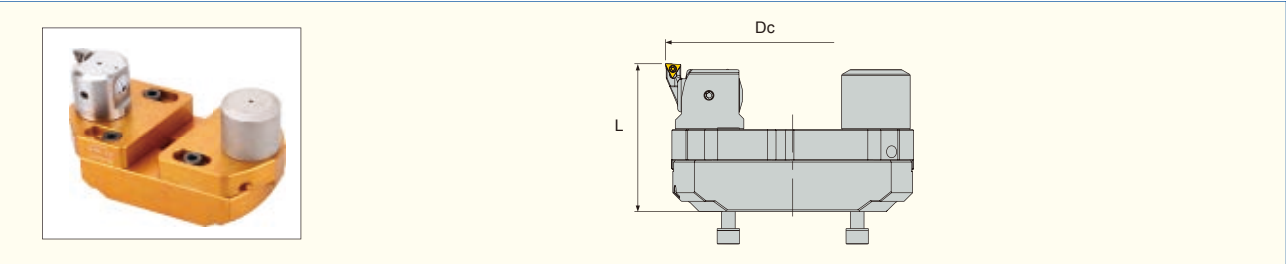
Dc	⑥刀座调整螺钉 Adjusting screw	滑块锁紧扳手 Allen key for cartridge	刀座调整扳手 Adjustable key for cartridge
148-200	SR50 M6x10 4 件	KEY01 M6	KEY01 M2
198-250	SR50 M6x10 4 件	KEY01 M6	KEY01 M3
248-300	SR50 M6x10 4 件	KEY01 M6	KEY01 M3

DAMPING BORING TOOL 阻尼减振镗刀

VLF 桥式阻尼减振微调精镗刀

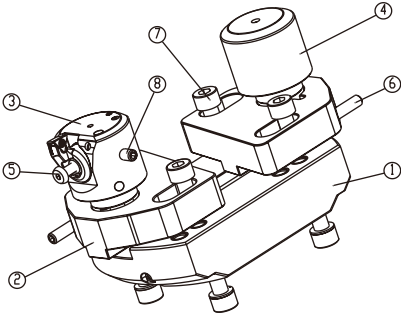
VLF Damping Precision Boring Tool with Bridge

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	在庫 Stock
VLF D148-212AL	148-212	86.5	VNL32	2.02	FRB 20B..	●
VLF D198-262AL	198-262	86.5	VNL32	2.28	FRB 20B..	●
VLF D248-312AL	248-312	86.5	VNL32	2.54	FRB 20B..	●

- 适配刀座需单独订购，请参照：☞ A13-A14 页。
- 适配接杆需单独订购，请参照：☞ A32 页。
- 刀具有内冷出水孔。
- 订货示例：1 件 VLF D148-212。
- The cartridge should be ordered separately, please see page A13-A14.
- Extension should be ordered separately, please see page A32.
- With coolant hole.
- Ordering sample: 1 PC VLF D148-212AL.



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

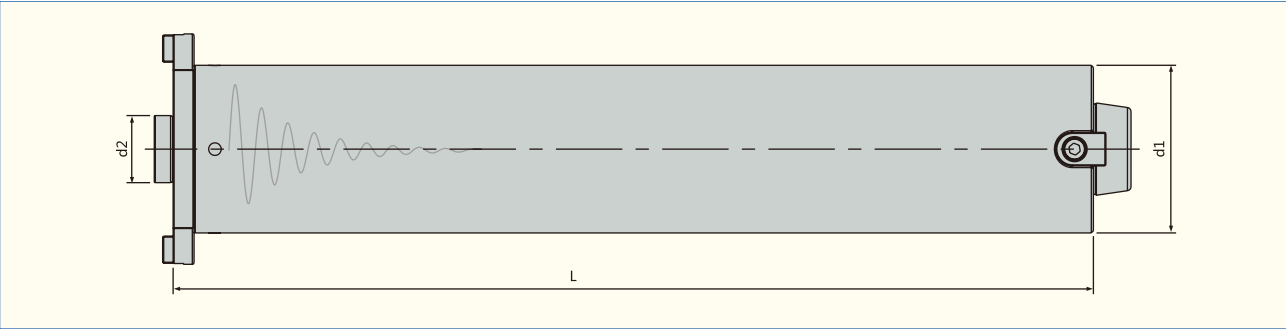
备件 Spare parts	螺钉扳手 Allen key
SR56 M5x12	KEY01 M3
SR54 M6x10	KEY01 M3
SR50 M6x20	KEY01 M3
SR55 M8x25	KEY01 M6

DAMPING BORING TOOL 阻尼减振镗刀

VNL 桥式阻尼减振镗刀接杆

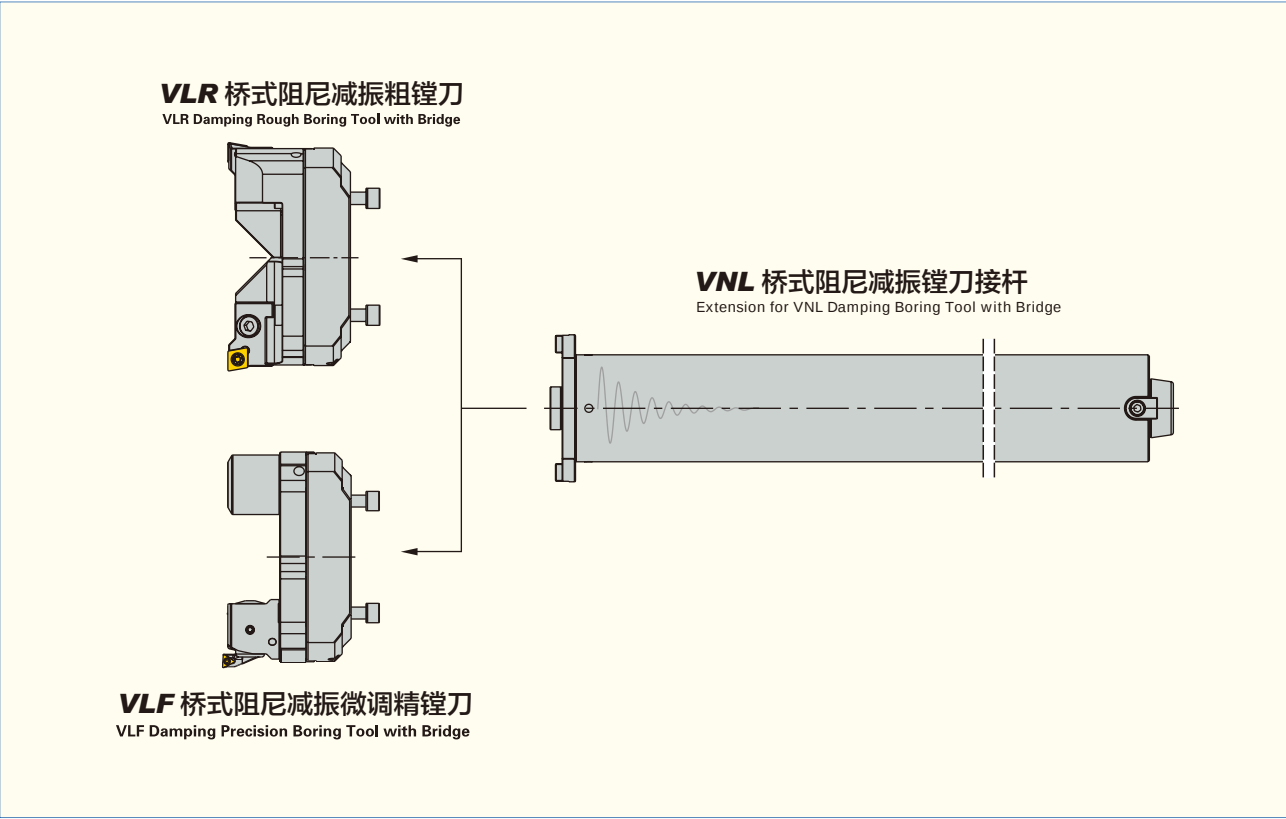
Extension for VNL Damping Boring Tool with Bridge

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	在庫 Stock
VNL32 D80.E80.440	80	32	440	16.05	PL04 12x10	●

- 刀杆有内冷出水孔。
- 适配刀柄需单独订购，请参照：☞ A41-A42 页。
- 订货示例：1 件 VNL32 D80.E80.440。
- With coolant hole.
- The adaptor should be ordered separately, please see page A41-A42.
- Ordering sample: 1 PC VNL32 D80.E80.440.



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

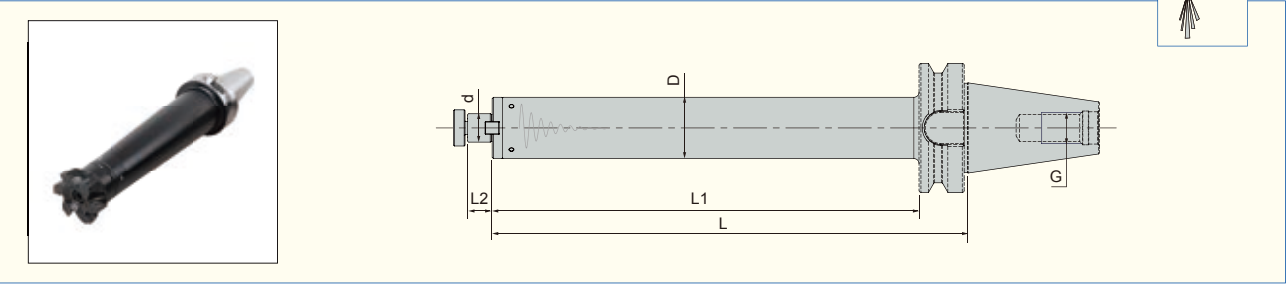
阻尼减振铣刀柄 B43
Damping Face Milling Cutter Adaptor

非标阻尼减振刀具 Special Damping Tools

非标阻尼减振刀具 B47
Special Damping Tools

DAMPING FACE MILLING CUTTER ADAPTOR 阻尼减振铣刀柄

阻尼减振铣刀杆
Damping Face Milling Cutter Adaptor



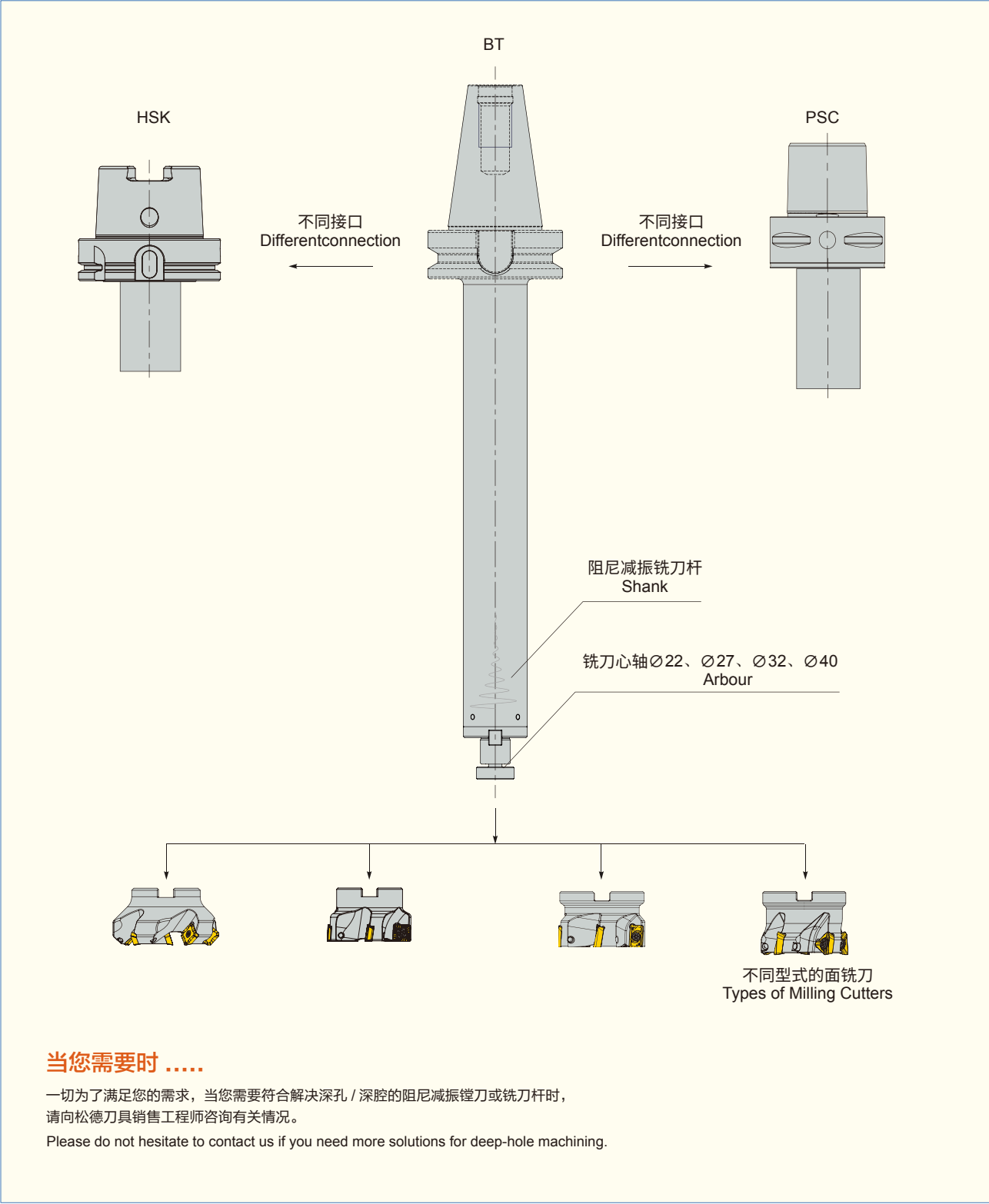
规格型号 Designation	L	D	d	L1	L2	G	Bar	Kg	适配刀盘 Insert	在庫 Stock
FBT50 SEM22XD48X370.V	371	47.5	22	333	19	24	70	9.04	50	●
FBT50 SEM22XD60X460.V	460	60	22	422	19	24	70	14.46	63	●
FBT50 SEM27XD76X570.V	572	76	27	534	21	24	70	21.2	80	●

- 适配铣刀盘需单独订购，请参照：C6-C18 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 SEM22XD48X370.V。
- The adaptor should be ordered separately, please see page C6-C18.
- With coolant hole.
- Suggest doing the maintenance when damping capacity is weaker than before.
- Ordering sample: 1 PC FBT50 SEM22XD48X370.V.



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.

● 标准库存
Item in stock

● 半标准库存 (订货时，请确认交货期)
Item of short delivery time
(please confirm delivery time when 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)
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DAMPING FACE MILLING CUTTER ADAPTOR 阻尼减振铣刀柄

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:

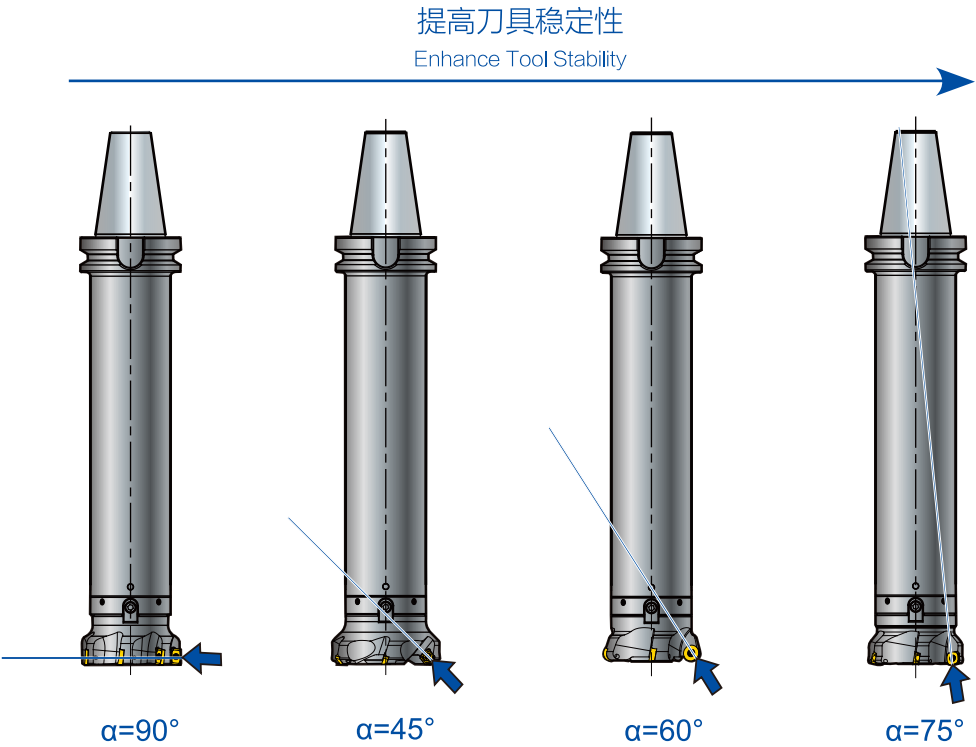
- The approach angle will affect the working direction of the cutting force
- Tool diameter which is relative to the radial cutting depth
- Insert groove
- Pitch

Approach Angle

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

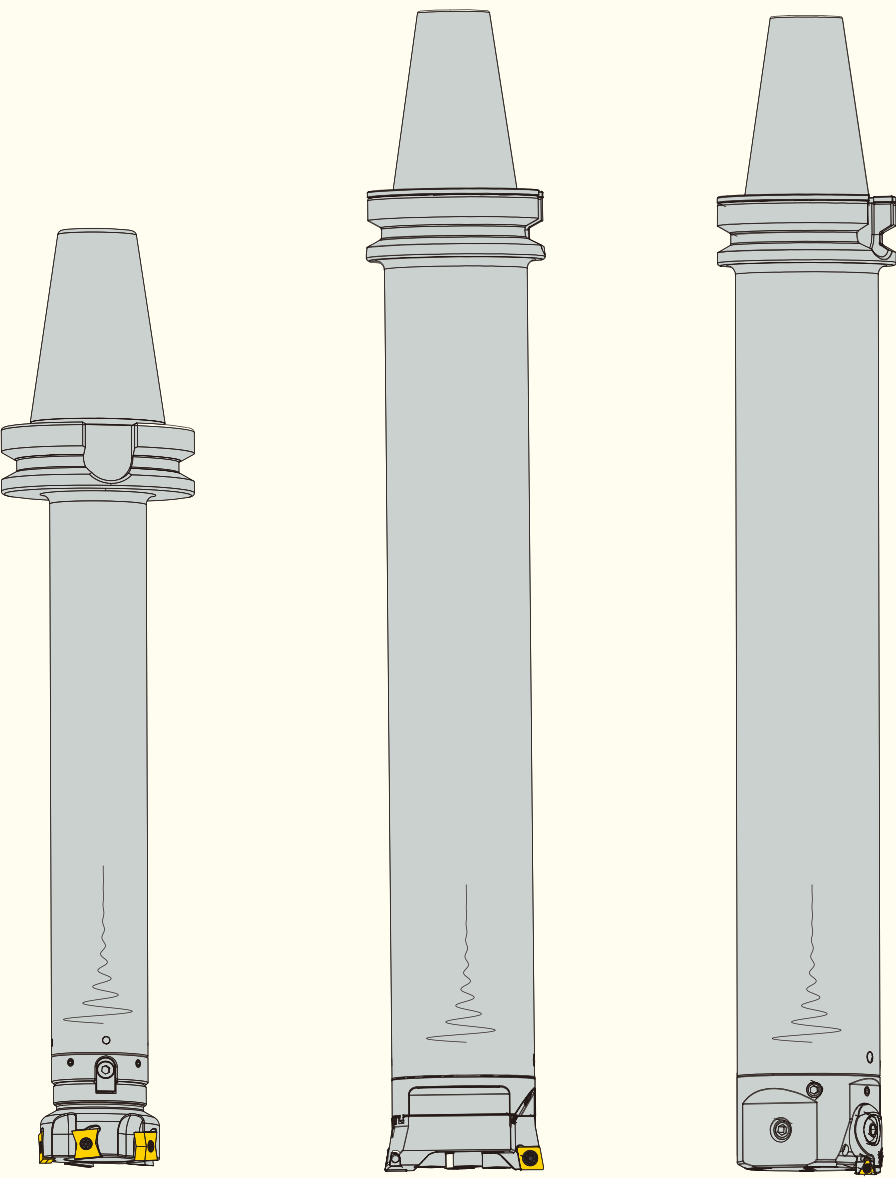
It will see the differences between damping tools and common tools clearly when the axial cutting force increases.

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



SPECIAL DAMPING TOOLS 非标阻尼减振刀具

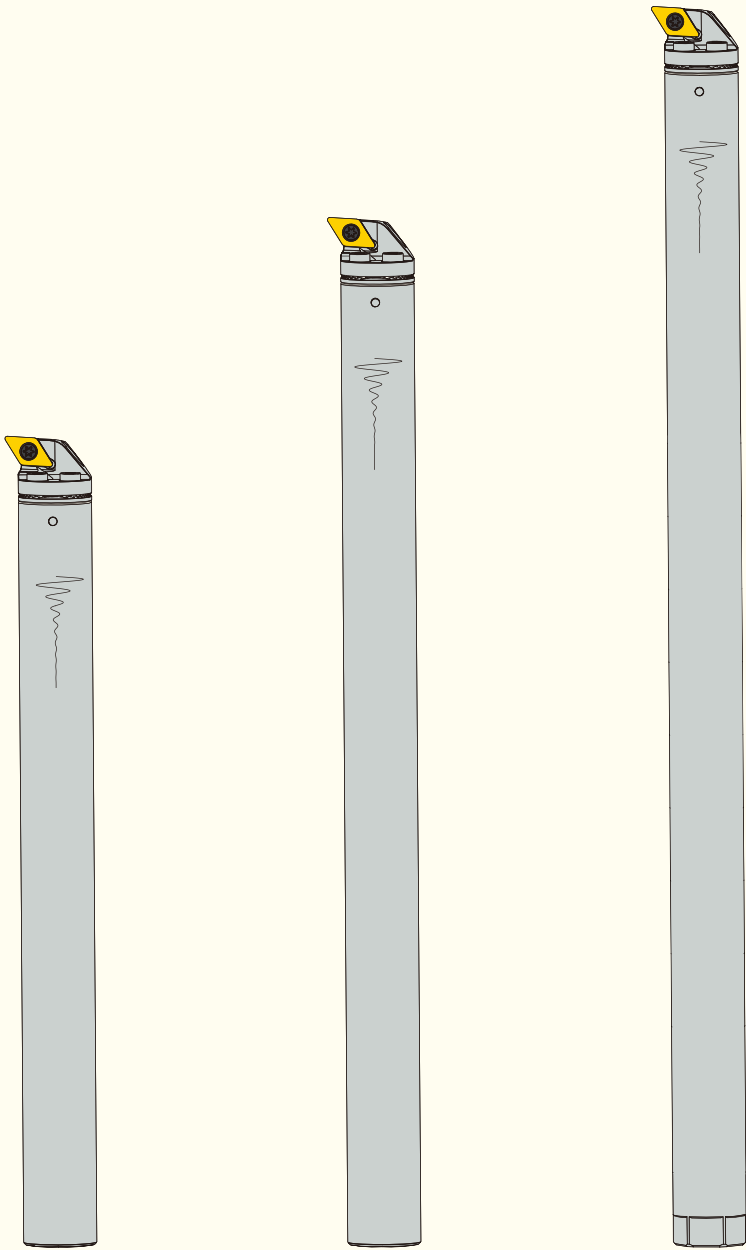
非标阻尼减振刀具
Special Damping Tools



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，
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SPECIAL DAMPING TOOLS 非标阻尼减振刀具

非标阻尼减振刀具
Special Damping Tools



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