



Monkula

MACHINING SOLVER



| Anti-Vibration Cutting Tools
| 抗震切削刀具

ABOUT MONKULA

艋庫拉制震股份有限公司原名為映帆企業有限公司，成立於2001年，為一專業的閥類、機械五金零件加工廠，服務終端客群為德、日兩國。2008年轉型研發及製造抗震刀桿，更名為艋庫拉制震股份有限公司，已逾十一載，行銷遍及全球30餘國。本公司生產設備有CNC車床、五軸加工機、CNC巨型車床。除了標準規格的抗震刀桿外，我們還提供客製化刀具的服務。產品性能亦經過精密機械研究發展中心(PMC)檢測。我們擁有豐富的加工經驗，可以輔助客戶解決困難加工問題。抗震刀桿的應用範圍包括：車床、銑床、搪孔、磨床。

Monkula Enterprise Co., Ltd. original name was YingFan Enterprise Co., Ltd., established in 2001, as a professional valve and mechanical hardware parts processing plant, customers are mainly end-users in Germany and Japan. In 2008, YingFan Enterprise Co., Ltd transformed and began to develop anti-vibration cutting tools and changed company name to Monkula Enterprise Co., Ltd. We have been manufacturing anti-vibration cutting tools for more than 12 years and have been sold in more than 30 countries around the world. The production line has CNC lathe, 5-axis CNC machine, CNC giant lathe. In addition to the standard specifications of anti-vibration cutting tools, we also provide customized tooling services. Besides, product performance is also tested by the Precision Machinery Research and Development Center (PMC). We have extensive machining experience to assist our customers in solving difficult machining problems. The application range of the anti-vibration cutting tools includes: lathe, milling machine, boring and grinding machine.



發明專利: Invention patent

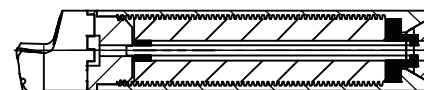
制震器原理 作用力與反作用力&頻率反制

本公司的制震器採螺紋狀設計，能增加與桿體的接觸面積，當進行切削時，制震器會抵消刀桿所產生的振動頻率。刀桿柄徑不同，產生的振動頻率也不同。柄徑越小，振動頻率越高，柄徑越大，振動頻率越低。

Damper system principle action force and reaction force & frequency counteraction

The damper system is threaded design and can increase the contact area with the tool. When the tool is cutting, the damper system counteracts the vibration frequency generated by the tool. When the tool diameter is different, the vibration frequency will be different. The smaller the tool diameter, the higher the vibration frequency, the larger the tool diameter and the lower the vibration frequency.

Structure of Damper System 制震器結構



CONTENT

- 01** Y-Type (Anti-Vibration) External Turning Tool (with Coolant Hole) / P 05 - P 11
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- 02** One Piece Anti-Vibration Boring Bar / P 12 - P 15
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- 03** Chatter off type Anti-Vibration Cutter / P 16 - P 24
一體式抗震車刀-杓爪刀
- 04** Chatter off type Anti-Vibration Cutter with Coolant Hole / P 25 - P 31
一體式出水抗震車刀-猛牛刀
- 05** M3S Anti-Vibration Boring Bar / P 32 - P 36
M3S 抗震車刀
- 06** Removable Type Anti-Vibration Boring Bar / P 37
三叉式抗震車刀
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- 10** Removable Cutting Head / P 41 - P 48
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組合式抗震車刀
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中心出水抗震刀套
- 13** Custom-Made Product / P 51
訂製產品

刀片選用方面 INSERT SELECTION

1 Insert shape selection 刀片形狀的選用:



2 Entering angle selection 切入角的選用: F 91° > U 93° > Q 107°

3 Clearance angle of Insert selection 刀片逃隙角選用: P 11° > C 7° > B 5° > N 0°

4 Insert corner radius selection 刀尖R角選用: 0.4mm > 0.2mm > 0.8mm

- Insert corner radius 0.4mm: Less cutting resistance, there is less tendency for vibration.
R角0.4mm的刀片: 切削阻力較小, 較不易引起震動
- Insert corner radius 0.2mm: It is recommended for high L/D and suitable for light cutting.
R角0.2mm的刀片: 建議用於高倍數, 適合輕切削
- Insert corner radius 0.8mm: Larger cutting resistance, there is higher tendency for vibration. It is recommended for low L/D (3D-5D) and suitable for roughing.
R角0.8mm的刀片: 切削阻力較大, 較易引起震動, 建議用於低倍數, 適合粗車
- It is not recommended to use Insert corner radius more than 0.8mm.
不建議使用R角0.8mm以上的刀片

加工條件方面 MACHINING CONDITION

1 Cutting speed (Vc : m/min) 切削速度:

- It is recommended to be consistent with the machining conditions of the insert.
建議與刀片的加工條件一致
- Below Vc 80 m/min will cause the insert wear and vibration.
低於米速80會造成刀片磨耗及引起震動
- In-plant test Vc 80m/min ~ Vc 300m/min works better.
廠內測試 Vc 80m/min ~ Vc 300m/min 效果較佳

2 Feed speed(F : mm/rev) 進給速度:

- The roughing feed is between 0.2 mm/rev and 0.3 mm/rev.
粗車進給約0.2mm/rev~0.3mm/rev之間
- If the finishing feed is less than 0.1mm/rev, the cutting speed must be increased to more than Vc 160 m/min to obtain a better cutting surface.
若精修進給小於0.1則須將米速提高到160以上, 才可得到較好的表面粗度

夾持 CLAMP



- It is recommended to use Anti-Vibration Cutting Sleeve to clamp the cutting tools.
建議使用抗震刀套夾持
- Since anti-vibration cutting sleeve completely encases the bar, not cylindrical sleeve with screws, therefore, it is more stable and will not damage the damper system.
由於抗震刀套將刀桿完全包住夾緊, 非一般刀套螺絲鎖固, 因此較為穩定也不會傷及制震器



Y型(出水)(抗震)外徑車刀

Y-Type (Anti-Vibration) External Turning Tool (with Coolant Hole)

Invention Patent 發明專利
US8371776 / I638692 / I419764

Material: SNCM439(Alloy Steel)
材質: 藍十字合金鋼
Hardness: HRC 42°
硬度: HRC 42度



Coolant hole 出水孔	2.5mm	1.8mm
Pump 水壓泵浦	≤ 20 bar	≥ 40 bar



Damper system
制震器



High pressure
water spray pipe
高壓噴水管

01. Anti-Vibration x Coolant Hole 有抗震+有出水:

- With high pressure water spray pipe, using high pressure coolant system, less built-up edge. 搭配高壓噴水管, 使用高壓中心出水, 不易產生積屑瘤
- Increasing the effect of lubrication and cooling, solving the problem of chip removal and chip breaking. 增加潤滑及降溫效果, 解決排屑及斷屑問題
- Less insert consumption, optimizing the workpiece surface. 減少刀片消耗, 優化工件表面粗糙度
- Resetting insert accurately, changing insert quickly. 重複定位刀片準確, 替換刀片快速

02. No Anti-Vibration x Coolant Hole 沒抗震+有出水:

- With high pressure water spray pipe, using high pressure coolant system, less built-up edge. 搭配高壓噴水管, 使用高壓中心出水, 不易產生積屑瘤
- Increasing the effect of lubrication and cooling, solving the problem of chip removal and chip breaking. 增加潤滑及降溫效果, 解決排屑及斷屑問題
- Resetting insert accurately, changing insert quickly. 重複定位刀片準確, 替換刀片快速

03. Anti-Vibration x No Coolant Hole 有抗震+沒出水:

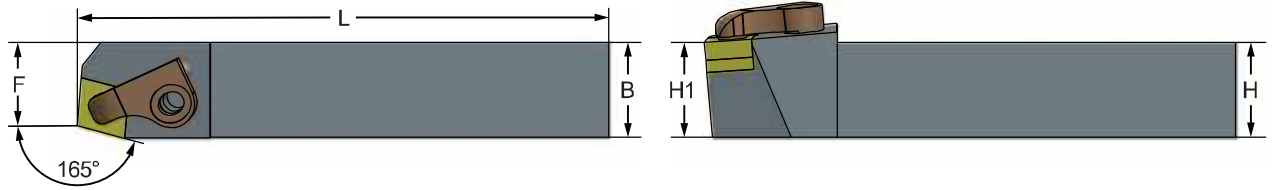
- Less insert consumption, optimizing the workpiece surface. 減少刀片消耗, 優化工件表面粗糙度
- Resetting insert accurately, changing insert quickly. 重複定位刀片準確, 替換刀片快速

04. No Anti-Vibration x No Coolant Hole 沒抗震+沒出水:

- Resetting insert accurately, changing insert quickly. 重複定位刀片準確, 替換刀片快速

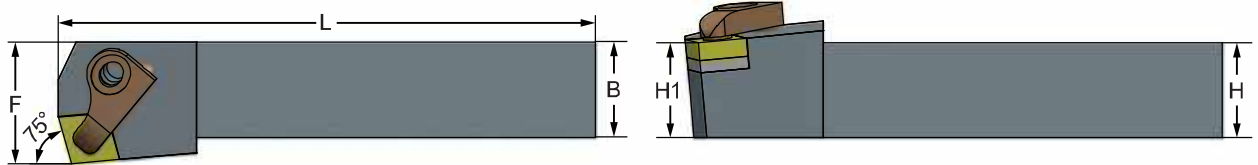
Y型(出水)(抗震)外徑車刀 Y-Type (Anti-Vibration) External Turning Tool (with Coolant Hole)

YCBN



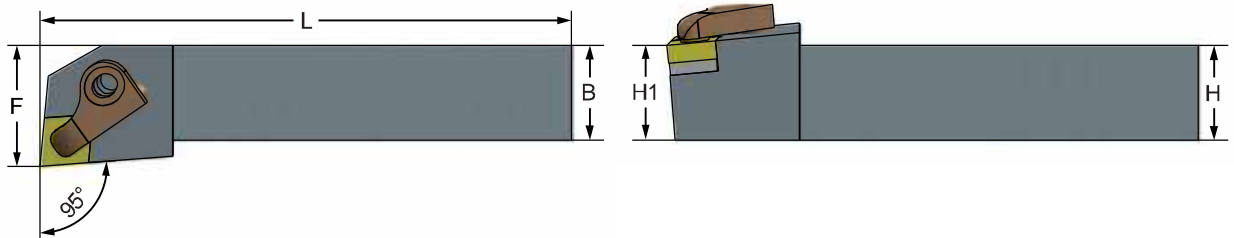
Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YCBNR/L-2020K12	20	20	125	17	CNMG1204	D-CBN	M6	AD01	GMC-422-4	M5	LW050
YCBNR/L-2525M12	25	25	145	22							
YCBNR/L-3232P12	32	32	170	29							

YCKN



Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YCKNR/L-2020K12	20	20	125	25	CNMG1204	D-CKN	M6	AD01	GMC-422-4	M5	LW050
YCKNR/L-2525M12	25	25	145	32							
YCKNR/L-3232P12	32	32	170	40							

YCLN



Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YCLNR/L-2020K12	20	20	125	25	CNMG1204	D-CLN	M6	AD01	GMC-422-4	M5	LW050
YCLNR/L-2525M12	25	25	145	32							
YCLNR/L-3232P12	32	32	170	40							

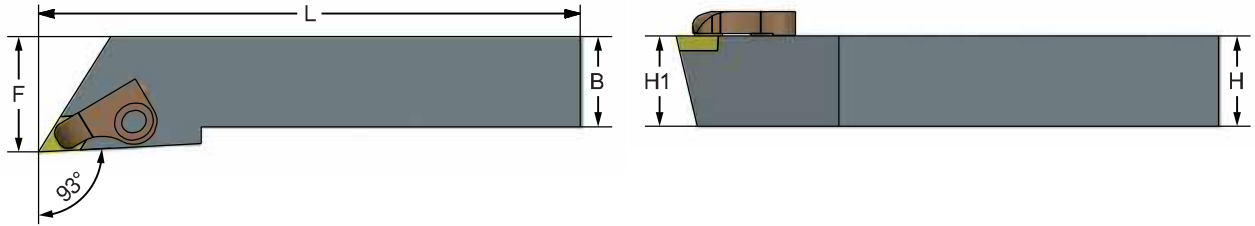
提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



Y型出水抗震外徑車刀

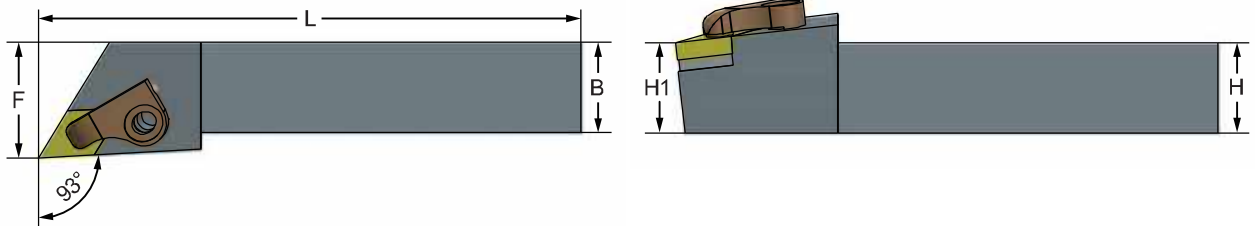
Y-Type (Anti-Vibration) External Turning Tool (with Coolant Hole)

YDJC



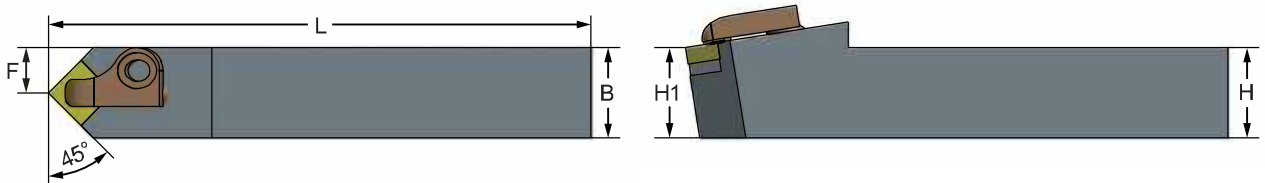
Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Wrench
Right / Left	H/H1	B	L	F					
YDJCR/L-2020K11	20	20	125	25	DCMT11T3	D-DJC	M6	AD01	LW050
YDJCR/L-2525M11	25	25	145	32					

YDJN



Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YDJNR/L-2020K1504	20	20	125	25	DNMG1504	D-DJN	M6	AD01	GW730	M4	LW050
YDJNR/L-2525M1504	25	25	145	32							

YSNN

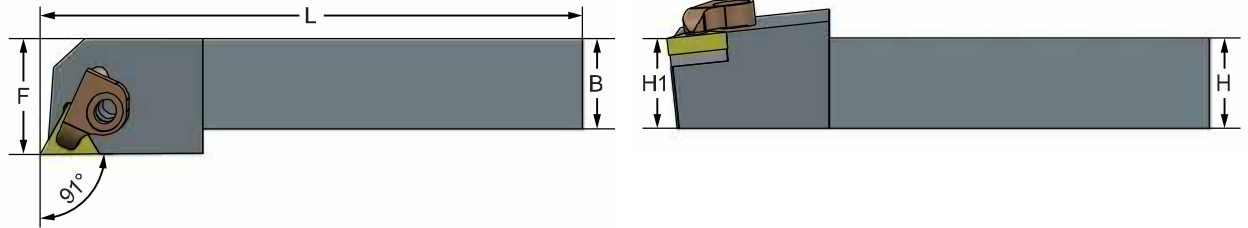


Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YSNNN-2020K12	20	20	125	10	SNMG1204	D-SNN	M6	AD01	GMS-432	M6	LW050
YSNNN-2525M12	25	25	145	12.5							

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

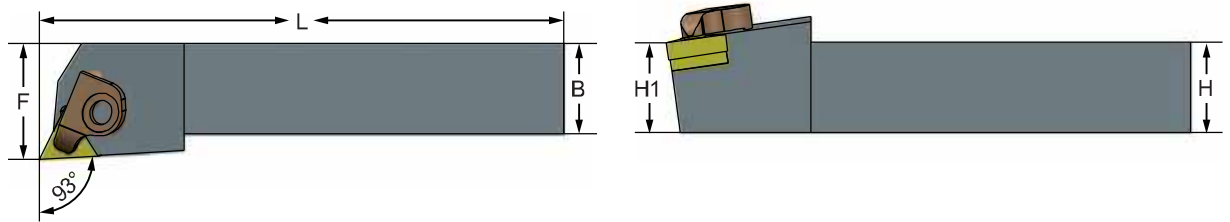
Y型(出水)(抗震)外徑車刀 Y-Type (Anti-Vibration) External Turning Tool (with Coolant Hole)

■ YTGN



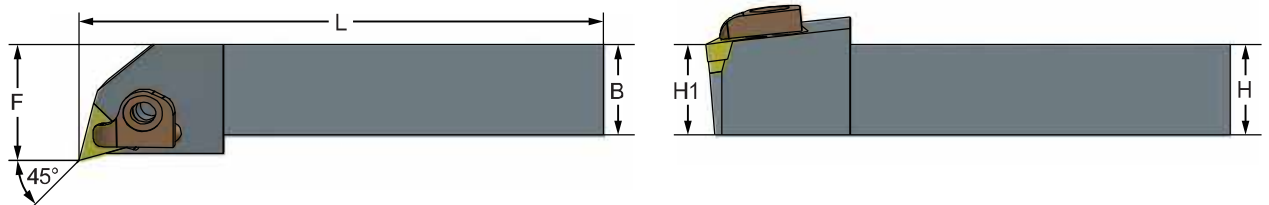
Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YTGNR/L-2020K16	20	20	125	25	TNMG1604	D-TGN	M6	AD01	GMT-321-1	M4	LW050
YTGNR/L-2525M16	25	25	145	32							

■ YTJN-1



Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YTJNR/L-2020K16-1	20	20	125	25	TNMG1604	D-TJN	M6	AD01	GMT-321-1	M4	LW050
YTJNR/L-2525M16-1	25	25	145	32							
YTJNR/L-3232P16-1	32	32	170	40							

■ YTQN

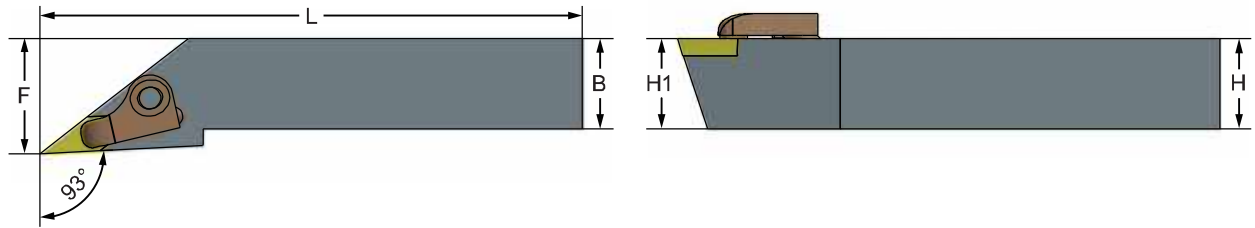


Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YTQNR/L-2020K16	20	20	125	25	TNMG1604	D-TQN	M6	AD01	GMT-321-1	M4	LW050
YTQNR/L-2525M16	25	25	145	32							

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

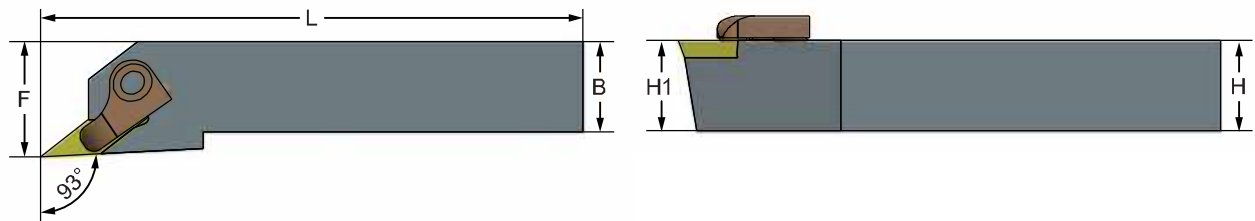
Y型(出水)(抗震)外徑車刀 Y-Type (Anti-Vibration) External Turning Tool (with Coolant Hole)

YVJB



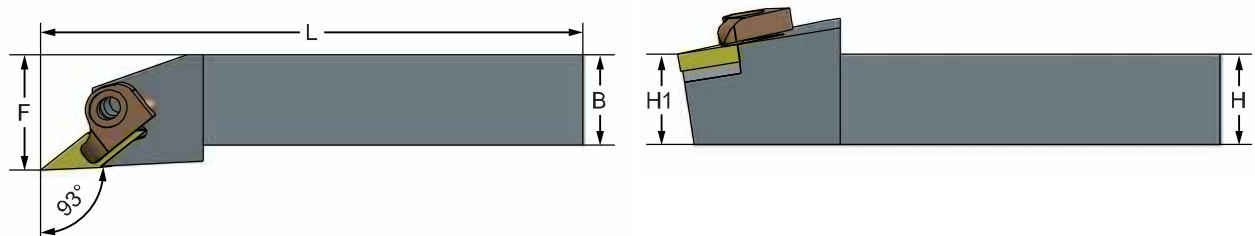
Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Wrench
Right / Left	H/H1	B	L	F					
YVJBR/L-2020K16	20	20	125	25	VBMT1604	D-VJB	M6	AD01	LW050
YVJBR/L-2525M16	25	25	145	32					

YVJC



Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Wrench
Right / Left	H/H1	B	L	F					
YVJCR/L-2020K16	20	20	125	25	VCMT1604	D-VJC	M6	AD01	LW050
YVJCR/L-2525M16	25	25	145	32					
YVJCR/L-2525M11	25	25	145	32	VCMT1103				

YVJN

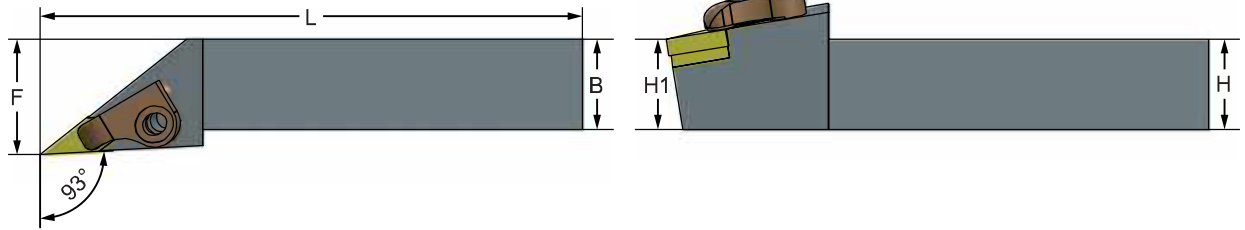


Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YVJNR-2020K16	20	20	125	25	VNMG1604	D-VJN-1	M6	AD01	GMV-322	M4	LW050
YVJNR-2525M16	25	25	145	32							

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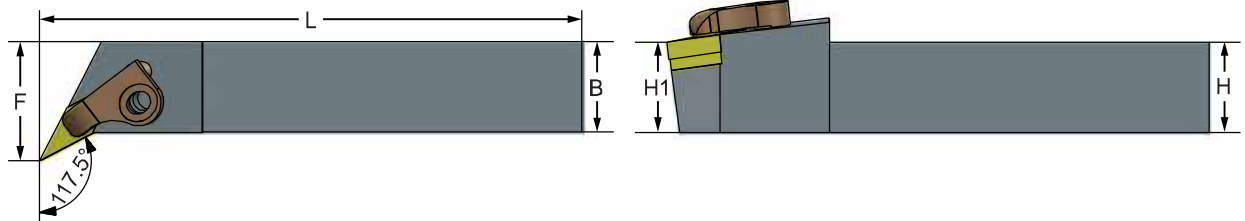
Y型(出水)(抗震)外徑車刀 Y-Type (Anti-Vibration) External Turning Tool (with Coolant Hole)

YVJN-CB



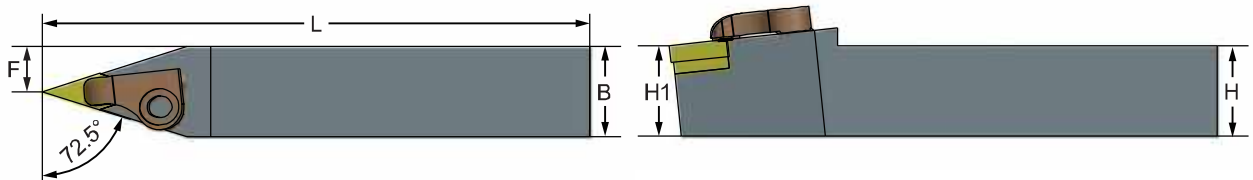
Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YVJNR/L-2020K16-CB	20	20	125	25	VNMG1604	D-VJN	M6	AD01	GMV-322	M4	LW050
YVJNR/L-2525M16-CB	25	25	145	32							

YVQN



Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YVQNR/L-2020K16	20	20	125	25	VNMG1604	D-VQN	M6	AD01	GMV-322	M4	LW050
YVQNR/L-2525M16	25	25	145	32							

YVVNN



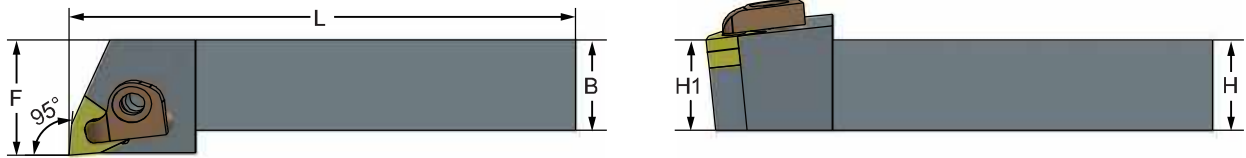
Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YVVNN-2020K16	20	20	125	10	VNMG1604	D-VVN	M6	AD01	GMV-322	M4	LW050
YVVNN-2525M16	25	25	145	12.5							

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



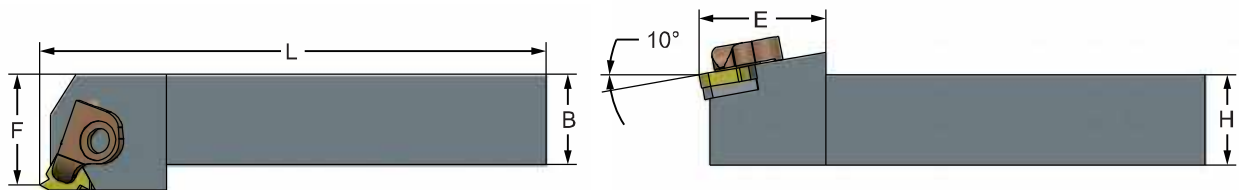
Y型(出水)(抗震)外徑車刀 Y-Type (Anti-Vibration) External Turning Tool (with Coolant Hole)

YWLN-1



Order No.	Dimensions (mm)				Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H/H1	B	L	F							
YWLN/L-2020K08-1	20	20	125	25	WNMG0804	D-WLN	M6	AD01	GMW-422-1	M5	LW050
YWLN/L-2525M08-1	25	25	145	32							
YWLN/L-3232P08-1	32	32	170	40							

YER



Order No.	Dimensions (mm)					Insert	Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right / Left	H	B	L	E	F							
YER-2525M16-0°	25	25	135	30	32	ER16	D-ER	M6	AD01	GMG-321R	M4	LW050
YER-2525M16-0.5°												
YER-2525M16-1°												
YER-2525M16-1.5°												
YER-2525M16-2°												
YER-2525M16-2.5°												
YER-2525M16-3°												
YER-2525M16-3.5°												

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式抗震車刀 One Piece Anti-Vibration Boring Bar

Invention Patent 發明專利
US8371776 / I419764

Damper system
制震器

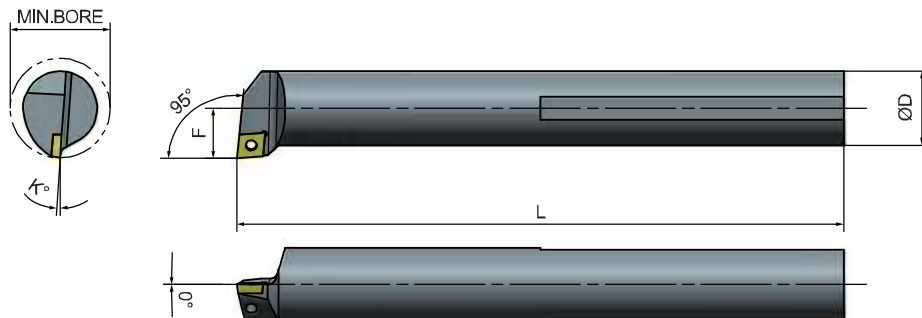
Material: SCM440(Alloy Steel)
材質: 紅十字合金鋼
Hardness: HRC 42°
硬度: HRC 42度

Material: SNCM439(Alloy Steel)
材質: 藍十字合金鋼
Hardness: HRC 42°
硬度: HRC 42度

Features 特色

- 01. Suitable for roughing & finishing.
適合粗車及精修
- 02. Machining with insert nose radius 0.8mm.
可用刀片 R 角 0.8mm 加工
- 03. Guarantee overhang 3D~5D.
保證3-5倍抗震

SCLC

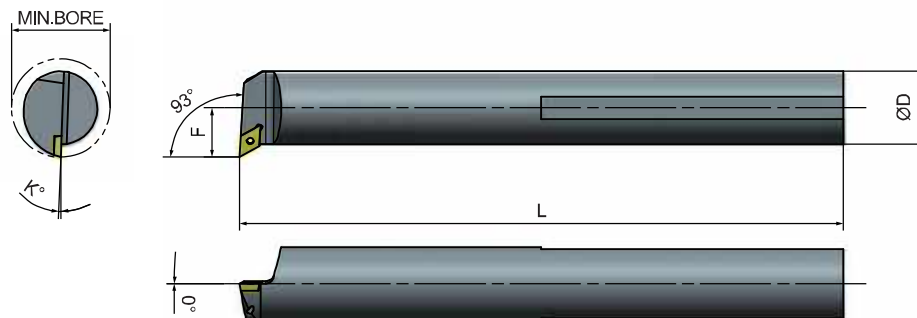


Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
3-5D	B16-SCLCR/L-09	CCMT09T308	16	11	9	180	20	M4	T15
	B20-SCLCR/L-09		20	13	8	200	24		
	B25-SCLCR/L-09		25	17	8	200	31		
	B25-SCLCR/L-12	CCMT120408	25	17	8	200	31	M5	T20
	B32-SCLCR/L-12		32	22	6	250	39		
	B40-SCLCR/L-12		40	27	4	300	48		

一體式抗震車刀

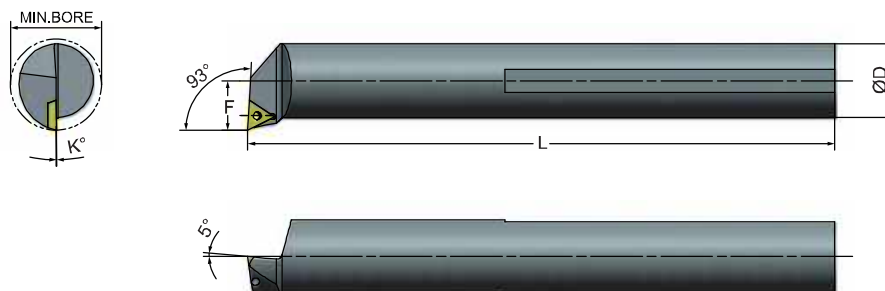
One Piece Anti-Vibration Boring Bar

SDUC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
3-5D	B16-SDUCR/L-11	DCMT11T308	16	11	7	180	20	M4	T15
	B20-SDUCR/L-11		20	13	8	200	24		
	B25-SDUCR/L-11		25	17	4	200	31		
	B32-SDUCR/L-11		32	22	4	250	39		
	B40-SDUCR/L-11		40	27	2	300	48		

STUP

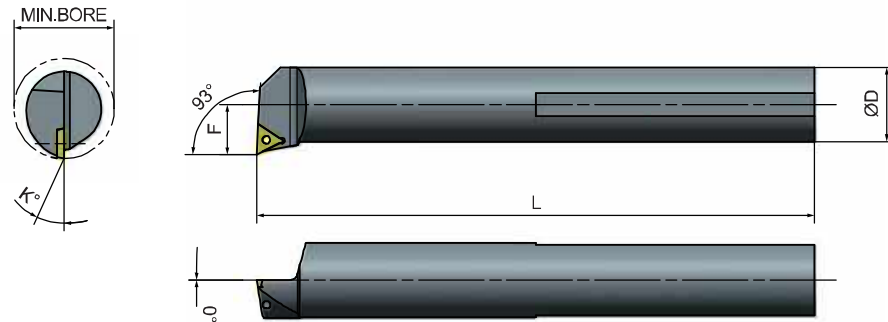


Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
3-5D	B16-STUPR/L-11	TPMT110308	16	11	2	180	20	M3	T10
	B20-STUPR/L-11		20	13	2	200	24		
	B25-STUPR/L-11		25	14.5	8	200	28		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

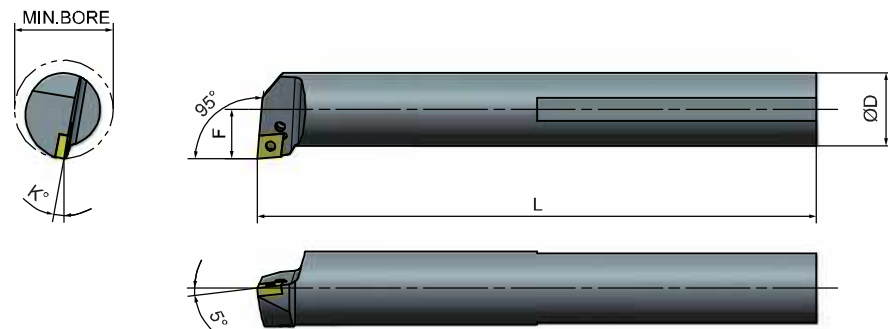
一體式抗震車刀 One Piece Anti-Vibration Boring Bar

STUC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
3-5D	B16-STUCR/L-11	TCMT110208	16	11	8	180	20	M2.5	T8
	B20-STUCR/L-11		20	11.5	6	200	23		
	B25-STUCR/L-11		25	17	4	200	31		
	B20-STUCR/L-16	TCMT16T308	20	13	8	200	24	M4	T15
	B25-STUCR/L-16		25	17	6	200	31		
	B32-STUCR/L-16		32	22	4	250	39		
	B40-STUCR/L-16		40	27	0	300	48		

PCLN



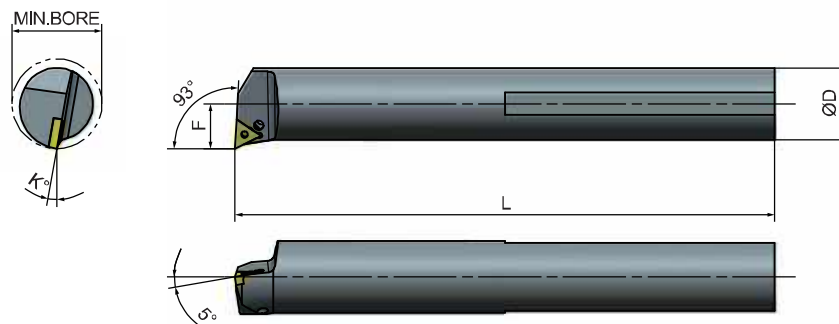
Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
3-5D	B25-PCLNR/L-12	CNMG120408	25	17	11	200	32	GPC4	LSP3	GSL17	LW025
	B32-PCLNR/L-12		32	22	11	250	40				
	B40-PCLNR/L-12		40	27	10	300	49				

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式抗震車刀

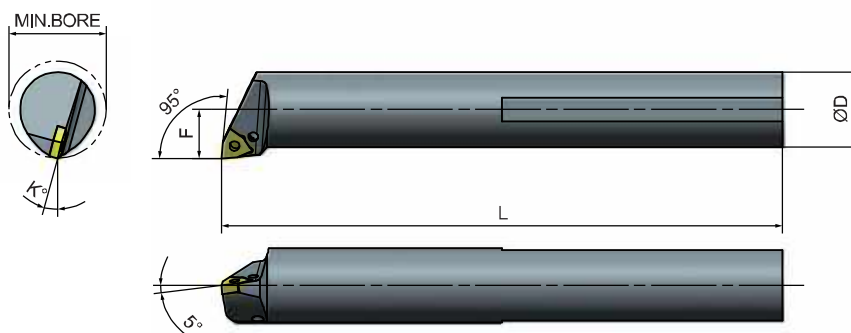
One Piece Anti-Vibration Boring Bar

■ PTUN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
3-5D	B25-PTUNR/L-16	TNMG160408	25	17	12	200	32	GPT3	LSP2	GSL14	LW025
	B32-PTUNR/L-16		32	22	10	250	40				
	B40-PTUNR/L-16		40	27	10	300	49				

■ PWLN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
3-5D	B25-PWLNR/L-08	WNMG080408	25	17	12	200	32	GPC4	LSP3	GSL17	LW025
	B32-PWLNR/L-08		32	22	10	250	40				
	B40-PWLNR/L-08		40	27	8	300	49				

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式抗震車刀-杓爪刀 Chatter off type Anti-Vibration Cutter

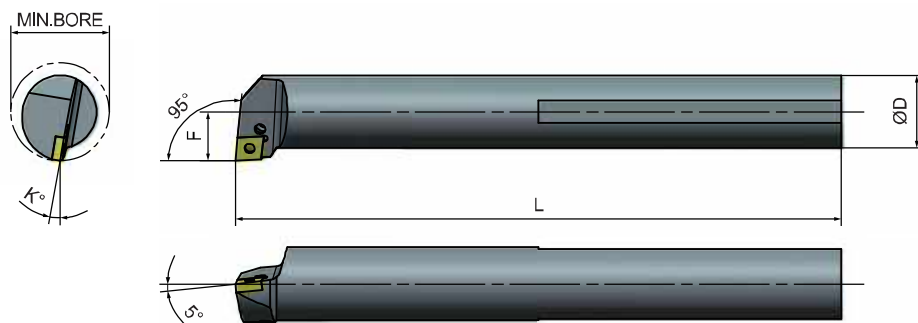
Invention Patent 發明專利
US8371776 / I419764



Features 特色

- 01. High machining efficiency, less insert consumption.
加工效率高, 減少刀片消耗
- 02. Machining with insert nose radius 0.4mm.
使用刀片 R 角 0.4mm 加工
- 03. Suitable for deep hole roughing.
適合深孔粗車

PCLN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5D	B20X5-PCLNR/L-12	CN..120404	20	13	12	200	25	GPC4	LSP3	GSL17	LW025
	B25X5-PCLNR/L-12		25	17	11	250	32				
5-6D	B32X5-PCLNR/L-12		32	22	11	300	40				
	B40X5-PCLNR/L-12		40	27	10	350	49				

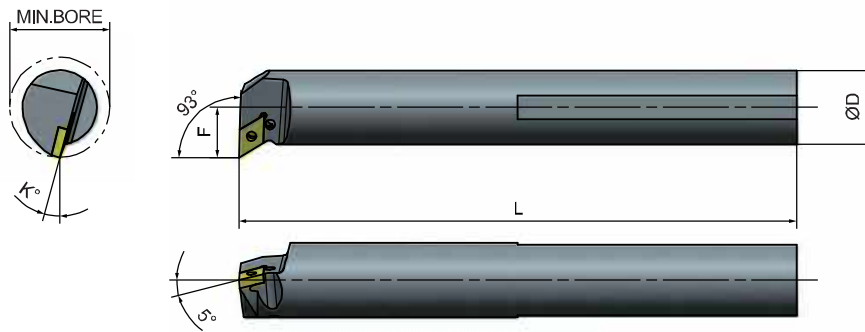
提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



一體式抗震車刀-杓爪刀

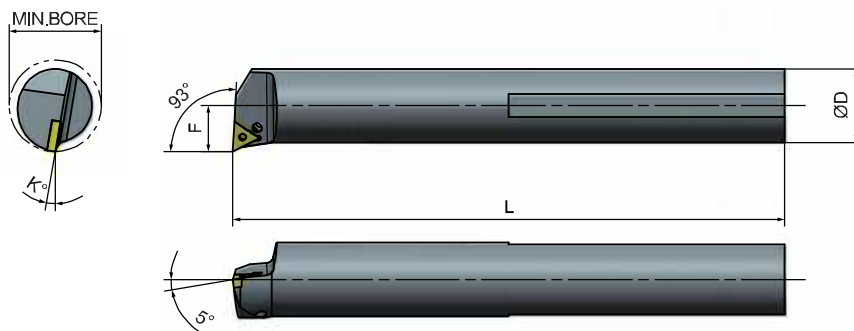
Chatter off type Anti-Vibration Cutter

PDUN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5D	B25X5-PDUNR/L-1504/06	DN..1504/06	25	17	12	250	32	GPC4	LSP3	GSL17	LW050
5-6D	B32X5-PDUNR/L-1504/06		32	22	17	300	40				
	B40X5-PDUNR/L-1504/06		40	27	15	350	49				

PTUN

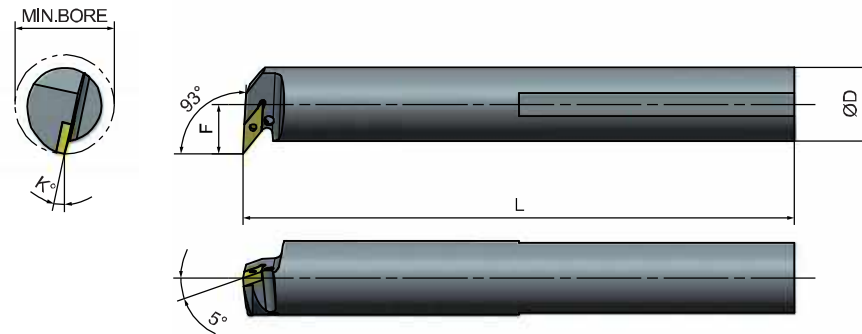


Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5D	B20X5-PTUNR/L-16	TN..160404	20	13	14	200	25	GPT3	LSP2	GSL14	LW025
	B25X5-PTUNR/L-16		25	17	12	250	32				
5-6D	B32X5-PTUNR/L-16		32	22	10	300	40				
	B40X5-PTUNR/L-16		40	27	10	350	49				

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

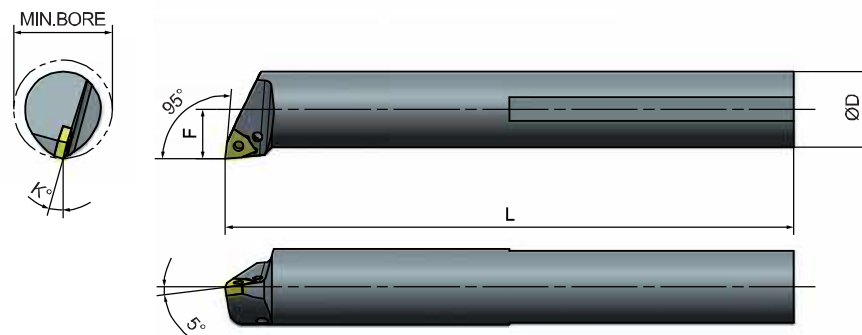
一體式抗震車刀-杓爪刀 Chatter off type Anti-Vibration Cutter

PVUN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5D	B20X5-PVUNR/L-16	VN..160404	20	19	12	200	31	GPT3	LSP2	GSL14	LW025
	B25X5-PVUNR/L-16		25	20	12	250	35				
5-6D	B32X5-PVUNR/L-16		32	22	12	300	40				
	B40X5-PVUNR/L-16		40	27	15	350	49				

PWLN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5D	B20X5-PWLNR/L-08	WN..080404	20	13	14	200	25	GPC4	LSP3	GSL17	LW025
	B25X5-PWLNR/L-08		25	17	12	250	32				
5-6D	B32X5-PWLNR/L-08		32	22	10	300	40				
	B40X5-PWLNR/L-08		40	27	8	350	49				

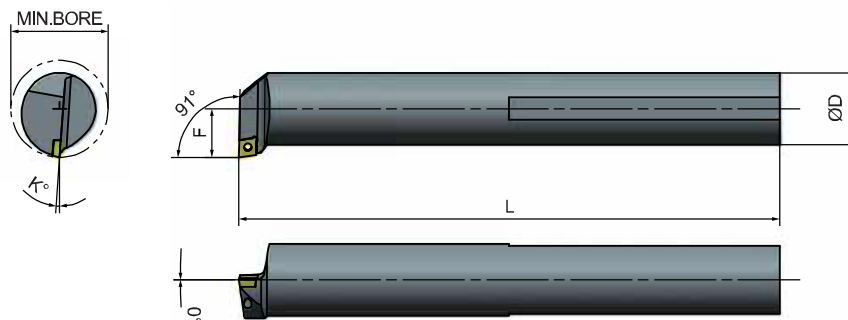
提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



一體式抗震車刀-杓爪刀

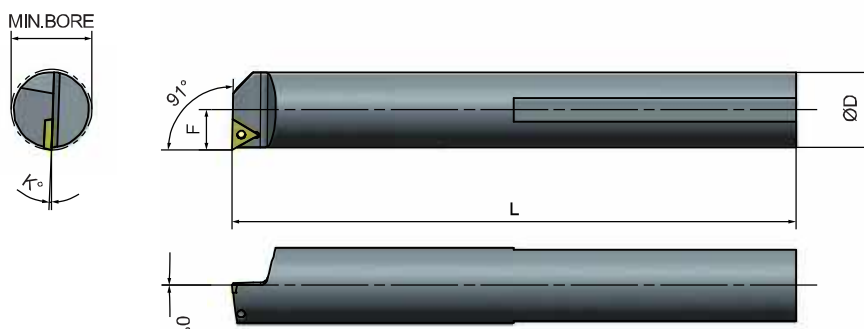
Chatter off type Anti-Vibration Cutter

SCFC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5D	B10X5-SCFCR/L-06	CCMT060204	10	7	12	150	13	M2.5	T8
	B12X5-SCFCR/L-06		12	9	9	150	16		
	B14X5-SCFCR/L-06		14	9	8	180	17		
	B16X5-SCFCR/L-06		16	11	7	180	20		
5-6D	B16X5-SCFCR/L-09	CCMT09T304	16	11	9	180	20	M4	T15
	B16X5-SCFCR/L-09-18		16	9	9	180	18		
	B18X5-SCFCR/L-09		18	12	8	200	22		
	B20X5-SCFCR/L-09		20	13	8	200	24		
	B20X5-SCFCR/L-12	CCMT120404	20	13	8	200	24	M5	T20

STFC

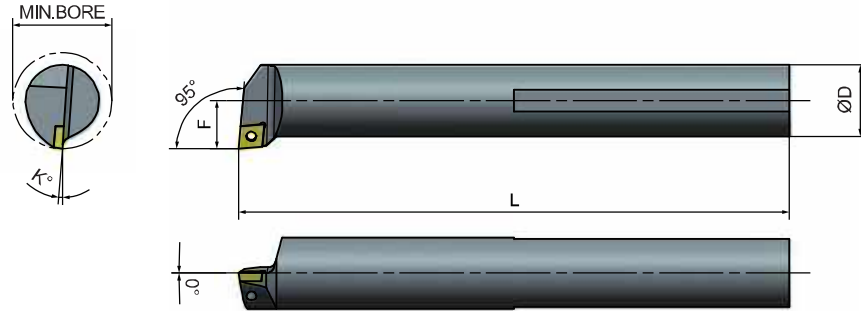


Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5D	B10X5-STFCR/L-11	TCMT110204	10	7	15	150	13	M2.5	T8
	B12X5-STFCR/L-11		12	8	10	150	15		
	B12X5-STFCR/L-11-14		12	7	10	150	14		
	B14X5-STFCR/L-11		14	8	10	180	16		
5-6D	B16X5-STFCR/L-11	TCMT16T304	16	9	6	180	18	M4	T15
	B18X5-STFCR/L-11		18	10	8	200	20		
	B20X5-STFCR/L-16		20	11.5	8	200	23		
	B25X5-STFCR/L-16		25	17	6	250	31		
	B32X5-STFCR/L-16		32	17.5	4	300	35		
	B40X5-STFCR/L-16		40	21.5	2	350	43		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式抗震車刀-杓爪刀 Chatter off type Anti-Vibration Cutter

SCLC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5D	B10X5-SCLCR/L-06	CCMT060204	10	7	12	150	13	M2.5	T8
	B10X5-SCLCR/L-06-12		10	6	12	150	12		
5-6D	B12X5-SCLCR/L-06		12	7	9	150	14		
	B14X5-SCLCR/L-06		14	9	8	180	17		
	B16X5-SCLCR/L-06		16	9	7	180	18		
	B14X5-SCLCR/L-09	CCMT09T304	14	9	11	180	17	M4	T15
	B16X5-SCLCR/L-09		16	11	9	180	20		
	B18X5-SCLCR/L-09		18	12	8	200	22		
	B20X5-SCLCR/L-09		20	13	8	200	24		
	B25X5-SCLCR/L-09		25	17	8	250	31		
	B32X5-SCLCR/L-09		32	18	6	300	35		
	B40X5-SCLCR/L-09		40	27	4	350	48		
	B32X5-SCLCR/L-12	CCMT120404	32	22	6	300	39	M5	T20
	B40X5-SCLCR/L-12		40	27	4	350	48		

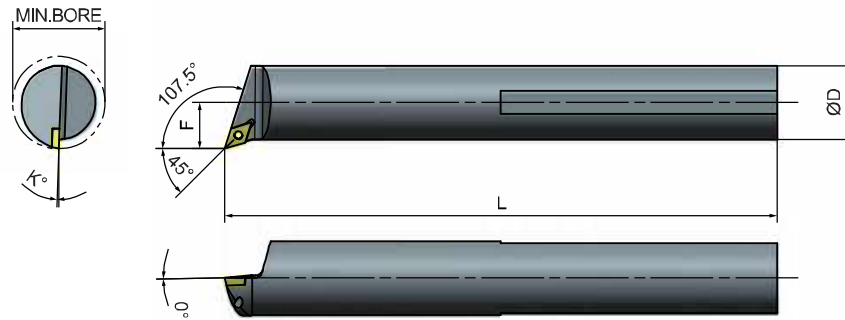
提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



一體式抗震車刀-杓爪刀

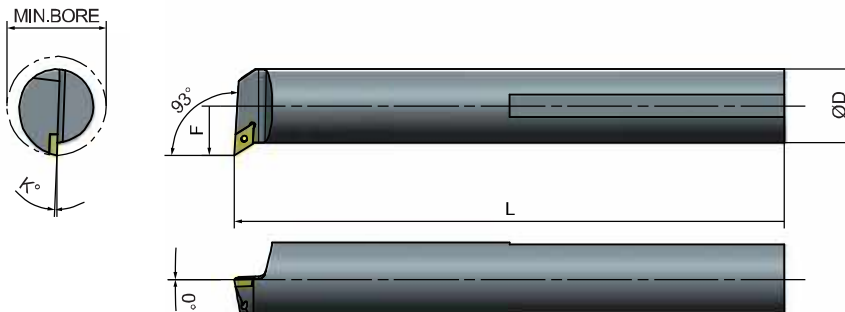
Chatter off type Anti-Vibration Cutter

SDQC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5D	B10X5-SDQCR/L-07	DCMT070204	10	7	10	150	13	M2.5	T8
	B12X5-SDQCR/L-07		12	9	8	150	16		
	B14X5-SDQCR/L-07		14	9	8	180	17		
	B16X5-SDQCR/L-07		16	11	6	180	20		
	B18X5-SDQCR/L-07		18	12	6	200	22		
5-6D	B16X5-SDQCR/L-11	DCMT11T304	16	11	7	180	20	M4	T15
	B18X5-SDQCR/L-11		18	12	7	200	22		
	B20X5-SDQCR/L-11		20	13	6	200	24		
	B25X5-SDQCR/L-11		25	17	4	250	31		
	B32X5-SDQCR/L-11		32	20	4	300	37		
	B40X5-SDQCR/L-11		40	27	2	350	48		

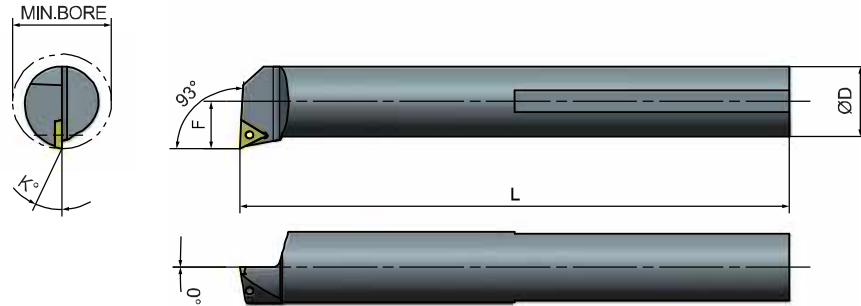
SDUC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5D	B10X5-SDUCR/L-07	DCMT070204	10	7	10	150	13	M2.5	T8
	B12X5-SDUCR/L-07		12	9	8	150	16		
	B14X5-SDUCR/L-07		14	9	8	180	17		
	B16X5-SDUCR/L-07		16	11	6	180	20		
	B18X5-SDUCR/L-07		18	12	6	200	22		
5-6D	B20X5-SDUCR/L-07	DCMT11T304	20	13	5	200	24	M4	T15
	B16X5-SDUCR/L-11		16	11	7	180	20		
	B18X5-SDUCR/L-11		18	12	7	200	22		
	B20X5-SDUCR/L-11		20	13	8	200	24		
	B25X5-SDUCR/L-11		25	17	4	250	31		
	B25X5-SDUCR/L-11-28		25	14	4	250	28		
	B32X5-SDUCR/L-11		32	22	4	300	39		
	B40X5-SDUCR/L-11		40	27	2	350	48		

一體式抗震車刀-杓爪刀 Chatter off type Anti-Vibration Cutter

STUC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5D	B10X5-STUCR/L-09	TCMT090204	10	6	12	150	12	M2.5	T8
	B10X5-STUCR/L-11	TCMT110204	10	6	12	150	12		
5-6D	B12X5-STUCR/L-11		12	7	10	150	14		
	B14X5-STUCR/L-11		14	8	8	180	16		
	B16X5-STUCR/L-11		16	11	8	180	20		
	B16X5-STUCR/L-11-18		16	9	8	180	18		
	B18X5-STUCR/L-11		18	10	6	200	20		
	B20X5-STUCR/L-11		20	11.5	6	200	23		
	B25X5-STUCR/L-11		25	16	4	250	30		
	B32X5-STUCR/L-11		32	17.5	4	300	35		
	B20X5-STUCR/L-16	TCMT16T304	20	11.5	8	200	23	M4	T15
	B25X5-STUCR/L-16		25	17	6	250	31		
	B25X5-STUCR/L-16-28		25	14	6	250	28		
	B32X5-STUCR/L-16		32	22	4	300	39		
	B40X5-STUCR/L-16		40	27	0	350	48		

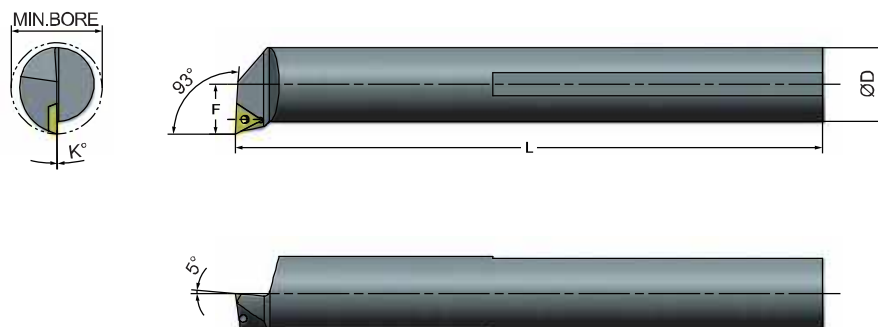
提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



一體式抗震車刀-杓爪刀

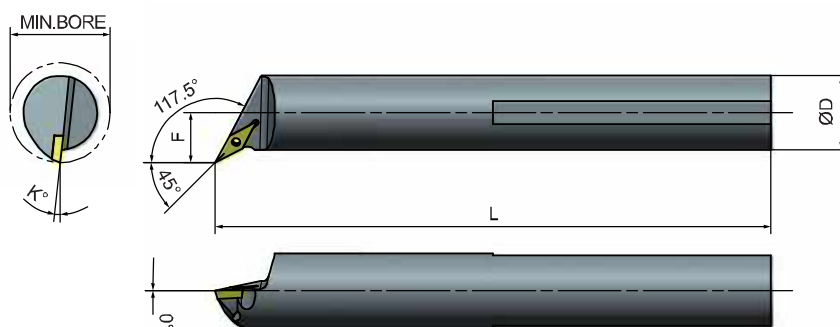
Chatter off type Anti-Vibration Cutter

STUP



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5D	B10X5-STUPR/L-11	TPMT110304	10	7	8	150	13	M3	T10
	B12X5-STUPR/L-11		12	8	6	150	15		
	B14X5-STUPR/L-11		14	8.5	8	180	17		
	B16X5-STUPR/L-11		16	10	2	180	18		
	B18X5-STUPR/L-11		18	10	6	200	20		
	B20X5-STUPR/L-11		20	13	2	200	24		
	B25X5-STUPR/L-11		25	14	8	250	28		
	B20X5-STUPR/L-16	TPMT1603/0404	20	13	8	200	24	M4	T15
	B25X5-STUPR/L-16		25	14.5	8	250	28		
	B32X5-STUPR/L-16		32	18	6	300	35		
	B40X5-STUPR/L-16		40	27	6	350	48		

SVQC



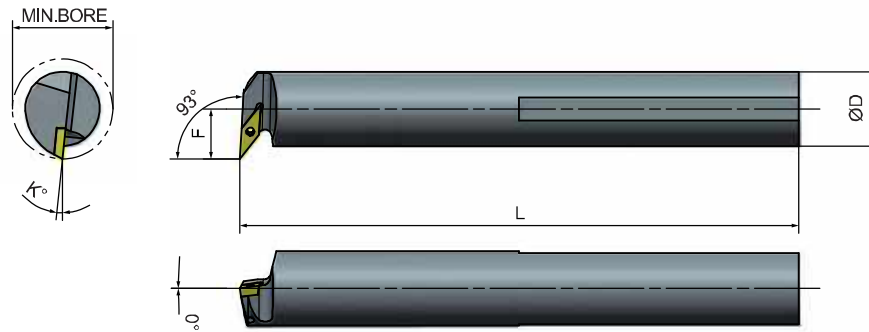
Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16X5-SVQCR/L-11	VCMT110304	16	13	7	180	22	M2.5	T8
	B20X5-SVQCR/L-16	VCMT160404	20	19	8	200	30	M4	T15
	B25X5-SVQCR/L-16		25	20.5	4	250	34		
	B32X5-SVQCR/L-16		32	22.5	8	300	40		
	B40X5-SVQCR/L-16		40	27	6	350	48		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式抗震車刀-杓爪刀

Chatter off type Anti-Vibration Cutter

SVUC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16X5-SVUCR/L-11	VCMT110304	16	13	7	180	22	M2.5	T8
	B18X5-SVUCR/L-11		18	13	8	200	23		
	B20X5-SVUCR/L-11		20	14	6	200	25		
	B20X5-SVUCR/L-16	VCMT160404	20	21	8	200	32	M4	T15
	B25X5-SVUCR/L-16		25	20.5	4	250	34		
	B32X5-SVUCR/L-16		32	22.5	6	300	40		
	B40X5-SVUCR/L-16		40	27	6	350	48		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



一體式出水抗震車刀-猛牛刀

Chatter off type Anti-Vibration Cutter with Coolant Hole

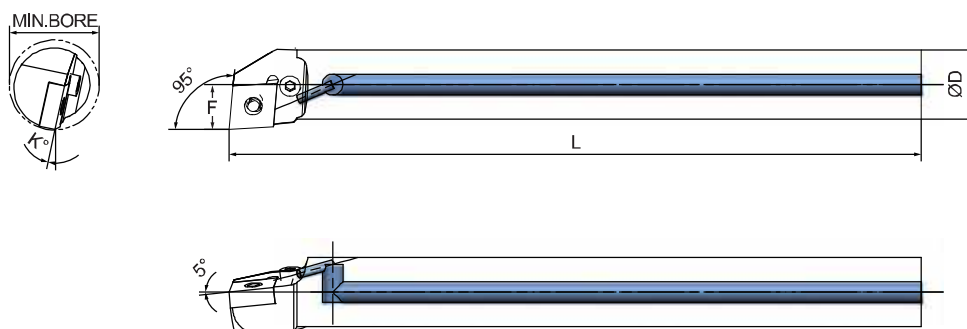
Invention Patent 發明專利
US8371776 / I419764



Features 特色

- 01. With coolant hole, good lubrication, good chip removal and chip breaking.
有內冷水孔, 潤滑效果好, 排屑及斷屑良好
- 02. High machining efficiency, less insert consumption.
加工效率高, 減少刀片消耗
- 03. Machining with insert nose radius 0.4mm.
使用刀片 R 角 0.4mm 加工
- 04. Suitable for deep hole roughing.
適合深孔粗車

PCLN

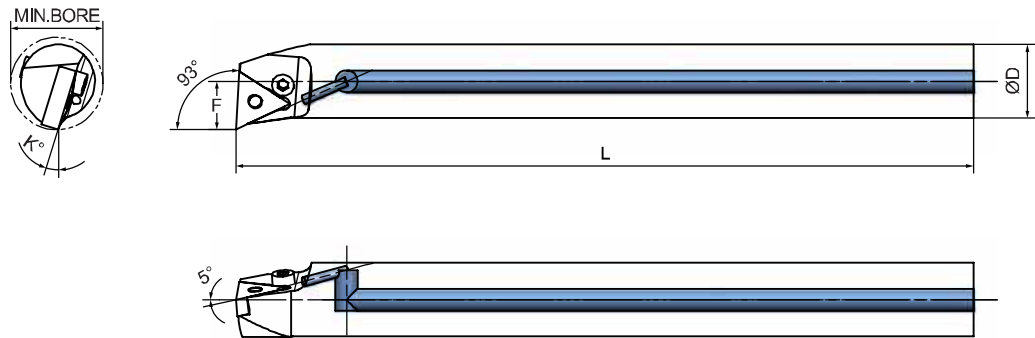


Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5D	B20W5-PCLNR/L-12	CN..120404	20	13	12	200	25	GPC4	LSP3	GSL17	LW025
	B25W5-PCLNR/L-12		25	17	11	250	32				
5-6D	B32W5-PCLNR/L-12		32	22	11	300	40				
	B40W5-PCLNR/L-12		40	27	10	350	49				

一體式出水抗震車刀-猛牛刀

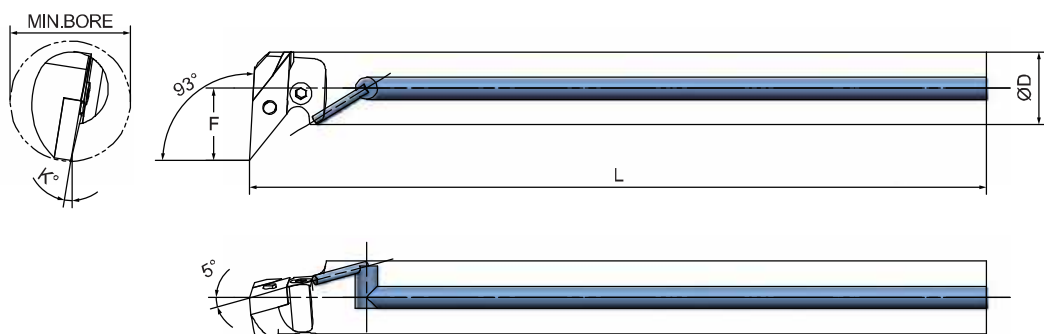
Chatter off type Anti-Vibration Cutter with Coolant Hole

PTUN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5D	B20W5-PTUNR/L-16	TN..160404	20	13	14	200	25	GPT3	LSP2	GSL14	LW025
	B25W5-PTUNR/L-16		25	17	12	250	32				
5-6D	B32W5-PTUNR/L-16		32	22	10	300	40				
	B40W5-PTUNR/L-16		40	27	10	350	49				

PVUN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5D	B20W5-PVUNR/L-16	VN..160404	20	19	12	200	31	GPT3	LSP2	GSL14	LW025
	B25W5-PVUNR/L-16		25	20	12	250	35				
5-6D	B32W5-PVUNR/L-16		32	22	12	300	40				
	B40W5-PVUNR/L-16		40	27	15	350	49				

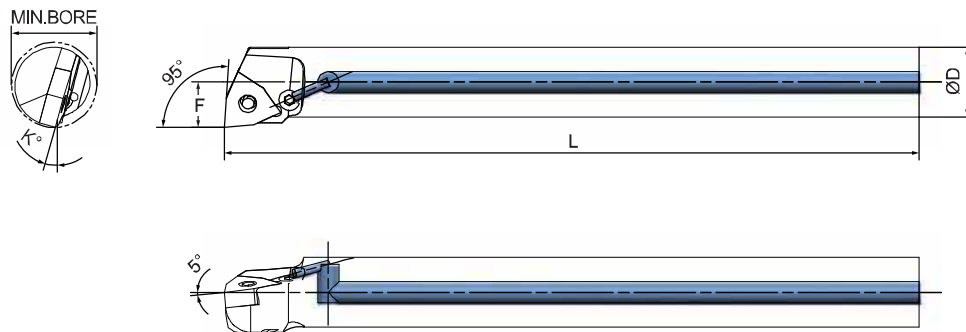
提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



一體式出水抗震車刀-猛牛刀

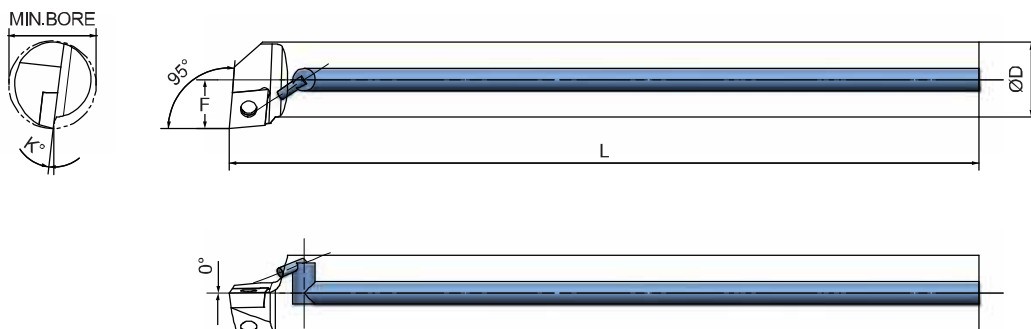
Chatter off type Anti-Vibration Cutter with Coolant Hole

PWLN



Ratio	Order No.	Insert	Dimensions (mm)					Parts			Wrench
	Right / Left		D	F	K	L	B				
5-6D	B32W5-PWLN/L-08	WN..080404	32	22	10	300	40	GPC4	LSP3	GSL17	LW025
	B40W5-PWLN/L-08		40	27	8	350	49				

SCLC



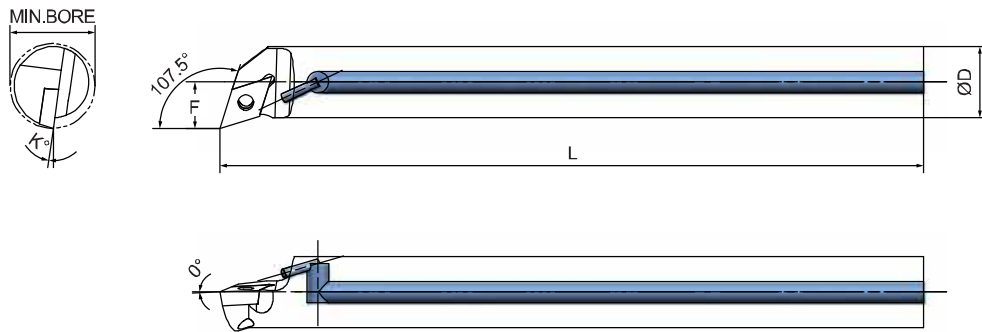
Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16W5-SCLCR/L-09	CCMT09T304	16	11	9	180	20	M4	T15
	B20W5-SCLCR/L-09		20	13	8	200	24		
	B25W5-SCLCR/L-12	CCMT120404	25	17	8	250	31	M5	T20
	B32W5-SCLCR/L-12		32	22	6	300	39		
	B40W5-SCLCR/L-12		40	27	4	350	48		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式出水抗震車刀-猛牛刀

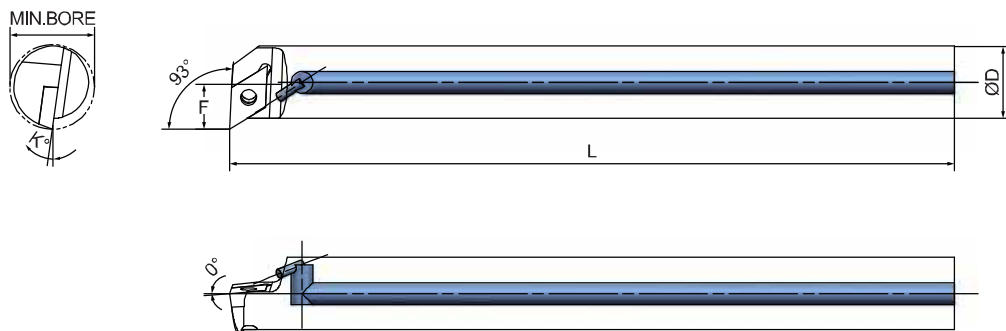
Chatter off type Anti-Vibration Cutter with Coolant Hole

SDQC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16W5-SDQCR/L-11	DCMT11T304	16	11	7	180	20	M4	T15
	B20W5-SDQCR/L-11		20	13	6	200	24		
	B25W5-SDQCR/L-11		25	17	4	250	31		
	B32W5-SDQCR/L-11		32	20	4	300	37		
	B40W5-SDQCR/L-11		40	27	2	350	48		

SDUC



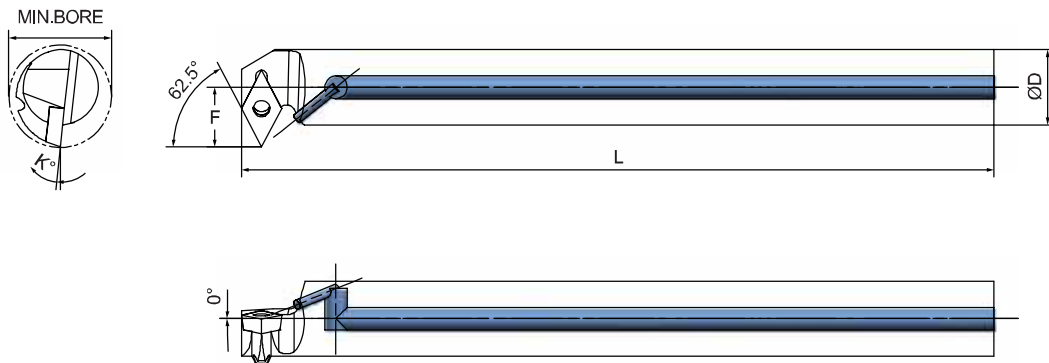
Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16W5-SDUCR/L-07	DCMT070204	16	11	6	180	20	M2.5	T8
	B16W5-SDUCR/L-11	DCMT11T304	16	11	7	180	20	M4	T15
	B20W5-SDUCR/L-11		20	13	8	200	24		
	B25W5-SDUCR/L-11		25	17	4	250	31		
	B25W5-SDUCR/L-11-28		25	14	4	250	28		
	B32W5-SDUCR/L-11		32	22	4	300	39		
	B40W5-SDUCR/L-11		40	27	2	350	48		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式出水抗震車刀-猛牛刀

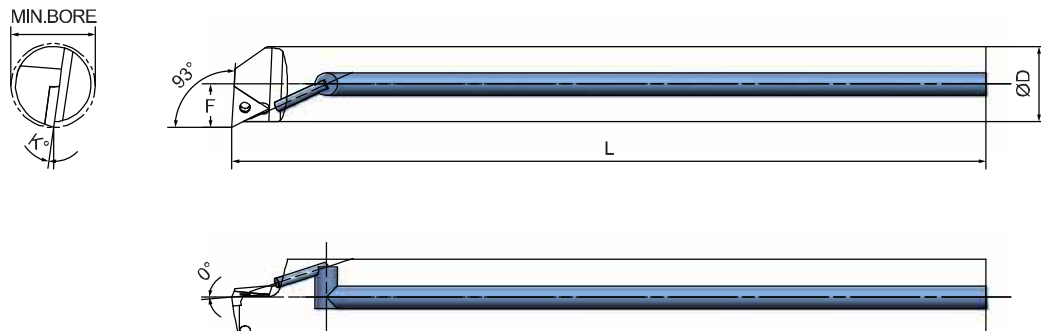
Chatter off type Anti-Vibration Cutter with Coolant Hole

SDWC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16W5-SDWCR/L-11	DCMT11T304	16	11	8	180	20	M4	T15
	B20W5-SDWCR/L-11		20	15	6	200	26		
	B25W5-SDWCR/L-11		25	17	4	250	31		
	B32W5-SDWCR/L-11		32	22	2	300	39		

STUC



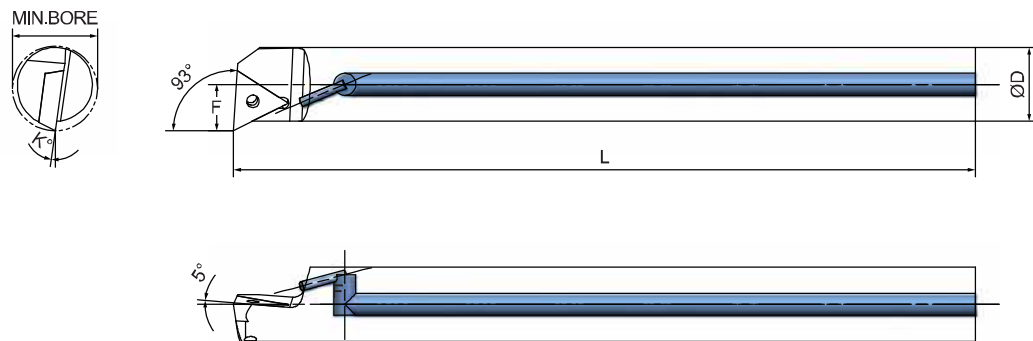
Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16W5-STUCR/L-11	TCMT110204	16	11	8	180	20	M2.5	T8
	B20W5-STUCR/L-11		20	11.5	6	200	23		
	B25W5-STUCR/L-11		25	16	4	250	30		
	B32W5-STUCR/L-11		32	17.5	4	300	35		
	B20W5-STUCR/L-16	TCMT16T304	20	11.5	8	200	23	M4	T15
	B25W5-STUCR/L-16		25	17	6	250	31		
	B32W5-STUCR/L-16		32	22	4	300	39		
	B40W5-STUCR/L-16		40	27	0	350	48		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式出水抗震車刀-猛牛刀

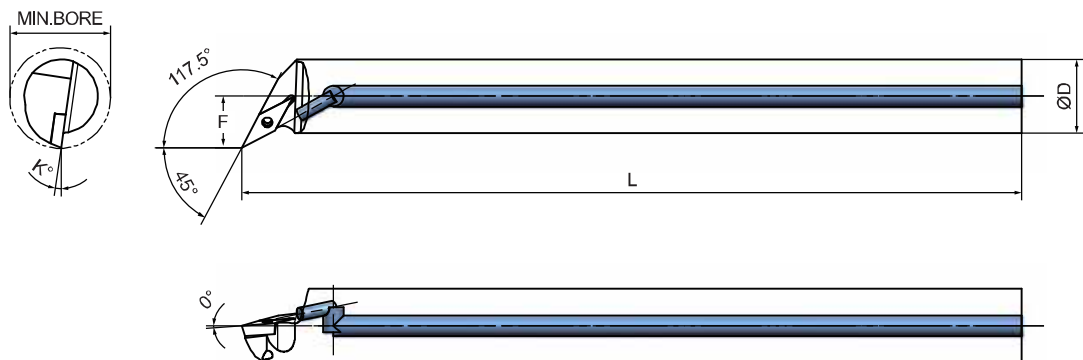
Chatter off type Anti-Vibration Cutter with Coolant Hole

STUP



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16W5-STUPR/L-11	TPMT110304	16	10	2	180	19	M3	T10
	B20W5-STUPR/L-11		20	13	2	200	24		
	B25W5-STUPR/L-16	TPMT1603/0404	25	14.5	8	250	28	M4	T15
	B32W5-STUPR/L-16		32	18	6	300	35		
	B40W5-STUPR/L-16		40	27	6	350	48		

SVQC



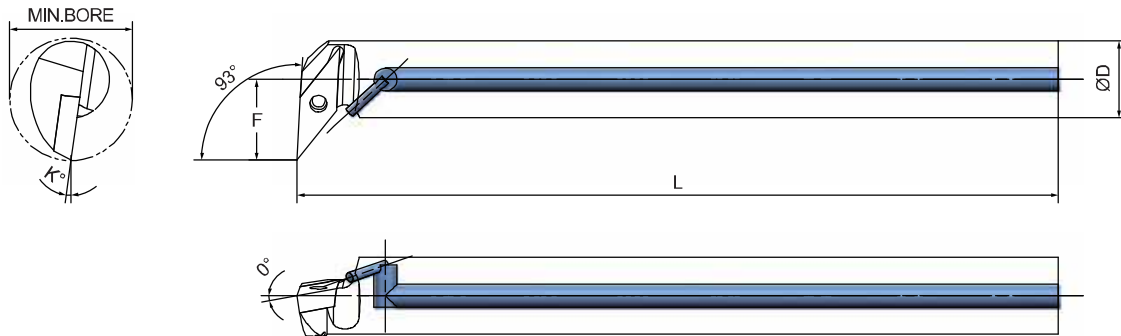
Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B32W5-SVQCR/L-16	VCMT160404	32	22.5	8	300	39	M4	T15
	B40W5-SVQCR/L-16		40	27	6	350	48		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

一體式出水抗震車刀-猛牛刀

Chatter off type Anti-Vibration Cutter with Coolant Hole

SVUC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
5-6D	B16W5-SVUCR/L-11	VCMT110304	16	13	7	180	22	M2.5	T8
	B20W5-SVUCR/L-11		20	14	6	200	25		
	B20W5-SVUCR/L-16	VCMT160404	20	21	8	200	32	M4	T15
	B25W5-SVUCR/L-16		25	20.5	4	250	34		
	B32W5-SVUCR/L-16		32	22.5	6	300	40		
	B40W5-SVUCR/L-16		40	27	6	350	48		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

M3S 抗震車刀

M3S Anti-Vibration Boring Bar

Invention Patentt 發明專利
I413557 / I419764



Features 特色

01. Suitable for deep hole finishing.
適合深孔精修
02. High machining efficiency, less insert consumption.
加工效率高, 減少刀片消耗
03. Good stiffness of the tools and good precision in cutting size.
刀桿剛性良好, 尺寸的準確度佳
04. Please work with anti-vibration cutting sleeve to have better anti-vibration effect.
請搭配抗震刀套使用, 可享受更好的抗震效果

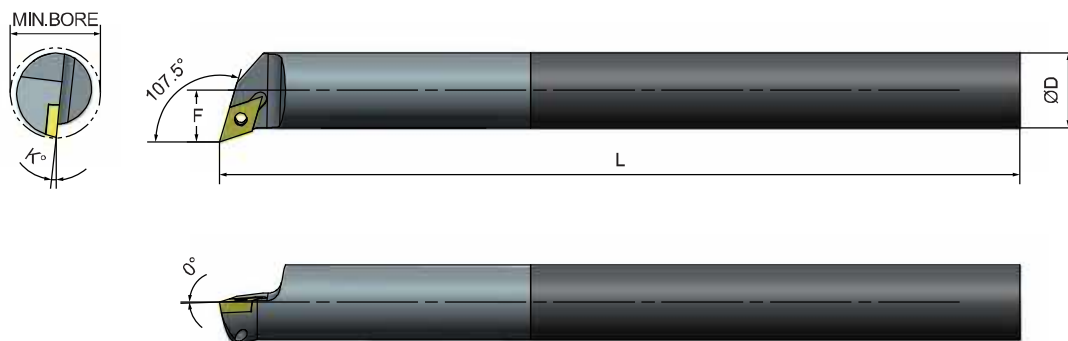


Type: M3S16X-SDUCR-07
Insert: DCMT070204
Overhang: 224 mm (14D)
Roughing / 粗車: Finishing / 精車:
Ap: 0.2mm / rev Ap: 0.05mm / rev
F: 0.2mm F: 0.12mm
Vc: 80m / min Vc: 100m / min

M3S 抗震車刀

M3S Anti-Vibration Boring Bar

SDQC



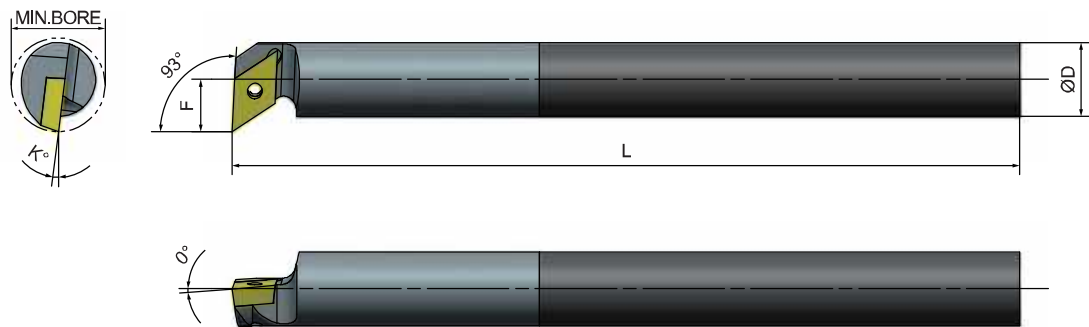
Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
6D	M3S10M-SDQCR-07	DCMT070204	10	7	10	150	13	M2.5	T8
	M3S12M-SDQCR-07		12	9	8	150	16		
	M3S14Q-SDQCR-07		14	9	8	180	17		
	M3S16Q-SDQCR-07		16	11	6	180	20		
	M3S16Q-SDQCR-11	DCMT11T304	16	11	7	180	20	M4	T15
	M3S18R-SDQCR-07	DCMT070204	18	12	6	200	22	M2.5	T8
	M3S18R-SDQCR-11	DCMT11T304	18	12	7	200	22	M4	T15
8D	M3S10Q-SDQCR-07	DCMT070204	10	7	10	180	13	M2.5	T8
	M3S12Q-SDQCR-07		12	9	8	180	16		
	M3S14R-SDQCR-07		14	9	8	200	17		
	M3S16X-SDQCR-07		16	11	6	220	20		
	M3S16X-SDQCR-11	DCMT11T304	16	11	7	220	20	M4	T15
	M3S18X-SDQCR-07	DCMT070204	18	12	6	240	22	M2.5	T8
	M3S18X-SDQCR-11	DCMT11T304	18	12	7	240	22	M4	T15
10D	M3S12X-SDQCR-07	DCMT070204	12	9	8	210	16	M2.5	T8
	M3S14X-SDQCR-07		14	9	8	240	17		
	M3S16S-SDQCR-07		16	11	6	250	20		
	M3S16S-SDQCR-11	DCMT11T304	16	11	7	250	20	M4	T15
	M3S18X-SDQCR-07	DCMT070204	18	12	6	280	22	M2.5	T8
	M3S18X-SDQCR-11	DCMT11T304	18	12	7	280	22	M4	T15
12D	M3S14X-SDQCR-07	DCMT070204	14	9	8	270	17	M2.5	T8
	M3S16X-SDQCR-07		16	11	6	290	20		
	M3S16X-SDQCR-11	DCMT11T304	16	11	7	290	20	M4	T15
	M3S18X-SDQCR-07	DCMT070204	18	12	6	320	22	M2.5	T8
	M3S18X-SDQCR-11	DCMT11T304	18	12	7	320	22	M4	T15

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

M3S 抗震車刀

M3S Anti-Vibration Boring Bar

SDUC



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
6D	M3S10M-SDUCR-07	DCMT070204	10	7	10	150	13	M2.5	T8
	M3S12M-SDUCR-07		12	9	8	150	16		
	M3S14Q-SDUCR-07		14	9	8	180	17		
	M3S16Q-SDUCR-07		16	11	6	180	20		
	M3S16Q-SDUCR-11	DCMT11T304	16	11	7	180	20	M4	T15
	M3S18R-SDUCR-11		18	12	7	200	22		
8D	M3S10Q-SDUCR-07	DCMT070204	10	7	10	180	13	M2.5	T8
	M3S12Q-SDUCR-07		12	9	8	180	16		
	M3S14R-SDUCR-07		14	9	8	200	17		
	M3S16X-SDUCR-07		16	11	6	220	20		
	M3S16X-SDUCR-11	DCMT11T304	16	11	7	220	20	M4	T15
	M3S18X-SDUCR-11		18	12	7	240	22		
10D	M3S12X-SDUCR-07	DCMT070204	12	9	8	210	16	M2.5	T8
	M3S14X-SDUCR-07		14	9	8	240	17		
	M3S16S-SDUCR-07		16	11	6	250	20		
	M3S16S-SDUCR-11	DCMT11T304	16	11	7	250	20	M4	T15
	M3S18X-SDUCR-11		18	12	7	280	22		
12D	M3S14X-SDUCR-07	DCMT070202	14	9	8	270	17	M2.5	T8
	M3S16X-SDUCR-07		16	11	6	290	20		
	M3S16X-SDUCR-11	DCMT11T302	16	11	7	290	20	M4	T15
	M3S18X-SDUCR-11		18	12	7	320	22		

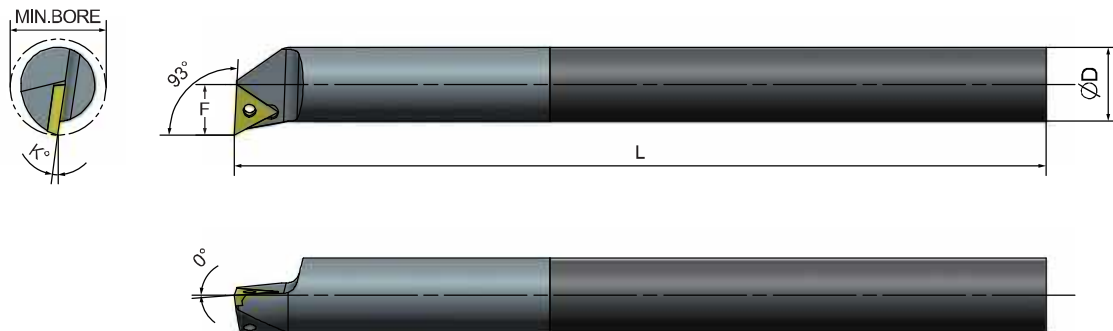
提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



M3S 抗震車刀

M3S Anti-Vibration Boring Bar

STUC



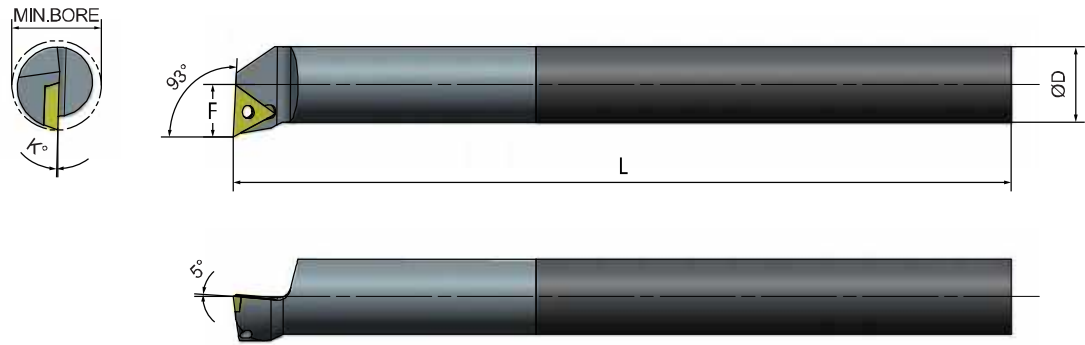
Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
6D	M3S8K-STUCR-08	TCMT080204	8	5	10	125	10	M2.5	T8
	M3S10M-STUCR-11	TCMT110204	10	6	12	150	12		
	M3S12M-STUCR-11		12	7	10	150	14		
	M3S14Q-STUCR-11		14	8	8	180	16		
	M3S16Q-STUCR-11		16	9	8	180	18		
	M3S18R-STUCR-11		18	10	6	200	20		
8D	M3S10Q-STUCR-11	TCMT110204	10	6	12	180	12		
	M3S12Q-STUCR-11		12	7	10	180	14		
	M3S14R-STUCR-11		14	8	8	200	16		
	M3S16X-STUCR-11		16	9	8	220	18		
	M3S18X-STUCR-11		18	10	6	240	20		
10D	M3S10R-STUCR-11	TCMT110204	10	6	12	200	12		
	M3S12X-STUCR-11		12	7	10	210	14		
	M3S14X-STUCR-11		14	8	8	240	16		
	M3S16S-STUCR-11		16	9	8	250	18		
	M3S18X-STUCR-11		18	10	6	280	20		
12D	M3S14X-STUCR-11	TCMT110202	14	8	8	270	16		
	M3S16X-STUCR-11		16	9	8	290	18		
	M3S18X-STUCR-11		18	10	6	320	20		
14D	M3S14T-STUCR-11	TCMT110204	14	8	8	300	16		
	M3S16X-STUCR-11		16	9	8	330	18		
	M3S18U-STUCR-11		18	10	6	350	20		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.

M3S 抗震車刀

M3S Anti-Vibration Boring Bar

STUP



Ratio	Order No.	Insert	Dimensions (mm)					Screw	Wrench
	Right / Left		D	F	K	L	B		
6D	M3S8K-STUPR-08	TPMT080204	8	5	10	125	10	M2.5	T8
	M3S10M-STUPR-11	TPMT110304	10	7	8	150	13		
	M3S12M-STUPR-11		12	8	6	150	15		
	M3S14Q-STUPR-11		14	8.5	8	180	17		
	M3S16Q-STUPR-11		16	10	2	180	19		
	M3S18R-STUPR-11		18	10	6	200	20		
8D	M3S10Q-STUPR-11		10	7	8	180	13	M3	T10
	M3S12Q-STUPR-11		12	8	6	180	15		
	M3S14R-STUPR-11		14	8.5	8	200	17		
	M3S16X-STUPR-11		16	10	2	220	19		
	M3S18X-STUPR-11		18	10	6	240	20		
10D	M3S10R-STUPR-11		10	7	8	200	13		
	M3S12X-STUPR-11		12	8	6	210	15		
	M3S14X-STUPR-11		14	8.5	8	240	17		
	M3S16S-STUPR-11		16	10	2	250	19		
	M3S18X-STUPR-11		18	10	6	280	20		
12D	M3S14X-STUPR-11	TPMT110302 TPMT110304	14	8.5	8	270	17		
	M3S16X-STUPR-11		16	10	2	290	19		
	M3S18X-STUPR-11		18	10	6	320	20		
14D	M3S14T-STUPR-11		14	8.5	8	300	17		
	M3S16X-STUPR-11		16	10	2	330	19		
	M3S18U-STUPR-11		18	10	6	350	20		

提供訂製特殊柄徑及特殊長度刀桿 Customized tool diameter and length are available.



三叉式抗震車刀

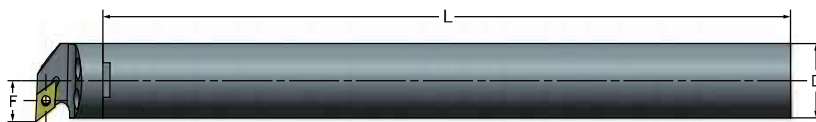
Removable Type Anti-Vibration Boring Bar

Invention Patent 發明專利
US8371776 / I419764



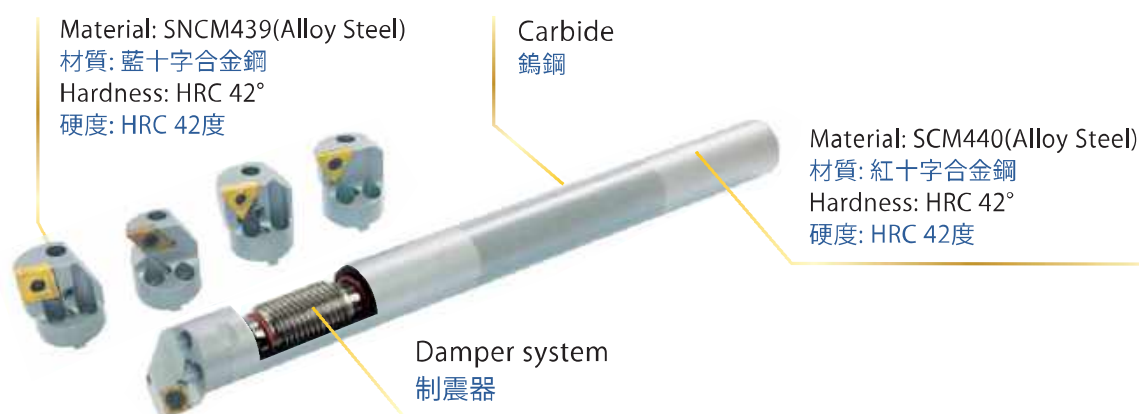
Features 特色

- 01. Suitable for deep hole roughing.
適合用於粗加工
- 02. With coolant hole.
有內冷水孔
- 03. Can interchange different cutting heads.
可替換不同刀頭



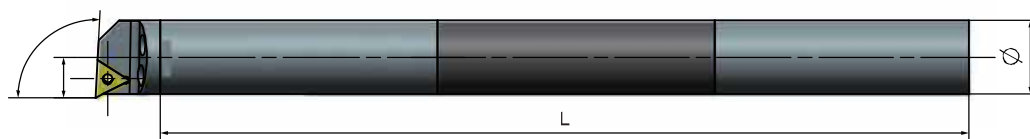
Ratio	Order No.	ØD (mm)	L (mm)	懸身長度 Overhang(mm)	可換式車刀頭 Removable Cutting Head	Screw 🔩	Wrench 🔑
6D	M6D-20-200	20	200	120	CH2-20-S-Type	M3	2.5
	M6D-25-250	25	250	150	CH3-25-S-Type	M4	3
	M6D-32-300	32	300	192	CH4-32-S/P-Type	M5	4
	M6D-40-350	40	350	240	CH5-40-S/P-Type	M6	5
	M6D-50-400-40	50	400	300			
	M6D-60-450-40	60	450	360			
8D	M8D-32-350	32	350	256	CH4-32-S/P-Type	M5	4
	M8D-40-420	40	420	320	CH5-40-S/P-Type	M6	5
	M8D-50-510-40	50	510	400			
	M8D-60-620-40	60	620	480			
10D	M10D-40-530	40	530	400			
	M10D-50-668-40	50	668	500			
	M10D-60-808-40	60	808	600			

Invention Patent 發明專利
I413557 /I419764



Features 特色

01. Suitable for deep hole finishing.
適合用於精加工
02. With coolant hole, can interchange different cutting heads.
有內冷水孔，可替換不同刀頭
03. Middle section is carbide, which can increase the rigidity of boring bar and make it more stable when machining.
中段採鎢鋼熔合，增加其剛性，使加工尺寸更穩定
04. Please work with anti-vibration cutting sleeve to have better anti-vibration effect.
請搭配抗震刀套使用，可享受更好的抗震效果



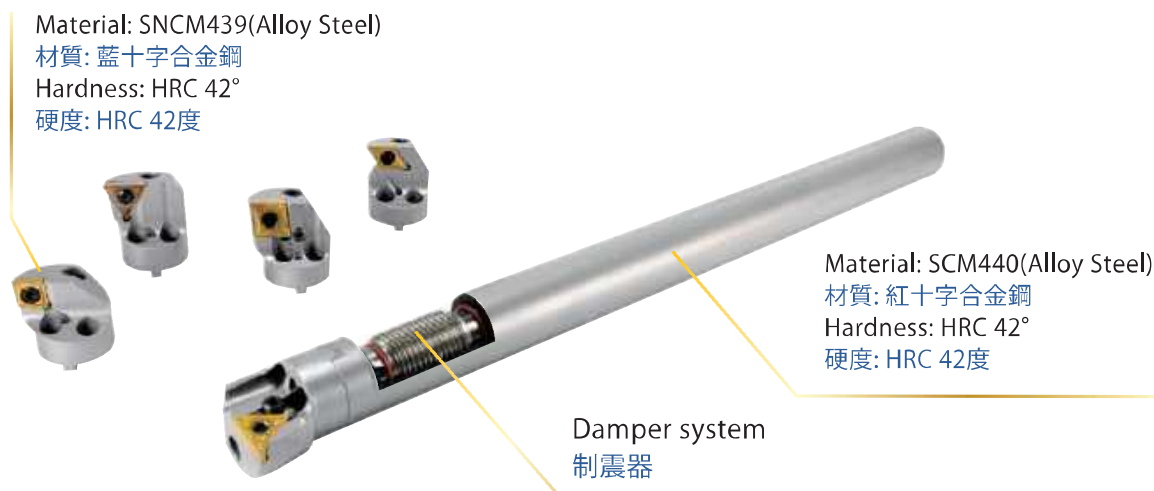
Ratio	Order No.	ØD (mm)	L (mm)	懸身長度 Overhang(mm)	可換式車刀頭 Removable Cutting Head	Screw	Wrench
6D	TSC-20-200	20	200	120	CH2-20-S-Type	M3	2.5
	TSC-25-250	25	250	150	CH3-25-S/P-Type	M4	3
	TSC-32-300	32	300	192	CH4-32-S/P-Type	M5	4
8D	TSC-20-250	20	250	160	CH2-20-S-Type	M3	2.5
	TSC-25-300	25	300	200	CH3-25-S-Type	M4	3
	TSC-32-350	32	350	256	CH4-32-S/P-Type	M5	4
10D	TSC-20-300	20	300	200	CH2-20-S-Type	M3	2.5
	TSC-25-350	25	350	250	CH3-25-S-Type	M4	3
	TSC-32-420	32	420	320	CH4-32-S/P-Type	M5	4
	TSC-40-520	40	520	400	CH5-40-S/P-Type	M6	5
12D	TSC-20-340	20	340	240	CH2-20-S-Type	M3	2.5
	TSC-25-400	25	400	300	CH3-25-S-Type	M4	3
	TSC-32-480	32	480	384	CH4-32-S-Type	M5	4
	TSC-40-580	40	580	480	CH5-40-S-Type	M6	5
14D	TSC-20-380	20	380	280	CH2-20-S-Type	M3	2.5
	TSC-25-450	25	450	350	CH3-25-S-Type	M4	3
	TSC-32-560	32	560	448	CH4-32-S-Type	M5	4
	TSC-40-660	40	660	560	CH5-40-S-Type	M6	5



CI 抗震車刀

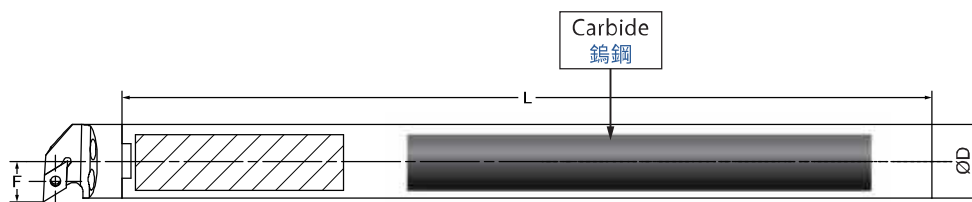
Removable Type CI Anti-Vibration Boring Bar

Invention Patent 發明專利
I413557 / I419764



Features 特色

01. C I = Carbide Inside.
內塞鎢鋼
02. Combining the advantages of Removable Type Anti-Vibration Boring Bar and TSC Removable Type Anti-Vibration Boring Bar.
結合三叉式抗震車刀和TSC抗震車刀的優點
03. Good cutting performance, suitable for roughing and finishing.
良好的切削能力, 適用於粗車及精修
04. With coolant hole.
有內冷水孔
05. Good stiffness of the tools and good precision in cutting size.
刀桿剛性良好, 尺寸的準確度佳
06. Increasing tool stiffness, reducing the risk of tool broken when machining.
增加刀桿韌性, 減少加工時斷刀的風險
07. Please work with anti-vibration cutting sleeve to have better anti-vibration effect.
請搭配抗震刀套使用, 可享受更好的抗震效果
08. Can interchange different cutting heads.
可替換不同刀頭



Ratio	Order No.	ØD (mm)	L (mm)	懸身長度 Overhang(mm)	可換式車刀頭 Removable Cutting Head	Screw 🔩	Wrench 🔑
7D	M7D-20-235-CI	20	235	140	CH2-20-S-Type	M3	2.5
	M7D-25-275-CI	25	275	175	CH3-25-S/P-Type	M4	3
	M7D-32-325-CI	32	325	224	CH4-32-S/P-Type	M5	4
	M7D-40-385-CI	40	385	280	CH5-40-S/P-Type	M6	5
	M7D-50-450-CI	50	450	350			

巨型抗震車刀

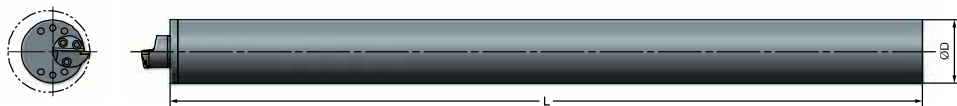
Giant Anti-Vibration Boring Bar

Invention Patent 發明專利
US8371776



Features 特色

- 01. Can interchange different cutting heads.
可替換不同刀頭
- 02. Optimizing the workpiece surface.
優化工件表面粗糙度
- 03. Machining inner and outer surface with adapter for replacement.
內、外徑加工以轉接頭更替
- 04. The boring bar has damper system inside, which can increase the stability of the bar and work efficiency.
刀桿內含制震器，增加平穩度與工作效率



Ratio	Order No.	ØD (mm)	L (mm)	懸身長度 Overhang(mm)	可換式車刀頭 Removable Cutting Head	Screw 🔩	Wrench 🔑
7D	M7D-80-900-40	80	900	560	CH5-40-S/P-Type	M6	5
	M7D-100-1200-40	100	1200	700			
	M7D-120-1500-40	120	1500	840			
	M7D-150-1900-40	150	1900	1050			
	M7D-200-2400-40	200	2400	1400			
	M7D-250-3200-40	250	3200	1750			
10D	M10D-80-1200-40	80	1200	800			
	M10D-100-1500-40	100	1500	1000			
	M10D-120-1900-40	120	1900	1200			
	M10D-150-2400-40	150	2400	1500			
	M10D-180-2800-40	180	2800	1800			
	M10D-200-3200-40	200	3200	2000			
	M10D-250-4000-40	250	4000	2500			



可換式車刀頭

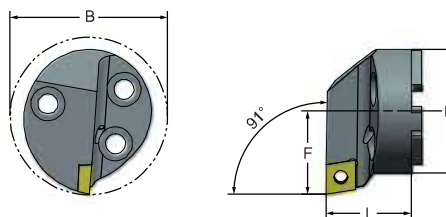
Removable Cutting Head

Material: SNCM439(Alloy Steel)
 材質: 藍十字合金鋼
 Hardness: HRC 42°
 硬度: HRC 42度



Type 刀型	Shim 墊片	Advantage 優點	Machining 加工	Disadvantage 缺點
S-Type	No	Less cutting resistance 切削阻力小	Profile turning, reducing interference 仿型加工、減少干涉	High insert price 刀片價格高
P-Type	No	Good chip removal 排屑良好	Continuous cutting 連續車削	Large interrupted cutting may cause insert displacement 大斷續切削恐有刀片位移之虞
Y-Type	Yes	Suitable for heavy cutting, reset accurately, good chip breaking effect with high pressure equipment 適合重切削, 重複定位準確 使用高壓設備斷屑效果良好	Interrupted cutting 斷續車削	Poor chip removal 排屑較不好

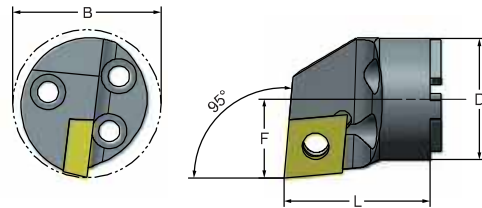
SCFCR



Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SCFCR-09	CCMT09T304	20	13	8	22	24	M4	T15
CH3-25-SCFCR-09		25	13.5	8	25	27		
CH4-32-SCFCR-09		32	22	6	29	39		
CH5-40-SCFCR-09		40	27	4	17	48		
CH3-25-SCFCR-12	CCMT120404	25	17	8	29	31	M5	T20
CH4-32-SCFCR-12		32	22	6	32	39		
CH5-40-SCFCR-12		40	27	4	32	48		

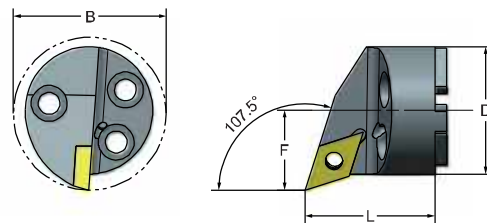
可換式車刀頭 Removable Cutting Head

SCLCR



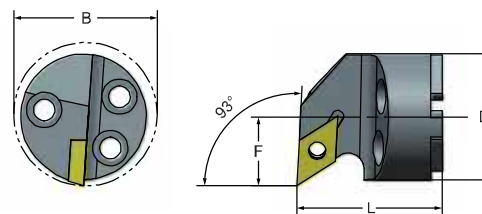
Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SCLCR-09	CCMT09T304	20	13	7	22	24	M4	T15
CH3-25-SCLCR-09		25	17	8	27	31		
CH4-32-SCLCR-09		32	22	6	28	39		
CH2-20-SCLCR-12	CCMT120404	20	13	8	27	24	M5	T20
CH3-25-SCLCR-12		25	17	8	27	31		
CH4-32-SCLCR-12		32	22	6	28	39		
CH5-40-SCLCR-12		40	27	4	34	48		

SDQCR



Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SDQCR-07	DCMT070204	20	13	6	26.5	24	M2.5	T8
CH2-20-SDQCR-11	DCMT11T304	20	13	6	25	24	M4	T15
CH3-25-SDQCR-11		25	17	4	29.5	31		
CH4-32-SDQCR-11		32	20	4	32	37		
CH5-40-SDQCR-11		40	27	2	36.5	48		

SDUCR



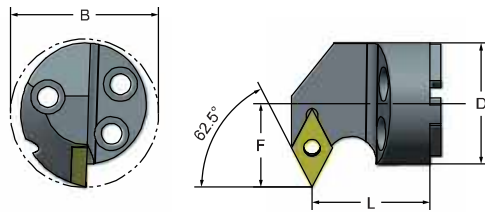
Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SDUCR-07	DCMT070204	20	13	5	23.7	24	M2.5	T8
CH3-25-SDUCR-07		25	17	4	23	31		
CH2-20-SDUCR-11	DCMT11T304	20	13	8	22.7	24	M4	T15
CH3-25-SDUCR-11		25	17	4	25.5	31		
CH4-32-SDUCR-11		32	22	4	34	39		
CH5-40-SDUCR-11		40	27	2	34	48		

提供訂製特殊車刀頭 Customized removable cutting head is available.

可換式車刀頭

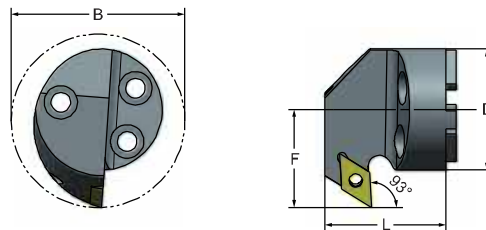
Removable Cutting Head

SDWCR



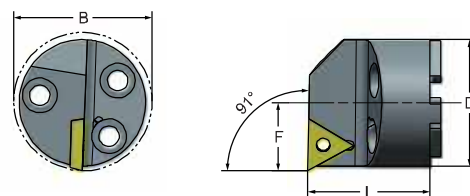
Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SDWCR-11	DCMT11T304	20	14.5	8	30	26	M4	T15
CH3-25-SDWCR-11		25	17	6	36	31		
CH4-32-SDWCR-11		32	22	4	40	39		
CH5-40-SDWCR-11		40	27	2	35	48		

SDZCR



Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SDZCR-11	DCMT11T304	20	15.5	8	30	27	M4	T15
CH3-25-SDZCR-11		25	18	6	36	32		
CH4-32-SDZCR-11		32	22	4	40	39		
CH5-40-SDZCR-11		40	27	4	35	48		

STFCR

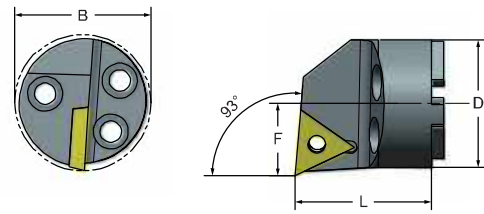


Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-STFCR-11	TCMT110204	20	11.5	6	22	23	M2.5	T8
CH3-25-STFCR-16	TCMT16T304	25	17	6	29	31	M4	T15
CH4-32-STFCR-16		32	17.5	4	31	35		
CH5-40-STFCR-16		40	21.5	2	38	43		

提供訂製特殊車刀頭 Customized removable cutting head is available.

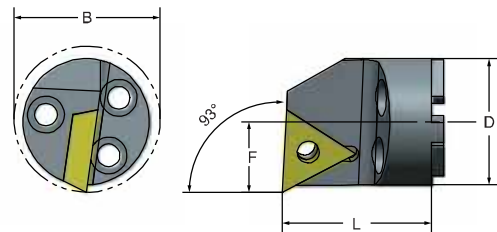
可換式車刀頭 Removable Cutting Head

STUCR



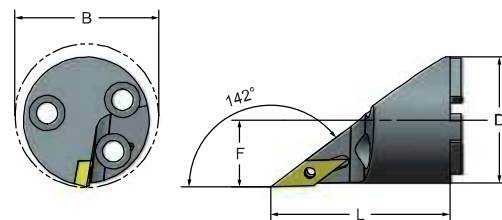
Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-STUCR-11	TCMT110204	20	11.5	6	28	23	M2.5	T8
CH3-25-STUCR-11		25	13.5	4	24	27		
CH2-20-STUCR-16	TCMT16T304	20	12	8	28	23	M4	T15
CH3-25-STUCR-16		25	17	6	30	31		
CH4-32-STUCR-16		32	22	4	28	39		
CH4-32-STUCR-16-35		32	17.5	4	32	35		
CH5-40-STUCR-16		40	27	0	36	48		

STUPR



Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-STUPR-11	TPMT110304	20	12.5	2	24	24	M3	T10
CH3-25-STUPR-11		25	14	8	25	28		
CH4-32-STUPR-11		32	18	6	29	35		
CH2-20-STUPR-16	TPMT1603/0404	20	12.5	8	29	24	M4	T15
CH3-25-STUPR-16		25	14.5	8	30	28		
CH4-32-STUPR-16		32	22	6	35	39		
CH4-32-STUPR-16-36		32	18	6	33	35		
CH5-40-STUPR-16		40	27	6	36	48		

SVJCR

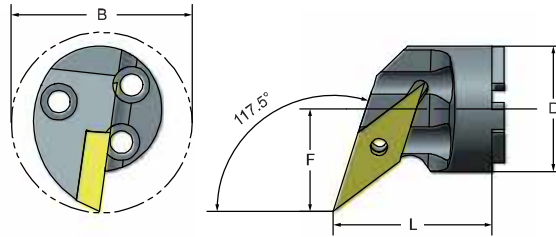


Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SVJCR-11	VCMT110304	20	12	6	31	23	M2.5	T8
CH3-25-SVJCR-11		25	13.5	6	36	27		
CH4-32-SVJCR-11		32	17	4	43	34		
CH2-20-SVJCR-16	VCMT160404	20	12	6	40	23	M4	T15
CH5-40-SVJCR-16		40	22	4	60	43		

提供訂製特殊車刀頭 Customized removable cutting head is available.

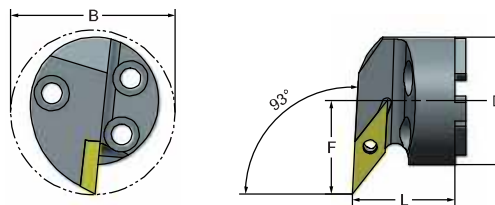
可換式車刀頭 Removable Cutting Head

SVQCR



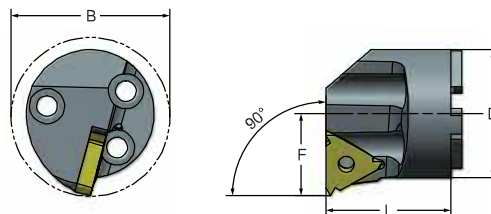
Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SVQCR-16	VCMT160404	20	19	8	24	30	M4	T15
CH3-25-SVQCR-16		25	20.5	4	33	34		
CH4-32-SVQCR-16		32	22.5	8	38	40		
CH5-40-SVQCR-16		40	27	6	41	48		

SVUCR



Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SVUCR-11	VCMT110304	20	14	6	22	25	M2.5	T8
CH2-20-SVUCR-16	VCMT160404	20	21	8	23	32	M4	T15
CH3-25-SVUCR-16		25	20.5	4	27	34		
CH4-32-SVUCR-16		32	22.5	6	29	40		
CH4-32-SVUCR-16-49		32	24.5	6	30	42		
CH5-40-SVUCR-16		40	27	6	38	48		

SIR

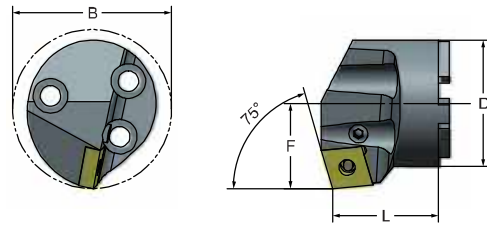


Order No.	Insert	Dimensions (mm)					Screw	Wrench
Right		D	F	K	L	B		
CH2-20-SIR-16	IR16	20	12	21	27.5	24	M3.5	T10
CH3-25-SIR-16		25	15	21	29	30		
CH4-32-SIR-16		32	18.5	15	31	37		
CH5-40-SIR-16		40	24	15	34.8	46		
CH3-25-SIR-22	IR22	25	17	21	33	32	M4.5	T15
CH4-32-SIR-22		32	20	15	34.5	38		
CH5-40-SIR-22		40	25.7	15	39	48		

提供訂製特殊車刀頭 Customized removable cutting head is available.

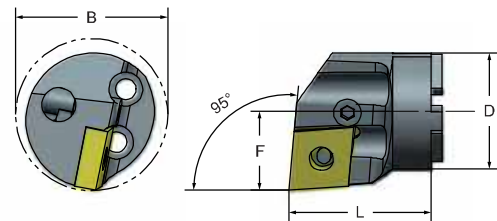
可換式車刀頭 Removable Cutting Head

PCKNR



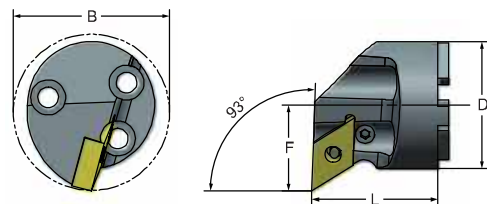
Order No.	Insert	Dimensions (mm)					Parts			Wrench
Right		D	F	K	L	B				
CH2-20-PCKNR-12	CN..120404	20	13	17	31	25	GPC4	LSP3	GSL17	LW025
CH3-25-PCKNR-12		25	17	14	34	32				
CH4-32-PCKNR-12		32	22	14	35	40				
CH5-40-PCKNR-12		40	27	12	38	49				

PCLNR



Order No.	Insert	Dimensions (mm)					Parts			Wrench
Right		D	F	K	L	B				
CH2-20-PCLNR-12	CN..120404	20	13	12	29	25	GPC4	LSP3	GSL17	LW025
CH3-25-PCLNR-12		25	17	11	32	32				
CH4-32-PCLNR-12		32	22	11	33	40				
CH5-40-PCLNR-12		40	27	10	37	49				

PDUNR

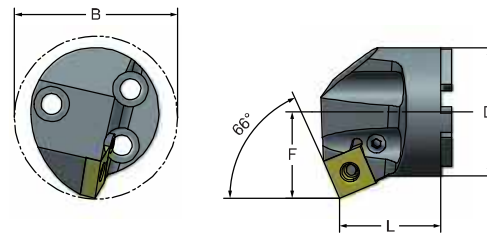


Order No.	Insert	Dimensions (mm)					Parts			Wrench
Right		D	F	K	L	B				
CH3-25-PDUNR-1504/1506	DN..150404 DN..150604	25	17	12	32	32	GPC4	LSP3	GSL17	LW025
CH4-32-PDUNR-1504/1506		32	22	10	39	40				
CH5-40-PDUNR-1504/1506		40	27	15	40	49				

提供訂製特殊車刀頭 Customized removable cutting head is available.

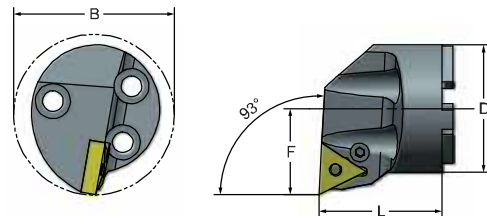
可換式車刀頭 Removable Cutting Head

PSKNR



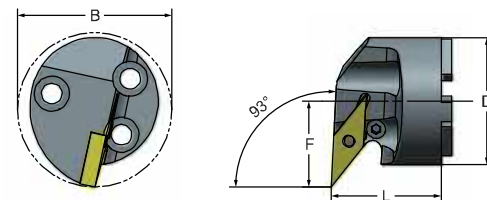
Order No.	Insert	Dimensions (mm)					Parts			Wrench
Right		D	F	K	L	B				
CH4-32-PSKNR-12	SN..120404	32	22	10	36	40	GPC4	LSP3	GSL17	LW025
CH5-40-PSKNR-12		40	27	10	38	49				

PTUNR



Order No.	Insert	Dimensions (mm)					Parts			Wrench
Right		D	F	K	L	B				
CH2-20-PTUNR-16	TN..160404	20	13	14	27	25	GPT3	LSP2	GSL14	LW025
CH3-25-PTUNR-16		25	17	12	31	32				
CH4-32-PTUNR-16		32	22	10	35	40				
CH5-40-PTUNR-16		40	27	10	38	49				

PVUNR

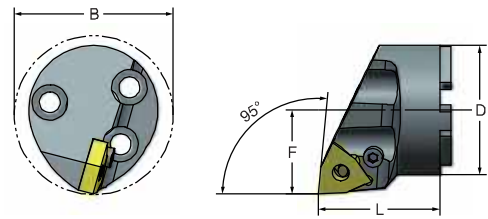


Order No.	Insert	Dimensions (mm)					Parts			Wrench
Right		D	F	K	L	B				
CH2-20-PVUNR-16	VN..160404	20	19	12	30	31	GPT3	LSP2	GSL14	LW025
CH3-25-PVUNR-16		25	20	12	32	35				
CH4-32-PVUNR-16		32	22	12	35	40				
CH5-40-PVUNR-16		40	27	15	34	49				

提供訂製特殊車刀頭 Customized removable cutting head is available.

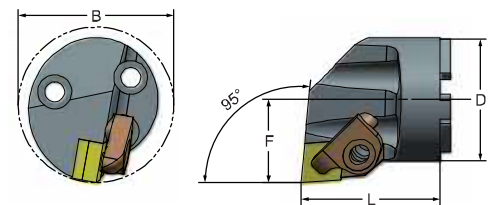
可換式車刀頭 Removable Cutting Head

PWLNR



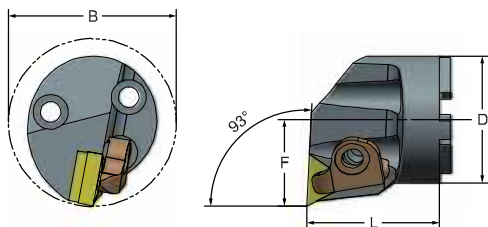
Order No.	Insert	Dimensions (mm)					Parts			Wrench
Right		D	F	K	L	B				
CH2-20-PWLNR-08	WN..080404	20	13	14	25	25	GPC4	LSP3	GSL17	LW025
CH3-25-PWLNR-08		25	17	12	32	32				
CH4-32-PWLNR-08		32	22	10	35	40				
CH5-40-PWLNR-08		40	27	8	37	49				

YCLNR



Order No.	Insert	Dimensions (mm)					Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right		D	F	K	L	B						
CH4-32-YCLNR-12	CN..120404	32	22	11	39	39	D-CLN	M6	AD01	GMC-422-4	M5	LW050
CH5-40-YCLNR-12		40	27	10	40	48						

YTUNR



Order No.	Insert	Dimensions (mm)					Clamp	Clamp Screw	Spring	Shim	Shim Screw	Wrench
Right		D	F	K	L	B						
CH4-32-YTUNR-16	TN..160404	32	22	10	39	39	D-TUN	M6	AD01	GMT-321-1	M4	LW050
CH5-40-YTUNR-16		40	27	10	40	48						

提供訂製特殊車刀頭 Customized removable cutting head is available.

組合式抗震車刀

Combination Type Anti-Vibration Boring Bar

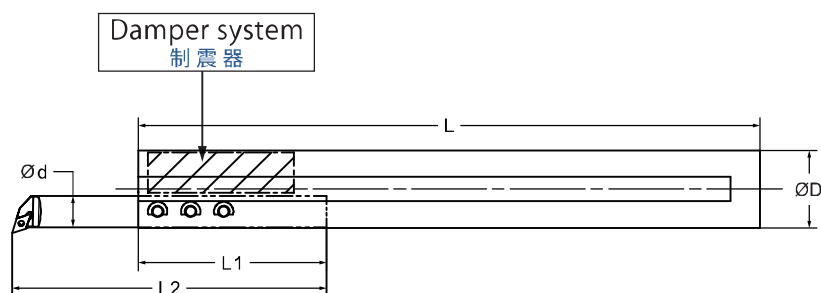
Invention Patent 發明專利
I419764



Material: SCM440
材質: 紅十字合金鋼
Hardness: HRC 42°
硬度: HRC 42度

Features 特色

- 01. With coolant Hole.
有內冷水孔
- 02. With coolant system to extend tool life span and good cutting surface.
中心出水延長刀桿壽命並獲得良好的表面粗糙度
- 03. The tool is off center design and suitable for different diameter machining.
刀桿採偏心式設計，適合異徑加工
- 04. The front boring bar can be replaced freely (Boring bar with / without anti-vibration / carbide boring bar / left or right hand boring bar).
小徑刀桿可選用任意品牌刀桿，左右手刀桿皆可

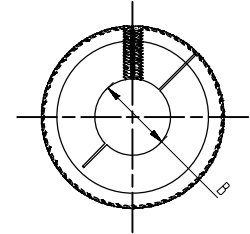
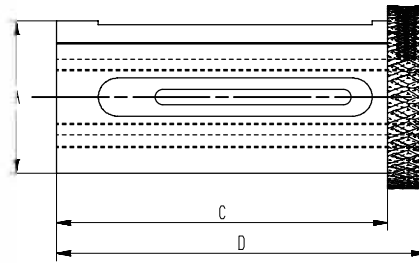


Ratio	Order No.	ΦD (mm)	Φd (mm)	L (mm)	L1 (mm)	懸身長度 L2 (mm)
6D	MT20-S08L-200	20	8	200	95	120
7D	MT25-S10L-200	25	10	200	95	175
	MT32-S12L-280	32	12	280	115	224
	MT40-S16L-320	40	16	320	115	280
	MT50-S20L-400	50	20	400	120	350

中心出水抗震刀套 Anti-Vibration Cutting Sleeve with Coolant System

Invention Patent 發明專利
I606877

Material: SCM415 (Alloy Steel)
材質: 綠十字合金鋼
Hardness: HRC 58°
硬度: HRC 58度



Features 特色

01. C-type completely encases the bar, stable clamping and improve anti-vibration effect.
C型包覆，夾持穩定，增加抗震效果
02. Can reduce insert consumption and increase cutting speed and productivity.
可降低刀片耗損並提高加工線速度與切削量
03. Not easily deformed, easy to disassemble and assemble from tool holder.
不易變形，拆裝於刀座方便
04. With side hole inlet turning tools, no need to connect water tube.
搭配側孔進水刀桿，無需另外接管
05. Clamping with anti-vibration cutting sleeve prevents the carbide tool from breaking.
使用抗震刀套夾持可避免鎢鋼刀桿斷裂
06. It is not recommended to mill the surface on turning tools to maintain tool completeness and increase strength.
建議刀桿不銑平面，以保持刀桿的完整性並提升強度

Order No.	A	B	C	D
MK32-S08	32	8	76	86
MK32-S10	32	10	76	86
MK32-S12	32	12	76	86
MK32-S14	32	14	76	86
MK32-S16	32	16	76	86
MK32-S18	32	18	76	86
MK32-S20	32	20	76	86
MK32-S25	32	25	76	86
MK40-S08	40	8	88	98
MK40-S10	40	10	88	98
MK40-S12	40	12	88	98
MK40-S14	40	14	88	98
MK40-S16	40	16	88	98
MK40-S18	40	18	88	98
MK40-S20	40	20	88	98
MK40-S25	40	25	88	98
MK40-S32	40	32	88	98

Order No.	A	B	C	D
MK50-S08	50	8	102	112
MK50-S10	50	10	102	112
MK50-S12	50	12	102	112
MK50-S14	50	14	102	112
MK50-S16	50	16	102	112
MK50-S18	50	18	102	112
MK50-S20	50	20	102	112
MK50-S25	50	25	102	112
MK50-S32	50	32	102	112
MK50-S40	50	40	102	112



- 抗震搪孔刀桿
Anti-Vibration Boring Tool
- 抗震銑刀桿
Anti-Vibration Milling Tool
- 抗震研磨棒
Anti-Vibration Grinding Tool
- 特殊組合式抗震刀桿
Special Combination Anti-Vibration Tool





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