

Tooling Systems Cartridges G1 to G27

G

Tooling

G

Tooling

Cartridges



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Stock Markings and Symbols

● mark: Standard stocked item

● mark: To be replaced with the new item featured on the same page

▲ mark: To be replaced by a new product, made to order, or discontinued
(please confirm stock availability)

* mark: Semi-standard stock (please confirm stock availability)







○ mark: Stock or planned stock (please confirm stock availability)

Blank: Made-to-order item

— mark: Not available

General Features of Tooling Systems

■ Tooling Systems

Application	System Name		Feature	Ref. Page
Turning	ICTM STANDARD		Shanks for turning applications in multi-tasking machines, conforming to the ICTM (Interface Committee for Turning Mill) Standard. Compatible with HSK-A type, tools can be shared between multi-tasking machines and machining centres. <i>Compliant with ISO standard ISO12164-3:2008.</i>	G3 ~
	HSK Tooling System			
Milling	Polygon Taper Shank SumiPolygon		Polygon keyless coupling system achieves an indexing accuracy of $\pm 2\mu\text{m}$. Supports both turning and rotating tools. <i>Compliant with ISO standard ISO26623-1:2008.</i>	G8 ~
	Modular Taper Shank		Achieving high-precision machining by increasing rigidity at high-speed rotations with two locating faces on the taper and flange, along with an excellent clamping mechanism. <i>Compliant with ISO standard ISO 26622-1:2008.</i>	G18
	HSK Tooling System		The ISO standard for milling shanks with 2 locating faces.	G18
	Smart Damper™		A special anti-vibration mechanism is built in to realize high-efficiency and high quality machining with a long overhang.	G20 ~
	IGETALLOY ABS System		This quick change system for round tools uses a unique mechanism with a strong holding force. The system offers high rigidity and precision, and exhibits good indexing accuracy during tool changes.	G22 ~

HSK Tooling System



ICTM
STANDARD

■ Features

The HSK tooling system has been adopted by Japan's 17 major machine tool manufacturers as the interface for turning tools in multi-tasking machines. It is based on the ICTM (Interface Committee for Turning Mill) standard. Based on the ISO standard HSK shank, this system is designed to improve precision in turning applications, and is compatible with the HSK-A type that is in widely use on machining centres.

* Catalogue numbers have been changed due to ISO standardisation (ISO 12164-3:2008).

For support with non-standard specifications, contact us directly.

General External Turning and Profiling
Double Clamp

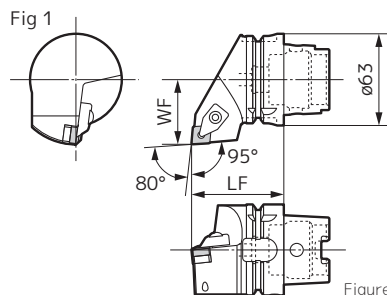
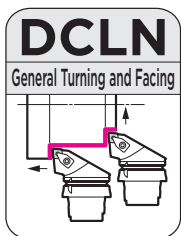


Figure shows right-handed (R) tool.

Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
CN□□1204□□	B14 ~	
		CNMG120408N-GE

Holder

Parts

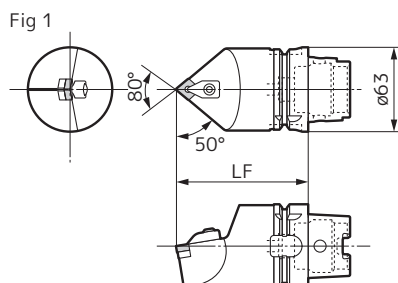
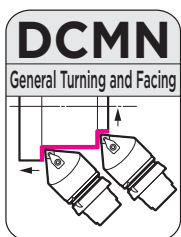
Dimensions (mm)

Cat. No.	Previous Cat. No.	Stock		Overhang LF	Cutting Edge WF	Fig	Clamp Set		Shim	Shim Screw	Wrench for Shim	Wrench
		R	L				Icon	N·m				
HSK63TH-DCLN R/L-DX12	H63A-WH-DCLN R/L-DX12			65	45	1	SCP-2	5.0	CNS1204	BFTX0409N	TRX15 (*)	LH040

*Wrench for shim is sold separately from the main body.

Clamp Set Parts **IC C48**

General External Turning and Profiling
Double Clamp



Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
CN□□1204□□	B14 ~	
		CNMG120408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Previous Cat. No.	Stock	Overhang LF	Fig	Clamp Set		Shim	Shim Screw	Wrench for Shim	Wrench
					Icon	N·m				
HSK63TH-DCMN N-H12	H63A-WH-DCMN N-H12		100	1	SCP-2	5.0	CNS1204	BFTX0409N	TRX15 (*)	LH040
HSK63TH-DCMN N-L12	H63A-WH-DCMN N-L12		140	1	SCP-2	5.0	CNS1204	BFTX0409N	TRX15 (*)	LH040

*Wrench for shim is sold separately from the main body.

Clamp Set Parts **IC C48**

Recommended Tightening Torque (N·m)

HSK Tooling System

Tooling

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Cartridges

General External Turning and Profiling Double Clamp

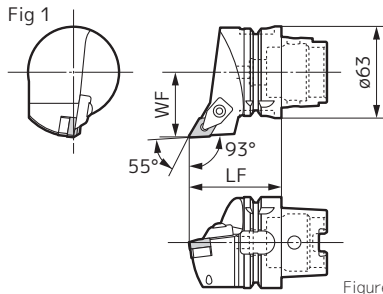
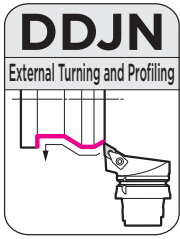


Figure shows right-handed (R) tool.

Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
DN□□1504□□	B24 ~	
		DNMG150408N-GE

Holder

Parts

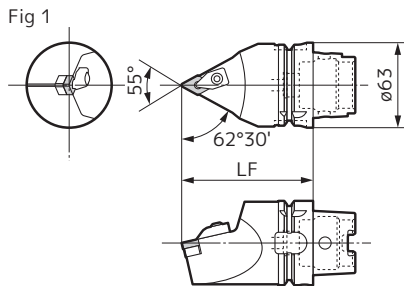
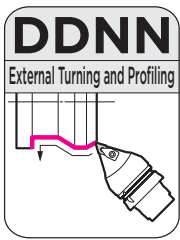
Dimensions (mm)

Cat. No.	Previous Cat. No.	Stock		Overhang LF	Cutting Edge WF	Fig	Clamp Set		Shim	Shim Screw	Wrench for Shim	Wrench
		R	L									
HSK63TH-DDJN R/L-DX15	H63A-WH-DDJN R/L-DX15			65	45	1	SCP-2	5.0	DNS1504	BFTX0409N	TRX15 (*)	LH040

*Wrench for shim is sold separately from the main body.

Clamp Set Parts C48

General External Turning and Profiling Double Clamp



Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
DN□□1504□□	B24 ~	
		DNMG150408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Previous Cat. No.	Stock	Overhang LF	Fig	Clamp Set		Shim	Shim Screw	Wrench for Shim	Wrench
HSK63TH-DDNN N-H15	H63A-WH-DDNN N-H15		100	1	SCP-2	5.0	DNS1504	BFTX0409N	TRX15 (*)	LH040
HSK63TH-DDNN N-L15	H63A-WH-DDNN N-L15		140	1	SCP-2	5.0	DNS1504	BFTX0409N	TRX15 (*)	LH040

*Wrench for shim is sold separately from the main body.

Clamp Set Parts C48

General External Turning and Profiling Double Clamp

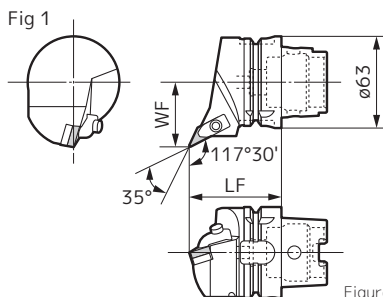
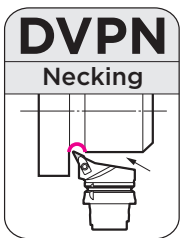


Figure shows right-handed (R) tool.

Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
VN□□1604□□	B58 ~	
		VNMG 160408N-GE

Holder

Parts

Dimensions (mm)

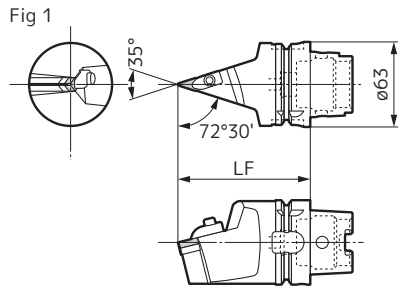
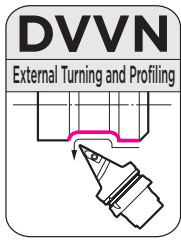
Cat. No.	Previous Cat. No.	Stock		Overhang LF	Cutting Edge WF	Fig	Clamp Set		Shim	Shim Screw	Wrench for Shim	Wrench
		R	L									
HSK63TH-DVPN R/L-DX16	H63A-WH-DVPN R/L-DX16			65	45	1	SCP-4	5.0	VNS1604	BFTX0307N	TRX10 (*)	LH040

*Wrench for shim is sold separately from the main body.

Clamp Set Parts C48

HSK Tooling System

General External Turning and Profiling
Double Clamp



Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
VN□□1604□□	B58 ~

VNMG 160408N-GE

Holder

Cat. No.	Previous Cat. No.	Stock	Overhang		Fig
			LF		
HSK63TH-DVVN N-H16	H63A-WH-DVVN N-H16		100		1

Parts

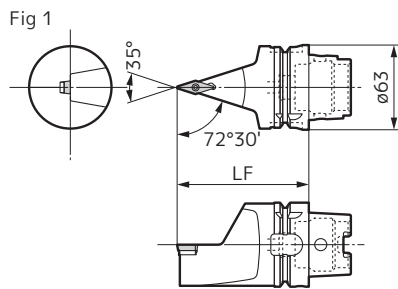
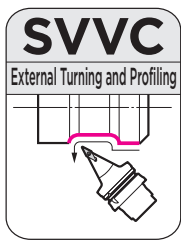
Dimensions (mm)

Clamp Set	Shim	Shim Screw	Wrench for Shim	Wrench
SCP-4	VNS1604	BFTX0307N	TRX10 (*)	LH040

*Wrench for shim is sold separately from the main body.

Clamp Set Parts **C48**

General External Turning and Profiling
Screw-on



Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
VC□□1604□□	B120 ~

VCMT160404N-SU

Holder

Cat. No.	Previous Cat. No.	Stock	Overhang		Fig
			LF		
HSK63TH-SVVC N-H16	H63A-WH-SVVCN-H16		100		1
HSK63TH-SVVC N-L16	H63A-WH-SVVCN-L16		140		1

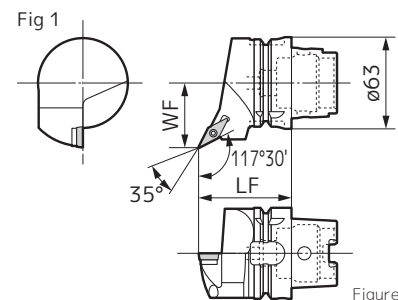
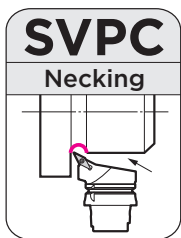
Parts

Dimensions (mm)

Pin	Nut	Shim	Flat Insert Screw	Wrench for Shim	Wrench
VP25	CPV33N	SVP32	BFTX03508	LH025(*)	TRX10

*Wrench for shim is sold separately from the main body.

General External Turning and Profiling
Screw-on



Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
VC□□1604□□	B120 ~

VCMT160404N-SU

Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Previous Cat. No.	Stock		Overhang		Cutting Edge	Fig	Pin	Nut	Shim	Flat Insert Screw	Wrench for Shim	Wrench
		R	L	LF	WF								
		HSK63TH-SVPC R/L-DX16	H63A-WH-SVPCL-DX16					65	45	1	VP20	CPV33N	SVP32

*Wrench for shim is sold separately from the main body.

HSK Tooling System

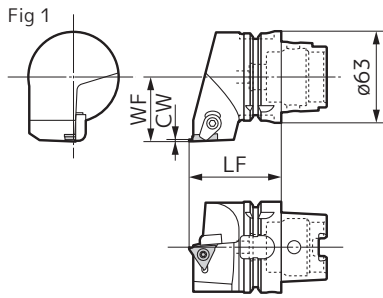
Tooling

G


Tooling

Cartridges

External Grooving
Double Clamp



Insert






Applicable Insert Cat. No.	Ref. Page	(Representative example)
TGAR4000□	F6 to F8	
TGAR4000BF	F9	

TGAR4150

Holder

Parts

Dimensions (mm)

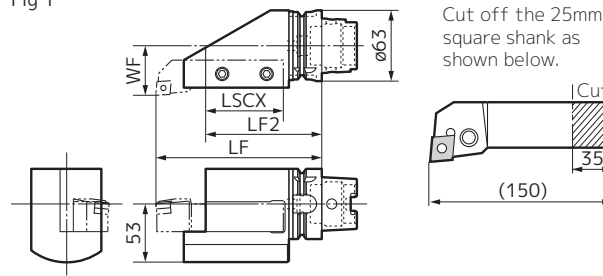
Cat. No.	Previous Cat. No.	Stock	Overhang		Width of Cut	Group No.	Fig	Dimensions (mm)					
			LF	WF				Flat Insert Screw	Clamp Plate	Double Screw	Wrench	Wrench	
HSK63TH-GWC R-DX412	H63A-WH-GWC R-DX412		65	45	1.25 to 1.45	2	1						
HSK63TH-GWC R-DX415	H63A-WH-GWC R-DX415		65	45	1.50 to 2.30	3	1	BFTX0511N	5.0	CCM8UL	WB8-22T	TRX20	LT27
HSK63TH-GWC R-DX425	H63A-WH-GWC R-DX425		65	45	2.50 to 4.80	4	1						

Refer to TGA series insert group numbers on pages F6, F7, F8, and F9 for applicable inserts. Select applicable inserts for the holders by using matching group numbers.

HSK Tooling System

Square Shank Holder

Fig 1



Cut off the 25mm square shank as shown below.

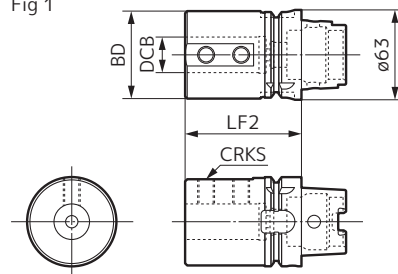
Holder

Parts Dimensions (mm)

Cat. No.	Previous Cat. No.	Stock	Overhang		Clamping Length	Cutting Edge	Fig	Set Screw		Wrench
			LF	LF2				BT	LH	
HSK63TH-S2525 R-105	H63A-WH-S2525 R-105		150	105	70	45	1	BT1230	LH060	

Holder for Boring Bar

Fig 1



Holder

Parts Dimensions (mm)

Cat. No.	Previous Cat. No.	Stock	Shank Dia.		Body Dia.	Min. Clamping Length	Screw	Fig	Set Screw		Wrench
			DCB	BD					BT	LH	
HSK63TH-C08-65	H63A-WH-C08-65		8	28	65	M8	1	BTD0809		LH040	
HSK63TH-C10-70	H63A-WH-C10-70		10	35	70	M8	1	BTD0812			
HSK63TH-C12-70	H63A-WH-C12-70		12	42	70	M8	1			LH050	
HSK63TH-C16-75	H63A-WH-C16-75		16	48	75	M10	1	BT1015			
HSK63TH-C20-75	H63A-WH-C20-75		20	52	75	M10	1			LH060	
HSK63TH-C25-83	H63A-WH-C25-83		25	62	83	M12	1	BT1215			
HSK63TH-C32-87	H63A-WH-C32-87		32	62	87	M12	1			LH080	
HSK63TH-C40-97	H63A-WH-C40-97		40	65	97	M16	1	BT1612			

Cut the boring bar to fit.

SumiPolygon



■ Features

SumiPolygon is a keyless coupling with a characteristic polygonal shape, which evenly distributes cutting torque across three surfaces, providing high rigidity and high indexing accuracy.

For support with non-standard design specifications, contact us directly.

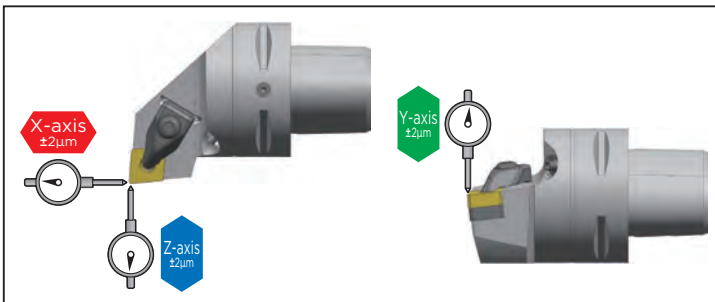
■ Features

- **Sizes**
 - Mounting size PSC32 (DCSFMS = 32mm) to PSC80 (DCSFMS = 80mm) supported
- **High Rigidity and High Precision**
 - 1/20 polygon tapered shape supported on 2 faces for high rigidity Keyless coupling distributes cutting torque uniformly to 3 faces, reducing fluctuations in cutting edge height
 - Repeatability when tools are changed is within $\pm 2\mu\text{m}$ on all 3 axes
- **Reduced Tool Change Time**
 - No need to change inserts on the machine, so the tool change time is significantly reduced
- **Coolant supported (up to 1MPa)**

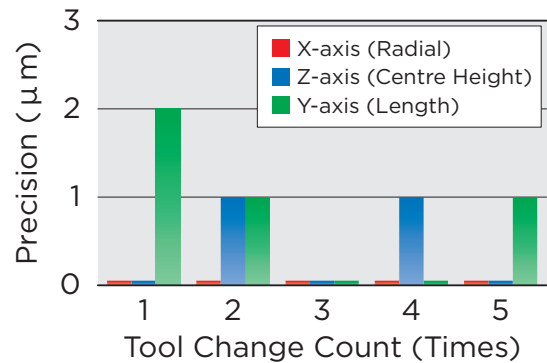
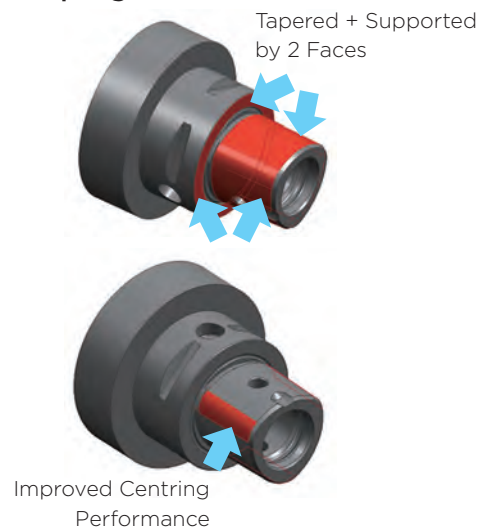
■ Repetitive Accuracy

Repeatability when tools are changed is within $\pm 2\mu\text{m}$ on all 3 axes:

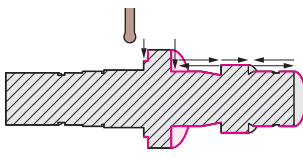
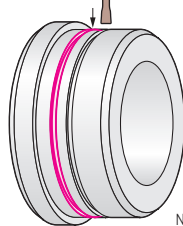
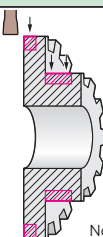
X-axis (Radial Direction) Y-axis (Centre Height Direction), Z-axis (Lengthwise Direction)



■ Coupling Structure



Application Examples

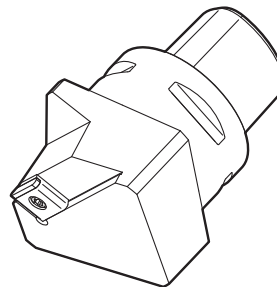
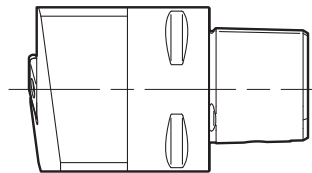
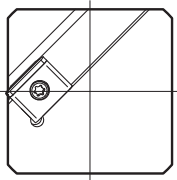
Nickel-Chromium Molybdenum Alloy Output Shaft Grooving	Stainless Steel Socket Joint Grooving	Sintered Alloy Sprocket Grooving/Facing
 <p>No Abnormal Chatter or Vibration</p>	 <p>No Abnormal Chatter or Vibration</p>	 <p>No Abnormal Chatter or Vibration</p>
Holder : PSC40 Made-to-Order Product Insert : GCMN4020-RG (AC425K) Cutting Conditions: $vc = 120$ to 140m/min , $f = 0.25$ to 0.35mm/rev $ap = 2\text{mm}$ Wet	Holder : PSC40 Made-to-Order Product Insert : GCMN4008-MG (AC530U) Cutting Conditions: $vc = 100\text{m/min}$, $f = 0.1\text{mm/rev}$ $ap = 3\text{mm}$ Wet	Holder : PSC40 Made-to-Order Product Insert : Made-to-Order Insert (Diameter 6.35mm) MG (AC530U) Cutting Conditions: Grooving $vc = 180\text{m/min}$, $f = 0.16\text{mm/rev}$, $ap = 4\text{mm} \times 2$ Passes Wet Facing $vc = 190\text{m/min}$, $f = 0.18\text{mm/rev}$, $ap = 0.2\text{mm}$ Wet

Made-to-Order Product Design Example

[For support with non-standard design specifications, contact us directly.](#)

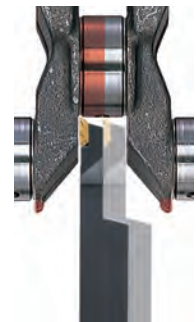
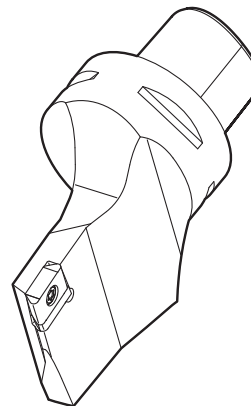
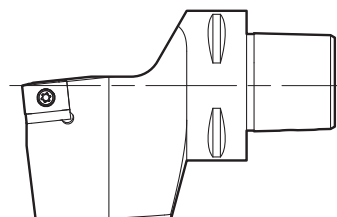
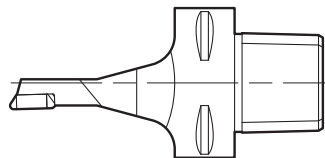
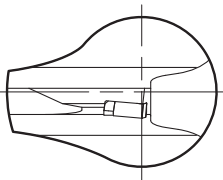
Hard Skiving Tool

High-efficiency Hardened Steel Machining Tool



SEC-XD series Holders

Tools for Crank Shaft Machining



SumiPolygon

Tooling

G

Tooling

Cartridges

External Internal Coolant

External Turning
Double Clamp

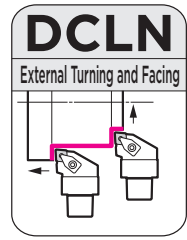


Fig 1

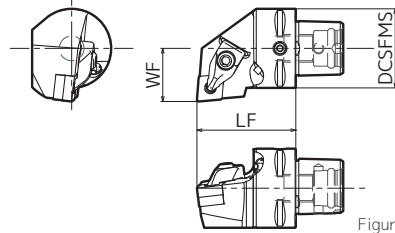


Figure shows right-handed (R) tool.

Insert

Applicable Insert Cat. No. Ref. Page
CN□□1204□□ B14 ~

(Representative example)
 CNMG120408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge		Overhang	Mounting	Fig	Clamp Set	Shim	Shim Screw	Wrench for Shim	Top Hex Wrench	Bottom Hex Wrench	Coolant Nozzle
	R	L	WF	LF	DCSFMS	Fig								
PSC40 DCLN R/L 27050-12-NP	●	●	27	50	40	1								
PSC50 DCLN R/L 35060-12-NP	●	●	35	60	50	1	SCP-2	5.0	CNS1204	BFTX0409N	TRX15 (*)	LH040	LH025	C4-CNZ
PSC63 DCLN R/L 45065-12-NP	●	●	45	65	63	1								

*Wrench for shim is sold separately from the main body.

Clamp Set Parts

External Internal Coolant

External Turning
Lever Lock

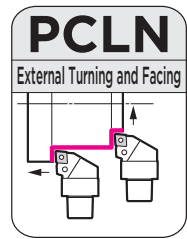


Fig 1

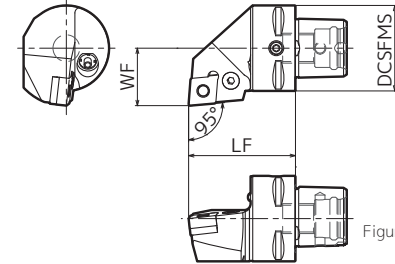


Figure shows right-handed (R) tool.

Insert

Applicable Insert Cat. No. Ref. Page
CN□□1204□□ B14 ~

(Representative example)
 CNMG120408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge		Overhang	Mounting	Fig	Lever Pin	Bolt	Shim	Shim Retainer	Wrench	Coolant Nozzle
	R	L	WF	LF	DCSFMS	Fig							
PSC40 PCLN R/L 27050-12-NP	●	●	27	50	40	1							
PSC50 PCLN R/L 35060-12-NP	●	●	35	60	50	1	LCL4	LCS4	LSC42	LSP4	LH030	C4-CNZ	
PSC63 PCLN R/L 45065-12-NP	●	●	45	65	63	1							

External Internal Coolant

External Turning
Double Clamp

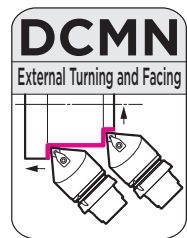
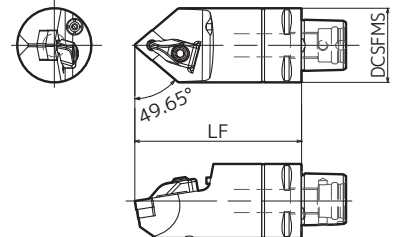


Fig 1



Insert

Applicable Insert Cat. No. Ref. Page
CN□□1204□□ B14 ~

(Representative example)
 CNMG120408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Stock	Overhang	Mounting	Fig	Clamp Set	Shim	Shim Screw	Wrench for Shim	Top Hex Wrench	Bottom Hex Wrench	Coolant Nozzle	
	N	LF	DCSFMS		Fig							
PSC40 DCMN N 00090-12-NP	●	90	40	1								
PSC50 DCMN N 00105-12-NP	●	105	50	1	SCP-2	5.0	CNS1204	BFTX0409N	TRX15 (*)	LH040	LH025	C4-CNZ
PSC63 DCMN N 00140-12-NP	●	140	63	1								

*Wrench for shim is sold separately from the main body.

Clamp Set Parts



SumiPolygon



External Turning
Double Clamp

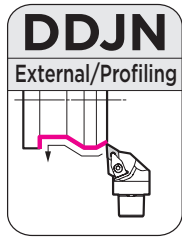


Fig 1

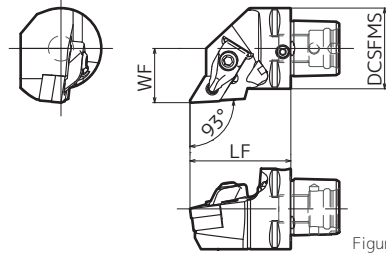


Figure shows right-handed (R) tool.

Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
DN□□1504□□	B24 ~

DNMG150408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge		Overhang	Mounting		Fig	Clamp Set		Shim	Shim Screw	Wrench for Shim	Top Hex Wrench	Bottom Hex Wrench	Coolant Nozzle
	R	L	WF	LF		DCSFMS	SCP-2		(N·m)							
PSC40 DDJN R/L 27050-15-NP*	●	●	27	50	40	1	SCP-2	5.0	DNS1504	BFTX0409N	TRX15 (*)	LH040	LH025	C4-CNZ		
PSC50 DDJN R/L 35060-15-NP	●	●	35	60	50	1										
PSC63 DDJN R/L 45065-15-NP	●	●	45	65	63	1										
PSC63 DDJN R/L 45130-15-NP	●	●	45	130	63	1										

*Depending on the design, ATC and extension bars may not be usable in some cases. Contact your local sales office prior to use.

*Wrench for shim is sold separately from the main body.

Clamp Set Parts C48



External Turning
Lever Lock

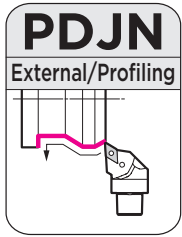


Fig 1

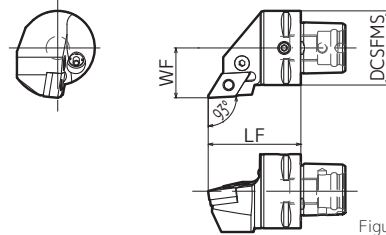


Figure shows right-handed (R) tool.

Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
DN□□1504□□	B24 ~

DNMG150408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge		Overhang	Mounting	Fig	Lever Pin	Bolt	Shim	Shim Retainer	Wrench	Coolant Nozzle
	R	L	WF	LF				DCSFMS					
PSC40 PDJN R/L 27050-15-NP	●	●	27	50	40	1							
PSC50 PDJN R/L 35060-15-NP	●	●	35	60	50	1	LCL4	LCS4	LSD42	LSP4	LH030	C4-CNZ	
PSC63 PDJN R/L 45065-15-NP	●	●	45	65	63	1							



External Turning
Double Clamp

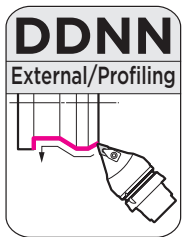
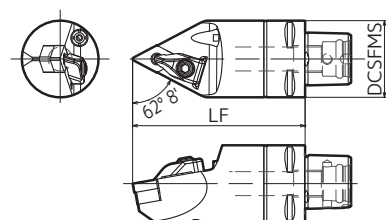


Fig 1



Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
DN□□1504□□	B24 ~

DNMG150408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Stock	Overhang	Mounting	Fig	Clamp Set		Shim	Shim Screw	Wrench for Shim	Top Hex Wrench	Bottom Hex Wrench	Coolant Nozzle
	N	LF	DCSFMS		SCP-2	(N·m)						
PSC40 DDNN N 00090-15-NP	●	90	40	1	SCP-2	5.0	DNS1504	BFTX0409N	TRX15 (*)	LH040	LH025	C4-CNZ
PSC50 DDNN N 00090-15-NP	●	90	50	1								
PSC50 DDNN N 00125-15-NP	●	125	50	1								
PSC63 DDNN N 00100-15-NP	●	100	63	1								
PSC63 DDNN N 00140-15-NP	●	140	63	1								

*Wrench for shim is sold separately from the main body.

Clamp Set Parts C48

Note: The red Cat. No. parts have been changed from those in the 2023-2024 General Catalogue. Recommended Tightening Torque (N·m)

Tooling
G
Tooling
Cartridges

SumiPolygon

Tooling

G

Tooling

Cartridges



External Turning
Double Clamp

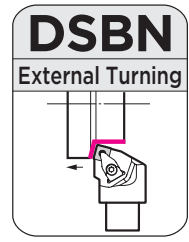


Fig 1

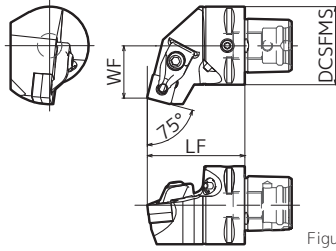



Figure shows right-handed (R) tool.

Insert















Applicable Insert Cat. No.	Ref. Page	
SN□□1204□□	B33 ~	

(Representative example)
SNMG120404N-GU

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge WF	Overhang LF	Mounting DCSFMS	Fig	Clamp Set	Shim	Shim Screw	Wrench for Shim	Top Hex Wrench	Bottom Hex Wrench	Coolant Nozzle	
	R	L												
PSC40 DSBN R/L 27050-12-NP	●	●	27	50	40	1								
PSC50 DSBN R/L 35060-12-NP	●	●	35	60	50	1	SCP-2	5.0	SNS1204	BFTX0409N	TRX15 (*)	LH040	LH025	C4-CNZ
PSC63 DSBN R/L 45065-12-NP	●	●	45	65	63	1								

*Wrench for shim is sold separately from the main body.

Clamp Set Parts  C48



External Turning
Double Clamp

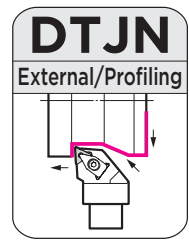


Fig 1

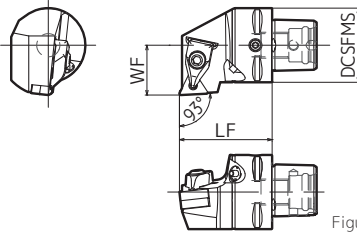



Figure shows right-handed (R) tool.

Insert















Applicable Insert Cat. No.	Ref. Page	
TN□□1604□□	B48 ~	

(Representative example)
TNMG160404N-GU

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge WF	Overhang LF	Mounting DCSFMS	Fig	Clamp Set	Shim	Shim Screw	Wrench for Shim	Top Hex Wrench	Bottom Hex Wrench	Coolant Nozzle	
	R	L												
PSC40 DTJN R/L 27050-16-NP	●	●	27	50	40	1								
PSC50 DTJN R/L 35060-16-NP	●	●	35	60	50	1	SCP-1	5.0	TNS1604	BFTX0307N	TRX10 (*)	LH040	LH025	C4-CNZ

*Wrench for shim is sold separately from the main body.

Clamp Set Parts  C48



SumiPolygon



External Turning
Screw-on

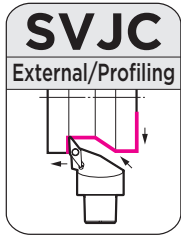


Fig 1

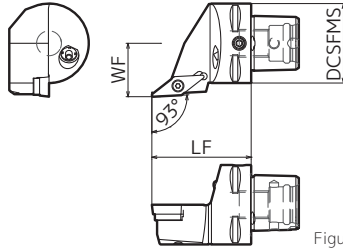


Figure shows right-handed (R) tool.

Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
VCC□□1604□□	B120 ~

VCMT160404N-SU

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge	Overhang	Mounting	Fig	Pin	Nut	Shim	Flat Insert Screw	Wrench for Shim	Wrench	Coolant Nozzle
	R	L	WF	LF	DCSFMS		VP20	CPV33N	SVP32	BFTX03508	N·m	LH025	TRX10
PSC40 SVJC R/L 27050-16-NP*	●	●	27	50	40	1	VP20						
PSC50 SVJC R/L 35060-16-NP	●	●	35	60	50	1	VP25						
PSC63 SVJC R/L 45065-16-NP	●	●	45	65	63	1	VP25						

* Depending on the design, ATC and extension bars may not be usable in some cases. Contact your local sales office prior to use.



External Turning
Screw-on

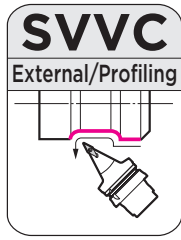
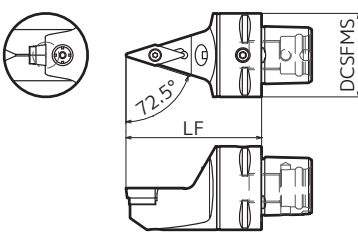


Fig 1



Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
VCC□□1604□□	B120 ~

VCMT160404N-SU

Holder

Parts

Dimensions (mm)

Cat. No.	Stock	Overhang	Mounting	Fig	Pin	Nut	Shim	Flat Insert Screw	Wrench for Shim	Wrench	Coolant Nozzle
	N	LF	DCSFMS		VP20	CPV33N	SVP32	BFTX03508	N·m	LH025	TRX10
PSC40 SVVC N 00065-16-NP	●	65	40	1	VP20						
PSC50 SVVC N 00090-16-NP	●	90	50	1	VP25						
PSC50 SVVC N 00125-16-NP	●	125	50	1	VP25						
PSC63 SVVC N 00100-16-NP	●	100	63	1	VP25						
PSC63 SVVC N 00140-16-NP	●	140	63	1	VP25						



External Turning
Double Clamp

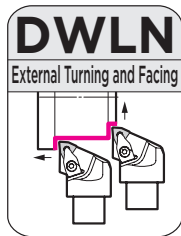


Fig 1

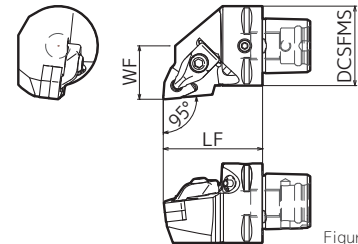


Figure shows right-handed (R) tool.

Insert

(Representative example)

Applicable Insert Cat. No.	Ref. Page
WNC□□0804□□	B63 ~

WNMG080404N-GU

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge	Overhang	Mounting	Fig	Clamp Set	Shim	Shim Screw	Wrench for Shim	Top Hex Wrench	Bottom Hex Wrench	Coolant Nozzle
	R	L	WF	LF	DCSFMS		SCP-2	WNS0804	BFTX0409N	TRX15 (*)	LH040	LH025	C4-CNZ
PSC40 DWLN R/L 27050-08-NP	●	●	27	50	40	1	SCP-2	WNS0804	BFTX0409N	TRX15 (*)	LH040	LH025	C4-CNZ

*Wrench for shim is sold separately from the main body.

Clamp Set Parts **C48**

Note: The red Cat. No. parts have been changed from those in the 2023-2024 General Catalogue. Recommended Tightening Torque (N·m)

Tooling
G
Tooling
Cartridges

SumiPolygon

Tooling

G

Tooling

Cartridges

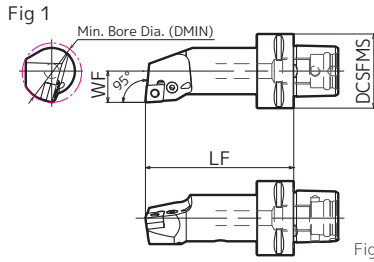
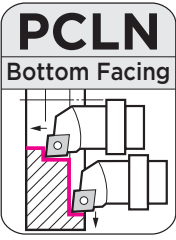
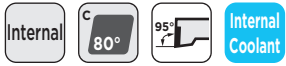


Figure shows right-handed (R) tool.

Internal Boring
Lever Lock

Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
CN□□090300	B12	
		CNMG090308N-GU

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Min. Bore Dia. DMIN	Cutting Edge WF	Overhang LF	Mounting DCSFMS	Fig	Lever Pin	Bolt	Shim	Shim Retainer	Wrench
	R	L										
PSC40 PCLN R/L 17080-09-NP	●	●	32	17	80	40	1	LCL3	LCS3	LSC32	LSP3	LH025

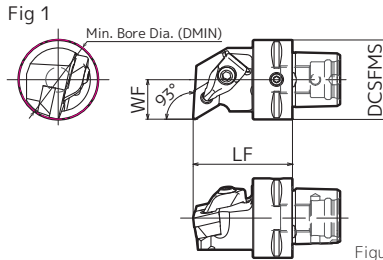
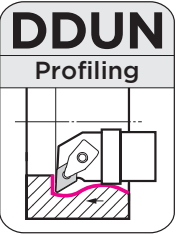


Figure shows right-handed (R) tool.

Internal Boring
Double Clamp

Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
DN□□150400	B24 ~	
		DNMG150408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Min. Bore Dia. DMIN	Cutting Edge WF	Overhang LF	Mounting DCSFMS	Fig	Clamp Set		Shim	Shim Screw	Wrench for Shim	Top Hex Wrench	Bottom Hex Wrench
	R	L												
PSC40 DDUN R/L 20050-15-NP	●	●	40	20	50	40	1			DNS1504B	BFTX0409N	TRX15 (*)	LH040	LH025
PSC40 DDUN R/L 20070-15-NP	●	●	40	20	70	40	1	SCP-2	5.0	DNS1504B	BFTX0409N	TRX15 (*)	LH040	LH025
PSC40 DDUN R/L 27090-15-NP	●	●	54	27	90	40	1			DNS1504B	BFTX0409N	TRX15 (*)	LH040	LH025

*Wrench for shim is sold separately from the main body.

Clamp Set Parts E82

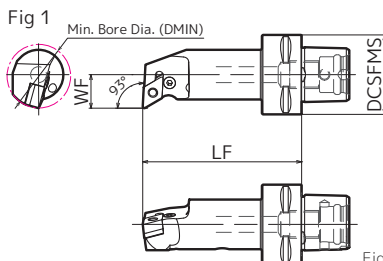
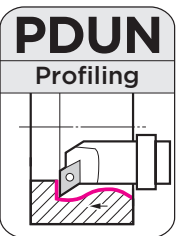


Figure shows right-handed (R) tool.

Internal Boring
Lever Lock

Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
DN□□110400	B23 ~	
		DNMG150408N-GE

Holder

Parts

Dimensions (mm)

Cat. No.	Stock		Min. Bore Dia. DMIN	Cutting Edge WF	Overhang LF	Mounting DCSFMS	Fig	Lever Pin	Bolt	Shim	Shim Retainer	Wrench
	R	L										
PSC40 PDUN R/L 17080-11-NP	●	●	32	17	80	40	1	LCL3	LCS3	LSD317	LSP3	LH025

SumiPolygon



Internal Boring
Lever Lock

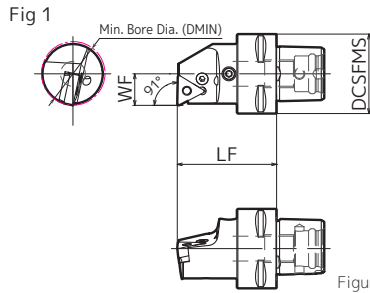
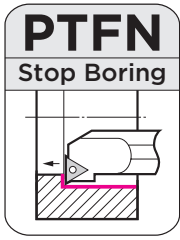



Figure shows right-handed (R) tool.


Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
TN□□1604□□	B48 ~	
		TNMG160404N-GU

Holder

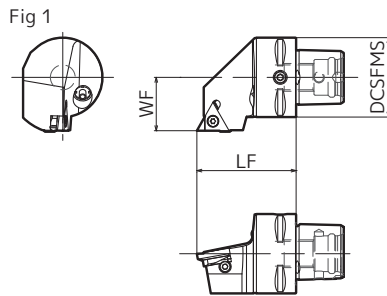
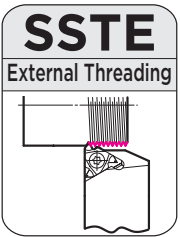
Parts

Dimensions (mm)


Cat. No.	Stock		Min. Bore Dia.	Cutting Edge	Overhang	Mounting	Fig	Lever Pin	Bolt	Shim	Shim Retainer	Wrench
	R	L						DMIN	WF	LF	DCSFMS	
PSC40 PTFN R/L 16050-16-NP	●	●	32	16	50	40	1	LCL3	LCS3	LST317CA	LSP3	LH025



External Threading
Screw-on







Insert

Applicable Insert Cat. No.	Ref. Page	(Representative example)
16ER□□□□CB	F114	
		16ERA60-CB

Holder



Parts

Dimensions (mm)

Cat. No.	Stock	Cutting Edge	Overhang	Mounting	Fig	Shim	Shim Screw	Flat Insert Screw	Wrench for Shim	Wrench	Flat Washer	Coolant Nozzle	
						R	WF	LF	DCSFMS				
PSC40 SSTE R 27050-16ER	●	27	50	40	1								
PSC50 SSTE R 35060-16ER	●	35	60	50	1	YE3	BX0304	BFTX0312N	2.0	LH025 (*)	TRX10	PW3	C4-CNZ
PSC63 SSTE R 45065-16ER	●	45	65	63	1								

*Wrench for shim is sold separately from the main body.

Clamp Set Parts

Applicable Clamp Set Cat. No.	Spring		Cap Screw		N·m
		Stock		Stock	
SCP-1	CSP08	●	CP-M5-20-1	●	5.0
SCP-2	CSP08	●	CP-M5-20-1	●	

CP-M5-20-1 can also be fastened from the other end of the screw.

SumiPolygon



SumiPolygon Cassette for External Grooving
Clamp-on

Tooling

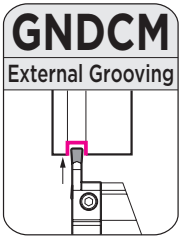
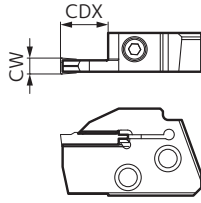


Fig 1



Insert

Applicable Insert	Cat. No.	Ref. Page
GCC□□□□□□□□	F53	

(Representative example)
GCMN2002-GG

Figure shows right-handed (R) tool.

G

GND series Cassette

Parts

Dimensions (mm)

Cat. No.	Stock		Width of Cut	Maximum Groove Depth	Applicable Holder	Fig	Cap Screw		Wrench
	R	L	CW	CDX			Cap Screw	N·m	Wrench
GNDCM R/L 212	●	●	2	12	PSC00GND0000000 R/L	1	BX0512	5.0	LH040
GNDCM R/L 312	●	●	3	12		1			
GNDCM R/L 418	●	●	4	18	PSC00GND0000090 R/L	1	5.0	LH040	
GNDCM R/L 518	●	●	5	18		1			
GNDCM R/L 618	●	●	6	18	1				

Select holders and inserts with matching width of cut (CW). Refer to page F53 for applicable inserts.

The maximum groove depth CDX is the figure during grooving. For maximum depth of cut during traverse cutting and profiling, refer to page F21.

Tooling

Cartridges

Identification Code Cassette

GNDCM R 2 12

Series Code

Feed Direction

Width of Cut (mm)

Maximum Groove Depth (mm)

Fig 1

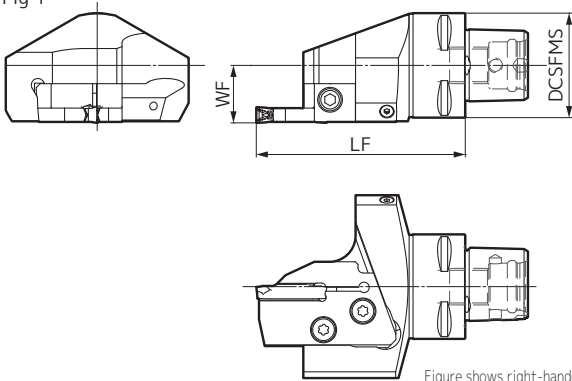


Figure shows right-handed (R) tool.

Fig 1

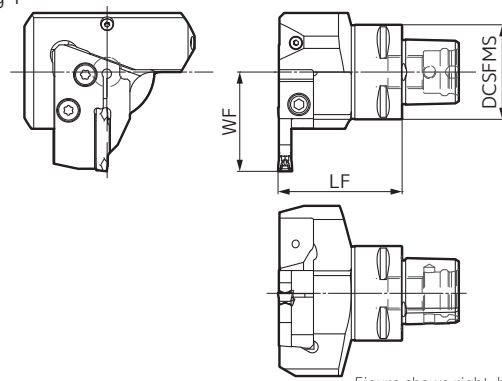


Figure shows right-handed (R) tool.

GND series Tool Holder (Straight) Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge	Overhang	Mounting	Applicable Cassettes	Fig	Flat Head Screw		Wrench
	R	L						WF	LF	DCS-FMS
PSC40 GND 228000 R/L	●	●	22	80	40	GNDCM R/L000	1	BFTX0619N	7.5	TT25
PSC50 GND 278000 R/L	●	●	27	80	50	GNDCM R/L000	1	BFTX0619N	7.5	TT25
PSC63 GND 338000 R/L	●	●	33	80	63	GNDCM R/L000	1	BFTX0619N	7.5	TT25

Inserts and cassettes are not included with the holders.

GND series Tool Holder (L type) Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge	Overhang	Mounting	Applicable Cassettes	Fig	Flat Head Screw		Wrench
	R	L						WF	LF	DCS-FMS
PSC40 GND 425290 R/L	●	●	42	52.5	40	GNDCM L/ROO	1	BFTX0619N	7.5	TT25
PSC50 GND 475590 R/L	●	●	47	55	50	GNDCM L/ROO	1	BFTX0619N	7.5	TT25
PSC63 GND 545790 R/L	●	●	54	57	63	GNDCM L/ROO	1	BFTX0619N	7.5	TT25

Inserts and cassettes are not included with the holders.

Identification Code Holder

PSC40 GND 42 52 90 R

SumiPolygon Shank Size

Series Code: GND series

WF Dimension (mm)

LF Dimension (mm)

00: Straight 90: L type

Feed Direction

Adapter

Fig 1

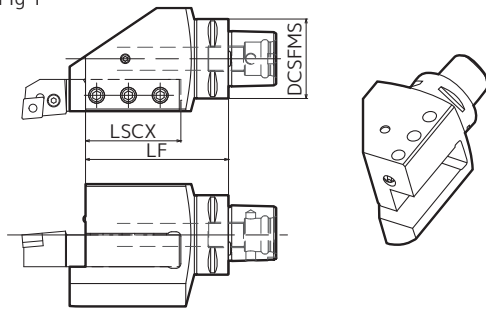


Figure shows right-handed (R) tool.

Holder for Square Shank (Adapter)

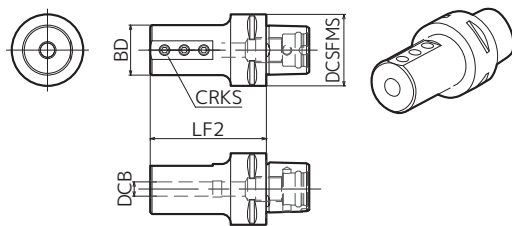
Parts

Dimensions (mm)

Cat. No.	Stock		Cutting Edge LSCX	Overhang LF	Mounting DCSFMS	Fig	Parts		
	R	L					Set Screw	Wrench	Coolant Nozzle
PSC50 S2020 R/L -90	●	●	60	90	50	1			
PSC63 S2525 R/L -100	●	●	70	100	63	1	BTD1012	LH050	C4-CNZ

Adapter

Fig 1



Holder for Boring Bar (Adapter)

Parts

Dimensions (mm)

Cat. No.	Stock N	Cutting Edge BD	Overhang LF2	Shank Dia. DCB	Screw CRKS	Mounting DCSFMS	Fig	Parts	
								Set Screw	Wrench
PSC40 C08-65	●	28	65	8	M6	40	1	BTD0609	LH030
PSC40 C10-70	●	35	70	10	M8	40	1	BTD0812	LH040
PSC40 C12-70	●	42	70	12	M10	40	1	BTD1012	LH050
PSC40 C16-75	●	48	75	16	M10	40	1		
PSC40 C20-75	●	52	75	20	M10	40	1		
PSC40 C25-83	●	62	83	25	M10	40	1		
PSC40 C32-87	●	62	87	32	M10	40	1		
PSC50 C08-65	●	28	65	8	M6	50	1		
PSC50 C10-70	●	35	70	10	M8	50	1	BTD0812	LH040
PSC50 C12-70	●	42	70	12	M10	50	1	BTD1012	LH050
PSC50 C16-75	●	48	75	16	M10	50	1		
PSC50 C20-75	●	52	75	20	M10	50	1		
PSC50 C25-83	●	62	83	25	M10	50	1		
PSC50 C32-87	●	62	87	32	M10	50	1		
PSC63 C12-70	●	42	70	12	M10	63	1		
PSC63 C16-75	●	48	75	16	M10	63	1		
PSC63 C20-75	●	52	75	20	M10	63	1		

Modular Taper Shank/HSK Tooling System

*Catalogue numbers have been changed due to the establishment of ISO standard ISO 26622-1:2008.



Modular Taper Shank

This has widespread use throughout Europe and the United States.



HSK Tooling System

This hollow shank was developed by RWTH Aachen University and the German Industry Association, and has been adopted as an ISO standard.

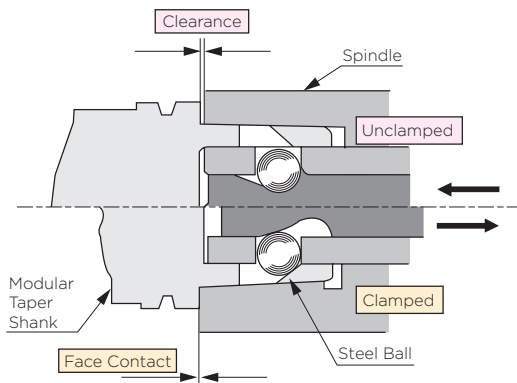
Features

- Tool shape suitable for high-speed rotations.
- Achieving high-precision machining by increasing rigidity at high-speed rotations with two locating faces on the taper and flange, along with an excellent clamping mechanism.
- Hollow and short taper reduces weight and shortens ATC time when changing tools.

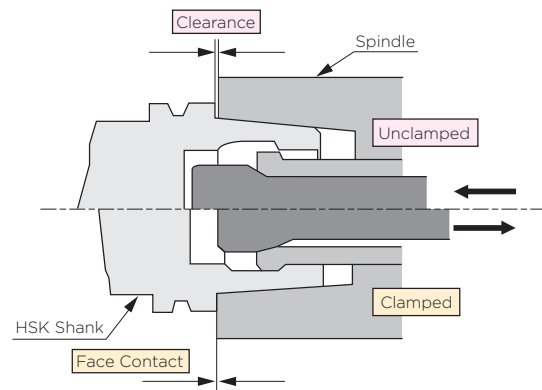
Features

- DIN standard with 2 locating faces.
- Two locating faces on the taper and flange, for high precision and high rigidity machining.
- Hollow and short taper reduces weight and allows for high-speed ATC.

Mechanism



Mechanism



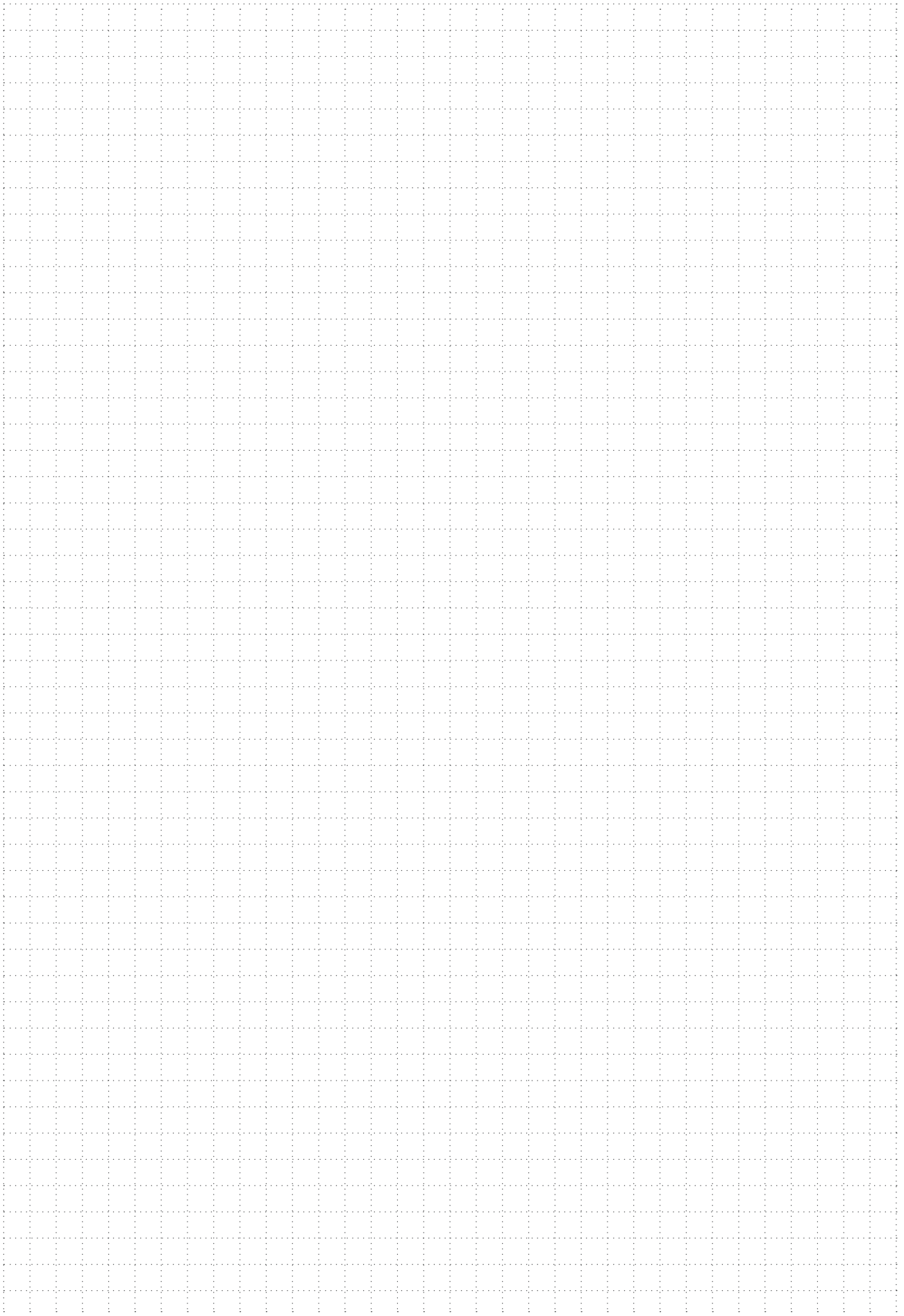
Size

Cat. No.	Dimensions (mm)	
	Mounting Dia.	Mounting Dia.
	DCON	DCON2
TS32	32	24
TS40	40	30
TS50	50	40
TS63	63	50
TS80	80	64

Size

Cat. No.	Dimensions (mm)	
	Mounting Dia.	Mounting Dia.
	DCON	DCON2
HSK A32	32	24
HSK A40	40	30
HSK A50	50	38
HSK A63	63	48
HSK A80	80	60
HSK A100	100	75

MEMO



Smart Damper™



■ Features

Smart Damper™ is arbors equipped with a special anti-vibration mechanism that has both counter damping and friction damping effects.

This suppresses chattering when machining with a large overhang, to prevent reduction of machined surface quality and tool life.

Expanded Internal Boring Lineup **Smart Damper™ for Internal Boring IES E10**

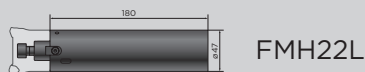


- Used in combination with a basic holder and damper head.
- Basic holder lineup supports **BBT50 (BIG-PLUS™)** Arbor and **HSK-A100** arbors in different lengths.
- Through-centre coolant compatible.

■ Smart Damper™ Combination Example (BBT50 type)

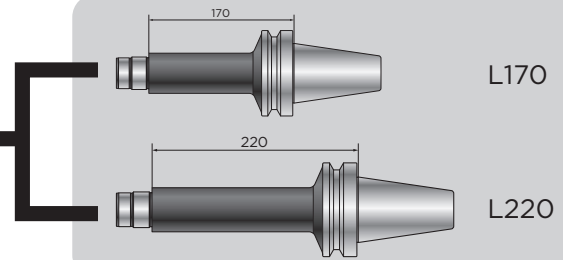
Damper Head

ø47 type



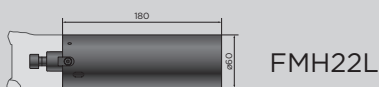
S-SDF3647FMH□□L180

Basic Holder

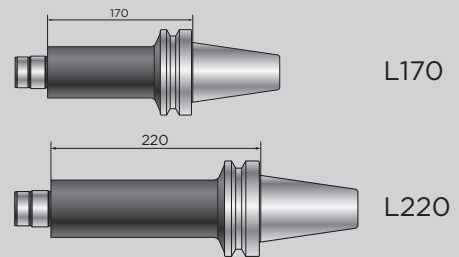
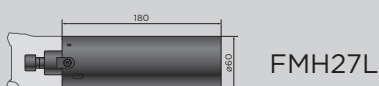


S-SDF3647L□□□-BBT50

ø60 type



S-SDF3660FMH□□L180



S-SDF3660L□□□-BBT50

Face Milling Example with 347mm Overhang

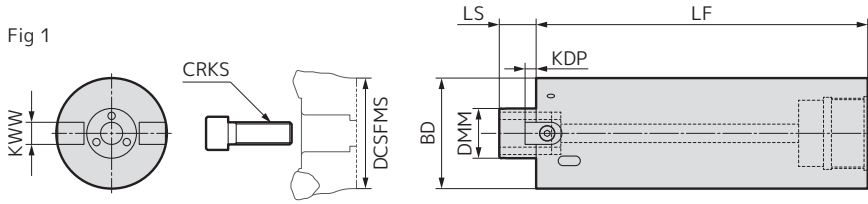
Arbor	Results	
	Machined Surface	Vibration
Competitor's Arbor No Anti-Vibration Mechanism		
Smart Damper™ With Anti-Vibration Mechanism		

Suppress chatter by using a Smart Damper™!!

Work Material: S50C
Tool: Tool Diameter ø63 (5-teeth)
Cutting Conditions: vc = 100m/min, fz = 1.0mm/t, ap = 1.4mm, ae = 30mm

*Smart Damper™ and BIG-PLUS™ are registered trademarks of BIG DAISHOWA Co., Ltd.

Smart Damper™



Damper Head

Dimensions (mm)

Cat. No.	Stock	Connecting Dia. DMM	Body Dia. BD	Overall Length LF	Connection Length LS	Keyway Width KWW	Keyway Depth KDP	Screw CRKS	Weight (kg)	Mounting DCSFMS	Fig
S-SDF3647FMH22L180	●	22	47	180	18	10	5	M10	3.0	36 up	1
S-SDF3660FMH22L180	●	22	60	180	18	10	5	M10	4.5	49 up	1
S-SDF3660FMH27L180	●	27	60	180	20	12	6	M12	4.5	46 up	1

Refer to the user's manual for methods of mounting to basic tool holders.

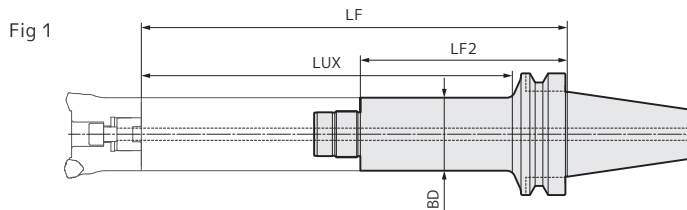
The cutter is not included in the weight.

A hook wrench and clamp bolt for tightening the cutter are included.

DCSFMS shows the cutter mounting surface diameter. Take care if the mounting surface diameter is small relative to the cutter outer diameter.

Identification Code

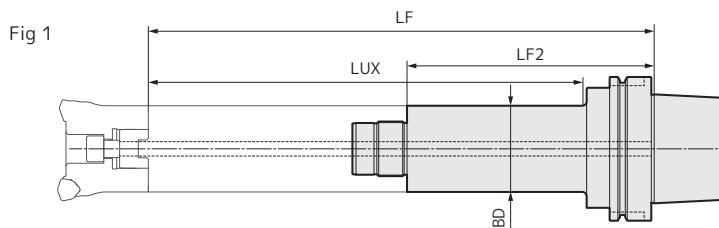
S-SDF36 47 FMH 22 L180
Connection Method Body Dia. Series Code Connecting Dia. Overall Length



Basic Holder BBT50 type

Dimensions (mm)

Cat. No.	Stock	Body Dia. BD	Overhang LF	Min. Clamping Length LF2	Effective Overhang LUX	Weight (kg)	Applicable Damper Head	Fig
S-SDF3647L170-BBT50	●	47	350	170	297	5.6	S-SDF3647FMH00LO00	1
S-SDF3647L220-BBT50	●	47	400	220	347	6.3	S-SDF3647FMH00LO00	1
S-SDF3660L170-BBT50	●	60	350	170	297	6.7	S-SDF3660FMH00LO00	1
S-SDF3660L220-BBT50	●	60	400	220	347	7.8	S-SDF3660FMH00LO00	1



Basic Holder HSK-A100 type

Dimensions (mm)

Cat. No.	Stock	Body Dia. BD	Overhang LF	Min. Clamping Length LF2	Effective Overhang LUX	Weight (kg)	Applicable Damper Head	Fig
S-SDF3647L170-HSKA100	●	47	350	170	310	4.4	S-SDF3647FMH00LO00	1
S-SDF3647L220-HSKA100	●	47	400	220	360	5.0	S-SDF3647FMH00LO00	1
S-SDF3660L170-HSKA100	●	60	350	170	310	5.5	S-SDF3660FMH00LO00	1
S-SDF3660L220-HSKA100	●	60	400	220	360	6.0	S-SDF3660FMH00LO00	1

Identification Code

S-SDF36 47 L170 - BBT50
Connection Method Body Dia. Min. Clamping Length Shank type

*Smart Damper™ is a registered trademark of BIG DAISHOWA Co., Ltd.

ABS System



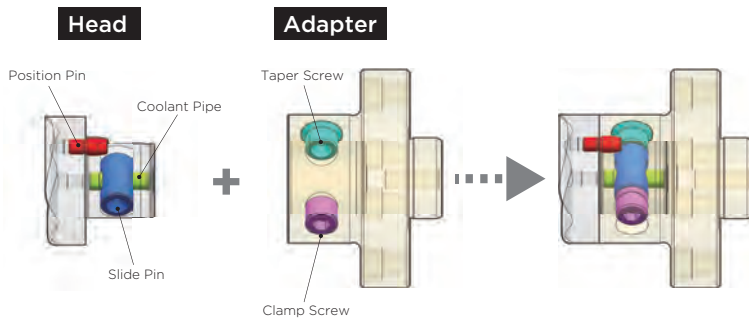
■ Features

The IGETALLOY ABS system has received high acclamation worldwide for its strong clamping force, high rigidity and high precision. ABS is one of the quick change systems for round tools, which increases our customers' productivity in special tooling applications, while simplifying and standardising these special tools. The SBA system is also available. For details, please contact us.

■ Applications

- The clamp screw, taper screw and slide pin act as a wedge for strong holding force.
- High rigidity, high precision. High indexing accuracy during tool changes.
- A wide array of sizes are available to cover a variety of tools.
- Easy handling allows short tool change times.
- Allows coolant supply from inside the spindle.
- Strong clamping force even with small diameters.

■ Clamp Mechanism



■ ABS Standard (Head)

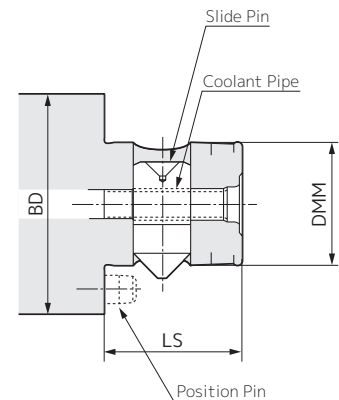
Head Dimensions

Dimensions (mm)

Cat. No.	Body Dia.	Shank Dia.	Shank Length
	BD	DMM	LS
ABS 25M	25	13	20
ABS 32M	32	16	23
ABS 40M	40	20	26
ABS 50M	50	28	31
ABS 63M	63	34	38
ABS 80M	80	46	43

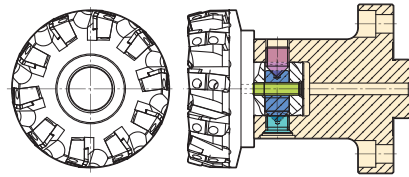
Parts

Set Cat. No.	Slide Pin	Position Pin	Coolant Pipe
ABS25-ES-M3	ABS25-E3.2	ABS25-E4	ABS25-E6
ABS32-ES-M3	ABS32-E3.2	ABS32-E4	ABS32-E6
ABS40-ES-M3	ABS40-E3.2	ABS40-E4	ABS40-E6
ABS50-ES-M3	ABS50-E3.2	ABS50-E4	ABS50-E6
ABS63-ES-M3	ABS63-E3.2	ABS63-E4	ABS63-E6
ABS80-ES-M3	ABS80-E3.2	ABS80-E4	ABS80-E6

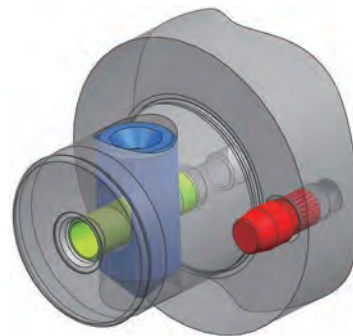
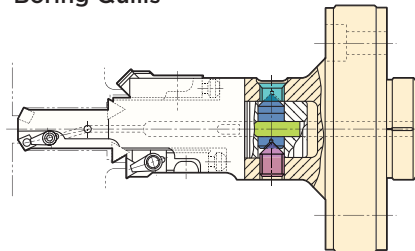


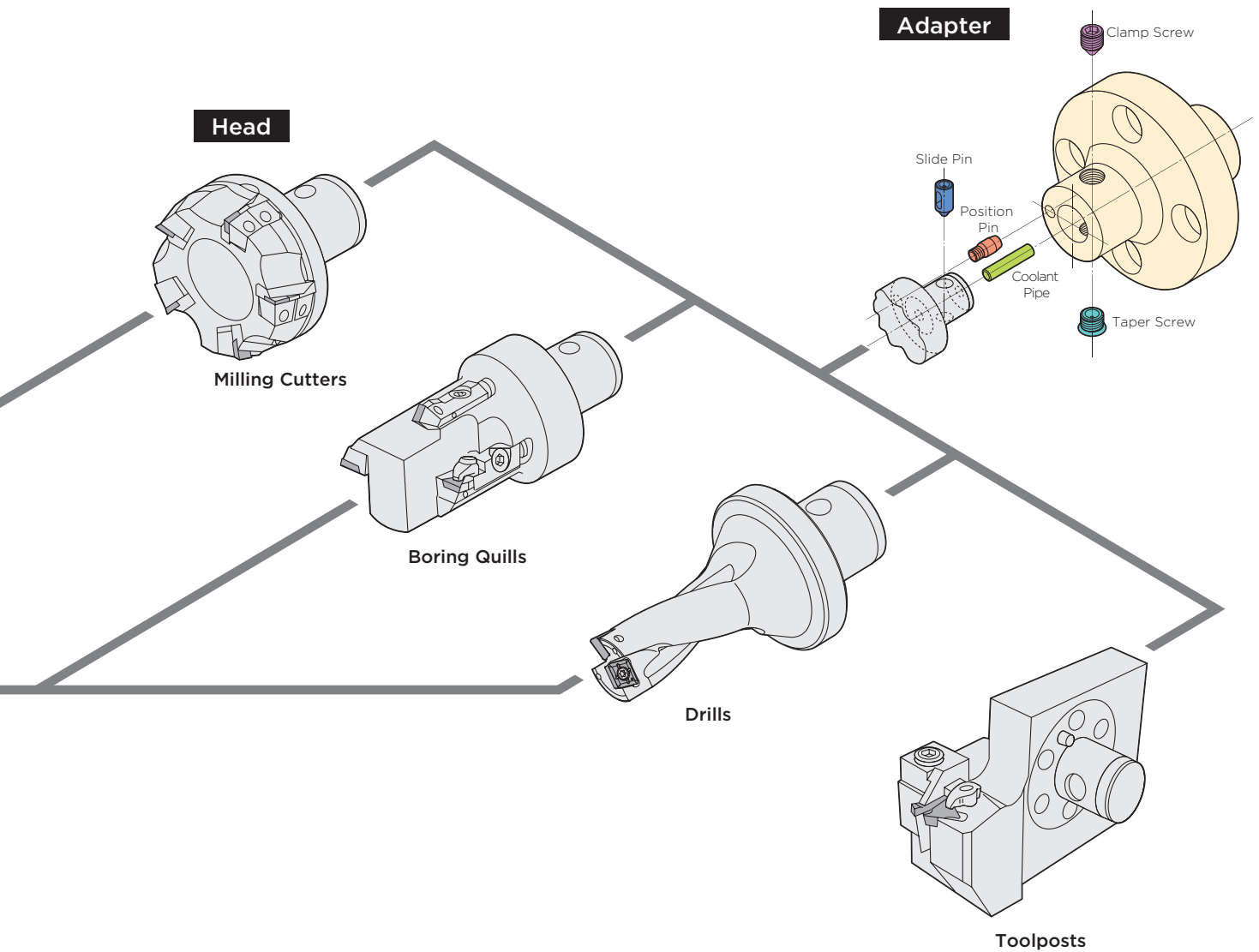
■ ABS System Design Examples

Indexable Cutters



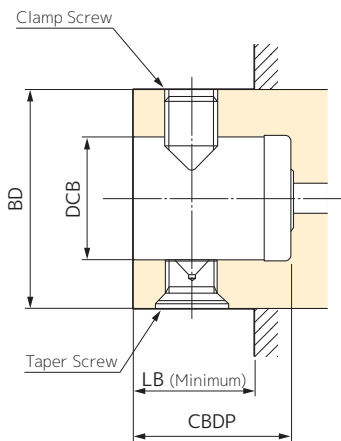
Boring Quills





Tooling
G
Tooling
Cartridges

■ ABS Standard (Adapter)



Adapter Dimensions

Dimensions (mm)

Cat. No.	Body Dia.	Shank Dia.	Shank Length	Min. Clamping Length
	BD	DCB	CBDP	LB
ABS 25W	25	13	22	13.0
ABS 32W	32	16	25	16.0
ABS 40W	40	20	30	18.5
ABS 50W	50	28	34	22.0
ABS 63W	63	34	41	28.0
ABS 80W	80	46	48	34.0
ABS100W	100	56	58	40.5
ABS125W	125	70	76	51.0
ABS160W	160	90	96	53.0
ABS200W	200	112	116	82.0

Parts



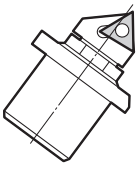
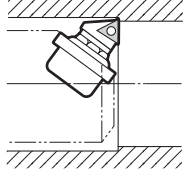
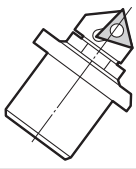
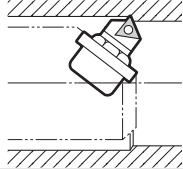
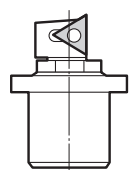
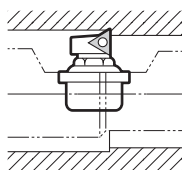

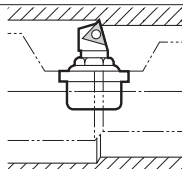
Set Cat. No.	Clamp Screw	Taper Screw
ABS25-FS-W	ABS25-F1	ABS25-F2
ABS32-FS-W	ABS32-F1	ABS32-F2
ABS40-FS-W	ABS40-F1	ABS40-F2
ABS50-FS-W	ABS50-F1	ABS50-F2
ABS63-FS-W	ABS63-F1	ABS63-F2
ABS80-FS-W	ABS80-F1	ABS80-F2
ABS100-FS-W	ABS100-F1	ABS100-F2
ABS125-FS-W	ABS125-F1	ABS125-F2
ABS160-FS-W	ABS160-F1	ABS160-F2
ABS200-FS-W	ABS200-F1	ABS200-F2

SEC-Micro Units

This section introduces an overview of the series.

Refer to the separate "SEC-Cartridge Unit/Micro Unit" catalogue for details on Micro Units (holders, inserts, parts) and quill unit seat machining.

Micro Unit Cat. No. by Model/Tooling type

		MUP series			MUN series		
							
Illustrations	Tooling	Cat. No.	Min. Bore Dia. (mm)	Stock LH	Cat. No.	Min. Bore Dia. (mm)	Stock LH
		MUP1-A0	25	●●	MUN2-A0	36	
		MUP2-A0	36	●●	MUN3-A0	47	
		MUP3-A0	47	●●	MUN3L-A0	54	
		MUP4-A0	73	●	MUN4-A0	73	
						MUN4L-A0	78
		MUP1-A15	25	●	MUN2-A15	36	
		MUP2-A15	36	●	MUN3-A15	47	
		MUP3-A15	47		MUN3L-A15	54	
		MUP4-A15	73		MUN4-A15	73	
						MUN4L-A15	78
		MUP1-V0	25	●●	MUN2-V0	36	
		MUP2-V0	36	●●	MUN3-V0	47	
		MUP3-V0	47	●●	MUN3L-V0	54	
		MUP4-V0	73	●	MUN4-V0	73	
						MUN4L-V0	78
		MUP1-V15	25	●	MUN2-V15	36	
		MUP2-V15	36	●	MUN3-V15	47	
		MUP3-V15	47	●	MUN3L-V15	54	
		MUP4-V15	73	●	MUN4-V15	73	
						MUN4L-V15	78

*If a left hand unit is required, include "LH" after the catalogue number. (Ex.: MUP1-A0-LH, MUP1-V0-LH)

*Inserts and wrenches are not included with Micro Units.

SEC-Cartridge Units

This section introduces an overview of the series.

Refer to the separate "SEC-Cartridge Unit/Micro Unit" catalogue for details on Micro Units (holders, inserts, parts) and quill unit seat machining.

■ Features of Each Model

Classification	Standard type	MINIT type		ISO type				
	Cat. No.	BU type	MINIT P24 type	MINIT N38 type	SP type / SX type / SC type	CP type	CE type	PN type
Shape	The most common type of cartridge units		Mini type with good edge sharpness and chip control	Compact type for multi-tooling configurations	Screw-on type positive cutting edge with excellent sharpness and chip evacuation	Positive cutting edge type for low-rigidity work	High rake cutting edge type for non-ferrous metal machining	Negative cutting edge type with excellent compatibility and economy
Items								
Clamp Mechanism	Pin Lock	Screw-on	Pin Lock	Screw-on	Clamp-on	Clamp-on	Clamp-on	Pin Lock
Adjustability	Yes	Axial: No Radial: Yes	No (By using shims)	Yes	Yes	Yes	Yes	Yes
Rake Angle	Negative	Positive	Negative	Positive	Positive	Positive	Negative	
Applicable Insert Relief Angle	0°	11°	0°	11° (SP type) 7° (SX type / SC type)	11°	20°	0°	
Cutting Edge Position	Above Centre	Above Centre/On Centre	Above Centre	On Centre	On Centre	On Centre	On Centre	
Min. Bore Dia. (mm)	ø24	ø24	ø38	ø30	ø30	ø30	ø38	

■ Cartridge Unit Cat. No. (For Triangular Inserts) by Model/Tooling type

() shows the min. bore diameter (mm).

Configuration	BU type	Stock		MINIT P24 type	Stock		MINIT N38 type	Stock		SP type / SX type / SC type	Stock		CP type	Stock		CE type	Stock		PN type	Stock	
		R	L		R	L		R	L		R	L		R	L		R	L		R	L
							MTGN3 R/L(38)	●	●	STGP R/L-10CA(38)	●	●	CTGP R/L10CA(38)	●	●	CTGE R/L10CA(38)			PTGN R/L10CA(38)	●	●
										STGP R/L-12CA(50)	●	●	CTGP R/L12CA(50)	●	●	CTGE R/L12CA(50)			PTGN R/L12CA(50)	●	●
										STGP R/L-16CA(60)	●	●	CTGP R/L16CA(60)	●	●				PTGN R/L16CA(60)	●	●
																			PTGN R/L20CA(70)	●	●
	BU224 R/L(48)	●	●	MTJP22 R/L(24)	●	●	MTJN3 R/L(38)	●	●	STJP R/L-10CA(38)	●	●	CTJP R/L10CA(38)	●	●	CTJE R/L10CA(38)	●	●			
	BU225 R/L(60)	●	●							STJP R/L-12CA(50)	●	●	CTJP R/L12CA(50)	●	●	CTJE R/L12CA(50)	●	●			
										STJP R/L-16CA(55)	●	●	CTJP R/L16CA(55)	●	●						
	BU252 R/L(24)	●	●	MTFP22 R/L(24)	●	●	MTFN3 R/L(38)	●	●	STFP R/L- 8CA(30)	●	●	CTFP R/L 8CA(30)	●	●	CTFE R/L 8CA(30)	●	●	PTFN R/L10CA(38)	●	●
	BU253 R/L(30)	●	●							STFP R/L-10CA(38)	●	●	CTFP R/L10CA(38)	●	●	CTFE R/L10CA(38)	●	●	PTFN R/L12CA(50)	●	●
	BU254 R/L(38)	●	●							STFP R/L-12CA(50)	●	●	CTFP R/L12CA(50)	●	●	CTFE R/L12CA(50)	●	●	PTFN R/L16CA(55)	●	●
	BU255 R/L(48)	●	●							STFP R/L-16CA(55)	●	●	CTFP R/L16CA(55)	●	●	CTFE R/L16CA(55)	●	●	PTFN R/L20CA(70)	●	●
	BU256 R/L(55)	●	●									CTFP R/L20CA(70)	●	●	CTFE R/L20CA(70)	●	●				
	BU293 R/L(30)	●	●	MTUP22 R/L(24)	●	●	MTUN3 R/L(38)	●	●	STUP R/L-10CA(38)	●	●	CTUP R/L10CA(38)	●	●	CTUE R/L10CA(38)	●	●			
	BU294 R/L(38)	●	●							STUP R/L-12CA(50)	●	●	CTUP R/L12CA(50)	●	●	CTUE R/L12CA(50)	●	●			
	BU295 R/L(48)	●	●							STUP R/L-16CA(55)	●	●	CTUP R/L16CA(55)	●	●						
	BU295ER/L(48)	●	●																		
										STTP R/L- 8CA(30)	●	●	CTTP R/L 8CA(30)	●	●	CTTE R/L 8CA(30)	●	●	PTTN R/L10CA(38)	●	●
										STTP R/L-10CA(38)	●	●	CTTP R/L10CA(38)	●	●	CTTE R/L10CA(38)	●	●	PTTN R/L12CA(50)	●	●
										STTP R/L-12CA(50)	●	●	CTTP R/L12CA(50)	●	●	CTTE R/L12CA(50)	●	●	PTTN R/L16CA(60)	●	●
										STTP R/L-16CA(60)	●	●	CTTP R/L16CA(60)	●	●	CTTE R/L16CA(60)	●	●			
										STSP R/L-10CA(38)	●	●	CTSP R/L10CA(38)	●	●	CTSE R/L 8CA(30)	●	●			
										STSP R/L-12CA(50)	●	●	CTSP R/L12CA(50)	●	●	CTSE R/L10CA(38)	●	●			
										STSP R/L-16CA(55)	●	●	CTSP R/L16CA(55)	●	●	CTSE R/L12CA(50)	●	●			
												CTSE R/L16CA(55)	●	●							
				MTWP22 R/L(24)	●	●	MTWN3 R/L(38)	●	●	STWP R/L- 8CA(30)	●	●	CTWP R/L 8CA(30)	●	●	CTWE R/L 8CA(30)	●	●			
										STWP R/L-10CA(38)	●	●	CTWP R/L10CA(38)	●	●	CTWE R/L10CA(38)	●	●			
										STWP R/L-12CA(50)	●	●	CTWP R/L12CA(50)	●	●	CTWE R/L12CA(50)	●	●			
										STWP R/L-16CA(55)	●	●	CTWP R/L16CA(55)	●	●	CTWE R/L16CA(55)	●	●			
										STRP R/L 8CA(30)	●	●	CTRP R/L 8CA(30)	●	●	CTRE R/L 8CA(30)	●	●			
										STRP R/L 10CA(38)	●	●	CTRP R/L 10CA(38)	●	●	CTRE R/L 10CA(38)	●	●			
										STXP R/L 8CA(30)	●	●	CTXP R/L 8CA(30)	●	●	CTXE R/L 8CA(30)	●	●			
										STXP R/L 10CA(38)	●	●	CTXP R/L 10CA(38)	●	●	CTXE R/L 10CA(38)	●	●			

*Inserts and wrenches are not included with Cartridge Units.

Tooling

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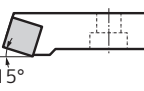
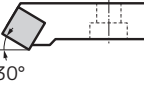
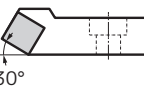
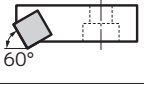
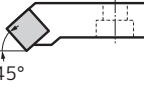
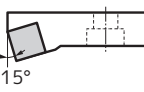
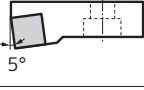

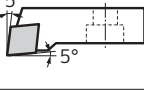
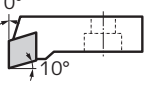
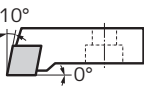
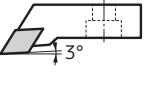
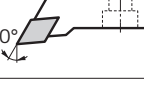
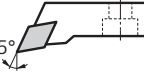
Tooling

Cartridges

SEC-Cartridge Units

■ Tool Holder Cat. No. (For Square Inserts, 80°, 55°, Diamond Inserts)

() shows the min. bore diameter (mm).

Configuration	BU type	Stock		MINIT P24 type	Stock		MINIT N38 type	Stock		SP type / SX type / SC type	Stock		CP type	Stock		CE type	Stock		PN type	Stock		
		R	L		R	L		R	L		R	L		R	L		R	L		R	L	
 15°	BU113 R/L(30)	●					MSRN4 R/L(38)	●	●	SSRP R/L-10CA(38)	●	●	CSRP R/L10CA(38)	●		CSRE R/L10CA(38)	●					
	BU114 R/L(38)	●											CSRP R/L12CA(50)	●		CSRE R/L12CA(50)	●					
	BU115 R/L(48)	●											CSRP R/L16CA(55)	●								
 30°	BU133 R/L(30)	●		MSTP04 R/L(24)	●	●	MSTN4 R/L(38)	●	●	SSTP R/L 10CA(38)	●	●	CSTP R/L 8CA(30)	●	●	CSTE R/L 8CA(30)	●	●				
	BU134 R/L(38)	●	●										CSTP R/L 10CA(38)	●	●	CSTE R/L 10CA(38)	●	●				
	BU135 R/L(48)	●	●																			
 30°	BU134E R/L(30)	●																				
	BU135E R/L(38)	●																				
 60°										SSWP R/L 10CA(38)	●	●	CSWP R/L 8CA(30)	●	●	CSWE R/L 8CA(30)	●	●				
													CSWP R/L 10CA(38)	●	●	CSWE R/L 10CA(38)	●	●				
 45°	BU142 R/L(24)	●	●	MSSP04 R/L(24)	●	●	MSSN4 R/L(38)	●	●	SSSP R/L- 8CA(30)	●	●	CSSP R/L 8CA(30)	●	●	CSSE R/L 8CA(30)	●	●	PSSN R/L10CA(38)	●	●	
	BU143 R/L(30)	●								SSSP R/L-10CA(38)	●	●	CSSP R/L10CA(38)	●	●	CSSE R/L10CA(38)	●	●	PSSN R/L12CA(50)	●	●	
	BU144 R/L(38)	●	●										CSSP R/L12CA(50)	●	●	CSSE R/L12CA(50)	●	●	PSSN R/L16CA(55)	●	●	
	BU145 R/L(48)	●	●										CSSP R/L16CA(55)	●	●	CSSE R/L16CA(55)	●	●				
 15°	BU152 R/L(24)	●	●				MSKN4 R/L(38)	●	●	SSKP R/L- 8CA(30)	●	●	CSKP R/L 8CA(30)	●	●	CSKE R/L 8CA(30)	●	●	PSKN R/L10CA(38)	●	●	
	BU153 R/L(30)	●	●							SSKP R/L-10CA(38)	●	●	CSKP R/L10CA(38)	●	●	CSKE R/L10CA(38)	●	●	PSKN R/L12CA(50)	●	●	
	BU154 R/L(38)	●	●										CSKP R/L12CA(50)	●	●	CSKE R/L12CA(50)	●	●	PSKN R/L16CA(55)	●	●	
	BU155 R/L(48)	●	●										CSKP R/L16CA(55)	●	●	CSKE R/L16CA(55)	●	●	PSKN R/L20CA(70)	●	●	
 5°	BU183 R/L(30)	●		MSYP04 R/L(24)	●	●	MSYN4 R/L(38)	●	●	SSYP R/L- 8CA(30)	●	●	CSYP R/L 8CA(30)	●	●	CSYE R/L 8CA(30)	●	●	PSYN R/L10CA(38)	●	●	
	BU184 R/L(38)	●								SSYP R/L-10CA(38)	●	●	CSYP R/L10CA(38)	●	●	CSYE R/L10CA(38)	●	●	PSYN R/L12CA(50)	●	●	
	BU185 R/L(48)	●											CSYP R/L12CA(50)	●	●	CSYE R/L12CA(50)	●	●	PSYN R/L16CA(55)	●	●	
 0°	BU194 R/L(30)	●																				
	BU195 R/L(38)	●																				
 5°							MCLN4 R/L(38)	●	●	SXLP R 8CA(30)	●	—							PCLN R/L12CA(50)	●	●	
										SXLP R 10CA(38)	●	—							PCLN R/L16CA(55)	●	●	
										SCLC R/L 10CA(56)	●	●							PCLN R/L20CA(70)	●	●	
 0°							MCFN4 R/L(38)	●	●	SXFP R 8CA(30)	●	—										
										SXFP R 10CA(38)	●	—										
										SCFC R/L 10CA(56)	●	●										
 10°							MCGN4 R/L(38)	●	●													
 3°							MDJN4 R/L(38)	●	●													
 30°										SDAC R/L 10CA(56)	●	●										
 25°										SDBC R/L 10CA(56)	●	●										

*Inserts and wrenches are not included with Cartridge Units.

Boring Quills / Carbide Line Boring Bars

This section introduces an overview of the series.
Refer to the separate "SEC-Cartridge Unit/Micro Unit" catalogue for details on Micro Units (holders, inserts, spare parts) and quill unit seat machining.

Indexable Cartridges and Boring Quills



Carbide Line Boring Bar

Carbide Line Bar Equipped with Cartridges



Tooling



Tooling

Cartridges

