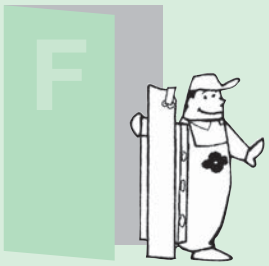
Cut-off Tools F

F67 to F96

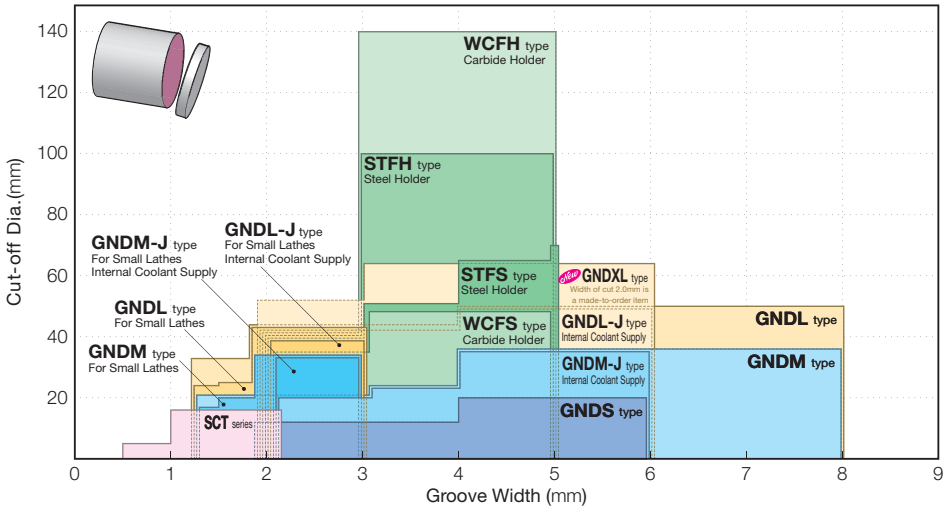


Stock Markings and Symbols

● ● 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 stocked item (please confirm stock availability)
○ mark: Stock or planned stock (please confirm stock availability)
Blank: Made-to-order item
— mark: Not available

Selection Guide

Cut-off

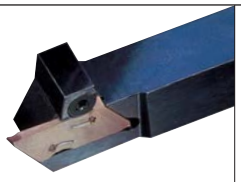


■ Range of Applications (For Solid Workpieces)

Applications	Series	Shape	Insert Shape ( ) indicates no. of cutting edges	Cut-off Dia. / Groove Width	Features
For Small Lathes	**SCT**	→ F78	(2) Right Hand Left-handed Neutral	16.0 / 2.0 / 0.5	· Ground insert with good sharpness · Can clamp even from behind · 2-cornered type inserts
For Small to Medium Diameters	**GND** For Small Lathes **GNDM/GNDM-J** **GNDL/GNDL-J**	→ F80~	(2)	32.0 / 3.0 / 1.25	· High-rigidity design and outstanding chip control · Unground 2-cornered type inserts, available with widths starting at 1.25mm
	GND **GNDS** **GNDM/GNDM-J** **GNDL/GNDL-J** **GNDXL** NEW	→ F84~	Right Hand Left-handed Neutral	50.0 / *2.0 / 8.0	· High-rigidity body, rigid clamping · Outstanding chip control · Unground 2-cornered type inserts
For Medium to Large Diameters	**STFH** **STFS** (SumiGrip Jr.)	→ F70 / F72	(1) Right Hand Left-handed Neutral	100.0 / 5.0 / 2.0	· Can be used for large diameter cut-off up to ø100mm · Economical steel shank · 1-cornered self-restrained type inserts
	WCFH **WCFS** (SumiGrip)	→ F74 / F76	(1) Right Hand Left-handed Neutral	140.0 / 5.0 / 2.0	· Can be used for large diameter cut-off up to ø140mm · High-rigidity carbide shank · 1-cornered self-restrained type inserts

* Width of cut 2.0mm is a made-to-order item.

■ Cut-off Tool series

SEC-Small Diameter Cut-off Tool Holders **SCT series**		· Our first recommendation for small lathes · Excellent sharpness suppresses cutting resistance and central pips	
SEC-Cut-off Tool Holders **GND series** GNDS type GNDM/GNDM-J type GNDL type / GNDL-J type GNDXL type NEW		· Our first recommendation for small to medium diameters · Enables stable cut-off thanks to high-rigidity body and rigid clamping	
SEC-Cut-off Tool Holders **STFH type / STFS type** Steel Shank (SumiGrip Jr.) **WCFH type / WCFS type** Carbide Shank (SumiGrip)		· Our first recommendation for medium to large diameters · Blade type is also available for cut-off up to ø140mm	

SumiGrip

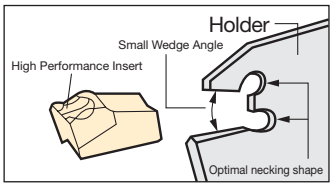
■ Features

- Available in cemented carbide holder (Sumi Grip) and steel holder (SumiGrip Jr.)
- Capable of interrupted cutting
- Can be used for cut-off, grooving, chamfering, etc.

■ Types

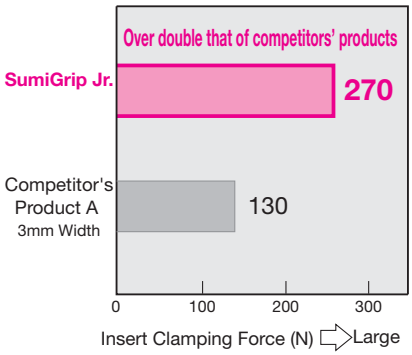
(1) Tool Block type
STFH type (Steel)/
WCFH type (Carbide)

(2) Shank type
STFS type (Steel)/
WCFS type (Carbide)

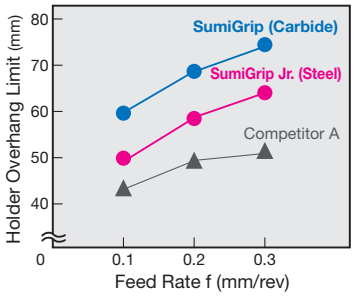


■ Cutting Performance (Holder)

● Insert Clamping Force

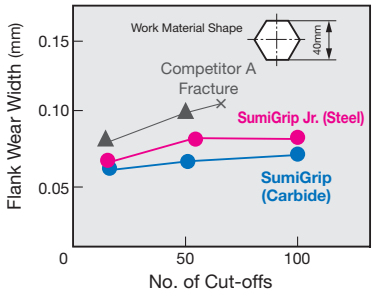


● Holder Overhang



Work Material: S45C (ø50mm, 250HB)
Cutting Conditions: vc = 80m/min Dry

● Wear Resistance



Work Material: S45C (Hex), Insert: 3mm Width Coated
Cutting Conditions: vc = 150m/min, f = 0.15mm/rev
Wet (Water Soluble)

■ GG type / GF type / CF type Chipbreaker + AC1030U

- The grooving tool GND series offers several chipbreakers for excellent chip control.
- Low cutting force chipbreaker GF type (neutral) or CF type (handed) inserts, coupled with a carbide blade, enable stable machining and prevent chattering even when machining stainless steel.
- Achieving stable long tool life with the AC1030U grade.

■ Cutting Performance (Chipbreaker)

● Chip Control (Performance)

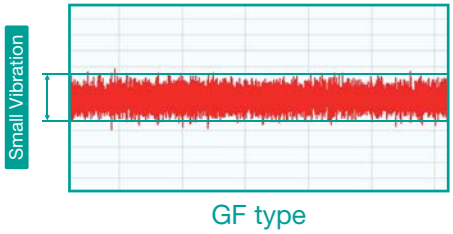

GF type


GG type

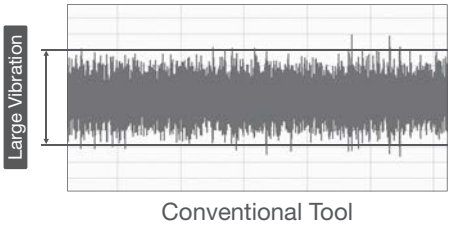

Conventional Tool

Work Material: S45C (ø40mm)
3.0mm Width Cut-off
Cutting Conditions: vc = 100m/min
f = 0.1mm/rev
Wet

● Anti-Vibration Performance



GF type



Conventional Tool

Work Material: SUS316 (ø40mm)
3.0mm Width Cut-off
Cutting Conditions: vc = 100m/min
f = 0.1mm/rev
Wet

STFH type

Cut-off

Cut-off
(Steel Holder/Tool Block type)

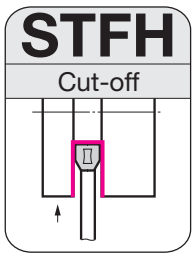
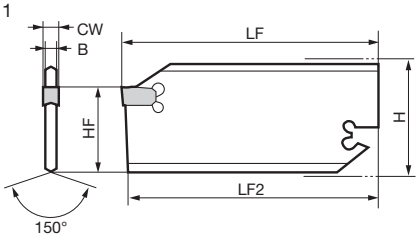
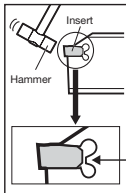


Fig 1



● Insert Mounting Method



Mount the insert by lightly knocking it in with a wooden or plastic hammer.

(Check that the insert cannot be pulled out by hand.)

There is no need to force the insert back end against the holder.

⚠ Note that driving in the insert too far may cause damage to the insert or holder.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock	Height H	Width B	Overall Length LF	Cutting Edge Height HF	Reference Length LF2	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Applicable Tool Blocks	Fig	Wrench
STFH 26-2	●	26	1.6	109	21.4	108	**2.0**	**40**	WCF○2□		1	SL-4
STFH 26-3	●	26	2.4	109	21.4	108	**3.0**	**70**	WCF○3□	SBN 20-26	1	
STFH 26-4	●	26	3.4	109	21.4	108	**4.0**	**70**	WCF○4□	SBU 20-26	1	
STFH 26-5	●	26	4.3	109	21.4	108	**5.0**	**70**	WCF○5□		1	
STFH 32-2	●	32	1.6	149	25.0	148	**2.0**	**40**	WCF○2□	SBN 20-32	1	SL-4
STFH 32-3	●	32	2.4	149	25.0	148	**3.0**	**100**	WCF○3□	SBN 25-32	1	
STFH 32-4	●	32	3.4	149	25.0	148	**4.0**	**100**	WCF○4□	SBU 20-32	1	
STFH 32-5	●	32	4.3	149	25.0	148	**5.0**	**100**	WCF○5□	SBU 25-32	1	

* The shape of STFH32-2 is slightly different from the above figure. Refer to F71 for applicable inserts.

Fig 1

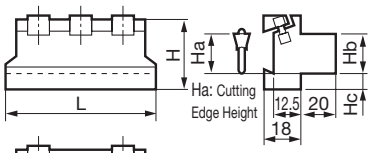


Fig 2

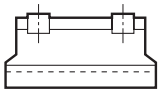


Fig 1

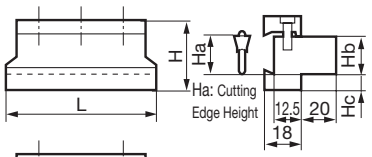
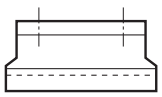


Fig 2



Tool Block SBN type (Integrated)

Parts

Dimensions (mm)

Cat. No.	Stock	Cutting Edge Height Ha	Mounting Length Hb	Mounting Position Hc	Height H	Overall Length L	Fig	Clamp Plate	Double Screw	Wrench
SBN 20-26	●	20	20	10.0	45	80	2	BWS30	WB8-20	LH040
SBN 20-32	●	20	20	13.5	50	100	1			
SBN 25-32	●	25	25	8.5	50	110	1			

Tool Block SBU type (Split type)

Parts

Dimensions (mm)

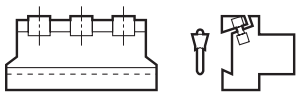
Cat. No.	Stock	Cutting Edge Height Ha	Mounting Length Hb	Mounting Position Hc	Height H	Overall Length L	Fig	Clamp Wedge	Cap Screw	Wrench
SBU 20-26	●	20	20	10.0	45	80	2	BCS15	BX0622	LH050
SBU 20-32	●	20	20	13.5	50	100	1	BCS20		
SBU 25-32	●	25	25	8.5	50	110	1	BCS25		

BCS15
BCS20
BCS25

Tool Block type Selection Guide

Integrated type

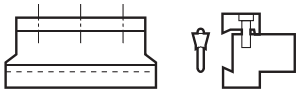
SBN type Example: SBN20-32



· Applicable to toolpost **A** shown on the right.

Split type

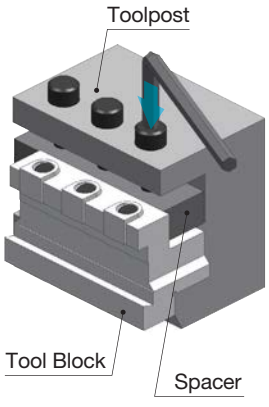
SBU type Example: SBU20-32



· Applicable to toolposts **A** **B** shown on the right.
· Large clamp plate ensures a wide clamp area that enables long holder overhang.

A General-purpose Lathe, etc.

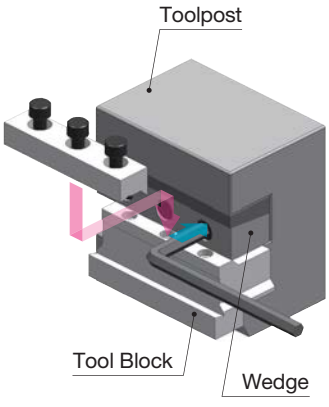
SBN type | SBU type



(Clamp from above)

B Turret type Toolpost, etc.

SBU type



(Clamp from the side)

STFH type

Fig 1 (Neutral (N))

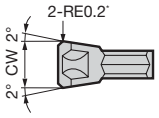


Fig 2 (Right Hand (R))

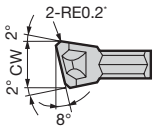
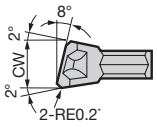


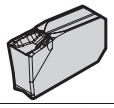
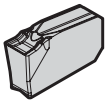
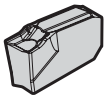
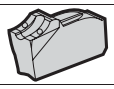
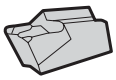
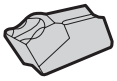
Fig 3 (Left Hand (L))



* WCF□ 2T: 2-RE0.15

Inserts for STFH (SumiGrip / SumiGrip Jr. common) (Coated Carbide / Cermet / Cemented Carbide)

Dimensions (mm)

Appearance	Cat. No.	AC830P	AC225	AC1030U	T1500A	A30	G10E	Width of Cut CW	Applicable Holder	Fig
WCF N○-GG General-purpose 	**WCF N2-GG**	●	—		—	—	—	**2.0**	STFH ○○-2	1
	WCF N3-GG	●	—		—	—	—	**3.0**	STFH ○○-3	1
	WCF N4-GG	●	—		—	—	—	**4.0**	STFH ○○-4	1
	WCF N5-GG	●	—		—	—	—	**5.0**	STFH ○○-5	1
WCF N○-GF Exotic Alloy Low Feed 	**WCF N2-GF**		—	●	—	—	—	**2.0**	STFH ○○-2	1
	WCF N3-GF		—	●	—	—	—	**3.0**	STFH ○○-3	1
	WCF N4-GF		—	●	—	—	—	**4.0**	STFH ○○-4	1
	WCF N5-GF		—	●	—	—	—	**5.0**	STFH ○○-5	1
WCF □○-CF Exotic Alloy Low Feed (Handed) 	**WCF R3-CF**		—	●	—	—	—	**3.0**	STFH ○○-3	2
	WCF L3-CF		—	●	—	—	—	**3.0**		3
	WCF R4-CF		—	●	—	—	—	**4.0**	STFH ○○-4	2
	WCF L4-CF		—	●	—	—	—	**4.0**		3
WCF □2T Small Diameter Low Cutting Force 	**WCF N2T**	●	—	—	—	—	—	**2.0**	STFH ○○-2	1
	WCF R2T	●	—	—	—	—	—	**2.0**		2
	WCF L2T	●	—	—	—	—	—	**2.0**		3
WCF □○ No Chipbreaker For General Steel 	**WCF N3**	●	—	—	—	—	—	**3.0**	STFH ○○-3	1
	WCF R3	●	—	—	—	—	—	**3.0**		2
	WCF L3	●	—	—	—	—	—	**3.0**		3
	WCF N4	●	—	—	—	—	—	**4.0**	STFH ○○-4	1
	WCF R4	●	—	—	—	—	—	**4.0**		2
	WCF L4	●	—	—	—	—	—	**4.0**		3
	WCF N5	●	—	—	—	—	—	**5.0**	STFH ○○-5	1
	WCF R5	●	—	—	—	—	—	**5.0**		2
	WCF L5	●	—	—	—	—	—	**5.0**		3
WCF □○A Exotic Alloy Low Feed 	**WCF N2A**		●	—	—			**2.0**	STFH ○○-2	1
	WCF N3A		●	—	●	●	●	**3.0**	STFH ○○-3	1
	WCF R3A		●	—		●		**3.0**		2
	WCF L3A		●	—	—			**3.0**		3
	WCF N4A		●	—	●			**4.0**	STFH ○○-4	1
	WCF R4A		●	—	—			**4.0**		2
	WCF L4A		●	—	—			**4.0**		3
	WCF N5A		●	—	—			**5.0**	STFH ○○-5	1
	WCF R5A		—	—	—			**5.0**		2
	WCF L5A		—	—	—			**5.0**		3
WCF □○B Cast Iron Light Alloys 	**WCF N3B**		—	—	—	—	●	**3.0**	STFH ○○-3	1
	WCF R3B		—	—	—	—	●	**3.0**		2
	WCF L3B		—	—	—	—	●	**3.0**		3
	WCF N4B		—	—	—	—	●	**4.0**	STFH ○○-4	1
	WCF R4B		—	—	—	—	●	**4.0**		2
	WCF L4B		—	—	—	—		**4.0**		3
* Same chipbreaker shape as the type for general steel (WCF□○), but with smaller cutting edge treatment.	**WCF N5B**		—	—	—	—	●	**5.0**	STFH ○○-5	1
	WCF R5B		—	—	—	—		**5.0**		2
	WCF L5B		—	—	—	—	●	**5.0**		3

Recommended Cutting Conditions

Work Material		Cutting Speed **vc** (m/min)					
		Coated Carbide			Cermet	Cemented Carbide	
		AC830P	AC225	AC1030U	T1500A	A30	G10E
P Steel	General Steel	80 to 200	80 to 200	50 to 200	80 to 200	50 to 120	—
	Mild Steel	100 to 230	100 to 230	50 to 230	100 to 230	70 to 150	—
	Die Steel	60 to 150	60 to 150	50 to 150	60 to 150	50 to 120	—
M Stainless Steel		70 to 150	60 to 150	50 to 150	—	70 to 130	—
K Cast Iron		—	—	50 to 200	—	—	50 to 120
N Non-Ferrous Metal		—	—	200 to 500	—	—	200 to 500

Chipbreaker		Feed Rate **f** (mm/rev)										
		Neutral						Handed				
		GG	**GF**	No Chipbreaker	**T**	**A**	**B**	No Chipbreaker	**CF**	**T**	**A**	**B**
		General-purpose	Exotic Alloy/Low Cutting Force type	General Steel	Small Diameter/ Low Cutting Force	Exotic Alloy/Low Feed	Cast Iron/Light Alloys	General Steel	Exotic Alloy/Low Cutting Force type	Small Diameter/ Low Cutting Force	Exotic Alloy/Low Feed	Cast Iron/Light Alloys
Width of Cut CW (mm)	**2.0**	0.05 to 0.20	0.03 to 0.12	—	0.03 to 0.10	0.03 to 0.12	—	—	—	0.03 to 0.10	—	—
	3.0	0.08 to 0.25	0.04 to 0.15	0.08 to 0.25	—	0.04 to 0.15	0.05 to 0.15	0.08 to 0.25	0.05 to 0.12	—	0.04 to 0.15	0.05 to 0.15
	4.0	0.10 to 0.30	0.05 to 0.18	0.10 to 0.30	—	0.05 to 0.18	0.05 to 0.18	0.10 to 0.30	0.05 to 0.12	—	0.05 to 0.18	0.05 to 0.18
	5.0	0.10 to 0.35	0.05 to 0.20	0.10 to 0.30	—	0.05 to 0.20	0.06 to 0.20	0.10 to 0.30	—	—	—	0.06 to 0.20

STFS type

Cut-off

For Cut-off
(Steel Holder/Shank type)

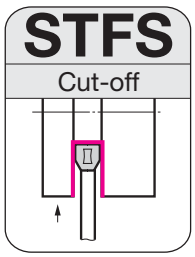


Fig 1

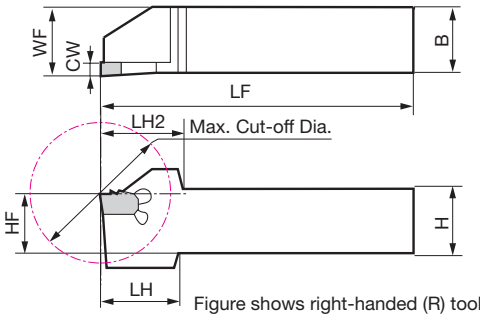
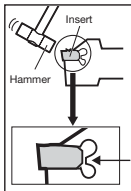


Figure shows right-handed (R) tool.

● Insert Mounting Method



Mount the insert by lightly knocking it in with a wooden or plastic hammer.

(Check that the insert cannot be pulled out by hand.)

There is no need to force the insert back end against the holder.

⚠ Note that driving in the insert too far may cause damage to the insert or holder.

Holder

Parts Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Head LH2	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Wrench
STFS R/L1010-2	●	●	10	10	86	10	10	17	17	**2.0**	**28**	WCF○2□	1	SL-4
STFS R/L1212-2	●	●	12	12	110	12	12	18	18	**2.0**	**30**		1	
STFS R/L1616-2	●	●	16	16	110	16	16	—	19	**2.0**	**32**		1	
STFS R/L2020-2	●	●	20	20	125	20	20	—	24	**2.0**	**40**		1	
STFS R/L1616-3	●	●	16	16	110	16	16	20	22	**3.0**	**35**	WCF○3□	1	SL-4
STFS R/L2012-3	●	●	20	12	110	12	20	—	24	**3.0**	**40**		1	
STFS R/L2020-3	●	●	20	20	125	20	20	—	30	**3.0**	**50**		1	
STFS R/L2525-3	●	●	25	25	150	25	25	—	30	**3.0**	**50**		1	
STFS R/L2020-4	●	●	20	20	125	20	20	—	33	**4.0**	**55**	WCF○4□	1	SL-4
STFS R/L2525-4	●	●	25	25	150	25	25	—	38	**4.0**	**65**		1	
STFS R/L2020-5	●	●	20	20	125	20	20	—	35	**5.0**	**60**	WCF○5□	1	SL-4
STFS R/L2525-5	●	●	25	25	150	25	25	—	40	**5.0**	**70**		1	

Refer to F73 for applicable inserts.

STFS type

Fig 1 (Neutral (N))

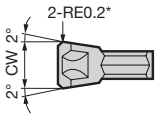


Fig 2 (Right Hand (R))

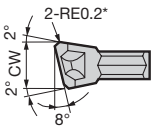
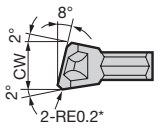


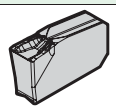
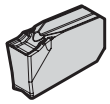
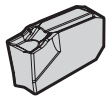
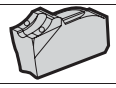
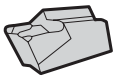
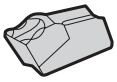
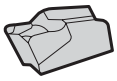
Fig 3 (Left Hand (L))



* WCF□ 2T: 2-RE0.15

Inserts for STFS (SumiGrip / SumiGrip Jr. common) (Coated Carbide / Cermet / Cemented Carbide)

Dimensions (mm)

Appearance	Cat. No.	AC830P	AC225	AC1030U	T1500A	A30	G10E	Width of Cut CW	Applicable Holder	Fig
WCF N○-GG General-purpose 	**WCF N2-GG**	●	—		—	—	—	**2.0**	STFS R/L○○○○-2	1
	WCF N3-GG	●	—		—	—	—	**3.0**	STFS R/L○○○○-3	1
	WCF N4-GG	●	—		—	—	—	**4.0**	STFS R/L○○○○-4	1
	WCF N5-GG	●	—		—	—	—	**5.0**	STFS R/L○○○○-5	1
WCF N○-GF Exotic Alloy Low Feed 	**WCF N2-GF**		—	●	—	—	—	**2.0**	STFS R/L○○○○-2	1
	WCF N3-GF		—	●	—	—	—	**3.0**	STFS R/L○○○○-3	1
	WCF N4-GF		—	●	—	—	—	**4.0**	STFS R/L○○○○-4	1
	WCF N5-GF		—	●	—	—	—	**5.0**	STFS R/L○○○○-5	1
WCF □○-CF Exotic Alloy Low Feed (Handed) 	**WCF R3-CF**		—	●	—	—	—	**3.0**	STFS R/L○○○○-3	2
	WCF L3-CF		—	●	—	—	—	**3.0**		3
	WCF R4-CF		—	●	—	—	—	**4.0**	STFS R/L○○○○-4	2
	WCF L4-CF		—	●	—	—	—	**4.0**		3
WCF □2T Small Diameter Low Cutting Force 	**WCF N2T**	●	—	—	—	—	—	**2.0**	STFS R/L○○○○-2	1
	WCF R2T	●	—	—	—	—	—	**2.0**		2
	WCF L2T	●	—	—	—	—	—	**2.0**		3
WCF □○ No Chipbreaker For General Steel 	**WCF N3**	●	—	—	—	—	—	**3.0**	STFS R/L○○○○-3	1
	WCF R3	●	—	—	—	—	—	**3.0**		2
	WCF L3	●	—	—	—	—	—	**3.0**		3
	WCF N4	●	—	—	—	—	—	**4.0**	STFS R/L○○○○-4	1
	WCF R4	●	—	—	—	—	—	**4.0**		2
	WCF L4	●	—	—	—	—	—	**4.0**		3
	WCF N5	●	—	—	—	—	—	**5.0**	STFS R/L○○○○-5	1
	WCF R5	●	—	—	—	—	—	**5.0**		2
	WCF L5	●	—	—	—	—	—	**5.0**		3
WCF □○A Exotic Alloy Low Feed 	**WCF N2A**		●	—	—			**2.0**	STFS R/L○○○○-2	1
	WCF N3A		●	—	●	●	●	**3.0**	STFS R/L○○○○-3	1
	WCF R3A		●	—		●		**3.0**		2
	WCF L3A		●	—	—			**3.0**		3
	WCF N4A		●	—	●			**4.0**	STFS R/L○○○○-4	1
	WCF R4A		●	—	—			**4.0**		2
	WCF L4A		●	—	—			**4.0**		3
	WCF N5A		●	—	—			**5.0**	STFS R/L○○○○-5	1
	WCF R5A		—	—	—			**5.0**		2
	WCF L5A		—	—	—			**5.0**		3
WCF □○B Cast Iron Light Alloys 	**WCF N3B**		—	—	—	—	●	**3.0**	STFS R/L○○○○-3	1
	WCF R3B		—	—	—	—	●	**3.0**		2
	WCF L3B		—	—	—	—	●	**3.0**		3
	WCF N4B		—	—	—	—	●	**4.0**	STFS R/L○○○○-4	1
	WCF R4B		—	—	—	—	●	**4.0**		2
	WCF L4B		—	—	—	—		**4.0**		3
	WCF N5B		—	—	—	—	●	**5.0**	STFS R/L○○○○-5	1
	WCF R5B		—	—	—	—		**5.0**		2
	WCF L5B		—	—	—	—	●	**5.0**		3

* Same chipbreaker shape as the type for general steel (WCF□○), but with smaller cutting edge treatment.

Recommended Cutting Conditions

Work Material		Cutting Speed vc (m/min)					
		Coated Carbide			Cermet	Cemented Carbide	
		AC830P	AC225	AC1030U	T1500A	A30	G10E
P Steel	General Steel	80 to 200	80 to 200	50 to 200	80 to 200	50 to 120	—
	Mild Steel	100 to 230	100 to 230	50 to 230	100 to 230	70 to 150	—
	Die Steel	60 to 150	60 to 150	50 to 150	60 to 150	50 to 120	—
M Stainless Steel		70 to 150	60 to 150	50 to 150	—	70 to 130	—
K Cast Iron		—	—	50 to 200	—	—	50 to 120
N Non-Ferrous Metal		—	—	200 to 500	—	—	200 to 500

Chipbreaker		Feed Rate f (mm/rev)										
		Neutral						Handed				
		GG	GF	No Chipbreaker	T	A	B	No Chipbreaker	CF	T	A	B
		General-purpose	Exotic Alloy/Low Cutting Force type	General Steel	Small Diameter/ Low Cutting Force	Exotic Alloy/Low Feed	Cast Iron/Light Alloys	General Steel	Exotic Alloy/Low Cutting Force type	Small Diameter/ Low Cutting Force	Exotic Alloy/Low Feed	Cast Iron/Light Alloys
Width of Cut CW (mm)	**2.0**	0.05 to 0.20	0.03 to 0.12	—	0.03 to 0.10	0.03 to 0.12	—	—	—	0.03 to 0.10	—	—
	3.0	0.08 to 0.25	0.04 to 0.15	0.08 to 0.25	—	0.04 to 0.15	0.05 to 0.15	0.08 to 0.25	0.05 to 0.12	—	0.04 to 0.15	0.05 to 0.15
	4.0	0.10 to 0.30	0.05 to 0.18	0.10 to 0.30	—	0.05 to 0.18	0.05 to 0.18	0.10 to 0.30	0.05 to 0.12	—	0.05 to 0.18	0.05 to 0.18
	5.0	0.10 to 0.35	0.05 to 0.20	0.10 to 0.30	—	0.05 to 0.20	0.06 to 0.20	0.10 to 0.30	—	—	—	0.06 to 0.20

WCFH type

Cut-off

For Cut-off
(Carbide Holder/Tool Block type)

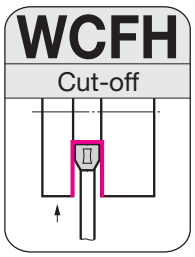


Fig 1

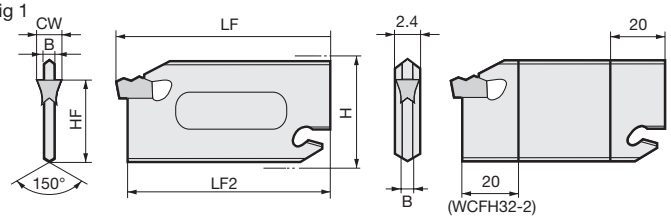
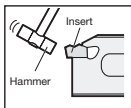


Figure shows right-handed (R) tool.

● Insert Mounting Method



Mount the insert by lightly knocking it in with a wooden or plastic hammer.
(Check that the insert cannot be pulled out by hand.)

⚠ Note that driving in the insert too far may cause damage to the insert or holder.

Holder

Parts Dimensions (mm)

Cat. No.	Stock	Height H	Width B	Overall Length LF	Cutting Edge Height HF	Reference Length LF2	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Applicable Tool Blocks	Fig	Wrench
WCFH 26-2	●	26	1.7	110	21.4	109.0	**2.0**	**40**	WCF□2○		1	SL-2
WCFH 26-3	●	26	2.4	110	21.4	108.5	**3.0**	**80**	WCF□3○	SBN 20-26	1	
WCFH 26-4	●	26	3.4	110	21.4	108.5	**4.0**	**80**	WCF□4○	SBU 20-26	1	SL-1
WCFH 26-5	●	26	4.3	110	21.4	108.5	**5.0**	**80**	WCF□5○		1	
WCFH 32-2	●	32	1.7	150	25.0	149.0	**2.0**	**40**	WCF□2○	SBN 20-32	1	SL-2
WCFH 32-3	●	32	2.4	150	25.0	148.5	**3.0**	**140**	WCF□3○	SBN 25-32	1	
WCFH 32-4	●	32	3.4	150	25.0	148.5	**4.0**	**140**	WCF□4○	SBU 20-32	1	SL-1
WCFH 32-5	●	32	4.3	150	25.0	148.5	**5.0**	**140**	WCF□5○	SBU 25-32	1	

Refer to F75 for applicable inserts.

Fig 1

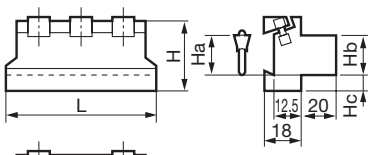


Fig 2

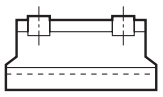


Fig 1

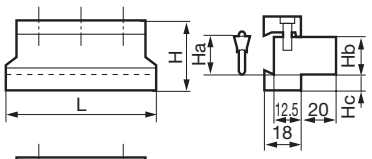
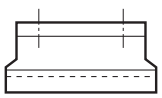


Fig 2



Tool Block SBN type (Integrated) Parts

Dimensions (mm)

Cat. No.	Stock	Cutting Edge Height Ha	Mounting Length Hb	Mounting Position Hc	Height H	Overall Length L	Fig	Clamp Plate	Double Screw	Wrench
SBN 20-26	●	20	20	10.0	45	80	2			
SBN 20-32	●	20	20	13.5	50	100	1	BWS30	WB8-20	LH040
SBN 25-32	●	25	25	8.5	50	110	1			

Tool Block SBU type (Split type) Parts

Dimensions (mm)

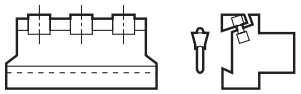
Cat. No.	Stock	Cutting Edge Height Ha	Mounting Length Hb	Mounting Position Hc	Height H	Overall Length L	Fig	Clamp Wedge	Cap Screw	Wrench
SBU 20-26	●	20	20	10.0	45	80	2	BCS15		
SBU 20-32	●	20	20	13.5	50	100	1	BCS20	BX0622	LH050
SBU 25-32	●	25	25	8.5	50	110	1	BCS25		

BCS15 BCS20 BCS25

Tool Block type Selection Guide

Integrated type

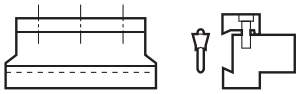
SBN type Example: SBN20-32



· Applicable to toolpost **A** shown on the right.

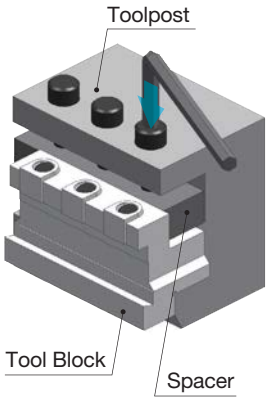
Split type

SBU type Example: SBU20-32



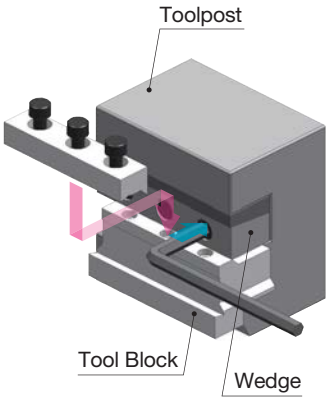
· Applicable to toolposts **A** **B** shown on the right.
· Large clamp plate ensures a wide clamp area that enables long holder overhang.

A General-purpose Lathe, etc.
SBN type | SBU type



(Clamp from above)

B Turret type Toolpost, etc.
SBU type



(Clamp from the side)

SumiGrip

WCFH type

Fig 1 (Neutral (N))

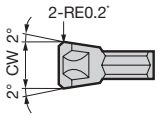


Fig 2 (Right Hand (R))

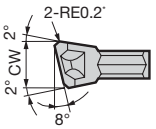
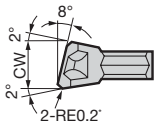


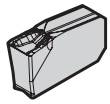
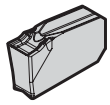
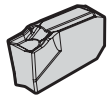
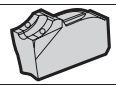
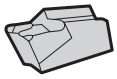
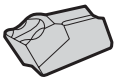
Fig 3 (Left Hand (L))



* WCF□ 2T: 2-RE0.15

Inserts for WCFH (SumiGrip / SumiGrip Jr. common) (Coated Carbide / Cermet / Cemented Carbide)

Dimensions (mm)

Appearance	Cat. No.	AC830P	AC225	AC1030U	T1500A	A30	G10E	Width of Cut CW	Applicable Holder	Fig
WCF N○-GG General-purpose 	**WCF N2-GG**	●	—		—	—	—	**2.0**	WCFH ○○-2	1
	WCF N3-GG	●	—		—	—	—	**3.0**	WCFH ○○-3	1
	WCF N4-GG	●	—		—	—	—	**4.0**	WCFH ○○-4	1
	WCF N5-GG	●	—		—	—	—	**5.0**	WCFH ○○-5	1
WCF N○-GF Exotic Alloy Low Feed 	**WCF N2-GF**		—	●	—	—	—	**2.0**	WCFH ○○-2	1
	WCF N3-GF		—	●	—	—	—	**3.0**	WCFH ○○-3	1
	WCF N4-GF		—	●	—	—	—	**4.0**	WCFH ○○-4	1
	WCF N5-GF		—	●	—	—	—	**5.0**	WCFH ○○-5	1
WCF □○-CF Exotic Alloy Low Feed (Handed) 	**WCF R3-CF**		—	●	—	—	—	**3.0**	WCFH ○○-3	2
	WCF L3-CF		—	●	—	—	—	**3.0**		3
	WCF R4-CF		—	●	—	—	—	**4.0**	WCFH ○○-4	2
	WCF L4-CF		—	●	—	—	—	**4.0**		3
WCF □2T Small Diameter Low Cutting Force 	**WCF N2T**	●	—	—	—	—	—	**2.0**	WCFH ○○-2	1
	WCF R2T	●	—	—	—	—	—	**2.0**		2
	WCF L2T	●	—	—	—	—	—	**2.0**		3
WCF □○ No Chipbreaker For General Steel 	**WCF N3**	●	—	—	—	—	—	**3.0**	WCFH ○○-3	1
	WCF R3	●	—	—	—	—	—	**3.0**		2
	WCF L3	●	—	—	—	—	—	**3.0**		3
	WCF N4	●	—	—	—	—	—	**4.0**	WCFH ○○-4	1
	WCF R4	●	—	—	—	—	—	**4.0**		2
	WCF L4	●	—	—	—	—	—	**4.0**		3
	WCF N5	●	—	—	—	—	—	**5.0**	WCFH ○○-5	1
	WCF R5	●	—	—	—	—	—	**5.0**		2
	WCF L5	●	—	—	—	—	—	**5.0**		3
WCF □○A Exotic Alloy Low Feed 	**WCF N2A**		●	—	—			**2.0**	WCFH ○○-2	1
	WCF N3A		●	—	●	●	●	**3.0**	WCFH ○○-3	1
	WCF R3A		●	—		●		**3.0**		2
	WCF L3A		●	—	—			**3.0**		3
	WCF N4A		●	—	●			**4.0**	WCFH ○○-4	1
	WCF R4A		●	—	—			**4.0**		2
	WCF L4A		●	—	—			**4.0**		3
	WCF N5A		●	—	—			**5.0**	WCFH ○○-5	1
	WCF R5A		—	—	—			**5.0**		2
	WCF L5A		—	—	—			**5.0**		3
WCF □○B Cast Iron Light Alloys 	**WCF N3B**		—	—	—	—	●	**3.0**	WCFH ○○-3	1
	WCF R3B		—	—	—	—	●	**3.0**		2
	WCF L3B		—	—	—	—	●	**3.0**		3
	WCF N4B		—	—	—	—	●	**4.0**	WCFH ○○-4	1
	WCF R4B		—	—	—	—	●	**4.0**		2
	WCF L4B		—	—	—	—		**4.0**		3
	WCF N5B		—	—	—	—	●	**5.0**	WCFH ○○-5	1
	WCF R5B		—	—	—	—		**5.0**		2
	WCF L5B		—	—	—	—	●	**5.0**		3

* Same chipbreaker shape as the type for general steel (WCF□○), but with smaller cutting edge treatment.

Recommended Cutting Conditions

Work Material		Cutting Speed **vc** (m/min)					
		Coated Carbide			Cermet	Cemented Carbide	
		AC830P	AC225	AC1030U	T1500A	A30	G10E
P Steel	General Steel	80 to 200	80 to 200	50 to 200	80 to 200	50 to 120	—
	Mild Steel	100 to 230	100 to 230	50 to 230	100 to 230	70 to 150	—
	Die Steel	60 to 150	60 to 150	50 to 150	60 to 150	50 to 120	—
M Stainless Steel		70 to 150	60 to 150	50 to 150	—	70 to 130	—
K Cast Iron		—	—	50 to 200	—	—	50 to 120
N Non-Ferrous Metal		—	—	200 to 500	—	—	200 to 500

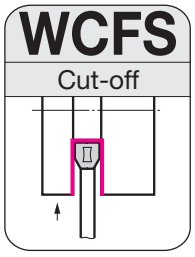
Chipbreaker		Feed Rate **f** (mm/rev)										
		Neutral						Handed				
		GG	**GF**	No Chipbreaker	**T**	**A**	**B**	No Chipbreaker	**CF**	**T**	**A**	**B**
		General-purpose	Exotic Alloy/Low Cutting Force type	General Steel	Small Diameter/ Low Cutting Force	Exotic Alloy/Low Feed	Cast Iron/Light Alloys	General Steel	Exotic Alloy/Low Cutting Force type	Small Diameter/ Low Cutting Force	Exotic Alloy/Low Feed	Cast Iron/Light Alloys
Width of Cut CW (mm)	**2.0**	0.05 to 0.20	0.03 to 0.12	—	0.03 to 0.10	0.03 to 0.12	—	—	—	0.03 to 0.10	—	—
	3.0	0.08 to 0.25	0.04 to 0.15	0.08 to 0.25	—	0.04 to 0.15	0.05 to 0.15	0.08 to 0.25	0.05 to 0.12	—	0.04 to 0.15	0.05 to 0.15
	4.0	0.10 to 0.30	0.05 to 0.18	0.10 to 0.30	—	0.05 to 0.18	0.05 to 0.18	0.10 to 0.30	0.05 to 0.12	—	0.05 to 0.18	0.05 to 0.18
	5.0	0.10 to 0.35	0.05 to 0.20	0.10 to 0.30	—	0.05 to 0.20	0.06 to 0.20	0.10 to 0.30	—	—	—	0.06 to 0.20

WCFS type

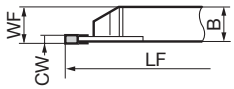
Cut-off

For Cut-off
(Carbide Holder/Shank type)

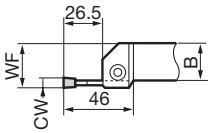
WCFS
Cut-off



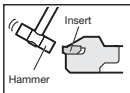
Brazed Blade type



Blade Clamp type



● Insert Mounting Method



Mount the insert by lightly knocking it in with a wooden or plastic hammer.
(Check that the insert cannot be pulled out by hand.)

⚠ Note that driving in the insert too far may cause damage to the insert or holder.

Fig 1

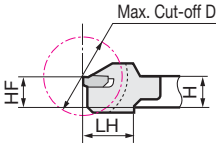


Fig 2

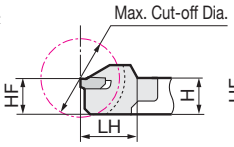


Fig 3

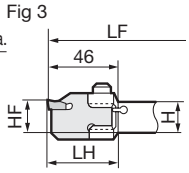


Fig 4

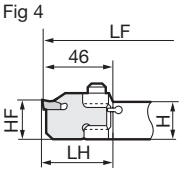


Figure shows right-handed (R) tool.

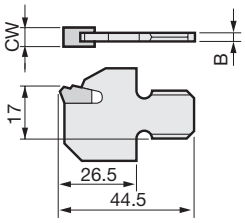
Holder

Parts Dimensions (mm)

Type	Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Height HF	Head LH	Width of Cut CW	Max. Cut-off Dia.	Applicable Blades	Applicable Insert	Fig	Wrench
Brazed type	**WCFS R/L1010-2**	●	●	10	10	86	10	10	**2.0**	**28**	—	WCF□2○	1	
	R/L1212-2	●	●	12	12	110	12	18	**2.0**	**30**	—	WCF□2○	1	SL-2
	R/L1616-2	●	●	16	16	100	16	25	**2.0**	**35**	—	WCF□2○	2	
	R/L1616-3	●	●	16	16	100	16	25	**3.0**	**35**	—	WCF□3○	2	SL-1
Clamp type	**WCFS R/L20-3**	●	●	20	20	125	20	46	**3.0**	**50**	WCFH17-3	WCF□3○	3	
	R/L20-4	●	●	20	20	125	20	46	**4.0**	**50**	WCFH17-4	WCF□4○	3	SL-1
	R/L20-5	●		20	20	125	20	46	**5.0**	**50**	WCFH17-5	WCF□5○	3	
	WCFS R/L25-3	●	●	25	25	150	25	46	**3.0**	**50**	WCFH17-3	WCF□3○	4	
	R/L25-4	●	●	25	25	150	25	46	**4.0**	**50**	WCFH17-4	WCF□4○	4	SL-1
	R/L25-5	●		25	25	150	25	46	**5.0**	**50**	WCFH17-5	WCF□5○	4	

Refer to F77 for applicable inserts. Blade is included with the holder.

Fig 1



Blade

Dimensions (mm)

Cat. No.	Stock	Width of Cut CW	Width B	Applicable Holder
WCFH 17-3	●	**3**	2.4	WCFS R/L20-3,25-3
WCFH 17-4	●	**4**	3.4	WCFS R/L20-4,25-4
WCFH 17-5	●	**5**	4.3	WCFS R/L20-5,25-5

Parts

Applicable Holder	Cap Screw	Wrench
WCFS R/L20-○, WCFS R/L25-○	BX0622	LH050

WCFS type

Fig 1 (Neutral (N))

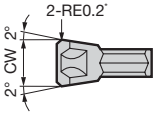


Fig 2 (Right Hand (R))

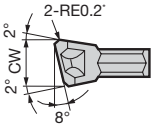
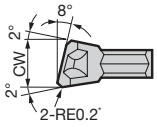


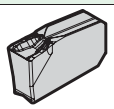
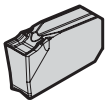
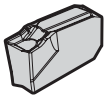
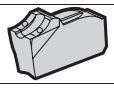
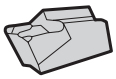
Fig 3 (Left Hand (L))



* WCF□ 2T: 2-RE0.15

Inserts for WCFS (SumiGrip / SumiGrip Jr. common) (Coated Carbide / Cermet / Cemented Carbide)

Dimensions (mm)

Appearance	Cat. No.	AC830P	AC225	AC1030U	T1500A	A30	G10E	Width of Cut CW	Applicable Holder	Fig
WCF N○-GG General-purpose 	**WCF N2-GG**	●	—		—	—	—	**2.0**	WCFS R/L○○○○-2	1
	WCF N3-GG	●	—		—	—	—	**3.0**	WCFS R/L○○○○-3,WCFS R/L○○-3	1
	WCF N4-GG	●	—		—	—	—	**4.0**	WCFS R/L○○-4	1
	WCF N5-GG	●	—		—	—	—	**5.0**	WCFS R/L○○-5	1
WCF N○-GF Exotic Alloy Low Feed 	**WCF N2-GF**		—	●	—	—	—	**2.0**	WCFS R/L○○○○-2	1
	WCF N3-GF		—	●	—	—	—	**3.0**	WCFS R/L○○○○-3,WCFS R/L○○-3	1
	WCF N4-GF		—	●	—	—	—	**4.0**	WCFS R/L○○-4	1
	WCF N5-GF		—	●	—	—	—	**5.0**	WCFS R/L○○-5	1
WCF □○-CF Exotic Alloy Low Feed (Handed) 	**WCF R3-CF**		—	●	—	—	—	**3.0**	WCFS R/L○○○○-3	2
	WCF L3-CF		—	●	—	—	—	**3.0**	WCFS R/L○○-3	3
	WCF R4-CF		—	●	—	—	—	**4.0**	WCFS R/L○○-4	2
	WCF L4-CF		—	●	—	—	—	**4.0**		3
WCF □2T Small Diameter Low Cutting Force 	**WCF N2T**	●	—	—	—	—	—	**2.0**	WCFS R/L○○○○-2	1
	WCF R2T	●	—	—	—	—	—	**2.0**		2
	WCF L2T	●	—	—	—	—	—	**2.0**		3
WCF □○ No Chipbreaker For General Steel 	**WCF N3**	●	—	—	—	—	—	**3.0**	WCFS R/L○○○○-3	1
	WCF R3	●	—	—	—	—	—	**3.0**	WCFS R/L○○-3	2
	WCF L3	●	—	—	—	—	—	**3.0**		3
	WCF N4	●	—	—	—	—	—	**4.0**	WCFS R/L○○-4	1
	WCF R4	●	—	—	—	—	—	**4.0**		2
	WCF L4	●	—	—	—	—	—	**4.0**		3
	WCF N5	●	—	—	—	—	—	**5.0**	WCFS R/L○○-5	1
	WCF R5	●	—	—	—	—	—	**5.0**		2
	WCF L5	●	—	—	—	—	—	**5.0**		3
WCF □○A Exotic Alloy Low Feed 	**WCF N2A**		●	—	—			**2.0**	WCFS R/L○○○○-2	1
	WCF N3A		●	—	●	●	●	**3.0**	WCFS R/L○○○○-3	1
	WCF R3A		●	—		●		**3.0**	WCFS R/L○○-3	2
	WCF L3A		●	—	—			**3.0**		3
	WCF N4A		●	—	●			**4.0**	WCFS R/L○○-4	1
	WCF R4A		●	—	—			**4.0**		2
	WCF L4A		●	—	—			**4.0**		3
	WCF N5A		●	—	—			**5.0**	WCFS R/L○○-5	1
	WCF R5A		—	—	—			**5.0**		2
	WCF L5A		—	—	—			**5.0**		3
WCF □○B Cast Iron Light Alloys 	**WCF N3B**		—	—	—	—	●	**3.0**	WCFS R/L○○○○-3	1
	WCF R3B		—	—	—	—	●	**3.0**	WCFS R/L○○-3	2
	WCF L3B		—	—	—	—	●	**3.0**		3
	WCF N4B		—	—	—	—	●	**4.0**	WCFS R/L○○-4	1
	WCF R4B		—	—	—	—	●	**4.0**		2
	WCF L4B		—	—	—	—		**4.0**		3
	WCF N5B		—	—	—	—	●	**5.0**	WCFS R/L○○-5	1
	WCF R5B		—	—	—	—		**5.0**		2
	WCF L5B		—	—	—	—	●	**5.0**		3

* Same chipbreaker shape as the type for general steel (WCF□○), but with smaller cutting edge treatment.

Recommended Cutting Conditions

Work Material		Cutting Speed vc (m/min)					
		Coated Carbide			Cermet	Cemented Carbide	
		AC830P	AC225	AC1030U	T1500A	A30	G10E
P Steel	General Steel	80 to 200	80 to 200	50 to 200	80 to 200	50 to 120	—
	Mild Steel	100 to 230	100 to 230	50 to 230	100 to 230	70 to 150	—
	Die Steel	60 to 150	60 to 150	50 to 150	60 to 150	50 to 120	—
M Stainless Steel		70 to 150	60 to 150	50 to 150	—	70 to 130	—
K Cast Iron		—	—	50 to 200	—	—	50 to 120
N Non-Ferrous Metal		—	—	200 to 500	—	—	200 to 500

Chipbreaker		Feed Rate f (mm/rev)										
		Neutral						Handed				
		GG	GF	No Chipbreaker	T	A	B	No Chipbreaker	CF	T	A	B
		General-purpose	Exotic Alloy/Low Cutting Force type	General Steel	Small Diameter/ Low Cutting Force	Exotic Alloy/Low Feed	Cast Iron/Light Alloys	General Steel	Exotic Alloy/Low Cutting Force type	Small Diameter/ Low Cutting Force	Exotic Alloy/Low Feed	Cast Iron/Light Alloys
Width of Cut CW (mm)	**2.0**	0.05 to 0.20	0.03 to 0.12	—	0.03 to 0.10	0.03 to 0.12	—	—	—	0.03 to 0.10	—	—
	3.0	0.08 to 0.25	0.04 to 0.15	0.08 to 0.25	—	0.04 to 0.15	0.05 to 0.15	0.08 to 0.25	0.05 to 0.12	—	0.04 to 0.15	0.05 to 0.15
	4.0	0.10 to 0.30	0.05 to 0.18	0.10 to 0.30	—	0.05 to 0.18	0.05 to 0.18	0.10 to 0.30	0.05 to 0.12	—	0.05 to 0.18	0.05 to 0.18
	5.0	0.10 to 0.35	0.05 to 0.20	0.10 to 0.30	—	0.05 to 0.20	0.06 to 0.20	0.10 to 0.30	—	—	—	0.06 to 0.20

SCT type

Cut-off

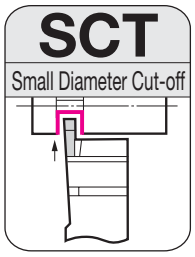


Fig 1

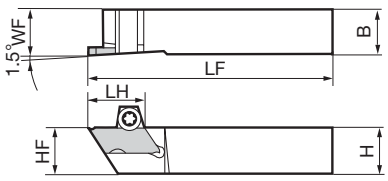


Fig 2

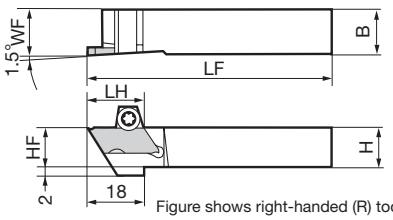


Figure shows right-handed (R) tool.

SumiSmall

Holder (Right-Hand)

Parts

Dimensions (mm)

Cat. No.	Stock	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Applicable Insert	Fig	Parts: Flat Head Screw	Parts: Wrench
SCT R1010	●	10	10	120	10	10	15	CT R05○○○○(-NB) CT R12○○○○(-NB)	1	BFTX0410T8L	TRX08
SCT R1212	●	12	12	120	12	12	15		1		
SCT R1616	●	16	16	120	16	16	15		1		
SCT R1010-16	●	10	10	120	10	10	18	CT R16○○○○(-NB)	2	BFTX0410T8L	TRX08
SCT R1212-16	●	12	12	120	12	12	18		1		
SCT R1616-16	●	16	16	120	16	16	18		1		

Holder (Left-Hand)

Parts

Dimensions (mm)

Cat. No.	Stock	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Applicable Insert	Fig	Parts: Flat Head Screw	Parts: Wrench
SCT L1010	●	10	10	120	10	10	15	CT L05○○○○(-NB) CT L12○○○○(-NB)	1	BFTX0410T8R	TRX08
SCT L1212	●	12	12	120	12	12	15		1		
SCT L1616	●	16	16	120	16	16	15		1		
SCT L1010-16	●	10	10	120	10	10	18	CT L16○○○○(-NB)	2	BFTX0410T8R	TRX08
SCT L1212-16	●	12	12	120	12	12	18		1		
SCT L1616-16	●	16	16	120	16	16	18		1		

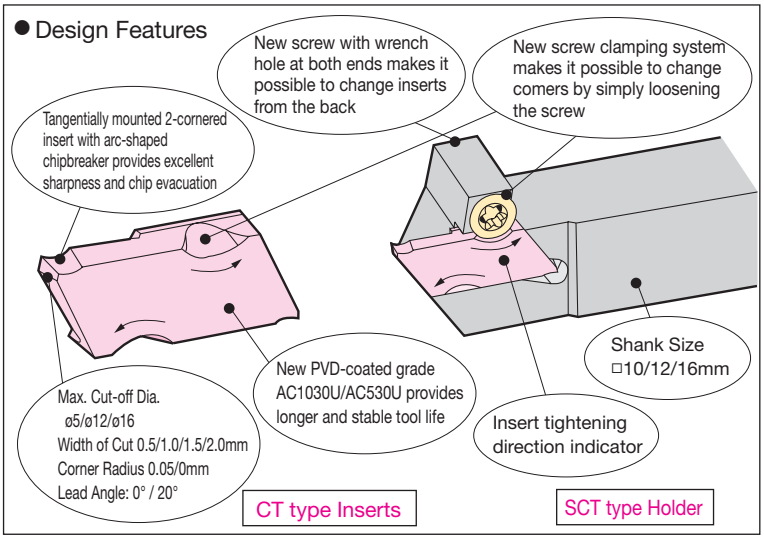
Features

● **Simple Indexable Inserts**
New clamping system makes it possible to change corners simply by loosening the screw from the back

● **High Quality Surface Finish**
Excellent chip removal, leaves only a small pip at center of the work face.

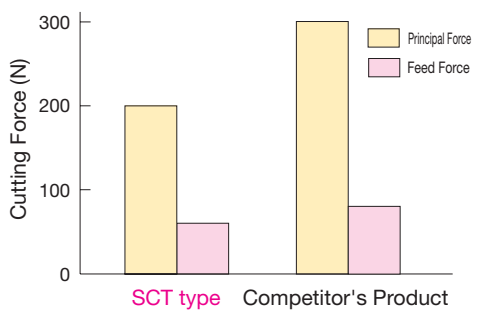
● **Long, Stable Tool Life**
PVD Coating
Long, stable tool life with AC1030U/AC530U

● Design Features



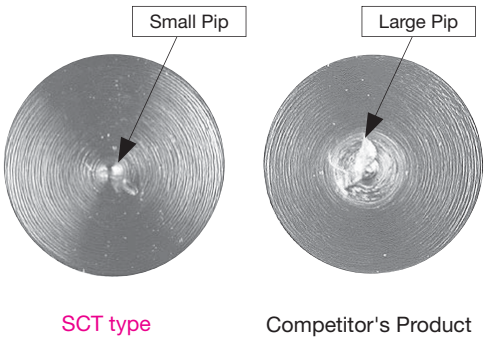
Cutting Performance

● Cutting Force



Work Material: S45C (ø10mm) Width of Cut: 1.5mm
vc = 60m/min, f = 0.06mm/rev Wet

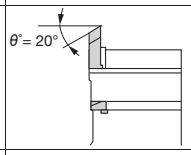
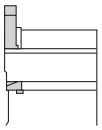
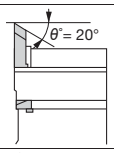
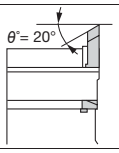
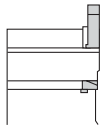
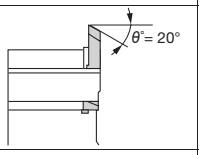
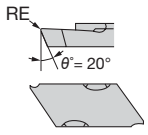
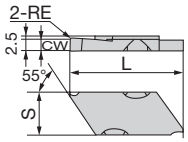
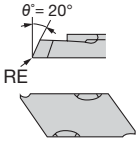
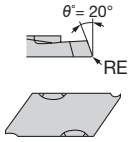
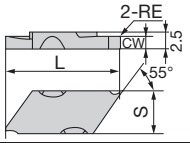
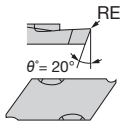
● Surface Finish



Work Material: SUS430 (ø8mm) Width of Cut: 1.0mm (Handed)
vc = 45m/min, f = 0.02mm/rev Wet

SCT type

Insert Mounting Status and Dimensions (Figure shows insert with chipbreaker)

Holder Feed Direction	For Right-handed Holder (SCTR)			For Left-handed Holder (SCTL)		
Insert Cat. No.	CTR○○R	CTR○○N	CTR○○L	CTL○○R	CTL○○N	CTL○○L
Holder Mounting Status						
Insert Shape and Dimensions						

Insert (For Right-handed Holders) (Coated Carbide)

Dimensions (mm)

Cat. No.	AC1030U			AC530U			Max. Cut-off Dia.	Width of Cut	Corner Radius	Overall Length	Thickness	Chipbreaker	Applicable Holder
	R	N	L	R	N	L		CW	RE	L	S		
CTR 050505 R/N/L	●	●	●	●	●	●	**5**	**0.5**	0.05	19	7	Yes	SCT R1010 SCT R1212 SCT R1616
CTR 050500 R/N/L	●	●		●	●		**5**	**0.5**	0	19	7	Yes	
CTR 121005 R/N/L	●	●	●	●	●	●	**12**	**1.0**	0.05	19	7	Yes	
CTR 121505 R/N/L	●	●	●	●	●	●	**12**	**1.5**	0.05	19	7	Yes	
CTR 122005 R/N/L	●	●		●	●		**12**	**2.0**	0.05	19	7	Yes	
CTR 121000 R/N/L	●	●		●	●		**12**	**1.0**	0	19	7	Yes	
CTR 121500 R/N/L	●	●		●	●		**12**	**1.5**	0	19	7	Yes	
CTR 122000 R/N/L	●	●		●	●		**12**	**2.0**	0	19	7	Yes	
CTR 161005 R/N/L							**16**	**1.0**	0.05	23.1	8.3	Yes	SCT R1010-16 SCT R1212-16 SCT R1616-16
CTR 161505 R/N/L	●	●		●	●		**16**	**1.5**	0.05	23.1	8.3	Yes	
CTR 162005 R/N/L	●	●	●	●	●	●	**16**	**2.0**	0.05	23.1	8.3	Yes	
CTR 161000 R/N/L							**16**	**1.0**	0	23.1	8.3	Yes	
CTR 161500 R/N/L	●	●		●	●		**16**	**1.5**	0	23.1	8.3	Yes	
CTR 162000 R/N/L	●	●	●	●	●	●	**16**	**2.0**	0	23.1	8.3	Yes	
CTR 050500 R/N/L-NB							**5**	**0.5**	0	19	7	No	SCT R1010 SCT R1212 SCT R1616
CTR 121000 R/N/L-NB	●			●			**12**	**1.0**	0	19	7	No	
CTR 121500 R/N/L-NB	●			●			**12**	**1.5**	0	19	7	No	
CTR 122000 R/N/L-NB	●			●			**12**	**2.0**	0	19	7	No	
CTR 161000 R/N/L-NB							**16**	**1.0**	0	23.1	8.3	No	SCT R1010-16 SCT R1212-16 SCT R1616-16
CTR 161500 R/N/L-NB							**16**	**1.5**	0	23.1	8.3	No	
CTR 162000 R/N/L-NB	●			●			**16**	**2.0**	0	23.1	8.3	No	

Inserts (For Left-handed Holders) (Coated Carbide)

Dimensions (mm)

Cat. No.	AC1030U			AC530U			Max. Cut-off Dia.	Width of Cut	Corner Radius	Overall Length	Thickness	Chipbreaker	Applicable Holder
	R	N	L	R	N	L		CW	RE	L	S		
CTL 050505 R/N/L	●	●		●	●		**5**	**0.5**	0.05	19	7	Yes	SCT L1010 SCT L1212 SCT L1616
CTL 050500 R/N/L	●	●		●	●		**5**	**0.5**	0	19	7	Yes	
CTL 121005 R/N/L	●	●	●	●	●	●	**12**	**1.0**	0.05	19	7	Yes	
CTL 121505 R/N/L	●	●	●	●	●	●	**12**	**1.5**	0.05	19	7	Yes	
CTL 122005 R/N/L	●	●		●	●		**12**	**2.0**	0.05	19	7	Yes	
CTL 121000 R/N/L	●	●		●	●		**12**	**1.0**	0	19	7	Yes	
CTL 121500 R/N/L	●	●		●	●		**12**	**1.5**	0	19	7	Yes	
CTL 122000 R/N/L	●	●		●	●		**12**	**2.0**	0	19	7	Yes	
CTL 161005 R/N/L							**16**	**1.0**	0.05	23.1	8.3	Yes	SCT L1010-16 SCT L1212-16 SCT L1616-16
CTL 161505 R/N/L	●	●		●	●		**16**	**1.5**	0.05	23.1	8.3	Yes	
CTL 162005 R/N/L	●	●	●	●	●	●	**16**	**2.0**	0.05	23.1	8.3	Yes	
CTL 161000 R/N/L							**16**	**1.0**	0	23.1	8.3	Yes	
CTL 161500 R/N/L	●	●		●	●		**16**	**1.5**	0	23.1	8.3	Yes	
CTL 162000 R/N/L	●	●		●	●		**16**	**2.0**	0	23.1	8.3	Yes	
CTL 050500 R/N/L-NB							**5**	**0.5**	0	19	7	No	SCT L1010 SCT L1212 SCT L1616
CTL 121000 R/N/L-NB							**12**	**1.0**	0	19	7	No	
CTL 121500 R/N/L-NB							**12**	**1.5**	0	19	7	No	
CTL 122000 R/N/L-NB							**12**	**2.0**	0	19	7	No	
CTL 161000 R/N/L-NB							**16**	**1.0**	0	23.1	8.3	No	SCT L1010-16 SCT L1212-16 SCT L1616-16
CTL 161500 R/N/L-NB							**16**	**1.5**	0	23.1	8.3	No	
CTL 162000 R/N/L-NB							**16**	**2.0**	0	23.1	8.3	No	

GNDM type / GNDL type

Cut-off | Zero Offset

SumiSmall

GNDM

Cut-off (For Small Lathes)

Fig 1

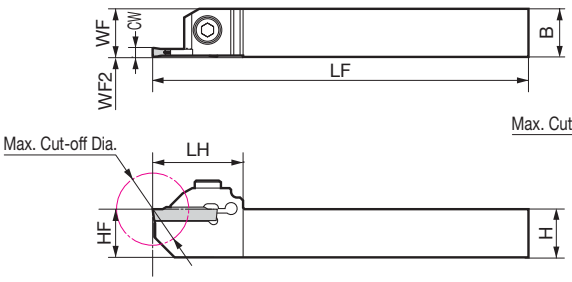


Fig 2

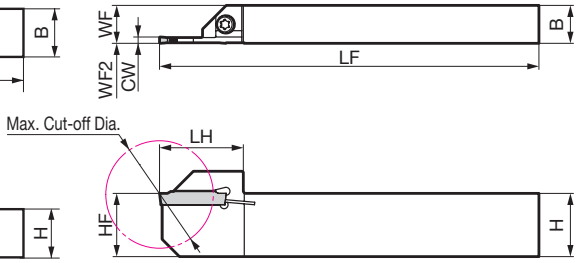


Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Offset WF2	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Cap Screw BX0515 / BFTX0414	N·m	Wrench LT15-10 / LH040
GNDM R/L1616JX-1.2508	●	●	16	16	120	(16)	16	26	0	**1.25**	**16**	GCM N125005-GF	1	BX0515	**4.0**	LH040
GNDM R/L1616JX-1.510	●	●	16	16	120	(16)	16	26	0	**1.50**	**20**	GCM N150005-GF	1			
GNDM R/L1616JX-212	●	●	16	16	120	(16)	16	30	0	**2.00**	**24**	GC□ □20○○-□□	1			
GNDM R/L1616JX-312	●	●	16	16	120	(16)	16	30	0	**3.00**	**24**	GC□ □30○○-□□	1			
GNDM R/L2012JX-217	●	●	20	12	120	(12)	20	26.5	0	**2.00**	**34**	GC□ □20○○-□□	2	BFTX0414	**3.0**	LT15-10
GNDM R/L2012JX-317	●	●	20	12	120	(12)	20	26.5	0	**3.00**	**34**	GC□ □30○○-□□	2			

Select holders and inserts with matching width of cut (CW).
Refer to F81 for applicable inserts.

Cut-off | Zero Offset

SumiSmall

GNDL

Cut-off (For Small Lathes)

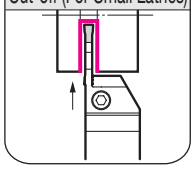


Fig 1

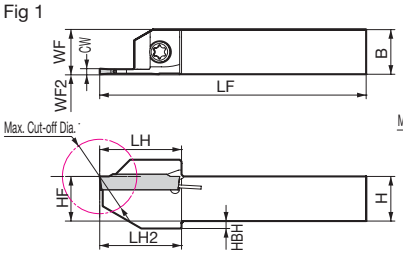


Fig 2

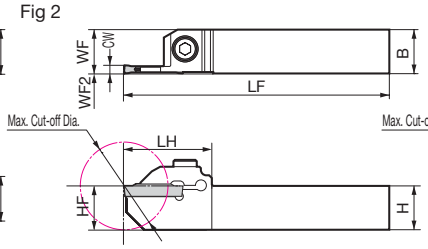


Fig 3

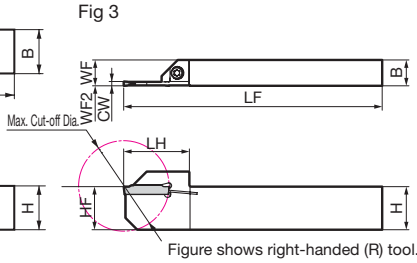


Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Step HBH	Head LH	Head LH2	Offset WF2	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Flat Head Screw / Cap Screw BFTX0412N / BFTX0414 / BX0515	N·m	Wrench LT15-10 / LH040
GNDL R/L1010JX-1.2510	●	●	10	10	120	(10)	10	2.0	18	18.3	0	**1.25**	**20**	GCM N125005-GF	1	BFTX0412N	**3.0**	LT15-10
GNDL R/L1010JX-1.510	●	●	10	10	120	(10)	10	2.0	18	18.3	0	**1.50**	**20**	GCM N150005-GF	1			
GNDL R/L1010JX-210	●	●	10	10	120	(10)	10	2.0	22	22.3	0	**2.00**	**20**	GC□ □20○○-□□	1			
GNDL R/L1010JX-310	●	●	10	10	120	(10)	10	2.0	22	22.3	0	**3.00**	**20**	GC□ □30○○-□□	1			
GNDL R/L1212JX-1.2512	●	●	12	12	120	(12)	12	2.0	19	19.3	0	**1.25**	**24**	GCM N125005-GF	1	BFTX0412N	**3.0**	LT15-10
GNDL R/L1212JX-1.512	●	●	12	12	120	(12)	12	2.0	19	19.3	0	**1.50**	**24**	GCM N150005-GF	1			
GNDL R/L1212JX-212.5	●	●	12	12	120	(12)	12	2.0	22	22.3	0	**2.00**	**25**	GC□ □20○○-□□	1			
GNDL R/L1212JX-312.5	●	●	12	12	120	(12)	12	2.0	22	22.3	0	**3.00**	**25**	GC□ □30○○-□□	1			
GNDL R/L1616JX-1.2512.5	●	●	16	16	120	(16)	16	—	28	—	0	**1.25**	**20**	GCM N125005-GF	2	BX0515	**4.0**	LH040
GNDL R/L1616JX-1.512.5	●	●	16	16	120	(16)	16	—	28	—	0	**1.50**	**25**	GCM N150005-GF	2			
GNDL R/L1616JX-216	●	●	16	16	120	(16)	16	—	32	—	0	**2.00**	**32**	GC□ □20○○-□□	2			
GNDL R/L1616JX-316	●	●	16	16	120	(16)	16	—	32	—	0	**3.00**	**32**	GC□ □30○○-□□	2			
GNDL R/L2012JX-221	●	●	20	12	120	(12)	20	—	30.5	—	0	**2.00**	**42**	GC□ □20○○-□□	3	BFTX0414	**3.0**	LT15-10
GNDL R/L2012JX-321	●	●	20	12	120	(12)	20	—	30.5	—	0	**3.00**	**42**	GC□ □30○○-□□	3			

Select holders and inserts with matching width of cut (CW).
Refer to F81 for applicable inserts.

N·m Recommended Tightening Torque (N·m)

GNDM type / GNDL type

Inserts for GNDM type (For Small Lathes)/GNDL type (For Small Lathes) (Coated Carbide/ Cermet/ Cemented Carbide)

Fig 1

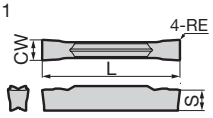
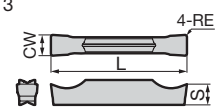


Fig 2 (Figure shows right-handed (R) tool.)

Fig 3



Grooving / Traverse Cutting

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N3002-MG	●	●		●	●	●		●	—	3.0	±0.03	0.2	21.1	3.8	5	1
N3004-MG	●	●	●	●	●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N2002-ML	—	—	—	—	●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
GCM N3002-ML	●	●	●	●	●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8	5	1
N3004-ML	●	●		●	●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1

Grooving / Cut-off

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N2002-GG		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
GCM N3002-GG		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8	5	1
N3004-GG		●	●		●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N2002-GL		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
N2004-GL		●			●	●		●	—	2.0	±0.03	0.4	21.1	3.6	5	1
GCM N3002-GL		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GL		●			●	●		●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N125005-GF	—	—	—	—	—	—	—	●	—	1.25	±0.03	0.05	17.4	3.2		1
GCM N150005-GF	—	—	—	—	—	—	—	●	—	1.5	±0.03	0.05	17.8	3.7		1
GCM N2002-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1
N2004-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GF		●	●		●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GF		●			●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1

Cut-off (Handed Edge)

Dimensions (mm)

Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	Lead Angle	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
								PSI	Width of Cut	Tolerance	RE	L	S		
GCM R2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6	5	2
L2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6		2
GCM R3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
L3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
GCM R20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6	5	2
L20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
GCM R20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
L20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2

GCMR: Right-handed, GCML: Left-handed

Non-Ferrous Metals

Dimensions (mm)

Cat. No.	H10								Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
									Width of Cut	Tolerance	RE	L	S		
GCG N2002-GA	●								2.0	±0.025	0.2	21.1	3.6	5	3
N3002-GA	●								3.0	±0.025	0.2	21.1	3.8		3

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications
Grooving / Traverse Cutting	MG	Multi-functional / General-purpose
	ML	Multi-functional / Low-feed
Grooving / Cut-off	GG	Grooving / General-purpose
	GL	Grooving / Low-feed
	GF	Grooving / Low cutting force

Type	Symbol	Applications
Cut-off (Handed Edge)	CG	Cut-off / General-purpose
	CF	Cut-off / Low cutting force
Non-Ferrous Metals	GA	Non-Ferrous Metals / General-purpose

Chipbreaker Selection F13 Precautions for Use F22 Recommended Cutting Conditions F19

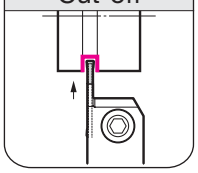
Note: The values in red have been changed from those in the 2021-2022 General Catalogue.

Select holders and inserts with matching width of cut (CW). Not usable with GNDXL type / GNDIS type holders.

GNDM-J type / GNDL-J type

GNDM-J

Cut-off



Cut-off
Zero Offset
Internal Coolant

Fig 1

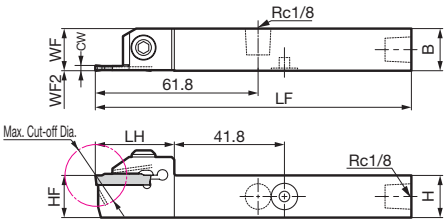


Fig 2

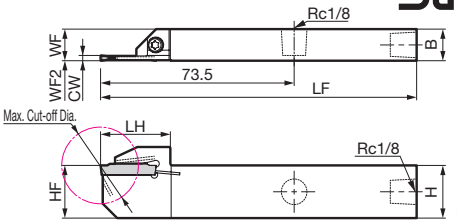
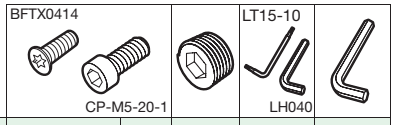


Figure shows right-handed (R) tool.

SumiSmall

■ Parts



■ Holder

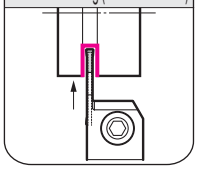
Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Offset WF2	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Flat Head Screw / Cap Screw	N·m	Plug	Top Hex Wrench	Bottom Hex Wrench
GNDM R/L1616JX-212J	●	●	16	16	120	(16)	16	30.0	0	**2.0**	**24**	GC□ □20○○-□□	1	CP-M5-20-1	**5.0**	XP02	LH040	LH025
GNDM R/L1616JX-312J	●	●	16	16	120	(16)	16	30.0	0	**3.0**	**24**	GC□ □30○○-□□	1					
GNDM R/L2012JX-217J	●	●	20	12	120	(12)	20	26.5	0	**2.0**	**34**	GC□ □20○○-□□	2	BFTX0414	**3.0**	XP02	LT15-10	—
GNDM R/L2012JX-317J	●	●	20	12	120	(12)	20	26.5	0	**3.0**	**34**	GC□ □30○○-□□	2					

Select holders and inserts with matching width of cut (CW). Refer to F83 for applicable inserts.

GNDL-J

External Grooving (for Small Lathes)



Cut-off
Zero Offset
Internal Coolant

Fig 1

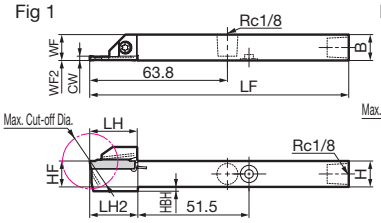


Fig 2

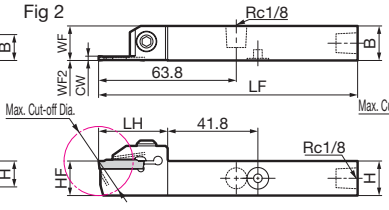


Fig 3

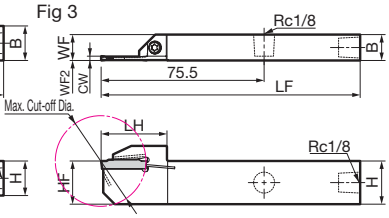
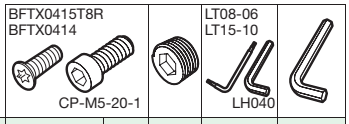


Figure shows right-handed (R) tool.

SumiSmall

■ Parts



■ Holder

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Step HBH	Head LH	Head LH2	Offset WF2	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Flat Head Screw / Cap Screw	N·m	Plug	Top Hex Wrench	Bottom Hex Wrench
GNDL R/L1212JX-212.5J	●	●	12	12	120	(12)	12	2.0	22.0	22.3	0	**2.0**	**25**	GC□ □20○○-□□	1	BFTX0415T8R	**1.5**	XP02	LT08-06	←
GNDL R/L1212JX-312.5J	●	●	12	12	120	(12)	12	2.0	22.0	22.3	0	**3.0**	**25**	GC□ □30○○-□□	1					
GNDL R/L1616JX-216J	●	●	16	16	120	(16)	16	—	32.0	—	0	**2.0**	**32**	GC□ □20○○-□□	2	CP-M5-20-1	**5.0**	XP02	LH040	LH025
GNDL R/L1616JX-316J	●	●	16	16	120	(16)	16	—	32.0	—	0	**3.0**	**32**	GC□ □30○○-□□	2					
GNDL R/L2012JX-221J	●	●	20	12	120	(12)	20	—	30.5	—	0	**2.0**	**42**	GC□ □20○○-□□	3	BFTX0414	**3.0**	XP02	LT15-10	—
GNDL R/L2012JX-321J	●	●	20	12	120	(12)	20	—	30.5	—	0	**3.0**	**42**	GC□ □30○○-□□	3					

Select holders and inserts with matching width of cut (CW). Refer to F83 for applicable inserts.

Fig 1

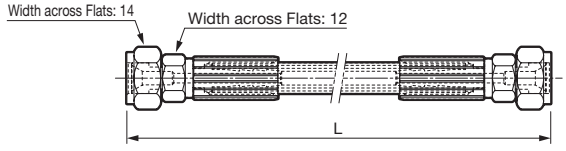


Fig 1

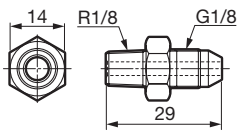
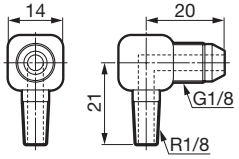


Fig 2



Parts (Hose)

Dimensions (mm)

Cat. No.	Stock	L	Screw Standard	Screw Standard	Fig
J-HOSE-G1/8-G1/8-200	●	200	G1/8	G1/8	1
J-HOSE-G1/8-G1/8-300	●	300	G1/8	G1/8	1

Hoses are sold separately.

Piping Method for Hoses and Connectors F23

Parts (Connector)

Dimensions (mm)

Cat. No.	Stock	Screw Standard	Screw Standard	Fig
J-G1/8-R1/8-00	●	G1/8	R1/8	1
J-G1/8-R1/8-90	●	G1/8	R1/8	2

Connectors are sold separately.

Piping Method for Hoses and Connectors F23

N·m Recommended Tightening Torque (N·m)

GNDM-J type / GNDL-J type

Inserts for GNDM-J type (For Small Lathes)/GNDL-J type (For Small Lathes)

(Coated Carbide/ Cermet/ Cemented Carbide)

Fig 1

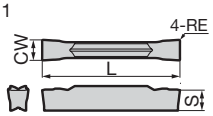
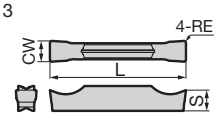


Fig 2 (Figure shows right-handed (R) tools.)

Fig 3



Grooving / Traverse Cutting

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N3002-MG	●	●		●	●	●		●	—	**3.0**	±0.03	0.2	21.1	3.8	5	1
N3004-MG	●	●	●	●	●	●	●	●	—	**3.0**	±0.03	0.4	21.1	3.8		1
GCM N2002-ML	—	—	—	—	●	●	●	●	—	**2.0**	±0.03	0.2	21.1	3.6		1
GCM N3002-ML	●	●	●	●	●	●	●	●	●	**3.0**	±0.03	0.2	21.1	3.8	5	1
N3004-ML	●	●		●	●	●		●	●	**3.0**	±0.03	0.4	21.1	3.8		1

Grooving / Cut-off

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N2002-GG		●	●		●	●	●	●	—	**2.0**	±0.03	0.2	21.1	3.6		1
GCM N3002-GG		●	●		●	●	●	●	—	**3.0**	±0.03	0.2	21.1	3.8	5	1
N3004-GG		●	●		●	●	●	●	—	**3.0**	±0.03	0.4	21.1	3.8		1
GCM N2002-GL		●	●		●	●	●	●	—	**2.0**	±0.03	0.2	21.1	3.6		1
N2004-GL		●			●	●		●	—	**2.0**	±0.03	0.4	21.1	3.6	5	1
GCM N3002-GL		●	●		●	●	●	●	—	**3.0**	±0.03	0.2	21.1	3.8		1
N3004-GL		●			●	●		●	—	**3.0**	±0.03	0.4	21.1	3.8		1
GCM N2002-GF	—	—	—	—	●	●		●	●	**2.0**	±0.03	0.2	21.1	3.6		1
N2004-GF	—	—	—	—	●	●		●	●	**2.0**	±0.03	0.4	21.1	3.6	5	1
GCM N3002-GF		●	●		●	●	●	●	●	**3.0**	±0.03	0.2	21.1	3.8		1
N3004-GF		●			●	●		●	●	**3.0**	±0.03	0.4	21.1	3.8		1

Cut-off (Handed Edge)

Dimensions (mm)

Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	Lead Angle	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
								PSI	Width of Cut	Tolerance	RE	L	S		
GCM R2002-CG-05	●	●	●	●	●	●	—	5°	**2.0**	±0.03	0.2	21.1	3.6	5	2
L2002-CG-05	●	●	●	●	●	●	—	5°	**2.0**	±0.03	0.2	21.1	3.6		2
GCM R3002-CG-05	●	●	●	●	●	●	—	5°	**3.0**	±0.03	0.2	21.3	3.8		2
L3002-CG-05	●	●	●	●	●	●	—	5°	**3.0**	±0.03	0.2	21.3	3.8		2
GCM R20003-CF-10	—	—	●	●	—	—	●	10°	**2.0**	±0.08	0.03	22.4	3.6	5	2
L20003-CF-10	—	—	●	●	—	—	●	10°	**2.0**	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-10	—	—	●	●	—	—	●	10°	**3.0**	±0.08	0.03	22.4	3.8		2
L30003-CF-10	—	—	●	●	—	—	●	10°	**3.0**	±0.08	0.03	22.4	3.8		2
GCM R20003-CF-15	—	—	●	●	—	—	●	15°	**2.0**	±0.08	0.03	22.4	3.6		2
L20003-CF-15	—	—	●	●	—	—	●	15°	**2.0**	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-15	—	—	●	●	—	—	●	15°	**3.0**	±0.08	0.03	22.4	3.8		2
L30003-CF-15	—	—	●	●	—	—	●	15°	**3.0**	±0.08	0.03	22.4	3.8		2

GCMR: Right-handed, GCML: Left-handed

Non-Ferrous Metals

Dimensions (mm)

Cat. No.	H10								Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
									Width of Cut	Tolerance	RE	L	S		
GCG N2002-GA	●								**2.0**	±0.025	0.2	21.1	3.6	5	3
N3002-GA	●								**3.0**	±0.025	0.2	21.1	3.8		3

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications
Grooving / Traverse Cutting	MG	Multi-functional / General-purpose
	ML	Multi-functional / Low-feed
Grooving / Cut-off	GG	Grooving / General-purpose
	GL	Grooving / Low-feed
	GF	Grooving / Low cutting force

Type	Symbol	Applications
Cut-off (Handed Edge)	CG	Cut-off / General-purpose
	CF	Cut-off / Low cutting force
Non-Ferrous Metals	GA	Non-Ferrous Metals / General-purpose

Chipbreaker Selection F13 Precautions for Use F22 Recommended Cutting Conditions F19

Select holders and inserts with matching width of cut (CW). Not usable with GNDXL type / GNDIS type holders.

GNDS type

External

* For traverse cutting (groove expansion), use a multi-functional or profiling insert.

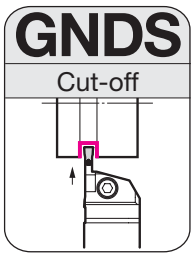


Fig 1

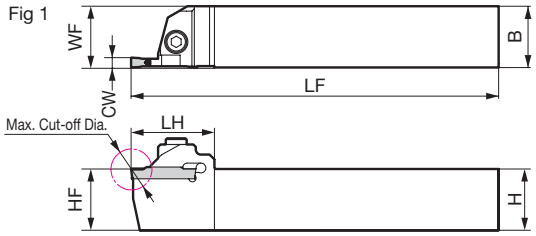


Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Cap Screw	N·m	Wrench
GNDS R/L2020K-206	●	●	20	20	125	20	20	30	**2.0**	**12**	GC□ □20○○-□□	1			
GNDS R/L2020K-306	●	●	20	20	125	20	20	30	**3.0**	**12**	GC□ □30○○-□□	1			
GNDS R/L2020K-410	●	●	20	20	125	20	20	34	**4.0**	**20**	GC□ □40○○-□□	1	BX0520	**5.0**	LH040
GNDS R/L2020K-510	●	●	20	20	125	20	20	34	**5.0**	**20**	GC□ N50○○-□□	1			
GNDS R/L2020K-610	●	●	20	20	125	20	20	34	**6.0**	**20**	GC□ N60○○-□□	1			
GNDS R/L2525M-206	●	●	25	25	150	25	25	30	**2.0**	**12**	GC□ □20○○-□□	1			
GNDS R/L2525M-306	●	●	25	25	150	25	25	30	**3.0**	**12**	GC□ □30○○-□□	1			
GNDS R/L2525M-410	●	●	25	25	150	25	25	34	**4.0**	**20**	GC□ □40○○-□□	1	BX0520	**5.0**	LH040
GNDS R/L2525M-510	●	●	25	25	150	25	25	34	**5.0**	**20**	GC□ N50○○-□□	1			
GNDS R/L2525M-610	●	●	25	25	150	25	25	34	**6.0**	**20**	GC□ N60○○-□□	1			

Select holders and inserts with matching width of cut (CW). Refer to F85 for applicable inserts.

N·m Recommended Tightening Torque (N·m)

GNDS type

Inserts for GNDS type

(Coated Carbide/ Cermet/ Cemented Carbide)

Fig 1

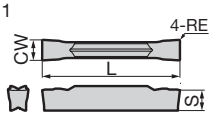
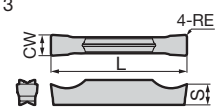


Fig 2 (Figure shows right-handed (R) tool.)

Fig 3



Grooving / Traverse Cutting

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N3002-MG	●	●		●	●	●		●	—	3.0	±0.03	0.2	21.1	3.8	5	1
N3004-MG	●	●	●	●	●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-MG	●	●		●	●	●		●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-MG	●	●		●	●	●		●	—	4.0	±0.03	0.4	26.4	4.0		1
N4008-MG	●	●	●	●	●	●	●	●	—	4.0	±0.03	0.8	26.4	4.0		1
GCM N5004-MG	●	●		●	●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-MG	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-MG	●	●		●	●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-MG	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.8	26.4	4.5		1
GCM N2002-ML	—	—	—	—	●	●	●	●	●	2.0	±0.03	0.2	21.1	3.6	5	1
GCM N3002-ML	●	●	●	●	●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-ML	●	●		●	●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-ML	●	●		●	●	●		●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-ML	●	●	●	●	●	●	●	●	●	4.0	±0.03	0.4	26.4	4.0		1
N4008-ML	●	●		●	●	●		●	●	4.0	±0.03	0.8	26.4	4.0		1
GCM N5004-ML	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-ML	●	●		●	●	●		●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-ML	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-ML	●	●		●	●	●		●	—	6.0	±0.03	0.8	26.4	4.5		1

Grooving / Cut-off

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N2002-GG		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6	5	1
GCM N3002-GG		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GG		●	●		●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GG		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GG		●	●		●	●	●	●	—	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GG		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GG		●	●		●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GG		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GG		●	●		●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N2002-GL		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6	5	1
N2004-GL		●			●	●		●	—	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GL		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GL		●			●	●		●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GL		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GL		●			●	●		●	—	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GL		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GL		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GL		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GL		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N2002-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1
N2004-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GF		●	●		●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GF		●			●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GF		●	●		●	●	●	●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-GF		●			●	●		●	●	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GF		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GF		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GF		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GF		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1

Cut-off (Handed Edge)

Dimensions (mm)

Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	Lead Angle	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
								PSI	Width of Cut	Tolerance	RE	L	S		
GCM R2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6	5	2
L2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6		2
GCM R3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
L3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
GCM R4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
L4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
GCM R20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6	5	2
L20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
GCM R20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
L20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2

GCMR: Right-handed, GCML: Left-handed

Non-Ferrous Metals

Dimensions (mm)

Cat. No.	H10								Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
									Width of Cut	Tolerance	RE	L	S		
GCG N2002-GA	●								2.0	±0.025	0.2	21.1	3.6	5	3
N3002-GA	●								3.0	±0.025	0.2	21.1	3.8		3
GCG N4004-GA	●								4.0	±0.025	0.4	26.4	4.0		3
N5004-GA	●								5.0	±0.025	0.4	26.4	4.1		3
N6004-GA	●								6.0	±0.025	0.4	26.4	4.5		3

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications
Grooving / Traverse Cutting	MG	Multi-functional / General-purpose
	ML	Multi-functional / Low-feed
Grooving / Cut-off	GG	Grooving / General-purpose
	GL	Grooving / Low-feed
	GF	Grooving / Low cutting force

Type	Symbol	Applications
Cut-off (Handed Edge)	CG	Cut-off / General-purpose
	CF	Cut-off / Low cutting force
Non-Ferrous Metals	GA	Non-Ferrous Metals / General-purpose

Chipbreaker Selection F13 Precautions for Use F22 Recommended Cutting Conditions F19

Select holders and inserts with matching width of cut (CW). Not usable with GNDXL type / GNDIS type holders.

GNDM type

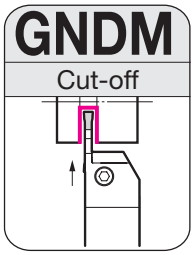


Fig 1

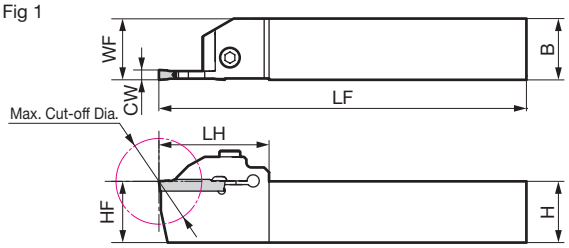


Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Flat Head Screw (BX0520 / BX0620)	Flat Head Screw (N·m)	Wrench
GNDM R/L2020K-1.2510	●	●	20	20	125	20	20	34.0	**1.25**	**20**	GCM N125005-GF	1			
GNDM R/L2020K-1.510	●	●	20	20	125	20	20	34.0	**1.50**	**20**	GCM N150005-GF	1			
GNDM R/L2020K-210	●	●	20	20	125	20	20	33.6	**2.00**	**20**	GC□ □20○○-□□	1			
GNDM R/L2020K-312	●	●	20	20	125	20	20	36.6	**3.00**	**24**	GC□ □30○○-□□	1	BX0520	**5.0**	LH040
GNDM R/L2020K-418	●	●	20	20	125	20	20	45.0	**4.00**	**36**	GC□ □40○○-□□	1			
GNDM R/L2020K-518	●	●	20	20	125	20	20	45.0	**5.00**	**36**	GC□ N50○○-□□	1			
GNDM R/L2020K-618	●	●	20	20	125	20	20	45.0	**6.00**	**36**	GC□ N60○○-□□	1			
GNDM R/L2525M-1.2510	●	●	25	25	150	25	25	36.0	**1.25**	**20**	GCM N125005-GF	1			
GNDM R/L2525M-1.510	●	●	25	25	150	25	25	36.0	**1.50**	**20**	GCM N150005-GF	1			
GNDM R/L2525M-210	●	●	25	25	150	25	25	33.6	**2.00**	**20**	GC□ □20○○-□□	1			
GNDM R/L2525M-312	●	●	25	25	150	25	25	36.6	**3.00**	**24**	GC□ □30○○-□□	1	BX0520	**5.0**	LH040
GNDM R/L2525M-418	●	●	25	25	150	25	25	45.0	**4.00**	**36**	GC□ □40○○-□□	1			
GNDM R/L2525M-518	●	●	25	25	150	25	25	45.0	**5.00**	**36**	GC□ N50○○-□□	1			
GNDM R/L2525M-618	●	●	25	25	150	25	25	45.0	**6.00**	**36**	GC□ N60○○-□□	1			
GNDM R/L3225P-312			32	25	170	25	32	36.6	**3.00**	**24**	GC□ □30○○-□□	1			
GNDM R/L3225P-418			32	25	170	25	32	45.0	**4.00**	**36**	GC□ □40○○-□□	1	BX0520	**5.0**	LH040
GNDM R/L3225P-518			32	25	170	25	32	45.0	**5.00**	**36**	GC□ N50○○-□□	1			
GNDM R/L3225P-618			32	25	170	25	32	45.0	**6.00**	**36**	GC□ N60○○-□□	1			
GNDM R/L3225P-718			32	25	170	25	32	50.0	**7.00**	**36**	GCM N70○○-□□	1	BX0620	**6.0**	LH050
GNDM R/L3225P-818			32	25	170	25	32	50.0	**8.00**	**36**	GCM N80○○-□□	1			
GNDM R/L3232P-312	●	●	32	32	170	32	32	36.6	**3.00**	**24**	GC□ □30○○-□□	1			
GNDM R/L3232P-418	●	●	32	32	170	32	32	45.0	**4.00**	**36**	GC□ □40○○-□□	1			
GNDM R/L3232P-518	●	●	32	32	170	32	32	45.0	**5.00**	**36**	GC□ N50○○-□□	1	BX0620	**6.0**	LH050
GNDM R/L3232P-618	●	●	32	32	170	32	32	45.0	**6.00**	**36**	GC□ N60○○-□□	1			
GNDM R/L3232P-718	●	●	32	32	170	32	32	50.0	**7.00**	**36**	GCM N70○○-□□	1			
GNDM R/L3232P-818	●	●	32	32	170	32	32	50.0	**8.00**	**36**	GCM N80○○-□□	1			

Select holders and inserts with matching width of cut (CW). The maximum cut-off diameter indicated above is for inserts with RE = 0.2mm.
Refer to F87 for applicable inserts.

(N·m) Recommended Tightening Torque (N·m)

GNDM type

Inserts for GNDM type

(Coated Carbide/ Cermet/ Cemented Carbide)

Fig 1

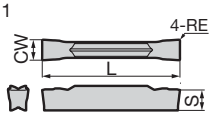
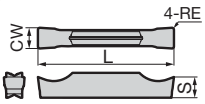


Fig 2 (Figure shows right-handed (R) tool.)

Fig 3



Grooving / Traverse Cutting

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N3002-MG	●	●		●	●	●		●	—	3.0	±0.03	0.2	21.1	3.8	5	1
N3004-MG	●	●	●	●	●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-MG	●	●		●	●	●		●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-MG	●	●		●	●	●		●	—	4.0	±0.03	0.4	26.4	4.0		1
N4008-MG	●	●	●	●	●	●	●	●	—	4.0	±0.03	0.8	26.4	4.0		1
GCM N5004-MG	●	●		●	●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-MG	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-MG	●	●		●	●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-MG	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.8	26.4	4.5		1
GCM N7004-MG	●	●		●	●	●		●	—	7.0	±0.04	0.4	28.8	5.5		1
N7008-MG	●	●	●	●	●	●	●	●	—	7.0	±0.04	0.8	28.8	5.5		1
GCM N8004-MG	●	●		●	●	●		●	—	8.0	±0.04	0.4	28.8	6.0		1
N8008-MG	●	●	●	●	●	●	●	●	—	8.0	±0.04	0.8	28.8	6.0		1
GCM N2002-ML	—	—	—	—	●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6	5	1
GCM N3002-ML	●	●	●	●	●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-ML	●	●		●	●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-ML	●	●		●	●	●		●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-ML	●	●	●	●	●	●	●	●	●	4.0	±0.03	0.4	26.4	4.0		1
N4008-ML	●	●		●	●	●		●	●	4.0	±0.03	0.8	26.4	4.0		1
GCM N5004-ML	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-ML	●	●		●	●	●		●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-ML	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-ML	●	●		●	●	●		●	—	6.0	±0.03	0.8	26.4	4.5		1
GCM N7004-ML	●	●	●	●	●	●	●	●	—	7.0	±0.04	0.4	28.8	5.5		1
N7008-ML	●	●		●	●	●		●	—	7.0	±0.04	0.8	28.8	5.5		1
GCM N8004-ML	●	●	●	●	●	●	●	●	—	8.0	±0.04	0.4	28.8	6.0		1
N8008-ML	●	●		●	●	●		●	—	8.0	±0.04	0.8	28.8	6.0		1

Grooving / Cut-off

Dimensions (mm)

Cat. No.										Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N2002-GG		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6	5	1
GCM N3002-GG		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GG		●	●		●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GG		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GG		●	●		●	●	●	●	—	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GG		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GG		●	●		●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GG		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GG		●	●		●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N7004-GG		●	●		●	●	●	●	—	7.0	±0.04	0.4	28.8	5.5		1
GCM N8004-GG		●	●		●	●	●	●	—	8.0	±0.04	0.4	28.8	6.0		1
GCM N2002-GL		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6	5	1
N2004-GL		●			●	●		●	—	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GL		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GL		●			●	●		●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GL		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GL		●			●	●		●	—	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GL		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GL		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GL		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GL		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N7004-GL		●	●		●	●	●	●	—	7.0	±0.04	0.4	28.8	5.5		1
GCM N8004-GL		●	●		●	●	●	●	—	8.0	±0.04	0.4	28.8	6.0		1
GCM N125005-GF	—	—	—	—	—	—	—	●	—	1.25	±0.03	0.05	17.4	3.2	5	1
GCM N150005-GF	—	—	—	—	—	—	—	●	—	1.5	±0.03	0.05	17.8	3.7		1
GCM N2002-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.2	21.1	3.6		1
N2004-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GF		●	●		●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GF		●			●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GF		●	●		●	●	●	●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-GF		●			●	●		●	●	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GF		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GF		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GF		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GF		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N7002-GF		●	●		●	●	●	●	—	7.0	±0.04	0.2	28.8	5.5		1
N7004-GF		●	●		●	●	●	●	—	7.0	±0.04	0.4	28.8	5.5		1
GCM N8002-GF		●	●		●	●	●	●	—	8.0	±0.04	0.2	28.8	6.0		1
N8004-GF		●	●		●	●	●	●	—	8.0	±0.04	0.4	28.8	6.0		1

Cut-off (Handed Edge)

Dimensions (mm)

Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	Lead Angle	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
								PSI	Width of Cut	Tolerance	RE	L	S		
GCM R2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6	5	2
L2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6		2
GCM R3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
L3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
GCM R4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
L4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
GCM R20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6	5	2
L20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
GCM R20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
L20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2

GCMR: Right-handed, GCML: Left-handed

Non-Ferrous Metals

Dimensions (mm)

Cat. No.	H10									Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCG N2002-GA	●									2.0	±0.025	0.2	21.1	3.6	5	3
N3002-GA	●									3.0	±0.025	0.2	21.1	3.8		3
GCG N4004-GA	●									4.0	±0.025	0.4	26.4	4.0		3
N5004-GA	●									5.0	±0.025	0.4	26.4	4.1		3
N6004-GA	●									6.0	±0.025	0.4	26.4	4.5		3

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications
Grooving / Traverse Cutting	MG	Multi-functional / General-purpose
	ML	Multi-functional / Low-feed
Grooving / Cut-off	GG	Grooving / General-purpose
	GL	Grooving / Low-feed
	GF	Grooving / Low cutting force
Cut-off (Handed Edge)	CG	Cut-off / General-purpose
	CF	Cut-off / Low cutting force
Non-Ferrous Metals	GA	Non-Ferrous Metals / General-purpose

Chipbreaker Selection F13 | Precautions for Use F22 | Recommended Cutting Conditions F19

Note: The values in red have been changed from those in the 2021-2022 General Catalogue.

Select holders and inserts with matching width of cut (CW). Not usable with GNDXL type / GNDIS type holders.

GNDM-J type

Cut-off | Internal Coolant

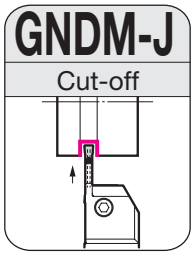


Fig 1

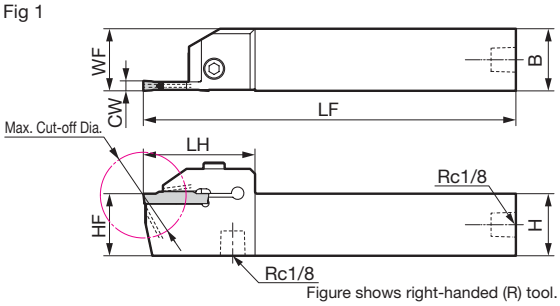


Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Cap Screw	Cap Screw N·m	Plug	Wrench
GNDM R/L2020K-210J	●	●	20	20	125	20	20	33.6	**2.00**	**20**	GC□ □20○○-□□	1				
R/L2020K-312J	●	●	20	20	125	20	20	36.6	**3.00**	**24**	GC□ □30○○-□□	1				
R/L2020K-418J	●	●	20	20	125	20	20	45	**4.00**	**36**	GC□ □40○○-□□	1	BX0520	**6.0**	XP02	LH040
R/L2020K-518J	●	●	20	20	125	20	20	45	**5.00**	**36**	GC□ N50○○-□□	1				
R/L2020K-618J	●	●	20	20	125	20	20	45	**6.00**	**36**	GC□ N60○○-□□	1				
GNDM R/L2525K-210J	●	●	25	25	125	25	25	33.6	**2.00**	**20**	GC□ □20○○-□□	1				
R/L2525K-312J	●	●	25	25	125	25	25	36.6	**3.00**	**24**	GC□ □30○○-□□	1				
R/L2525K-418J	●	●	25	25	125	25	25	45	**4.00**	**36**	GC□ □40○○-□□	1	BX0520	**6.0**	XP02	LH040
R/L2525K-518J	●	●	25	25	125	25	25	45	**5.00**	**36**	GC□ N50○○-□□	1				
R/L2525K-618J	●	●	25	25	125	25	25	45	**6.00**	**36**	GC□ N60○○-□□	1				

Select holders and inserts with matching width of cut (CW). The maximum cut-off diameter indicated above is for inserts with RE = 0.2mm.
Refer to F89 for applicable inserts.

Fig 1

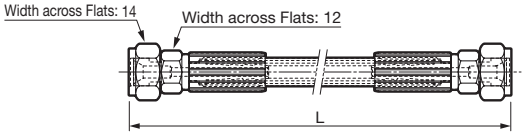


Fig 1

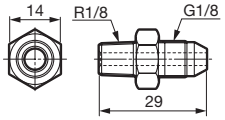
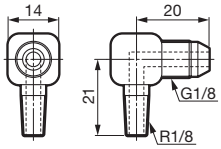


Fig 2



Parts (Hose)

Dimensions (mm)

Cat. No.	Stock	L	Screw Standard	Screw Standard	Fig
J-HOSE-G1/8-G1/8-200	●	200	G1/8	G1/8	1
J-HOSE-G1/8-G1/8-300	●	300	G1/8	G1/8	1

Hoses are sold separately.

Piping Method for Hoses and Connectors F23

Parts (Connector)

Dimensions (mm)

Cat. No.	Stock	Screw Standard	Screw Standard	Fig
J-G1/8-R1/8-00	●	G1/8	R1/8	1
J-G1/8-R1/8-90	●	G1/8	R1/8	2

Connectors are sold separately.

Piping Method for Hoses and Connectors F23

N·m Recommended Tightening Torque (N·m)

GNDM-J type

Inserts for GNDM-J type

(Coated Carbide/ Cermet/ Cemented Carbide)

Fig 1

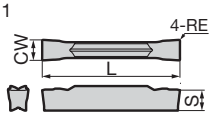
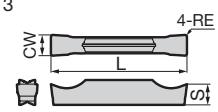


Fig 2 (Figure shows right-handed (R) tool.)

Fig 3



Grooving / Traverse Cutting

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N3002-MG	●	●		●	●	●		●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-MG	●	●	●	●	●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-MG	●	●		●	●	●		●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-MG	●	●		●	●	●		●	—	4.0	±0.03	0.4	26.4	4.0		1
N4008-MG	●	●	●	●	●	●	●	●	—	4.0	±0.03	0.8	26.4	4.0	5	1
GCM N5004-MG	●	●		●	●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-MG	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-MG	●	●		●	●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-MG	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.8	26.4	4.5		1
GCM N2002-ML	—	—	—	—	●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
GCM N3002-ML	●	●	●	●	●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-ML	●	●		●	●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-ML	●	●		●	●	●		●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-ML	●	●	●	●	●	●	●	●	●	4.0	±0.03	0.4	26.4	4.0		1
N4008-ML	●	●		●	●	●		●	●	4.0	±0.03	0.8	26.4	4.0	5	1
GCM N5004-ML	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-ML	●	●		●	●	●		●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-ML	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-ML	●	●		●	●	●		●	—	6.0	±0.03	0.8	26.4	4.5		1

Grooving / Cut-off

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N2002-GG		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
GCM N3002-GG		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GG		●	●		●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GG		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GG		●	●		●	●	●	●	—	4.0	±0.03	0.4	26.4	4.0	5	1
GCM N5002-GG		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GG		●	●		●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GG		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GG		●	●		●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N2002-GL		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
N2004-GL		●			●	●		●	—	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GL		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GL		●			●	●		●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GL		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GL		●			●	●		●	—	4.0	±0.03	0.4	26.4	4.0	5	1
GCM N5002-GL		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GL		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GL		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GL		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N2002-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.2	21.1	3.6		1
N2004-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GF		●	●		●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GF		●			●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GF		●	●		●	●	●	●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-GF		●			●	●		●	●	4.0	±0.03	0.4	26.4	4.0	5	1
GCM N5002-GF		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GF		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GF		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GF		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1

Cut-off (Handed Edge)

Dimensions (mm)

Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	Lead Angle	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
								PSI	Width of Cut	Tolerance	RE	L	S		
GCM R2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6		2
L2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6		2
GCM R3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8	5	2
L3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
GCM R4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
L4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
GCM R20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6		2
L20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8	5	2
GCM R20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
L20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2

GCMR: Right-handed, GCML: Left-handed

Non-Ferrous Metals

Dimensions (mm)

Cat. No.	H10								Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
									Width of Cut	Tolerance	RE	L	S		
GCG N2002-GA	●								2.0	±0.025	0.2	21.1	3.6		3
N3002-GA	●								3.0	±0.025	0.2	21.1	3.8		3
GCG N4004-GA	●								4.0	±0.025	0.4	26.4	4.0	5	3
N5004-GA	●								5.0	±0.025	0.4	26.4	4.1		3
N6004-GA	●								6.0	±0.025	0.4	26.4	4.5		3

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications
Grooving / Traverse Cutting	MG	Multi-functional / General-purpose
	ML	Multi-functional / Low-feed
Grooving / Cut-off	GG	Grooving / General-purpose
	GL	Grooving / Low-feed
	GF	Grooving / Low cutting force

Type	Symbol	Applications
Cut-off (Handed Edge)	CG	Cut-off / General-purpose
	CF	Cut-off / Low cutting force
Non-Ferrous Metals	GA	Non-Ferrous Metals / General-purpose

Chipbreaker Selection F13 Precautions for Use F22 Recommended Cutting Conditions F19

Select holders and inserts with matching width of cut (CW). Not usable with GNDXL type / GNDIS type holders.

GNDL type

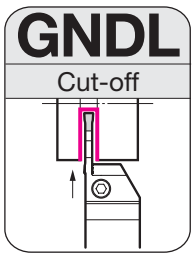


Fig 1

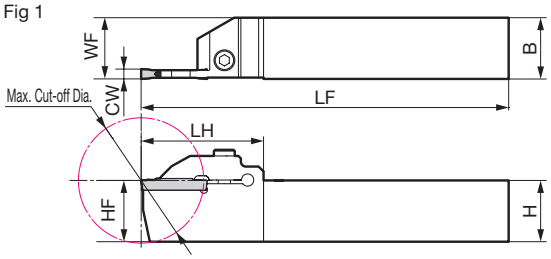


Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Cap Screw (BX0520 / BX0620)	Cap Screw N·m	Wrench
GNDL R/L2020K-1.2516	●	●	20	20	125	20	20	38.0	**1.25**	**32**	GCM N125005-GF	1	BX0520	**5.0**	LH040
GNDL R/L2020K-1.516	●	●	20	20	125	20	20	38.0	**1.50**	**32**	GCM N150005-GF	1			
GNDL R/L2020K-220	●	●	20	20	125	20	20	44.5	**2.00**	**40**	GC□ □20○○-□□	1			
GNDL R/L2020K-320	●	●	20	20	125	20	20	44.5	**3.00**	**40**	GC□ □30○○-□□	1			
GNDL R/L2020K-425	●	●	20	20	125	20	20	50.0	**4.00**	**50**	GC□ □40○○-□□	1			
GNDL R/L2020K-525	●	●	20	20	125	20	20	50.0	**5.00**	**50**	GC□ N50○○-□□	1			
GNDL R/L2020K-625	●	●	20	20	125	20	20	50.0	**6.00**	**50**	GC□ N60○○-□□	1			
GNDL R/L2525M-1.2516	●	●	25	25	150	25	25	40.0	**1.25**	**32**	GCM N125005-GF	1	BX0520	**5.0**	LH040
GNDL R/L2525M-1.516	●	●	25	25	150	25	25	40.0	**1.50**	**32**	GCM N150005-GF	1			
GNDL R/L2525M-220	●	●	25	25	150	25	25	44.5	**2.00**	**40**	GC□ □20○○-□□	1			
GNDL R/L2525M-320	●	●	25	25	150	25	25	44.5	**3.00**	**40**	GC□ □30○○-□□	1			
GNDL R/L2525M-425	●	●	25	25	150	25	25	50.0	**4.00**	**50**	GC□ □40○○-□□	1			
GNDL R/L2525M-525	●	●	25	25	150	25	25	50.0	**5.00**	**50**	GC□ N50○○-□□	1			
GNDL R/L2525M-625	●	●	25	25	150	25	25	50.0	**6.00**	**50**	GC□ N60○○-□□	1			
GNDL R/L3225P-320			32	25	170	25	32	44.5	**3.00**	**40**	GC□ □30○○-□□	1	BX0520	**5.0**	LH040
GNDL R/L3225P-425			32	25	170	25	32	50.0	**4.00**	**50**	GC□ □40○○-□□	1			
GNDL R/L3225P-525			32	25	170	25	32	50.0	**5.00**	**50**	GC□ N50○○-□□	1			
GNDL R/L3225P-625			32	25	170	25	32	50.0	**6.00**	**50**	GC□ N60○○-□□	1			
GNDL R/L3225P-725			32	25	170	25	32	50.0	**7.00**	**50**	GCM N70○○-□□	1	BX0620	**6.0**	LH050
GNDL R/L3225P-825			32	25	170	25	32	50.0	**8.00**	**50**	GCM N80○○-□□	1			
GNDL R/L3232P-320	●	●	32	32	170	32	32	44.5	**3.00**	**40**	GC□ □30○○-□□	1	BX0620	**6.0**	LH050
GNDL R/L3232P-425	●	●	32	32	170	32	32	50.0	**4.00**	**50**	GC□ □40○○-□□	1			
GNDL R/L3232P-525	●	●	32	32	170	32	32	50.0	**5.00**	**50**	GC□ N50○○-□□	1			
GNDL R/L3232P-625	●	●	32	32	170	32	32	50.0	**6.00**	**50**	GC□ N60○○-□□	1			
GNDL R/L3232P-725	●	●	32	32	170	32	32	50.0	**7.00**	**50**	GCM N70○○-□□	1			
GNDL R/L3232P-825	●	●	32	32	170	32	32	50.0	**8.00**	**50**	GCM N80○○-□□	1			

Select holders and inserts with matching width of cut (CW). The maximum cut-off diameter indicated above is for inserts with RE = 0.2mm.
Refer to F91 for applicable inserts.

N·m Recommended Tightening Torque (N·m)

GNDL type

Inserts for GNDL type

(Coated Carbide/ Cermet/ Cemented Carbide)

Fig 1

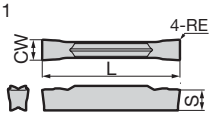
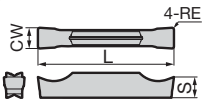


Fig 2 (Figure shows right-handed (R) tool.)

Fig 3



Grooving / Traverse Cutting

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N3002-MG	●	●		●	●	●		●	—	3.0	±0.03	0.2	21.1	3.8	5	1
N3004-MG	●	●	●	●	●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-MG	●	●		●	●	●		●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-MG	●	●		●	●	●		●	—	4.0	±0.03	0.4	26.4	4.0		1
N4008-MG	●	●	●	●	●	●	●	●	—	4.0	±0.03	0.8	26.4	4.0		1
GCM N5004-MG	●	●		●	●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-MG	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-MG	●	●		●	●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-MG	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.8	26.4	4.5		1
GCM N7004-MG	●	●		●	●	●		●	—	7.0	±0.04	0.4	28.8	5.5		1
N7008-MG	●	●	●	●	●	●	●	●	—	7.0	±0.04	0.8	28.8	5.5		1
GCM N8004-MG	●	●		●	●	●		●	—	8.0	±0.04	0.4	28.8	6.0		1
N8008-MG	●	●	●	●	●	●	●	●	—	8.0	±0.04	0.8	28.8	6.0		1
GCM N2002-ML	—	—	—	—	●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6	5	1
GCM N3002-ML	●	●	●	●	●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-ML	●	●		●	●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-ML	●	●		●	●	●		●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-ML	●	●	●	●	●	●	●	●	●	4.0	±0.03	0.4	26.4	4.0		1
N4008-ML	●	●		●	●	●		●	●	4.0	±0.03	0.8	26.4	4.0		1
GCM N5004-ML	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-ML	●	●		●	●	●		●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-ML	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-ML	●	●		●	●	●		●	—	6.0	±0.03	0.8	26.4	4.5		1
GCM N7004-ML	●	●	●	●	●	●	●	●	—	7.0	±0.04	0.4	28.8	5.5		1
N7008-ML	●	●		●	●	●		●	—	7.0	±0.04	0.8	28.8	5.5		1
GCM N8004-ML	●	●	●	●	●	●	●	●	—	8.0	±0.04	0.4	28.8	6.0		1
N8008-ML	●	●		●	●	●		●	—	8.0	±0.04	0.8	28.8	6.0		1

Grooving / Cut-off

Dimensions (mm)

Cat. No.										Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N2002-GG		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6	5	1
GCM N3002-GG		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GG		●	●		●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GG		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GG		●	●		●	●	●	●	—	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GG		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GG		●	●		●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GG		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GG		●	●		●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N7004-GG		●	●		●	●	●	●	—	7.0	±0.04	0.4	28.8	5.5		1
GCM N8004-GG		●	●		●	●	●	●	—	8.0	±0.04	0.4	28.8	6.0		1
GCM N2002-GL		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6	5	1
N2004-GL		●			●	●		●	—	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GL		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GL		●			●	●		●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GL		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GL		●			●	●		●	—	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GL		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GL		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GL		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GL		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N7004-GL		●	●		●	●	●	●	—	7.0	±0.04	0.4	28.8	5.5		1
GCM N8004-GL		●	●		●	●	●	●	—	8.0	±0.04	0.4	28.8	6.0		1
GCM N125005-GF	—	—	—	—	—	—	—	●	—	1.25	±0.03	0.05	17.4	3.2	5	1
GCM N150005-GF	—	—	—	—	—	—	—	●	—	1.5	±0.03	0.05	17.8	3.7		1
GCM N2002-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.2	21.1	3.6		1
N2004-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GF		●	●		●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GF		●			●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GF		●	●		●	●	●	●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-GF		●			●	●		●	●	4.0	±0.03	0.4	26.4	4.0		1
GCM N5002-GF		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GF		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GF		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GF		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N7002-GF		●	●		●	●	●	●	—	7.0	±0.04	0.2	28.8	5.5		1
N7004-GF		●	●		●	●	●	●	—	7.0	±0.04	0.4	28.8	5.5		1
GCM N8002-GF		●	●		●	●	●	●	—	8.0	±0.04	0.2	28.8	6.0		1
N8004-GF		●	●		●	●	●	●	—	8.0	±0.04	0.4	28.8	6.0		1

Cut-off (Handed Edge)

Dimensions (mm)

Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	Lead Angle	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
								PSI	Width of Cut	Tolerance	RE	L	S		
GCM R2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6	5	2
L2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6		2
GCM R3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
L3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
GCM R4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
L4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
GCM R20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6	5	2
L20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
GCM R20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
L20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2

GCMR: Right-handed, GCML: Left-handed

Non-Ferrous Metals

Dimensions (mm)

Cat. No.	H10								Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
									Width of Cut	Tolerance	RE	L	S		
GCG N2002-GA	●								2.0	±0.025	0.2	21.1	3.6	5	3
N3002-GA	●								3.0	±0.025	0.2	21.1	3.8		3
GCG N4004-GA	●								4.0	±0.025	0.4	26.4	4.0		3
N5004-GA	●								5.0	±0.025	0.4	26.4	4.1		3
N6004-GA	●								6.0	±0.025	0.4	26.4	4.5		3

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications
Grooving / Traverse Cutting	MG	Multi-functional / General-purpose
	ML	Multi-functional / Low-feed
Grooving / Cut-off	GG	Grooving / General-purpose
	GL	Grooving / Low-feed
	GF	Grooving / Low cutting force
Cut-off (Handed Edge)	CG	Cut-off / General-purpose
	CF	Cut-off / Low cutting force
Non-Ferrous Metals	GA	Non-Ferrous Metals / General-purpose

Chipbreaker Selection F13 | Precautions for Use F22 | Recommended Cutting Conditions F19

Note: The values in red have been changed from those in the 2021-2022 General Catalogue.

Select holders and inserts with matching width of cut (CW). Not usable with GNDXL type / GNDIS type holders.

GNDL-J type

Cut-off | Internal Coolant

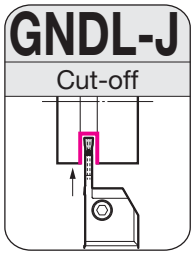


Fig 1

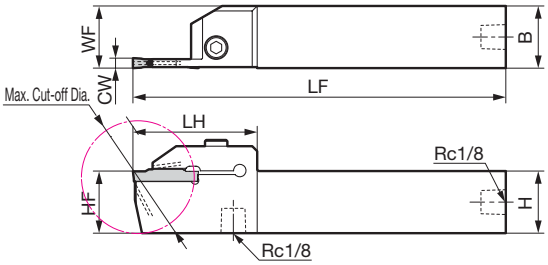


Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Cap Screw	Cap Screw N·m	Plug	Wrench
GNDL R/L2020K-220J	●	●	20	20	125	20	20	44.5	**2.00**	**40**	GC□ □20○○-□□	1				
R/L2020K-320J	●	●	20	20	125	20	20	44.5	**3.00**	**40**	GC□ □30○○-□□	1				
R/L2020K-425J	●	●	20	20	125	20	20	50	**4.00**	**50**	GC□ □40○○-□□	1	BX0520	**6.0**	XP02	LH040
R/L2020K-525J	●	●	20	20	125	20	20	50	**5.00**	**50**	GC□ N50○○-□□	1				
R/L2020K-625J	●	●	20	20	125	20	20	50	**6.00**	**50**	GC□ N60○○-□□	1				
GNDL R/L2525K-220J	●	●	25	25	125	25	25	44.5	**2.00**	**40**	GC□ □20○○-□□	1				
R/L2525K-320J	●	●	25	25	125	25	25	44.5	**3.00**	**40**	GC□ □30○○-□□	1				
R/L2525K-425J	●	●	25	25	125	25	25	50	**4.00**	**50**	GC□ □40○○-□□	1	BX0520	**6.0**	XP02	LH040
R/L2525K-525J	●	●	25	25	125	25	25	50	**5.00**	**50**	GC□ N50○○-□□	1				
R/L2525K-625J	●	●	25	25	125	25	25	50	**6.00**	**50**	GC□ N60○○-□□	1				

Select holders and inserts with matching width of cut (CW). The maximum cut-off diameter indicated above is for inserts with RE = 0.2mm.
Refer to F93 for applicable inserts.

Fig 1

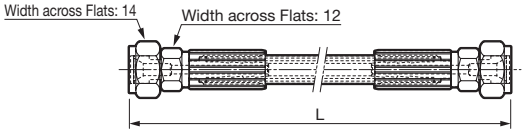


Fig 1

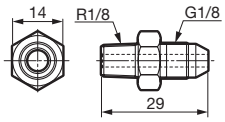
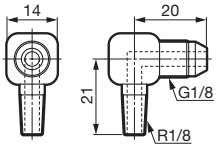


Fig 2



Parts (Hose)

Dimensions (mm)

Cat. No.	Stock	L	Screw Standard	Screw Standard	Fig
J-HOSE-G1/8-G1/8-200	●	200	G1/8	G1/8	1
J-HOSE-G1/8-G1/8-300	●	300	G1/8	G1/8	1

Hoses are sold separately.

Piping Method for Hoses and Connectors F23

Parts (Connector)

Dimensions (mm)

Cat. No.	Stock	Screw Standard	Screw Standard	Fig
J-G1/8-R1/8-00	●	G1/8	R1/8	1
J-G1/8-R1/8-90	●	G1/8	R1/8	2

Connectors are sold separately.

Piping Method for Hoses and Connectors F23

N·m Recommended Tightening Torque (N·m)

GNDL-J type

Inserts for GNDL-J type

(Coated Carbide / Cermet / Cemented Carbide)

Fig 1

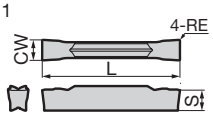
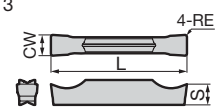


Fig 2 (Figure shows right-handed (R) tool.)

Fig 3



Grooving / Traverse Cutting

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N3002-MG	●	●		●	●	●		●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-MG	●	●	●	●	●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-MG	●	●		●	●	●		●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-MG	●	●		●	●	●		●	—	4.0	±0.03	0.4	26.4	4.0		1
N4008-MG	●	●	●	●	●	●	●	●	—	4.0	±0.03	0.8	26.4	4.0	5	1
GCM N5004-MG	●	●		●	●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-MG	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-MG	●	●		●	●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-MG	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.8	26.4	4.5		1
GCM N2002-ML	—	—	—	—	●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
GCM N3002-ML	●	●	●	●	●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-ML	●	●		●	●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-ML	●	●		●	●	●		●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-ML	●	●	●	●	●	●	●	●	●	4.0	±0.03	0.4	26.4	4.0	5	1
N4008-ML	●	●		●	●	●		●	●	4.0	±0.03	0.8	26.4	4.0		1
GCM N5004-ML	●	●	●	●	●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
N5008-ML	●	●		●	●	●		●	—	5.0	±0.03	0.8	26.4	4.1		1
GCM N6004-ML	●	●	●	●	●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
N6008-ML	●	●		●	●	●		●	—	6.0	±0.03	0.8	26.4	4.5		1

Grooving / Cut-off

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
										Width of Cut	Tolerance	RE	L	S		
GCM N2002-GG		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
GCM N3002-GG		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GG		●	●		●	●	●	●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GG		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GG		●	●		●	●	●	●	—	4.0	±0.03	0.4	26.4	4.0	5	1
GCM N5002-GG		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GG		●	●		●	●	●	●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GG		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GG		●	●		●	●	●	●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N2002-GL		●	●		●	●	●	●	—	2.0	±0.03	0.2	21.1	3.6		1
N2004-GL		●			●	●		●	—	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GL		●	●		●	●	●	●	—	3.0	±0.03	0.2	21.1	3.8		1
N3004-GL		●			●	●		●	—	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GL		●	●		●	●	●	●	—	4.0	±0.03	0.2	26.4	4.0		1
N4004-GL		●			●	●		●	—	4.0	±0.03	0.4	26.4	4.0	5	1
GCM N5002-GL		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GL		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GL		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GL		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1
GCM N2002-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.2	21.1	3.6		1
N2004-GF	—	—	—	—	●	●		●	●	2.0	±0.03	0.4	21.1	3.6		1
GCM N3002-GF		●	●		●	●	●	●	●	3.0	±0.03	0.2	21.1	3.8		1
N3004-GF		●			●	●		●	●	3.0	±0.03	0.4	21.1	3.8		1
GCM N4002-GF		●	●		●	●	●	●	●	4.0	±0.03	0.2	26.4	4.0		1
N4004-GF		●			●	●		●	●	4.0	±0.03	0.4	26.4	4.0	5	1
GCM N5002-GF		●	●		●	●	●	●	—	5.0	±0.03	0.2	26.4	4.1		1
N5004-GF		●			●	●		●	—	5.0	±0.03	0.4	26.4	4.1		1
GCM N6002-GF		●	●		●	●	●	●	—	6.0	±0.03	0.2	26.4	4.5		1
N6004-GF		●			●	●		●	—	6.0	±0.03	0.4	26.4	4.5		1

Cut-off (Handed Edge)

Dimensions (mm)

Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	Lead Angle	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
								PSI	Width of Cut	Tolerance	RE	L	S		
GCM R2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6		2
L2002-CG-05	●	●	●	●	●	●	—	5°	2.0	±0.03	0.2	21.1	3.6		2
GCM R3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8	5	2
L3002-CG-05	●	●	●	●	●	●	—	5°	3.0	±0.03	0.2	21.3	3.8		2
GCM R4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
L4002-CG-05	●	●	●	●	●	●	—	5°	4.0	±0.04	0.2	26.7	4.0		2
GCM R20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6		2
L20003-CF-10	—	—	●	●	—	—	●	10°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-10	—	—	●	●	—	—	●	10°	3.0	±0.08	0.03	22.4	3.8	5	2
GCM R20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
L20003-CF-15	—	—	●	●	—	—	●	15°	2.0	±0.08	0.03	22.4	3.6		2
GCM R30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2
L30003-CF-15	—	—	●	●	—	—	●	15°	3.0	±0.08	0.03	22.4	3.8		2

GCMR: Right-handed, GCML: Left-handed

Non-Ferrous Metals

Dimensions (mm)

Cat. No.	H10								Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
									Width of Cut	Tolerance	RE	L	S		
GCG N2002-GA	●								2.0	±0.025	0.2	21.1	3.6		3
N3002-GA	●								3.0	±0.025	0.2	21.1	3.8		3
GCG N4004-GA	●								4.0	±0.025	0.4	26.4	4.0	5	3
N5004-GA	●								5.0	±0.025	0.4	26.4	4.1		3
N6004-GA	●								6.0	±0.025	0.4	26.4	4.5		3

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications
Grooving / Traverse Cutting	MG	Multi-functional / General-purpose
	ML	Multi-functional / Low-feed
Grooving / Cut-off	GG	Grooving / General-purpose
	GL	Grooving / Low-feed
	GF	Grooving / Low cutting force

Type	Symbol	Applications
Cut-off (Handed Edge)	CG	Cut-off / General-purpose
	CF	Cut-off / Low cutting force
Non-Ferrous Metals	GA	Non-Ferrous Metals / General-purpose

Chipbreaker Selection F13 Precautions for Use F22 Recommended Cutting Conditions F19

Select holders and inserts with matching width of cut (CW). Not usable with GNDXL type / GNDIS type holders.

GNDXL type

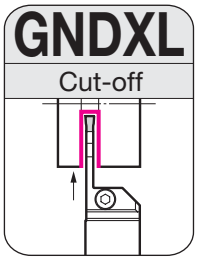


Fig 1

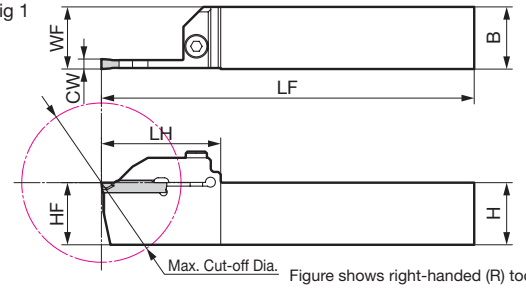


Figure shows right-handed (R) tool.

Holder

Parts

Dimensions (mm)

Cat. No.	Stock R	Stock L	Height H	Width B	Overall Length LF	Cutting Edge Distance WF	Cutting Edge Height HF	Head LH	Width of Cut CW	Max. Cut-off Dia.	Applicable Insert	Fig	Cap Screw	Cap Screw N·m	Wrench
GNDXL R/L2020K-226			20	20	125	20	20	42.0	**2.0**	**52**	GCM N2002-GF1	1			
GNDXL R/L2020K-332	●	●	20	20	125	20	20	48.0	**3.0**	**64**	GCM N30○○-□□1	1			
GNDXL R/L2020K-432	●	●	20	20	125	20	20	48.0	**4.0**	**64**	GCM N40○○-□□1	1	BX0520	**5.0**	LH040
GNDXL R/L2020K-532	●	●	20	20	125	20	20	48.0	**5.0**	**64**	GCM N50○○-□□1	1			
GNDXL R/L2020K-632	●	●	20	20	125	20	20	48.0	**6.0**	**64**	GCM N60○○-□□1	1			
GNDXL R/L2525M-226			25	25	150	25	25	42.0	**2.0**	**52**	GCM N2002-GF1	1			
GNDXL R/L2525M-332	●	●	25	25	150	25	25	48.0	**3.0**	**64**	GCM N30○○-□□1	1			
GNDXL R/L2525M-432	●	●	25	25	150	25	25	48.0	**4.0**	**64**	GCM N40○○-□□1	1	BX0520	**5.0**	LH040
GNDXL R/L2525M-532	●	●	25	25	150	25	25	48.0	**5.0**	**64**	GCM N50○○-□□1	1			
GNDXL R/L2525M-632	●	●	25	25	150	25	25	48.0	**6.0**	**64**	GCM N60○○-□□1	1			

Select holders and inserts with matching width of cut (CW). Only 1-cornered inserts can be used. Refer to F95 for applicable inserts.

N·m Recommended Tightening Torque (N·m) ● mark: Standard stocked item (new product/expanded item)

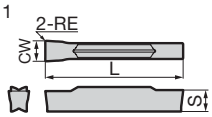
GNDXL type

New

Inserts for GNDXL type (1-cornered)

(Coated Carbide)

Fig 1



Grooving / Traverse Cutting (1-cornered)

Dimensions (mm)

Cat. No.	AC5015S	AC5025S	AC530U	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
				Width of Cut	Tolerance	RE	L	S		
GCM N3002-ML1	●	●	●	**3.0**	±0.03	0.2	21.1	3.8	5	1
GCM N4004-ML1	●	●	●	**4.0**	±0.03	0.4	26.4	4.0		1
GCM N5004-ML1	●	●	●	**5.0**	±0.03	0.4	26.4	4.1		1
GCM N6004-ML1	●	●	●	**6.0**	±0.03	0.4	26.4	4.5		1

Grooving / Cut-off (1-cornered)

Dimensions (mm)

Cat. No.	AC5015S	AC5025S	AC530U	Width of Cut CW		Corner Radius	Overall Length	Thickness	Pcs/Pack	Fig
				Width of Cut	Tolerance	RE	L	S		
GCM N2002-GF1				**2.0**	±0.03	0.2	21.1	3.6	5	1
GCM N3002-GF1	●	●	●	**3.0**	±0.03	0.2	21.1	3.8		1
GCM N4002-GF1	●	●	●	**4.0**	±0.03	0.2	26.4	4.0		1
GCM N5002-GF1	●	●	●	**5.0**	±0.03	0.2	26.4	4.1		1
GCM N6002-GF1	●	●	●	**6.0**	±0.03	0.2	26.4	4.5		1

Select holders and inserts with matching width of cut (CW). Use in combination with GNDXL type holders. Not usable with GNDIS type holders.

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications
Grooving / Traverse Cutting	ML	Multi-functional / Low-feed
Grooving / Cut-off	GF	Grooving / Low cutting force

Chipbreaker Selection F13 Precautions for Use F22 Recommended Cutting Conditions F19

● mark: Standard stocked item (new product/expanded item)

MEMO