

SEC-Grooving Tool Holders GND series

GND Series

Rev. 17



Stable Machining Through Outstanding Chip Control and Chatter Resistance

Groove depths up to 32mm supported
**GNDXL type + Dedicated
1-cornered Insert**



- High precision machining with a cutting width tolerance of $\pm 0.03\text{mm}$ (width of cut 1.25 to 6mm / lead angle 0° , 5°)
- Available in 10 chipbreaker styles and 11 insert grades for diverse machining applications
- New** ■ Series now includes Holders for Deep Grooves GNDXL type, supporting deep grooves up to 32mm

Grooving Tool Holders GND Series



■ Characteristics

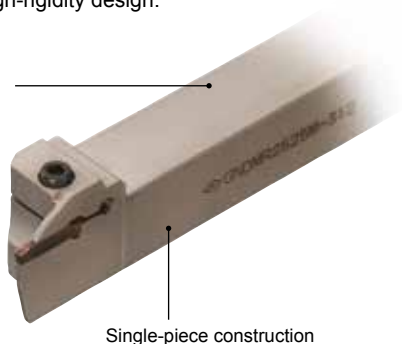
- Wide range of application processes
For grooving, turning, copying, facing, boring and cut-off.
- Stable tool life
An array of chipbreakers improves the efficiency in chip control in various applications and prevents unexpected damage caused by chip blockade.
- Smooth cutting and high efficiency machining
Holders utilizing one-piece body construction made of special steel, reduce vibration by 30 % during machining as compared to conventional types.
- High precision grooving widths with moulded inserts
Grooving insert width tolerance of $\pm 0,03$ mm over the entire range

■ Cutting Performance

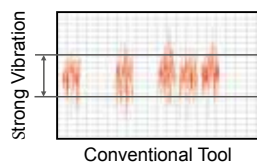
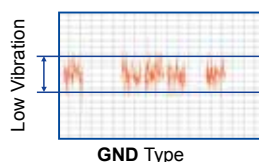
Eliminates Vibration

Reduces vibration up to 30 % compared to conventional steels thanks to its high-rigidity design.

Special die steel



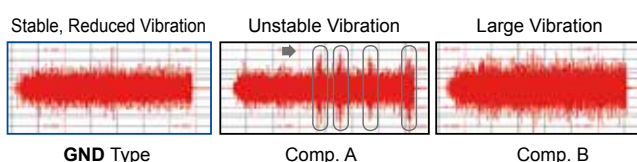
Single-piece construction



Work Material: 15CrMo5
Holder: GNDL R2525M 220
Insert: GCM N2002 GG
Cutting Conditions: $v_c = 100$ m/min, $f = 0,10$ mm/rev, $a_p = 20$ mm, wet

Ensures both, high rigidity and good chip evacuation

Internal

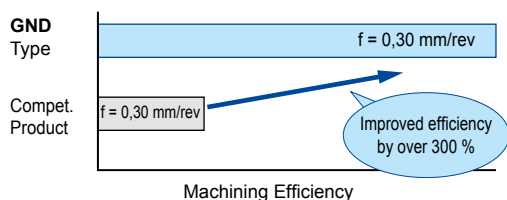


Work Material: 15CrMo5
Holder: GNDI R2532 T306
Insert: GCM N3002 GG
Cutting Conditions: $v_c = 100$ m/min, $f = 0,05$ mm/rev, $a_p = 3,0$ mm, wet

■ Application Examples

Substantially improved machining efficiency!

High rigidity holder enables high load machining at high feed rate.



Work Material: 42CrMo4
Holder: GNDL R2525M 320
Insert: GCM N3002 GG (AC530U)
Cutting Conditions: $v_c = 130$ m/min, $f = 0,30$ mm/rev, wet

Stable and long tool life ensures reliable functionality even on automatic production lines!

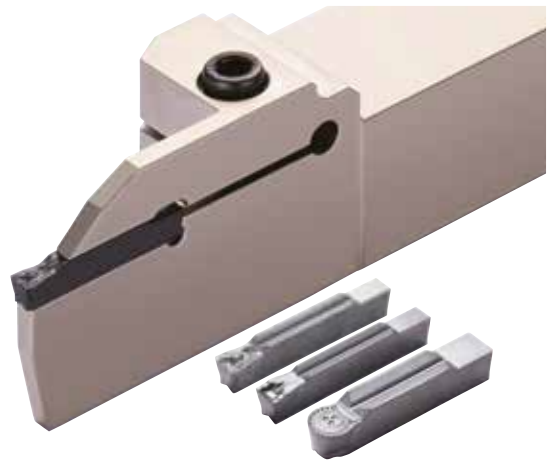
Reduction of chattering prevents unexpected breakage.



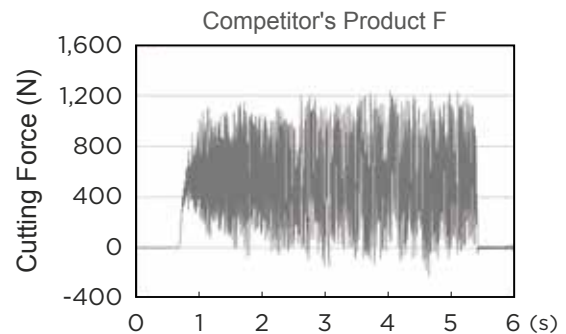
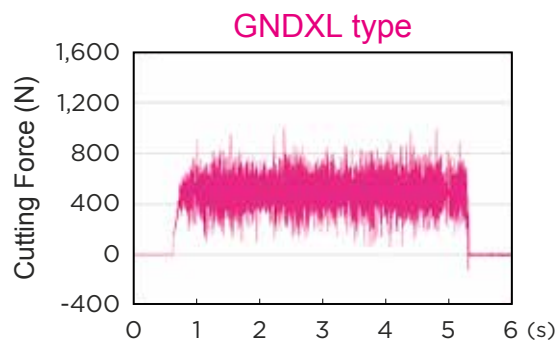
Work Material: C53
Holder: GNDM L2525M 618
Insert: GCM N6030 RG (AC530U)
Cutting Conditions: $v_c = 130$ m/min, $f = 0,30$ mm/rev, wet

■ New Holders for Deep Grooves GNDXL type New

- D SEC-Grooving Tools GND series now feature holders for deep grooves with groove depth up to **32mm**
- D Integrated high-rigidity body and insert realise superb vibration resistance with extra-strong clamp-on specifications
- D Shank width lineup includes **20mm square** and **25mm square**
- D Dedicated **1-cornered inserts** for deep grooving with **widths of cut from 3.0 to 6.0mm** are stocked (2.0 mm is a made-to-order item)
- D Chipbreaker lineup includes ML type / GF type / RN type



■ Vibration Resistance



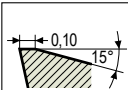
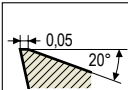
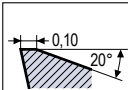
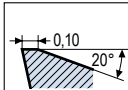
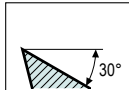
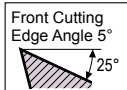
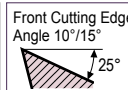
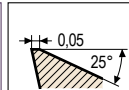
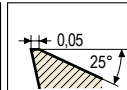
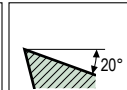
Work Material: X5CrNiMo17-12-2 Holder: GNDXL R2525M-332 Insert: GCMN3002-GF1 (AC530U) Cutting Conditions: $v_c=100\text{m/min}$ $f=0.10\text{mm/rev}$ $a_p=10\text{mm}$ Wet (External Coolant Supply)

Grooving Tool Holders

GND Series

■ Inserts - Chipbreaker Series

Achieving stability and longer tool life. A variety of chipbreakers ensures outstanding chip control performance in many different types of applications.

Grooving / Turning		Grooving / Cut-Off			Cut-Off		Profiling	Necking	Non Ferrous Metals	
General Type	Low Feed Type	General Type	Low Feed Type	Low Cutting Force Type	Cut-Off Type	Low Cutting Force Type	General Type	General Type	General Type	
MG	ML	GG	GL	GF	CG	CF	RG	RN	GA	
										
Cross Section of Cutting Edge	Cross Section of Cutting Edge	Cross Section of Cutting Edge	Cross Section of Cutting Edge	Cross Section of Cutting Edge	Cross Section of Cutting Edge	Cross Section of Cutting Edge	Cross Section of Cutting Edge	Cross Section of Cutting Edge	Cross Section of Cutting Edge	
										
Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)
1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0	1,25 1,5 2,0
3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0	3,0 4,0 5,0
6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0	6,0 7,0 8,0
Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade
AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P	AC8025P AC8035P
AC830P AC425K	AC830P AC425K	AC830P AC425K	AC830P AC425K	AC830P AC425K	AC830P AC425K	AC830P AC425K	AC830P AC425K	AC830P AC425K	AC830P AC425K	AC830P AC425K
AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S	AC5015S AC5025S
AC520U AC530U	AC520U AC530U	AC520U AC530U	AC520U AC530U	AC520U AC530U	AC520U AC530U	AC520U AC530U	AC520U AC530U	AC520U AC530U	AC520U AC530U	AC520U AC530U
AC1030U T2500A	AC1030U T2500A	AC1030U T2500A	AC1030U T2500A	AC1030U T2500A	AC1030U T2500A	AC1030U T2500A	AC1030U T2500A	AC1030U T2500A	AC1030U T2500A	AC1030U T2500A
H10	H10	H10	H10	H10	H10	H10	H10	H10	H10	H10

Stock
 * Only use with GNDIS

■ Recommended Cutting Conditions

Work Material	P Carbon Steel / Alloy Steel				M Stainless Steel			K Cast Iron			S Exotic Alloy		N
Grade	AC830P AC8025P AC8035P	AC520U	AC530U AC1030U	T2500A	AC830P	AC520U AC5015S AC5025S	AC530U AC1030U	AC425K	AC520U	AC530U AC1030U	AC520U AC5015S AC5025S	AC530U AC1030U	H10
Cutting Speed (m/min)	80-200	80-200	50-200	50-200	70-150	70-150	50-150	80-200	60-200	50-200	20-80	20-60	150-300

Please see cutting data page 13

■ Excellent Chip Control

Grooving




GND Type
(GG Type Chipbreaker)

Work Material: 15CrMo5
 Holder: GNDL R2525M 320
 Insert: GCM N3002 GG
 Cutting Conditions: $v_c=100$ m/min, $f=0,15$ mm/rev, $a_p=12,0$ mm, wet

Turning




GND Type
(ML Type Chipbreaker)

Work Material: 15CrMo5
 Holder: GNDM R2525M 312
 Insert: GCM N3002 ML
 Cutting Conditions: $v_c=100$ m/min, $f=0,10$ mm/rev, $a_p=0,5$ mm, wet

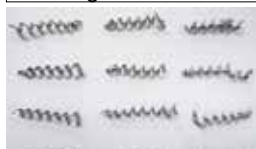
Cut-Off




GND Type
(CG Type Chipbreaker)

Work Material: X5CrMo17122 (Ø 30 mm)
 Holder: GNDL R2525M 220
 Insert: GCM R2002 CG 05
 Cutting Conditions: $v_c=100$ m/min, $f=0,15$ mm/rev, wet

Profiling




GND Type
(RG Type Chipbreaker)

Work Material: 15CrMo5
 Holder: GNDM R2525M 312
 Insert: GCM N3015 RG
 Cutting Conditions: $v_c=100$ m/min, $f=0,15$ mm/rev, $a_p=0,1$ mm, wet

Grooving Tool Holders GND Series

Chipbreaker Selection

	 Grooving / Turning	 Grooving	 Cut-Off
1st Recommendation	MG General Feed 	GG General Feed 	GG General Feed 
2nd Recommendation	ML Low Feed Good Chip Control 	GL General Feed Good Chip Control 	CG General Feed Feed Direction Front Cutting Edge Angle 5° 
	GF Low Cutting Force 	GF Low Cutting Force 	CF Low Cutting Force Feed Direction Front Cutting Edge Angle 10°/15° 

	 Profiling / Radius Grooving Outside Diameter	 Necking / Radius Grooving Internal Profiling	 For Non Ferrous Metals
Recommendation	RG General Feed 1st Recommendation 	RN General Feed 2nd Recommendation w = 2 mm 	GA General Feed 

Grade Selection

Cutting Process	P Steel	M Stainless Steel	K Cast Iron	S Exotic Alloy	N Non Ferrous Metals
Continuous, high speed	AC8025P CVD	AC8035P (AC830P) CVD	1st Recommendation AC425K CVD	AC5015S PVD	
	AC8035P (AC830P) CVD	AC5015S PVD	AC8025P CVD		
	AC5025S (AC520U) PVD	1st Recommendation AC5025S (AC520U) PVD	AC5015S PVD	1st Recommendation AC5025S (AC520U) PVD	
Interrupted, unstable	1st Recommendation AC530U/AC1030U PVD	AC530U AC1030U PVD	AC5025S (AC520U) PVD	AC530U AC1030U PVD	1st Recommendation H10 Uncoated Carbide

Only AC520U and AC1030U are stocked for inserts of GNDIS holders.

Grooving Tool Holders

GND Series

For External Machining (For Small Lathes)

Turning / Profiling

GNDM
Straight Type

Shank Size
Height x Width
16 mm x 16 mm
20 mm x 12 mm

→ 18 SumiSmall

Grooving Width (mm)		
1.25	1.5	2.0
3.0	4.0	5.0
6.0	7.0	8.0

Chipbreaker
MG ML GG GL GF CG CF RG RN GA

GNDM-J
Straight Type

Shank Size
Height x Width
16 mm x 16 mm
20 mm x 12 mm

→ 20 SumiSmall

Grooving Width (mm)		
1.25	1.5	2.0
3.0	4.0	5.0
6.0	7.0	8.0

Chipbreaker
MG ML GG GL GF CG CF RG RN GA

Grooving / Cut-Off

GNDL
Straight Type

Shank Size
Height x Width
10 mm x 10 mm
12 mm x 12 mm
16 mm x 16 mm
20 mm x 12 mm

→ 18 SumiSmall

Grooving Width (mm)		
1.25	1.5	2.0
3.0	4.0	5.0
6.0	7.0	8.0

Chipbreaker
MG ML GG GL GF CG CF RG RN GA

GNDL-J
Straight Type

Shank Size
Height x Width
12 mm x 12 mm
16 mm x 16 mm
20 mm x 12 mm

→ 20 SumiSmall

Grooving Width (mm)		
1.25	1.5	2.0
3.0	4.0	5.0
6.0	7.0	8.0

Chipbreaker
MG ML GG GL GF CG CF RG RN GA

Series for External Machining for Small Lathes Series

Type	Shank Size Height : Width	Cutting Width (mm)	Series	Max. Grooving Depth (mm)						Ref. Page	Applicable Chipbreaker									
				5	10	15	20	25	30		MG	ML	GG	GL	GF	CG	CF	RG	RN	GA
For Small Lathes	10	10	GNDL		10					18					○					
		10	GNDL		10					18		○	○	○	○	○	○		○	○
		10	GNDL		10					18	○	○	○	○	○	○	○	○	○	○
	12	12	GNDL		12					18					○					
		12	GNDL		12,5					18		○	○	○	○	○	○		○	○
		12	GNDL-J		12,5					20		○	○	○	○	○	○		○	○
		12	GNDL		12,5					18	○	○	○	○	○	○	○	○	○	○
		12	GNDL-J		12,5					20	○	○	○	○	○	○	○	○	○	○
		12	GNDL-J		12,5					20	○	○	○	○	○	○	○	○	○	○
	16	16	GNDM		8					18					○					
		16	GNDL		12,5					18					○					
		16	GNDM		10					18					○					
		16	GNDM		12					18		○	○	○	○	○	○		○	○
		16	GNDM-J		12					20		○	○	○	○	○	○		○	○
		16	GNDL		16					18		○	○	○	○	○	○		○	○
		16	GNDL-J		16					20		○	○	○	○	○	○		○	○
		16	GNDM		12					18	○	○	○	○	○	○	○	○	○	○
		16	GNDM-J		12					20	○	○	○	○	○	○	○	○	○	○
		16	GNDL		16					18	○	○	○	○	○	○	○	○	○	○
		16	GNDL-J		16					20	○	○	○	○	○	○	○	○	○	○
	20	12	GNDM		17					18		○	○	○	○	○	○		○	○
		12	GNDM-J		17					20		○	○	○	○	○	○		○	○
		12	GNDL		21					18		○	○	○	○	○	○		○	○
		12	GNDL-J		21					20		○	○	○	○	○	○		○	○
		12	GNDM		17					18	○	○	○	○	○	○	○	○	○	○
		12	GNDM-J		17					20	○	○	○	○	○	○	○	○	○	○
		12	GNDL		21					18	○	○	○	○	○	○	○	○	○	○
		12	GNDL-J		21					20	○	○	○	○	○	○	○	○	○	○
		12	GNDL-J		21					20	○	○	○	○	○	○	○	○	○	○

Stock

○ 1st Recommendation

○ 2nd Recommendation

Grooving Tool Holders

GND Series

For External Machining (Straight Type)

Turning / Profiling

Grooving / Cut-Off

Grooving / Cut-Off (traverse cutting)

GNDS	GNDM	GNDM-JE	GNDL	GNDL-JE	GNDXL New
Straight Type	Straight Type	Straight Type	Straight Type	Straight Type	Straight Type
Shank Size Height x Width 20 mm x 20 mm 25 mm x 25 mm	Shank Size Height x Width 20 mm x 20 mm 25 mm x 25 mm 32 mm x 25 mm 32 mm x 32 mm	Shank Size Height x Width 20 mm x 20 mm 25 mm x 25 mm	Shank Size Height x Width 20 mm x 20 mm 25 mm x 25 mm 32 mm x 25 mm 32 mm x 32 mm	Shank Size Height x Width 20 mm x 20 mm 25 mm x 25 mm	Shank Size Height x Width 20 mm x 20 mm 25 mm x 25 mm
→ 22	→ 24	→ 26	→ 28	→ 30	→ 33
Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)	Grooving Width (mm)
1.25 1.5 2.0	1.25 1.5 2.0	1.25 1.5 2.0	1.25 1.5 2.0	1.25 1.5 2.0	2.0 3.0 4.0
3.0 4.0 5.0	3.0 4.0 5.0	3.0 4.0 5.0	3.0 4.0 5.0	3.0 4.0 5.0	5.0 6.0
6.0 7.0 8.0	6.0 7.0 8.0	6.0 7.0 8.0	6.0 7.0 8.0	6.0 7.0 8.0	
Chipbreaker	Chipbreaker	Chipbreaker	Chipbreaker	Chipbreaker	Chipbreaker
MG ML GG GL GF CG CF RG RN GA	MG ML GG GL GF CG CF RG RN GA	MG ML GG GL GF CG CF RG RN GA	MG ML GG GL GF CG CF RG RN GA	MG ML GG GL GF CG CF RG RN GA	ML GF RN

Inserts are dedicated products.

Series for External Machining (Straight Type)

Type	Shank Size		Cutting Width (mm)								Series	Max. Grooving Depth (mm)						Ref. Page	Applicable Chipbreaker														
	Height	Width	1.25	1.5	2	3	4	5	6	7		8	5	10	15	20	25		30	MG	ML	GG	GL	GF	CG	CF	RG	RN	GA				
Straight Type	20	20	1.25	1.5								GNDM	10						24														
			1.25	1.5									GNDL	16						28													
					2									GNDL	6						22												
					2									GNDM	10						24												
					2									GNDM-JE	10						26												
					2									GNDL	20						28												
					2									GNDL-JE	20						30												
		25				3								GNDL	6						22												
						3								GNDM	12						24												
						3								GNDM-JE	12						26												
						3								GNDL	20						28												
						3								GNDL-JE	20						30												
			25*					4							GNDL	25						28											
								4							GNDL-JE	25						30											
							4						GNDM	18						24													
							4						GNDM-JE	18						26													
								4					GNDL	25						28													
								4					GNDL-JE	25						30													
									5 6				GNDL	10						22													
									5 6				GNDM	18						24													
									5 6				GNDM-JE	18						26													
										5 6			GNDL	25						28													
										5 6			GNDL-JE	25						30													
											7 8		GNDM	18						24													
											7 8		GNDL	25						28													
	32	25*												GNDM	12						24												
													GNDL	20						28													
													GNDM	18						24													
												GNDL	25						28														
32												GNDM	18						24														
												GNDL	25						28														
												GNDM	18						24														
												GNDL	25						28														
											GNDM	18						24															
											GNDL	25						28															

Stock

* Made to order item (32x25mm)

1st Recommendation 2nd Recommendation

Stock

* Made to order item (32x25mm)

1st Recommendation

2nd Recommendation

ML: Multi-functional / Low-feed type GF: Grooving / Low cutting force type RN: Facing / Necking / General-purpose type

Type	Shank Size	Cutting Edge Width (mm)	Model	Max. Groove Depth (mm)	Ref. Page	Applicable Chipbreakers (GNDXL type Dedicated)		
	Height (H) Width (B)	2 3 4 5 6		5 10 15 20 25 30 35		ML	GF	RN
Straight Edge type	20 20	2	GNDXL	26				
	25 25	3 4 5 6		32				

Stock

Made to order item

Note: Only dedicated I-cornered inserts (insert part number suffix [I]) can be used for GNDXL type.

Stock

Suitable

Grooving Tool Holders

GNDMS / GNDLS / GNDCM (JE) Type

For External Machining (L Type)

Turning / Profiling

GNDMS

L Type
Shank Size
Height x Width
20 mm x 20 mm
25 mm x 25 mm

→ 24

Grooving Width (mm)		
1,25	1,5	2,0
3,0	4,0	5,0
6,0	7,0	8,0

Chipbreaker
MG ML GG GL GF CG CF RG RN GA

Grooving / Cut-Off

GNDLS

L Type
Shank Size
Height x Width
20 mm x 20 mm
25 mm x 25 mm

→ 28

Grooving Width (mm)		
1,25	1,5	2,0
3,0	4,0	5,0
6,0	7,0	8,0

Chipbreaker
MG ML GG GL GF CG CF RG RN GA

Series for External Machining (L Type)

Type	Shank Size	Cutting Width (mm)								Series	Max. Grooving Depth (mm)						Ref. Page	Applicable Chipbreaker									
		Height	Width	1,25	1,5	2	3	4	5		6	7	8	5	10	15		20	25	30	MG	ML	GG	GL	GF	CG	CF
L Type	20	20			2							GNDLS	16	28		☐	☐	☐	☐	☐	☐	☐	☐		☐	☐	☐
						3						GNDMS	10	24	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
						3						GNDLS	16	28	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
							4					GNDMS	12	24	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
								5				GNDMS	12	24	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
												GNDLS	18	28		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	25	25				3						GNDMS	12	24	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						3						GNDLS	18	28	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
							4					GNDMS	14	24	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
							4					GNDLS	23	28	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
								5	6			GNDMS	14	24	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
									5	6		GNDLS	23	28	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Stock

☐ 1st Recommendation ☐ 2nd Recommendation

Cassettes for Radial Machining

Grooving

GNDCM

Cassette
Applicable Holder
SumiPolygon
PSC 00 (Straight)
PSC 90 (L Type)

→ 44

Grooving Width (mm)		
1,25	1,5	2,0
3,0	4,0	5,0
6,0	7,0	8,0

Chipbreaker
MG ML GG GL GF CG CF RG RN GA

GNDCM-JE

Cassette
Applicable Holder
SumiPolygon
PSC 00 (Straight)
PSC 90 (L Type)

→ 46

Grooving Width (mm)		
1,25	1,5	2,0
3,0	4,0	5,0
6,0	7,0	8,0

Chipbreaker
MG ML GG GL GF CG CF RG RN GA

Radial Grooving Cassettes

Type	Applicable Holders	Cutting Width (mm)								Series	Max. Grooving Depth (mm)						Ref. Page	Applicable Chipbreaker									
		1.25	1.5	2	3	4	5	6	7		8	5	10	15	20	25		30	MG	ML	GG	GL	GF	CG	CF	RG	RN
Cassette	GND00			2							GNDCM(JE)		12				44/46		☐	☐	☐	☐	☐	☐	☐	☐	☐
					3						GNDCM(JE)		12				44/46	☐	☐	☐	☐	☐	☐	☐	☐	☐	
	GND90					4					GNDCM(JE)		18				44/46	☐	☐	☐	☐	☐	☐	☐	☐	☐	
							5	6			GNDCM(JE)		18				44/46	☐	☐	☐	☐	☐			☐	☐	

Stock

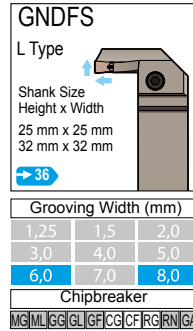
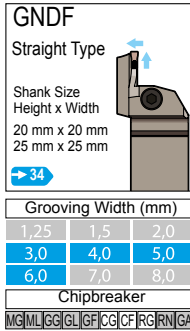
1st Recommendation

2nd Recommendation

Grooving Tool Holders GNDF / GNDFS Type

For Face Machining

Grooving / Turning / Profiling



Series for Face Machining

Type	Shank Size		Cutting Width (mm)						Series	Max. Grooving Depth (mm)						Bore (mm)						Ref. Page	Applicable Chipbreaker												
	Height	Width	3	4	5	6	7	8		5	10	15	20	25	30	50	100	150	200	250	300		1.000	MG	ML	GG	GL	GF	CG	CF	RGR	RN	GA		
Straight Type	20	20	3						GNDF														34												
			3																					34											
			3																					34											
			3																					34											
			3																					34											
			3																					34											
		3																					34												
		25	4						GNDF															34											
			4																					34											
			4																					34											
			4																					34											
			4																					34											
	4																						34												
	25	4						GNDF															34												
					5																		34												
					5																		34												
					5																		34												
					5																		34												
					5																		34												
		25				6			GNDF															34											
						6																		34											
						6																		34											
						6																		34											
						6																		34											
						6																		34											
L Type	20	20				6		GNDFS														36													
						6																	36												
						6																	36												
						6																	36												
						6																	36												
						6																	36												
	25	25						GNDFS															36												
																							36												
																							36												
																							36												
																							36												
																							36												

Stock

Make to order item

1st Recommendation

2nd Recommendation

Stock

Make to order item

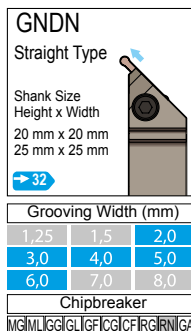
○ 1st Recommendation

○ 2nd Recommendation

Grooving Tool Holders

GNDN Type

For Necking



Series for Necking

Type	Shank Size		Cutting Width (mm)					Series	Max. Grooving Depth (mm)							Min. Bore (mm)	Ref. Page	Applicable Chipbreaker									
	Height	Width	2	3	4	5	6		5	10	15	20	25	30	MG			ML	GG	GL	GF	CG	CF	RG	RN	GA	
Straight Type	20	20	2					GNDN	2.0							ø20	32									○	
				3					2.5								ø20	32								○	
	25	25			4				3.0								ø30	32								○	
							5				3.5						ø30	32								○	
							6		4.0						ø30	32								○			

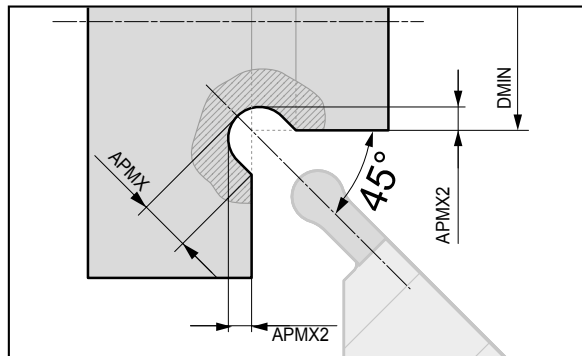
Stock

Tips for Necking

Notes for Undercutting

Recommended Chipbreaker: RN

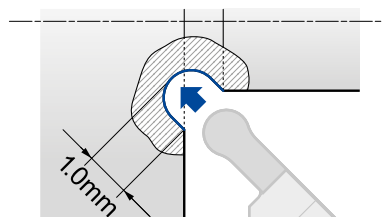
Distance between Workpiece and Necking



Edge Width CW (mm)	Depth of Necking APMX (mm)	Distance between Workpiece and Necking APMX2 (mm)
2,0	1,50	0,64
3,0	2,00	0,79
4,0	3,00	1,29
5,0	3,50	1,44
6,0	4,00	1,59

The recommended cutting conditions for necking are the same as grooving with RN type chipbreaker and edge width. To prevent interference with the work material, do not use the holder for less than the minimum cutting diameter (DMIN) as specified for GNDN type holders.

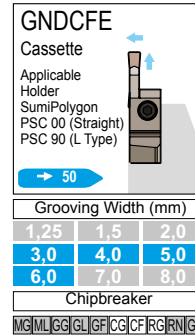
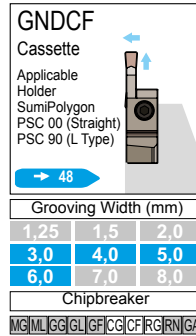
Chip Shape



Work Material: 34CrMo4
Holder: GNDN R2020K 325-020
Insert: GCM N3015 RN
Cutting Conditions: $v_c = 100\text{m/min}$, $f = 0,1\text{mm/rev}$
Depth of Necking = 1,0mm, wet

Cassettes for Face Machining

Face Grooving / Turning / Profiling



Face Grooving Cassettes

Type		Cutting Width (mm)						Series	Max. Grooving Depth (mm)						Bore (mm)	Ref. Page	Applicable Chipbreaker															
		3	4	5	6	7	8		5	10	15	20	25	30	50	100	150	200	250	300	1.000											
Straight Type		3						GNDCF GNDCFE							12							48/50	○	○	○	○	○				○	○
		3													15							48/50	○	○	○	○	○				○	○
		3													15							48/50	○	○	○	○	○				○	○
		3													18							48/50	○	○	○	○	○				○	○
		3													18							48/50	○	○	○	○	○				○	○
			4												18							48/50	○	○	○	○	○				○	○
			4												18							48/50	○	○	○	○	○				○	○
			4												18							48/50	○	○	○	○	○				○	○
			4												18							48/50	○	○	○	○	○				○	○
			4												18							48/50	○	○	○	○	○				○	○
			4												18							48/50	○	○	○	○	○				○	○
			5												18							48/50	○	○	○	○	○				○	○
			5												18							48/50	○	○	○	○	○				○	○
			5												18							48/50	○	○	○	○	○				○	○
			5												18							48/50	○	○	○	○	○				○	○
			5												18							48/50	○	○	○	○	○				○	○
			6												18							48/50	○	○	○	○	○				○	○
			6												18							48/50	○	○	○	○	○				○	○
			6												18							48/50	○	○	○	○	○				○	○
			6												18							48/50	○	○	○	○	○				○	○
			6												18							48/50	○	○	○	○	○				○	○
			6												18							48/50	○	○	○	○	○				○	○

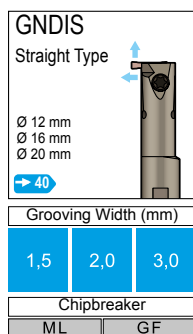
Stock
 Make to order item
 1st Recommendation
 2nd Recommendation

Grooving Tool Holders

GNDI / GNDIS Type

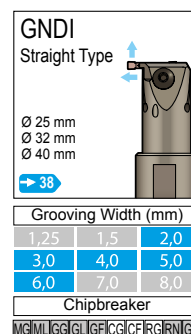
For Internal Machining ($\geq \varnothing 14$ mm)

Grooving / Turning / Copying



For Internal Machining ($\geq \varnothing 32$ mm)

Grooving / Turning / Copying



Series for Internal Machining ($\geq \varnothing 14$ mm)

Type	Shank Size (mm)	Cutting Width (mm)			Series	Max. Grooving Depth (mm)	Min. Bore (mm)	Ref. Page	Applicable Chipbreaker	
		1,5	2	3					ML	GF
Straight Type	Ø12	1,5			GNDIS	2,6	Ø14	40		○
		1,5				3,6	Ø14	40		○
			2	3		2,6	Ø14	40	○	○
			2	3		3,6	Ø14	40	○	○
	Ø16	1,5			GNDIS	3,6	Ø16	40		○
		1,5				4,6	Ø20	40		○
			2	3		3,6	Ø16	40	○	○
			2	3		4,6	Ø20	40	○	○
	Ø20	1,5			GNDIS	6,6	Ø25	40		○
			2	3		6,6	Ø25	40	○	○

Stock

GNDIS type: use smaller GXM type inserts

○ 1st Recommendation

Series for Internal Machining ($\geq \varnothing 32$ mm)

Type	Shank Size (mm)	Cutting Width (mm)					Series	Max. Grooving Depth (mm)						Min. Bore (mm)	Ref. Page	Applicable Chipbreaker									
		2	3	4	5	6		5	10	15	20	25	30			MG	ML	GG	GL	GF	CG	CF	RG	RN	GA
Straight Type	ø25	2					GNDI	6					ø32	38		⊙	○	○	○	○				○	⊙
			3	4	5			6					ø32	38	○	○	○	○				○	⊙		
	ø32	2						6					ø32	38		⊙	○	○	○				○	⊙	
				3	4	5			10					ø40	38	○	⊙	○	○				○	⊙	
	ø40		3	4	5	6		11				ø50	38	○	⊙	○	○				○	⊙			
												⊙ 1st Recommendation			○ 2nd Recommendation										

Chipbreaker Selection Guide

Groov. Width (mm)	Recommended Cutting Conditions		Nose Radius (mm)	Chipbreaker
	Grooving	Turning		
1,25	Chip-breaker GF 		0.05	MG ML GG GL GF CG CF RG RN GA
1,5	Chip-breaker GF 		0.05	MG ML GG GL GF CG CF RG RN GA
2,0	Chipbreaker 		0.03	MG ML GG GL GF CG CF RG RN GA
			0.2	MG ML GG GL GF CG CF RG RN GA
			0.4	MG ML GG GL GF CG CF RG RN GA
			1.0	MG ML GG GL GF CG CF RG RN GA
3,0	Chipbreaker 		0.03	MG ML GG GL GF CG CF RG RN GA
			0.2	MG ML GG GL GF CG CF RG RN GA
			0.4	MG ML GG GL GF CG CF RG RN GA
			1.5	MG ML GG GL GF CG CF RG RN GA
4,0	Chipbreaker 		0.2	MG ML GG GL GF CG CF RG RN GA
			0.4	MG ML GG GL GF CG CF RG RN GA
			0.8	MG ML GG GL GF CG CF RG RN GA
			2.0	MG ML GG GL GF CG CF RG RN GA
5,0	Chipbreaker 		0.2	MG ML GG GL GF CG CF RG RN GA
			0.4	MG ML GG GL GF CG CF RG RN GA
			0.8	MG ML GG GL GF CG CF RG RN GA
			2.5	MG ML GG GL GF CG CF RG RN GA
6,0	Chipbreaker 		0.2	MG ML GG GL GF CG CF RG RN GA
			0.4	MG ML GG GL GF CG CF RG RN GA
			0.8	MG ML GG GL GF CG CF RG RN GA
			3.0	MG ML GG GL GF CG CF RG RN GA
7,0	Chipbreaker 		0.2	MG ML GG GL GF CG CF RG RN GA
			0.4	MG ML GG GL GF CG CF RG RN GA
			0.8	MG ML GG GL GF CG CF RG RN GA
			3.5	MG ML GG GL GF CG CF RG RN GA
8,0	Chipbreaker 		0.2	MG ML GG GL GF CG CF RG RN GA
			0.4	MG ML GG GL GF CG CF RG RN GA
			0.8	MG ML GG GL GF CG CF RG RN GA
			4.0	MG ML GG GL GF CG CF RG RN GA

Recommended Cutting Conditions

Work Material	P Carbon Steel, Alloy Steel				M Stainless Steel			K Cast Iron			S Exotic Alloy		N
Grade	AC830P AC8025P AC8035P	AC520U	AC530U AC1030U	T2500A	AC830P	AC520U AC5015S AC5025S	AC530U AC1030U	AC425K	AC520U	AC530U AC1030U	AC520U AC5015S AC5025S	AC530U AC1030U	H10
Cutting Speed (m/min)	80–200	80–200	50–200	50–200	70–150	70–150	50–150	80–200	60–200	50–200	20–80	20–60	150–300

Grooving Tool Holders

GND Series

Identification Details – Holders

GND M R 25 25 (M) - (T) 3 12 (J/JE) (- 035)

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
Series Symbol	Holder Design	Shank Width / Work Diameter	Type	Max. Grooving Depth	Min. Machining Diameter					
GND	Chart 3	Chart 5	Internal Grooving	Chart 8	(mm)					
	Application	Shank Height / Diameter	Shank Length	Insert Width	Coolant Supply					
	Chart 2	Chart 4	Chart 6	Chart 7						
					JE: Internal Coolant (Screw Connection European Standard)					
					J: Internal Coolant (Screw Connection Japanese Standard)					

② Application			③ Holder Design		④ Shank Height / Diameter			⑤ Shank Width / Work Diameter		
Symbol	Application		Symbol	Direction	Application	Symbol	Height (mm)	Application	Symbol	Width (mm)
S	External Multi-Purpose	Grooving/Cut Off/Turning/Profiling	R	Right	External/Face Grooving (Shank Height)	10	10	External/Face Grooving (Shank Width)	10	10
M	External Multi-Purpose	Grooving/Cut Off/Turning/Profiling	L	Left		12	12		12	12
L	External Grooving	Grooving/Cut Off				16	16		16	16
XL	External Deep Grooving	Grooving/Cut Off				20	20		20	20
						25	25		25	25
MS	External L-Styled (Side Cut) Multi-Purpose	Grooving/Turning/Profiling			Internal Grooving (Shank Diameter)	25	25	Internal Grooving (Shank Diameter)	32	32
						32	32		40	40
LS	External L-Styled (Side Cut) Deep Grooving	Grooving				40	40		50	50
N	Necking	Necking								
I	Internal Grooving	Grooving/Turning/Profiling								
IS	Internal Grooving	Grooving/Turning/Profiling								
F	Face Grooving	Grooving/Turning/Profiling								
FS	L-Shaped Tools for Facing	Grooving/Turning/Profiling								
CM	Cassette for Polygon Holder	Radial Grooving								
CF	Cassette for Polygon Holder	Face Grooving								

⑥ Shank Length		⑧ Insert Width		⑨ Max. Grooving Depth			
Symbol	Length (mm)	Symbol	Groov. Width (mm)	Symbol	Groov. Depth (mm)	Symbol	Groov. Depth (mm)
JX	120	1,25	1,25	06	6,0	20	20,0
K	125	1,5	1,5	08	8,0	23	23,0
M	150	2	2,0	10	10,0	25	25,0
P	170	3	3,0	11	11,0		
		4	4,0	12	12,0		
		5	5,0	12,5	12,5		
		6	6,0	14	14,0		
		7	7,0	16	16,0		
		8	8,0	18	18,0		

To ensure maximum rigidity, use the multi-purpose type holder to machine the maximum grooving depth.

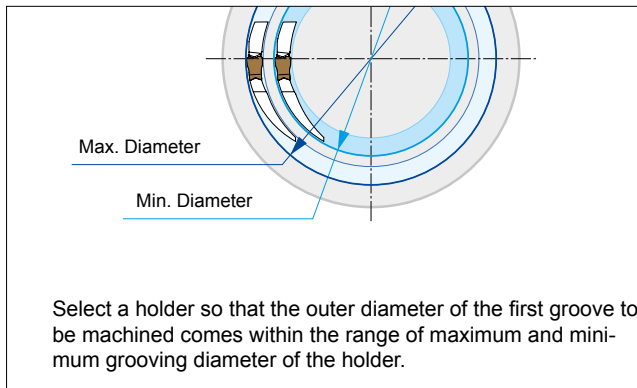
Identification Details – Inserts

G C M N 30 02 (S) - G G -(1) -(05)

①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
Series Symbol	Tolerance	Insert Width	Nose Radius	Applicable Holder	Chipbreaker	Front Rel. Angle	Front Cutt. Edge Angle	No. of Cutting Edges	
Grooving	G Class	Symbol Groov. Width (mm)	Symbol R (mm)	Symbol Holder	Symbol Application	C: 7°	PSI	Symbol No. of cutting edges	
	M Class	125 1,25	005 0,05	S GNDIS	MG Multi-Purpose: General Feed	X: Special	05 : 5°	No. 2-cornered type	
		150 1,5	02 0,2		ML Multi-Purpose: Low Feed		10 : 10°	1 1-cornered type (GNDXL type Dedicated)	
		20 2,0	04 0,4		GG Grooving: General Feed		15 : 15°		
		30 3,0	08 0,8		GL Grooving: Low Feed				
		40 4,0	15 1,5		GF Grooving: Low Cutting Forces				
		50 5,0	20 2,0		CG Cut-Off				
		60 6,0	25 2,5		CF Cut-Off: Low Cutting Forces				
		70 7,0	30 3,0		RG Copying: General Feed				
		80 8,0			RN Multi-Purpose: General Feed				
					GA Multi-Purpose: General Feed				

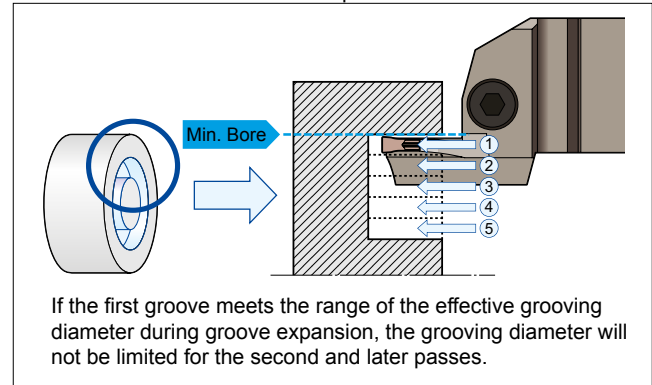
Key Points for Face Machining

Holder Selection



Precautions for Groove Expansion

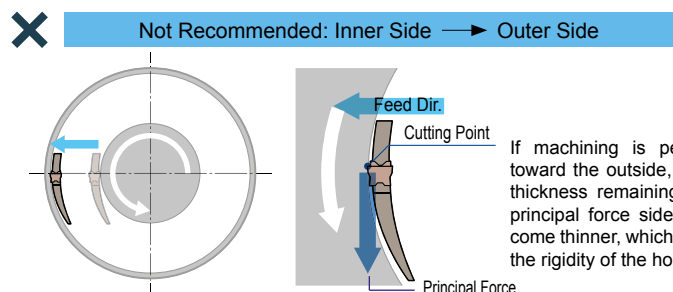
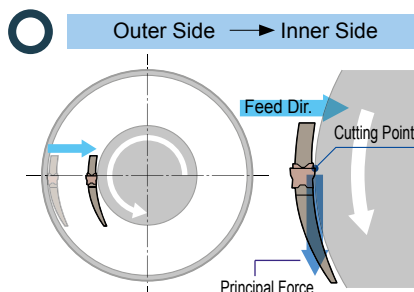
Recommended Chipbreaker: **MG, ML, GG, GL, GF**



Precautions for Turning

Recommended Chipbreaker: **MG, ML**

Considering the rigidity of the holder, we recommend machining from the outside to the inside.



- If the first groove meets the range of the effective grooving diameter in face turning, the grooving diameter will not be limited for the second and later passes.
- Select the chipbreaker of the lower limit side of the recommended cutting conditions and straight chips before evacuation. (In face grooving, broken chips easily get stuck in grooves, which causes problems.)
- When breaking chips, step feed is required.

Key Points for Internal Machining

Precautions for Internal Machining

Recommended Chipbreaker: **ML, GL**

If the prepared hole diameter is small, use an ML or GL low-feed chipbreaker, each of which reduces chip curl diameter, to ensure adequate chip evacuation.



Work Material: 15CrMo5 (Ø 25 mm)
Holder: GNDI R2532 T306
Insert: GCM N300 □-□□
Cutting Conditions: $v_c=100$ m/min, $f=0,10$ mm/rev, $a_p=3,0$ mm, wet



! Chip shapes differ between internal and external machining even under the same cutting conditions.

Work Material: 15CrMo5
Holder: GNDL R2525M 320
Insert: GCM N3002 GG
Cutting Conditions: $v_c=100$ m/min, $f=0,10$ mm/rev, $a_p=5$ mm, wet

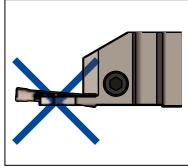
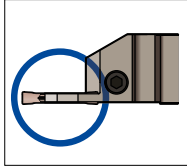
Grooving Tool Holders GND Series

Precautions for Grooving Tool Holders GND Series

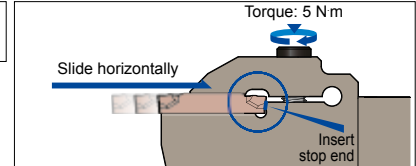
■ Notes on how to Attach Inserts

- ① Remove any foreign particles or oil from the insert seat before attaching the insert.
- ② Ensure the seat location is clean and free of damage.
- ③ Slide the insert level over its seat.
- ④ Push the insert with its opposite end (the holder side) firmly against the insert stop end.
- ⑤ The recommended tightening torque is 5 N.m. Tightening above the recommended torque may damage the insert or the holder which could cause injury and other accidents.

③ Attach insert on the seat flat.



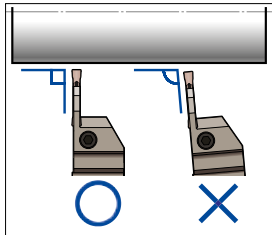
④ Push insert fully into place.



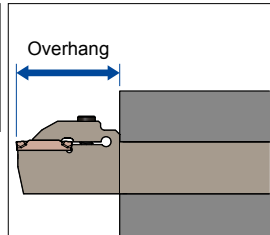
■ Notes on how to Apply Holders

- ① Remove any foreign particles or oil from the tool post before attaching the holder.
- ② Ensure the seat location is clean and free of damage.
- ③ Attach the holder so that the insert is perpendicular to the workpiece.
- ④ Set holder with shortest possible overhang.
- ⑤ When grooving or turning, adjust the center height of the cutting edge to as close ± 0 mm as possible. (Within $\pm 0,1$ mm is recommended)
- ⑥ Incorrect center height adjustment may cause chattering. (In cut-off applications, adjust the center height of the cutting edge to a value from 0,0 to +0,2 mm). A lower center height will result in larger nip at the center.

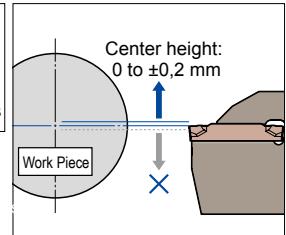
③ Attach at right angle to work-piece.



④ Set with short overhang

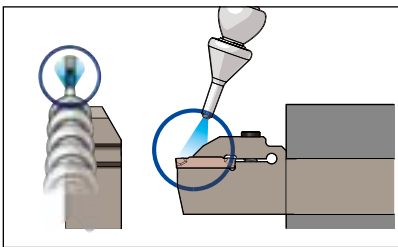


⑥ Center height adjustment in cut-off applications



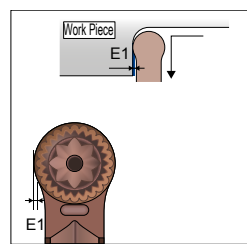
■ Notes on Setting Coolant Supply Nozzle

Set the coolant supply nozzle so that coolant can be supplied from the top of the upper clamp unit.



■ Maximum Depth of Cut

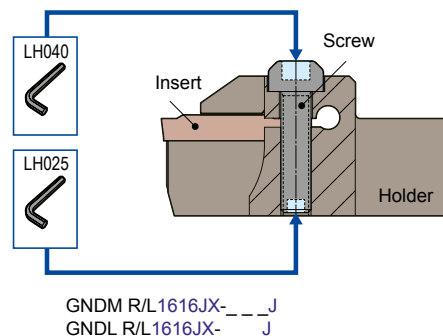
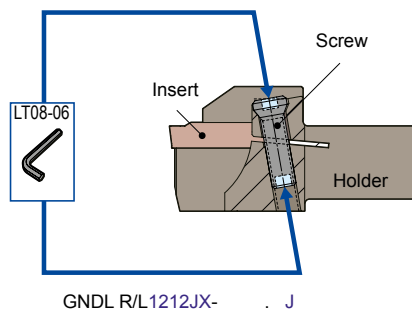
Maximum depth of cut when pulling up with RG chipbreaker



Grooving Width (mm)	Max. Depth of Cut (mm)
CW	E1
3,0	0,15
4,0	0,20
5,0	0,25
6,0	0,30
7,0	0,35
8,0	0,40

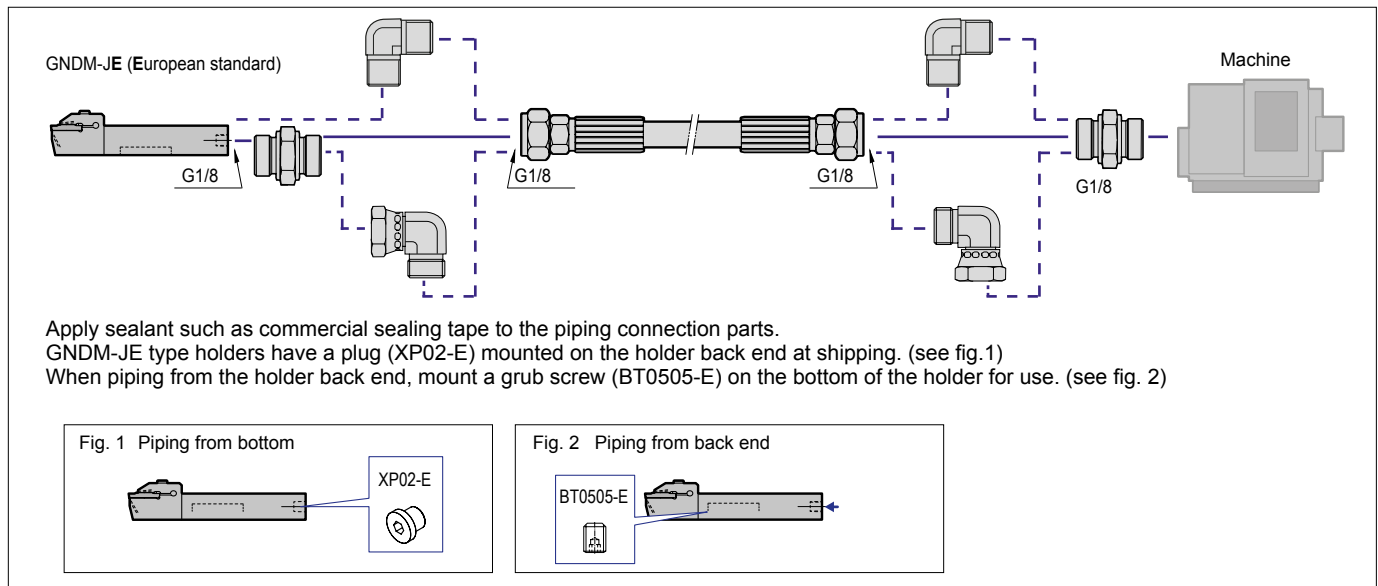
Key Points of Internal Coolant-Type Holders for Small Lathes

The insert for internal coolant-type 12 mm and 16 mm holders for small lathes can be replaced from either the top or bottom.

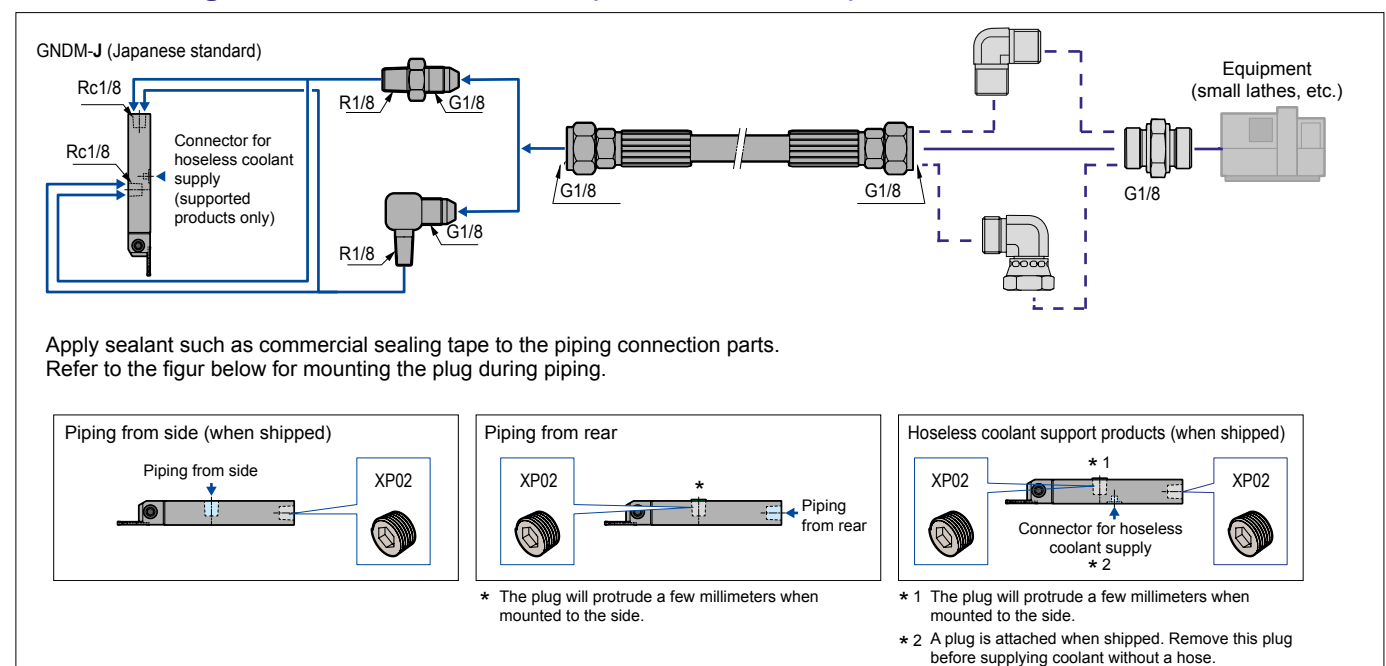


Key Points for Connecting Hoses and Connectors

■ Connecting Hoses and Connectors



■ Connecting Hoses and Connectors (for Small Lathes)

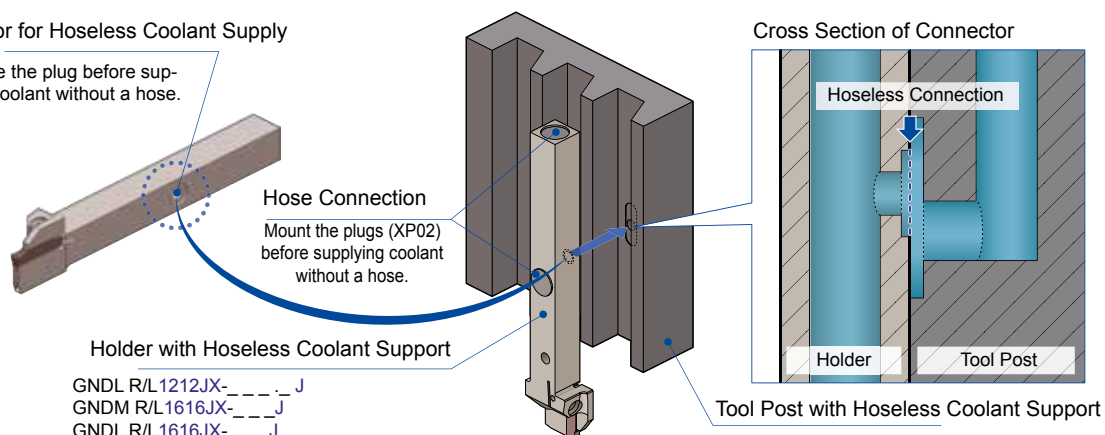


Holder with Hoseless Coolant Support

Direct coolant supply from the tool post is possible without a hose

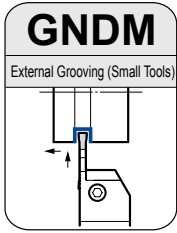
Connector for Hoseless Coolant Supply

Remove the plug before supplying coolant without a hose.



Grooving Tool Holders GNDM / GNDL Type

External General-Purpose Type for Small Lathes (Grooving, Turning, Profiling)



Use the multi-purpose profiling insert for turning (wide grooves).

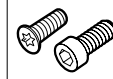
■ Holders

Cat. No.	Stock		Dimensions (mm)								Grooving Width (mm)	Max. Groov. Depth (mm)	Max. Cutt-Off Dia (mm)	Fig.	Applicable Insert	Cap Screw	Spanner
	R	L	H	B	LF	WF	HF	LH	WF2	CW							
GNDM R/L 1616 JX 1.2508	●	●	16	16	120	(16)	16	26	0	1,25	8,0	16	1	GCM N125005 GF	BX0515	4,0	LH040
GNDM R/L 1616 JX 1.510	●	●	16	16	120	(16)	16	26	0	1,50	10,0	20		GCM N150005 GF			
GNDM R/L 1616 JX 212	●	●	16	16	120	(16)	16	30	0	2,00	12,0	24		GCM □20○-□□			
GNDM R/L 1616 JX 312	●	●	16	16	120	(16)	16	30	0	3,00	12,0	24		GCM □30○-□□			
GNDM R/L 2012 JX 217	○	○	20	12	120	(12)	20	26,5	0	2,00	17,0	34	2	GCM □20○-□□	BFTX0414	3,0	LT15-10
GNDM R/L 2012 JX 317	○	○	20	12	120	(12)	20	26,5	0	3,00	17,0	34		GCM □30○-□□			

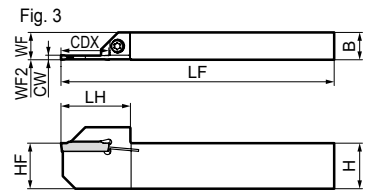
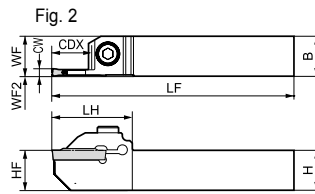
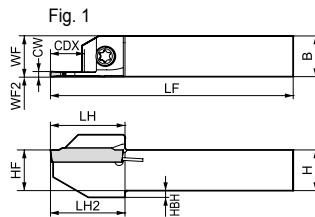
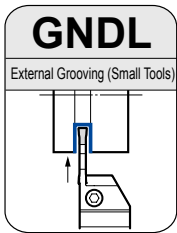
Select holders and inserts with the same grooving width (CW).

Above figures show right hand tools.

■ Spare Parts



External Grooving / Cut-Off for Small Lathes



Above figures show right hand tools.

■ Holders

Cat. No.	Stock		Dimensions (mm)									Grooving Width (mm)	Max. Groov. Depth (mm)	Max. Cutt-Off Dia (mm)	Fig.	Applicable Insert	Cap Screw		Spanner
	R	L	H	B	LF	WF	HF	HBH	LH	LH2	WF2	CW	CDX						
GNDL R/L 1010 JX 1.2510	●	●	10	10	120	(10)	10	2,0	18	18,3	0	1,25	10,0	20	1	GCM N125005 GF	BFTX0412N	3,0	LT15-10
GNDL R/L 1010 JX 1.510	●	●	10	10	120	(10)	10	2,0	18	18,3	0	1,50	10,0	20		GCM N150005 GF			
GNDL R/L 1010 JX 210	●	●	10	10	120	(10)	10	2,0	22	22,3	0	2,00	10,0	20		GCM □20○-□□			
GNDL R/L 1010 JX 310	●	●	10	10	120	(10)	10	2,0	22	22,3	0	3,00	10,0	20		GCM □30○-□□			
GNDL R/L 1212 JX 1.2512	●	●	12	12	120	(12)	12	2,0	19	19,3	0	1,25	12,0	24	1	GCM N125005 GF	BFTX0412N	3,0	LT15-10
GNDL R/L 1212 JX 1.512	●	●	12	12	120	(12)	12	2,0	19	19,3	0	1,50	12,0	24		GCM N150005 GF			
GNDL R/L 1212 JX 212.5	●	●	12	12	120	(12)	12	2,0	22	22,3	0	2,00	12,5	25		GCM □20○-□□			
GNDL R/L 1212 JX 312.5	●	●	12	12	120	(12)	12	2,0	22	22,3	0	3,00	12,5	25		GCM □30○-□□			
GNDL R/L 1616 JX 1.2512.5	○	●	16	16	120	(16)	16	—	28	—	0	1,25	12,5	25	2	GCM N125005 GF	BFTX0515	4,0	LH040
GNDL R/L 1616 JX 1.512.5	●	●	16	16	120	(16)	16	—	28	—	0	1,50	12,5	25		GCM N150005 GF			
GNDL R/L 1616 JX 216	●	●	16	16	120	(16)	16	—	32	—	0	2,00	16,0	32		GCM □20○-□□			
GNDL R/L 1616 JX 316	●	●	16	16	120	(16)	16	—	32	—	0	3,00	16,0	32		GCM □30○-□□			
GNDL R/L 2012 JX 221	○	○	20	12	120	(12)	20	—	30,5	—	0	2,00	21,0	42	3	GCM □20○-□□	BFTX0414	3,0	LT15-10
GNDL R/L 2012 JX 321	○	○	20	12	120	(12)	20	—	30,5	—	0	3,00	21,0	42		GCM □30○-□□			

Select holders and inserts with the same grooving width (CW).

■ Spare Parts



Grooving Tool Holders GNDM / GNDL Type

Inserts for GNDM / GNDL (Small Tools)

Coated Carbide

Cermet

Carbide

Fig. 1

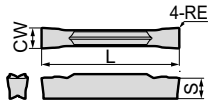


Fig. 2

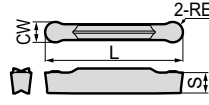


Fig. 3

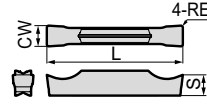
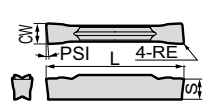


Fig. 4



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG N3004 MG	●	●	●	○	●	●	○	●	—	3,0	±0,03 ±0,03	0,2 0,4	21,1 21,1	3,8 3,8	1
GCM N2002 ML N3002 ML N3004 ML	—	—	—	—	●	●	○	○	○	2,0 3,0	±0,03 ±0,03 ±0,03	0,2 0,2 0,4	21,1 21,1 21,1	3,6 3,8 3,8	1

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
								Cutting Width	Tolerance				
GCM N2002 GG N3002 GG N3004 GG	●	●	●	●	○	○	—	2,0 3,0	±0,03 ±0,03 ±0,03	0,2 0,2 0,4	21,1 21,1 21,1	3,6 3,8 3,8	1
GCM N2002 GL N2004 GL N3002 GL N3004 GL	●	●	●	●	○	○	—	2,0 3,0	±0,03 ±0,03 ±0,03 ±0,03	0,2 0,4 0,2 0,4	21,1 21,1 21,1 21,1	3,6 3,6 3,8 3,8	1
GCM N125005 GF N150005 GF	—	—	—	—	—	—	—	1,25 1,5	±0,03 ±0,03	0,05 0,05	17,4 17,4	3,2 3,7	1
GCM N2002 GF N2004 GF N3002 GF N3004 GF	—	—	●	●	○	○	○	2,0 3,0	±0,03 ±0,03 ±0,03 ±0,03	0,2 0,4 0,2 0,4	21,1 21,1 21,1 21,1	3,6 3,6 3,8 3,8	1

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	●	○	○	—	3,0	±0,03	1,5	21,1	3,8	2

Cut-Off Machining (Handed Edge)

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U		CW		RE	L	S	Fig.	
									Cutting Width	Tolerance					
GCM R2002 CG 05	●	●	●	●	○	●	—		5°	2,0	±0,03	0,2	21,1	3,6	4
L2002 CG 05	●	●	●	●	○	○	—		5°	2,0	±0,03	0,2	21,1	3,6	
GCM R3002 CG 05	●	●	●	●	○	○	—		5°	3,0	±0,03	0,2	21,3	3,8	
L3002 CG 05	●	●	●	●	○	○	—		5°	3,0	±0,03	0,2	21,3	3,8	
GCM R4002 CG 05	●	●	●	●	○	●	—		5°	4,0	±0,04	0,2	26,7	4,0	4
L4002 CG 05	●	●	●	●	○	○	—		5°	4,0	±0,04	0,2	26,7	4,0	
GCM R20003 CF 10	—	—	●	●	—	●	—		10°	2,0	±0,08	0,03	22,4	3,6	
L20003 CF 10	—	—	●	●	—	●	—		10°	2,0	±0,08	0,03	22,4	3,6	
GCM R30003 CF 10	—	—	●	●	—	●	—		10°	3,0	±0,08	0,03	22,4	3,8	4
L30003 CF 10	—	—	●	●	—	●	—		10°	3,0	±0,08	0,03	22,4	3,8	
GCM R20003 CF 15	—	—	●	●	—	●	—		15°	2,0	±0,08	0,03	22,4	3,6	
L20003 CF 15	—	—	●	●	—	●	—		15°	2,0	±0,08	0,03	22,4	3,6	
GCM R30003 CF 15	—	—	●	●	—	●	—		15°	3,0	±0,08	0,03	22,4	3,8	4
L30003 CF 15	—	—	●	●	—	●	—		15°	3,0	±0,08	0,03	22,4	3,8	

GCM R: Right hand

GCM L: Left hand

Combine the insert with a holder such that the width of cut (CW) matches.

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2010 RN N3015 RN	—	—	—	—	●	●	○	○	—	2,0 3,0	±0,03 ±0,03	1,0 1,5	21,7 22,6	3,6 3,8	2

Non-Ferrous Metals

Dimensions (mm)

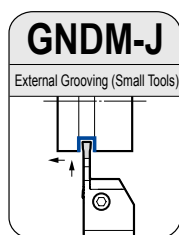


Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCG N2002 GA N3002 GA	○	○	—	—	—	—	—	—	—	2,0 3,0	±0,025 ±0,025	0,2 0,2	21,1 21,1	3,6 3,8	3

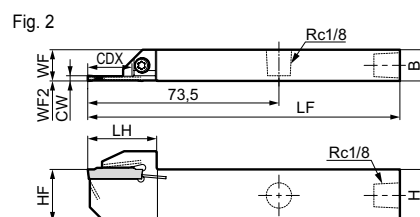
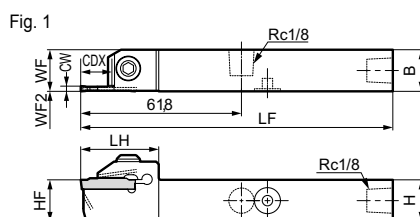
Grooving Tool Holders GNDM-J / GNDL-J Type

Holder with Internal Coolant

External Multi-Purpose Type for Small Lathes (Grooving, Turning, Profiling)



Use the multi-purpose profiling insert for turning (wide grooves).



Above figures show right hand tools.

Spare Parts

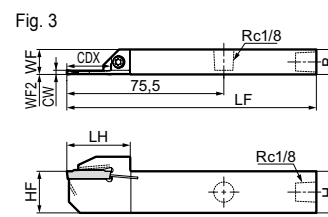
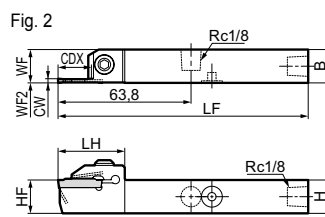
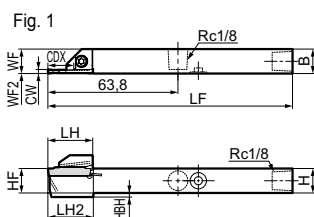
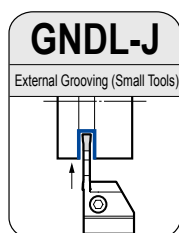
BFTX0414	LT15-10	
CP-M5-20-1	LH040	
Screw / Cap Screw	Plug	Wrench for Upper Surface
CP-M5-20-1	XP02	Wrench for Lower Surface
5,0	LT15-10	

Holders

Cat. No.	Stock		Dimensions (mm)							Grooving Width (mm)	Max. Groov. Depth (mm)	Max. Cutt-Off Dia (mm)	Fig.	Applicable Insert	Screw / Cap Screw		Plug	Wrench for Upper Surface	Wrench for Lower Surface
	R	L	H	B	LF	WF	HF	LH	WF2	CW	CDX								
GNDM R/L 1616 JX 212 J	○	○	16	16	120	(16)	16	30,0	0	2,0	12,0	24	1	GC□ □200○-□□	CP-M5-20-1	5,0	XP02	LH040	LH025
GNDM R/L 1616 JX 312 J	○	○	16	16	120	(16)	16	30,0	0	3,0	12,0	24	1	GC□ □300○-□□	CP-M5-20-1	5,0	XP02	LH040	LH025
GNDM R/L 2012 JX 217 J	○	○	20	12	120	(12)	20	26,5	0	2,0	17,0	34	2	GC□ □200○-□□	BFTX0414	3,0	XP02	LT15-10	
GNDM R/L 2012 JX 317 J	○	○	20	12	120	(12)	20	26,5	0	3,0	17,0	34	2	GC□ □300○-□□	BFTX0414	3,0	XP02	LT15-10	

Select holders and inserts with the same grooving width (CW).

External Grooving / Cut-Off for Small Lathes



Above figures show right hand tools.

Spare Parts

BFTX0414	LT15-10	
CP-M5-20-1	LH040	
Screw / Cap Screw	Plug	Wrench for Upper Surface
BFTX0415T8R	XP02	Wrench for Lower Surface
1,5	LT08-06	

Holders

Cat. No.	Stock		Dimensions (mm)								Grooving Width (mm)	Max. Groov. Depth (mm)	Max. Cutt-Off Dia (mm)	Fig.	Applicable Insert	Screw / Cap Screw	Plug	Wrench for Upper Surface	Wrench for Lower Surface
	R	L	H	B	LF	WF	HF	HBH	LH	LH2	WF2	CW	CDX						
GNDL R/L 1212 JX 212.5 J	○	○	12	12	120 (12)	12	2,0	22,0	22,3	0	2,0	12,5	25	1	GCM □ 2000-□ □	BFTX0415T8R	1,5	XP02	LT08-06
GNDL R/L 1212 JX 312.5 J	○	○	12	12	120 (12)	12	2,0	22,0	22,3	0	3,0	12,5	25	1	GCM □ 3000-□ □	BFTX0415T8R	1,5	XP02	LT08-06
GNDL R/L 1616 JX 216 J	○	○	16	16	120 (16)	16	-	32,0	-	0	2,0	16,0	32	2	GC □ 2000-□ □	CP-M5-20-1	5,0	XP02	LH040
GNDL R/L 1616 JX 316 J	○	○	16	16	120 (16)	16	-	32,0	-	0	3,0	16,0	32	2	GC □ 3000-□ □	CP-M5-20-1	5,0	XP02	LH040
GNDL R/L 2012 JX 221 J	○	○	20	12	120 (12)	20	-	30,5	-	0	2,0	21,0	42	3	GCM □ 2000-□ □	BFTX0414	3,0	XP02	LT15-10
GNDL R/L 2012 JX 321 J	○	○	20	12	120 (12)	20	-	30,5	-	0	3,0	21,0	42	3	GCM □ 3000-□ □	BFTX0414	3,0	XP02	LT15-10

Select holders and inserts with the same grooving width (CW).

Parts (Hoses and Connectors)

See page 21

Grooving Tool Holders GNDM-J / GNDL-J Type

Inserts for GNDM-J / GNDL-J (Small Tools)

Coated Carbide

Cermet

Carbide

Fig. 1

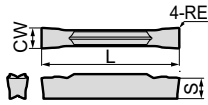


Fig. 2

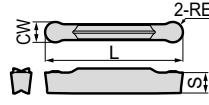


Fig. 3

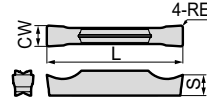
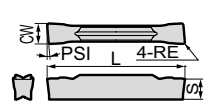


Fig. 4



Grooving / Traversing

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG N3004 MG	●	●	●	○	●	●	●	●	—	3,0	±0,03 ±0,03	0,2 0,4	21,1 21,1	3,8 3,8	1
GCM N2002 ML N3002 ML N3004 ML	—	—	—	—	●	●	○	○	○	2,0 3,0	±0,03 ±0,03 ±0,03	0,2 0,2 0,4	21,1 21,1 21,1	3,6 3,8 3,8	1

Grooving / Cut-Off Machining

Dimensions (mm)

Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
								Cutting Width	Tolerance				
GCM N2002 GG N3002 GG N3004 GG	●	●	●	●	○	○	—	2,0 3,0	±0,03 ±0,03 ±0,03	0,2 0,2 0,4	21,1 21,1 21,1	3,6 3,8 3,8	1
GCM N2002 GL N2004 GL N3002 GL N3004 GL	●	●	●	●	○	○	—	2,0 3,0	±0,03 ±0,03 ±0,03 ±0,03	0,2 0,4 0,2 0,4	21,1 21,1 21,1 21,1	3,6 3,6 3,8 3,8	1
GCM N125005 GF N150005 GF	—	—	—	—	●	—	—	1,25 1,5	±0,03 ±0,03	0,05 0,05	17,4 17,4	3,2 3,7	1
GCM N2002 GF N2004 GF N3002 GF N3004 GF	—	—	—	—	○	○	—	2,0 3,0	±0,03 ±0,03 ±0,03 ±0,03	0,2 0,4 0,2 0,4	21,1 21,1 21,1 21,1	3,6 3,6 3,8 3,8	1

External Profiling / External Radius Grooving

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	○	○	○	○	3,0	±0,03	1,5	21,1	3,8	2

Profiling / Radius Grooving / Necking

Dimensions (mm)

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2010 RN N3015 RN	—	—	—	—	●	○	○	○	—	2,0 3,0	±0,03 ±0,03	1,0 1,5	21,7 22,6	3,6 3,8	2

Non-Ferrous Metals

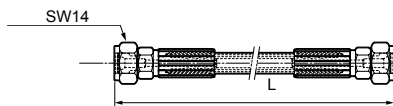
Dimensions (mm)

Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCG N2002 GA N3002 GA	○	○	○	○	○	○	○	○	○	2,0 3,0	±0,025 ±0,025	0,2 0,2	21,1 21,1	3,6 3,8	3

Parts (Hoses and Connectors)

Parts Hoses

Fig. 1



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

Hoses are sold separately.

Parts (Connector) on Holder Side

Fig. 1

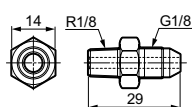
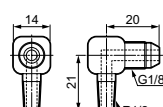


Fig. 2



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.

Parts (Connector) on Machine Side

Fig. 1

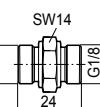


Fig. 2

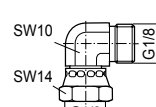
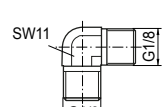


Fig. 3



Cat. No.	Stock	Screw Standard	Screw Standard	Fig.
J-G1/8-G1/8-00-E	●	G1/8	G1/8	1
J-G1/8-G1/8F-90-E	●	G1/8	G1/8	2
J-G1/8-G1/8-90-E	●	G1/8	G1/8	3

Connectors are sold separately.

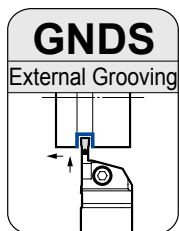
● Euro stock

○ Japan stock

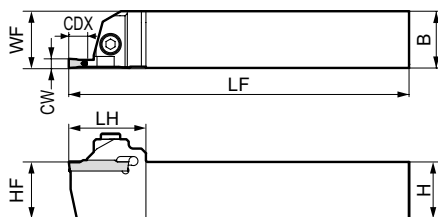
Grooving Tool Holders

GNDS Type

External Multi-Purpose Shallow Grooves Type (Grooving, Turning, Profiling)

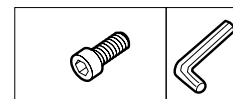


Use the multi-purpose profiling insert for turning (wide grooves).



Above figures show right hand tools.

Spare Parts



Holders

Cat. No.	Stock		Dimensions (mm)						Grooving Width (mm)	Max. Groov. Depth (mm)	Applicable Insert	Cap Screw		Spanner
	R	L	H	B	LF	WF	HF	LH	CW	CDX				
GNDS R/L 2020 K 206	●	●	20	20	125	20	20	30	2,0	6	GCM □20○○-□□	BX0520	5,0	LH040
GNDS R/L 2020 K 306	●	●	20	20	125	20	20	30	3,0	6	GCM □30○○-□□			
GNDS R/L 2020 K 410	●	●	20	20	125	20	20	34	4,0	10	GCM □40○○-□□			
GNDS R/L 2020 K 510	●	●	20	20	125	20	20	34	5,0	10	GCM N50○○-□□			
GNDS R/L 2020 K 610	●	●	20	20	125	20	20	34	6,0	10	GCM N60○○-□□			
GNDS R/L 2525 M 206	●	●	25	25	150	25	25	30	2,0	6	GCM □20○○-□□			
GNDS R/L 2525 M 306	●	●	25	25	150	25	25	30	3,0	6	GCM □30○○-□□			
GNDS R/L 2525 M 410	●	●	25	25	150	25	25	34	4,0	10	GCM □40○○-□□			
GNDS R/L 2525 M 510	●	●	25	25	150	25	25	34	5,0	10	GCM N50○○-□□			
GNDS R/L 2525 M 610	●	●	25	25	150	25	25	34	6,0	10	GCM N60○○-□□			

Select holders and inserts with the same grooving width (CW).

Grooving Tool Holders GNDS Type

Inserts for GNDS

Coated Carbide Cermet Carbide

Fig. 1

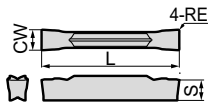


Fig. 2

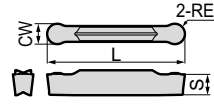


Fig. 3

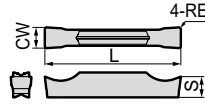
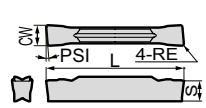


Fig. 4



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG	●	●		○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	1
N3004 MG	●	●	●		●	●	●	●	—		±0,03	0,4	21,1	3,8	
N4002 MG	●	●		○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	●		○	●	●	—	5,0	±0,03	0,8	26,4	4,0	
N5004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●		●		○	●	—	6,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,5	
N6008 MG	●	●				○	●	●	—		±0,03	0,8	26,4	4,5	
GCM N2002 ML	—	—	—	—	—	—	○	●	—	2,0	±0,03	0,2	21,1	3,6	1
N3002 ML	●	●	●	●	●	●	●	○	—		±0,03	0,2	21,1	3,8	
N3004 ML				○				○	—	3,0	±0,03	0,4	21,1	3,8	
N4002 ML				○	●	●	●	○	—		±0,03	0,2	26,4	4,0	
N4004 ML			●		●	●	●	○	—	4,0	±0,03	0,4	26,4	4,0	
N4008 ML	●	●		○	●	●	○	○	—		±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	●	●	●	○	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 ML	●	●		○	●	●	○	○	—		±0,03	0,8	26,4	4,1	
N6004 ML	●	●	●			○	○	○	—	6,0	±0,03	0,4	26,4	4,5	
N6008 ML	●	●		○			○	○	—			±0,03	0,8	26,4	4,5

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A			CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2002 GG	●	●	●	●	●	●	—			2,0	±0,03	0,2	21,1	3,6	1
N3002 GG	●	●	●	●	○	○	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GG	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
N4002 GG	●	●	●	●	○	○	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
N5002 GG	●	●	●	●	○	○	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
N6002 GG	●	●	●	●	○	○	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,5	
GCM N2002 GL	●	●	●	●	○	○	—			2,0	±0,03	0,2	21,1	3,6	1
N2004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,6	
N3002 GL	●	●	●	●	○	○	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
N4002 GL	●	●	●	●	○	○	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
N5002 GL	●	●	●	●	○	○	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
N6002 GL	●	●	●	●	○	○	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,5	
GCM N2002 GF	—	—	●	●	●	○	○			2,0	±0,03	0,2	21,1	3,6	1
N2004 GF	—	—	●	●	●	○	○				±0,03	0,4	21,1	3,6	
N3002 GF	●	●	●	●	●	○	○			3,0	±0,03	0,2	21,1	3,8	
N3004 GF	●	●	●	●	●	○	○				±0,03	0,4	21,1	3,8	
N4002 GF	●	●	●	●	●	○	○			4,0	±0,03	0,2	26,4	4,0	
N4004 GF	●	●	●	●	●	○	○				±0,03	0,4	26,4	4,0	
N5002 GF	●	●	●	●	●	●	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GF	●	●	●	●	●	●	—				±0,03	0,4	26,4	4,1	
N6002 GF	●	●	●	●	●	●	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GF	●	●	●	●	●	●	—				±0,03	0,4	26,4	4,5	

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	●	○	●	○	3.0	±0.03	1.5	21.1	3.8	2
N4020 RG	●	●	●	●	●	●	○	●	—	4.0	±0.03	2.0	26.4	4.0	
N5025 RG	●	●	●	●	●	●	○	●	—	5.0	±0.03	2.5	27.2	4.1	
N6030 RG	●	●	●	●	●	●	○	●	—	6.0	±0.03	3.0	27.5	4.5	

Cut-Off Machining (Handed Edge)

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U		CW		RE	L	S	Fig.
									Cutting Width	Tolerance				
GCM R2002 CG 05	●	●	●	●	○	●	—	5°	2,0	±0,03	0,2	21,1	3,6	4
L2002 CG 05	●	●	●	●	○	●	—	5°	2,0	±0,03	0,2	21,1	3,6	
GCM R3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8	
L3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8	
GCM R4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0	
L4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0	
GCM R2003 CF 10	—	—	●	●	—	—	●	10°	2,0	±0,08	0,03	22,4	3,6	4
L2003 CF 10	—	—	●	●	—	—	●	10°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 10	—	—	●	●	—	—	●	10°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 10	—	—	●	●	—	—	●	10°	3,0	±0,08	0,03	22,4	3,8	
GCM R2003 CF 15	—	—	●	●	—	—	●	15°	2,0	±0,08	0,03	22,4	3,6	
L2003 CF 15	—	—	●	●	—	—	●	15°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 15	—	—	●	●	—	—	●	15°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 15	—	—	●	●	—	—	●	15°	3,0	±0,08	0,03	22,4	3,8	

GCM R: Right hand

GCM L: Left hand

Combine the insert with a holder such that the width of cut (CW) matches.

Non-Ferrous Metals

Dimensions (mm)

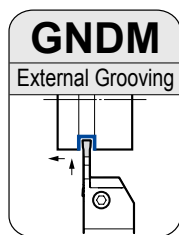


Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCG N2002 GA	○									2,0	±0,025	0,2	21,1	3,6	3
N3002 GA	○									3,0	±0,025	0,2	21,1	3,8	
N4004 GA	○									4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○									5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	

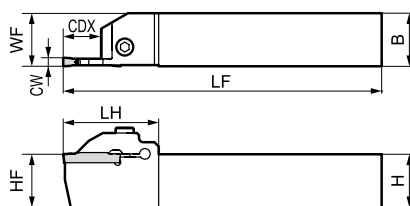
Grooving Tool Holders

GNDM / GNDMS Type

External Multi-Purpose Type (Grooving, Turning, Profiling)



Use for multi-purpose or profiling insert for turning (wide grooves).



Above figures show right hand tools.

Spare Parts

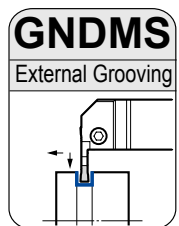


Holders

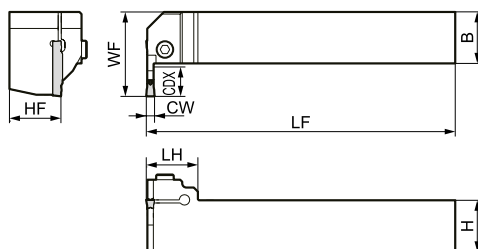
Cat. No.	Stock		Dimensions (mm)						Grooving Width (mm)	Max. Groov. Depth (mm)	Max. Cutt-Off Dia (mm)	Applicable Insert	Cap Screw		Spanner
	R	L	H	B	LF	WF	HF	LH	CW	CDX					
GNDM R/L 2020 K 1.2510	●	●	20	20	125	20	20	34,0	1,25	10	20	GCM N125005 GF	BX0520	5,0	LH040
GNDM R/L 2020 K 1.510	●	●	20	20	125	20	20	34,0	1,50	10	20	GCM N150005 GF			
GNDM R/L 2020 K 210	●	●	20	20	125	20	20	33,6	2,00	10	20	GCM □20○○-□□			
GNDM R/L 2020 K 312	●	●	20	20	125	20	20	36,6	3,00	12	24	GCM □30○○-□□			
GNDM R/L 2020 K 418	●	●	20	20	125	20	20	45,0	4,00	18	36	GCM □40○○-□□			
GNDM R/L 2020 K 518	●	●	20	20	125	20	20	45,0	5,00	18	36	GCM N50○○-□□			
GNDM R/L 2020 K 618	●	●	20	20	125	20	20	45,0	6,00	18	36	GCM N60○○-□□			
GNDM R/L 2525 M 1.2510	●	●	25	25	150	25	25	36,0	1,25	10	20	GCM N125005 GF			
GNDM R/L 2525 M 1.510	●	●	25	25	150	25	25	36,0	1,50	10	20	GCM N150005 GF			
GNDM R/L 2525 M 210	●	●	25	25	150	25	25	33,6	2,00	10	20	GCM N20○○-□□			
GNDM R/L 2525 M 312	●	●	25	25	150	25	25	36,6	3,00	12	24	GCM □30○○-□□			
GNDM R/L 2525 M 418	●	●	25	25	150	25	25	45,0	4,00	18	36	GCM □40○○-□□			
GNDM R/L 2525 M 518	●	●	25	25	150	25	25	45,0	5,00	18	36	GCM N50○○-□□			
GNDM R/L 2525 M 618	●	●	25	25	150	25	25	45,0	6,00	18	36	GCM N60○○-□□			
GNDM R/L 3225 P 312			32	25	170	25	32	36,6	3,00	12	24	GCM □30○○-□□	BX0620	6,0	LH050
GNDM R/L 3225 P 418			32	25	170	25	32	45,0	4,00	18	36	GCM □40○○-□□			
GNDM R/L 3225 P 518			32	25	170	25	32	45,0	5,00	18	36	GCM N50○○-□□			
GNDM R/L 3225 P 618			32	25	170	25	32	45,0	6,00	18	36	GCM N60○○-□□			
GNDM R/L 3225 P 718			32	25	170	25	32	50,0	7,00	18	36	GCM N70○○-□□			
GNDM R/L 3225 P 818			32	25	170	25	32	50,0	8,00	18	36	GCM N80○○-□□	BX0620	6,0	LH050
GNDM R/L 3232 P 312	●	●	32	32	170	32	32	36,6	3,00	12	24	GCM □30○○-□□			
GNDM R/L 3232 P 418	●	●	32	32	170	32	32	45,0	4,00	18	36	GCM □40○○-□□			
GNDM R/L 3232 P 518	●	●	32	32	170	32	32	45,0	5,00	18	36	GCM N50○○-□□			
GNDM R/L 3232 P 618	●	●	32	32	170	32	32	45,0	6,00	18	36	GCM N60○○-□□			
GNDM R/L 3232 P 718	●	●	32	32	170	32	32	50,0	7,00	18	36	GCM N70○○-□□			
GNDM R/L 3232 P 818	●	●	32	32	170	32	32	50,0	8,00	18	36	GCM N80○○-□□			

Select holders and inserts with the same grooving width (CW).

External L-Styled (Side Cut) Multi-Purpose Type (Grooving, Turning, Profiling)



Use for multi-purpose or profiling insert for turning (wide grooves).



Above figures show right hand tools.

Spare Parts



Holders

Cat. No.	Stock		Dimensions (mm)						Grooving Width (mm)	Max. Groov. Depth (mm)	Applicable Insert	Cap Screw		Spanner
	R	L	H	B	LF	WF	HF	LH	CW	CDX				
GNDMS R/L 2020 K 310	●	○	20	20	125	32	20	25	3,0	10	GCM □30○○-□□	BX0520	5,0	LH040
GNDMS R/L 2020 K 412	●	●	20	20	125	34	20	25	4,0	12	GCM □40○○-□□			
GNDMS R/L 2020 K 512	●	○	20	20	125	34	20	25	5,0	12	GCM N50○○-□□			
GNDMS R/L 2525 M 312	●	●	25	25	150	39	25	25	3,0	12	GCM □30○○-□□			
GNDMS R/L 2525 M 414	●	●	25	25	150	41	25	25	4,0	14	GCM □40○○-□□			
GNDMS R/L 2525 M 514	●	●	25	25	150	41	25	25	5,0	14	GCM N50○○-□□			
GNDMS R/L 2525 M 614	●	●	25	25	150	41	25	25	6,0	14	GCM N60○○-□□			

Select holders and inserts with the same grooving width (CW).

● Euro stock

○ Japan stock

Grooving Tool Holders GNDM / GNDMS Type

Inserts for GNDM / GNDMS

Coated Carbide

Cermet

Carbide

Fig. 1

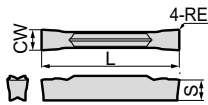


Fig. 2

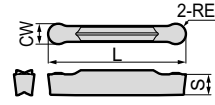


Fig. 3

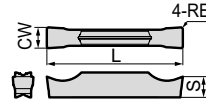
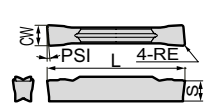


Fig. 4



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
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	
N4002 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,8	26,4	4,0	
N5004 MG	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 MG	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,8	26,4	4,5	
N7004 MG	●	●	●	○	●	●	●	●	—	7,0	±0,04	0,4	28,8	5,5	
N7008 MG	●	●	●	○	●	●	●	●	—	7,0	±0,04	0,8	28,8	5,5	1
N8004 MG	●	●	●	○	●	●	●	●	—	8,0	±0,04	0,4	28,8	6,0	
N8008 MG	●	●	●	○	●	●	●	●	—	8,0	±0,04	0,8	28,8	6,0	
GCM N2002 ML	—	—	—	—	○	—	○	—	—	2,0	±0,03	0,2	21,1	3,6	
N3002 ML	●	●	●	○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 ML	●	●	●	○	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 ML	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,8	26,4	4,1	
N6004 ML	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 ML	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,8	26,4	4,5	1
N7004 ML	●	●	●	○	●	●	●	●	—	7,0	±0,04	0,4	28,8	5,5	
N7008 ML	●	●	●	○	●	●	●	●	—	7,0	±0,04	0,8	28,8	5,5	
N8004 ML	●	●	●	○	●	●	●	●	—	8,0	±0,04	0,4	28,8	6,0	
N8008 ML	●	●	●	○	●	●	●	●	—	8,0	±0,04	0,8	28,8	6,0	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
								Cutting Width	Tolerance				
GCM N2002 GG	●	●	●	●	●	●	—	2,0	±0,03	0,2	21,1	3,6	1
N3002 GG	●	●	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GG	●	●	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GG	●	●	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GG	●	●	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GG	●	●	●	●	●	●	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GG	●	●	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N6002 GG	●	●	●	●	●	●	—	6,0	±0,03	0,2	26,4	4,5	
N6004 GG	●	●	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N7004 GG	●	●	●	●	●	●	—	7,0	±0,04	0,4	28,8	5,5	
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	
N2004 GL	●	●	●	●	●	●	—	2,0	±0,03	0,4	21,1	3,6	
N3002 GL	●	●	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GL	●	●	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GL	●	●	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GL	●	●	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GL	●	●	●	●	●	●	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GL	●	●	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N6002 GL	●	●	●	●	●	●	—	6,0	±0,03	0,2	26,4	4,5	
N6004 GL	●	●	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N7004 GL	●	●	●	●	●	●	—	7,0	±0,04	0,4	28,8	5,5	1
N8004 GL	●	●	●	●	●	●	—	8,0	±0,04	0,4	28,8	6,0	
GCM N125005 GF	—	—	—	—	—	—	—	1,25	±0,03	0,05	17,4	3,2	
N150005 GF	—	—	—	—	—	—	—	1,5	±0,03	0,05	17,4	3,7	
GCM N2002 GF	—	—	—	—	—	—	—	2,0	±0,03	0,2	21,1	3,6	
N2004 GF	—	—	—	—	—	—	—	2,0	±0,03	0,4	21,1	3,6	
N3002 GF	●	●	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GF	●	●	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GF	●	●	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GF	●	●	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GF	●	●	●	●	●	●	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GF	●	●	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	1
N6002 GF	●	●	●	●	●	●	—	6,0	±0,03	0,2	26,4	4,5	
N6004 GF	●	●	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N7002 GF	●	●	●	●	●	●	—	7,0	±0,04	0,2	28,8	5,5	
N7004 GF	●	●	●	●	●	●	—	7,0	±0,04	0,4	28,8	5,5	
N8002 GF	●	●	●	●	●	●	—	8,0	±0,04	0,2	28,8	6,0	
N8004 GF	●	●	●	●	●	●	—	8,0	±0,04	0,4	28,8	6,0	

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	●	●	●	—	3,0	±0,03	1,5	21,1	3,8	2
N4020 RG	●	●	●	●	●	●	●	●	—	4,0	±0,03	2,0	26,4	4,0	
N5025 RG	●	●	●	●	●	●	●	●	—	5,0	±0,03	2,5	27,2	4,1	
N6030 RG	●	●	●	●	●	●	●	●	—	6,0	±0,03	3,0	27,5	4,5	
N7035 RG	●	●	●	●	●	●	●	●	—	7,0	±0,04	3,5	29,1	5,5	
N8040 RG	●	●	●	●	●	●	●	●	—	8,0	±0,04	4,0	29,3	6,0	

Cut-Off Machining (Handed Edge)

Dimensions (mm)



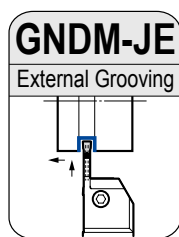
Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U		CW		RE	L	S	Fig.
									Cutting Width	Tolerance				
GCM R2002 CG 05	●	●	●	●	○	○	—	5°	2,0	±0,03	0,2	21,1	3,6	4
L2002 CG 05	●	●	●	●	○	○	—	5°	2,0	±0,03	0,2	21,1	3,6	
GCM R3002 CG 05	●	●	●	●	○	○	—	5°	3,0	±0,03	0,2	21,3	3,8	
L3002 CG 05	●	●	●	●	○	○	—	5°	3,0	±0,03	0,2	21,3	3,8	
GCM R4002 CG 05	●	●	●	●	○	○	—	5°	4,0	±0,04	0,2	26,7	4,0	
L4002 CG 05	●	●	●	●	○	○	—	5°	4,0	±0,04	0,2	26,7	4,0	
GCM R2003 CF 10	—	—	●	●	—	—	●	10°	2,0	±0,08	0,03	22,4	3,6	4
L2003 CF 10	—	—	●	●	—	—	●	10°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 10	—	—	●	●	—	—	●	10°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 10	—	—	●	●	—	—	●	10°	3,0	±0,08	0,03	22,4	3,8	
GCM R2003 CF 15	—	—	●	●	—	—	●	15°	2,0	±0,08	0,03	22,4	3,6	
L2003 CF 15	—	—	●	●	—	—	●	15°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 15	—	—	●	●	—	—	●	15°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 15	—	—	●	●	—	—	●	15°	3,0	±0,08	0,03	22,4	3,8	

Grooving Tool Holders

GNDM-JE Type

Holder with Internal Coolant

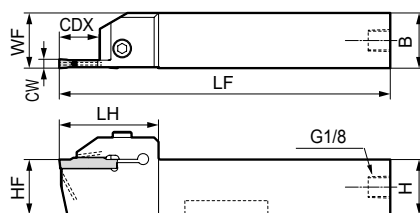
External Multi-Purpose Type (Grooving, Turning, Profiling)



Internal Coolant



Use for multi-purpose or profiling insert for turning (wide grooves).



Above figures show right hand tools.

Spare Parts

Cap Screw	Plug and Sealing	Grub Screw*	Spanner
BX0520	6,0	XP02-E	BT0505-E
			LH040

Holders

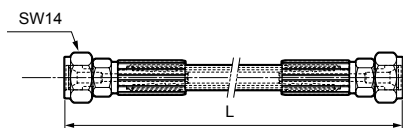
Cat. No.	Stock		Dimensions (mm)						Grooving Width (mm)	Max. Groov. Depth (mm)	Max. Cutt-Off Dia (mm)	Applicable Insert
	R	L	H	B	LF	WF	HF	LH				
GNDM R/L 2020 X 210 JE	●	●	20	20	100	20	20	33,6	2,00	10	20	GC □ 2000-□□
GNDM R/L 2020 X 312 JE	●	●	20	20	100	20	20	36,6	3,00	12	24	GC □ 3000-□□
GNDM R/L 2020 X 418 JE	●	●	20	20	110	20	20	45,0	4,00	18	36	GC □ 4000-□□
GNDM R/L 2020 X 518 JE	●	●	20	20	110	20	20	45,0	5,00	18	36	GC □ N5000-□□
GNDM R/L 2020 X 618 JE	●	●	20	20	110	20	20	45,0	6,00	18	36	GC □ N6000-□□
GNDM R/L 2525 X 210 JE	●	●	25	25	100	25	25	33,6	2,00	10	20	GC □ 2000-□□
GNDM R/L 2525 X 312 JE	●	●	25	25	100	25	25	36,6	3,00	12	24	GC □ 3000-□□
GNDM R/L 2525 X 418 JE	●	●	25	25	110	25	25	45,0	4,00	18	36	GC □ 4000-□□
GNDM R/L 2525 X 518 JE	●	●	25	25	110	25	25	45,0	5,00	18	36	GC □ N5000-□□
GNDM R/L 2525 X 618 JE	●	●	25	25	110	25	25	45,0	6,00	18	36	GC □ N6000-□□

Select holders and inserts with the same grooving width (CW).

*Grub screws are sold separately (M5x5)

Parts (Hose)

Fig. 1



Cat. No.	Stock	L (mm)	Srew Standard	Srew Standard	Fig.
J-HOSE-G1/8-G1/8-200-E	●	200	G1/8	G1/8	1
J-HOSE-G1/8-G1/8-300-E	●	300	G1/8	G1/8	1

Hoses are sold separately.

Parts (Connector)

Fig. 1

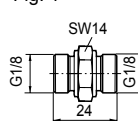


Fig. 2

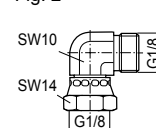
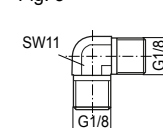


Fig. 3



Cat. No.	Stock	Srew Standard	Srew Standard	Fig.
J-G1/8-G1/8-00-E	●	G1/8	G1/8	1
J-G1/8-G1/8F-90-E	●	G1/8	G1/8	2
J-G1/8-G1/8-90-E	●	G1/8	G1/8	3

Connectors are sold separately.

Grooving Tool Holders GNDM-JE Type

Inserts for GNDM-JE

Coated Carbide

Cermet

Carbide

Fig. 1

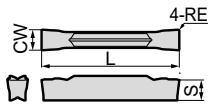


Fig. 2

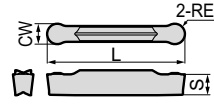


Fig. 3

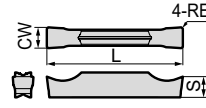
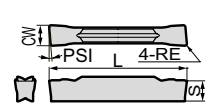


Fig. 4



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG	●	●		○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	1
N3004 MG	●	●	●		●	●	●	●	—		±0,03	0,4	21,1	3,8	
N4002 MG	●	●		○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	●	●		○	●	—	5,0	±0,03	0,8	26,4	4,0	
N5004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●		●	●		○	—	6,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,5	
N6008 MG	●	●			●	●		○	—	±0,03	0,8	26,4	4,5		
GCM N2002 ML	—	—	—	—	—	—	○	○	○	2,0	±0,03	0,2	21,1	3,6	1
N3002 ML	●	●	●	●	●	●	●	●	○		±0,03	0,2	21,1	3,8	
N3004 ML				○				○	○	3,0	±0,03	0,4	21,1	3,8	
N4002 ML				○				○	○		±0,03	0,2	26,4	4,0	
N4004 ML			●					○	○	4,0	±0,03	0,4	26,4	4,0	
N4008 ML	●	●		○	●	●		○	○		±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	●	●	●		○	—	5,0	±0,03	0,4	26,4	4,1	
N5008 ML	●	●		○	●	●	○	○	—		±0,03	0,8	26,4	4,1	
N6004 ML	●	●	●				○	○	—	6,0	±0,03	0,4	26,4	4,5	
N6008 ML	●	●		○	●	●		○	—		±0,03	0,8	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A			CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2002 GG	●	●	●	●	●	●	—			2,0	±0,03	0,2	21,1	3,6	1
N3002 GG	●	●	●	●	○	○	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GG	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
N4002 GG	●	●	●	●	○	○	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
N5002 GG	●	●	●	●	○	○	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
N6002 GG	●	●	●	●	○	○	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,5	
GCM N2002 GL	●	●	●	●	○	○	—			2,0	±0,03	0,2	21,1	3,6	1
N2004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,6	
N3002 GL	●	●	●	●	○	○	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
N4002 GL	●	●	●	●	○	○	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
N5002 GL	●	●	●	●	○	○	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
N6002 GL	●	●	●	●	○	○	—				±0,03	0,2	26,4	4,5	
N6004 GL	●	●	●	●	○	○	—			6,0	±0,03	0,4	26,4	4,5	
GCM N2002 GF	—	—	●	●	●	○	○			2,0	±0,03	0,2	21,1	3,6	1
N2004 GF	—	—	●	●	●	○	○				±0,03	0,4	21,1	3,6	
N3002 GF	●	●	●	●	●	○	○			3,0	±0,03	0,2	21,1	3,8	
N3004 GF	●	●	●	●	●	○	○				±0,03	0,4	21,1	3,8	
N4002 GF	●	●	●	●	●	○	○			4,0	±0,03	0,2	26,4	4,0	
N4004 GF	●	●	●	●	●	○	○				±0,03	0,4	26,4	4,0	
N5002 GF	●	●	●	●	●	○	○			5,0	±0,03	0,2	26,4	4,1	
N5004 GF	●	●	●	●	●	○	○				±0,03	0,4	26,4	4,1	
N6002 GF	●	●	●	●	●	○	○				±0,03	0,2	26,4	4,5	
N6004 GF	●	●	●	●	●	○	○			6,0	±0,03	0,4	26,4	4,5	

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	●	○	●	○	3.0	±0.03	1.5	21.1	3.8	2
N4020 RG	●	●	●	●	●	●	○	●	—	4.0	±0.03	2.0	26.4	4.0	
N5025 RG	●	●	●	●	●	●	○	●	—	5.0	±0.03	2.5	27.2	4.1	
N6030 RG	●	●	●	●	●	●	○	●	—	6.0	±0.03	3.0	27.5	4.5	

Cut-Off Machining (Handed Edge)

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	CW		RE	L	S	Fig.	
								Cutting Width	Tolerance					
GCM R2002 CG 05	●	●	●	●	○	●	—	5°	2,0	±0,03	0,2	21,1	3,6	4
L2002 CG 05	●	●	●	●	○	●	—	5°	2,0	±0,03	0,2	21,1	3,6	
GCM R3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8	
L3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8	
GCM R4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0	
L4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0	
GCM R2003 CF 10	—	—	●	●	—	—	●	10°	2,0	±0,08	0,03	22,4	3,6	4
L2003 CF 10	—	—	●	●	—	—	●	10°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 10	—	—	●	●	—	—	●	10°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 10	—	—	●	●	—	—	●	10°	3,0	±0,08	0,03	22,4	3,8	
GCM R2003 CF 15	—	—	●	●	—	—	●	15°	2,0	±0,08	0,03	22,4	3,6	
L2003 CF 15	—	—	●	●	—	—	●	15°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 15	—	—	●	●	—	—	●	15°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 15	—	—	●	●	—	—	●	15°	3,0	±0,08	0,03	22,4	3,8	

GCM R: Right hand

GCM L: Left hand

Combine the insert with a holder such that the width of cut (CW) matches.

Non-Ferrous Metals

Dimensions (mm)

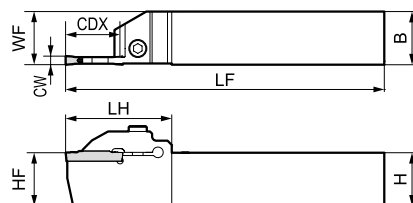
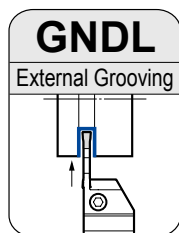


Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCG N2002 GA	○									2,0	±0,025	0,2	21,1	3,6	3
N3002 GA	○									3,0	±0,025	0,2	21,1	3,8	
N4004 GA	○									4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○									5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	

Grooving Tool Holders

GNDL / GNDLS Type

External Deep Grooving and Cut-Off



Above figures show right hand tools.

Spare Parts

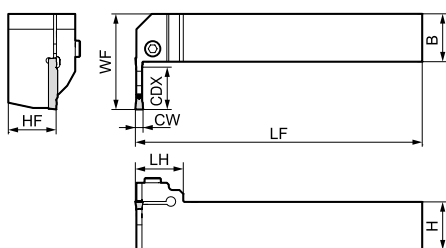
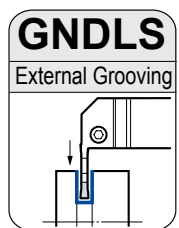


Holders

Cat. No.	Stock		Dimensions (mm)						Grooving Width (mm)	Max. Groov. Depth (mm)	Max. Cutt-Off Dia (mm)	Applicable Insert	Cap Screw		Spanner
	R	L	H	B	LF	WF	HF	LH							
GNDL R/L 2020 K 1.2516	●	●	20	20	125	20	20	38,0	1,25	16	32	GCM N125005 GF	BX0520	5,0	LH040
GNDL R/L 2020 K 1.516	●	●	20	20	125	20	20	38,0	1,50	16	32	GCM N150005 GF			
GNDL R/L 2020 K 220	●	●	20	20	125	20	20	44,5	2,00	20	40	GCM □20○-□□			
GNDL R/L 2020 K 320	●	●	20	20	125	20	20	44,5	3,00	20(18)	40	GCM □30○-□□			
GNDL R/L 2020 K 425	●	●	20	20	125	20	20	50,0	4,00	25(23)	50	GCM □40○-□□			
GNDL R/L 2020 K 525	●	●	20	20	125	20	20	50,0	5,00	25(23)	50	GCM N50○-□□			
GNDL R/L 2020 K 625	●	●	20	20	125	20	20	50,0	6,00	25(23)	50	GCM N60○-□□			
GNDL R/L 2525 M 1.2516	●	●	25	25	150	25	25	40,0	1,25	16	32	GCM N125005 GF			
GNDL R/L 2525 M 1.516	●	●	25	25	150	25	25	40,0	1,50	16	32	GCM N150005 GF			
GNDL R/L 2525 M 220	●	●	25	25	150	25	25	44,5	2,00	20	40	GCM □20○-□□			
GNDL R/L 2525 M 320	●	●	25	25	150	25	25	44,5	3,00	20(18)	40	GCM □30○-□□			
GNDL R/L 2525 M 425	●	●	25	25	150	25	25	50,0	4,00	25(23)	50	GCM □40○-□□			
GNDL R/L 2525 M 525	●	●	25	25	150	25	25	50,0	5,00	25(23)	50	GCM N50○-□□			
GNDL R/L 2525 M 625	●	●	25	25	150	25	25	50,0	6,00	25(23)	50	GCM N60○-□□			
GNDL R/L 3225 P 320			32	25	170	25	32	44,5	3,00	20(18)	40	GCM □30○-□□	BX0520	6,0	LH050
GNDL R/L 3225 P 425			32	25	170	25	32	50,0	4,00	25(23)	50	GCM □40○-□□			
GNDL R/L 3225 P 525			32	25	170	25	32	50,0	5,00	25(23)	50	GCM N50○-□□			
GNDL R/L 3225 P 625			32	25	170	25	32	50,0	6,00	25(23)	50	GCM N60○-□□			
GNDL R/L 3225 P 725			32	25	170	25	32	50,0	7,00	25(23)	50	GCM N70○-□□	BX0520	6,0	LH050
GNDL R/L 3225 P 825			32	25	170	25	32	50,0	8,00	25(23)	50	GCM N80○-□□			
GNDL R/L 3232 P 320	●	●	32	32	170	32	32	44,5	3,00	20(18)	40	GCM □30○-□□	BX0620	6,0	LH050
GNDL R/L 3232 P 425	●	●	32	32	170	32	32	50,0	4,00	25(23)	50	GCM □40○-□□			
GNDL R/L 3232 P 525	●	●	32	32	170	32	32	50,0	5,00	25(23)	50	GCM N50○-□□			
GNDL R/L 3232 P 625	●	●	32	32	170	32	32	50,0	6,00	25(23)	50	GCM N60○-□□			
GNDL R/L 3232 P 725	●	●	32	32	170	32	32	50,0	7,00	25(23)	50	GCM N70○-□□			
GNDL R/L 3232 P 825	●	●	32	32	170	32	32	50,0	8,00	25(23)	50	GCM N80○-□□			

Select holders and inserts with the same grooving width (CW). Dimensions in parentheses are for applications that use copying inserts (RG type breakers).

External L-Styled (Side Cut) Grooving



Above figures show right hand tools.

Spare Parts



Holders

Cat. No.	Stock		Dimensions (mm)						Grooving Width (mm)	Max. Groov. Depth (mm)	Applicable Insert	Cap Screw		Spanner
	R	L	H	B	LF	WF	HF	LH	CW	CDX				
GNDLS R/L 2020 K 216	●	●	20	20	125	38	20	25	2,0	16	GCM □20○-□□	BX0520	5,0	LH040
GNDLS R/L 2020 K 316	○	●	20	20	125	38	20	25	3,0	16	GCM □30○-□□			
GNDLS R/L 2525 M 218	●	●	25	25	150	45	25	25	2,0	18	GCM □20○-□□			
GNDLS R/L 2525 M 318	●	●	25	25	150	45	25	25	3,0	18	GCM □30○-□□			
GNDLS R/L 2525 M 423	●	●	25	25	150	50	25	25	4,0	23	GCM □40○-□□			
GNDLS R/L 2525 M 523	○	○	25	25	150	50	25	25	5,0	23	GCM N50○-□□			
GNDLS R/L 2525 M 623	●	○	25	25	150	50	25	25	6,0	23	GCM N60○-□□			

Select holders and inserts with the same grooving width (CW).

● Euro stock

○ Japan stock

Grooving Tool Holders GNDL / GNDLS Type

Inserts for GNDL / GNDLS

Coated Carbide

Cermet

Carbide

Fig. 1

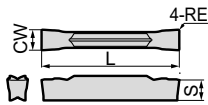


Fig. 2

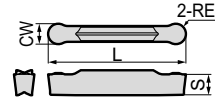


Fig. 3

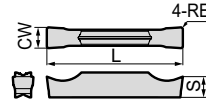
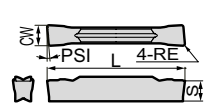


Fig. 4



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
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	
N4002 MG	●	●	○	○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 MG	●	●	○	○	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 MG	●	●	○	○	●	●	●	●	—	4,0	±0,03	0,8	26,4	4,0	
N5004 MG	●	●	○	○	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 MG	●	●	○	○	●	●	●	●	—	5,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●	○	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 MG	●	●	○	○	●	●	●	●	—	6,0	±0,03	0,8	26,4	4,5	
N7004 MG	●	●	○	○	●	●	●	●	—	7,0	±0,04	0,4	28,8	5,5	
N7008 MG	●	●	○	○	●	●	●	●	—	7,0	±0,04	0,8	28,8	5,5	1
N8004 MG	●	●	○	○	●	●	●	●	—	8,0	±0,04	0,4	28,8	6,0	
N8008 MG	●	●	○	○	●	●	●	●	—	8,0	±0,04	0,8	28,8	6,0	
GCM N2002 ML	—	—	—	—	○	○	○	○	—	2,0	±0,03	0,2	21,1	3,6	
N3002 ML	●	●	○	○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 ML	●	●	○	○	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 ML	●	●	○	○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 ML	●	●	○	○	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 ML	●	●	○	○	●	●	●	●	—	4,0	±0,03	0,8	26,4	4,0	
N5004 ML	●	●	○	○	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 ML	●	●	○	○	●	●	●	●	—	5,0	±0,03	0,8	26,4	4,1	
N6004 ML	●	●	○	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 ML	●	●	○	○	●	●	●	●	—	6,0	±0,03	0,8	26,4	4,5	
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	
N8004 ML	●	●	○	○	●	●	●	●	—	8,0	±0,04	0,4	28,8	6,0	
N8008 ML	●	●	○	○	●	●	●	●	—	8,0	±0,04	0,8	28,8	6,0	

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	○	○	●	●	●	●	—	3,0	±0,03	1,5	21,1	3,8	2
N4020 RG	●	●	○	○	●	●	●	●	—	4,0	±0,03	2,0	26,4	4,0	
N5025 RG	●	●	○	○	●	●	●	●	—	5,0	±0,03	2,5	27,2	4,1	
N6030 RG	●	●	○	○	●	●	●	●	—	6,0	±0,03	3,0	27,5	4,5	
N7035 RG	●	●	○	○	●	●	●	●	—	7,0	±0,04	3,5	29,1	5,5	
N8040 RG	●	●	○	○	●	●	●	●	—	8,0	±0,04	4,0	29,3	6,0	

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2010 RN	—	—	—	—	○	○	○	○	—	2,0	±0,03	1,0	21,7	3,6	2
N3015 RN	●	●	○	○	●	●	●	●	—	3,0	±0,03	1,5	22,6	3,8	
N4020 RN	●	●	○	○	●	●	●	●	—	4,0	±0,03	2,0	28,2	4,0	
N5025 RN	●	●	○	○	●	●	●	●	—	5,0	±0,03	2,5	28,3	4,1	
N6030 RN	●	●	○	○	●	●	●	●	—	6,0	±0,03	3,0	28,3	4,5	

Non-Ferrous Metals

Dimensions (mm)



Cat. No.	H									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
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	
N4004 GA	○	—	—	—	—	—	—	—	—	4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○	—	—	—	—	—	—	—	—	5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○	—	—	—	—	—	—	—	—	6,0	±0,025	0,4	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



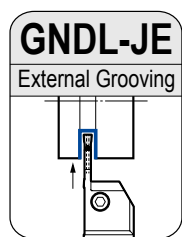
Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A			CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2002 GG	●	●	●	●	○	●	—			2,0	±0,03	0,2	21,1	3,6	1
N3002 GG	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GG	●	●	●	●	○	●	—				±0,03	0,4	21,1	3,8	
N4002 GG	●	●	●	●	○	●	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GG	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,0	
N5002 GG	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GG	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,1	
N6002 GG	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GG	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,5	
N7004 GG	●	○	●	●	○	●	—			7,0	±0,04	0,4	28,8	5,5	
N8004 GG	●	●	●	○	○	●	—			8,0	±0,04	0,4	28,8	6,0	
GCM N2002 GL	●	●	●	●	○	●	—			2,0	±0,03	0,2	21,1	3,6	1
N2004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,6	
N3002 GL	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
N4002 GL	●	●	●	●	○	●	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
N5002 GL	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
N6002 GL	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,5	
N7004 GL	●	○	●	●	○	●	—			7,0	±0,04	0,4	28,8	5,5	
N8004 GL	●	○	●	○	○	●	—			8,0	±0,04	0,4	28,8	6,0	
GCM N125005 GF	—	—	—	—	—	●	—			1,25	±0,03	0,05	17,4	3,2	1
N150005 GF	—	—	—	—	—	●	—			1,5	±0,03	0,05	17,4	3,7	
GCM N2002 GF	—	—	●	●	●	○	○			2,0	±0,03	0,2	21,1	3,6	1
N2004 GF	—	—	●	●	●	○	○				±0,03	0,4	21,1	3,6	
N3002 GF	●	●	●	●	●	●	○			3,0	±0,03	0,2	21,1	3,8	
N3004 GF	●	●	●	●	●	●	○				±0,03	0,4	21,1	3,8	
N4002 GF	●	●	●	●	●	●	○			4,0	±0,03	0,2	26,4	4,0	
N4004 GF	●	●	●	●	●	●	○				±0,03	0,4	26,4	4,0	
N5002 GF	●	●	●	●	●	●	○			5,0	±0,03	0,2	26,4	4,1	
N5004 GF	●	●	●	●	●	●	—				±0,03	0,4	26,4	4,1	
N6002 GF	●	●	●	●	●	●	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GF	●	●	●	●	●	●	—				±0,03	0,4	26,4	4,5	
N7002 GF	●	●	●	●	○	●	—			7,0	±0,04	0,2	28,8	5,5	
N7004 GF	●	●	●	○	○	●	—				±0,04	0,4	28,8	5,5	
N8002 GF	●	●	●	○	○	●	—			8,0	±0,04	0,2	28,8	6,0	
N8004 GF	●	●	●	○	○	●	—				±0,04	0,4	28,8	6,0	

Grooving Tool Holders

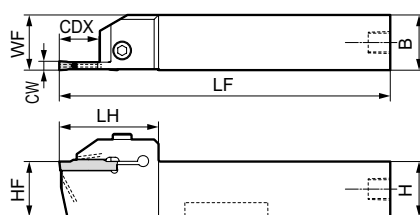
GNDL-JE Type

Holder with Internal Coolant

External Deep Grooving and Cut-Off



Internal Coolant



Above figures show right hand tools.

■ Holders

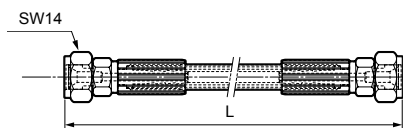
Cat. No.	Stock		Dimensions (mm)						Grooving Width (mm)	Max. Groov. Depth (mm)	Max. Cutt-Off Dia (mm)	Applicable Insert	Cap Screw	Plug and Sealing	Grub Screw*	Spanner
	R	L	H	B	LF	WF	HF	LH								
GNDL R/L 2020 X 220 JE	●	●	20	20	110	20	20	44,5	2,00	20	40	GC □ 2000-□ □	BX0520	6,0	XP02-E	BT0505-E
GNDL R/L 2020 X 320 JE	●	●	20	20	110	20	20	44,5	3,00	20	40	GC □ 3000-□ □				
GNDL R/L 2020 X 425 JE	●	●	20	20	115	20	20	50,0	4,00	25	50	GC □ 4000-□ □				
GNDL R/L 2020 X 525 JE	●	●	20	20	115	20	20	50,0	5,00	25	50	GC □ N5000-□ □				
GNDL R/L 2020 X 625 JE	●	●	20	20	115	20	20	50,0	6,00	25	50	GC □ N6000-□ □				
GNDL R/L 2525 X 220 JE	●	●	25	25	110	25	25	44,5	2,00	20	40	GC □ 2000-□ □				
GNDL R/L 2525 X 320 JE	●	●	25	25	110	25	25	44,5	3,00	20	40	GC □ 3000-□ □				
GNDL R/L 2525 X 425 JE	●	●	25	25	115	25	25	50,0	4,00	25	50	GC □ 4000-□ □				
GNDL R/L 2525 X 525 JE	●	●	25	25	115	25	25	50,0	5,00	25	50	GC □ N5000-□ □				
GNDL R/L 2525 X 625 JE	●	●	25	25	115	25	25	50,0	6,00	25	50	GC □ N6000-□ □				

Select holders and inserts with the same grooving width (CW).

*Grub screws are sold separately (M5x5)

■ Parts (Hose)

Fig. 1



Cat. No.	Stock	L (mm)	Srew Standard	Srew Standard	Fig.
J-HOSE-G1/8-G1/8-200-E	●	200	G1/8	G1/8	1
J-HOSE-G1/8-G1/8-300-E	●	300	G1/8	G1/8	1

Hoses are sold separately.

■ Parts (Connector)

Fig. 1

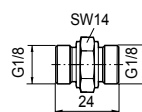


Fig. 2

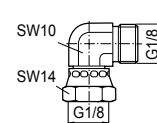
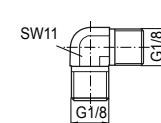


Fig. 3



Cat. No.	Stock	Srew Standard	Srew Standard	Fig.
J-G1/8-G1/8-00-E	●	G1/8	G1/8	1
J-G1/8-G1/8F-90-E	●	G1/8	G1/8	2
J-G1/8-G1/8-90-E	●	G1/8	G1/8	3

Connectors are sold separately.

Grooving Tool Holders GNDL-JE Type

Inserts for GNDL-JE

Coated Carbide

Cermet

Carbide

Fig. 1

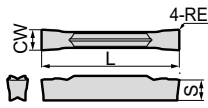


Fig. 2

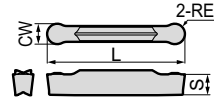


Fig. 3

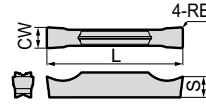
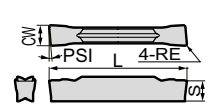


Fig. 4



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG	●	●		○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	1
N3004 MG	●	●	●		●	●	●	●	—		±0,03	0,4	21,1	3,8	
N4002 MG	●	●		○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	●		○	●	●	—	5,0	±0,03	0,8	26,4	4,0	
N5004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●		●		○	●	—	6,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●		○	●	●	●	●	—		±0,03	0,4	26,4	4,5	
N6008 MG	●	●				○	●	●	—		±0,03	0,8	26,4	4,5	
GCM N2002 ML	—	—	—	—	●	●	○	●	○	2,0	±0,03	0,2	21,1	3,6	1
N3002 ML	●	●	●	●	●	●	●	●	○	3,0	±0,03	0,2	21,1	3,8	
N3004 ML				○				○	○		±0,03	0,4	21,1	3,8	
N4002 ML				○	●	●	●	●	○	4,0	±0,03	0,2	26,4	4,0	
N4004 ML			●		●	●	●	●	○		±0,03	0,4	26,4	4,0	
N4008 ML	●	●		○	●	●	○	○	○	5,0	±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	●	●	●	○	●	—		±0,03	0,4	26,4	4,1	
N5008 ML	●	●		○	●	●	○	○	—	6,0	±0,03	0,8	26,4	4,1	
N6004 ML	●	●	●			○	○	○	—		±0,03	0,4	26,4	4,5	
N6008 ML	●	●		○	●	●	○	○	—		±0,03	0,8	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A			CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2002 GG	●	●	●	●	●	●	—			2,0	±0,03	0,2	21,1	3,6	1
N3002 GG	●	●	●	●	○	○	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GG	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
N4002 GG	●	●	●	●	○	○	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
N5002 GG	●	●	●	●	○	○	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
N6002 GG	●	●	●	●	○	○	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GG	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,5	
GCM N2002 GL	●	●	●	●	○	○	—			2,0	±0,03	0,2	21,1	3,6	1
N2004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,6	
N3002 GL	●	●	●	●	○	○	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
N4002 GL	●	●	●	●	○	○	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
N5002 GL	●	●	●	●	○	○	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
N6002 GL	●	●	●	●	○	○	—				±0,03	0,2	26,4	4,5	
N6004 GL	●	●	●	●	○	○	—			6,0	±0,03	0,4	26,4	4,5	
GCM N2002 GF	—	—	●	●	●	○	○			2,0	±0,03	0,2	21,1	3,6	1
N2004 GF	—	—	●	●	●	○	○				±0,03	0,4	21,1	3,6	
N3002 GF	●	●	●	●	●	○	○			3,0	±0,03	0,2	21,1	3,8	
N3004 GF	●	●	●	●	●	○	○				±0,03	0,4	21,1	3,8	
N4002 GF	●	●	●	●	●	○	○			4,0	±0,03	0,2	26,4	4,0	
N4004 GF	●	●	●	●	●	○	○				±0,03	0,4	26,4	4,0	
N5002 GF	●	●	●	●	●	○	○			5,0	±0,03	0,2	26,4	4,1	
N5004 GF	●	●	●	●	●	○	○				±0,03	0,4	26,4	4,1	
N6002 GF	●	●	●	●	●	○	○				±0,03	0,2	26,4	4,5	
N6004 GF	●	●	●	●	●	○	○			6,0	±0,03	0,4	26,4	4,5	

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	●	○	●	○	3.0	±0.03	1.5	21.1	3.8	2
N4020 RG	●	●	●	●	●	●	○	●	—	4.0	±0.03	2.0	26.4	4.0	
N5025 RG	●	●	●	●	●	●	○	●	—	5.0	±0.03	2.5	27.2	4.1	
N6030 RG	●	●	●	●	●	●	○	●	—	6.0	±0.03	3.0	27.5	4.5	

Cut-Off Machining (Handed Edge)

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U	CW		RE	L	S	Fig.	
								Cutting Width	Tolerance					
GCM R2002 CG 05	●	●	●	●	○	●	—	5°	2,0	±0,03	0,2	21,1	3,6	4
L2002 CG 05	●	●	●	●	○	●	—	5°	2,0	±0,03	0,2	21,1	3,6	
GCM R3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8	
L3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8	
GCM R4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0	
L4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0	
GCM R2003 CF 10	—	—	●	●	—	—	●	10°	2,0	±0,08	0,03	22,4	3,6	4
L2003 CF 10	—	—	●	●	—	—	●	10°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 10	—	—	●	●	—	—	●	10°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 10	—	—	●	●	—	—	●	10°	3,0	±0,08	0,03	22,4	3,8	
GCM R2003 CF 15	—	—	●	●	—	—	●	15°	2,0	±0,08	0,03	22,4	3,6	
L2003 CF 15	—	—	●	●	—	—	●	15°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 15	—	—	●	●	—	—	●	15°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 15	—	—	●	●	—	—	●	15°	3,0	±0,08	0,03	22,4	3,8	

GCM R: Right hand

GCM L: Left hand

Combine the insert with a holder such that the width of cut (CW) matches.

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2010 RN	—	—	—	—	●	●	●	●	—	2,0	±0,03	1,0	21,7	3,6	2
N3015 RN	●	●	●	○	●	●	●	●	—	3,0	±0,03	1,5	22,6	3,8	
N4020 RN	●	●	●	○	●	●	●	●	—	4,0	±0,03	2,0	28,2	4,0	
N5025 RN	●	●	●	○	●	●	●	●	—	5,0	±0,03	2,5	28,3	4,1	
N6030 RN	●	●	●	○	●	●	●	●	—	6,0	±0,03	3,0	28,3	4,5	

Non-Ferrous Metals

Dimensions (mm)

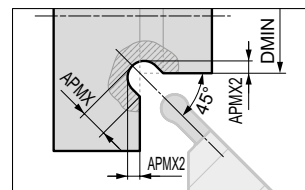
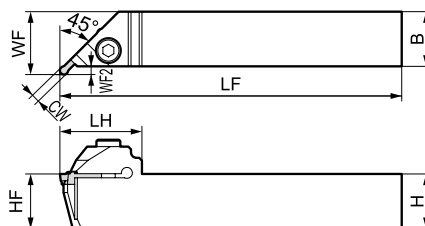
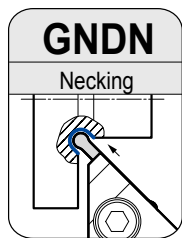


Cat. No.	H								CW		RE	L	S	Fig.
									Cutting Width	Tolerance				
GCG N2002 GA	○								2.0	±0.025	0.2	21.1	3.6	3
N3002 GA	○								3.0	±0.025	0.2	21.1	3.8	
N4004 GA	○								4.0	±0.025	0.4	26.4	4.0	
N5004 GA	○								5.0	±0.025	0.4	26.4	4.1	
N6004 GA	○								6.0	±0.025	0.4	26.4	4.5	

Grooving Tool Holders

GNDN Type

Necking



Above figures show right hand tools.

Spare Parts

Holders

Cat. No.	Stock		Dimensions (mm)							Min. Bore (mm)	Groov. Width (mm)	APMX	APMX2	Applicable Insert	Cap Screw	Spanner
	R	L	H	B	LF	WF	HF	LH	WF2							
GNDN R/L2020 K 215-020	○	○	20	20	125	23	20	30	3,0	20	2,0	1,5	0,64	GCM N2010 RN	BX0520	5,0
GNDN R/L2020 K 320-020	○	○	20	20	125	23	20	30	3,0	20	3,0	2,0	0,79	GCM N3015 RN		
GNDN R/L2020 K 430-030	○	○	20	20	125	24	20	32	4,0	30	4,0	3,0	1,29	GCM N4020 RN		
GNDN R/L2020 K 535-030	○	○	20	20	125	25	20	35	5,0	30	5,0	3,5	1,44	GCM N5025 RN		
GNDN R/L2020 K 640-030	○	○	20	20	125	25	20	35	5,0	30	6,0	4,0	1,59	GCM N6030 RN		
GNDN R/L2525 M 215-020	○	○	25	25	150	28	25	30	3,0	20	2,0	1,5	0,64	GCM N2010 RN	BX0520	5,0
GNDN R/L2525 M 320-020	○	○	25	25	150	28	25	30	3,0	20	3,0	2,0	0,79	GCM N3015 RN		
GNDN R/L2525 M 430-030	○	○	25	25	150	29	25	32	4,0	30	4,0	3,0	1,29	GCM N4020 RN		
GNDN R/L2525 M 535-030	○	○	25	25	150	30	25	35	5,0	30	5,0	3,5	1,44	GCM N5025 RN		
GNDN R/L2525 M 640-030	○	○	25	25	150	30	25	35	5,0	30	6,0	4,0	1,59	GCM N6030 RN		

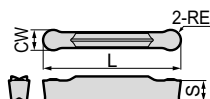
Select holders and inserts with the same grooving width (CW).

Inserts for GNDN

Coated Carbide

Cermet

Fig. 2



Profiling / Radius Grooving / Necking

Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2010 RN	—	—	—	—	●	●	○	○	—	2,0	±0,03	1,0	21,7	3,6	2
N3015 RN	●	●	●	○	●	●	○	○	—	3,0	±0,03	1,5	22,6	3,8	
N4020 RN	●	●	●	○	●	●	○	○	—	4,0	±0,03	2,0	28,2	4,0	
N5025 RN	●	●	●	○	●	●	○	○	—	5,0	±0,03	2,5	28,3	4,1	
N6030 RN	●	●	●	○	●	●	○	○	—	6,0	±0,03	3,0	28,3	4,5	

Select holders and inserts with the same grooving width (CW).

Grooving Tool Holders GNDXL Type

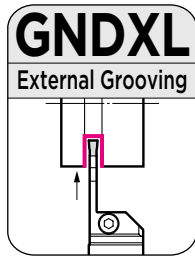


Fig 1

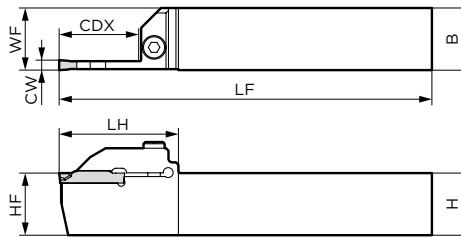


Figure shows right-handed (R) tool.

External Deep Grooving and Cut-off
Clamp-on

■ Holders

■ Spare Parts Dimensions (mm)

Cat. No.	Stock		Dimensions (mm)					Head	Width of Cut	Maximum Groove Depth	Max. Cut-off Dia.	Applicable Insert	Fig	Cap Screw		Wrench
	R	L	H	B	LF	WF	HF							LH	CW	
GNDXL R/L2020K-226			20	20	125	20	20	42.0	2.0	26	52	GCM N2002-GF1	1	BX0520	5.0	LH040
R/L2020K-332	●	●	20	20	125	20	20	48.0	3.0	32	64	GCM N30□□-□□1	1			
R/L2020K-432	●	●	20	20	125	20	20	48.0	4.0	32	64	GCM N40□□-□□1	1			
R/L2020K-532	●	●	20	20	125	20	20	48.0	5.0	32	64	GCM N50□□-□□1	1			
R/L2020K-632	●	●	20	20	125	20	20	48.0	6.0	32	64	GCM N60□□-□□1	1			
GNDXL R/L2525M-226			25	25	150	25	25	42.0	2.0	26	52	GCM N2002-GF1	1	BX0520	5.0	LH040
R/L2525M-332	●	●	25	25	150	25	25	48.0	3.0	32	64	GCM N30□□-□□1	1			
R/L2525M-432	●	●	25	25	150	25	25	48.0	4.0	32	64	GCM N40□□-□□1	1			
R/L2525M-532	●	●	25	25	150	25	25	48.0	5.0	32	64	GCM N50□□-□□1	1			
R/L2525M-632	●	●	25	25	150	25	25	48.0	6.0	32	64	GCM N60□□-□□1	1			

Select holders and inserts with matching width of cut (CW). Only 1-cornered inserts can be used. Refer to P33 for applicable inserts.

The maximum groove depth CDX is the figure during grooving. For maximum depth of cut during traverse cutting and profiling, refer to P11.

■ Inserts for GNDXL type (1-cornered)

(Coated Carbide)

Fig 1

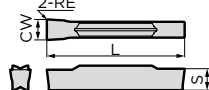
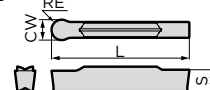


Fig 2



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

● 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
N4004-ML1	●	●	●	4.0	±0.03	0.4	26.4	4.0		1
N5004-ML1	●	●	●	5.0	±0.03	0.4	26.4	4.1		1
N6004-ML1	●	●	●	6.0	±0.03	0.4	26.4	4.5		1

● Profiling / Radius Grooving (1-cornered)

Dimensions (mm)

Cat. No.	AC5015S	AC5025S	AC530U	Width of Cut CW		Corner Radius RE	Overall Length L	Thickness S	Pcs/Pack	Fig
				Width of Cut	Tolerance					
GCM N3015-RN1	●	●	●	3.0	±0.03	1.5	22.6	3.8	5	2
N6030-RN1	●	●	●	6.0	±0.03	3.0	28.3	4.5		2

● Grooving / Cut-off (1-cornered)

Dimensions (mm)

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

Part Number Suffix Code (Chipbreakers)

Type	Symbol	Applications	Type	Symbol	Applications
Grooving / Traverse Cutting	ML1	Multi-functional / Low-feed	Profiling / Radius Grooving	RN1	General-purpose
Grooving / Cut-off	GF1	Grooving / Low cutting force			

Chipbreaker Selection P6

Recommended Cutting Conditions P11

Precautions for Use P14

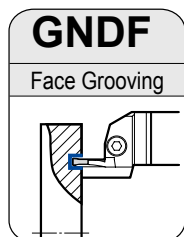
○ Japan stock

● Euro stock

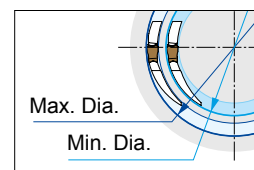
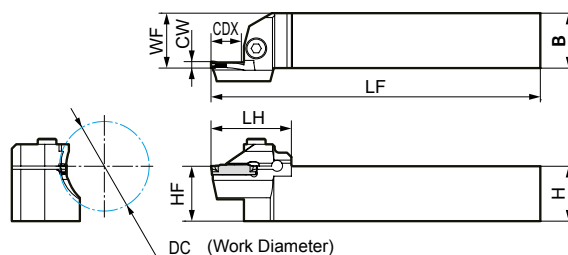
Grooving Tool Holders

GNDF Type

Face Grooving

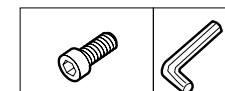


Use for multi-purpose or profiling insert for turning (wide grooves).



Work diameters in the stock indicate external diameters of face grooving.

Spare Parts



Holders

Cat. No.	Stock		Dimensions (mm)						Work Dia. (mm)	Groov. Width (mm)	Max. Cut- off Dia. (mm)	Applicable Insert	Cap Screw	N-m	Spanner
	R	L	H	B	LF	WF	HF	LH	DC	CW	CDX				
GNDF R/L 2020 K 312-035	●	●	20	20	125	20	20	35,6	35-45	3,0	12	GCM N3000-□□	BX0520	5,0	LH040
GNDF R/L 2020 K 312-040	●	●	20	20	125	20	20	35,6	40-55	3,0	12				
GNDF R/L 2020 K 318-050	●	●	20	20	125	20	20	41,6	50-70	3,0	18				
GNDF R/L 2020 K 318-065	●	●	20	20	125	20	20	41,6	65-100	3,0	18				
GNDF R/L 2020 K 318-090	●	●	20	20	125	20	20	41,6	90-150	3,0	18				
GNDF R/L 2020 K 318-140	●	●	20	20	125	20	20	41,6	140-200	3,0	18				
GNDF R/L 2020 K 318-180	●	●	20	20	125	20	20	41,6	180-300	3,0	18	GCM N4000-□□	BX0520	5,0	LH040
GNDF R/L 2020 K 418-040	●	●	20	20	125	20	20	41,6	40-55	4,0	18				
GNDF R/L 2020 K 423-050	●	●	20	20	125	20	20	46,6	50-70	4,0	23				
GNDF R/L 2020 K 423-065	●	●	20	20	125	20	20	46,6	65-90	4,0	23				
GNDF R/L 2020 K 423-085	●	○	20	20	125	20	20	46,6	85-130	4,0	23				
GNDF R/L 2020 K 423-125	○	●	20	20	125	20	20	46,6	125-200	4,0	23				
GNDF R/L 2020 K 423-180	○	○	20	20	125	20	20	46,6	180-300	4,0	23	GCM N5000-□□	BX0520	5,0	LH040
GNDF R/L 2020 K 423-280	○	○	20	20	125	20	20	46,6	280-1000	4,0	23				
GNDF R/L 2020 K 523-050	○	○	20	20	125	20	20	46,6	50-70	5,0	23				
GNDF R/L 2020 K 523-065	○	●	20	20	125	20	20	46,6	65-90	5,0	23				
GNDF R/L 2020 K 523-085	●	○	20	20	125	20	20	46,6	85-130	5,0	23				
GNDF R/L 2020 K 523-125	●	○	20	20	125	20	20	46,6	125-200	5,0	23				
GNDF R/L 2020 K 523-180	○	○	20	20	125	20	20	46,6	180-300	5,0	23	GCM N6000-□□	BX0520	5,0	LH040
GNDF R/L 2020 K 523-280	○	○	20	20	125	20	20	46,6	280-1000	5,0	23				
GNDF R/L 2020 K 623-050	○	○	20	20	125	20	20	46,6	50-75	6,0	23				
GNDF R/L 2020 K 623-070	○	○	20	20	125	20	20	46,6	70-110	6,0	23				
GNDF R/L 2020 K 623-100	○	●	20	20	125	20	20	46,6	100-200	6,0	23				
GNDF R/L 2020 K 623-180	○	○	20	20	125	20	20	46,6	180-300	6,0	23				
GNDF R/L 2020 K 623-280	○	○	20	20	125	20	20	46,6	280-1000	6,0	23	GCM N3000-□□	BX0520	5,0	LH040
GNDF R/L 2525 M 312-035	●	●	25	25	150	25	25	35,6	35-45	3,0	12				
GNDF R/L 2525 M 312-040	●	●	25	25	150	25	25	35,6	40-55	3,0	12				
GNDF R/L 2525 M 318-050	●	●	25	25	150	25	25	41,6	50-70	3,0	18				
GNDF R/L 2525 M 318-065	●	●	25	25	150	25	25	41,6	65-100	3,0	18				
GNDF R/L 2525 M 318-090	●	●	25	25	150	25	25	41,6	90-150	3,0	18				
GNDF R/L 2525 M 318-140	●	●	25	25	150	25	25	41,6	140-200	3,0	18	GCM N4000-□□	BX0520	5,0	LH040
GNDF R/L 2525 M 318-180	●	●	25	25	150	25	25	41,6	180-300	3,0	18				
GNDF R/L 2525 M 418-040	●	●	25	25	150	25	25	41,6	40-55	4,0	18				
GNDF R/L 2525 M 423-050	●	●	25	25	150	25	25	46,6	50-70	4,0	23				
GNDF R/L 2525 M 423-065	●	●	25	25	150	25	25	46,6	65-90	4,0	23				
GNDF R/L 2525 M 423-085	●	●	25	25	150	25	25	46,6	85-130	4,0	23				
GNDF R/L 2525 M 423-125	●	●	25	25	150	25	25	46,6	125-200	4,0	23	GCM N5000-□□	BX0520	5,0	LH040
GNDF R/L 2525 M 423-180	●	●	25	25	150	25	25	46,6	180-300	4,0	23				
GNDF R/L 2525 M 423-280	●	●	25	25	150	25	25	46,6	280-1000	4,0	23				
GNDF R/L 2525 M 523-050	●	●	25	25	150	25	25	46,6	50-70	5,0	23				
GNDF R/L 2525 M 523-065	●	●	25	25	150	25	25	46,6	65-90	5,0	23				
GNDF R/L 2525 M 523-085	●	●	25	25	150	25	25	46,6	85-130	5,0	23				
GNDF R/L 2525 M 523-125	●	●	25	25	150	25	25	46,6	125-200	5,0	23	GCM N6000-□□	BX0520	5,0	LH040
GNDF R/L 2525 M 523-180	●	●	25	25	150	25	25	46,6	180-300	5,0	23				
GNDF R/L 2525 M 523-280	●	●	25	25	150	25	25	46,6	280-1000	5,0	23				
GNDF R/L 2525 M 623-050	●	○	25	25	150	25	25	46,6	50-75	6,0	23				
GNDF R/L 2525 M 623-070	●	●	25	25	150	25	25	46,6	70-110	6,0	23				
GNDF R/L 2525 M 623-100	●	●	25	25	150	25	25	46,6	100-200	6,0	23				
GNDF R/L 2525 M 623-180	○	●	25	25	150	25	25	46,6	180-300	6,0	23	GCM N3000-□□	BX0520	5,0	LH040
GNDF R/L 2525 M 623-280	●	●	25	25	150	25	25	46,6	280-1000	6,0	23				

Select holders and inserts with the same grooving width (CW).

Grooving Tool Holders GNDF Type

Inserts for GNDF

Coated Carbide

Cermet

Carbide

Fig. 1

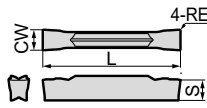


Fig. 2

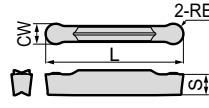
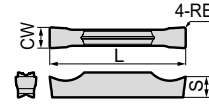


Fig. 3



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG	●	●		○	●	●		●	—	3,0	+0,03	0,2	21,1	3,8	1
N3004 MG	●	●	●		●	●	○	●	—		+0,03	0,4	21,1	3,8	
N4002 MG	●	●		○	●	●		●	—	4,0	+0,03	0,2	26,4	4,0	
N4004 MG	●	●		○	●	●		●	—		+0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	●	●		○	●	—	5,0	+0,03	0,8	26,4	4,0	
N5004 MG	●	●		○	●	●		●	—		+0,03	0,4	26,4	4,1	
N5008 MG	●	●	●		●	●	○	●	—	6,0	+0,03	0,8	26,4	4,1	
N6004 MG	●	●		○	●	●		●	—		+0,03	0,4	26,4	4,5	
N6008 MG	●	●	●	●		○	●	●	—		+0,03	0,8	26,4	4,5	
GCM N2002 ML	—	—	—	—	●	●	○	●	—	2,0	+0,03	0,2	21,1	3,6	1
N3002 ML	●	●			●	●		○	—	3,0	+0,03	0,2	21,1	3,8	
N3004 ML	●	●		○	●	●		○	—		+0,03	0,4	21,1	3,8	
N4002 ML	●	●		○	●	●		○	—	4,0	+0,03	0,2	26,4	4,0	
N4004 ML	●	●	●		●	●		○	—		+0,03	0,4	26,4	4,0	
N4008 ML	●	●		○	●	●	○	○	—	5,0	+0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	●	●		○	●	—		+0,03	0,4	26,4	4,1	
N5008 ML	●	●		○	●	●		○	—	6,0	+0,03	0,8	26,4	4,1	
N6004 ML	●	●	●		●	●	○	○	—		+0,03	0,4	26,4	4,5	
N6008 ML	●	●		○	●	●		○	—		+0,03	0,8	26,4	4,5	

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	●	●	●	○	3,0	±0,03	1,5	21,1	3,8	2
N4020 RG	●	●	●	●	●	●	●	●	○	4,0	±0,03	2,0	26,4	4,0	
N5025 RG	●	●	●	●	●	●	●	●	○	5,0	±0,03	2,5	27,2	4,1	
N6030 RG	●	●	●	●	●	●	●	●	—	6,0	±0,03	3,0	27,5	4,5	

Non-Ferrous Metals

Dimensions (mm)



Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCG N3002 GA	○									3,0	±0,025	0,2	21,1	3,8	3
N4004 GA	○									4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○									5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



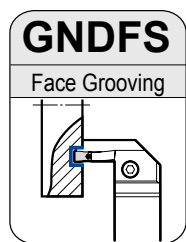
Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A			CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 GG N3004 GG N4002 GG N4004 GG N5002 GG N5004 GG N6002 GG N6004 GG	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	
	●	●	●	●	○	●	—				±0,03	0,4	21,1	3,8	
	●	●	●	●	○	●	—			4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,0	
	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,1	
	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,5	
GCM N3002 GL N3004 GL N4002 GL N4004 GL N5002 GL N5004 GL N6002 GL N6004 GL	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	
	●	●	●	●	○	●	—				±0,03	0,4	21,1	3,8	
	●	●	●	●	○	●	—			4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,0	
	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,1	
	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,5	
GCM N3002 GF N3004 GF N4002 GF N4004 GF N5002 GF N5004 GF N6002 GF N6004 GF	●	●	●	●	●	○	○			3,0	±0,03	0,2	21,1	3,8	
	●	●	●	●	●	●	○	○			±0,03	0,4	21,1	3,8	
	●	●	●	●	●	●	○	○		4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	●	●	○	○			±0,03	0,4	26,4	4,0	
	●	●	●	●	●	●	—	—		5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	●	●	—	—			±0,03	0,4	26,4	4,1	
	●	●	●	●	●	●	—	—		6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	●	●	—	—			±0,03	0,4	26,4	4,5	

Combine the insert with a holder such that the width of cut (CW) matches.

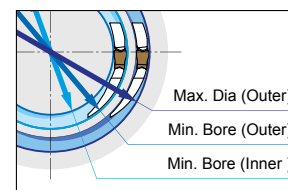
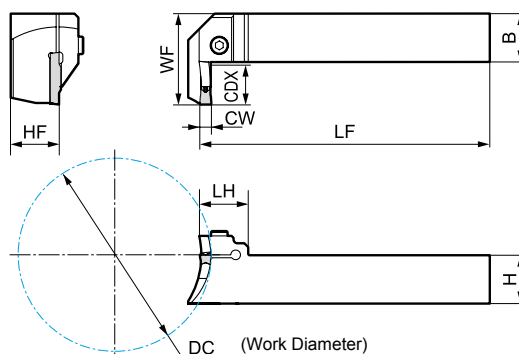
Grooving Tool Holders

GNDFS Type

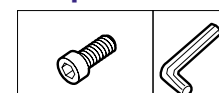
Face Grooving L-Styled (Non-Adjustable Type)



Use the multi-purpose copying inserts for turning (wide grooves).



Spare Parts



Above figures show right hand tools.

Holders

Cat. No.	Stock		Dimensions (mm)						Work Dia. (mm)	Min. Bore Ø Inner (mm)	Groov. Width (mm)	Max. Groov. Depth (mm)	Applicable Insert	Cap Screw	N·m	Spanner
	R	L	H	B	LF	WF	HF	LH								
GNDFS R/L2525M 620 070			25	25	150	47	25	25	70-100	58	6,0	20	GC□ N60○○-□□	BX0520	5,0	LH040
GNDFS R/L2525M 620 100			25	25	150	47	25	25	100-200	88	6,0	20				
GNDFS R/L2525M 620 180			25	25	150	47	25	25	180-300	168	6,0	20				
GNDFS R/L2525M 620 280			25	25	150	47	25	25	280-1000	268	6,0	20				
GNDFS R/L2525M 620 450			25	25	150	47	25	25	>450	438	6,0	20				
GNDFS R/L3232P 620 070			32	32	170	54	32	25	70-100	58	6,0	20	GC□ N60○○-□□	BX0620	6,0	LH050
GNDFS R/L3232P 620 100			32	32	170	54	32	25	100-200	88	6,0	20				
GNDFS R/L3232P 620 180			32	32	170	54	32	25	180-300	168	6,0	20				
GNDFS R/L3232P 620 280			32	32	170	54	32	25	280-1000	268	6,0	20				
GNDFS R/L3232P 620 450			32	32	170	54	32	25	>450	438	6,0	20				
GNDFS R/L2525M 820 070			25	25	150	47	25	30	70-100	54	8,0	20	GCM N80○○-□□	BX0620	6,0	LH050
GNDFS R/L2525M 820 100			25	25	150	47	25	30	100-200	84	8,0	20				
GNDFS R/L2525M 820 180			25	25	150	47	25	30	180-300	164	8,0	20				
GNDFS R/L2525M 820 280			25	25	150	47	25	30	280-1000	264	8,0	20				
GNDFS R/L2525M 820 450			25	25	150	47	25	30	>450	434	8,0	20				
GNDFS R/L3232P 820 070			32	32	170	54	32	30	70-100	54	8,0	20	GCM N80○○-□□	BX0620	6,0	LH050
GNDFS R/L3232P 820 100			32	32	170	54	32	30	100-200	84	8,0	20				
GNDFS R/L3232P 820 180			32	32	170	54	32	30	180-300	164	8,0	20				
GNDFS R/L3232P 820 280			32	32	170	54	32	30	280-1000	264	8,0	20				
GNDFS R/L3232P 820 450			32	32	170	54	32	30	>450	434	8,0	20				

Select holders and inserts with the same grooving width (CW).

Grooving Tool Holders GNDFS Type

Inserts for GNDFS

Coated Carbide

Cermet

Carbide

Fig. 1

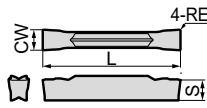


Fig. 2

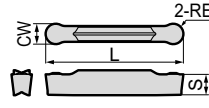
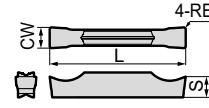


Fig. 3



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N6004 MG	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	1
N6008 MG	●	●	●	○	●	●	●	●	—	8,0	±0,03	0,8	26,4	4,5	
N8004 MG	●	●	●	○	●	●	●	●	—	8,0	±0,04	0,4	28,8	6,0	
N8008 MG	●	●	●	○	●	●	●	●	—	8,0	±0,04	0,8	28,8	6,0	1
GCM N6004 ML	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 ML	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,8	26,4	4,5	
N8004 ML	●	●	●	○	●	●	●	●	—	8,0	±0,04	0,4	28,8	6,0	
N8008 ML	●	●	●	○	●	●	●	●	—	8,0	±0,04	0,8	28,8	6,0	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
								Cutting Width	Tolerance				
GCM N6002 GG	●	●	●	○	●	—	—	6,0	±0,03	0,2	26,4	4,5	1
N6004 GG	●	●	●	○	●	—	—	8,0	±0,03	0,4	26,4	4,5	
N8004 GG	●	●	●	○	●	—	—	8,0	±0,04	0,4	28,8	6,0	
GCM N6002 GL	●	●	●	○	●	—	—	6,0	±0,03	0,2	26,4	4,5	1
N6004 GL	●	●	●	○	●	—	—	8,0	±0,03	0,4	26,4	4,5	
N8004 GL	●	○	●	○	●	—	—	8,0	±0,04	0,4	28,8	6,0	
GCM N6002 GF	●	●	●	●	●	—	—	6,0	±0,03	0,2	26,4	4,5	1
N6004 GF	●	●	●	●	●	—	—	8,0	±0,03	0,4	26,4	4,5	
N8002 GF	●	●	●	○	●	—	—	8,0	±0,04	0,2	28,8	6,0	
N8004 GF	●	●	●	○	●	—	—	8,0	±0,04	0,4	28,8	6,0	

Combine the insert with a holder such that the width of cut (CW) matches.

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N6030 RN	●	●	●	●	●	●	○	○	—	6,0	±0,03	3,0	28,3	4,5	2

Non-Ferrous Metals

Dimensions (mm)

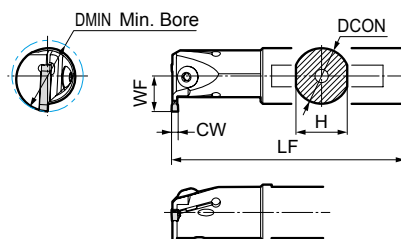
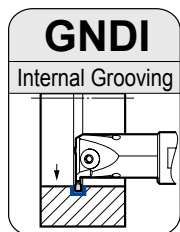


Cat. No.	H									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCG N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	3

Grooving Tool Holders

GNDI Type

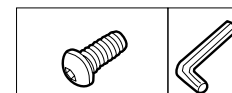
Internal Grooving



Use for multi-purpose or profiling insert for turning (wide grooves).

Above figures show right hand tools.

Spare Parts



Holders

Cat. No.	Stock		Dimensions (mm)				Min. Bore (mm)	Groov. Width (mm)	Max. Groov. Depth (mm)	Applicable Insert	Cap Screw	N·m	Spanner
	R	L	DCON	H	LF	WF	DMIN	CW	CDX				
GNDI R/L 2532 T 206	●	●	25	23	200	16	32	2,0	6	GCM N2000-□□	BH0516	5,0	LH030
GNDI R/L 3240 T 210	●	●	32	30	250	26	40	2,0	10	GCM N2000-□□	BH0616	6,0	LH040
GNDI R/L 2532 T 306	●	●	25	23	200	16	32	3,0	6	GCM N3000-□□	BH0516	5,0	LH030
GNDI R/L 3240 T 310	●	●	32	30	250	26	40	3,0	10	GCM N3000-□□	BH0616	6,0	LH040
GNDI R/L 4050 T 311	●	●	40	38	300	31	50	3,0	11	GCM N3000-□□	BH0616	6,0	LH040
GNDI R/L 2532 T 406	●	●	25	23	200	19	32	4,0	6	GCM N4000-□□	BH0516	5,0	LH030
GNDI R/L 3240 T 410	●	●	32	30	250	26	40	4,0	10	GCM N4000-□□	BH0616	6,0	LH040
GNDI R/L 4050 T 411	●	●	40	38	300	31	50	4,0	11	GCM N4000-□□	BH0616	6,0	LH040
GNDI R/L 2532 T 506	●	○	25	23	200	19	32	5,0	6	GCM N5000-□□	BH0516	5,0	LH030
GNDI R/L 3240 T 510	●	●	32	30	250	26	40	5,0	10	GCM N5000-□□	BH0616	6,0	LH040
GNDI R/L 4050 T 511	●	●	40	38	300	31	50	5,0	11	GCM N5000-□□	BH0616	6,0	LH040
GNDI R/L 4050 T 611	●	●	40	38	300	31	50	6,0	11	GCM N6000-□□	BH0616	6,0	LH040

Select holders and inserts with the same grooving width (CW).

Grooving Tool Holders GNDI Type

Inserts for GNDI

Coated Carbide Cermet Carbide

Fig. 1

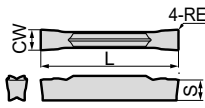


Fig. 2

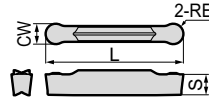
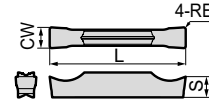


Fig. 3



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
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	
N4002 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,8	26,4	4,0	
N5004 MG	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 MG	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,8	26,4	4,5	
GCM N2002 ML	—	—	—	—	○	○	○	○	—	2,0	±0,03	0,2	21,1	3,6	1
N3002 ML	●	●	●	○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 ML	●	●	●	○	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 ML	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,8	26,4	4,1	
N6004 ML	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 ML	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,8	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
								Cutting Width	Tolerance				
GCM N2002 GG	●	●	●	●	○	○	—	2,0	±0,03	0,2	21,1	3,6	1
N3002 GG	●	●	●	●	○	○	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GG	●	●	●	●	○	○	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GG	●	●	●	●	○	○	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GG	●	●	●	●	○	○	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GG	●	●	●	●	○	○	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GG	●	●	●	●	○	○	—	5,0	±0,03	0,4	26,4	4,1	
N6002 GG	●	●	●	●	○	○	—	6,0	±0,03	0,2	26,4	4,5	
N6004 GG	●	●	●	●	○	○	—	6,0	±0,03	0,4	26,4	4,5	
GCM N2002 GL	●	●	●	●	○	○	—	2,0	±0,03	0,2	21,1	3,6	1
N2004 GL	●	●	●	●	○	○	—	3,0	±0,03	0,4	21,1	3,6	
N3002 GL	●	●	●	●	○	○	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GL	●	●	●	●	○	○	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GL	●	●	●	●	○	○	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GL	●	●	●	●	○	○	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GL	●	●	●	●	○	○	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GL	●	●	●	●	○	○	—	5,0	±0,03	0,4	26,4	4,1	
N6002 GL	●	●	●	●	○	○	—	6,0	±0,03	0,2	26,4	4,5	
N6004 GL	●	●	●	●	○	○	—	6,0	±0,03	0,4	26,4	4,5	
GCM N2002 GF	—	—	●	●	○	○	—	2,0	±0,03	0,2	21,1	3,6	1
N2004 GF	—	—	●	●	○	○	—	3,0	±0,03	0,4	21,1	3,6	
N3002 GF	●	●	●	●	○	○	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GF	●	●	●	●	○	○	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GF	●	●	●	●	○	○	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GF	●	●	●	●	○	○	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GF	●	●	●	●	○	○	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GF	●	●	●	●	○	○	—	5,0	±0,03	0,4	26,4	4,1	
N6002 GF	●	●	●	●	○	○	—	6,0	±0,03	0,2	26,4	4,5	
N6004 GF	●	●	●	●	○	○	—	6,0	±0,03	0,4	26,4	4,5	

Combine the insert with a holder such that the width of cut (CW) matches.

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	—	—	—	—	○	○	○	○	—	3,0	±0,03	1,5	21,1	3,8	2
N4020 RG	●	●	●	○	●	●	○	○	—	4,0	±0,03	2,0	26,4	4,0	
N5025 RG	●	●	●	○	●	●	○	○	—	5,0	±0,03	2,5	27,2	4,1	
N6030 RG	●	●	●	○	●	●	○	○	—	6,0	±0,03	3,0	27,5	4,5	

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2010 RN	—	—	—	—	○	○	○	○	—	2,0	±0,03	1,0	21,7	3,6	2
N3015 RN	●	●	●	○	●	●	○	○	—	3,0	±0,03	1,5	22,6	3,8	
N4020 RN	●	●	●	○	●	●	○	○	—	4,0	±0,03	2,0	28,2	4,0	
N5025 RN	●	●	●	○	●	●	○	○	—	5,0	±0,03	2,5	28,3	4,1	
N6030 RN	●	●	●	○	●	●	○	○	—	6,0	±0,03	3,0	28,3	4,5	

Non-Ferrous Metals

Dimensions (mm)

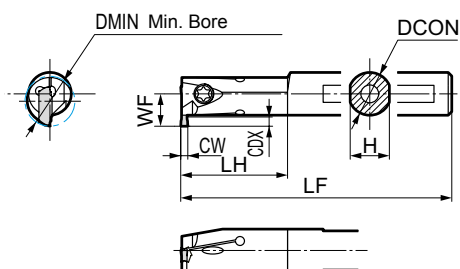
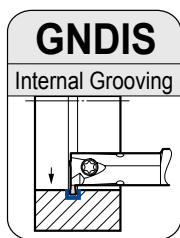


Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCG N2002 GA	○									2,0	±0,025	0,2	21,1	3,6	3
N3002 GA	○									3,0	±0,025	0,2	21,1	3,8	
N4004 GA	○									4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○									5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	

Grooving Tool Holders

GNDIS Type

Internal Grooving



Above figures show right hand tools.

Spare Parts

Holders

Cat. No.	Stock		Dimensions (mm)					Min. Bore (mm)	Groov. Width (mm)	Max. Groov. Depth (mm)	Applicable Insert	Cap Screw	Spanner
	R	L	DCON	H	LF	LH	WF	DMIN	CW	CDX			
GNDIS R/L 1214 T 1526	○	○	12	11	150	30	9,0	14	1,5	2,6	GXM N150005S GF	BFTX0409N	3,4
GNDIS R/L 1214 T 1536	○	○	12	11	150	30	10,0	14	1,5	3,6	GXM N150005S GF		
GNDIS R/L 1616 T 1536	○	○	16	15	160	35	11,5	16	1,5	3,6	GXM N150005S GF		
GNDIS R/L 1620 T 1546	○	○	16	15	160	40	14,5	20	1,5	4,6	GXM N150005S GF	BFTX0511N	5,0
GNDIS R/L 2025 T 1566	○	○	20	19	180	40	19,0	25	1,5	6,6	GXM N150005S GF		
GNDIS R/L 1214 T 2026	○	○	12	11	150	30	9,0	14	2,0	2,6	GXM N2002S-□□	BFTX0409N	3,4
GNDIS R/L 1214 T 2036	○	○	12	11	150	30	10,0	14	2,0	3,6	GXM N2002S-□□		
GNDIS R/L 1616 T 2036	○	○	16	15	160	35	11,5	16	2,0	3,6	GXM N2002S-□□		
GNDIS R/L 1620 T 2046	○	○	16	15	160	40	14,5	20	2,0	4,6	GXM N2002S-□□	BFTX0511N	5,0
GNDIS R/L 2025 T 2066	○	○	20	19	180	40	19,0	25	2,0	6,6	GXM N2002S-□□		
GNDIS R/L 1214 T 3026	○	○	12	11	150	30	9,0	14	3,0	2,6	GXM N3002S-□□	BFTX0409N	3,4
GNDIS R/L 1214 T 3036	○	○	12	11	150	30	10,0	14	3,0	3,6	GXM N3002S-□□		
GNDIS R/L 1616 T 3036	○	○	16	15	160	35	11,5	16	3,0	3,6	GXM N3002S-□□		
GNDIS R/L 1620 T 3046	○	○	16	15	160	40	14,5	20	3,0	4,6	GXM N3002S-□□	BFTX0511N	5,0
GNDIS R/L 2025 T 3066	○	○	20	19	180	40	19,0	25	3,0	6,6	GXM N3002S-□□		

Select holders and inserts with the same grooving width (CW).

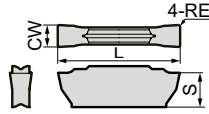
Only GXM inserts can be used.

Grooving Tool Holders GNDIS Type

Inserts for GNDIS

Coated Carbide

Fig. 1



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC520U	AC1030U								CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GXM N2002S ML	○	○								2,0	±0,03	0,2	11,1	3,1	1
N3002S ML	○	○								3,0	±0,03	0,2	11,1	3,1	

Select holders and inserts with the same grooving width (CW).

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC520U	AC1030U									CW		RE	L	S	Fig.
											Cutting Width	Tolerance				
GXM N150005S GF	—	○									1,5	±0,03	0,2	21,1	3,6	1
N2002S GF	○	○									2,0	±0,03	0,2	21,1	3,8	
N3002S GF	○	○									3,0	±0,03	0,4	21,1	3,8	

GCM and GCG inserts are not compatible.

Recommended Cutting Conditions

Work Material	P Carbon Steel / Alloy Steel		M Stainless Steel		K Cast Iron		S Exotic Alloy	
Grade	AC520U	AC1030U	AC520U	AC1030U	AC520U	AC1030U	AC520U	AC1030U
Cutting Speed (m/min)	80–200	50–200	70–150	50–150	60–200	50–200	20–80	20–60

Grooving / Cut-Off Machining / Necking

Chipbreaker		Feed Rate (mm/rev)	
		ML	GF
Width of Cut CW (mm)	1,5	—	0,02–0,10
	2,0	0,03–0,12	0,03–0,12
	3,0	0,05–0,15	0,05–0,15

Traversing

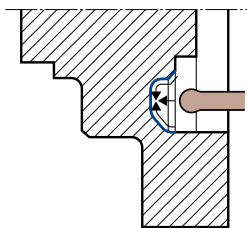
Chipbreaker		ML	
		Feed Rate (mm/rev)	Depth of Cut (mm)
Width of Cut CW (mm)	2,0	0,03–0,12	0,2–0,8
	3,0	0,05–0,15	0,3–1,2

Grooving Tool Holders

GND Series

Application Examples

20CrMo5, Automotive Part, Face Profiling



Target:

- Higher rigidity
- Vibration reduction
- Chip control
- Wear resistance performance

Holder: GND F R2525M 423-125

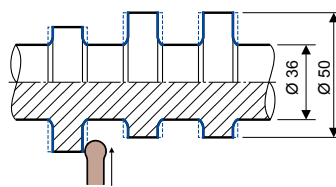
Insert: GCM N4020 RG

Grooving width: 4,0 mm

Cutting conditions: $v_c = 200$ m/min
 $f = 0,14$ mm/rev
 wet

Stable machining free of vibration!
 Excellent chip control using the GND type.

C53, Cam Shaft Grooving / Finishing (Contin. to Heavy Interrupted)



Target:

- Higher rigidity
- Vibration reduction
- Chip control
- Fracture resistance

Holder: GND M L2525M 618

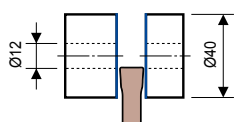
Insert: GCM N6030 RG

Grooving width: 6,0 mm

Cutting conditions: $v_c = 130$ m/min
 $f = 0,36$ mm/rev
 wet

Stable machining free of vibration!
 Excellent fracture resistance
 Stable chip control

C48, Machine Part, Cut-Off



Normal Wear
GND



Chipping / Large Wear
Conventional Tool

Target:

- Higher rigidity
- Vibration reduction
- Fracture resistance

Holder: GND L R2525M 320

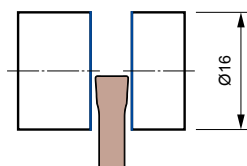
Insert: GCM N3002 GG

Grooving width: 3,0 mm

Cutting conditions: $n = 1600$ min⁻¹
 $v_c = 200$ m/min
 $f = 0,05$ mm/rev
 wet

Stable machining free of vibration!
 Excellent fracture resistance

34CrMo4, Tempered Material Hydraulic Component, Cut-Off



Target:

- Chip control
- Wear resistance

Holder: GND L R2525M 320

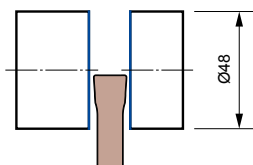
Insert: GCM N3002 GG

Grooving width: 3,0 mm

Cutting conditions: $n = 4.000$ min⁻¹
 $v_c = 200$ m/min
 $f = 0,05$ mm/rev
 wet

Stable chip control
 Excellent wear resistance

X40CrVMo5-1, (45-48HRC), Machine Part, Cut-Off



Target:

- Higher rigidity
- Vibration reduction
- Chip control

Holder: GND L R2525M 425

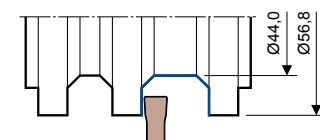
Insert: GCM N4002 GG

Grooving width: 4,0 mm

Cutting conditions: $v_c = 50$ m/min
 $f = 0,03$ mm/rev
 wet

Stable machining free of vibration!
 Excellent chip control using the GND type.
 No more unexpected breakage!

20Cr4, Gear Shaft, Grooving / Pocketing



Target:

- Higher rigidity
- Vibration reduction
- Chip control

Holder: GND M R2020K 518

Insert: GCM N5008 MG

Grooving width: 5,0 mm

Cutting conditions: $v_c = 150$ m/min
 $f = 0,1$ mm/rev
 wet

Stable machining free of vibration!
 Excellent chip control using the GND type.

Application Examples

34CrMo4, Crank, Cut-Off	
	Target: - Higher rigidity - Vibration reduction - Chip control Holder: GNDL R2525M 320 Insert: GCM N3002 GG Grooving width: 3,0 mm Cutting conditions: $v_c = 115$ m/min $f = 0,30$ mm/rev wet
Improved efficiency Stable machining free of vibration Stable chip control	

20Cr4, Gear Shaft, Grooving	
	Target: - Higher rigidity - Chattering reduction - Chip control Holder: GNDM R2525M 312 Insert: GCM N3004 GG Grooving width: 3,0 mm Cutting conditions: $v_c = 100$ m/min $f = 0,12$ mm/rev wet
Stable machining without chattering or vibration Excellent chip control of GND type	

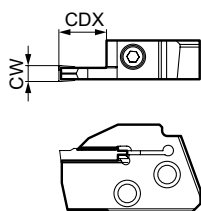
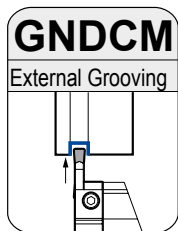
Sintered Clutch Hub, Face Grooving	
	Target: - Machining efficiency - Chattering reduction Holder: GNDP R2020K 523 050 Insert: GCM N5008 MG Grooving width: 5,0 mm Cutting conditions: $n = 500$ min⁻¹ $v_c = 100$ m/min $f = 0,05$ mm/rev wet
Reduces cycle time by up to 20% Stable cutting without chattering or vibration	

C45, Motorcycle Transmission Part (Collar), Internal Grooving	
	Target: - Tool life - Chip control Holder: GNDIS R1620 T2046 Insert: GXM N2002S GF Grooving width: 2,0 mm Cutting conditions: $v_c = 150$ m/min $f = 0,03$ mm/rev $a_p = 1,7$ mm wet
Long tool life through stable chip control using a high-rigidity tool and 3D breaker	

34CrMo4, Machine Component, Cut-Off	
	Target: - Machined surface - Tool life Holder: GNDM R2020K 210 Insert: GCM R20003 CF15 Grooving width: 2,0 mm Cutting conditions: $n = 2.500$ min⁻¹ $f = 0,04$ mm/rev wet
Superior chip control for machined surface improvements Impressive sharpness with 1,8x tool life	

Pure Iron Automotive Component, Cut-Off	
	Target: - Machining efficiency - Tool life Holder: GNDM R1616JX 216J (special type) Insert: GCM N2002 GF Grooving width: 2,0 mm Cutting conditions: $v_c = 150$ m/min max. $f = 0,06$ mm/rev wet - internal coolant (normal pressure)
Internal coolant ensures effective cooling of the cutting edge for 4 times better tool life Reduced tool changes for long-term automatic operation Improved productivity made possible by changing to high-speed conditions	

ISO-PSC Polygon Modular GND Grooving System



General Features

New grades and chipbreakers have been added to the already established GND grooving system with polygon shank and a flexible and economical cassette system for inserts. An array of chipbreakers improves the efficiency in chip control in various applications such as grooving, turning, profiling and cut-off.

Advantages

- GND inserts for soft grooving from 2,0 - 6,0 mm width
- Expanded grade selection with 9 different chipbreakers for a wide application range
- Provides excellent chip control
- Achieves stable long tool life

Cassette

Cat. No.	R	L	CW (mm)	CDX (mm)	Inserts	Cap Screw	Tightening Torque (N·m)	Spanner
GNDCM R/L 212	●	●	2	12	GCM □20□□-□□	BX0512	5,0 	LH040
GNDCM R/L 312	●	●	3		GCM □30□□-□□			
GNDCM R/L 418	●	●	4	18	GCM □40□□-□□		6,0 	
GNDCM R/L 518	●	●	5		GCM □50□□-□□			
GNDCM R/L 618	●	●	6		GCM □60□□-□□			

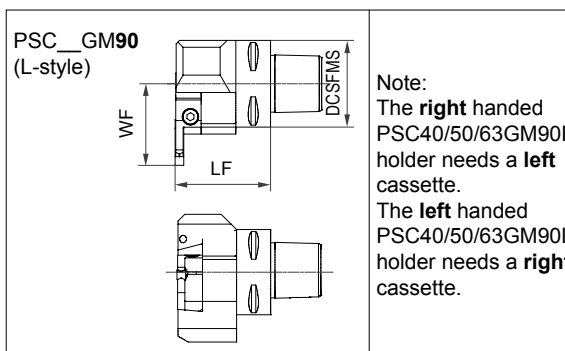
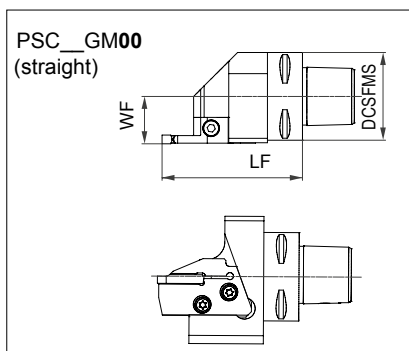
Handling

ATTENTION

To fix the cassette on the holder, please clamp the cassette at first with the inner torx screw.



Holder



Note:
The **right** handed PSC40/50/63GM90R holder needs a **left** cassette.
The **left** handed PSC40/50/63GM90L holder needs a **right** cassette.

Style	Cat. No.	R	L	DCSFMS (mm)	WF (mm)	LF (mm)	Cap Screw	Tightening Torque (N·m)	Spanner
Straight	PSC40GM00 R/L	●	●	40	22	80*	BFTX0619N	7,5	LT25
	PSC50GM00 R/L	●	●	50	27				
	PSC63GM00 R/L	●	●	63	33				
L-Style	PSC40GM90 R/L	●	●	40	42*	52,5			
	PSC50GM90 R/L	●	●	50	47*	55,0			
	PSC63GM90 R/L	●	●	63	54*	57,0			

* Dimension when using radial grooving cassettes.

Identification Details - Polygon-Toolholder

PSC	40	-	G	M	00	R
Polygonshank	Shank Diameter (DCSFMS)		Series Symbol GND	Application External Multi-Purpose	Style 00 = Straight 90 = L-Style	Holder Design R = Right L = Left

Identification Details - Cassette

GND	C	M	L	3	12
Series Symbol GND	Cassette	Application External Multi-Purpose	Holder Design R = Right L = Left	Grooving Width	Max. Grooving Depth



ISO-PSC Polygon Modular GND Grooving System

Inserts for GNDCM

Coated Carbide

Cermet

Carbide

Fig. 1

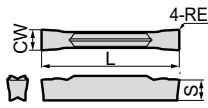


Fig. 2

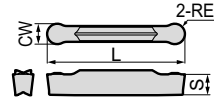


Fig. 3

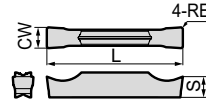
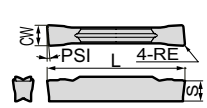


Fig. 4



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
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	
N4002 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,8	26,4	4,0	
N5004 MG	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
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	
N3002 ML	●	●	●	○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 ML	●	●	●	○	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 ML	●	●	●	○	●	●	●	●	—	4,0	±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 ML	●	●	●	○	●	●	●	●	—	5,0	±0,03	0,8	26,4	4,1	
N6004 ML	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 ML	●	●	●	○	●	●	●	●	—	6,0	±0,03	0,8	26,4	4,5	

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	●	●	●	—	3,0	±0,03	1,5	21,1	3,8	2
N4020 RG	●	●	●	●	●	●	●	●	—	4,0	±0,03	2,0	26,4	4,0	
N5025 RG	●	●	●	●	●	●	●	●	—	5,0	±0,03	2,5	27,2	4,1	
N6030 RG	●	●	●	●	●	●	●	●	—	6,0	±0,03	3,0	27,5	4,5	
	●	●	●	●	●	●	●	●	—	6,0	±0,03	3,0	27,5	4,5	

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2010 RN	—	—	—	—	—	—	—	—	—	2,0	±0,03	1,0	21,7	3,6	2
N3015 RN	●	●	●	○	●	●	●	●	—	3,0	±0,03	1,5	22,6	3,8	
N4020 RN	●	●	●	○	●	●	●	●	—	4,0	±0,03	2,0	28,2	4,0	
N5025 RN	●	●	●	○	●	●	●	●	—	5,0	±0,03	2,5	28,3	4,1	
N6030 RN	●	●	●	○	●	●	●	●	—	6,0	±0,03	3,0	28,3	4,5	
	●	●	●	○	●	●	●	●	—	6,0	±0,03	3,0	28,3	4,5	

Non-Ferrous Metals

Dimensions (mm)



Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
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	
N4004 GA	○									4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○									5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
								Cutting Width	Tolerance				
GCM N2002 GG	●	●	●	●	●	●	—	2,0	±0,03	0,2	21,1	3,6	1
N3002 GG	●	●	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GG	●	●	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GG	●	●	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GG	●	●	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GG	●	●	●	●	●	●	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GG	●	●	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N6002 GG	●	●	●	●	●	●	—	6,0	±0,03	0,2	26,4	4,5	
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	
N2004 GL	●	●	●	●	●	●	—	2,0	±0,03	0,4	21,1	3,6	
N3002 GL	●	●	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GL	●	●	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GL	●	●	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GL	●	●	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GL	●	●	●	●	●	●	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GL	●	●	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N6002 GL	●	●	●	●	●	●	—	6,0	±0,03	0,2	26,4	4,5	
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	
N2004 GF	—	—	—	—	—	—	—	2,0	±0,03	0,4	21,1	3,6	
N3002 GF	●	●	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	
N3004 GF	●	●	●	●	●	●	—	3,0	±0,03	0,4	21,1	3,8	
N4002 GF	●	●	●	●	●	●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 GF	●	●	●	●	●	●	—	4,0	±0,03	0,4	26,4	4,0	
N5002 GF	●	●	●	●	●	●	—	5,0	±0,03	0,2	26,4	4,1	
N5004 GF	●	●	●	●	●	●	—	5,0	±0,03	0,4	26,4	4,1	
N6002 GF	●	●	●	●	●	●	—	6,0	±0,03	0,2	26,4	4,5	
N6004 GF	●	●	●	●	●	●	—	6,0	±0,03	0,4	26,4	4,5	

Cut-Off Machining (Handed Edge)

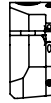
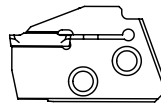
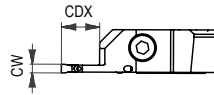
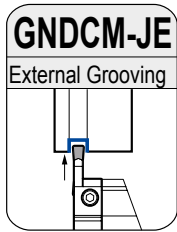
Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U		CW		RE	L	S	Fig.
									Cutting Width	Tolerance				
GCM R2002 CG 05	●	●	●	●	○	●	—	5°	2,0	±0,03	0,2	21,1	3,6	4
L2002 CG 05	●	●	●	●	○	—	—	5°	2,0	±0,03	0,2	21,1	3,6	
GCM R3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8	
L3002 CG 05	●	●	●	●	○	—	—	5°	3,0	±0,03	0,2	21,3	3,8	
GCM R4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0	
L4002 CG 05	●	●	●	●	○	—	—	5°	4,0	±0,04	0,2	26,7	4,0	
GCM R2003 CF 10	—	—	●	●	—	●	—	10°	2,0	±0,08	0,03	22,4	3,6	4
L2003 CF 10	—	—	●	●	—	—	—	10°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 10	—	—	●	●	—	●	—	10°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 10	—	—	●	●	—	—	—	10°	3,0	±0,08	0,03	22,4	3,8	
GCM R2003 CF 15	—	—	●	●	—	●	—	15°	2,0	±0,08	0,03	22,4	3,6	
L2003 CF 15	—	—	●	●	—	—	—	15°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 15	—	—	●	●	—	●	—	15°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 15	—	—	●	●	—	—	—	15°	3,0	±0,08	0,03	22,4	3,8	

ISO-PSC Polygon Modular GND Grooving System

Cassette with Internal Coolant



General Features

The already established GND grooving system with polygon shank and a flexible cassette system for grooving inserts, has been extended by a version with internal coolant supply. The direct cooling at the cutting edge ensures excellent chip breaking and improves chip control during external grooving.

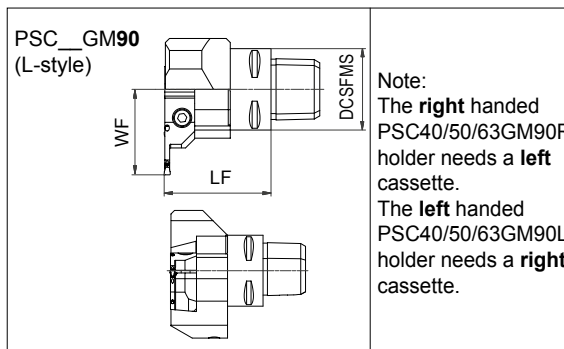
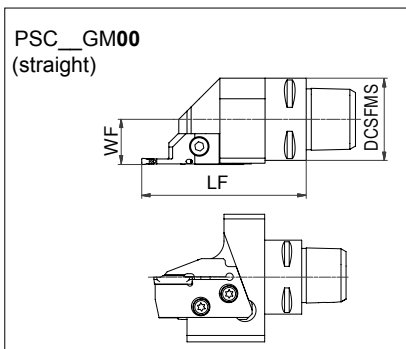
Advantages

- External grooving cassettes with internal coolant supply
- PSC Polygon holders straight and 90° with internal coolant supply
- GND inserts for soft grooving from 2,0-6,0 mm grooving width
- Provides excellent chip control
- Depending on the coolant pressure, the tool life of the cutting edge will increase significantly.

Cassette with Internal Coolant

Cat. No.	R	L	CW (mm)	CDX (mm)	Inserts	Cap Screw	Tightening Torque (N·m)	Spanner
GNDCM R/L 212-JE	●	●	2	12	GCM □20□-□□	BX0512	5,0	LH040
GNDCM R/L 312-JE	●	●	3		GCM □30□-□□			
GNDCM R/L 418-JE	●	●	4		GCM □40□-□□			
GNDCM R/L 518-JE	●	●	5	18	GCM □50□-□□		6,0	
GNDCM R/L 618-JE	●	●	6		GCM □60□-□□			

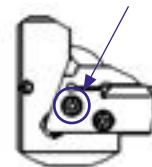
Holder



Handling

ATTENTION

To fix the cassette on the holder, please clamp the cassette at first with the inner torx screw.



Style	Cat. No.	R	L	DCSFMS (mm)	WF (mm)	LF (mm)	Cap Screw	Tightening Torque (N·m)	Spanner	Sealing Set (4xOring)
Straight	PSC40GM00 R/L-JE	●	●	40	22	80*	BFTX0619N	7,5	LT25	ARC SET
	PSC50GM00 R/L-JE	●	●	50	27					
	PSC63GM00 R/L-JE	●	●	63	33					
L-Style	PSC40GM90 R/L-JE	●	●	40	42*	52,5				
	PSC50GM90 R/L-JE	●	●	50	47*	55,0				
	PSC63GM90 R/L-JE	●	●	63	54*	57,0				

* Dimension when using radial grooving cassettes.

Identification Details - Polygon-Toolholder

PSC	40	-	G	M	00	R	JE
Polygonshank	Shank Diameter (DCSFMS)		Series Symbol GND	Application External Multi-Purpose	Style 00 = Straight 90 = L-Style	Holder Design R = Right L = Left	Internal Coolant (European Design)

Identification Details - Cassette

GND	C	M	L	3	12	JE
Series Symbol GND	Cassette	Application External Multi-Purpose	Holder Design R = Right L = Left	Grooving Width	Max. Grooving Depth	Internal Coolant (European Design)



ISO-PSC Polygon Modular GND Grooving System

Inserts for GNDCM-JE

Coated Carbide Cermet Carbide

Fig. 1

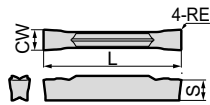


Fig. 2

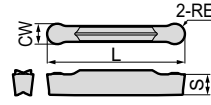


Fig. 3

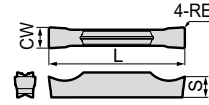
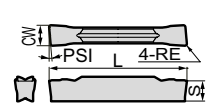


Fig. 4



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG	●	●		○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	1
N3004 MG	●	●	●	○	●	●	○	●	—		±0,03	0,4	21,1	3,8	
N4002 MG	●	●			●	●		●	—	4,0	±0,03	0,2	26,4	4,0	
N4004 MG	●	●		○	●	●		●	—		±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	●	●		○	—	—	5,0	±0,03	0,8	26,4	4,0	
N5004 MG	●	●		○	●	●		●	—		±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●		●		○	●	—	6,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●		○	●	●		●	—		±0,03	0,4	26,4	4,5	
N6008 MG	●	●	●	●	●		○	—	—	±0,03	0,8	26,4	4,5		
GCM N2002 ML	—	—	—	—	●	●	○	●	—	2,0	±0,03	0,2	21,1	3,6	1
N3002 ML	●	●	●	—	●	●	○	○	—	3,0	±0,03	0,2	21,1	3,8	
N3004 ML	●	●	●	○	●	●	●	○	—		±0,03	0,4	21,1	3,8	
N4002 ML	●	●		○	●	●	●	○	—	4,0	±0,03	0,2	26,4	4,0	
N4004 ML	●	●	●		●	●	○	○	—		±0,03	0,4	26,4	4,0	
N4008 ML	●	●		○	●	●	○	○	—	5,0	±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	●	●		○	●	—		±0,03	0,4	26,4	4,1	
N5008 ML	●	●		○	●	●		○	—	6,0	±0,03	0,8	26,4	4,1	
N6004 ML	●	●			●	●		○	—		±0,03	0,4	26,4	4,5	
N6008 ML	●	●		○	●	●		○	—	±0,03	0,8	26,4	4,5		

External Profiling / External Radius Grooving

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RG	●	●	●	●	●	●	●	●	○	3,0	±0,03	1,5	21,1	3,8	2
N4020 RG	●	●	●	●	●	●	●	●	○	4,0	±0,03	2,0	26,4	4,0	
N5025 RG	●	●	●	●	●	●	●	●	○	5,0	±0,03	2,5	27,2	4,1	
N6030 RG	●	●	●	●	●	●	●	●	○	6,0	±0,03	3,0	27,5	4,5	
	●	●	●	●	●	●	●	●	○	6,0	±0,03	3,0	27,5	4,5	

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2010 RN	—	—	—	—	●	●	●	●	—	2,0	±0,03	1,0	21,7	3,6	2
N3015 RN	●	●	●	○	●	●	●	●	—	3,0	±0,03	1,5	22,6	3,8	
N4020 RN	●	●	●	○	●	●	●	●	—	4,0	±0,03	2,0	28,2	4,0	
N5025 RN	●	●	●	○	●	●	●	●	—	5,0	±0,03	2,5	28,3	4,1	
N6030 RN	●	●	●	○	●	●	●	●	—	6,0	±0,03	3,0	28,3	4,5	
	●	●	●	○	●	●	●	●	—	6,0	±0,03	3,0	28,3	4,5	

Non-Ferrous Metals

Dimensions (mm)



Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
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	
N4004 GA	○									4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○									5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A			CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N2002 GG	●	●	●	●	●	●	—			2,0	±0,03	0,2	21,1	3,6	1
N3002 GG	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GG	●	●	●	●	○	●	—				±0,03	0,4	21,1	3,8	
N4002 GG	●	●	●	●	○	●	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GG	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,0	
N5002 GG	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GG	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,1	
N6002 GG	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
N6004 GG	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,5	
GCM N2002 GL	●	●	●	●	○	●	—			2,0	±0,03	0,2	21,1	3,6	1
N2004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,6	
N3002 GL	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	
N3004 GL	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
N4002 GL	●	●	●	●	○	○	—			4,0	±0,03	0,2	26,4	4,0	
N4004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
N5002 GL	●	●	●	●	○	○	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GL	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
N6002 GL	●	●	●	●	○	●	—				±0,03	0,2	26,4	4,5	
N6004 GL	●	●	●	●	○	○	—			6,0	±0,03	0,4	26,4	4,5	
GCM N2002 GF	—	—	●	●	●	○	○			2,0	±0,03	0,2	21,1	3,6	1
N2004 GF	—	—	●	●	●	○	○				±0,03	0,4	21,1	3,6	
N3002 GF	●	●	●	●	●	○	○			3,0	±0,03	0,2	21,1	3,8	
N3004 GF	●	●	●	●	●	○	○				±0,03	0,4	21,1	3,8	
N4002 GF	●	●	●	●	●	○	○			4,0	±0,03	0,2	26,4	4,0	
N4004 GF	●	●	●	●	●	○	○				±0,03	0,4	26,4	4,0	
N5002 GF	●	●	●	●	●	○	—			5,0	±0,03	0,2	26,4	4,1	
N5004 GF	●	●	●	●	●	○	—				±0,03	0,4	26,4	4,1	
N6002 GF	●	●	●	●	●	○	—				±0,03	0,2	26,4	4,5	
N6004 GF	●	●	●	●	●	○	—			6,0	±0,03	0,4	26,4	4,5	

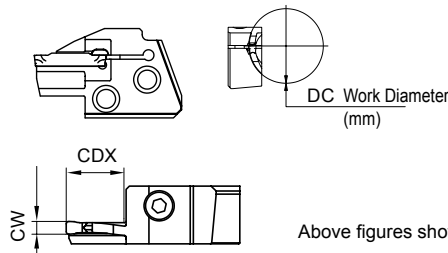
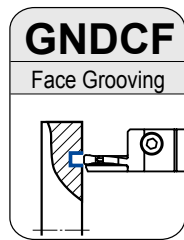
Cut-Off Machining (Handed Edge)

Dimensions (mm)

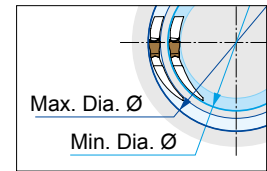


Cat. No.		AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	AC1030U		CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM R2002 CG 05	●	●	●	●	○	●	●	—	5°	2,0	±0,03	0,2	21,1	3,6	4
L2002 CG 05	●	●	●	●	○	●	—	5°	2,0	±0,03	0,2	21,1	3,6		
GCM R3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8		
L3002 CG 05	●	●	●	●	○	●	—	5°	3,0	±0,03	0,2	21,3	3,8		
GCM R4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0		
L4002 CG 05	●	●	●	●	○	●	—	5°	4,0	±0,04	0,2	26,7	4,0		
GCM R2003 CF 10	—	—	●	●	—	—	●	—	10°	2,0	±0,08	0,03	22,4	3,6	4
L2003 CF 10	—	—	●	●	—	—	●	—	10°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 10	—	—	●	●	—	—	●	—	10°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 10	—	—	●	●	—	—	●	—	10°	3,0	±0,08	0,03	22,4	3,8	
GCM R2003 CF 15	—	—	●	●	—	—	●	—	15°	2,0	±0,08	0,03	22,4	3,6	
L2003 CF 15	—	—	●	●	—	—	●	—	15°	2,0	±0,08	0,03	22,4	3,6	
GCM R3003 CF 15	—	—	●	●	—	—	●	—	15°	3,0	±0,08	0,03	22,4	3,8	
L3003 CF 15	—	—	●	●	—	—	●	—	15°	3,0	±0,08	0,03	22,4	3,8	

ISO-PSC Polygon Modular GND Grooving System



Above figures show right hand tools.

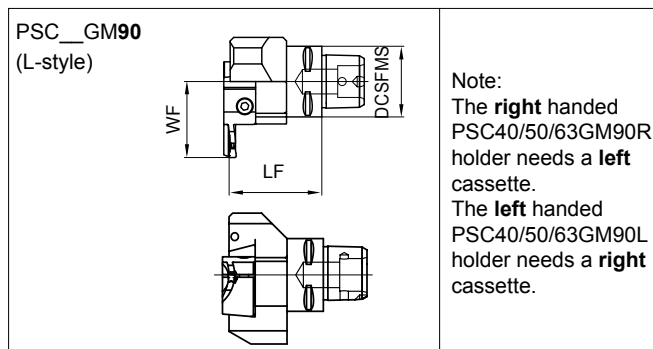
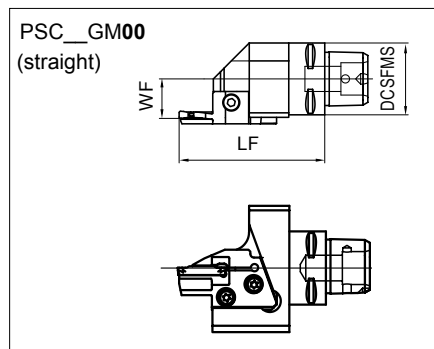


Work diameters in the stock indicate external diameters of face grooving.

Cassette

Cat. No.	R	L	CW (mm)	Diameter Range (mm)	DC (mm)	CDX (mm)	Inserts	Cap Screw	Tightening Torque (N·m)	Spanner
GNDCF R/L 312-040	●	●	3	40–200	40–55	12	GC□ N300○-□□	BX0512	5,0 	LH040
GNDCF R/L 315-050	●	●			50–70	15				
GNDCF R/L 315-065	●	●			65–100	15				
GNDCF R/L 318-090	●	□			90–150	18				
GNDCF R/L 318-140	●	□			140–200	18				
GNDCF R/L 418-040	●	●	4	40–300	40–55	18	GC□ N400○-□□			
GNDCF R/L 418-050	●	□			50–70	18				
GNDCF R/L 418-065	●	●			65–90	18				
GNDCF R/L 418-085	●	□			85–130	18				
GNDCF R/L 418-125	□	□			125–200	18				
GNDCF R/L 418-180	●	□		180–300	18					
GNDCF R/L 518-050	□	□	5	50–300	50–70	18	GC□ N500○-□□			
GNDCF R/L 518-065	□	□			65–90	18				
GNDCF R/L 518-085	□	□			85–130	18				
GNDCF R/L 518-125	●	□			125–200	18				
GNDCF R/L 518-180	□	□			180–300	18				
GNDCF R/L 618-050	□	□	6	50–1000	50–75	18	GC□ N600○-□□			
GNDCF R/L 618-070	□	□			70–110	18				
GNDCF R/L 618-100	□	□			100–200	18				
GNDCF R/L 618-180	□	□			180–300	18				
GNDCF R/L 618-280	□	□			280–1000	18				

Holder



Style	Cat. No.	R	L	DCSFMS (mm)	WF (mm)	LF (mm)	Cap Screw	Tightening Torque (N·m)	Spanner
Straight	PSC40GM00 R/L	●	●	40	22	81*	BFTX0619N	7,5	LT25
	PSC50GM00 R/L	●	●	50	27				
	PSC63GM00 R/L	●	●	63	33				
L-Style	PSC40GM90 R/L	●	●	40	43*	52,5			
	PSC50GM90 R/L	●	●	50	48*	55,0			
	PSC63GM90 R/L	●	●	63	55*	57,0			

* Dimension when using face grooving cassettes.

Identification Details - Polygon-Toolholder

PSC	40	-	G	M	00	R
Polygonshank	Shank Diameter (DCSFMS)		Series Symbol GND	Application External Multi-Purpose	Style 00 = Straight 90 = L-Style	Holder Design R = Right L = Left

Identification Details - Cassette

GND	C	F	L	3	12
Series Symbol GND	Cassette	Application Face Grooving	Holder Design R = Right L = Left	Grooving Width	Max. Grooving Depth

● Euro stock

□ = On request



ISO-PSC Polygon Modular GND Grooving System

Inserts for GNDCF

Coated Carbide

Cermet

Carbide

Fig. 1

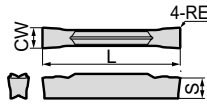


Fig. 2

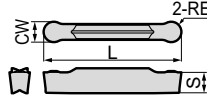
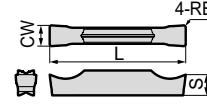


Fig. 3



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG	●	●		○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	1
N3004 MG	●	●	●		●		○	●	—		±0,03	0,4	21,1	3,8	
N4002 MG	●	●		○	●	●		○	—		±0,03	0,2	26,4	4,0	
N4004 MG	●	●		○	●	●		○	—	4,0	±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	●	●		○	—	—		±0,03	0,8	26,4	4,0	
N5004 MG	●	●		○	●	●		●	—		±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●		●		○	—	—	5,0	±0,03	0,8	26,4	4,1	
N6004 MG	●	●		○	●	●		●	—		±0,03	0,4	26,4	4,5	
N6008 MG	●	●	●	●	●		○	●	—		±0,03	0,8	26,4	4,5	
GCM N3002 ML	●	●	●		●	●		○	○	3,0	±0,03	0,2	21,1	3,8	1
N3004 ML	●	●		○	●	●		●	○		±0,03	0,4	21,1	3,8	
N4002 ML	●	●		○	●	●		●	○		±0,03	0,2	26,4	4,0	
N4004 ML	●	●	●		●	●		○	○	4,0	±0,03	0,4	26,4	4,0	
N4008 ML	●	●		○	●	●		○	○		±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	●	●		○	●	—		±0,03	0,4	26,4	4,1	
N5008 ML	●	●		○	●		○	—	—	5,0	±0,03	0,8	26,4	4,1	
N6004 ML	●	●	●		●	●		○	—		±0,03	0,4	26,4	4,5	
N6008 ML	●	●		○	●	●		○	—		±0,03	0,8	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A			CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 GG N3004 GG N4002 GG N4004 GG N5002 GG N5004 GG N6002 GG N6004 GG	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	1
	●	●	●	●	○	●	—				±0,03	0,4	21,1	3,8	
	●	●	●	●	○	●	—			4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,0	
	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,1	
	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,5	
GCM N3002 GL N3004 GL N4002 GL N4004 GL N5002 GL N5004 GL N6002 GL N6004 GL	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	1
	●	●	●	●	○	●	—				±0,03	0,4	21,1	3,8	
	●	●	●	●	○	●	—			4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,0	
	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,1	
	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,5	
GCM N3002 GF N3004 GF N4002 GF N4004 GF N5002 GF N5004 GF N6002 GF N6004 GF	●	●	●	●	○	●	○			3,0	±0,03	0,2	21,1	3,8	1
	●	●	●	●	○	●	○				±0,03	0,4	21,1	3,8	
	●	●	●	●	○	●	○			4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	○	●	○				±0,03	0,4	26,4	4,0	
	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,1	
	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,5	

Combine the insert with a holder such that the width of cut (CW) matches.

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RN	●	●	●	○	●	●	●	●	—	3,0	±0,03	1,5	22,6	3,8	2
N4020 RN	●	●	●	○	●	●	●	●	—	4,0	±0,03	2,0	28,2	4,0	
N5025 RN	●	●	●	○	●	●	●	●	—	5,0	±0,03	2,5	28,3	4,1	
N6030 RN	●	●	●	○	●	●	●	●	—	6,0	±0,03	3,0	28,3	4,5	

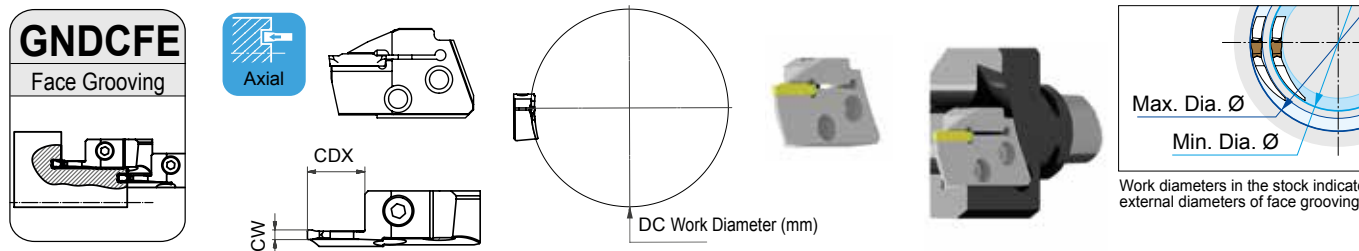
Non-Ferrous Metals

Dimensions (mm)



Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 GA	○									3,0	±0,025	0,2	21,1	3,8	3
N4004 GA	○									4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○									5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	

ISO-PSC Polygon Modular GND Grooving System



Above figures show right hand tools.

Cassette

Cat. No.	R	L	CW (mm)	Diameter Range (mm)	DC (mm)	CDX (mm)	Inserts	Cap Screw	Tightening Torque (N·m)	Spanner						
GNDCFE R/L 312-040	●	○	3	40–200	40–55	12	GC□ N300○-□□	BX0512	5,0 	LH040						
GNDCFE R/L 315-050	○	○			50–70	15										
GNDCFE R/L 315-065	○	○			65–100	15										
GNDCFE R/L 317-090	●	○			90–150	17										
GNDCFE R/L 317-140	●	○			140–200	17										
GNDCFE R/L 417-040	●	○	4	40–300	40–55	17	GC□ N400○-□□		BX0512		6,0 	LH040				
GNDCFE R/L 417-050	○	○			50–70	17										
GNDCFE R/L 417-065	●	●			65–90	17										
GNDCFE R/L 417-085	●	●			85–130	17										
GNDCFE R/L 417-125	○	○			125–200	17										
GNDCFE R/L 417-180	●	●	5	50–300	180–300	17	GC□ N500○-□□				BX0512		6,0 	LH040		
GNDCFE R/L 517-050	○	○			50–70	17										
GNDCFE R/L 517-065	○	○			65–90	17										
GNDCFE R/L 517-085	○	○			85–130	17										
GNDCFE R/L 517-125	○	○			125–200	17										
GNDCFE R/L 517-180	○	○	6	50–1000	180–300	17	GC□ N600○-□□						BX0512		6,0 	LH040
GNDCFE R/L 617-050	○	○			50–75	17										
GNDCFE R/L 617-070	○	○			70–110	17										
GNDCFE R/L 617-100	○	○			100–200	17										
GNDCFE R/L 617-180	○	○			180–300	17										
GNDCFE R/L 617-280	□	○	6	50–1000	280–1000	17	GC□ N600○-□□	BX0512		6,0 					LH040	

Holder

PSC_GM00
(straight)

PSC_GM90
(L-style)

Note:
The **right** handed PSC40/50/63GM90R holder needs a **left** cassette.
The **left** handed PSC40/50/63GM90L holder needs a **right** cassette.

Style	Cat. No.	R	L	DCSFMS (mm)	WF (mm)	LF (mm)	Cap Screw	Tightening Torque (N·m)	Spanner
Straight	PSC40GM00 R/L	●	●	40	22	80*	BFTX0619N	7,5	LT25
	PSC50GM00 R/L	●	●	50	27				
	PSC63GM00 R/L	●	●	63	33				
L-Style	PSC40GM90 R/L	●	●	40	42*	52,5			
	PSC50GM90 R/L	●	●	50	47*	55,0			
	PSC63GM90 R/L	●	●	63	54*	57,0			

* Dimension when using face grooving cassettes.

Identification Details - Polygon-Toolholder

PSC

Polygonshank

40

Shank Diameter (DCSFMS)

G

Series Symbol GND

M

Application External Multi-Purpose

00

Style 00 = Straight 90 = L-Style

R

Holder Design R = Right L = Left

JE

Internal Coolant (European Design)

Identification Details - Cassette

GND

Series Symbol GND

C

Cassette

F

Application Face Grooving

L

Holder Design R = Right L = Left

3

Grooving Width

12

Max. Grooving Depth

JE

Internal Coolant (European Design)

● Euro stock

□ = On request



ISO-PSC Polygon Modular GND Grooving System

Inserts for GNDCF

Coated Carbide

Cermet

Carbide

Fig. 1

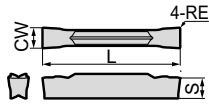


Fig. 2

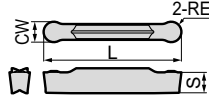
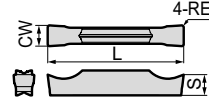


Fig. 3



Grooving / Traversing

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 MG	●	●		○	●	●	●	●	—	3,0	±0,03	0,2	21,1	3,8	1
N3004 MG	●	●	●		●		○	●	—		±0,03	0,4	21,1	3,8	
N4002 MG	●	●	●	○	●	●		●	—		±0,03	0,2	26,4	4,0	
N4004 MG	●	●		○	●	●		●	—	4,0	±0,03	0,4	26,4	4,0	
N4008 MG	●	●	●	●	●		○	●	—		±0,03	0,8	26,4	4,0	
N5004 MG	●	●	●	○	●	●		●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 MG	●	●	●		●		○	●	—		±0,03	0,8	26,4	4,1	
N6004 MG	●	●		○	●	●		●	—	6,0	±0,03	0,4	26,4	4,5	
N6008 MG	●	●	●	●	●		○	●	—		±0,03	0,8	26,4	4,5	
GCM N3002 ML	●	●	●		●	●	○	●	○	3,0	±0,03	0,2	21,1	3,8	1
N3004 ML	●	●		○	●	●		●	○		±0,03	0,4	21,1	3,8	
N4002 ML	●	●	●	○	●	●		●	○		±0,03	0,2	26,4	4,0	
N4004 ML	●	●			●	●		●	○	4,0	±0,03	0,4	26,4	4,0	
N4008 ML	●	●	●	○	●	●		○	○		±0,03	0,8	26,4	4,0	
N5004 ML	●	●	●	●	●		○	●	—	5,0	±0,03	0,4	26,4	4,1	
N5008 ML	●	●		○	●	●		○	—		±0,03	0,8	26,4	4,1	
N6004 ML	●	●	●		●	●		○	—	6,0	±0,03	0,4	26,4	4,5	
N6008 ML	●	●		○	●	●		○	—		±0,03	0,8	26,4	4,5	

Grooving / Cut-Off Machining

Dimensions (mm)



Cat. No.	AC8035P	AC830P	AC5015S	AC5025S	AC520U	AC530U	T2500A			CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 GG N3004 GG N4002 GG N4004 GG N5002 GG N5004 GG N6002 GG N6004 GG	●	●	●	●	○	●	—			3,0	±0,03	0,2	21,1	3,8	1
	●	●	●	●	○	●	—				±0,03	0,4	21,1	3,8	
	●	●	●	●	○	●	—			4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,0	
	●	●	●	●	○	●	—			5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,1	
	●	●	●	●	○	●	—			6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	○	●	—				±0,03	0,4	26,4	4,5	
GCM N3002 GL N3004 GL N4002 GL N4004 GL N5002 GL N5004 GL N6002 GL N6004 GL	●	●	●	●	○	○	—			3,0	±0,03	0,2	21,1	3,8	1
	●	●	●	●	○	○	—				±0,03	0,4	21,1	3,8	
	●	●	●	●	○	○	—			4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,0	
	●	●	●	●	○	○	—			5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,1	
	●	●	●	●	○	○	—			6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	○	○	—				±0,03	0,4	26,4	4,5	
GCM N3002 GF N3004 GF N4002 GF N4004 GF N5002 GF N5004 GF N6002 GF N6004 GF	●	●	●	●	●	○	○			3,0	±0,03	0,2	21,1	3,8	1
	●	●	●	●	●	○	○				±0,03	0,4	21,1	3,8	
	●	●	●	●	●	●	○			4,0	±0,03	0,2	26,4	4,0	
	●	●	●	●	●	●	○				±0,03	0,4	26,4	4,0	
	●	●	●	●	●	●	—			5,0	±0,03	0,2	26,4	4,1	
	●	●	●	●	●	●	—				±0,03	0,4	26,4	4,1	
	●	●	●	●	●	●	—			6,0	±0,03	0,2	26,4	4,5	
	●	●	●	●	●	●	—				±0,03	0,4	26,4	4,5	

Combine the insert with a holder such that the width of cut (CW) matches.

Profiling / Radius Grooving / Necking

Dimensions (mm)



Cat. No.	AC8025P	AC8035P	AC830P	AC425K	AC5015S	AC5025S	AC520U	AC530U	T2500A	CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3015 RN	●	●	●	○	●	●	●	●	—	3,0	±0,03	1,5	22,6	3,8	2
N4020 RN	●	●	●	○	●	●	●	●	—	4,0	±0,03	2,0	28,2	4,0	
N5025 RN	●	●	●	○	●	●	●	●	—	5,0	±0,03	2,5	28,3	4,1	
N6030 RN	●	●	●	○	●	●	●	●	—	6,0	±0,03	3,0	28,3	4,5	

Non-Ferrous Metals

Dimensions (mm)



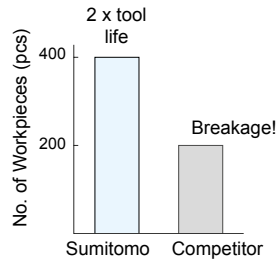
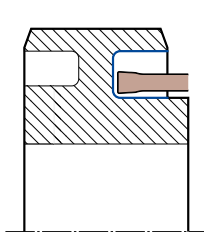
Cat. No.	H1									CW		RE	L	S	Fig.
										Cutting Width	Tolerance				
GCM N3002 GA	○									3,0	±0,025	0,2	21,1	3,8	3
N4004 GA	○									4,0	±0,025	0,4	26,4	4,0	
N5004 GA	○									5,0	±0,025	0,4	26,4	4,1	
N6004 GA	○									6,0	±0,025	0,4	26,4	4,5	

ISO-PSC Polygon Modular GND Grooving System



■ Application Examples

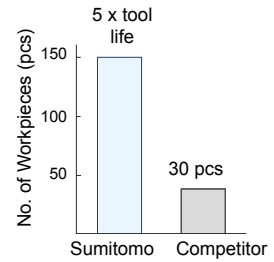
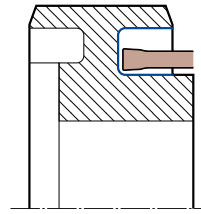
Case-Hardened Steel, Synchronizer Ring, Face Grooving



Holder: PSC40GM00R
Cassette: GNDCFR618-050
Insert: GCMN6004MLAC830P

Cutting Conditions: $v_c = 180$ m/min, $f = 0,15$ mm/rev, $t_e = 0,16$ min
Coolant: air

21CrNiMo2, Gear, Face Grooving



Holder: PSC40GM90L
Cassette: GNDCFR518-050
Insert: GCMN5004MLAC830P

Cutting Conditions: $v_c = 200$ m/min, $f = 0,154$ mm/rev, $t_e = 0,73$ min
Coolant: —



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