

HOW TO READ THE STANDARD OF GROOVING AND CUTTING OFF

● How this section page is organised

- ① Classified according to external or internal applications.
- ② Sub-classified according to product series.
(Refer to the index on the next page.)

[For External Grooving / Cutting Off]

[For Internal Grooving]

FIGURE SHOWING THE TOOLING APPLICATION uses illustrations and arrows to depict available machining applications such as cutting off, grooving, and copying.

INDICATION OF HOLDER TYPE ACCORDING TO APPLICATION indicates the holder types, such as the standard type or the L type, according to machining application.

TITLE OF PRODUCT

PRODUCT SECTION

GROOVING / CUTTING OFF

GY SERIES (EXTERNAL)

Seal Size	Dimensions (mm)			Type	Hand (R/L)	Holder	Order Number		Fig.		
	CW	CDX	CUTDIA				Stock	Modular Blade			
D 2.00 2.24	6	12	Modular	R	GYHR1616-J00-M20R	●	GYM20RA-D06	●	3		
				L	GYLR1616-J00-M20L	●	GYM20LA-D06	●	3		
				Mono Block		R	GYR2020K00-M20R	▲	—	—	7
				L	GYL2020K00-M20L	▲	—	—	—	7	
				Modular		R	GYHR2020K00-M20R	●	GYM20RA-D06	●	1
				L	GYLR2020K00-M20L	●	GYM20LA-D06	●	1		
			Modular		R	GYHR2020K00-M25R	●	GYM25RA-D06	●	3	
			L	GYLR2020K00-M25L	●	GYM25LA-D06	●	3			
			Mono Block		R	GYR2525M00-M20	▲	—	—	7	
			L	GYL2525M00-M20	▲	—	—	—	7		
			Modular		R	GYHR2525M00-M25R	●	GYM25RA-D06	●	1	
			L	GYLR2525M00-M25L	●	GYM25LA-D06	●	1			
	Modular		R	GYHR3225P00-M25R	●	GYM25RA-D06	●	5			
	L	GYLR3225P00-M25L	●	GYM25LA-D06	●	5					
	10	20	Modular		R	GYHR1616-J00-M20R	●	GYM20RA-D10	●	3	
			L	GYLR1616-J00-M20L	●	GYM20LA-D10	●	3			
			Modular		R	GYHR2020K00-M20R	●	GYM20RA-D10	●	1	
			L	GYLR2020K00-M20L	●	GYM20LA-D10	●	1			
			Modular		R	GYHR2020K00-M25R	●	GYM25RA-D12	●	3	
			L	GYLR2020K00-M25L	●	GYM25LA-D12	●	3			
	12	24	Modular		R	GYHR2525M00-M25R	●	GYM25RA-D12	●	1	
			L	GYLR2525M00-M25L	●	GYM25LA-D12	●	1			
			Modular		R	GYHR3225P00-M25R	●	GYM25RA-D12	●	5	
			L	GYLR3225P00-M25L	●	GYM25LA-D12	●	5			
Modular			R	GYHR3225P00-M25R	●	GYM25RA-D12	●	5			
L			GYLR3225P00-M25L	●	GYM25LA-D12	●	5				
18 #4	36	Modular		R	GYHR1616-J00-M20R	●	GYM20RB-D18	●	4		
		L	GYLR1616-J00-M20L	●	GYM20LB-D18	●	4				
		Mono Block		R	GYR2020K00-D18	▲	—	—	7		
		L	GYL2020K00-D18	▲	—	—	—	7			
		Modular		R	GYHR2020K00-M20R	●	GYM20RB-D18	●	2		
		L	GYLR2020K00-M20L	●	GYM20LB-D18	●	2				
20 #1	40 #2	Mono Block		R	GYR2525M00-D20	▲	—	—	7		
		L	GYL2525M00-D20	▲	—	—	—	7			
		Modular		R	GYHR2525M00-M25R	●	GYM25RA-D20	●	2		
		L	GYLR2525M00-M25L	●	GYM25LA-D20	●	2				
		Modular		R	GYHR3225P00-M25R	●	GYM25RA-D20	●	6		
		L	GYLR3225P00-M25L	●	GYM25LA-D20	●	6				

CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011~F013.
*2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011~F013.
*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LU, WF and H values may vary.
*4 The maximum groove depth (CDX) is limited by the workpiece diameter. For details, please refer to page F104.

● : Inventory maintained in Japan. ▲ : Inventory maintained in Japan.

MIN. CUTTING DIAMETER is colour-coded to let you find, at a glance, the minimum cutting diameters for internal machining.

GEOMETRY

PRODUCT FEATURES

GROOVING / CUTTING OFF

F TYPE

FSL51 Internal Grooving, Threading

1 Corner type (FSL5108R,5110R) 2 Corner type (FSL512R,5114R,5116R)

Order Number	Stock	Insert Number	Dimensions (mm)										Min. Groove Depth (mm)	Clamp Screw	Interch.
			R	Grooving	Threading	DCON	LF	LU	WF	H	CW	DMR			
FSL5108R	●	MLG10	●	MLT1001L	8	125	30	4.8	7	1.2	1.5	10	1.0	TS26	TKY08F
FSL5110R	●	MLG10	●	MLT1001L	10	150	40	5.8	9	2.0	12	1.0	TS25	TKY08F	
FSL5112R	●	MLG14	●	MLT1401L	12	180	50	6.8	10.8	1.5	14	2.0	TS32	TKY08F	
FSL5114R	●	MLG14	●	MLT1401L	14	180	60	7.8	12.4	3.0	16	2.0	TS32	TKY08F	
FSL5116R	●	MLG20	●	MLT2001L	16	200	70	9.7	14	3.0	20	3.0	TS43	TKY15F	

*1 DMIN : Min. Cutting Diameter
*2 Clamp Torque (N·m) : TS25=1.0, TS32=1.0, TS43=3.5

FSL52 (Carbide shank) Internal Grooving, Threading

1 Corner type (FSL5208R,5210R) 2 Corner type (FSL5212R,5214R,5216R)

Order Number	Stock	Insert Number	Dimensions (mm)										Min. Groove Depth (mm)	Clamp Screw	Interch.
			R	Grooving	Threading	DCON	LF	LU	WF	H	CW	DMR			
FSL5208R	●	MLG10	●	MLT1001L	8	125	60	4.8	7	1.2	10	1.0	TS26	TKY08F	
FSL5210R	●	MLG10	●	MLT1001L	10	150	70	5.8	9	2.0	12	1.0	TS25	TKY08F	
FSL5212R	●	MLG14	●	MLT1401L	12	180	80	6.8	10.8	1.5	14	2.0	TS32	TKY08F	
FSL5214R	●	MLG14	●	MLT1401L	14	180	85	7.8	12.4	3.0	16	2.0	TS32	TKY08F	
FSL5216R	●	MLG20	●	MLT2001L	16	200	115	9.7	14	3.0	20	3.0	TS43	TKY15F	

*1 DMIN : Min. Cutting Diameter
*2 Clamp Torque (N·m) : TS25=1.0, TS32=1.0, TS43=3.5

● : Inventory maintained in Japan. (Contains 10 inserts per case.)

PRODUCT STANDARDS indicates order numbers, stock status (per right/left hand), holders, Modular Blade, cutting widths, maximum groove depths, maximum cut-off diameters, dimensions, applicable inserts, and cutting edge shapes.

LEGEND FOR STOCK STATUS MARK is shown on the left hand page of each double-page spread.

● To Order : For holder, please specify ① order number and hand of tool (right/left). For insert, please specify ① insert number and ② grade.

TURNING TOOLS

GROOVING AND CUTTING OFF

CLASSIFICATION (EXTERNAL).....	F002
CLASSIFICATION (INTERNAL).....	F003

STANDARD OF GROOVING AND CUTTING OFF TOOLS

EXTERNAL

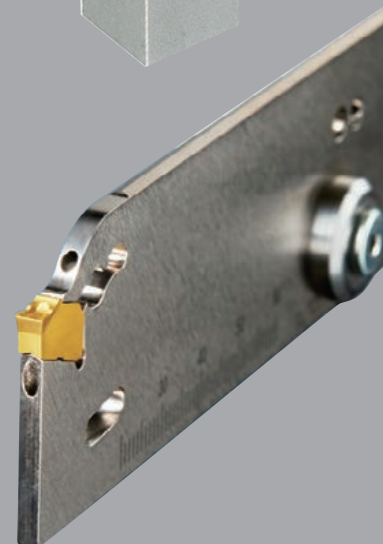
FEATURES OF THE GY SERIES.....	F004
GY SERIES ORDER NUMBER.....	F008
GY SERIES INSERTS.....	F011
GY SERIES REFERENCE MATERIAL...	F015
GY SERIES.....	F016
GW SERIES.....	F122
MG HOLDER.....	F136
SMG HOLDER.....	F138

INTERNAL

GY SERIES.....	F086
MICRO-MINI BORING BARS.....	F139
MICRO-MINI TWIN BORING BARS.....	F140
F TYPE BORING BARS.....	F144
D TYPE BORING HEAD.....	F146

*Arranged by Alphabetical order

- F139 C^oOR-BLS
- F140 CG
- F146 DPT4
- F144 FSL51
- F144 FSL52
- F130 GW1
- F128 GWB
- F129 GWTB
- F016 GY
- F136 MGH
- F137 MGT
- F145 MLG
- F145 MLT
- F142 RBH
- F143 SBH
- F138 SMGH
- F138 SMGT
- F138 SMTT



CLASSIFICATION


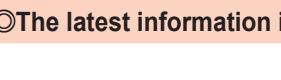


EXTERNAL

Name of Tool Holder	Insert Shape	Features	Cutting Width According to Cutting Mode (mm)					
			Shallow Grooving	Deep Grooving	Cutting Off	Copying	Recessing	Face Grooving
GY Series  F016		Modular blade type <ul style="list-style-type: none"> ● Clamp-on type. ● The modular blade allows for high rigidity and accuracy. (Tri-Lock System) ● Various insert types. Mono block type <ul style="list-style-type: none"> ● Clamp-on type. ● Maximum cut off diameter : 50mm. 	1.5 2.24 2.39 2.5 2.74 3.18 3.24 4 4.24 4.75 5 5.24 6.31 6.35 8	1.5 2.24 2.39 2.5 2.74 3.18 3.24 4 4.24 4.75 5 5.24 6.31 6.35 8	1.5 2.24 2.39 2.5 2.74 3.18 3.24 4 4.24 4.75 5 5.24 6.31 6.35 8	2 2.5 3 4 4.75 5 6 6.35 8	2 2.5 3 3.18 4 4.75 5 6 6.35	2 2.24 2.39 2.5 2.74 3.18 3.24 4 4.24 4.75 5 5.24 6.31 6.35
GW Series  F122		<ul style="list-style-type: none"> ● Spring clamp type. ● Simple insert clamping method. ● The blade is possible to use with both external or through coolant. ● Breaker system offering excellent chip disposal properties. ● Maximum cut off diameter : 120mm. 	2 2.39 3 4 5	2 2.39 3 4 5	2 2.39 3 4 5			
MG Holder  F136		<ul style="list-style-type: none"> ● Clamp-on type. ● Precision class insert. ● Positive insert suffers from negligible chattering and thus produces a good finished surface. 	1.25 6					
SMG Holder  F138		<ul style="list-style-type: none"> ● Screw-on type. ● Precision class insert. ● Positive insert suffers from negligible chattering and thus produces a good finished surface. 	0.5 1.3					
SMALL TOOLS	GTAH GTBH GTCH  D018		<ul style="list-style-type: none"> ● For gang type tool posts. ● Small Shank : 8–16mm ● Possible to control the back clamping. ● High rigidity due to design of vertical insert. ● Economical due to the design of three-corner inserts. 	0.3 3.0				
	CTAH  D020		<ul style="list-style-type: none"> ● For gang type tool posts. ● Small Shank : 8–16mm ● Due to the design of handed tool holders, able to minimize accumulation of workpieces. ● High rigidity due to design of vertical insert. ● Maximum cut off diameter : 12mm 	0.7 1.0 1.5 2.0	0.7 1.0 1.5 2.0	0.7 1.0 1.5 2.0		
	CTBH  D015		<ul style="list-style-type: none"> ● For gang type tool posts. ● Small Shank : 10–16mm ● Single holder for inserts for back turning and cutting off. ● High rigidity due to design of vertical insert. ● Maximum cut off diameter : 16mm 	1.5 2.0	1.5 2.0	1.5 2.0		
	CSVH  D027		<ul style="list-style-type: none"> ● For cam type tool posts. ● Small Shank : 7–12mm ● Single holder responds to front turning, back turning, grooving, threading and cutting off operations. ● The most suitable for machining of small parts with work diameter 5mm or smaller. ● Maximum groove depth : 0.3–2.5mm ● Maximum cut off diameter : 3–5mm 	0.25 1.5		0.6 1.5		

GROOVING / CUTTING OFF

F

INTERNAL

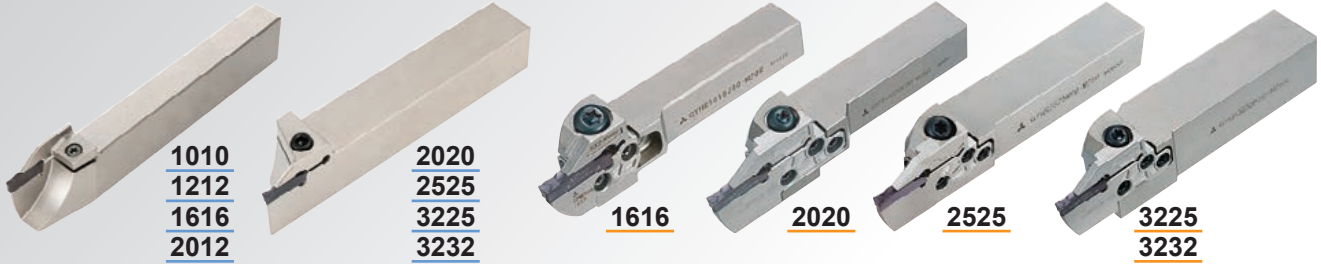
Name of Tool Holder	Insert Shape	Features	Min. Cutting Diameter (mm)	Groove Width (mm)	Max. Groove Depth (mm)
MICRO-MINI TWIN Boring Bars                     	—	<ul style="list-style-type: none"> ● Solid carbide type. ● Economical due to single tool with two cutting edges. 	3.0	1.0 2.0	1.0 2.0
MICRO-MINI Boring Bars                 					

GY SERIES

A wide selection of holders and inserts available for diverse grooving and cutting off applications

External • Face holders

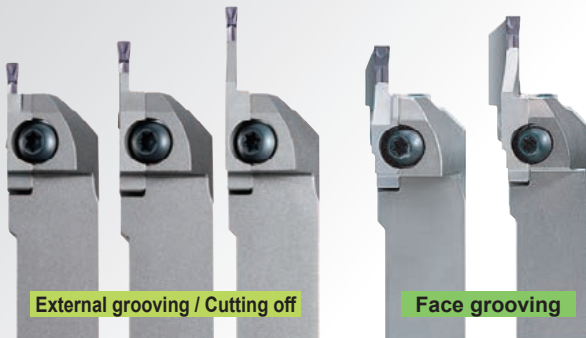
Corresponding blades to a variety of modular holders with different shank sizes



Mono block type

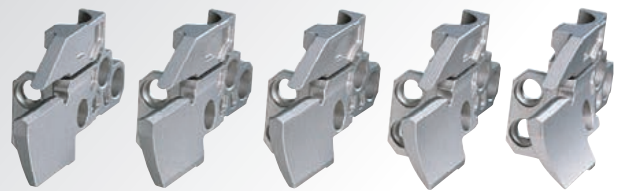
Modular type

A wide selection of holders and inserts available for diverse grooving and cutting off applications



Same holder

Applicable for various diameters of face grooves by the wide array of modular blades with different grooving diameters



Internal holders

A wide range of holders available from minimum diameter of $\phi 25\text{mm}$

Mono block type

Min. cutting diameter $\phi 25, \phi 32\text{mm}$

Modular type

Min. cutting diameter $\phi 40, \phi 50\text{mm}$
 $\phi 60, \phi 70\text{mm}$



Short shank types are standard stocked

Mono block type

Modular type



Short

Standard

Short

Standard

GROOVING / CUTTING OFF

F

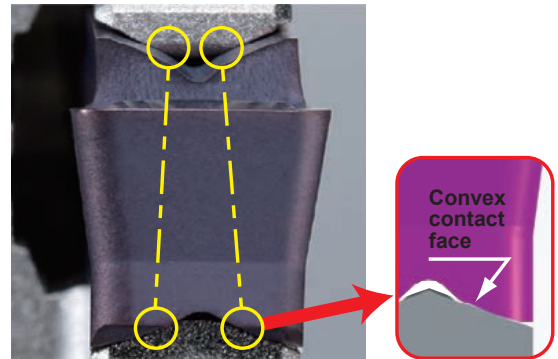
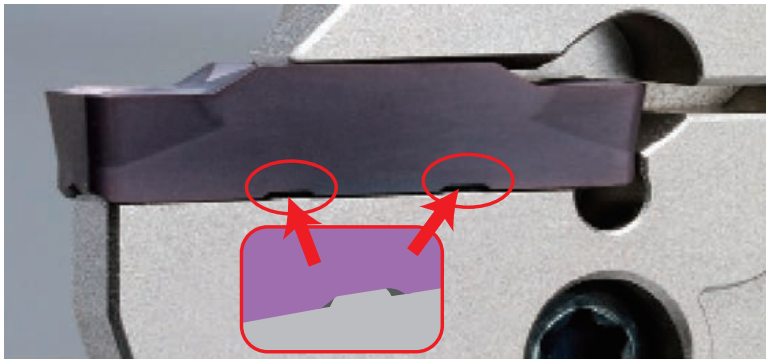


Original insert design leading the way to new grooving and cutting off applications

Highly reliable insert clamping

Safety keys prevent insert movement.

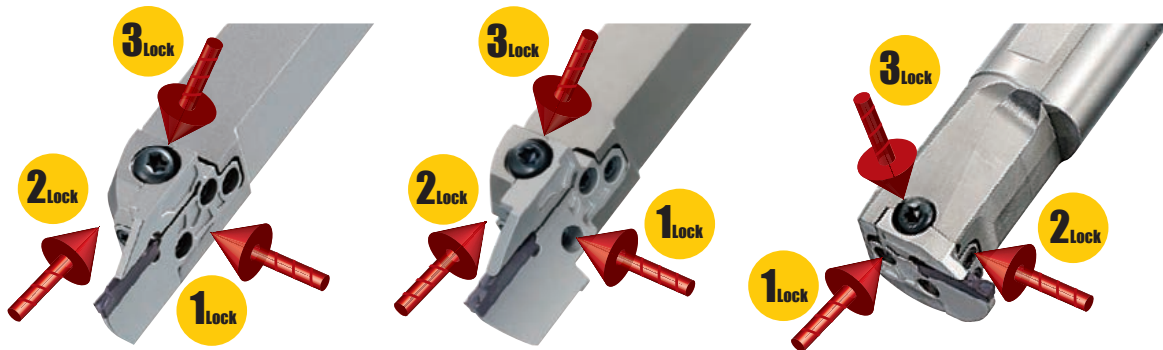
The convex geometry ensures high precision clamping.



New TRI-LOCK System for increased stability and performance!

TRI-LOCK System

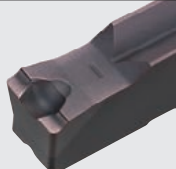

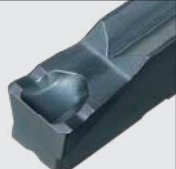
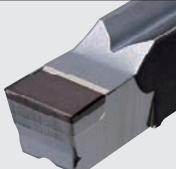
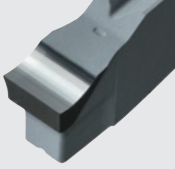
The TRI-LOCK system ensures the blade is securely fixed in 3 directions (side, front and top), giving high rigidity for stable grooving and cutting off performance.







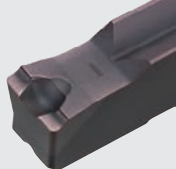



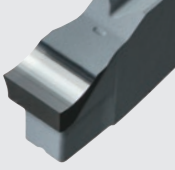
INSERT

A WIDE SELECTION OF INSERTS

Breaker system

Grooving				
				
GU Breaker (For Gummy Steel)	GS Breaker (Low feeds)	GM Breaker (Medium feeds)	GFGS (For hardened steel)	GL Breaker (Aluminium Alloys)



For Multifunctional Grooving			Copying/For recessing
			
MF Breaker (G class)	MS Breaker (Low feeds)	MM Breaker (Medium feeds)	BM Breaker

Cutting Off				
				
GU Breaker (For Gummy Steel)	GS Breaker (Low feeds)	GM Breaker (Medium feeds)	R/L05-GM Breaker (Medium feeds)	GL Breaker (Aluminium Alloys)

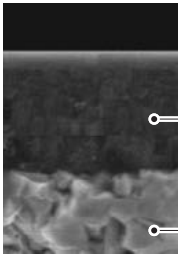
GROOVING / CUTTING OFF

F

INSERT GRADE

Workpiece Material Machining Condition	P Steel	M Stainless Steel	K Cast Iron	N Aluminium Alloy	S Heat Resistant Alloy / Titanium Alloy	H Hardened Steel
	Stable  Machining Condition  Unstable	NX2525 MY5015 VP10RT VP20RT	VP10RT VP20RT	MY5015 VP10RT VP20RT	RT9010	NEW MP9015 RT9010 NEW MP9025

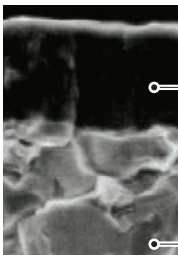
MP9000 Series



- The high Al-rich (Al, Ti)N single layer coating provides stabilization of the high hardness phase and succeeds in dramatically improving wear, crater and welding resistance.

High Al-rich (Al, Ti)N Single Layer Coating
Special Cemented Carbide Substrate

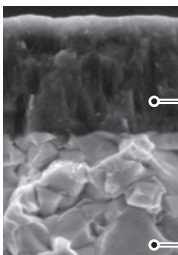
VP20RT



- PVD coated grade suitable for a wide range of applications. The combination of a special tough cemented carbide substrate with MIRACLE coating provides an excellent balance of wear and fracture resistance.

MIRACLE Coating
Tough cemented carbide substrate (90.5HRA)

VP10RT



- PVD coated grade with a cemented carbide substrate harder than VP20RT. For use on difficult-to-cut materials and for extending tool life.

MIRACLE Coating
Tough cemented carbide substrate (92.0HRA)

GL Breaker for Aluminium Alloys

G Class Breaker

Improved chip control by narrowing the breaker width.

High Rake Angle

Achieves low cutting resistance.

Sharp Edge

Improved welding resistance for aluminium alloys.



MF Breaker (Finishing)

Efficient chip breaking when cross-feed machining.

Chips are controlled when finish machining.



MY5015



- MY5015 is a CVD coated grade with excellent wear resistance even at high temperatures. It provides longer tool life when machining cast and ductile cast irons. Also suitable for high-speed continuous cutting of steels.

CVD Coated Carbide
Tough cemented carbide substrate

RT9010

- RT9010 is an uncoated cemented carbide grade. Suitable for processing non-ferrous metals.

NX2525

- NX2525, a cermet grade for finish machining of steels and for good surface finishes at lower cutting speeds.

BC8110

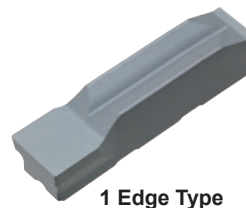
- A CBN coated grade for continuous cutting, which provides longer life when machining hardened steel.

BLANK INSERTS

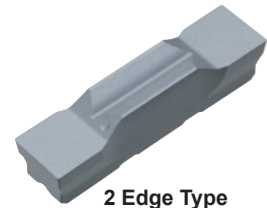
- Blank inserts for custom grinding

RT9010/RT9020 for insert blank

- First recommendation on insert blank is RT9020 due to the tougher carbide substrate and suitable for a wide range of application. RT9010 is a harder substrate than RT9020 and is ideal for long tool life on stable cutting applications. Coating is recommended for application on steel, stainless steel and cast iron materials.



1 Edge Type

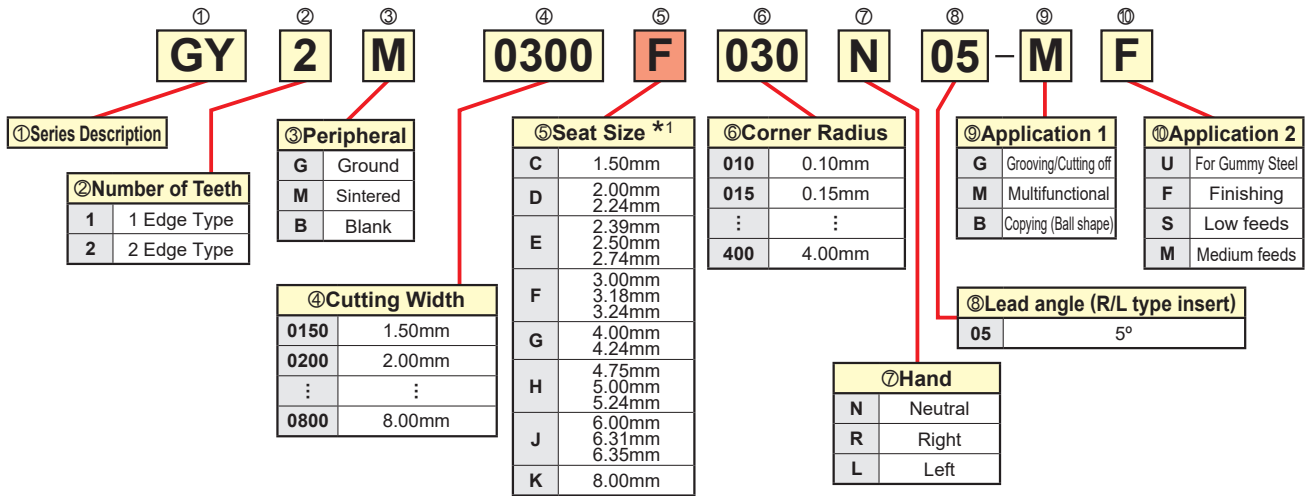


2 Edge Type

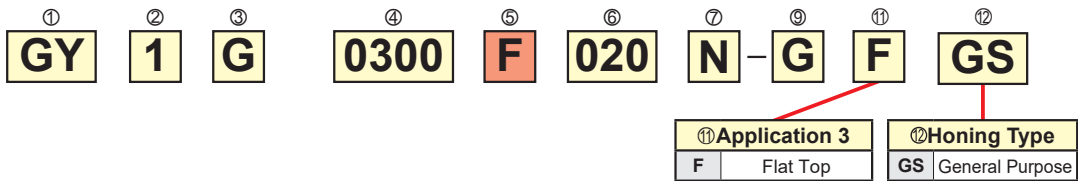
* Insert blank is not suitable for machining without grinding.

GY SERIES ORDER NUMBER

■ INSERT



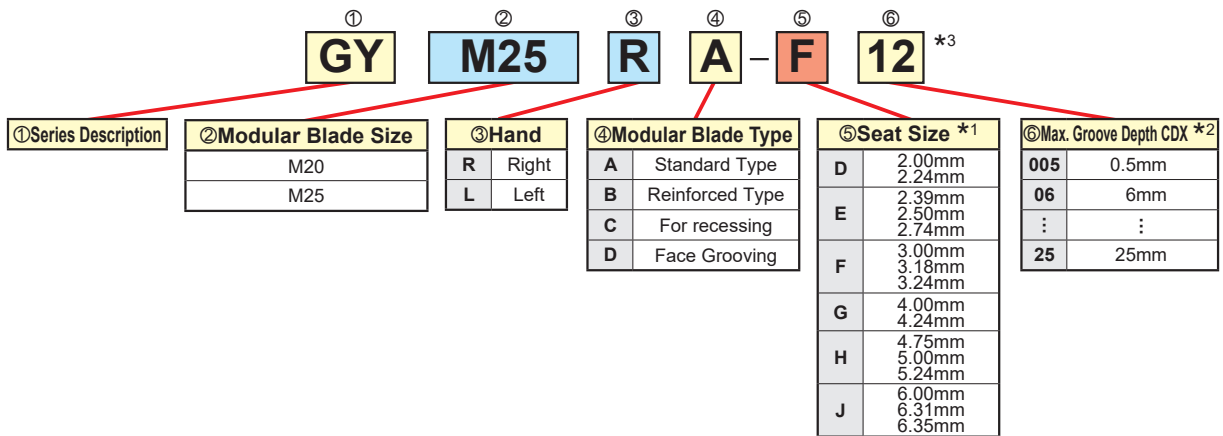
■ CBN INSERT



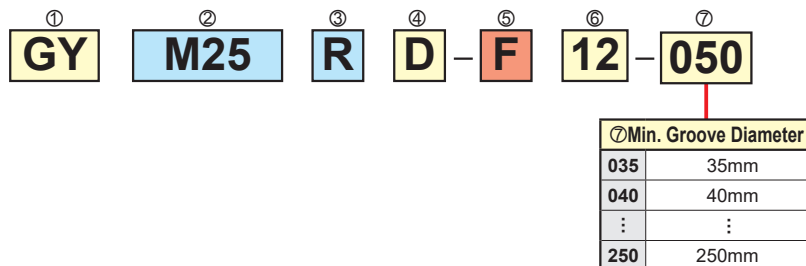
*1 Select a seat size with the same symbol as that of modular blade and mono block holder.

■ MODULAR BLADE

● EXTERNAL/INTERNAL/FOR RECESSING



● FACE GROOVING



*1 Select a seat size with the same symbol as that of the insert.

*2 The maximum groove depth is a value when used for external grooving and changes according to the insert used. For internal grooving, refer to the maximum groove depth on pages F086—F092.

*3 GYM20R/LA-○10, GYM20R/LA-○12, GYM25R/LA-○12 and GYM25R/LA-○14 can be used for both external and internal grooving.

EXTERNAL/FACE GROOVING/FOR RECESSING

MONO BLOCK HOLDER

① **GY** ② **P** ③ **R** ④ **2525** ⑤ **M** ⑥ **00** - ⑦ **K** ⑧ **25**

① Series Description

② Holder Type

S	Mono-Block Holder for Swiss-Type Automatic Lathes
P	With mono block offset
Q	Without mono block offset
H	Modular holder

③ Hand of Holder

R	Right
L	Left

④ Shank Diameter(H x W)

1010	10x10mm
1212	12x12mm
1616	16x16mm
2012	20x12mm
2020	20x20mm
2525	25x25mm
3225	32x25mm
3232	32x32mm

⑤ Holder Length LF

J	110mm
JX	120mm
K	125mm
M	150mm
P	170mm

⑥ Angle

00	0°
50	50°
90	90°

⑦ Seat Size *1

C	1.50mm
D	2.00mm 2.24mm
E	2.39mm 2.50mm 2.74mm
F	3.00mm 3.18mm 3.24mm
G	4.00mm 4.24mm
H	4.75mm 5.00mm 5.24mm
J	6.00mm 6.31mm 6.35mm
K	8.00mm

⑧ Max. Groove Depth CDX

06	6mm
08	8mm
:	:
25	25mm

MODULAR HOLDER

① **GY** ② **H** ③ **R** ④ **2525** ⑤ **M** ⑥ **00** - ⑦ **M25** ⑧ **R**

⑦ Modular Blade Size

M20
M25

⑧ Hand of Modular Blade

R	Right
L	Left

*1 Select a seat size with the same symbol as that of the insert.

INTERNAL

MONO BLOCK HOLDER

① **GY** ② **A** ③ **R** ④ **20** ⑤ **K** ⑥ **90** ⑦ **A** - ⑧ **F** ⑨ **06**

① Series Description

② Holder Type

A	Mono Block
D	Modular holder

③ Hand of Holder

R	Right
L	Left

④ Shank Diameter DCON

20	20mm
25	25mm
32	32mm
40	40mm
50	50mm

⑤ Holder Length LF

K	125mm
L	140mm
M	150mm
P	170mm
Q	180mm
R	200mm
S	250mm
T	300mm

⑥ Angle

90	90°
----	-----

⑦ Neck Length

A	30mm
B	40mm
C	50mm
D	60mm
F	80mm

⑧ Seat Size *1

D	2.00mm 2.24mm
E	2.39mm 2.50mm 2.74mm
F	3.00mm 3.18mm 3.24mm
G	4.00mm 4.24mm
H	4.75mm 5.00mm 5.24mm
J	6.00mm 6.31mm 6.24mm

⑨ Max. Groove Depth CDX

06	6mm
07	7mm

MODULAR HOLDER

① **GY** ② **D** ③ **R** ④ **40** ⑤ **M** ⑥ **90** ⑦ **D** - ⑧ **M25** ⑨ **L**

⑧ Modular Blade Size

M20
M25

⑨ Hand of Modular Blade

R	Right
L	Left

*1 Select a seat size with the same symbol as that of the insert.

PSC Holder Order Number

EXTERNAL/FACE GROOVING/FOR RECESSING

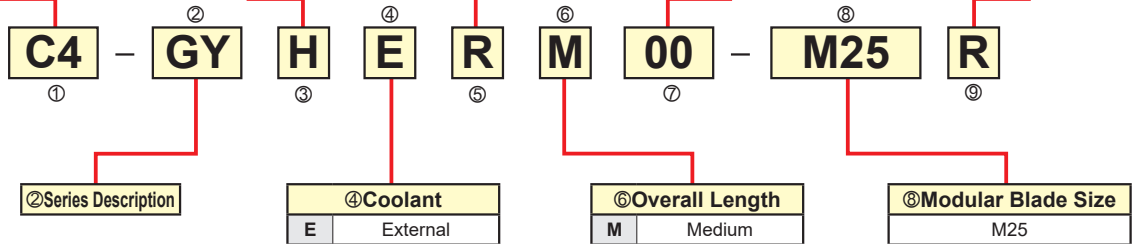
① Mounting Size	
C4	PSC40
C5	PSC50
C6	PSC63

③ Holder Type	
H	Modular Type Holder

⑤ Hand	
R	Right
L	Left

⑦ Angle(degree)	
00	0°
50	50°
90	90°

⑨ Hand of Modular Blade	
R	Right
L	Left



F

GROOVING / CUTTING OFF

GY SERIES INSERTS

INSERTS

Applications	Geometry	Order Number	Stock								Seat Size	Dimensions (mm)						
			Coated				Cermet		Carbide			CW		RER/L	CDX	*		
			NEW	NEW								Cutting Width	Tolerance					
			MP9015	MP9025	VP10RT	VP20RT	MY5015	NX2525	RT9010	RT9020								
For Grooving / Cutting Off	GU Breaker (For gummy steel) 	GY2M0200D020N-GU			●	●	●					D	2.00	±0.03	0.2	19.7	20.70	
		GY2M0239E020N-GU			●	●	●						E	2.39	±0.03	0.2	19.8	20.70
		GY2M0250E020N-GU			●	●	●						E	2.50	±0.03	0.2	19.5	20.70
		GY2M0300F030N-GU			●	●	●						F	3.00	±0.03	0.3	19.3	20.70
		GY2M0318F030N-GU			●	●	●						F	3.18	±0.03	0.3	19.3	20.70
		GY2M0400G030N-GU			●	●	●						G	4.00	±0.04	0.3	24.2	25.65
		GY2M0475H040N-GU			●	●	●						H	4.75	±0.04	0.4	24.2	25.65
		GY2M0500H040N-GU			●	●	●						H	5.00	±0.04	0.4	24.2	25.65
		GY2M0600J040N-GU			●	●	●						J	6.00	±0.04	0.4	24.2	25.65
		GY2M0635J040N-GU			●	●	●						J	6.35	±0.04	0.4	24.2	25.65
	GS Breaker (Low feeds) 	GY2M0150C010N-GS			●	●	●						C	1.50	±0.03	0.1	13.4	14.70
		GY2M0200D020N-GS			●	●	●						D	2.00	±0.03	0.2	18.7	20.70
		GY2M0239E020N-GS			●	●	●						E	2.39	±0.03	0.2	18.5	20.70
		GY2M0250E020N-GS			●	●	●						E	2.50	±0.03	0.2	18.5	20.70
		GY2M0300F020N-GS			●	●	●						F	3.00	±0.03	0.2	18.5	20.70
		GY2M0318F020N-GS			●	●	●						F	3.18	±0.03	0.2	18.5	20.70
		GY2M0400G020N-GS			●	●	●						G	4.00	±0.04	0.2	23.9	25.65
		GY2M0475H030N-GS			●	●	●						H	4.75	±0.04	0.3	23.9	25.65
		GY2M0500H030N-GS			●	●	●						H	5.00	±0.04	0.3	24.0	25.65
		GY2M0600J030N-GS			●	●	●						J	6.00	±0.04	0.3	24.1	25.65
		GY2M0635J030N-GS			●	●	●						J	6.35	±0.04	0.3	24.1	25.65
		GY2M0800K030N-GS			●	●							K	8.00	±0.04	0.3	29.1	30.50
	GM Breaker (Medium feeds) 	GY1M0200D020N-GM	●	●	●	●	●						D	2.00	±0.03	0.2	—	20.70
		GY1M0250E020N-GM	●	●	●	●	●						E	2.50	±0.03	0.2	—	20.70
		GY1M0300F030N-GM	●	●	●	●	●						F	3.00	±0.03	0.3	—	20.70
		GY1M0400G030N-GM	●	●	●	●	●						G	4.00	±0.04	0.3	—	25.65
		GY1M0500H040N-GM	●	●	●	●	●						H	5.00	±0.04	0.4	—	25.65
	GM Breaker (Medium feeds) 	GY2M0150C020N-GM	●	●	●	●	●						C	1.50	±0.03	0.2	13.9	14.70
		GY2M0200D020N-GM	●	●	●	●	●						D	2.00	±0.03	0.2	19.4	20.70
		GY2M0239E020N-GM	●	●	●	●	●						E	2.39	±0.03	0.2	19.4	20.70
		GY2M0250E020N-GM	●	●	●	●	●						E	2.50	±0.03	0.2	19.4	20.70
		GY2M0300F030N-GM	●	●	●	●	●						F	3.00	±0.03	0.3	19.4	20.70
		GY2M0318F030N-GM	●	●	●	●	●						F	3.18	±0.03	0.3	19.4	20.70
		GY2M0400G030N-GM	●	●	●	●	●						G	4.00	±0.04	0.3	24.4	25.65
		GY2M0475H040N-GM	●	●	●	●	●						H	4.75	±0.04	0.4	24.3	25.65
GY2M0500H040N-GM		●	●	●	●	●						H	5.00	±0.04	0.4	24.3	25.65	
GY2M0600J040N-GM		●	●	●	●	●						J	6.00	±0.04	0.4	24.3	25.65	
GY2M0635J040N-GM		●	●	●	●	●						J	6.35	±0.04	0.4	24.3	25.65	
GY2M0800K050N-GM		●	●	●	●	●						K	8.00	±0.04	0.5	29.3	30.50	
GL Breaker (For Aluminium Alloys) 	GY2G0200D005N-GL									●		D	2.00	±0.02	0.05	19.5	21.05	
	GY2G0250E005N-GL									●		E	2.50	±0.02	0.05	19.1	21.05	
	GY2G0300F005N-GL									●		F	3.00	±0.02	0.05	18.9	21.05	

* The dimension depends on the breaker. Refer to the F015 "L dimension tolerance conversion table".

● = NEW

● : Inventory maintained in Japan.
(Contains 10 inserts per case.)

F

GROOVING / CUTTING OFF

GY SERIES INSERTS

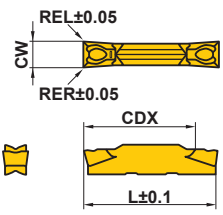
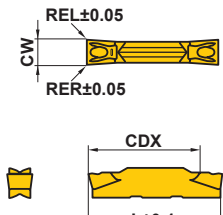
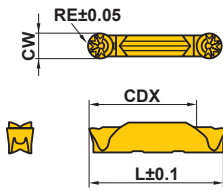
INSERTS

Applications	Geometry	Order Number	Stock							Seat Size	Dimensions (mm)									
			Coated			Cermet	Carbide	CBN	CW		RER/L	CDX	*2							
			NEW	NEW				Cutting Width	Tolerance				L	LE						
			MP9015	MP9025	VP10RT	VP20RT	MY5015				NX2525	RT9010			RT9020	BC8110				
For Cutting Off	R/L05-GM Breaker Right hand insert shown.	GY1M0200D020R05-GM			●	●						D	2.00	±0.03	0.2	—	20.80	—		
		GY1M0200D020L05-GM			●	●							D	2.00	±0.03	0.2	—	20.80	—	
		GY1M0300F030R05-GM			●	●							F	3.00	±0.03	0.3	—	20.85	—	
		GY1M0300F030L05-GM			●	●							F	3.00	±0.03	0.3	—	20.85	—	
	R/L05-GM Breaker Right hand insert shown.	GY2M0200D020R05-GM			●	●							D	2.00	±0.03	0.2	19.5	20.80	—	
		GY2M0200D020L05-GM			●	●							D	2.00	±0.03	0.2	19.5	20.80	—	
		GY2M0250E020R05-GM			●	●							E	2.50	±0.03	0.2	19.5	20.825	—	
		GY2M0250E020L05-GM			●	●							E	2.50	±0.03	0.2	19.5	20.825	—	
GY2M0300F030R05-GM				●	●							F	3.00	±0.03	0.3	19.5	20.85	—		
GY2M0300F030L05-GM				●	●							F	3.00	±0.03	0.3	19.5	20.85	—		
GY2M0400G030R05-GM				●	●							G	4.00	±0.04	0.3	24.5	25.85	—		
GY2M0400G030L05-GM				●	●							G	4.00	±0.04	0.3	24.5	25.85	—		
Flat Top (For hardened steel) 	GY1G0200D020N-GFGS											▲	D	2.00	±0.03	0.2	—	20.70	2.7	
	GY1G0239E020N-GFGS												▲	E	2.39	±0.03	0.2	—	20.70	2.7
	GY1G0250E020N-GFGS												▲	E	2.50	±0.03	0.2	—	20.70	2.7
	GY1G0300F020N-GFGS												▲	F	3.00	±0.03	0.2	—	20.70	2.7
	GY1G0318F020N-GFGS												▲	F	3.18	±0.03	0.2	—	20.70	2.7
	GY1G0400G020N-GFGS												▲	G	4.00	±0.03	0.2	—	25.65	2.7
	GY1G0475H020N-GFGS												▲	H	4.75	±0.03	0.2	—	25.65	2.7
	GY1G0500H020N-GFGS												▲	H	5.00	±0.03	0.2	—	25.65	2.7
MF Breaker (Finishing) 	GY2G0200D020N-MF			●	●	●	●						D	2.00	±0.02	0.2	19.5	21.05	—	
	*1 GY2G0224D015N-MF			●	●	●	●						D	2.24	±0.02	0.15	19.8	21.05	—	
	GY2G0239E020N-MF			●	●	●	●						E	2.39	±0.02	0.2	19.2	21.05	—	
	GY2G0250E020N-MF			●	●	●	●						E	2.50	±0.02	0.2	19.4	21.05	—	
	*1 GY2G0274E020N-MF			●	●	●	●						E	2.74	±0.02	0.2	19.7	21.05	—	
	GY2G0300F020N-MF			●	●	●	●						F	3.00	±0.02	0.2	19.5	21.05	—	
	GY2G0300F040N-MF			●	●	●	●						F	3.00	±0.02	0.4	19.3	21.05	—	
	GY2G0318F020N-MF			●	●	●	●						F	3.18	±0.02	0.2	19.5	21.05	—	
	GY2G0318F040N-MF			●	●	●	●						F	3.18	±0.02	0.4	19.3	21.05	—	
	*1 GY2G0324F020N-MF			●	●	●	●						F	3.24	±0.02	0.2	19.5	21.05	—	
	GY2G0400G020N-MF			●	●	●	●						G	4.00	±0.02	0.2	24.9	25.95	—	
	GY2G0400G040N-MF			●	●	●	●						G	4.00	±0.02	0.4	24.7	25.95	—	
	GY2G0400G080N-MF			●	●	●	●						G	4.00	±0.02	0.8	24.3	25.95	—	
	*1 GY2G0424G020N-MF			●	●	●	●						G	4.24	±0.02	0.2	24.9	25.95	—	
	GY2G0475H020N-MF			●	●	●	●						H	4.75	±0.02	0.2	24.4	25.95	—	
	GY2G0475H040N-MF			●	●	●	●						H	4.75	±0.02	0.4	24.2	25.95	—	
	GY2G0475H080N-MF			●	●	●	●						H	4.75	±0.02	0.8	23.8	25.95	—	
	GY2G0500H020N-MF			●	●	●	●						H	5.00	±0.02	0.2	24.4	25.95	—	
	GY2G0500H040N-MF			●	●	●	●						H	5.00	±0.02	0.4	24.2	25.95	—	
	GY2G0500H080N-MF			●	●	●	●						H	5.00	±0.02	0.8	23.8	25.95	—	
	*1 GY2G0524H020N-MF			●	●	●	●						H	5.24	±0.02	0.2	24.4	25.95	—	
	GY2G0600J020N-MF			●	●	●	●						J	6.00	±0.02	0.2	24.4	25.95	—	
	GY2G0600J040N-MF			●	●	●	●						J	6.00	±0.02	0.4	24.2	25.95	—	
	GY2G0600J080N-MF			●	●	●	●						J	6.00	±0.02	0.8	23.8	25.95	—	
*1 GY2G0631J020N-MF			●	●	●	●						J	6.31	±0.02	0.2	24.4	25.95	—		
GY2G0635J020N-MF			●	●	●	●						J	6.35	±0.02	0.2	24.4	25.95	—		
GY2G0635J040N-MF			●	●	●	●						J	6.35	±0.02	0.4	24.2	25.95	—		
GY2G0635J080N-MF			●	●	●	●						J	6.35	±0.02	0.8	23.8	25.95	—		

*1 Circlip corresponding width of cut

● = NEW

● : Inventory maintained in Japan. ▲ : Inventory maintained in Japan. To be replaced by new products.
 (Contains 10 inserts per case.) (Contains one CBN insert per case.)

Applications	Geometry	Order Number	Stock								Seat Size	Dimensions (mm)							
			Coated				Cermet		Carbide			CW		RE RER/L	CDX	*2 L			
			NEW	NEW								Cutting Width	Tolerance						
			MP9015	MP9025	VP10RT	VP20RT	MY5015	NX2525	RT9010	RT9020									
For Multifunctional Grooving	MS Breaker (Low feeds) 	GY2M0200D020N-MS			●	●	●	●				D	2.00	±0.03	0.2	19.1	20.70		
		GY2M0250E020N-MS			●	●	●	●					E	2.50	±0.03	0.2	19.1	20.70	
		GY2M0300F020N-MS			●	●	●	●					F	3.00	±0.03	0.2	19.2	20.70	
		GY2M0300F040N-MS			●	●	●	●					F	3.00	±0.03	0.4	18.9	20.70	
		GY2M0400G020N-MS			●	●	●	●					G	4.00	±0.04	0.2	24.2	25.65	
		GY2M0400G040N-MS			●	●	●	●					G	4.00	±0.04	0.4	23.9	25.65	
		GY2M0500H040N-MS			●	●	●	●					H	5.00	±0.04	0.4	23.9	25.65	
		GY2M0500H080N-MS			●	●	●	●					H	5.00	±0.04	0.8	23.5	25.65	
		GY2M0600J040N-MS			●	●	●	●					J	6.00	±0.04	0.4	23.9	25.65	
		GY2M0600J080N-MS			●	●	●	●					J	6.00	±0.04	0.8	23.5	25.65	
		GY2M0800K080N-MS			●	●	●	●					K	8.00	±0.04	0.8	28.5	30.50	
		For Multifunctional Grooving	MM Breaker (Medium feeds) 	GY2M0200D020N-MM	●	●	●	●	●					D	2.00	±0.03	0.2	19.1	20.70
				GY2M0250E020N-MM	●	●	●	●	●						E	2.50	±0.03	0.2	19.1
GY2M0300F020N-MM	●			●	●	●	●						F	3.00	±0.03	0.2	19.1	20.70	
GY2M0300F040N-MM	●			●	●	●	●						F	3.00	±0.03	0.4	18.9	20.70	
GY2M0300F080N-MM	●			●	●	●	●						F	3.00	±0.03	0.8	18.5	20.70	
GY2M0400G020N-MM	●			●	●	●	●						G	4.00	±0.04	0.2	24.1	25.65	
GY2M0400G040N-MM	●			●	●	●	●						G	4.00	±0.04	0.4	23.9	25.65	
GY2M0400G080N-MM	●			●	●	●	●						G	4.00	±0.04	0.8	23.5	25.65	
GY2M0500H040N-MM	●			●	●	●	●						H	5.00	±0.04	0.4	23.9	25.65	
GY2M0500H080N-MM	●			●	●	●	●						H	5.00	±0.04	0.8	23.5	25.65	
GY2M0600J040N-MM	●			●	●	●	●						J	6.00	±0.04	0.4	23.9	25.65	
GY2M0600J080N-MM	●			●	●	●	●						J	6.00	±0.04	0.8	23.5	25.65	
GY2M0800K080N-MM	●			●	●	●	●						K	8.00	±0.04	0.8	28.5	30.50	
GY2M0800K120N-MM	●	●	●	●	●						K	8.00	±0.04	1.2	28.1	30.50			
For Copying / For Recessing	BM Breaker 	GY2M0200D100N-BM	●	●	●	●	●					D	2.00	±0.03	1.00	19.5	20.90		
		GY2M0250E125N-BM	●	●	●	●	●						E	2.50	±0.03	1.25	19.3	20.90	
		GY2M0300F150N-BM	●	●	●	●	●						F	3.00	±0.03	1.50	19.0	20.90	
		GY2M0318F159N-BM	●	●	●	●	●						F	3.18	±0.03	1.59	18.9	20.90	
		GY2M0400G200N-BM	●	●	●	●	●						G	4.00	±0.04	2.00	23.4	25.80	
		GY2M0475H238N-BM	●	●	●	●	●						H	4.75	±0.04	2.38	22.9	25.80	
		GY2M0500H250N-BM	●	●	●	●	●						H	5.00	±0.04	2.50	22.8	25.80	
		GY2M0600J300N-BM	●	●	●	●	●						J	6.00	±0.04	3.00	22.5	25.90	
		GY2M0635J318N-BM	●	●	●	●	●						J	6.35	±0.04	3.18	22.3	25.90	
		GY2M0800K400N-BM	●	●	●	●	●						K	8.00	±0.04	4.00	26.5	30.80	

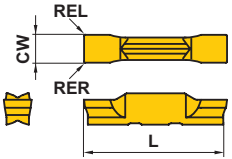
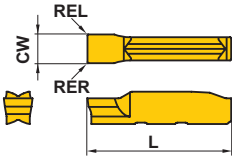
*2 The dimension depends on the breaker. Refer to the F015 "L dimension tolerance conversion table".

● = NEW

F
GROOVING / CUTTING OFF

GY SERIES INSERTS

BLANK INSERTS

Geometry	Order Number	Stock			Seat Size	Dimensions (mm)				
		Cermet		Carbide		CW		RER	REL	L
		NX2525	RT9010			Groove Width	Tolerance			
2 Edge Type 	GY2B0220D020N	●	●	●	D	2.20	±0.10	0.2	0.2	21.05
	NEW GY2B0250D020N	●	●	●	D	2.55	±0.10	0.2	0.2	21.28
	GY2B0270E020N	●	●	●	E	2.70	±0.10	0.2	0.2	21.05
	NEW GY2B0300E020N	●	●	●	E	3.05	±0.10	0.2	0.2	21.28
	GY2B0340F020N	●	●	●	F	3.40	±0.10	0.2	0.2	21.05
	NEW GY2B0360F020N	●	●	●	F	3.65	±0.10	0.2	0.2	21.28
	GY2B0420G020N	●	●	●	G	4.20	±0.10	0.2	0.2	26.00
	NEW GY2B0460G020N	●	●	●	G	4.65	±0.10	0.2	0.2	26.18
	GY2B0520H020N	●	●	●	H	5.20	±0.10	0.2	0.2	26.00
	NEW GY2B0560H020N	●	●	●	H	5.65	±0.10	0.2	0.2	26.18
	GY2B0655J020N	●	●	●	J	6.55	±0.10	0.2	0.2	26.03
	NEW GY2B0680J020N	●	●	●	J	6.85	±0.10	0.2	0.2	26.18
NEW GY2B0880K020N		●	●	K	8.85	±0.10	0.2	0.2	30.88	
1 Edge Type 	GY1B0220D020N	●	●	●	D	2.20	±0.10	0.2	0.2	21.07
	GY1B0270E020N	●	●	●	E	2.70	±0.10	0.2	0.2	21.10
	GY1B0340F020N	●	●	●	F	3.40	±0.10	0.2	0.2	21.00
	GY1B0420G020N	●	●	●	G	4.20	±0.10	0.2	0.2	25.86
	GY1B0520H020N	●	●	●	H	5.20	±0.10	0.2	0.2	25.90
	GY1B0655J020N	●	●	●	J	6.55	±0.10	0.2	0.2	25.90

Insert blank is not suitable for machining without grinding.




● = **NEW**

F

GROOVING / CUTTING OFF

Reference Material

C-TYPE CIRCLIP STANDARDS LIST

Category	Application		Standard	Width (Tolerance)									
				For shaft					For hole				
 C-type stop ring	For shaft	For hole		0.5		0.305	+0.051	1.15		9		0.457	+0.051
				0.7		0.457	0	1.35		1.1		0.457	0
				0.8		0.737		1.75		1.3		0.737	
				0.9		0.991	+0.076	1.95	+0.14	1.6	+0.14	0.991	+0.076
				1.1	+0.14	1.168	0	2.2	0	1.85	0	1.168	0
				1.3	0	1.422	+0.102	2.7		2.15		1.422	+0.102
				1.6		1.727	0	3.2	+0.18	2.65	+0.18	1.727	0
				1.85		2.184		4.2	0	3.15		2.184	
				2.15		2.616	+0.127			4.15	+0.18	2.616	+0.127
				2.65		3.048	0			5.15	0	3.048	0
 C-type concentric stop ring	For shaft	For hole	ANSI B27.7/27.8 (US) BS 3673 (UK) DIN 471/472 (De) NF E 22 163 (Fr) UNI 7435/7438 (It) JIS B 2804 (JP)	3.15	+0.18	3.531	+0.152			6.2	+0.22		
				4.15	0								
				5.15									
				6.2	+0.22								
 E-type stop ring	For shaft		N1*** American	0.32	+0.05	0.305	+0.051	0.3	+0.05				
				0.5	0	0.457	0	0.4	0				
				0.7	+0.10	0.584		0.5					
				1.0	0	0.737	+0.076	0.7	+0.10				
				1.2	+0.14	0.991	0	0.9	0				
				1.4	0	1.168		1.15	+0.14				
		1.422	+0.102	1.75									
		1.727	0	2.2	0								

O-RING STANDARDS

Category	Standard	Width (Tolerance)					
		General		For oil pressure		For air pressure	
For stable	DIN 3770/3771 (De)	2.54		1.9	+0.1		
		3.18		2.3	0		
		4.32	+0.13	2.9	+0.15	2.3	
		6.1	0	3.1	0	3.1	+0.2
For dynamic	JIS B 2401 (JP) ISO 3601	3.2	+0.2	3.6	+0.2	3.7	0
		4.0	0	4.5	0	6.4	
	SMS 1586/1588 (Se) BS 1806/4518 (UK)	7.5		5.5	+0.3	9.0	
		11.0		7.0	0	2.4	
	SAE AS-568 (US)	2.39		8.6	+0.4	3.6	+0.25
		3.58	+0.25	10.7	0	4.8	0
		4.78	0			7.1	
		7.14				9.5	
		9.58					

- G-class insert with MF breaker is available for single-step machining.
- Conventional GY series insert is available for single-step machining.
- Machined in multiple steps or by cross feed machining.

GY SERIES L DIMENSION TOLERANCE CONVERSION TABLE

Cutting Width CW (mm)	*1 Dimensions L (mm)	*2 Dimensional tolerance (mm) versus standard dimension (L) of each breaker							
		GU	GS/GM	MS/MM	R/L-GM	Flat Top	MF	BM	GL
1.50	14.70		0						
2.00	20.70	0	0	0	0.10	0	0.35	0.20	0.35
2.24	*3 (20.7)						0.35		
2.39	20.70	0	0			0	0.35		
2.50	20.70	0	0	0	0.125	0	0.35	0.20	0.35
2.74	*3 (20.7)						0.35		
3.00	20.70	0	0	0	0.15	0	0.35	0.20	0.35
3.18	20.70	0	0			0	0.35	0.20	
3.24	*3 (20.7)						0.35		
4.00	25.65	0	0	0	0.20	0	0.30	0.15	
4.24	*3 (25.65)						0.30		
4.75	25.65	0	0			0	0.30	0.15	
5.00	25.65	0	0	0	0.30	0	0.30	0.15	
5.24	*3 (25.65)						0.30		
6.00	25.65	0	0	0		0	0.30	0.25	
6.31	*3 (25.65)						0.30		
6.35	25.65	0	0				0.30	0.25	
8.00	30.50		0	0				0.30	

- *1 This value is used at the described holder dimension.
- *2 when there is no applicable breaker.
- *3 The standard dimensions shown here use an approximate insert width.

F
GROOVING / CUTTING OFF

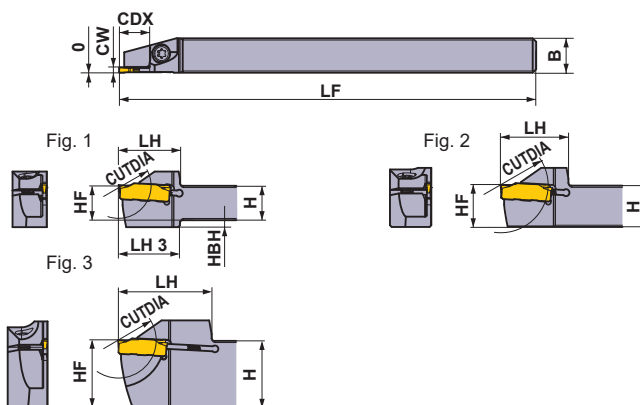
GY SERIES (External for Swiss style lathes)



1 00° type holder NEW

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2G ^{GL}	Insert	GY2M ^{MS}
Insert	GY1G ^{GM} _{GFGS}	Insert	GY2M ^{MM}

Insert	GY2M ^{GS} _{GM} -BM	Insert	GY2M ^{GS} _{GM}
Insert	GY2G ^{GL}	Insert	GY2M ^{MS}
Insert	GY1G ^{GM} _{GFGS} /R/L	Insert	GY2M ^{MM}



Right hand tool holder shown.

GROOVING / CUTTING OFF

F

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number		Fig.
	CW	CDX*4	CUTDIA			Holder	Stock	
C	1.50	8	16	Mono Block	R	GYSR1010JX00-C08	●	1
				Mono Block	L	GYSL1010JX00-C08	●	1
		12	24	Mono Block	R	GYSR1212JX00-C08	●	2
				Mono Block	L	GYSL1212JX00-C08	●	2
		13	26	Mono Block	R	GYSR1212JX00-C12	●	1
				Mono Block	L	GYSL1212JX00-C12	●	1
13	26	Mono Block	R	GYSR1616JX00-C13	●	2		
		Mono Block	L	GYSL1616JX00-C13	●	2		
D	2.00 2.24	10	20	Mono Block	R	GYSR1010JX00-D10	●	1
				Mono Block	L	GYSL1010JX00-D10	●	1
		12	24	Mono Block	R	GYSR1212JX00-D12	●	1
				Mono Block	L	GYSL1212JX00-D12	●	1
		13	26	Mono Block	R	GYSR1616JX00-D13	●	2
				Mono Block	L	GYSL1616JX00-D13	●	2
		16	32	Mono Block	R	GYSR1616JX00-D16	●	2
				Mono Block	L	GYSL1616JX00-D16	●	2
		17	34	Mono Block	R	GYSR1915K00-D17	●	3
				Mono Block	L	GYSL1915K00-D17	●	3
				Mono Block	R	GYSR2012JX00-D17	●	3
				Mono Block	L	GYSL2012JX00-D17	●	3
17	34	Mono Block	R	GYSR2020K00-D17	●	2		
		Mono Block	L	GYSL2020K00-D17	●	2		
17	34	Mono Block	R	GYSR2525M00-D17	●	2		
		Mono Block	L	GYSL2525M00-D17	●	2		
E	2.39 2.50 2.74	10	20	Mono Block	R	GYSR1010JX00-E10	●	1
				Mono Block	L	GYSL1010JX00-E10	●	1
		12	24	Mono Block	R	GYSR1212JX00-E12	●	1
				Mono Block	L	GYSL1212JX00-E12	●	1
		13	26	Mono Block	R	GYSR1616JX00-E13	●	2
				Mono Block	L	GYSL1616JX00-E13	●	2
		16	32	Mono Block	R	GYSR1616JX00-E16	●	2
				Mono Block	L	GYSL1616JX00-E16	●	2
		17	34	Mono Block	R	GYSR1915K00-E17	●	3
				Mono Block	L	GYSL1915K00-E17	●	3
				Mono Block	R	GYSR2012JX00-E17	●	3
				Mono Block	L	GYSL2012JX00-E17	●	3
17	34	Mono Block	R	GYSR2020K00-E17	●	2		
		Mono Block	L	GYSL2020K00-E17	●	2		
17	34	Mono Block	R	GYSR2525M00-E17	●	2		
		Mono Block	L	GYSL2525M00-E17	●	2		

CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.



*2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011—F013.

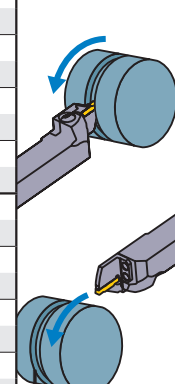
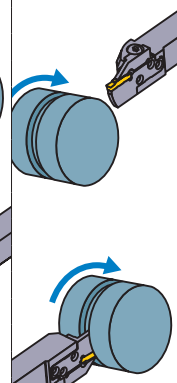
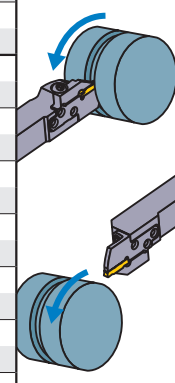
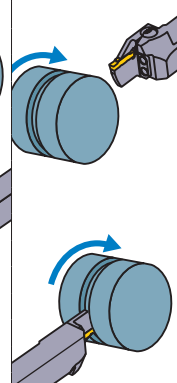
*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH and LH 3 values may vary.

*4 The maximum groove depth (CDX) is limited by the workpiece diameter. For details, please refer to page F104.

● : Inventory maintained in Japan.

SPARE PARTS

Holder		
	Clamp Screw	Wrench
GYSR/L1010JX00	CS350990T	TKY10R
GYSR/L1212JX00		
GYSR/L1616JX00	TS4SBL	TKY15R
GYSR/L1915K00		
GYSR/L2012JX00	CS350990T	TKY10R
GYSR/L2020K00	HSC05018	TKY40R
GYSR/L2525K00		

Dimensions (mm) *3								Cutting Mode	
H	B	LF	LH	LH 3	HF	HBH		Clockwise	Anticlockwise
10	10	120	17.5	17.5	10	2	R		
10	10	120	17.5	17.5	10	2			
12	12	120	19.5	—	12	—			
12	12	120	19.5	—	12	—			
12	12	120	19.5	19.5	12	2			
12	12	120	19.5	19.5	12	2			
16	16	120	25	—	16	—			
16	16	120	25	—	16	—			
20	12	120	28	—	20	—			
20	12	120	28	—	20	—			
10	10	120	17.5	17.5	10	2	L		
10	10	120	17.5	17.5	10	2			
12	12	120	19.5	19.5	12	2			
12	12	120	19.5	19.5	12	2			
16	16	120	25	—	16	—			
16	16	120	25	—	16	—			
16	16	120	28	—	16	—			
16	16	120	28	—	16	—			
19.05	15.875	125	28	—	19.05	—			
19.05	15.875	125	28	—	19.05	—			
20	12	120	28	—	20	—			
20	12	120	28	—	20	—			
20	20	125	35	—	20	—			
20	20	125	35	—	20	—			
25	25	150	40	—	25	—			
25	25	150	40	—	25	—			
10	10	120	17.5	17.5	10	2			
10	10	120	17.5	17.5	10	2			
12	12	120	19.5	19.5	12	2			
12	12	120	19.5	19.5	12	2			
16	16	120	25	—	16	—			
16	16	120	25	—	16	—			
16	16	120	28	—	16	—			
16	16	120	28	—	16	—			
19.05	15.875	125	28	—	19.05	—			
19.05	15.875	125	28	—	19.05	—			
20	12	120	28	—	20	—			
20	12	120	28	—	20	—			
20	20	125	35	—	20	—			
20	20	125	35	—	20	—			
25	25	150	40	—	25	—			
25	25	150	40	—	25	—			

Insert selection

Seat Size	Geometry name
C	GY○○○0150C○○○○○—Breaker shown below
D	GY○○○0200/0224D○○○○○—Breaker shown below
E	GY○○○0239/0250/0274E○○○○○—Breaker shown below

For grooving/cutting off breaker > F011, F012							
Seat Size	Breaker	GU	GS	GM	GL	05-GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Aluminium)	(Cutting off)	(Hardened steel)
CW		Neutral	Neutral	Neutral	Neutral	With hand	Neutral
C	1.50mm		●	●			
D	2.00mm	●	●	●	●	●	●
E	2.39mm	●	●	●			●
E	2.50mm	●	●	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
CW					Ball shape
C	1.50mm				
D	2.00mm	●	●	●	●
D	2.24mm	●			
E	2.39mm	●			
E	2.50mm	●	●	●	●
E	2.74mm	●			

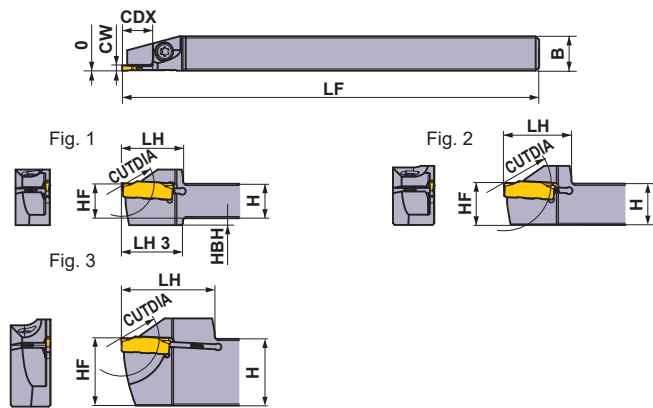
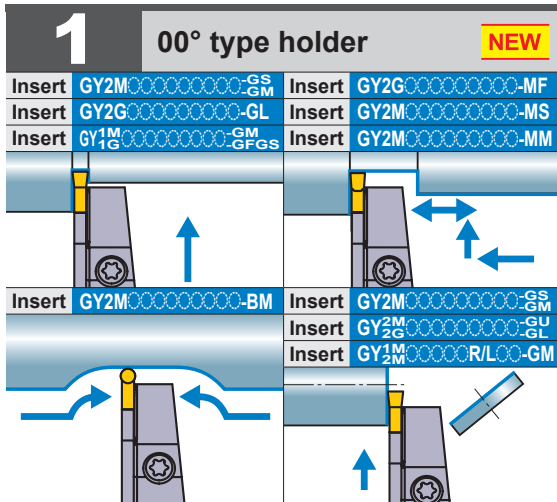
● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

GY SERIES (External for Swiss style lathes)



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number		Fig.
	CW	CDX*4	CUTDIA			Holder	Stock	
F	3.00 3.18 3.24	12	24	Mono Block	R	GYSR1212JX00-F12	●	1
					L	GYSL1212JX00-F12	●	1
		13	26	Mono Block	R	GYSR1616JX00-F13	●	2
					L	GYSL1616JX00-F13	●	2
		16	32	Mono Block	R	GYSR1616JX00-F16	●	2
					L	GYSL1616JX00-F16	●	2
		17	34	Mono Block	R	GYSR1915K00-F17	●	3
					L	GYSL1915K00-F17	●	3
					R	GYSR2012JX00-F17	●	3
		L	GYSL2012JX00-F17	●	3			

CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011–F013.



*2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011–F013.

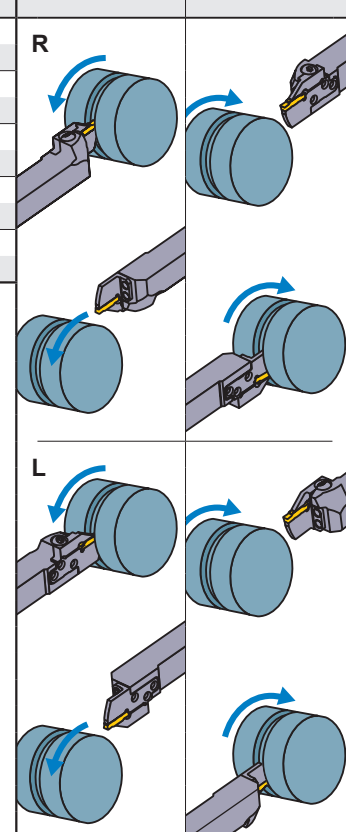
*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH and LH 3 values may vary.

*4 The maximum groove depth (CDX) is limited by the workpiece diameter. For details, please refer to page F104.

● : Inventory maintained in Japan.

SPARE PARTS

Holder		
	Clamp Screw	Wrench
GYSR/L1010JX00	CS350990T	TKY10R
GYSR/L1212JX00		
GYSR/L1616JX00	TS4SBL	TKY15R
GYSR/L1915K00		
GYSR/L2012JX00	CS350990T	TKY10R
GYSR/L2020K00	HSC05018	TKY40R
GYSR/L2525K00		

	Dimensions (mm) *3							Cutting Mode	
	H	B	LF	LH	LH 3	HF	HBH	Clockwise	Anticlockwise
	12	12	120	19.5	19.5	12	2		
	12	12	120	19.5	19.5	12	2		
	16	16	120	25	—	16	—		
	16	16	120	25	—	16	—		
	16	16	120	28	—	16	—		
	16	16	120	28	—	16	—		
	19.05	15.875	125	28	—	19.05	—		
	19.05	15.875	125	28	—	19.05	—		
	20	12	120	28	—	20	—		
	20	12	120	28	—	20	—		

Insert selection

Seat Size	Geometry name
F	GY○○0300/0318/0324F○○○○○—Breaker shown below

For grooving/cutting off breaker > F011, F012							
Seat Size	Breaker	GU	GS	GM	GL	05-GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Aluminium)	(Cutting off)	(Hardened steel)
CW		Neutral	Neutral	Neutral	Neutral	With hand	Neutral
	F	3.00mm	●	●	●	●	●
	3.18mm	●	●	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
F					Ball shape
	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
RE 0.4	●				
3.24mm	●				



● : Standard insert with dimensions

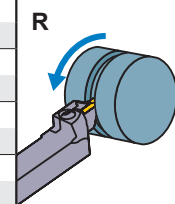
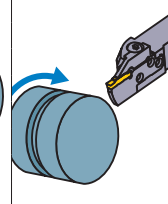
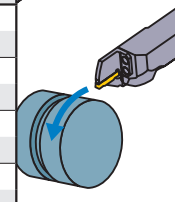
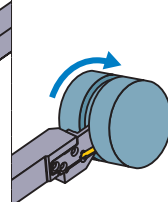
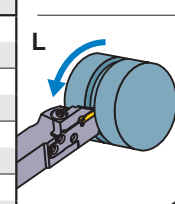
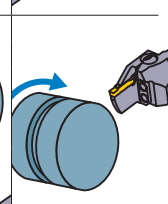
F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

SPARE PARTS

Holder		
	Clamp Screw	Wrench
GYSR/L1010JX00-11	CS350990T (Clamp Torque : 2.5N·m)	TKY10R
GYSR/L1212JX00-13		
GYSR/L2012JX00-18		
GYSR/L1616JX00-17	TS4SBL (Clamp Torque : 3.5N·m)	TKY15R

	Dimensions (mm) *3							Cutting Mode	
	H	B	LF	LH	LH 2	HF	HBH	Clockwise	Anticlockwise
	10	10	120	22	16	10	2		
	10	10	120	22	16	10	2		
	12	12	120	22	16	12	—		
	12	12	120	22	16	12	—		
	16	16	120	27	17	16	—		
	16	16	120	27	17	16	—		
	20	12	120	28	16	20	—		
	20	12	120	28	16	20	—		
	10	10	120	22	23	10	2		
	10	10	120	22	23	10	2		
	12	12	120	22	23	12	—		
	12	12	120	22	23	12	—		
	16	16	120	27	24	16	—		
	16	16	120	27	24	16	—		
	20	12	120	28	23	20	—		
	20	12	120	28	23	20	—		
	10	10	120	22	23	10	2		
	10	10	120	22	23	10	2		
	12	12	120	22	23	12	—		
	12	12	120	22	23	12	—		
	16	16	120	27	24	16	—		
	16	16	120	27	24	16	—		
	20	12	120	28	23	20	—		
	20	12	120	28	23	20	—		

Insert selection

Seat Size	Geometry name
C	GY-0150C —Breaker shown below
D	GY-0200/0224D —Breaker shown below
E	GY-0239/0250/0274E —Breaker shown below
F	GY-0300/0318/0324F —Breaker shown below

For grooving/cutting off breaker > F011, F012							
Seat Size	Breaker	GU	GS	GM	GL	05-GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Aluminium)	(Cutting off)	(Hardened steel)
	CW	Neutral	Neutral	Neutral	Neutral	With hand	Neutral
C	1.50mm		●	●			
D	2.00mm	●	●	●	●	●	●
E	2.39mm	●	●	●			●
	2.50mm	●	●	●	●	●	●
	3.00mm	●	●	●	●	●	●
F	3.18mm	●	●	●			●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
	CW				Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●			
	2.39mm	●			
E	2.50mm	●	●	●	●
	2.74mm	●			
	3.00mm				●
F	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

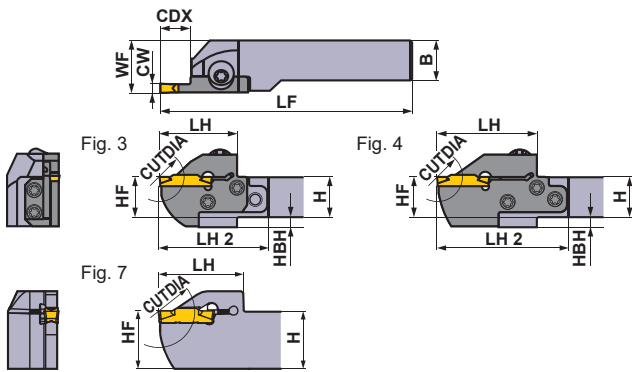
● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

* Wrench : ① : Clamp Screw, ② : Blade Screw



Right hand tool holder shown.

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYQR/L	HSC05020 (Clamp Torque : 7.0N·m)	—	HKY40R
GYHR/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R
M20R/L			②TKY15D
GYHR/L	M25R/L	TS55 (Clamp Torque : 5.0N·m)	①TKY30R
M25R/L			②TKY25D

Dimensions (mm) *3									Cutting Mode	
H	B	LF	LH	LH 2	HF	WF	HBH		Clockwise	Anticlockwise
16	16	104	28	44	16	20	4	R		
16	16	104	28	44	16	20	4			
20	20	125	36	—	20	20.15	—			
20	20	125	36	—	20	20.15	—			
20	20	119	28	43	20	23	—			
20	20	119	28	43	20	23	—			
20	20	117	31	52	20	26	5			
20	20	117	31	52	20	26	5			
25	25	150	36	—	25	25.15	—			
25	25	150	36	—	25	25.15	—			
25	25	142	31	49	25	28	—			
25	25	142	31	49	25	28	—			
32	25	162	31	49	32	28	—			
32	25	162	31	49	32	28	—			
32	32	162	31	49	32	35	—			
32	32	162	31	49	32	35	—			
16	16	110	34	50	16	20	4			
16	16	110	34	50	16	20	4			
20	20	125	34	49	20	23	—			
20	20	125	34	49	20	23	—			
20	20	125	39	60	20	26	5			
20	20	125	39	60	20	26	5			
25	25	150	39	57	25	28	—			
25	25	150	39	57	25	28	—			
32	25	170	39	57	32	28	—			
32	25	170	39	57	32	28	—			
32	32	170	39	57	32	35	—			
32	32	170	39	57	32	35	—			
16	16	116	40	56	16	20	4			
16	16	116	40	56	16	20	4			
20	20	125	39	—	20	20.1	—			
20	20	125	39	—	20	20.1	—			
20	20	131	40	55	20	23	—			
20	20	131	40	55	20	23	—			
20	20	131	45	66	20	26	5			
20	20	131	45	66	20	26	5			
25	25	150	41	—	25	25.1	—			
25	25	150	41	—	25	25.1	—			
25	25	156	45	63	25	28	—			
25	25	156	45	63	25	28	—			
32	25	176	45	63	32	28	—			
32	25	176	45	63	32	28	—			
32	32	176	45	63	32	35	—			
32	32	176	45	63	32	35	—			

Insert selection

Seat Size	Geometry name
D	GY000200/0224D0000—Breaker shown below

For grooving/cutting off breaker > F011, F012							
Seat Size	Breaker	GU	GS	GM	GL	05-GM	GFGS
		For gummy steel	(Low)	(Medium)	(Aluminium)	(Cutting off)	(Hardened steel)
CW	Neutral	Neutral	Neutral	With hand	With hand	Neutral	
D	2.00mm	●	●	●	●	●	●

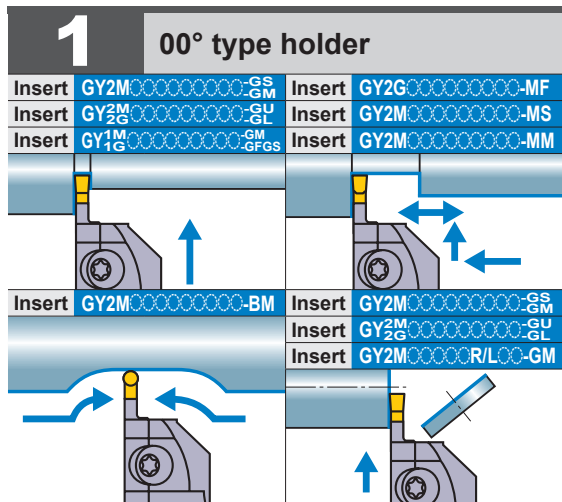
For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
CW	Neutral	●	●	●	●
D	2.00mm	●	●	●	●
D	2.24mm	●	●	●	●

● : Standard insert with dimensions

F
GROOVING / CUTTING OFF

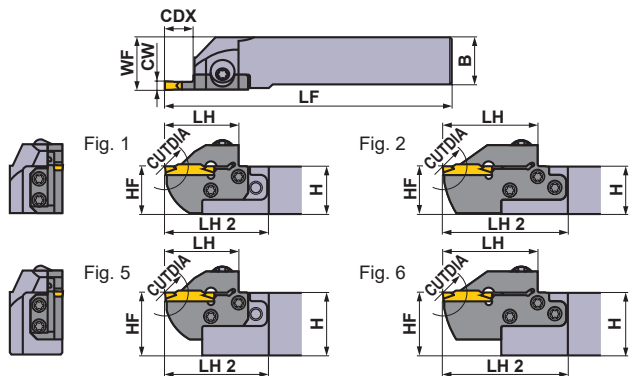
IDENTIFICATION > F008, F009
CUTTING CONDITIONS > F100
CAUTION FOR USE > F106

GY SERIES (EXTERNAL)



Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	CUTDIA			Holder	Stock	Modular Blade	Stock	
E	2.39 2.50 2.74	6	12	Modular	R	GYHR1616J00-M20R	●	GYM20RA-E06	●	3
				Modular	L	GYHL1616J00-M20L	●	GYM20LA-E06	●	3
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-E06	●	1
				Modular	L	GYHL2020K00-M20L	●	GYM20LA-E06	●	1
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-E06	●	3
				Modular	L	GYHL2020K00-M25L	●	GYM25LA-E06	●	3
		Modular	R	GYHR2525M00-M25R	●	GYM25RA-E06	●	1		
		Modular	L	GYHL2525M00-M25L	●	GYM25LA-E06	●	1		
		Modular	R	GYHR3225P00-M25R	●	GYM25RA-E06	●	5		
		Modular	L	GYHL3225P00-M25L	●	GYM25LA-E06	●	5		
		Modular	R	GYHR3232P00-M25R	●	GYM25RA-E06	●	5		
		Modular	L	GYHL3232P00-M25L	●	GYM25LA-E06	●	5		
	10	Modular	R	GYHR1616J00-M20R	●	GYM20RA-E10	●	3		
			L	GYHL1616J00-M20L	●	GYM20LA-E10	●	3		
		12	Modular	R	GYHR2020K00-M20R	●	GYM20RA-E10	●	1	
				L	GYHL2020K00-M20L	●	GYM20LA-E10	●	1	
			Modular	R	GYHR2020K00-M25R	●	GYM25RA-E12	●	3	
			Modular	L	GYHL2020K00-M25L	●	GYM25LA-E12	●	3	
	Modular	R	GYHR2525M00-M25R	●	GYM25RA-E12	●	1			
	Modular	L	GYHL2525M00-M25L	●	GYM25LA-E12	●	1			
	18 *4	Modular	R	GYHR3225P00-M25R	●	GYM25RA-E12	●	5		
			L	GYHL3225P00-M25L	●	GYM25LA-E12	●	5		
		20 *1	Modular	R	GYHR3232P00-M25R	●	GYM25RA-E12	●	5	
				L	GYHL3232P00-M25L	●	GYM25LA-E12	●	5	
Modular			R	GYHR1616J00-M20R	●	GYM20RB-E18	●	4		
			L	GYHL1616J00-M20L	●	GYM20LB-E18	●	4		
20 *1	40 *2	Modular	R	GYHR2020K00-M20R	●	GYM20RB-E18	●	2		
		Modular	L	GYHL2020K00-M20L	●	GYM20LB-E18	●	2		
		Modular	R	GYHR2020K00-M25R	●	GYM25RA-E20	●	4		
		Modular	L	GYHL2020K00-M25L	●	GYM25LA-E20	●	4		
	Modular	R	GYHR2525M00-M25R	●	GYM25RA-E20	●	2			
	Modular	L	GYHL2525M00-M25L	●	GYM25LA-E20	●	2			
	Modular	R	GYHR3225P00-M25R	●	GYM25RA-E20	●	6			
	Modular	L	GYHL3225P00-M25L	●	GYM25LA-E20	●	6			
Modular	R	GYHR3232P00-M25R	●	GYM25RA-E20	●	6				
Modular	L	GYHL3232P00-M25L	●	GYM25LA-E20	●	6				

CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011–F013.

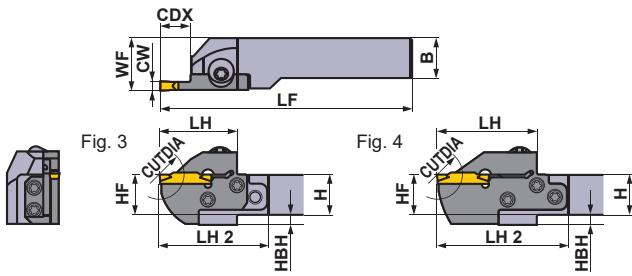
*2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011–F013.

*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH, LH 2 and WF values may vary.

*4 The maximum groove depth (CDX) is limited by the workpiece diameter. For details, please refer to page F104.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw



Right hand tool holder shown.

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYQR/L	HSC05020 (Clamp Torque : 7.0N·m)	—	HKY40R
GYHR/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYHR/L			TS55 (Clamp Torque : 5.0N·m)

	Dimensions (mm) *3								Cutting Mode		
	H	B	LF	LH	LH 2	HF	WF	HBH	Clockwise	Anticlockwise	
	16	16	104	28	44	16	20	4	R		
	16	16	104	28	44	16	20	4			
	20	20	119	28	43	20	23	—			
	20	20	119	28	43	20	23	—			
	20	20	117	31	52	20	26	5			
	20	20	117	31	52	20	26	5			
	25	25	142	31	49	25	28	—			
	25	25	142	31	49	25	28	—			
	32	25	162	31	49	32	28	—			
	32	25	162	31	49	32	28	—			
	32	32	162	31	49	32	35	—			
	32	32	162	31	49	32	35	—			
	16	16	110	34	50	16	20	4		L	
	16	16	110	34	50	16	20	4			
	20	20	125	34	49	20	23	—			
	20	20	125	34	49	20	23	—			
	20	20	125	39	60	20	26	5			
	20	20	125	39	60	20	26	5			
	25	25	150	39	57	25	28	—			
	25	25	150	39	57	25	28	—			
	32	25	170	39	57	32	28	—			
	32	25	170	39	57	32	28	—			
	32	32	170	39	57	32	35	—			
	32	32	170	39	57	32	35	—			
	16	16	116	40	56	16	20	4			
	16	16	116	40	56	16	20	4			
	20	20	131	40	55	20	23	—			
	20	20	131	40	55	20	23	—			
	20	20	131	45	66	20	26	5			
	20	20	131	45	66	20	26	5			
	25	25	156	45	63	25	28	—			
	25	25	156	45	63	25	28	—			
	32	25	176	45	63	32	28	—			
	32	25	176	45	63	32	28	—			
	32	32	176	45	63	32	35	—			
	32	32	176	45	63	32	35	—			

Insert selection

Seat Size	Geometry name
E	GY00239/0250/0274E Breaker shown below

For grooving/cutting off breaker > F011, F012							
Seat Size	Breaker	GU	GS	GM	GL	05-GM	GFGS
		For gummy steel	(Low)	(Medium)	(Aluminium)	(Cutting off)	(Hardened steel)
CW		Neutral	Neutral	Neutral	With hand	With hand	Neutral
E	2.39mm	●	●	●			●
	2.50mm	●	●	●	●	●	●

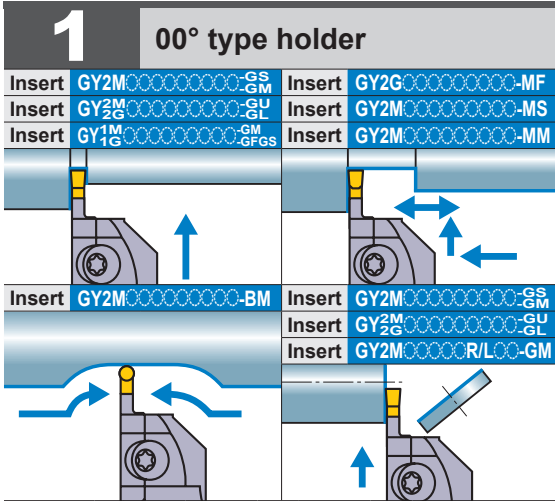
For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
CW					Ball shape
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			

● : Standard insert with dimensions

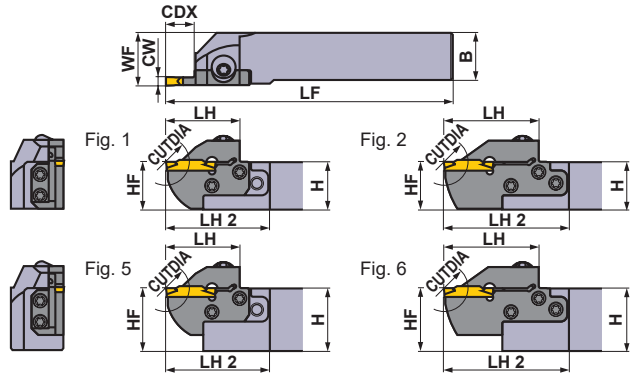
F
GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
CUTTING CONDITIONS > F100
CAUTION FOR USE > F106

GY SERIES (EXTERNAL)



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

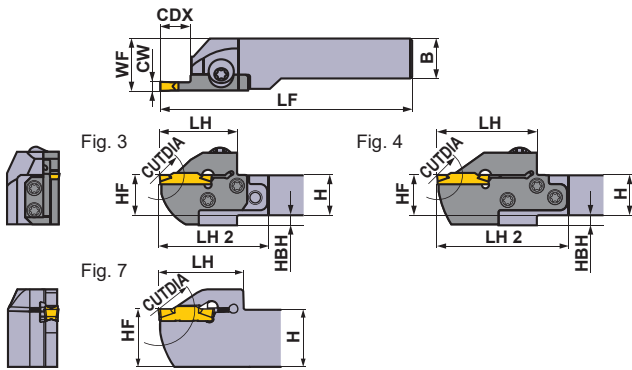
Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	CUTDIA			Holder	Stock	Modular Blade	Stock	
F	3.00 3.18 3.24	6	12	Modular	R	GYHR1616J00-M20R	●	GYM20RA-F06	●	3
				Modular	L	GYHL1616J00-M20L	●	GYM20LA-F06	●	3
				Mono Block	R	GYQR2020K00-F06	▲	—	—	7
				Mono Block	L	GYQL2020K00-F06	▲	—	—	7
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-F06	●	1
				Modular	L	GYHL2020K00-M20L	●	GYM20LA-F06	●	1
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-F06	●	3
				Modular	L	GYHL2020K00-M25L	●	GYM25LA-F06	●	3
				Mono Block	R	GYQR2525M00-F06	▲	—	—	7
				Mono Block	L	GYQL2525M00-F06	▲	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-F06	●	1
				Modular	L	GYHL2525M00-M25L	●	GYM25LA-F06	●	1
		Modular	R	GYHR3225P00-M25R	●	GYM25RA-F06	●	5		
		Modular	L	GYHL3225P00-M25L	●	GYM25LA-F06	●	5		
		Modular	R	GYHR3232P00-M25R	●	GYM25RA-F06	●	5		
		Modular	L	GYHL3232P00-M25L	●	GYM25LA-F06	●	5		
		10	20	Modular	R	GYHR1616J00-M20R	●	GYM20RA-F10	●	3
				Modular	L	GYHL1616J00-M20L	●	GYM20LA-F10	●	3
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-F10	●	1
				Modular	L	GYHL2020K00-M20L	●	GYM20LA-F10	●	1
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-F12	●	3
				Modular	L	GYHL2020K00-M25L	●	GYM25LA-F12	●	3
		12	24	Modular	R	GYHR2525M00-M25R	●	GYM25RA-F12	●	1
				Modular	L	GYHL2525M00-M25L	●	GYM25LA-F12	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-F12	●	5
				Modular	L	GYHL3225P00-M25L	●	GYM25LA-F12	●	5
		18 *4	36	Modular	R	GYHR3232P00-M25R	●	GYM25RA-F12	●	5
				Modular	L	GYHL3232P00-M25L	●	GYM25LA-F12	●	5
Modular	R			GYHR1616J00-M20R	●	GYM20RB-F18	●	4		
Modular	L			GYHL1616J00-M20L	●	GYM20LB-F18	●	4		
20 *1	40 *2	Mono Block	R	GYQR2020K00-F18	▲	—	—	7		
		Mono Block	L	GYQL2020K00-F18	▲	—	—	7		
		Modular	R	GYHR2020K00-M20R	●	GYM20RB-F18	●	2		
		Modular	L	GYHL2020K00-M20L	●	GYM20LB-F18	●	2		
		Modular	R	GYHR2020K00-M25R	●	GYM25RA-F20	●	4		
		Modular	L	GYHL2020K00-M25L	●	GYM25LA-F20	●	4		
		Mono Block	R	GYQR2525M00-F20	▲	—	—	7		
		Mono Block	L	GYQL2525M00-F20	▲	—	—	7		
Modular	R	Modular	R	GYHR2525M00-M25R	●	GYM25RA-F20	●	2		
		Modular	L	GYHL2525M00-M25L	●	GYM25LA-F20	●	2		
		Modular	R	GYHR3225P00-M25R	●	GYM25RA-F20	●	6		
		Modular	L	GYHL3225P00-M25L	●	GYM25LA-F20	●	6		
Modular	R	Modular	R	GYHR3232P00-M25R	●	GYM25RA-F20	●	6		
		Modular	L	GYHL3232P00-M25L	●	GYM25LA-F20	●	6		

CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011–F013.
 *2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011–F013.
 *3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH, LH 2 and WF values may vary.
 *4 The maximum groove depth (CDX) is limited by the workpiece diameter. For details, please refer to page F104.

● : Inventory maintained in Japan. ▲ : Inventory maintained in Japan. To be replaced by new products.

* Wrench : ① : Clamp Screw, ② : Blade Screw



Right hand tool holder shown.

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYQR/L	HSC05020 (Clamp Torque : 7.0N·m)	—	HKY40R
GYHR/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYHR/L			TS55 (Clamp Torque : 5.0N·m)

Dimensions (mm) *3									Cutting Mode	
H	B	LF	LH	LH 2	HF	WF	HBH		Clockwise	Anticlockwise
16	16	104	28	44	16	20	4	R		
16	16	104	28	44	16	20	4			
20	20	125	36	—	20	20.3	—			
20	20	125	36	—	20	20.3	—			
20	20	119	28	43	20	23	—			
20	20	119	28	43	20	23	—			
20	20	117	31	52	20	26	5			
20	20	117	31	52	20	26	5			
25	25	150	36	—	25	25.3	—			
25	25	150	36	—	25	25.3	—			
25	25	142	31	49	25	28	—			
25	25	142	31	49	25	28	—			
32	25	162	31	49	32	28	—			
32	25	162	31	49	32	28	—			
32	32	162	31	49	32	35	—			
32	32	162	31	49	32	35	—			
16	16	110	34	50	16	20	4			
16	16	110	34	50	16	20	4			
20	20	125	34	49	20	23	—			
20	20	125	34	49	20	23	—			
20	20	125	39	60	20	26	5			
20	20	125	39	60	20	26	5			
25	25	150	39	57	25	28	—			
25	25	150	39	57	25	28	—			
32	25	170	39	57	32	28	—			
32	25	170	39	57	32	28	—			
32	32	170	39	57	32	35	—			
32	32	170	39	57	32	35	—			
16	16	116	40	56	16	20	4			
16	16	116	40	56	16	20	4			
20	20	125	39	—	20	20.25	—			
20	20	125	39	—	20	20.25	—			
20	20	131	40	55	20	23	—			
20	20	131	40	55	20	23	—			
20	20	131	45	66	20	26	5			
20	20	131	45	66	20	26	5			
25	25	150	41	—	25	25.25	—			
25	25	150	41	—	25	25.25	—			
25	25	156	45	63	25	28	—			
25	25	156	45	63	25	28	—			
32	25	176	45	63	32	28	—			
32	25	176	45	63	32	28	—			
32	32	176	45	63	32	35	—			
32	32	176	45	63	32	35	—			

Insert selection

Seat Size	Geometry name
F	GY0300/0318/0324F Breaker shown below

For grooving/cutting off breaker > F011, F012							
Seat Size	Breaker	GU	GS	GM	GL	05-GM	GFGS
		For gummy steel	(Low)	(Medium)	(Aluminium)	(Cutting off)	(Hardened steel)
	CW	Neutral	Neutral	Neutral	With hand	With hand	Neutral
F	3.00mm	●	●	●	●	●	●
	3.18mm	●	●	●	●	●	●

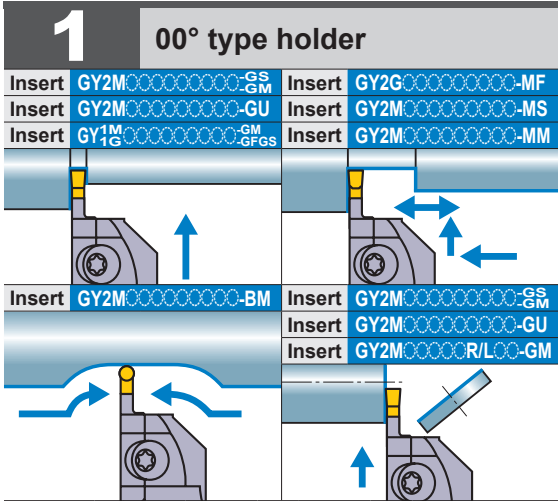
For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
	CW				Ball shape
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

● : Standard insert with dimensions

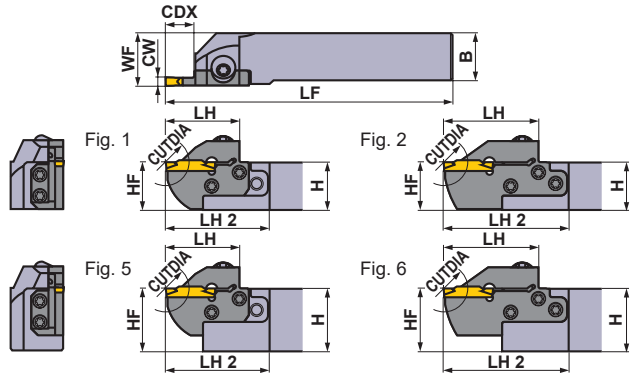
F GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

GY SERIES (EXTERNAL)



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	CUTCUTDIA			Holder	Stock	Modular Blade	Stock	
G	4.00 4.24	8	16	Mono Block	R	GYQR2020K00-G08	●	—	—	7
				Mono Block	L	GYQL2020K00-G08	●	—	—	7
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-G08	●	3
				Modular	L	GYHL2020K00-M25L	●	GYM25LA-G08	●	3
				Mono Block	R	GYQR2525M00-G08	●	—	—	7
				Mono Block	L	GYQL2525M00-G08	●	—	—	7
		Modular	R	GYHR2525M00-M25R	●	GYM25RA-G08	●	1		
		Modular	L	GYHL2525M00-M25L	●	GYM25LA-G08	●	1		
		Modular	R	GYHR3225P00-M25R	●	GYM25RA-G08	●	5		
		Modular	L	GYHL3225P00-M25L	●	GYM25LA-G08	●	5		
		Modular	R	GYHR3232P00-M25R	●	GYM25RA-G08	●	5		
		Modular	L	GYHL3232P00-M25L	●	GYM25LA-G08	●	5		
	Modular	R	GYHR1616J00-M20R	●	GYM20RA-G12	●	3			
	Modular	L	GYHL1616J00-M20L	●	GYM20LA-G12	●	3			
	Modular	R	GYHR2020K00-M20R	●	GYM20RA-G12	●	1			
	Modular	L	GYHL2020K00-M20L	●	GYM20LA-G12	●	1			
	Modular	R	GYHR2020K00-M25R	●	GYM25RA-G14	●	3			
	Modular	L	GYHL2020K00-M25L	●	GYM25LA-G14	●	3			
	Modular	R	GYHR2525M00-M25R	●	GYM25RA-G14	●	1			
	Modular	L	GYHL2525M00-M25L	●	GYM25LA-G14	●	1			
	Modular	R	GYHR3225P00-M25R	●	GYM25RA-G14	●	5			
	Modular	L	GYHL3225P00-M25L	●	GYM25LA-G14	●	5			
	Modular	R	GYHR3232P00-M25R	●	GYM25RA-G14	●	5			
	Modular	L	GYHL3232P00-M25L	●	GYM25LA-G14	●	5			
Modular	R	GYHR2020K00-G25	●	—	—	8				
Modular	L	GYQL2020K00-G25	●	—	—	8				
Modular	R	GYHR2020K00-M25R	●	GYM25RA-G25	●	4				
Modular	L	GYHL2020K00-M25L	●	GYM25LA-G25	●	4				
Mono Block	R	GYQR2525M00-G25	●	—	—	7				
Mono Block	L	GYQL2525M00-G25	●	—	—	7				
Modular	R	GYHR2525M00-M25R	●	GYM25RA-G25	●	2				
Modular	L	GYHL2525M00-M25L	●	GYM25LA-G25	●	2				
Modular	R	GYHR3225P00-M25R	●	GYM25RA-G25	●	6				
Modular	L	GYHL3225P00-M25L	●	GYM25LA-G25	●	6				
Modular	R	GYHR3232P00-M25R	●	GYM25RA-G25	●	6				
Modular	L	GYHL3232P00-M25L	●	GYM25LA-G25	●	6				

CW = Cutting Width CDX = Max. Groove Depth CUTCUTDIA = Max. Cut Off Diameter

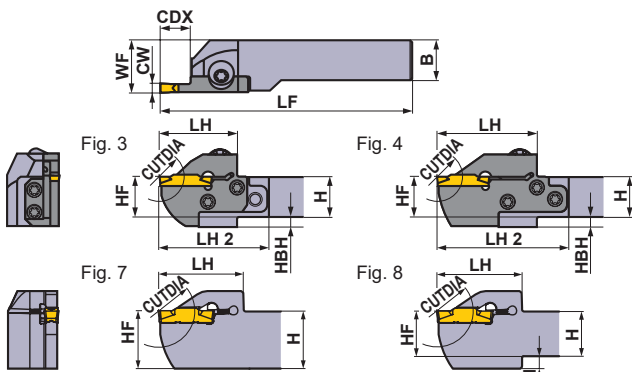
*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

*2 The maximum cut off diameter (CUTCUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011—F013.

*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH, LH 2 and WF values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw



Right hand tool holder shown.

SPARE PARTS			
Holder			
	Clamp Screw	Blade Screw	Wrench *
GYQR/L	HSC05020 (Clamp Torque : 7.0N·m)	—	HKY40R
GYHR/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R
M20R/L			②TKY15D
GYHR/L	M25R/L	TS55 (Clamp Torque : 5.0N·m)	①TKY30R
			②TKY25D

Dimensions (mm) *3									Cutting Mode	
H	B	LF	LH	LH 2	HF	WF	HBH		Clockwise	Anticlockwise
20	20	125	41	—	20	20.35	—	R		
20	20	125	41	—	20	20.35	—			
20	20	119	33	54	20	26	5			
20	20	119	33	54	20	26	5			
25	25	150	41	—	25	25.35	—			
25	25	150	41	—	25	25.35	—			
25	25	144	33	51	25	28	—			
25	25	144	33	51	25	28	—			
32	25	164	33	51	32	28	—			
32	25	164	33	51	32	28	—			
32	32	164	33	51	32	35	—			
32	32	164	33	51	32	35	—			
16	16	110	34	50	16	20	4			
16	16	110	34	50	16	20	4			
20	20	125	34	49	20	23	—			
20	20	125	34	49	20	23	—			
20	20	125	39	60	20	26	5			
20	20	125	39	60	20	26	5			
25	25	150	39	57	25	28	—			
25	25	150	39	57	25	28	—			
32	25	170	39	57	32	28	—			
32	25	170	39	57	32	28	—			
32	32	170	39	57	32	35	—			
32	32	170	39	57	32	35	—			
20	20	125	46	—	20	20.35	4			
20	20	125	46	—	20	20.35	4			
20	20	136	50	71	20	26	5			
20	20	136	50	71	20	26	5			
25	25	150	46	—	25	25.35	—			
25	25	150	46	—	25	25.35	—			
25	25	161	50	68	25	28	—			
25	25	161	50	68	25	28	—			
32	25	181	50	68	32	28	—			
32	25	181	50	68	32	28	—			
32	32	181	50	68	32	35	—			
32	32	181	50	68	32	35	—			

Insert selection

Seat Size	Geometry name
G	GY0239/0250/0274E Breaker shown below

For grooving/cutting off breaker > F011, F012						
Seat Size	Breaker	GU	GS	GM	05-GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Cutting off)	(Hardened steel)
CW		Neutral	Neutral	Neutral	With hand	Neutral
G	4.00mm	●	●	●	●	●

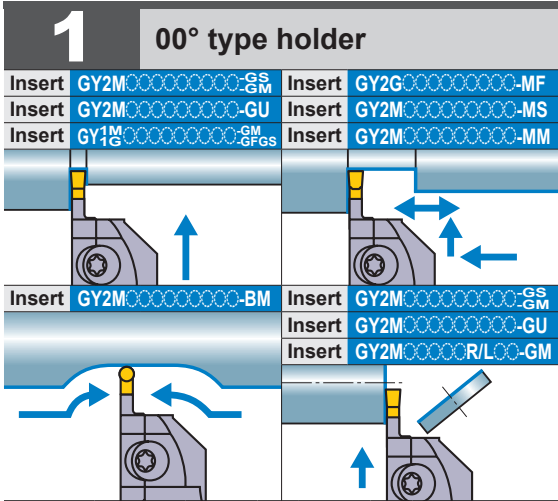
For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
CW					Ball shape
G	4.00mm	●	●	●	●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	4.24mm	●			

● : Standard insert with dimensions

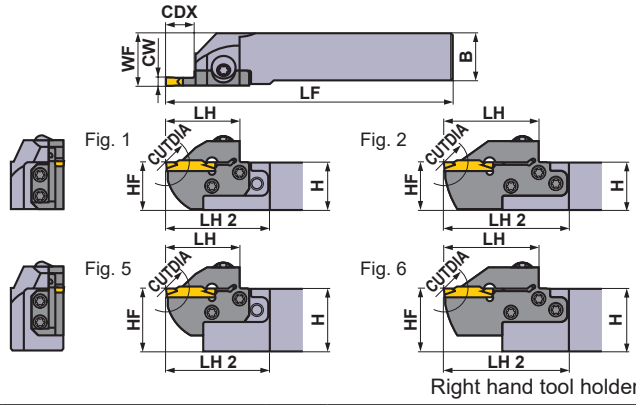
F
GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

GY SERIES (EXTERNAL)



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	CUTCIA			Holder	Stock	Modular Blade	Stock	
H	4.75 5.00 5.24	8	16	Mono Block	R	GYQR2020K00-H08	●	—	—	7
				L	GYQL2020K00-H08	●	—	—	7	
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-H08	●	3
				L	GYHL2020K00-M25L	●	GYM25LA-H08	●	3	
				Mono Block	R	GYQR2525M00-H08	●	—	—	7
				L	GYQL2525M00-H08	●	—	—	7	
		Modular	R	GYHR2525M00-M25R	●	GYM25RA-H08	●	1		
		L	GYHL2525M00-M25L	●	GYM25LA-H08	●	1			
		Modular	R	GYHR3225P00-M25R	●	GYM25RA-H08	●	5		
		L	GYHL3225P00-M25L	●	GYM25LA-H08	●	5			
		Modular	R	GYHR3232P00-M25R	●	GYM25RA-H08	●	5		
		L	GYHL3232P00-M25L	●	GYM25LA-H08	●	5			
	12	Modular	R	GYHR1616J00-M20R	●	GYM20RA-H12	●	3		
			L	GYHL1616J00-M20L	●	GYM20LA-H12	●	3		
		Modular	R	GYHR2020K00-M20R	●	GYM20RA-H12	●	1		
			L	GYHL2020K00-M20L	●	GYM20LA-H12	●	1		
		14	Modular	R	GYHR2020K00-M25R	●	GYM25RA-H14	●	3	
				L	GYHL2020K00-M25L	●	GYM25LA-H14	●	3	
	Modular		R	GYHR2525M00-M25R	●	GYM25RA-H14	●	1		
			L	GYHL2525M00-M25L	●	GYM25LA-H14	●	1		
	25 *1	Modular	R	GYHR3225P00-M25R	●	GYM25RA-H14	●	5		
			L	GYHL3225P00-M25L	●	GYM25LA-H14	●	5		
		Modular	R	GYHR3232P00-M25R	●	GYM25RA-H14	●	5		
			L	GYHL3232P00-M25L	●	GYM25LA-H14	●	5		
Mono Block		R	GYQR2020K00-H25	●	—	—	8			
		L	GYQL2020K00-H25	●	—	—	8			
50 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RA-H25	●	4			
		L	GYHL2020K00-M25L	●	GYM25LA-H25	●	4			
	Mono Block	R	GYQR2525M00-H25	●	—	—	7			
		L	GYQL2525M00-H25	●	—	—	7			
	Modular	R	GYHR2525M00-M25R	●	GYM25RA-H25	●	2			
		L	GYHL2525M00-M25L	●	GYM25LA-H25	●	2			
Modular	R	GYHR3225P00-M25R	●	GYM25RA-H25	●	6				
	L	GYHL3225P00-M25L	●	GYM25LA-H25	●	6				
Modular	R	GYHR3232P00-M25R	●	GYM25RA-H25	●	6				
	L	GYHL3232P00-M25L	●	GYM25LA-H25	●	6				

CW = Cutting Width CDX = Max. Groove Depth CUTCIA = Max. Cut Off Diameter

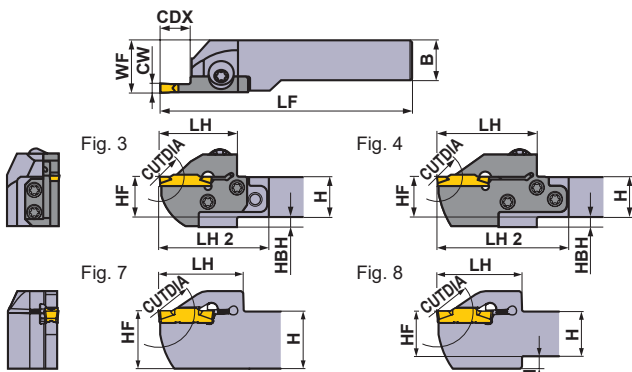
*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

*2 The maximum cut off diameter (CUTCIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011—F013.

*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH, LH 2 and WF values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw



Right hand tool holder shown.

SPARE PARTS			
Holder			
	Clamp Screw	Blade Screw	Wrench *
GYQR/L	HSC05020 (Clamp Torque : 7.0N·m)	—	HKY40R
GYHR/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R
M20R/L			②TKY15D
GYHR/L	M25R/L	TS55 (Clamp Torque : 5.0N·m)	①TKY30R
			②TKY25D

Dimensions (mm) *3									Cutting Mode	
H	B	LF	LH	LH 2	HF	WF	HBH		Clockwise	Anticlockwise
20	20	125	41	—	20	20.35	—	R		
20	20	125	41	—	20	20.35	—			
20	20	119	33	54	20	26	5			
20	20	119	33	54	20	26	5			
25	25	150	41	—	25	25.35	—			
25	25	150	41	—	25	25.35	—			
25	25	144	33	51	25	28	—			
25	25	144	33	51	25	28	—			
32	25	164	33	51	32	28	—			
32	25	164	33	51	32	28	—			
32	32	164	33	51	32	35	—			
32	32	164	33	51	32	35	—			
16	16	110	34	50	16	20	4	L		
16	16	110	34	50	16	20	4			
20	20	125	34	49	20	23	—			
20	20	125	34	49	20	23	—			
20	20	125	39	60	20	26	5			
20	20	125	39	60	20	26	5			
25	25	150	39	57	25	28	—			
25	25	150	39	57	25	28	—			
32	25	170	39	57	32	28	—			
32	25	170	39	57	32	28	—			
32	32	170	39	57	32	35	—			
32	32	170	39	57	32	35	—			
20	20	125	46	—	20	20.35	4			
20	20	125	46	—	20	20.35	4			
20	20	136	50	71	20	26	5			
20	20	136	50	71	20	26	5			
25	25	150	46	—	25	25.35	—			
25	25	150	46	—	25	25.35	—			
25	25	161	50	68	25	28	—			
25	25	161	50	68	25	28	—			
32	25	181	50	68	32	28	—			
32	25	181	50	68	32	28	—			
32	32	181	50	68	32	35	—			
32	32	181	50	68	32	35	—			

Insert selection

Seat Size	Geometry name
H	GY00475/0500/0524H Breaker shown below

For grooving/cutting off breaker > F011, F012						
Seat Size	Breaker	GU	GS	GM	05-GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Cutting off)	(Hardened steel)
CW	4.75mm	●	●	●	●	●
	5.00mm	●	●	●	●	●
H	4.75mm	●	●	●	●	●
	5.00mm	●	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
CW	4.75mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			
H	5.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
5.24mm	●				

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

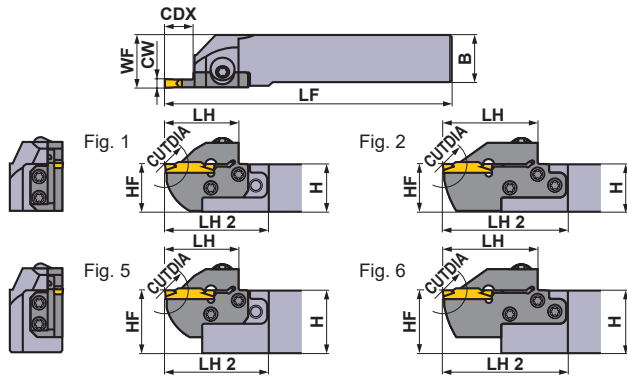
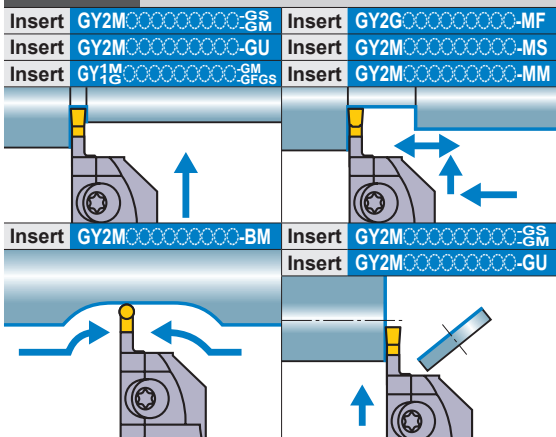
GY SERIES (EXTERNAL)

1

00° type holder

Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	CUTO			Holder	Stock	Modular Blade	Stock	
J	6.00 6.31 6.35	8	16	Mono Block	R	GYQR2020K00-J08	●	—	—	7
					L	GYQL2020K00-J08	●	—	—	7
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-J08	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-J08	●	3
				Mono Block	R	GYQR2525M00-J08	●	—	—	7
					L	GYQL2525M00-J08	●	—	—	7
		Modular	R	GYHR2525M00-M25R	●	GYM25RA-J08	●	1		
			L	GYHL2525M00-M25L	●	GYM25LA-J08	●	1		
		Modular	R	GYHR3225P00-M25R	●	GYM25RA-J08	●	5		
			L	GYHL3225P00-M25L	●	GYM25LA-J08	●	5		
		Modular	R	GYHR3232P00-M25R	●	GYM25RA-J08	●	5		
			L	GYHL3232P00-M25L	●	GYM25LA-J08	●	5		
	14	28	Modular	R	GYHR2020K00-M25R	●	GYM25RA-J14	●	3	
				L	GYHL2020K00-M25L	●	GYM25LA-J14	●	3	
			Modular	R	GYHR2525M00-M25R	●	GYM25RA-J14	●	1	
				L	GYHL2525M00-M25L	●	GYM25LA-J14	●	1	
			Modular	R	GYHR3225P00-M25R	●	GYM25RA-J14	●	5	
				L	GYHL3225P00-M25L	●	GYM25LA-J14	●	5	
	25 *1	50 *2	Mono Block	R	GYQR2020K00-J25	●	—	—	8	
				L	GYQL2020K00-J25	●	—	—	8	
			Modular	R	GYHR2020K00-M25R	●	GYM25RA-J25	●	4	
				L	GYHL2020K00-M25L	●	GYM25LA-J25	●	4	
			Mono Block	R	GYQR2525M00-J25	●	—	—	7	
				L	GYQL2525M00-J25	●	—	—	7	
Modular	R	GYHR2525M00-M25R	●	GYM25RA-J25	●	2				
	L	GYHL2525M00-M25L	●	GYM25LA-J25	●	2				
Modular	R	GYHR3225P00-M25R	●	GYM25RA-J25	●	6				
	L	GYHL3225P00-M25L	●	GYM25LA-J25	●	6				
Modular	R	GYHR3232P00-M25R	●	GYM25RA-J25	●	6				
	L	GYHL3232P00-M25L	●	GYM25LA-J25	●	6				

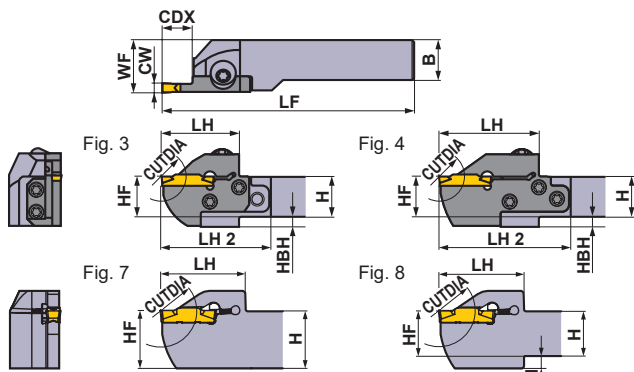
CW = Cutting Width CDX = Max. Groove Depth CUTO = Max. Cut Off Diameter

*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

*2 The maximum cut off diameter (CUTO) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011—F013.

*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH, LH 2 and WF values may vary.

● : Inventory maintained in Japan.



Right hand tool holder shown.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder			
	Clamp Screw	Blade Screw 5 pcs.	Wrench *
GYQR/L	HSC05020 (Clamp Torque : 7.0N·m)	—	HKY40R
GYHR/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D

	Dimensions (mm) *3								Cutting Mode	
	H	B	LF	LH	LH 2	HF	WF	HBH	Clockwise	Anticlockwise
	20	20	125	41	—	20	20.35	—	R	
	20	20	125	41	—	20	20.35	—		
	20	20	119	33	54	20	26	5		
	20	20	119	33	54	20	26	5		
	25	25	150	41	—	25	25.35	—		
	25	25	150	41	—	25	25.35	—		
	25	25	144	33	51	25	28	—		
	25	25	144	33	51	25	28	—		
	32	25	164	33	51	32	28	—		
	32	25	164	33	51	32	28	—		
	32	32	164	33	51	32	35	—		
	32	32	164	33	51	32	35	—		
	20	20	125	39	60	20	26	5	L	
	20	20	125	39	60	20	26	5		
	25	25	150	39	57	25	28	—		
	25	25	150	39	57	25	28	—		
	32	25	170	39	57	32	28	—		
	32	25	170	39	57	32	28	—		
	32	32	170	39	57	32	35	—		
	32	32	170	39	57	32	35	—		
	20	20	125	46	—	20	20.35	4		
	20	20	125	46	—	20	20.35	4		
	20	20	136	50	71	20	26	5		
	20	20	136	50	71	20	26	5		
	25	25	150	46	—	25	25.35	—		
	25	25	150	46	—	25	25.35	—		
	25	25	161	50	68	25	28	—		
	25	25	161	50	68	25	28	—		
	32	25	181	50	68	32	28	—		
	32	25	181	50	68	32	28	—		
	32	32	181	50	68	32	35	—		
	32	32	181	50	68	32	35	—		

Insert selection

Seat Size	Geometry name
J	GY0600/0631/0635J — Breaker shown below

For grooving/cutting off breaker > F011, F012						
Seat Size	Breaker	GU	GS	GM	05-GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Cutting off)	(Hardened steel)
J	6.00mm	●	●	●	●	●
	6.35mm	●	●	●	●	●

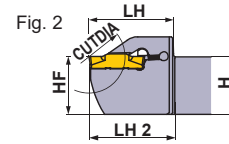
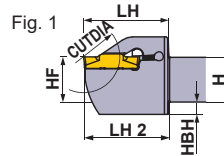
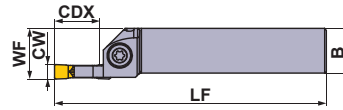
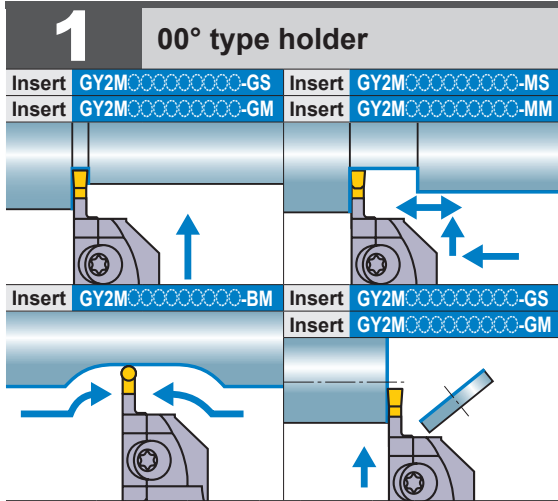
For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
J	6.00mm	●	●	●	●
	RE 0.2	●	●	●	●
	RE 0.4	●	●	●	●
	RE 0.8	●	●	●	●
	6.31mm	●	●	●	●
	6.35mm	●	●	●	●

● : Standard insert with dimensions

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106



GY SERIES (EXTERNAL)



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	CUTDIA			Holder	Stock	Modular Blade	Stock	
K	8.00	25 *1	50 *2	Mono Block	R	GYPR2525M00-K25	●	—	—	1
					L	GYPL2525M00-K25	●	—	—	1
				Mono Block	R	GYPR3225P00-K25	●	—	—	2
					L	GYPL3225P00-K25	●	—	—	2
				Mono Block	R	GYPR3232P00-K25	●	—	—	3
					L	GYPL3232P00-K25	●	—	—	3

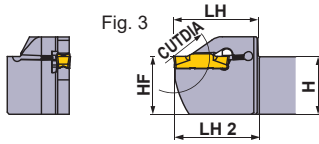
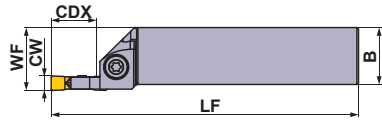
CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

*2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011—F013.

*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH, LH 2 and WF values may vary.

● : Inventory maintained in Japan.



Right hand tool holder shown.

SPARE PARTS		
Holder		
	Clamp Screw	Wrench
GYPR/L○○○○○○○○00-K25		GY06013M (Clamp Torque : 6.0N·m)
		TKY30R

	Dimensions (mm) *3								Cutting Mode	
	H	B	LF	LH	LH 2	HF	WF	HBH	Clockwise	Anticlockwise
	25	25	150	47	48	25	28	7	R	
	25	25	150	47	48	25	28	7		
	32	25	170	47	48	32	28	—	L	
	32	25	170	47	48	32	28	—		
	32	32	170	47	48	32	35	—	R	
	32	32	170	47	48	32	35	—		
									L	

Insert selection

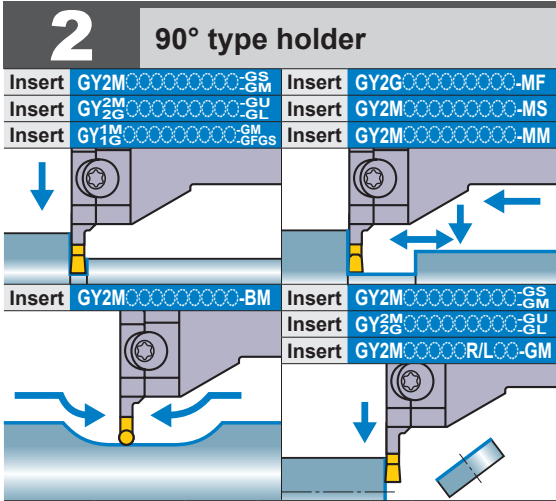
Seat Size	Geometry name
K	GY○○0800K○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012						
Seat Size	Breaker	GU	GS	GM	05-GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Cutting off)	(Hardened steel)
CW	Neutral	Neutral	Neutral	With hand	Neutral	
K	8.00mm		●	●		

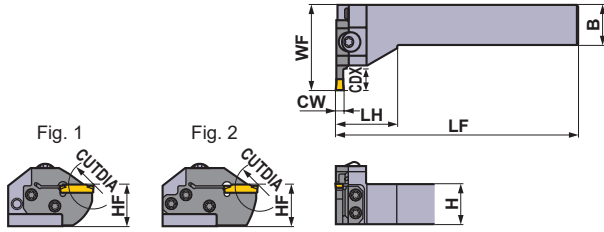
For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
CW	RE 0.8		●	●	●
K	RE 1.2		●	●	●

● : Standard insert with dimensions

GY SERIES (EXTERNAL)



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.



Right hand tool holder shown.




Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	CUTDIA			Holder	Stock	Modular Blade	Stock	
D	2.00 2.24	6	12	Modular	R	GYHR2020K90-M20L	●	GYM20LA-D06	●	1
				Modular	L	GYHL2020K90-M20R	●	GYM20RA-D06	●	1
		10	20	Modular	R	GYHR2525M90-M25L	●	GYM25LA-D06	●	1
				Modular	L	GYHL2525M90-M25R	●	GYM25RA-D06	●	1
		12	24	Modular	R	GYHR2020K90-M20L	●	GYM20LA-D10	●	1
				Modular	L	GYHL2020K90-M20R	●	GYM20RA-D10	●	1
18 *4	36	Modular	R	GYHR2525M90-M25L	●	GYM25LA-D12	●	1		
		Modular	L	GYHL2525M90-M25R	●	GYM25RA-D12	●	1		
E	2.39 2.50 2.74	6	12	Modular	R	GYHR2020K90-M20L	●	GYM20LA-E06	●	1
				Modular	L	GYHL2020K90-M20R	●	GYM20RA-E06	●	1
		10	20	Modular	R	GYHR2525M90-M25L	●	GYM25LA-E06	●	1
				Modular	L	GYHL2525M90-M25R	●	GYM25RA-E06	●	1
		12	24	Modular	R	GYHR2020K90-M20L	●	GYM20LA-E10	●	1
				Modular	L	GYHL2020K90-M20R	●	GYM20RA-E10	●	1
18 *4	36	Modular	R	GYHR2525M90-M25L	●	GYM25LA-E12	●	1		
		Modular	L	GYHL2525M90-M25R	●	GYM25RA-E12	●	1		
20 *1	40 *2	Modular	R	GYHR2020K90-M20L	●	GYM20LB-E18	●	2		
		Modular	L	GYHL2020K90-M20R	●	GYM20RB-E18	●	2		
20 *1	40 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LA-E20	●	2		
		Modular	L	GYHL2525M90-M25R	●	GYM25RA-E20	●	2		

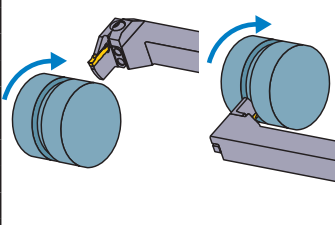
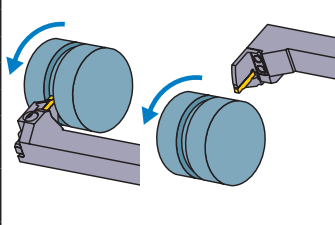
CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

- *1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.
- *2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011—F013.
- *3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH and WF values may vary.
- *4 The maximum groove depth (CDX) is limited by the workpiece diameter. For details, please refer to page F104.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR2020K90-M20L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R
GYHL2020K90-M20R			②TKY15D
GYHR2525M90-M25L		TS55 (Clamp Torque : 5.0N·m)	①TKY30R
GYHL2525M90-M25R	②TKY25D		

	Dimensions (mm) *3						Cutting Mode
	H	B	LF	LH	HF	WF	
	20	20	125	35	20	39	R 
	20	20	125	35	20	39	
	25	25	150	38	25	45	
	25	25	150	38	25	45	
	20	20	125	35	20	45	
	20	20	125	35	20	45	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	20	20	125	35	20	51	
	20	20	125	35	20	51	
	25	25	150	38	25	59	L 
	25	25	150	38	25	59	
	20	20	125	35	20	39	
	20	20	125	35	20	39	
	25	25	150	38	25	45	
	25	25	150	38	25	45	
	20	20	125	35	20	45	
	20	20	125	35	20	45	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	20	20	125	35	20	51	
	20	20	125	35	20	51	
	25	25	150	38	25	59	
	25	25	150	38	25	59	

Insert selection

Seat Size	Geometry name
D	GY○○0200/0224D○○○○○-Breaker shown below
E	GY○○0239/0250/0274E○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012							
Seat Size	Breaker	GU	GS	GM	GL	05-GM	GFGS
		For gummy steel	(Low)	(Medium)	(Aluminium)	(Cutting off)	(Hardened steel)
CW		Neutral	Neutral	Neutral	With hand	With hand	Neutral
	D	2.00mm	●	●	●	●	●
E	D	2.39mm	●	●	●	●	●
	E	2.50mm	●	●	●	●	●

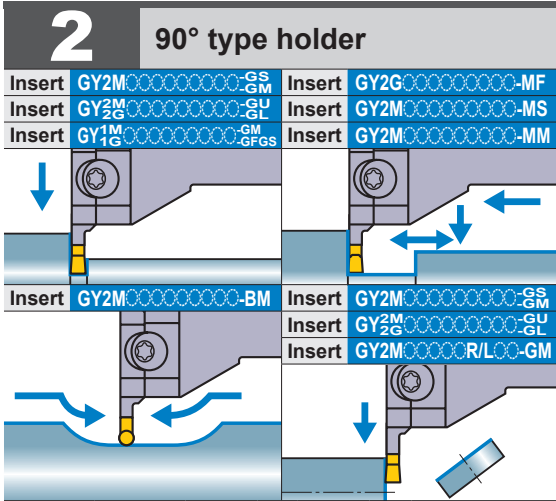
For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
D					Ball shape
	D	2.00mm	●	●	●
		2.24mm	●		
		2.39mm	●		
E	D	2.50mm	●	●	●
	E	2.74mm	●		

● : Standard insert with dimensions

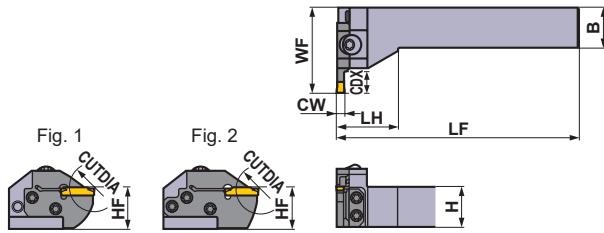
F
GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

GY SERIES (EXTERNAL)



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.



Right hand tool holder shown.




Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	CUTDIA			Holder	Stock	Modular Blade	Stock	
F	3.00 3.18 3.24	6	12	Modular	R	GYHR2020K90-M20L	●	GYM20LA-F06	●	1
				Modular	L	GYHL2020K90-M20R	●	GYM20RA-F06	●	1
		10	20	Modular	R	GYHR2525M90-M25L	●	GYM25LA-F06	●	1
				Modular	L	GYHL2525M90-M25R	●	GYM25RA-F06	●	1
		12	24	Modular	R	GYHR2020K90-M20L	●	GYM20LA-F10	●	1
				Modular	L	GYHL2020K90-M20R	●	GYM20RA-F10	●	1
18 *4	40 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LA-F12	●	1		
		Modular	L	GYHL2525M90-M25R	●	GYM25RA-F12	●	1		
G	4.00 4.24	8	16	Modular	R	GYHR2020K90-M20L	●	GYM20LB-F18	●	2
				Modular	L	GYHL2020K90-M20R	●	GYM20RB-F18	●	2
		12	24	Modular	R	GYHR2525M90-M25L	●	GYM25LA-F20	●	2
				Modular	L	GYHL2525M90-M25R	●	GYM25RA-F20	●	2
		14	28	Modular	R	GYHR2020K90-M20L	●	GYM20LA-G12	●	1
				Modular	L	GYHL2020K90-M20R	●	GYM20RA-G12	●	1
25 *1	50 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LA-G14	●	1		
		Modular	L	GYHL2525M90-M25R	●	GYM25RA-G14	●	1		
				Modular	R	GYHR2525M90-M25L	●	GYM25LA-G25	●	2
				Modular	L	GYHL2525M90-M25R	●	GYM25RA-G25	●	2

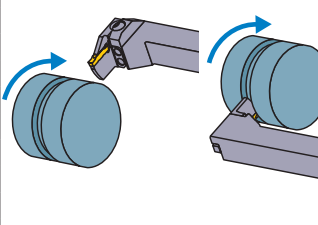
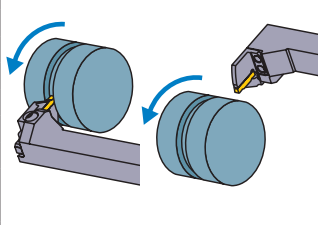
CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

- *1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.
- *2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011—F013.
- *3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH and WF values may vary.
- *4 The maximum groove depth (CDX) is limited by the workpiece diameter. For details, please refer to page F104.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR2020K90-M20L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R
GYHL2020K90-M20R			②TKY15D
GYHR2525M90-M25L		TS55 (Clamp Torque : 5.0N·m)	①TKY30R
GYHL2525M90-M25R			②TKY25D

	Dimensions (mm) *3						Cutting Mode
	H	B	LF	LH	HF	WF	
	20	20	125	35	20	39	R 
	20	20	125	35	20	39	
	25	25	150	38	25	45	
	25	25	150	38	25	45	
	20	20	125	35	20	45	
	20	20	125	35	20	45	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	20	20	125	35	20	51	
	20	20	125	35	20	51	
	25	25	150	38	25	59	L 
	25	25	150	38	25	59	
	25	25	150	38	25	47	
	25	25	150	38	25	47	
	20	20	125	35	20	45	
	20	20	125	35	20	45	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	

Insert selection

Seat Size	Geometry name
F	GY○○○0300/0318/0324F○○○○○-Breaker shown below
G	GY○○○0400/0424G○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012							
Seat Size	Breaker	GU	GS	GM	GL	05-GM	GFGS
		For gummy steel	(Low)	(Medium)	(Aluminium)	(Cutting off)	(Hardened steel)
CW		Neutral	Neutral	Neutral	With hand	With hand	Neutral
	F	3.00mm	●	●	●	●	●
	3.18mm	●	●	●	●	●	●
G	4.00mm	●	●	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
F					Ball shape
	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
F	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
G	3.24mm	●			
	4.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8	●		●	
	4.24mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

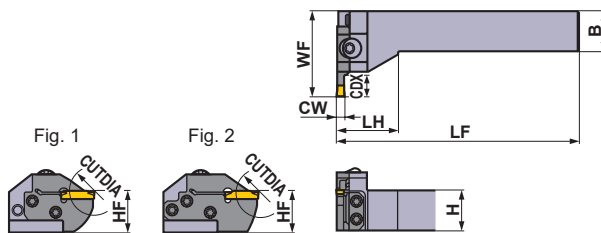
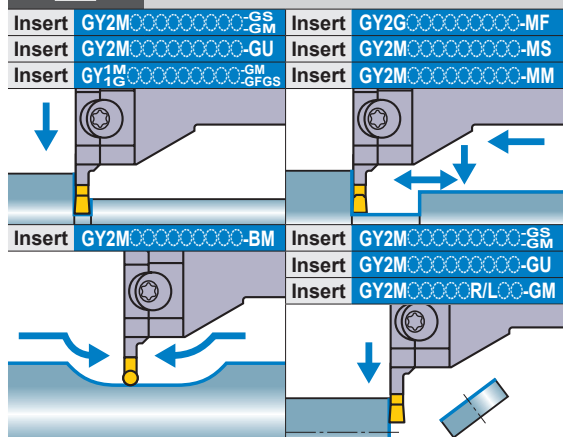
GY SERIES (EXTERNAL)

2

90° type holder

Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.



Right hand tool holder shown.

GROOVING / CUTTING OFF

F

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.	
	CW	CDX	CUTDIA			Holder	Stock	Modular Blade	Stock		
H	4.75 5.00 5.24	8	16	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LA-H08 GYM25RA-H08	●	1 1	
		12	24	Modular	R L	GYHR2020K90-M20L GYHL2020K90-M20R	●	GYM20LA-H12 GYM20RA-H12	●	1 1	
		14	28	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LA-H14 GYM25RA-H14	●	1 1	
		25 *1	50 *2	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LA-H25 GYM25RA-H25	●	2 2	
J	6.00 6.31 6.35	8	16	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LA-J08 GYM25RA-J08	●	1 1	
		14	28	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LA-J14 GYM25RA-J14	●	1 1	
		25 *1	50 *2	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LA-J25 GYM25RA-J25	●	2 2	

CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter




*1 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

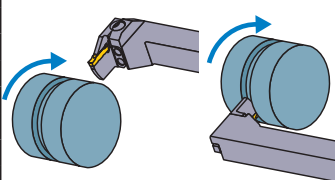
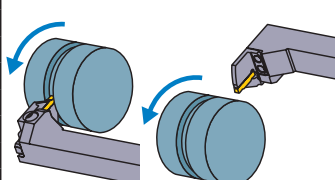
*2 The maximum cut off diameter (CUTDIA) varies according to the insert used. The cut off diameter is double the maximum groove depth (CDX) of inserts on pages F011—F013.

*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH, LH 2 and WF values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder Number		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR2020K90-M20L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R
GYHL2020K90-M20R			②TKY15D
GYHR2525M90-M25L		TS55 (Clamp Torque : 5.0N·m)	①TKY30R
GYHL2525M90-M25R			②TKY25D

	Dimensions (mm) *3						Cutting Mode	
	H	B	LF	LH	HF	WF		
	25	25	150	38	25	47	R 	
	25	25	150	38	25	47		
	20	20	125	35	20	45		
	20	20	125	35	20	45		
	25	25	150	38	25	53		
	25	25	150	38	25	53		
	25	25	150	38	25	64		
	25	25	150	38	25	64		
	25	25	150	38	25	47		L 
	25	25	150	38	25	47		
	25	25	150	38	25	53		
	25	25	150	38	25	53		
	25	25	150	38	25	64		
	25	25	150	38	25	64		

Insert selection

Seat Size	Geometry name
H	GY○○0475/0500/0524H○○○○○-Breaker shown below
J	GY○○0600/0631/0635J○○○○○-Breaker shown below

For grooving/cutting off breaker> F011, F012						
Seat Size	Breaker	GU	GS	GM	05-GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Cutting off)	(Hardened steel)
	CW	Neutral	Neutral	Neutral	With hand	Neutral
H	4.75mm	●	●	●	●	●
	5.00mm	●	●	●	●	●
J	6.00mm	●	●	●	●	●
	6.35mm	●	●	●	●	●

For multifunctional grooving breaker> F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying, Recessing)
	CW				Ball shape
H	4.75mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			
	5.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
J	5.24mm	●			
	6.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	6.31mm	●			
	6.35mm				●
	RE 0.2	●			
RE 0.4	●				
RE 0.8	●				

● : Standard insert with dimensions

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F100
 CAUTION FOR USE > F106

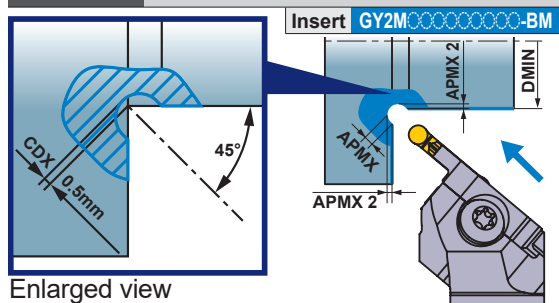
GY SERIES (FOR EXTERNAL RECESSING)

3

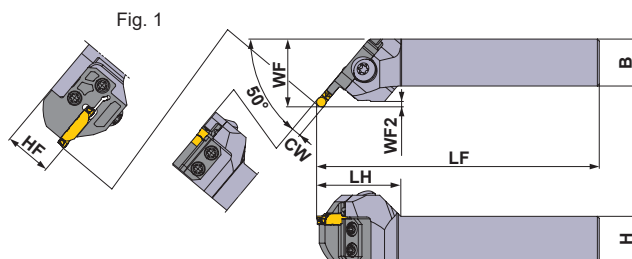
For 50° recessing holder

Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.



Enlarged view



Right hand tool holder shown.




Seat Size	Dimensions (mm)					Type	Hand (R/L)	Order Number				Fig.
	CW	CDX	DMIN	APMX	APMX 2			Holder	Stock	Modular Blade	Stock	
D	2.00	0.5	30	1.5	0.646	Modular	R	GYHR2020K50-M20L	●	GYM20LC-D005	●	1
						Modular	L	GYHL2020K50-M20R	●	GYM20RC-D005	●	1
E	2.50			1.75	0.72	Modular	R	GYHR2525M50-M25L	●	GYM25LC-D005	●	1
						Modular	L	GYHL2525M50-M25R	●	GYM25RC-D005	●	1
F	3.00 3.18			2	0.793	Modular	R	GYHR2020K50-M20L	●	GYM20LC-E005	●	1
						Modular	L	GYHL2020K50-M20R	●	GYM20RC-E005	●	1
G	4.00			2.5	0.939	Modular	R	GYHR2525M50-M25L	●	GYM25LC-E005	●	1
						Modular	L	GYHL2525M50-M25R	●	GYM25RC-E005	●	1
H	4.75 5.00			2.88	1.049	Modular	R	GYHR2020K50-M20L	●	GYM20LC-F005	●	1
						Modular	L	GYHL2020K50-M20R	●	GYM20RC-F005	●	1
J	6.00 6.35	3.5	1.232	Modular	R	GYHR2525M50-M25L	●	GYM25LC-F005	●	1		
				Modular	L	GYHL2525M50-M25R	●	GYM25RC-F005	●	1		

*1 Cannot be used because external and face grooving blade interferes with the work.

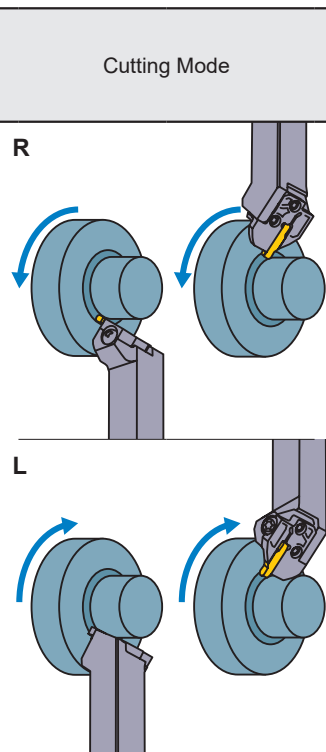
*2 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LH, WF and WF2 values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		 4 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K50-M20R/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY25D
GYHR/L2525M50-M25R/L		TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D

	Dimensions (mm) *2						
	H	B	LF	LH	HF	WF	WF2
	20	20	125	40	20	32	1.6
	20	20	125	40	20	32	1.6
	25	25	150	45	25	35	1.6
	25	25	150	45	25	35	1.6
	20	20	125	40	20	32	1.8
	20	20	125	40	20	32	1.8
	25	25	150	45	25	35	1.8
	25	25	150	45	25	35	1.8
	20	20	125	40	20	32	2.0
	20	20	125	40	20	32	2.0
	25	25	150	45	25	35	2.0
	25	25	150	45	25	35	2.0
	20	20	125	40	20	32	2.4
	20	20	125	40	20	32	2.4
	25	25	150	45	25	35	2.4
	25	25	150	45	25	35	2.4
	20	20	125	40	20	33	2.8
	20	20	125	40	20	33	2.8
	25	25	150	45	25	36	2.8
	25	25	150	45	25	36	2.8
	25	25	150	44	25	36	3.4
	25	25	150	44	25	36	3.4



Insert selection

Geometry name	
GY2M○○○○○○○○○N-BM	

For multifunctional grooving breaker > F013		
Seat Size	Breaker CW	BM (Copying, Recessing)
		Ball shape
D	2.00mm	●
E	2.50mm	●
F	3.00mm	●
	3.18mm	●
G	4.00mm	●
H	4.75mm	●
	5.00mm	●
J	6.00mm	●
	6.35mm	●

● : Standard insert with dimensions

F
GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
CUTTING CONDITIONS > F105
CAUTION FOR USE > F105

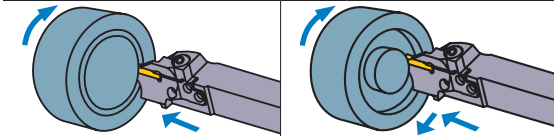
GY SERIES (FACE GROOVING)

4

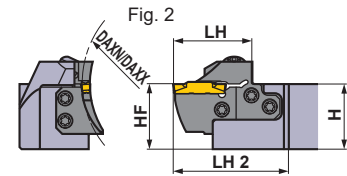
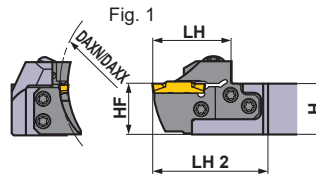
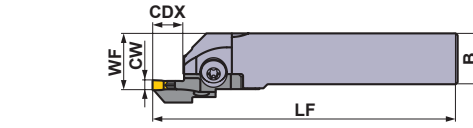
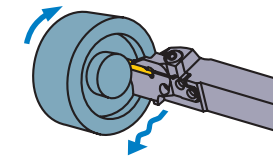
00° type holder

Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Insert GY2M^{BM}



Right hand tool holder shown.

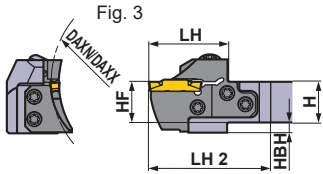
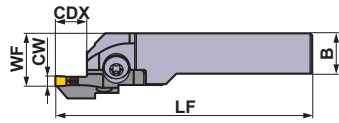
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
D	2.00	40	50	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-040	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-D12-040	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-040	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-D12-040	●	1
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-040	●	2			
		Modular	L	GYHL3225P00-M25L	●	GYM25LD-D12-040	●	2			
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-040	●	2			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-D12-040	●	2			
		Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-050	●	3			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-D12-050	●	3			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-050	●	1			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-D12-050	●	1			
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-050	●	2				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-D12-050	●	2				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-050	●	2				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-D12-050	●	2				
	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-060	●	3				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-D12-060	●	3				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-060	●	1				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-D12-060	●	1				
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-060	●	2				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-D12-060	●	2				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-060	●	2				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-D12-060	●	2				
Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-075	●	3					
Modular	L	GYHL2020K00-M25L	●	GYM25LD-D12-075	●	3					
Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-075	●	1					
Modular	L	GYHL2525M00-M25L	●	GYM25LD-D12-075	●	1					
Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-075	●	2					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-D12-075	●	2					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-075	●	2					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-D12-075	●	2					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

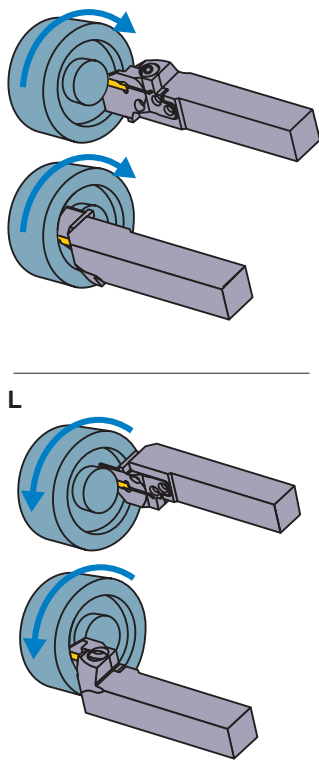


Right hand tool holder shown.

SPARE PARTS

Holder	Clamp Screw	Blade Screw 5 pcs.	Wrench *
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—	R	
25	25	150	39	57	25	28	—	R	
32	25	170	39	57	32	28	—	R	
32	25	170	39	57	32	28	—	R	
32	32	170	39	57	32	35	—	R	
32	32	170	39	57	32	35	—	R	
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—	R	
25	25	150	39	57	25	28	—	R	
32	25	170	39	57	32	28	—	R	
32	25	170	39	57	32	28	—	R	
32	32	170	39	57	32	35	—	R	
32	32	170	39	57	32	35	—	R	
20	20	125	39	60	20	26	5	L	
20	20	125	39	60	20	26	5	L	
25	25	150	39	57	25	28	—	L	
25	25	150	39	57	25	28	—	L	
32	25	170	39	57	32	28	—	L	
32	25	170	39	57	32	28	—	L	
32	32	170	39	57	32	35	—	L	
32	32	170	39	57	32	35	—	L	
20	20	125	39	60	20	26	5	L	
20	20	125	39	60	20	26	5	L	
25	25	150	39	57	25	28	—	L	
25	25	150	39	57	25	28	—	L	
32	25	170	39	57	32	28	—	L	
32	25	170	39	57	32	28	—	L	
32	32	170	39	57	32	35	—	L	
32	32	170	39	57	32	35	—	L	



Insert selection

Seat Size	Geometry name
D	GY○○0200/0224D○○○○—Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
D	2.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying) Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●	●	●	●

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

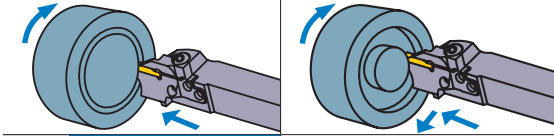
4

00° type holder

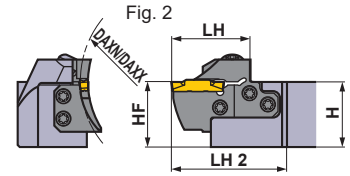
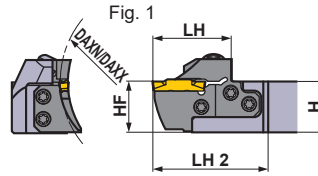
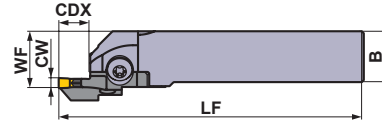
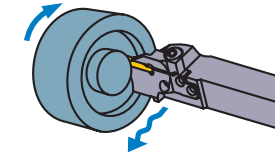
Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.

Insert	GY2M ^{GS}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM}	Insert	GY2M ^{MM}



Insert GY2M^{BM}



Right hand tool holder shown.

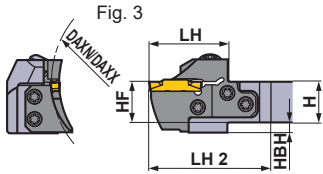
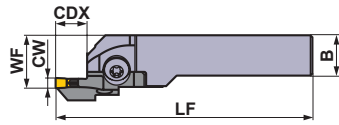
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
D	2.00 2.24	100	150	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-100	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-D12-100	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-100	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-D12-100	●	1
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-100	●	2			
		Modular	L	GYHL3225P00-M25L	●	GYM25LD-D12-100	●	2			
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-100	●	2			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-D12-100	●	2			
	135	200	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-135	●	3	
				Modular	L	GYHL2020K00-M25L	●	GYM25LD-D12-135	●	3	
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-135	●	1	
				Modular	L	GYHL2525M00-M25L	●	GYM25LD-D12-135	●	1	
180	250	12	Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-135	●	2		
			Modular	L	GYHL3225P00-M25L	●	GYM25LD-D12-135	●	2		
			Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-135	●	2		
			Modular	L	GYHL3232P00-M25L	●	GYM25LD-D12-135	●	2		
180	250	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-180	●	3		
			Modular	L	GYHL2020K00-M25L	●	GYM25LD-D12-180	●	3		
			Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-180	●	1		
			Modular	L	GYHL2525M00-M25L	●	GYM25LD-D12-180	●	1		
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-180	●	2				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-D12-180	●	2				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-180	●	2				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-D12-180	●	2				

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

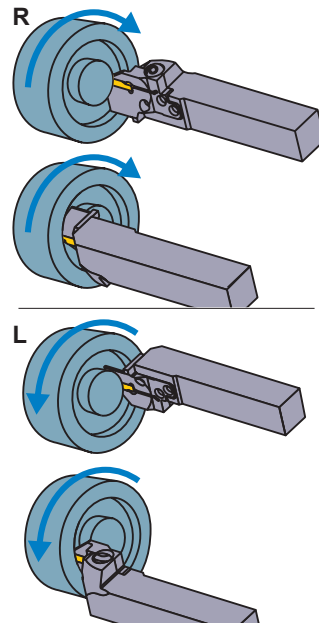


Right hand tool holder shown.

SPARE PARTS

Holder	Clamp Screw	Blade Screw 5 pcs.	Wrench *
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	Dimensions (mm) *1								Cutting Mode
	H	B	LF	LH	LH 2	HF	WF	HBH	
	20	20	125	39	60	20	26	5	R
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	R
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	R
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	R
	32	32	170	39	57	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	L
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	L
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	



Insert selection

Seat Size	Geometry name
D	GY○○0200/0224D○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
D	2.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying) Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●	●	●	●

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

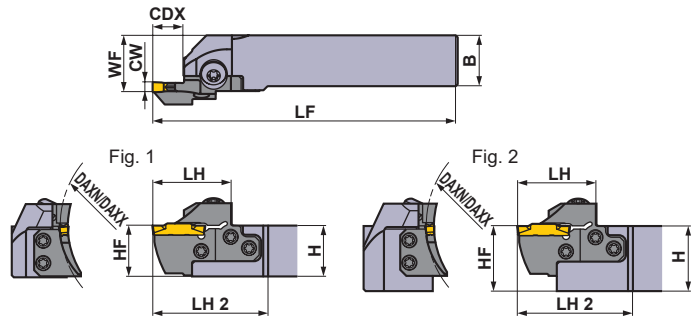
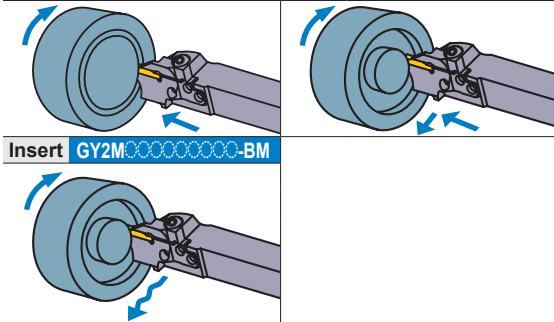
GY SERIES (FACE GROOVING)

4

00° type holder

Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Right hand tool holder shown.

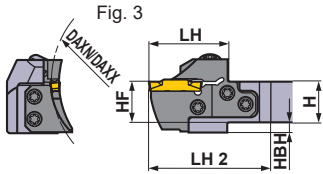
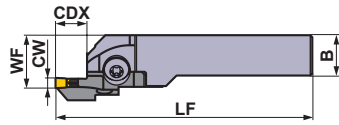
Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.	
	CW	DAXN	DAXX			CDX	Holder	Stock	Modular Blade		Stock
E	2.39 2.50 2.74	40	50	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-E12-040	●	3
					L	GYHL2020K00-M25L	●	GYM25LD-E12-040	●	3	
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-E12-040	●	1
					L	GYHL2525M00-M25L	●	GYM25LD-E12-040	●	1	
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-E12-040	●	2			
		L	GYHL3225P00-M25L	●	GYM25LD-E12-040	●	2				
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-E12-040	●	2			
		L	GYHL3232P00-M25L	●	GYM25LD-E12-040	●	2				
	50	60	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-E12-050	●	3	
				L	GYHL2020K00-M25L	●	GYM25LD-E12-050	●	3		
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-E12-050	●	1	
				L	GYHL2525M00-M25L	●	GYM25LD-E12-050	●	1		
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-E12-050	●	2				
	L	GYHL3225P00-M25L	●	GYM25LD-E12-050	●	2					
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-E12-050	●	2				
	L	GYHL3232P00-M25L	●	GYM25LD-E12-050	●	2					
	60	75	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-E12-060	●	3	
				L	GYHL2020K00-M25L	●	GYM25LD-E12-060	●	3		
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-E12-060	●	1	
				L	GYHL2525M00-M25L	●	GYM25LD-E12-060	●	1		
Modular		R	GYHR3225P00-M25R	●	GYM25RD-E12-060	●	2				
L		GYHL3225P00-M25L	●	GYM25LD-E12-060	●	2					
Modular		R	GYHR3232P00-M25R	●	GYM25RD-E12-060	●	2				
L		GYHL3232P00-M25L	●	GYM25LD-E12-060	●	2					
75	100	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-E12-075	●	3		
			L	GYHL2020K00-M25L	●	GYM25LD-E12-075	●	3			
			Modular	R	GYHR2525M00-M25R	●	GYM25RD-E12-075	●	1		
			L	GYHL2525M00-M25L	●	GYM25LD-E12-075	●	1			
Modular	R	GYHR3225P00-M25R	●	GYM25RD-E12-075	●	2					
L	GYHL3225P00-M25L	●	GYM25LD-E12-075	●	2						
Modular	R	GYHR3232P00-M25R	●	GYM25RD-E12-075	●	2					
L	GYHL3232P00-M25L	●	GYM25LD-E12-075	●	2						

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

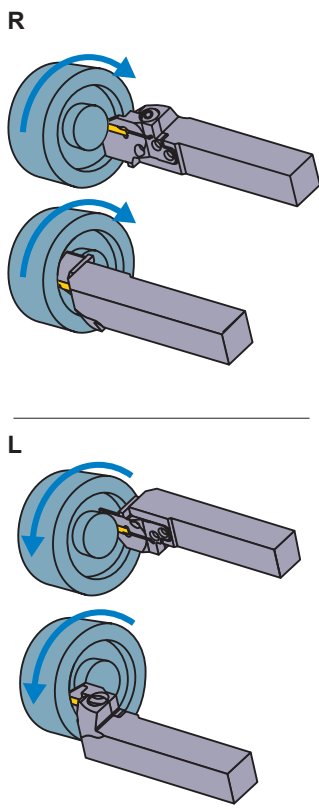


Right hand tool holder shown.

SPARE PARTS

Holder Number	Clamp Screw	Blade Screw 5 pcs.	Wrench *
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	125	39	60	20	26	5		
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	125	39	60	20	26	5		
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	125	39	60	20	26	5		
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		



Insert selection

Seat Size	Geometry name
E	GY○○0239/0250/0274E○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
E	CW	●	●	●	●
	E	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
E	CW				Ball shape
	E	●	●	●	
	E	●	●	●	

● : Standard insert with dimensions

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

F

GROOVING / CUTTING OFF

GY SERIES (FACE GROOVING)

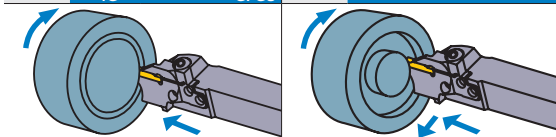
4

00° type holder

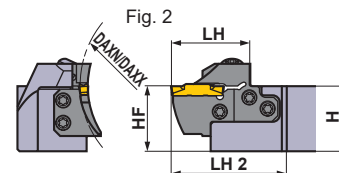
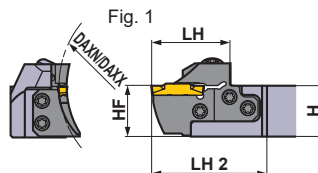
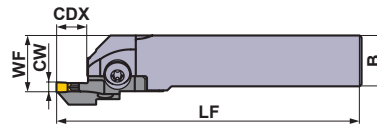
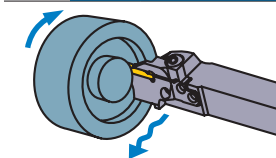
Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Insert GY2M^{BM}



Right hand tool holder shown.

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
E	2.39 2.50 2.74	100	150	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-E12-100	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-E12-100	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-E12-100	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-E12-100	●	1
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-E12-100	●	2			
		Modular	L	GYHL3225P00-M25L	●	GYM25LD-E12-100	●	2			
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-E12-100	●	2			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-E12-100	●	2			
	135	200	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-E12-135	●	3	
				Modular	L	GYHL2020K00-M25L	●	GYM25LD-E12-135	●	3	
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-E12-135	●	1	
				Modular	L	GYHL2525M00-M25L	●	GYM25LD-E12-135	●	1	
	180	250	12	Modular	R	GYHR3225P00-M25R	●	GYM25RD-E12-135	●	2	
				Modular	L	GYHL3225P00-M25L	●	GYM25LD-E12-135	●	2	
				Modular	R	GYHR3232P00-M25R	●	GYM25RD-E12-135	●	2	
				Modular	L	GYHL3232P00-M25L	●	GYM25LD-E12-135	●	2	
180	250	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-E12-180	●	3		
			Modular	L	GYHL2020K00-M25L	●	GYM25LD-E12-180	●	3		
			Modular	R	GYHR2525M00-M25R	●	GYM25RD-E12-180	●	1		
			Modular	L	GYHL2525M00-M25L	●	GYM25LD-E12-180	●	1		
180	250	12	Modular	R	GYHR3225P00-M25R	●	GYM25RD-E12-180	●	2		
			Modular	L	GYHL3225P00-M25L	●	GYM25LD-E12-180	●	2		
			Modular	R	GYHR3232P00-M25R	●	GYM25RD-E12-180	●	2		
			Modular	L	GYHL3232P00-M25L	●	GYM25LD-E12-180	●	2		

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

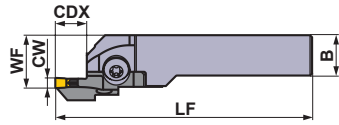
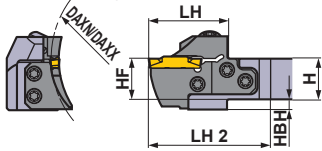


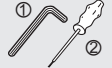


Fig. 3

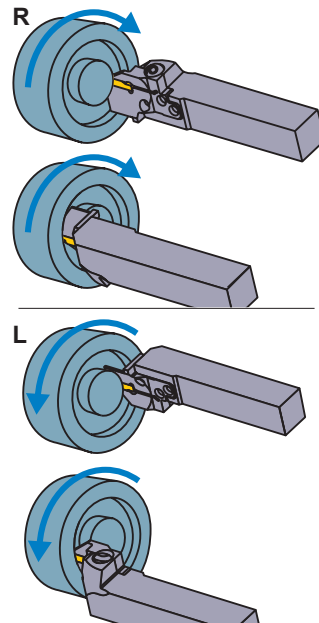


Right hand tool holder shown.

SPARE PARTS

Holder		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	Dimensions (mm) *1								Cutting Mode
	H	B	LF	LH	LH 2	HF	WF	HBH	
	20	20	125	39	60	20	26	5	R
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	L
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	L
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	L
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	



Insert selection

Seat Size	Geometry name
E	GY○○0239/0250/0274E○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
E	2.39mm	●	●	●	●
	2.50mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying) Ball shape
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

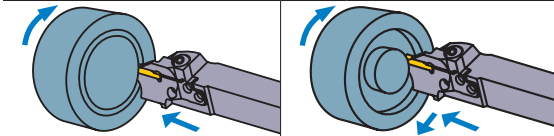
4

00° type holder

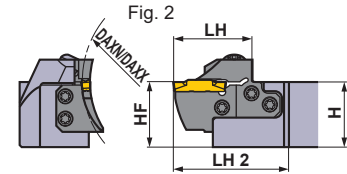
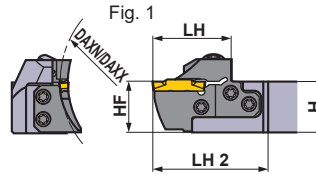
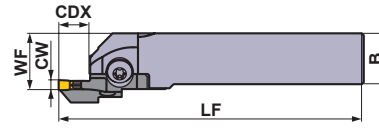
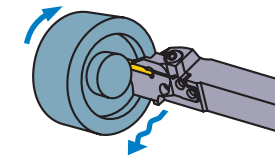
Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Insert GY2M^{BM}



Right hand tool holder shown.

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
F	3.00 3.18 3.24	35	40	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-035	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-F12-035	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-035	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-F12-035	●	1
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-035	●	2			
		Modular	L	GYHL3225P00-M25L	●	GYM25LD-F12-035	●	2			
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-035	●	2			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-F12-035	●	2			
	50	60	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-040	●	3	
				Modular	L	GYHL2020K00-M25L	●	GYM25LD-F12-040	●	3	
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-040	●	1	
				Modular	L	GYHL2525M00-M25L	●	GYM25LD-F12-040	●	1	
Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-040	●	2					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-F12-040	●	2					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-040	●	2					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-F12-040	●	2					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

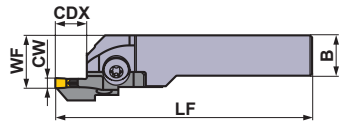
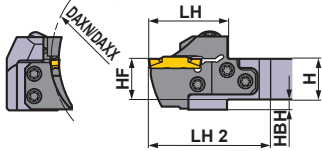





Fig. 3

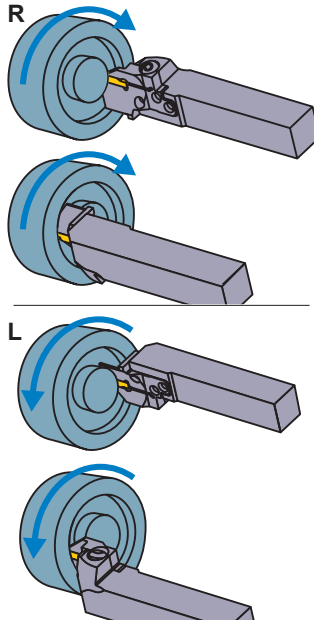


Right hand tool holder shown.

SPARE PARTS

Holder		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	Dimensions (mm) *1								Cutting Mode
	H	B	LF	LH	LH 2	HF	WF	HBH	
	20	20	125	39	60	20	26	5	R
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	L
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	L
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	L
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	



Insert selection

Seat Size	Geometry name
F	GY○○0300/0318/0324F○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
F	CW				
		3.00mm	●	●	●
		3.18mm	●	●	●

For multifunctional grooving breaker > F012, F013						
Seat Size	Breaker	MF	MS	MM	BM	
		(Finish)	(Low)	(Medium)	(Copying)	
F	CW				Ball shape	
			3.00mm			●
		RE 0.2	●	●	●	
		RE 0.4	●	●	●	
		RE 0.8			●	
		3.18mm				●
		3.24mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

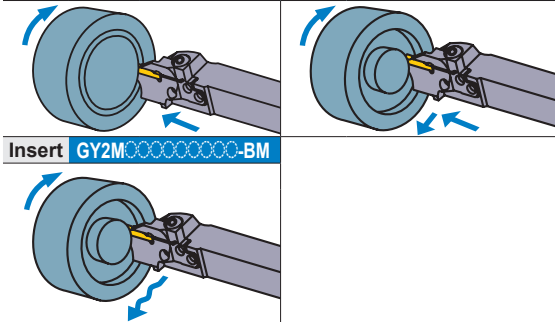
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

4

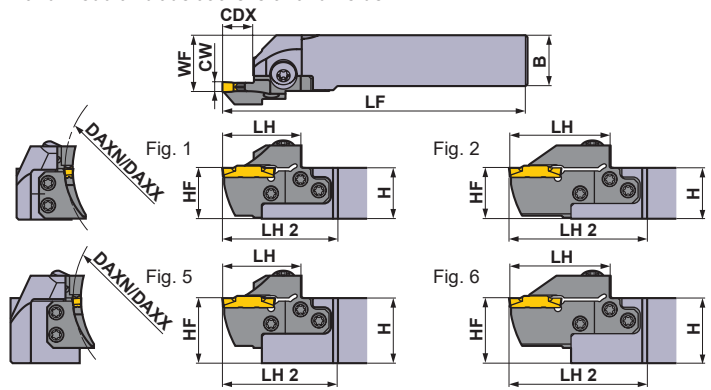
00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

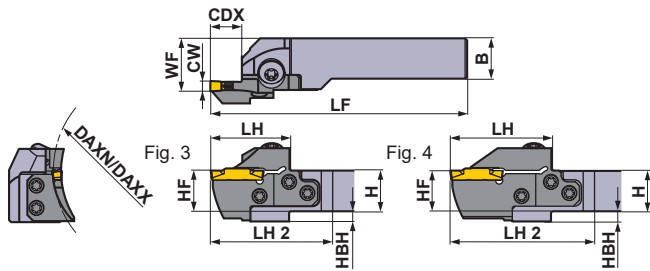
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
F	3.00 3.18 3.24	60	75	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-060	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-F12-060	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-060	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-F12-060	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-060	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-F12-060	●	5
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-060	●	5			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-F12-060	●	5			
		Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-060	●	4			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-F20-060	●	4			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-060	●	2			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-F20-060	●	2			
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-060	●	6				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-F20-060	●	6				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-060	●	6				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-F20-060	●	6				
	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-075	●	3				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-F12-075	●	3				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-075	●	1				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-F12-075	●	1				
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-075	●	5				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-F12-075	●	5				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-075	●	5				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-F12-075	●	5				
Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-075	●	4					
Modular	L	GYHL2020K00-M25L	●	GYM25LD-F20-075	●	4					
Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-075	●	2					
Modular	L	GYHL2525M00-M25L	●	GYM25LD-F20-075	●	2					
Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-075	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-F20-075	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-075	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-F20-075	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

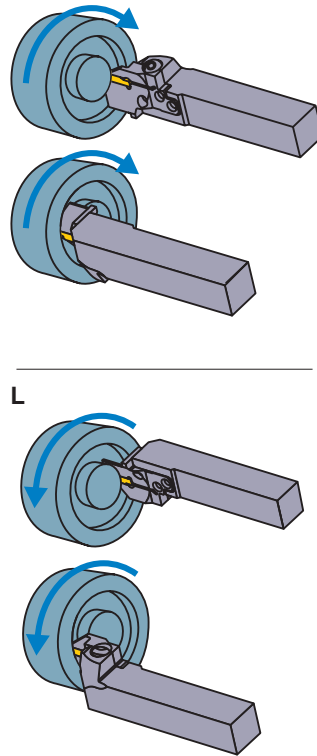


* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

	Dimensions (mm) *1								Cutting Mode
	H	B	LF	LH	LH 2	HF	WF	HBH	
	20	20	125	39	60	20	26	5	R
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	R
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	
	32	32	170	39	57	32	35	—	
	20	20	131	45	66	20	26	5	
	20	20	131	45	66	20	26	5	
	25	25	156	45	63	25	28	—	
	25	25	156	45	63	25	28	—	
	32	25	176	45	63	32	28	—	
	32	25	176	45	63	32	28	—	
	32	32	176	45	63	32	35	—	
	32	32	176	45	63	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	
	32	32	170	39	57	32	35	—	
	20	20	131	45	66	20	26	5	
	20	20	131	45	66	20	26	5	
	25	25	156	45	63	25	28	—	
	25	25	156	45	63	25	28	—	
	32	25	176	45	63	32	28	—	
	32	25	176	45	63	32	28	—	
	32	32	176	45	63	32	35	—	
	32	32	176	45	63	32	35	—	



Insert selection

Seat Size	Geometry name
F	GY○○0300/0318/0324F○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

● : Standard insert with dimensions

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

F

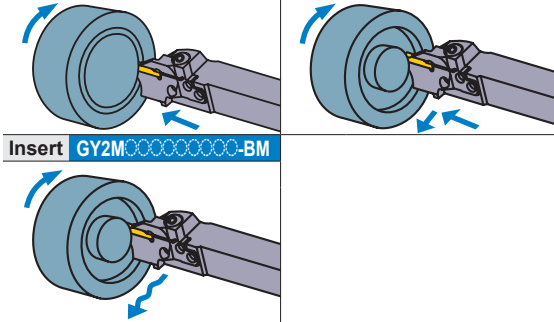
GROOVING / CUTTING OFF

GY SERIES (FACE GROOVING)

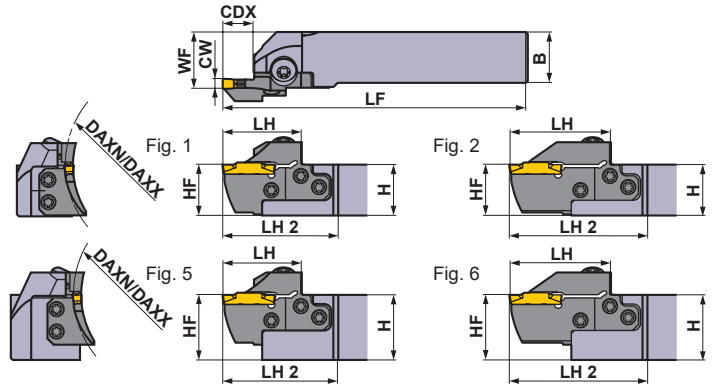
4

00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



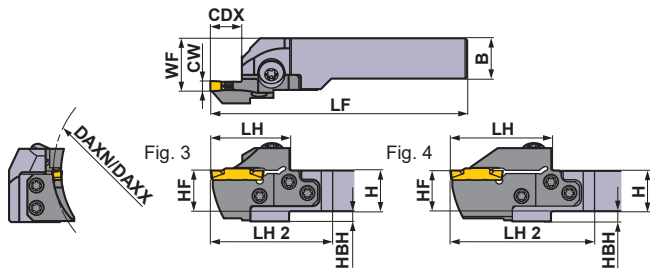
Right hand tool holder shown.

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
F	3.00 3.18 3.24	100	150	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-100	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-F12-100	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-100	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-F12-100	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-100	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-F12-100	●	5
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-100	●	5			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-F12-100	●	5			
		Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-100	●	4			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-F20-100	●	4			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-100	●	2			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-F20-100	●	2			
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-100	●	6				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-F20-100	●	6				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-100	●	6				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-F20-100	●	6				
	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-135	●	3				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-F12-135	●	3				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-135	●	1				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-F12-135	●	1				
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-135	●	5				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-F12-135	●	5				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-135	●	5				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-F12-135	●	5				
Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-135	●	4					
Modular	L	GYHL2020K00-M25L	●	GYM25LD-F20-135	●	4					
Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-135	●	2					
Modular	L	GYHL2525M00-M25L	●	GYM25LD-F20-135	●	2					
Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-135	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-F20-135	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-135	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-F20-135	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.
 *2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

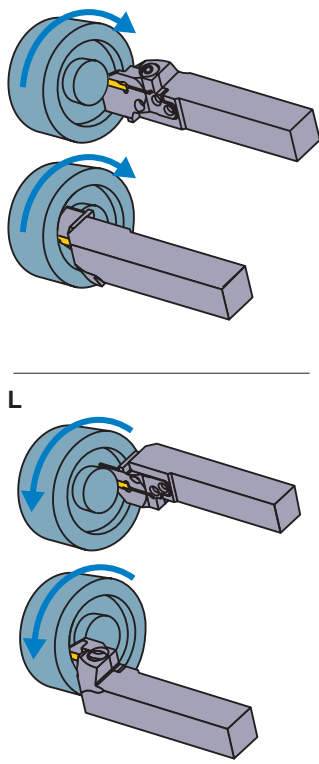


* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—	R	
25	25	150	39	57	25	28	—	R	
32	25	170	39	57	32	28	—	R	
32	25	170	39	57	32	28	—	R	
32	32	170	39	57	32	35	—	R	
32	32	170	39	57	32	35	—	R	
20	20	131	45	66	20	26	5	R	
20	20	131	45	66	20	26	5	R	
25	25	156	45	63	25	28	—	R	
25	25	156	45	63	25	28	—	R	
32	25	176	45	63	32	28	—	R	
32	25	176	45	63	32	28	—	R	
32	32	176	45	63	32	35	—	R	
32	32	176	45	63	32	35	—	R	
20	20	125	39	60	20	26	5	L	
20	20	125	39	60	20	26	5	L	
25	25	150	39	57	25	28	—	L	
25	25	150	39	57	25	28	—	L	
32	25	170	39	57	32	28	—	L	
32	25	170	39	57	32	28	—	L	
32	32	170	39	57	32	35	—	L	
32	32	170	39	57	32	35	—	L	
20	20	131	45	66	20	26	5	L	
20	20	131	45	66	20	26	5	L	
25	25	156	45	63	25	28	—	L	
25	25	156	45	63	25	28	—	L	
32	25	176	45	63	32	28	—	L	
32	25	176	45	63	32	28	—	L	
32	32	176	45	63	32	35	—	L	
32	32	176	45	63	32	35	—	L	



Insert selection

Seat Size	Geometry name
F	GY○○0300/0318/0324F○○○○○Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

● : Standard insert with dimensions

F
GROOVING / CUTTING OFF

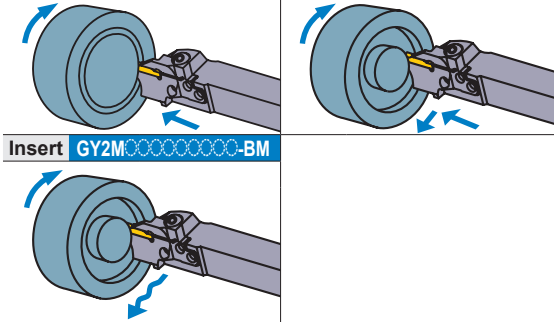
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

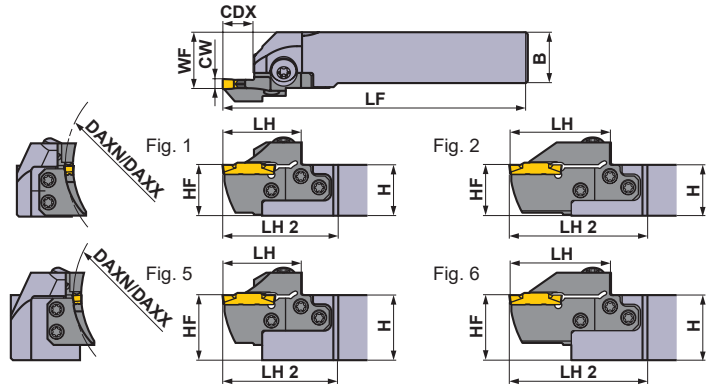
4

00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



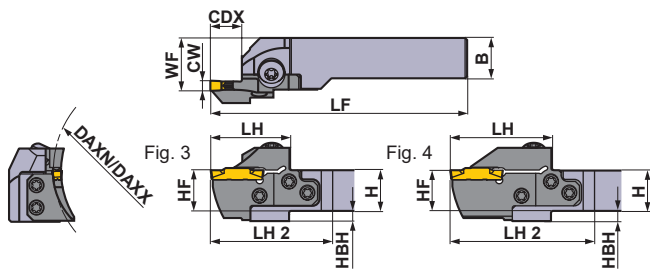
Right hand tool holder shown.

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
F	3.00 3.18 3.24	180	250	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-180	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-F12-180	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-180	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-F12-180	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-180	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-F12-180	●	5
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-180	●	5			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-F12-180	●	5			
		Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-180	●	4			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-F20-180	●	4			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-180	●	2			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-F20-180	●	2			
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-180	●	6				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-F20-180	●	6				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-180	●	6				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-F20-180	●	6				
	225	999	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-225	●	3	
				Modular	L	GYHL2020K00-M25L	●	GYM25LD-F12-225	●	3	
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-225	●	1	
				Modular	L	GYHL2525M00-M25L	●	GYM25LD-F12-225	●	1	
Modular			R	GYHR3225P00-M25R	●	GYM25RD-F12-225	●	5			
Modular			L	GYHL3225P00-M25L	●	GYM25LD-F12-225	●	5			
Modular			R	GYHR3232P00-M25R	●	GYM25RD-F12-225	●	5			
Modular			L	GYHL3232P00-M25L	●	GYM25LD-F12-225	●	5			
20 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-225	●	4				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-F20-225	●	4				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-225	●	2				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-F20-225	●	2				
Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-225	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-F20-225	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-225	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-F20-225	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.
 *2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.



* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

	Dimensions (mm) *1								Cutting Mode
	H	B	LF	LH	LH 2	HF	WF	HBH	
	20	20	125	39	60	20	26	5	R
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	
	32	32	170	39	57	32	35	—	
	20	20	131	45	66	20	26	5	
	20	20	131	45	66	20	26	5	
	25	25	156	45	63	25	28	—	
	25	25	156	45	63	25	28	—	
	32	25	176	45	63	32	28	—	
	32	25	176	45	63	32	28	—	
	32	32	176	45	63	32	35	—	
	32	32	176	45	63	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	
	32	32	170	39	57	32	35	—	
	20	20	131	45	66	20	26	5	
	20	20	131	45	66	20	26	5	
	25	25	156	45	63	25	28	—	
	25	25	156	45	63	25	28	—	
	32	25	176	45	63	32	28	—	
	32	25	176	45	63	32	28	—	
	32	32	176	45	63	32	35	—	
	32	32	176	45	63	32	35	—	

Insert selection

Seat Size	Geometry name
F	GY○○○0300/0318/0324F○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

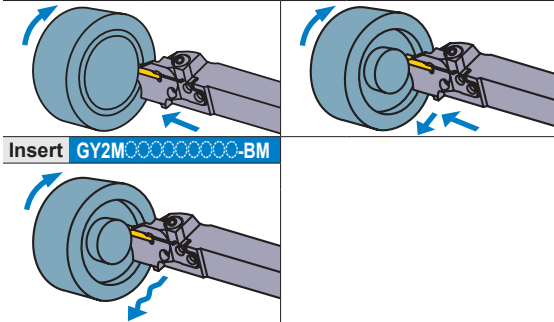
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

4

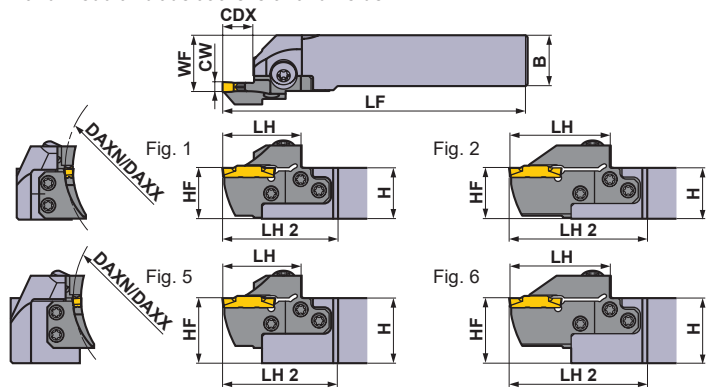
00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

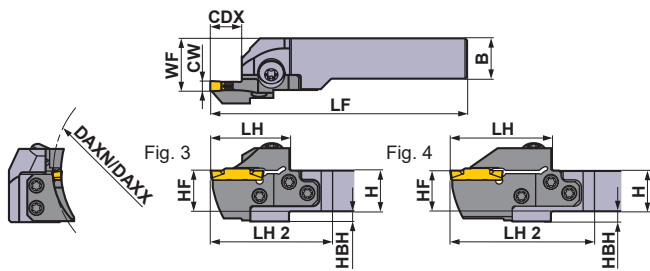
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
G	4.00 4.24	40	50	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-040	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-G14-040	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-040	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-G14-040	●	1
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-040	●	5			
		Modular	L	GYHL3225P00-M25L	●	GYM25LD-G14-040	●	5			
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-040	●	5			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-G14-040	●	5			
		Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-050	●	3			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-G14-050	●	3			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-050	●	1			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-G14-050	●	1			
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-050	●	5				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-G14-050	●	5				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-050	●	5				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-G14-050	●	5				
	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-060	●	3				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-G14-060	●	3				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-060	●	1				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-G14-060	●	1				
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-060	●	5				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-G14-060	●	5				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-060	●	5				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-G14-060	●	5				
Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-060	●	4					
Modular	L	GYHL2020K00-M25L	●	GYM25LD-G25-060	●	4					
Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-060	●	2					
Modular	L	GYHL2525M00-M25L	●	GYM25LD-G25-060	●	2					
Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-060	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-G25-060	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-060	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-G25-060	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.



* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

	Dimensions (mm) *1								Cutting Mode
	H	B	LF	LH	LH 2	HF	WF	HBH	
	20	20	125	39	60	20	26	5	R
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	
	32	32	170	39	57	32	35	—	
	20	20	125	39	60	20	26	5	L
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	
	32	32	170	39	57	32	35	—	
	20	20	136	50	71	20	26	5	
	20	20	136	50	71	20	26	5	
	25	25	161	50	68	25	28	—	
	25	25	161	50	68	25	28	—	
	32	25	181	50	68	32	28	—	
	32	25	181	50	68	32	28	—	
	32	32	181	50	68	32	35	—	
	32	32	181	50	68	32	35	—	

Insert selection

Seat Size	Geometry name
G	GY○○0400/0424G○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
G	4.00mm	●	●	●	●
	RE 0.2	●	●	●	●
	RE 0.4	●	●	●	●
	RE 0.8	●	●	●	●
	4.24mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

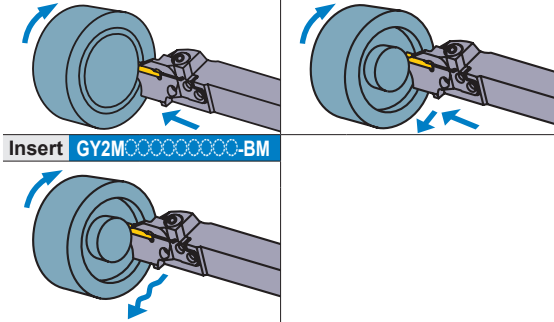
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

4

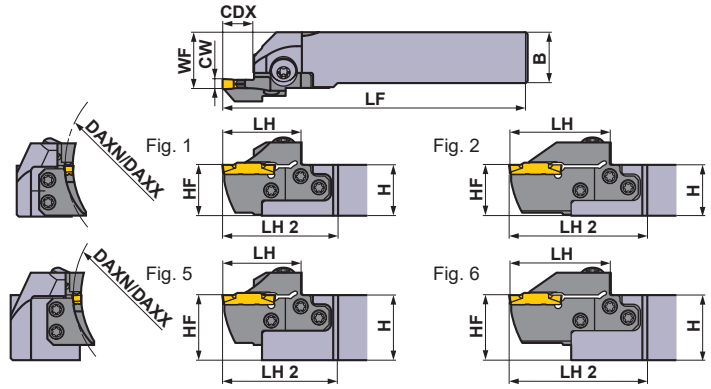
00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

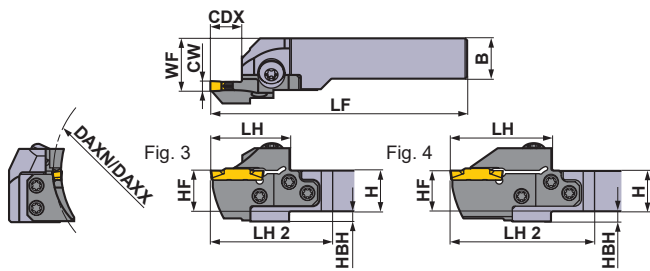
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
G	4.00 4.24	85	125	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-085	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-G14-085	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-085	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-G14-085	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-085	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-G14-085	●	5
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-085	●	5			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-G14-085	●	5			
		Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-085	●	4			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-G25-085	●	4			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-085	●	2			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-G25-085	●	2			
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-085	●	6				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-G25-085	●	6				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-085	●	6				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-G25-085	●	6				
	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-125	●	3				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-G14-125	●	3				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-125	●	1				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-G14-125	●	1				
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-125	●	5				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-G14-125	●	5				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-125	●	5				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-G14-125	●	5				
Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-125	●	4					
Modular	L	GYHL2020K00-M25L	●	GYM25LD-G25-125	●	4					
Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-125	●	2					
Modular	L	GYHL2525M00-M25L	●	GYM25LD-G25-125	●	2					
Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-125	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-G25-125	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-125	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-G25-125	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.



* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder	Clamp Screw	Blade Screw 5 pcs.	Wrench *
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	136	50	71	20	26	5		
20	20	136	50	71	20	26	5		
25	25	161	50	68	25	28	—		
25	25	161	50	68	25	28	—		
32	25	181	50	68	32	28	—		
32	25	181	50	68	32	28	—		
32	32	181	50	68	32	35	—		
32	32	181	50	68	32	35	—		
20	20	125	39	60	20	26	5		
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	136	50	71	20	26	5		
20	20	136	50	71	20	26	5		
25	25	161	50	68	25	28	—		
25	25	161	50	68	25	28	—		
32	25	181	50	68	32	28	—		
32	25	181	50	68	32	28	—		
32	32	181	50	68	32	35	—		
32	32	181	50	68	32	35	—		

Insert selection

Seat Size	Geometry name
G	GY○○0400/0424G○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
G	4.00mm	●	●	●	●
	RE 0.2	●	●	●	●
	RE 0.4	●	●	●	●
	RE 0.8	●	●	●	●
	4.24mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

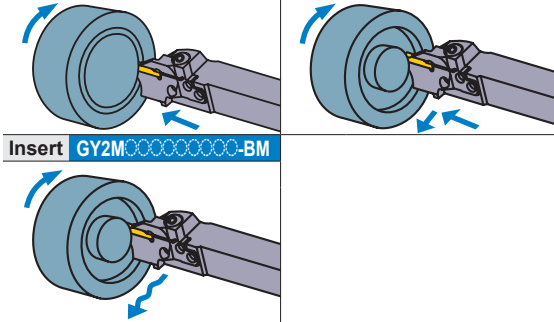
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

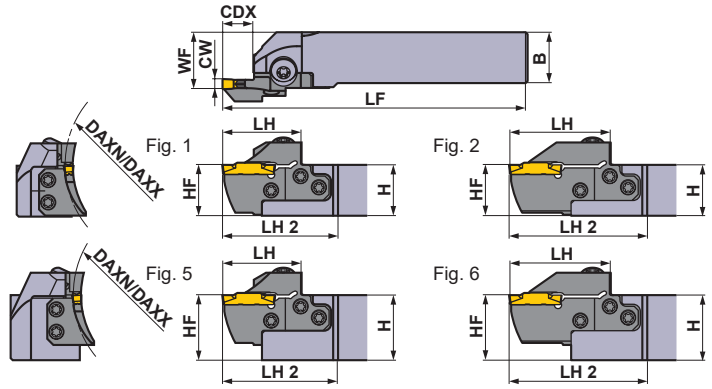
4

00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



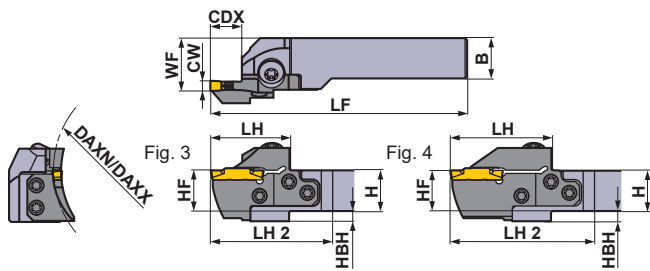
Right hand tool holder shown.

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
G	4.00	180	280	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-180	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-G14-180	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-180	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-G14-180	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-180	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-G14-180	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-180	●	5
					Modular	L	GYHL3232P00-M25L	●	GYM25LD-G14-180	●	5
				25 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-180	●	4
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-G25-180	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-180	●	2
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-G25-180	●	2
	4.24	250	999	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-250	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-G14-250	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-250	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-G14-250	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-250	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-G14-250	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-250	●	5
					Modular	L	GYHL3232P00-M25L	●	GYM25LD-G14-250	●	5
				25 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-250	●	4
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-G25-250	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-250	●	2
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-G25-250	●	2
Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-250	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-G25-250	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-250	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-G25-250	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.
 *2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.



* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder	Clamp Screw	Blade Screw 5 pcs.	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	136	50	71	20	26	5		
20	20	136	50	71	20	26	5		
25	25	161	50	68	25	28	—		
25	25	161	50	68	25	28	—		
32	25	181	50	68	32	28	—		
32	25	181	50	68	32	28	—		
32	32	181	50	68	32	35	—		
32	32	181	50	68	32	35	—		
20	20	125	39	60	20	26	5		
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	136	50	71	20	26	5		
20	20	136	50	71	20	26	5		
25	25	161	50	68	25	28	—		
25	25	161	50	68	25	28	—		
32	25	181	50	68	32	28	—		
32	25	181	50	68	32	28	—		
32	32	181	50	68	32	35	—		
32	32	181	50	68	32	35	—		

Insert selection

Seat Size	Geometry name
G	GY○○0400/0424G○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying) Ball shape
G	4.00mm	●	●	●	●
	RE 0.2	●	●	●	●
	RE 0.4	●	●	●	●
	RE 0.8	●	●	●	●
	4.24mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

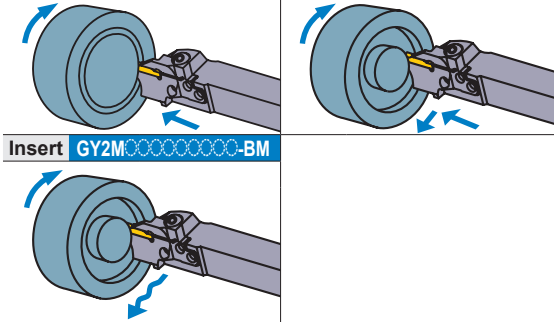
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

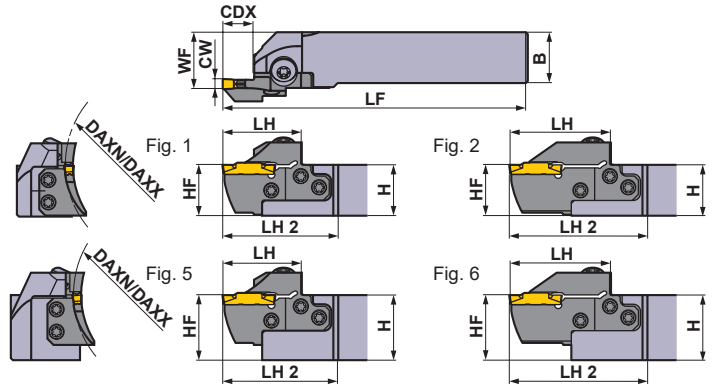
4

00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

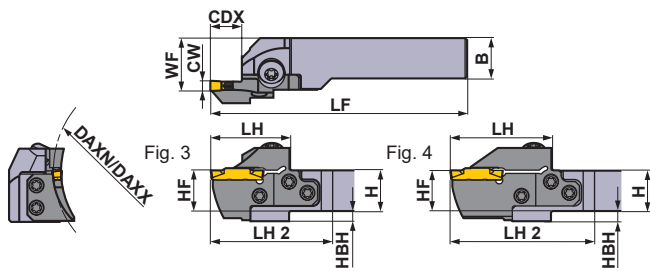
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
H	4.75 5.00 5.24	50	60	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-050	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-H14-050	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-050	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-H14-050	●	1
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-050	●	5			
		Modular	L	GYHL3225P00-M25L	●	GYM25LD-H14-050	●	5			
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-050	●	5			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-H14-050	●	5			
	60	85	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-060	●	3	
				Modular	L	GYHL2020K00-M25L	●	GYM25LD-H14-060	●	3	
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-060	●	1	
				Modular	L	GYHL2525M00-M25L	●	GYM25LD-H14-060	●	1	
			Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-060	●	5		
			Modular	L	GYHL3225P00-M25L	●	GYM25LD-H14-060	●	5		
			Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-060	●	5		
			Modular	L	GYHL3232P00-M25L	●	GYM25LD-H14-060	●	5		
25 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-060	●	4				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-H25-060	●	4				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-060	●	2				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-H25-060	●	2				
Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-060	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-H25-060	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-060	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-H25-060	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.



* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder	Clamp Screw	Blade Screw 5 pcs.	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

	Dimensions (mm) *1								Cutting Mode
	H	B	LF	LH	LH 2	HF	WF	HBH	
	20	20	125	39	60	20	26	5	R
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	R
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	
	20	20	125	39	60	20	26	5	R
	20	20	125	39	60	20	26	5	
	25	25	150	39	57	25	28	—	L
	25	25	150	39	57	25	28	—	
	32	25	170	39	57	32	28	—	R
	32	25	170	39	57	32	28	—	
	32	32	170	39	57	32	35	—	L
	32	32	170	39	57	32	35	—	
	20	20	136	50	71	20	26	5	R
	20	20	136	50	71	20	26	5	
	25	25	161	50	68	25	28	—	L
	25	25	161	50	68	25	28	—	
	32	25	181	50	68	32	28	—	R
	32	25	181	50	68	32	28	—	
	32	32	181	50	68	32	35	—	L
	32	32	181	50	68	32	35	—	

Insert selection

Seat Size	Geometry name
H	GY○○0475/0500/0524H○○○—Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
H	4.75mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			
	5.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	5.24mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

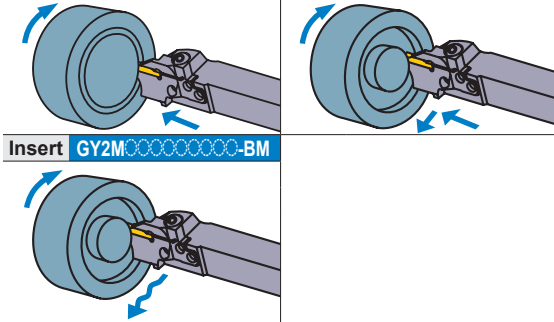
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

4

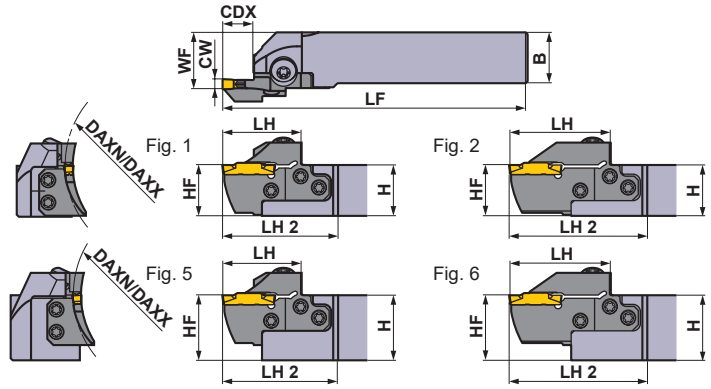
00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

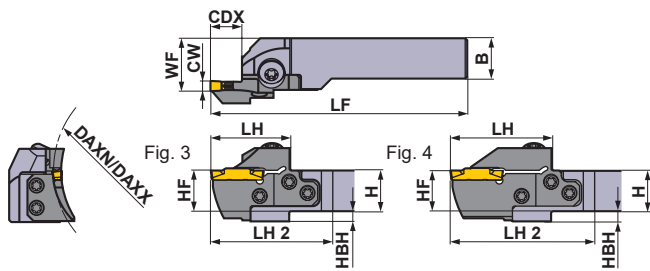
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
H	4.75 5.00 5.24	85	125	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-085	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-H14-085	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-085	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-H14-085	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-085	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-H14-085	●	5
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-085	●	5			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-H14-085	●	5			
		Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-085	●	4			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-H25-085	●	4			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-085	●	2			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-H25-085	●	2			
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-085	●	6				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-H25-085	●	6				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-085	●	6				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-H25-085	●	6				
	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-125	●	3				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-H14-125	●	3				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-125	●	1				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-H14-125	●	1				
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-125	●	5				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-H14-125	●	5				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-125	●	5				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-H14-125	●	5				
Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-125	●	4					
Modular	L	GYHL2020K00-M25L	●	GYM25LD-H25-125	●	4					
Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-125	●	2					
Modular	L	GYHL2525M00-M25L	●	GYM25LD-H25-125	●	2					
Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-125	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-H25-125	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-125	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-H25-125	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

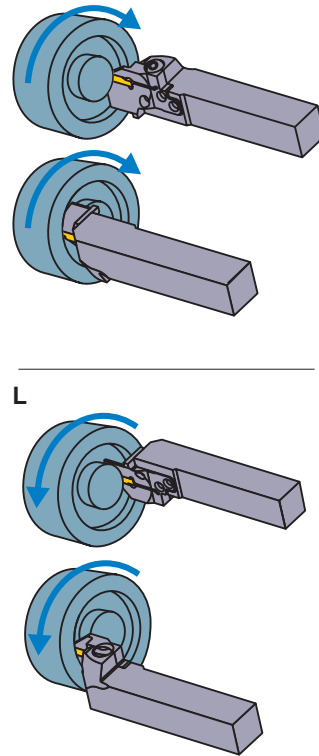


* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—	R	
25	25	150	39	57	25	28	—	R	
32	25	170	39	57	32	28	—	R	
32	25	170	39	57	32	28	—	R	
32	32	170	39	57	32	35	—	R	
32	32	170	39	57	32	35	—	R	
20	20	136	50	71	20	26	5	R	
20	20	136	50	71	20	26	5	R	
25	25	161	50	68	25	28	—	R	
25	25	161	50	68	25	28	—	R	
32	25	181	50	68	32	28	—	R	
32	25	181	50	68	32	28	—	R	
32	32	181	50	68	32	35	—	R	
32	32	181	50	68	32	35	—	R	
20	20	125	39	60	20	26	5	L	
20	20	125	39	60	20	26	5	L	
25	25	150	39	57	25	28	—	L	
25	25	150	39	57	25	28	—	L	
32	25	170	39	57	32	28	—	L	
32	25	170	39	57	32	28	—	L	
32	32	170	39	57	32	35	—	L	
32	32	170	39	57	32	35	—	L	
20	20	136	50	71	20	26	5	L	
20	20	136	50	71	20	26	5	L	
25	25	161	50	68	25	28	—	L	
25	25	161	50	68	25	28	—	L	
32	25	181	50	68	32	28	—	L	
32	25	181	50	68	32	28	—	L	
32	32	181	50	68	32	35	—	L	
32	32	181	50	68	32	35	—	L	



Insert selection

Seat Size	Geometry name
H	GY○○0475/0500/0524H○○○○○Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
H	4.75mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			
	5.00mm				●
	RE 0.2	●			
H	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	5.24mm	●			

● : Standard insert with dimensions

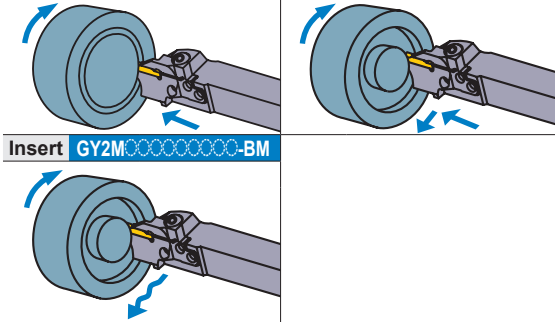
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

4

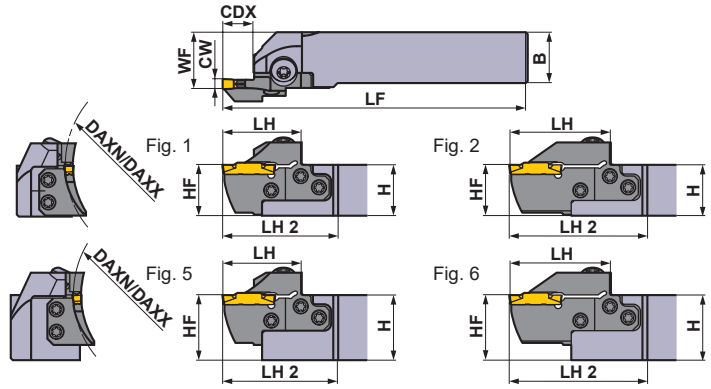
00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

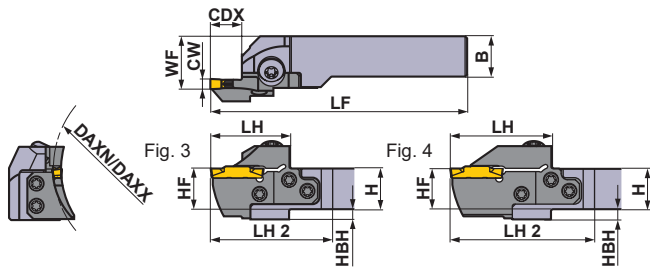
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
H	4.75 5.00 5.24	180	280	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-180	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-H14-180	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-180	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-H14-180	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-180	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-H14-180	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-180	●	5
					Modular	L	GYHL3232P00-M25L	●	GYM25LD-H14-180	●	5
	25 *2	180	280	25 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-180	●	4
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-H25-180	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-180	●	2
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-H25-180	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-180	●	6
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-H25-180	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-180	●	6
					Modular	L	GYHL3232P00-M25L	●	GYM25LD-H25-180	●	6
	250	999	14	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-250	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-H14-250	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-250	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-H14-250	●	1
Modular					R	GYHR3225P00-M25R	●	GYM25RD-H14-250	●	5	
Modular					L	GYHL3225P00-M25L	●	GYM25LD-H14-250	●	5	
Modular					R	GYHR3232P00-M25R	●	GYM25RD-H14-250	●	5	
Modular					L	GYHL3232P00-M25L	●	GYM25LD-H14-250	●	5	
25 *2	250	999	25 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-250	●	4	
				Modular	L	GYHL2020K00-M25L	●	GYM25LD-H25-250	●	4	
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-250	●	2	
				Modular	L	GYHL2525M00-M25L	●	GYM25LD-H25-250	●	2	
				Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-250	●	6	
				Modular	L	GYHL3225P00-M25L	●	GYM25LD-H25-250	●	6	
				Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-250	●	6	
				Modular	L	GYHL3232P00-M25L	●	GYM25LD-H25-250	●	6	

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

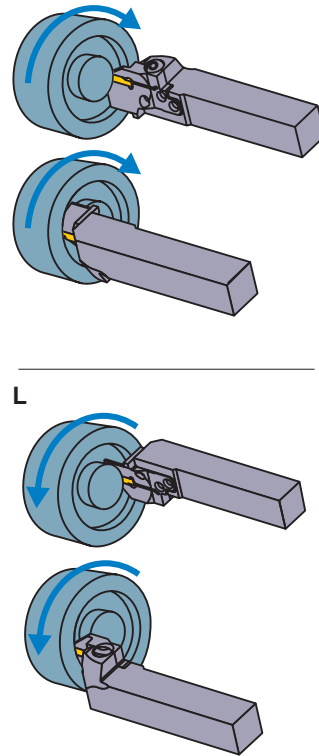


* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—	R	
25	25	150	39	57	25	28	—	R	
32	25	170	39	57	32	28	—	R	
32	25	170	39	57	32	28	—	R	
32	32	170	39	57	32	35	—	R	
32	32	170	39	57	32	35	—	R	
20	20	136	50	71	20	26	5	R	
20	20	136	50	71	20	26	5	R	
25	25	161	50	68	25	28	—	R	
25	25	161	50	68	25	28	—	R	
32	25	181	50	68	32	28	—	R	
32	25	181	50	68	32	28	—	R	
32	32	181	50	68	32	35	—	R	
32	32	181	50	68	32	35	—	R	
20	20	125	39	60	20	26	5	L	
20	20	125	39	60	20	26	5	L	
25	25	150	39	57	25	28	—	L	
25	25	150	39	57	25	28	—	L	
32	25	170	39	57	32	28	—	L	
32	25	170	39	57	32	28	—	L	
32	32	170	39	57	32	35	—	L	
32	32	170	39	57	32	35	—	L	
20	20	136	50	71	20	26	5	L	
20	20	136	50	71	20	26	5	L	
25	25	161	50	68	25	28	—	L	
25	25	161	50	68	25	28	—	L	
32	25	181	50	68	32	28	—	L	
32	25	181	50	68	32	28	—	L	
32	32	181	50	68	32	35	—	L	
32	32	181	50	68	32	35	—	L	



Insert selection

Seat Size	Geometry name
H	GY○○0475/0500/0524H○○○○○Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
H	4.75mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			
	5.00mm				●
	RE 0.2	●			
H	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	5.24mm	●			

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

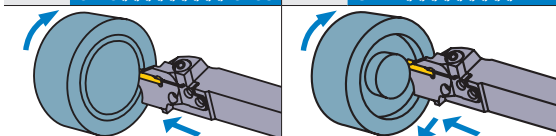
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

F071

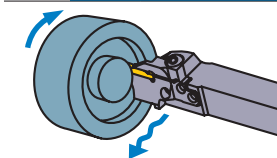
GY SERIES (FACE GROOVING)

4 00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1G ^{GFGS}	Insert	GY2M ^{MM}

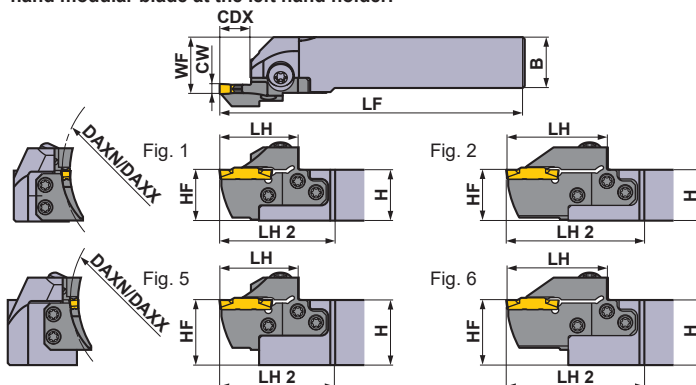


Insert GY2M^{BM}



Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

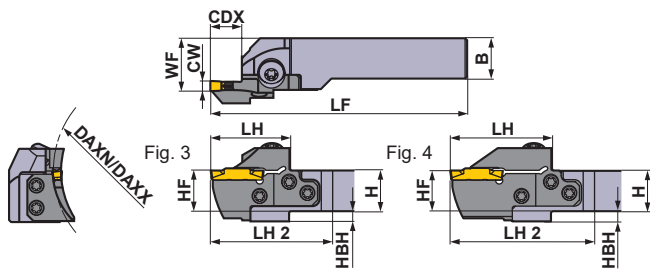
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
J	6.00 6.31 6.35	50	70	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-050	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-J14-050	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-050	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-J14-050	●	1
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-050	●	5			
		Modular	L	GYHL3225P00-M25L	●	GYM25LD-J14-050	●	5			
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-050	●	5			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-J14-050	●	5			
		Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-070	●	3			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-J14-070	●	3			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-070	●	1			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-J14-070	●	1			
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-070	●	5				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-J14-070	●	5				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-070	●	5				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-J14-070	●	5				
	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J25-070	●	4				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-J25-070	●	4				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-J25-070	●	2				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-J25-070	●	2				
	Modular	R	GYHR3225P00-M25R	●	GYM25RD-J25-070	●	6				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-J25-070	●	6				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-J25-070	●	6				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-J25-070	●	6				
Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-110	●	3					
Modular	L	GYHL2020K00-M25L	●	GYM25LD-J14-110	●	3					
Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-110	●	1					
Modular	L	GYHL2525M00-M25L	●	GYM25LD-J14-110	●	1					
Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-110	●	5					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-J14-110	●	5					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-110	●	5					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-J14-110	●	5					
Modular	R	GYHR2020K00-M25R	●	GYM25RD-J25-110	●	4					
Modular	L	GYHL2020K00-M25L	●	GYM25LD-J25-110	●	4					
Modular	R	GYHR2525M00-M25R	●	GYM25RD-J25-110	●	2					
Modular	L	GYHL2525M00-M25L	●	GYM25LD-J25-110	●	2					
Modular	R	GYHR3225P00-M25R	●	GYM25RD-J25-110	●	6					
Modular	L	GYHL3225P00-M25L	●	GYM25LD-J25-110	●	6					
Modular	R	GYHR3232P00-M25R	●	GYM25RD-J25-110	●	6					
Modular	L	GYHL3232P00-M25L	●	GYM25LD-J25-110	●	6					

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

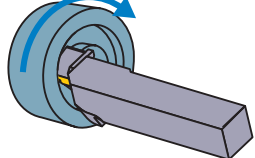
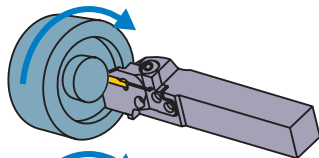


* Wrench : ① : Clamp Screw, ② : Blade Screw

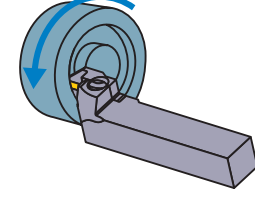
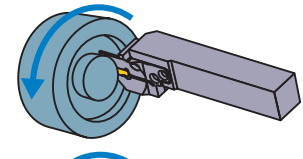
SPARE PARTS			
Holder	Clamp Screw	Blade Screw 5 pcs.	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—	L	
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	125	39	60	20	26	5		
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	136	50	71	20	26	5		
20	20	136	50	71	20	26	5		
25	25	161	50	68	25	28	—		
25	25	161	50	68	25	28	—		
32	25	181	50	68	32	28	—		
32	25	181	50	68	32	28	—		
32	32	181	50	68	32	35	—		
32	32	181	50	68	32	35	—		
20	20	125	39	60	20	26	5		
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	136	50	71	20	26	5		
20	20	136	50	71	20	26	5		
25	25	161	50	68	25	28	—		
25	25	161	50	68	25	28	—		
32	25	181	50	68	32	28	—		
32	25	181	50	68	32	28	—		
32	32	181	50	68	32	35	—		
32	32	181	50	68	32	35	—		



L



Insert selection

Seat Size	Geometry name
J	GY○○0600/0631/0635J○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
J	6.00mm	●	●	●	●
	6.35mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
J	6.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	6.31mm	●			
	6.35mm				●
	RE 0.2	●			
	RE 0.4	●			
RE 0.8	●				

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

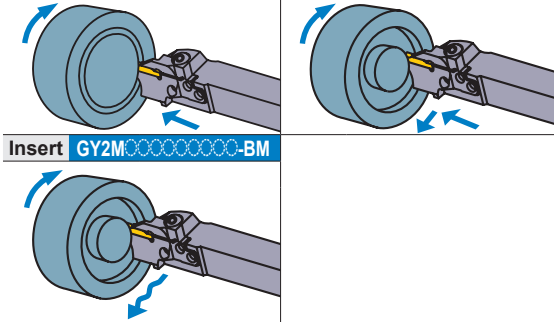
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

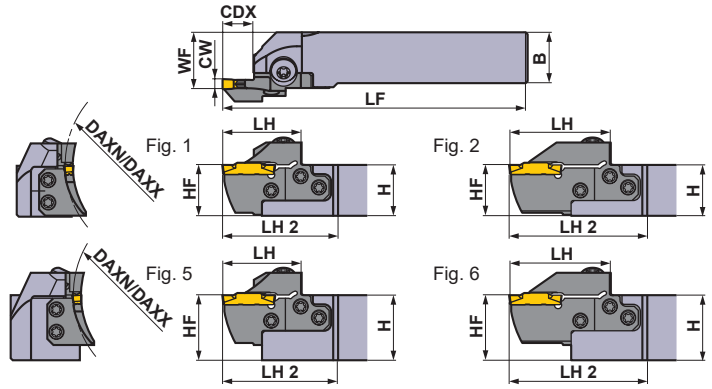
4

00° type holder

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1G ^{GFGS}	Insert	GY2M ^{MM}



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.



Right hand tool holder shown.

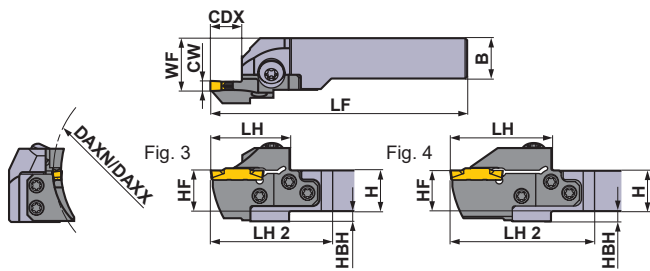
Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
J	6.00 6.31 6.35	170	280	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-170	●	3
					Modular	L	GYHL2020K00-M25L	●	GYM25LD-J14-170	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-170	●	1
					Modular	L	GYHL2525M00-M25L	●	GYM25LD-J14-170	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-170	●	5
					Modular	L	GYHL3225P00-M25L	●	GYM25LD-J14-170	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-170	●	5
					Modular	L	GYHL3232P00-M25L	●	GYM25LD-J14-170	●	5
	25 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J25-170	●	4			
		Modular	L	GYHL2020K00-M25L	●	GYM25LD-J25-170	●	4			
		Modular	R	GYHR2525M00-M25R	●	GYM25RD-J25-170	●	2			
		Modular	L	GYHL2525M00-M25L	●	GYM25LD-J25-170	●	2			
		Modular	R	GYHR3225P00-M25R	●	GYM25RD-J25-170	●	6			
		Modular	L	GYHL3225P00-M25L	●	GYM25LD-J25-170	●	6			
		Modular	R	GYHR3232P00-M25R	●	GYM25RD-J25-170	●	6			
		Modular	L	GYHL3232P00-M25L	●	GYM25LD-J25-170	●	6			
	250	999	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-250	●	3	
				Modular	L	GYHL2020K00-M25L	●	GYM25LD-J14-250	●	3	
				Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-250	●	1	
				Modular	L	GYHL2525M00-M25L	●	GYM25LD-J14-250	●	1	
25 *2			Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-250	●	5		
			Modular	L	GYHL3225P00-M25L	●	GYM25LD-J14-250	●	5		
			Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-250	●	5		
			Modular	L	GYHL3232P00-M25L	●	GYM25LD-J14-250	●	5		
25 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J25-250	●	4				
	Modular	L	GYHL2020K00-M25L	●	GYM25LD-J25-250	●	4				
	Modular	R	GYHR2525M00-M25R	●	GYM25RD-J25-250	●	2				
	Modular	L	GYHL2525M00-M25L	●	GYM25LD-J25-250	●	2				
25 *2	Modular	R	GYHR3225P00-M25R	●	GYM25RD-J25-250	●	6				
	Modular	L	GYHL3225P00-M25L	●	GYM25LD-J25-250	●	6				
	Modular	R	GYHR3232P00-M25R	●	GYM25RD-J25-250	●	6				
	Modular	L	GYHL3232P00-M25L	●	GYM25LD-J25-250	●	6				

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH, LH 2, and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

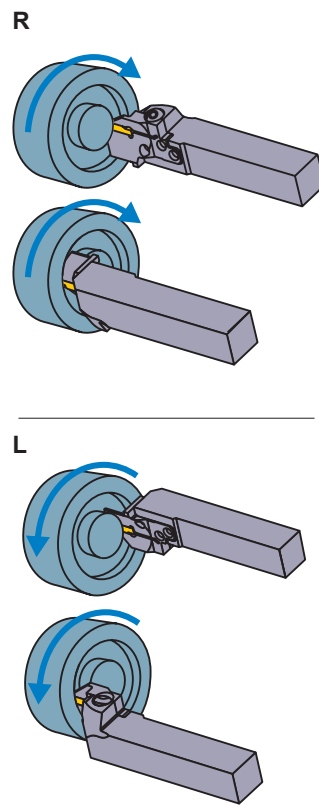


* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		5 pcs.	① ②
	Clamp Screw	Blade Screw	Wrench *
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Right hand tool holder shown.

Dimensions (mm) *1									Cutting Mode
H	B	LF	LH	LH 2	HF	WF	HBH		
20	20	125	39	60	20	26	5	R	
20	20	125	39	60	20	26	5	R	
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	136	50	71	20	26	5		
20	20	136	50	71	20	26	5		
25	25	161	50	68	25	28	—		
25	25	161	50	68	25	28	—		
32	25	181	50	68	32	28	—		
32	25	181	50	68	32	28	—		
32	32	181	50	68	32	35	—		
32	32	181	50	68	32	35	—		
20	20	125	39	60	20	26	5		
20	20	125	39	60	20	26	5		
25	25	150	39	57	25	28	—		
25	25	150	39	57	25	28	—		
32	25	170	39	57	32	28	—		
32	25	170	39	57	32	28	—		
32	32	170	39	57	32	35	—		
32	32	170	39	57	32	35	—		
20	20	136	50	71	20	26	5		
20	20	136	50	71	20	26	5		
25	25	161	50	68	25	28	—		
25	25	161	50	68	25	28	—		
32	25	181	50	68	32	28	—		
32	25	181	50	68	32	28	—		
32	32	181	50	68	32	35	—		
32	32	181	50	68	32	35	—		



Insert selection

Seat Size	Geometry name
J	GY○○0600/0631/0635J○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
J	6.00mm	●	●	●	●
	6.35mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
J	6.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	6.31mm	●			
	6.35mm				●
	RE 0.2	●			
	RE 0.4	●			
RE 0.8	●				

● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F110
 CAUTION FOR USE > F112

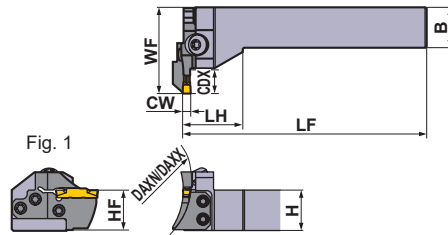
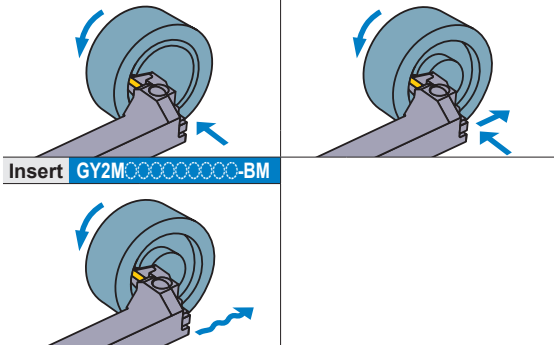
GY SERIES (FACE GROOVING)

5

90° type holder

Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Right hand tool holder shown.

GROOVING / CUTTING OFF

F

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
D	2.00 2.24	40	50	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-D12-040 GYM25RD-D12-040	●	1
		50	60	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-D12-050 GYM25RD-D12-050	●	1
		60	75	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-D12-060 GYM25RD-D12-060	●	1
		75	100	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-D12-075 GYM25RD-D12-075	●	1
		100	150	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-D12-100 GYM25RD-D12-100	●	1
		135	200	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-D12-135 GYM25RD-D12-135	●	1
		180	250	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-D12-180 GYM25RD-D12-180	●	1
E	2.39 2.50 2.74	40	50	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-E12-040 GYM25RD-E12-040	●	1
		50	60	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-E12-050 GYM25RD-E12-050	●	1
		60	75	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-E12-060 GYM25RD-E12-060	●	1
		75	100	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-E12-075 GYM25RD-E12-075	●	1
		100	150	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-E12-100 GYM25RD-E12-100	●	1
		135	200	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-E12-135 GYM25RD-E12-135	●	1
		180	250	12	Modular	R L	GYHR2525M90-M25L GYHL2525M90-M25R	●	GYM25LD-E12-180 GYM25RD-E12-180	●	1

CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH and WF values may vary.

● : Inventory maintained in Japan.

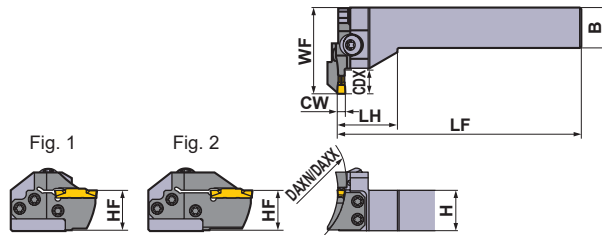
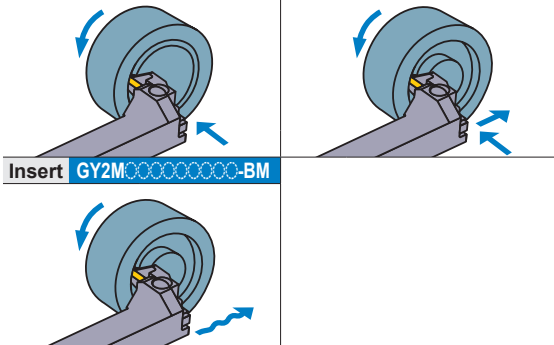
GY SERIES (FACE GROOVING)

5

90° type holder

Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Right hand tool holder shown.

GROOVING / CUTTING OFF

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
F	3.00 3.18 3.24	35	40	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-035	●	1
						L	GYHL2525M90-M25R	●	GYM25RD-F12-035	●	1
		40	50	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-040	●	1
						L	GYHL2525M90-M25R	●	GYM25RD-F12-040	●	1
		50	60	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-050	●	1
						L	GYHL2525M90-M25R	●	GYM25RD-F12-050	●	1
		60	75	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-060	●	1
						L	GYHL2525M90-M25R	●	GYM25RD-F12-060	●	1
				20 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F20-060	●	2
						L	GYHL2525M90-M25R	●	GYM25RD-F20-060	●	2
		75	100	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-075	●	1
						L	GYHL2525M90-M25R	●	GYM25RD-F12-075	●	1
				20 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F20-075	●	2
						L	GYHL2525M90-M25R	●	GYM25RD-F20-075	●	2
		100	150	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-100	●	1
						L	GYHL2525M90-M25R	●	GYM25RD-F12-100	●	1
				20 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F20-100	●	2
						L	GYHL2525M90-M25R	●	GYM25RD-F20-100	●	2
		135	200	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-135	●	1
						L	GYHL2525M90-M25R	●	GYM25RD-F12-135	●	1
20 *2	Modular			R	GYHR2525M90-M25L	●	GYM25LD-F20-135	●	2		
				L	GYHL2525M90-M25R	●	GYM25RD-F20-135	●	2		
180	250	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-180	●	1		
				L	GYHL2525M90-M25R	●	GYM25RD-F12-180	●	1		
		20 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F20-180	●	2		
				L	GYHL2525M90-M25R	●	GYM25RD-F20-180	●	2		
225	999	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-225	●	1		
				L	GYHL2525M90-M25R	●	GYM25RD-F12-225	●	1		
		20 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F20-225	●	2		
				L	GYHL2525M90-M25R	●	GYM25RD-F20-225	●	2		




CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

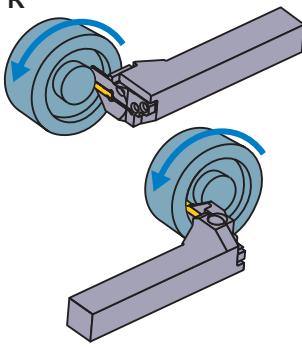
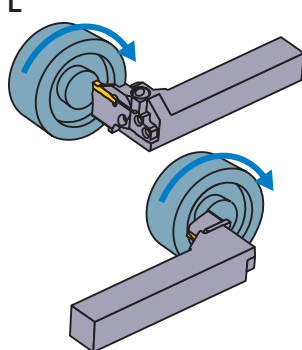
*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR2525M90-M25L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHL2525M90-M25R			

	Dimensions (mm) *1						Cutting Mode
	H	B	LF	LH	HF	WF	
	25	25	150	38	25	53	R 
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	59	L 
	25	25	150	38	25	59	
	25	25	150	38	25	59	
	25	25	150	38	25	59	
	25	25	150	38	25	59	
	25	25	150	38	25	59	
	25	25	150	38	25	59	
	25	25	150	38	25	59	
	25	25	150	38	25	59	
	25	25	150	38	25	59	
	25	25	150	38	25	59	

Insert selection

Seat Size	Geometry name
F	GY○○0300/0318/0324F○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

● : Standard insert with dimensions

F
GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
CUTTING CONDITIONS > F110
CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

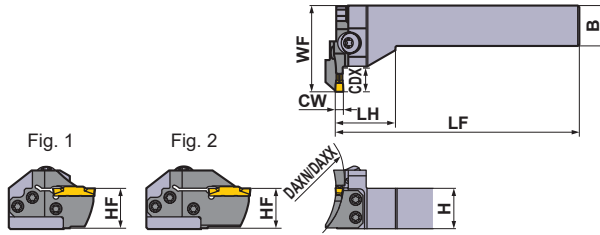
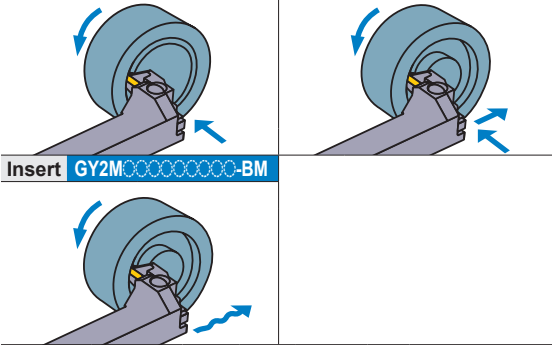
5

90° type holder

Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Right hand tool holder shown.

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
G	4.00 4.24	40	50	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G14-040	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-G14-040	●	1		
		50	60	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G14-050	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-G14-050	●	1		
		60	85	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G14-060	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-G14-060	●	1		
				25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G25-060	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-G25-060	●	2		
		85	125	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G14-085	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-G14-085	●	1		
				25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G25-085	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-G25-085	●	2		
		125	200	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G14-125	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-G14-125	●	1		
				25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G25-125	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-G25-125	●	2		
180	280	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G14-180	●	1		
		L	GYHL2525M90-M25R	●	GYM25RD-G14-180	●	1				
		25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G25-180	●	2		
		L	GYHL2525M90-M25R	●	GYM25RD-G25-180	●	2				
250	999	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G14-250	●	1		
		L	GYHL2525M90-M25R	●	GYM25RD-G14-250	●	1				
		25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-G25-250	●	2		
		L	GYHL2525M90-M25R	●	GYM25RD-G25-250	●	2				




CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

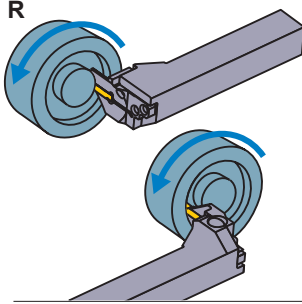
*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011 – F013.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR2525M90-M25L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHL2525M90-M25R			

	Dimensions (mm) *1						Cutting Mode
	H	B	LF	LH	HF	WF	
	25	25	150	38	25	53	R 
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	

Insert selection

Seat Size	Geometry name
G	GY○○0400/0424G○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
G	4.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8	●		●	
	4.24mm	●			

● : Standard insert with dimensions

F
GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
CUTTING CONDITIONS > F110
CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

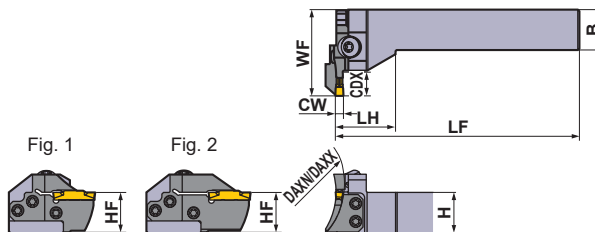
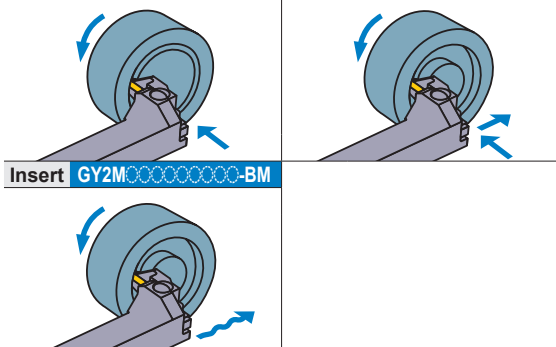
5

90° type holder

Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Right hand tool holder shown.

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
H	4.75 5.00 5.24	50	60	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H14-050	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-H14-050	●	1		
		60	85	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H14-060	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-H14-060	●	1		
		85	125	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H25-060	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-H25-060	●	2		
		85	125	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H14-085	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-H14-085	●	1		
		125	200	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H25-085	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-H25-085	●	2		
		125	200	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H14-125	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-H14-125	●	1		
		180	280	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H25-125	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-H25-125	●	2		
		180	280	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H14-180	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-H14-180	●	1		
250	999	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H25-180	●	2		
		L	GYHL2525M90-M25R	●	GYM25RD-H25-180	●	2				
250	999	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H14-250	●	1		
		L	GYHL2525M90-M25R	●	GYM25RD-H14-250	●	1				
250	999	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-H25-250	●	2		
		L	GYHL2525M90-M25R	●	GYM25RD-H25-250	●	2				




CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

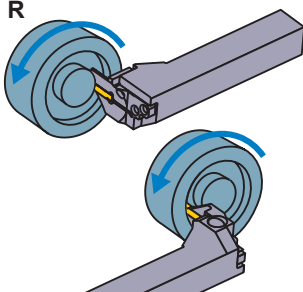
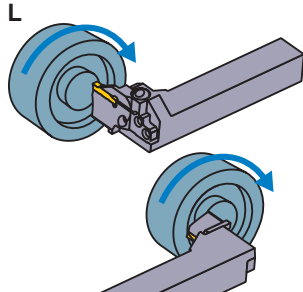
*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR2525M90-M25L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHL2525M90-M25R			

	Dimensions (mm) *1						Cutting Mode
	H	B	LF	LH	HF	WF	
	25	25	150	38	25	53	R 
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	L 
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	

Insert selection

Seat Size	Geometry name
H	GY○○0475/0500/0524H○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
H	4.75mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			
	5.00mm				●
	RE 0.2	●			
H	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	5.24mm	●			

● : Standard insert with dimensions

F
GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
CUTTING CONDITIONS > F110
CAUTION FOR USE > F112

GY SERIES (FACE GROOVING)

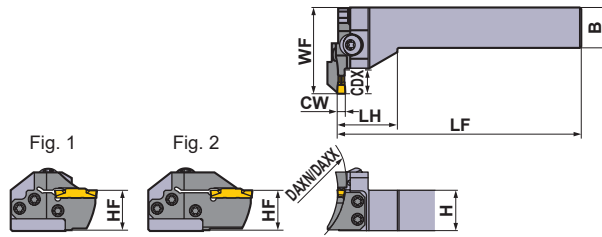
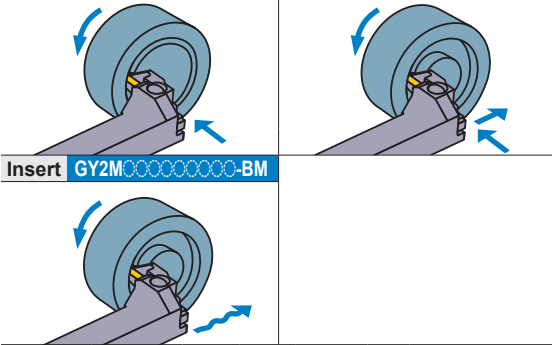
5

90° type holder

Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1G ^{GFGS}	Insert	GY2M ^{MM}



Right hand tool holder shown.

Seat Size	Dimensions (mm)				Type	Hand (R/L)	Order Number				Fig.
	CW	DAXN	DAXX	CDX			Holder	Stock	Modular Blade	Stock	
J	6.00 6.31 6.35	50	70	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J14-050	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-J14-050	●	1		
		70	110	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J14-070	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-J14-070	●	1		
		110	200	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J25-070	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-J25-070	●	2		
		110	200	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J14-110	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-J14-110	●	1		
		170	280	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J25-110	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-J25-110	●	2		
		170	280	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J14-170	●	1
				L	GYHL2525M90-M25R	●	GYM25RD-J14-170	●	1		
		250	999	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J25-170	●	2
				L	GYHL2525M90-M25R	●	GYM25RD-J25-170	●	2		
250	999	14	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J14-250	●	1		
		L	GYHL2525M90-M25R	●	GYM25RD-J14-250	●	1				
250	999	25 *2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J25-250	●	2		
		L	GYHL2525M90-M25R	●	GYM25RD-J25-250	●	2				




CW = Cutting Width DAXN = Axial groove outside diameter minimum DAXX = Axial groove outside diameter maximum CDX = Max. Groove Depth

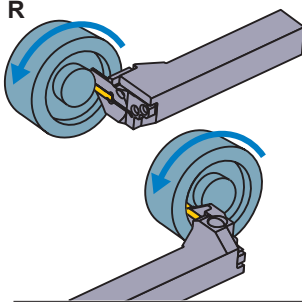
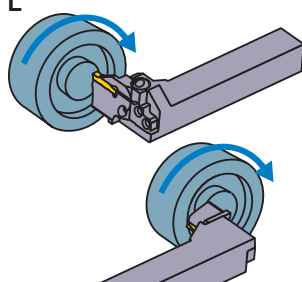
*1 Dimensions shown are when standard insert is used. If other insert geometries are used then LF, LH and WF values may vary.

*2 The maximum groove depth (CDX) varies according to the insert used. Please refer to the maximum groove depth (CDX) of inserts on pages F011—F013.

● : Inventory maintained in Japan.

* Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS			
Holder		 5 pcs.	
	Clamp Screw	Blade Screw	Wrench *
GYHR2525M90-M25L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHL2525M90-M25R			

	Dimensions (mm) *1						Cutting Mode
	H	B	LF	LH	HF	WF	
	25	25	150	38	25	53	R 
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
							L 
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	53	
	25	25	150	38	25	53	
	25	25	150	38	25	64	
	25	25	150	38	25	64	
	25	25	150	38	25	64	

Insert selection

Seat Size	Geometry name
J	GY○○0600/0631/0635J○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
J	6.00mm	●	●	●	●
	6.35mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying) Ball shape
J	6.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	6.31mm	●			
	6.35mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			

● : Standard insert with dimensions

GY SERIES (INTERNAL GROOVING)

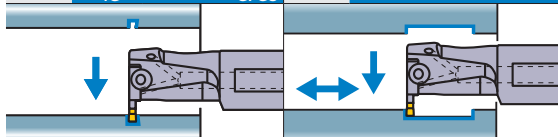
6

90° type holder

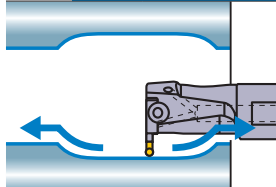
Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

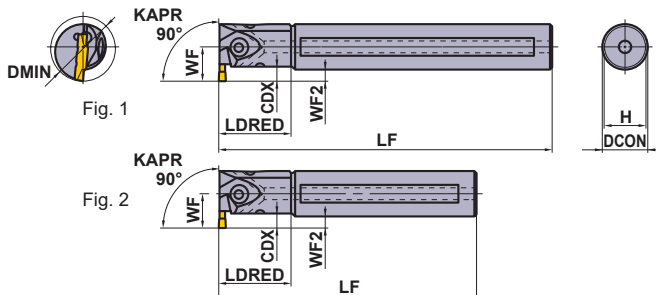
Insert	GY2M ^{GS} _{GM}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU} _{GL}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM} _{GFGS}	Insert	GY2M ^{MM}



Insert GY2M^{BM}



● Mono block type (Air / coolant through)



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX *3	DMIN			Holder	Stock	Modular Blade	Stock	
D	2.00 2.24	6	25	Mono Block	R	GYAR20K90A-D06	●	—	—	2
				Mono Block	L	GYAL20K90A-D06	●	—	—	2
			Mono Block	R	GYAR20Q90A-D06	●	—	—	1	
			Mono Block	L	GYAL20Q90A-D06	●	—	—	1	
		32	Mono Block	R	GYAR25K90B-D06	●	—	—	2	
			Mono Block	L	GYAL25K90B-D06	●	—	—	2	
		40	4—9.5 *1	Modular	R	GYDR32L90C-M20L	●	GYM20LA-D10	●	4
				Modular	L	GYDL32L90C-M20R	●	GYM20RA-D10	●	4
	50	5.5—9.5 *1	Modular	R	GYDR32S90C-M20L	●	GYM20LA-D10	●	3	
			Modular	L	GYDL32S90C-M20R	●	GYM20RA-D10	●	3	
	7—11.5 *1	60	Modular	R	GYDR40M90D-M20L	●	GYM20LA-D10	●	4	
			Modular	L	GYDL40M90D-M20R	●	GYM20RA-D10	●	4	
		Modular	R	GYDR40T90D-M20L	●	GYM20LA-D10	●	3		
		Modular	L	GYDL40T90D-M20R	●	GYM20RA-D10	●	3		
		70	Modular	R	GYDR40M90D-M25L	●	GYM25LA-D12	●	4	
			Modular	L	GYDL40M90D-M25R	●	GYM25RA-D12	●	4	
	70	7—11.5 *1	Modular	R	GYDR40T90D-M25L	●	GYM25LA-D12	●	3	
			Modular	L	GYDL40T90D-M25R	●	GYM25RA-D12	●	3	
70	7—11.5 *1	Modular	R	GYDR50P90F-M25L	●	GYM25LA-D12	●	4		
		Modular	L	GYDL50P90F-M25R	●	GYM25RA-D12	●	4		
70	7—11.5 *1	Modular	R	GYDR50T90F-M25L	●	GYM25LA-D12	●	3		
		Modular	L	GYDL50T90F-M25R	●	GYM25RA-D12	●	3		

CW = Cutting Width CDX = Max. Groove Depth DMIN = Minimum cutting diameter

*1 The maximum groove depth (CDX) varies according to the cutting diameter (DMIN). For details, please refer to page F116.

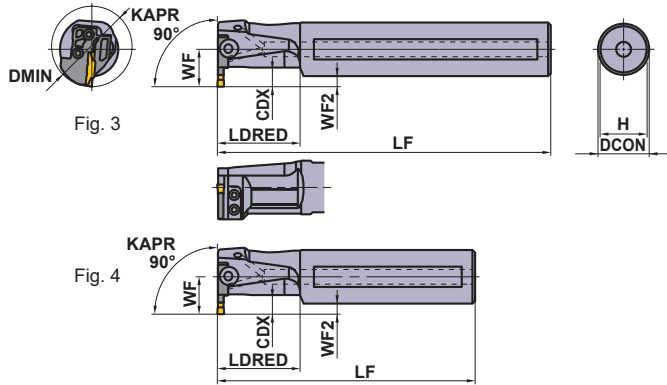
*2 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LDRED, WF and WF2 values may vary.

*3 The maximum groove depth (CDX) is a value within the dimension LDRED.

● : Inventory maintained in Japan.

●Modular blade type (Air / coolant through)

* Wrench : ① : Clamp Screw, ② : Blade Screw

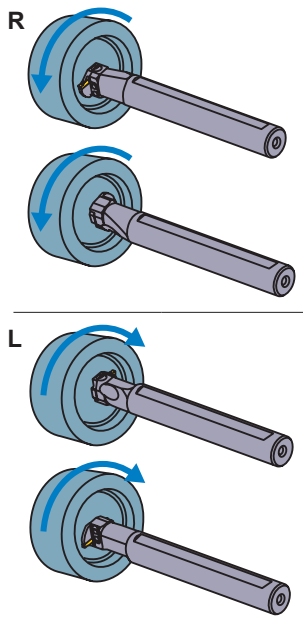


Right hand tool holder shown.

SPARE PARTS

Holder	① Clamp Screw	② Blade Screw 4 pcs.	① Wrench *
GYAR/L20○90A-○06	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYAR/L25○90B-○06	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYDR/L32○90C-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M25L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYDR/L50○90F-M25L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D

	Dimensions (mm) *2						Cutting Mode
	DCON	LF	LDRED	WF	WF2	H	
	20	125	30	14.5	4.5	18	R
	20	125	30	14.5	4.5	18	
	20	180	30	14.5	4.5	18	
	20	180	30	14.5	4.5	18	
	25	125	40	19	6.5	23	L
	25	125	40	19	6.5	23	
	25	200	40	19	6.5	23	
	25	200	40	19	6.5	23	
	32	140	50	22	6	30	R
	32	140	50	22	6	30	
	32	250	50	22	6	30	
	32	250	50	22	6	30	
	40	150	60	28	8	37	L
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	40	150	60	28	8	37	R
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	50	170	80	34	9	47	L
	50	170	80	34	9	47	
	50	300	80	34	9	47	
	50	300	80	34	9	47	



Insert selection

Seat Size	Geometry name
D	GY○○0200/0224D○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012						
Seat Size	Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GL (Aluminium)	GFGS (Hardened steel)
D	2.00mm	●	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
D	2.00mm	●	●	●	●
	2.24mm	●	●	●	●

● : Standard insert with dimensions

F
GROOVING / CUTTING OFF

IDENTIFICATION > F008, F009
CUTTING CONDITIONS > F117
CAUTION FOR USE > F120

GY SERIES (INTERNAL GROOVING)

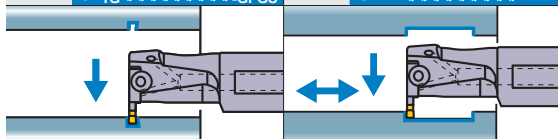
6

90° type holder

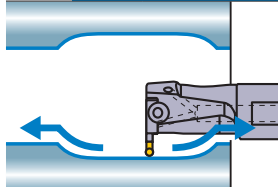
Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

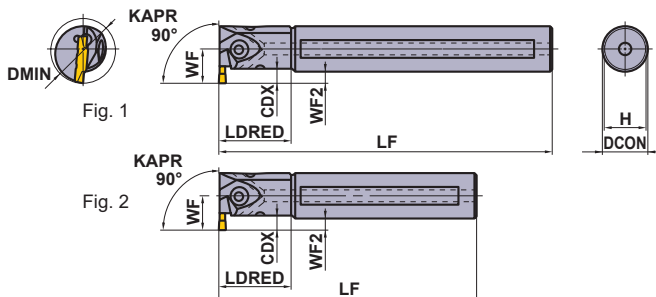
Insert	GY2M ^{GS}	Insert	GY2G ^{MF}
Insert	GY2M ^{GU}	Insert	GY2M ^{MS}
Insert	GY1 ^{GM}	Insert	GY2M ^{MM}



Insert GY2M^{BM}



● Mono block type (Air / coolant through)



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.	
	CW	CDX *3	DMIN			Holder	Stock	Modular Blade	Stock		
E	2.39	6	25	Mono Block	R	GYAR20K90A-E06	●	—	—	2	
				Mono Block	L	GYAL20K90A-E06	●	—	—	2	
				Mono Block	R	GYAR20Q90A-E06	●	—	—	1	
				Mono Block	L	GYAL20Q90A-E06	●	—	—	1	
		32	Mono Block	R	GYAR25K90B-E06	●	—	—	2		
			Mono Block	L	GYAL25K90B-E06	●	—	—	2		
			Mono Block	R	GYAR25R90B-E06	●	—	—	1		
			Mono Block	L	GYAL25R90B-E06	●	—	—	1		
	2.50	4—9.5 *1	40	Modular	R	GYDR32L90C-M20L	●	GYM20LA-E10	●	4	
				Modular	L	GYDL32L90C-M20R	●	GYM20RA-E10	●	4	
		2.74	5.5—9.5 *1	50	Modular	R	GYDR32S90C-M20L	●	GYM20LA-E10	●	3
					Modular	L	GYDL32S90C-M20R	●	GYM20RA-E10	●	3
	7—11.5 *1	60	60	Modular	R	GYDR40M90D-M20L	●	GYM20LA-E10	●	4	
				Modular	L	GYDL40M90D-M20R	●	GYM20RA-E10	●	4	
				Modular	R	GYDR40T90D-M20L	●	GYM20LA-E10	●	3	
		70	70	Modular	L	GYDL40T90D-M20R	●	GYM20RA-E10	●	3	
				Modular	R	GYDR40M90D-M25L	●	GYM25LA-E12	●	4	
				Modular	L	GYDL40M90D-M25R	●	GYM25RA-E12	●	4	
70	70	Modular	R	GYDR40T90D-M25L	●	GYM25LA-E12	●	3			
		Modular	L	GYDL40T90D-M25R	●	GYM25RA-E12	●	3			
		Modular	R	GYDR50P90F-M25L	●	GYM25LA-E12	●	4			
Modular	L	GYDL50P90F-M25R	●	GYM25RA-E12	●	4					
Modular	R	GYDR50T90F-M25L	●	GYM25LA-E12	●	3					
Modular	L	GYDL50T90F-M25R	●	GYM25RA-E12	●	3					

CW = Cutting Width CDX = Max. Groove Depth DMIN = Minimum cutting diameter

*1 The maximum groove depth (CDX) varies according to the cutting diameter (DMIN). For details, please refer to page F116.

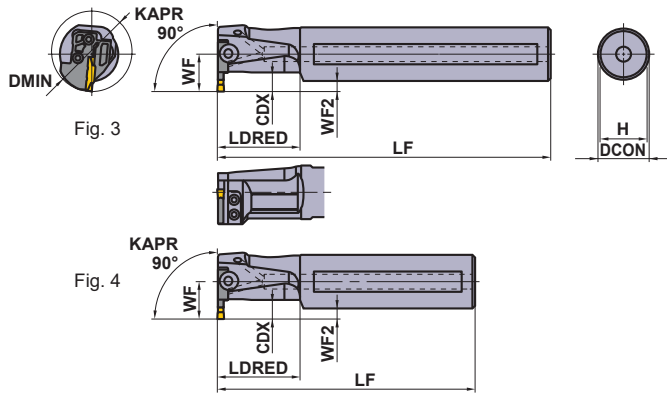
*2 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LDRED, WF and WF2 values may vary.

*3 The maximum groove depth (CDX) is a value within the dimension LDRED.

● : Inventory maintained in Japan.

●Modular blade type (Air / coolant through)

* Wrench : ① : Clamp Screw, ② : Blade Screw

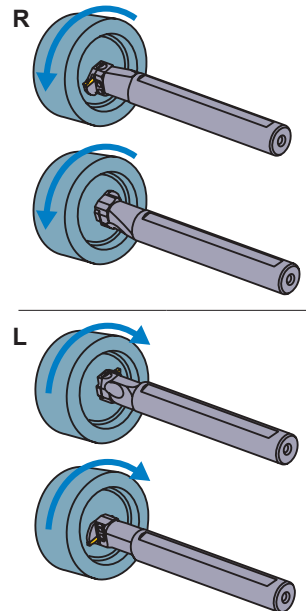


SPARE PARTS

Holder	① Clamp Screw	② Blade Screw 4 pcs.	① Wrench *
GYAR/L20○90A-○06	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYAR/L25○90B-○06	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYDR/L32○90C-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M25L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYDR/L50○90F-M25L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D

Right hand tool holder shown.

	Dimensions (mm) *2						Cutting Mode
	DCON	LF	LDRED	WF	WF2	H	
	20	125	30	14.5	4.5	18	R
	20	125	30	14.5	4.5	18	
	20	180	30	14.5	4.5	18	
	20	180	30	14.5	4.5	18	
	25	125	40	19	6.5	23	L
	25	125	40	19	6.5	23	
	25	200	40	19	6.5	23	
	25	200	40	19	6.5	23	
	32	140	50	22	6	30	R
	32	140	50	22	6	30	
	32	250	50	22	6	30	
	32	250	50	22	6	30	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	50	170	80	34	9	47	L
	50	170	80	34	9	47	
	50	300	80	34	9	47	
	50	300	80	34	9	47	



Insert selection

Seat Size	Geometry name
E	GY○○0239/0250/0274E○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012						
Seat Size	Breaker CW	GU	GS	GM	GL	GFGS
		(For gummy steel)	(Low)	(Medium)	(Aluminium)	(Hardened steel)
E	2.39mm	●	●	●	●	●
	2.50mm	●	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying) Ball nose
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			

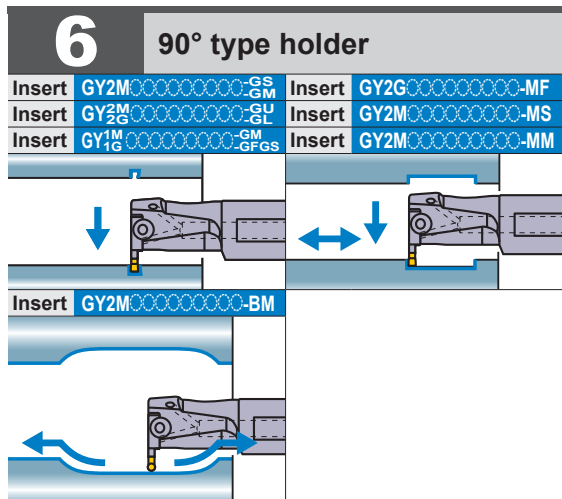
● : Standard insert with dimensions

F

GROOVING / CUTTING OFF

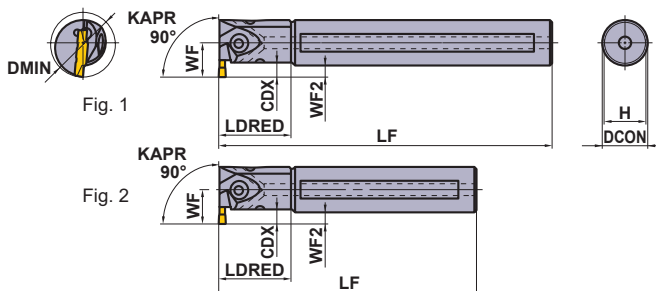
IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F117
 CAUTION FOR USE > F120

GY SERIES (INTERNAL GROOVING)



Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

● Mono block type (Air / coolant through)



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX *3	DMIN			Holder	Stock	Modular Blade	Stock	
F	3.00 3.18 3.24	6	25	Mono Block	R	GYAR20K90A-F06	●	—	—	2
				L	GYAL20K90A-F06	●	—	—	2	
			Mono Block	R	GYAR20Q90A-F06	●	—	—	1	
			L	GYAL20Q90A-F06	●	—	—	1		
		32	Mono Block	R	GYAR25K90B-F06	●	—	—	2	
			L	GYAL25K90B-F06	●	—	—	2		
		40	Mono Block	R	GYAR25R90B-F06	●	—	—	1	
			L	GYAL25R90B-F06	●	—	—	1		
	4—9.5 *1	40	Modular	R	GYDR32L90C-M20L	●	GYM20LA-F10	●	4	
			L	GYDL32L90C-M20R	●	GYM20RA-F10	●	4		
		Modular	R	GYDR32S90C-M20L	●	GYM20LA-F10	●	3		
		L	GYDL32S90C-M20R	●	GYM20RA-F10	●	3			
	5.5—9.5 *1	50	Modular	R	GYDR40M90D-M20L	●	GYM20LA-F10	●	4	
			L	GYDL40M90D-M20R	●	GYM20RA-F10	●	4		
		Modular	R	GYDR40T90D-M20L	●	GYM20LA-F10	●	3		
		L	GYDL40T90D-M20R	●	GYM20RA-F10	●	3			
7—11.5 *1	60	Modular	R	GYDR40M90D-M25L	●	GYM25LA-F12	●	4		
		L	GYDL40M90D-M25R	●	GYM25RA-F12	●	4			
	Modular	R	GYDR40T90D-M25L	●	GYM25LA-F12	●	3			
	L	GYDL40T90D-M25R	●	GYM25RA-F12	●	3				
	70	Modular	R	GYDR50P90F-M25L	●	GYM25LA-F12	●	4		
		L	GYDL50P90F-M25R	●	GYM25RA-F12	●	4			
32	32	Mono Block	R	GYAR25K90B-G07	●	—	—	2		
		L	GYAL25K90B-G07	●	—	—	2			
40	40	Mono Block	R	GYAR25R90B-G07	●	—	—	1		
		L	GYAL25R90B-G07	●	—	—	1			
G	4.00 4.24	4.5—11.5 *1	40	Modular	R	GYDR32L90C-M20L	●	GYM20LA-G12	●	4
				L	GYDL32L90C-M20R	●	GYM20RA-G12	●	4	
		Modular	R	GYDR32S90C-M20L	●	GYM20LA-G12	●	3		
		L	GYDL32S90C-M20R	●	GYM20RA-G12	●	3			
	6—11.5 *1	50	Modular	R	GYDR40M90D-M20L	●	GYM20LA-G12	●	4	
			L	GYDL40M90D-M20R	●	GYM20RA-G12	●	4		
	Modular	R	GYDR40T90D-M20L	●	GYM20LA-G12	●	3			
	L	GYDL40T90D-M20R	●	GYM20RA-G12	●	3				
	7.5—13 *1	60	Modular	R	GYDR40M90D-M25L	●	GYM25LA-G14	●	4	
			L	GYDL40M90D-M25R	●	GYM25RA-G14	●	4		
		Modular	R	GYDR40T90D-M25L	●	GYM25LA-G14	●	3		
		L	GYDL40T90D-M25R	●	GYM25RA-G14	●	3			
70	70	Modular	R	GYDR50P90F-M25L	●	GYM25LA-G14	●	4		
		L	GYDL50P90F-M25R	●	GYM25RA-G14	●	4			
Modular	R	GYDR50T90F-M25L	●	GYM25LA-G14	●	3				
L	GYDL50T90F-M25R	●	GYM25RA-G14	●	3					

CW = Cutting Width CDX = Max. Groove Depth DMIN = Minimum cutting diameter

*1 The maximum groove depth (CDX) varies according to the cutting diameter (DMIN). For details, please refer to page F116.

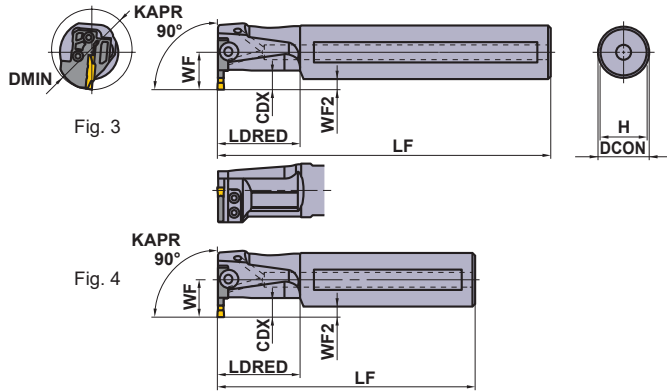
*2 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LDRED, WF and WF2 values may vary.

*3 The maximum groove depth (CDX) is a value within the dimension LDRED.

● : Inventory maintained in Japan.

●Modular blade type (Air / coolant through)

* Wrench : ① : Clamp Screw, ② : Blade Screw

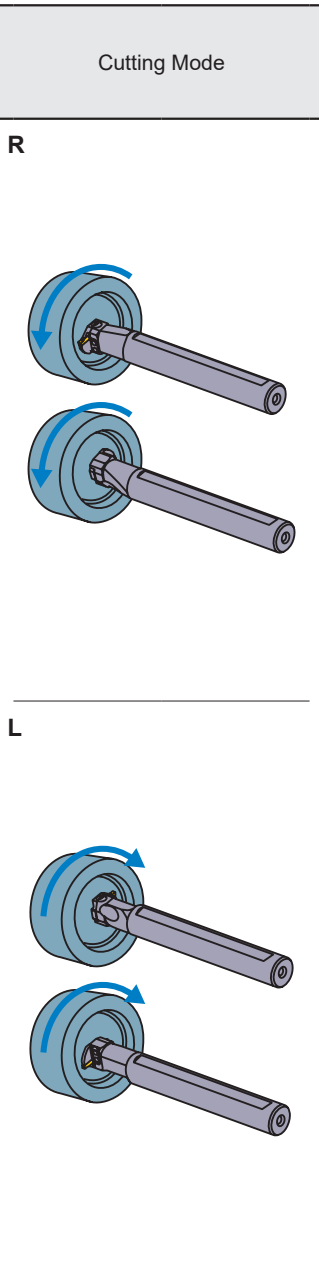


SPARE PARTS

Holder	① Clamp Screw	② Blade Screw 4 pcs.	① Wrench *
GYAR/L20○90A-F06	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYAR/L25○90B-○○○	—	—	—
GYDR/L32○90C-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYDR/L50○90F-M25L/R	②GY06013M (Clamp Torque : 6.0N·m)	—	—

Right hand tool holder shown.

	Dimensions (mm) *2						Cutting Mode
	DCON	LF	LDRED	WF	WF2	H	
	20	125	30	14.5	4.5	18	R
	20	125	30	14.5	4.5	18	
	20	180	30	14.5	4.5	18	
	20	180	30	14.5	4.5	18	
	25	125	40	19	6.5	23	
	25	125	40	19	6.5	23	
	25	200	40	19	6.5	23	
	25	200	40	19	6.5	23	
	32	140	50	22	6	30	
	32	140	50	22	6	30	
	32	250	50	22	6	30	
	32	250	50	22	6	30	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	50	170	80	34	9	47	
	50	170	80	34	9	47	
	50	300	80	34	9	47	
	50	300	80	34	9	47	
	25	125	40	19	6.5	23	
	25	125	40	19	6.5	23	
	25	200	40	19	6.5	23	
	25	200	40	19	6.5	23	
	32	140	50	22	6	30	
	32	140	50	22	6	30	
	32	250	50	22	6	30	
	32	250	50	22	6	30	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	50	170	80	34	9	47	
	50	170	80	34	9	47	
	50	300	80	34	9	47	
	50	300	80	34	9	47	



Insert selection

Seat Size	Geometry name
F	GY○○○0300/0318/0324F○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012						
Seat Size	Breaker CW	GU	GS	GM	GL	GFGS
		(For gummy steel)	(Low)	(Medium)	(Aluminium)	(Hardened steel)
F	3.00mm	●	●	●	●	●
	3.18mm	●	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
3.24mm	●				

Seat Size	Geometry name
G	GY○○○0400/0424G○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying)
G	4.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8	●		●	
	4.24mm	●			

● : Standard insert with dimensions

IDENTIFICATION > F008, F009
CUTTING CONDITIONS > F117
CAUTION FOR USE > F120

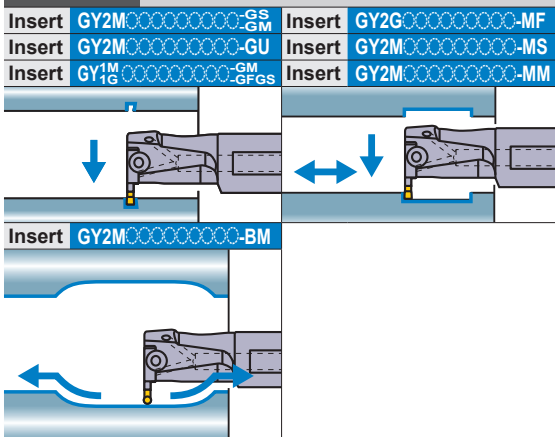
F
GROOVING / CUTTING OFF

GY SERIES (INTERNAL GROOVING)

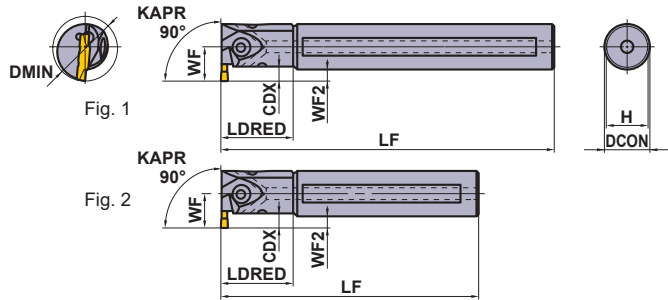
6

90° type holder

Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.



● Mono block type (Air / coolant through)



Right hand tool holder shown.

F GROOVING / CUTTING OFF

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number				Fig.
	CW	CDX *3	DMIN			Holder	Stock	Modular Blade	Stock	
H	4.75 5.00 5.24	7	32	Mono Block	R	GYAR25K90B-H07	●	—	—	2
				Mono Block	L	GYAL25K90B-H07	●	—	—	2
		4.5—11.5 *1	40	Modular	R	GYDR32L90C-M20L	●	GYM20LA-H12	●	4
				Modular	L	GYDL32L90C-M20R	●	GYM20RA-H12	●	4
			Modular	R	GYDR32S90C-M20L	●	GYM20LA-H12	●	3	
				L	GYDL32S90C-M20R	●	GYM20RA-H12	●	3	
	6—11.5 *1	50	Modular	R	GYDR40M90D-M20L	●	GYM20LA-H12	●	4	
			Modular	L	GYDL40M90D-M20R	●	GYM20RA-H12	●	4	
		Modular	R	GYDR40T90D-M20L	●	GYM20LA-H12	●	3		
			L	GYDL40T90D-M20R	●	GYM20RA-H12	●	3		
	7.5—13 *1	60	Modular	R	GYDR40M90D-M25L	●	GYM25LA-H14	●	4	
			Modular	L	GYDL40M90D-M25R	●	GYM25RA-H14	●	4	
		Modular	R	GYDR40T90D-M25L	●	GYM25LA-H14	●	3		
			L	GYDL40T90D-M25R	●	GYM25RA-H14	●	3		
		70	Modular	R	GYDR50P90F-M25L	●	GYM25LA-H14	●	4	
			Modular	L	GYDL50P90F-M25R	●	GYM25RA-H14	●	4	
J	6.00 6.31 6.35	7.5—13 *1	60	Modular	R	GYDR40M90D-M25L	●	GYM25LA-J14	●	4
				Modular	L	GYDL40M90D-M25R	●	GYM25RA-J14	●	4
			Modular	R	GYDR40T90D-M25L	●	GYM25LA-J14	●	3	
				L	GYDL40T90D-M25R	●	GYM25RA-J14	●	3	
		70	Modular	R	GYDR50P90F-M25L	●	GYM25LA-J14	●	4	
			Modular	L	GYDL50P90F-M25R	●	GYM25RA-J14	●	4	
		Modular	R	GYDR50T90F-M25L	●	GYM25LA-J14	●	3		
			L	GYDL50T90F-M25R	●	GYM25RA-J14	●	3		

CW = Cutting Width CDX = Max. Groove Depth DMIN = Minimum cutting diameter

*1 The maximum groove depth (CDX) varies according to the cutting diameter (DMIN). For details, please refer to page F116.

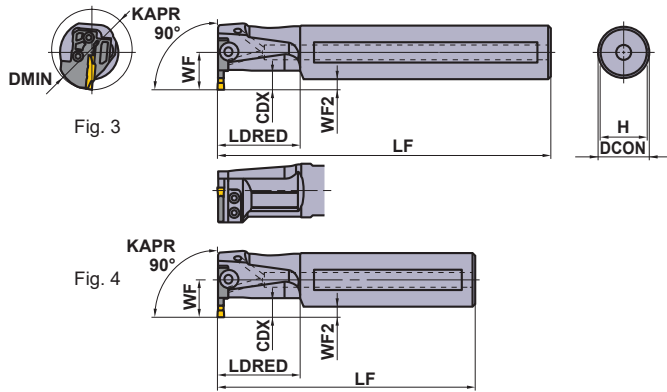
*2 Dimensions shown are when the standard insert is used. If other insert geometries are used then LF, LDRED, WF and WF2 values may vary.

*3 The maximum groove depth (CDX) is a value within the dimension LDRED.

● : Inventory maintained in Japan.

●Modular blade type (Air / coolant through)

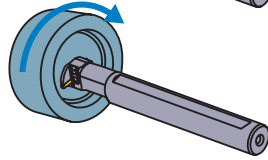
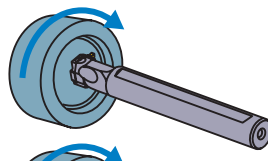
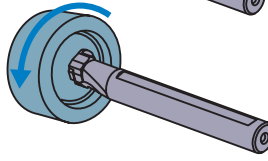
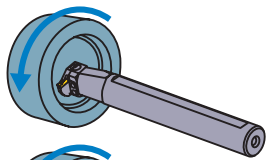
* Wrench : ① : Clamp Screw, ② : Blade Screw



SPARE PARTS			
Holder	① Clamp Screw	② Blade Screw 4 pcs.	① Wrench *
GYAR/L25○90B-○07	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYDR/L32○90C-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYDR/L50○90F-M25L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D

Right hand tool holder shown.

	Dimensions (mm) *2						Cutting Mode
	DCON	LF	LDRED	WF	WF2	H	
	25	125	40	19	6.5	23	R
	25	125	40	19	6.5	23	
	25	200	40	19	6.5	23	
	25	200	40	19	6.5	23	
	32	140	50	22	6	30	L
	32	140	50	22	6	30	
	32	250	50	22	6	30	
	32	250	50	22	6	30	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	50	170	80	34	9	47	
	50	170	80	34	9	47	
	50	300	80	34	9	47	
	50	300	80	34	9	47	
	40	150	60	28	8	37	
	40	150	60	28	8	37	
	40	300	60	28	8	37	
	40	300	60	28	8	37	
	50	170	80	34	9	47	
	50	170	80	34	9	47	
	50	300	80	34	9	47	
	50	300	80	34	9	47	



Insert selection

Seat Size	Geometry name
H	GY○○0475/0500/0524H○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying) Ball nose
H	4.75mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			
	5.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
5.24mm	●				

Seat Size	Geometry name
J	GY○○0600/0631/0635J○○○○○-Breaker shown below

For grooving/cutting off breaker > F011, F012					
Seat Size	Breaker CW	GU	GS	GM	GFGS
		(For gummy steel)	(Low)	(Medium)	(Hardened steel)
J	6.00mm	●	●	●	
	6.35mm	●	●	●	

For multifunctional grooving breaker > F012, F013					
Seat Size	Breaker CW	MF	MS	MM	BM
		(Finish)	(Low)	(Medium)	(Copying) Ball nose
J	6.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	6.31mm	●			
	6.35mm				●
	RE 0.2	●			
	RE 0.4	●			
RE 0.8	●				

● : Standard insert with dimensions

IDENTIFICATION > F008, F009
 CUTTING CONDITIONS > F117
 CAUTION FOR USE > F120

F
GROOVING / CUTTING OFF

GY SERIES (EXTERNAL / FACE GROOVING)



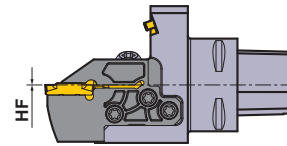
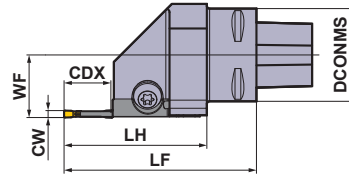
PSC 00° type holder

NEW

Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the right hand modular blade at the right hand holder and the left hand modular blade at the left hand holder.

P	M	K	N	S	H
Steel	Stainless Steel	Cast Iron	Non-ferrous Metal	Difficult-to-Cut Materials	Hardened Steel



Right hand tool holder shown.

GROOVING / CUTTING OFF

Order Number	Stock	Hand (R/L)	Coolant	Mounting Size	DCONMS	CW
C4-GYHERM00-M25R	●	R	External	PSC40	40	2.0–6.35
C4-GYHELM00-M25L	●	L	External	PSC40	40	2.0–6.35
C5-GYHERM00-M25R	●	R	External	PSC50	50	2.0–6.35
C5-GYHELM00-M25L	●	L	External	PSC50	50	2.0–6.35
C6-GYHERM00-M25R	●	R	External	PSC63	63	2.0–6.35
C6-GYHELM00-M25L	●	L	External	PSC63	63	2.0–6.35

(mm)

Set Dimensions with Modular Blades

Holder Type	Modular Blade Type	Standard CW	CDX	WF	HF	LF	LH
C4-GYHER/LM00-M25R/L	GYM25R/LO-D06	2.0	6	27.0	0	69	47.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-D12	2.0	12	27.0	0	77	55.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-D20	2.0	20	27.0	0	83	61.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-E06	2.5	6	27.0	0	69	47.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-E12	2.5	12	27.0	0	77	55.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-E20	2.5	20	27.0	0	83	61.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-F06	3.0	6	27.0	0	69	47.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-F12	3.0	12	27.0	0	77	55.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-F20	3.0	20	27.0	0	83	61.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-G08	4.0	8	27.0	0	71	49.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-G14	4.0	14	27.0	0	77	55.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-G25	4.0	25	27.0	0	88	66.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-H08	5.0	8	27.0	0	71	49.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-H14	5.0	14	27.0	0	77	55.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-H25	5.0	25	27.0	0	88	66.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-J08	6.0	8	27.0	0	71	49.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-J14	6.0	14	27.0	0	77	55.6
C4-GYHER/LM00-M25R/L	GYM25R/LO-J25	6.0	25	27.0	0	88	66.6

(mm)

*Modular blade type: Blades for face machining indicate a code for the minimum face grooving diameter. Example) GYM25RD-D12-040

The "O" symbol is a position to insert the letter "A" for external diameter machining or "D" for face machining.

Note 1) The indicated dimensions are values for standard inserts (GM breakers). If other inserts are mounted, LF and LH may differ. Select the inserts and recommended conditions from "TOOL NEWS B255J-G GYGW Inserts".

● : Inventory maintained in Japan.

(mm)







Holder Type	Modular Blade Type	Standard CW	CDX	WF	HF	LF	LH
C5-GYHER/LM00-M25R/L	GYM25R/L-D06	2.0	6	35.0	0	69	47.6
C5-GYHER/LM00-M25R/L	GYM25R/L-D12	2.0	12	35.0	0	77	55.6
C5-GYHER/LM00-M25R/L	GYM25R/L-D20	2.0	20	35.0	0	83	61.6
C5-GYHER/LM00-M25R/L	GYM25R/L-E06	2.5	6	35.0	0	69	47.6
C5-GYHER/LM00-M25R/L	GYM25R/L-E12	2.5	12	35.0	0	77	55.6
C5-GYHER/LM00-M25R/L	GYM25R/L-E20	2.5	20	35.0	0	83	61.6
C5-GYHER/LM00-M25R/L	GYM25R/L-F06	3.0	6	35.0	0	69	47.6
C5-GYHER/LM00-M25R/L	GYM25R/L-F12	3.0	12	35.0	0	77	55.6
C5-GYHER/LM00-M25R/L	GYM25R/L-F20	3.0	20	35.0	0	83	61.6
C5-GYHER/LM00-M25R/L	GYM25R/L-G08	4.0	8	35.0	0	71	49.6
C5-GYHER/LM00-M25R/L	GYM25R/L-G14	4.0	14	35.0	0	77	55.6
C5-GYHER/LM00-M25R/L	GYM25R/L-G25	4.0	25	35.0	0	88	66.6
C5-GYHER/LM00-M25R/L	GYM25R/L-H08	5.0	8	35.0	0	71	49.6
C5-GYHER/LM00-M25R/L	GYM25R/L-H14	5.0	14	35.0	0	77	55.6
C5-GYHER/LM00-M25R/L	GYM25R/L-H25	5.0	25	35.0	0	88	66.6
C5-GYHER/LM00-M25R/L	GYM25R/L-J08	6.0	8	35.0	0	71	49.6
C5-GYHER/LM00-M25R/L	GYM25R/L-J14	6.0	14	35.0	0	77	55.6
C5-GYHER/LM00-M25R/L	GYM25R/L-J25	6.0	25	35.0	0	88	66.6
C6-GYHER/LM00-M25R/L	GYM25R/L-D06	2.0	6	45.0	0	71	47.6
C6-GYHER/LM00-M25R/L	GYM25R/L-D12	2.0	12	45.0	0	79	55.6
C6-GYHER/LM00-M25R/L	GYM25R/L-D20	2.0	20	45.0	0	85	61.6
C6-GYHER/LM00-M25R/L	GYM25R/L-E06	2.5	6	45.0	0	71	47.6
C6-GYHER/LM00-M25R/L	GYM25R/L-E12	2.5	12	45.0	0	79	55.6
C6-GYHER/LM00-M25R/L	GYM25R/L-E20	2.5	20	45.0	0	85	61.6
C6-GYHER/LM00-M25R/L	GYM25R/L-F06	3.0	6	45.0	0	71	47.6
C6-GYHER/LM00-M25R/L	GYM25R/L-F12	3.0	12	45.0	0	79	55.6
C6-GYHER/LM00-M25R/L	GYM25R/L-F20	3.0	20	45.0	0	85	61.6
C6-GYHER/LM00-M25R/L	GYM25R/L-G08	4.0	8	45.0	0	73	49.6
C6-GYHER/LM00-M25R/L	GYM25R/L-G14	4.0	14	45.0	0	79	55.6
C6-GYHER/LM00-M25R/L	GYM25R/L-G25	4.0	25	45.0	0	90	66.6
C6-GYHER/LM00-M25R/L	GYM25R/L-H08	5.0	8	45.0	0	73	49.6
C6-GYHER/LM00-M25R/L	GYM25R/L-H14	5.0	14	45.0	0	79	55.6
C6-GYHER/LM00-M25R/L	GYM25R/L-H25	5.0	25	45.0	0	90	66.6
C6-GYHER/LM00-M25R/L	GYM25R/L-J08	6.0	8	45.0	0	73	49.6
C6-GYHER/LM00-M25R/L	GYM25R/L-J14	6.0	14	45.0	0	79	55.6
C6-GYHER/LM00-M25R/L	GYM25R/L-J25	6.0	25	45.0	0	90	66.6

*Modular blade type: Blades for face machining indicate a code for the minimum face grooving diameter. Example) GYM25RD-D12-040

The "○" symbol is a position to insert the letter "A" for external diameter machining or "D" for face machining.

Note 1) The indicated dimensions are values for standard inserts (GM breakers). If other inserts are mounted, LF and LH may differ. Select the inserts and recommended conditions from "TOOL NEWS B255J-G GYGW Inserts".

SPARE PARTS

											
Order Number	Pcs.	Order Number	Pcs.	Order Number	Pcs.	Order Number	Pcs.	Order Number	Order Number		
GY06013M	1	TS55	5	HSD05004S	1	NZ22042080S	1	TKY25D	TKY30R		

* Clamp Torque (N · m) : GY06013M=6.0, TS55=5.0

Nozzle Exchange Key : NZKH050S

IDENTIFICATION	> F010
INSERTS	> F011 – F013
CUTTING CONDITIONS	> F100, F110
CAUTION FOR USE	> F106, F112

GY SERIES (EXTERNAL / FACE GROOVING)



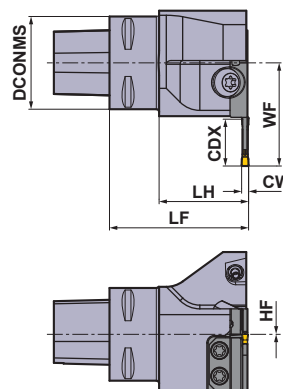
PSC 90° type holder

NEW

Note 1) Please order the modular blade and modular holder separately.

Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

P	M	K	N	S	H
Steel	Stainless Steel	Cast Iron	Non-ferrous Metal	Difficult-to-Cut Materials	Hardened Steel



Left hand tool holder shown.

GROOVING / CUTTING OFF

Order Number	Stock	Hand (R/L)	Coolant	Mounting Size	DCONMS	CW
C4-GYHERM90-M25L	●	R	External	PSC40	40	2.0-6.35
C4-GYHELM90-M25R	●	L	External	PSC40	40	2.0-6.35
C5-GYHERM90-M25L	●	R	External	PSC50	50	2.0-6.35
C5-GYHELM90-M25R	●	L	External	PSC50	50	2.0-6.35
C6-GYHERM90-M25L	●	R	External	PSC63	63	2.0-6.35
C6-GYHELM90-M25R	●	L	External	PSC63	63	2.0-6.35

(mm)

Set Dimensions with Modular Blades

(mm)

Holder Type	Modular Blade Type	Standard CW	CDX	WF	HF	LF	LH
C4-GYHER/LM90-M25L/R	GYM25L/R-D06	2.0	6	30.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-D12	2.0	12	38.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-D20	2.0	20	44.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-E06	2.5	6	30.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-E12	2.5	12	38.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-E20	2.5	20	44.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-F06	3.0	6	30.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-F12	3.0	12	38.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-F20	3.0	20	44.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-G08	4.0	8	32.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-G14	4.0	14	38.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-G25	4.0	25	49.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-H08	5.0	8	32.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-H14	5.0	14	38.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-H25	5.0	25	49.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-J08	6.0	8	32.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-J14	6.0	14	38.5	0	60	38.6
C4-GYHER/LM90-M25L/R	GYM25L/R-J25	6.0	25	49.5	0	60	38.6

*Modular blade type: Blades for face machining indicate a code for the minimum face grooving diameter. Example) GYM25RD-D12-040

The "○" symbol is a position to insert the letter "A" for external diameter machining or "D" for face machining.

Note 1) The indicated dimensions are values for standard inserts (GM breakers). If other inserts are mounted, LF and LH may differ. Select the inserts and recommended conditions from "TOOL NEWS B255J-G GYGW Inserts".

● : Inventory maintained in Japan.

(mm)







Holder Type	Modular Blade Type	Standard CW	CDX	WF	HF	LF	LH
C5-GYHER/LM90-M25L/R	GYM25L/R-D06	2.0	6	33.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-D12	2.0	12	41.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-D20	2.0	20	47.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-E06	2.5	6	33.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-E12	2.5	12	41.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-E20	2.5	20	47.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-F06	3.0	6	33.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-F12	3.0	12	41.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-F20	3.0	20	47.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-G08	4.0	8	35.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-G14	4.0	14	41.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-G25	4.0	25	52.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-H08	5.0	8	35.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-H14	5.0	14	41.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-H25	5.0	25	52.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-J08	6.0	8	35.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-J14	6.0	14	41.0	0	60	38.6
C5-GYHER/LM90-M25L/R	GYM25L/R-J25	6.0	25	52.0	0	60	38.6
C6-GYHER/LM90-M25L/R	GYM25L/R-D06	2.0	6	40.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-D12	2.0	12	48.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-D20	2.0	20	54.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-E06	2.5	6	40.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-E12	2.5	12	48.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-E20	2.5	20	54.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-F06	3.0	6	40.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-F12	3.0	12	48.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-F20	3.0	20	54.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-G08	4.0	8	42.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-G14	4.0	14	48.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-G25	4.0	25	59.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-H08	5.0	8	42.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-H14	5.0	14	48.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-H25	5.0	25	59.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-J08	6.0	8	42.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-J14	6.0	14	48.0	0	70	46.6
C6-GYHER/LM90-M25L/R	GYM25L/R-J25	6.0	25	59.0	0	70	46.6

*Modular blade type: Blades for face machining indicate a code for the minimum face grooving diameter. Example) GYM25RD-D12-040

The "○" symbol is a position to insert the letter "A" for external diameter machining or "D" for face machining.

Note 1) The indicated dimensions are values for standard inserts (GM breakers). If other inserts are mounted, LF and LH may differ. Select the inserts and recommended conditions from "TOOL NEWS B255J-G GYGW Inserts".

SPARE PARTS

											
Order Number	Pcs.	Order Number	Pcs.	Order Number	Pcs.	Order Number	Pcs.	Order Number	Order Number		
GY06013M	1	TS55	5	HSD05004S	1	NZ22042080S	1	TKY25D	TKY30R		

* Clamp Torque (N · m) : GY06013M=6.0, TS55=5.0

Nozzle Exchange Key : NZKH050S

IDENTIFICATION	> F010
INSERTS	> F011 – F013
CUTTING CONDITIONS	> F100, F110
CAUTION FOR USE	> F106, F112

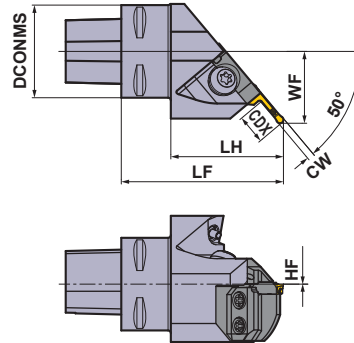
GY SERIES (FOR RECESSING)



PSC For 50° recessing holder **NEW**

Note 1) Please order the modular blade and modular holder separately.
 Note 2) Please set the left hand modular blade at the right hand holder and the right hand modular blade at the left hand holder.

- P
 - M
 - K
 - N
 - S
 - H
- Steel Stainless Steel Cast Iron Non-ferrous Metal Difficult-to-Cut Materials Hardened Steel



Left hand tool holder shown.

GROOVING / CUTTING OFF

Order Number	Stock	Hand (R/L)	Coolant	Mounting Size	DCONMS	CW
C4-GYHERM50-M25L	●	R	External	PSC40	40	2.0-6.35
C4-GYHELM50-M25R	●	L	External	PSC40	40	2.0-6.35
C5-GYHERM50-M25L	●	R	External	PSC50	50	2.0-6.35
C5-GYHELM50-M25R	●	L	External	PSC50	50	2.0-6.35
C6-GYHERM50-M25L	●	R	External	PSC63	63	2.0-6.35
C6-GYHELM50-M25R	●	L	External	PSC63	63	2.0-6.35

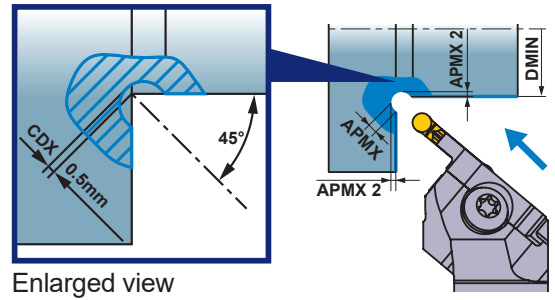
(mm)

SPARE PARTS

*		*									
Clamp Screw		Blade Screw		Plug		Nozzle		Wrench 1		Wrench 2	
Order Number	Pcs.	Order Number	Pcs.	Order Number	Pcs.	Order Number	Pcs.	Order Number	Order Number	Order Number	Order Number
GY06013M	1	TS55	4	HSD05004S	1	NZ22042080S	1	TKY25D		TKY30R	

* Clamp Torque (N · m) : GY06013M=6.0, TS55=5.0
 Nozzle Exchange Key : NZKH050S

● : Inventory maintained in Japan.



Enlarged view

Set Dimensions with Modular Blades

(mm)

Holder Type	Modular Blade Type	Standard CW	CDX	DMIN	APMX	APMX2	WF	HF	LF	LH
C4-GYHER/LM50-M25L/R	GYM25L/RC-D005	2.0	0.5	30	1.50	0.646	30.6	0	70.2	48.8
C4-GYHER/LM50-M25L/R	GYM25L/RC-E005	2.5	0.5	30	1.75	0.720	30.8	0	70.1	48.7
C4-GYHER/LM50-M25L/R	GYM25L/RC-F005	3.0	0.5	30	2.00	0.793	31.0	0	70.0	48.6
C4-GYHER/LM50-M25L/R	GYM25L/RC-G005	4.0	0.5	20	2.50	0.939	31.4	0	69.8	48.4
C4-GYHER/LM50-M25L/R	GYM25L/RC-H005	5.0	0.5	20	2.88	1.049	31.8	0	69.6	48.2
C4-GYHER/LM50-M25L/R	GYM25L/RC-J005	6.0	0.5	20	3.50	1.232	32.4	0	69.4	48.0
C5-GYHER/LM50-M25L/R	GYM25L/RC-D005	2.0	0.5	30	1.50	0.646	32.6	0	70.2	48.8
C5-GYHER/LM50-M25L/R	GYM25L/RC-E005	2.5	0.5	30	1.75	0.720	32.8	0	70.1	48.7
C5-GYHER/LM50-M25L/R	GYM25L/RC-F005	3.0	0.5	30	2.00	0.793	33.0	0	70.0	48.6
C5-GYHER/LM50-M25L/R	GYM25L/RC-G005	4.0	0.5	20	2.50	0.939	33.4	0	69.8	48.4
C5-GYHER/LM50-M25L/R	GYM25L/RC-H005	5.0	0.5	20	2.88	1.049	33.8	0	69.6	48.2
C5-GYHER/LM50-M25L/R	GYM25L/RC-J005	6.0	0.5	20	3.50	1.232	34.4	0	69.4	48.0
C6-GYHER/LM50-M25L/R	GYM25L/RC-D005	2.0	0.5	30	1.50	0.646	39.6	0	70.2	46.8
C6-GYHER/LM50-M25L/R	GYM25L/RC-E005	2.5	0.5	30	1.75	0.720	39.8	0	70.1	46.7
C6-GYHER/LM50-M25L/R	GYM25L/RC-F005	3.0	0.5	30	2.00	0.793	40.0	0	70.0	46.6
C6-GYHER/LM50-M25L/R	GYM25L/RC-G005	4.0	0.5	20	2.50	0.939	40.4	0	69.8	46.4
C6-GYHER/LM50-M25L/R	GYM25L/RC-H005	5.0	0.5	20	2.88	1.049	40.8	0	69.6	46.2
C6-GYHER/LM50-M25L/R	GYM25L/RC-J005	6.0	0.5	20	3.50	1.232	41.4	0	69.4	46.0

DMIN = Minimum cutting diameter

Note 1) The indicated dimensions are values for standard inserts (BM breakers). If other inserts are mounted, LF and LH may differ. Select the inserts and recommended conditions from "TOOL NEWS B255J-G GYGW Inserts".

F

GROOVING / CUTTING OFF

IDENTIFICATION	> F010
INSERTS	> F013
CUTTING CONDITIONS	> F105
CAUTION FOR USE	> F105

GROOVING / CUTTING OFF

RECOMMENDED CUTTING SPEED [For External Grooving / Cutting Off]

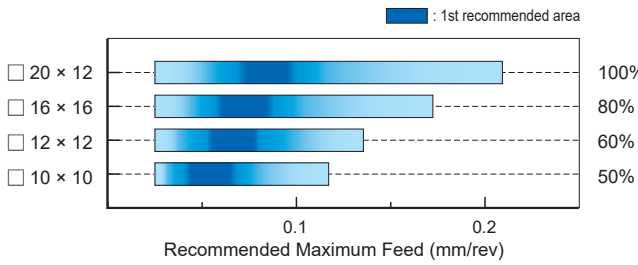
Workpiece Material	Hardness	Grade	Cutting Speed vc (m/min)							
			50	100	150	200	250	300	500	
P Mild Steel	≤160HB	VP20RT		100		220				
		VP10RT		110		230				
		NX2525		90		210				
	Carbon Steel Alloy Steel	160–280HB	VP20RT		80		180			
			VP10RT		90		190			
			MY5015		110		250			
		≥280HB	VP20RT		60		140			
			VP10RT		70		150			
		MY5015		90		210				
		NX2525		55		135				
M Stainless Steel	≤270HB	VP20RT		60		140				
		VP10RT		70		150				
K Gray Cast Iron	Tensile Strength ≤300MPa	VP20RT		80		180				
		VP10RT		90		190				
		MY5015		140		300				
	Ductile Cast Iron	Tensile Strength ≤800MPa	VP20RT		60		140			
			VP10RT		70		150			
			MY5015		90		210			
S Heat Resistant Alloy Titanium Alloy	—	MP9015		40		100				
		MP9025		30		90				
		VP20RT		30		60				
		VP10RT/ RT9010		40		70				
H Hardened Steel	≥50HRC	BC8110		80		120				
N Aluminium Alloys (A6061, 7075)	Content Si<5%	RT9010					200		500	
		Aluminium Alloys (AC4B)					200		500	
		Aluminium Alloys (ADC12, A390)				100		200		

Note 1) For MP9015, MP9025, VP10RT, VP20RT and MY5015, wet cutting is recommended.

RECOMMENDED CUTTING CONDITIONS [For External Grooving / Cutting Off]

Recommended cutting conditions when combining a GYHR/L2525M00/90-M25R/L modular holder and GYM25R/LA-○○○ modular blade.

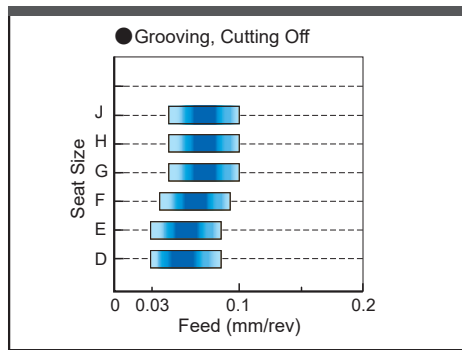
In the case of mono block type holder for Swiss style lathes



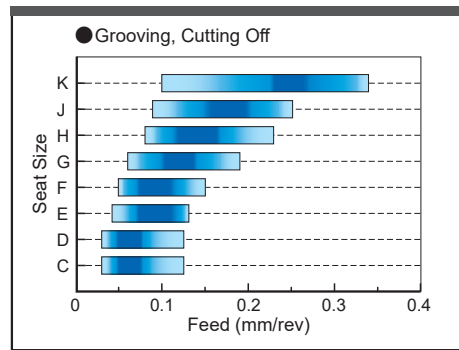
Please refer to the tables above on recommended cutting conditions for external grooving and cutting off. Apply the percentage ratio shown on each shank size with the values in the table.

Recommended feed rate and depth of cut

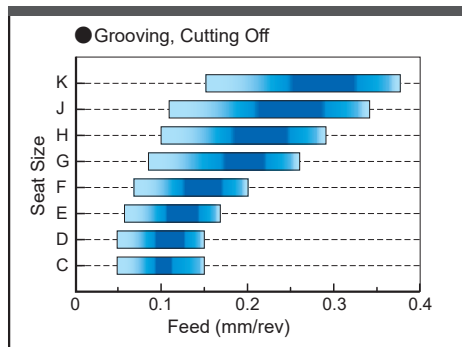
GU BREAKER



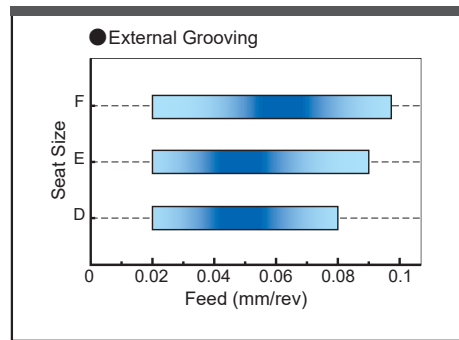
GS BREAKER



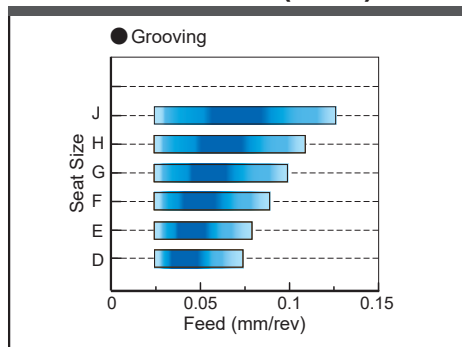
GM BREAKER



GL BREAKER



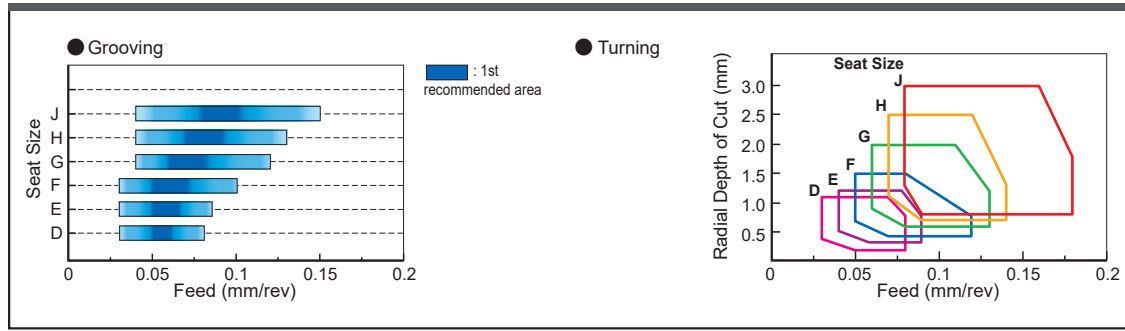
FLAT TOP GFGS (CBN)



Seat Size	Insert Width (mm)
	C
D	2.00
	2.24
E	2.39
	2.50
	2.74
F	3.00
	3.18
	3.24
G	4.00
	4.24
H	4.75
	5.00
	5.24
J	6.00
	6.31
	6.35
K	8.00

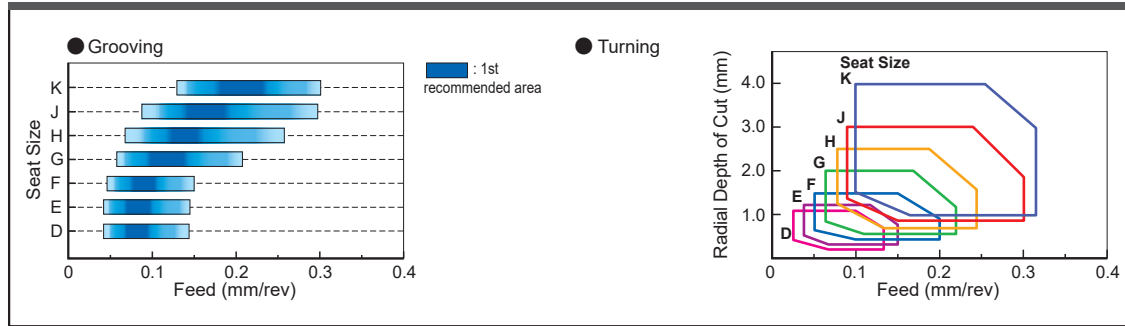
GROOVING / CUTTING OFF

MF BREAKER

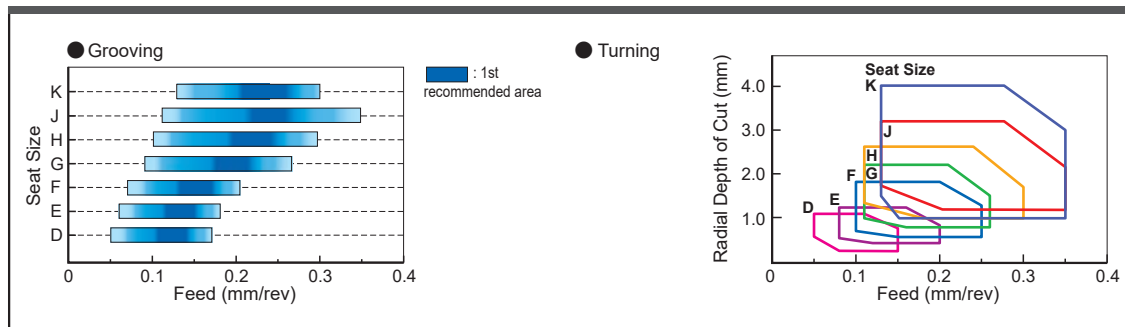


Seat Size	
Insert Width (mm)	
D	2.00
D	2.24
E	2.39
E	2.50
F	3.00
F	3.18
F	3.24
G	4.00
G	4.24
H	4.75
H	5.00
H	5.24
J	6.00
J	6.31
J	6.35
K	8.00

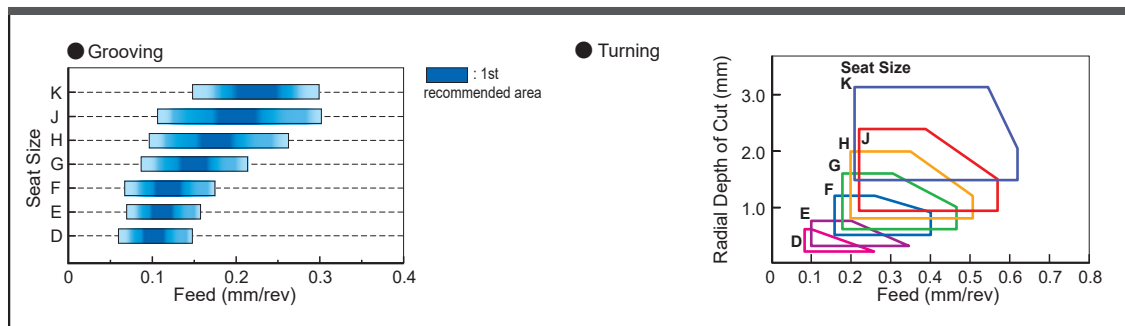
MS BREAKER



MM BREAKER

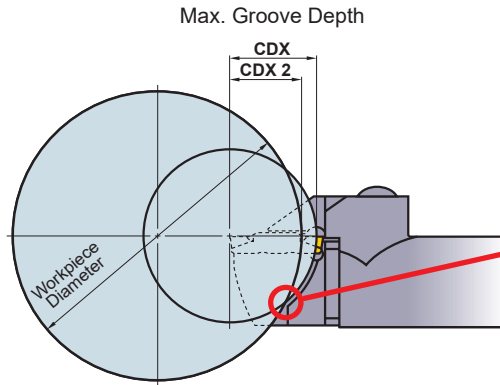


BM BREAKER

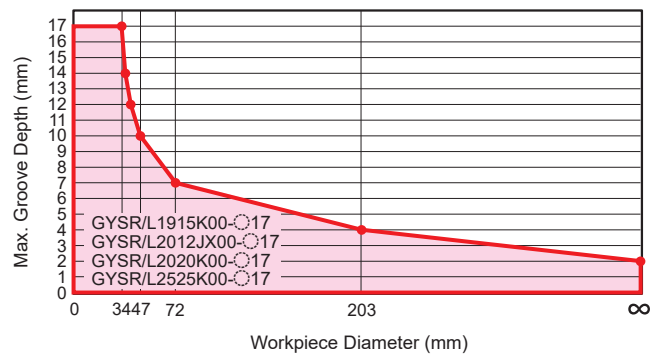
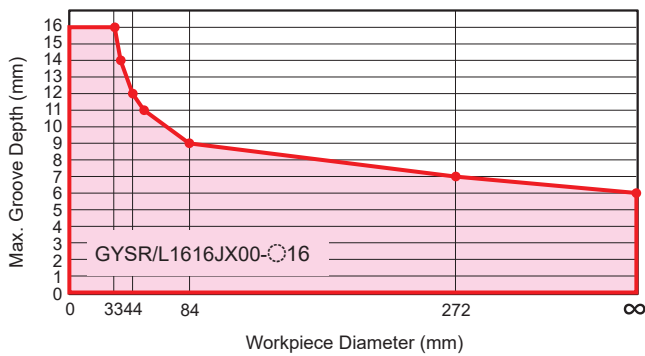
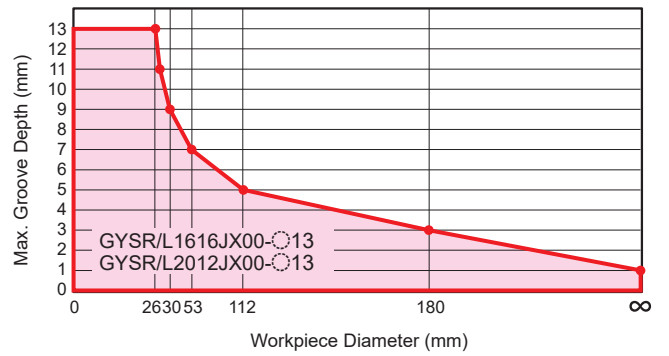
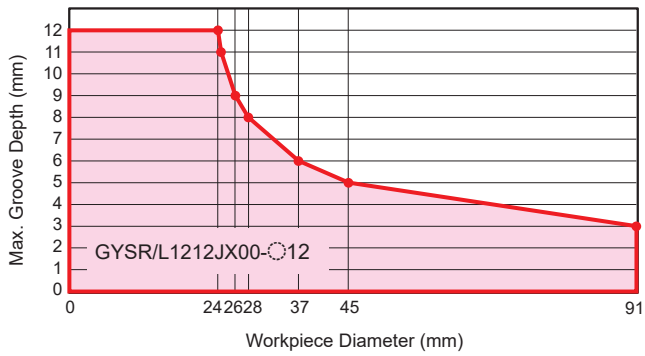
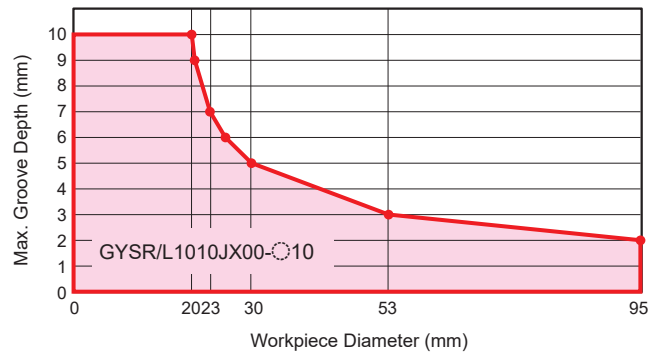
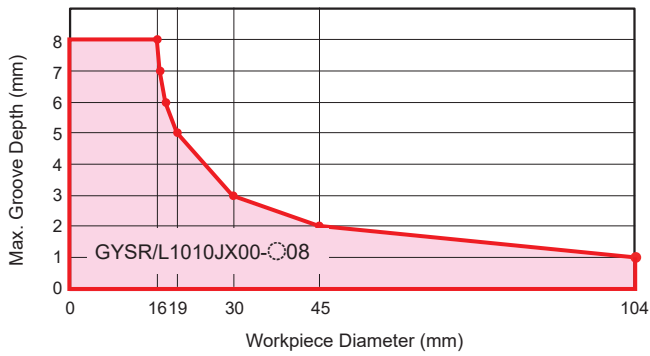


LIMITATION OF THE MAXIMUM GROOVE DEPTH [For External Grooving]

The maximum groove depth is limited by the workpiece diameter.

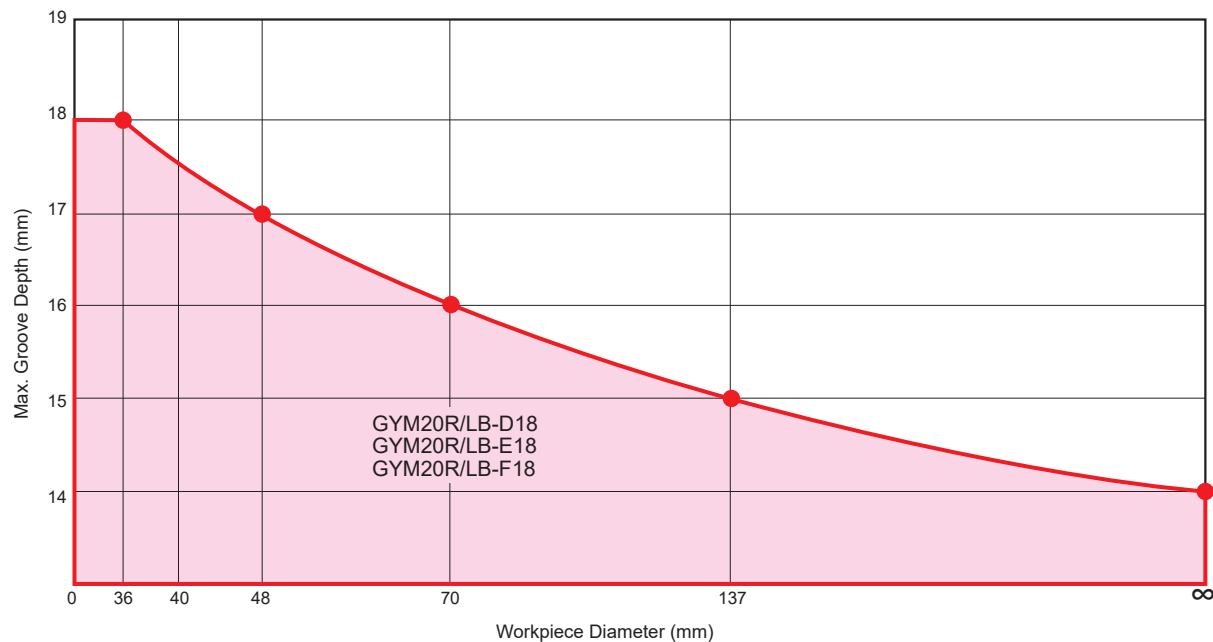
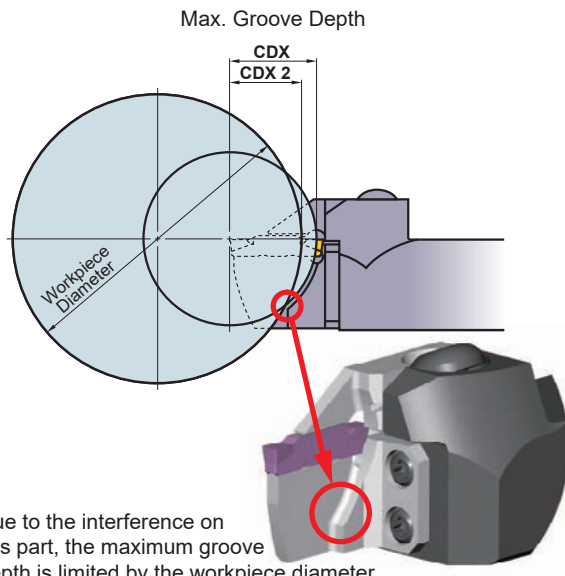


Due to interference, the maximum groove depth is limited by the workpiece diameter.



LIMITATION OF THE MAXIMUM GROOVE DEPTH [For External Grooving]

- When using the modular blade GYM \odot R/LA- $\odot\odot\odot$
The maximum groove depth is not limited by the workpiece diameter.
- When using the modular blade GYM \odot R/LB- $\odot\odot\odot$
The maximum groove depth is limited by the workpiece diameter.



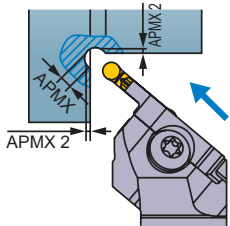
RECOMMENDED CUTTING SPEED [For External Recessing]

Workpiece Material	Hardness	Grade	Cutting Speed v_c (m/min)							
			50	100	150	200	250			
P Mild Steel Carbon Steel Alloy Steel Carbon Steel Alloy Steel	≤180HB	VP20RT	80		180					
		VP10RT	90		190					
	180–280HB	VP20RT	60		140					
		VP10RT	70		150					
		MY5015	90		210					
		NX2525	55		135					
	280–350HB	VP20RT	50		110					
		VP10RT	60		120					
		MY5015	80		160					
		NX2525	45		105					
	M Stainless Steel	≤350HB	VP20RT	50		110				
			VP10RT	60		120				
K Gray Cast Iron Ductile Cast Iron	Tensile Strength ≤350MPa	VP20RT	60		140					
		VP10RT	70		150					
		MY5015	90		210					
	Tensile Strength ≤800MPa	VP20RT	50		110					
		VP10RT	60		120					
		MY5015	80		160					
S Heat Resistant Alloy Titanium Alloy	-	MP9015	40		100					
		MP9025	30		90					
		VP20RT	30		60					
		VP10RT	40		70					

Note 1) For MP9015, MP9025, VP10RT, VP20RT and MY5015, wet cutting is recommended.

F
GROOVING / CUTTING OFF

DISTANCE FROM WORK SURFACE TO RECESS DEPTH

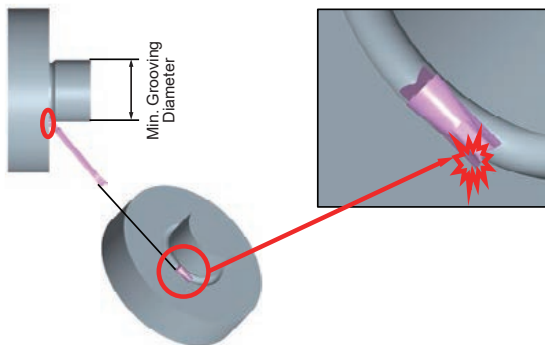


Cutting Width CW (mm)	Recess Depth APMX (mm)	Distance from Work Surface to Recess Depth APMX 2 (mm)
2.00	1.50	0.646
2.50	1.75	0.720
3.00	2.00	0.793
3.18	2.09	0.819
4.00	2.50	0.939
4.75	2.88	1.049
5.00	3.00	1.086
6.00	3.50	1.232
6.35	3.68	1.283

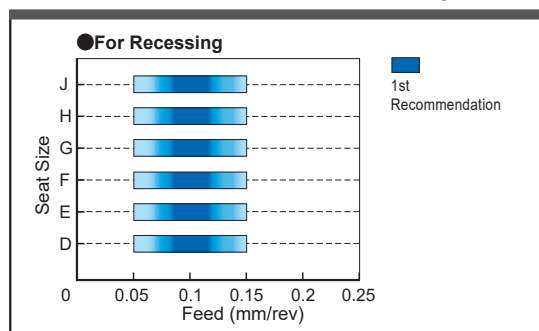
BM BREAKER

Minimum grooving diameter

Ensure the tool is suitable for the diameter being machined. Refer to the Min. Grooving Diameter as shown in the table on the “page number” to avoid a collision with the workpiece shown below.



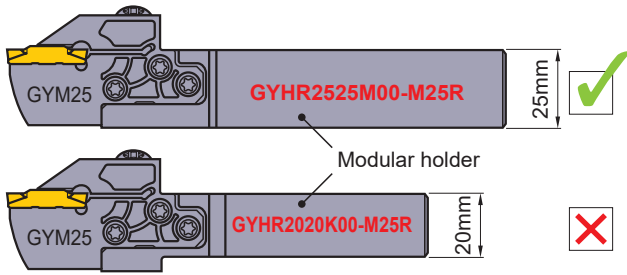
Recommended feed rate and depth of cut



TOOL SELECTION

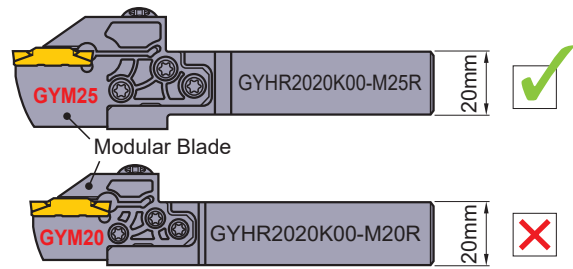
Notes when selecting the tool body

Precautions when selecting a modular holder.



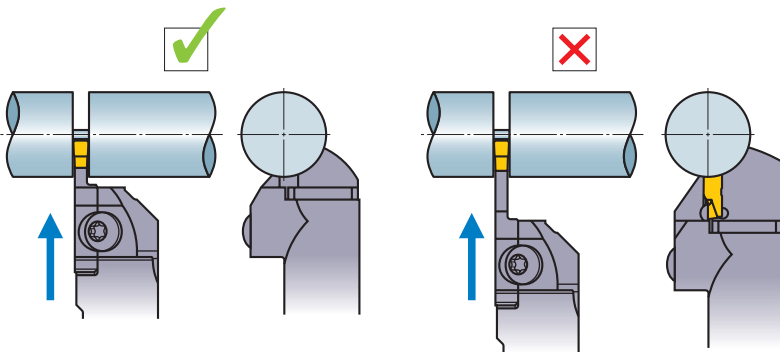
● Select a modular holder with the largest possible shank size to maintain mounting rigidity.

Modular blade (1)



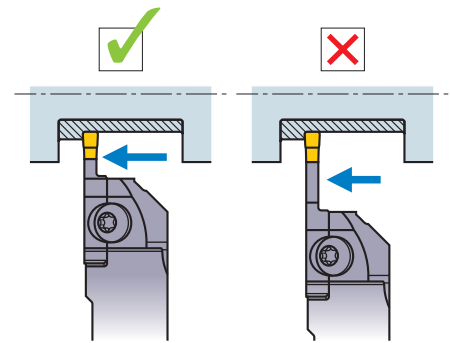
● If there is no restriction for use, select the largest modular blade for the same shank size.

Modular blade (2)



● Select the shortest possible blade suitable for the application.

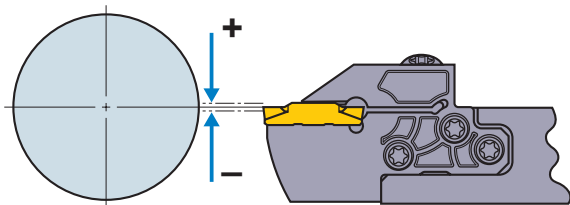
Modular blade (3)



● Select the shortest possible blade suitable for the application.

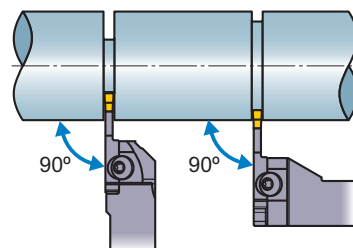
Notes when setting the tool

Setting of cutting edge height



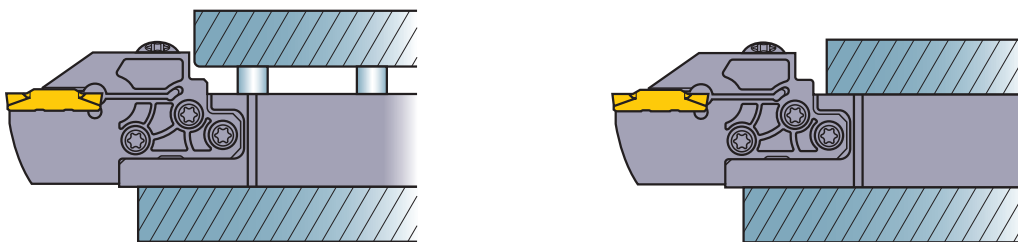
<Grooving/Cross-feed machining>
Set the cutting edge height to $\pm 0.1\text{mm}$ parallel to the central axis.
<Cutting off>
Set the cutting edge height to $0\text{--}+0.2\text{mm}$ parallel to the central axis.

Tool body setting angle



● Set the insert perpendicular to the central axis.

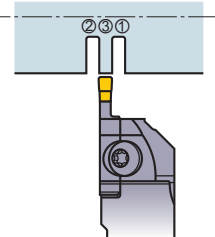
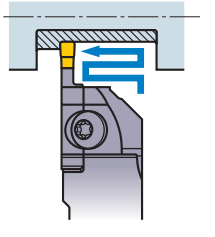
Overhang



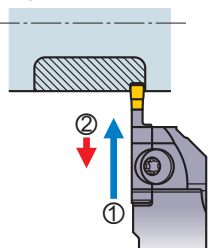
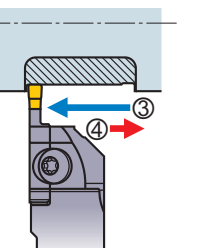
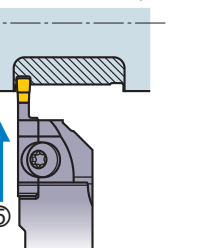
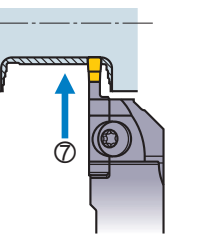
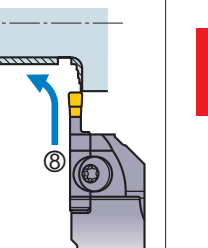
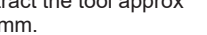
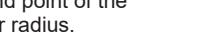
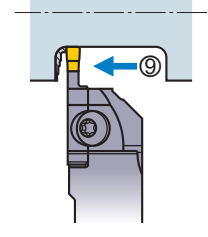
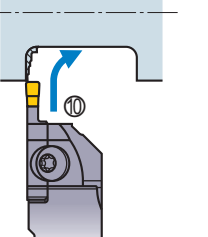
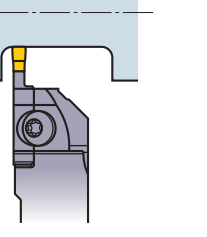
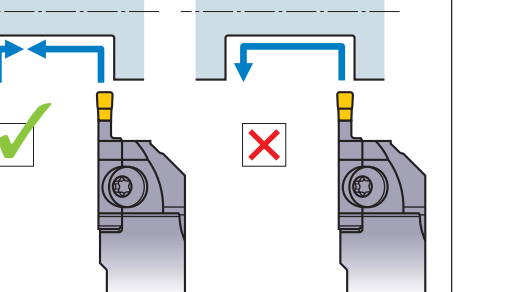
● When setting the tool, ensure that the overhang is as short as possible and avoid the step difference part as above figure shows.

MACHINING RECOMMENDATIONS

Notes on multi-functional machining (MF, MS and MM breakers)

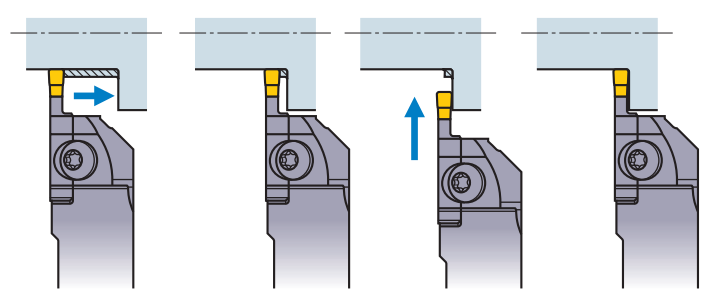
Machining narrow grooves	Machining wide grooves
 <p>● It is recommended to carry out plunging in several passes. Following the steps above makes it difficult for chips to elongate. This also improves the accuracy of workpiece wall surface.</p>	 <p>● It is recommended that cross-feed machining is used.</p>

Machining wide grooves

ROUGHING			FINISHING	
 <p>① Carry out grooving.</p>	 <p>② Retract the tool approx 0.1mm.</p>	 <p>③ Carry out cross feed machining.</p>	 <p>④ Retract the tool approx 0.1mm.</p>	 <p>⑤ Carry out grooving.</p>
<p>⑥ Retract the tool approx 0.1mm.</p>	<p>* Repeat the steps ①-⑥.</p>	 <p>⑦ Carry out grooving to the end point of the corner radius.</p>	 <p>⑧ Machining of the wall surface, corner radius and bottom face should be carried out in one process.</p>	
FINISHING			Precautions when finishing walls	
 <p>⑨ Stop at the bottom of the corner radius.</p>	 <p>⑩ Machine the counter wall to the corner radius in one process.</p>	 <p>⑪ Finish machining.</p>	 <p>● To produce high accuracy walls using MS or MM breaker insert, do not carry out back turning. Plunging is recommended.</p>	

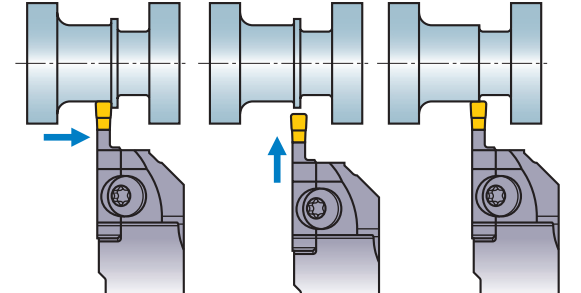
F
GROOVING / CUTTING OFF

Wall machining



● When machining a wall, chip jamming can occur. In this case, stop cross feed machining just before the wall (at a point less than the insert width) then remove the remaining material by plunging.

Machining of a ring section

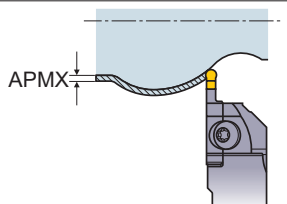


● When a ring remains in a cross feed end process, finish cross feed machining 1-1.5mm short of the end point, then remove the ring by plunging.

MACHINING RECOMMENDATIONS

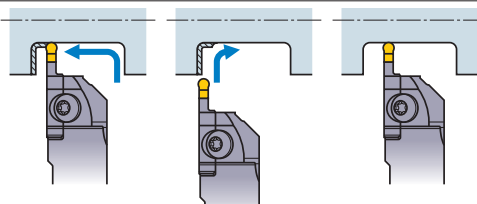
Notes on multi-functional machining (BM breaker)

Copying



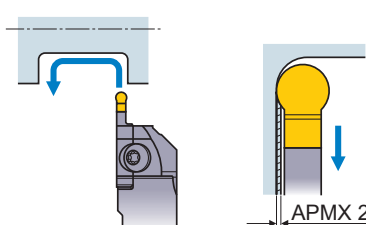
● With the BM breaker insert, 3 dimensional copying is possible. Set the depth of cut (APMX) to 40% less than the insert width.

Roughing



● Use plunging and cross-feed machining. When machining the corner, vibration is likely to occur. To avoid this, reduce the feed by 50%.

Finishing



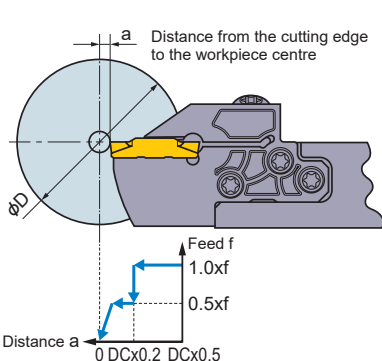
Insert	APMX 2 (mm)
GY2M0200D100N-BM	0.05
GY2M0250E125N-BM	0.10
GY2M0300F150N-BM	0.15
GY2M0318F159N-BM	
GY2M0400G200N-BM	0.20
GY2M0475H238N-BM	0.24
GY2M0500H250N-BM	
GY2M0600J300N-BM	0.30
GY2M0635J318N-BM	0.40
GY2M0800K400N-BM	

● Carry out finishing in one process. For the depth of cut (APMX 2) when back turning, refer to the table on the right.

Notes for cutting off

Feed

<Feed>

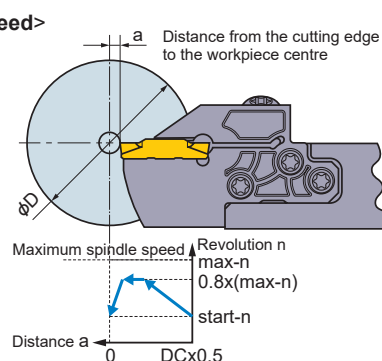


● When the cutting edge approaches the centre, reduce the feed by 50%.

● If necessary, stop the feed prior to reaching the centre of the workpiece to prevent it falling under its own weight.

Revolution

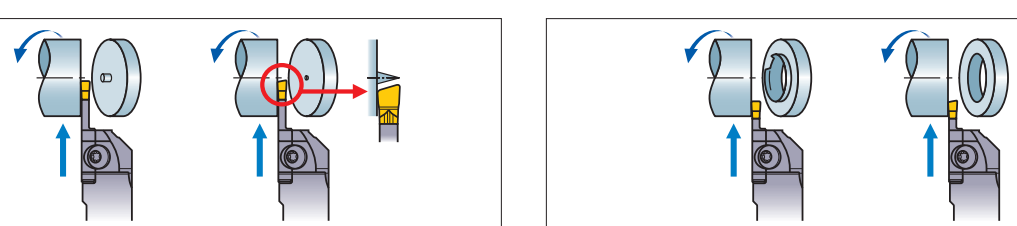
<Spindle speed>



● When using constant cutting speed during a cutting off cycle, it is recommended to limit the spindle speed to 80% of maximum to ensure stability.

● To prevent the workpiece from being expelled, lower the spindle speed before finishing the grooving operation.

Insert



● When there is a centre stub on solid bar work or burrs are formed on pipe material, it is possible to decrease them by using a handed insert. With a handed insert, machining tends to be less stable when compared to using a neutral insert. Pay special attention to avoid fracturing of the cutting edge and decrease the feed when necessary.

F

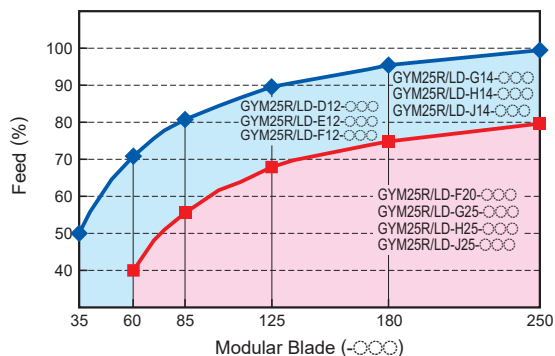
GROOVING / CUTTING OFF

Memo

A series of horizontal dashed lines for writing.

GROOVING / CUTTING OFF

RELATIONSHIP BETWEEN THE MODULAR BLADE AND FEED PER ROTATION [For Face Grooving]



Note 1) Adjust the feed per rotation in the cutting conditions to the percentage shown in the table above.

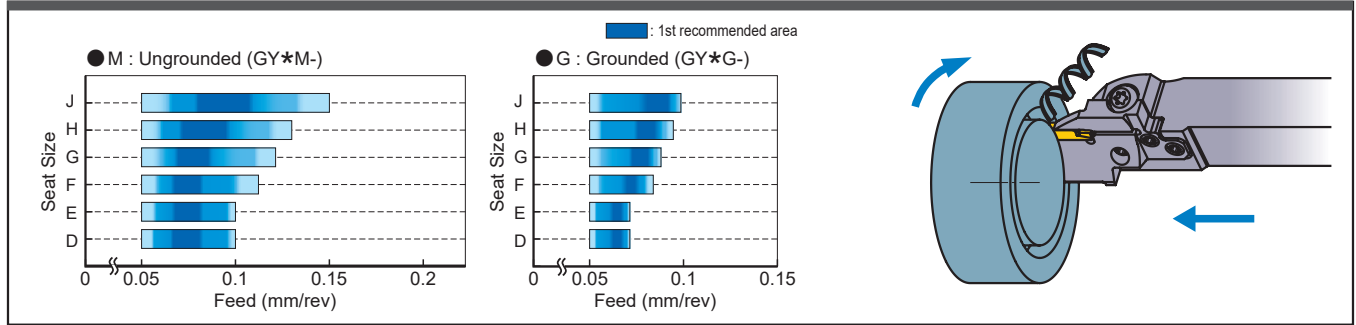
RECOMMENDED CUTTING SPEED [For Face Grooving]

Workpiece Material	Hardness	Grade	Cutting Speed (m/min)						
			50	100	150	200	250	300	
P Mild Steel Carbon Steel Alloy Steel	≤160HB	VP20RT	80		180				
		VP10RT	90		190				
		NX2525	70		170				
	160–280HB	VP20RT	60		140				
		VP10RT	70		150				
		MY5015	90		210				
		NX2525	55		135				
		≥280HB	VP20RT	50		110			
			VP10RT	60		120			
	M Stainless Steel	≤270HB	VP20RT	50		110			
			VP10RT	60		120			
	K Gray Cast Iron Ductile Cast Iron	Tensile Strength ≤300MPa	VP20RT	60		140			
VP10RT			70		150				
MY5015			90		210				
Tensile Strength ≤800MPa		VP20RT	50		110				
		VP10RT	60		120				
		MY5015	80		160				
S Heat Resistant Alloy Titanium Alloy	—	MP9015	40		100				
		MP9025	30		90				
		VP20RT	30		60				
		VP10RT	40		70				
		RT9010	40		70				
H Hardened Steel	≥50HRC	BC8110	60		120				

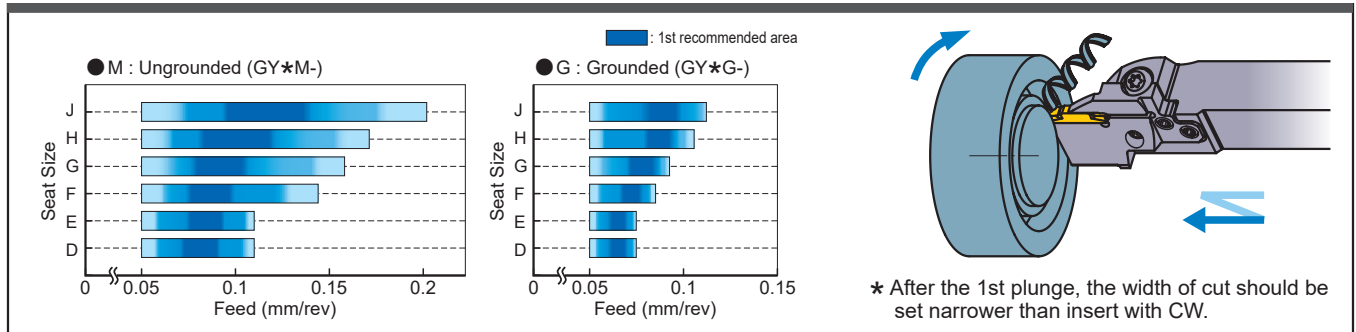
Note 1) For MP9015, MP9025, VP10RT, VP20RT and MY5015, wet cutting is recommended.

RECOMMENDED CUTTING CONDITIONS [For Face Grooving]

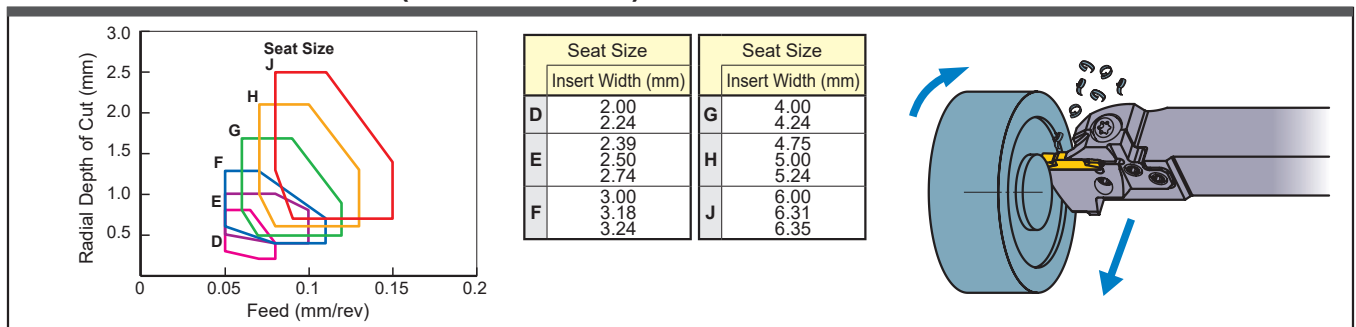
GROOVING



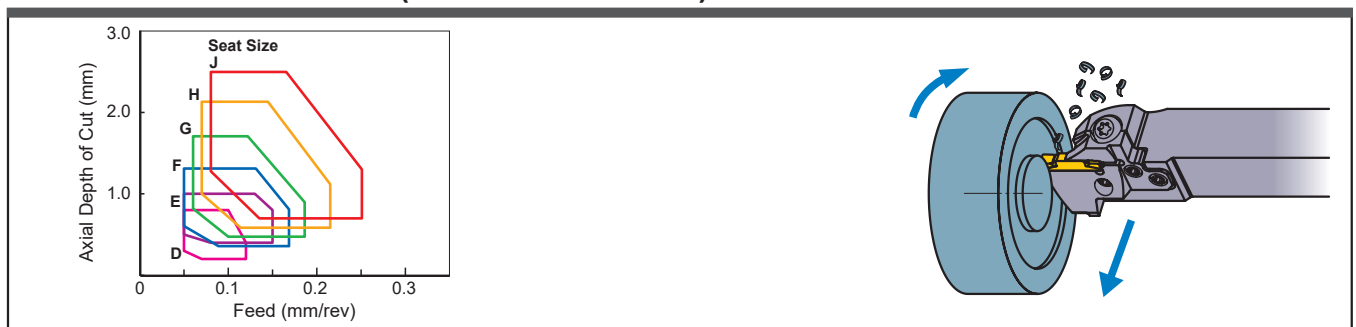
PLUNGING



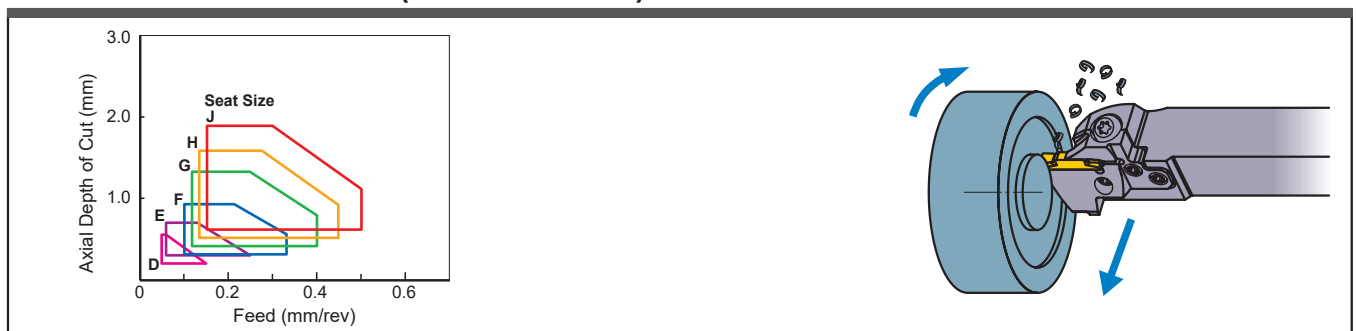
TRAVERSE MACHINING (MF BREAKER)



TRAVERSE MACHINING (MM/MS BREAKER)



TRAVERSE MACHINING (BM BREAKER)



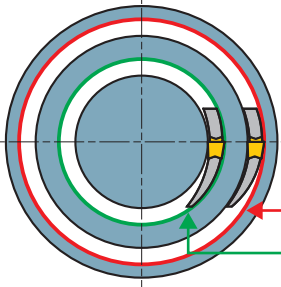
Note 1) GL chip breaker is not recommended for face grooving.

TOOL SELECTION

Notes when selecting the tool body

F

Modular blade (1)

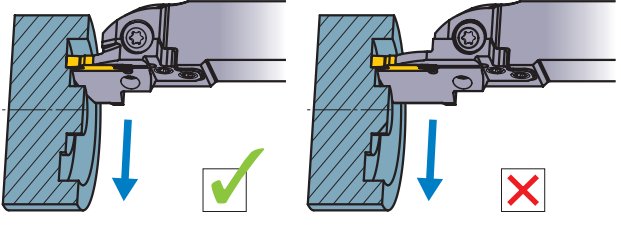


- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of DAXN minimum and DAXX maximum that are described in the table of dimensions.

DAXX (Max.)

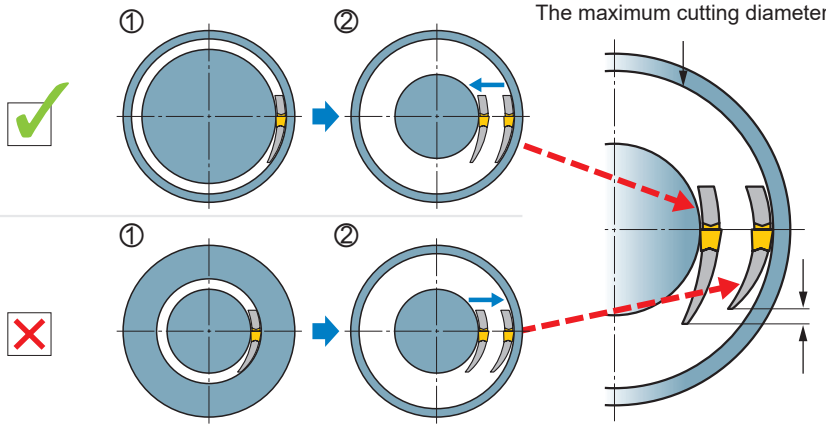
DAXN (Min.)

Modular blade (2)




- Select the shortest possible blade suitable for the application.

Modular blade (3)



The maximum cutting diameter

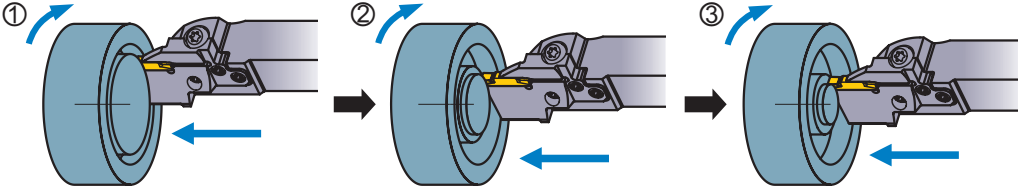
- Select the largest size blade within the maximum cutting diameter of the workpiece.
- Machine from the outer diameter towards the centre.



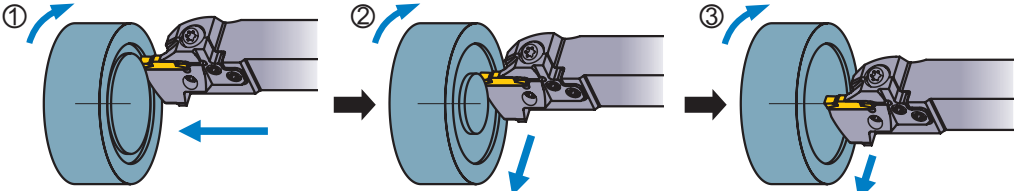
- Increased machining stability and rigidity is possible if a modular blade with the largest possible back metal is used.

At first machine the maximum cutting diameter, there is no restriction in the cutting diameter on the remaining process.

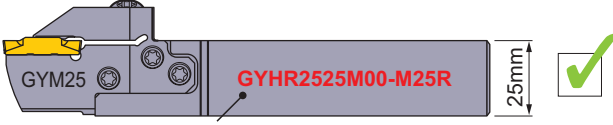
- When plunging in several passes.




- When combining plunging and infeed machining.



Precautions when selecting a modular holder.



Modular holder



Modular holder

- Select a modular holder with the largest possible shank size to maintain mounting rigidity.

F112

Notes when setting the tool

Setting the cutting edge height

- Set the cutting edge height to $\pm 0.1\text{mm}$ parallel to the central axis.
- Cutting edge centre height check should be done by traverse machining towards the centre with a very small depth of cut and ensure that an even surface and no material remains at the centre point afterwards.

When interfering the wall of groove and the Modular blade

- If interference occurs even when the correct blade is used, the cutting edge height could be incorrect.
 - When interference occurs on the inner side of the blade, the cutting edge height is set too high.
 - When interference occurs on the outer side of the blade, the cutting edge height is set too low.

Setting the tool

- Set the insert parallel to the central axis.

Tool overhang

- When setting the tool, ensure that the overhang is as short as possible and avoid the step difference part as above figure shows.

MACHINING RECOMMENDATIONS

Notes when face grooving

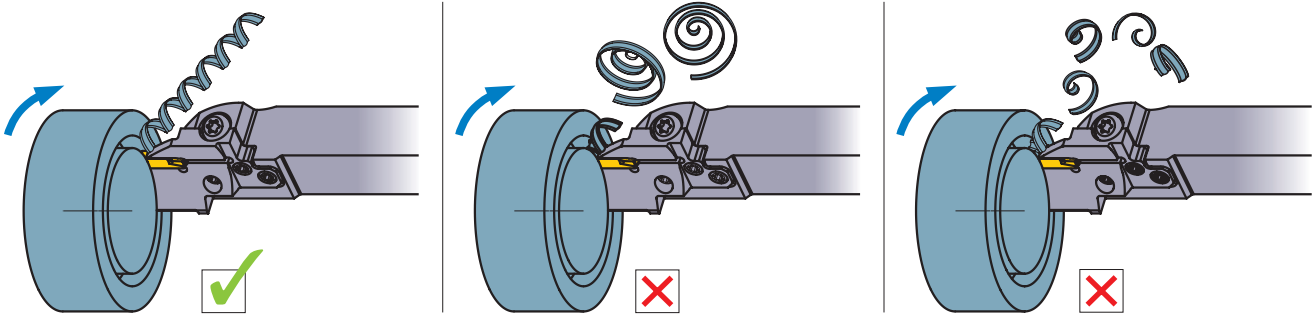
- Always machine from the outer diameter towards the centre.

Machining narrow grooves	Machining wide grooves
<ul style="list-style-type: none"> ● Plunging in several passes is recommended. 	<ul style="list-style-type: none"> ● Cross feed machining is recommended.

MACHINING RECOMMENDATIONS

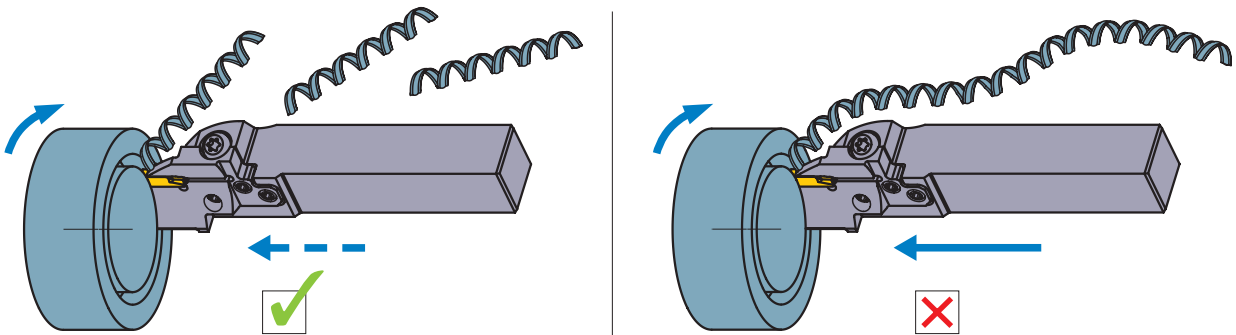
Notes when face grooving

Notes on the first pass (1)



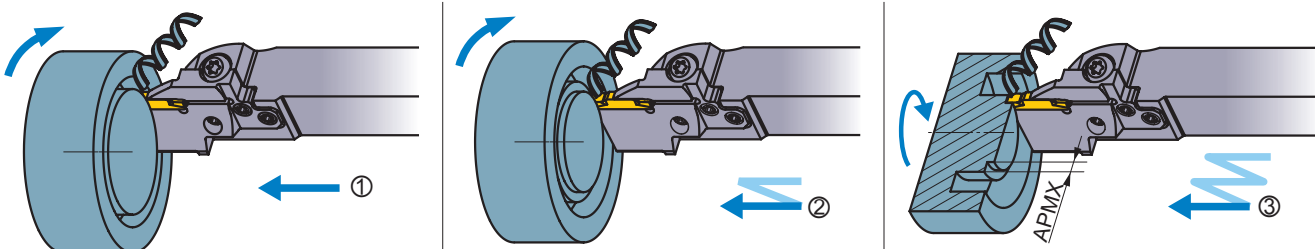
- During the first face grooving pass it is difficult to disperse broken chips and can lead to problems such as a chipped insert. Maintain longer chips that disperse easily by decreasing the feed per rotation.

Notes on the first pass (2)



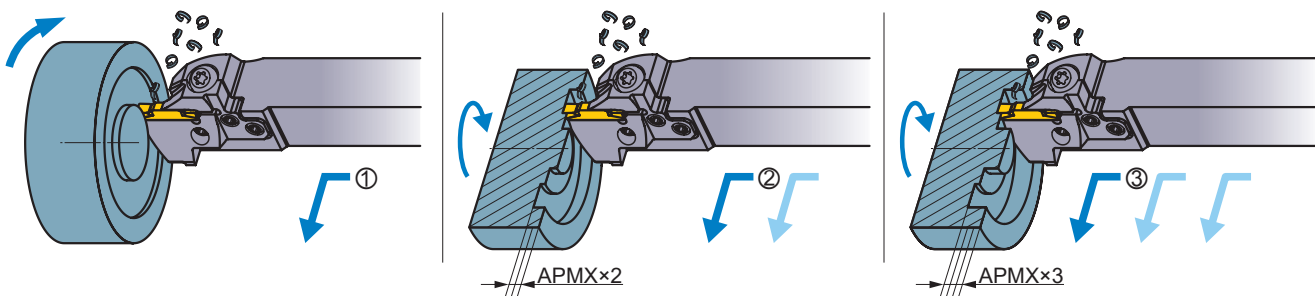
- When chips become too long, use peck feed to break them into a suitable length.

Notes when wide face grooving by plunging in several passes



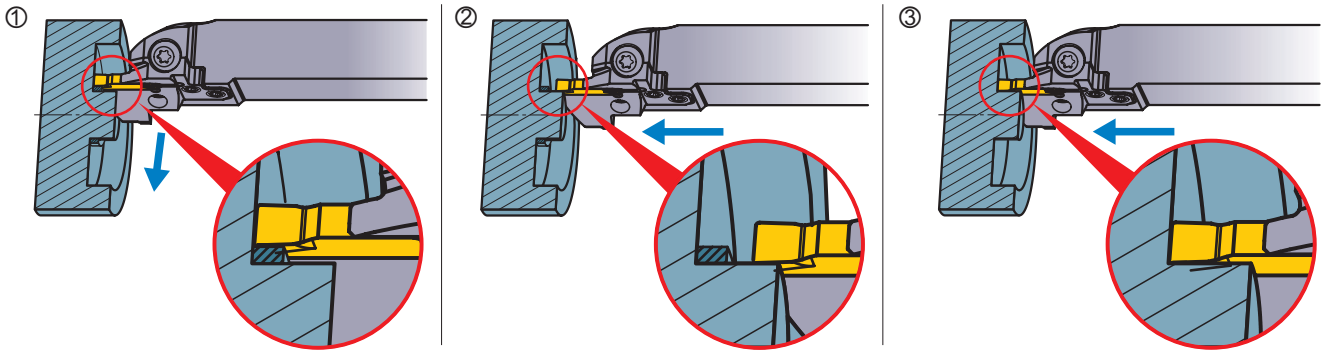
- When machining a face groove in several passes, machine from the outer diameter towards the centre so that space for discharging chips is created to prevent insert damage caused by chip jamming.
- Plunging width of cut is recommended to be set at 60 - 80% of the insert width. This enhances the effect of the chip breaker by enlarging the width of the groove to improve chip dispersal.

Notes when wide face grooving by combination of plunging and traverse machining (1)



- When face groove machining by using plunge feed and traverse machining, always machine from the outer diameter towards the centre to disperse chips outward to avoid chip jamming problems.
- Set the depth of cut within 40% of the insert width.

Notes when wide face grooving by combination of plunging and traverse machining (2)



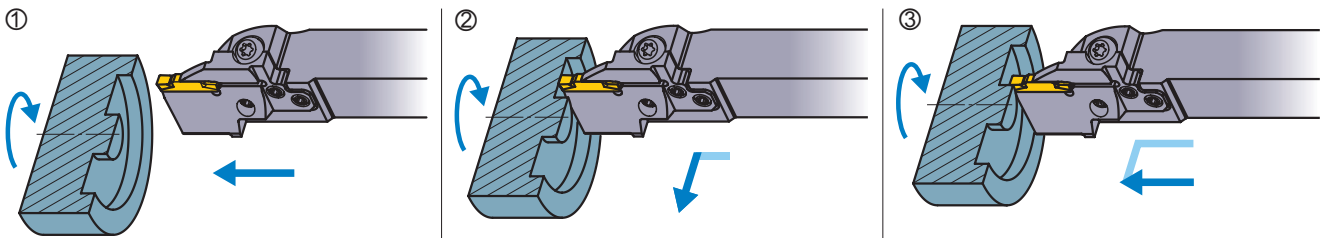
- When infeed machining at the bottom of a deep groove, chips may interfere on the cutting edge near the centre wall. In such cases, stop infeed machining just before the centre wall (at a point less than the insert width) then remove the remaining material by plunging.

Notes when copying (BM Breaker)



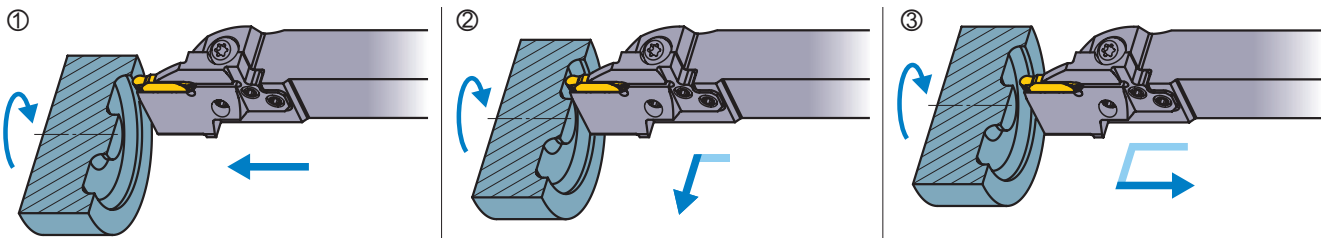
- With the BM breaker insert, 3 dimensional copying is possible. Set the depth of cut (APMX 2) to 30% less than the insert width.

Finishing (1)

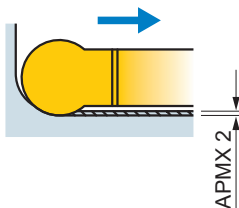


- When finish cutting, machine continuously from the outer wall to the bottom of the groove, then finally plunge cut the centre wall.

Finishing (2) (BM Breaker)



- Carry out finishing in one process. For the depth of cut (APMX 2) when back turning, refer to the table on the right.



Insert	APMX 2 (mm)
GY2M0200D100N-BM	0.10
GY2M0250E125N-BM	
GY2M0300F150N-BM	
GY2M0318F159N-BM	0.15
GY2M0400G200N-BM	
GY2M0475H238N-BM	0.20
GY2M0500H250N-BM	
GY2M0600J300N-BM	0.25
GY2M0635J318N-BM	

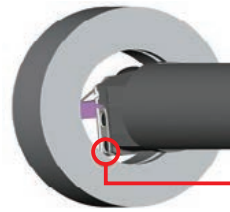
LIMITATION OF THE MAXIMUM GROOVE DEPTH [For Internal Grooving]

•When using the mono block type

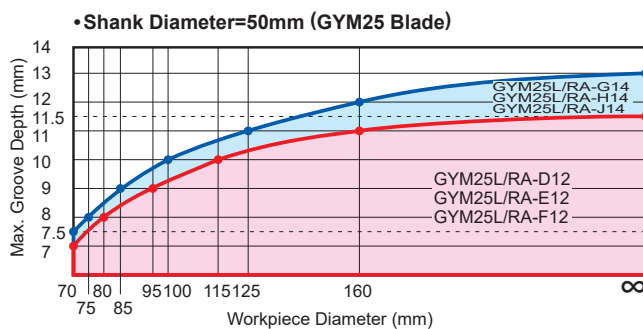
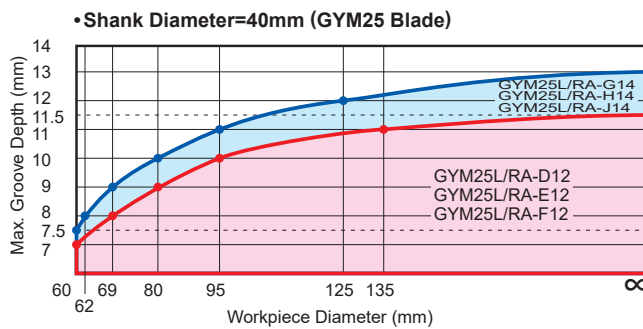
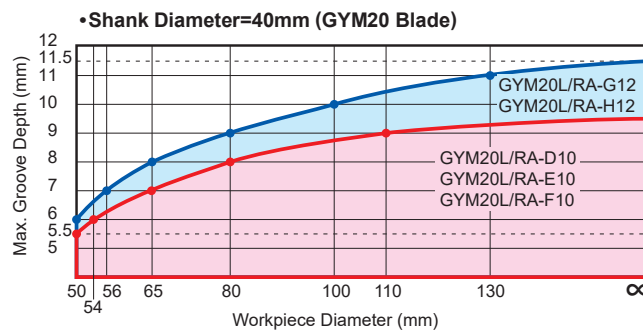
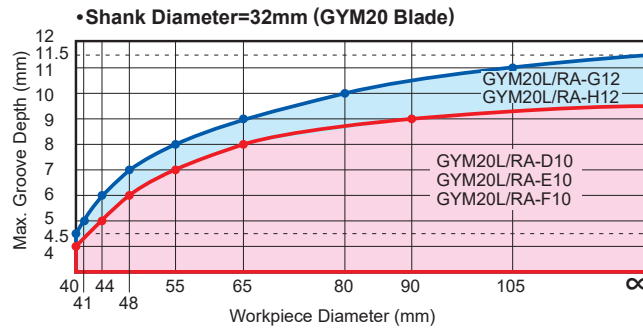
The maximum groove depth is not limited by the cutting diameter.

•When using the modular blade type

The maximum groove depth is limited by the cutting diameter.



Due to interference of this part, the maximum groove depth is limited by the cutting diameter.



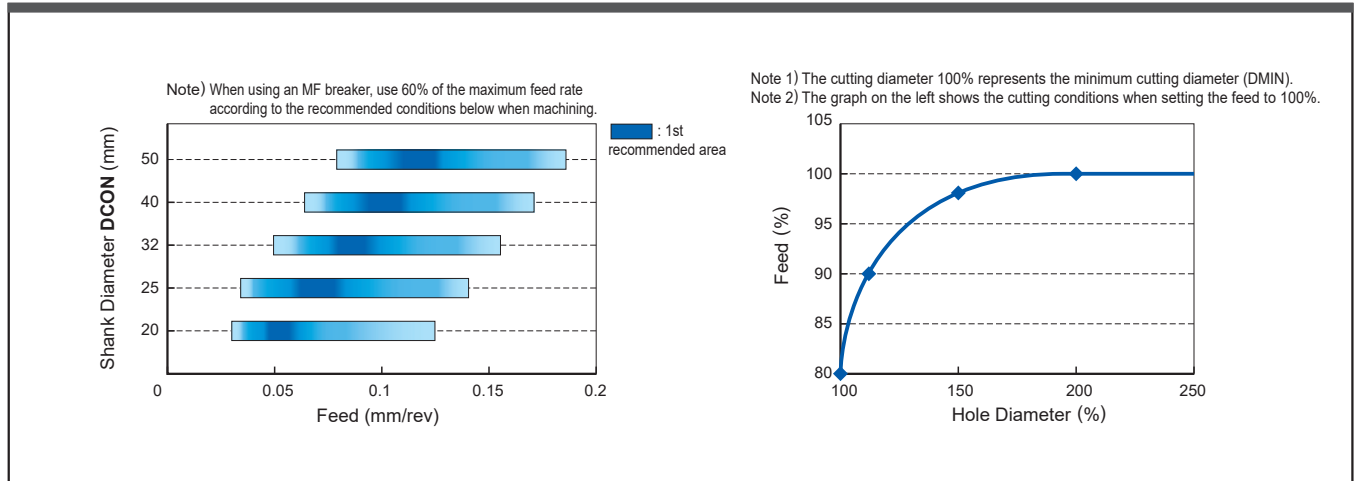
RECOMMENDED CUTTING SPEED [For Internal Grooving]

Workpiece Material	Hardness	Grade	Cutting Speed (m/min)								
			50	100	150	200	250	300	400		
P	Mild Steel	VP20RT		80		180					
		VP10RT		90		190					
		NX2525		70		170					
	Carbon Steel Alloy Steel	160–280HB	VP20RT		60		140				
			VP10RT		70		150				
			MY5015		90		210				
			NX2525		55		135				
		≥280HB	VP20RT		50		110				
			VP10RT		60		120				
			MY5015		80		160				
NX2525		45		105							
M	Stainless Steel	VP20RT		50		110					
		VP10RT		60		120					
K	Gray Cast Iron	VP20RT		60		140					
		VP10RT		70		150					
		MY5015		90		210					
	Ductile Cast Iron	VP20RT		50		110					
		VP10RT		60		120					
		MY5015		80		160					
S	Heat Resistant Alloy Titanium Alloy	MP9015		40		100					
		MP9025		30		90					
		VP20RT		30		60					
		VP10RT/RT9010		40		70					
H	Hardened Steel	≥50HRC	BC8110		60		100				
N	Aluminium Alloys (A6061, 7075)	Content Si < 5%	RT9010				150			400	
	Aluminium Alloys (AC4B)	Content 5% ≤ Si ≤ 10%	RT9010				150			400	
	Aluminium Alloys (ADC12, A390)	Content Si > 10%	RT9010		80		160				

Note 1) For MP9015, MP9025, VP10RT, VP20RT and MY5015, wet cutting is recommended.

RECOMMENDED CUTTING CONDITIONS [For Internal Grooving]

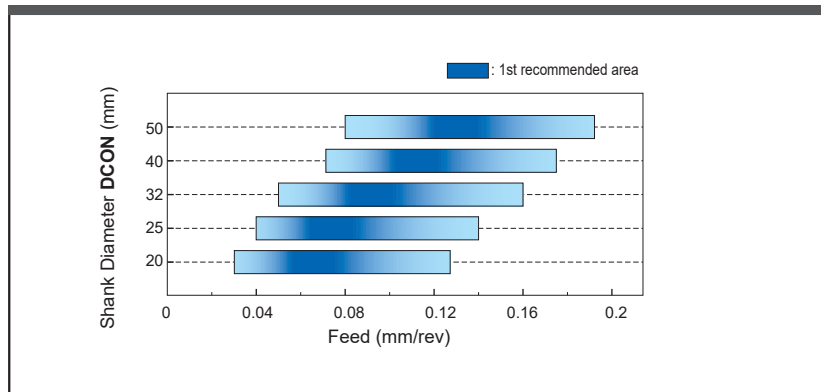
GROOVING



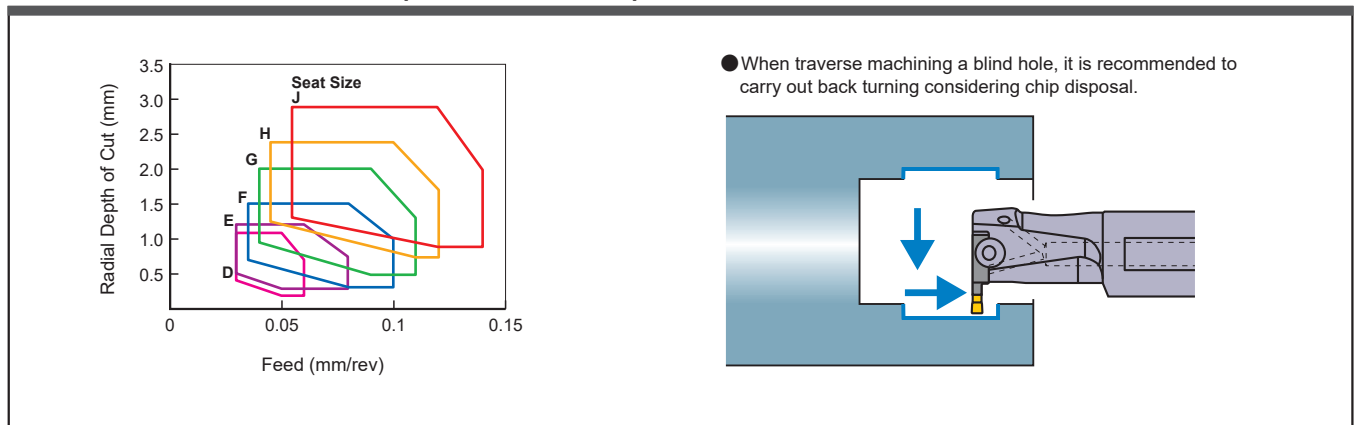
F

GROOVING / CUTTING OFF

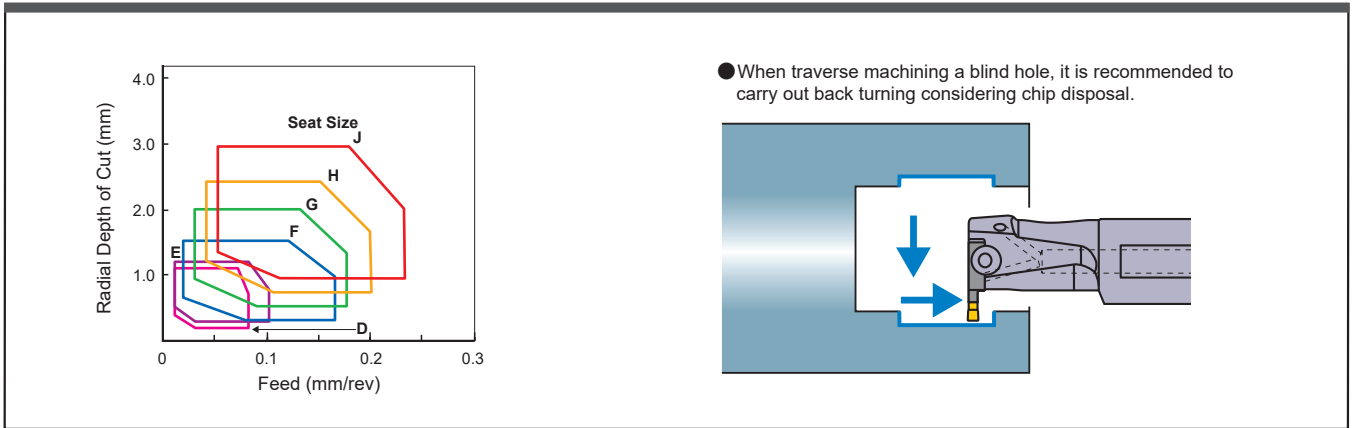
GROOVING (GL BREAKER)



TRAVERSE MACHINING (MF BREAKER)

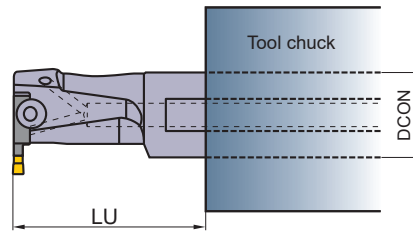


TRAVERSE MACHINING (MM/MS BREAKER)



Note 1) The above cutting conditions are for when using the tool overhang (LU) 1.6-2.0 times larger than the shank diameter (DCON). (L/D=1.6-2.0)
When using L/D larger than 2.0, reduce the cutting conditions.

Seat Size			
	Insert Width (mm)	Insert Width (mm)	
D	2.00	G	4.00
	2.24		4.24
E	2.39	H	4.75
	2.50		5.00
	2.74		5.24
F	3.00	J	6.00
	3.18		6.31
	3.24		6.35



TOOL SELECTION

Notes when selecting the tool body

Holder

● When the overhang is the same, select a holder with the largest possible shank size to ensure sufficient clamping rigidity.

Modular blade (1)

GYM20R/LA-D10	GYM25R/LA-D12
GYM20R/LA-E10	GYM25R/LA-E12
GYM20R/LA-F10	GYM25R/LA-F12
GYM20R/LA-G12	GYM25R/LA-G14
GYM20R/LA-H12	GYM25R/LA-H14
	GYM25R/LA-J14

● For an internal holder, select a modular blade listed above.

Modular blade (2)

● For a $\varnothing 40$ shank holder, if there is no restriction for use, select a holder suitable for GYM25 blade.

Notes when setting the tool

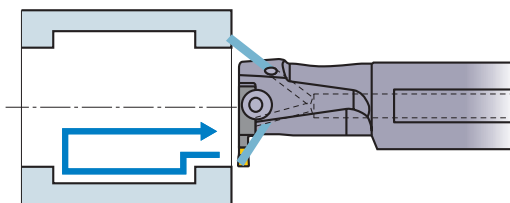
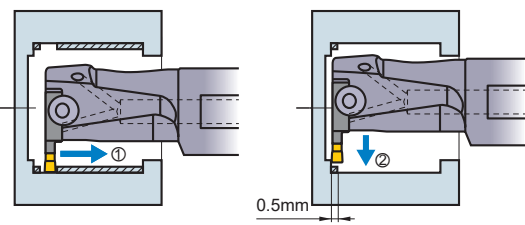
Overhang

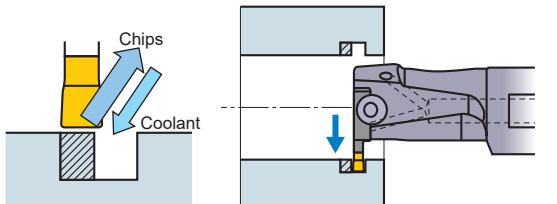
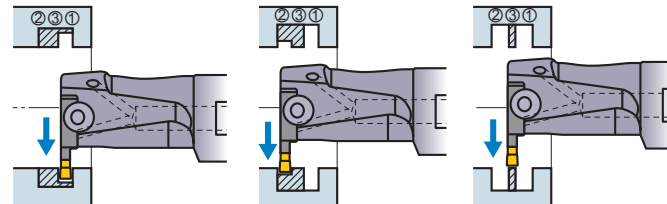
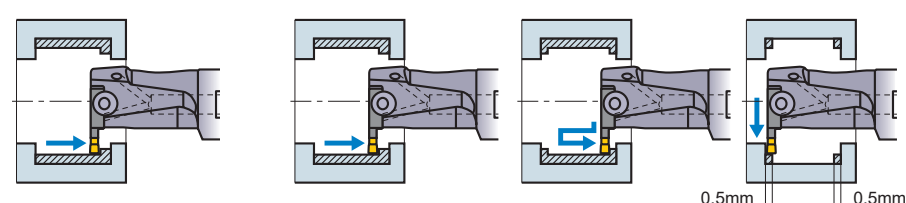
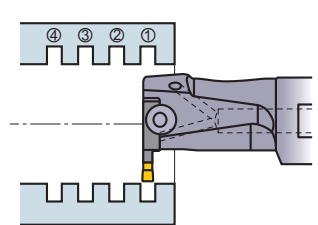
● The maximum groove depth is limited to the dimension LDRED. When machining with longer overhangs, refer to the dimension WF2 of the tool used.

MACHINING RECOMMENDATIONS

Notes on multi-function machining (MF, MS and MM breakers)

For internal grooving, the machining methods for external grooving can be used, but please note the following precautions.

Coolant	Machining blind holes
 <ul style="list-style-type: none"> ● Supply large amounts of coolant for effective chip disposal during cutting. Maintain supply until the tool has been retracted completely for improved chip disposal. 	 <ul style="list-style-type: none"> ● As continuous chips tend to elongate at the back of the bore, the above operation is recommended. The recommended width of cut for ② is 0.5mm.

Machining Wide Grooves	
<p style="text-align: center;">Grooving</p> <ul style="list-style-type: none"> ● When the cutting edge width is $x 2 \geq$ groove width  <ul style="list-style-type: none"> ● When the depth of cut is shallower than the cutting edge width, continuous chips are usually produced. When plunging in several passes, it is recommended to carry out machining in the steps above. This ensures that coolant reaches the cutting edge and chips are easily discharged. 	<ul style="list-style-type: none"> ● When the cutting edge width is $x 2 <$ groove width  <ul style="list-style-type: none"> ● When the groove depth is larger than the cutting edge width, carry out plunging in the steps above to break up chips efficiently.
<p style="text-align: center;">Turning</p>  <ul style="list-style-type: none"> ● When chip breaking and disposal are especially important, cross-feed machining is recommended. ● Wide face grooving when the corner R of the work piece is equal to the corner R of the insert, machine as shown above. (When corner R of the work piece is larger than corner R of the insert, refer to the description of external wide grooving.) ● If the groove depth exceeds a given level, chips may elongate at the wall. In such a case, increase the feed and carry out machining as shown above. 	<p style="text-align: center;">Machining instruction</p>  <ul style="list-style-type: none"> ● It is recommended to carry out grooving from the front end of the workpiece. This reduces workpiece deflection.

F
GROOVING / CUTTING OFF



GW SERIES

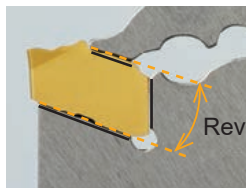
Long Lasting, Easy to Use Cutting Off & Grooving System

Easy to Utilize Configuration that Improves Tool Handling

Clamp

Simple insert clamping method offering high rigidity.

To prevent the insert from being pulled out during machining a reverse taper angle has been designed from the front of the insert, additionally the design also includes 3 large locating faces between the insert and the blade offering increased cutting edge reliability. The blade itself is made from a special alloy steel to suit this application.



Reverse Taper Angle

In respect to insert indexing a unique wrench is supplied to ensure ease when changing the insert.

Voice of Developer

Just how easy is it to set an insert?

With the use of a unique wrench, it is possible to locate and remove the insert with one simply action making it easier for use in the workshop.

F

GROOVING / CUTTING OFF



Through Coolant Blade

Increased wear resistance due to the use of 2 through coolant ejection holes.

2 through coolant holes supply the coolant to both the rake and flank face, leading to effective cutting edge cooling and increased wear resistance.



Additionally this blade can also be used for both low pressure and high pressure coolant (7MPa).

Voice of Developer

How is it possible to reduce heat generation?

The 2 coolant holes used in the blade are capable of using high coolant pressures of up to (7MPa), this is achieved by using as large as possible a through coolant hole diameter. The ejection holes are located close to the cutting edge so as to improve the cutting edge cooling effect and increasing wear resistance.

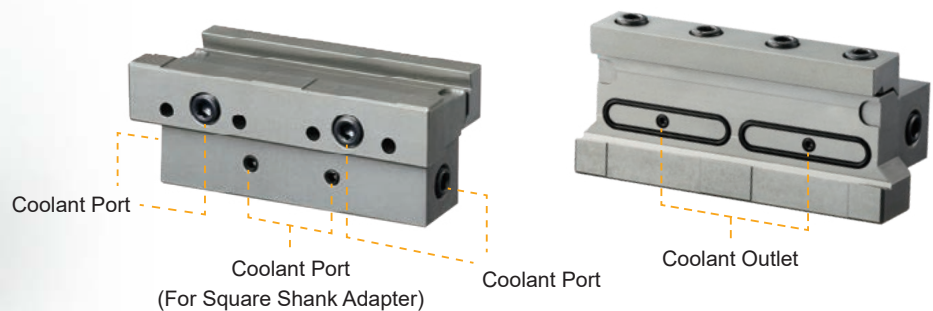


You Tube

Coolant Ports

Flexible set up possible with the use of 6 coolant ports.

There are 6 coolant ports designed into the tool block. This makes it easier for the end user to set up the tool block and blade to a configuration that suits their needs. If necessary it is also possible to use coolant hose. The ejection type coolant also improves cutting edge cooling and chip evacuation.



Voice of Developer

Possible to set up to suit the requirements of the workshop environment.

One of the objectives of this product is to respond to the customers complaints that "the product did not fit and could not be used". Starting with the coolant outlet that prevents leaks even when oil quantity or overhangs change, everything from the material and the shape of the O-ring, to the length of the hose has been tailored to the effective use in the workshop.

Breaker System Offering Excellent Chip Disposal Properties



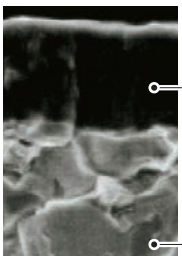
INSERT GRADE

Workpiece Material Machining Condition	P Steel	M Stainless Steel	K Cast Iron	S Heat Resistant Alloy / Titanium Alloy
Stable	MY5015		MY5015	VP10RT
	VP10RT	VP10RT	VP10RT	
Machining Condition	VP20RT	VP20RT	VP20RT	VP20RT
	VP30RT	VP30RT		
Unstable				

F

GROOVING / CUTTING OFF

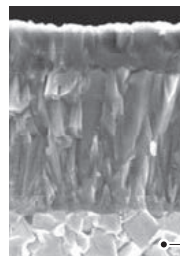
VP20RT



- PVD coated grade suitable for a wide range of applications. The combination of a special tough cemented carbide substrate with MIRACLE coating provides an excellent balance of wear and fracture resistance.

MIRACLE Coating
Carbide Substrate (90.5HRA)

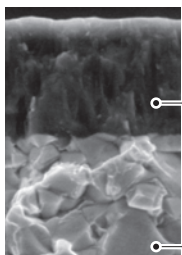
MY5015



- MY5015 is a CVD coated grade with excellent wear resistance even at high temperatures. It provides longer tool life when machining cast and ductile cast irons. Also suitable for high-speed continuous cutting of steels.

CVD Coated Carbide
Carbide Substrate

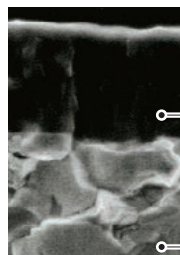
VP10RT



- PVD coated grade with a cemented carbide substrate harder than VP20RT. For use on difficult-to-cut materials and for extending tool life.

MIRACLE Coating
Carbide Substrate (92.0HRA)

VP30RT



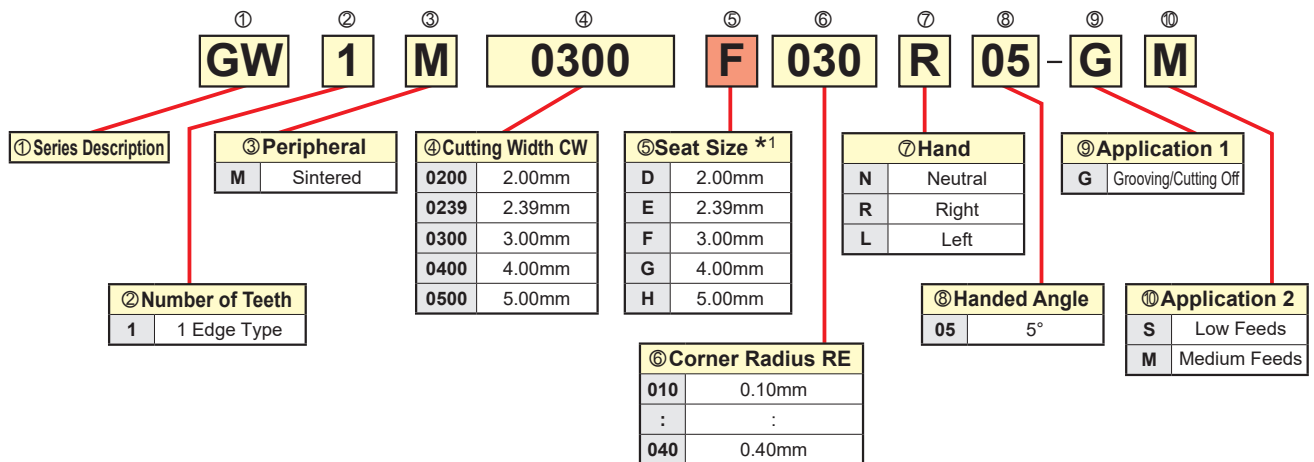
- A combination of a tough, special cemented carbide substrate and MIRACLE coating. Ideal for heavy interrupted cutting of stainless and general steels.

MIRACLE Coating (Al,Ti)N
Carbide Substrate (88.8HRA)

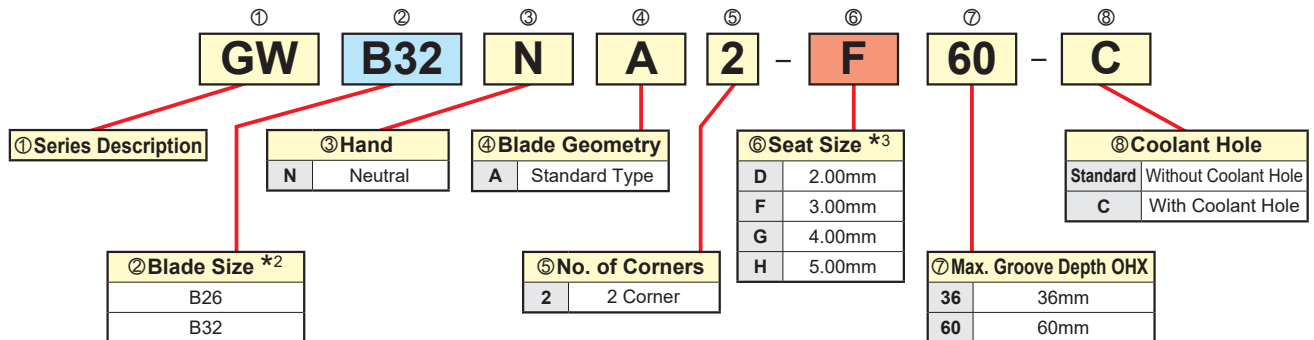
GW SERIES ORDER NUMBER

Insert / Blade / Tool Block

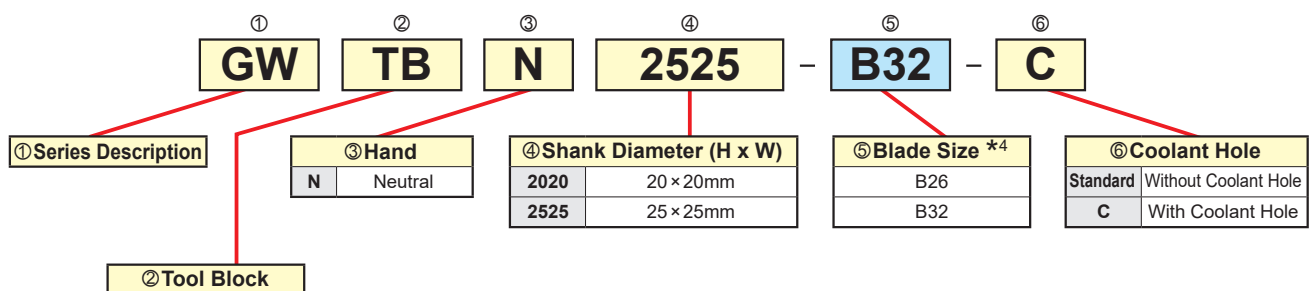
● Insert



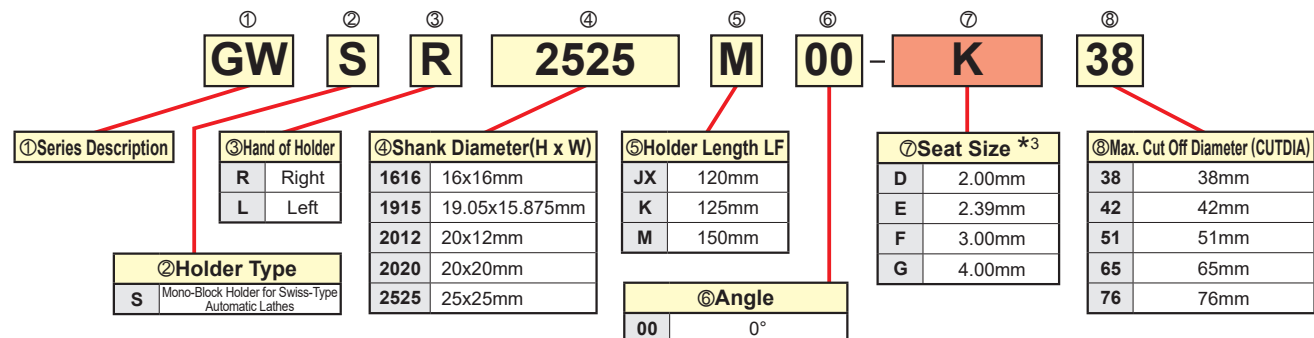
● Blade



● Tool Block

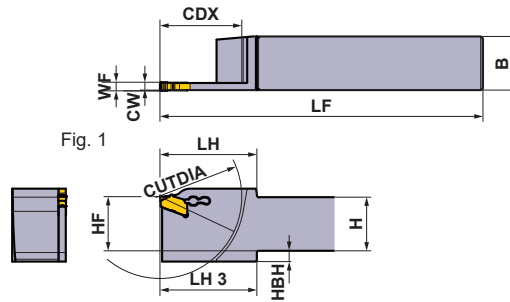
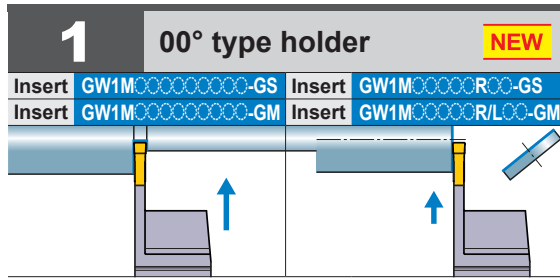


● MONO BLOCK HOLDER



- *1 Select the mono-block holder with the same seat size symbol as the modular blade.
- *2 Select blade size with the same symbol as that of tool block.
- *3 Select seat size with the same symbol of the insert.
- *4 Select blade size with the same symbol as that of blade.

GW SERIES (External for Swiss style lathes)



Right hand tool holder shown.

Seat Size	Dimensions (mm)			Type	Hand (R/L)	Order Number		Fig.
	CW	CDX	CUTDIA			Holder	Stock	
D	2.00	19	38	Mono Block	R	GWSR1616JX00-D38	●	1
				Mono Block	L	GWSL1616JX00-D38	●	1
		21	42	Mono Block	R	GWSR1915K00-D38	●	1
				Mono Block	L	GWSL1915K00-D38	●	1
				Mono Block	R	GWSR2020K00-D42	●	1
				Mono Block	R	GWSR2012K00-D42	●	1
				Mono Block	L	GWSL2012K00-D42	●	1
				Mono Block	R	GWSR2525M00-D42	●	2
E	2.39	19	38	Mono Block	R	GWSR1915K00-E38	●	1
				Mono Block	L	GWSL1915K00-E38	●	1
		21	42	Mono Block	R	GWSR2020K00-E42	●	1
				Mono Block	L	GWSL2020K00-E42	●	1
				Mono Block	L	GWSL2020K00-E42-M	●	3
				Mono Block	R	GWSR2012K00-E42	●	1
				Mono Block	L	GWSL2012K00-E42	●	1
				Mono Block	R	GWSR2525M00-E42	●	2
F	3.00	19	38	Mono Block	R	GWSR1915K00-F38	●	1
				Mono Block	L	GWSL1915K00-F38	●	1
		21	42	Mono Block	R	GWSR2012K00-F42	●	1
				Mono Block	L	GWSL2012K00-F42	●	1
				Mono Block	R	GWSR2020K00-F42	●	1
				Mono Block	L	GWSL2020K00-F42	●	1
				Mono Block	L	GWSL2020K00-F42-M	●	3
				Mono Block	R	GWSR2020K00-F51	●	1
		25.5	51	Mono Block	L	GWSL2020K00-F51	●	1
				Mono Block	L	GWSL2020K00-F51-M	●	3
				Mono Block	R	GWSR2525M00-F51	●	1
				Mono Block	L	GWSL2525M00-F51	●	1
32.5	65			Mono Block	R	GWSR2020M00-F65	●	1
				Mono Block	L	GWSL2020M00-F65	●	1
38	76	Mono Block	R	GWSR2525M00-F76	●	1		
		Mono Block	L	GWSL2525M00-F76	●	1		
G	4.00	38	76	Mono Block	R	GWSR2525M00-G76	●	1
				Mono Block	L	GWSL2525M00-G76	●	1

CW = Cutting Width CDX = Max. Groove Depth CUTDIA = Max. Cut Off Diameter

● : Inventory maintained in Japan.

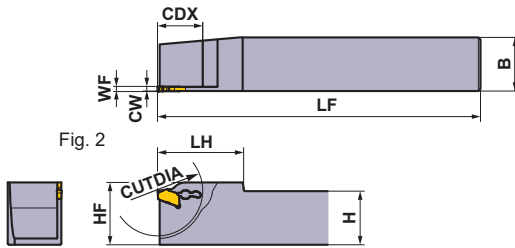


Fig. 2

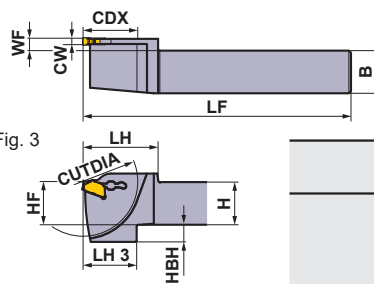


Fig. 3

Right hand tool holder shown.

Left hand tool holder shown.

SPARE PARTS	
Holder	
GWSR/L1616JX00-D38	
GWSR/L00000000-00-0000	GWY39L
GWSR/L2020K00-0000-M	

	Dimensions (mm)								Cutting Mode	
	H	B	LF	LH	LH 3	HF	WF	HBH	Clockwise	Anticlockwise
	16	16	120	30	30	16	0.3	6	R	
	16	16	120	30	30	16	0.3	6		
	19.05	15.875	125	35	35	19.05	0.3	3	R	
	19.05	15.875	125	35	35	19.05	0.3	3		
	20	20	125	35	25	20	0.3	4	R	
	20	20	125	35	25	20	0.3	4		
	20	12	125	35	25	20	0.3	4	R	
	20	12	125	35	25	20	0.3	4		
	25	25	150	40	—	25	0.3	—	R	
	25	25	150	40	—	25	0.3	—		
	19.05	15.875	125	35	35	19.05	0.2	3	L	
	19.05	15.875	125	35	35	19.05	0.2	3		
	20	20	125	35	25	20	0.2	4	L	
	20	20	125	35	25	20	0.2	4		
	20	20	125	35	25	20	5.7	8	L	
	20	12	125	35	25	20	0.2	4		
	20	12	125	35	25	20	0.2	4	L	
	25	25	150	40	—	25	0.2	—		
	25	25	150	40	—	25	0.2	—	L	
	20	20	125	35	25	20	0.3	3		
	20	12	125	35	25	20	0.3	4	L	
	20	12	125	35	25	20	0.3	4		
	20	20	125	35	25	20	0.3	4	L	
	20	20	125	35	25	20	5.8	8		
	20	20	125	35	25	20	0.3	8	L	
	20	20	125	35	25	20	0.3	8		
	20	20	125	35	25	20	5.8	8	L	
	25	25	150	40	40	25	0.3	3		
	25	25	150	40	40	25	0.3	3	L	
	20	20	150	40	33	20	0.3	10		
	20	20	150	40	33	20	0.3	10	L	
	25	25	150	45	45	25	0.3	5		
	25	25	150	45	45	25	0.3	5	L	
	25	25	150	45	45	25	0.4	5		
	25	25	150	45	45	25	0.4	5	L	
	25	25	150	45	45	25	0.4	5		

Insert selection

Seat Size	Geometry name
D	GW1M0200D000N—Breaker shown below
	GW1M0200D000R/L00—Breaker shown below
E	GW1M0239E000N—Breaker shown below
	GW1M0239E000R/L00—Breaker shown below
F	GW1M0300F000N—Breaker shown below
	GW1M0300F000R/L00—Breaker shown below
G	GW1M0400G000N—Breaker shown below
	GW1M0400G000R/L00—Breaker shown below

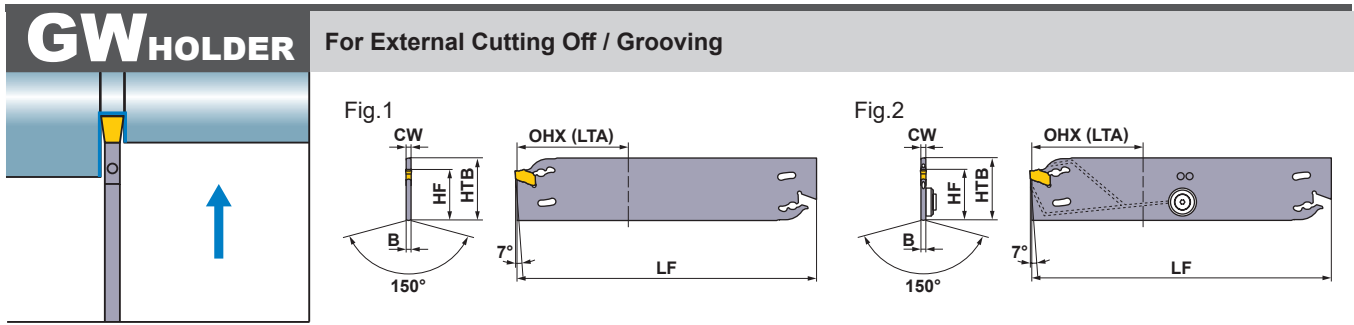
For grooving/cutting off breaker > F130						
Seat Size	Breaker	GS (Low)	GM (Medium)	05-GS (Low)	05-GS (Low)	05-GM (Cutting off)
		Neutral	Neutral	With hand	With hand	With hand
D	2.00mm	●	●	●	●	●
E	2.39mm	●	●	●	●	●
F	3.00mm	●	●	●	●	●
G	4.00mm	●	●			●

● : Standard insert with dimensions

F GROOVING / CUTTING OFF

IDENTIFICATION > F125
 INSERTS > F130
 CUTTING CONDITIONS > F132
 CAUTION FOR USE > F134

GW SERIES (EXTERNAL)



Without Coolant Hole

(mm)

Seat Size	CW	*1 CUTDIA	Order Number	Stock	*2 OHN	*3 OHX (LTA)	B	LF	HTB	HF	Fig.	Insert Type		Tool Block Type
												Insert Type	Wrench	
D	2.00	72	GWB26NA2-D36	●	16	36	1.55	110	26	21.4	1	GW1M0200D	GWY39L	GWTBN-B26
		120	GWB32NA2-D60	●	16	60	1.55	150	32	25	1	GW1M0200D	GWY39L	GWTBN-B32
F	3.00	72	GWB26NA2-F36	●	16	36	2.45	110	26	21.4	1	GW1M0300F	GWY39L	GWTBN-B26
		120	GWB32NA2-F60	●	16	60	2.45	150	32	25	1	GW1M0300F	GWY39L	GWTBN-B32
G	4.00	72	GWB26NA2-G36	●	19	36	3.35	110	26	21.4	1	GW1M0400G	GWY39L	GWTBN-B26
		120	GWB32NA2-G60	●	19	60	3.35	150	32	25	1	GW1M0400G	GWY39L	GWTBN-B32
H	5.00	72	GWB26NA2-H36	●	19	36	4.25	110	26	21.4	1	GW1M0500H	GWY39L	GWTBN-B26
		120	GWB32NA2-H60	●	19	60	4.25	150	32	25	1	GW1M0500H	GWY39L	GWTBN-B32

With Coolant Hole

(mm)

Seat Size	CW	*1 CUTDIA	Order Number	Stock	*2 OHN	*3 OHX (LTA)	B	LF	HTB	HF	Fig.	Insert Type		Tool Block Type
												Insert Type	Wrench	
D	2.00	72	GWB26NA2-D36-C	●	16	36	1.55	110	26	21.4	2	GW1M0200D	GWY39L	GWTBN-B26-C
		120	GWB32NA2-D60-C	●	26	60	1.55	150	32	25	2	GW1M0200D	GWY39L	GWTBN-B32-C
F	3.00	72	GWB26NA2-F36-C	●	16	36	2.45	110	26	21.4	2	GW1M0300F	GWY39L	GWTBN-B26-C
		120	GWB32NA2-F60-C	●	26	60	2.45	150	32	25	2	GW1M0300F	GWY39L	GWTBN-B32-C
G	4.00	72	GWB26NA2-G36-C	●	19	36	3.35	110	26	21.4	2	GW1M0400G	GWY39L	GWTBN-B26-C
		120	GWB32NA2-G60-C	●	26	60	3.35	150	32	25	2	GW1M0400G	GWY39L	GWTBN-B32-C
H	5.00	72	GWB26NA2-H36-C	●	19	36	4.25	110	26	21.4	2	GW1M0500H	GWY39L	GWTBN-B26-C
		120	GWB32NA2-H60-C	●	26	60	4.25	150	32	25	2	GW1M0500H	GWY39L	GWTBN-B32-C

*1 CUTDIA: Maximum Cut Off Diameter *2 OHN: Minimum Overhang Length *3 OHX(LTA): Maximum Overhang Length

Note 1) Recommended Maximum Coolant Pressure: 7MPa

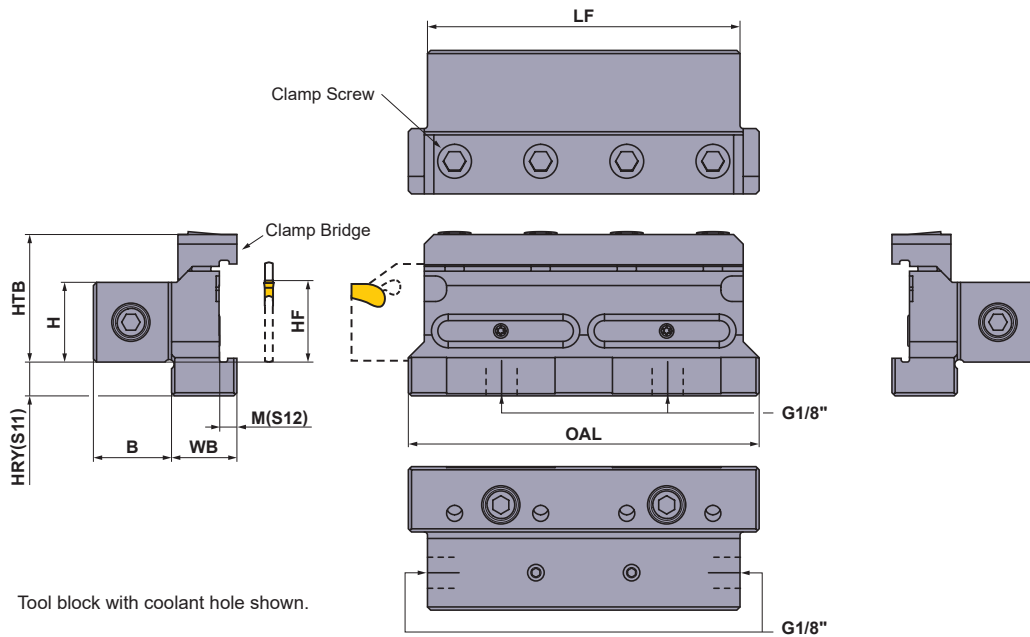
Spare Parts for Blades with Coolant Hole

(mm)

Order Number	CW	Washer		Clamp Screw	Wrench
		①	②		
GWB26NA2-D36-C	2.0	①GWW04038		GW04005F	HKY20R
GWB32NA2-D60-C	2.0	①GWW04038		GW04005F	HKY20R
GWB26NA2-F36-C	3.0	①GWW04038		GW04005F	HKY20R
GWB32NA2-F60-C	3.0	①GWW04038		GW04005F	HKY20R
GWB26NA2-G36-C	4.0	②GWW04026		GW04005F	HKY20R
GWB32NA2-G60-C	4.0	②GWW04026		GW04005F	HKY20R
GWB26NA2-H36-C	5.0	②GWW04026		GW04005F	HKY20R
GWB32NA2-H60-C	5.0	②GWW04026		GW04005F	HKY20R

● : Inventory maintained in Japan.

■ Tool Block



Tool block with coolant hole shown.

Without Coolant Hole

Order Number	Stock	H	HF	HTB	HRY (S11)	B	WB	M (S12)	LF	OAL	①	*	
											Clamp Bridge	Clamp Screw	Wrench
GWTBN2020-B26	●	20	20	33.5	11	19.5	20.0	5.0	75	85	① GWCW1	HSC06020	HKY50R
GWTBN2020-B32	●	20	20	35.0	15.6	19.5	20.5	5.5	100	110	② GWCW2	HSC06020	HKY50R
GWTBN2525-B26	●	25	25	38.5	6	24.5	20.0	5.0	75	85	① GWCW1	HSC06020	HKY50R
GWTBN2525-B32	●	25	25	40.0	10.6	24.5	20.5	5.5	100	110	② GWCW2	HSC06020	HKY50R

With Coolant Hole

Order Number	Stock	H	HF	HTB	HRY (S11)	B	WB	M (S12)	LF	OAL	①	*	
											Clamp Bridge	Clamp Screw	Wrench
GWTBN2020-B26-C	●	20	20	33.5	11	19.5	20.0	5.0	75	85	① GWCW1	HSC06020	HKY50R
GWTBN2020-B32-C	●	20	20	35.0	15.6	19.5	20.5	5.5	100	110	② GWCW2	HSC06020	HKY50R
GWTBN2525-B26-C	●	25	25	38.5	6	24.5	20.0	5.0	75	85	① GWCW1	HSC06020	HKY50R
GWTBN2525-B32-C	●	25	25	40.0	10.6	24.5	20.5	5.5	100	110	② GWCW2	HSC06020	HKY50R

* Clamp Torque (N · m) : HSC06020=7.0

Note 1) Recommended Maximum Coolant Pressure : 7MPa

Spare Parts for Tool Block with Coolant Hole

Order Number	①					
	②	Plug	Plug	Wrench	Plug	Wrench
GWTBN2020-B26-C	ORGW332N9	HGJ-PT1/8	HSD05004S	HKY25R	CS300590T	TKY08R
GWTBN2020-B32-C	ORGW457N9	HGJ-PT1/8	HSD05004S	HKY25R	CS300590T	TKY08R
GWTBN2525-B26-C	ORGW332N9	HGJ-PT1/8	HSD05004S	HKY25R	CS300590T	TKY08R
GWTBN2525-B32-C	ORGW457N9	HGJ-PT1/8	HSD05004S	HKY25R	CS300590T	TKY08R

GW SERIES INSERTS

(mm)

Application	Order Number	Stock						CW		REL	RER	PSIRR PSIRL	Geometry
		Coating			Carbide			Cutting Width	Tolerance				
		MY5015	VP10RT	VP20RT	VP30RT	RT9010	RT9020						
Grooving, Cutting Off	GW1M0200D020N-GS	●	●	●			2.00	±0.03	0.2	0.2	—		
Grooving, Cutting Off	NEW GW1M0239E020N-GS	●	●	●			2.39	±0.03	0.2	0.2	—		
Grooving, Cutting Off	GW1M0300F020N-GS	●	●	●			3.00	±0.03	0.2	0.2	—		
Grooving, Cutting Off	GW1M0400G020N-GS	●	●	●			4.00	±0.04	0.2	0.2	—		
Grooving, Cutting Off	GW1M0500H030N-GS	●	●	●			5.00	±0.04	0.3	0.3	—		
Grooving, Cutting Off	GW1M0200D020N-GM	●	●	●			2.00	±0.03	0.2	0.2	—		
Grooving, Cutting Off	NEW GW1M0239E020N-GM	●	●	●			2.39	±0.03	0.2	0.2	—		
Grooving, Cutting Off	GW1M0300F030N-GM	●	●	●			3.00	±0.03	0.3	0.3	—		
Grooving, Cutting Off	GW1M0400G030N-GM	●	●	●			4.00	±0.04	0.3	0.3	—		
Grooving, Cutting Off	GW1M0500H040N-GM	●	●	●			5.00	±0.04	0.4	0.4	—		
Cutting off, Low Feed	NEW GW1M0200D020R05-GS	●	●	●			2.00	±0.03	0.2	0.2	5		
Cutting off, Low Feed	NEW GW1M0239E020R05-GS	●	●	●			2.39	±0.03	0.2	0.2	5		
Cutting off, Low Feed	NEW GW1M0300F020R05-GS	●	●	●			3.00	±0.03	0.2	0.2	5		
Cutting off Low Feed, Lead Angle 8°	NEW GW1M0200D003R08-GS	●	●	●			2.00	±0.03	0.03	0.03	8		
Cutting off Low Feed, Lead Angle 8°	NEW GW1M0239E003R08-GS	●	●	●			2.39	±0.03	0.03	0.03	8		
Cutting off Low Feed, Lead Angle 8°	NEW GW1M0300F003R08-GS	●	●	●			3.00	±0.03	0.03	0.03	8		
Cutting Off	GW1M0200D020R05-GM	●	●	●			2.00	±0.03	0.2	0.2	5		
Cutting Off	GW1M0200D020L05-GM	●	●	●			2.00	±0.03	0.2	0.2	5		
Cutting Off	NEW GW1M0239E020R05-GM	●	●	●			2.39	±0.03	0.2	0.2	5		
Cutting Off	NEW GW1M0239E020L05-GM	●	●	●			2.39	±0.03	0.2	0.2	5		
Cutting Off	GW1M0300F030R05-GM	●	●	●			3.00	±0.03	0.3	0.3	5		
Cutting Off	GW1M0300F030L05-GM	●	●	●			3.00	±0.03	0.3	0.3	5		
Cutting Off	GW1M0400G030R05-GM	●	●	●			4.00	±0.04	0.3	0.3	5		
Cutting Off	GW1M0400G030L05-GM	●	●	●			4.00	±0.04	0.3	0.3	5		
Cutting Off	GW1M0500H040R05-GM	●	●	●			5.00	±0.04	0.4	0.4	5		
Cutting Off	GW1M0500H040L05-GM	●	●	●			5.00	±0.04	0.4	0.4	5		

Right hand insert shown.

● = NEW

GROOVING / CUTTING OFF

F

Blank Inserts

(mm)

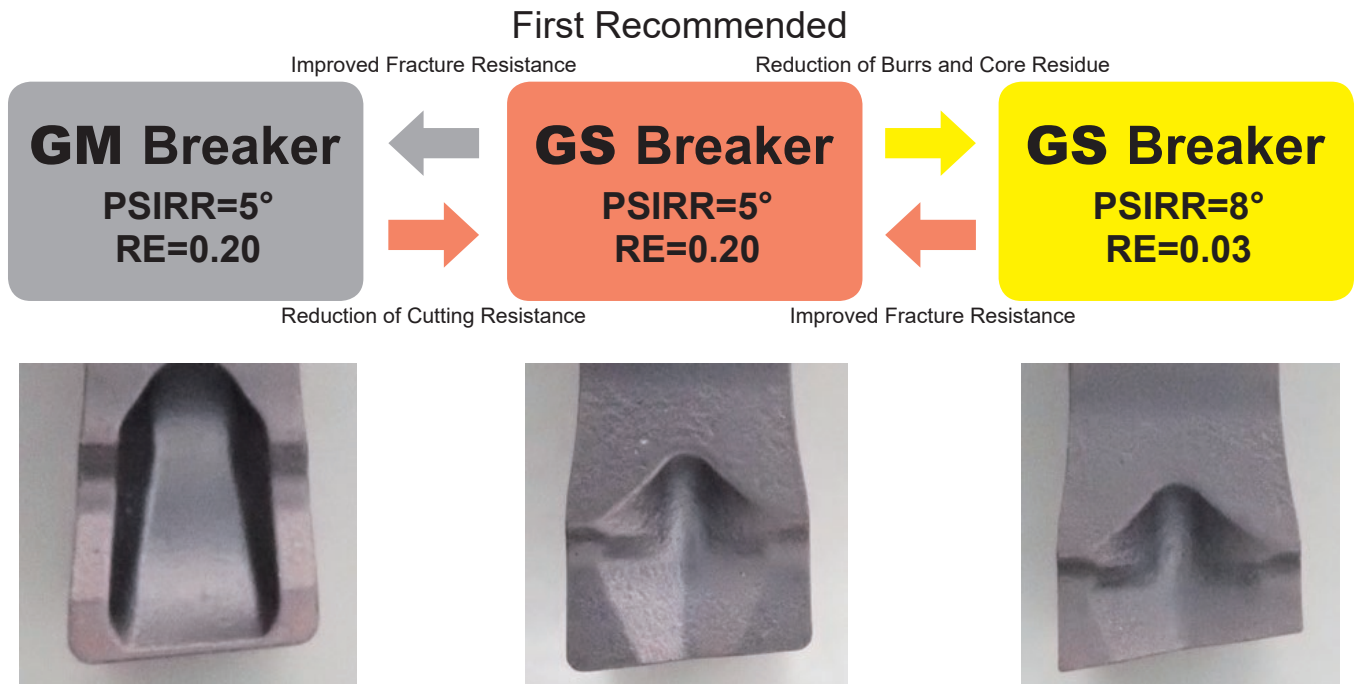
Geometry	Order Number	Carbide		CW		RER	REL
		RT9010	RT9020	Grooving Width	Tolerance		
NEW	GW1B0440F020N	●	●	4.44	±0.10	0.2	0.2
	GW1B0540G020N	●	●	5.44	±0.10	0.2	0.2
	GW1B0640H020N	●	●	6.44	±0.10	0.2	0.2

* Insert blank is not suitable for machining without grinding.

● = NEW



Proper Use of GW Series Right Hand Inserts



F
GROOVING / CUTTING OFF

Coolant Hose Kit

Connector Type	Order Number	Stock	Hose Length	Kit Details									
				Hose		Banjo Adapter		Banjo Bolt		Adapter		Washer	
				Code No.	QTY.	Code No.	QTY.	Code No.	QTY.	Code No.	QTY.	Code No.	QTY.
Straight	CS-1/8-150SS	●	150	HOSE-1/8-150	—	—	—	—	AD-G1/8	2	WA-M10	2	
Straight	CS-1/8-200SS	●	200	HOSE-1/8-200	—	—	—	—	AD-G1/8	2	WA-M10	2	
Straight	CS-1/8-250SS	●	250	HOSE-1/8-250	—	—	—	—	AD-G1/8	2	WA-M10	2	
Straight	CS-1/8-300SS	●	300	HOSE-1/8-300	—	—	—	—	AD-G1/8	2	WA-M10	2	
Elbow Straight	CS-1/8-150BS	●	150	HOSE-1/8-150	AD-BM10	1	BB-G1/8	1	AD-G1/8	1	WA-M10	3	
Elbow Straight	CS-1/8-200BS	●	200	HOSE-1/8-200	AD-BM10	1	BB-G1/8	1	AD-G1/8	1	WA-M10	3	
Elbow Straight	CS-1/8-250BS	●	250	HOSE-1/8-250	AD-BM10	1	BB-G1/8	1	AD-G1/8	1	WA-M10	3	
Elbow Straight	CS-1/8-300BS	●	300	HOSE-1/8-300	AD-BM10	1	BB-G1/8	1	AD-G1/8	1	WA-M10	3	
Elbow	CS-1/8-150BB	●	150	HOSE-1/8-150	AD-BM10	2	BB-G1/8	2	—	—	WA-M10	4	
Elbow	CS-1/8-200BB	●	200	HOSE-1/8-200	AD-BM10	2	BB-G1/8	2	—	—	WA-M10	4	
Elbow	CS-1/8-250BB	●	250	HOSE-1/8-250	AD-BM10	2	BB-G1/8	2	—	—	WA-M10	4	
Elbow	CS-1/8-300BB	●	300	HOSE-1/8-300	AD-BM10	2	BB-G1/8	2	—	—	WA-M10	4	

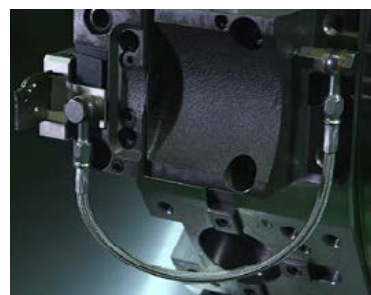
Connection Screw Size = G1/8"

Mounting Example

Elbow Straight Type



Elbow Type



RECOMMENDED CUTTING CONDITIONS

■ Cutting Speed

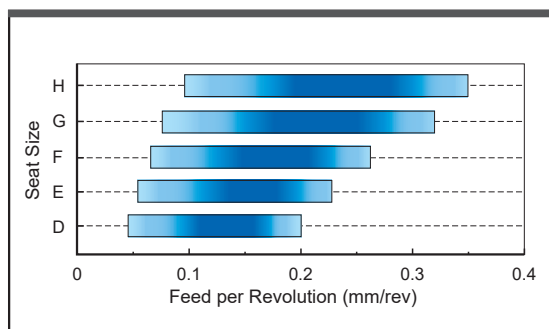
Workpiece Material	Hardness	Grade	Cutting Speed (m/min)					
			50	100	150	200	250	300
P Mild Steel Carbon Steel Alloy Steel	≤160HB	VP20RT		100		240		
		VP10RT		110		250		
	160–280HB	VP20RT	80		200			
		VP10RT	90		210			
		VP30RT	60		180			
		MY5015		110		250		
	≥280HB	VP20RT	60		160			
		VP10RT	70		170			
		VP30RT	40		140			
		MY5015		90		210		
M Stainless Steel	≤270HB	VP20RT	60		180			
		VP10RT	70		190			
		VP30RT	40		160			
K Gray Cast Iron Ductile Cast Iron	Tensile Strength ≤300MPa	VP20RT		80		200		
		VP10RT		90		210		
		MY5015			140		300	
	Tensile Strength ≤800MPa	VP20RT	60		160			
		VP10RT	70		170			
		MY5015		90		210		
S Heat Resistant Alloy Titanium Alloy	—	VP20RT	30	60				
		VP10RT	40	70				

Note 1) VP20RT is the first recommended grade for materials.

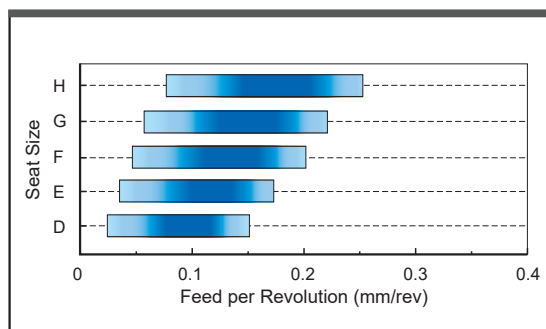
Note 2) For VP10RT, VP20RT, VP30RT and MY5015, wet cutting is recommended.

■ Feed per Revolution

GM Breaker



GS Breaker



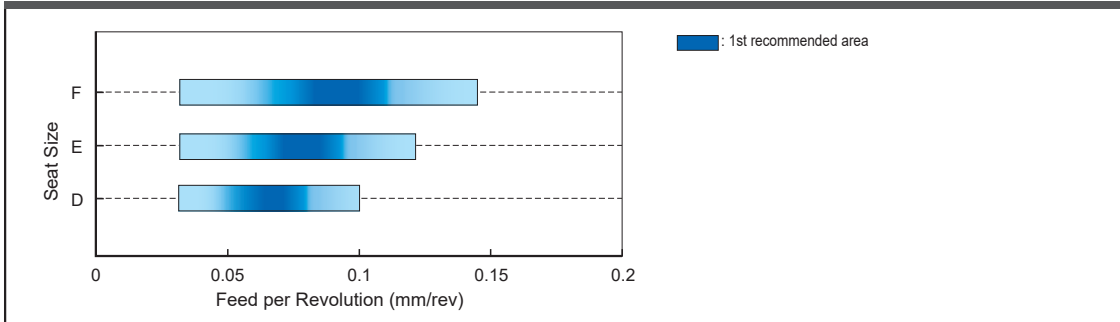
■ : 1st recommended area

Seat Size	
Seat Size	Insert Width (mm)
D	2.00
E	2.39
F	3.00
G	4.00
H	5.00

Chip Breaker	Feed per Revolution (mm/rev)				
	Seat Size D	Seat Size E	Seat Size F	Seat Size G	Seat Size H
GM Breaker	0.05–0.20	0.06–0.23	0.07–0.26	0.08–0.32	0.10–0.35
GS Breaker	0.03–0.15	0.04–0.17	0.05–0.20	0.06–0.22	0.08–0.25

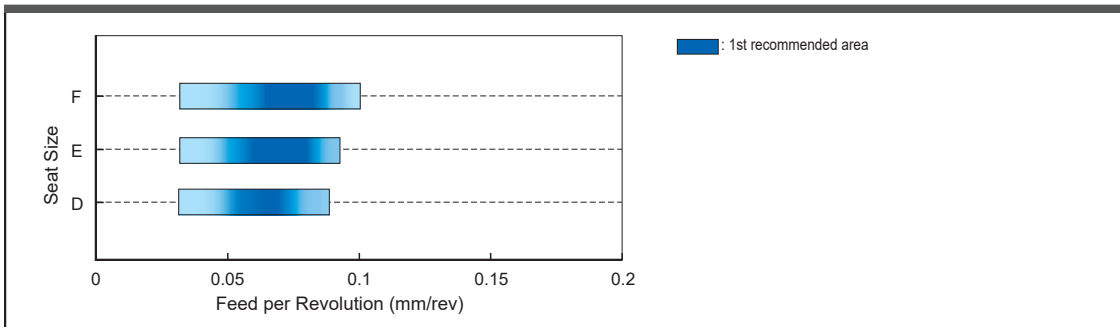
■ Cutting Off Feed per Revolution

R05-GS Breaker

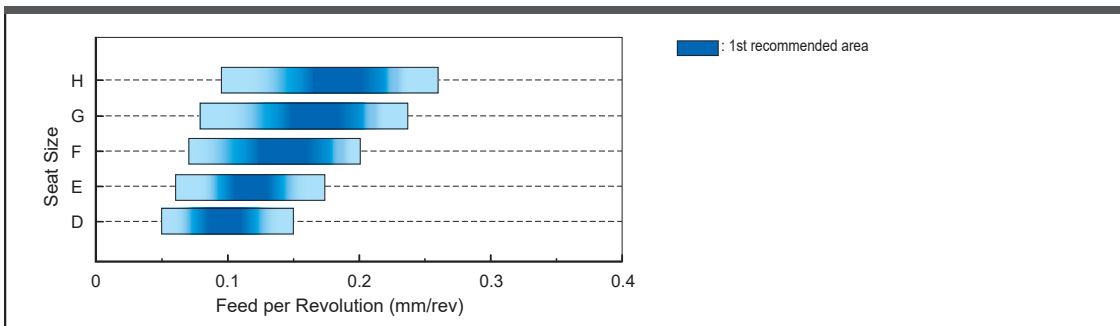


Seat Size	
Insert Width (mm)	
D	2.00
E	2.39
F	3.00
G	4.00
H	5.00

R08-GS Breaker



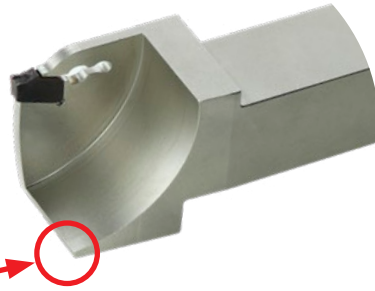
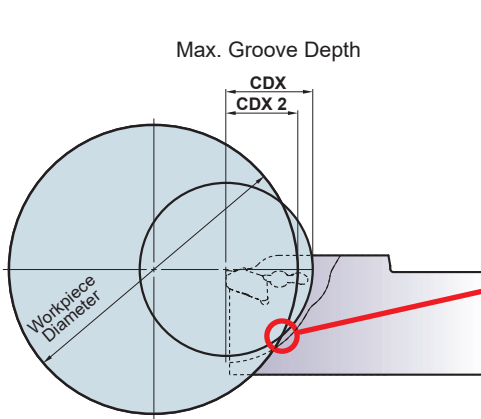
R/L05-GM Breaker



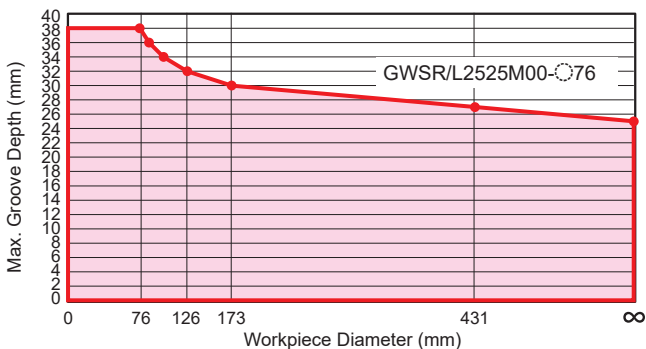
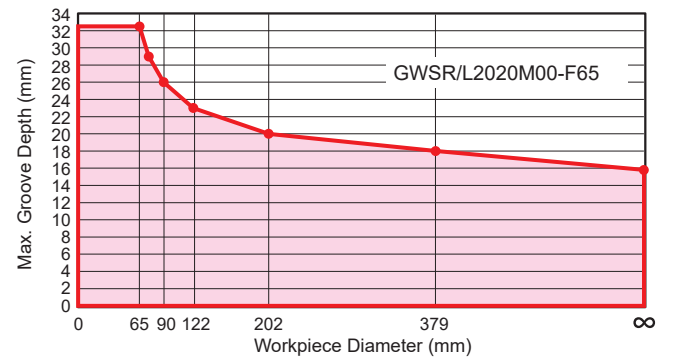
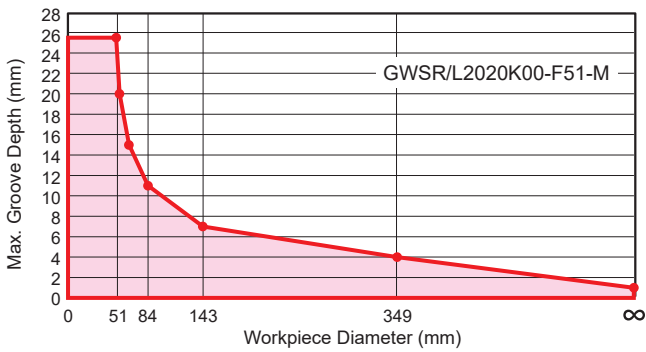
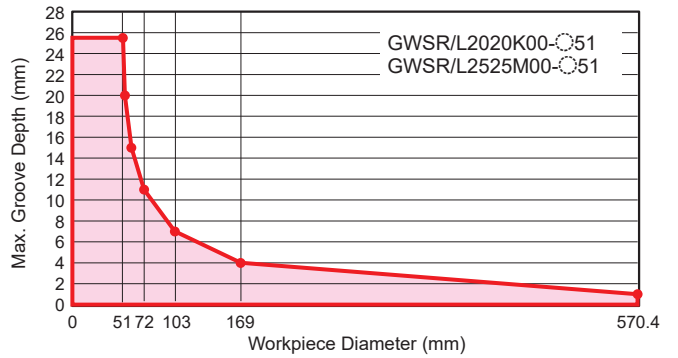
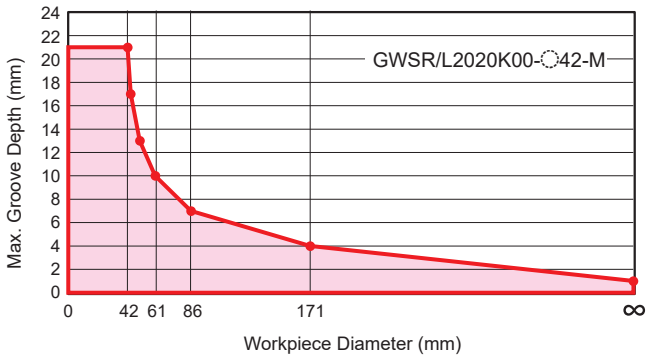
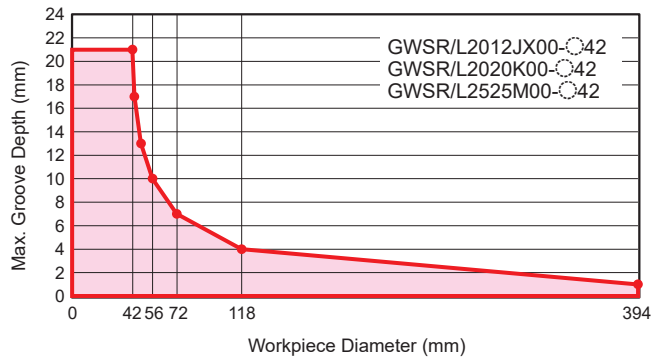
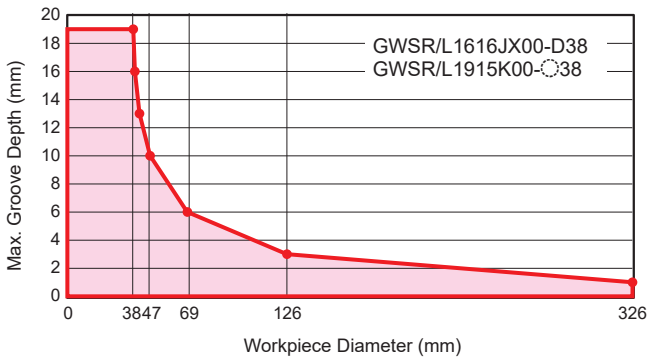
Chip Breaker	PSIPR	Hand	Feed per Revolution (mm/rev)				
			Seat Size D	Seat Size E	Seat Size F	Seat Size G	Seat Size H
R05-GS	5°	R	0.03–0.10	0.03–0.12	0.03–0.14	–	–
R08-GS	8°	R	0.03–0.08	0.03–0.09	0.03–0.14	–	–
R05-GM	5°	R/L	0.05–0.15	0.06–0.17	0.07–0.20	0.08–0.23	0.10–0.26

LIMITATION OF THE MAXIMUM GROOVE DEPTH [For External Grooving]

The maximum groove depth is limited by the workpiece diameter.



Due to interference, the maximum groove depth is limited by the workpiece diameter.



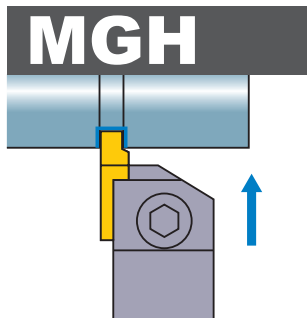
Memo

A series of horizontal dashed lines for writing, spanning the width of the page.

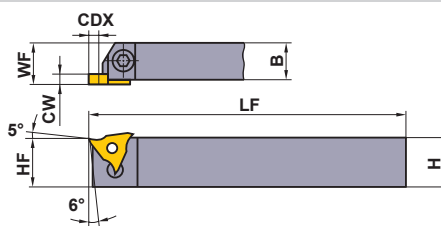
GROOVING / CUTTING OFF

MG HOLDER

- Clamp-on type
- Positive insert suffers from negligible chattering and thus produces a good finished surface.
- Cutting width CW 1.25–6.0mm



External grooving







Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions(mm)						
	R	L		CW	CDX	H	B	LF	HF	WF
MGHR/L2020K3315	●	●	33125 33400	1.25	1.2	20	20	125	20	20.2
MGHR/L2020K3323	●	●		1.45	1.5					
MGHR/L2525M3315	●	●		1.5 ≤ CW ≤ 2.3	3.0					
MGHR/L2525M3315	●	●	33125 33400	1.25	1.2	25	25	150	25	25.2
MGHR/L2525M3323	●	●		1.45	1.5					
MGHR/L2525M3333	●	●		1.5 ≤ CW ≤ 2.3	3.0					
MGHR/L2525M3333	●	●	2.3 < CW ≤ 3.3	3.0	25	25	150	25	25.2	
MGHR/L2525M3333	●	●	3.3 < CW ≤ 4.7	3.0	25	25	150	25	25.2	
MGHR/L2020K4315	●	●	43125 43470	1.25	1.2 (2.0)*	20	20	125	20	20.2
MGHR/L2020K4323	●	●		1.45	1.5					
MGHR/L2020K4333	●	●		1.5 ≤ CW ≤ 2.3	3.0 (3.5)*					
MGHR/L2525M4315	●	●	43125 43470	2.3 < CW ≤ 3.3	4.5 (4.0)*	25	25	150	25	25.2
MGHR/L2525M4323	●	●		3.3 < CW ≤ 4.7 (4.0)*	4.5 (5.0)*					
MGHR/L2525M4333	●	●		1.25	1.2 (2.0)*					
MGHR/L2525M4315	●	●	44500 44600	1.45	1.5	25	25	150	25	25.2
MGHR/L2525M4323	●	●		1.5 ≤ CW ≤ 2.3	3.0 (3.5)*					
MGHR/L2525M4333	●	●		2.3 < CW ≤ 3.3	4.5 (4.0)*					
MGHR/L2525M4447	●	●	3.3 < CW ≤ 4.7 (4.0)*	4.5 (5.0)*	25	25	150	25	25.2	
MGHR/L2525M4447	●	●	44500 44600	4.7 < CW ≤ 6.3	4.5	25	25	150	25	25.2

* Dimensions when installing the CBN insert.

SPARE PARTS

Order Number		 *		
MGHR/L2020K3315 MGHR/L2525M4447	MTK1R/L	HBH06020	MES3	HKY40R

* Clamp Torque (N · m) : HBH06020=7.0

RECOMMENDED CUTTING CONDITIONS

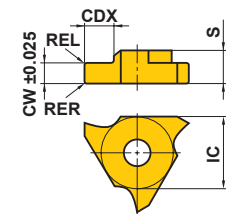
Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P Carbon Steel Alloy Steel	180–280HB	VP20MF	120 (100–140)	0.14 (0.03–0.25)
		NX2525	130 (100–160)	0.12 (0.03–0.2)
M Stainless Steel	≤200HB	VP20MF	120 (100–140)	0.12 (0.03–0.18)
K Gray Cast Iron	Tensile Strength ≤350MPa	VP20MF	120 (100–140)	0.12 (0.03–0.18)

Note) For machining a narrow groove, apply a lower feed within the recommended range.

● : Inventory maintained in Japan.
(Contains 10 inserts per case.)

INSERTS

Order Number	Stock						Dimensions(mm)					Geometry
	Coated		Cermet		Carbide		CW	CDX	IC	S	RER/L	
	VP20MF		NX2525		UT120T							
	R	L	R	L	R	L						
MGTR/L33125	●	●	●		●	●	1.25	1.2	9.525	4.76	0.2	MGTR/L...
MGTR/L33145	●	●	●		●	●	1.45	1.5	9.525	4.76	0.2	
MGTR/L33150	●	●	●	●	●	●	1.5	3	9.525	4.76	0.2	
MGTR/L33175	●	●	●	●	●	●	1.75	3	9.525	4.76	0.2	
MGTR/L33200	●	●	●	●	●	●	2	3	9.525	4.76	0.2	
MGTR/L33230	●	●			●	●	2.3	3	9.525	4.76	0.2	
MGTR/L33250	●	●	●	●	●	●	2.5	3	9.525	4.76	0.3	
MGTR/L33270	●	●			●	●	2.7	3	9.525	4.76	0.3	
MGTR/L33280	●	●			●	●	2.8	3	9.525	4.76	0.3	
MGTR/L33300	●	●	●	●	●	●	3	3	9.525	4.76	0.3	
MGTR/L33320	●	●			●		3.2	3	9.525	4.76	0.3	
MGTR/L33330		●			●	●	3.3	3	9.525	4.76	0.3	
MGTR/L33350	●	●	●		●	●	3.5	3	9.525	4.76	0.3	
MGTR/L33400	●	●	●	●	●	●	4	3	9.525	4.76	0.3	
MGTR/L43125	●	●	●	●	●	●	1.25	1.2	12.7	4.76	0.2	
MGTR/L43145	●	●			●	●	1.45	1.5	12.7	4.76	0.2	
MGTR/L43150	●	●	●	●	●	●	1.5	3	12.7	4.76	0.2	
MGTR/L43175	●	●	●	●	●	●	1.75	3	12.7	4.76	0.2	
MGTR/L43200	●	●	●	●	●	●	2	3.5	12.7	4.76	0.2	
MGTR/L43230	●	●	●	●	●	●	2.3	3	12.7	4.76	0.2	
MGTR/L43250	●	●	●	●	●	●	2.5	4.5	12.7	4.76	0.3	
MGTR/L43260	●	●	●		●	●	2.6	4.5	12.7	4.76	0.3	
MGTR/L43270	●	●			●	●	2.7	4.5	12.7	4.76	0.3	
MGTR/L43280		●		●	●	●	2.8	4.5	12.7	4.76	0.3	
MGTR/L43300	●	●	●	●	●	●	3	4.5	12.7	4.76	0.3	
MGTR/L43320	●				●	●	3.2	4.5	12.7	4.76	0.3	
MGTR/L43330		●		●	●	●	3.3	4.5	12.7	4.76	0.3	
MGTR/L43350	●	●	●	●	●	●	3.5	4.5	12.7	4.76	0.3	
MGTR/L43400	●	●	●		●	●	4	4.5	12.7	4.76	0.3	
MGTR/L43420	●	●	●		●	●	4.2	4.5	12.7	4.76	0.4	
MGTR/L43430	●	●	●		●	●	4.3	4.5	12.7	4.76	0.4	
MGTR/L43450	●	●	●	●	●	●	4.5	4.5	12.7	4.76	0.4	
MGTR/L43470	●	●	●	●	●	●	4.7	4.5	12.7	4.76	0.4	
MGTR/L44500	●	●			●	●	5	4.5	12.7	6.35	0.4	
MGTR/L44550	●				●		5.5	4.5	12.7	6.35	0.4	
MGTR/L44600	●				●	●	6	4.5	12.7	6.35	0.4	



Right hand insert shown.

F

GROOVING / CUTTING OFF

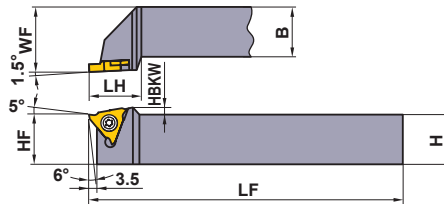
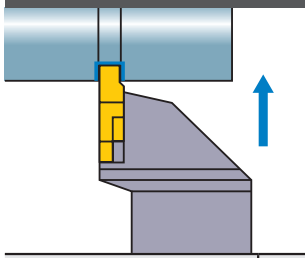
GROOVING / CUTTING OFF

SMG HOLDER

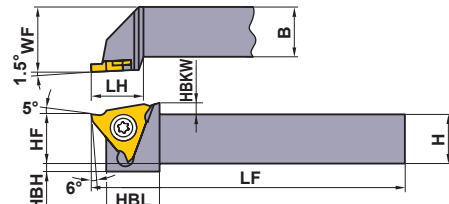
- Screw-on type
- Positive insert suffers from negligible chattering.
- Applicable to narrow grooving and threading.
- Cutting width CW 0.5–1.3mm

SMGH

External grooving, Threading



Right hand tool holder only.



SMGHR1010E16, SMGHR1212F16

Order Number	Stock	Insert Number		Dimensions(mm)								*		
		Grooving	Threading	H	B	LF	LH	HF	WF	HBKW	HBH			HBL
SMGHR1010E16	●	SMGTR 16×2○○○○C	SMTTR 160360○○	10	10	70	16.5	10	12	2.5	4	13	FC400890T	TKY10F
SMGHR1212F16	●			12	12	80	16.5	12	16	2.5	2	13	FC400890T	TKY10F
SMGHR1616H16	●			16	16	100	20	16	20	—	—	—	FC400890T	TKY10F
SMGHR2020K16	●			20	20	125	20	20	25	—	—	—	FC400890T	TKY10F
SMGHR2525M16	●			25	25	150	20	25	32	—	—	—	FC400890T	TKY10F

* Clamp Torque (N · m) : FC400890T=2.5

SMG INSERTS (GROOVING)

Order Number	Stock			Dimensions(mm)						Geometry
	NX2525	Cermet	Carbide	CW	CDX	IC	S	D1	BCH	
		UTi20T	HTi10							
SMGTR16X2050			●	0.5	1.5	9.525	2	4.5	—	
SMGTR16X2060	●	●	●	0.6	1.5	9.525	2	4.5	—	
SMGTR16X2050C	●	●	●	0.5	1.5	9.525	2	4.5	0.05	
SMGTR16X2060C	●	●	●	0.6	1.5	9.525	2	4.5	0.05	
SMGTR16X2070C	●	●	●	0.7	2	9.525	2	4.5	0.05	
SMGTR16X2075C	●	●	●	0.75	2	9.525	2	4.5	0.05	
SMGTR16X2080C	●	●	●	0.8	2	9.525	2	4.5	0.1	
SMGTR16X2090C	●	●	●	0.9	2	9.525	2	4.5	0.1	
SMGTR16X2095C	●	●	●	0.95	2	9.525	2	4.5	0.1	
SMGTR16X2100C	●	●	●	1	2.5	9.525	2	4.5	0.1	
SMGTR16X2110C	●	●	●	1.1	2.5	9.525	2	4.5	0.1	
SMGTR16X2120C	●	●	●	1.2	2.5	9.525	2	4.5	0.1	
SMGTR16X2130C	●	●	●	1.3	2.5	9.525	2	4.5	0.1	

SMT INSERTS (THREADING)

Order Number	Stock		Thread Pitch (mm)	Geometry
	Carbide	RE		
	UTi20T	RE		
SMTTR16036001	●	0.1	1.0–1.5	
SMTTR16036002	●	0.2	1.75–2.0	

Note 1) When installing the threading insert to the tool body, a difference occurs. Please refer to page G031.

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P Carbon Steel Alloy Steel	180–280HB	UTi20T	100 (80–120)	0.07 (0.03–0.1)
		NX2525	130 (100–160)	0.07 (0.03–0.1)
M Stainless Steel	≤200HB	UTi20T	130 (100–160)	0.1 (0.05–0.15)
K Gray Cast Iron	Tensile Strength ≤350MPa	UTi20T	100 (80–120)	0.1 (0.05–0.15)
		HTi10	350 (300–400)	0.1 (0.05–0.15)
N Aluminium Alloy	—	HTi10	250 (200–300)	0.1 (0.03–0.15)
		HTi10	250 (200–300)	0.1 (0.03–0.15)
		HTi10	250 (200–300)	0.1 (0.03–0.15)

● : Inventory maintained in Japan.
(Contains 10 inserts per case.)

MICRO-MINI

- Solid carbide type with min. cutting diameter 3.2mm.
- l/d is 5 times the diameter.
- Insert can be ground to suit the application.
- Suitable for a wide range of tooling including threading and grooving.

MICRO-MINI STANDARD (SOLID CARBIDE BORING BAR)

Order Number	Stock	Dimensions(mm)						Geometry
	TF15	CW	DCON	LF	LDRED	DMIN*	WF2	
C03FR-BLS	●	2.0	3	80	15	3.2	1.0	
C04FR-BLS	●	2.5	4	80	20	4.2	1.5	
C05HR-BLS	●	3.0	5	100	25	5.2	2.0	

Right hand tool only.

* DMIN : Min. Cutting Diameter

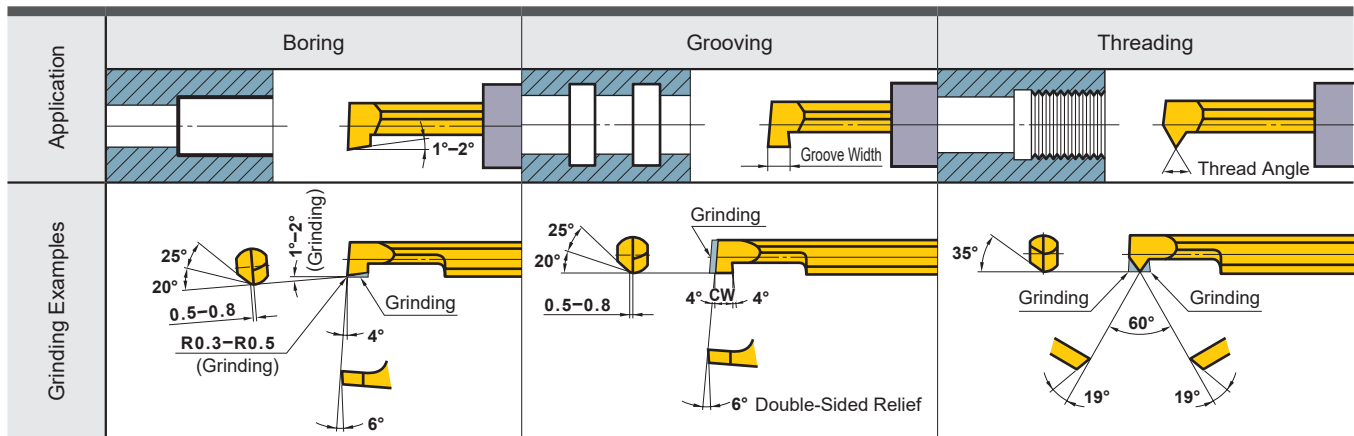
RECOMMENDED CUTTING CONDITIONS

	Workpiece Material	Cutting Speed (m/min)	Feed (mm/rev)	Depth of Cut (mm)	Excescence Quantity (l/d)	Edge Condition	
						Corner Radius or BCH *	Honing *
P	Carbon Steel · Alloy Steel 180-280HB	40 (30-50)	0.05 (-0.1)	0.2 (0.1-0.3)	5	0.1-0.5	0.01-0.05
M	Stainless Steel ≤200HB	40 (30-50)	0.05 (-0.1)	0.2 (0.1-0.3)	5	≤0.4	≤0.03 (Honing not required)
K	Gray Cast Iron ≤350MPa	40 (30-50)	0.05 (-0.05)	0.2 (0.1-0.3)	5	0.1-0.5	0.01-0.05
N	Non-ferrous Metal	80 (60-100)	0.05 (-0.1)	0.3 (0.1-0.5)	5	0.1-0.5	≤0.03 (Honing not required)

*Cutting edge is not honed. Please hone according to the application before machining.

GRINDING THE CUTTING EDGE OF MICRO-MINI

- MICRO-MINI can be applied to boring and grooving as supplied. But, it can also be reground as shown below.
- For shaping and regrinding, use a diamond whetstone approximately #250-#400. Please grind according to the application using the figure below as a reference.

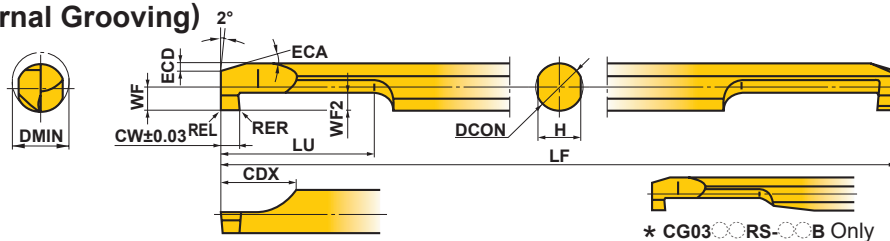


● : Inventory maintained in Japan.
(MICRO MINI is available in 1 piece in one pack.)

SPARE PARTS > P001
TECHNICAL DATA > Q001

MICRO-MINI TWIN

■CG TYPE (Internal Grooving)



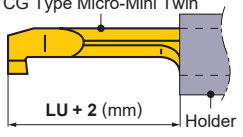
F
GROOVING / CUTTING OFF

Order Number	Stock		Breaker	Dimensions (mm)												
	Micro-Grain Carbide	Coated		DMIN	CW	WF2	RER/L	DCON	LF	LU	CDX	WF	H	ECA	ECD	
	TF15	VP15TF														
CG0305RS-10	●	●	Without	3	1	1	0.05	3	50	5	6	1.3	2.7	15°	0.3	
CG0305RS-10B	●	●	With	3	1	1	0.05	3	50	5	6	1.3	2.7	15°	0.3	
CG0306RS-20	●	●	Without	3	2	1	0.1	3	50	6	6	1.3	2.7	15°	0.3	
CG0306RS-20B	●	●	With	3	2	1	0.1	3	50	6	6	1.3	2.7	15°	0.3	
CG03RS-10	●	●	Without	3	1	1	0.05	3	50	10	6	1.3	2.7	15°	0.3	
CG03RS-10B	●	●	With	3	1	1	0.05	3	50	10	6	1.3	2.7	15°	0.3	
CG03RS-20	●	●	Without	3	2	1	0.1	3	50	11	6	1.3	2.7	15°	0.3	
CG03RS-20B	●	●	With	3	2	1	0.1	3	50	11	6	1.3	2.7	15°	0.3	
CG0407RS-10	●	●	Without	4	1	1.5	0.05	4	60	7	7	1.8	3.6	15°	0.5	
CG0407RS-10B	●	●	With	4	1	1.5	0.05	4	60	7	7	1.8	3.6	15°	0.5	
CG0408RS-20	●	●	Without	4	2	1.5	0.1	4	60	8	7	1.8	3.6	15°	0.5	
CG0408RS-20B	●	●	With	4	2	1.5	0.1	4	60	8	7	1.8	3.6	15°	0.5	
CG04RS-10	●	●	Without	4	1	1.5	0.05	4	60	15	7	1.8	3.6	15°	0.5	
CG04RS-10B	●	●	With	4	1	1.5	0.05	4	60	15	7	1.8	3.6	15°	0.5	
CG04RS-20	●	●	Without	4	2	1.5	0.1	4	60	16	7	1.8	3.6	15°	0.5	
CG04RS-20B	●	●	With	4	2	1.5	0.1	4	60	16	7	1.8	3.6	15°	0.5	
CG0510RS-10	●	●	Without	5	1	2	0.05	5	70	10	8	2.3	4.5	15°	0.7	
CG0510RS-10B	●	●	With	5	1	2	0.05	5	70	10	8	2.3	4.5	15°	0.7	
CG0511RS-20	●	●	Without	5	2	2	0.1	5	70	11	8	2.3	4.5	15°	0.7	
CG0511RS-20B	●	●	With	5	2	2	0.1	5	70	11	8	2.3	4.5	15°	0.7	
CG05RS-10	●	●	Without	5	1	2	0.05	5	70	20	8	2.3	4.5	15°	0.7	
CG05RS-10B	●	●	With	5	1	2	0.05	5	70	20	8	2.3	4.5	15°	0.7	
CG05RS-20	●	●	Without	5	2	2	0.1	5	70	21	8	2.3	4.5	15°	0.7	
CG05RS-20B	●	●	With	5	2	2	0.1	5	70	21	8	2.3	4.5	15°	0.7	
CG0610RS-10	●	●	Without	6	1	2	0.05	6	75	10	8	2.8	5.4	15°	0.7	
CG0610RS-10B	●	●	With	6	1	2	0.05	6	75	10	8	2.8	5.4	15°	0.7	
CG0611RS-20	●	●	Without	6	2	2	0.1	6	75	11	8	2.8	5.4	15°	0.7	
CG0611RS-20B	●	●	With	6	2	2	0.1	6	75	11	8	2.8	5.4	15°	0.7	
CG06RS-10	●	●	Without	6	1	2	0.05	6	75	20	8	2.8	5.4	15°	0.7	
CG06RS-10B	●	●	With	6	1	2	0.05	6	75	20	8	2.8	5.4	15°	0.7	
CG06RS-20	●	●	Without	6	2	2	0.1	6	75	21	8	2.8	5.4	15°	0.7	
CG06RS-20B	●	●	With	6	2	2	0.1	6	75	21	8	2.8	5.4	15°	0.7	
CG0712RS-10	●	●	Without	7	1	2	0.05	7	85	12	8	3.3	6.4	15°	0.7	
CG0712RS-10B	●	●	With	7	1	2	0.05	7	85	12	8	3.3	6.4	15°	0.7	
CG0713RS-20	●	●	Without	7	2	2	0.1	7	85	13	8	3.3	6.4	15°	0.7	
CG0713RS-20B	●	●	With	7	2	2	0.1	7	85	13	8	3.3	6.4	15°	0.7	
CG07RS-10	●	●	Without	7	1	2	0.05	7	85	25	8	3.3	6.4	15°	0.7	
CG07RS-10B	●	●	With	7	1	2	0.05	7	85	25	8	3.3	6.4	15°	0.7	
CG07RS-20	●	●	Without	7	2	2	0.1	7	85	26	8	3.3	6.4	15°	0.7	
CG07RS-20B	●	●	With	7	2	2	0.1	7	85	26	8	3.3	6.4	15°	0.7	

● : Inventory maintained in Japan.

(MICRO-MINI TWIN is available in 1 piece in one pack.)

RECOMMENDED CUTTING CONDITIONS

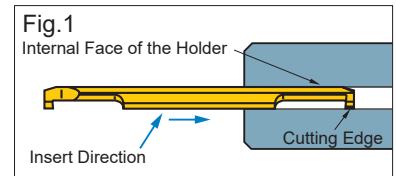
Workpiece Material	Hardness	Cutting Speed (m/min)	Feed (mm/rev)		Recommended Tool Overhang (mm)
			CG03RS/CG04RS	CG05RS/CG06RS/CG07RS	
P Carbon Steel · Alloy Steel	180–280HB	80 (40–120)	0.02 (0.01–0.03)	0.03 (0.01–0.05)	CG Type Micro-Mini Twin 
M Stainless Steel	≤200HB	80 (40–120)	0.02 (0.01–0.03)	0.03 (0.01–0.05)	
K Gray Cast Iron	Tensile Strength ≤350MPa	80 (40–120)	0.03 (0.01–0.05)	0.03 (0.01–0.05)	
N Non-ferrous Metal	—	120 (80–160)	0.03 (0.01–0.05)	0.05 (0.01–0.08)	

Note 1) Wet cutting is recommended.

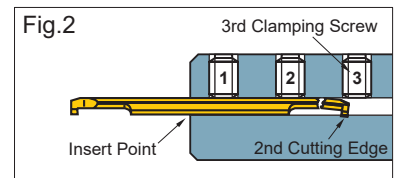
■ PRECAUTIONS WHEN USING THE MICRO-MINI TWIN

● When using a holder for general purpose / small automatic lathe:

① To avoid chipping of the 2nd cutting edge take care when inserting the boring bar into the holder. Refer to fig.1. If the 2nd edge contacts the internal face of the holder there is a possibility that it may chip.



② When using this type of holder, there is a possibility that damage to the shank and the 2nd cutting edge can occur. Make sure that the clamping screws are tightened to the set torque value. Additionally make sure that there is no clamping screw near the 2nd cutting edge as this can break the boring bar.



◎ When using Mitsubishi holders

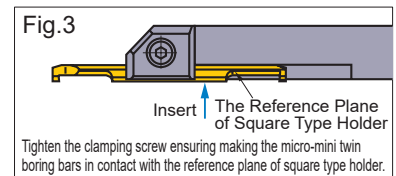
When using holders with a tool overhang of recommended quantity, ensure that the 3rd clamping screw is removed prior to machining. The set torque value for clamping screw is 2.0 N·m.

● When using a square type holder:

① When installing the boring bar into the holder, tighten the clamp screws after ensuring the flats on the tool holder are parallel to the reference flats on the micro-mini bar. Refer to fig.3.

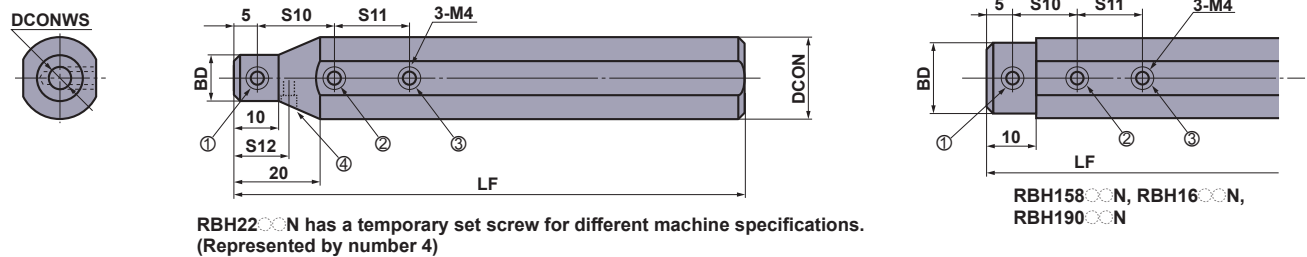
② Make sure that the clamping screws are tightened to the recommended values.

③ Do not tighten the clamp screw without a bar in place, otherwise the bridge will be deformed.



GROOVING / CUTTING OFF

ROUND TYPE HOLDER



GROOVING / CUTTING OFF

F

Order Number	Stock	Dimensions (mm)							MICRO-MINI C	MICRO-MINI TWIN CG	*1 Clamp Screw				Wrench	Torque (N·m)
		DCON	DCONWS	BD	LF	S10	S11	S12			①	②	③	④		
RBH15830N	●	15.875	3	15	100	10	10	—	03FR-BLS	03RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH15840N	●	15.875	4	15	100	15	15	—	04FR-BLS	04RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH15850N	●	15.875	5	15	100	15	15	—	05HR-BLS	05RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH15860N	●	15.875	6	15	100	15	15	—	—	06RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH15870N	●	15.875	7	15	100	20	20	—	—	07RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH1630N	●	16	3	15	100	10	10	—	03FR-BLS	03RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH1640N	●	16	4	15	100	15	15	—	04FR-BLS	04RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH1650N	●	16	5	15	100	15	15	—	05HR-BLS	05RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH1660N	●	16	6	15	100	15	15	—	—	06RS-○○(B)	A	A	A	—	HKY20F	2.0
RBH1670N	●	16	7	15	100	20	20	—	—	07RS-○○(B)	A	A	A	—	HKY20F	2.0
*2 RBH19030N	●	19.05	3	18	125	10	10	—	03FR-BLS	03RS-○○(B)	B	B	B	—	HKY20F	2.0
*2 RBH19040N	●	19.05	4	18	125	15	15	—	04FR-BLS	04RS-○○(B)	B	B	B	—	HKY20F	2.0
*2 RBH19050N	●	19.05	5	18	125	15	15	—	05HR-BLS	05RS-○○(B)	B	B	B	—	HKY20F	2.0
*2 RBH19060N	●	19.05	6	18	125	15	15	—	—	06RS-○○(B)	B	B	B	—	HKY20F	2.0
*2 RBH19070N	●	19.05	7	18	125	20	20	—	—	07RS-○○(B)	B	B	B	—	HKY20F	2.0
RBH2030N	●	20	3	12	125	10	10	—	03FR-BLS	03RS-○○(B)	A	A	B	—	HKY20F	2.0
RBH2040N	●	20	4	13	125	15	15	—	04FR-BLS	04RS-○○(B)	A	B	B	—	HKY20F	2.0
RBH2050N	●	20	5	14	125	15	15	—	05HR-BLS	05RS-○○(B)	A	B	B	—	HKY20F	2.0
RBH2060N	●	20	6	15	125	15	15	—	—	06RS-○○(B)	A	B	B	—	HKY20F	2.0
RBH2070N	●	20	7	16	125	20	20	—	—	07RS-○○(B)	A	B	B	—	HKY20F	2.0
RBH2230N	●	22	3	12	125	10	10	10	03FR-BLS	03RS-○○(B)	A	B	C	A	HKY20F	2.0
RBH2240N	●	22	4	13	125	15	15	12.5	04FR-BLS	04RS-○○(B)	A	B	B	A	HKY20F	2.0
RBH2250N	●	22	5	14	125	15	15	12.5	05HR-BLS	05RS-○○(B)	A	B	B	A	HKY20F	2.0
RBH2260N	●	22	6	15	125	15	15	15	—	06RS-○○(B)	A	B	B	A	HKY20F	2.0
RBH2270N	●	22	7	16	125	20	20	15	—	07RS-○○(B)	A	B	B	A	HKY20F	2.0
RBH2530N	●	25	3	12	150	10	10	—	03FR-BLS	03RS-○○(B)	A	B	C	—	HKY20F	2.0
RBH2540N	●	25	4	13	150	15	15	—	04FR-BLS	04RS-○○(B)	A	C	C	—	HKY20F	2.0
RBH2550N	●	25	5	14	150	15	15	—	05HR-BLS	05RS-○○(B)	A	C	C	—	HKY20F	2.0
RBH2560N	●	25	6	15	150	15	15	—	—	06RS-○○(B)	A	C	C	—	HKY20F	2.0
RBH2570N	●	25	7	16	150	20	20	—	—	07RS-○○(B)	A	C	C	—	HKY20F	2.0
RBH25430N	●	25.4	3	12	150	10	10	—	03FR-BLS	03RS-○○(B)	A	B	C	—	HKY20F	2.0
RBH25440N	●	25.4	4	13	150	15	15	—	04FR-BLS	04RS-○○(B)	A	C	C	—	HKY20F	2.0
RBH25450N	●	25.4	5	14	150	15	15	—	05HR-BLS	05RS-○○(B)	A	C	C	—	HKY20F	2.0
RBH25460N	●	25.4	6	15	150	15	15	—	—	06RS-○○(B)	A	C	C	—	HKY20F	2.0
RBH25470N	●	25.4	7	16	150	20	20	—	—	07RS-○○(B)	A	C	C	—	HKY20F	2.0

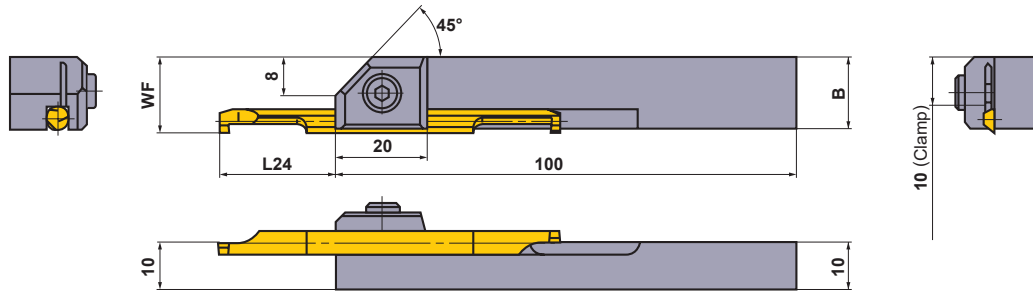
*1 Order number of clamp screw A=HSS04004, B=HSS04006, C=HSS04008

*2 Revised order number.

Conventional Order Number	Revised Order Number
RBH1930N	RBH19030N
RBH1940N	RBH19040N
RBH1950N	RBH19050N
RBH1960N	RBH19060N
RBH1970N	RBH19070N

● : Inventory maintained in Japan.

SQUARE TYPE HOLDER



Order Number	Stock	Dimensions (mm)				MICRO-MINI TWIN CG	Clamp Screw	Wrench	Torque (N • m)
		MICRO-MINI TWIN CG							
		B	WF	L24 *					
				Width of Cutting Edge 1mm	Width of Cutting Edge 2mm				
SBH1030R	●	13.8	13.8	13—17.5 (14)	14—16.5 (15)	03RS-10(B),03RS-20(B)	HSC05012	HKY40R	9.5
SBH1040R	●	14.7	14.8	18—22.5 (19)	19—21.5 (20)	04RS-10(B),04RS-20(B)	HSC05012	HKY40R	9.5
SBH1050R	●	15.6	15.8	23—27.5 (24)	24—26.5 (25)	05RS-10(B),05RS-20(B)	HSC05012	HKY40R	9.5
SBH1060R	●	16.5	16.8	23—32.5 (24)	24—31.5 (25)	06RS-10(B),06RS-20(B)	HSC05012	HKY40R	9.5
SBH1070R	●	17.4	17.8	28—38 (29)	29—37 (30)	07RS-10(B),07RS-20(B)	HSC05012	HKY40R	9.5

Note 1) The MICRO-MINI cannot be fit to square holders.

* L24 is the length of overhang for sufficient clamping, and () is the recommended length for machining of carbon and alloy steel.

GROOVING / CUTTING OFF

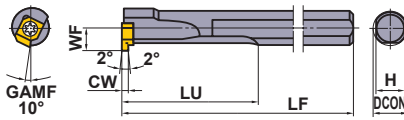
F TYPE

- Min. cutting diameter 10mm
- Screw-on type
- Usable for various applications.
- Max. groove depth : 3mm

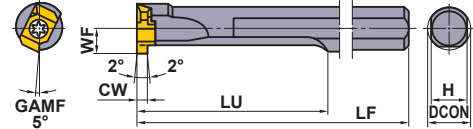
FSL51

Internal grooving, Threading

1 Corner type (FSL5108R,5110R)



2 Corner type (FSL5112R,5114R,5116R)



Right hand tool holder only.

Order Number	Stock	Insert Number		Dimensions(mm)							Max. Groove Depth (mm)	*2	
	R	Grooving	Threading	DCON	LF	LU	WF	H	CW	DMIN*1		Clamp Screw	Wrench
FSL5108R	●	MLG10 \odot L	MLT1001L	8	125	30	4.8	7	1.2	10	1.0	TS25	TKY08F
FSL5110R	●	MLG10 \odot L	MLT1001L	10	150	40	5.8	9	1.5	12	1.0	TS25	TKY08F
FSL5112R	●	MLG14 \odot L	MLT1401L	12	180	50	6.8	10.8	2.0	14	2.0	TS32	TKY08F
FSL5114R	●	MLG14 \odot L	MLT1401L	14	180	60	7.8	12.4	3.0	16	2.0	TS32	TKY08F
FSL5116R	●	MLG20 \odot L	MLT2001L	16	200	70	9.7	14	4.0	20	3.0	TS43	TKY15F

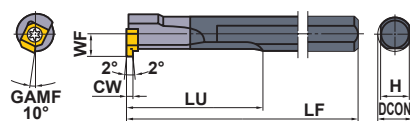
*1 DMIN : Min. Cutting Diameter

*2 Clamp Torque (N · m) : TS25=1.0, TS32=1.0, TS43=3.5

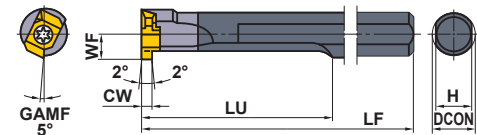
FSL52

(Carbide shank) Internal grooving, Threading

1 Corner type (FSL5208R,5210R)



2 Corner type (FSL5212R,5214R,5216R)



Right hand tool holder only.

Order Number	Stock	Insert Number		Dimensions(mm)							Max. Groove Depth (mm)	*2	
	R	Grooving	Threading	DCON	LF	LU	WF	H	CW	DMIN*1		Clamp Screw	Wrench
FSL5208R	●	MLG10 \odot L	MLT1001L	8	125	60	4.8	7	1.2	10	1.0	TS25	TKY08F
FSL5210R	●	MLG10 \odot L	MLT1001L	10	150	70	5.8	9	2.0	12	1.0	TS25	TKY08F
FSL5212R	●	MLG14 \odot L	MLT1401L	12	180	80	6.8	10.8	1.5	14	2.0	TS32	TKY08F
FSL5214R	●	MLG14 \odot L	MLT1401L	14	180	85	7.8	12.4	3.0	16	2.0	TS32	TKY08F
FSL5216R	●	MLG20 \odot L	MLT2001L	16	200	115	9.7	14	4.0	20	3.0	TS43	TKY15F

*1 DMIN : Min. Cutting Diameter

*2 Clamp Torque (N · m) : TS25=1.0, TS32=1.0, TS43=3.5

INSERTS

Application	CW and pitch (mm)	Order Number	Coated	Carbide	Dimensions(mm)						Geometry	
			UP20M	UTi20T	L	W1	CDX	S	RE	BCH		
Grooving	1.2	MLG1012L		●	7	5	1	2.38	—	0.1	MLG...L 	
	1.5	MLG1015L		●	7	5	1	2.38	—	0.1		
	2	MLG1020L		●	7	5	1	2.38	—	0.1		
	Grooving	1.5	MLG1415L		●	11.8	6.5	2	4.76	—	0.1	MLG...L
		2	MLG1420L		●	11.8	6.5	2	4.76	—	0.1	
		3	MLG1430L		●	11.8	6.5	2	4.76	—	0.1	
		2	MLG2020L		●	16.8	9.03	3	6.35	—	0.1	
		3	MLG2030L		●	16.8	9.03	3	6.35	—	0.1	
		4	MLG2040L		●	16.8	9.03	3	6.35	—	0.1	
	Threading	Pitch 1.5—2.0	MLT1001L	●	●	7	5	—	2.38	0.1	—	MLT MLT1001L
Pitch 1.5—2.5		MLT1401L	●	●	11.8	6.5	—	4.76	0.1	—		
Pitch 1.5—3.5		MLT2001L	●	●	16.8	9.03	—	6.35	0.1	—		
Threading												MLT1401L/2001L

F
GROOVING / CUTTING OFF

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)			
				1.2, 1.5mm	2.0mm	3.0mm	4.0mm
P Carbon Steel Alloy Steel	180—280HB	UP20M • UTi20T	90 (60—120)	0.05 (0.02—0.08)	0.05 (0.02—0.08)	0.05 (0.02—0.08)	0.05 (0.02—0.08)
	280—350HB	UP20M • UTi20T	80 (50—100)	0.03 (0.02—0.04)	0.03 (0.02—0.04)	0.03 (0.02—0.04)	0.03 (0.02—0.04)

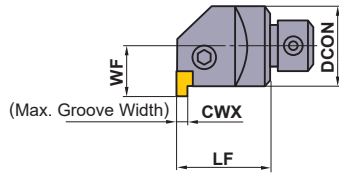
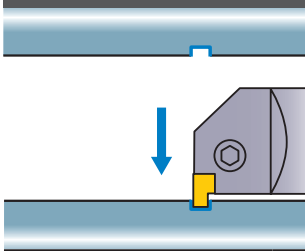
GROOVING / CUTTING OFF

D TYPE BORING HEAD

- Min. cutting diameter : 40mm
- Pin lock type
- Exchangeable head type
- Cutting width CW 1.25-4.7mm

DPT4

Internal grooving



Right hand tool holder only.

Order Number	Stock	Insert Number	Dimensions(mm)					Lock Pin	Lock Screw *2	Stop Ring	Wrench
			CWX	DCON	LF	WF	DMIN *1				
DPT4132R	●	MGTL43	4.7	32	40	20	40	P21S	HSP08014	E01	HKY40R
DPT4140R	●		4.7	40	50	25	50	P21S	HSP08014	E01	HKY40R

Note 1) Please use left hand insert.

*1 DMIN : Min. Cutting Diameter

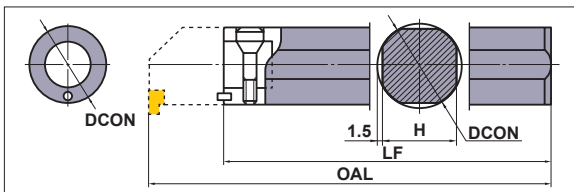
*2 Clamp Torque (N · m) : HSP08014=7.0

F

GROOVING / CUTTING OFF

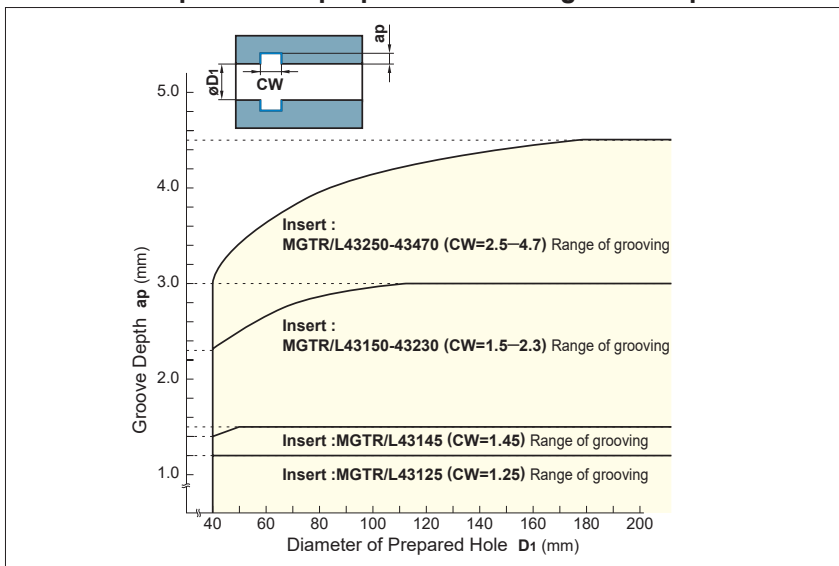
STANDARD ARBOR FOR D TYPE BORING HEAD

① Designation	② Arbor Length (mm)	③ Arbor Diameter (mm)	④ Head Diameter (mm)
B	1	32	32
		32	32
		40	40



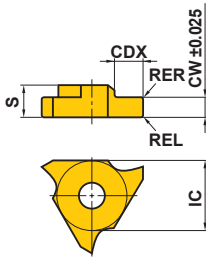
Order Number	Stock	Dimensions (mm)				Set Bolt	Wrench	Head Order Number
		DCON	LF	H	OAL			
B13232	●	32	260	29	300	SD32	HKY60R	DPT4132R
B14040	●	40	310	37	360	SD40	HKY60R	DPT4140R

Relationship between prepared hole and groove depth for DPT4 type



● : Inventory maintained in Japan.
(Contains 10 inserts per case.)

INSERTS

Order Number	Stock			Dimensions(mm)					Geometry
	Coated	Cermet	Carbide	CW	CDX	IC	S	RER/L	
	VP20MF	NX2525	UT120T						
MGTL43125	●	●	●	1.25	1.2	12.7	4.76	0.2	
MGTL43145	●	●	●	1.45	1.5	12.7	4.76	0.2	
MGTL43150	●	●	●	1.5	3.0	12.7	4.76	0.2	
MGTL43175	●	●	●	1.75	3.0	12.7	4.76	0.2	
MGTL43200	●	●	●	2	3.0	12.7	4.76	0.2	
MGTL43230	●	●	●	2.3	3.0	12.7	4.76	0.2	
MGTL43250	●	●	●	2.5	4.5	12.7	4.76	0.3	
MGTL43260	●		●	2.6	4.5	12.7	4.76	0.3	
MGTL43270	●		●	2.7	4.5	12.7	4.76	0.3	
MGTL43280	●	●	●	2.8	4.5	12.7	4.76	0.3	
MGTL43300	●	●	●	3	4.5	12.7	4.76	0.3	
MGTL43320			●	3.2	4.5	12.7	4.76	0.3	
MGTL43330	●	●	●	3.3	4.5	12.7	4.76	0.3	
MGTL43350	●	●	●	3.5	4.5	12.7	4.76	0.3	
MGTL43400	●		●	4	4.5	12.7	4.76	0.3	
MGTL43420	●		●	4.2	4.5	12.7	4.76	0.4	
MGTL43430	●		●	4.3	4.5	12.7	4.76	0.4	
MGTL43450	●	●	●	4.5	4.5	12.7	4.76	0.4	
MGTL43470	●	●	●	4.7	4.5	12.7	4.76	0.4	

F

GROOVING / CUTTING OFF

RECOMMENDED CUTTING CONDITIONS

Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P Carbon Steel Alloy Steel	180—280HB	VP20MF	120 (100—140)	0.14 (0.03—0.25)
		NX2525	130 (100—160)	0.12 (0.03—0.2)
M Stainless Steel	≤200HB	VP20MF	120 (100—140)	0.12 (0.03—0.18)
K Gray Cast Iron	Tensile Strength ≤350MPa	VP20MF	120 (100—140)	0.12 (0.03—0.18)

Note 1) For machining a narrow groove, apply a lower feed within the recommended range.