HOW TO READ THE STANDARD OF GROOVING AND CUTTING OFF

●How this section page is organised

①Classified according to external or internal applications.
②Sub-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.

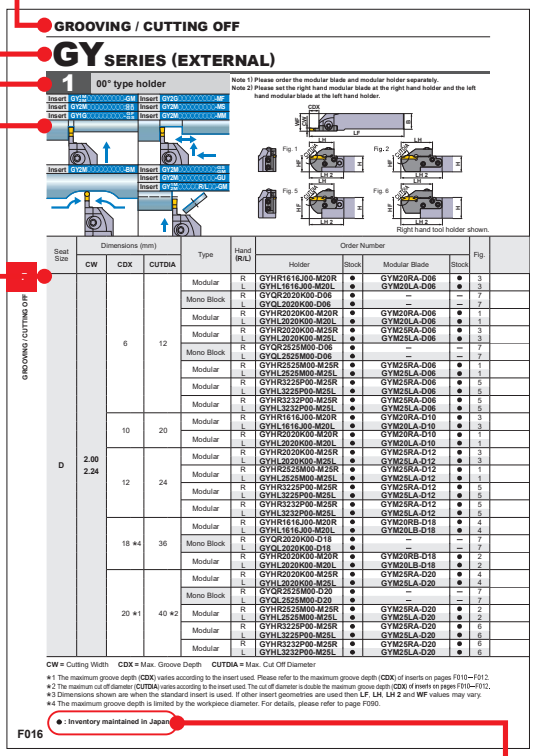
TITLE OF PRODUCT

PRODUCT SECTION

PRODUCT FEATURES

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

GEOMETRY


GROOVING / CUTTING OFF

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.

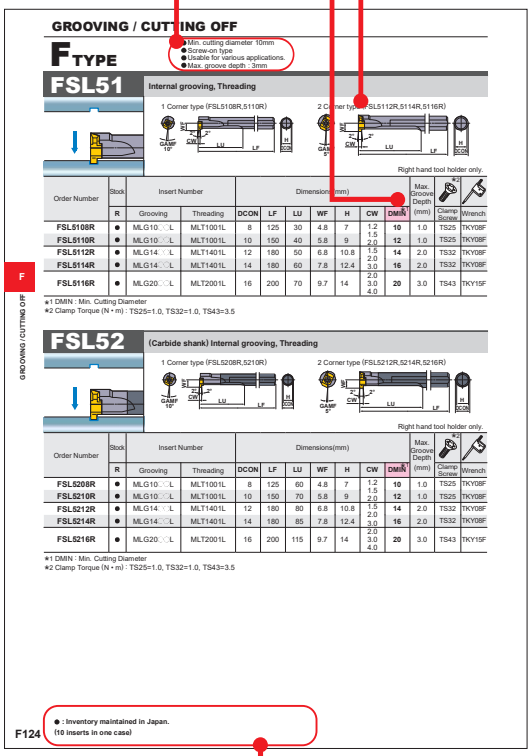
Seat Size	CW	CDX	CUTDIA	Type	Hand (R/L)	Holder	Stock	Modular Blade	Stock	Fig.
D	2.00 2.24	6	12	Modular	R	GYHR1616J00-M20R	●	GYM20RA-D06	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-D06	●	3
				Mono Block	R	GYQR2020K00-D06	●	—	—	7
					L	GYQL2020K00-D06	●	—	—	7
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-D06	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-D06	●	1
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-D06	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-D06	●	3
				Mono Block	R	GYQR2525M00-D06	●	—	—	7
					L	GYQL2525M00-D06	●	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-D06	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-D06	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-D06	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-D06	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-D06	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-D06	●	5
		10	20	Modular	R	GYHR1616J00-M20R	●	GYM20RA-D10	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-D10	●	3
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-D10	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-D10	●	1
		12	24	Modular	R	GYHR2020K00-M25R	●	GYM25RA-D12	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-D12	●	3
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-D12	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-D12	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-D12	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-D12	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-D12	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-D12	●	5
		18 ※4	36	Modular	R	GYHR1616J00-M20R	●	GYM20RB-D18	●	4
					L	GYHL1616J00-M20L	●	GYM20LB-D18	●	4
				Mono Block	R	GYQR2020K00-D18	●	—	—	7
					L	GYQL2020K00-D18	●	—	—	7
				Modular	R	GYHR2020K00-M20R	●	GYM20RB-D18	●	2
					L	GYHL2020K00-M20L	●	GYM20LB-D18	●	2
		20 ※1	40 ※2	Modular	R	GYHR2020K00-M25R	●	GYM25RA-D20	●	4
					L	GYHL2020K00-M25L	●	GYM25LA-D20	●	4
				Mono Block	R	GYQR2525M00-D20	●	—	—	7
					L	GYQL2525M00-D20	●	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-D20	●	2
					L	GYHL2525M00-M25L	●	GYM25LA-D20	●	2
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-D20	●	6
					L	GYHL3225P00-M25L	●	GYM25LA-D20	●	6
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-D20	●	6
					L	GYHL3232P00-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 F010—F012.
※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 F010—F012.
※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 is limited by the workpiece diameter. For details, please refer to page F090.

● : Inventory maintained in Japan.

F016


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)	Clamp Screw ※2	Wrench ※2
	R	Grooving	Threading	DCON	LF	LU	WF	H	CW	DMIN ※1			
FSL5108R	●	MLG10□□L	MLT1001L	8	125	30	4.8	7	1.2 1.5 2.0	10	1.0	TS25	TKY08F
FSL5110R	●	MLG10□□L	MLT1001L	10	150	40	5.8	9	2.0	12	1.0	TS25	TKY08F
FSL5112R	●	MLG14□□L	MLT1401L	12	180	50	6.8	10.8	1.5 2.0	14	2.0	TS32	TKY08F
FSL5114R	●	MLG14□□L	MLT1401L	14	180	60	7.8	12.4	3.0	16	2.0	TS32	TKY08F
FSL5116R	●	MLG20□□L	MLT2001L	16	200	70	9.7	14	2.0 3.0 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)	Clamp Screw ※2	Wrench ※2
	R	Grooving	Threading	DCON	LF	LU	WF	H	CW	DMIN ※1			
FSL5208R	●	MLG10□□L	MLT1001L	8	125	60	4.8	7	1.2 1.5 2.0	10	1.0	TS25	TKY08F
FSL5210R	●	MLG10□□L	MLT1001L	10	150	70	5.8	9	2.0	12	1.0	TS25	TKY08F
FSL5212R	●	MLG14□□L	MLT1401L	12	180	80	6.8	10.8	1.5 2.0	14	2.0	TS32	TKY08F
FSL5214R	●	MLG14□□L	MLT1401L	14	180	85	7.8	12.4	3.0	16	2.0	TS32	TKY08F
FSL5216R	●	MLG20□□L	MLT2001L	16	200	115	9.7	14	2.0 3.0 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

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

F124

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

TURNING TOOLS

GROOVING AND CUTTING OFF

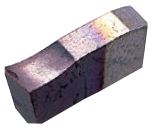
*Arranged by Alphabetical order

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  F014		**Modular blade type** ● Clamp-on type. ● The modular blade allows for high rigidity and accuracy. (Tri-Lock System) ● Various insert types. **Mono block type** ● Clamp-on type. ● Maximum cut off diameter : 50mm. TOOL NEWS	1.5 2 2.24 2.39 2.5 2.74 3 3.18 3.24 4 4.24 4.75 5 5.24 6 6.31 6.35 8	1.5 2 2.24 2.39 2.5 2.74 3 3.18 3.24 4 4.24 4.75 5 5.24 6 6.31 6.35 8	1.5 2 2.24 2.39 2.5 2.74 3 3.18 3.24 4 4.24 4.75 5 5.24 6 6.31 6.35 8	2 2.5 3 3.18 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 3.18 3.24 4 4.24 4.75 5 5.24 6 6.31 6.35
GW Series NEW  F110		● 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. TOOL NEWS	2.0 3.0 4.0 5.0	2.0 3.0 4.0 5.0	2.0 3.0 4.0 5.0			
UG Holder  F114		● Spring clamp type. ● Strengthened insert clamping. ● Block and blade type and solid type series. ● Maximum cut off diameter : 120mm.	2.2 3.1 4.1 5.1	2.2 3.1 4.1 5.1	2.2 3.1 4.1 5.1			
MG Holder  F116		● Clamp-on type. ● Precision class insert. ● Positive insert suffers from negligible chattering and thus produces a good finished surface.	1.25 I 6					
SMG Holder  F118		● Screw-on type. ● Precision class insert. ● Positive insert suffers from negligible chattering and thus produces a good finished surface.	0.5 I 1.3					
SMALL TOOLS **GTAH GTBH GTCH**  D016		● 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 I 3.0					
CTAH  D018		● 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  D013		● 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			
CTCH  D021		● For gang type tool posts. ● Small Shank : 10mm,12mm ● High cutting edge sharpness and excellent chip discharge. ● Maximum cut off diameter : 20mm	2.2 2.5	2.2 2.5	2.2 2.5			

EXTERNAL

	Name of Tool Holder	Insert Shape	Features	Cutting Width According to Cutting Mode (mm)				
				Shallow Grooving	Deep Grooving	Cutting Off	Copying	Face Grooving
SMALL TOOLS	**CTDH**  D022		● For gang type tool posts. ● Small Shank : 16mm ● High cutting edge sharpness and excellent chip discharge. ● Maximum cut off diameter : 23–35mm	2.5	2.5	2.5		
	CTEH  D023		● For gang type tool posts. ● Small Shank : 16mm ● High cutting edge sharpness and excellent chip discharge. ● Maximum cut off diameter : 23–35mm	3.0	3.0	3.0		
	CSVH  D027		● 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 I 1.5		0.6 I 1.5		

INTERNAL

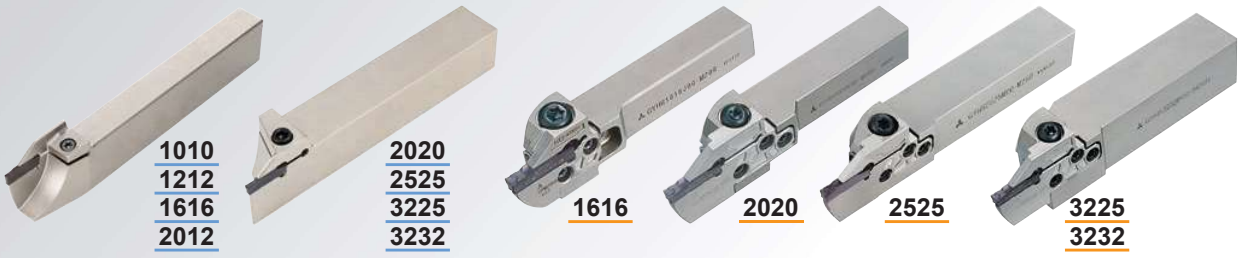
Name of Tool Holder	Insert Shape	Features	Min. Cutting Diameter (mm)	Groove Width (mm)	Max. Groove Depth (mm)
MICRO-MINI TWIN Boring Bars  F120	–	● Solid carbide type. ● Economical due to single tool with two cutting edges.	3.0	1.0 I 2.0	1.0 I 2.0
MICRO-MINI Boring Bars  F119	–	● Solid carbide type. ● Insert can be ground to suit the application.	3.2	2.0 I 3.0	1.0 I 2.0
GY Series  F080		**Modular blade type** ● Clamp-on type. ● The modular blade allows for high rigidity and accuracy. (Tri-Lock System) ● Various insert types. **Mono block type** ● Clamp-on type. TOOL NEWS	25	2 I 6.35	4 I 13
FSL5  F124		● Screw-on type. ● Precision class insert. ● Holder is capable of performing both grooving and threading. ● Maximum groove depth : 3mm.	10	1.2 I 4.0	1.0 I 3.0
DPT4  F126		● Pin lock type. ● Precision class insert. ● Exchangable head type.	40	1.25 I 4.5	1.2 I 4.5

GY SERIES

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

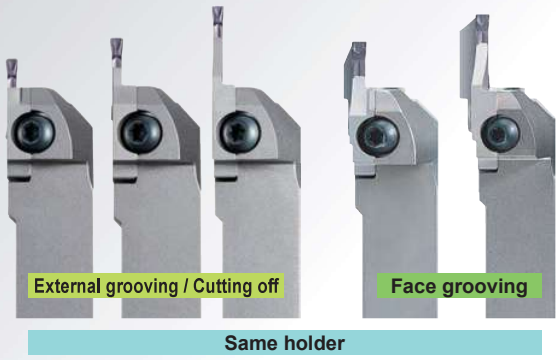
External • Face holders

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



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 ø25mm

Short shank types are standard stocked

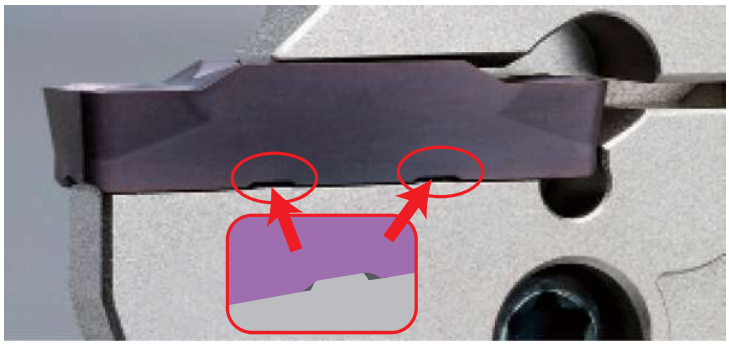
F

GROOVING / CUTTING OFF

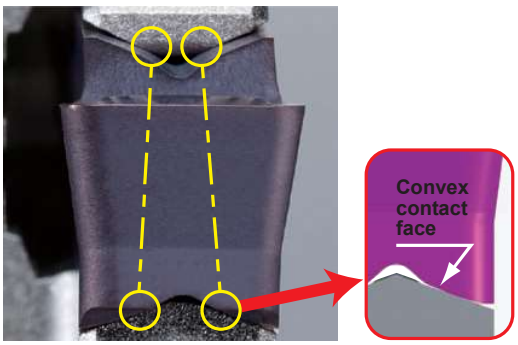
Original insert design leading the way to new grooving and cutting off applications

Highly reliable insert clamping

Safety keys prevent insert movement.



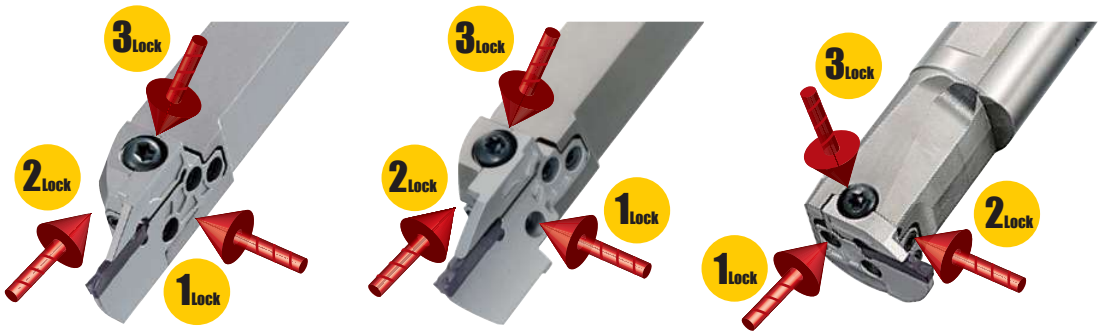
The convex geometry ensures high precision clamping.



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.

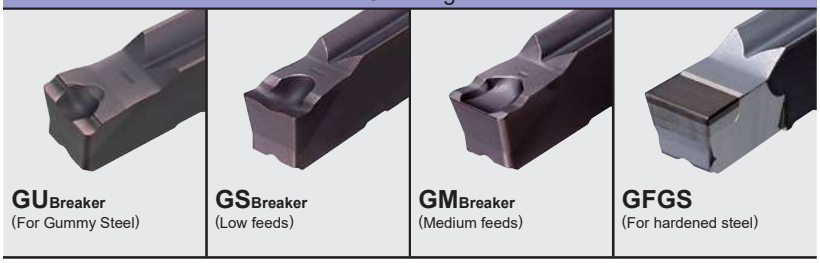


INSERT

A WIDE SELECTION OF INSERTS

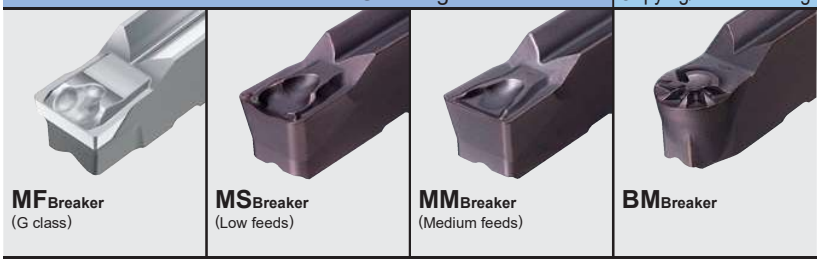
●Breaker system

Grooving



GU Breaker (For Gummy Steel)	GS Breaker (Low feeds)	GM Breaker (Medium feeds)	GFGS (For hardened steel)

For Multifunctional Grooving / Copying/For recessing



MF Breaker (G class)	MS Breaker (Low feeds)	MM Breaker (Medium feeds)	BM Breaker

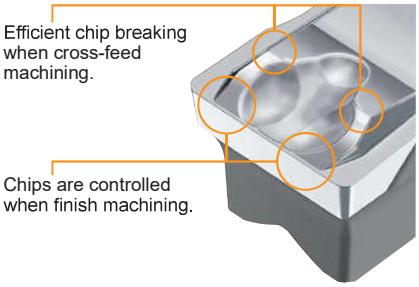
Cutting Off

GU Breaker (For Gummy Steel)	GS Breaker (Low feeds)	GM Breaker (Medium feeds)	R/L05-GM Breaker (Medium feeds)

●Selection of cutting widths

●Different corner radii available

●MF Breaker

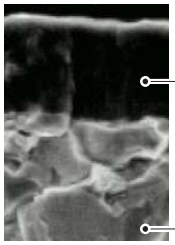


INSERT GRADE

Work Material / Machining Condition	P Steel	M Stainless Steel	K Cast Iron	S Heat Resistant Alloy / Titanium Alloy	H Hardened Steel
Stable ↑ Machining Condition ↓ Unstable	NX2525 MY5015 VP10RT VP20RT	VP10RT VP20RT	MY5015 VP10RT VP20RT	VP10RT / RT9010 VP20RT	BC8110 / MB8025

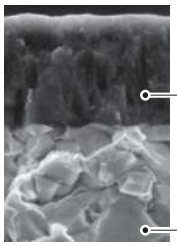
Note1) VP20RT is the first recommended grade for materials other than hardened steel.
Note2) For VP10RT, VP20RT and MY5015, wet cutting is recommended.

VP20RT (1st Recommendation)



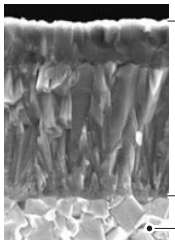
● PVD coated grade suitable for a wide range of applications. The combination of a special tough cemented carbide substrate with MIRACLE coating provides an excellent balance of wear and fracture resistance.

VP10RT (2nd Recommendation)



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

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.

RT9010

● First recommended grade for Titanium alloys.
Not recommended for use on non-ferrous alloys.

NX2525

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

BC8110

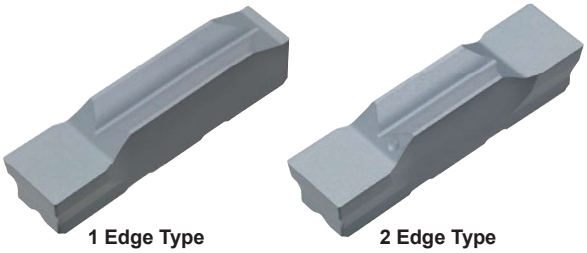
● A CBN coated grade for continuous cutting, which provides longer life when machining hardened steel.

MB8025

● MB8025 is a sintered CBN grade for hardened steel.

BLANK INSERTS

● Blank inserts for custom grinding



1 Edge Type　　2 Edge Type

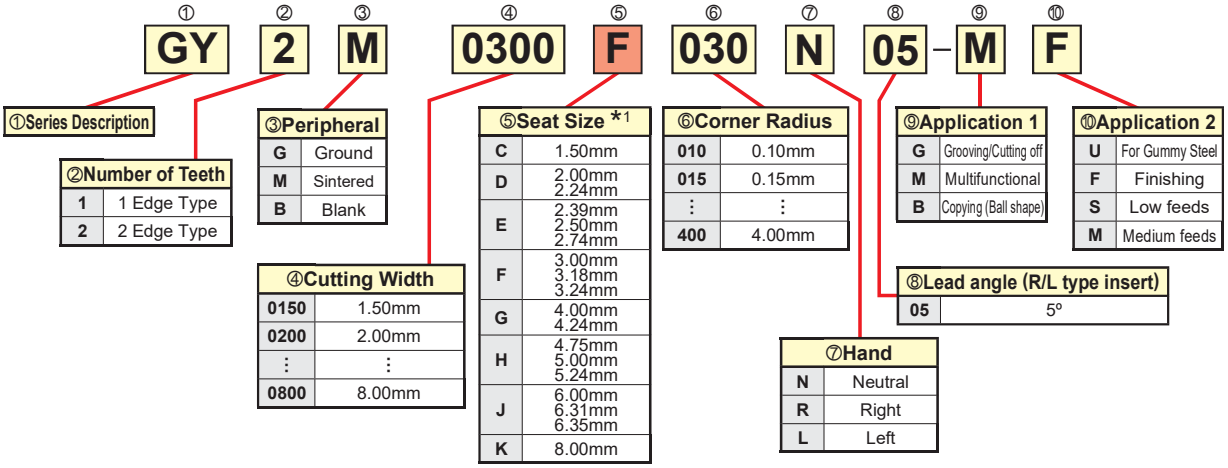
*** Insert blank is not suitable for machining without grinding.**

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.

GY SERIES ORDER NUMBER

■INSERT



①Series Description

②Number of Teeth

1	1 Edge Type
2	2 Edge Type

③Peripheral

G	Ground
M	Sintered
B	Blank

④Cutting Width

0150	1.50mm
0200	2.00mm
⋮	⋮
0800	8.00mm

⑤Seat 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

⑥Corner Radius

010	0.10mm
015	0.15mm
⋮	⋮
400	4.00mm

⑦Hand

N	Neutral
R	Right
L	Left

⑧Lead angle (R/L type insert)

05	5°

⑨Application 1

G	Grooving/Cutting off
M	Multifunctional
B	Copying (Ball shape)

⑩Application 2

U	For Gummy Steel
F	Finishing
S	Low feeds
M	Medium feeds

■CBN INSERT

⑪Application 3

F	Flat Top

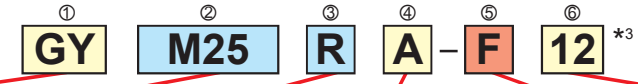
⑫Honing Type

GS	General Purpose

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

■MODULAR BLADE

● EXTERNAL/INTERNAL/FOR RECESSING



①Series Description

②Modular Blade Size

M20
M25

③Hand

R	Right
L	Left

④Modular Blade Type

A	Standard Type
B	Reinforced Type
C	For recessing
D	Face Grooving

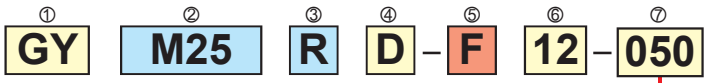
⑤Seat Size *1

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 6.35mm

⑥Max. Groove Depth CDX *2

005	0.5mm
06	6mm
⋮	⋮
25	25mm

● FACE GROOVING



⑦Min. Groove Diameter

035	35mm
040	40mm
⋮	⋮
250	250mm

*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 F080—F086.
*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	②	③	④	⑤	⑥		⑦	⑧
GY	P	R	2525	M	00	–	K	25

①Series Description

②Holder Type

S	Mono block type for Swiss style lathes
P	With mono block offset
Q	Without mono block offset
H	Modular holder

③Hand of Holder

R	Right
L	Left

④Shank Diameter(H x W)

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

⑤Holder Length LF

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

⑥Angle

00	0°
50	50°
90	90°

⑦Seat 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

⑧Max. Groove Depth CDX

06	6mm
08	8mm
⋮	⋮
25	25mm

● MODULAR HOLDER

①	②	③	④	⑤	⑥		⑨	⑩
GY	H	R	2525	M	00	–	M25	R

⑨Modular Blade Size

M20
M25

⑩Hand 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	②	③	④	⑤	⑥	⑦		⑧	⑨
GY	A	R	20	K	90	A	–	F	06

①Series Description

②Holder Type

A	Mono Block
D	Modular holder

③Hand of Holder

R	Right
L	Left

④Shank Diameter DCON

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

⑤Holder Length LF

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

⑥Angle

90	90°

⑦Neck Length

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

⑧Seat 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

⑨Max. Groove Depth CDX

06	6mm
07	7mm

● MODULAR HOLDER

①	②	③	④	⑤	⑥	⑦		⑩	⑪
GY	D	R	40	M	90	D	–	M25	L

⑩Modular Blade Size

M20
M25

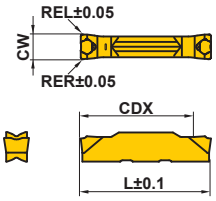
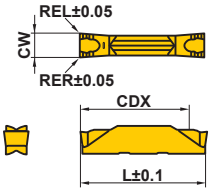
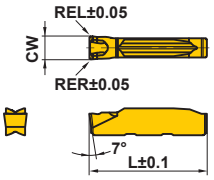
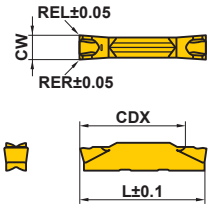
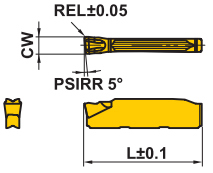
⑪Hand of Modular Blade

R	Right
L	Left

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

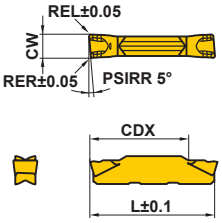
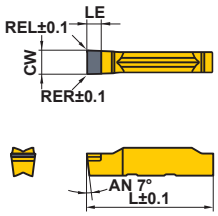
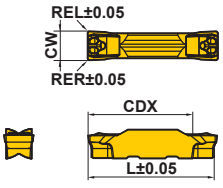
GY SERIES INSERTS

INSERTS

Applications	Geometry	Order Number	Stock: Coated VP10RT	Coated VP20RT	Coated MY5015	Cermet NX2525	Carbide RT9010	Carbide RT9020	CBN MB8025	Seat Size	Dimensions (mm): CW Cutting Width	CW Tolerance	RER/L	CDX	✱2 L
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
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

✱2 The dimension depends on the breaker. Refer to the F013 “L dimension tolerance conversion table”.

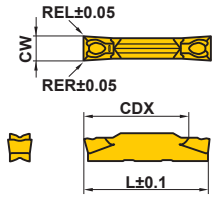
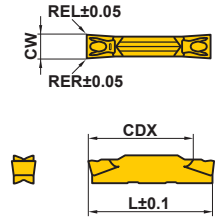
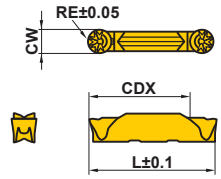
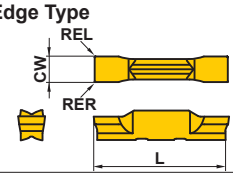
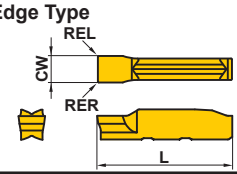
● : Inventory maintained in Japan.
(10 inserts in one case) (CBN inserts are available in 1 piece in one case.)

Applications	Geometry	Order Number	Stock								Seat Size	Dimensions (mm)					
			Coated		Cermet		Carbide		CBN			CW		RER/L	CDX	∗2 L	LE
			VP10RT	VP20RT	MY5015	NX2525	RT9010	RT9020	BC8110	MB8025		Cutting Width	Tolerance				
For Cutting Off	**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	—
		GY2M0500H040R05-GM	●	●							H	5.00	±0.04	0.4	24.5	25.95	—
		GY2M0500H040L05-GM	●	●							H	5.00	±0.04	0.4	24.5	25.95	—
For Grooving	**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
		GY1G0600J020N-GFGS							●		J	6.00	±0.03	0.2	—	25.65	2.7
For Multifunctional Grooving	**MF Breaker** (Finishing) 	GY2G0200D020N-MF	●	●		●		●			D	2.00	±0.02	0.2	19.5	21.05	—
		∗1GY2G0224D015N-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	—
		∗1GY2G0274E020N-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	—
		∗1GY2G0324F020N-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	—
		∗1GY2G0424G020N-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	—
		∗1GY2G0524H020N-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	—
		∗1GY2G0631J020N-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

GY SERIES INSERTS

INSERTS

Applications	Geometry	Order Number	Stock: Coated VP10RT	Coated VP20RT	Coated MY5015	Cermet NX2525		Carbide RT9010	Carbide RT9020	CBN MB8025	Seat Size	Dimensions (mm): CW Cutting Width	CW Tolerance	RE RER/L	CDX	⋆2 L
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
	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	20.70
		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
⋆1 Blank	**2 Edge Type** 	GY2B0220D020N				●		●	●		D	2.20	±0.10	0.2	—	21.05
		GY2B0270E020N				●		●	●		E	2.70	±0.10	0.2	—	21.05
		GY2B0340F020N				●		●	●		F	3.40	±0.10	0.2	—	21.05
		GY2B0420G020N				●		●	●		G	4.20	±0.10	0.2	—	26.00
		GY2B0520H020N				●		●	●		H	5.20	±0.10	0.2	—	26.00
		GY2B0655J020N				●		●	●		J	6.55	±0.10	0.2	—	26.03
	1 Edge Type 	GY1B0220D020N				●		●	●		D	2.20	±0.10	0.2	—	21.07
		GY1B0270E020N				●		●	●		E	2.70	±0.10	0.2	—	21.10
		GY1B0340F020N				●		●	●		F	3.40	±0.10	0.2	—	21.00
		GY1B0420G020N				●		●	●		G	4.20	±0.10	0.2	—	25.86
		GY1B0520H020N				●		●	●		H	5.20	±0.10	0.2	—	25.90
		GY1B0655J020N				●		●	●		J	6.55	±0.10	0.2	—	25.90

⋆1 **Insert blank is not suitable for machining without grinding.**

⋆2 The dimension depends on the breaker. Refer to the F013 “L dimension tolerance conversion table”.

● : **Inventory maintained in Japan.**
(10 inserts in one case)

C-TYPE CIRCLIP STANDARDS LIST

Category	Application		Standard	Width (Tolerance)	
				For shaft	For hole
C-type 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)	0.5 0.7 0.8 0.9 1.1 1.3 1.6 1.85 2.15 2.65 3.15 4.15 5.15 6.2 : +0.14 0 / +0.18 0 / +0.22 0 0.305 0.457 0.737 0.991 1.168 1.422 1.727 2.184 2.616 3.048 3.531 : +0.051 0 / +0.076 0 / +0.102 0 / +0.127 0 / +0.152 0 1.15 1.35 1.75 1.95 2.2 2.7 3.2 4.2 : +0.14 0 / +0.18 0	9 1.1 1.3 1.6 1.85 2.15 2.65 3.15 4.15 5.15 6.2 : +0.14 0 / +0.18 0 / +0.22 0 0.457 0.737 0.991 1.168 1.422 1.727 2.184 2.616 3.048 : +0.051 0 / +0.076 0 / +0.102 0 / +0.127 0
C-type concentric stop ring 	For shaft	For hole	JIS B 2804 (JP)		
E-type stop ring 	For shaft		N1*** American	0.32 0.5 0.7 1.0 1.2 1.4 : +0.05 0 / +0.10 0 / +0.14 0 0.305 0.457 0.584 0.737 0.991 1.168 1.422 1.727 : +0.051 0 / +0.076 0 / +0.102 0 0.3 0.4 0.5 0.7 0.9 1.15 1.75 2.2 : +0.05 0 / +0.10 0 / +0.14 0	

O-RING STANDARDS

Category	Standard	Width (Tolerance)		
		General	For oil pressure	For air pressure
For stable	DIN 3770/3771 (De) JIS B 2401 (JP) ISO 3601	2.54 3.18 4.32 6.1 8.0 : +0.13 0 3.2 4.0 7.5 11.0 : +0.2 0 2.5 3.2 4.7 7.5 11.1 : +0.14 0	1.9 2.3 2.9 3.6 4.5 5.5 7.0 8.6 10.7 : +0.1 0 / +0.15 0 / +0.2 0 / +0.3 0 / +0.4 0 / +0.5 0 2.3 3.1 3.7 6.4 9.0 : +0.2 0	
For dynamic	SMS 1586/1588 (Se) BS 1806/4518 (UK) SAE AS-568 (US)	2.39 3.58 4.78 7.14 9.58 : +0.25 0	2.4 3.6 4.8 7.1 9.5 : +0.25 0	2.3 3.1 3.7 6.4 9.0 : +0.2 0 2.2 3.4 4.6 6.9 9.3 : +0.25 0

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.

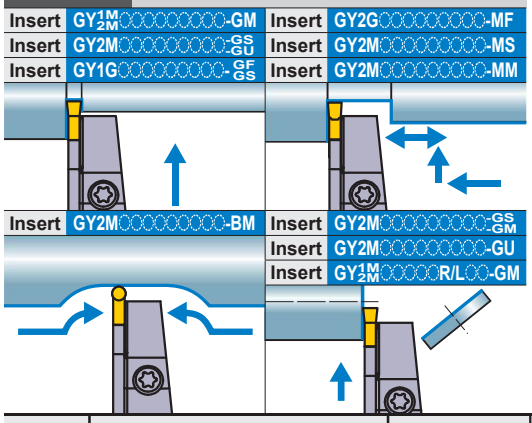
L DIMENSION TOLERANCE CONVERSION TABLE

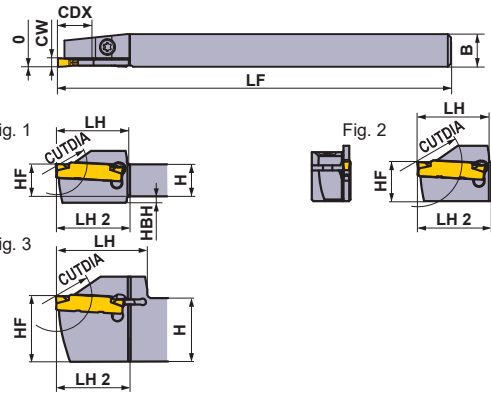
Cutting Width **CW** (mm)	*1 Dimensions **L** (mm)	*2 Dimensional tolerance (mm) versus standard dimension (L) of each breaker						
		GU	**GS/GM**	**MS/MM**	**R/L-GM**	Flat Top	**MF**	**BM**
1.50	14.70		0					
2.00	20.70	0	0	0	0.10	0	0.35	0.20
2.24	*3 (20.7)						0.35	
2.39	20.70	0	0			0	0.35	
2.50	20.70	0	0	0	0.125	0	0.35	0.20
2.74	*3 (20.7)						0.35	
3.00	20.70	0	0	0	0.15	0	0.35	0.20
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.

GY SERIES (External for Swiss style lathes)

1 00° type holder





Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX*4	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Fig.
C	1.50	11	22	Mono Block	R	GYSR1010JX00-C11	●	1
					L	GYSL1010JX00-C11	●	1
		13	26	Mono Block	R	GYSR1212JX00-C13	●	2
					L	GYSL1212JX00-C13	●	2
		17*1	34*2	Mono Block	R	GYSR1616JX00-C17	●	2
					L	GYSL1616JX00-C17	●	2
		18*1	36*2	Mono Block	R	GYSR2012JX00-C18	●	3
					L	GYSL2012JX00-C18	●	3
D	2.00 2.24	11	22	Mono Block	R	GYSR1010JX00-D11	●	1
					L	GYSL1010JX00-D11	●	1
		13	26	Mono Block	R	GYSR1212JX00-D13	●	2
					L	GYSL1212JX00-D13	●	2
		17	34	Mono Block	R	GYSR1616JX00-D17	●	2
					L	GYSL1616JX00-D17	●	2
		18	36	Mono Block	R	GYSR2012JX00-D18	●	3
					L	GYSL2012JX00-D18	●	3
E	2.39 2.50 2.74	11	22	Mono Block	R	GYSR1010JX00-E11	●	1
					L	GYSL1010JX00-E11	●	1
		13	26	Mono Block	R	GYSR1212JX00-E13	●	2
					L	GYSL1212JX00-E13	●	2
		17	34	Mono Block	R	GYSR1616JX00-E17	●	2
					L	GYSL1616JX00-E17	●	2
		18	36	Mono Block	R	GYSR2012JX00-E18	●	3
					L	GYSL2012JX00-E18	●	3
F	3.00 3.18 3.24	11	22	Mono Block	R	GYSR1010JX00-F11	●	1
					L	GYSL1010JX00-F11	●	1
		13	26	Mono Block	R	GYSR1212JX00-F13	●	2
					L	GYSL1212JX00-F13	●	2
		17	34	Mono Block	R	GYSR1616JX00-F17	●	2
					L	GYSL1616JX00-F17	●	2
		18	36	Mono Block	R	GYSR2012JX00-F18	●	3
					L	GYSL2012JX00-F18	●	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 F010—F012.
*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 F010—F012.
*3 Dimensions shown are when the standard insert is used. If other insert geometries are used then **LF**, **LH** and **LH 2** values may vary.
*4 The maximum groove depth (**CDX**) is limited by the workpiece diameter. For details, please refer to page F090.

● : **Inventory maintained in Japan.**

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	R	
	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	L	
	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➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	05-GM (Cutting off)	GFGS (Hardened steel)
		Neutral	Neutral	Neutral	With hand	Neutral
C	1.50mm		●	●		
D	2.00mm	●	●	●	●	●
E	2.39mm	●	●	●		●
	2.50mm	●	●	●	●	●
F	3.00mm	●	●	●	●	●
	3.18mm	●	●	●		●

For multifunctional grooving breaker➢ F011, F012

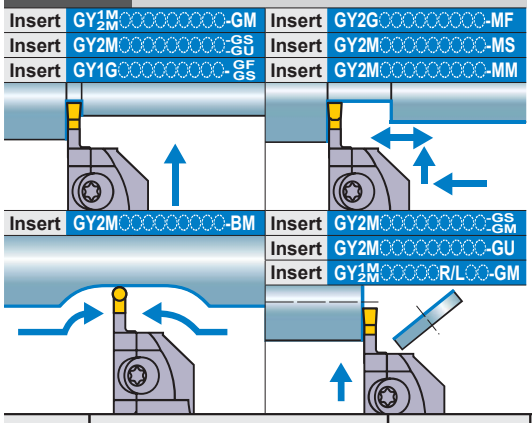
Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing)
					Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●			
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

● : Standard insert with dimensions

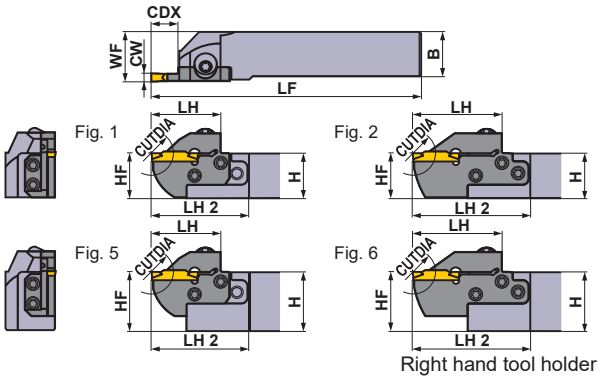
IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F088
CAUTION FOR USE ➢ F092

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.



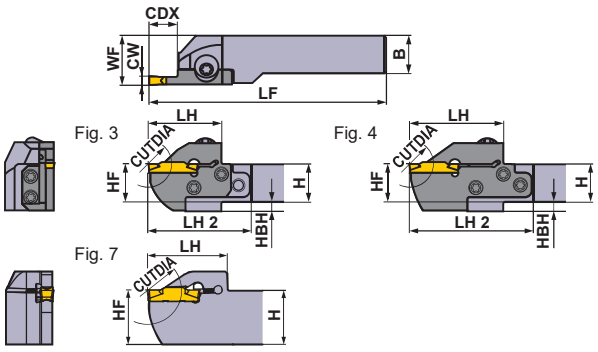
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
D	2.00 2.24	6	12	Modular	R	GYHR1616J00-M20R	●	GYM20RA-D06	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-D06	●	3
				Mono Block	R	GYQR2020K00-D06	●	—	—	7
					L	GYQL2020K00-D06	●	—	—	7
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-D06	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-D06	●	1
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-D06	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-D06	●	3
				Mono Block	R	GYQR2525M00-D06	●	—	—	7
					L	GYQL2525M00-D06	●	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-D06	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-D06	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-D06	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-D06	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-D06	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-D06	●	5
		10	20	Modular	R	GYHR1616J00-M20R	●	GYM20RA-D10	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-D10	●	3
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-D10	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-D10	●	1
		12	24	Modular	R	GYHR2020K00-M25R	●	GYM25RA-D12	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-D12	●	3
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-D12	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-D12	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-D12	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-D12	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-D12	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-D12	●	5
		18 ✶4	36	Modular	R	GYHR1616J00-M20R	●	GYM20RB-D18	●	4
					L	GYHL1616J00-M20L	●	GYM20LB-D18	●	4
				Mono Block	R	GYQR2020K00-D18	●	—	—	7
					L	GYQL2020K00-D18	●	—	—	7
				Modular	R	GYHR2020K00-M20R	●	GYM20RB-D18	●	2
					L	GYHL2020K00-M20L	●	GYM20LB-D18	●	2
		20 ✶1	40 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RA-D20	●	4
					L	GYHL2020K00-M25L	●	GYM25LA-D20	●	4
				Mono Block	R	GYQR2525M00-D20	●	—	—	7
					L	GYQL2525M00-D20	●	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-D20	●	2
					L	GYHL2525M00-M25L	●	GYM25LA-D20	●	2
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-D20	●	6
					L	GYHL3225P00-M25L	●	GYM25LA-D20	●	6
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-D20	●	6
					L	GYHL3232P00-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 F010—F012.
✶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 F010—F012.
✶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 F090.

● : **Inventory maintained in Japan.**



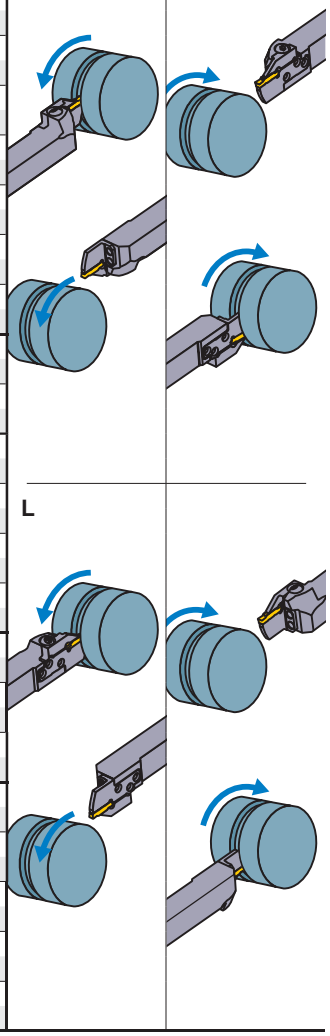
Right hand tool holder shown.

∗ 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○○○○○○○○-M20R/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R 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
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	–	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	–		
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	GY○○0200/0224D○○○○–Breaker shown below

For grooving/cutting off breaker➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	05-GM (Cutting off)	GFGS (Hardened steel)
		Neutral	Neutral	Neutral	With hand	Neutral
D	2.00mm	●	●	●	●	●

For multifunctional grooving breaker➢ F011, F012

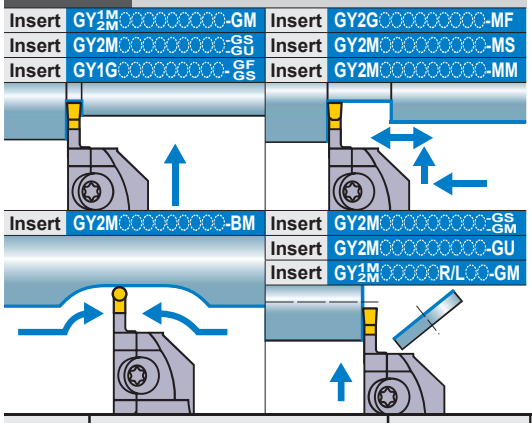
Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing)
					Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●			

● : Standard insert with dimensions

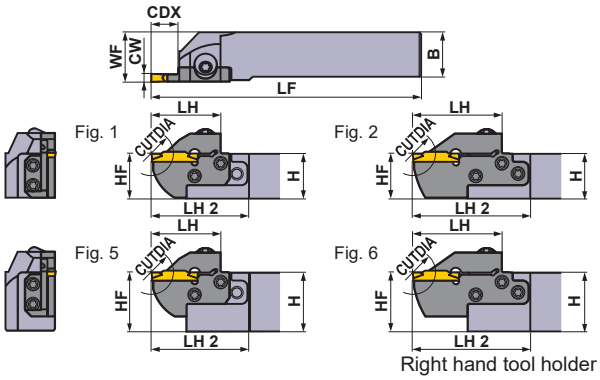
IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F088
CAUTION FOR USE ➢ F092

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) CW	CDX	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
E	2.39 2.50 2.74	6	12	Modular	R	GYHR1616J00-M20R	●	GYM20RA-E06	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-E06	●	3
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-E06	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-E06	●	1
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-E06	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-E06	●	3
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-E06	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-E06	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-E06	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-E06	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-E06	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-E06	●	5
		10	20	Modular	R	GYHR1616J00-M20R	●	GYM20RA-E10	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-E10	●	3
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-E10	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-E10	●	1
		12	24	Modular	R	GYHR2020K00-M25R	●	GYM25RA-E12	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-E12	●	3
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-E12	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-E12	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-E12	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-E12	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-E12	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-E12	●	5
		18 ✶4	36	Modular	R	GYHR1616J00-M20R	●	GYM20RB-E18	●	4
					L	GYHL1616J00-M20L	●	GYM20LB-E18	●	4
				Modular	R	GYHR2020K00-M20R	●	GYM20RB-E18	●	2
					L	GYHL2020K00-M20L	●	GYM20LB-E18	●	2
		20 ✶1	40 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RA-E20	●	4
					L	GYHL2020K00-M25L	●	GYM25LA-E20	●	4
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-E20	●	2
					L	GYHL2525M00-M25L	●	GYM25LA-E20	●	2
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-E20	●	6
					L	GYHL3225P00-M25L	●	GYM25LA-E20	●	6
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-E20	●	6
					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 F010—F012.
✶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 F010—F012.
✶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 F090.

● : **Inventory maintained in Japan.**

Fig. 3

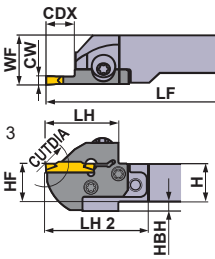
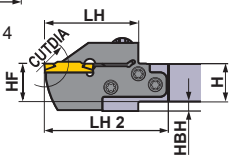


Fig. 4



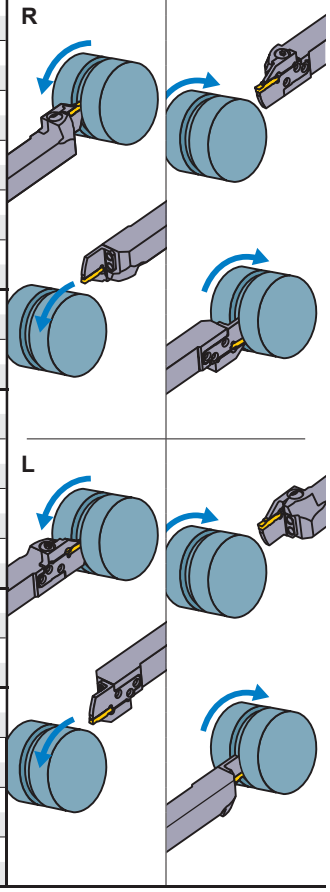
Right hand tool holder shown.

∗ 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○○○○○○○○-M20R/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R 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
	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		
	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	–	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	–		
	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	GY○○0239/0250/0274E○○○○–Breaker shown below

For grooving/cutting off breaker➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel) Neutral	GS (Low) Neutral	GM (Medium) Neutral	05-GM (Cutting off) With hand	GFGS (Hardened steel) Neutral
E	2.39mm	●	●	●		●
	2.50mm	●	●	●	●	●

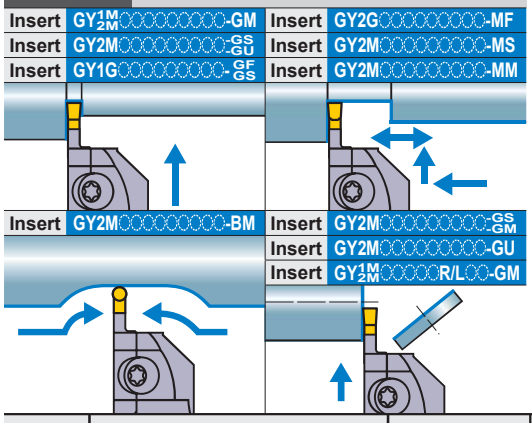
For multifunctional grooving breaker➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing) Ball shape
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			

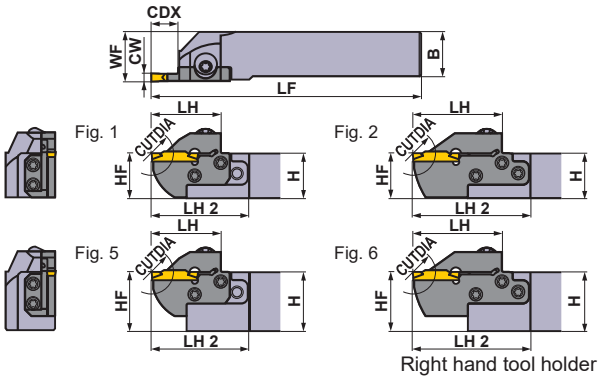
● : Standard insert with dimensions

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.



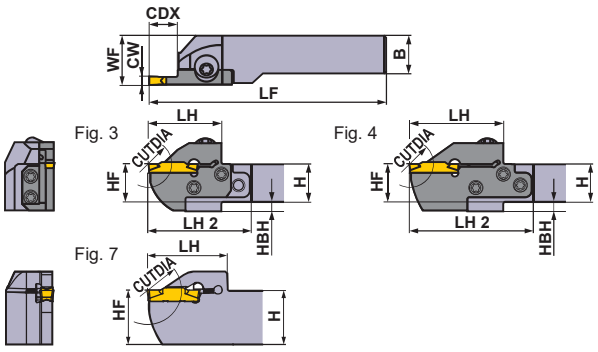
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
F	3.00 3.18 3.24	6	12	Modular	R	GYHR1616J00-M20R	●	GYM20RA-F06	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-F06	●	3
				Mono Block	R	GYQR2020K00-F06	●	—	—	7
					L	GYQL2020K00-F06	●	—	—	7
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-F06	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-F06	●	1
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-F06	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-F06	●	3
				Mono Block	R	GYQR2525M00-F06	●	—	—	7
					L	GYQL2525M00-F06	●	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-F06	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-F06	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-F06	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-F06	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-F06	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-F06	●	5
		10	20	Modular	R	GYHR1616J00-M20R	●	GYM20RA-F10	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-F10	●	3
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-F10	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-F10	●	1
		12	24	Modular	R	GYHR2020K00-M25R	●	GYM25RA-F12	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-F12	●	3
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-F12	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-F12	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-F12	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-F12	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-F12	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-F12	●	5
		18 ✶4	36	Modular	R	GYHR1616J00-M20R	●	GYM20RB-F18	●	4
					L	GYHL1616J00-M20L	●	GYM20LB-F18	●	4
				Mono Block	R	GYQR2020K00-F18	●	—	—	7
					L	GYQL2020K00-F18	●	—	—	7
				Modular	R	GYHR2020K00-M20R	●	GYM20RB-F18	●	2
					L	GYHL2020K00-M20L	●	GYM20LB-F18	●	2
		20 ✶1	40 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RA-F20	●	4
					L	GYHL2020K00-M25L	●	GYM25LA-F20	●	4
				Mono Block	R	GYQR2525M00-F20	●	—	—	7
					L	GYQL2525M00-F20	●	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-F20	●	2
					L	GYHL2525M00-M25L	●	GYM25LA-F20	●	2
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-F20	●	6
					L	GYHL3225P00-M25L	●	GYM25LA-F20	●	6
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-F20	●	6
					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 F010—F012.
✶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 F010—F012.
✶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 F090.

● : **Inventory maintained in Japan.**



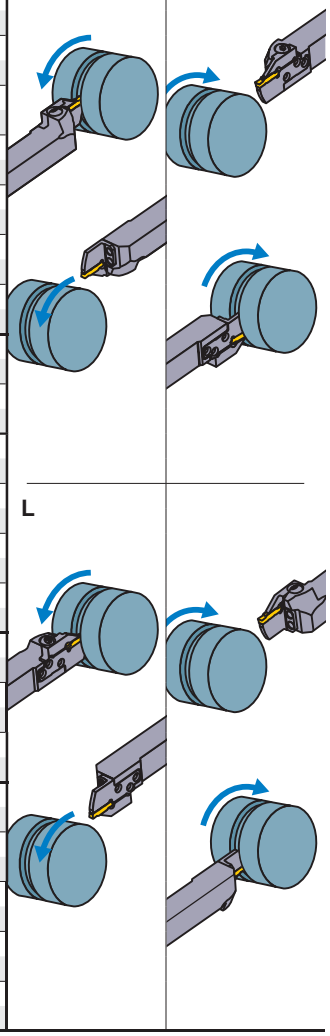
Right hand tool holder shown.

★ 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○○○○○○○○-M20R/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R 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
	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	–	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	–		
	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	GY○○0239/0250/0274E○○○○–Breaker shown below

For grooving/cutting off breaker➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel) Neutral	GS (Low) Neutral	GM (Medium) Neutral	05-GM (Cutting off) With hand	GFGS (Hardened steel) Neutral
F	3.00mm	●	●	●	●	●
	3.18mm	●	●	●		●

For multifunctional grooving breaker➢ F011, F012

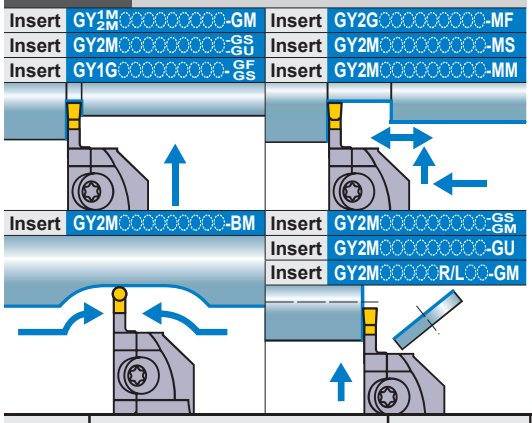
Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing) Ball shape
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

● : Standard insert with dimensions

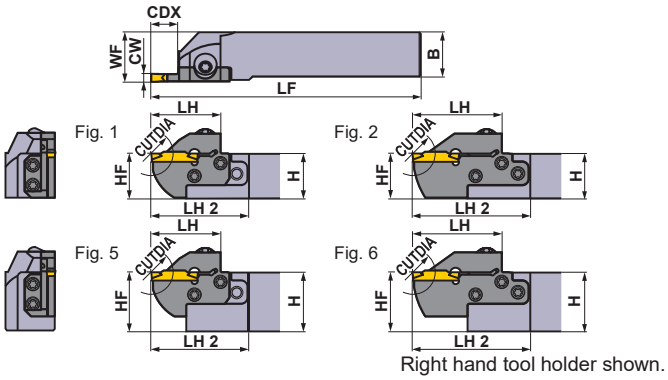
IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F088
CAUTION FOR USE ➢ F092

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.



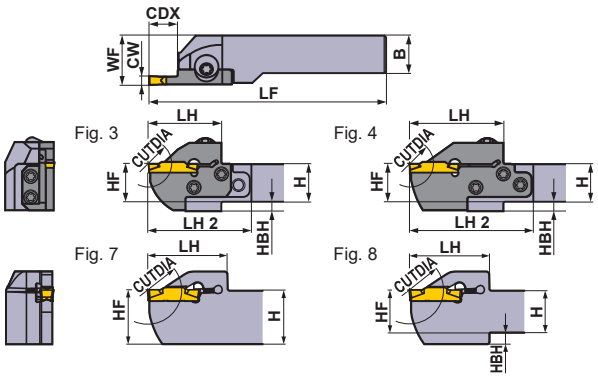
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
G	4.00 4.24	8	16	Mono Block	R	GYQR2020K00-G08	●	—	—	7
					L	GYQL2020K00-G08	●	—	—	7
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-G08	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-G08	●	3
				Mono Block	R	GYQR2525M00-G08	●	—	—	7
					L	GYQL2525M00-G08	●	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-G08	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-G08	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-G08	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-G08	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-G08	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-G08	●	5
		12	24	Modular	R	GYHR1616J00-M20R	●	GYM20RA-G12	●	3
					L	GYHL1616J00-M20L	●	GYM20LA-G12	●	3
				Modular	R	GYHR2020K00-M20R	●	GYM20RA-G12	●	1
					L	GYHL2020K00-M20L	●	GYM20LA-G12	●	1
		14	28	Modular	R	GYHR2020K00-M25R	●	GYM25RA-G14	●	3
					L	GYHL2020K00-M25L	●	GYM25LA-G14	●	3
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-G14	●	1
					L	GYHL2525M00-M25L	●	GYM25LA-G14	●	1
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-G14	●	5
					L	GYHL3225P00-M25L	●	GYM25LA-G14	●	5
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-G14	●	5
					L	GYHL3232P00-M25L	●	GYM25LA-G14	●	5
		25 ✶1	50 ✶2	Mono Block	R	GYQR2020K00-G25	●	—	—	8
					L	GYQL2020K00-G25	●	—	—	8
				Modular	R	GYHR2020K00-M25R	●	GYM25RA-G25	●	4
					L	GYHL2020K00-M25L	●	GYM25LA-G25	●	4
				Mono Block	R	GYQR2525M00-G25	●	—	—	7
					L	GYQL2525M00-G25	●	—	—	7
				Modular	R	GYHR2525M00-M25R	●	GYM25RA-G25	●	2
					L	GYHL2525M00-M25L	●	GYM25LA-G25	●	2
				Modular	R	GYHR3225P00-M25R	●	GYM25RA-G25	●	6
					L	GYHL3225P00-M25L	●	GYM25LA-G25	●	6
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-G25	●	6
					L	GYHL3232P00-M25L	●	GYM25LA-G25	●	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 F010—F012.
✶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 F010—F012.
✶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.**



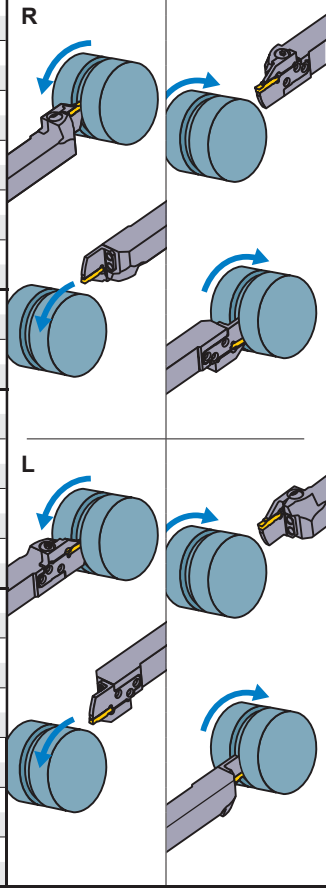
Right hand tool holder shown.

★ 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○○○○○○○○-M20R/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R 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	GY○○0239/0250/0274E○○○○–Breaker shown below

For grooving/cutting off breaker➢ F010, F011

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

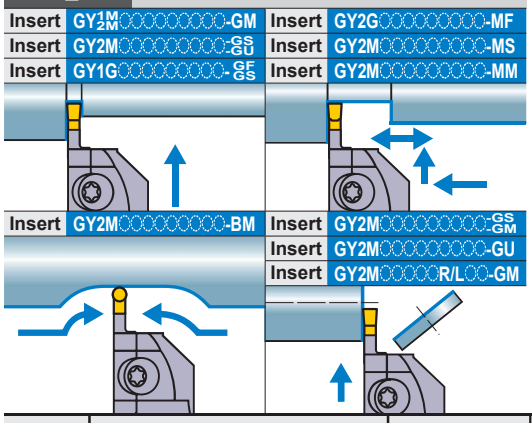
For multifunctional grooving breaker➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing)
					Ball shape
G	4.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8	●		●	
	4.24mm	●			

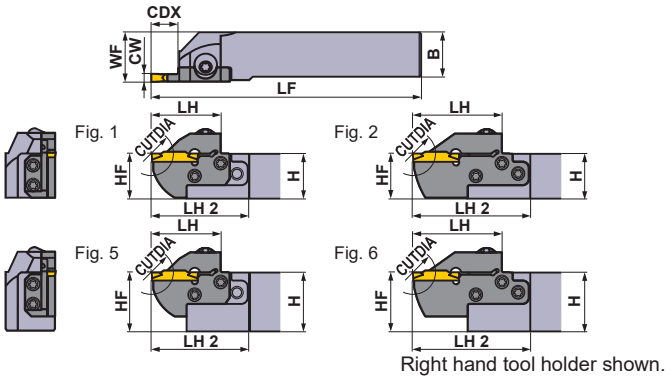
● : Standard insert with dimensions

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.



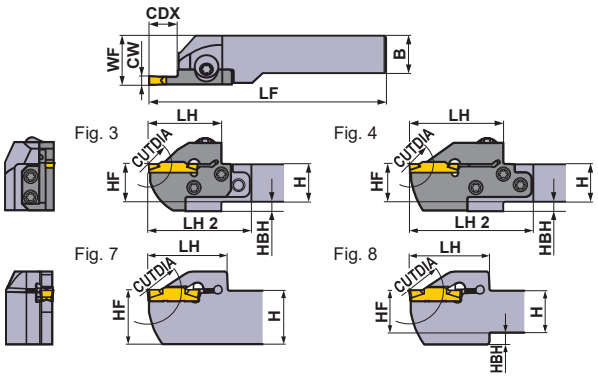
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
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	24	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	28	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
				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
		25 ✶1	50 ✶2	Mono Block	R	GYQR2020K00-H25	●	—	—	8
					L	GYQL2020K00-H25	●	—	—	8
				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 **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 F010—F012.
✶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 F010—F012.
✶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○○○○○○○○-M20R/L	GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R 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	L	
	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	GY○○0475/0500/0524H○○○○–Breaker shown below

For grooving/cutting off breaker➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel) Neutral	GS (Low) Neutral	GM (Medium) Neutral	05-GM (Cutting off) With hand	GFGS (Hardened steel) Neutral
H	4.75mm	●	●	●		●
	5.00mm	●	●	●	●	●

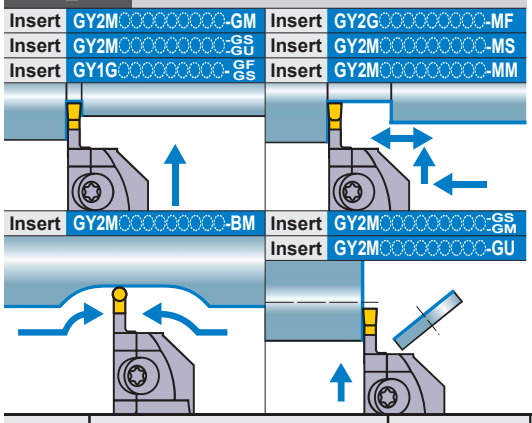
For multifunctional grooving breaker➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing) 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	●	●	●	
	5.24mm	●			

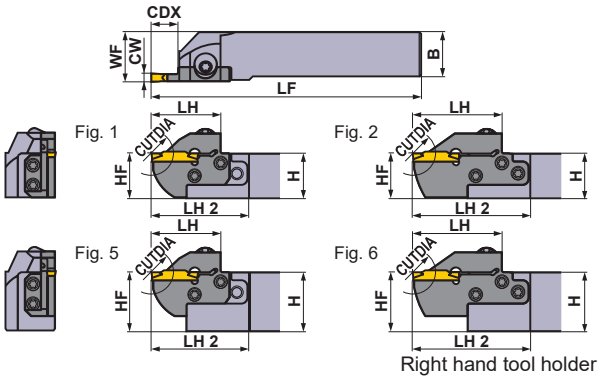
● : Standard insert with dimensions

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.



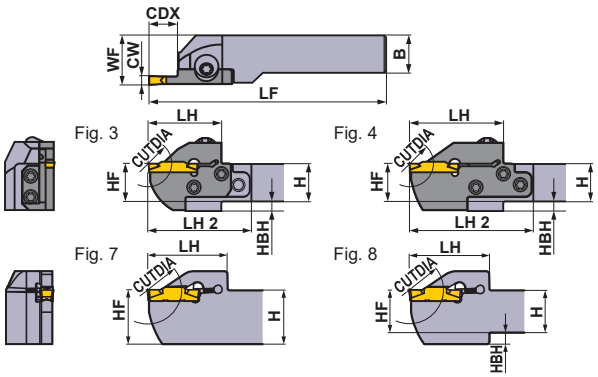
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
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
				Modular	R	GYHR3232P00-M25R	●	GYM25RA-J14	●	5
					L	GYHL3232P00-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 **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 F010—F012.
∗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 F010—F012.
∗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 ★ (①, ②)
GYQR/L○○○○○○○○-○○○	HSC05020 (Clamp Torque : 7.0N·m)	–	HKY40R
GYHR/L○○○○○○○○-M25R/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		
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	L	
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	GY○○0600/0631/0635J○○○○–Breaker shown below

For grooving/cutting off breaker➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	05-GM (Cutting off)	GFGS (Hardened steel)
		Neutral	Neutral	Neutral	With hand	Neutral
J	6.00mm	●	●	●		●
	6.35mm	●	●	●		

For multifunctional grooving breaker➢ F011, F012

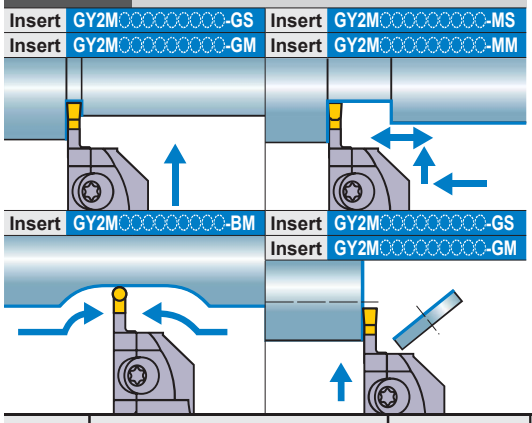
Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing)
					Ball shape
J	6.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	6.31mm	●			
	6.35mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			

● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F088
CAUTION FOR USE ➢ F092

GY SERIES (EXTERNAL)

1 00° type holder



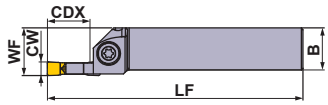


Fig. 1

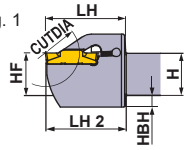
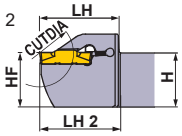


Fig. 2



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 F010—F012.
∗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 F010—F012.
∗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.**

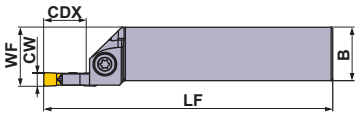
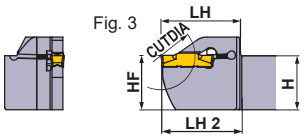


Fig. 3



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	—		
	32	25	170	47	48	32	28	—		
	32	32	170	47	48	32	35	—		
	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➢ F010, F011

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

For multifunctional grooving breaker➢ F011, F012

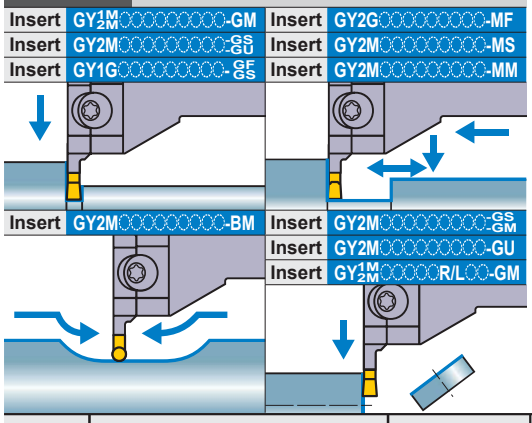
Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing)
					Ball shape
K	8.00mm				●
	RE 0.8		●	●	
	RE 1.2			●	

● : Standard insert with dimensions

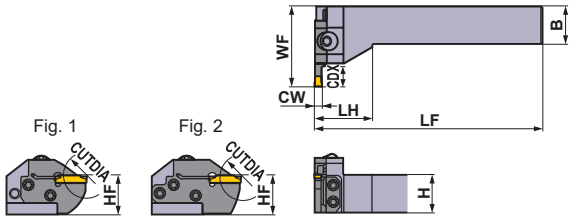
IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F088
CAUTION FOR USE ➢ F092

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.

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
					L	**GYHL2020K90-M20R**	●	**GYM20RA-D06**	●	1
				Modular	R	**GYHR2525M90-M25L**	●	**GYM25LA-D06**	●	1
					L	**GYHL2525M90-M25R**	●	**GYM25RA-D06**	●	1
		10	20	Modular	R	**GYHR2020K90-M20L**	●	**GYM20LA-D10**	●	1
					L	**GYHL2020K90-M20R**	●	**GYM20RA-D10**	●	1
		12	24	Modular	R	**GYHR2525M90-M25L**	●	**GYM25LA-D12**	●	1
					L	**GYHL2525M90-M25R**	●	**GYM25RA-D12**	●	1
		18∗4	36	Modular	R	**GYHR2020K90-M20L**	●	**GYM20LB-D18**	●	2
					L	**GYHL2020K90-M20R**	●	**GYM20RB-D18**	●	2
		20∗1	40∗2	Modular	R	**GYHR2525M90-M25L**	●	**GYM25LA-D20**	●	2
					L	**GYHL2525M90-M25R**	●	**GYM25RA-D20**	●	2
E	2.39 2.50 2.74	6	12	Modular	R	**GYHR2020K90-M20L**	●	**GYM20LA-E06**	●	1
					L	**GYHL2020K90-M20R**	●	**GYM20RA-E06**	●	1
				Modular	R	**GYHR2525M90-M25L**	●	**GYM25LA-E06**	●	1
					L	**GYHL2525M90-M25R**	●	**GYM25RA-E06**	●	1
		10	20	Modular	R	**GYHR2020K90-M20L**	●	**GYM20LA-E10**	●	1
					L	**GYHL2020K90-M20R**	●	**GYM20RA-E10**	●	1
		12	24	Modular	R	**GYHR2525M90-M25L**	●	**GYM25LA-E12**	●	1
					L	**GYHL2525M90-M25R**	●	**GYM25RA-E12**	●	1
		18∗4	36	Modular	R	**GYHR2020K90-M20L**	●	**GYM20LB-E18**	●	2
					L	**GYHL2020K90-M20R**	●	**GYM20RB-E18**	●	2
		20∗1	40∗2	Modular	R	**GYHR2525M90-M25L**	●	**GYM25LA-E20**	●	2
					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 F010—F012.
∗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 F010—F012.
∗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 F090.

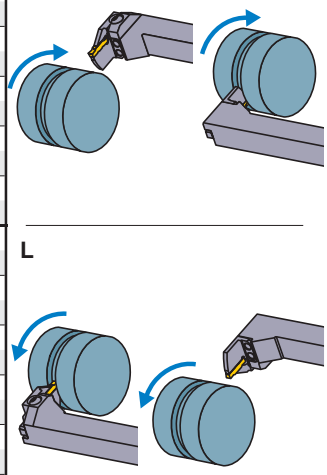
● : **Inventory maintained in Japan.**

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

SPARE PARTS

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

	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	
	25	25	150	38	25	59	
	20	20	125	35	20	39	**L**
	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➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	05-GM (Cutting off)	GFGS (Hardened steel)
		Neutral	Neutral	Neutral	With hand	Neutral
D	2.00mm	●	●	●	●	●
E	2.39mm	●	●	●		●
	2.50mm	●	●	●	●	●

For multifunctional grooving breaker➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing)
					Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●			
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			

● : Standard insert with dimensions

F

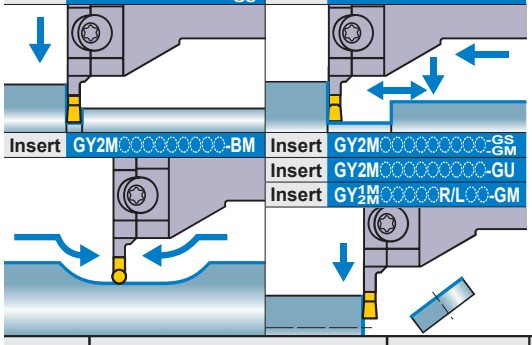
GROOVING / CUTTING OFF

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F088
CAUTION FOR USE ➢ F092

GY SERIES (EXTERNAL)

2 90° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
Insert GY2M○○○○○○○○○○-MM



Insert GY2M○○○○○○○○○○-BM
Insert GY2M○○○○○○○○○○-GS/GM
Insert GY2M○○○○○○○○○○-GU
Insert GY1M/2M○○○○○○R/L○○-GM

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.

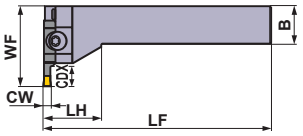


Fig. 1

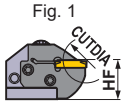
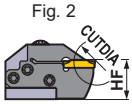


Fig. 2



Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
F	3.00 3.18 3.24	6	12	Modular	R	GYHR2020K90-M20L	●	GYM20LA-F06	●	1
					L	GYHL2020K90-M20R	●	GYM20RA-F06	●	1
				Modular	R	GYHR2525M90-M25L	●	GYM25LA-F06	●	1
					L	GYHL2525M90-M25R	●	GYM25RA-F06	●	1
		10	20	Modular	R	GYHR2020K90-M20L	●	GYM20LA-F10	●	1
					L	GYHL2020K90-M20R	●	GYM20RA-F10	●	1
		12	24	Modular	R	GYHR2525M90-M25L	●	GYM25LA-F12	●	1
					L	GYHL2525M90-M25R	●	GYM25RA-F12	●	1
		18∗4	36	Modular	R	GYHR2020K90-M20L	●	GYM20LB-F18	●	2
					L	GYHL2020K90-M20R	●	GYM20RB-F18	●	2
		20∗1	40∗2	Modular	R	GYHR2525M90-M25L	●	GYM25LA-F20	●	2
					L	GYHL2525M90-M25R	●	GYM25RA-F20	●	2
G	4.00 4.24	8	16	Modular	R	GYHR2525M90-M25L	●	GYM25LA-G08	●	1
					L	GYHL2525M90-M25R	●	GYM25RA-G08	●	1
		12	24	Modular	R	GYHR2020K90-M20L	●	GYM20LA-G12	●	1
					L	GYHL2020K90-M20R	●	GYM20RA-G12	●	1
		14	28	Modular	R	GYHR2525M90-M25L	●	GYM25LA-G14	●	1
					L	GYHL2525M90-M25R	●	GYM25RA-G14	●	1
		25∗1	50∗2	Modular	R	GYHR2525M90-M25L	●	GYM25LA-G25	●	2
					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 F010—F012.
∗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 F010—F012.
∗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 F090.

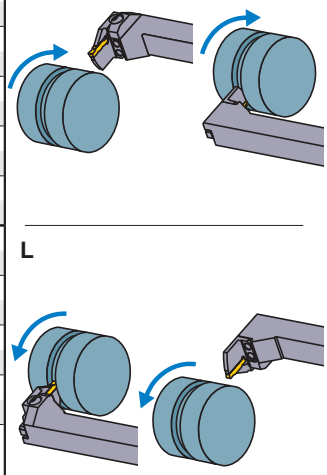
● : **Inventory maintained in Japan.**

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

SPARE PARTS

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

	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	
	25	25	150	38	25	59	
	25	25	150	38	25	47	L
	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➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	05-GM (Cutting off)	GFGS (Hardened steel)
		Neutral	Neutral	Neutral	With hand	Neutral
F	3.00mm	●	●	●	●	●
	3.18mm	●	●	●		●
G	4.00mm	●	●	●	●	●

For multifunctional grooving breaker➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing)
					Ball shape
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			
G	4.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8	●		●	
	4.24mm	●			

● : Standard insert with dimensions

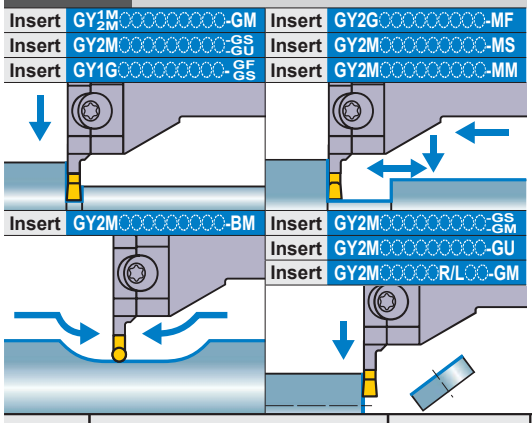
F

GROOVING / CUTTING OFF

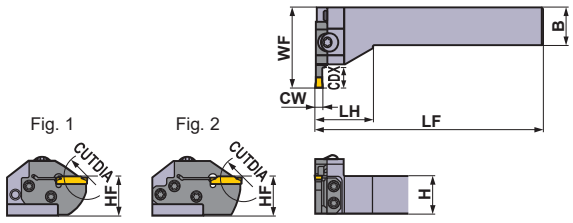
IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F088
CAUTION FOR USE ➢ F092

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.

Seat Size	Dimensions (mm) CW	CDX	CUTDIA	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
H	4.75 5.00 5.24	8	16	Modular	R	GYHR2525M90-M25L	●	GYM25LA-H08	●	1
					L	GYHL2525M90-M25R	●	GYM25RA-H08	●	1
		12	24	Modular	R	GYHR2020K90-M20L	●	GYM20LA-H12	●	1
					L	GYHL2020K90-M20R	●	GYM20RA-H12	●	1
		14	28	Modular	R	GYHR2525M90-M25L	●	GYM25LA-H14	●	1
					L	GYHL2525M90-M25R	●	GYM25RA-H14	●	1
		25∗1	50∗2	Modular	R	GYHR2525M90-M25L	●	GYM25LA-H25	●	2
					L	GYHL2525M90-M25R	●	GYM25RA-H25	●	2
J	6.00 6.31 6.35	8	16	Modular	R	GYHR2525M90-M25L	●	GYM25LA-J08	●	1
					L	GYHL2525M90-M25R	●	GYM25RA-J08	●	1
		14	28	Modular	R	GYHR2525M90-M25L	●	GYM25LA-J14	●	1
					L	GYHL2525M90-M25R	●	GYM25RA-J14	●	1
		25∗1	50∗2	Modular	R	GYHR2525M90-M25L	●	GYM25LA-J25	●	2
					L	GYHL2525M90-M25R	●	GYM25RA-J25	●	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 F010—F012.
∗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 F010—F012.
∗3 Dimensions shown are when the standard insert is used. If other insert geometries are used then **LF**, **LH** and **WF** values may vary.

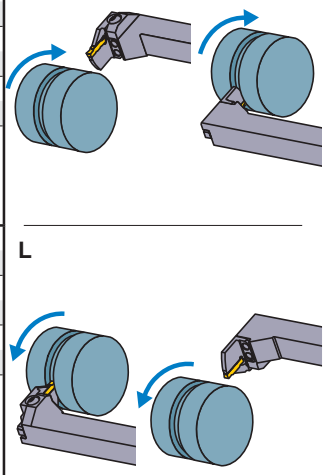
● : **Inventory maintained in Japan.**

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

SPARE PARTS

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

	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➢ F010, F011

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

For multifunctional grooving breaker➢ F011, F012

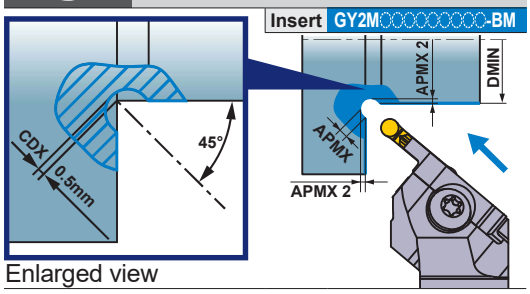
Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying, Recessing)
					Ball shape
H	4.75mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			
	5.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	5.24mm	●			
J	6.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	●	●	
	6.31mm	●			
	6.35mm				●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

● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F088
CAUTION FOR USE ➢ F092

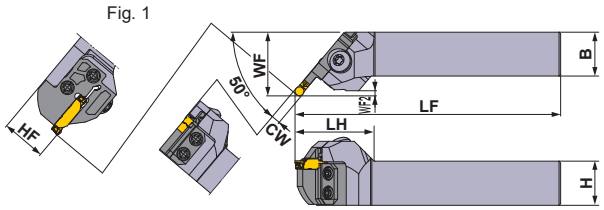
GY SERIES (FOR EXTERNAL RECESSING)

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.

Fig. 1



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	
							L	GYHL2020K50-M20R	●	GYM20RC-D005	●	1	
						Modular	R	GYHR2525M50-M25L	●	GYM25LC-D005	●	1	
							L	GYHL2525M50-M25R	●	GYM25RC-D005	●	1	
E	2.50			1.75	0.72	Modular	R	GYHR2020K50-M20L	●	GYM20LC-E005	●	1	
							L	GYHL2020K50-M20R	●	GYM20RC-E005	●	1	
						Modular	R	GYHR2525M50-M25L	●	GYM25LC-E005	●	1	
							L	GYHL2525M50-M25R	●	GYM25RC-E005	●	1	
F	3.00 3.18			2	0.793	Modular	R	GYHR2020K50-M20L	●	GYM20LC-F005	●	1	
							L	GYHL2020K50-M20R	●	GYM20RC-F005	●	1	
						Modular	R	GYHR2525M50-M25L	●	GYM25LC-F005	●	1	
							L	GYHL2525M50-M25R	●	GYM25RC-F005	●	1	
G	4.00		20	2.5	0.939	Modular	R	GYHR2020K50-M20L	●	GYM20LC-G005	●	1	
							L	GYHL2020K50-M20R	●	GYM20RC-G005	●	1	
						Modular	R	GYHR2525M50-M25L	●	GYM25LC-G005	●	1	
							L	GYHL2525M50-M25R	●	GYM25RC-G005	●	1	
H	4.75 5.00			2.88	1.049	Modular	R	GYHR2020K50-M20L	●	GYM20LC-H005	●	1	
							L	GYHL2020K50-M20R	●	GYM20RC-H005	●	1	
						Modular	R	GYHR2525M50-M25L	●	GYM25LC-H005	●	1	
							L	GYHL2525M50-M25R	●	GYM25RC-H005	●	1	
J	6.00 6.35			3.5	1.232	Modular	R	GYHR2525M50-M25L	●	GYM25LC-J005	●	1	
							L	GYHL2525M50-M25R	●	GYM25RC-J005	●	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.

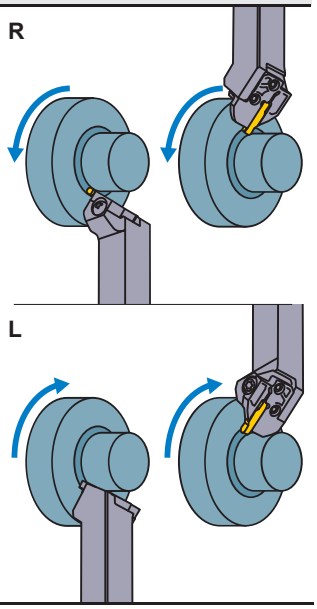
★ Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	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

Cutting Mode



Insert selection

Geometry name
GY2M○○○○○○○○○N-BM

For multifunctional grooving breaker ➢ F012

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	●

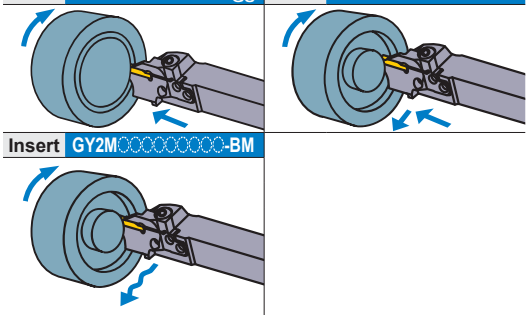
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F091
CAUTION FOR USE ➢ F091

GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.

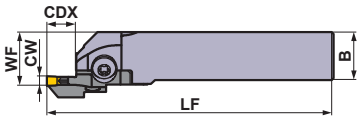


Fig. 1

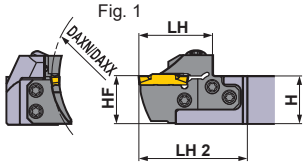
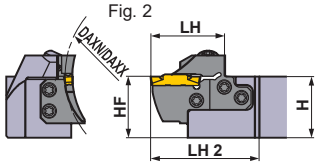


Fig. 2



Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
D	2.00 2.24	40	50	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-040	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-D12-040	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-040	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-D12-040	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-040	●	2
						L	GYHL3225P00-M25L	●	GYM25LD-D12-040	●	2
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-040	●	2
						L	GYHL3232P00-M25L	●	GYM25LD-D12-040	●	2
		50	60	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-050	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-D12-050	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-050	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-D12-050	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-050	●	2
						L	GYHL3225P00-M25L	●	GYM25LD-D12-050	●	2
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-050	●	2
						L	GYHL3232P00-M25L	●	GYM25LD-D12-050	●	2
		60	75	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-060	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-D12-060	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-060	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-D12-060	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-060	●	2
						L	GYHL3225P00-M25L	●	GYM25LD-D12-060	●	2
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-060	●	2
						L	GYHL3232P00-M25L	●	GYM25LD-D12-060	●	2
		75	100	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-D12-075	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-D12-075	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-D12-075	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-D12-075	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-D12-075	●	2
						L	GYHL3225P00-M25L	●	GYM25LD-D12-075	●	2
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-D12-075	●	2
						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.

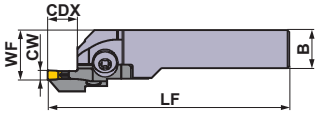
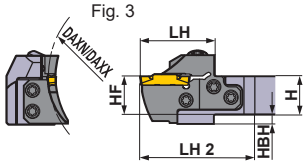


Fig. 3



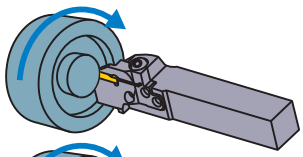
Right hand tool holder shown.

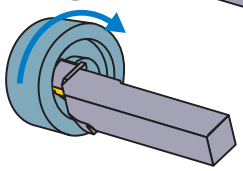
∗ Wrench : ① : Clamp Screw, ② : Blade Screw

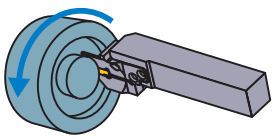
SPARE PARTS

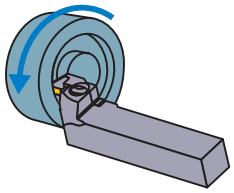
Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ∗
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	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	
	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	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
D	GY○○0200/0224D○○○○–Breaker shown below

For grooving/cutting off breaker ➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
D	2.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●			

● : Standard insert with dimensions

F

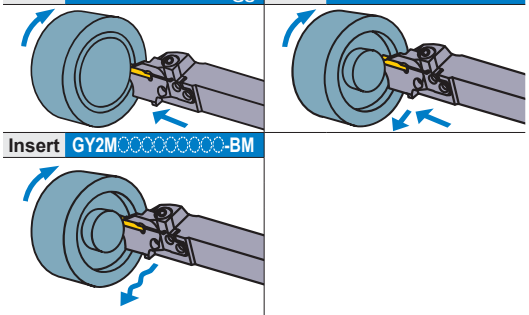
GROOVING / CUTTING OFF

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.

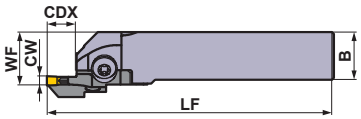


Fig. 1

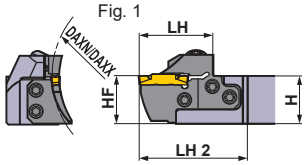
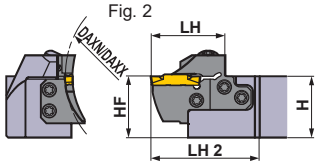


Fig. 2



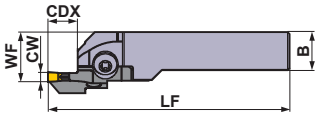
Right hand tool holder shown.

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



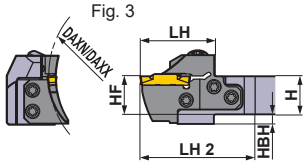


Fig. 3

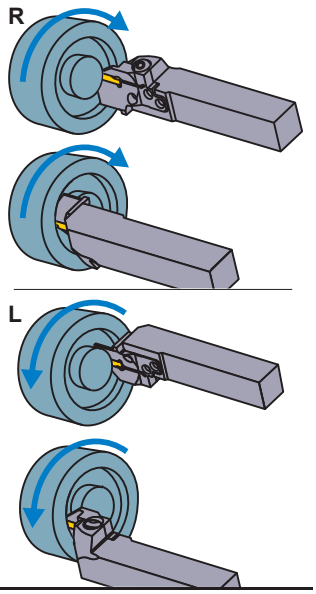
Right hand tool holder shown.

∗ 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			

	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	
	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	—	



Insert selection

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

For grooving/cutting off breaker ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
D	2.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●			

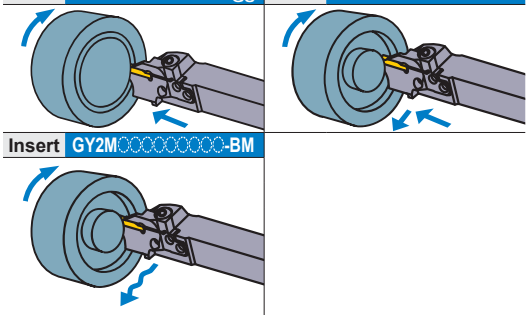
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○-GM
Insert GY2M○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-MS
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.

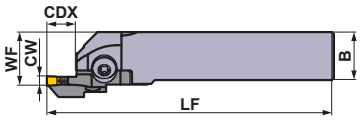


Fig. 1

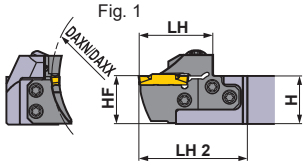
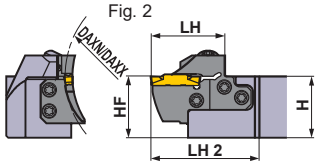


Fig. 2



Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
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.

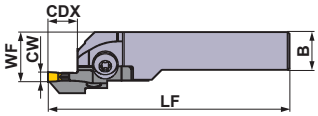
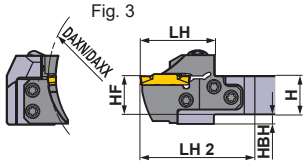


Fig. 3



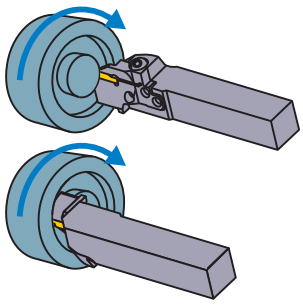
Right hand tool holder shown.

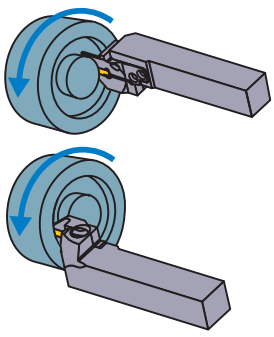
∗ Wrench : ① : Clamp Screw, ② : Blade Screw

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	
	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	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	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 ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
E	2.39mm	●	●	●	●
	2.50mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					Ball shape
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			

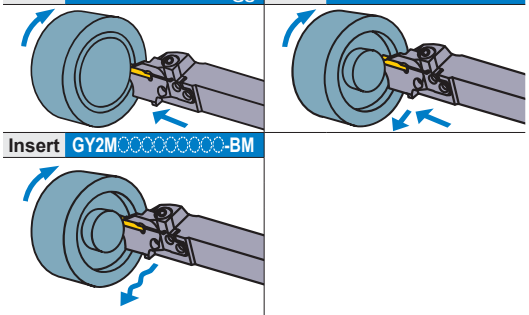
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.

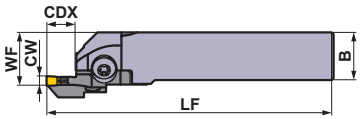


Fig. 1

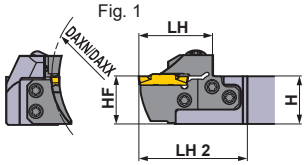
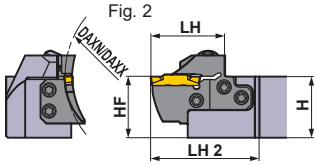


Fig. 2



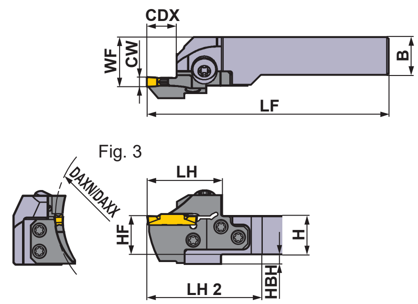
Right hand tool holder shown.

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



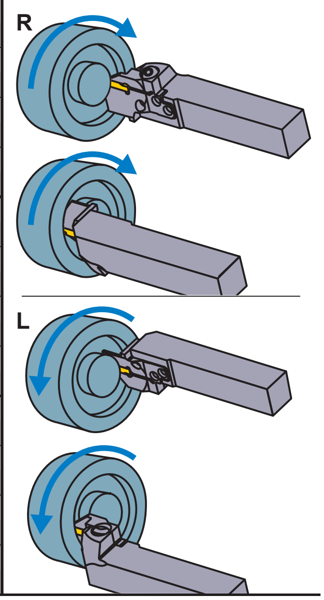
Right hand tool holder shown.

* 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			

	Dimensions (mm) *1								Cutting Mode
	H	B	LF	LH	LH 2	HF	WF	HBH	
	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 ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
E	2.39mm	●	●	●	●
	2.50mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

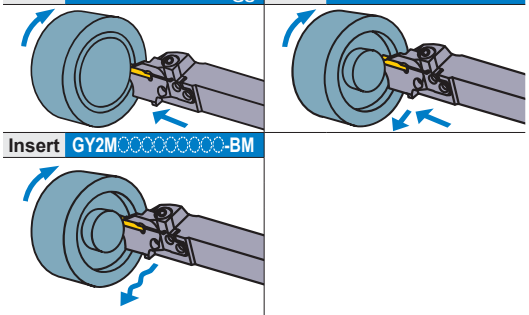
Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying) Ball shape
E	2.39mm	●			
	2.50mm	●	● (red)	●	●
	2.74mm	●			

● (red) : Standard insert with dimensions

GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○-GM
Insert GY2M○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-MS
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.

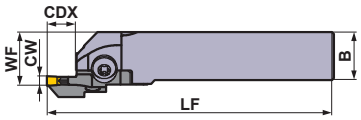


Fig. 1

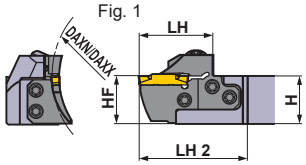
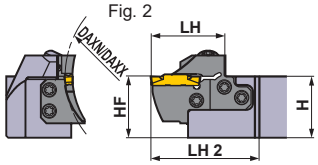


Fig. 2



Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
F	3.00 3.18 3.24	35	40	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-035	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-F12-035	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-035	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-F12-035	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-035	●	2
						L	GYHL3225P00-M25L	●	GYM25LD-F12-035	●	2
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-035	●	2
						L	GYHL3232P00-M25L	●	GYM25LD-F12-035	●	2
		40	50	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-040	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-F12-040	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-040	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-F12-040	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-040	●	2
						L	GYHL3225P00-M25L	●	GYM25LD-F12-040	●	2
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-040	●	2
						L	GYHL3232P00-M25L	●	GYM25LD-F12-040	●	2
		50	60	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-050	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-F12-050	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-050	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-F12-050	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-050	●	2
						L	GYHL3225P00-M25L	●	GYM25LD-F12-050	●	2
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-050	●	2
						L	GYHL3232P00-M25L	●	GYM25LD-F12-050	●	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.

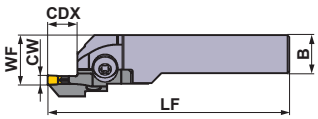
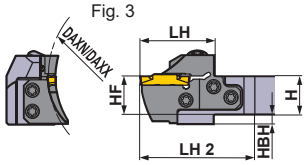


Fig. 3



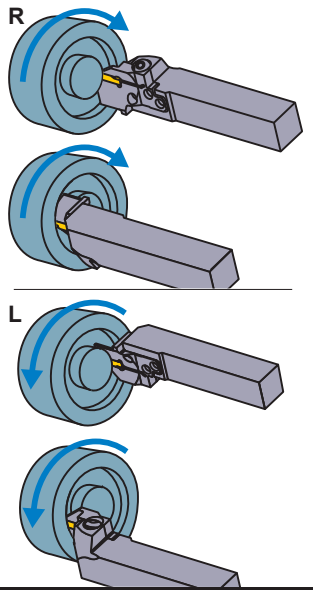
Right hand tool holder shown.

∗ 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			

	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	
	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	—	



Insert selection

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

For grooving/cutting off breaker ➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					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

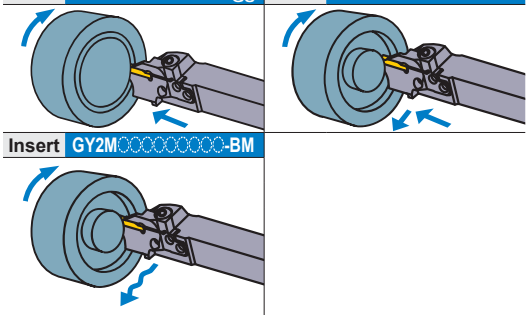
GROOVING / CUTTING OFF

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

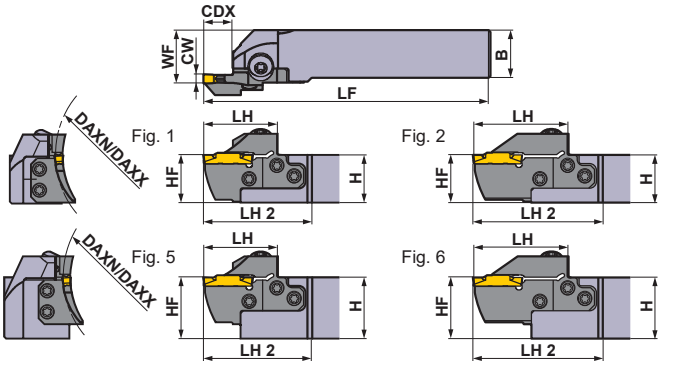
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○-GM
Insert GY2M○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-MS
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.



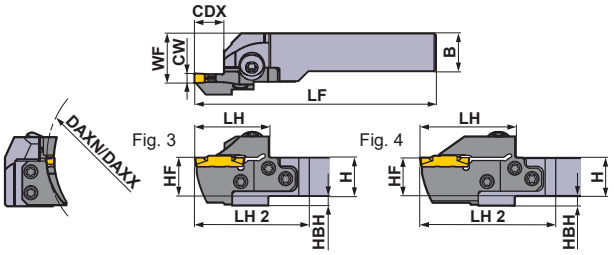
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
F	3.00 3.18 3.24	60	75	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-060	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-F12-060	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-060	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-F12-060	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-060	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-F12-060	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-060	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-F12-060	●	5
				20 ∗2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-060	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-F20-060	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-060	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-F20-060	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-060	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-F20-060	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-060	●	6
						L	GYHL3232P00-M25L	●	GYM25LD-F20-060	●	6
		75	100	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-075	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-F12-075	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-075	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-F12-075	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-075	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-F12-075	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-075	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-F12-075	●	5
				20 ∗2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-075	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-F20-075	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-075	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-F20-075	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-075	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-F20-075	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-075	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



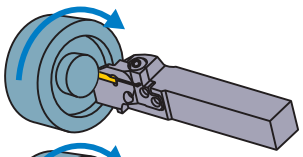
Right hand tool holder shown.

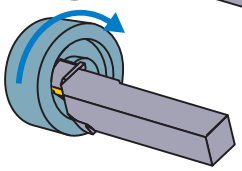
★ Wrench : ① : Clamp Screw, ② : Blade Screw

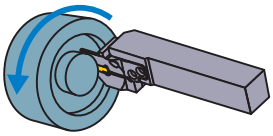
SPARE PARTS

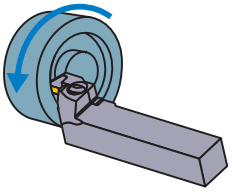
Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ★
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	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	—	
	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 ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					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

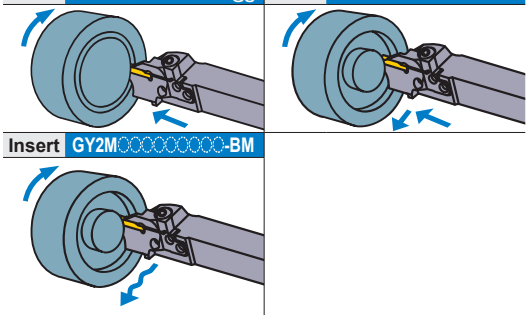
GROOVING / CUTTING OFF

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

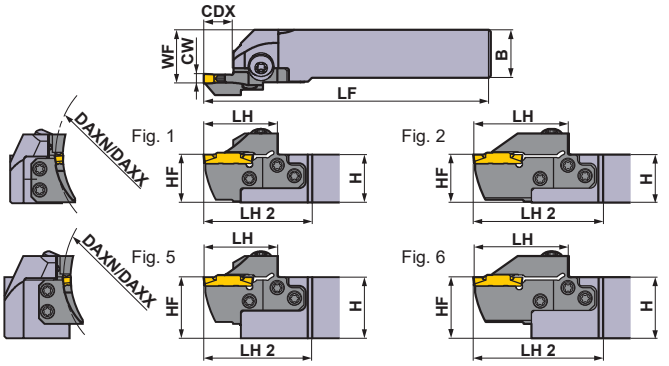
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.



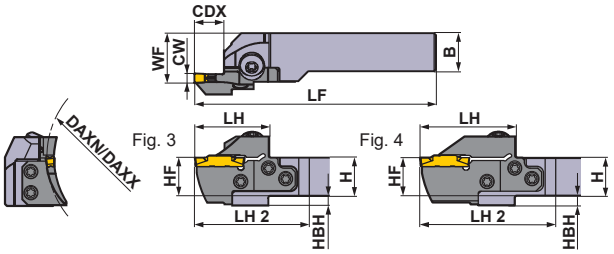
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
F	3.00 3.18 3.24	100	150	12	Modular	R	**GYHR2020K00-M25R**	●	**GYM25RD-F12-100**	●	3
						L	**GYHL2020K00-M25L**	●	**GYM25LD-F12-100**	●	3
					Modular	R	**GYHR2525M00-M25R**	●	**GYM25RD-F12-100**	●	1
						L	**GYHL2525M00-M25L**	●	**GYM25LD-F12-100**	●	1
					Modular	R	**GYHR3225P00-M25R**	●	**GYM25RD-F12-100**	●	5
						L	**GYHL3225P00-M25L**	●	**GYM25LD-F12-100**	●	5
					Modular	R	**GYHR3232P00-M25R**	●	**GYM25RD-F12-100**	●	5
						L	**GYHL3232P00-M25L**	●	**GYM25LD-F12-100**	●	5
				20 ∗2	Modular	R	**GYHR2020K00-M25R**	●	**GYM25RD-F20-100**	●	4
						L	**GYHL2020K00-M25L**	●	**GYM25LD-F20-100**	●	4
					Modular	R	**GYHR2525M00-M25R**	●	**GYM25RD-F20-100**	●	2
						L	**GYHL2525M00-M25L**	●	**GYM25LD-F20-100**	●	2
					Modular	R	**GYHR3225P00-M25R**	●	**GYM25RD-F20-100**	●	6
						L	**GYHL3225P00-M25L**	●	**GYM25LD-F20-100**	●	6
					Modular	R	**GYHR3232P00-M25R**	●	**GYM25RD-F20-100**	●	6
						L	**GYHL3232P00-M25L**	●	**GYM25LD-F20-100**	●	6
		135	200	12	Modular	R	**GYHR2020K00-M25R**	●	**GYM25RD-F12-135**	●	3
						L	**GYHL2020K00-M25L**	●	**GYM25LD-F12-135**	●	3
					Modular	R	**GYHR2525M00-M25R**	●	**GYM25RD-F12-135**	●	1
						L	**GYHL2525M00-M25L**	●	**GYM25LD-F12-135**	●	1
					Modular	R	**GYHR3225P00-M25R**	●	**GYM25RD-F12-135**	●	5
						L	**GYHL3225P00-M25L**	●	**GYM25LD-F12-135**	●	5
					Modular	R	**GYHR3232P00-M25R**	●	**GYM25RD-F12-135**	●	5
						L	**GYHL3232P00-M25L**	●	**GYM25LD-F12-135**	●	5
				20 ∗2	Modular	R	**GYHR2020K00-M25R**	●	**GYM25RD-F20-135**	●	4
						L	**GYHL2020K00-M25L**	●	**GYM25LD-F20-135**	●	4
					Modular	R	**GYHR2525M00-M25R**	●	**GYM25RD-F20-135**	●	2
						L	**GYHL2525M00-M25L**	●	**GYM25LD-F20-135**	●	2
					Modular	R	**GYHR3225P00-M25R**	●	**GYM25RD-F20-135**	●	6
						L	**GYHL3225P00-M25L**	●	**GYM25LD-F20-135**	●	6
					Modular	R	**GYHR3232P00-M25R**	●	**GYM25RD-F20-135**	●	6
						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 F010—F012.

● : **Inventory maintained in Japan.**



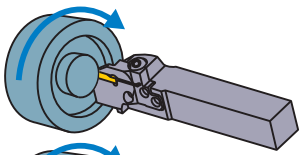
Right hand tool holder shown.

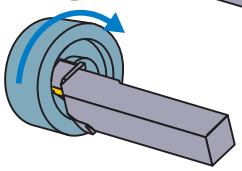
∗ Wrench : ① : Clamp Screw, ② : Blade Screw

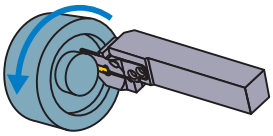
SPARE PARTS

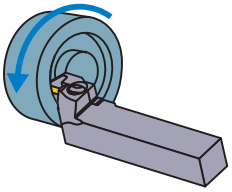
Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ∗
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	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	—	
	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 ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					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

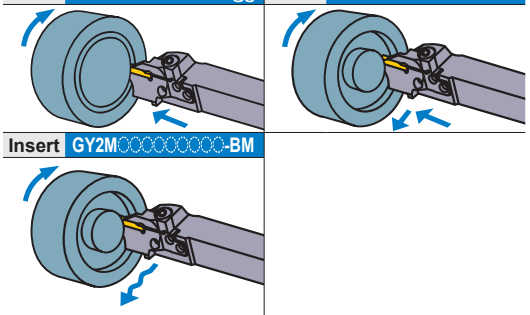
GROOVING / CUTTING OFF

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

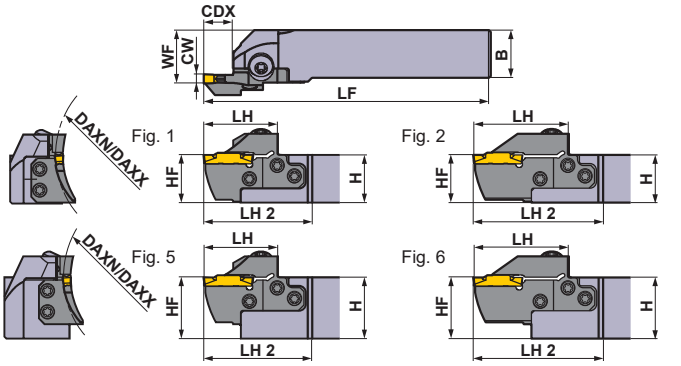
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.



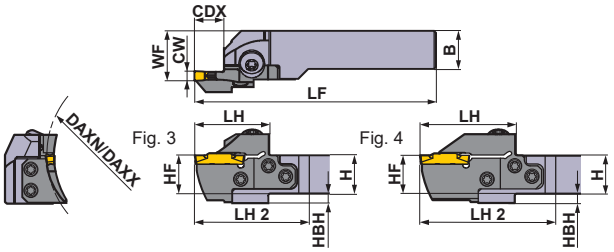
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
F	3.00 3.18 3.24	180	250	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-180	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-F12-180	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-180	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-F12-180	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-180	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-F12-180	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-180	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-F12-180	●	5
				20 ∗2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-180	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-F20-180	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-180	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-F20-180	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-180	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-F20-180	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-180	●	6
						L	GYHL3232P00-M25L	●	GYM25LD-F20-180	●	6
		225	999	12	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F12-225	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-F12-225	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F12-225	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-F12-225	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F12-225	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-F12-225	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F12-225	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-F12-225	●	5
				20 ∗2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-F20-225	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-F20-225	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-F20-225	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-F20-225	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-F20-225	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-F20-225	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-F20-225	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



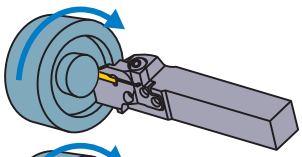
Right hand tool holder shown.

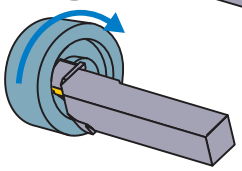
★ Wrench : ① : Clamp Screw, ② : Blade Screw

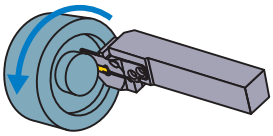
SPARE PARTS

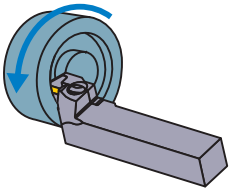
Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ★
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	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	—	
	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 ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					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

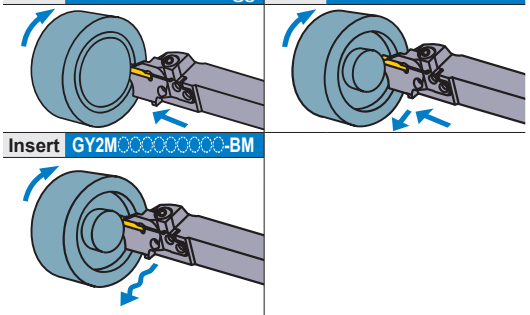
GROOVING / CUTTING OFF

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

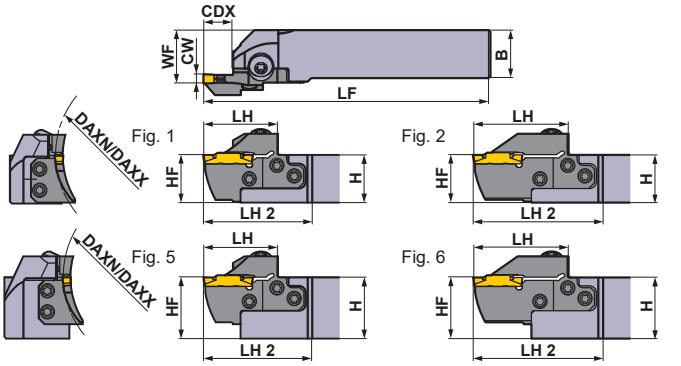
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.



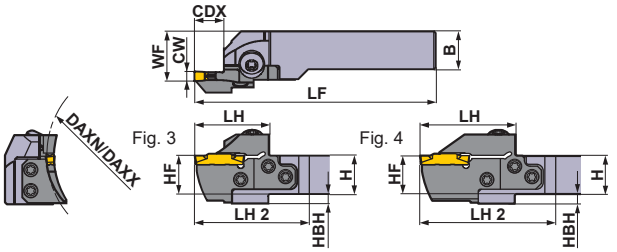
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
G	4.00 4.24	40	50	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-040	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-G14-040	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-040	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-G14-040	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-040	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-G14-040	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-040	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-G14-040	●	5
		50	60	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-050	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-G14-050	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-050	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-G14-050	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-050	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-G14-050	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-050	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-G14-050	●	5
		60	85	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-060	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-G14-060	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-060	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-G14-060	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-060	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-G14-060	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-060	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-G14-060	●	5
				25 *2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-060	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-G25-060	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-060	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-G25-060	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-060	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-G25-060	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-060	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



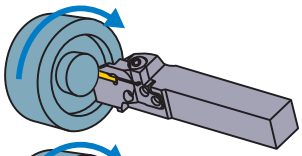
Right hand tool holder shown.

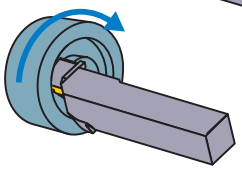
∗ Wrench : ① : Clamp Screw, ② : Blade Screw

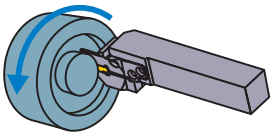
SPARE PARTS

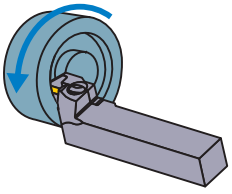
Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ∗
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	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	—	
	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	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 ➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					Ball shape
G	4.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8	●		●	
	4.24mm	●			

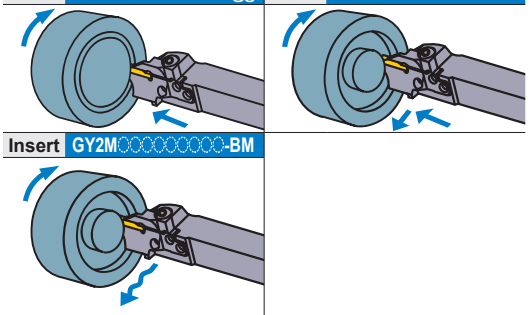
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

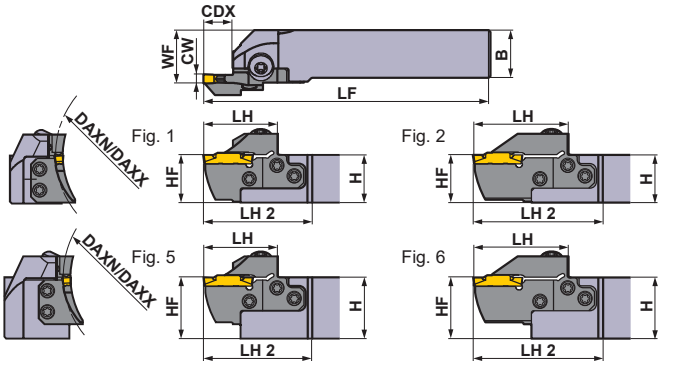
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.



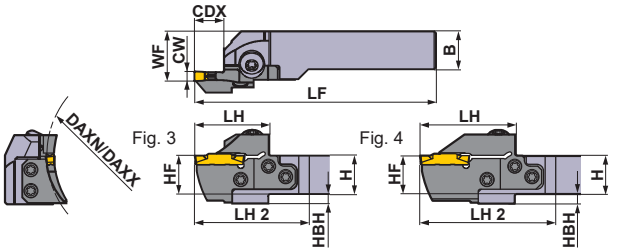
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
G	4.00 4.24	85	125	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-085	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-G14-085	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-085	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-G14-085	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-085	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-G14-085	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-085	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-G14-085	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-085	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-G25-085	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-085	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-G25-085	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-085	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-G25-085	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-085	●	6
						L	GYHL3232P00-M25L	●	GYM25LD-G25-085	●	6
		125	200	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-125	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-G14-125	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-125	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-G14-125	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-125	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-G14-125	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-125	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-G14-125	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-125	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-G25-125	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-125	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-G25-125	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-125	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-G25-125	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-125	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



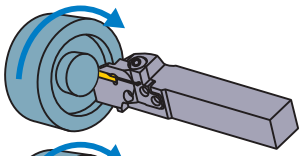
Right hand tool holder shown.

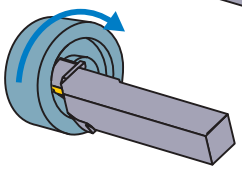
★ Wrench : ① : Clamp Screw, ② : Blade Screw

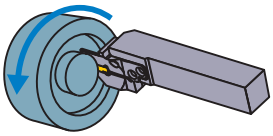
SPARE PARTS

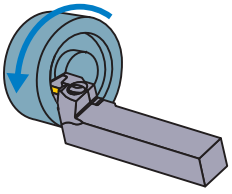
Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ★
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

	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	—	
	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	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 ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ 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	●			

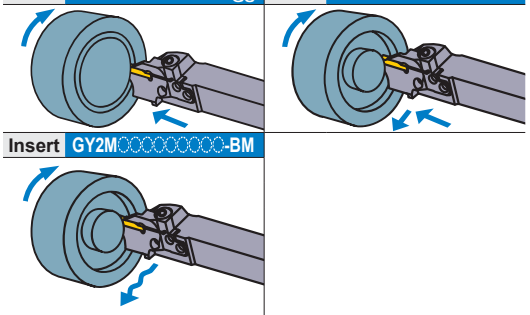
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

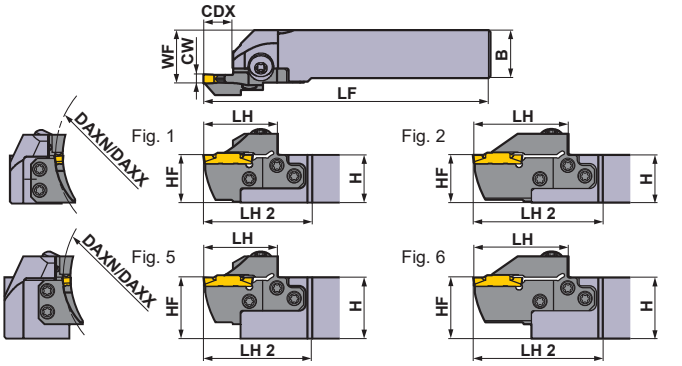
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.



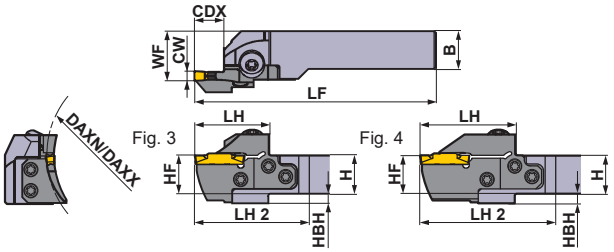
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
G	4.00 4.24	180	280	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-180	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-G14-180	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-180	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-G14-180	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-180	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-G14-180	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-180	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-G14-180	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-180	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-G25-180	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-180	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-G25-180	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-180	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-G25-180	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-180	●	6
						L	GYHL3232P00-M25L	●	GYM25LD-G25-180	●	6
		250	999	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G14-250	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-G14-250	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G14-250	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-G14-250	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G14-250	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-G14-250	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G14-250	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-G14-250	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-G25-250	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-G25-250	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-G25-250	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-G25-250	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-G25-250	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-G25-250	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-G25-250	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



Right hand tool holder shown.

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

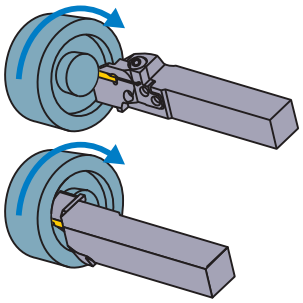
SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ∗
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			

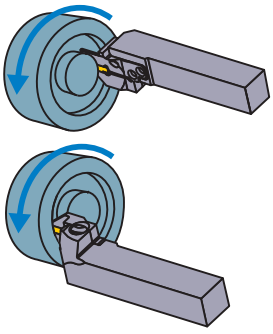
Dimensions (mm) ∗1							
H	B	LF	LH	LH 2	HF	WF	HBH
20	20	125	39	60	20	26	5
20	20	125	39	60	20	26	5
25	25	150	39	57	25	28	—
25	25	150	39	57	25	28	—
32	25	170	39	57	32	28	—
32	25	170	39	57	32	28	—
32	32	170	39	57	32	35	—
32	32	170	39	57	32	35	—
20	20	136	50	71	20	26	5
20	20	136	50	71	20	26	5
25	25	161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

Cutting Mode

R



L



Insert selection

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

For grooving/cutting off breaker ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ 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	●			

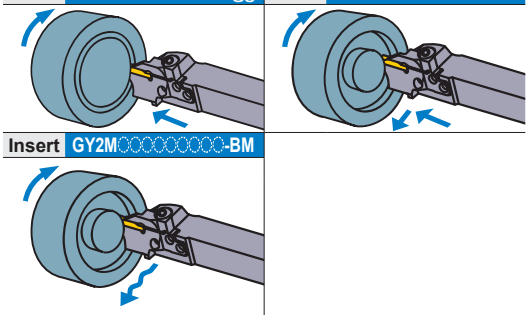
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

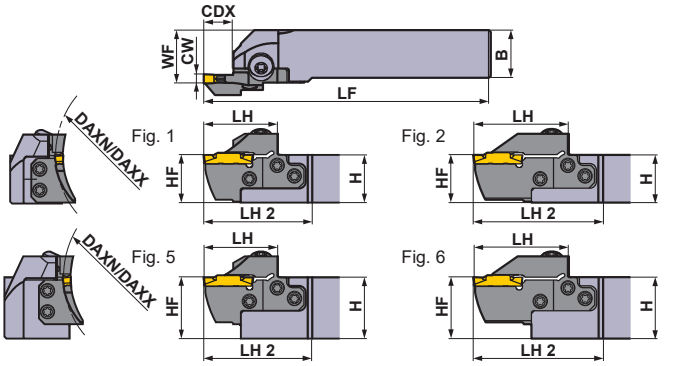
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○-GM
Insert GY2M○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-MS
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.



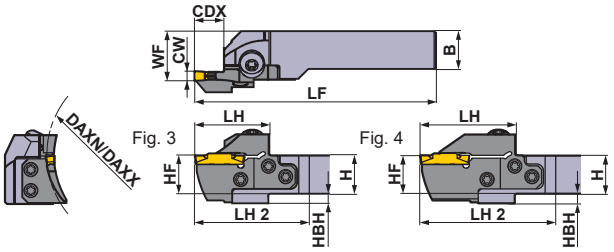
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
H	4.75 5.00 5.24	50	60	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-050	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-H14-050	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-050	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-H14-050	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-050	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-H14-050	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-050	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-H14-050	●	5
		60	85	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-060	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-H14-060	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-060	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-H14-060	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-060	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-H14-060	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-060	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-H14-060	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-060	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-H25-060	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-060	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-H25-060	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-060	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-H25-060	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-060	●	6
						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 F010–F012.

● : Inventory maintained in Japan.



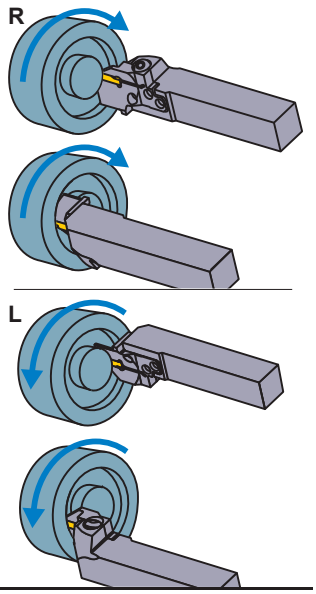
Right hand tool holder shown.

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

SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ★
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	—	
	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	—	



Insert selection

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

For grooving/cutting off breaker ➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					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	●	●	●	
	5.24mm	●			

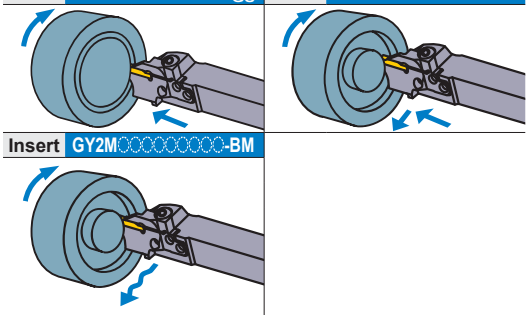
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

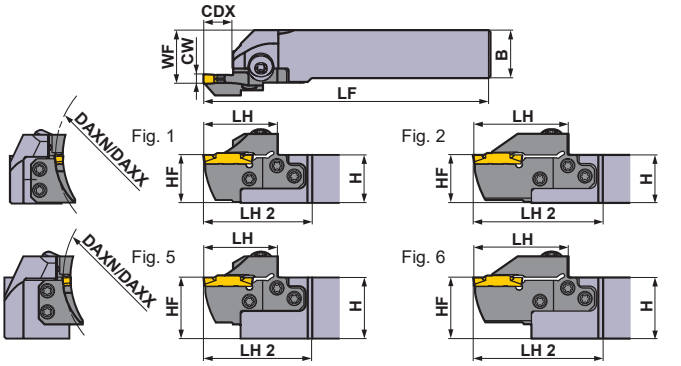
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.



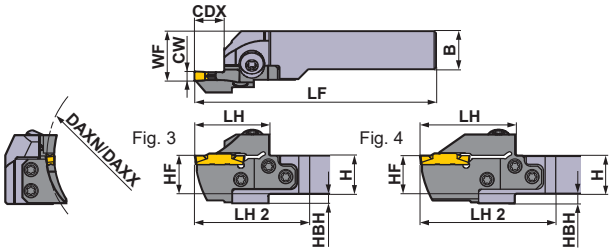
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
H	4.75 5.00 5.24	85	125	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-085	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-H14-085	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-085	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-H14-085	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-085	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-H14-085	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-085	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-H14-085	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-085	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-H25-085	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-085	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-H25-085	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-085	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-H25-085	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-085	●	6
						L	GYHL3232P00-M25L	●	GYM25LD-H25-085	●	6
		125	200	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-125	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-H14-125	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-125	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-H14-125	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-125	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-H14-125	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-125	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-H14-125	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-125	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-H25-125	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-125	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-H25-125	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-125	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-H25-125	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-125	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



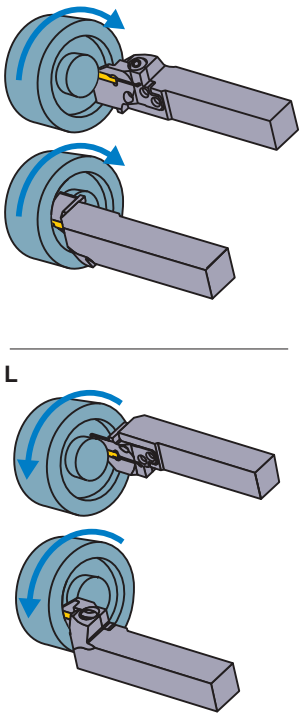
Right hand tool holder shown.

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

SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ★
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	—	
	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	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
H	GY○○0475/0500/0524H○○○○—Breaker shown below

For grooving/cutting off breaker ➢ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					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	●	●	●	
	5.24mm	●			

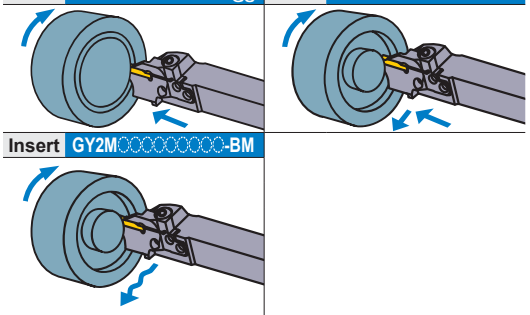
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

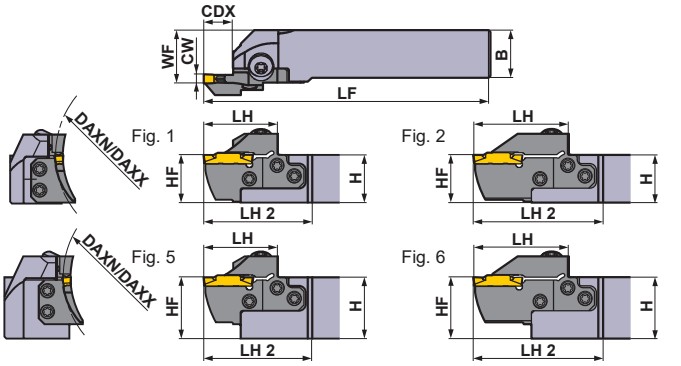
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-MS
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.



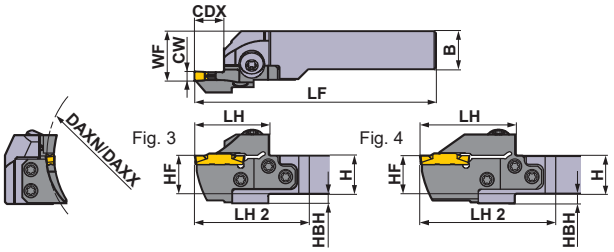
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
H	4.75 5.00 5.24	180	280	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-180	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-H14-180	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-180	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-H14-180	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-180	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-H14-180	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-180	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-H14-180	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-180	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-H25-180	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-180	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-H25-180	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-180	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-H25-180	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-180	●	6
						L	GYHL3232P00-M25L	●	GYM25LD-H25-180	●	6
		250	999	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H14-250	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-H14-250	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H14-250	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-H14-250	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H14-250	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-H14-250	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H14-250	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-H14-250	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-H25-250	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-H25-250	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-H25-250	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-H25-250	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-H25-250	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-H25-250	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-H25-250	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



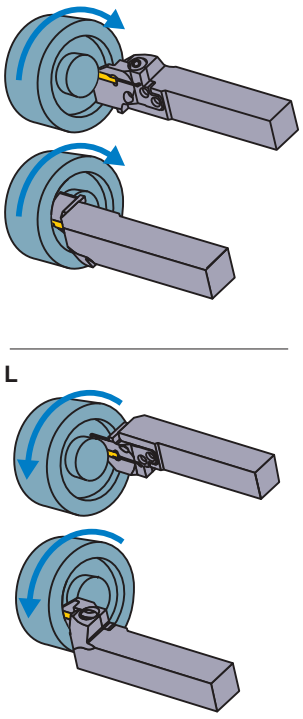
Right hand tool holder shown.

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

SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ∗
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	—	
	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	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
H	GY○○0475/0500/0524H○○○○—Breaker shown below

For grooving/cutting off breaker ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					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	●	●	●	
	5.24mm	●			

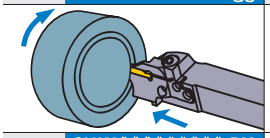
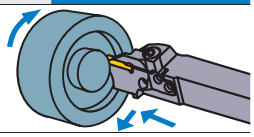
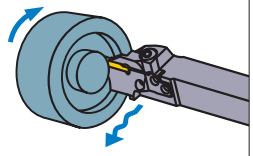
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

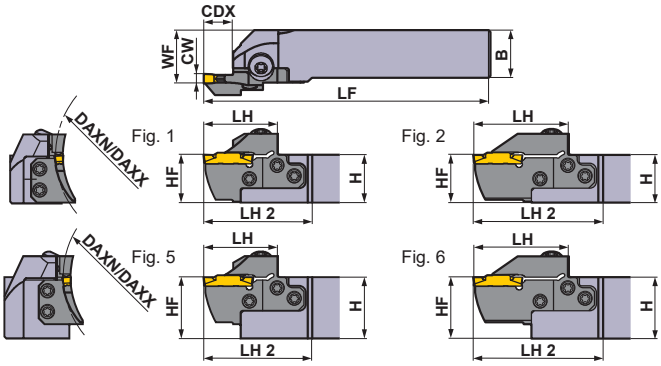
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY2M○○○○○○○○○-GS/GM
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-GU
Insert GY2M○○○○○○○○○-MS
Insert GY1G○○○○○○○○○-GF/GS
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.



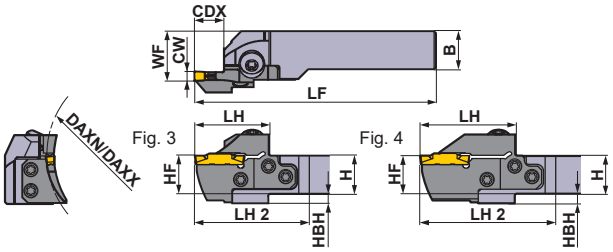
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
J	6.00 6.31 6.35	50	70	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-050	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-J14-050	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-050	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-J14-050	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-050	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-J14-050	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-050	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-J14-050	●	5
		70	110	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-070	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-J14-070	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-070	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-J14-070	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-070	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-J14-070	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-070	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-J14-070	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J25-070	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-J25-070	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J25-070	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-J25-070	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J25-070	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-J25-070	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J25-070	●	6
						L	GYHL3232P00-M25L	●	GYM25LD-J25-070	●	6
		110	200	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-110	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-J14-110	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-110	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-J14-110	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-110	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-J14-110	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-110	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-J14-110	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J25-110	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-J25-110	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J25-110	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-J25-110	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J25-110	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-J25-110	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J25-110	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



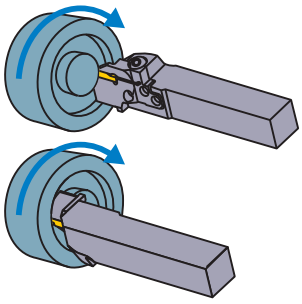
Right hand tool holder shown.

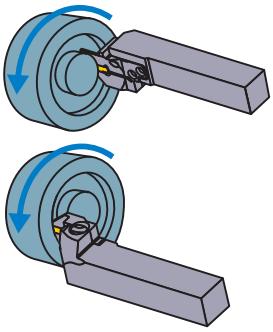
★ Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ★
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	—	
	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	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
J	GY○○0600/0631/0635J○○○○–Breaker shown below

For grooving/cutting off breaker ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
J	6.00mm	●	●	●	●
	6.35mm	●	●	●	

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (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	●			

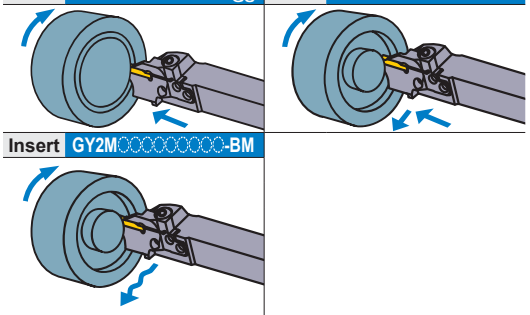
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

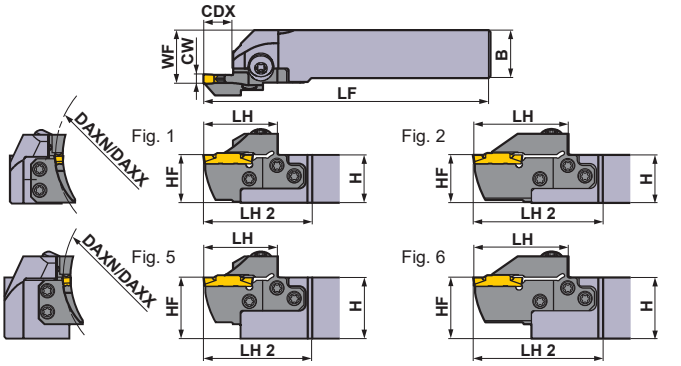
GY SERIES (FACE GROOVING)

4 00° type holder

Insert GY2M○○○○○○○○○-GS/GM
Insert GY2M○○○○○○○○○-GU
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-MS
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.



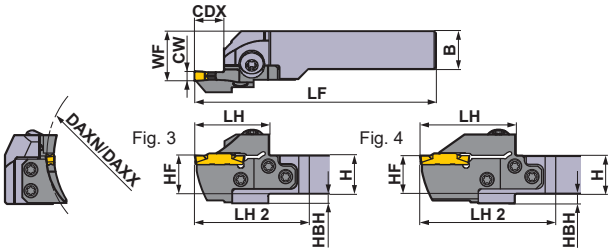
Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
J	6.00 6.31 6.35	170	280	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-170	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-J14-170	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-170	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-J14-170	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-170	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-J14-170	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-170	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-J14-170	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J25-170	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-J25-170	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J25-170	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-J25-170	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J25-170	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-J25-170	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J25-170	●	6
						L	GYHL3232P00-M25L	●	GYM25LD-J25-170	●	6
		250	999	14	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J14-250	●	3
						L	GYHL2020K00-M25L	●	GYM25LD-J14-250	●	3
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J14-250	●	1
						L	GYHL2525M00-M25L	●	GYM25LD-J14-250	●	1
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J14-250	●	5
						L	GYHL3225P00-M25L	●	GYM25LD-J14-250	●	5
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J14-250	●	5
						L	GYHL3232P00-M25L	●	GYM25LD-J14-250	●	5
				25 ✶2	Modular	R	GYHR2020K00-M25R	●	GYM25RD-J25-250	●	4
						L	GYHL2020K00-M25L	●	GYM25LD-J25-250	●	4
					Modular	R	GYHR2525M00-M25R	●	GYM25RD-J25-250	●	2
						L	GYHL2525M00-M25L	●	GYM25LD-J25-250	●	2
					Modular	R	GYHR3225P00-M25R	●	GYM25RD-J25-250	●	6
						L	GYHL3225P00-M25L	●	GYM25LD-J25-250	●	6
					Modular	R	GYHR3232P00-M25R	●	GYM25RD-J25-250	●	6
						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 F010—F012.

● : Inventory maintained in Japan.



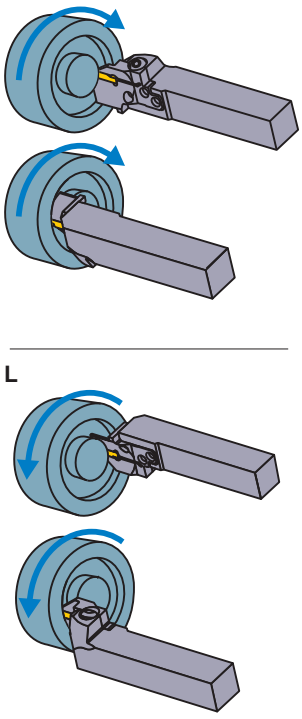
Right hand tool holder shown.

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

SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ∗
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	—	
	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	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
J	GY○○0600/0631/0635J○○○○–Breaker shown below

For grooving/cutting off breaker ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
J	6.00mm	●	●	●	●
	6.35mm	●	●	●	

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (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	●			

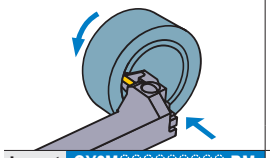
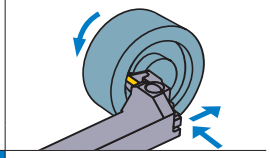
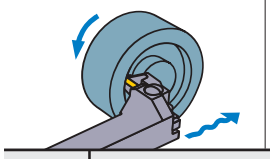
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

GY SERIES (FACE GROOVING)

5 90° type holder

Insert GY1M/2M○○○○○○○○○○-GM
Insert GY2G○○○○○○○○○○-MF
Insert GY2M○○○○○○○○○○-GS/GU
Insert GY2M○○○○○○○○○○-MS
Insert GY1G○○○○○○○○○○-GF/GS
Insert GY2M○○○○○○○○○○-MM

Insert GY2M○○○○○○○○○○-BM

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.

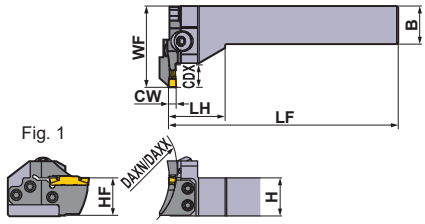


Fig. 1

Right hand tool holder shown.

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

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

SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	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	53	
	25	25	150	38	25	53	
	25	25	150	38	25	53	L
	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	53	
	25	25	150	38	25	53	

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 ➢ F010, F011

Seat Size	Breaker CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
D	2.00mm	●	●	●	●
E	2.39mm	●	●	●	●
	2.50mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	Breaker CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying) Ball shape
D	2.00mm	●	●	●	●
	2.24mm	●			
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			

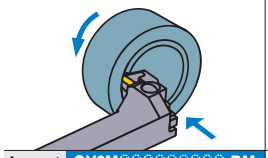
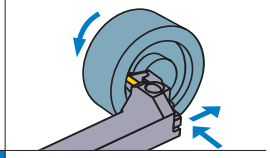
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

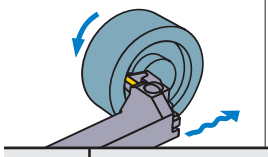
GY SERIES (FACE GROOVING)

5 90° type holder

Insert GY1M/2M○○○○○○○○○-GM
Insert GY2M○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-MS
Insert GY2M○○○○○○○○○-MM

Insert GY2M○○○○○○○○○-BM



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.

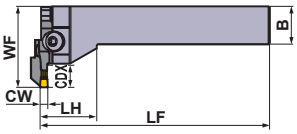


Fig. 1

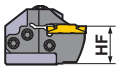


Fig. 2

Right hand tool holder shown.

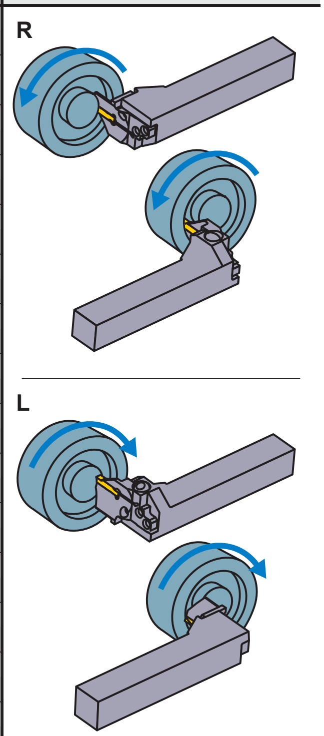
Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
F	3.00 3.18 3.24	35	40	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-035	●	1
						L	GYHL2525M90-M25R	●	GYM25RD-F12-035	●	1
		40	50	12	Modular	R	GYHR2525M90-M25L	●	GYM25LD-F12-040	●	1
						L	GYHL2525M90-M25R	●	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 F010—F012.

● : Inventory maintained in Japan.

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



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

SPARE PARTS

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

Insert selection

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

For grooving/cutting off breaker ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying) Ball shape
F	3.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	● (red)	●	
	RE 0.8			●	
	3.18mm				●
	RE 0.2	●			
	RE 0.4	●			
	3.24mm	●			

● (red) : Standard insert with dimensions

F

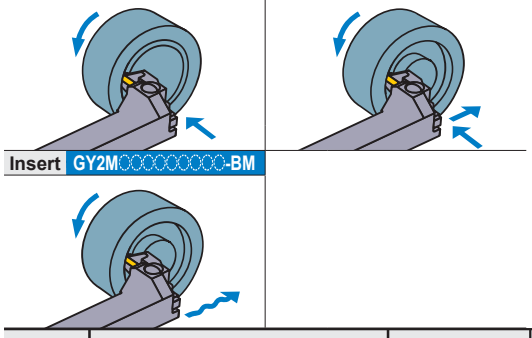
GROOVING / CUTTING OFF

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

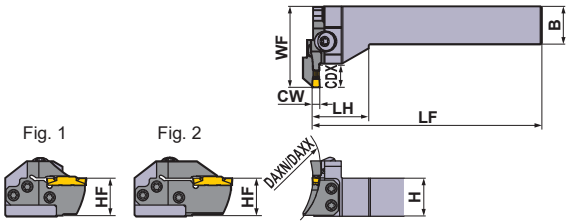
GY SERIES (FACE GROOVING)

5 90° type holder

Insert	GY$^{1M}_{2M}$○○○○○○○○○-GM	Insert	GY2G○○○○○○○○○-MF
Insert	GY2M○○○○○○○○○-$^{GS}_{GU}$	Insert	GY2M○○○○○○○○○-MS
Insert	GY1G○○○○○○○○○-$^{GF}_{GS}$	Insert	GY2M○○○○○○○○○-MM
Insert	GY2M○○○○○○○○○-BM		



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) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
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 F010—F012.

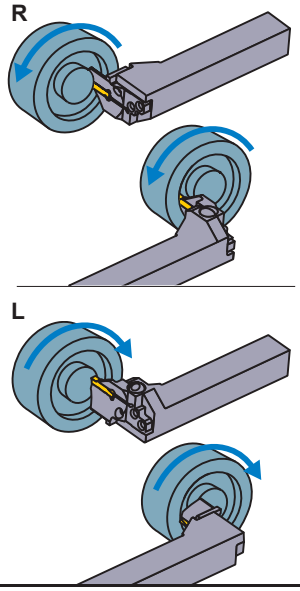
● : Inventory maintained in Japan.

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

SPARE PARTS

Holder	Clamp Screw	Blade Screw (5 pcs.)	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	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	L
	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 ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ 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	●			

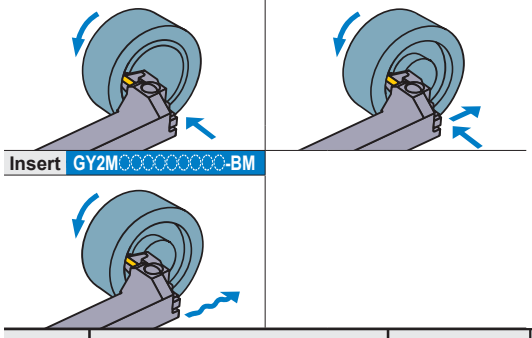
● : Standard insert with dimensions

IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

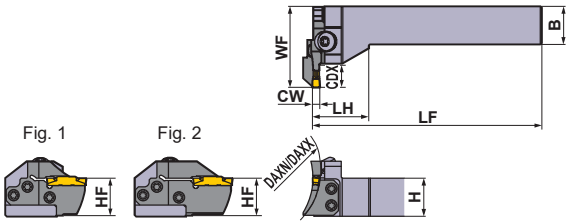
GY SERIES (FACE GROOVING)

5 90° type holder

Insert GY1M/2M○○○○○○○○○-GM
Insert GY2M○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-MS
Insert GY2M○○○○○○○○○-MM
Insert GY2M○○○○○○○○○-BM



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) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
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
				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
				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
				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
				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
				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 F010—F012.

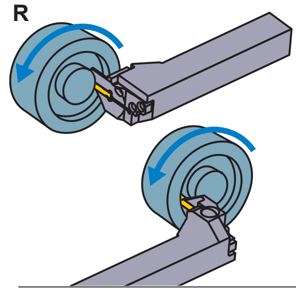
● : Inventory maintained in Japan.

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

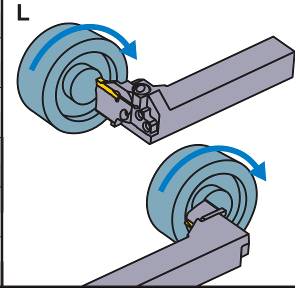
SPARE PARTS			
Holder	Clamp Screw	Blade Screw (5 pcs.)	Wrench ⁎
GYHR2525M90-M25L GYHL2525M90-M25R	GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D

	Dimensions (mm) ⁎1						Cutting Mode
	H	B	LF	LH	HF	WF	
	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	
	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	

R



L



Insert selection

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

For grooving/cutting off breaker ➢ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying) 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	●	🔴	●	
	5.24mm	●			

🔴 : Standard insert with dimensions

F

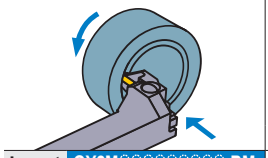
GROOVING / CUTTING OFF

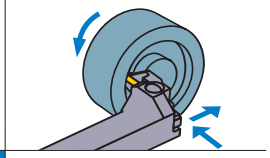
IDENTIFICATION ➢ F008, F009
CUTTING CONDITIONS ➢ F096
CAUTION FOR USE ➢ F098

GY SERIES (FACE GROOVING)

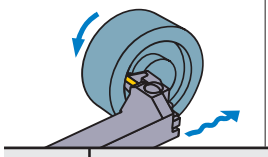
5 90° type holder

Insert GY2M○○○○○○○○○-GS/GM
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-GU
Insert GY2M○○○○○○○○○-MS
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2M○○○○○○○○○-MM





Insert GY2M○○○○○○○○○-BM



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.

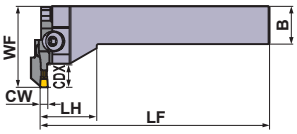


Fig. 1

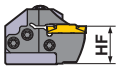


Fig. 2

Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	DAXN	DAXX	CDX	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
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
				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
				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
				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
				25 ✶2	Modular	R	GYHR2525M90-M25L	●	GYM25LD-J25-250	●	2
						L	GYHL2525M90-M25R	●	GYM25RD-J25-250	●	2

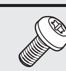
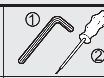
CW = Cutting Width **DAXN =** Axial groove outside diameter minimum **DAXX =** Axial groove outside diameter maximum **CDX =** Max. Groove Depth

✶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 F010—F012.

● : Inventory maintained in Japan.

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

SPARE PARTS

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

	Dimensions (mm) ⁎1					
	H	B	LF	LH	HF	WF
	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
	25	25	150	38	25	53
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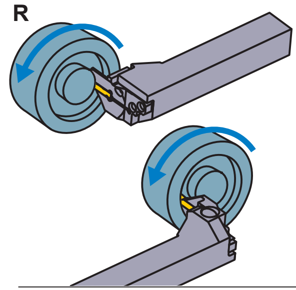
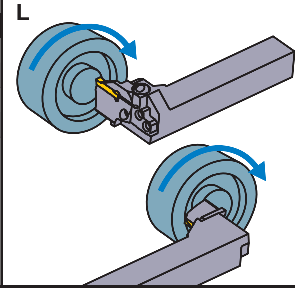
	25	25	150	38	25	64
	25	25	150	38	25	64

Cutting Mode

R



L



Insert selection

Seat Size	Geometry name
J	GY◌◌0600/0631/0635J◌◌◌◌–Breaker shown below

For grooving/cutting off breaker ➤ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
J	6.00mm	●	●	●	●
	6.35mm	●	●	●	

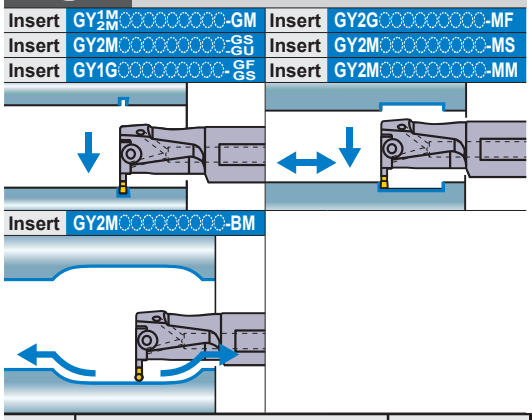
For multifunctional grooving breaker ➤ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying) Ball shape
J	6.00mm				●
	RE 0.2	●			
	RE 0.4	●	●	●	
	RE 0.8	●	● (red)	●	
	6.31mm	●			
	6.35mm				●
	RE 0.2	●			
	RE 0.4	●			
	RE 0.8	●			

● (red) : 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.

●Mono block type (Air / coolant through)

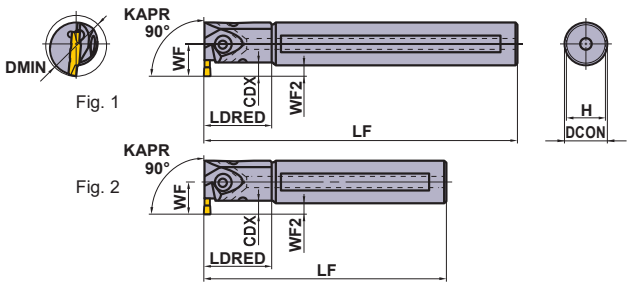


Fig. 1

Fig. 2

Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX ✶3	DMIN	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
D	2.00 2.24	6	25	Mono Block	R	GYAR20K90A-D06	●	—	—	2
					L	GYAL20K90A-D06	●	—	—	2
				Mono Block	R	GYAR20Q90A-D06	●	—	—	1
					L	GYAL20Q90A-D06	●	—	—	1
			32	Mono Block	R	GYAR25K90B-D06	●	—	—	2
					L	GYAL25K90B-D06	●	—	—	2
				Mono Block	R	GYAR25R90B-D06	●	—	—	1
					L	GYAL25R90B-D06	●	—	—	1
		4—9.5 ✶1	40	Modular	R	GYDR32L90C-M20L	●	GYM20LA-D10	●	4
					L	GYDL32L90C-M20R	●	GYM20RA-D10	●	4
				Modular	R	GYDR32S90C-M20L	●	GYM20LA-D10	●	3
					L	GYDL32S90C-M20R	●	GYM20RA-D10	●	3
		5.5—9.5 ✶1	50	Modular	R	GYDR40M90D-M20L	●	GYM20LA-D10	●	4
					L	GYDL40M90D-M20R	●	GYM20RA-D10	●	4
				Modular	R	GYDR40T90D-M20L	●	GYM20LA-D10	●	3
					L	GYDL40T90D-M20R	●	GYM20RA-D10	●	3
		7—11.5 ✶1	60	Modular	R	GYDR40M90D-M25L	●	GYM25LA-D12	●	4
					L	GYDL40M90D-M25R	●	GYM25RA-D12	●	4
				Modular	R	GYDR40T90D-M25L	●	GYM25LA-D12	●	3
					L	GYDL40T90D-M25R	●	GYM25RA-D12	●	3
			70	Modular	R	GYDR50P90F-M25L	●	GYM25LA-D12	●	4
					L	GYDL50P90F-M25R	●	GYM25RA-D12	●	4
				Modular	R	GYDR50T90F-M25L	●	GYM25LA-D12	●	3
					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 F102.
✶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)

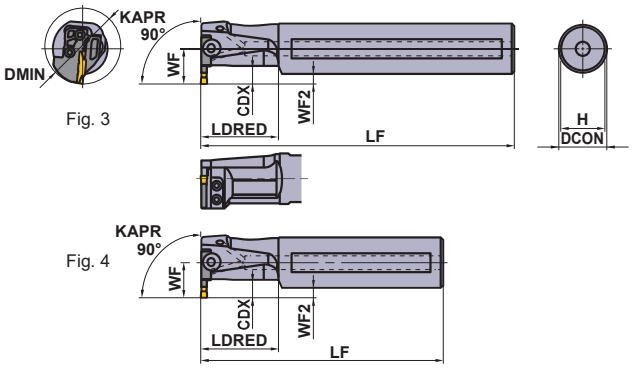


Fig. 3

Fig. 4

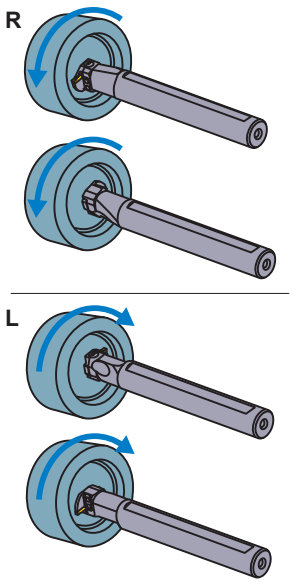
Right hand tool holder shown.

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

SPARE PARTS

Holder	① ② Clamp Screw	4 pcs. Blade Screw	① ② Wrench ∗
GYAR/L20○90A-○06 GYAR/L25○90B-○06	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYDR/L32○90C-M20L/R GYDR/L40○90D-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M25L/R 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	
	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	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	
	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
D	GY○○0200/0224D○○○○–Breaker shown below

For grooving/cutting off breaker ➤ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
D	2.00mm	●	●	●	●

For multifunctional grooving breaker ➤ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					Ball nose
D	2.00mm	●	●	●	●
	2.24mm	●			

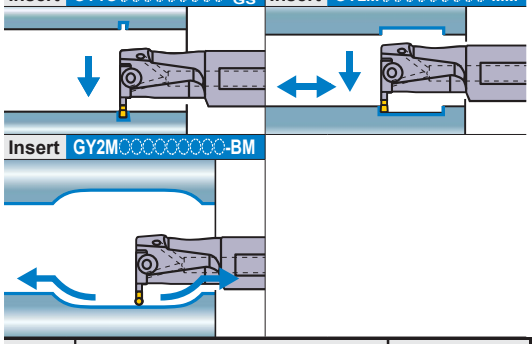
● : Standard insert with dimensions

IDENTIFICATION ➤ F008, F009
CUTTING CONDITIONS ➤ F102
CAUTION FOR USE ➤ F104

GY SERIES (INTERNAL GROOVING)

6 90° type holder

Insert GY1M/2M○○○○○○○○○-GM
Insert GY2M○○○○○○○○○-GS/GU
Insert GY1G○○○○○○○○○-GF/GS
Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-MS
Insert GY2M○○○○○○○○○-MM
Insert GY2M○○○○○○○○○-BM



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)

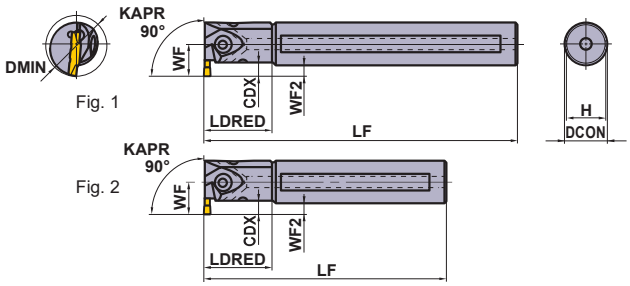


Fig. 1

Fig. 2

Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX ✶3	DMIN	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
E	2.39 2.50 2.74	6	25	Mono Block	R	GYAR20K90A-E06	●	—	—	2
					L	GYAL20K90A-E06	●	—	—	2
				Mono Block	R	GYAR20Q90A-E06	●	—	—	1
					L	GYAL20Q90A-E06	●	—	—	1
			32	Mono Block	R	GYAR25K90B-E06	●	—	—	2
					L	GYAL25K90B-E06	●	—	—	2
				Mono Block	R	GYAR25R90B-E06	●	—	—	1
					L	GYAL25R90B-E06	●	—	—	1
		4—9.5 ✶1	40	Modular	R	GYDR32L90C-M20L	●	GYM20LA-E10	●	4
					L	GYDL32L90C-M20R	●	GYM20RA-E10	●	4
				Modular	R	GYDR32S90C-M20L	●	GYM20LA-E10	●	3
					L	GYDL32S90C-M20R	●	GYM20RA-E10	●	3
		5.5—9.5 ✶1	50	Modular	R	GYDR40M90D-M20L	●	GYM20LA-E10	●	4
					L	GYDL40M90D-M20R	●	GYM20RA-E10	●	4
				Modular	R	GYDR40T90D-M20L	●	GYM20LA-E10	●	3
					L	GYDL40T90D-M20R	●	GYM20RA-E10	●	3
		7—11.5 ✶1	60	Modular	R	GYDR40M90D-M25L	●	GYM25LA-E12	●	4
					L	GYDL40M90D-M25R	●	GYM25RA-E12	●	4
				Modular	R	GYDR40T90D-M25L	●	GYM25LA-E12	●	3
					L	GYDL40T90D-M25R	●	GYM25RA-E12	●	3
			70	Modular	R	GYDR50P90F-M25L	●	GYM25LA-E12	●	4
					L	GYDL50P90F-M25R	●	GYM25RA-E12	●	4
				Modular	R	GYDR50T90F-M25L	●	GYM25LA-E12	●	3
					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 F102.
✶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)

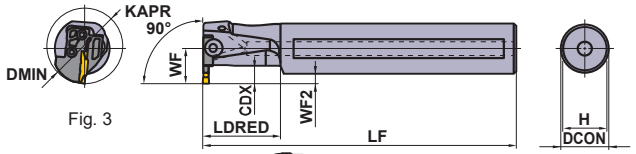


Fig. 3

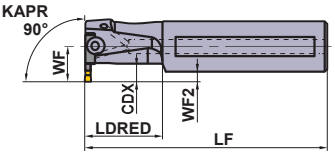


Fig. 4

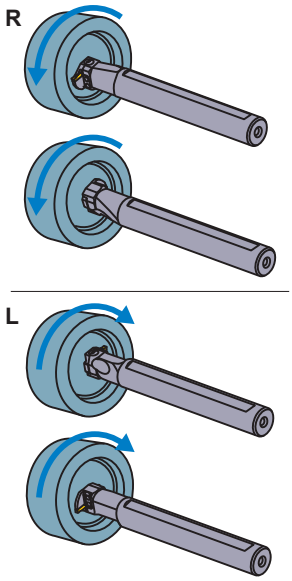
Right hand tool holder shown.

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

SPARE PARTS

Holder	① ② Clamp Screw	4 pcs. Blade Screw	① ② Wrench ★
GYAR/L20○90A-○06 GYAR/L25○90B-○06	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYDR/L32○90C-M20L/R GYDR/L40○90D-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M25L/R 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	
	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	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	
	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
E	GY○○0239/0250/0274E○○○○–Breaker shown below

For grooving/cutting off breaker ➤ F010, F011

Seat Size	CW \ Breaker	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
E	2.39mm	●	●	●	●
	2.50mm	●	●	●	●

For multifunctional grooving breaker ➤ F011, F012

Seat Size	CW \ Breaker	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					Ball nose
E	2.39mm	●			
	2.50mm	●	●	●	●
	2.74mm	●			

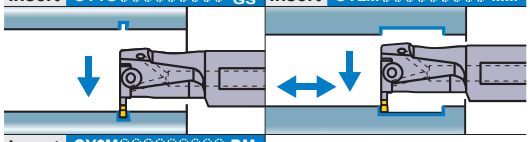
● : Standard insert with dimensions

IDENTIFICATION ➤ F008, F009
CUTTING CONDITIONS ➤ F102
CAUTION FOR USE ➤ F104

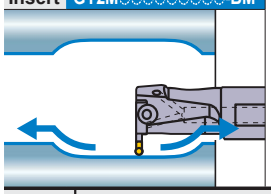
GY SERIES (INTERNAL GROOVING)

6 90° type holder

Insert GY1M/2M○○○○○○○○○-GM Insert GY2G○○○○○○○○○-MF
Insert GY2M○○○○○○○○○-GS/GU Insert GY2M○○○○○○○○○-MS
Insert GY1G○○○○○○○○○-GF/GS Insert GY2M○○○○○○○○○-MM



Insert GY2M○○○○○○○○○-BM



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)

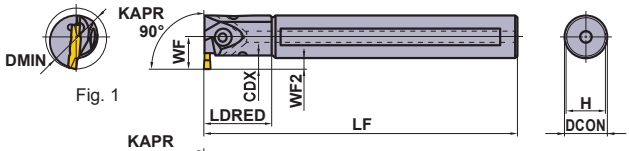


Fig. 1

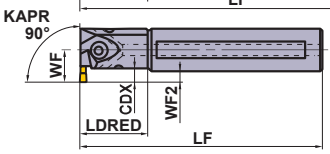


Fig. 2

Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX *3	DMIN	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
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
				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
				Modular	R	GYDR50T90F-M25L	●	GYM25LA-F12	●	3
					L	GYDL50T90F-M25R	●	GYM25RA-F12	●	3
G	4.00 4.24	7	32	Mono Block	R	GYAR25K90B-G07	●	—	—	2
					L	GYAL25K90B-G07	●	—	—	2
				Mono Block	R	GYAR25R90B-G07	●	—	—	1
					L	GYAL25R90B-G07	●	—	—	1
		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	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 F102.
*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)

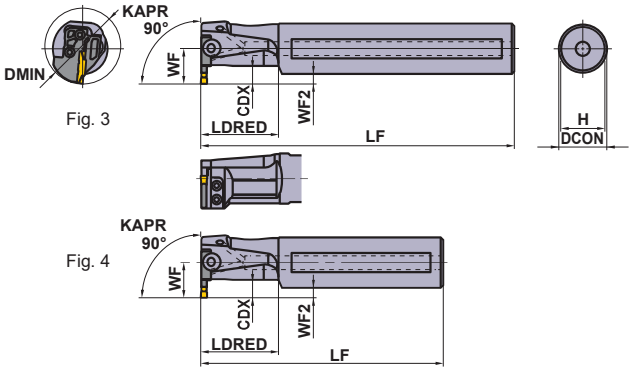


Fig. 3

Fig. 4

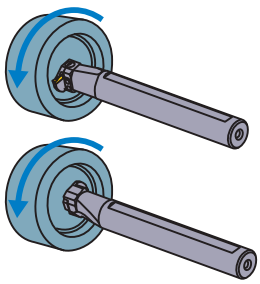
Right hand tool holder shown.

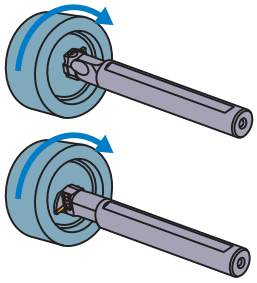
★ Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS

Holder	① ② Clamp Screw	① ② 4 pcs. Blade Screw	① ② Wrench ★
GYAR/L20○90A-F06 GYAR/L25○90B-○○○	①GY05016S (Clamp Torque : 5.0N·m)	—	①TKY20R
GYDR/L32○90C-M20L/R GYDR/L40○90D-M20L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS407 (Clamp Torque : 3.5N·m)	①TKY30R ②TKY15D
GYDR/L40○90D-M25L/R 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	
	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	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	
	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 ➤ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
F	3.00mm	●	●	●	●
	3.18mm	●	●	●	●

For multifunctional grooving breaker ➤ F011, F012

Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					Ball nose
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 ➤ F010, F011

Seat Size	Breaker / CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
G	4.00mm	●	●	●	●

For multifunctional grooving breaker ➤ F011, F012

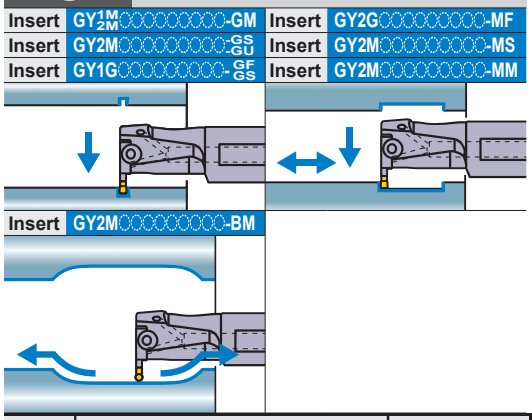
Seat Size	Breaker / CW	MF (Finish)	MS (Low)	MM (Medium)	BM (Copying)
					Ball nose
G	4.00mm				●
	RE 0.2	●	●	●	
	RE 0.4	●	●	●	
	RE 0.8	●		●	
	4.24mm	●			

● : Standard insert with dimensions

IDENTIFICATION ➤ F008, F009
CUTTING CONDITIONS ➤ F102
CAUTION FOR USE ➤ F104

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)

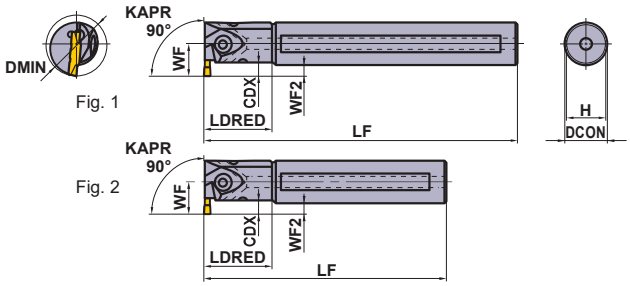


Fig. 1

Fig. 2

Right hand tool holder shown.

Seat Size	Dimensions (mm) CW	CDX ✶3	DMIN	Type	Hand (R/L)	Order Number Holder	Stock	Modular Blade	Stock	Fig.
H	4.75 5.00 5.24	7	32	Mono Block	R	GYAR25K90B-H07	●	—	—	2
					L	GYAL25K90B-H07	●	—	—	2
				Mono Block	R	GYAR25R90B-H07	●	—	—	1
					L	GYAL25R90B-H07	●	—	—	1
		4.5—11.5 ✶1	40	Modular	R	GYDR32L90C-M20L	●	GYM20LA-H12	●	4
					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
					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
					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
					L	GYDL50P90F-M25R	●	GYM25RA-H14	●	4
				Modular	R	GYDR50T90F-M25L	●	GYM25LA-H14	●	3
					L	GYDL50T90F-M25R	●	GYM25RA-H14	●	3
J	6.00 6.31 6.35	7.5—13 ✶1	60	Modular	R	GYDR40M90D-M25L	●	GYM25LA-J14	●	4
					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
					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 F102.
✶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)

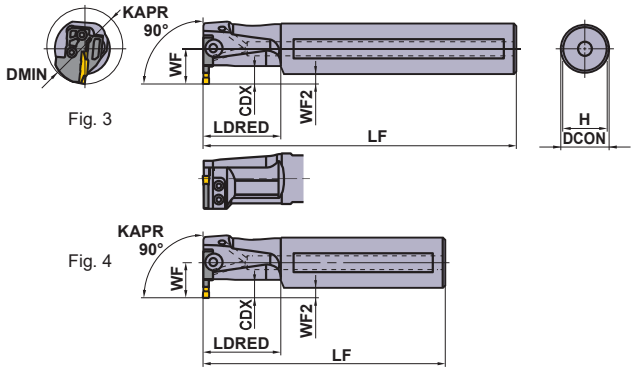


Fig. 3

Fig. 4

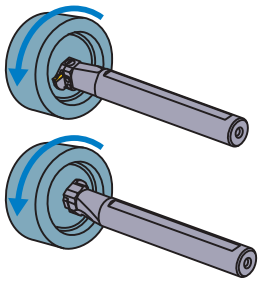
Right hand tool holder shown.

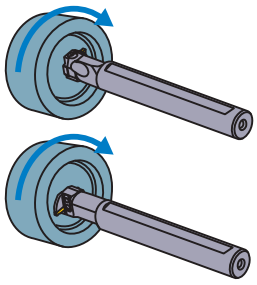
★ Wrench : ① : Clamp Screw, ② : Blade Screw

SPARE PARTS

Holder	① ② Clamp Screw	4 pcs. Blade Screw	① ② 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			
GYDR/L40○90D-M25L/R	②GY06013M (Clamp Torque : 6.0N·m)	TS55 (Clamp Torque : 5.0N·m)	①TKY30R ②TKY25D
GYDR/L50○90F-M25L/R			

	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	
	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	L
	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 ➢ F010, F011

Seat Size	Breaker CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
H	4.75mm	●	●	●	●
	5.00mm	●	●	●	●

For multifunctional grooving breaker ➢ F011, F012

Seat Size	Breaker CW	MF (Finish)	MS (Low)	MM (Medium)	BM (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 ➢ F010, F011

Seat Size	Breaker CW	GU (For gummy steel)	GS (Low)	GM (Medium)	GFGS (Hardened steel)
J	6.00mm	●	●	●	
	6.35mm	●	●	●	

For multifunctional grooving breaker ➢ F011, F012

Seat Size	Breaker CW	MF (Finish)	MS (Low)	MM (Medium)	BM (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 ➢ F102
CAUTION FOR USE ➢ F104

RECOMMENDED CUTTING SPEED [For External Grooving / Cutting Off]

	Work Material	Hardness	Grade	Cutting Speed **vc** (m/min)
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
			NX2525	70–170
		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	–	VP20RT	30–60
			VP10RT	40–70
			RT9010	40–70
H	Hardened Steel	50HRC≤	BC8110	80–120
			MB8025	80–120

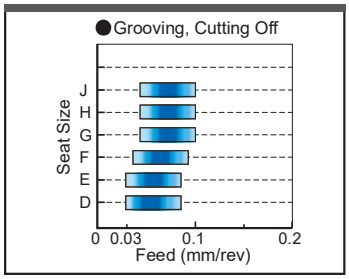
Note 1) **VP20RT** is the first recommended grade for materials other than hardened steel.
Note 2) For VP10RT, VP20RT and MY5015, wet cutting is recommended.

RECOMMENDED CUTTING CONDITIONS [For External Grooving / Cutting Off]

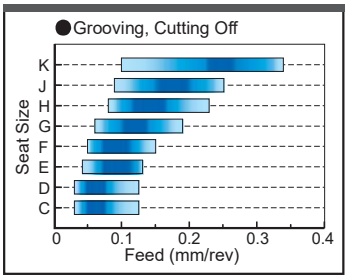
Recommended cutting conditions when combining a GYHR/L2525M00/90-M24R/L modular holder and GYM25R/LA-○○○ modular blade.

■ Recommended feed rate and depth of cut

GU BREAKER



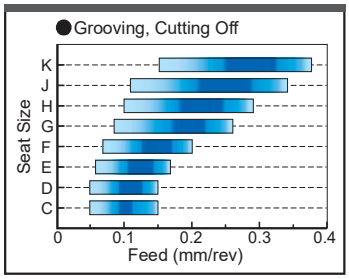
GS BREAKER



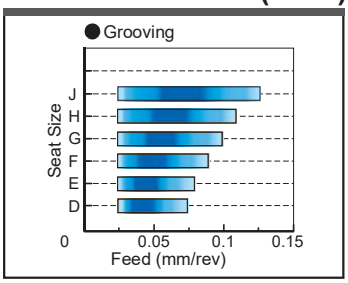
: 1st recommended area

Seat Size	Insert Width (mm)
C	1.50
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

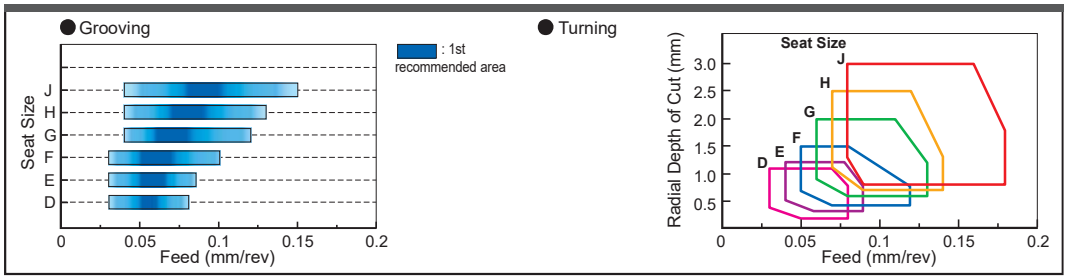
GM BREAKER



FLAT TOP GFGS (CBN)

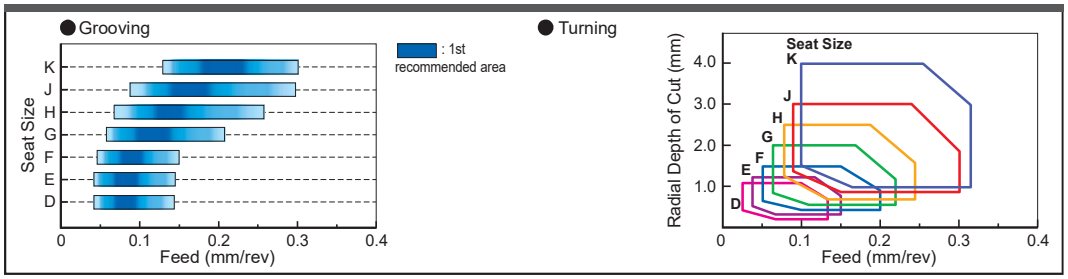


MF BREAKER

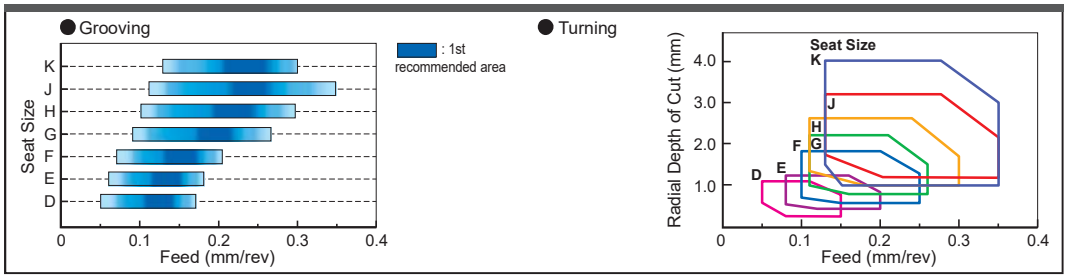


Seat Size	Insert Width (mm)
C	1.50
D	2.00 2.24
E	2.39 2.50 2.74
F	3.00 3.18 3.24
G	4.00 4.24
H	4.75 5.00 5.24
J	6.00 6.31 6.35
K	8.00

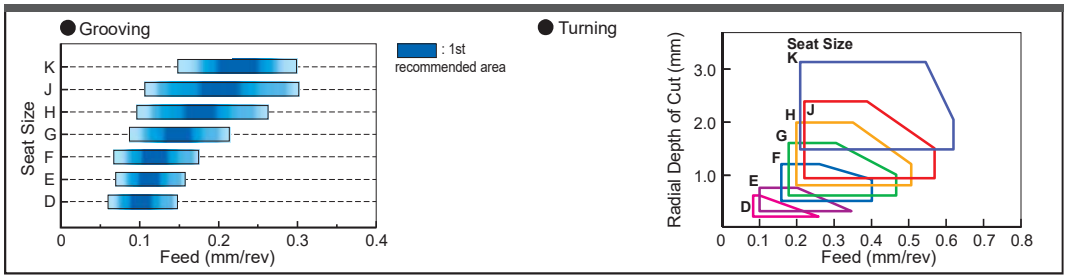
MS BREAKER



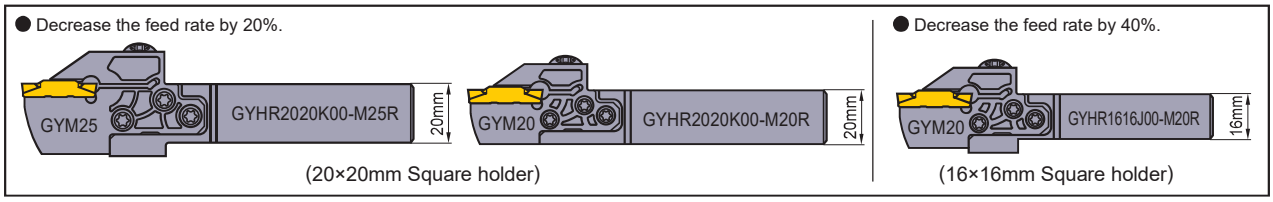
MM BREAKER



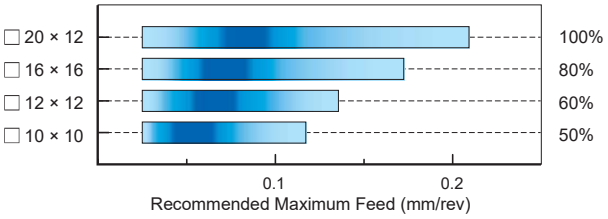
BM BREAKER



Note 1) Lower the recommended cutting speed given in the table by 20% and 40% respectively when combining the following modular holders and modular blades.



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

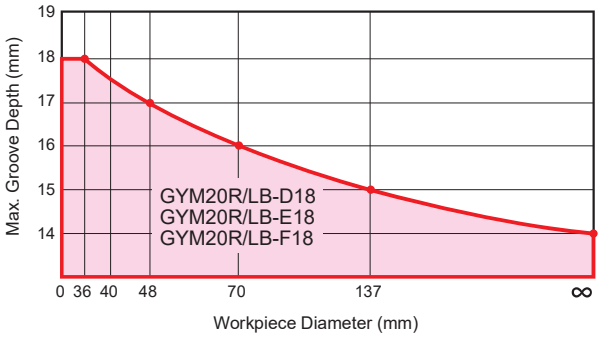


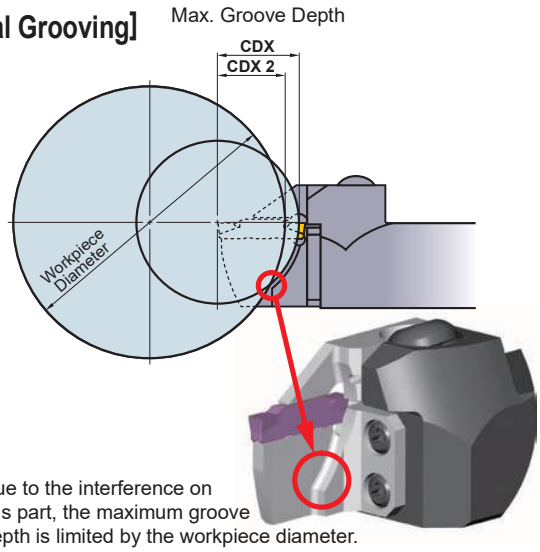
Please refer to the tables above on recommended cutting conditions for external grooving and cutting off.
Apply the percentage ratio shown on each shank size with the values in the table.

LIMITATION OF THE MAXIMUM GROOVE DEPTH [For External Grooving]

•When using the modular blade GYM○○R/LA-○○○
The maximum groove depth is not limited by the workpiece diameter.

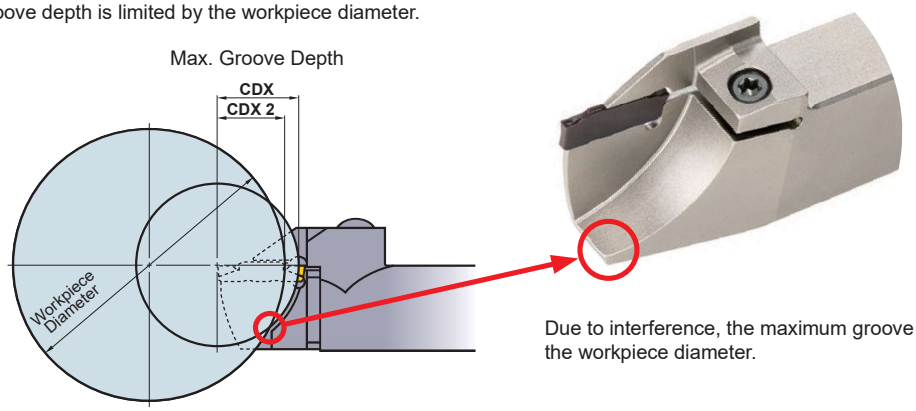
•When using the modular blade GYM○○R/LB-○○○
The maximum groove depth is limited by the workpiece diameter.



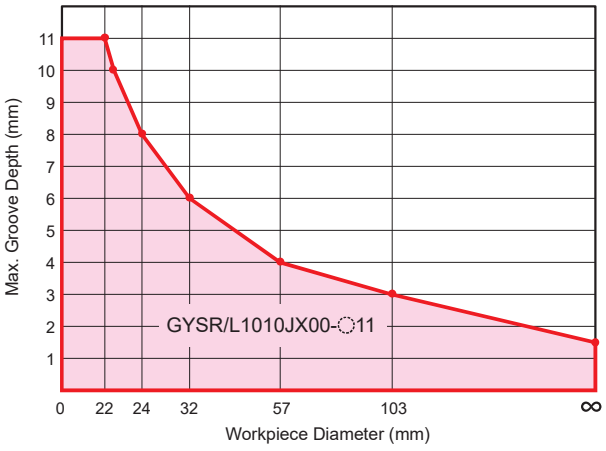


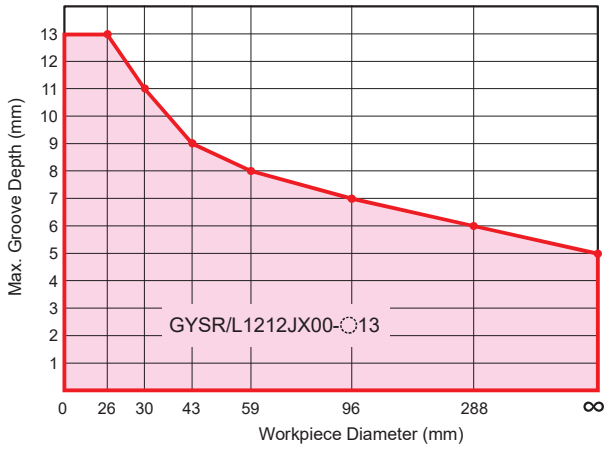
Due to the interference on this part, the maximum groove depth is limited by the workpiece diameter.

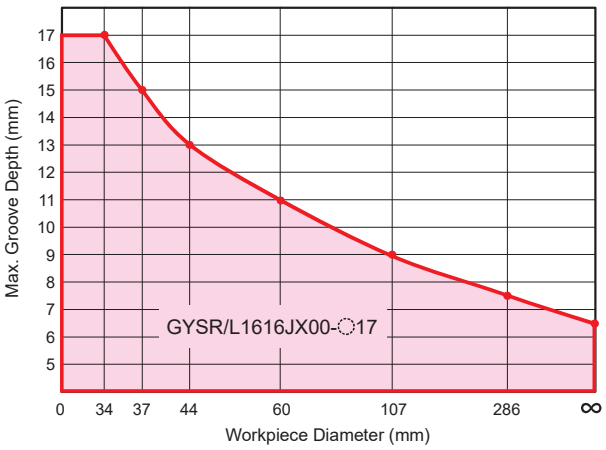
•In the case of mono block type holder for Swiss style lathes
The maximum groove depth is limited by the workpiece diameter.

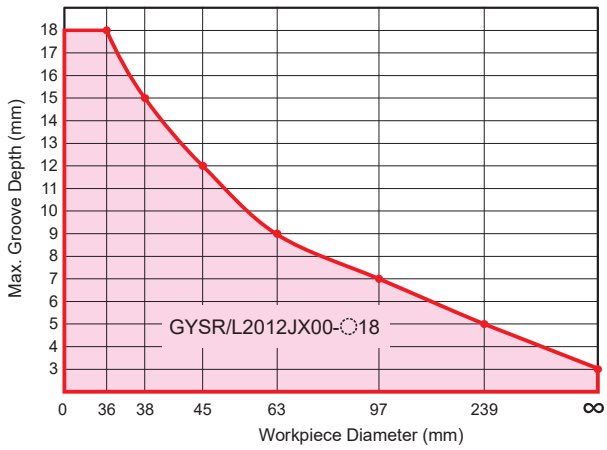


Due to interference, the maximum groove depth is limited by the workpiece diameter.







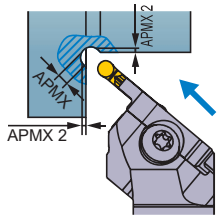


RECOMMENDED CUTTING SPEED [For External Recessing]

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

Note 1) VP20RT is the first recommended grade for materials other than hardened steel.
Note 2) For VP10RT, VP20RT and MY5015, wet cutting is recommended.

DISTANCE FROM WORK SURFACE TO RECESS DEPTH

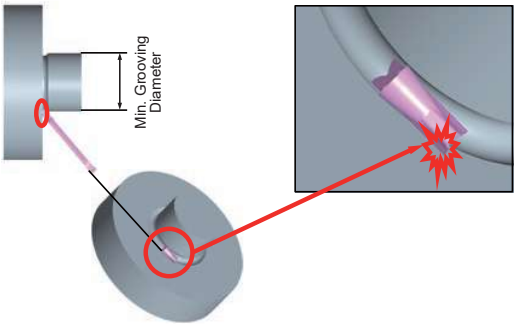


Cutting Width CW (mm)	Recess Depth APMX (mm)	Distance from Work Surface to Recess Depth APMX 2 (mm)
2.00	1.50	0.646
2.50	1.75	0.720
3.00	2.00	0.793
3.18	2.09	0.819
4.00	2.50	0.939
4.75	2.88	1.049
5.00	3.00	1.086
6.00	3.50	1.232
6.35	3.68	1.283

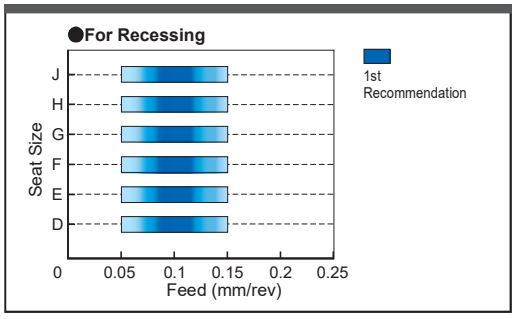
BM BREAKER

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.



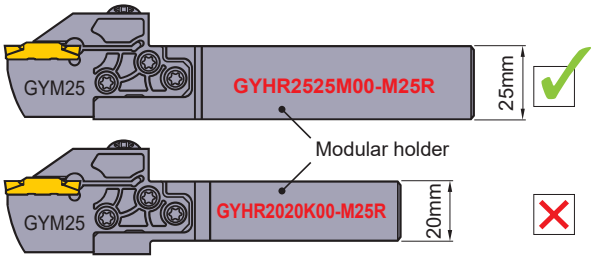
Recommended feed rate and depth of cut



TOOL SELECTION

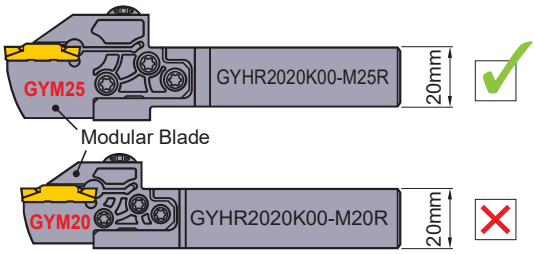
Notes when selecting the tool body

Precautions when selecting a modular holder.



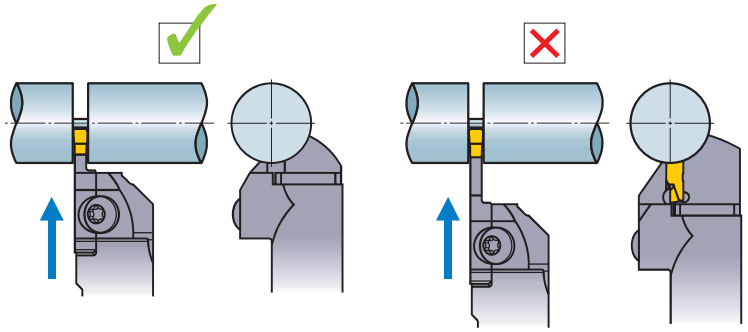
●Select a modular holder with the largest possible shank size to maintain mounting rigidity.

Modular blade (1)



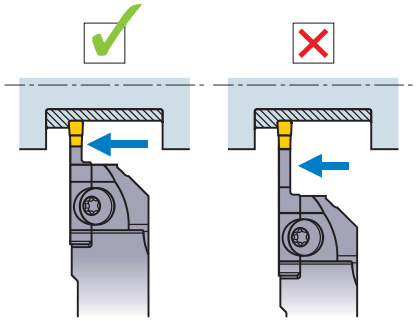
●If there is no restriction for use, select the largest modular blade for the same shank size.

Modular blade (2)



●Select the shortest possible blade suitable for the application.

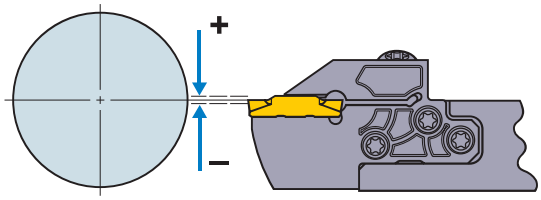
Modular blade (3)



●Select the shortest possible blade suitable for the application.

Notes when setting the tool

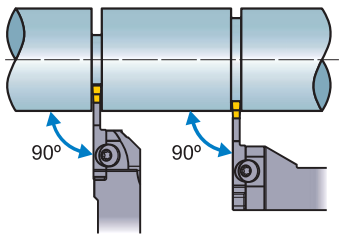
Setting of cutting edge height



<Grooving/Cross-feed machining>
Set the cutting edge height to ±0.1mm parallel to the central axis.

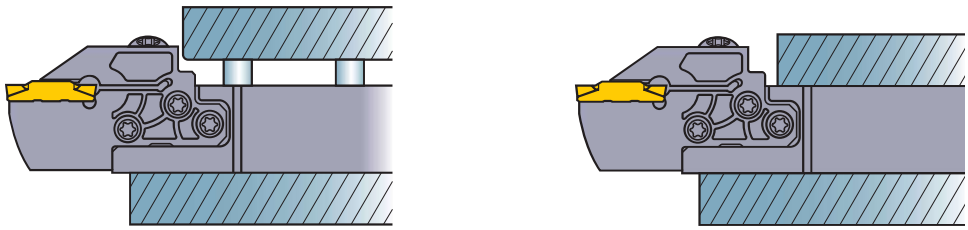
<Cutting off>
Set the cutting edge height to 0–+0.2mm parallel to the central axis.

Tool body setting angle



●Set the insert perpendicular to the central axis.

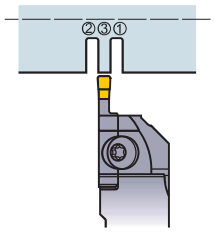
Overhang



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

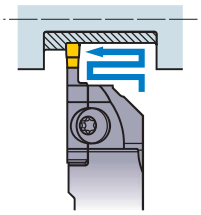
Notes on multi-functional machining (MF, MS and MM breakers)

Machining narrow grooves



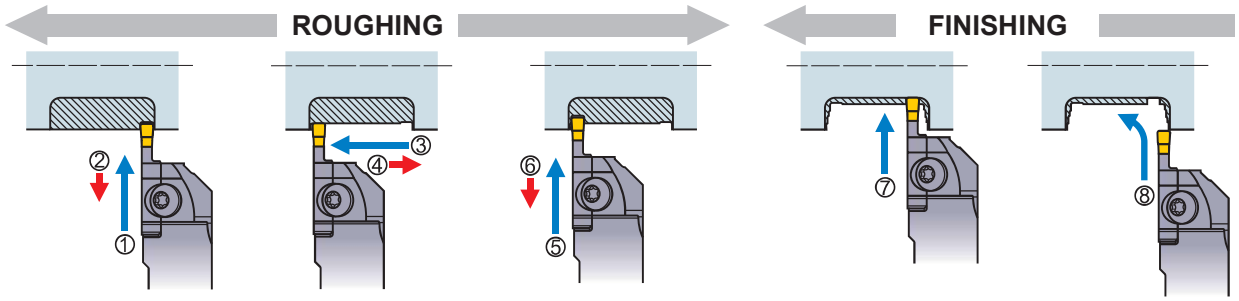
●It is recommended to carry out plunging in several passes. Following the steps above makes it difficult for chips to elongate. This also improves the accuracy of workpiece wall surface.

Machining wide grooves



●It is recommended that cross-feed machining is used.

Machining wide grooves



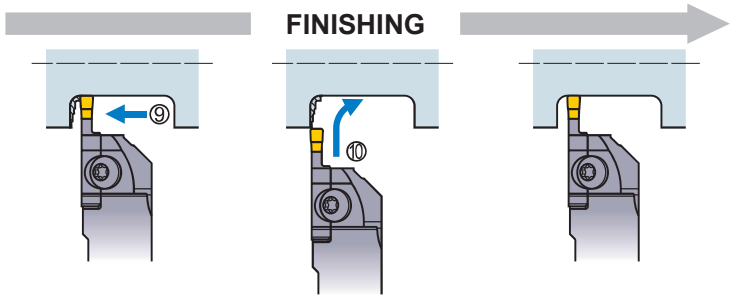
①Carry out grooving.
②Retract the tool approx 0.1mm.

③Carry out cross feed machining.
④Retract the tool approx 0.1mm.

⑤Carry out grooving.
⑥Retract the tool approx 0.1mm.
* Repeat the steps ①–⑥.

⑦Carry out grooving to the end point of the corner radius.

⑧Machining of the wall surface, corner radius and bottom face should be carried out in one process.

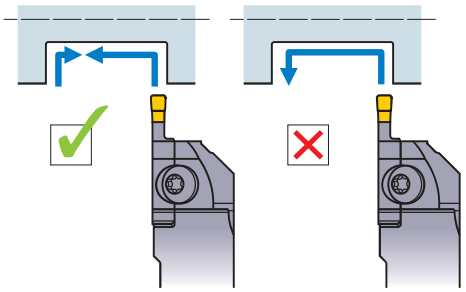


⑨Stop at the bottom of the corner radius.

⑩Machine the counter wall to the corner radius in one process.

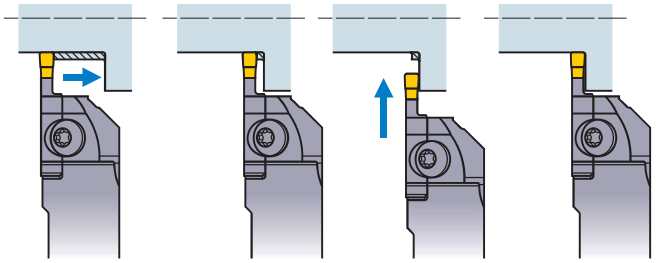
⑪Finish machining.

Precautions when finishing walls



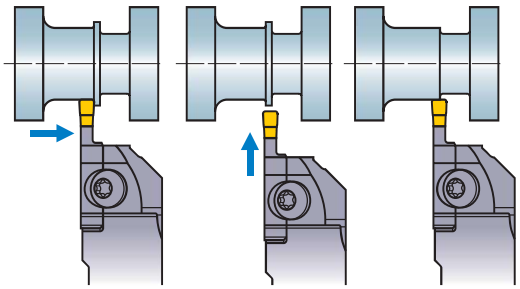
●To produce high accuracy walls using MS or MM breaker insert, do not carry out back turning. Plunging is recommended.

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

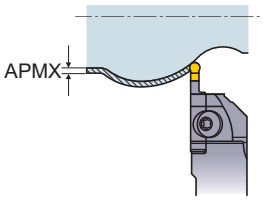


●When a ring remains in a cross feed end process, finish cross feed machining 1–1.5mm short of the end point, then remove the ring by plunging.

MACHINING RECOMMENDATIONS

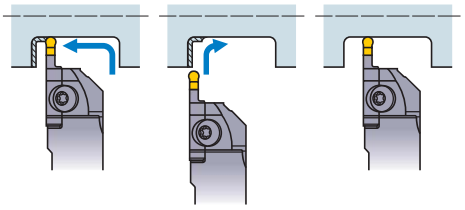
Notes on multi-functional machining (BM breaker)

Copying



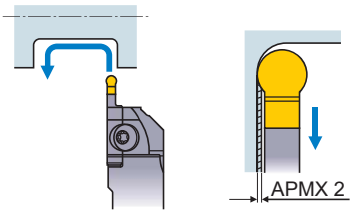
●With the BM breaker insert, 3 dimensional copying is possible.
Set the depth of cut (APMX) to 40% less than the insert width.

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



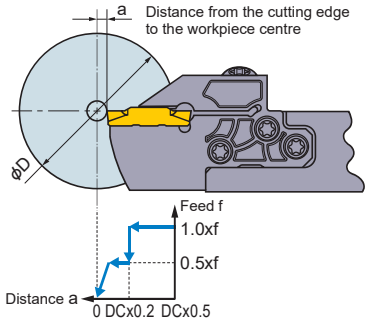
●Carry out finishing in one process.
For the depth of cut (APMX 2) when back turning, refer to the table on the right.

Insert	APMX 2 (mm)
GY2M0200D100N-BM	0.05
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	
GY2M0800K400N-BM	0.40

Notes for cutting off

Feed

<Feed>

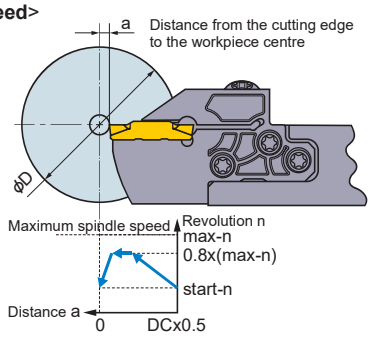


●When the cutting edge approaches the centre, reduce the feed by 50%.

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

Revolution

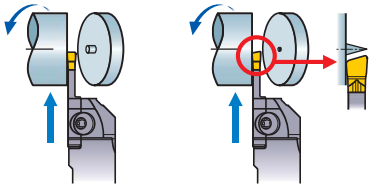
<Spindle speed>



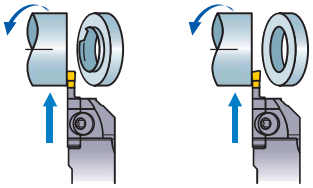
●When using constant cutting speed during a cutting off cycle, it is recommended to limit the spindle speed to 80% of maximum to ensure stability.

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

Insert



Neutral insert　　Handed insert

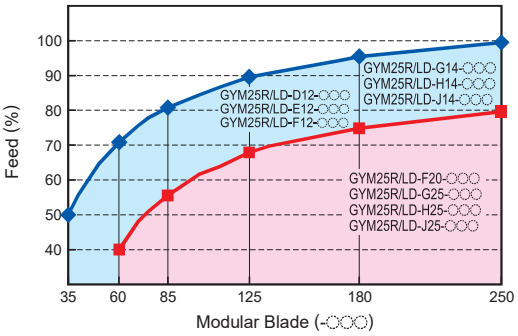


Neutral insert　　Handed insert

●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.

Memo

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.

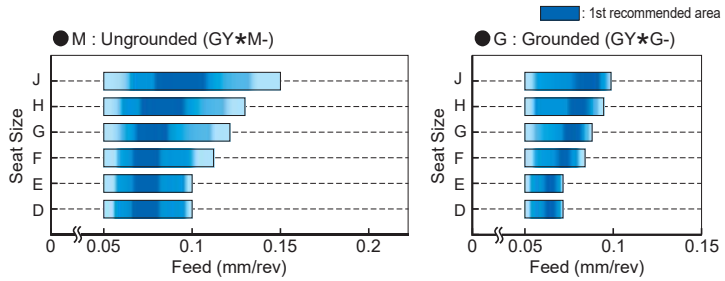
RECOMMENDED CUTTING SPEED [For Face Grooving]

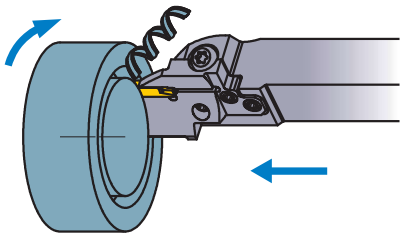
	Work Material	Hardness	Grade	Cutting Speed (m/min) 50 100 150 200 250 300
P	Mild Steel	≤160HB	VP20RT	80 – 180
			VP10RT	90 – 190
			NX2525	70 – 170
	Carbon Steel Alloy Steel	160–280HB	VP20RT	60 – 140
			VP10RT	70 – 150
			MY5015	90 – 210
			NX2525	55 – 135
		280HB≤	VP20RT	50 – 110
			VP10RT	60 – 120
			MY5015	80 – 160
			NX2525	45 – 105
M	Stainless Steel	≤270HB	VP20RT	50 – 110
			VP10RT	60 – 120
K	Gray Cast Iron	Tensile Strength ≤300MPa	VP20RT	60 – 140
			VP10RT	70 – 150
			MY5015	90 – 210
	Ductile Cast Iron	Tensile Strength ≤800MPa	VP20RT	50 – 110
			VP10RT	60 – 120
			MY5015	80 – 160
S	Heat Resistant Alloy Titanium Alloy	–	VP20RT	30 – 60
			VP10RT	40 – 70
			RT9010	40 – 70
H	Hardened Steel	50HRC≤	BC8110	60 – 120
			MB8025	60 – 120

Note 1) VP20RT is the first recommended grade for materials other than hardened steel.
Note 2) For VP10RT, VP20RT and MY5015, wet cutting is recommended.

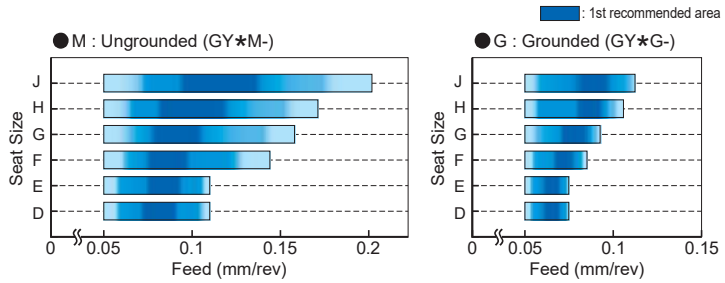
RECOMMENDED CUTTING CONDITIONS [For Face Grooving]

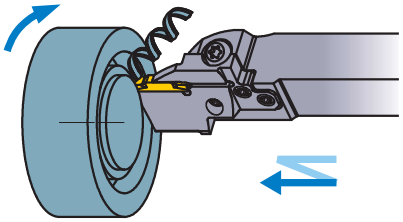
GROOVING





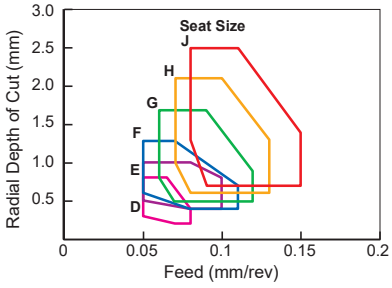
PLUNGING





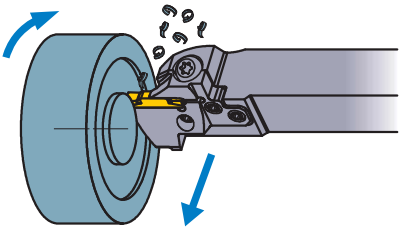
✱ After the 1st plunge, the width of cut should be set narrower than insert with CW.

TRAVERSE MACHINING (MF BREAKER)

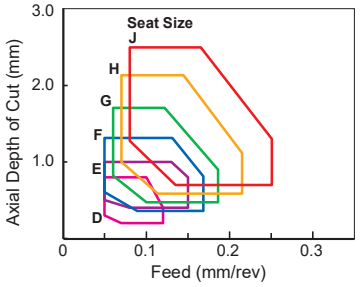


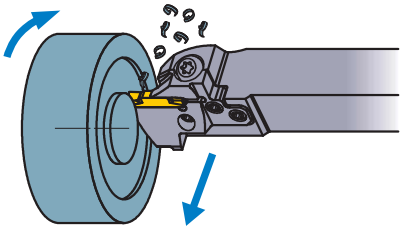
Seat Size	Insert Width (mm)
D	2.00 2.24
E	2.39 2.50 2.74
F	3.00 3.18 3.24

Seat Size	Insert Width (mm)
G	4.00 4.24
H	4.75 5.00 5.24
J	6.00 6.31 6.35

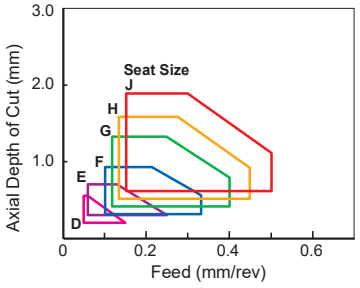


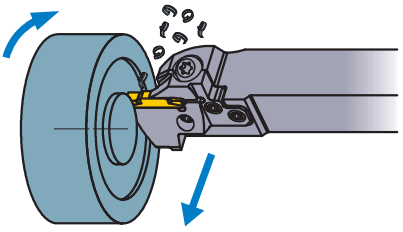
TRAVERSE MACHINING (MM/MS BREAKER)





TRAVERSE MACHINING (BM BREAKER)

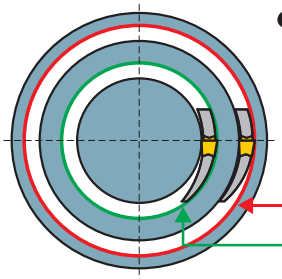




TOOL SELECTION

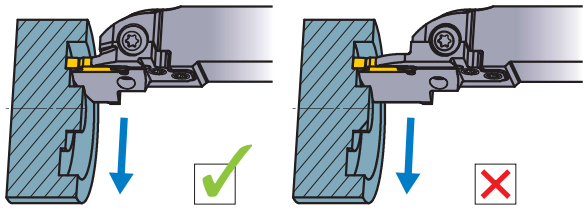
Notes when selecting the tool body

Modular blade (1)



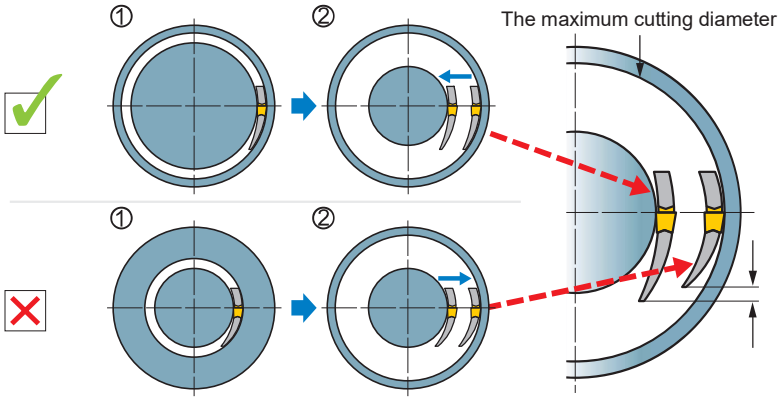
●Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of DAXN minimum and DAXX maximum that are described in the table of dimensions.

Modular blade (2)



●Select the shortest possible blade suitable for the application.

Modular blade (3)



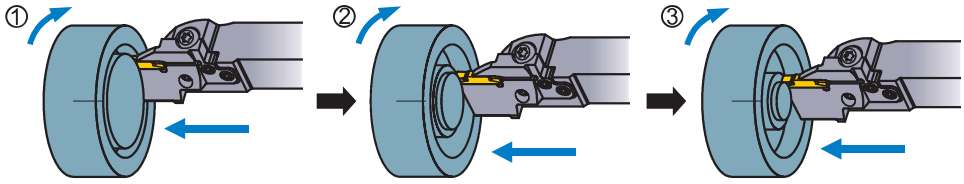
●Select the largest size blade within the maximum cutting diameter of the workpiece.

●Machine from the outer diameter towards the centre.

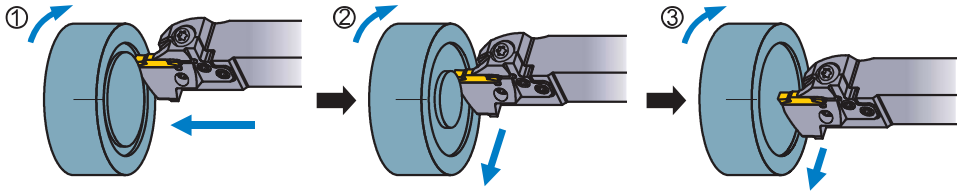
●Increased machining stability and rigidity is possible if a modular blade with the largest possible back metal is used.

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

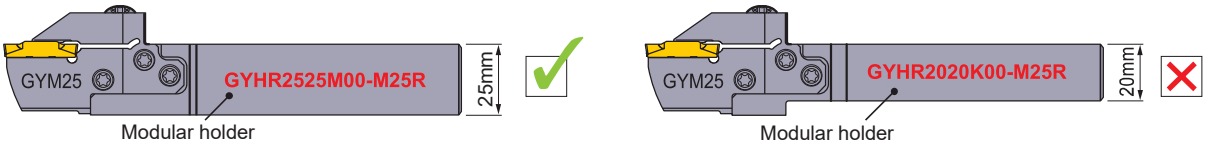
●When plunging in several passes.



●When combining plunging and infeed machining.



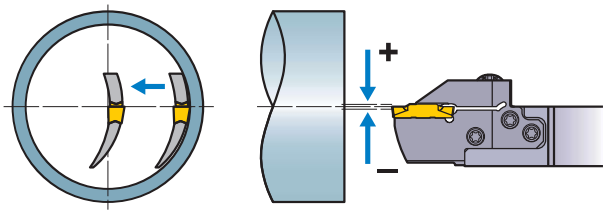
Precautions when selecting a modular holder.



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

Notes when setting the tool

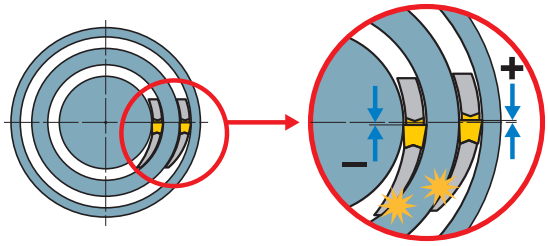
Setting the cutting edge height



●Set the cutting edge height to ±0.1mm 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.

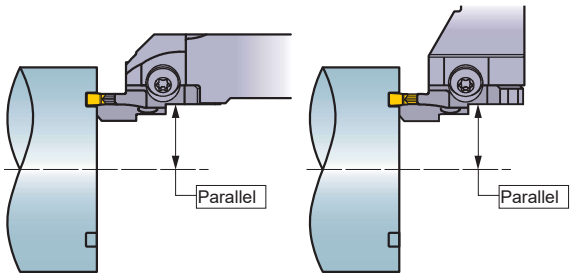
When interfering the wall of groove and the Modular blade



●If interference occurs even when the correct blade is used, the cutting edge height could be incorrect.

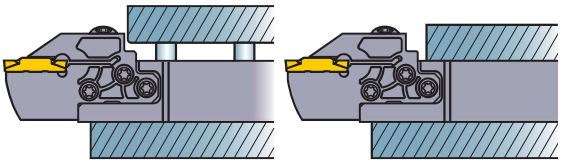
{ When interference occurs on the inner side of the blade, the cutting edge height is set too high.
When interference occurs on the outer side of the blade, the cutting edge height is set too low.

Setting the tool



●Set the insert parallel to the central axis.

Tool overhang



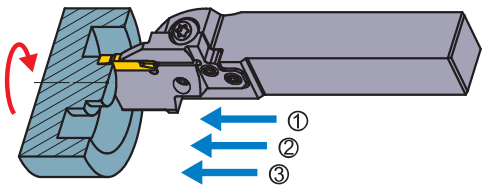
●When setting the tool, ensure that the overhang is as short as possible and avoid the step difference part as above figure shows.

MACHINING RECOMMENDATIONS

Notes when face grooving

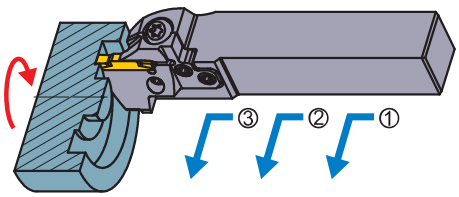
●**Always machine from the outer diameter towards the centre.**

Machining narrow grooves



●Plunging in several passes is recommended.

Machining wide grooves

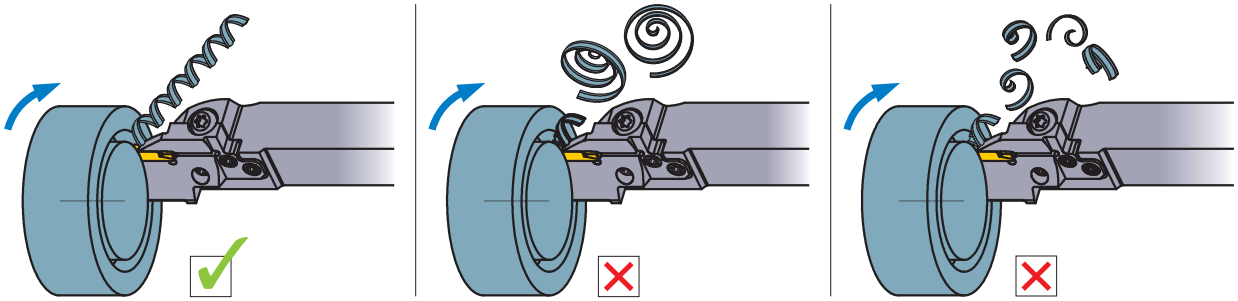


●Cross feed machining is recommended.

MACHINING RECOMMENDATIONS

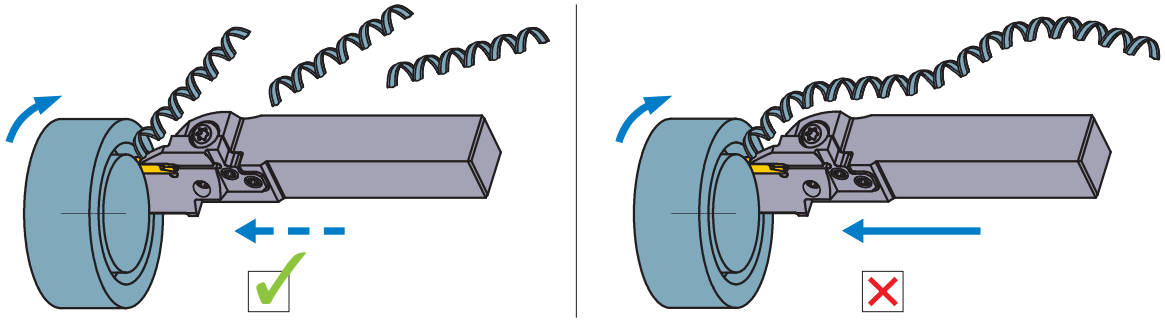
Notes when face grooving

Notes on the first pass (1)



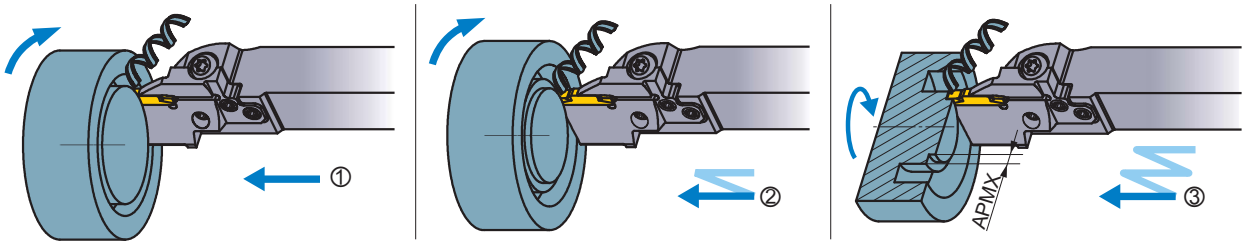
●During the first face grooving pass it is difficult to disperse broken chips and can lead to problems such as a chipped insert. Maintain longer chips that disperse easily by decreasing the feed per rotation.

Notes on the first pass (2)



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

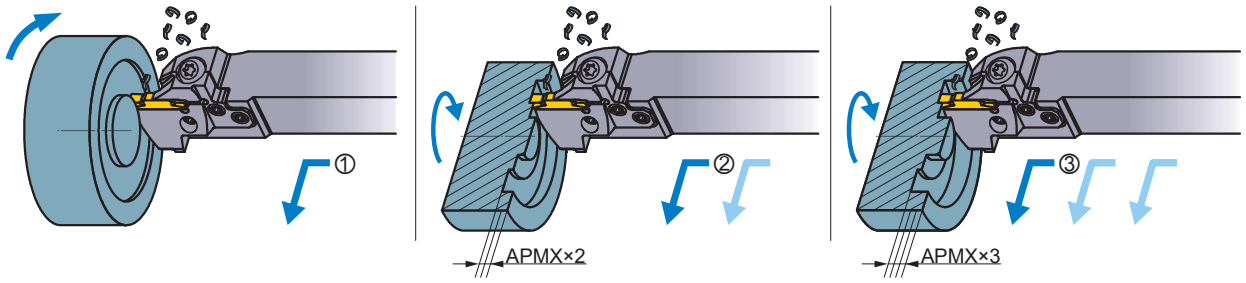
Notes when wide face grooving by plunging in several passes



●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.

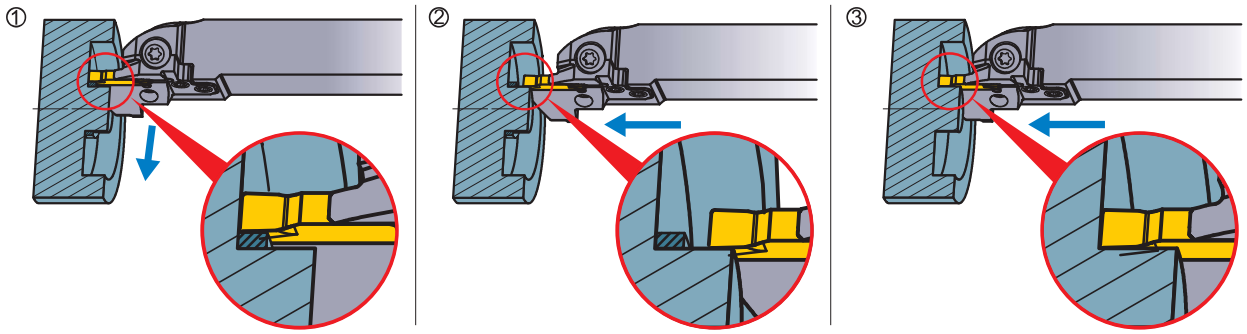
Notes when wide face grooving by combination of plunging and traverse machining (1)



●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.

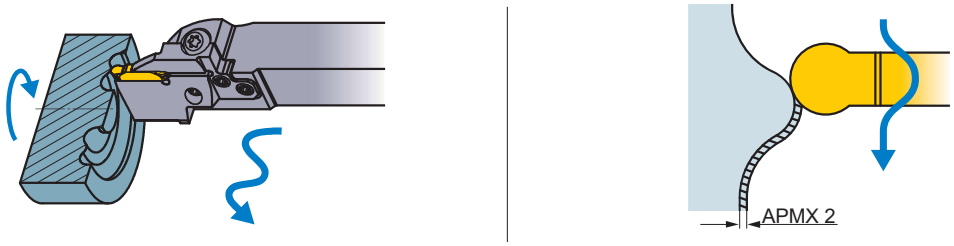
●Set the depth of cut within 40% of the insert width.

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



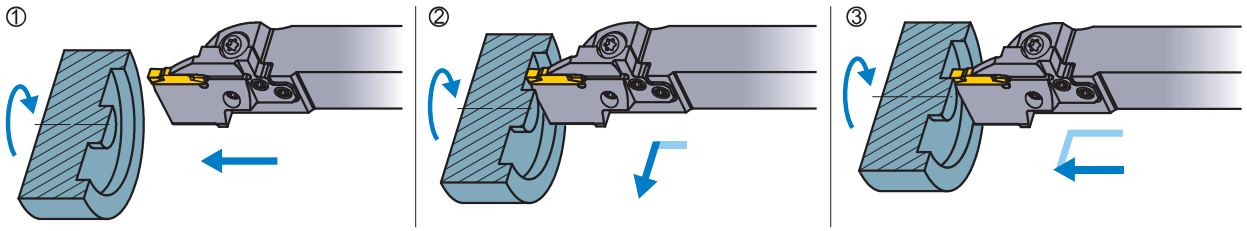
●When infeed machining at the bottom of a deep groove, chips may interfere on the cutting edge near the centre wall.
In such cases, stop infeed machining just before the centre wall (at a point less than the insert width) then remove the remaining material by plunging.

Notes when copying (BM Breaker)



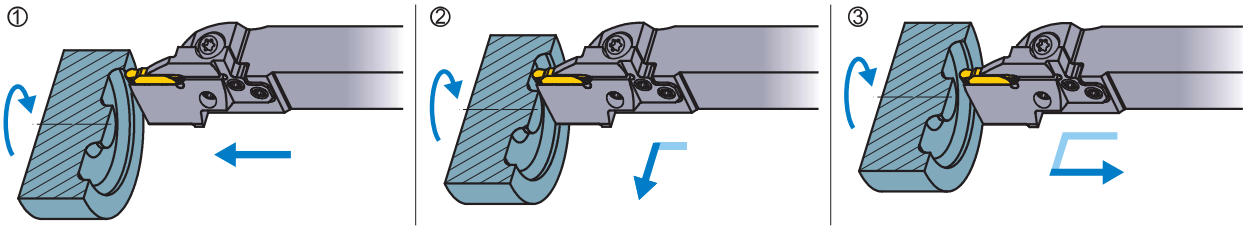
●With the BM breaker insert, 3 dimensional copying is possible. Set the depth of cut (APMX 2) to 30% less than the insert width.

Finishing (1)

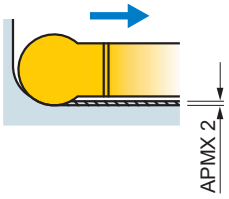


●When finish cutting, machine continuously from the outer wall to the bottom of the groove, then finally plunge cut the centre wall.

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.

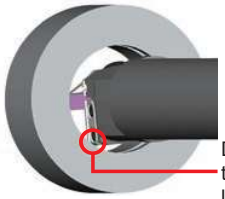


Insert	APMX 2 (mm)
GY2M0200D100N-BM	0.10
GY2M0250E125N-BM	
GY2M0300F150N-BM	
GY2M0318F159N-BM	
GY2M0400G200N-BM	0.15
GY2M0475H238N-BM	0.20
GY2M0500H250N-BM	
GY2M0600J300N-BM	0.25
GY2M0635J318N-BM	

LIMITATION OF THE MAXIMUM GROOVE DEPTH [For Internal Grooving]

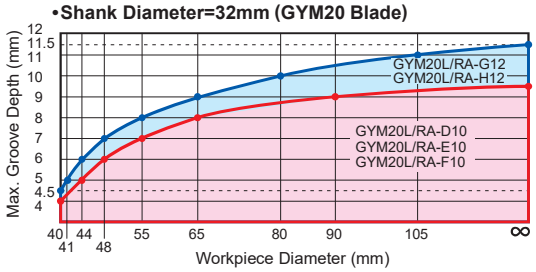
•When using the mono block type
The maximum groove depth is not limited by the cutting diameter.

•When using the modular blade type
The maximum groove depth is limited by the cutting diameter.

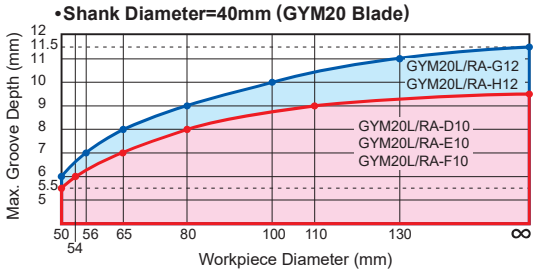


Due to interference of this part, the maximum groove depth is limited by the cutting diameter.

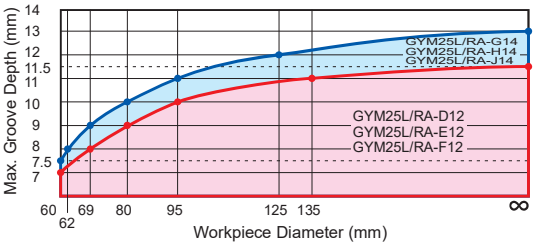
•Shank Diameter=32mm (GYM20 Blade)



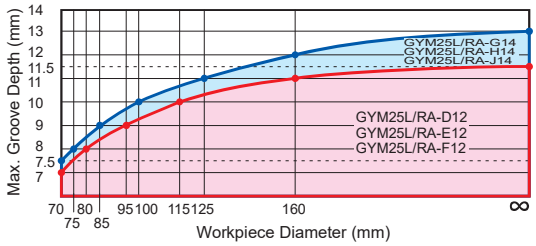
•Shank Diameter=40mm (GYM20 Blade)



•Shank Diameter=40mm (GYM25 Blade)



•Shank Diameter=50mm (GYM25 Blade)



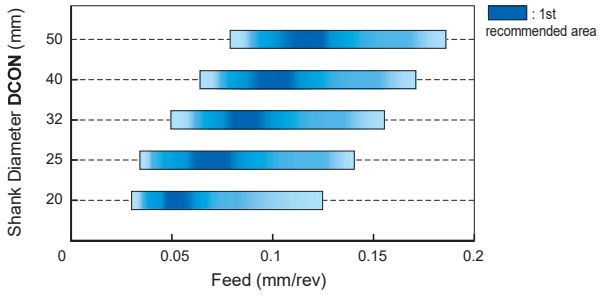
RECOMMENDED CUTTING SPEED [For Internal Grooving]

	Work Material	Hardness	Grade	Cutting Speed (m/min) 50 100 150 200 250 300
P	Mild Steel	≤160HB	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	≤270HB	VP20RT	50–110
			VP10RT	60–120
K	Gray Cast Iron	Tensile Strength ≤300MPa	VP20RT	60–140
			VP10RT	70–150
			MY5015	90–210
	Ductile Cast Iron	Tensile Strength ≤800MPa	VP20RT	50–110
			VP10RT	60–120
			MY5015	80–160
S	Heat Resistant Alloy Titanium Alloy	—	VP20RT	30–60
			VP10RT	40–70
			RT9010	40–70
H	Hardened Steel	50HRC≤	BC8110	60–100
			MB8025	60–100

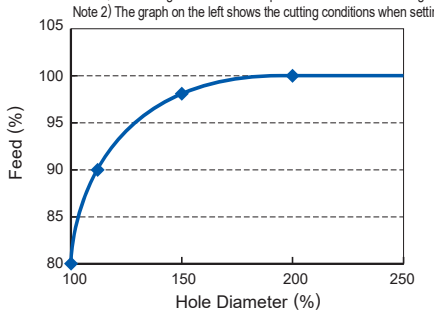
Note 1) VP20RT is the first recommended grade for materials other than hardened steel.
Note 2) For VP10RT, VP20RT and MY5015, wet cutting is recommended.

RECOMMENDED CUTTING CONDITIONS [For Internal Grooving]

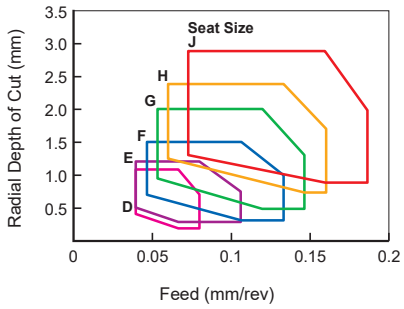
GROOVING



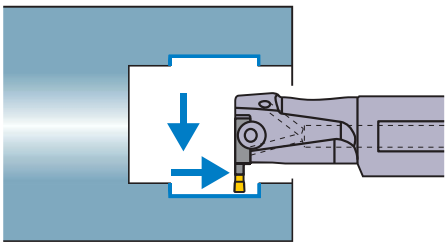
Note 1) The cutting diameter 100% represents the minimum cutting diameter (DMIN).
Note 2) The graph on the left shows the cutting conditions when setting the feed to 100%.



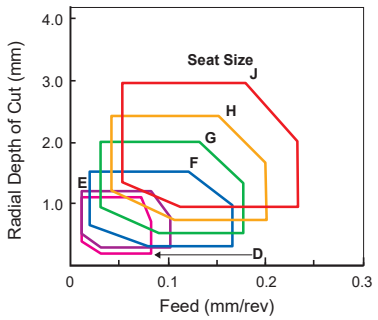
TRAVERSE MACHINING (MF BREAKER)



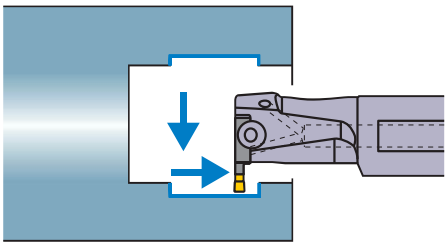
●When traverse machining a blind hole, it is recommended to carry out back turning considering chip disposal.



TRAVERSE MACHINING (MM/MS BREAKER)

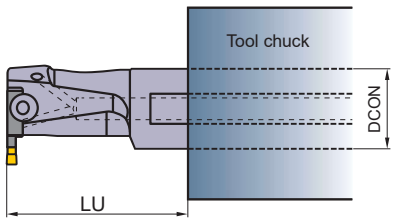


●When traverse machining a blind hole, it is recommended to carry out back turning considering chip disposal.



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.

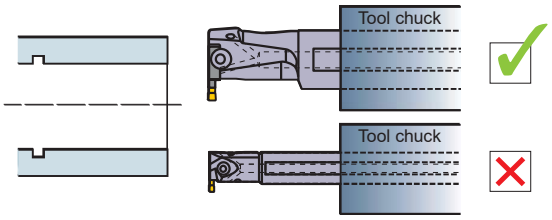
	Seat Size
	Insert Width (mm)
D	2.00 2.24
E	2.39 2.50 2.74
F	3.00 3.18 3.24
G	4.00 4.24
H	4.75 5.00 5.24
J	6.00 6.31 6.35



TOOL SELECTION

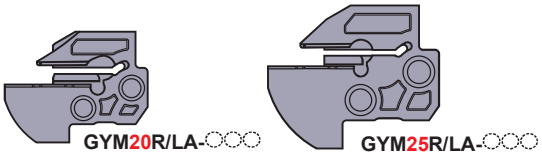
Notes when selecting the tool body

Holder



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

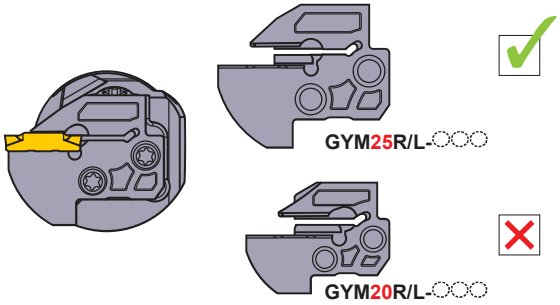
Modular blade (1)



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 a ø40 shank holder, if there is no restriction for use, select a holder suitable for GYM25 blade.

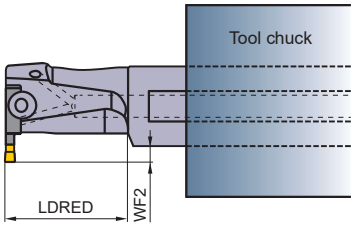
Modular blade (2)



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

Notes when setting the tool

Overhang



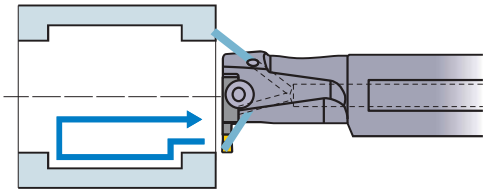
●The maximum groove depth is limited to the dimension LDRED. When machining with longer overhangs, refer to the dimension WF2 of the tool used.

MACHINING RECOMMENDATIONS

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

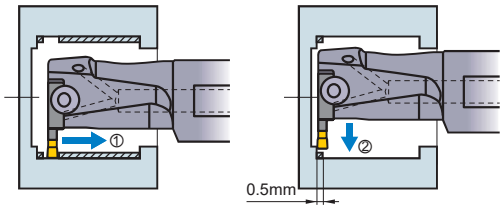
For internal grooving, the machining methods for external grooving can be used, but please note the following precautions.

Coolant



●Supply large amounts of coolant for effective chip disposal during cutting. Maintain supply until the tool has been retracted completely for improved chip disposal.

Machining blind holes

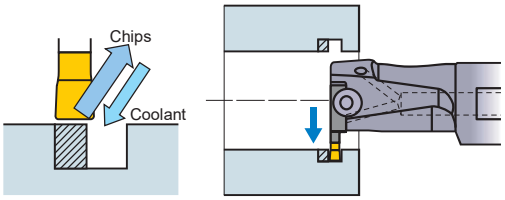


●As continuous chips tend to elongate at the back of the bore, the above operation is recommended.
The recommended width of cut for ② is 0.5mm.

Machining Wide Grooves

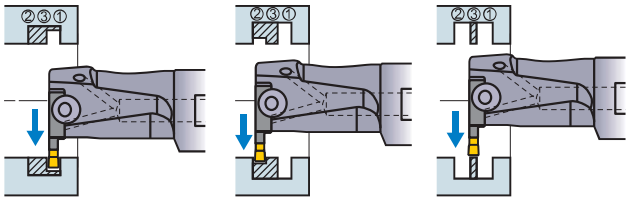
Grooving

●When the cutting edge width is x 2 ≥ groove width



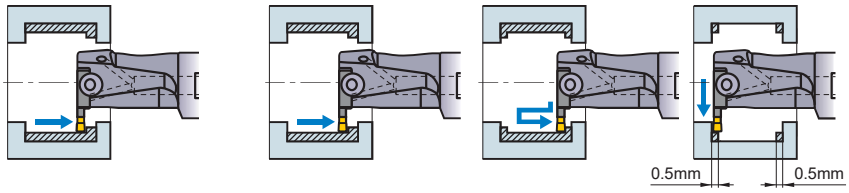
●When the depth of cut is shallower than the cutting edge width, continuous chips are usually produced. When plunging in several passes, it is recommended to carry out machining in the steps above. This ensures that coolant reaches the cutting edge and chips are easily discharged.

●When the cutting edge width is x 2 < groove width



●When the groove depth is larger than the cutting edge width, carry out plunging in the steps above to break up chips efficiently.

Turning

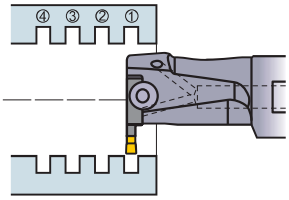


●When chip breaking and disposal are especially important, cross-feed machining is recommended.

●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.

Machining instruction



●It is recommended to carry out grooving from the front end of the workpiece.
This reduces workpiece deflection.

GW SERIES NEW

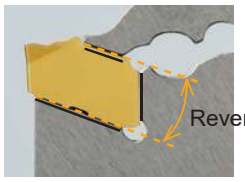
Long Lasting, Easy to Use Cutting Off & Grooving System

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.
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.

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?

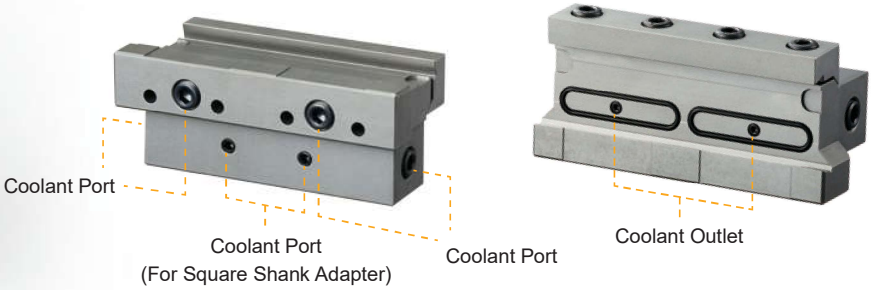
The 2 coolant holes used in the blade are capable of using high coolant pressures of up (7MPa), this is achieved by using as large as possible a through coolant hole diameter.
The ejection holes are located close to the cutting edge so as to improve the cutting edge cooling effect and increasing wear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

Low Feeds

GS Breaker

Medium Feeds

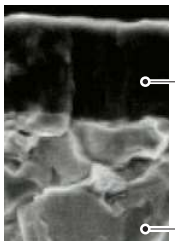
Neutral　　Right Hand / Left Hand

GM Breaker

INSERT GRADE

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

VP20RT (1st Recommendation)

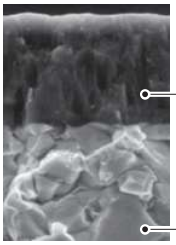


- PVD coated grade suitable for a wide range of applications. The combination of a special tough cemented carbide substrate with MIRACLE coating provides an excellent balance of wear and fracture resistance.

MY5015

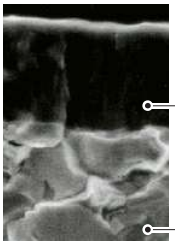
- MY5015 is a CVD coated grade with excellent wear resistance even at high temperatures. It provides longer tool life when machining cast and ductile cast irons. Also suitable for high speed continuous cutting of steels.

VP10RT



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

VP30RT

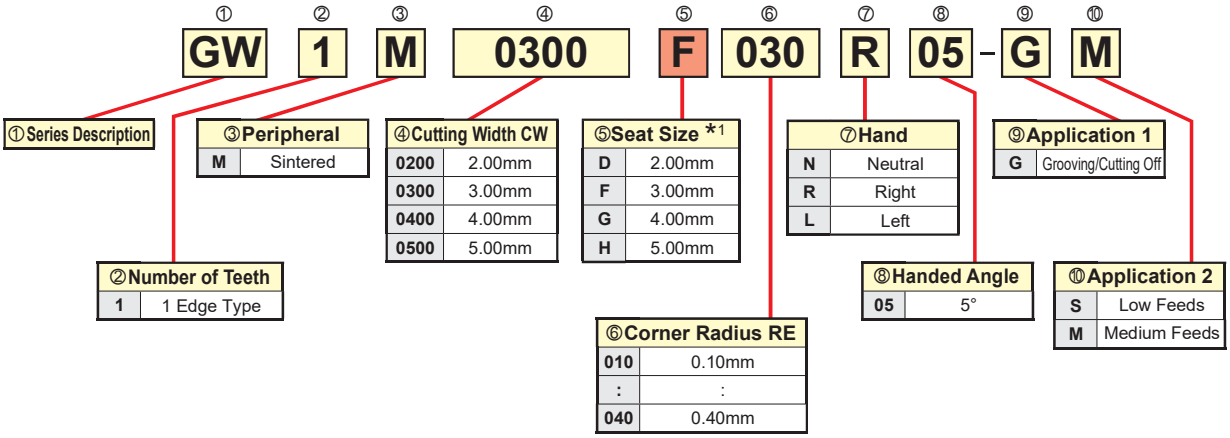


- A combination of a tough, special cemented carbide substrate and MIRACLE coating. Ideal for heavy interrupted cutting of stainless and general steels.

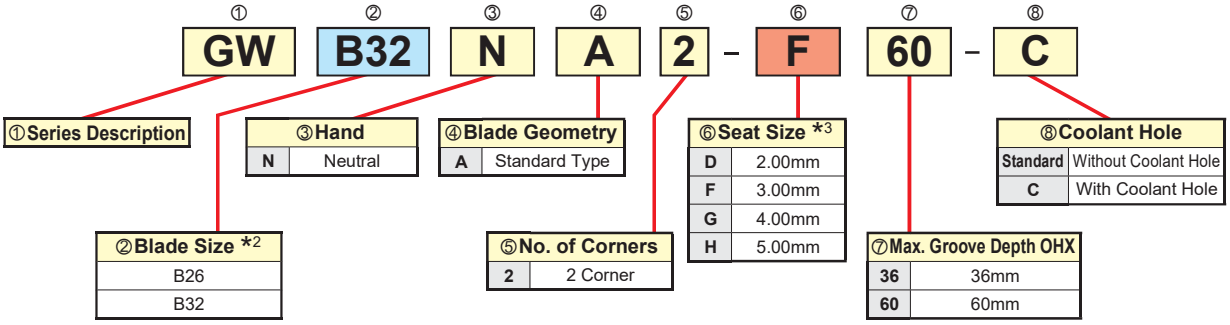
GW SERIES ORDER NUMBER

■ Insert / Blade / Tool Block

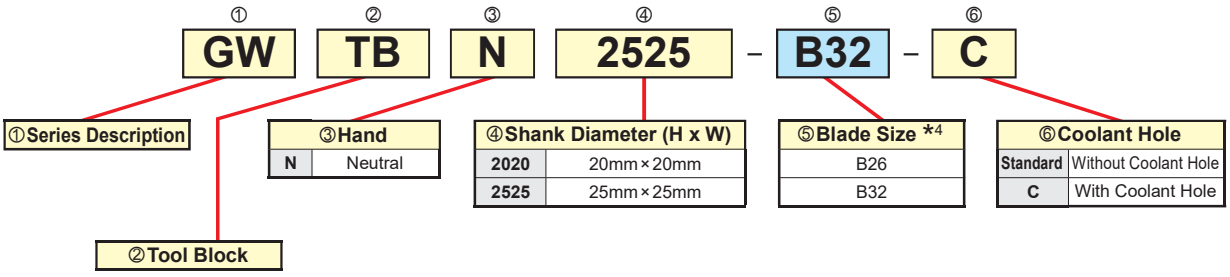
● Insert



● Blade



● Tool Block



*1 Select seat size with the same symbol as that of 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 NEW HOLDER

- Simple insert clamping method offering high rigidity.
- The blade is possible to use with both external or through coolant.
- Cutting width CW 2.0—5.0mm

TOOL NEWS

GW

For External Cutting Off / Grooving

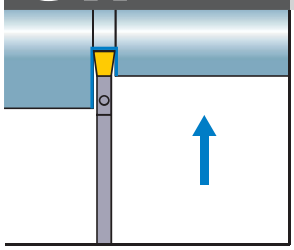


Fig.1

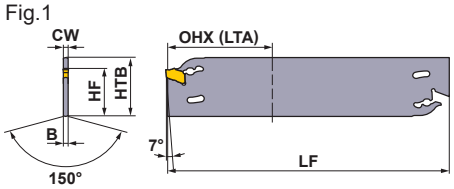
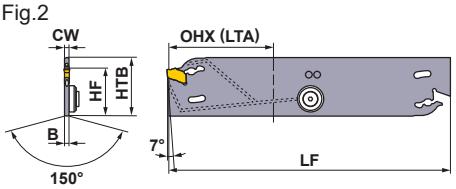


Fig.2



Without Coolant Hole

(mm)

Seat Size	CW	∗1 CUTDIA	Order Number	Stock	∗2 OHN	∗3 OHX (LTA)	B	LF	HTB	HF	Fig.	Insert Type	Wrench	Tool Block Type
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	Wrench	Tool Block Type
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

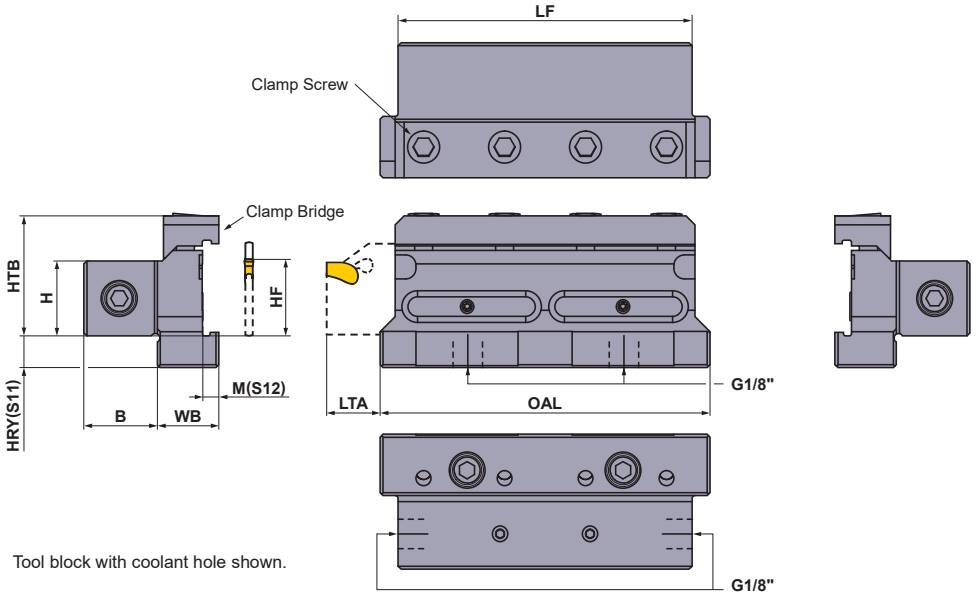
Spare Parts for Blades with Coolant Hole

(mm)

Order Number	CW	① ② Washer	Clamp Screw	Wrench
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

(mm)

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

With Coolant Hole

(mm)

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

★ Clamp Torque (N • m) : HSC06020=7.0

Note 1) Recommended Maximum Coolant Pressure : 7MPa

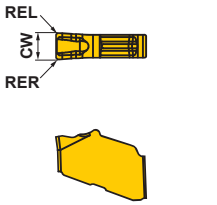
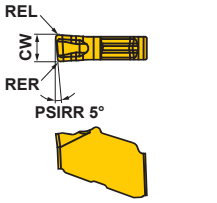
Spare Parts for Tool Block with Coolant Hole

Order Number	① ② O-ring	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

SPARE PARTS ➤ Q001
TECHNICAL DATA ➤ R001

Inserts

(mm)

Application	Order Number	Stock Coating MY5015	Stock Coating VP10RT	Stock Coating VP20RT	Stock Coating VP30RT	CW Cutting Width	CW Tolerance	REL	RER	PSIRR	Geometry
Grooving, Cutting Off	**GW1M0200D020N-GS**		●	●	●	2.00	±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	**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	**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	**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.

Coolant Hose Kit

(mm)

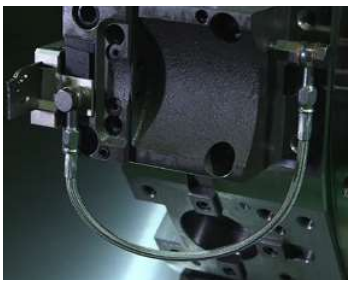
Connector Type	Order Number	Stock	Hose Length	Kit Details: Hose Code No.	Banjo Adapter Code No.	Banjo Adapter QTY.	Banjo Bolt Code No.	Banjo Bolt QTY.	Adapter Code No.	Adapter QTY.	Washer Code No.	Washer QTY.
Straight	**CS-1/8-150SS**	●	150	HOSE-1/8-150	–	–	–	–	AD-G1/8	2	WA-M10	2
Straight	**CS-1/8-200SS**	●	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



● : **Inventory maintained in Japan. (10 inserts in one case)**

SPARE PARTS ➤ Q001
TECHNICAL DATA ➤ R001

RECOMMENDED CUTTING CONDITIONS

■ Cutting Speed

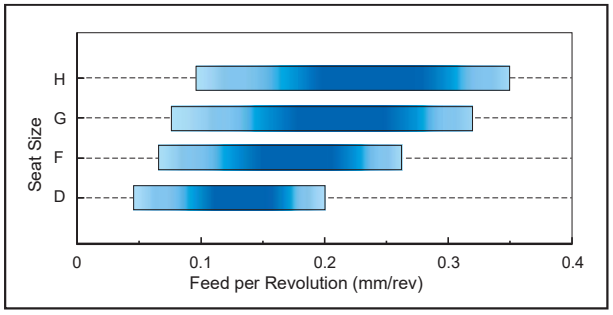
	Work Material	Hardness	Grade	Cutting Speed (m/min)
P	Mild Steel	≤160HB	VP20RT	100–240
			VP10RT	110–250
	Carbon Steel Alloy Steel	160–280HB	VP20RT	80–200
			VP10RT	90–210
			VP30RT	60–180
			MY5015	110–250
		≥280HB	VP20RT	60–160
			VP10RT	70–170
			VP30RT	40–140
			MY5015	90–210
M	Stainless Steel	≤270HB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

Cutting Speed (m/min): 50, 100, 150, 200, 250, 300

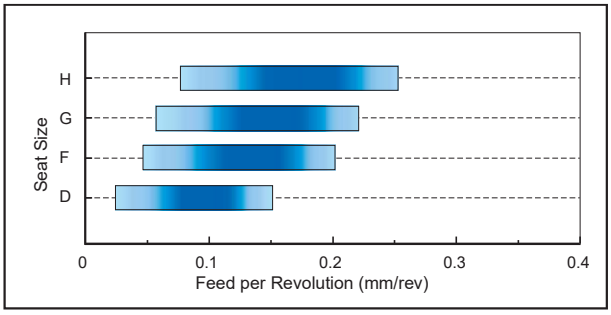
Note 1) VP20RT is the first recommended grade for materials.
Note 2) For VP10RT, VP20RT, VP30RT and MY5015, wet cutting is recommended.

■ Feed per Revolution

GM Breaker



GS Breaker



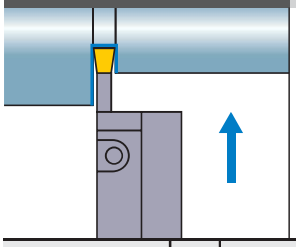
Chip Breaker	Feed per Revolution (mm/rev)			
	Seat Size D	Seat Size F	Seat Size G	Seat Size H
GM Breaker	0.05–0.20	0.07–0.26	0.08–0.32	0.10–0.35
GS Breaker	0.03–0.15	0.05–0.20	0.06–0.22	0.08–0.25

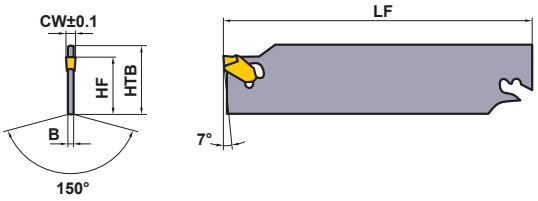
UG HOLDER

- Strengthened insert clamping force.
- Block and blade type and solid type series.
- Cutting width CW 2.2—5.1mm

UGHN

External cutting off, Grooving



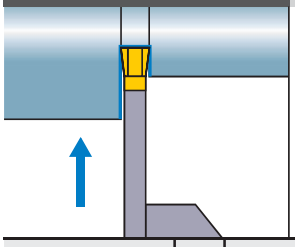


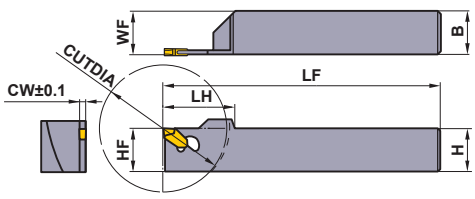
Order Number	Stock	Insert Number		Dimensions(mm)								Tool Block
				CW	CUTDIA*1	CDX *2	B	HF	HTB	LF	Wrench	
UGHN262	▲	KGT	2◌	2.2	50	20	1.60	21.4	26	111	UGS1	KGBN26-20 KGBN26-25
UGHN263	▲		3◌	3.1	75	32.5	2.35	21.4	26	111	UGS1	
UGHN264	▲		4◌	4.1	80	35	3.20	21.4	26	111	UGS1	
UGHN265	▲		5◌	5.1	80	35	4.00	21.4	26	111	UGS1	
UGHN322	▲		2◌	2.2	50	20	1.60	25.0	32	151	UGS1	KGBN32-20 KGBN32-25
UGHN323	▲		3◌	3.1	100	45	2.35	25.0	32	151	UGS1	
UGHN324	▲		4◌	4.1	100	45	3.20	25.0	32	151	UGS1	
UGHN325	▲		5◌	5.1	120	55	4.00	25.0	32	151	UGS1	

*1 CUTDIA : Max. Cut off Diameter
*2 CDX : Max. Groove Depth

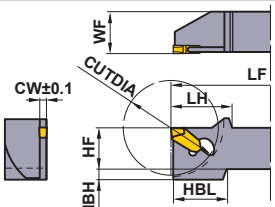
UGH

External cutting off, Grooving





Right hand tool holder shown.



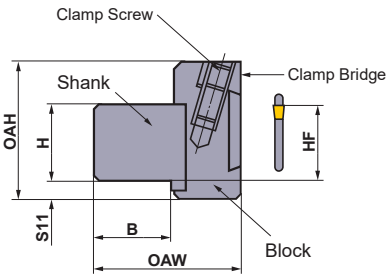
UGHR/L1616

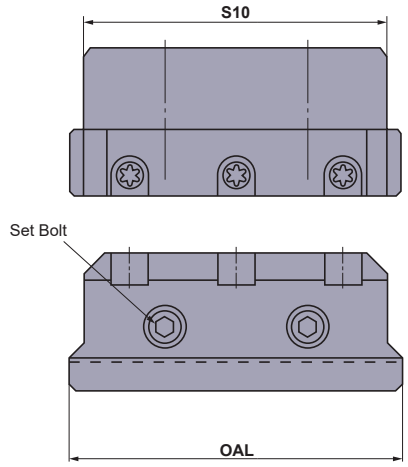
Order Number	Stock		Insert Number		Dimensions(mm)											Wrench
	R	L			CW	CUTDIA	CDX *	B	HF	LF	LH	H	WF	HBH	HBL	
UGHR/L1616H2	▲	▲	KGT	2◌	2.2	32	—	16	16	100	24	16	16.3	4	20	UGS1
UGHR/L1616H3	▲	▲		3◌	3.1	36	—	16	16	100	24	16	16.4	4	20	UGS1
UGHR/L2020K2A	▲	▲		2◌	2.2	32	—	20	20	125	24	20	20.3	—	—	UGS1
UGHR/L2020K2	▲	▲		2◌	2.2	42	8	20	20	125	25	20	20.3	—	—	UGS1
UGHR/L2020K3A	▲	▲		3◌	3.1	36	—	20	20	125	24	20	20.4	—	—	UGS1
UGHR/L2020K3	▲	▲		3◌	3.1	58	21	20	20	125	32	20	20.4	—	—	UGS1
UGHR/L2525M3	▲	▲		3◌	3.1	76	29	25	25	150	42	25	25.4	—	—	UGS1
UGHR/L2525M4	▲	▲		4◌	4.1	76	29	25	25	150	42	25	25.5	—	—	UGS1

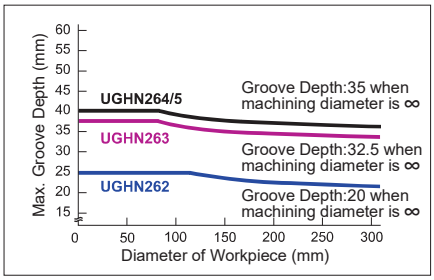
* CDX : Max. Groove Depth

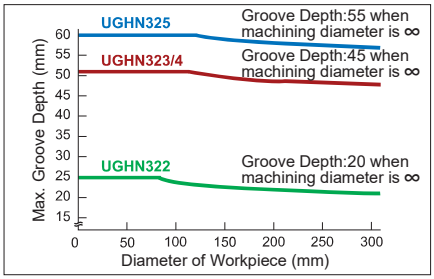
▲ : Inventory maintained in Japan. To be replaced by new products.
(10 inserts in one case)

TOOL BLOCK





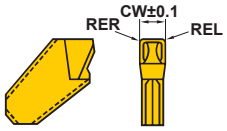
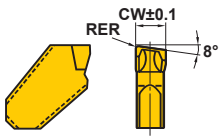




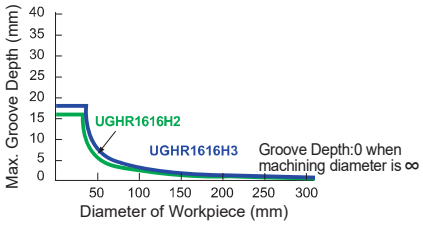
Order Number	Stock	Dimensions(mm)								① Clamp Bridge	① * Clamp Screw	① Wrench	② * Set Bolt	② Wrench
		B	H	HF	S10	S11	OAH	OAL	OAW					
KGBN26-20	▲	20	20	20	100	11	45	110	43	KGC1	LS15T	TKY25R	HSC08016	HKY60R
KGBN26-25	▲	25	25	25	100	6	45	110	48	KGC1	LS15T	TKY25R	HSC08016	HKY60R
KGBN32-20	▲	20	20	20	100	15.6	52	110	43	KGC1	LS15T	TKY25R	HSC08016	HKY60R
KGBN32-25	▲	25	25	25	100	10.6	52	110	48	KGC1	LS15T	TKY25R	HSC08016	HKY60R

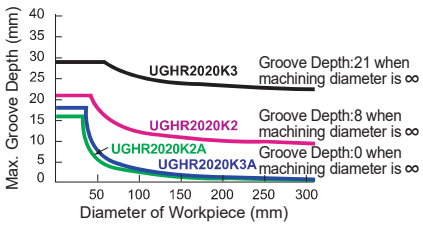
* Clamp Torque (N • m) : LS15T=8.5, HSC08016=24.0

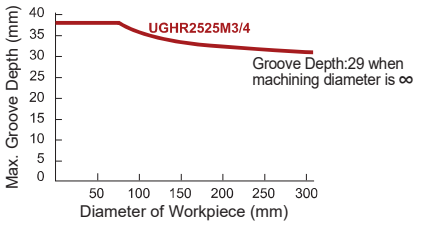
INSERTS

Order Number	Stock					Dimensions(mm)		Geometry
	Coated		Cermet	Carbide		CW	RER/L	
	UE6020	US735	NX2525	UTi20T				
KGT2N	▲		▲	▲		2.2	0.2	
KGT3N	▲	▲	▲	▲		3.1	0.2	
KGT4N	▲	▲	▲	▲		4.1	0.2	
KGT5N	▲	▲	▲	▲		5.1	0.2	
KGT2R	▲		▲	▲		2.2	0.2	
KGT2L	▲		▲	▲		2.2	0.2	
KGT3R	▲		▲	▲		3.1	0.2	
KGT3L	▲		▲	▲		3.1	0.2	
KGT4R	▲		▲	▲		4.1	0.2	
KGT4L	▲		▲	▲		4.1	0.2	
KGT5R	▲		▲	▲		5.1	0.2	
KGT5L	▲		▲	▲		5.1	0.2	Left hand tool holder shown.

Note 1) The above insert is not compatible with other manufacturer's holders.







RECOMMENDED CUTTING CONDITIONS

Work Material		Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)			
					Cutting Width 2.2mm	Cutting Width 3.1mm	Cutting Width 4.1mm	Cutting Width 5.1mm
P	Mild Steel	≤180HB	UE6020 • NX2525 UTi20T	120 (100—140)	0.08 (0.06—0.1)	0.1 (0.08—0.12)	0.12 (0.1—0.14)	0.12 (0.1—0.14)
	Carbon Steel Alloy Steel	180—280HB	UE6020 • NX2525 UTi20T	100 (80—120)	0.05 (0.04—0.06)	0.08 (0.06—0.1)	0.1 (0.08—0.12)	0.1 (0.08—0.12)
		280—350HB	UTi20T	80 (60—100)	0.05 (0.04—0.06)	0.08 (0.06—0.1)	0.1 (0.08—0.12)	0.1 (0.08—0.12)
M	Stainless Steel	≤200HB	US735	80 (60—100)	0.05 (0.04—0.06)	0.08 (0.06—0.1)	0.1 (0.08—0.12)	0.1 (0.08—0.12)

Note 1) Please set the cutting edge height 0.1—0.2mm higher than centre.

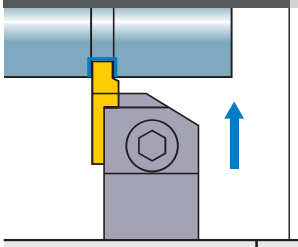
SPARE PARTS ➤ Q001
TECHNICAL DATA ➤ R001

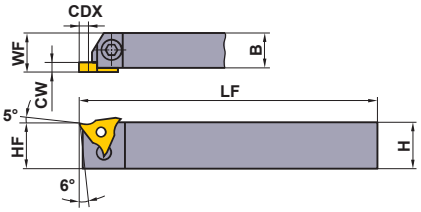
MG HOLDER

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

MGH

External grooving





Right hand tool holder shown.

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

* Dimensions when installing the CBN insert.

SPARE PARTS

Order Number	Clamp Bridge	Clamp Screw *	Spring	Wrench
MGHR/L2020K3315 I MGHR/L2525M4447	MTK1R/L	HBH06020	MES3	HKY40R

* Clamp Torque (N • m) : HBH06020=7.0

RECOMMENDED CUTTING CONDITIONS

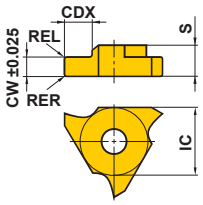
	Work Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P	Carbon Steel Alloy Steel	180—280HB	**VP20MF**	120 (100—140)	0.14 (0.03—0.25)
			NX2525	130 (100—160)	0.12 (0.03—0.2)
M	Stainless Steel	≤200HB	**VP20MF**	120 (100—140)	0.12 (0.03—0.18)
K	Gray Cast Iron	Tensile Strength ≤350MPa	**VP20MF**	120 (100—140)	0.12 (0.03—0.18)
H	Hardened Steel	50HRC≤	**MB8025**	100 (60—120)	0.05 (0.03—0.1)

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

● : **Inventory maintained in Japan.**
(10 inserts in one case) (CBN inserts are available in 1 piece in one case.)

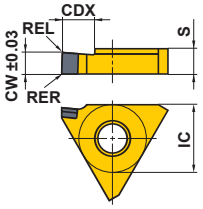
INSERTS

Order Number	Stock							Dimensions(mm)					Geometry
	Coated		Cermet		Carbide		CBN						
	VP20MF		NX2525		UTi20T		MB8025	CW	CDX	IC	S	RER/L	
	R	L	R	L	R	L	R						
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.

CBN Insert



Right hand insert only.

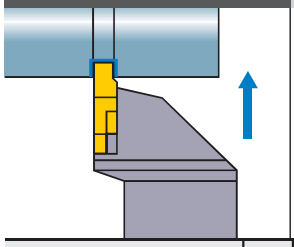
*RER=0.2 REL=0.2

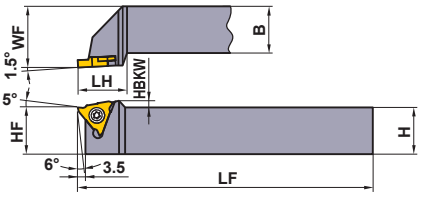
SMG HOLDER

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

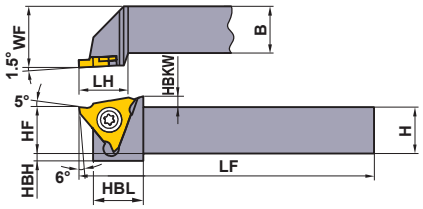
SMGH

External grooving, Threading





Right hand tool holder only.

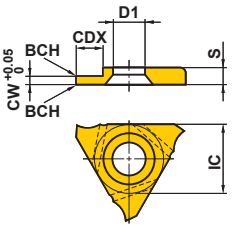


SMGHR1010E16, SMGHR1212F16

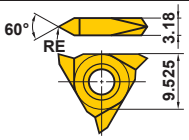
Order Number	Stock	Insert Number		Dimensions(mm)									*	
	R	Grooving	Threading	H	B	LF	LH	HF	WF	HBKW	HBH	HBL	Clamp Screw	Wrench
SMGHR1010E16	●	SMGTR 16×2□□□ 16×2□□□C	SMTTR 160360□□	10	10	70	16.5	10	12	2.5	4	13	FC400890T	TKY10F
SMGHR1212F16	●			12	12	80	16.5	12	16	2.5	2	13	FC400890T	TKY10F
SMGHR1616H16	●			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
	Cermet		Carbide		CW	CDX	IC	S	D1	BCH	
	NX2525		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	Dimensions(mm)	Thread Pitch (mm)	Geometry
	Carbide			
	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 G027.

RECOMMENDED CUTTING CONDITIONS

	Work 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 HTi10**	100 (80—120)	0.1 (0.05—0.15)
N	Aluminium Alloy	—	**HTi10**	350 (300—400)	0.1 (0.05—0.15)
	Brass	—	**HTi10**	250 (200—300)	0.1 (0.03—0.15)
	Acrylic	—	**HTi10**	250 (200—300)	0.1 (0.03—0.15)

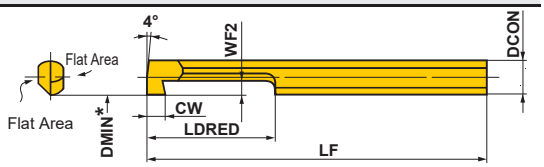
● : **Inventory maintained in Japan. (10 inserts in one case)**

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

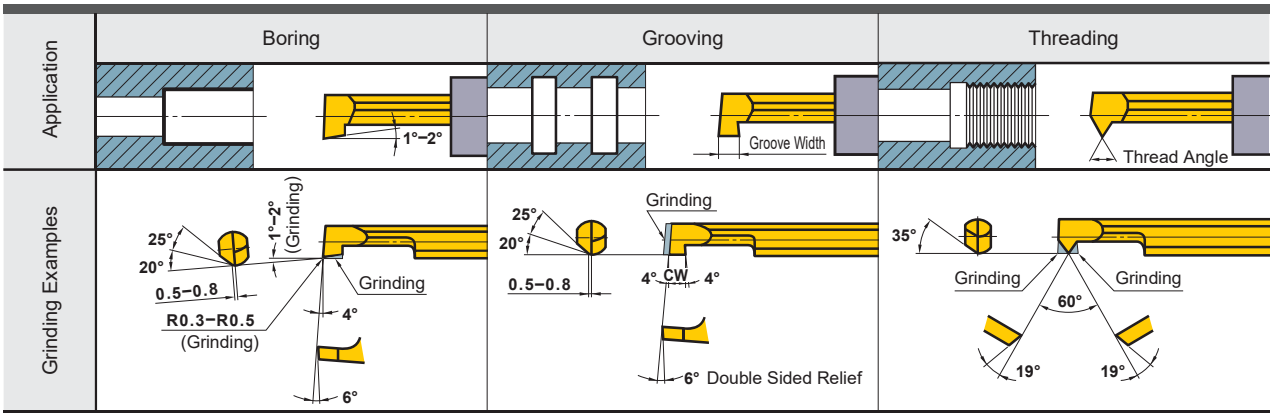
RECOMMENDED CUTTING CONDITIONS

	Work Material	Cutting Speed (m/min)	Feed (mm/rev)	Depth of Cut (mm)	Excrescence 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.

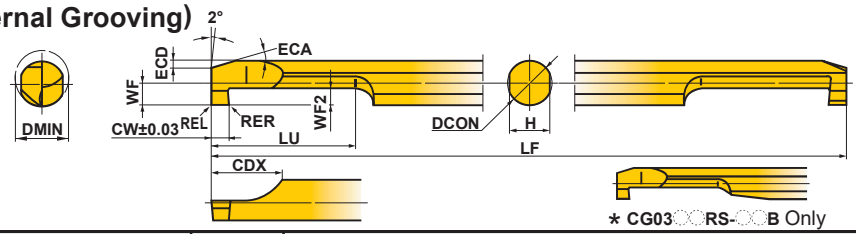


● : Inventory maintained in Japan. (MICRO MINI is available in 1 piece in one pack.)

SPARE PARTS ➤ Q001
TECHNICAL DATA ➤ R001

MICRO-MINI TWIN

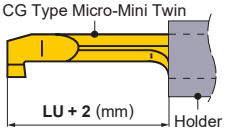
■CG TYPE (Internal Grooving)



Order Number	Stock		Breaker	Dimensions (mm)											
	Micro Grain Carbide	Coated													
	TF15	VP15TF		DMIN	CW	WF2	RER/L	DCON	LF	LU	CDX	WF	H	ECA	ECD
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

	Work 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)	

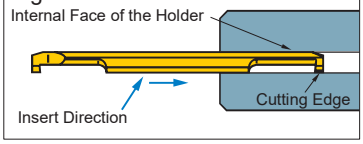
Note 1) Wet cutting is recommended.

■ 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.

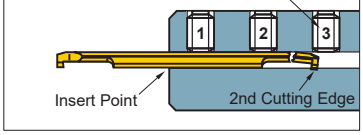
Fig.1



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.

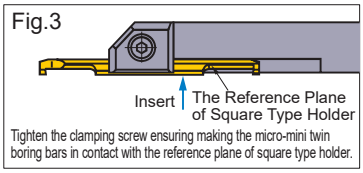
Fig.2



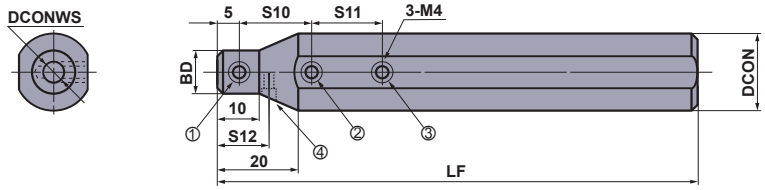
●When using a square type holder:

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.

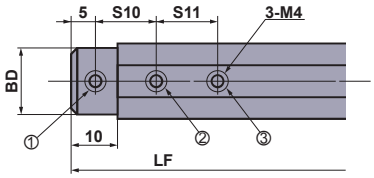
Fig.3



ROUND TYPE HOLDER



RBH22□□N has a temporary set screw for different machine specifications.
(Represented by number 4)



RBH158□□N, RBH16□□N,
RBH190□□N

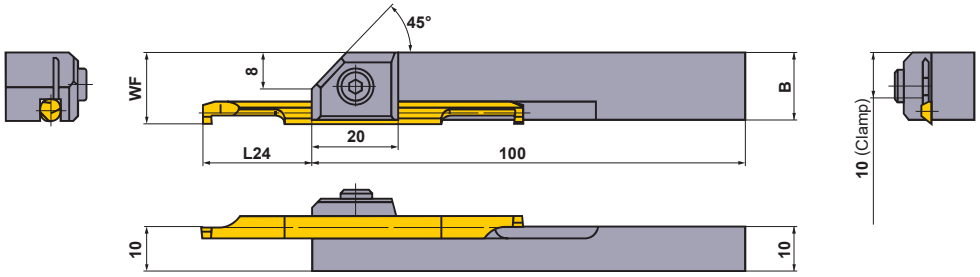
Order Number	Stock	Dimensions (mm)							MICRO-MINI C	MICRO-MINI TWIN CG	✱1 Clamp Screw				Wrench	Torque (N • m)
		DCON	DCONWS	BD	LF	S10	S11	S12			①	②	③	④		
RBH15830N	●	15.875	3	15	100	10	10	—	03FR-BLS	03RS-□□(B)	A	A	A	—	HKY20F	2.0
RBH15840N	●	15.875	4	15	100	15	15	—	04FR-BLS	04RS-□□(B)	A	A	A	—	HKY20F	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

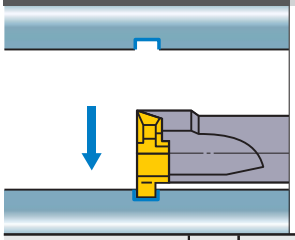
* L24 is the length of overhang for sufficient clamping, and ( ) is the recommended length for machining of carbon and alloy steel.

F TYPE

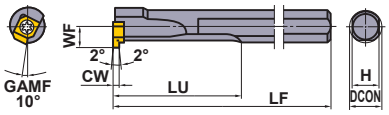
- Min. cutting diameter 10mm
- Screw-on type
- Usable for various applications.
- Max. groove depth : 3mm

FSL51

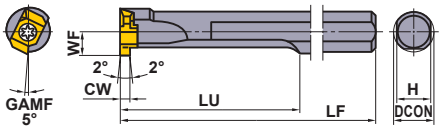
Internal grooving, Threading



1 Corner type (FSL5108R,5110R)



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



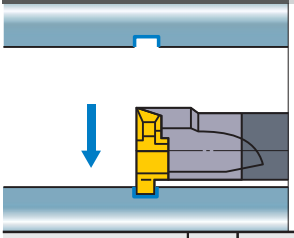
Right hand tool holder only.

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

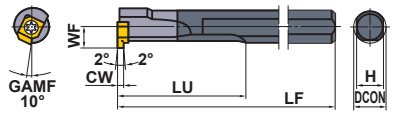
*1 DMIN : Min. Cutting Diameter
*2 Clamp Torque (N • m) : TS25=1.0, TS32=1.0, TS43=3.5

FSL52

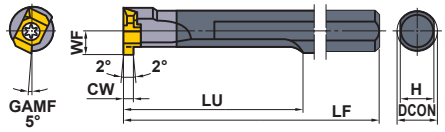
(Carbide shank) Internal grooving, Threading



1 Corner type (FSL5208R,5210R)



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



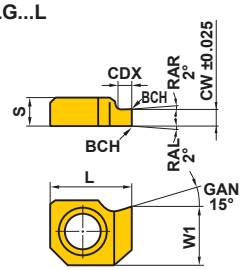
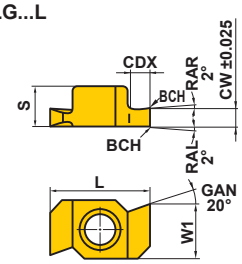
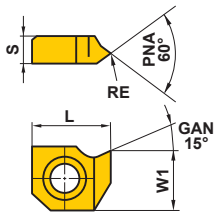
Right hand tool holder only.

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

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

INSERTS

Application	CW and pitch (mm)	Order Number	Coated UP20M	Carbide UTi20T	Dimensions(mm) L	W1	CDX	S	RE	BCH	Geometry
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	
	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** 
	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	–	

RECOMMENDED CUTTING CONDITIONS

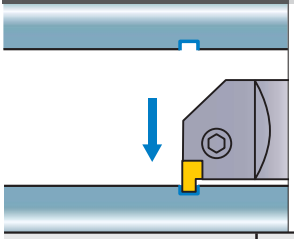
Work Material		Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev) 1.2, 1.5mm	2.0mm	3.0mm	4.0mm
P	Carbon Steel Alloy Steel	180–280HB	**UP20M • UTi20T**	90 (60–120)	0.05 (0.02–0.08)	0.05 (0.02–0.08)	0.05 (0.02–0.08)	0.05 (0.02–0.08)
		280–350HB	**UP20M • UTi20T**	80 (50–100)	0.03 (0.02–0.04)	0.03 (0.02–0.04)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

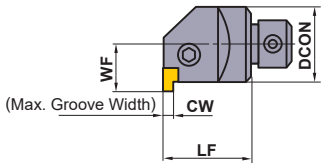
D TYPE BORING HEAD

- 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
	R		CW	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 **B** ② **1** ③ **32** ④ **32**

①Designation

②Arbor Length (mm)

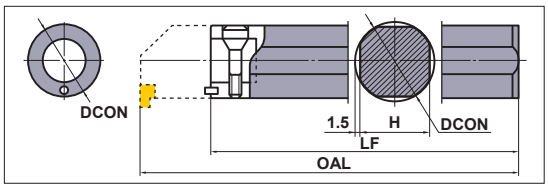
Symbol	DCON	LF	OAL
1	32	260	300
	40	310	360

③Arbor Diameter (mm)

Symbol	Diameter(DCON)
32	32
40	40

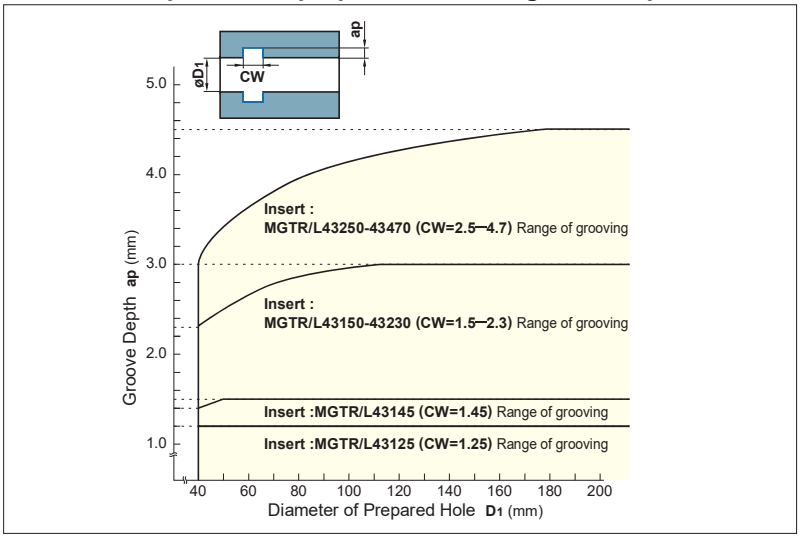
④Head Diameter (mm)

Symbol	Diameter(BD)
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

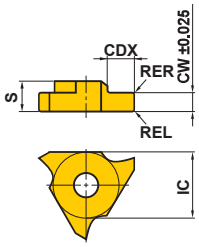
■Relationship between prepared hole and groove depth for DPT4 type



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

INSERTS

Order Number	Stock			Dimensions(mm)					Geometry
	Coated	Cermet	Carbide						
	VP20MF	NX2525	UTi20T	CW	CDX	IC	S	RER/L	
MGTL43125	●	●	●	1.25	1.2	12.7	4.76	0.2	**MGTL...**
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	



RECOMMENDED CUTTING CONDITIONS

	Work 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.