

MITSUBISHI CARBIDE

Face tools  
Available

Grooving System

# GY Series

# Grooving Revolution

■ Innovative clamping system ensures reliable grooving.

FEATURES.....P1

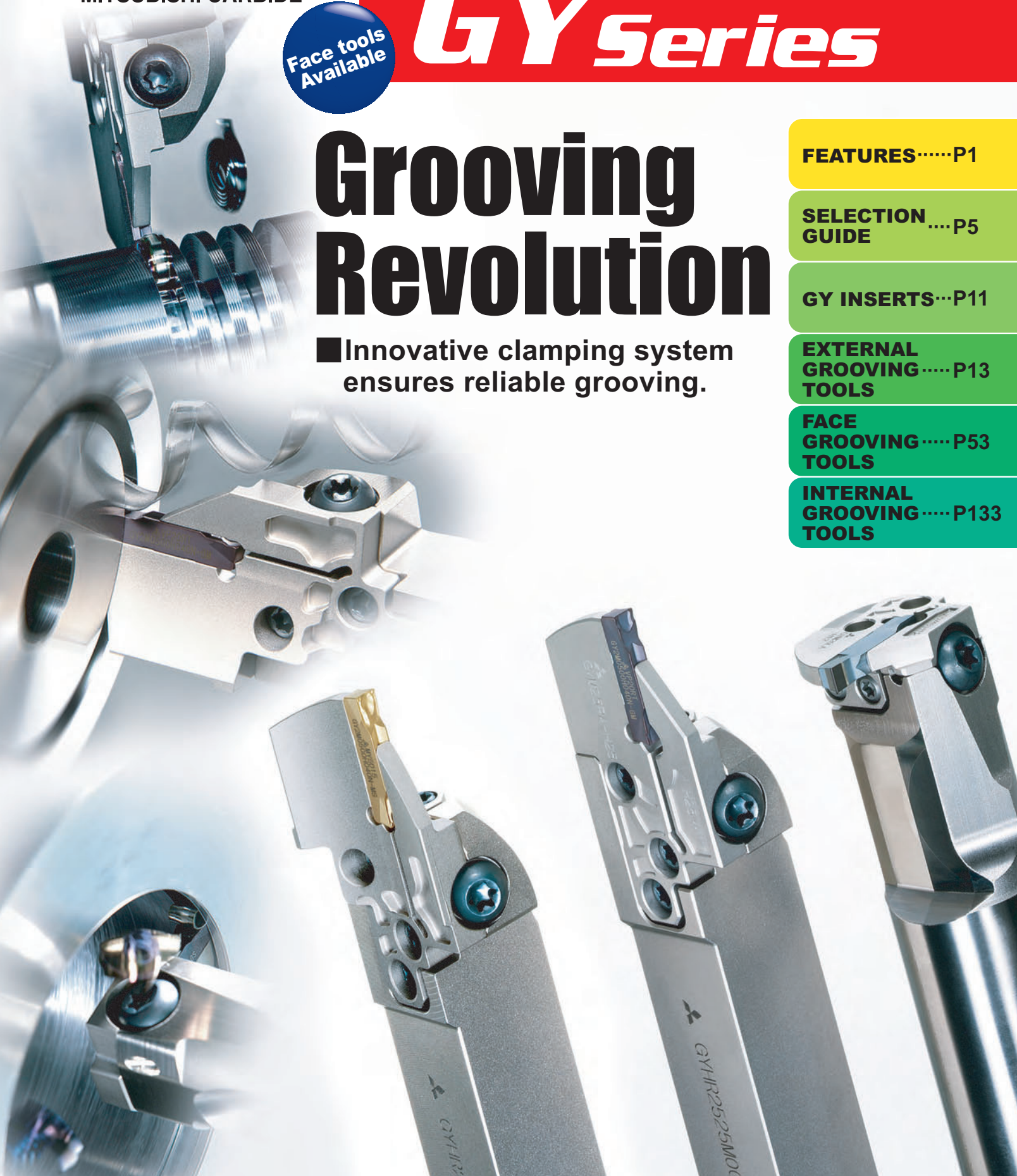
SELECTION GUIDE ....P5

GY INSERTS...P11

EXTERNAL GROOVING.....P13 TOOLS

FACE GROOVING.....P53 TOOLS

INTERNAL GROOVING.....P133 TOOLS



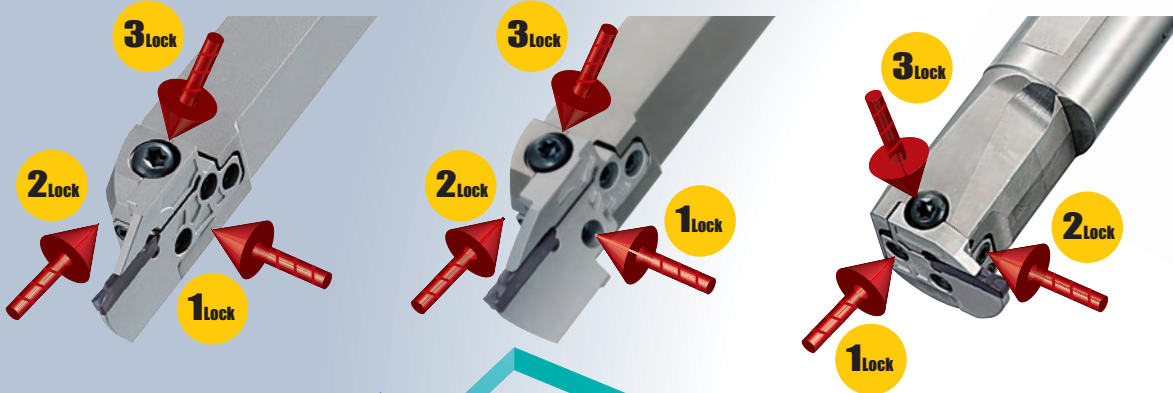
# GY SERIES

GY series offers ultimate rigidity and accuracy for stability when grooving.

## New TRI-LOCK System for increased stability and performance!

### ● Innovative TRI-LOCK System

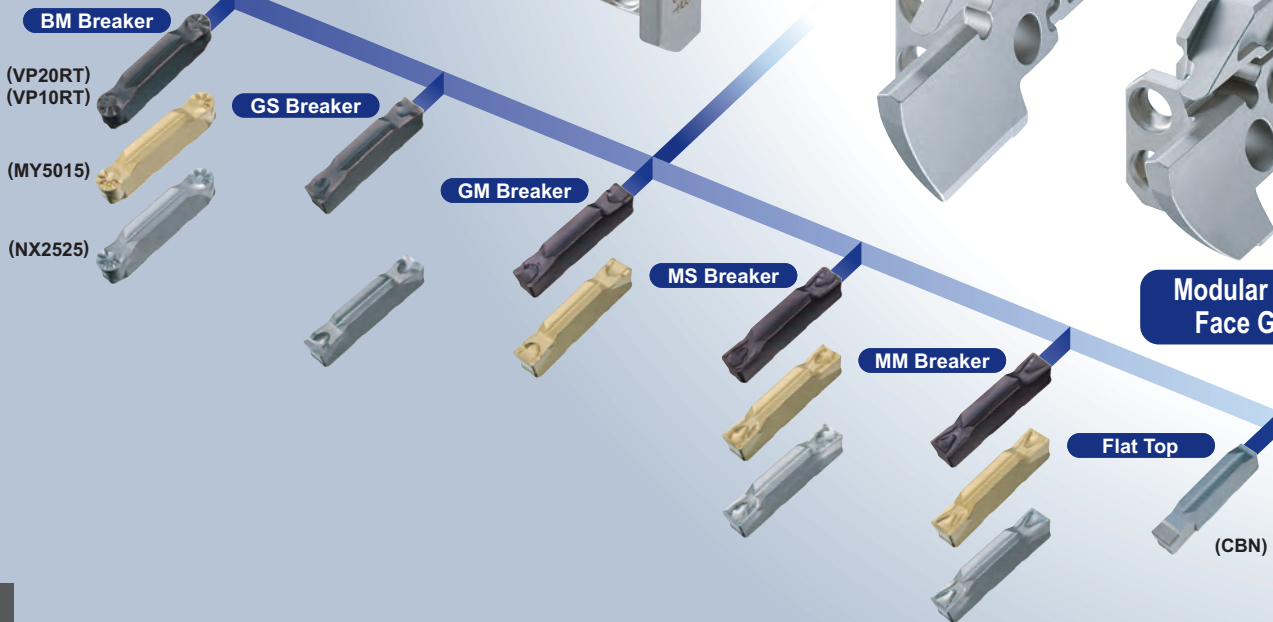
- Mitsubishi Materials has developed an original and unique, new modular blade system. The TRI-LOCK system ensures the blade is securely fixed in 3 directions (side, front and top), giving high rigidity for stable grooving performance.



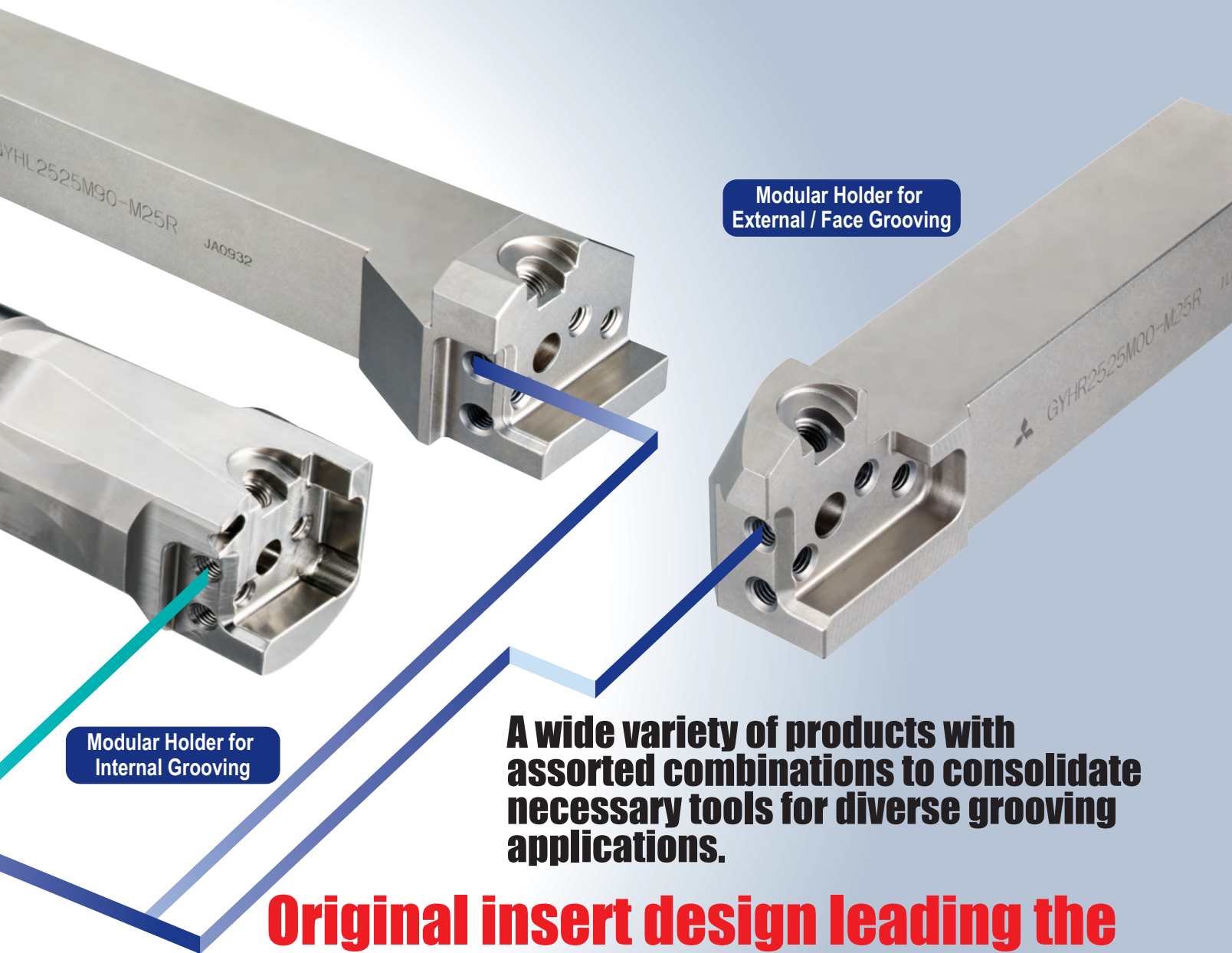
Modular Blade for External / Internal Grooving

Modular Blade for External Grooving

Modular Blade for Face Grooving



Easy to use modular blade system allows flexible tool management but maintains an overall strength comparable to a mono block type holder.



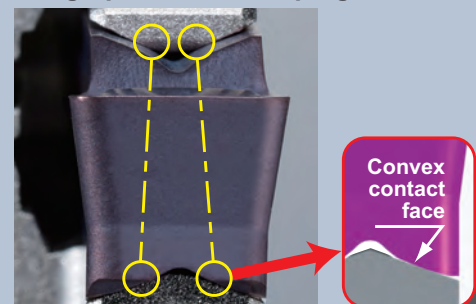
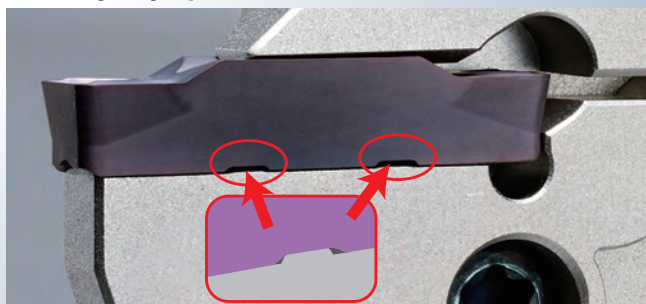
Modular Holder for External / Face Grooving

Modular Holder for Internal Grooving

**A wide variety of products with assorted combinations to consolidate necessary tools for diverse grooving applications.**

## **Original insert design leading the way to new grooving applications !**

- Highly reliable insert clamping
- Safety keys prevent insert movement.
- The convex geometry ensures high precision clamping.



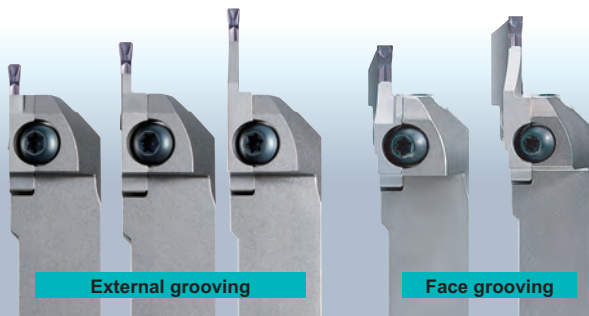
Convex contact face

# GY SERIES

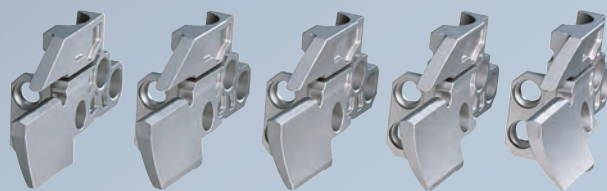
**A wide selection of holders and inserts available for diverse grooving applications.**

## External / Face holders

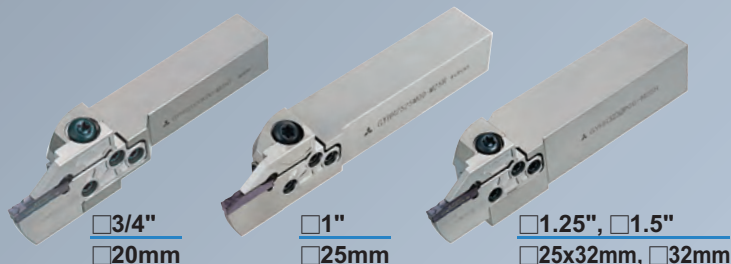
- Applicable for various depths of grooves by the wide array of modular blades with different lengths.



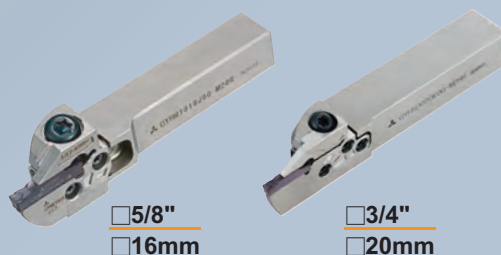
- Applicable for various diameter of face grooves by the wide array of modular blades with different grooving diameters.



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



**GYM25 Modular blade**



**GYM20 Modular blade**

## Internal holders

- A wide range of holders available from minimum diameter of  $\phi 1.000''$  ( $\phi 25\text{mm}$ ).

**Mono block type**

Min. cutting diameter

(Inch)  
 $\phi 1.000''$   
 $\phi 1.250''$

(Metric)  
 $\phi 25\text{mm}$   
 $\phi 32\text{mm}$



**Modular blade type**

Modular blade type

(Inch)  
 $\phi 1.625''$   
 $\phi 2.000''$   
 $\phi 2.500''$   
 $\phi 2.750''$

(Metric)  
 $\phi 40\text{mm}$   
 $\phi 50\text{mm}$   
 $\phi 60\text{mm}$   
 $\phi 70\text{mm}$



- Short shank types are standard stocked.

**Mono block type**

**Modular blade type**



Short

Standard

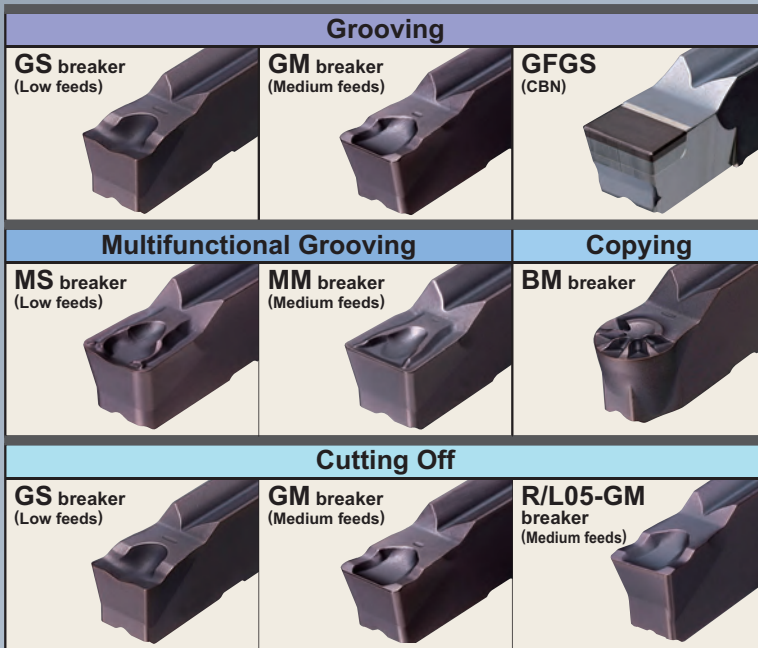
Short

Standard

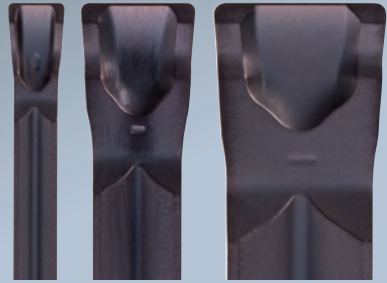
## Insert

### ● A wide selection of inserts

#### ● Breaker system



#### ● Selection of groove widths



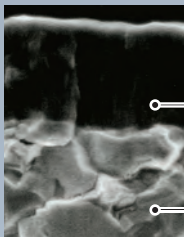
#### ● Different corner radii available



### ● Application of Insert Grades

Work Material	<b>P</b> Steel	<b>M</b> Stainless Steel	<b>K</b> Cast Iron	<b>S</b> Heat-resistant Alloy / Titanium Alloy	<b>H</b> Hardened Steel
Machining Condition					
Stable	<b>NEW NX2525</b>				
Machining Condition	<b>NEW MY5015</b>		<b>NEW MY5015</b>		<b>MB8025</b>
	<b>VP10RT</b>	<b>VP10RT</b>	<b>VP10RT</b>	<b>VP10RT</b>	
	<b>VP20RT</b>	<b>VP20RT</b>	<b>VP20RT</b>	<b>VP20RT</b>	
Unstable					

#### **VP20RT** (First recommendation)

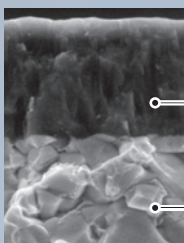


● MIRACLE coated **VP20RT** for general turning operations. The combination of the tough special cemented carbide substrate and MIRACLE coating bring a good balance of wear resistance and fracture toughness at a high level. Corresponding to various work piece materials and diverse applications.

**MIRACLE**® coating

Carbide substrate (HRA90.5)

#### **VP10RT**

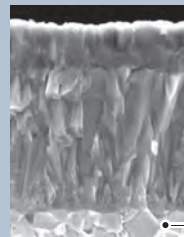


● MIRACLE coated **VP10RT** has high wear resistance. It adopts the special cemented carbide substrate that is harder than VP20RT. Use for hard-to-cut materials or to extend tool life.

**MIRACLE**® coating

Carbide substrate (HRA92.0)

#### **NEW MY5015**



● CVD coated **MY5015** with excellent wear resistance at higher cutting temperatures. It demonstrates longer tool life when machining cast iron and ductile cast iron. Also use for high speed cutting of steel under stable conditions such as continuous cutting.

CVD coating

Carbide substrate

#### **NEW NX2525**

● **NX2525** is a cermet grade for finishing. Use for finish cutting of steel to obtain a glazed surface or low-cutting-speed applications that weld easily.

#### **MB8025**

● **MB8025** is a sintered cubic-boron-nitride grade for hardened steel.

# SELECTION GUIDE (1)

## STEP 1 SELECT APPLICATION

1 Select the application and the direction of the workpiece rotation.

**Normal use**

**Clockwise**

External grooving / Cutting off / Copying		
1-1	00° type (Inch)	P13
1-2	00° type (Metric)	P29

Internal grooving / Copying		
5-1	90° right hand type (Inch)	P133
5-2	90° right hand type (Metric)	P139

Face grooving / Copying		
3-1	00° left hand type (Inch)	P57
3-2	00° left hand type (Metric)	P93

External grooving / Cutting off / Copying		
2-1	90° left hand type (Inch)	P25
2-2	90° left hand type (Metric)	P41

Face grooving / Copying		
4-1	90° right hand type (Inch)	P81
4-2	90° right hand type (Metric)	P117

**Reverse holder use**

External grooving / Cutting off / Copying		
2-1	90° left hand type (Inch)	P25
2-2	90° left hand type (Metric)	P41

External grooving / Cutting off / Copying		
1-1	00° type (Inch)	P13
1-2	00° type (Metric)	P29

Face grooving / Copying		
3-1	00° left hand type (Inch)	P57
3-2	00° left hand type (Metric)	P93

Internal grooving / Copying		
5-1	90° right hand type (Inch)	P133
5-2	90° right hand type (Metric)	P139

Face grooving / Copying		
4-1	90° right hand type (Inch)	P81
4-2	90° right hand type (Metric)	P117

## STEP 2 SELECT INSERT

1 Select an insert suitable for the application, then select the corresponding seat size.

\* Seat size refers to the seat width of the modular blade.

		Inserts					Dimensions (inch)						
Applications	Geometry	Order Number	Stock					Seat Size	W3				
			Coated		Cermet CBN				Grooving Width	Tolerance	Re	ar (Max.)	L2
			VP10RT	VP20RT	MY5015	NX2525	MB8025						
For Grooving / Cutting off	<b>GS Breaker</b> (Low feeds) 	GY2M0200D020N-GS	●	●	●			D	.079	±.0012	.008	.736	.815
		0239E020N-GS	●	●	●			E	.094	±.0012	.008	.728	.815
		0250E020N-GS	●	●	●			E	.098	±.0012	.008	.728	.815
		0300F020N-GS	●	●	●			F	.118	±.0012	.008	.728	.815
		0318F020N-GS	●	●	●			F	.125	±.0012	.008	.728	.815
		0400G020N-GS	●	●	●			G	.157	±.0016	.008	.941	1.010
		0475H030N-GS	●	●	●			H	.187	±.0016	.012	.941	1.010
		0500H030N-GS	●	●	●			H	.197	±.0016	.012	.945	1.010
		0600J030N-GS	●	●	●			J	.236	±.0016	.012	.949	1.010
		0635J030N-GS	●	●	●			J	.250	±.0016	.012	.949	1.010
For Grooving / Cutting off	<b>GM Breaker</b> (Medium feeds) 	GY2M0200D020N-GM	●	●				D	.079	±.0012	.008	.764	.815
		0239E020N-GM	●	●				E	.094	±.0012	.008	.764	.815
		0250E020N-GM	●	●				E	.098	±.0012	.008	.764	.815
		0300F030N-GM	●	●				F	.118	±.0012	.012	.764	.815
		0318F030N-GM	●	●				F	.125	±.0012	.012	.764	.815
		0400G030N-GM	●	●				G	.157	±.0016	.012	.961	1.010
		0475H040N-GM	●	●				H	.187	±.0016	.016	.957	1.010
		0500H040N-GM	●	●				H	.197	±.0016	.016	.957	1.010
		0600J040N-GM	●	●				J	.236	±.0016	.016	.957	1.010
		0635J040N-GM	●	●				J	.250	±.0016	.016	.957	1.010

**Counter Clockwise**

**Normal use**

External grooving / Cutting off / Copying		
1-1	00° type (Inch)	P13
1-2	00° type (Metric)	P29

External grooving / Cutting off / Copying		
2-1	90° right hand type (Inch)	P25
2-2	90° right hand type (Metric)	P41

Face grooving / Copying		
3-1	00° right hand type (Inch)	P53
3-2	00° right hand type (Metric)	P89

Internal grooving / Copying		
5-1	90° left hand type (Inch)	P133
5-2	90° left hand type (Metric)	P139

Face grooving / Copying		
4-1	90° left hand type (Inch)	P81
4-2	90° left hand type (Metric)	P117

**Reverse holder use**

External grooving / Cutting off / Copying		
1-1	00° type (Inch)	P13
1-2	00° type (Metric)	P29

Internal grooving / Copying		
5-1	90° left hand type (Inch)	P133
5-2	90° left hand type (Metric)	P139

Face grooving / Copying		
3-1	00° right hand type (Inch)	P53
3-2	00° right hand type (Metric)	P89

External grooving / Cutting off / Copying		
2-1	90° right hand type (Inch)	P25
2-2	90° right hand type (Metric)	P41

Face grooving / Copying		
4-1	90° left hand type (Inch)	P81
4-2	90° left hand type (Metric)	P117

## STEP 3 SELECT MODULAR HOLDER & BLADE

- 1 Proceed to the tool holder page in STEP1, then go to the column of the seat size selected in STEP 2.
- 2 Select the hand of the tool holder.
- 3 Select a modular holder suitable for the application.
- 4 Select the maximum groove depth.
- 5 Select a modular blade that corresponds to 4. When selecting a modular blade for face grooving note if the cutting diameter range is suitable.

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
D	.079	R	.236	.472	(1D1R3D1)	GYM20RA-D06	●	GYHRUS10B00-M20R	●
			.394	.787	(1D1R3D2)	GYM20RA-D10	●		
			.709 *4	1.417	(1D1R3D3)	GYM20RB-D18	●		
			.236	.472	(1F1R3D1)	GYM20RA-D06	●	GYHRUS12C00-M20R	●
			.394	.787	(1F1R3D2)	GYM20RA-D10	●		
			.709 *4	1.417	(1F1R3D3)	GYM20RB-D18	●		
			.236	.472	(1F1R4D1)	GYM25RA-D06	●	GYHRUS12C00-M25R	●
			.472	.945	(1F1R4D2)	GYM25RA-D12	●		
			.787 *1	1.575 *2	(1F1R4D3)	GYM25RA-D20	●		
			.236	.472	(1H1R4D1)	GYM25RA-D06	●	GYHRUS14D00-M25R	●
			.472	.945	(1H1R4D2)	GYM25RA-D12	●		
			.787 *1	1.575 *2	(1H1R4D3)	GYM25RA-D20	●		

# SELECTION GUIDE (2)

## HOLDER SELECTION

SELECTION GUIDE

### External Grooving (P13-P52)

#### 1 00° type

● Modular blade type



Right hand tool holder shown.

#### 2 90° type

● Modular blade type



Right hand tool holder shown.

		Insert Width					
Inserts P11	Inch	.079"	.094" .098"	.118" .125"	.157"	.187" .197"	.236" .250"
	Metric	2.00mm	2.39mm 2.50mm	3.00mm 3.18mm	4.00mm	4.75mm 5.00mm	6.00mm 6.35mm
Inch Holders	R	P13	P15	P17	P19	P21	P23
	L	P13	P15	P17	P19	P21	P23
Metric Holders	R	P29	P31	P33	P35	P37	P39
	L	P29	P31	P33	P35	P37	P39

		Insert Width					
Inserts	Inch	.079"	.094" .098"	.118" .125"	.157"	.187" .197"	.236" .250"
	Metric	2.00mm	2.39mm 2.50mm	3.00mm 3.18mm	4.00mm	4.75mm 5.00mm	6.00mm 6.35mm
Inch Holders	R	P25	P25	P25	P27	P27	P27
	L	P25	P25	P25	P27	P27	P27
Metric Holders	R	P41	P41	P41	P43	P43	P43
	L	P41	P41	P41	P43	P43	P43

## INSERT SELECTION

Grooving		
GS Breaker (Low feeds)	GM Breaker (Medium feeds)	Flat Top (CBN)
Cutting Mode		
External	Face	Internal

Multifunctional Grooving		
MS Breaker (Low feeds)	MM Breaker (Medium feeds)	
Cutting Mode		
External	Face	Internal




**Face Grooving (↻ P53-P132)**

**3 00° type**

● Modular blade type

**NEW**



Right hand tool holder shown.

**4 90° type**

● Modular blade type

**NEW**



Right hand tool holder shown.

Insert Width			
.118" .125"	.157"	.187" .197"	.236" .250"
3.00mm 3.18mm	4.00mm	4.75mm 5.00mm	6.00mm 6.35mm

Insert Width			
.118" .125"	.157"	.187" .197"	.236" .250"
3.00mm 3.18mm	4.00mm	4.75mm 5.00mm	6.00mm 6.35mm

- |       |       |       |       |
|-------|-------|-------|-------|
| ↻ P53 | ↻ P61 | ↻ P69 | ↻ P77 |
| ↻ P57 | ↻ P65 | ↻ P73 | ↻ P79 |

- |       |       |       |       |
|-------|-------|-------|-------|
| ↻ P81 | ↻ P83 | ↻ P85 | ↻ P87 |
| ↻ P81 | ↻ P83 | ↻ P85 | ↻ P87 |

- |       |        |        |        |
|-------|--------|--------|--------|
| ↻ P89 | ↻ P97  | ↻ P105 | ↻ P113 |
| ↻ P93 | ↻ P101 | ↻ P109 | ↻ P115 |


- |        |        |        |        |
|--------|--------|--------|--------|
| ↻ P117 | ↻ P119 | ↻ P121 | ↻ P123 |
| ↻ P117 | ↻ P119 | ↻ P121 | ↻ P123 |

**Internal Grooving (↻ P133-P151)**

**5 90° type**

● Mono block type (Through air / coolant)

● Modular blade type (Through air / coolant)



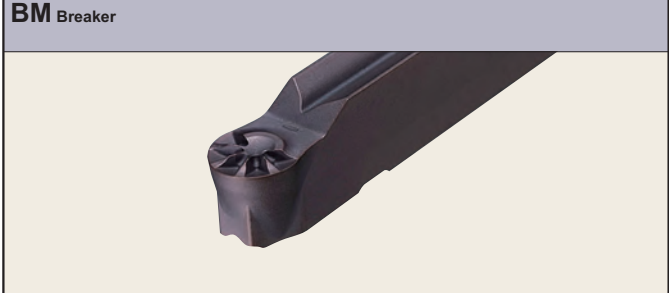
Right hand tool holder shown.

Insert Width					
.079"	.094" .098"	.118" .125"	.157"	.187" .197"	.236" .250"
2.00mm	2.39mm 2.50mm	3.00mm 3.18mm	4.00mm	4.75mm 5.00mm	6.00mm 6.35mm

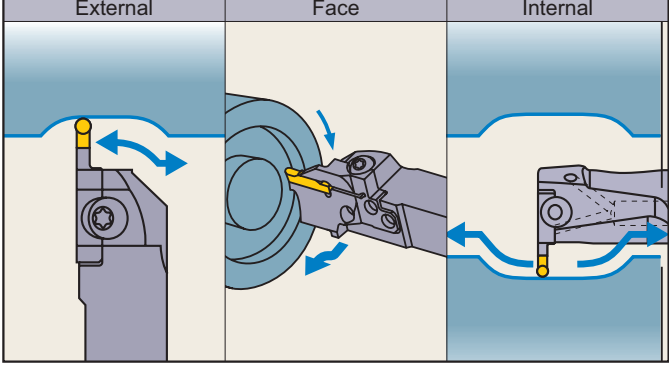
- |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| ↻ P133 | ↻ P133 | ↻ P135 | ↻ P135 | ↻ P137 | ↻ P137 |
| ↻ P133 | ↻ P133 | ↻ P135 | ↻ P135 | ↻ P137 | ↻ P137 |

- |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|
| ↻ P139 | ↻ P139 | ↻ P141 | ↻ P141 | ↻ P143 | ↻ P143 |
| ↻ P139 | ↻ P139 | ↻ P141 | ↻ P141 | ↻ P143 | ↻ P143 |

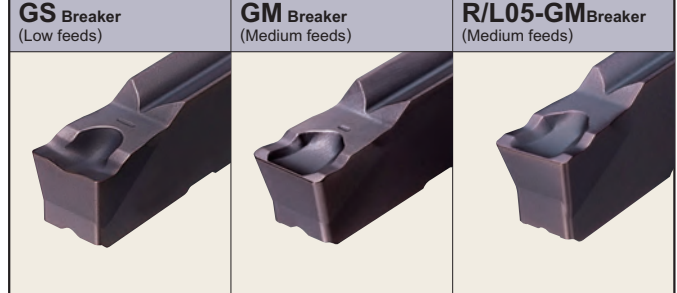
**Copying**



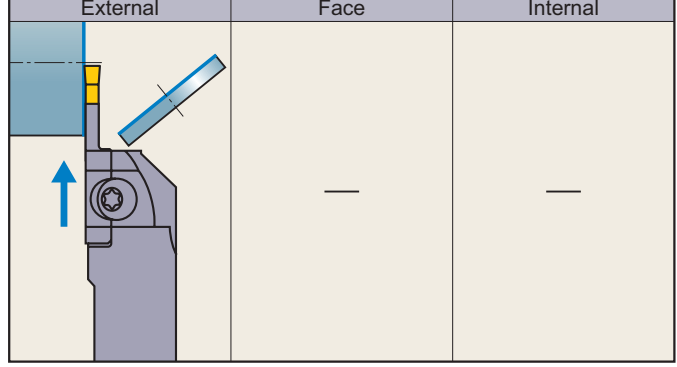
**Cutting Mode**



**Cutting Off**



**Cutting Mode**



# IDENTIFICATION

**Insert**

**GY 2 M 0300 F 030 N R 05 G M GS**

① Series Description

② Number of Teeth

1	1 Edge Type
2	2 Edge Type

③ Peripheral

G	Ground
M	Sintered

④ Groove Width

	Inch	Metric
0200	.079"	2.00mm
0239	.094"	2.39mm
0250	.098"	2.50mm
0300	.118"	3.00mm
0318	.125"	3.18mm
0400	.157"	4.00mm
0475	.187"	4.75mm
0500	.197"	5.00mm
0600	.236"	6.00mm
0635	.250"	6.35mm

⑤ Seat Size \*1

	Inch	Metric
D	.079"	2.00mm
E	.094"	2.39mm
F	.118"	3.00mm
G	.157"	4.00mm
H	.187"	4.75mm
J	.236"	6.00mm
	.250"	6.35mm

⑥ Corner Radius

	Inch	Metric
020	.008"	0.20mm
030	.012"	0.30mm
040	.016"	0.40mm
080	.031"	0.80mm
150	.059"	1.50mm
159	.063"	1.59mm
200	.079"	2.00mm
238	.094"	2.38mm
250	.098"	2.50mm
300	.118"	3.00mm
318	.125"	3.18mm

⑦ Hand

N	Neutral
R	Right
L	Left

⑧ Lead angle (R/L type insert)

05	5°
----	----

⑨ Application 1

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

⑩ Application 2

S	Low feed
M	Medium feed

⑪ Application 3

F	Flat Top
---	----------

\* Only for CBN inserts.

⑫ Horning Type \*

GS	General Purpose
----	-----------------

\* Only for CBN inserts.

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

**Modular blade**

**GY M25 R A F 12 D F 12 050**

① Series Description

② Modular Blade Size

M20
M25

③ Hand

R	Right
L	Left

④ Modular Blade Type

A	External / Internal Standard Type
B	External only Reinforced Type
D	Face grooving Type

⑤ Seat Size \*1

	Inch	Metric
D	.079"	2.00mm
E	.094"	2.39mm
F	.118"	3.00mm
G	.157"	4.00mm
H	.187"	4.75mm
J	.236"	6.00mm
	.250"	6.35mm

⑥ Max. Groove Depth \*2

	Inch	Metric
06	.236"	6mm
08	.315"	8mm
10	.394"	10mm
12	.472"	12mm
14	.551"	14mm
18	.709"	18mm
20	.787"	20mm
25	.984"	25mm

⑦ Min. Groove Diameter

	Inch	Metric
035	1.378"	35mm
040	1.575"	40mm
050	1.969"	50mm
060	2.362"	60mm
070	2.756"	70mm
075	2.953"	75mm
085	3.346"	85mm
100	3.937"	100mm
110	4.331"	110mm
125	4.921"	125mm
135	5.315"	135mm
170	6.693"	170mm
180	7.087"	180mm
250	9.843"	250mm

\*1 Select a seat size with the same symbol as that of 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 133-143.

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

\* Only for face grooving.

### EXTERNAL / FACE HOLDER

(Inch) **GY H R US16 D 00 - M25 R**  
 (Metric) **2525 M**

① Series Description: H External / Face Holder

② Holder Type: H External / Face Holder

③ Hand of Holder: R Right, L Left

④ Holder Size

	Inch	Metric
US10	.625"x.625"	1616 16mmx16mm
US12	.750"x.750"	2020 20mmx20mm
US16	1.000"x1.000"	2525 25mmx25mm
US20	1.250"x1.250"	3225 32mmx25mm
US24	1.500"x1.500"	3232 32mmx32mm

⑤ Holder Length

	Inch	Metric
B	4.5"	J 110mm
C	5.0"	K 125mm
D	6.0"	M 150mm
E	7.0"	P 170mm

⑥ Angle (degree): 00 0°, 90 90°

⑦ Modular Blade Size: M20, M25

⑧ Hand of Modular Blade: R Right, L Left

### INTERNAL HOLDER

#### ● Mono Block Holder Type

(Inch) **GY A R US16 K 90 A - F 06**  
 (Metric) **20**

① Series Description: A Mono block type

② Holder Type: A Mono block type

③ Hand of Holder: R Right, L Left

④ Shank Size

	Inch	Metric
US12	.750"	20 20mm
US16	1.000"	25 25mm

⑤ Holder Length

	Inch	Metric
K	5.0"	125mm
Q	7.0"	180mm
R	8.0"	200mm

⑥ Angle (degree): 90 90°

⑦ Neck Length

	Inch	Metric
A	1.250"	30mm
B	1.500"	40mm

⑧ Seat Size \*1

	Inch	Metric
D	.079"	2.00mm
E	.094" .098"	2.39mm 2.50mm
F	.118" .125"	3.00mm 3.18mm
G	.157"	4.00mm
H	.187" .197"	4.75mm 5.00mm
J	.236" .250"	6.00mm 6.35mm

⑨ Max. Grooving Depth

	Inch	Metric
06	.236"	6mm
07	.276"	7mm

#### ● Modular Holder Type

(Inch) **GY D L US20 L 90 D - M25 R**  
 (Metric) **40**

① Series Description: B Modular blade type

② Holder Type: B Modular blade type

③ Hand of Holder: R Right, L Left

④ Shank Size

	Inch	Metric
US20	1.250"	32 32mm
US24	1.500"	40 40mm
US32	2.000"	50 50mm

⑤ Holder Length

	Inch	Metric
L	5.5"	140mm
M	6.0"	150mm
P	6.75"	170mm
S	10.0"	250mm
T	12.0"	300mm

⑥ Angle (degree): 90 90°

⑦ Neck Length

	Inch	Metric
C	2.000"	50mm
D	2.500"	60mm
F	3.250"	80mm

⑧ Modular Blade Size: M20, M25

⑨ Hand of Modular Blade: R Right, L Left

# CLASSIFICATION OF GY INSERTS (EXTERNAL / FACE / INTERNAL)

## Inserts

Applications	Geometry	Order Number	Stock					Seat Size	Dimensions (inch)				
			Coated		Cermet	CBN	W3		Re	ar (Max.)	L2		
			VP10RT	VP20RT	MY5015	NX2525	MB8025					Grooving Width	Tolerance
For Grooving / Cutting off	<b>GS Breaker</b> (Low feeds)  	<b>GY2M0200D020N-GS</b>	●	●	●			D	.079	±.0012	.008	.736	.815
		<b>0239E020N-GS</b>	●	●	●			E	.094	±.0012	.008	.728	.815
		<b>0250E020N-GS</b>	●	●	●			E	.098	±.0012	.008	.728	.815
		<b>0300F020N-GS</b>	●	●	●			F	.118	±.0012	.008	.728	.815
		<b>0318F020N-GS</b>	●	●	●			F	.125	±.0012	.008	.728	.815
		<b>0400G020N-GS</b>	●	●	●			G	.157	±.0016	.008	.941	1.010
		<b>0475H030N-GS</b>	●	●	●			H	.187	±.0016	.012	.941	1.010
		<b>0500H030N-GS</b>	●	●	●			H	.197	±.0016	.012	.945	1.010
		<b>0600J030N-GS</b>	●	●	●			J	.236	±.0016	.012	.949	1.010
	<b>0635J030N-GS</b>	●	●	●			J	.250	±.0016	.012	.949	1.010	
	<b>GM Breaker</b> (Medium feeds)  	<b>GY2M0200D020N-GM</b>	●	●	●			D	.079	±.0012	.008	.764	.815
		<b>0239E020N-GM</b>	●	●	●			E	.094	±.0012	.008	.764	.815
		<b>0250E020N-GM</b>	●	●	●			E	.098	±.0012	.008	.764	.815
		<b>0300F030N-GM</b>	●	●	●			F	.118	±.0012	.012	.764	.815
		<b>0318F030N-GM</b>	●	●	●			F	.125	±.0012	.012	.764	.815
		<b>0400G030N-GM</b>	●	●	●			G	.157	±.0016	.012	.961	1.010
		<b>0475H040N-GM</b>	●	●	●			H	.187	±.0016	.016	.957	1.010
		<b>0500H040N-GM</b>	●	●	●			H	.197	±.0016	.016	.957	1.010
<b>0600J040N-GM</b>		●	●	●			J	.236	±.0016	.016	.957	1.010	
<b>0635J040N-GM</b>	●	●	●			J	.250	±.0016	.016	.957	1.010		
For Cutting off	<b>R/L05-GM Breaker</b>   Right hand insert shown.	<b>GY2M0200D020R05-GM</b>	●	●				D	.079	±.0012	.008	.768	.819
		<b>0200D020L05-GM</b>	●	●				D	.079	±.0012	.008	.768	.819
		<b>0250E020R05-GM</b>	●	●				E	.098	±.0012	.008	.768	.820
		<b>0250E020L05-GM</b>	●	●				E	.098	±.0012	.008	.768	.820
		<b>0300F030R05-GM</b>	●	●				F	.118	±.0012	.012	.768	.821
		<b>0300F030L05-GM</b>	●	●				F	.118	±.0012	.012	.768	.821
		<b>0400G030R05-GM</b>	●	●				G	.157	±.0016	.012	.965	1.018
		<b>0400G030L05-GM</b>	●	●				G	.157	±.0016	.012	.965	1.018
		<b>0500H040R05-GM</b>	●	●				H	.197	±.0016	.016	.965	1.022
<b>0500H040L05-GM</b>	●	●				H	.197	±.0016	.016	.965	1.022		

### ● Insert Grade

Work Material / Machining Condition	<b>P</b> Steel	<b>M</b> Stainless Steel	<b>K</b> Cast Iron	<b>S</b> Heat-resistant Alloy / Titanium Alloy	<b>H</b> Hardened Steel
Stable ↑ Machining Condition ↓ Unstable	● <b>NX2525</b> ● <b>MY5015</b> ● <b>VP10RT</b> ● <b>VP20RT</b>	● <b>VP10RT</b> ● <b>VP20RT</b>	● <b>MY5015</b> ● <b>VP10RT</b> ● <b>VP20RT</b>	● <b>VP10RT</b> ● <b>VP20RT</b>	● <b>MB8025</b>

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.

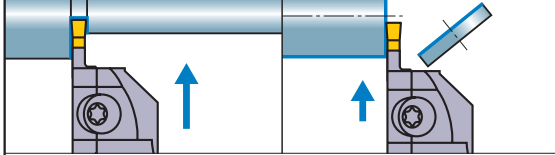
● : Inventory maintained. (10 inserts in one case)(CBN: 1 inserts in one case)

Applications	Geometry	Order Number	Stock					Seat Size	Dimensions (inch)					
			Coated		Cermet	CBN	W3		Re	ar (Max.)	L2			
			VP10RT	VP20RT	MY5015	NX2525	MB8025					Grooving Width	Tolerance	
			NEW	NEW										
For Multifunctional Grooving	<b>MS Breaker</b> (Low feeds) 	<b>GY2M0300F020N-MS</b>	●	●	●	●			<b>F</b>	.118	±.0012	.008	.756	.815
		<b>0300F040N-MS</b>	●	●	●	●			<b>F</b>	.118	±.0012	.016	.744	.815
		<b>0400G020N-MS</b>	●	●	●	●			<b>G</b>	.157	±.0016	.008	.953	1.010
		<b>0400G040N-MS</b>	●	●	●	●			<b>G</b>	.157	±.0016	.016	.941	1.010
		<b>0500H040N-MS</b>	●	●	●	●			<b>H</b>	.197	±.0016	.016	.941	1.010
		<b>0500H080N-MS</b>	●	●	●	●			<b>H</b>	.197	±.0016	.031	.925	1.010
		<b>0600J040N-MS</b>	●	●	●	●			<b>J</b>	.236	±.0016	.016	.941	1.010
		<b>0600J080N-MS</b>	●	●	●	●			<b>J</b>	.236	±.0016	.031	.925	1.010
	<b>MM Breaker</b> (Medium feeds) 	<b>GY2M0300F020N-MM</b>	●	●	●	●			<b>F</b>	.118	±.0012	.008	.752	.815
		<b>0300F040N-MM</b>	●	●	●	●			<b>F</b>	.118	±.0012	.016	.744	.815
		<b>0400G040N-MM</b>	●	●	●	●			<b>G</b>	.157	±.0016	.016	.941	1.010
		<b>0400G080N-MM</b>	●	●	●	●			<b>G</b>	.157	±.0016	.031	.925	1.010
		<b>0500H040N-MM</b>	●	●	●	●			<b>H</b>	.197	±.0016	.016	.941	1.010
		<b>0500H080N-MM</b>	●	●	●	●			<b>H</b>	.197	±.0016	.031	.925	1.010
<b>0600J040N-MM</b>		●	●	●	●			<b>J</b>	.236	±.0016	.016	.941	1.010	
<b>0600J080N-MM</b>		●	●	●	●			<b>J</b>	.236	±.0016	.031	.925	1.010	
For Copying	<b>BM Breaker</b> 	<b>GY2M0300F150N-BM</b>	●	●	●	●			<b>F</b>	.118	±.0012	.059	.748	.823
		<b>0318F159N-BM</b>	●	●	●	●			<b>F</b>	.125	±.0012	.063	.744	.823
		<b>0400G200N-BM</b>	●	●	●	●			<b>G</b>	.157	±.0016	.079	.921	1.016
		<b>0475H238N-BM</b>	●	●	●	●			<b>H</b>	.187	±.0016	.094	.902	1.016
		<b>0500H250N-BM</b>	●	●	●	●			<b>H</b>	.197	±.0016	.098	.898	1.016
		<b>0600J300N-BM</b>	●	●	●	●			<b>J</b>	.236	±.0016	.118	.886	1.020
		<b>0635J318N-BM</b>	●	●	●	●			<b>J</b>	.250	±.0016	.125	.878	1.020
For Grooving	<b>Flat Top (CBN)</b> 	<b>GY1G0200D020N-GFGS</b>					●	<b>D</b>	.079	±.0012	.008	—	.815	
		<b>0239E020N-GFGS</b>					●	<b>E</b>	.094	±.0012	.008	—	.815	
		<b>0250E020N-GFGS</b>					●	<b>E</b>	.098	±.0012	.008	—	.815	
		<b>0300F020N-GFGS</b>					●	<b>F</b>	.118	±.0012	.008	—	.815	
		<b>0318F020N-GFGS</b>					●	<b>F</b>	.125	±.0012	.008	—	.815	
		<b>0400G020N-GFGS</b>					●	<b>G</b>	.157	±.0012	.008	—	1.010	
		<b>0475H020N-GFGS</b>					●	<b>H</b>	.187	±.0012	.008	—	1.010	
		<b>0500H020N-GFGS</b>					●	<b>H</b>	.197	±.0012	.008	—	1.010	

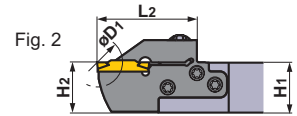
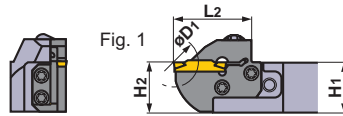
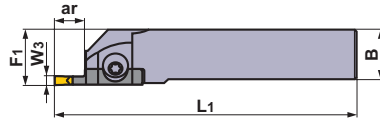
# GY SERIES (EXTERNAL GROOVING)

**1-1** 00° type holder (Inch)

Insert	GY2M○○○○○○○○-GS	Insert	GY2M○○○○○○○○-GS
Insert	GY2M○○○○○○○○-GM	Insert	GY2M○○○○○○○○-GM
Insert	GY1G○○○○○○○○-GS	Insert	GY2M○○○○○○/L○○-GM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.



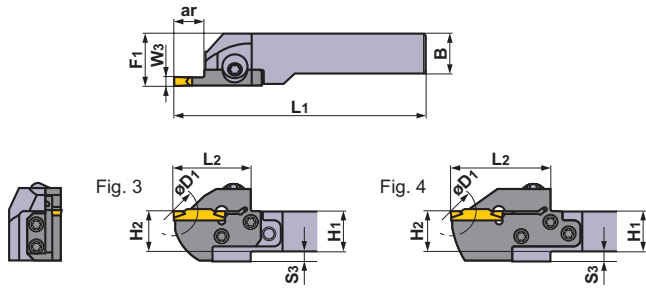
Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
D	.079	R	.236	.472	(1D1R3D1)	GYM20RA-D06	●	GYHRUS10B00-M20R	●
			.394	.787	(1D1R3D2)	GYM20RA-D10	●		
			.709 *4	1.417	(1D1R3D3)	GYM20RB-D18	●		
			.236	.472	(1F1R3D1)	GYM20RA-D06	●	GYHRUS12C00-M20R	●
			.394	.787	(1F1R3D2)	GYM20RA-D10	●		
			.709 *4	1.417	(1F1R3D3)	GYM20RB-D18	●		
			.236	.472	(1F1R4D1)	GYM25RA-D06	●	GYHRUS12C00-M25R	●
			.472	.945	(1F1R4D2)	GYM25RA-D12	●		
			.787 *1	1.575 *2	(1F1R4D3)	GYM25RA-D20	●		
			.236	.472	(1H1R4D1)	GYM25RA-D06	●	GYHRUS16D00-M25R	●
			.472	.945	(1H1R4D2)	GYM25RA-D12	●		
			.787 *1	1.575 *2	(1H1R4D3)	GYM25RA-D20	●		
		NEW	.236	.472	(1K1R4D1)	GYM25RA-D06	●	GYHRUS20D00-M25R	●
		NEW	.472	.945	(1K1R4D2)	GYM25RA-D12	●		
		NEW	.787 *1	1.575 *2	(1K1R4D3)	GYM25RA-D20	●		
		NEW	.236	.472	(1M1R4D1)	GYM25RA-D06	●	GYHRUS24E00-M25R	●
		NEW	.472	.945	(1M1R4D2)	GYM25RA-D12	●		
		NEW	.787 *1	1.575 *2	(1M1R4D3)	GYM25RA-D20	●		
		L	.236	.472	(1D1L3D1)	GYM20LA-D06	●	GYHLUS10B00-M20L	●
			.394	.787	(1D1L3D2)	GYM20LA-D10	●		
			.709 *4	1.417	(1D1L3D3)	GYM20LB-D18	●		
			.236	.472	(1F1L3D1)	GYM20LA-D06	●	GYHLUS12C00-M20L	●
			.394	.787	(1F1L3D2)	GYM20LA-D10	●		
			.709 *4	1.417	(1F1L3D3)	GYM20LB-D18	●		
.236	.472		(1F1L4D1)	GYM25LA-D06	●	GYHLUS12C00-M25L	●		
.472	.945		(1F1L4D2)	GYM25LA-D12	●				
.787 *1	1.575 *2		(1F1L4D3)	GYM25LA-D20	●				
.236	.472		(1H1L4D1)	GYM25LA-D06	●	GYHLUS16D00-M25L	●		
.472	.945		(1H1L4D2)	GYM25LA-D12	●				
.787 *1	1.575 *2		(1H1L4D3)	GYM25LA-D20	●				
NEW	.236	.472	(1K1L4D1)	GYM25LA-D06	●	GYHLUS20D00-M25L	●		
NEW	.472	.945	(1K1L4D2)	GYM25LA-D12	●				
NEW	.787 *1	1.575 *2	(1K1L4D3)	GYM25LA-D20	●				
NEW	.236	.472	(1M1L4D1)	GYM25LA-D06	●	GYHLUS24E00-M25L	●		
NEW	.472	.945	(1M1L4D2)	GYM25LA-D12	●				
NEW	.787 *1	1.575 *2	(1M1L4D3)	GYM25LA-D20	●				

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.  
 \*4 The maximum groove depth is limited by the workpiece diameter. For details, please refer to page 46.

## SPARE PARTS



Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHR/LUS10B00-M20R/L	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/LUS12C00-M20R/L			
GYHR/LUS12C00-M25R/L		TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
GYHR/LUS16D00-M25R/L			
GYHR/LUS20D00-M25R/L			
GYHR/LUS24E00-M25R/L			

Dimensions (inch) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
.625	.625	4.264	1.102	.625	.812	.125	3				P11 P12	
.625	.625	4.500	1.339	.625	.812	.125	3					
.625	.625	4.736	1.575	.625	.812	.125	4					
.750	.750	4.764	1.102	.750	.875	—	1					
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	5.236	1.575	.750	.875	—	2					
.750	.750	4.685	1.220	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.236	1.772	.750	1.000	.250	4					
1.000	1.000	5.685	1.220	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.236	1.772	1.000	1.125	—	2					
1.250	1.250	5.685	1.220	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.236	1.772	1.250	1.375	—	2					
1.500	1.500	6.685	1.220	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.236	1.772	1.500	1.625	—	2					
.625	.625	4.264	1.102	.625	.812	.125	3				P11 P12	
.625	.625	4.500	1.339	.625	.812	.125	3					
.625	.625	4.736	1.575	.625	.812	.125	4					
.750	.750	4.764	1.102	.750	.875	—	1					
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	5.236	1.575	.750	.875	—	2					
.750	.750	4.685	1.220	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.236	1.772	.750	1.000	.250	4					
1.000	1.000	5.685	1.220	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.236	1.772	1.000	1.125	—	2					
1.250	1.250	5.685	1.220	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.236	1.772	1.250	1.375	—	2					
1.500	1.500	6.685	1.220	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.236	1.772	1.500	1.625	—	2					

GY2M0200D020N-GS

GY2M0200D020N-GM  
(Gauge insert)

GY2M0200D020R05-GM  
GY2M0200D020L05-GM

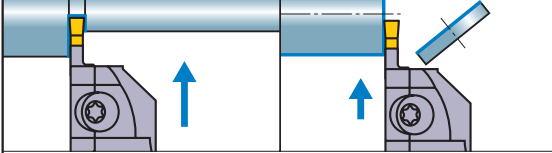
GY1G0200D020N-GFGS

EXTERNAL GROOVING

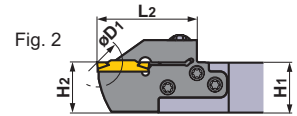
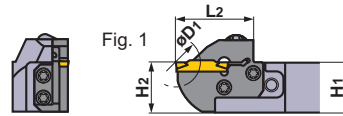
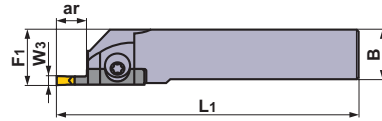
# GY SERIES (EXTERNAL GROOVING)

**1-1** 00° type holder (Inch)

Insert	GY2M <sup>0000000000</sup> -GS	Insert	GY2M <sup>0000000000</sup> -GS
Insert	GY2M <sup>0000000000</sup> -GM	Insert	GY2M <sup>0000000000</sup> -GM
Insert	GY1G <sup>0000000000</sup> -GS	Insert	GY2M <sup>0000000000</sup> /L <sup>00</sup> -GM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.



Right hand tool holder shown.

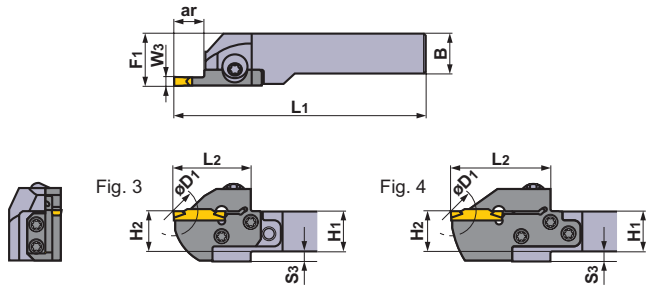
EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number				
						Modular Blade	Stock	Modular Holder	Stock	
E	.094	R	.236	.472	(1D1R3E1)	GYM20RA-E06	●	GYHRUS10B00-M20R	●	
			.394	.787	(1D1R3E2)	GYM20RA-E10	●			
			.709 *4	1.417	(1D1R3E3)	GYM20RB-E18	●			
			.236	.472	(1F1R3E1)	GYM20RA-E06	●	GYHRUS12C00-M20R	●	
			.394	.787	(1F1R3E2)	GYM20RA-E10	●			
			.709 *4	1.417	(1F1R3E3)	GYM20RB-E18	●			
			.236	.472	(1F1R4E1)	GYM25RA-E06	●	GYHRUS12C00-M25R	●	
			.472	.945	(1F1R4E2)	GYM25RA-E12	●			
			.787 *1	1.575 *2	(1F1R4E3)	GYM25RA-E20	●			
			.236	.472	(1H1R4E1)	GYM25RA-E06	●	GYHRUS16D00-M25R	●	
			.472	.945	(1H1R4E2)	GYM25RA-E12	●			
			.787 *1	1.575 *2	(1H1R4E3)	GYM25RA-E20	●			
			NEW	.236	.472	(1K1R4E1)	GYM25RA-E06	●	GYHRUS20D00-M25R	●
			NEW	.472	.945	(1K1R4E2)	GYM25RA-E12	●		
	NEW	.787 *1	1.575 *2	(1K1R4E3)	GYM25RA-E20	●				
	NEW	.236	.472	(1M1R4E1)	GYM25RA-E06	●	GYHRUS24E00-M25R	●		
	NEW	.472	.945	(1M1R4E2)	GYM25RA-E12	●				
	NEW	.787 *1	1.575 *2	(1M1R4E3)	GYM25RA-E20	●				
	.098	L	.236	.472	(1D1L3E1)	GYM20LA-E06	●	GYHLUS10B00-M20L	●	
			.394	.787	(1D1L3E2)	GYM20LA-E10	●			
			.709 *4	1.417	(1D1L3E3)	GYM20LB-E18	●			
			.236	.472	(1F1L3E1)	GYM20LA-E06	●	GYHLUS12C00-M20L	●	
			.394	.787	(1F1L3E2)	GYM20LA-E10	●			
			.709 *4	1.417	(1F1L3E3)	GYM20LB-E18	●			
			.236	.472	(1F1L4E1)	GYM25LA-E06	●	GYHLUS12C00-M25L	●	
			.472	.945	(1F1L4E2)	GYM25LA-E12	●			
			.787 *1	1.575 *2	(1F1L4E3)	GYM25LA-E20	●			
			.236	.472	(1H1L4E1)	GYM25LA-E06	●	GYHLUS16D00-M25L	●	
.472			.945	(1H1L4E2)	GYM25LA-E12	●				
.787 *1			1.575 *2	(1H1L4E3)	GYM25LA-E20	●				
NEW			.236	.472	(1K1L4E1)	GYM25LA-E06	●	GYHLUS20D00-M25L	●	
NEW			.472	.945	(1K1L4E2)	GYM25LA-E12	●			
NEW	.787 *1	1.575 *2	(1K1L4E3)	GYM25LA-E20	●					
NEW	.236	.472	(1M1L4E1)	GYM25LA-E06	●	GYHLUS24E00-M25L	●			
NEW	.472	.945	(1M1L4E2)	GYM25LA-E12	●					
NEW	.787 *1	1.575 *2	(1M1L4E3)	GYM25LA-E20	●					

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.  
 \*4 The maximum groove depth is limited by the workpiece diameter. For details, please refer to page 46.



## SPARE PARTS



Right hand tool holder shown.

Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHR/LUS10B00-M20R/L	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/LUS12C00-M20R/L			
GYHR/LUS12C00-M25R/L		TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
GYHR/LUS16D00-M25R/L			
GYHR/LUS20D00-M25R/L			
GYHR/LUS24E00-M25R/L			

Dimensions (inch) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
.625	.625	4.264	1.102	.625	.812	.125	3				P11 P12	
.625	.625	4.500	1.339	.625	.812	.125	3					
.625	.625	4.736	1.575	.625	.812	.125	4					
.750	.750	4.764	1.102	.750	.875	—	1					
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	5.236	1.575	.750	.875	—	2					
.750	.750	4.685	1.220	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.236	1.772	.750	1.000	.250	4					
1.000	1.000	5.685	1.220	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.236	1.772	1.000	1.125	—	2					
1.250	1.250	5.685	1.220	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.236	1.772	1.250	1.375	—	2					
1.500	1.500	6.685	1.220	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.236	1.772	1.500	1.625	—	2					
.625	.625	4.264	1.102	.625	.812	.125	3					
.625	.625	4.500	1.339	.625	.812	.125	3					
.625	.625	4.736	1.575	.625	.812	.125	4					
.750	.750	4.764	1.102	.750	.875	—	1					
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	5.236	1.575	.750	.875	—	2					
.750	.750	4.685	1.220	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.236	1.772	.750	1.000	.250	4					
1.000	1.000	5.685	1.220	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.236	1.772	1.000	1.125	—	2					
1.250	1.250	5.685	1.220	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.236	1.772	1.250	1.375	—	2					
1.500	1.500	6.685	1.220	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.236	1.772	1.500	1.625	—	2					

GY2M0239E020N-GS  
GY2M0250E020N-GS

GY2M0239E020N-GM  
GY2M0250E020N-GM  
(Gauge insert)

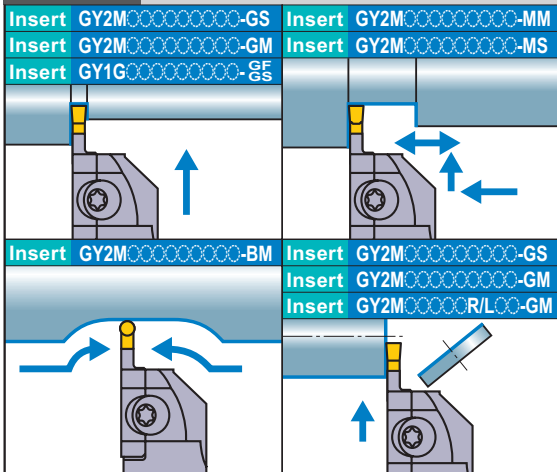
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GY2M0250E020L05-GM

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GY1G0250E020N-GFGS

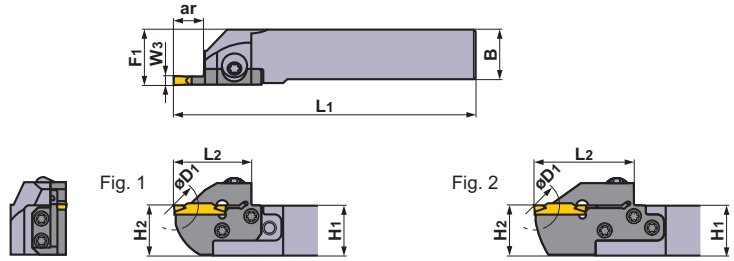
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

**1-1** 00° type holder (Inch)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.



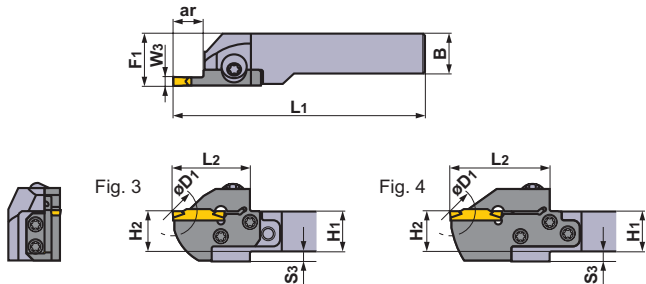
Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number				
						Modular Blade	Stock	Modular Holder	Stock	
F	.118	R	.236	.472	(1D1R3F1)	<b>GYM20RA-F06</b>	●	<b>GYHRUS10B00-M20R</b>	●	
			.394	.787	(1D1R3F2)	<b>GYM20RA-F10</b>	●			
			.709 *4	1.417	(1D1R3F3)	<b>GYM20RB-F18</b>	●			
			.236	.472	(1F1R3F1)	<b>GYM20RA-F06</b>	●	<b>GYHRUS12C00-M20R</b>	●	
			.394	.787	(1F1R3F2)	<b>GYM20RA-F10</b>	●			
			.709 *4	1.417	(1F1R3F3)	<b>GYM20RB-F18</b>	●			
			.236	.472	(1F1R4F1)	<b>GYM25RA-F06</b>	●	<b>GYHRUS12C00-M25R</b>	●	
			.472	.945	(1F1R4F2)	<b>GYM25RA-F12</b>	●			
			.787 *1	1.575 *2	(1F1R4F3)	<b>GYM25RA-F20</b>	●			
			.236	.472	(1H1R4F1)	<b>GYM25RA-F06</b>	●	<b>GYHRUS16D00-M25R</b>	●	
			.472	.945	(1H1R4F2)	<b>GYM25RA-F12</b>	●			
			.787 *1	1.575 *2	(1H1R4F3)	<b>GYM25RA-F20</b>	●			
			<b>NEW</b>	.236	.472	(1K1R4F1)	<b>GYM25RA-F06</b>	●	<b>GYHRUS20D00-M25R</b>	●
			<b>NEW</b>	.472	.945	(1K1R4F2)	<b>GYM25RA-F12</b>	●		
	<b>NEW</b>	.787 *1	1.575 *2	(1K1R4F3)	<b>GYM25RA-F20</b>	●				
	<b>NEW</b>	.236	.472	(1M1R4F1)	<b>GYM25RA-F06</b>	●	<b>GYHRUS24E00-M25R</b>	●		
	<b>NEW</b>	.472	.945	(1M1R4F2)	<b>GYM25RA-F12</b>	●				
	<b>NEW</b>	.787 *1	1.575 *2	(1M1R4F3)	<b>GYM25RA-F20</b>	●				
	.125	L	.236	.472	(1D1L3F1)	<b>GYM20LA-F06</b>	●	<b>GYHLUS10B00-M20L</b>	●	
			.394	.787	(1D1L3F2)	<b>GYM20LA-F10</b>	●			
			.709 *4	1.417	(1D1L3F3)	<b>GYM20LB-F18</b>	●			
			.236	.472	(1F1L3F1)	<b>GYM20LA-F06</b>	●	<b>GYHLUS12C00-M20L</b>	●	
			.394	.787	(1F1L3F2)	<b>GYM20LA-F10</b>	●			
			.709 *4	1.417	(1F1L3F3)	<b>GYM20LB-F18</b>	●			
			.236	.472	(1F1L4F1)	<b>GYM25LA-F06</b>	●	<b>GYHLUS12C00-M25L</b>	●	
			.472	.945	(1F1L4F2)	<b>GYM25LA-F12</b>	●			
			.787 *1	1.575 *2	(1F1L4F3)	<b>GYM25LA-F20</b>	●			
			.236	.472	(1H1L4F1)	<b>GYM25LA-F06</b>	●	<b>GYHLUS16D00-M25L</b>	●	
.472			.945	(1H1L4F2)	<b>GYM25LA-F12</b>	●				
.787 *1			1.575 *2	(1H1L4F3)	<b>GYM25LA-F20</b>	●				
<b>NEW</b>			.236	.472	(1K1L4F1)	<b>GYM25LA-F06</b>	●	<b>GYHLUS20D00-M25L</b>	●	
<b>NEW</b>			.472	.945	(1K1L4F2)	<b>GYM25LA-F12</b>	●			
<b>NEW</b>	.787 *1	1.575 *2	(1K1L4F3)	<b>GYM25LA-F20</b>	●					
<b>NEW</b>	.236	.472	(1M1L4F1)	<b>GYM25LA-F06</b>	●	<b>GYHLUS24E00-M25L</b>	●			
<b>NEW</b>	.472	.945	(1M1L4F2)	<b>GYM25LA-F12</b>	●					
<b>NEW</b>	.787 *1	1.575 *2	(1M1L4F3)	<b>GYM25LA-F20</b>	●					

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.  
 \*4 The maximum groove depth is limited by the workpiece diameter. For details, please refer to page 46.

## SPARE PARTS



Right hand tool holder shown.

Modular Holder Number	Clamp Screw	Blade Screw (5 pcs.)	Wrench
GYHR/LUS10B00-M20R/L		TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/LUS12C00-M20R/L		GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)
GYHR/LUS12C00-M25R/L			
GYHR/LUS16D00-M25R/L			
GYHR/LUS20D00-M25R/L			
GYHR/LUS24E00-M25R/L			

Dimensions (inch) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
.625	.625	4.264	1.102	.625	.812	.125	3					
.625	.625	4.500	1.339	.625	.812	.125	3					
.625	.625	4.736	1.575	.625	.812	.125	4					
.750	.750	4.764	1.102	.750	.875	—	1					
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	5.236	1.575	.750	.875	—	2					
.750	.750	4.685	1.220	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.236	1.772	.750	1.000	.250	4					
1.000	1.000	5.685	1.220	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.236	1.772	1.000	1.125	—	2					
1.250	1.250	5.685	1.220	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.236	1.772	1.250	1.375	—	2					
1.500	1.500	6.685	1.220	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.236	1.772	1.500	1.625	—	2					
.625	.625	4.264	1.102	.625	.812	.125	3					
.625	.625	4.500	1.339	.625	.812	.125	3					
.625	.625	4.736	1.575	.625	.812	.125	4					
.750	.750	4.764	1.102	.750	.875	—	1					
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	5.236	1.575	.750	.875	—	2					
.750	.750	4.685	1.220	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.236	1.772	.750	1.000	.250	4					
1.000	1.000	5.685	1.220	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.236	1.772	1.000	1.125	—	2					
1.250	1.250	5.685	1.220	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.236	1.772	1.250	1.375	—	2					
1.500	1.500	6.685	1.220	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.236	1.772	1.500	1.625	—	2					

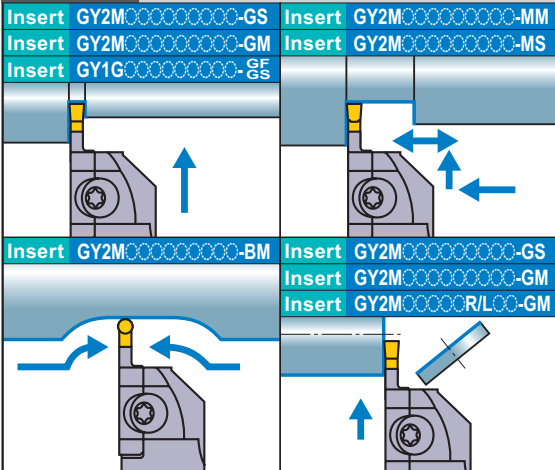
- GY2M0300F020N-GS**
- GY2M0318F020N-GS**
- GY2M0300F030N-GM**  
(Gauge insert)
- GY2M0318F030N-GM**
- GY2M0300F030R05-GM**
- GY2M0300F030L05-GM**
- GY2M0300F020N-MS**
- GY2M0300F040N-MS**
- GY2M0300F020N-MM**
- GY2M0300F040N-MM**
- GY2M0300F150N-BM**
- GY2M0318F159N-BM**
- GY1G0300F020N-GFGS**
- GY1G0318F020N-GFGS**

P11  
P12

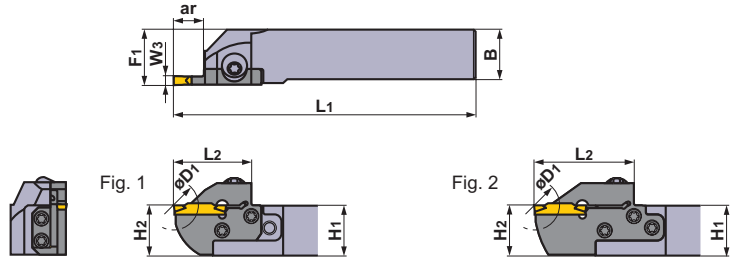
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

## 1-1 00° type holder (Inch)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.



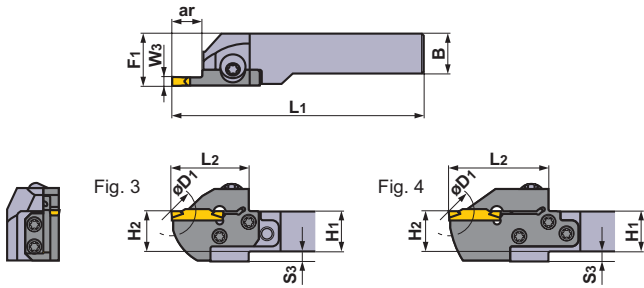
Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
G	.157	R	.472	.945	(1D1R3G1)	<b>GYM20RA-G12</b>	●	<b>GYHRUS10B00-M20R</b>	●
			.472	.945	(1F1R3G1)	<b>GYM20RA-G12</b>	●	<b>GYHRUS12C00-M20R</b>	●
			.315	.630	(1F1R4G1)	<b>GYM25RA-G08</b>	●		
			.551	1.102	(1F1R4G2)	<b>GYM25RA-G14</b>	●	<b>GYHRUS12C00-M25R</b>	●
			.984 *1	1.969 *2	(1F1R4G3)	<b>GYM25RA-G25</b>	●		
			.315	.630	(1H1R4G1)	<b>GYM25RA-G08</b>	●		
			.551	1.102	(1H1R4G2)	<b>GYM25RA-G14</b>	●	<b>GYHRUS16D00-M25R</b>	●
			.984 *1	1.969 *2	(1H1R4G3)	<b>GYM25RA-G25</b>	●		
			NEW .315	.630	(1K1R4G1)	<b>GYM25RA-G08</b>	●		
			NEW .551	1.102	(1K1R4G2)	<b>GYM25RA-G14</b>	●	<b>GYHRUS20D00-M25R</b>	●
		NEW .984 *1	1.969 *2	(1K1R4G3)	<b>GYM25RA-G25</b>	●			
		NEW .315	.630	(1M1R4G1)	<b>GYM25RA-G08</b>	●			
		NEW .551	1.102	(1M1R4G2)	<b>GYM25RA-G14</b>	●	<b>GYHRUS24E00-M25R</b>	●	
		NEW .984 *1	1.969 *2	(1M1R4G3)	<b>GYM25RA-G25</b>	●			
		L	.472	.945	(1D1L3G1)	<b>GYM20LA-G12</b>	●	<b>GYHLUS10B00-M20L</b>	●
			.472	.945	(1F1L3G1)	<b>GYM20LA-G12</b>	●	<b>GYHLUS12C00-M20L</b>	●
			.315	.630	(1F1L4G1)	<b>GYM25LA-G08</b>	●		
			.551	1.102	(1F1L4G2)	<b>GYM25LA-G14</b>	●	<b>GYHLUS12C00-M25L</b>	●
			.984 *1	1.969 *2	(1F1L4G3)	<b>GYM25LA-G25</b>	●		
			.315	.630	(1H1L4G1)	<b>GYM25LA-G08</b>	●		
.551	1.102		(1H1L4G2)	<b>GYM25LA-G14</b>	●	<b>GYHLUS16D00-M25L</b>	●		
.984 *1	1.969 *2		(1H1L4G3)	<b>GYM25LA-G25</b>	●				
NEW .315	.630		(1K1L4G1)	<b>GYM25LA-G08</b>	●				
NEW .551	1.102		(1K1L4G2)	<b>GYM25LA-G14</b>	●	<b>GYHLUS20D00-M25L</b>	●		
NEW .984 *1	1.969 *2	(1K1L4G3)	<b>GYM25LA-G25</b>	●					
NEW .315	.630	(1M1L4G1)	<b>GYM25LA-G08</b>	●					
NEW .551	1.102	(1M1L4G2)	<b>GYM25LA-G14</b>	●	<b>GYHLUS24E00-M25L</b>	●			
NEW .984 *1	1.969 *2	(1M1L4G3)	<b>GYM25LA-G25</b>	●					

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.

## SPARE PARTS



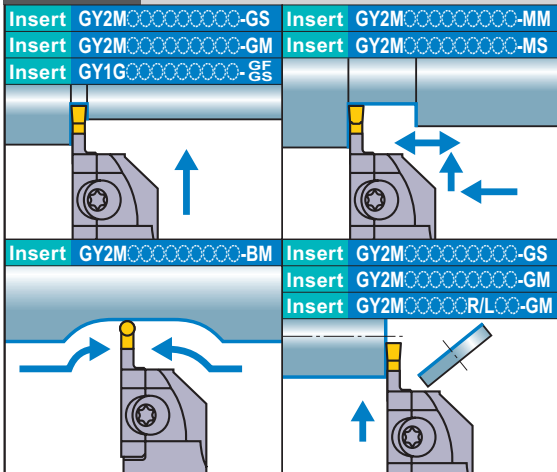
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHR/LUS10B00-M20R/L	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/LUS12C00-M20R/L			TS55 (Clamp Torque : 44 lbf-in)
GYHR/LUS12C00-M25R/L			
GYHR/LUS16D00-M25R/L			
GYHR/LUS20D00-M25R/L			
GYHR/LUS24E00-M25R/L			

Dimensions (inch) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
.625	.625	4.500	1.339	.625	.812	.125	3			<b>GY2M0400G020N-GS</b> <b>GY2M0400G030N-GM</b> (Gauge insert) <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b> <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b> <b>GY2M0400G200N-BM</b> <b>GY1G0400G020N-GFGS</b>	P11 P12	
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	4.764	1.299	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.433	1.969	.750	1.000	.250	4					
1.000	1.000	5.764	1.299	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.433	1.969	1.000	1.125	—	2					
1.250	1.250	5.764	1.299	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.433	1.969	1.250	1.375	—	2					
1.500	1.500	6.764	1.299	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.433	1.969	1.500	1.625	—	2					
.625	.625	4.500	1.339	.625	.812	.125	3					
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	4.764	1.299	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.433	1.969	.750	1.000	.250	4					
1.000	1.000	5.764	1.299	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.433	1.969	1.000	1.125	—	2					
1.250	1.250	5.764	1.299	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.433	1.969	1.250	1.375	—	2					
1.500	1.500	6.764	1.299	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.433	1.969	1.500	1.625	—	2					

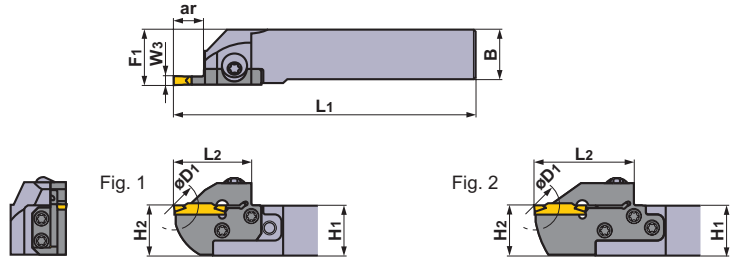
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

## 1-1 00° type holder (Inch)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.

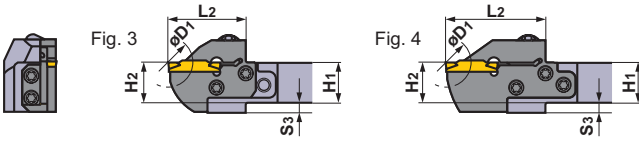
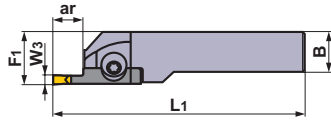


Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
H	.187 .197	R	.472	.945	(1D1R3H1)	<b>GYM20RA-H12</b>	●	<b>GYHRUS10B00-M20R</b>	●
			.472	.945	(1F1R3H1)	<b>GYM20RA-H12</b>	●	<b>GYHRUS12C00-M20R</b>	●
			.315	.630	(1F1R4H1)	<b>GYM25RA-H08</b>	●	<b>GYHRUS12C00-M25R</b>	●
			.551	1.102	(1F1R4H2)	<b>GYM25RA-H14</b>	●		
			.984 *1	1.969 *2	(1F1R4H3)	<b>GYM25RA-H25</b>	●	<b>GYHRUS16D00-M25R</b>	●
			.315	.630	(1H1R4H1)	<b>GYM25RA-H08</b>	●		
			.551	1.102	(1H1R4H2)	<b>GYM25RA-H14</b>	●		
			.984 *1	1.969 *2	(1H1R4H3)	<b>GYM25RA-H25</b>	●		
			NEW .315	.630	(1K1R4H1)	<b>GYM25RA-H08</b>	●	<b>GYHRUS20D00-M25R</b>	●
			NEW .551	1.102	(1K1R4H2)	<b>GYM25RA-H14</b>	●		
		NEW .984 *1	1.969 *2	(1K1R4H3)	<b>GYM25RA-H25</b>	●	<b>GYHRUS24E00-M25R</b>	●	
		NEW .315	.630	(1M1R4H1)	<b>GYM25RA-H08</b>	●			
		NEW .551	1.102	(1M1R4H2)	<b>GYM25RA-H14</b>	●			
		NEW .984 *1	1.969 *2	(1M1R4H3)	<b>GYM25RA-H25</b>	●			
		L	.472	.945	(1D1L3H1)	<b>GYM20LA-H12</b>	●	<b>GYHLUS10B00-M20L</b>	●
			.472	.945	(1F1L3H1)	<b>GYM20LA-H12</b>	●	<b>GYHLUS12C00-M20L</b>	●
			.315	.630	(1F1L4H1)	<b>GYM25LA-H08</b>	●	<b>GYHLUS12C00-M25L</b>	●
			.551	1.102	(1F1L4H2)	<b>GYM25LA-H14</b>	●		
			.984 *1	1.969 *2	(1F1L4H3)	<b>GYM25LA-H25</b>	●	<b>GYHLUS16D00-M25L</b>	●
			.315	.630	(1H1L4H1)	<b>GYM25LA-H08</b>	●		
.551	1.102		(1H1L4H2)	<b>GYM25LA-H14</b>	●				
.984 *1	1.969 *2		(1H1L4H3)	<b>GYM25LA-H25</b>	●				
NEW .315	.630		(1K1L4H1)	<b>GYM25LA-H08</b>	●	<b>GYHLUS20D00-M25L</b>	●		
NEW .551	1.102		(1K1L4H2)	<b>GYM25LA-H14</b>	●				
NEW .984 *1	1.969 *2	(1K1L4H3)	<b>GYM25LA-H25</b>	●	<b>GYHLUS24E00-M25L</b>	●			
NEW .315	.630	(1M1L4H1)	<b>GYM25LA-H08</b>	●					
NEW .551	1.102	(1M1L4H2)	<b>GYM25LA-H14</b>	●					
NEW .984 *1	1.969 *2	(1M1L4H3)	<b>GYM25LA-H25</b>	●					

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.



Right hand tool holder shown.

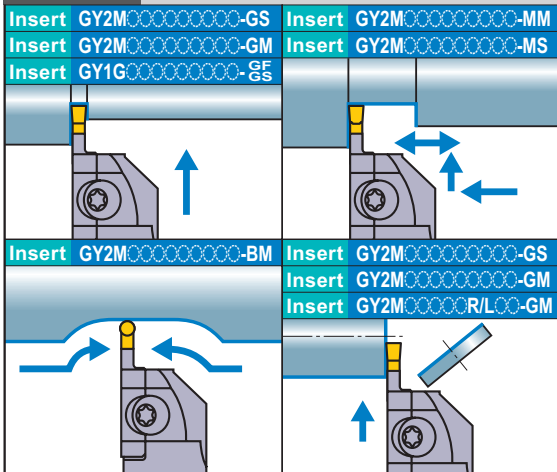
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHR/LUS10B00-M20R/L	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/LUS12C00-M20R/L			
GYHR/LUS12C00-M25R/L		TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
GYHR/LUS16D00-M25R/L			
GYHR/LUS20D00-M25R/L			
GYHR/LUS24E00-M25R/L			

Dimensions (inch) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
.625	.625	4.500	1.339	.625	.812	.125	3			<p>GY2M0475H030N-GS GY2M0500H030N-GS</p> <p>GY2M0475H040N-GM GY2M0500H040N-GM (Gauge insert)</p> <p>GY2M0500H040R05-GM GY2M0500H040L05-GM</p> <p>GY2M0500H040N-MS GY2M0500H080N-MS</p> <p>GY2M0500H040N-MM GY2M0500H080N-MM</p> <p>GY2M0475H238N-BM GY2M0500H250N-BM</p> <p>GY1G0475H020N-GFGS GY1G0500H020N-GFGS</p>	P11 P12	
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	4.764	1.299	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.433	1.969	.750	1.000	.250	4					
1.000	1.000	5.764	1.299	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.433	1.969	1.000	1.125	—	2					
1.250	1.250	5.764	1.299	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.433	1.969	1.250	1.375	—	2					
1.500	1.500	6.764	1.299	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.433	1.969	1.500	1.625	—	2					
.625	.625	4.500	1.339	.625	.812	.125	3					
.750	.750	5.000	1.339	.750	.875	—	1					
.750	.750	4.764	1.299	.750	1.000	.250	3					
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.433	1.969	.750	1.000	.250	4					
1.000	1.000	5.764	1.299	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.433	1.969	1.000	1.125	—	2					
1.250	1.250	5.764	1.299	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.433	1.969	1.250	1.375	—	2					
1.500	1.500	6.764	1.299	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.433	1.969	1.500	1.625	—	2					

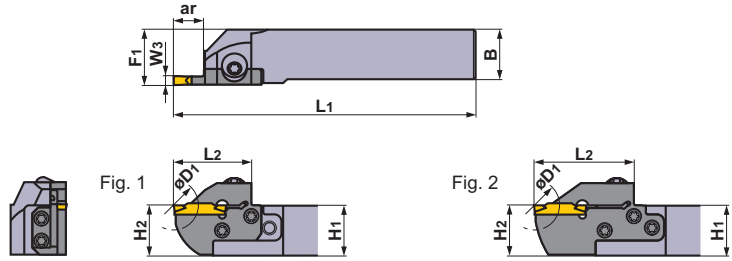
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

**1-1** 00° type holder (Inch)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.



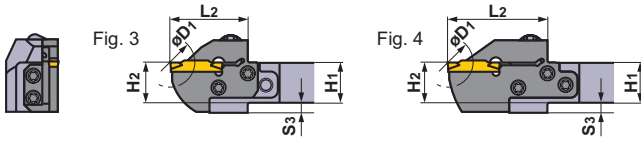
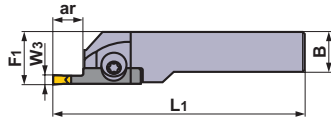
Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
J	.236	R	.315	.630	(1F1R4J1)	<b>GYM25RA-J08</b>	●	<b>GYHRUS12C00-M25R</b>	●
			.551	1.102	(1F1R4J2)	<b>GYM25RA-J14</b>	●		
			.984 *1	1.969 *2	(1F1R4J3)	<b>GYM25RA-J25</b>	●		
			.315	.630	(1H1R4J1)	<b>GYM25RA-J08</b>	●	<b>GYHRUS16D00-M25R</b>	●
			.551	1.102	(1H1R4J2)	<b>GYM25RA-J14</b>	●		
			.984 *1	1.969 *2	(1H1R4J3)	<b>GYM25RA-J25</b>	●		
			<b>NEW</b> .315	.630	(1K1R4J1)	<b>GYM25RA-J08</b>	●	<b>GYHRUS20D00-M25R</b>	●
			<b>NEW</b> .551	1.102	(1K1R4J2)	<b>GYM25RA-J14</b>	●		
			<b>NEW</b> .984 *1	1.969 *2	(1K1R4J3)	<b>GYM25RA-J25</b>	●		
			<b>NEW</b> .315	.630	(1M1R4J1)	<b>GYM25RA-J08</b>	●	<b>GYHRUS24E00-M25R</b>	●
			<b>NEW</b> .551	1.102	(1M1R4J2)	<b>GYM25RA-J14</b>	●		
			<b>NEW</b> .984 *1	1.969 *2	(1M1R4J3)	<b>GYM25RA-J25</b>	●		
	.250	L	.315	.630	(1F1L4J1)	<b>GYM25LA-J08</b>	●	<b>GYHLUS12C00-M25L</b>	●
			.551	1.102	(1F1L4J2)	<b>GYM25LA-J14</b>	●		
			.984 *1	1.969 *2	(1F1L4J3)	<b>GYM25LA-J25</b>	●		
			.315	.630	(1H1L4J1)	<b>GYM25LA-J08</b>	●	<b>GYHLUS16D00-M25L</b>	●
			.551	1.102	(1H1L4J2)	<b>GYM25LA-J14</b>	●		
			.984 *1	1.969 *2	(1H1L4J3)	<b>GYM25LA-J25</b>	●		
			<b>NEW</b> .315	.630	(1K1L4J1)	<b>GYM25LA-J08</b>	●	<b>GYHLUS20D00-M25L</b>	●
			<b>NEW</b> .551	1.102	(1K1L4J2)	<b>GYM25LA-J14</b>	●		
			<b>NEW</b> .984 *1	1.969 *2	(1K1L4J3)	<b>GYM25LA-J25</b>	●		
			<b>NEW</b> .315	.630	(1M1L4J1)	<b>GYM25LA-J08</b>	●	<b>GYHLUS24E00-M25L</b>	●
			<b>NEW</b> .551	1.102	(1M1L4J2)	<b>GYM25LA-J14</b>	●		
			<b>NEW</b> .984 *1	1.969 *2	(1M1L4J3)	<b>GYM25LA-J25</b>	●		

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.





Right hand tool holder shown.

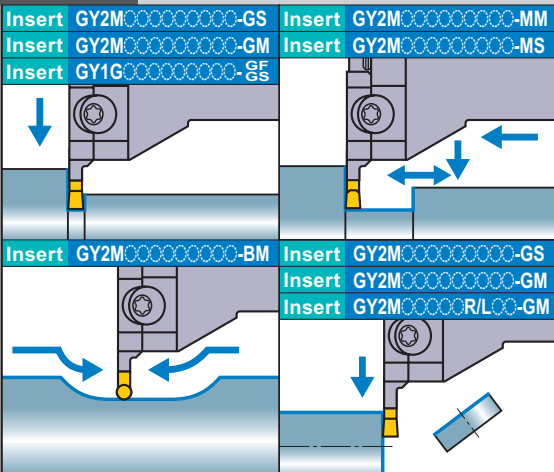
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHR/LUS12C00-M25R/L			
GYHR/LUS16D00-M25R/L	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
GYHR/LUS20D00-M25R/L			
GYHR/LUS24E00-M25R/L			

Dimensions (inch) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
.750	.750	4.764	1.299	.750	1.000	.250	3			GY2M0600J030N-GS GY2M0635J030N-GS  GY2M0600J040N-GM (Gauge insert) GY2M0635J040N-GM  GY2M0600J040N-MS GY2M0600J080N-MS  GY2M0600J040N-MM GY2M0600J080N-MM  GY2M0600J300N-BM GY2M0635J318N-BM	P11 P12	
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.433	1.969	.750	1.000	.250	4					
1.000	1.000	5.764	1.299	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.433	1.969	1.000	1.125	—	2					
1.250	1.250	5.764	1.299	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.433	1.969	1.250	1.375	—	2					
1.500	1.500	6.764	1.299	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.433	1.969	1.500	1.625	—	2					
.750	.750	4.764	1.299	.750	1.000	.250	3			GY2M0600J030N-GS GY2M0635J030N-GS  GY2M0600J040N-GM (Gauge insert) GY2M0635J040N-GM  GY2M0600J040N-MS GY2M0600J080N-MS  GY2M0600J040N-MM GY2M0600J080N-MM  GY2M0600J300N-BM GY2M0635J318N-BM	P11 P12	
.750	.750	5.000	1.535	.750	1.000	.250	3					
.750	.750	5.433	1.969	.750	1.000	.250	4					
1.000	1.000	5.764	1.299	1.000	1.125	—	1					
1.000	1.000	6.000	1.535	1.000	1.125	—	1					
1.000	1.000	6.433	1.969	1.000	1.125	—	2					
1.250	1.250	5.764	1.299	1.250	1.375	—	1					
1.250	1.250	6.000	1.535	1.250	1.375	—	1					
1.250	1.250	6.433	1.969	1.250	1.375	—	2					
1.500	1.500	6.764	1.299	1.500	1.625	—	1					
1.500	1.500	7.000	1.535	1.500	1.625	—	1					
1.500	1.500	7.433	1.969	1.500	1.625	—	2					

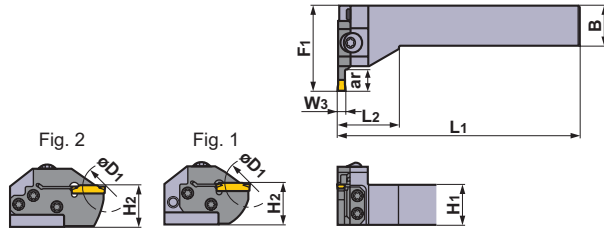
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

## 2-1 90° type holder (Inch)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



Right hand tool holder shown.




EXTERNAL GROOVING

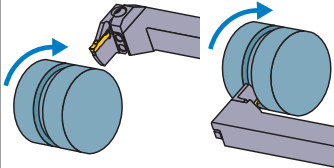




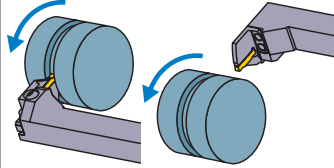




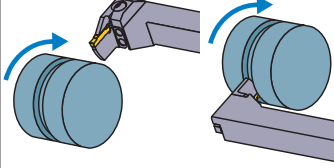






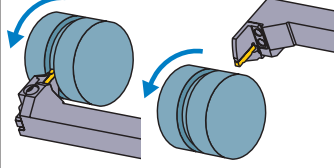


Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number				
						Modular Blade	Stock	Modular Holder	Stock	
D	.079	R	.236	.472	(2F1R3D1)	GYM20LA-D06	●	GYHRUS12C90-M20L	●	
			.394	.787	(2F1R3D2)	GYM20LA-D10	●			
			.709 *4	1.417	(2F1R3D3)	GYM20LB-D18	●			
		L	.236	.472	(2H1R4D1)	GYM25LA-D06	●	GYHRUS16D90-M25L	●	
			.472	.945	(2H1R4D2)	GYM25LA-D12	●			
			.787 *1	1.575 *2	(2H1R4D3)	GYM25LA-D20	●			
	E	.094 .098	R	.236	.472	(2F1R3E1)	GYM20LA-E06	●	GYHRUS12C90-M20L	●
				.394	.787	(2F1R3E2)	GYM20LA-E10	●		
				.709 *4	1.417	(2F1R3E3)	GYM20LB-E18	●		
			L	.236	.472	(2H1R4E1)	GYM25LA-E06	●	GYHRUS16D90-M25L	●
				.472	.945	(2H1R4E2)	GYM25LA-E12	●		
				.787 *1	1.575 *2	(2H1R4E3)	GYM25LA-E20	●		
F	.118 .125	R	.236	.472	(2F1R3F1)	GYM20LA-F06	●	GYHRUS12C90-M20L	●	
			.394	.787	(2F1R3F2)	GYM20LA-F10	●			
			.709 *4	1.417	(2F1R3F3)	GYM20LB-F18	●			
		L	.236	.472	(2H1R4F1)	GYM25LA-F06	●	GYHRUS16D90-M25L	●	
			.472	.945	(2H1R4F2)	GYM25LA-F12	●			
			.787 *1	1.575 *2	(2H1R4F3)	GYM25LA-F20	●			
	E	.094 .098	R	.236	.472	(2F1L3D1)	GYM20RA-D06	●	GYHLUS12C90-M20R	●
				.394	.787	(2F1L3D2)	GYM20RA-D10	●		
				.709 *4	1.417	(2F1L3D3)	GYM20RB-D18	●		
			L	.236	.472	(2H1L4D1)	GYM25RA-D06	●	GYHLUS16D90-M25R	●
				.472	.945	(2H1L4D2)	GYM25RA-D12	●		
				.787 *1	1.575 *2	(2H1L4D3)	GYM25RA-D20	●		
F	.118 .125	R	.236	.472	(2F1L3E1)	GYM20RA-E06	●	GYHLUS12C90-M20R	●	
			.394	.787	(2F1L3E2)	GYM20RA-E10	●			
			.709 *4	1.417	(2F1L3E3)	GYM20RB-E18	●			
		L	.236	.472	(2H1L4E1)	GYM25RA-E06	●	GYHLUS16D90-M25R	●	
			.472	.945	(2H1L4E2)	GYM25RA-E12	●			
			.787 *1	1.575 *2	(2H1L4E3)	GYM25RA-E20	●			

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.  
 \*4 The maximum groove depth is limited by the workpiece diameter. For details, please refer to page 46.

● : Inventory maintained.

## SPARE PARTS

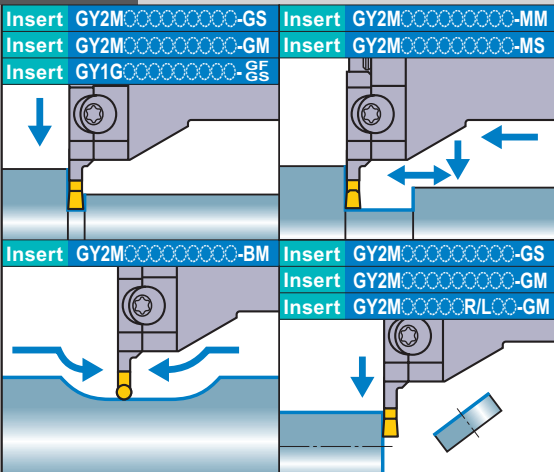
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS12C90-M20L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R
<b>GYHLUS12C90-M20R</b>			TKY15R
<b>GYHRUS16D90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R
<b>GYHLUS16D90-M25R</b>			TKY25R

Dimensions (inch) *3							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
.750	.750	5.000	1.375	.750	1.545	1		 <b>GY2M0200D020N-GS</b>	P11 P12	
.750	.750	5.000	1.375	.750	1.781	1		 <b>GY2M0200D020N-GM</b> (Gauge insert)		
.750	.750	5.000	1.375	.750	2.017	2		 <b>GY2M0200D020R05-GM</b> <b>GY2M0200D020L05-GM</b>		
1.000	1.000	6.000	1.500	1.000	1.779	1		 <b>GY1G0200D020N-GFGS</b>		
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
.750	.750	5.000	1.375	.750	1.545	1		 <b>GY2M0239E020N-GS</b> <b>GY2M0250E020N-GS</b>	P11 P12	
.750	.750	5.000	1.375	.750	1.781	1		 <b>GY2M0239E020N-GM</b> <b>GY2M0250E020N-GM</b> (Gauge insert)		
.750	.750	5.000	1.375	.750	2.017	2		 <b>GY2M0250E020R05-GM</b> <b>GY2M0250E020L05-GM</b>		
1.000	1.000	6.000	1.500	1.000	1.779	1		 <b>GY1G0239E020N-GFGS</b> <b>GY1G0250E020N-GFGS</b>		
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
.750	.750	5.000	1.375	.750	1.545	1		 <b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>	P11 P12	
.750	.750	5.000	1.375	.750	1.781	1		 <b>GY2M0300F030N-GM</b> (Gauge insert)		
.750	.750	5.000	1.375	.750	2.017	2		 <b>GY2M0318F030N-GM</b>		
1.000	1.000	6.000	1.500	1.000	1.779	1		 <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b>		
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b>		
1.000	1.000	6.000	1.500	1.000	2.330	2		 <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b>		
.750	.750	5.000	1.375	.750	1.545	1		 <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b>	P11 P12	
.750	.750	5.000	1.375	.750	1.781	1		 <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>		
.750	.750	5.000	1.375	.750	2.017	2				
1.000	1.000	6.000	1.500	1.000	1.779	1				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				

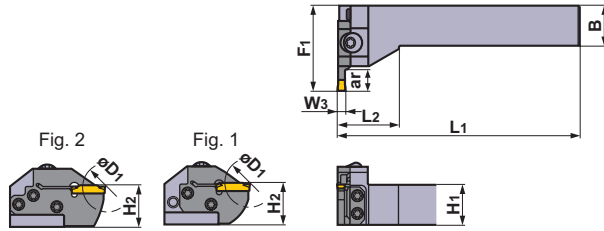
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

## 2-1 90° type holder (Inch)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



Right hand tool holder shown.




EXTERNAL GROOVING

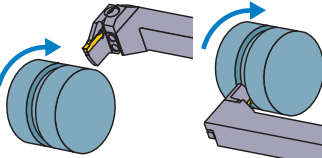







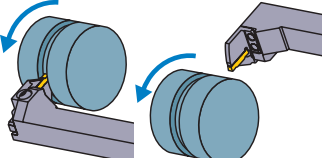







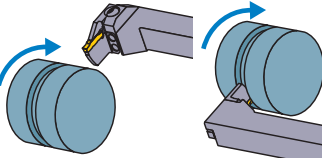





Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar (inch)	Max. Cut Off Diameter D <sub>1</sub> (inch)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
G	.157	R	.472	.945	(2F1R3G1)	<b>GYM20LA-G12</b>	●	<b>GYHRUS12C90-M20L</b>	●
			.315	.630	(2H1R4G1)	<b>GYM25LA-G08</b>	●	<b>GYHRUS16D90-M25L</b>	●
			.551	1.102	(2H1R4G2)	<b>GYM25LA-G14</b>	●		
			.984 *1	1.969 *2	(2H1R4G3)	<b>GYM25LA-G25</b>	●		
		L	.472	.945	(2F1L3G1)	<b>GYM20RA-G12</b>	●	<b>GYHLUS12C90-M20R</b>	●
			.315	.630	(2H1L4G1)	<b>GYM25RA-G08</b>	●	<b>GYHLUS16D90-M25R</b>	●
			.551	1.102	(2H1L4G2)	<b>GYM25RA-G14</b>	●		
			.984 *1	1.969 *2	(2H1L4G3)	<b>GYM25RA-G25</b>	●		
H	.187 .197	R	.472	.945	(2F1R3H1)	<b>GYM20LA-H12</b>	●	<b>GYHRUS12C90-M20L</b>	●
			.315	.630	(2H1R4H1)	<b>GYM25LA-H08</b>	●	<b>GYHRUS16D90-M25L</b>	●
			.551	1.102	(2H1R4H2)	<b>GYM25LA-H14</b>	●		
			.984 *1	1.969 *2	(2H1R4H3)	<b>GYM25LA-H25</b>	●		
		L	.472	.945	(2F1L3H1)	<b>GYM20RA-H12</b>	●	<b>GYHLUS12C90-M20R</b>	●
			.315	.630	(2H1L4H1)	<b>GYM25RA-H08</b>	●	<b>GYHLUS16D90-M25R</b>	●
			.551	1.102	(2H1L4H2)	<b>GYM25RA-H14</b>	●		
			.984 *1	1.969 *2	(2H1L4H3)	<b>GYM25RA-H25</b>	●		
J	.236 .250	R	.315	.630	(2H1R4J1)	<b>GYM25LA-J08</b>	●	<b>GYHRUS16D90-M25L</b>	●
			.551	1.102	(2H1R4J2)	<b>GYM25LA-J14</b>	●		
			.984 *1	1.969 *2	(2H1R4J3)	<b>GYM25LA-J25</b>	●		
		L	.315	.630	(2H1L4J1)	<b>GYM25RA-J08</b>	●	<b>GYHLUS16D90-M25R</b>	●
			.551	1.102	(2H1L4J2)	<b>GYM25RA-J14</b>	●		
			.984 *1	1.969 *2	(2H1L4J3)	<b>GYM25RA-J25</b>	●		

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.

● : Inventory maintained.

## SPARE PARTS

Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS12C90-M20L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R
<b>GYHLUS12C90-M20R</b>			TKY15R
<b>GYHRUS16D90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R
<b>GYHLUS16D90-M25R</b>			TKY25R

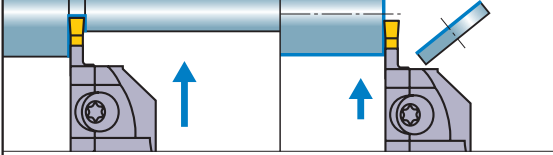
Dimensions (inch) *3							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
.750	.750	5.000	1.375	.750	1.781	1		 <b>GY2M0400G020N-GS</b>  <b>GY2M0400G030N-GM</b> (Gauge insert)	P11 P12	
1.000	1.000	6.000	1.500	1.000	1.857	1		 <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b>		
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b>		
1.000	1.000	6.000	1.500	1.000	2.527	2		 <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b>  <b>GY2M0400G200N-BM</b>  <b>GY1G0400G020N-GFGS</b>		
.750	.750	5.000	1.375	.750	1.781	1		 <b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>  <b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b> (Gauge insert)	P11 P12	
1.000	1.000	6.000	1.500	1.000	1.857	1		 <b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b>		
1.000	1.000	6.000	1.500	1.000	2.527	2		 <b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>  <b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>  <b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>		
1.000	1.000	6.000	1.500	1.000	1.857	1		 <b>GY2M0600J030N-GS</b> <b>GY2M0635J030N-GS</b>  <b>GY2M0600J040N-GM</b> (Gauge insert)	P11 P12	
1.000	1.000	6.000	1.500	1.000	2.094	1		<b>GY2M0635J040N-GM</b>		
1.000	1.000	6.000	1.500	1.000	2.527	2		 <b>GY2M0600J040N-MS</b> <b>GY2M0600J080N-MS</b>		
1.000	1.000	6.000	1.500	1.000	2.527	2		 <b>GY2M0600J040N-MM</b> <b>GY2M0600J080N-MM</b>  <b>GY2M0600J300N-BM</b> <b>GY2M0635J318N-BM</b>		

EXTERNAL GROOVING

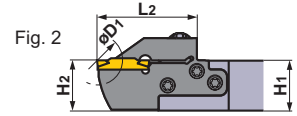
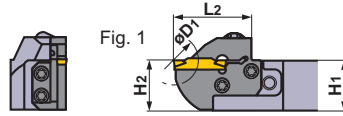
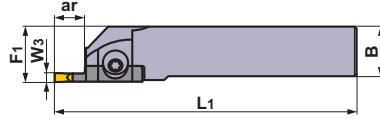
# GY SERIES (EXTERNAL GROOVING)

**1-2** 00° type holder (Metric)

Insert	GY2M○○○○○○○○○○-GS	Insert	GY2M○○○○○○○○○○-GS
Insert	GY2M○○○○○○○○○○-GM	Insert	GY2M○○○○○○○○○○-GM
Insert	GY1G○○○○○○○○○○-GS	Insert	GY2M○○○○○○○○○○/R/L○○-GM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.

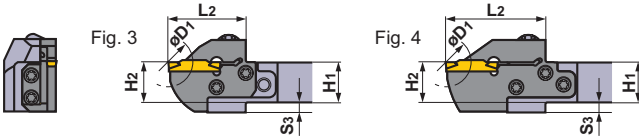
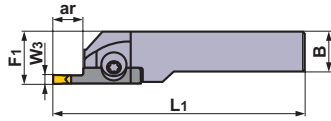


Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar (mm)	Max. Cut Off Diameter D <sub>1</sub> (mm)	ID	Order Number					
						Modular Blade	Stock	Modular Holder	Stock		
D	2.00	R	6	12	(1C1R3D1)	GYM20RA-D06	●	GYHR1616J00-M20R	●		
			10	20	(1C1R3D2)	GYM20RA-D10	●		●		
			18 *4	36	(1C1R3D3)	GYM20RB-D18	●		●		
			6	12	(1E1R3D1)	GYM20RA-D06	●	GYHR2020K00-M20R	●		
			10	20	(1E1R3D2)	GYM20RA-D10	●		●		
			18 *4	36	(1E1R3D3)	GYM20RB-D18	●		●		
			6	12	(1E1R4D1)	GYM25RA-D06	●	GYHR2020K00-M25R	●		
			12	24	(1E1R4D2)	GYM25RA-D12	●		●		
			20 *1	40 *2	(1E1R4D3)	GYM25RA-D20	●		●		
			6	12	(1G1R4D1)	GYM25RA-D06	●	GYHR2525M00-M25R	●		
			12	24	(1G1R4D2)	GYM25RA-D12	●		●		
			20 *1	40 *2	(1G1R4D3)	GYM25RA-D20	●		●		
		NEW	6	12	(1Q1R4D1)	GYM25RA-D06	●	GYHR3225P00-M25R	●		
		NEW	12	24	(1Q1R4D2)	GYM25RA-D12	●		★		
		NEW	20 *1	40 *2	(1Q1R4D3)	GYM25RA-D20	●		●		
		NEW	6	12	(1J1R4D1)	GYM25RA-D06	●	GYHR3232P00-M25R	●		
		NEW	12	24	(1J1R4D2)	GYM25RA-D12	●		★		
		NEW	20 *1	40 *2	(1J1R4D3)	GYM25RA-D20	●		●		
		L	2.00	R	6	12	(1C1L3D1)	GYM20LA-D06	●	GYHL1616J00-M20L	●
					10	20	(1C1L3D2)	GYM20LA-D10	●		●
					18 *4	36	(1C1L3D3)	GYM20LB-D18	●		●
				6	12	(1E1L3D1)	GYM20LA-D06	●	GYHL2020K00-M20L	●	
				10	20	(1E1L3D2)	GYM20LA-D10	●		●	
				18 *4	36	(1E1L3D3)	GYM20LB-D18	●		●	
6	12			(1E1L4D1)	GYM25LA-D06	●	GYHL2020K00-M25L	●			
12	24			(1E1L4D2)	GYM25LA-D12	●		●			
20 *1	40 *2			(1E1L4D3)	GYM25LA-D20	●		●			
6	12			(1G1L4D1)	GYM25LA-D06	●	GYHL2525M00-M25L	●			
12	24			(1G1L4D2)	GYM25LA-D12	●		●			
20 *1	40 *2			(1G1L4D3)	GYM25LA-D20	●		●			
NEW	6	12	(1Q1L4D1)	GYM25LA-D06	●	GYHL3225P00-M25L	●				
NEW	12	24	(1Q1L4D2)	GYM25LA-D12	●		★				
NEW	20 *1	40 *2	(1Q1L4D3)	GYM25LA-D20	●		●				
NEW	6	12	(1J1L4D1)	GYM25LA-D06	●	GYHL3232P00-M25L	●				
NEW	12	24	(1J1L4D2)	GYM25LA-D12	●		★				
NEW	20 *1	40 *2	(1J1L4D3)	GYM25LA-D20	●		●				

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.  
 \*4 The maximum groove depth is limited by the workpiece diameter. For details, please refer to page 46.



Right hand tool holder shown.

SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHR/L1616J00-M20R/L	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/L2020K00-M20R/L			
GYHR/L2020K00-M25R/L		TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Dimensions (mm) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
16	16	104	28	16	20	4	3				P11 P12	
16	16	110	34	16	20	4	3					
16	16	116	40	16	20	4	4					
20	20	119	28	20	23	—	1					
20	20	125	34	20	23	—	1					
20	20	131	40	20	23	—	2					
20	20	117	31	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	131	45	20	26	5	4					
25	25	142	31	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	156	45	25	28	—	2					
32	25	162	31	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	176	45	32	28	—	2					
32	32	162	31	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	176	45	32	35	—	2					
16	16	104	28	16	20	4	3				P11 P12	
16	16	110	34	16	20	4	3					
16	16	116	40	16	20	4	4					
20	20	119	28	20	23	—	1					
20	20	125	34	20	23	—	1					
20	20	131	40	20	23	—	2					
20	20	117	31	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	131	45	20	26	5	4					
25	25	142	31	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	156	45	25	28	—	2					
32	25	162	31	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	176	45	32	28	—	2					
32	32	162	31	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	176	45	32	35	—	2					

GY2M0200D020N-GS

GY2M0200D020N-GM  
(Gauge insert)

GY2M0200D020R05-GM  
GY2M0200D020L05-GM

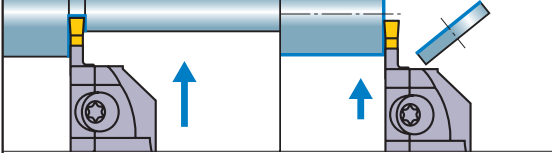
GY1G0200D020N-GFGS

EXTERNAL GROOVING

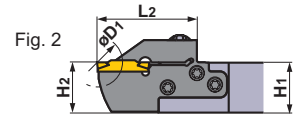
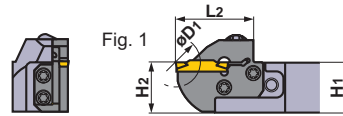
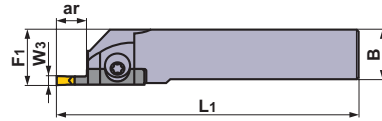
# GY SERIES (EXTERNAL GROOVING)

**1-2** 00° type holder (Metric)

Insert	GY2M○○○○○○○○-GS	Insert	GY2M○○○○○○○○-GS
Insert	GY2M○○○○○○○○-GM	Insert	GY2M○○○○○○○○-GM
Insert	GY1G○○○○○○○○-GS	Insert	GY2M○○○○○○/R/L○○-GM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.



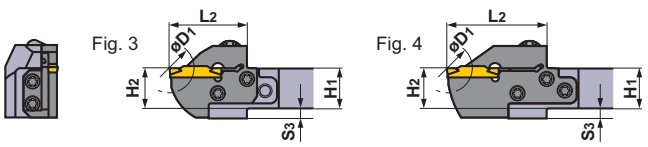
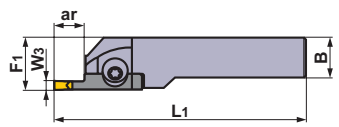
Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar (mm)	Max. Cut Off Diameter D <sub>1</sub> (mm)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
E	2.39 2.50	R	6	12	(1C1R3E1)	GYM20RA-E06	●	GYHR1616J00-M20R	●
			10	20	(1C1R3E2)	GYM20RA-E10	●		
			18 *4	36	(1C1R3E3)	GYM20RB-E18	●		
			6	12	(1E1R3E1)	GYM20RA-E06	●	GYHR2020K00-M20R	●
			10	20	(1E1R3E2)	GYM20RA-E10	●		
			18 *4	36	(1E1R3E3)	GYM20RB-E18	●		
			6	12	(1E1R4E1)	GYM25RA-E06	●	GYHR2020K00-M25R	●
			12	24	(1E1R4E2)	GYM25RA-E12	●		
			20 *1	40 *2	(1E1R4E3)	GYM25RA-E20	●		
			6	12	(1G1R4E1)	GYM25RA-E06	●	GYHR2525M00-M25R	●
			12	24	(1G1R4E2)	GYM25RA-E12	●		
			20 *1	40 *2	(1G1R4E3)	GYM25RA-E20	●		
		NEW	6	12	(1Q1R4E1)	GYM25RA-E06	●	GYHR3225P00-M25R	★
		NEW	12	24	(1Q1R4E2)	GYM25RA-E12	●		
		NEW	20 *1	40 *2	(1Q1R4E3)	GYM25RA-E20	●		
		NEW	6	12	(1J1R4E1)	GYM25RA-E06	●	GYHR3232P00-M25R	★
		NEW	12	24	(1J1R4E2)	GYM25RA-E12	●		
		NEW	20 *1	40 *2	(1J1R4E3)	GYM25RA-E20	●		
		L	6	12	(1C1L3E1)	GYM20LA-E06	●	GYHL1616J00-M20L	●
			10	20	(1C1L3E2)	GYM20LA-E10	●		
			18 *4	36	(1C1L3E3)	GYM20LB-E18	●		
			6	12	(1E1L3E1)	GYM20LA-E06	●	GYHL2020K00-M20L	●
			10	20	(1E1L3E2)	GYM20LA-E10	●		
			18 *4	36	(1E1L3E3)	GYM20LB-E18	●		
6	12		(1E1L4E1)	GYM25LA-E06	●	GYHL2020K00-M25L	●		
12	24		(1E1L4E2)	GYM25LA-E12	●				
20 *1	40 *2		(1E1L4E3)	GYM25LA-E20	●				
6	12		(1G1L4E1)	GYM25LA-E06	●	GYHL2525M00-M25L	●		
12	24		(1G1L4E2)	GYM25LA-E12	●				
20 *1	40 *2		(1G1L4E3)	GYM25LA-E20	●				
NEW	6	12	(1Q1L4E1)	GYM25LA-E06	●	GYHL3225P00-M25L	★		
NEW	12	24	(1Q1L4E2)	GYM25LA-E12	●				
NEW	20 *1	40 *2	(1Q1L4E3)	GYM25LA-E20	●				
NEW	6	12	(1J1L4E1)	GYM25LA-E06	●	GYHL3232P00-M25L	★		
NEW	12	24	(1J1L4E2)	GYM25LA-E12	●				
NEW	20 *1	40 *2	(1J1L4E3)	GYM25LA-E20	●				

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.  
 \*4 The maximum groove depth is limited by the workpiece diameter. For details, please refer to page 46.





Right hand tool holder shown.

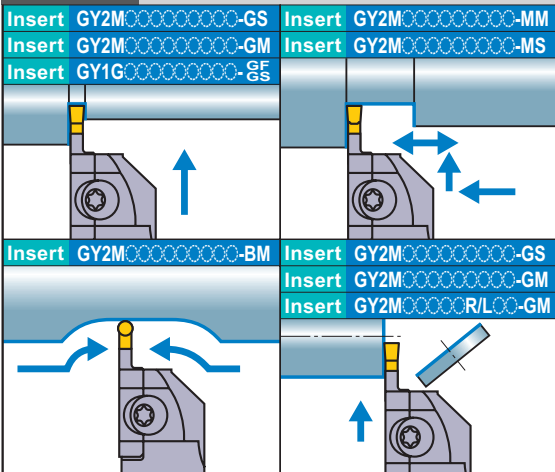
SPARE PARTS			
Modular Holder Number		(5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
GYHR/L1616J00-M20R/L		TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/L2020K00-M20R/L		GY06013M (Clamp Torque : 53 lbf-in)	TKY30R TKY25R
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Dimensions (mm) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
16	16	104	28	16	20	4	3				P11 P12	
16	16	110	34	16	20	4	3					
16	16	116	40	16	20	4	4					
20	20	119	28	20	23	—	1					
20	20	125	34	20	23	—	1					
20	20	131	40	20	23	—	2					
20	20	117	31	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	131	45	20	26	5	4					
25	25	142	31	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	156	45	25	28	—	2					
32	25	162	31	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	176	45	32	28	—	2					
32	32	162	31	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	176	45	32	35	—	2					
16	16	104	28	16	20	4	3			GY2M0239E020N-GS GY2M0250E020N-GS  GY2M0239E020N-GM GY2M0250E020N-GM (Gauge insert)  GY2M0250E020R05-GM GY2M0250E020L05-GM  GY1G0239E020N-GFGS GY1G0250E020N-GFGS	P11 P12	
16	16	110	34	16	20	4	3					
16	16	116	40	16	20	4	4					
20	20	119	28	20	23	—	1					
20	20	125	34	20	23	—	1					
20	20	131	40	20	23	—	2					
20	20	117	31	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	131	45	20	26	5	4					
25	25	142	31	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	156	45	25	28	—	2					
32	25	162	31	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	176	45	32	28	—	2					
32	32	162	31	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	176	45	32	35	—	2					

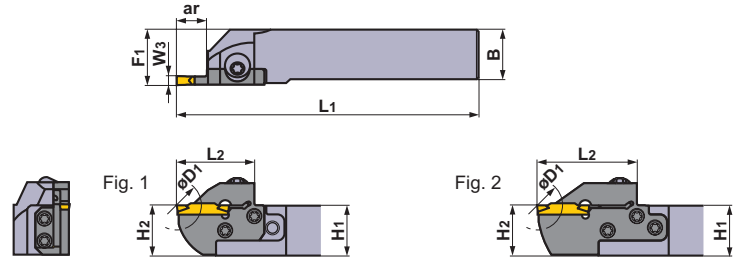
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

## 1-2 00° type holder (Metric)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.

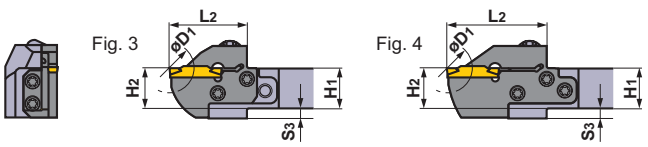
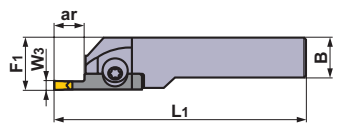


Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar (mm)	Max. Cut Off Diameter D <sub>1</sub> (mm)	ID	Order Number						
						Modular Blade	Stock	Modular Holder	Stock			
F	3.00 3.18	R	6	12	(1C1R3F1)	GYM20RA-F06	●	GYHR1616J00-M20R	●			
			10	20	(1C1R3F2)	GYM20RA-F10	●					
			18 *4	36	(1C1R3F3)	GYM20RB-F18	●					
			6	12	(1E1R3F1)	GYM20RA-F06	●	GYHR2020K00-M20R	●			
			10	20	(1E1R3F2)	GYM20RA-F10	●					
			18 *4	36	(1E1R3F3)	GYM20RB-F18	●					
			6	12	(1E1R4F1)	GYM25RA-F06	●	GYHR2020K00-M25R	●			
			12	24	(1E1R4F2)	GYM25RA-F12	●					
			20 *1	40 *2	(1E1R4F3)	GYM25RA-F20	●					
			6	12	(1G1R4F1)	GYM25RA-F06	●	GYHR2525M00-M25R	●			
			12	24	(1G1R4F2)	GYM25RA-F12	●					
			20 *1	40 *2	(1G1R4F3)	GYM25RA-F20	●					
		NEW	6	12	(1Q1R4F1)	GYM25RA-F06	●	GYHR3225P00-M25R	★			
		NEW	12	24	(1Q1R4F2)	GYM25RA-F12	●					
		NEW	20 *1	40 *2	(1Q1R4F3)	GYM25RA-F20	●					
		NEW	6	12	(1J1R4F1)	GYM25RA-F06	●	GYHR3232P00-M25R	★			
		NEW	12	24	(1J1R4F2)	GYM25RA-F12	●					
		NEW	20 *1	40 *2	(1J1R4F3)	GYM25RA-F20	●					
		L	3.00 3.18	R	6	12	(1C1L3F1)	GYM20LA-F06	●	GYHL1616J00-M20L	●	
					10	20	(1C1L3F2)	GYM20LA-F10	●			
					18 *4	36	(1C1L3F3)	GYM20LB-F18	●			
				L	R	6	12	(1E1L3F1)	GYM20LA-F06	●	GYHL2020K00-M20L	●
						10	20	(1E1L3F2)	GYM20LA-F10	●		
						18 *4	36	(1E1L3F3)	GYM20LB-F18	●		
L	R				6	12	(1E1L4F1)	GYM25LA-F06	●	GYHL2020K00-M25L	●	
					12	24	(1E1L4F2)	GYM25LA-F12	●			
					20 *1	40 *2	(1E1L4F3)	GYM25LA-F20	●			
	L				R	6	12	(1G1L4F1)	GYM25LA-F06	●	GYHL2525M00-M25L	●
						12	24	(1G1L4F2)	GYM25LA-F12	●		
						20 *1	40 *2	(1G1L4F3)	GYM25LA-F20	●		
NEW	6	12	(1Q1L4F1)	GYM25LA-F06	●	GYHL3225P00-M25L	★					
NEW	12	24	(1Q1L4F2)	GYM25LA-F12	●							
NEW	20 *1	40 *2	(1Q1L4F3)	GYM25LA-F20	●							
NEW	6	12	(1J1L4F1)	GYM25LA-F06	●	GYHL3232P00-M25L	★					
NEW	12	24	(1J1L4F2)	GYM25LA-F12	●							
NEW	20 *1	40 *2	(1J1L4F3)	GYM25LA-F20	●							

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.  
 \*4 The maximum groove depth is limited by the workpiece diameter. For details, please refer to page 46.



Right hand tool holder shown.

### SPARE PARTS

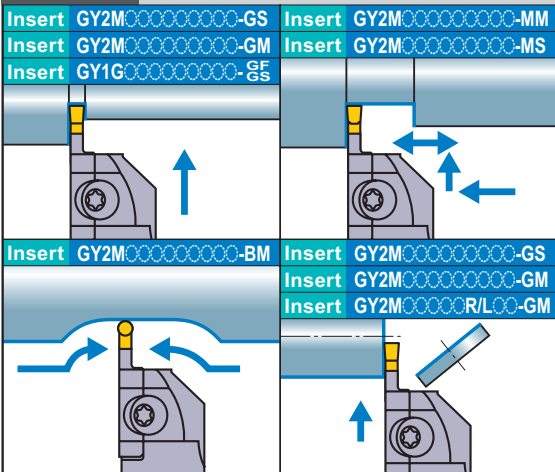
Modular Holder Number		(5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
GYHR/L1616J00-M20R/L		TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/L2020K00-M20R/L		GY06013M (Clamp Torque : 53 lbf-in)	TKY30R TKY25R
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Dimensions (mm) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
16	16	104	28	16	20	4	3			<b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b> <b>GY2M0300F030N-GM</b> (Gauge insert) <b>GY2M0318F030N-GM</b> <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b>	P11 P12	
16	16	110	34	16	20	4	3					
16	16	116	40	16	20	4	4					
20	20	119	28	20	23	—	1					
20	20	125	34	20	23	—	1					
20	20	131	40	20	23	—	2					
20	20	117	31	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	131	45	20	26	5	4					
25	25	142	31	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	156	45	25	28	—	2					
32	25	162	31	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	176	45	32	28	—	2					
32	32	162	31	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	176	45	32	35	—	2					
16	16	104	28	16	20	4	3			<b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b> <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b> <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>	P11 P12	
16	16	110	34	16	20	4	3					
16	16	116	40	16	20	4	4					
20	20	119	28	20	23	—	1					
20	20	125	34	20	23	—	1					
20	20	131	40	20	23	—	2					
20	20	117	31	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	131	45	20	26	5	4					
25	25	142	31	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	156	45	25	28	—	2					
32	25	162	31	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	176	45	32	28	—	2					
32	32	162	31	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	176	45	32	35	—	2					

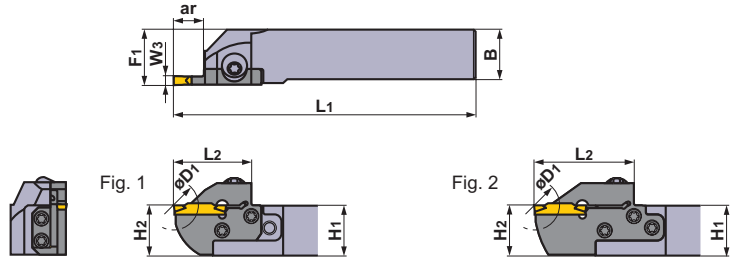
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

## 1-2 00° type holder (Metric)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.

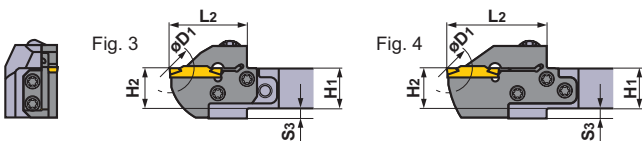
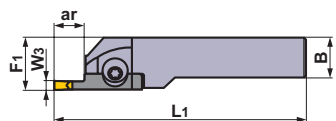


Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar (mm)	Max. Cut Off Diameter D <sub>1</sub> (mm)	ID	Order Number				
						Modular Blade	Stock	Modular Holder	Stock	
G	4.00	R	12	24	(1C1R3G1)	<b>GYM20RA-G12</b>	●	<b>GYHR1616J00-M20R</b>	●	
			12	24	(1E1R3G1)	<b>GYM20RA-G12</b>	●	<b>GYHR2020K00-M20R</b>	●	
			8	16	(1E1R4G1)	<b>GYM25RA-G08</b>	●	<b>GYHR2020K00-M25R</b>	●	
			14	28	(1E1R4G2)	<b>GYM25RA-G14</b>	●			
			25 *1	50 *2	(1E1R4G3)	<b>GYM25RA-G25</b>	●	<b>GYHR2525M00-M25R</b>	●	
			8	16	(1G1R4G1)	<b>GYM25RA-G08</b>	●			
			14	28	(1G1R4G2)	<b>GYM25RA-G14</b>	●			
			25 *1	50 *2	(1G1R4G3)	<b>GYM25RA-G25</b>	●	<b>GYHR3225P00-M25R</b>	★	
			NEW 8	16	(1Q1R4G1)	<b>GYM25RA-G08</b>	●			
			NEW 14	28	(1Q1R4G2)	<b>GYM25RA-G14</b>	●			
		NEW 25 *1	50 *2	(1Q1R4G3)	<b>GYM25RA-G25</b>	●	<b>GYHR3232P00-M25R</b>	★		
		NEW 8	16	(1J1R4G1)	<b>GYM25RA-G08</b>	●				
		NEW 14	28	(1J1R4G2)	<b>GYM25RA-G14</b>	●				
		NEW 25 *1	50 *2	(1J1R4G3)	<b>GYM25RA-G25</b>	●	<b>GYHL1616J00-M20L</b>	●		
		12	24	(1C1L3G1)	<b>GYM20LA-G12</b>	●				
		12	24	(1E1L3G1)	<b>GYM20LA-G12</b>	●			<b>GYHL2020K00-M20L</b>	●
		8	16	(1E1L4G1)	<b>GYM25LA-G08</b>	●				
		14	28	(1E1L4G2)	<b>GYM25LA-G14</b>	●				
		25 *1	50 *2	(1E1L4G3)	<b>GYM25LA-G25</b>	●			<b>GYHL2525M00-M25L</b>	●
		8	16	(1G1L4G1)	<b>GYM25LA-G08</b>	●				
14	28	(1G1L4G2)	<b>GYM25LA-G14</b>	●						
25 *1	50 *2	(1G1L4G3)	<b>GYM25LA-G25</b>	●	<b>GYHL3225P00-M25L</b>	★				
NEW 8	16	(1Q1L4G1)	<b>GYM25LA-G08</b>	●						
NEW 14	28	(1Q1L4G2)	<b>GYM25LA-G14</b>	●						
NEW 25 *1	50 *2	(1Q1L4G3)	<b>GYM25LA-G25</b>	●	<b>GYHL3232P00-M25L</b>	★				
NEW 8	16	(1J1L4G1)	<b>GYM25LA-G08</b>	●						
NEW 14	28	(1J1L4G2)	<b>GYM25LA-G14</b>	●						
NEW 25 *1	50 *2	(1J1L4G3)	<b>GYM25LA-G25</b>	●						

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.



Right hand tool holder shown.

### SPARE PARTS

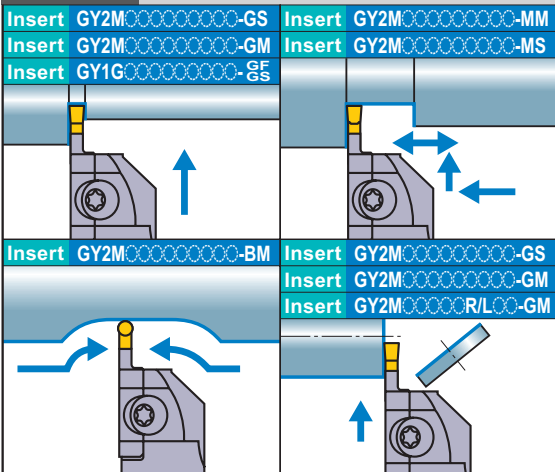
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHR/L1616J00-M20R/L		TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/L2020K00-M20R/L		GY06013M (Clamp Torque : 53 lbf-in)	TKY30R TKY25R
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Dimensions (mm) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
16	16	110	34	16	20	4	3			<b>GY2M0400G020N-GS</b> <b>GY2M0400G030N-GM</b> (Gauge insert) <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b> <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b> <b>GY2M0400G200N-BM</b> <b>GY1G0400G020N-GFGS</b>	P11 P12	
20	20	125	34	20	23	—	1					
20	20	119	33	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	136	50	20	26	5	4					
25	25	144	33	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	161	50	25	28	—	2					
32	25	164	33	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	181	50	32	28	—	2					
32	32	164	33	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	181	50	32	35	—	2					
16	16	110	34	16	20	4	3					
20	20	125	34	20	23	—	1					
20	20	119	33	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	136	50	20	26	5	4					
25	25	144	33	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	161	50	25	28	—	2					
32	25	164	33	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	181	50	32	28	—	2					
32	32	164	33	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	181	50	32	35	—	2					

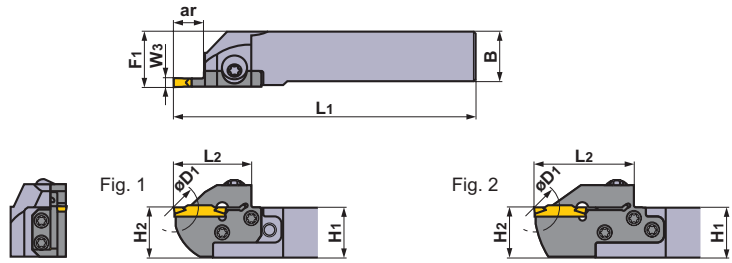
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

## 1-2 00° type holder (Metric)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.

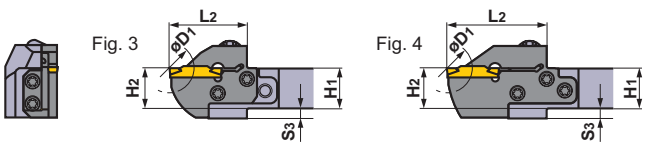
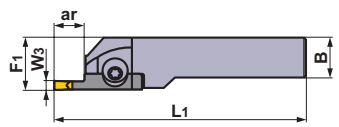


Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar (mm)	Max. Cut Off Diameter D <sub>1</sub> (mm)	ID	Order Number				
						Modular Blade	Stock	Modular Holder	Stock	
H	4.75 5.00	R	12	24	(1C1R3H1)	GYM20RA-H12	●	GYHR1616J00-M20R	●	
			12	24	(1E1R3H1)	GYM20RA-H12	●	GYHR2020K00-M20R	●	
			8	16	(1E1R4H1)	GYM25RA-H08	●	GYHR2020K00-M25R	●	
			14	28	(1E1R4H2)	GYM25RA-H14	●			
			25 *1	50 *2	(1E1R4H3)	GYM25RA-H25	●	GYHR2525M00-M25R	●	
			8	16	(1G1R4H1)	GYM25RA-H08	●			
			14	28	(1G1R4H2)	GYM25RA-H14	●			
			25 *1	50 *2	(1G1R4H3)	GYM25RA-H25	●	GYHR3225P00-M25R	★	
			NEW 8	16	(1Q1R4H1)	GYM25RA-H08	●			
			NEW 14	28	(1Q1R4H2)	GYM25RA-H14	●			
			NEW 25 *1	50 *2	(1Q1R4H3)	GYM25RA-H25	●	GYHR3232P00-M25R	★	
			NEW 8	16	(1J1R4H1)	GYM25RA-H08	●			
		NEW 14	28	(1J1R4H2)	GYM25RA-H14	●				
		NEW 25 *1	50 *2	(1J1R4H3)	GYM25RA-H25	●	GYHL1616J00-M20L	●		
		12	24	(1C1L3H1)	GYM20LA-H12	●				
		12	24	(1E1L3H1)	GYM20LA-H12	●			GYHL2020K00-M25L	●
		8	16	(1E1L4H1)	GYM25LA-H08	●				
		14	28	(1E1L4H2)	GYM25LA-H14	●				
		25 *1	50 *2	(1E1L4H3)	GYM25LA-H25	●			GYHL2525M00-M25L	●
		8	16	(1G1L4H1)	GYM25LA-H08	●				
		14	28	(1G1L4H2)	GYM25LA-H14	●	GYHL3225P00-M25L	★		
		25 *1	50 *2	(1G1L4H3)	GYM25LA-H25	●				
		NEW 8	16	(1Q1L4H1)	GYM25LA-H08	●	GYHL3232P00-M25L	★		
		NEW 14	28	(1Q1L4H2)	GYM25LA-H14	●				
NEW 25 *1	50 *2	(1Q1L4H3)	GYM25LA-H25	●	GYHL3232P00-M25L	★				
NEW 8	16	(1J1L4H1)	GYM25LA-H08	●						
NEW 14	28	(1J1L4H2)	GYM25LA-H14	●						
NEW 25 *1	50 *2	(1J1L4H3)	GYM25LA-H25	●						

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.



Right hand tool holder shown.

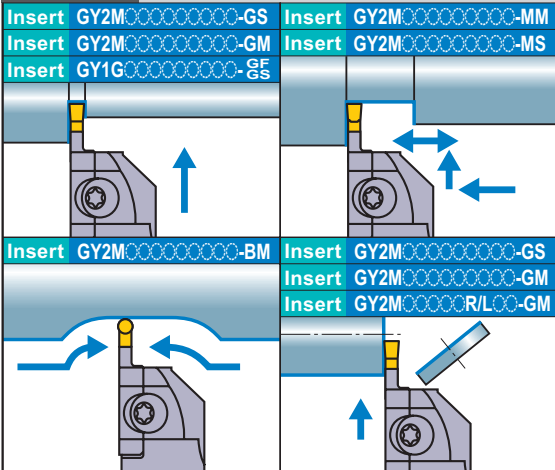
SPARE PARTS			
Modular Holder Number		(5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
GYHR/L1616J00-M20R/L		TS407 (Clamp Torque : 31 lbf-in)	TKY30R TKY15R
GYHR/L2020K00-M20R/L		GY06013M (Clamp Torque : 53 lbf-in)	TKY30R TKY25R
GYHR/L2020K00-M25R/L			
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

Dimensions (mm) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
16	16	110	34	16	20	4	3			GY2M0475H030N-GS GY2M0500H030N-GS  GY2M0475H040N-GM GY2M0500H040N-GM (Gauge insert)  GY2M0500H040R05-GM GY2M0500H040L05-GM  GY2M0500H040N-MS GY2M0500H080N-MS  GY2M0475H238N-BM GY2M0500H250N-BM  GY1G0475H020N-GFGS GY1G0500H020N-GFGS	P11 P12	
20	20	125	34	20	23	—	1					
20	20	119	33	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	136	50	20	26	5	4					
25	25	144	33	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	161	50	25	28	—	2					
32	25	164	33	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	181	50	32	28	—	2					
32	32	164	33	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	181	50	32	35	—	2					
16	16	110	34	16	20	4	3			GY2M0500H040N-MS GY2M0500H080N-MS  GY2M0500H040N-MM GY2M0500H080N-MM  GY2M0475H238N-BM GY2M0500H250N-BM  GY1G0475H020N-GFGS GY1G0500H020N-GFGS	P11 P12	
20	20	125	34	20	23	—	1					
20	20	119	33	20	26	5	3					
20	20	125	39	20	26	5	3					
20	20	136	50	20	26	5	4					
25	25	144	33	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	161	50	25	28	—	2					
32	25	164	33	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	181	50	32	28	—	2					
32	32	164	33	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	181	50	32	35	—	2					

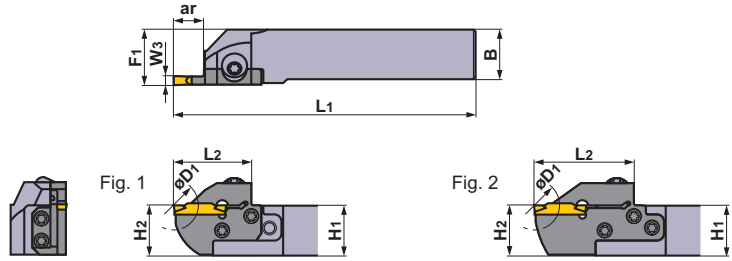
EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)

## 1-2 00° type holder (Metric)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder and left hand modular blade for left hand modular holder.



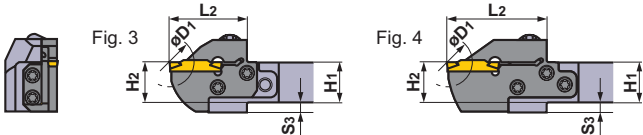
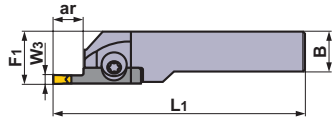
Right hand tool holder shown.

EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar (mm)	Max. Cut Off Diameter D <sub>1</sub> (mm)	ID	Order Number				
						Modular Blade	Stock	Modular Holder	Stock	
J	6.00	R	8	16	(1E1R4J1)	<b>GYM25RA-J08</b>	●	<b>GYHR2020K00-M25R</b>	●	
			14	28	(1E1R4J2)	<b>GYM25RA-J14</b>	●			
			25 *1	50 *2	(1E1R4J3)	<b>GYM25RA-J25</b>	●			
			8	16	(1G1R4J1)	<b>GYM25RA-J08</b>	●	<b>GYHR2525M00-M25R</b>	●	
			14	28	(1G1R4J2)	<b>GYM25RA-J14</b>	●			
			25 *1	50 *2	(1G1R4J3)	<b>GYM25RA-J25</b>	●			
			<b>NEW</b> 8	16	(1Q1R4J1)	<b>GYM25RA-J08</b>	●	<b>GYHR3225P00-M25R</b>	★	
			<b>NEW</b> 14	28	(1Q1R4J2)	<b>GYM25RA-J14</b>	●			
			<b>NEW</b> 25 *1	50 *2	(1Q1R4J3)	<b>GYM25RA-J25</b>	●			
		<b>NEW</b> 8	16	(1J1R4J1)	<b>GYM25RA-J08</b>	●	<b>GYHR3232P00-M25R</b>	★		
		<b>NEW</b> 14	28	(1J1R4J2)	<b>GYM25RA-J14</b>	●				
		<b>NEW</b> 25 *1	50 *2	(1J1R4J3)	<b>GYM25RA-J25</b>	●				
		6.35	L	8	16	(1E1L4J1)	<b>GYM25LA-J08</b>	●	<b>GYHL2020K00-M25L</b>	●
				14	28	(1E1L4J2)	<b>GYM25LA-J14</b>	●		
				25 *1	50 *2	(1E1L4J3)	<b>GYM25LA-J25</b>	●		
				8	16	(1G1L4J1)	<b>GYM25LA-J08</b>	●	<b>GYHL2525M00-M25L</b>	●
				14	28	(1G1L4J2)	<b>GYM25LA-J14</b>	●		
				25 *1	50 *2	(1G1L4J3)	<b>GYM25LA-J25</b>	●		
	<b>NEW</b> 8	16		(1Q1L4J1)	<b>GYM25LA-J08</b>	●	<b>GYHL3225P00-M25L</b>	★		
	<b>NEW</b> 14	28		(1Q1L4J2)	<b>GYM25LA-J14</b>	●				
	<b>NEW</b> 25 *1	50 *2		(1Q1L4J3)	<b>GYM25LA-J25</b>	●				
	<b>NEW</b> 8	16	(1J1L4J1)	<b>GYM25LA-J08</b>	●	<b>GYHL3232P00-M25L</b>	★			
	<b>NEW</b> 14	28	(1J1L4J2)	<b>GYM25LA-J14</b>	●					
	<b>NEW</b> 25 *1	50 *2	(1J1L4J3)	<b>GYM25LA-J25</b>	●					




\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.

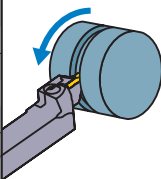
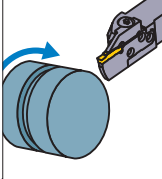









Right hand tool holder shown.

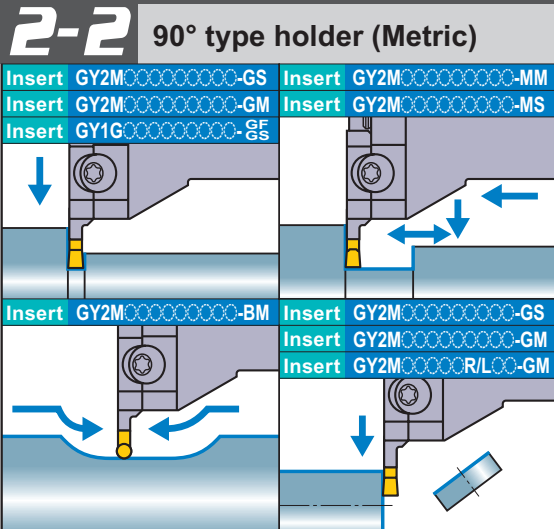
### SPARE PARTS

Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
GYHR/L2020K00-M25R/L	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
GYHR/L2525M00-M25R/L			
GYHR/L3225P00-M25R/L			
GYHR/L3232P00-M25R/L			

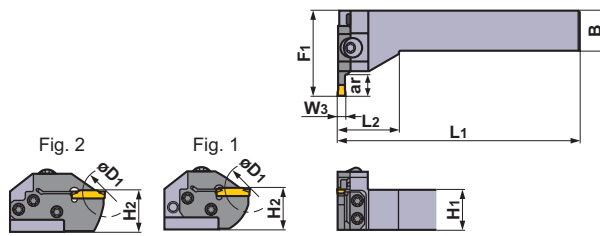
Dimensions (mm) *3								Fig.	Cutting Mode		Insert	
H1	B	L1	L2	H2	F1	S3	Clockwise		Counter Clockwise	Geometry / Insert Number	Page	
20	20	119	33	20	26	5	3			 <b>GY2M0600J030N-GS</b> <b>GY2M0635J030N-GS</b>   <b>GY2M0600J040N-GM</b> (Gauge insert) <b>GY2M0635J040N-GM</b>   <b>GY2M0600J040N-MS</b> <b>GY2M0600J080N-MS</b>   <b>GY2M0600J040N-MM</b> <b>GY2M0600J080N-MM</b>   <b>GY2M0600J300N-BM</b> <b>GY2M0635J318N-BM</b>	P11 P12	
20	20	125	39	20	26	5	3					
20	20	136	50	20	26	5	4					
25	25	144	33	25	28	—	1					
25	25	150	39	25	28	—	1					
25	25	161	50	25	28	—	2					
32	25	164	33	32	28	—	1					
32	25	170	39	32	28	—	1					
32	25	181	50	32	28	—	2					
32	32	164	33	32	35	—	1					
32	32	170	39	32	35	—	1					
32	32	181	50	32	35	—	2					

EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



Right hand tool holder shown.




EXTERNAL GROOVING

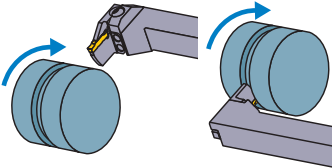


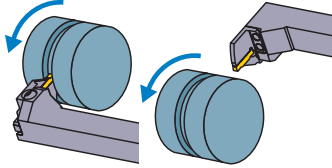


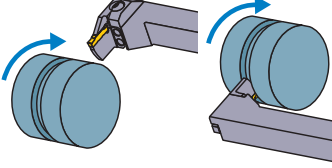


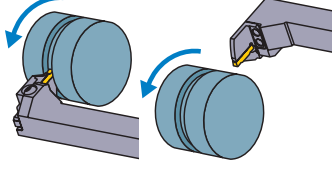







Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar (mm)	Max. Cut Off Diameter D <sub>1</sub> (mm)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
D	2.00	R	6	12	(2E1R3D1)	<b>GYM20LA-D06</b>	●	<b>GYHR2020K90-M20L</b>	●
			10	20	(2E1R3D2)	<b>GYM20LA-D10</b>	●		
			18 *4	36	(2E1R3D3)	<b>GYM20LB-D18</b>	●		
		L	6	12	(2G1R4D1)	<b>GYM25LA-D06</b>	●	<b>GYHR2525M90-M25L</b>	●
			12	24	(2G1R4D2)	<b>GYM25LA-D12</b>	●		
			20 *1	40 *2	(2G1R4D3)	<b>GYM25LA-D20</b>	●		
	2.39 2.50	R	6	12	(2E1L3D1)	<b>GYM20RA-D06</b>	●	<b>GYHL2020K90-M20R</b>	●
			10	20	(2E1L3D2)	<b>GYM20RA-D10</b>	●		
			18 *4	36	(2E1L3D3)	<b>GYM20RB-D18</b>	●		
		L	6	12	(2G1L4D1)	<b>GYM25RA-D06</b>	●	<b>GYHL2525M90-M25R</b>	●
			12	24	(2G1L4D2)	<b>GYM25RA-D12</b>	●		
			20 *1	40 *2	(2G1L4D3)	<b>GYM25RA-D20</b>	●		
E	2.39 2.50	R	6	12	(2E1R3E1)	<b>GYM20LA-E06</b>	●	<b>GYHR2020K90-M20L</b>	●
			10	20	(2E1R3E2)	<b>GYM20LA-E10</b>	●		
			18 *4	36	(2E1R3E3)	<b>GYM20LB-E18</b>	●		
		L	6	12	(2G1R4E1)	<b>GYM25LA-E06</b>	●	<b>GYHR2525M90-M25L</b>	●
			12	24	(2G1R4E2)	<b>GYM25LA-E12</b>	●		
			20 *1	40 *2	(2G1R4E3)	<b>GYM25LA-E20</b>	●		
	3.00 3.18	R	6	12	(2E1L3E1)	<b>GYM20RA-E06</b>	●	<b>GYHL2020K90-M20R</b>	●
			10	20	(2E1L3E2)	<b>GYM20RA-E10</b>	●		
			18 *4	36	(2E1L3E3)	<b>GYM20RB-E18</b>	●		
		L	6	12	(2G1L4E1)	<b>GYM25RA-E06</b>	●	<b>GYHL2525M90-M25R</b>	●
			12	24	(2G1L4E2)	<b>GYM25RA-E12</b>	●		
			20 *1	40 *2	(2G1L4E3)	<b>GYM25RA-E20</b>	●		
F	3.00 3.18	R	6	12	(2E1R3F1)	<b>GYM20LA-F06</b>	●	<b>GYHR2020K90-M20L</b>	●
			10	20	(2E1R3F2)	<b>GYM20LA-F10</b>	●		
			18 *4	36	(2E1R3F3)	<b>GYM20LB-F18</b>	●		
		L	6	12	(2G1R4F1)	<b>GYM25LA-F06</b>	●	<b>GYHR2525M90-M25L</b>	●
			12	24	(2G1R4F2)	<b>GYM25LA-F12</b>	●		
			20 *1	40 *2	(2G1R4F3)	<b>GYM25LA-F20</b>	●		
	3.00 3.18	R	6	12	(2E1L3F1)	<b>GYM20RA-F06</b>	●	<b>GYHL2020K90-M20R</b>	●
			10	20	(2E1L3F2)	<b>GYM20RA-F10</b>	●		
			18 *4	36	(2E1L3F3)	<b>GYM20RB-F18</b>	●		
		L	6	12	(2G1L4F1)	<b>GYM25RA-F06</b>	●	<b>GYHL2525M90-M25R</b>	●
			12	24	(2G1L4F2)	<b>GYM25RA-F12</b>	●		
			20 *1	40 *2	(2G1L4F3)	<b>GYM25RA-F20</b>	●		

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.  
 \*4 The maximum groove depth is limited by the workpiece diameter. For details, please refer to page 46.

● : Inventory maintained.

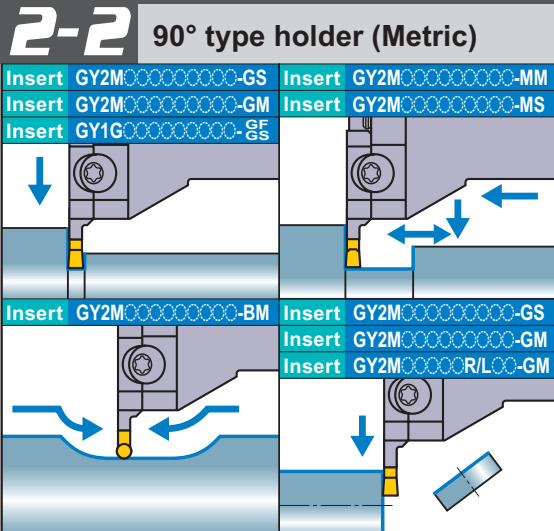
## SPARE PARTS

Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2020K90-M20L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R
<b>GYHL2020K90-M20R</b>			TKY15R
<b>GYHR2525M90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R
<b>GYHL2525M90-M25R</b>			TKY25R

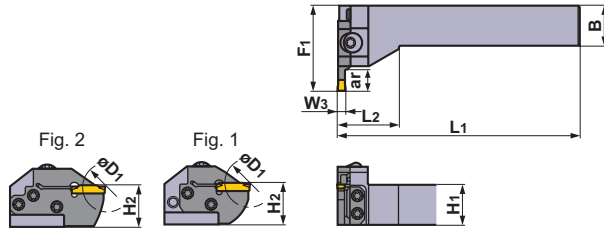
Dimensions (mm) *3							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
20	20	125	35	20	39	1		 <b>GY2M0200D020N-GS</b>  <b>GY2M0200D020N-GM</b> (Gauge insert)	P11 P12	
20	20	125	35	20	45	1				
20	20	125	35	20	51	2				
25	25	150	38	25	45	1				
25	25	150	38	25	53	1				
25	25	150	38	25	59	2				
20	20	125	35	20	39	1		 <b>GY2M0200D020R05-GM</b> <b>GY2M0200D020L05-GM</b>  <b>GY1G0200D020N-GFGS</b>	P11 P12	
20	20	125	35	20	45	1				
20	20	125	35	20	51	2				
25	25	150	38	25	45	1				
25	25	150	38	25	53	1				
25	25	150	38	25	59	2				
20	20	125	35	20	39	1		 <b>GY2M0239E020N-GS</b> <b>GY2M0250E020N-GS</b>  <b>GY2M0239E020N-GM</b> <b>GY2M0250E020N-GM</b> (Gauge insert)	P11 P12	
20	20	125	35	20	45	1				
20	20	125	35	20	51	2				
25	25	150	38	25	45	1				
25	25	150	38	25	53	1				
25	25	150	38	25	59	2				
20	20	125	35	20	39	1		 <b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>  <b>GY2M0300F030N-GM</b> (Gauge insert) <b>GY2M0318F030N-GM</b>  <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b>  <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b>  <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b>  <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b>  <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>	P11 P12	
20	20	125	35	20	45	1				
20	20	125	35	20	51	2				
25	25	150	38	25	45	1				
25	25	150	38	25	53	1				
25	25	150	38	25	59	2				

EXTERNAL GROOVING

# GY SERIES (EXTERNAL GROOVING)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.






Right hand tool holder shown.

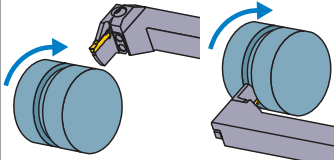


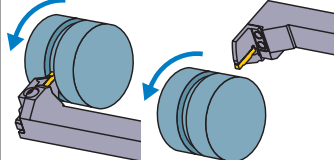





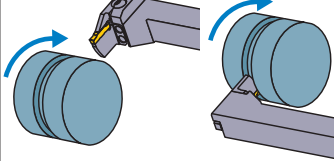


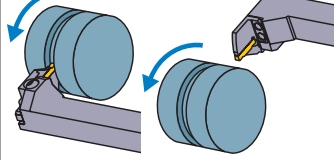





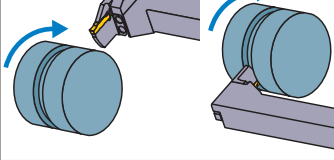


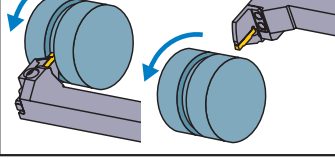



EXTERNAL GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar (mm)	Max. Cut Off Diameter D <sub>1</sub> (mm)	ID	Order Number			
						Modular Blade	Stock	Modular Holder	Stock
G	4.00	R	12	24	(2E1R3G1)	GYM20LA-G12	●	GYHR2020K90-M20L	●
			8	16	(2G1R4G1)	GYM25LA-G08	●	GYHR2525M90-M25L	●
			14	28	(2G1R4G2)	GYM25LA-G14	●		
			25 *1	50 *2	(2G1R4G3)	GYM25LA-G25	●		
		L	12	24	(2E1L3G1)	GYM20RA-G12	●	GYHL2020K90-M20R	●
			8	16	(2G1L4G1)	GYM25RA-G08	●	GYHL2525M90-M25R	●
			14	28	(2G1L4G2)	GYM25RA-G14	●		
			25 *1	50 *2	(2G1L4G3)	GYM25RA-G25	●		
H	4.75 5.00	R	12	24	(2E1R3H1)	GYM20LA-H12	●	GYHR2020K90-M20L	●
			8	16	(2G1R4H1)	GYM25LA-H08	●	GYHR2525M90-M25L	●
			14	28	(2G1R4H2)	GYM25LA-H14	●		
			25 *1	50 *2	(2G1R4H3)	GYM25LA-H25	●		
		L	12	24	(2E1L3H1)	GYM20RA-H12	●	GYHL2020K90-M20R	●
			8	16	(2G1L4H1)	GYM25RA-H08	●	GYHL2525M90-M25R	●
			14	28	(2G1L4H2)	GYM25RA-H14	●		
			25 *1	50 *2	(2G1L4H3)	GYM25RA-H25	●		
J	6.00 6.35	R	8	16	(2G1R4J1)	GYM25LA-J08	●	GYHR2525M90-M25L	●
			14	28	(2G1R4J2)	GYM25LA-J14	●		
			25 *1	50 *2	(2G1R4J3)	GYM25LA-J25	●		
		L	8	16	(2G1L4J1)	GYM25RA-J08	●	GYHL2525M90-M25R	●
			14	28	(2G1L4J2)	GYM25RA-J14	●		
			25 *1	50 *2	(2G1L4J3)	GYM25RA-J25	●		

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 The maximum cut off diameter D<sub>1</sub> varies according to the insert used. The cut off diameter is double the maximum groove depth (ar) of inserts on pages 11 and 12.  
 \*3 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub> and F<sub>1</sub> values may vary.

## SPARE PARTS

Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2020K90-M20L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY30R
<b>GYHL2020K90-M20R</b>			TKY15R
<b>GYHR2525M90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R
<b>GYHL2525M90-M25R</b>			TKY25R

	Dimensions (mm) *3						Fig.	Cutting Mode	Insert		
	H1	B	L1	L2	H2	F1			Geometry / Insert Number	Page	
	20	20	125	35	20	45	1		 <b>GY2M0400G020N-GS</b>  <b>GY2M0400G030N-GM</b> (Gauge insert)	P11 P12	
	25	25	150	38	25	47	1				 <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b>
	25	25	150	38	25	53	1				 <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b>
	25	25	150	38	25	64	2				 <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b>  <b>GY2M0400G200N-BM</b>  <b>GY1G0400G020N-GFGS</b>
	20	20	125	35	20	45	1		 <b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>  <b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b> (Gauge insert)	P11 P12	
	25	25	150	38	25	47	1				 <b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>
	25	25	150	38	25	53	1				 <b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b>
	25	25	150	38	25	64	2				 <b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>  <b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>  <b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>
	25	25	150	38	25	47	1		 <b>GY2M0600J030N-GS</b> <b>GY2M0635J030N-GS</b>  <b>GY2M0600J040N-GM</b> (Gauge insert)	P11 P12	
	25	25	150	38	25	53	1				<b>GY2M0635J040N-GM</b>
	25	25	150	38	25	64	2				 <b>GY2M0600J040N-MS</b> <b>GY2M0600J080N-MS</b>
	25	25	150	38	25	64	2				 <b>GY2M0600J040N-MM</b> <b>GY2M0600J080N-MM</b>  <b>GY2M0600J300N-BM</b> <b>GY2M0635J318N-BM</b>

EXTERNAL GROOVING

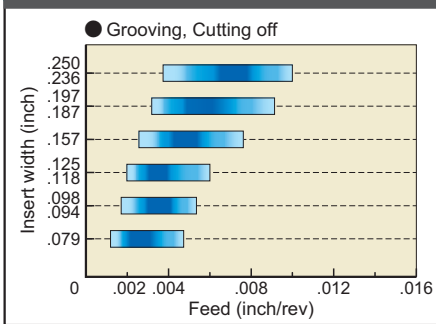
# GROOVING SYSTEM

## Recommended Cutting Conditions [External Grooving]

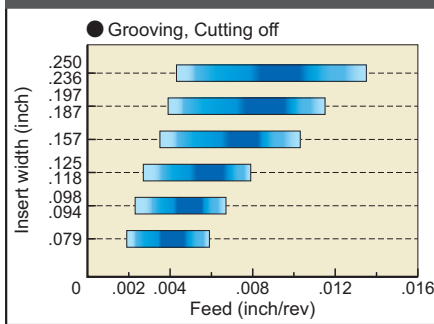
\*Below are the recommended cutting conditions when using the modular holder GYHR/LUS16D00-M25R/L with the modular blade GYM25A.

Recommended feed rate and depth of cut  : 1st recommended area

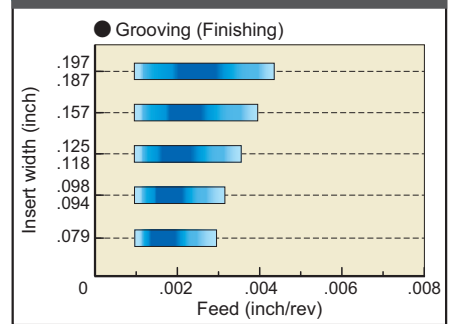
### GS Breaker



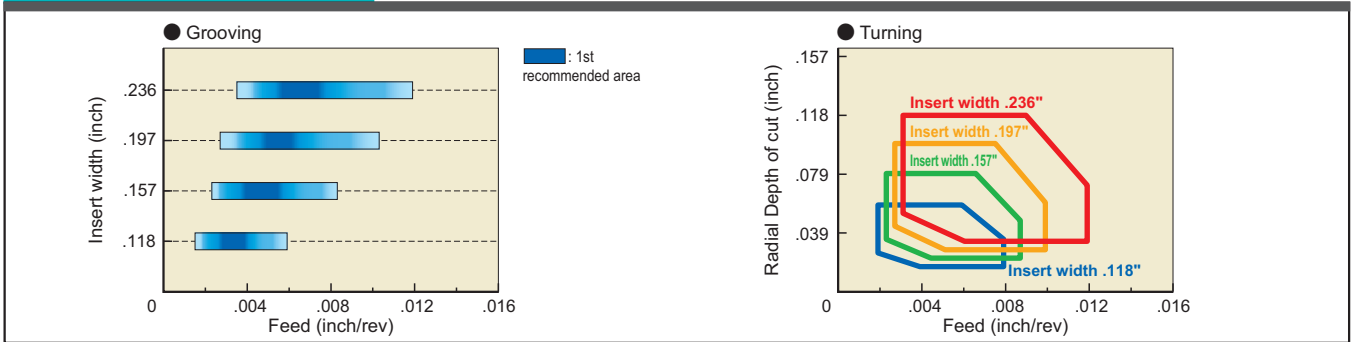
### GM Breaker



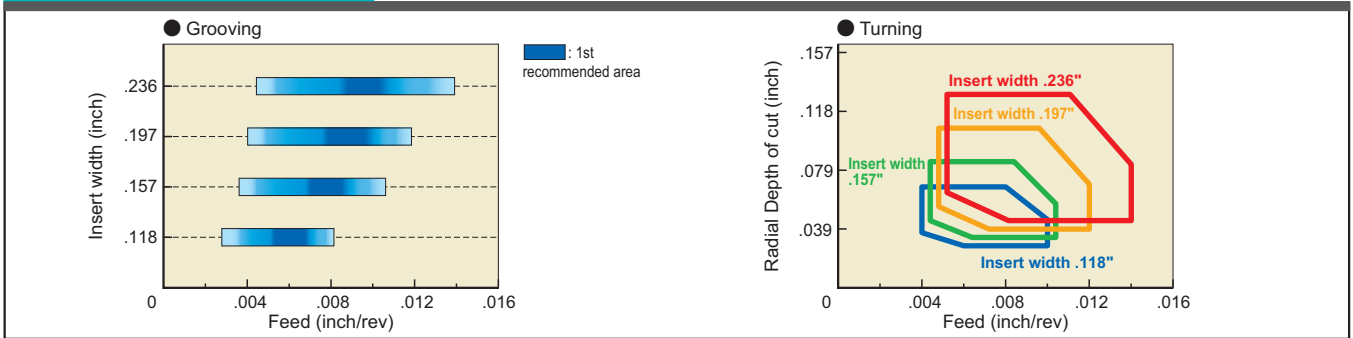
### Flat Top GFGS (CBN)



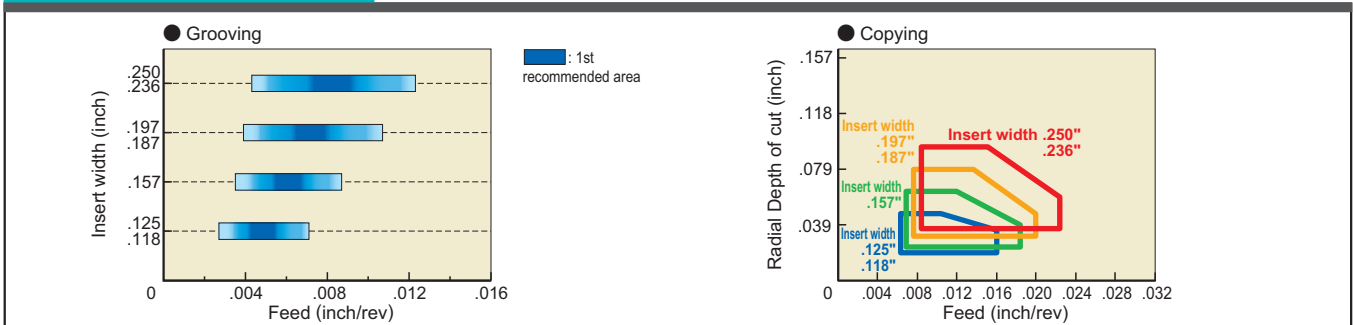
### MS Breaker



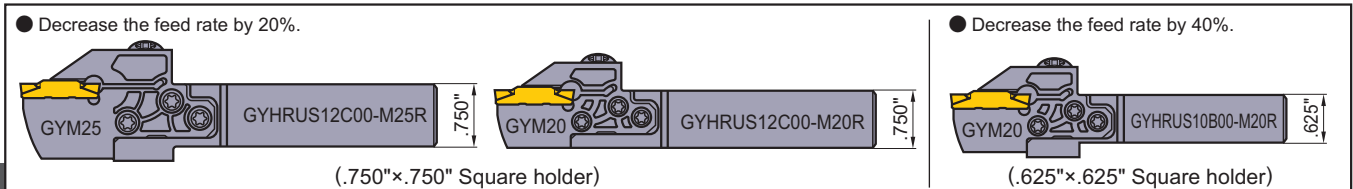
### MM Breaker



### BM Breaker



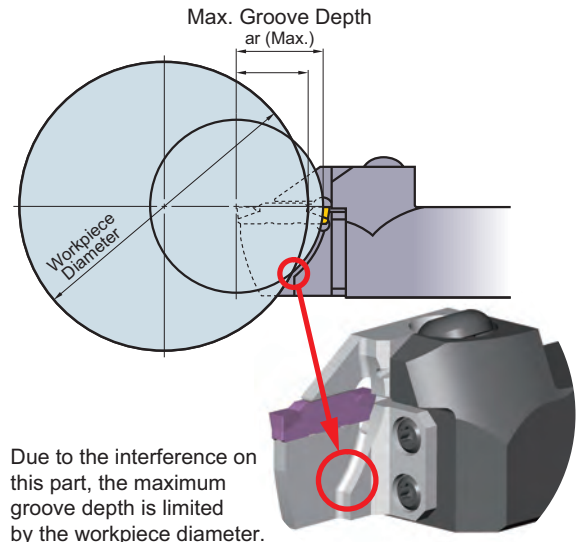
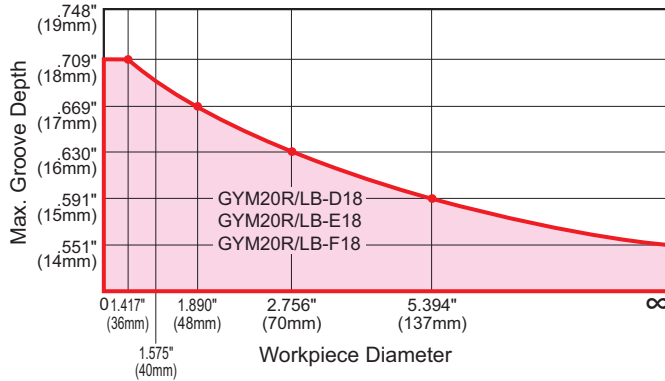
(Note) When using a combination as shown below, decrease the recommended feed rate by 20% and 40% respectively.



## Limitation of the maximum groove depth

- When using the modular blade GYM<sup>®</sup>OR/LA-<sup>®</sup> The maximum groove depth is not limited by the workpiece diameter.

- When using the modular blade GYM<sup>®</sup>OR/LB-<sup>®</sup> The maximum groove depth is limited by the workpiece diameter.



EXTERNAL GROOVING

## Recommended Cutting Speed (SFM)

Work Material	Hardness	Insert Grade	Cutting Speed (SFM)					
			165	330	495	660	825	990
P Mild Steel	≤160HB	VP20RT		330	720			
		VP10RT		360	755			
		MY5015		460	990			
		NX2525		295	690			
	160-280HB	VP20RT		260	590			
		VP10RT		295	625			
		MY5015		360	825			
		NX2525		230	560			
≥280HB	VP20RT		195	460				
	VP10RT		230	495				
	MY5015		295	690				
	NX2525		180	440				
M Stainless Steel	≤270HB	VP20RT		195	460			
		VP10RT		230	495			
K Cast Iron	Tensile Strength ≤300MPa	VP20RT		260	590			
		VP10RT		295	625			
		MY5015		460	990			
	Ductile Cast Iron	VP20RT		195	460			
		VP10RT		230	495			
		MY5015		295	690			
S Heat Resistant Alloy Titanium Alloy	-	VP20RT	100	195				
		VP10RT	130	230				
H Hardened steel	≥50HRC	MB8025		260	395			

Note 1) VP20RT is the first recommended grade for materials other than hardened steel.

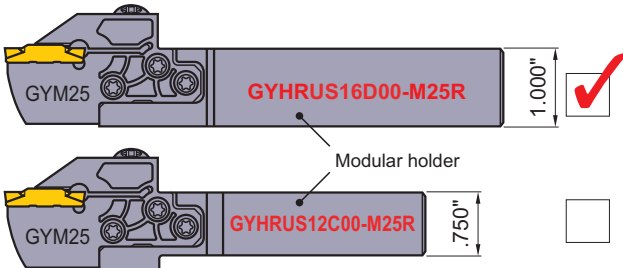
Note 2) For VP10RT, VP20RT and MY5015, wet cutting is recommended.

# GROOVING SYSTEM

## Tool Selection

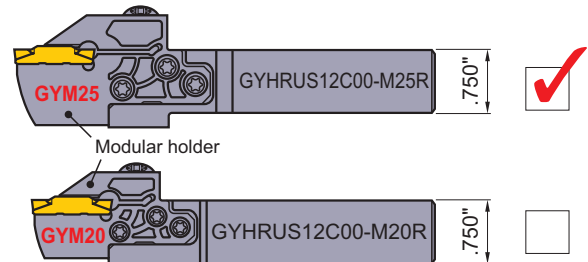
### Notes when selecting the tool body

#### Modular holder



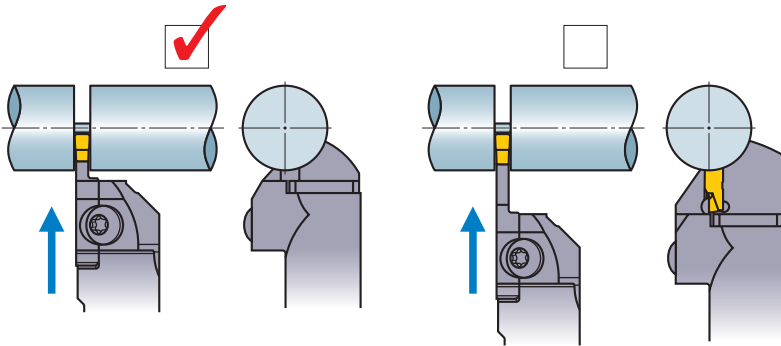
● To ensure sufficient clamping rigidity, select a modular holder with the largest possible shank size.

#### Modular blade (1)



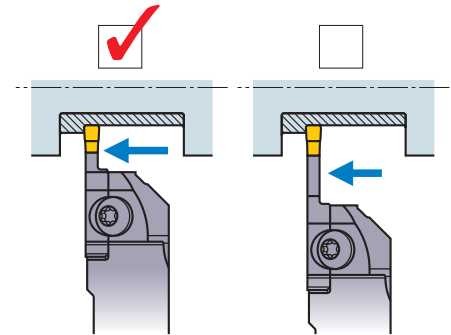
● If there is no restriction for use, select the largest modular blade for the same shank size.

#### Modular blade (2)



● Select the shortest possible blade suitable for the application.

#### Modular blade (3)



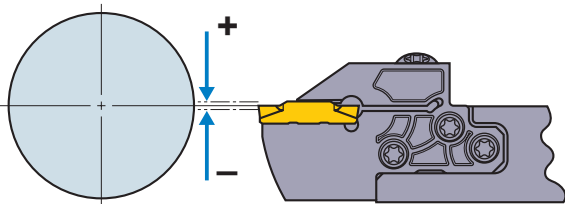
● Select the shortest possible blade suitable for the application.

EXTERNAL GROOVING

✓: Recommended.

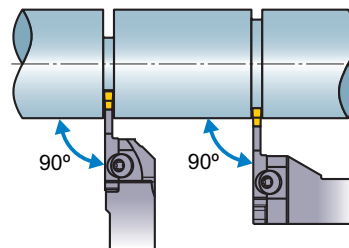
### Notes when setting the tool

#### Setting of cutting edge height



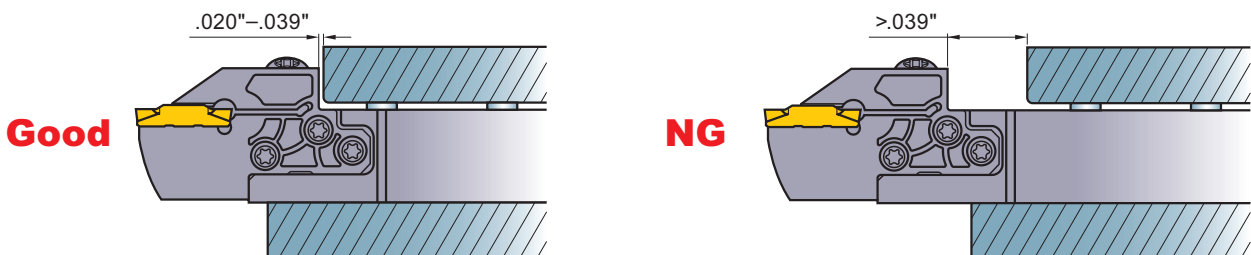
<Grooving/Cross-feed machining>  
Set the cutting edge height to  $\pm 0.004$ " parallel to the central axis.  
<Cutting off>  
Set the cutting edge height to  $0 - +0.008$ " parallel to the central axis.

#### Tool body setting angle



● Set the insert perpendicular to the central axis.

#### Overhang



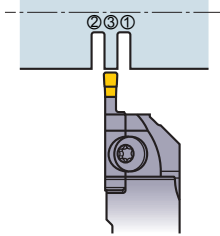
● When setting the tool, ensure that the overhang is as short as possible.



## Machining Recommendations

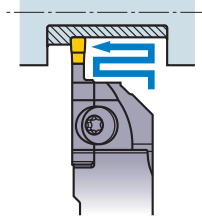
### Notes on multi-function machining (MS and MM breakers)

#### 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

##### Roughing

- ① Carry out grooving.
- ② Retract the tool approx .004".
- ③ Carry out cross feed machining.
- ④ Retract the tool approx .004".
- ⑤ Carry out grooving.
- ⑥ Retract the tool approx .004".

\* Repeat the steps ①-⑥.

##### Finishing

- ⑦ Carry out grooving to the end point of the corner radius.
- ⑧ Machining of the wall surface, corner radius and bottom face should be carried out in one process.

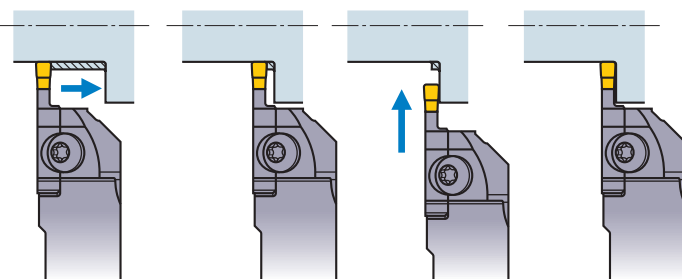
##### Finishing

- ⑨ Stop at the bottom of the corner radius.
- ⑩ Machine the counter wall to the corner radius in one process.
- ⑪ Finish machining.

##### Precautions when finishing walls

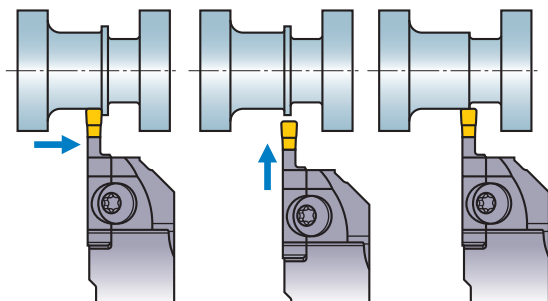
- To produce high accuracy walls using MS or MM breaker insert, do not carry out back turning. Plunging is recommended.

#### 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

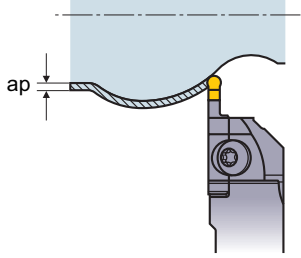


- When a ring remains in a cross feed end process, finish cross feed machining .040"-.059" short of the end point, then remove the ring by plunging.

# GROOVING SYSTEM

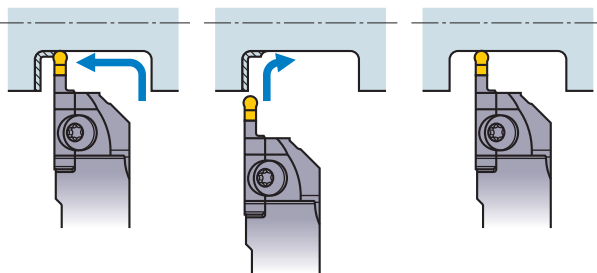
## Machining Recommendations

### Notes on multi-function machining (BM breaker)



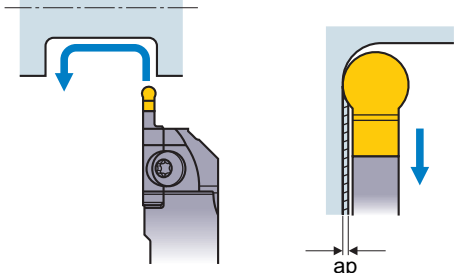
● With the BM breaker insert, 3 dimensional copying is possible. Set the depth of cut ( $a_p$ ) to 40% less than the insert width.

### 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



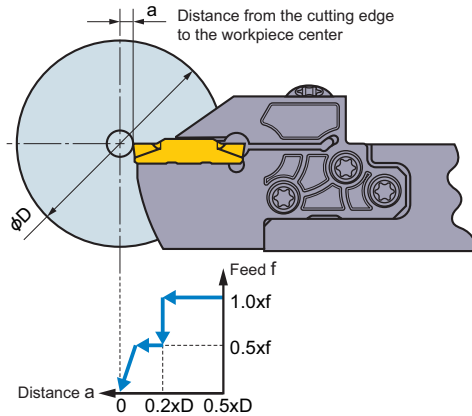
● Carry out finishing in one process. For the depth of cut ( $a_p$ ) when back turning, refer to the table on the right.

Insert	$a_p$ (inch)
GY2M0300F150N-BM	.006
GY2M0318F159N-BM	.008
GY2M0400G200N-BM	.009
GY2M0475H238N-BM	.009
GY2M0500H250N-BM	.012
GY2M0600J150N-BM	.012
GY2M0635J318N-BM	.012

## Notes for cutting off

### Notes of the cut off feed

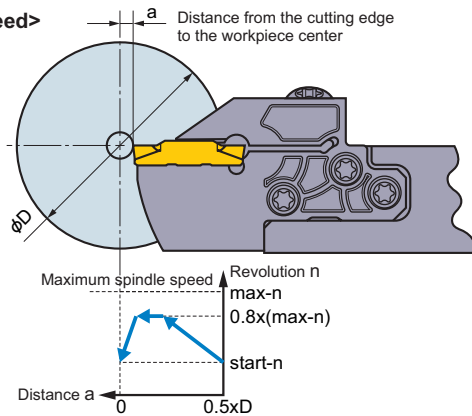
#### <Feed>



- When the cutting edge approaches the center, reduce the feed by 50%.
- If necessary, stop the feed prior to reaching the center of the workpiece to prevent it falling under its own weight.

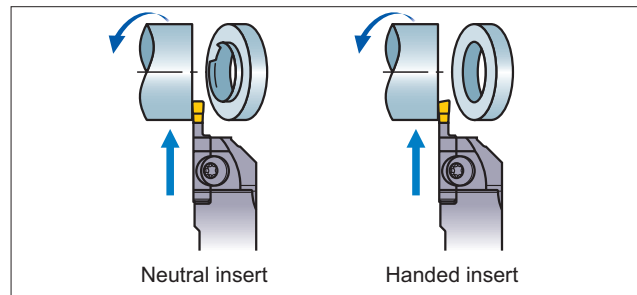
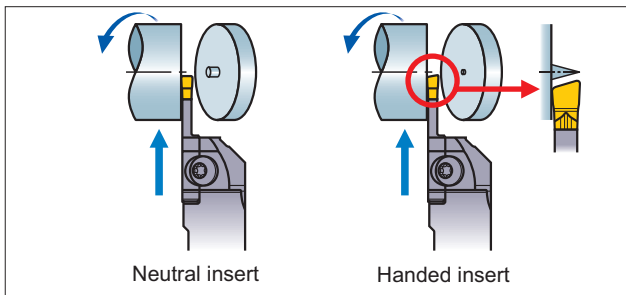
### Notes of the cut off revolution

#### <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.

### Notes of the handed insert



- When there is a center 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.

# ASSEMBLY INSTRUCTION

## Assembly Procedures

**A**

(Ex.) GYHRUS16D00 - **M25R**  
GYHR2525M00 - **M25R**

**Holder**

**Modular Blade**

(Ex.) **2**  
GY **M25R** A - **F** 20  
GY **M25R** A - **F** 12

Long (5 holes)  
Short, Medium (4 holes)

**Insert**

(Ex.) GY2M0300 **F** 040N-MS  
GY2M0318 **F** 030N-GM

Note 1) ③ and ④ are changed by the insert size.

**B**

Long Modular Blade (5 holes)

Side Screws (3 screws)

**B'**

Short, Medium Modular Blade (4 holes)

Side Screws (2 screws)

Note 2) ① and ② should be matched. (See caption A)

**C**

Front Screws (2 screws)

Note 3)  
Please tighten the modular blade setscrews in order of [Side screws] → [Front screws].

**D**

Note 4)  
Please clean the insert-seat before installing the insert.

Note 5)  
③ and ④ should be matched. (See caption A)

**E**

Note 6)  
Don't tighten the insert clamp screw without installing the insert. Modular blade might be damaged.

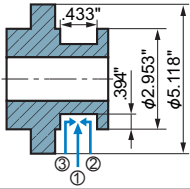
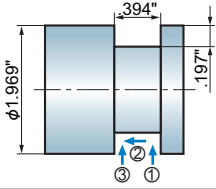
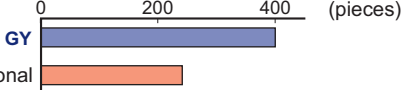
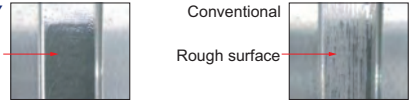
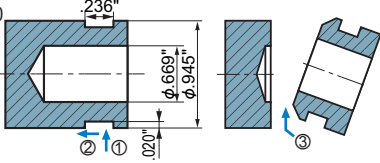
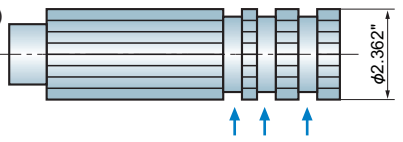

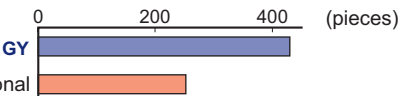
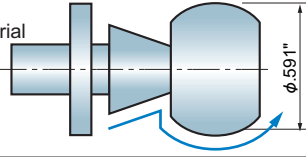
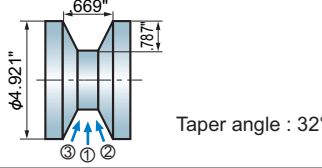
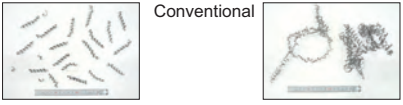
**Note 7)**  
The insert clamp screw is inclined. Ensure that the wrench is perpendicular to the screw tightening.

**Good**      **NG**

**F**

**Assembled**

# Application Examples for External Grooving

Modular Holder	GYHLUS16D00-M25L	GYHLUS24E00-M25L	
Modular Blade	GYM25LA-H14	GYM25LA-F12	
Insert	GY2M0500H080N-MS	GY2M0300F020N-MS	
Insert Grade	VP10RT	NX2525	
Workpiece	AISI 5120H 	AISI 1025 	
Component	Automotive transmission gear	Hydraulic piston	
Cutting Conditions	Cutting Speed (SFM)	590	690
	Feed (IPR)	.006	①②③ : .002
	Radial Depth of Cut (inch)	.394	①③ : .197 ② : Machining allowance .006
	Axial Depth of Cut (inch)	①(Grooving) : .197 ②③(Plunging) : .118	①③ : Machining allowance .010 ② : .394
	Coolant	Wet	Wet
Results	 <p>GY gave 1.6 times longer tool life. Additionally, the sharper edge geometry resulted in lower cutting forces and prevented the workpiece being drawn out of the chuck.</p>	 <p>GY tools achieved a smooth shiny surface finish compared to the dull conventional tool finish.</p>	
Modular Holder	GYHRUS12C00-M20R	GYHRUS16D00-M25R	
Modular Blade	GYM20RB-F18	GYM25RA-F06	
Insert	GY2M0300F020N-MS	GY1G0300F020N-GFGS	
Insert Grade	VP20RT	MB8025	
Workpiece	AISI 52100 	AISI 8620 (58-62HRC) 	
Component	Machine parts	Truck transmission main shaft	
Cutting Conditions	Cutting Speed (SFM)	430	420
	Feed (IPR)	①③ : .004 ② : .006	.004
	Radial Depth of Cut (inch)	①② : .020 ③ : .138	.051 (Machining allowance .006)
	Axial Depth of Cut (inch)	①③ : .118	.118 (Machining allowance .006)
	Coolant	Wet	Dry
Results	<p>GY reduces cycle times and tool changes due to the ability to both groove and turn. Improved chip disposal compared to conventional products.</p>  <p>● Chip geometry</p>	 <p>GY achieved 1.5 times longer tool life than a conventional product.</p>	
Modular Holder	GYHRUS12C00-M25R	GYHRUS16D00-M25R	
Modular Blade	GYM25RA-G08	GYM25RA-J25	
Insert	GY2M0400G200N-BM	GY2M0600H040N-MS	
Insert Grade	VP10RT	MY5015	
Workpiece	AISI 1045 Forging material 	AISI No35B  <p>Taper angle : 32°</p>	
Component	Ball stud for ball joint	Pulley	
Cutting Conditions	Cutting Speed (SFM)	490	985
	Feed (IPR)	.008	①②③ : .006
	Radial Depth of Cut (inch)	Machining allowance .010-.018	①②③ : .787
	Axial Depth of Cut (inch)	Machining allowance .010-.018	① : .236 ②③ : .217
	Coolant	Wet	Wet
Results	 <p>GY produced smaller consistent chips compared to longer uncontrolled chips when using conventional tools.</p>	<p>When machining cast iron, the highly rigid design allows stable cutting without vibration and negated the conventional problem of the insert becoming chipped.</p>	

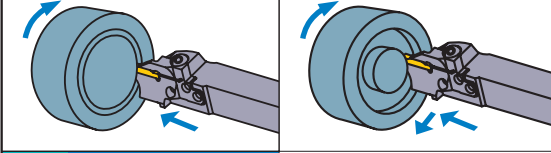
# GY SERIES (FACE GROOVING)

**3-1**

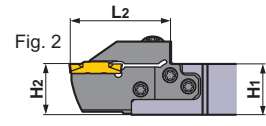
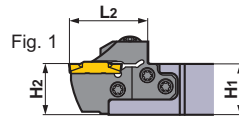
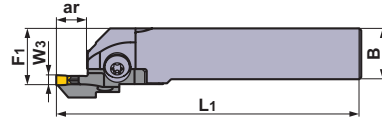
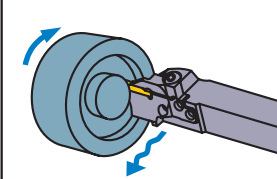
00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M	Insert GY2M
Insert GY2M	Insert GY2M
Insert GY1G	



Insert GY2M



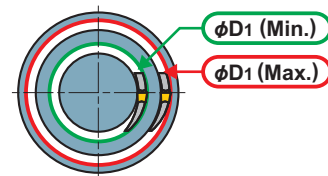
Right hand tool holder shown.

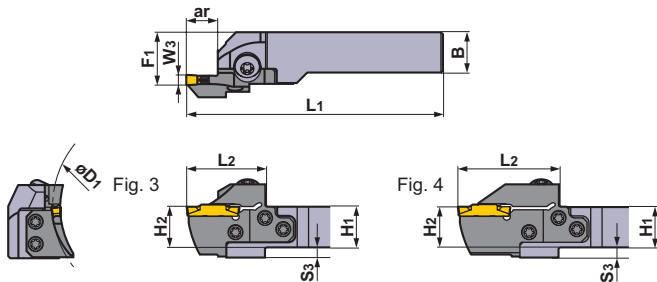
Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
F	.118 .125	*3 R	1.378	1.575	.472	(4F1R4F11)	GYM25RD-F12-035	●	GYHRUS12C00-M25R	●
			1.575	1.969	.472	(4F1R4F12)	GYM25RD-F12-040	●		
			1.969	2.362	.472	(4F1R4F13)	GYM25RD-F12-050	●		
			2.362	2.953	.472	(4F1R4F14)	GYM25RD-F12-060	●		
			2.953	3.937	.787 *1	(4F1R4F24)	GYM25RD-F20-060	●		
			2.953	3.937	.472	(4F1R4F15)	GYM25RD-F12-075	●		
			3.937	5.906	.787 *1	(4F1R4F25)	GYM25RD-F20-075	●		
			3.937	5.906	.472	(4F1R4F16)	GYM25RD-F12-100	●		
	5.315	7.874	.787 *1	(4F1R4F26)	GYM25RD-F20-100	●				
	5.315	7.874	.472	(4F1R4F17)	GYM25RD-F12-135	●				
	7.087	9.843	.787 *1	(4F1R4F27)	GYM25RD-F20-135	●				
	7.087	9.843	.472	(4F1R4F18)	GYM25RD-F12-180	●				
	7.087	9.843	.787 *1	(4F1R4F28)	GYM25RD-F20-180	●				
	1.378	1.575	.472	(4H1R4F11)	GYM25RD-F12-035	●	GYHRUS16D00-M25R	●		
	1.575	1.969	.472	(4H1R4F12)	GYM25RD-F12-040	●				
	1.969	2.362	.472	(4H1R4F13)	GYM25RD-F12-050	●				
2.362	2.953	.472	(4H1R4F14)	GYM25RD-F12-060	●					
2.953	3.937	.787 *1	(4H1R4F24)	GYM25RD-F20-060	●					
2.953	3.937	.472	(4H1R4F15)	GYM25RD-F12-075	●					
3.937	5.906	.787 *1	(4H1R4F25)	GYM25RD-F20-075	●					
3.937	5.906	.472	(4H1R4F16)	GYM25RD-F12-100	●					
5.315	7.874	.787 *1	(4H1R4F26)	GYM25RD-F20-100	●					
5.315	7.874	.472	(4H1R4F17)	GYM25RD-F12-135	●					
7.087	9.843	.787 *1	(4H1R4F27)	GYM25RD-F20-135	●					
7.087	9.843	.472	(4H1R4F18)	GYM25RD-F12-180	●					
7.087	9.843	.787 *1	(4H1R4F28)	GYM25RD-F20-180	●					

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 57 for left hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





Right hand tool holder shown.

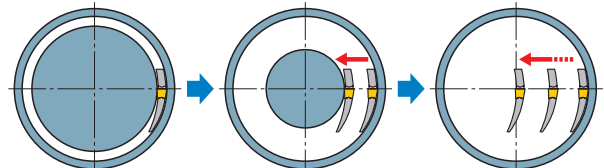
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS12C00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHRUS16D00-M25R</b>			

Dimensions (inch) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>	P11 P12	
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0300F030N-GM</b> <b>GY2M0318F030N-GM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b>		
.750	.750	5.236	1.772	.750	1.000	.250	4		<b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> (Gauge insert)		
.750	.750	5.236	1.772	.750	1.000	.250	4		<b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b>		
.750	.750	5.236	1.772	.750	1.000	.250	4		<b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>		
.750	.750	5.236	1.772	.750	1.000	.250	4				
.750	.750	5.000	1.535	.750	1.000	.250	3				
.750	.750	5.236	1.772	.750	1.000	.250	4				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.236	1.772	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.236	1.772	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.236	1.772	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.236	1.772	1.000	1.125	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



# GY SERIES (FACE GROOVING)

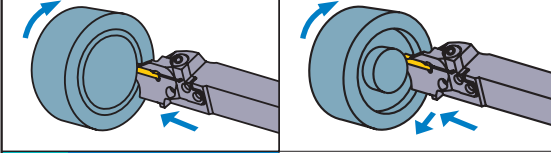
**3-1**

00° type holder (Inch) **NEW**

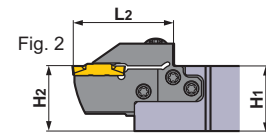
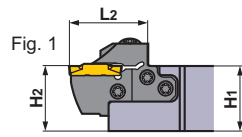
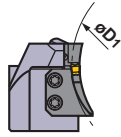
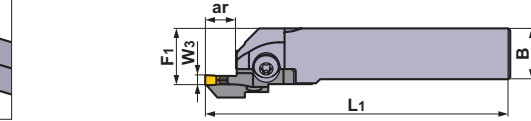
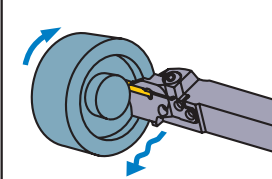
Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-00000000-GS  
 Insert GY2M-00000000-GM  
 Insert GY1G-00000000-GF  
 GS

Insert GY2M-00000000-MM  
 Insert GY2M-00000000-MS



Insert GY2M-00000000-BM



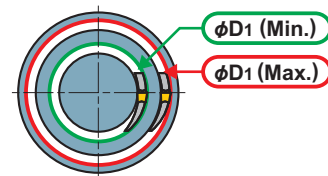
Right hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
F	.118 .125	*3 R	1.378	1.575	.472	(4K1R4F11)	GYM25RD-F12-035	●	GYHRUS20D00-M25R	●
			1.575	1.969	.472	(4K1R4F12)	GYM25RD-F12-040	●		
			1.969	2.362	.472	(4K1R4F13)	GYM25RD-F12-050	●		
			2.362	2.953	.472	(4K1R4F14)	GYM25RD-F12-060	●		
			2.953	3.937	.472	(4K1R4F15)	GYM25RD-F12-075	●		
			3.937	5.906	.472	(4K1R4F16)	GYM25RD-F12-100	●		
			5.315	7.874	.472	(4K1R4F17)	GYM25RD-F12-135	●		
			7.087	9.843	.472	(4K1R4F18)	GYM25RD-F12-180	●		
	1.378	1.575	.472	(4K1R4F24)	GYM25RD-F20-060	●				
	1.575	1.969	.472	(4K1R4F25)	GYM25RD-F20-075	●				
	1.969	2.362	.472	(4K1R4F26)	GYM25RD-F20-100	●				
	2.362	2.953	.472	(4K1R4F27)	GYM25RD-F20-135	●				
	2.953	3.937	.472	(4K1R4F28)	GYM25RD-F20-180	●				
	3.937	5.906	.472	(4M1R4F11)	GYM25RD-F12-035	●				
	5.315	7.874	.472	(4M1R4F12)	GYM25RD-F12-040	●				
	7.087	9.843	.472	(4M1R4F13)	GYM25RD-F12-050	●				
1.378	1.575	.472	(4M1R4F14)	GYM25RD-F12-060	●					
1.575	1.969	.472	(4M1R4F15)	GYM25RD-F12-075	●					
1.969	2.362	.472	(4M1R4F16)	GYM25RD-F12-100	●					
2.362	2.953	.472	(4M1R4F17)	GYM25RD-F12-135	●					
2.953	3.937	.472	(4M1R4F18)	GYM25RD-F12-180	●					
3.937	5.906	.472	(4M1R4F24)	GYM25RD-F20-060	●					
5.315	7.874	.472	(4M1R4F25)	GYM25RD-F20-075	●					
7.087	9.843	.472	(4M1R4F26)	GYM25RD-F20-100	●					
			(4M1R4F27)	GYM25RD-F20-135	●					
			(4M1R4F28)	GYM25RD-F20-180	●					

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 59 for left hand tools.




## Notes when selecting a modular blade (1)

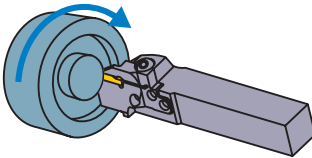

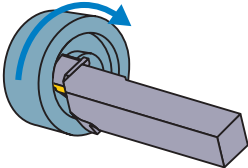
- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





## SPARE PARTS

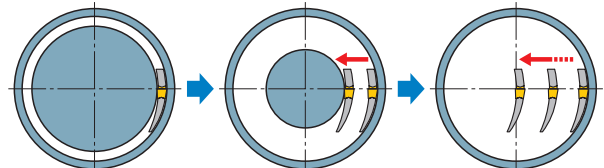
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS20D00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHRUS24E00-M25R</b>			

Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>	P11 P12	
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.236	1.772	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.236	1.772	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.236	1.772	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.236	1.772	1.250	1.375	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.236	1.772	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.236	1.772	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.236	1.772	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.236	1.772	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.236	1.772	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.236	1.772	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.236	1.772	1.500	1.625	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

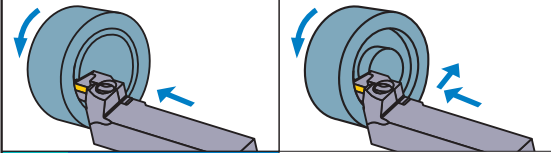


# GY SERIES (FACE GROOVING)

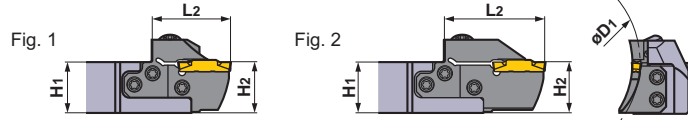
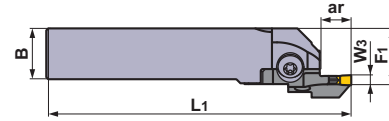
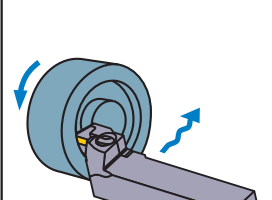
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M	Insert GY2M
Insert GY2M	Insert GY2M
Insert GY1G	



Insert GY2M



Left hand tool holder shown.

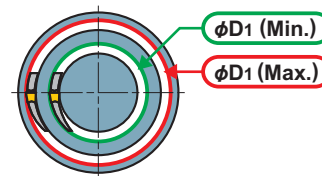
FACE GROOVING

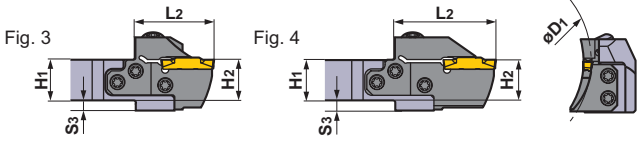
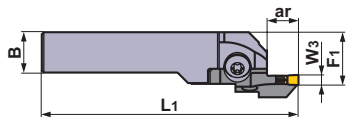
Seat Size	Insert Width W <sub>3</sub> (Inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (Inch)		Max. Groove Depth ar (Inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
F	.118 .125	*3 L	1.378	1.575	.472	(4F1L4F11)	GYM25LD-F12-035	●	GYHLUS12C00-M25L	●
			1.575	1.969	.472	(4F1L4F12)	GYM25LD-F12-040	●		
			1.969	2.362	.472	(4F1L4F13)	GYM25LD-F12-050	●		
			2.362	2.953	.472	(4F1L4F14)	GYM25LD-F12-060	●		
			2.953	3.937	.472	(4F1L4F15)	GYM25LD-F12-075	●		
			3.937	5.906	.472	(4F1L4F16)	GYM25LD-F12-100	●		
			5.315	7.874	.472	(4F1L4F17)	GYM25LD-F12-135	●		
			7.087	9.843	.472	(4F1L4F18)	GYM25LD-F12-180	●		
	1.378	1.575	.472	(4H1L4F11)	GYM25LD-F12-035	●	GYHLUS16D00-M25L	●		
	1.575	1.969	.472	(4H1L4F12)	GYM25LD-F12-040	●				
	1.969	2.362	.472	(4H1L4F13)	GYM25LD-F12-050	●				
	2.362	2.953	.472	(4H1L4F14)	GYM25LD-F12-060	●				
	2.953	3.937	.472	(4H1L4F15)	GYM25LD-F12-075	●				
	3.937	5.906	.472	(4H1L4F16)	GYM25LD-F12-100	●				
	5.315	7.874	.472	(4H1L4F17)	GYM25LD-F12-135	●				
	7.087	9.843	.472	(4H1L4F18)	GYM25LD-F12-180	●				

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 53 for right hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





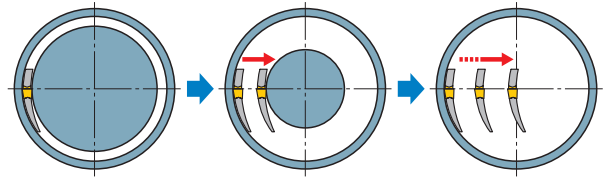
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHLUS12C00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS16D00-M25L</b>			

Dimensions (inch) *2								Fig.	Cutting Mode	Insert					
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page					
.750	.750	5.000	1.535	.750	1.000	.250	3			GY2M0300F020N-GS GY2M0318F020N-GS	P11 P12				
.750	.750	5.000	1.535	.750	1.000	.250	3					GY2M0300F030N-GM GY2M0318F030N-GM			
.750	.750	5.000	1.535	.750	1.000	.250	3					GY2M0300F030R05-GM GY2M0300F030L05-GM			
.750	.750	5.000	1.535	.750	1.000	.250	3					GY2M0300F020N-MS GY2M0300F040N-MS (Gauge insert)			
.750	.750	5.236	1.772	.750	1.000	.250	4						GY2M0300F020N-MM GY2M0300F040N-MM		
.750	.750	5.236	1.772	.750	1.000	.250	4								GY2M0300F150N-BM GY2M0318F159N-BM
.750	.750	5.000	1.535	.750	1.000	.250	3								GY1G0300F020N-GFGS GY1G0318F020N-GFGS
.750	.750	5.236	1.772	.750	1.000	.250	4								
.750	.750	5.000	1.535	.750	1.000	.250	3								
.750	.750	5.236	1.772	.750	1.000	.250	4								
1.000	1.000	6.000	1.535	1.000	1.125	—	1								
1.000	1.000	6.000	1.535	1.000	1.125	—	1								
1.000	1.000	6.000	1.535	1.000	1.125	—	1								
1.000	1.000	6.236	1.772	1.000	1.125	—	2								
1.000	1.000	6.000	1.535	1.000	1.125	—	1								
1.000	1.000	6.236	1.772	1.000	1.125	—	2								
1.000	1.000	6.000	1.535	1.000	1.125	—	1								
1.000	1.000	6.236	1.772	1.000	1.125	—	2								
1.000	1.000	6.000	1.535	1.000	1.125	—	1								
1.000	1.000	6.236	1.772	1.000	1.125	—	2								
1.000	1.000	6.000	1.535	1.000	1.125	—	1								
1.000	1.000	6.236	1.772	1.000	1.125	—	2								

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

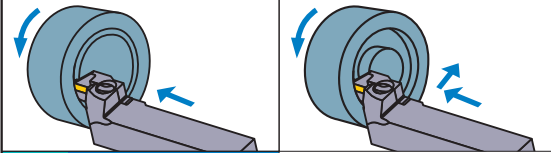


# GY SERIES (FACE GROOVING)

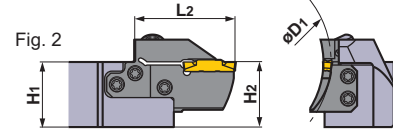
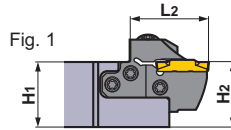
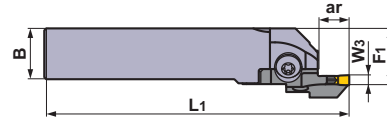
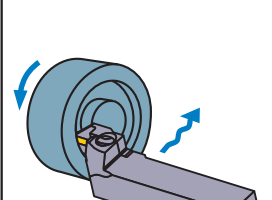
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M	Insert GY2M
Insert GY2M	Insert GY2M
Insert GY1G	



Insert GY2M



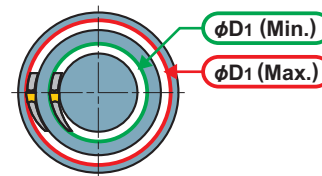
Left hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
F	.118 .125	*3 L	1.378	1.575	.472	(4K1L4F11)	GYM25LD-F12-035	●	GYHLUS20D00-M25L	●
			1.575	1.969	.472	(4K1L4F12)	GYM25LD-F12-040	●		
			1.969	2.362	.472	(4K1L4F13)	GYM25LD-F12-050	●		
			2.362	2.953	.472	(4K1L4F14)	GYM25LD-F12-060	●		
			2.953	3.937	.472	(4K1L4F15)	GYM25LD-F12-075	●		
			3.937	5.906	.472	(4K1L4F16)	GYM25LD-F12-100	●		
			5.315	7.874	.472	(4K1L4F17)	GYM25LD-F12-135	●		
			7.087	9.843	.472	(4K1L4F18)	GYM25LD-F12-180	●		
	1.378	1.575	.472	(4M1L4F11)	GYM25LD-F12-035	●	GYHLUS24E00-M25L	●		
	1.575	1.969	.472	(4M1L4F12)	GYM25LD-F12-040	●				
	1.969	2.362	.472	(4M1L4F13)	GYM25LD-F12-050	●				
	2.362	2.953	.472	(4M1L4F14)	GYM25LD-F12-060	●				
	2.953	3.937	.472	(4M1L4F15)	GYM25LD-F12-075	●				
	3.937	5.906	.472	(4M1L4F16)	GYM25LD-F12-100	●				
	5.315	7.874	.472	(4M1L4F17)	GYM25LD-F12-135	●				
	7.087	9.843	.472	(4M1L4F18)	GYM25LD-F12-180	●				




- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 55 for right hand tools.

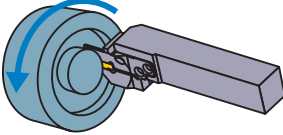







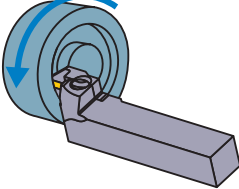
## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

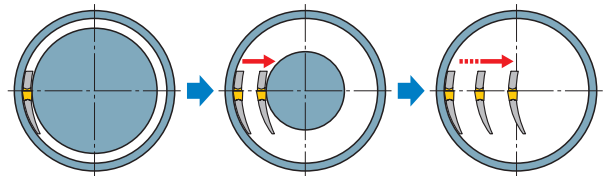
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHLUS20D00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS24E00-M25L</b>			

	Dimensions (inch) *2						Fig.	Cutting Mode	Insert	
	H1	B	L1	L2	H2	F1			Geometry / Insert Number	Page
	1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>	P11 P12
	1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0300F030N-GM</b> <b>GY2M0318F030N-GM</b>	
	1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b>	
	1.250	1.250	6.236	1.772	1.250	1.375	2		 <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> (Gauge insert)	
	1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b>	
	1.250	1.250	6.236	1.772	1.250	1.375	2		 <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b>	
	1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>	
	1.250	1.250	6.236	1.772	1.250	1.375	2			
	1.250	1.250	6.000	1.535	1.250	1.375	1			
	1.250	1.250	6.236	1.772	1.250	1.375	2			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.236	1.772	1.500	1.625	2			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.236	1.772	1.500	1.625	2			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.236	1.772	1.500	1.625	2			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.236	1.772	1.500	1.625	2			

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

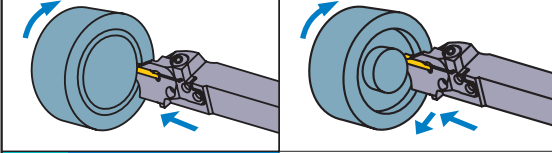


# GY SERIES (FACE GROOVING)

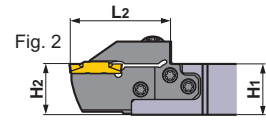
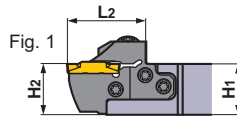
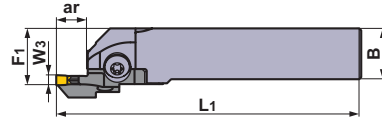
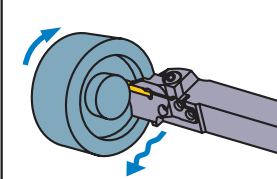
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-0000000000-GS    Insert GY2M-0000000000-MM  
 Insert GY2M-0000000000-GM    Insert GY2M-0000000000-MS  
 Insert GY1G-0000000000-GS



Insert GY2M-0000000000-BM



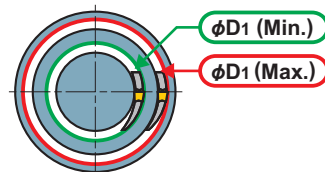
Right hand tool holder shown.

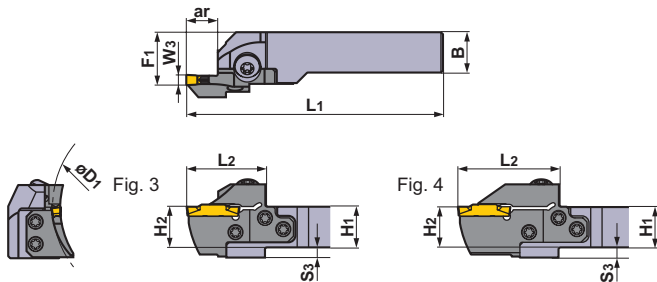
Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number					
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock		
G	.157	*3 R	1.575	1.969	.551	(4F1R4G11)	GYM25RD-G14-040	●	GYHRUS12C00-M25R	●		
			1.969	2.362	.551	(4F1R4G12)	GYM25RD-G14-050	●				
			2.362	3.346	.551	(4F1R4G13)	GYM25RD-G14-060	●				
					.984 *1	(4F1R4G23)	GYM25RD-G25-060	●				
			3.346	4.921	.551	(4F1R4G14)	GYM25RD-G14-085	●				
					.984 *1	(4F1R4G24)	GYM25RD-G25-085	●				
			4.921	7.874	.551	(4F1R4G15)	GYM25RD-G14-125	●				
					.984 *1	(4F1R4G25)	GYM25RD-G25-125	●				
			7.087	11.024	.551	(4F1R4G16)	GYM25RD-G14-180	●				
					.984 *1	(4F1R4G26)	GYM25RD-G25-180	●				
			9.843	39.331	.551	(4F1R4G17)	GYM25RD-G14-250	●				
					.984 *1	(4F1R4G27)	GYM25RD-G25-250	●				
			1.575	1.969	.551	(4H1R4G11)	GYM25RD-G14-040	●			GYHRUS16D00-M25R	●
			1.969	2.362	.551	(4H1R4G12)	GYM25RD-G14-050	●				
2.362	3.346	.551	(4H1R4G13)	GYM25RD-G14-060	●							
		.984 *1	(4H1R4G23)	GYM25RD-G25-060	●							
3.346	4.921	.551	(4H1R4G14)	GYM25RD-G14-085	●							
		.984 *1	(4H1R4G24)	GYM25RD-G25-085	●							
4.921	7.874	.551	(4H1R4G15)	GYM25RD-G14-125	●							
		.984 *1	(4H1R4G25)	GYM25RD-G25-125	●							
7.087	11.024	.551	(4H1R4G16)	GYM25RD-G14-180	●							
		.984 *1	(4H1R4G26)	GYM25RD-G25-180	●							
9.843	39.331	.551	(4H1R4G17)	GYM25RD-G14-250	●							
		.984 *1	(4H1R4G27)	GYM25RD-G25-250	●							

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 65 for left hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





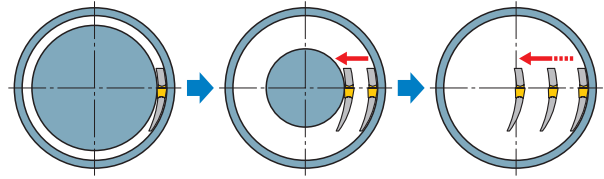
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYGRUS12C00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYGRUS16D00-M25R</b>			

Dimensions (inch) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
.750	.750	5.000	1.535	.750	1.000	.250	3			<b>GY2M0400G020N-GS</b>	P11 P12
.750	.750	5.000	1.535	.750	1.000	.250	3			<b>GY2M0400G030N-GM</b>	
.750	.750	5.000	1.535	.750	1.000	.250	3			<b>GY2M0400G030R05-GM</b>	
.750	.750	5.000	1.535	.750	1.000	.250	3			<b>GY2M0400G030L05-GM</b>	
.750	.750	5.433	1.969	.750	1.000	.250	4			<b>GY2M0400G020N-MS</b>	
.750	.750	5.433	1.969	.750	1.000	.250	4			<b>GY2M0400G040N-MS</b> (Gauge insert)	
.750	.750	5.433	1.969	.750	1.000	.250	4			<b>GY2M0400G040N-MM</b>	
.750	.750	5.433	1.969	.750	1.000	.250	4			<b>GY2M0400G080N-MM</b>	
.750	.750	5.433	1.969	.750	1.000	.250	4			<b>GY2M0400G200N-BM</b>	
.750	.750	5.433	1.969	.750	1.000	.250	4			<b>GY1G0400G020N-GFGS</b>	
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

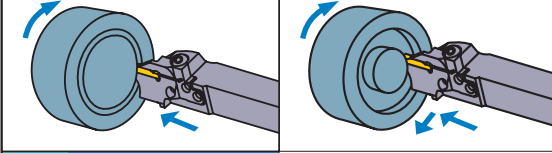


# GY SERIES (FACE GROOVING)

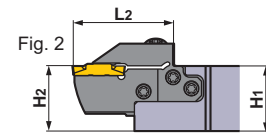
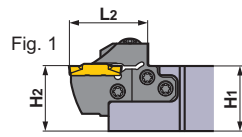
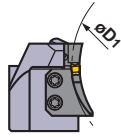
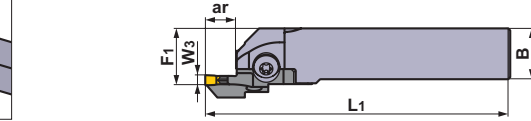
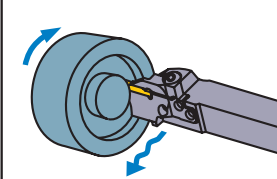
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-0000000000-GS    Insert GY2M-0000000000-MM  
 Insert GY2M-0000000000-GM    Insert GY2M-0000000000-MS  
 Insert GY1G-0000000000-GS



Insert GY2M-0000000000-BM



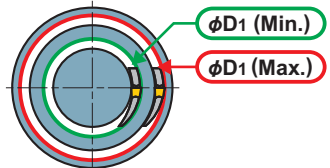
Right hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number					
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock		
G	.157	*3 R	1.575	1.969	.551	(4K1R4G11)	GYM25RD-G14-040	●	GYHRUS20D00-M25R	●		
			1.969	2.362	.551	(4K1R4G12)	GYM25RD-G14-050	●				
			2.362	3.346	.551	(4K1R4G13)	GYM25RD-G14-060	●				
					.984 *1	(4K1R4G23)	GYM25RD-G25-060	●				
			3.346	4.921	.551	(4K1R4G14)	GYM25RD-G14-085	●				
					.984 *1	(4K1R4G24)	GYM25RD-G25-085	●				
			4.921	7.874	.551	(4K1R4G15)	GYM25RD-G14-125	●				
					.984 *1	(4K1R4G25)	GYM25RD-G25-125	●				
			7.087	11.024	.551	(4K1R4G16)	GYM25RD-G14-180	●				
					.984 *1	(4K1R4G26)	GYM25RD-G25-180	●				
			9.843	39.331	.551	(4K1R4G17)	GYM25RD-G14-250	●				
					.984 *1	(4K1R4G27)	GYM25RD-G25-250	●				
			1.575	1.969	.551	(4M1R4G11)	GYM25RD-G14-040	●			GYHRUS24E00-M25R	●
			1.969	2.362	.551	(4M1R4G12)	GYM25RD-G14-050	●				
2.362	3.346	.551	(4M1R4G13)	GYM25RD-G14-060	●							
		.984 *1	(4M1R4G23)	GYM25RD-G25-060	●							
3.346	4.921	.551	(4M1R4G14)	GYM25RD-G14-085	●							
		.984 *1	(4M1R4G24)	GYM25RD-G25-085	●							
4.921	7.874	.551	(4M1R4G15)	GYM25RD-G14-125	●							
		.984 *1	(4M1R4G25)	GYM25RD-G25-125	●							
7.087	11.024	.551	(4M1R4G16)	GYM25RD-G14-180	●							
		.984 *1	(4M1R4G26)	GYM25RD-G25-180	●							
9.843	39.331	.551	(4M1R4G17)	GYM25RD-G14-250	●							
		.984 *1	(4M1R4G27)	GYM25RD-G25-250	●							

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 67 for left hand tools.




### Notes when selecting a modular blade (1)

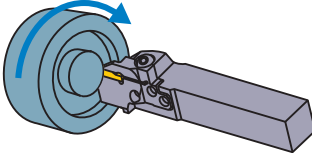

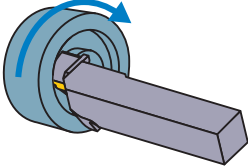

● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





## SPARE PARTS

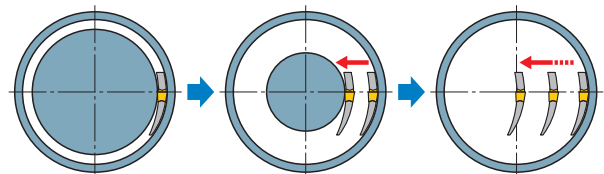
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS20D00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHRUS24E00-M25R</b>			

Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0400G020N-GS</b>	P11 P12	
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.500	1.500	7.000	1.535	1.500	1.625	1		 <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> (Gauge insert)		
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

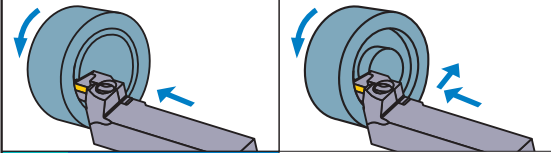


# GY SERIES (FACE GROOVING)

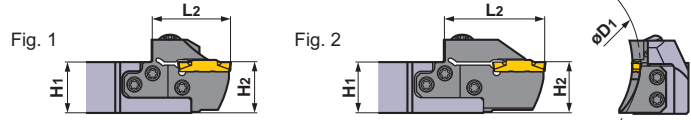
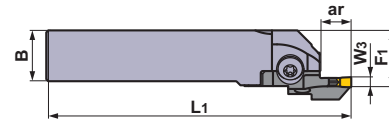
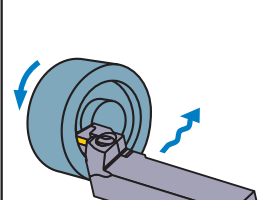
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M	Insert GY2M
Insert GY2M	Insert GY2M
Insert GY1G	



Insert GY2M



Left hand tool holder shown.

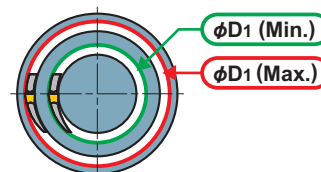
FACE GROOVING

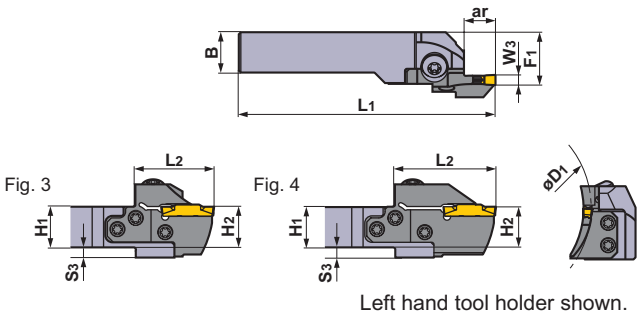
Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
G	.157	*3 L	1.575	1.969	.551	(4F1L4G11)	GYM25LD-G14-040	●	GYHLUS12C00-M25L	●
			1.969	2.362	.551	(4F1L4G12)	GYM25LD-G14-050	●		
			2.362	3.346	.551	(4F1L4G13)	GYM25LD-G14-060	●		
					.984 *1	(4F1L4G23)	GYM25LD-G25-060	●		
			3.346	4.921	.551	(4F1L4G14)	GYM25LD-G14-085	●		
					.984 *1	(4F1L4G24)	GYM25LD-G25-085	●		
			4.921	7.874	.551	(4F1L4G15)	GYM25LD-G14-125	●		
					.984 *1	(4F1L4G25)	GYM25LD-G25-125	●		
			7.087	11.024	.551	(4F1L4G16)	GYM25LD-G14-180	●		
					.984 *1	(4F1L4G26)	GYM25LD-G25-180	●		
			9.843	39.331	.551	(4F1L4G17)	GYM25LD-G14-250	●		
					.984 *1	(4F1L4G27)	GYM25LD-G25-250	●		
			1.575	1.969	.551	(4H1L4G11)	GYM25LD-G14-040	●		
			1.969	2.362	.551	(4H1L4G12)	GYM25LD-G14-050	●		

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 61 for right hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





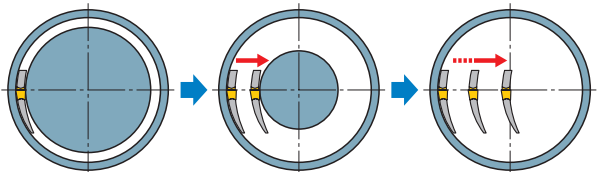
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHLUS12C00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS16D00-M25L</b>			

Dimensions (inch) *2								Fig.	Cutting Mode	Insert				
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page				
.750	.750	5.000	1.535	.750	1.000	.250	3			<b>GY2M0400G020N-GS</b>	P11 P12			
.750	.750	5.000	1.535	.750	1.000	.250	3					<b>GY2M0400G030N-GM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3					<b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3					<b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> (Gauge insert)		
.750	.750	5.000	1.535	.750	1.000	.250	3					<b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3					<b>GY2M0400G200N-BM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3					<b>GY1G0400G020N-GFGS</b>		
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
.750	.750	5.433	1.969	.750	1.000	.250	4							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.433	1.969	1.000	1.125	—	2							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.433	1.969	1.000	1.125	—	2							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.433	1.969	1.000	1.125	—	2							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.433	1.969	1.000	1.125	—	2							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.433	1.969	1.000	1.125	—	2							

FACE GROOVING

**Notes when selecting a modular blade (2)**

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

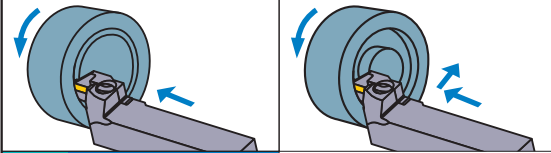


# GY SERIES (FACE GROOVING)

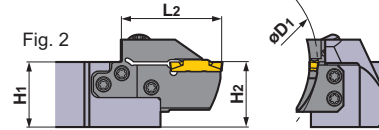
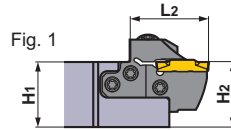
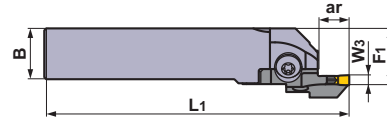
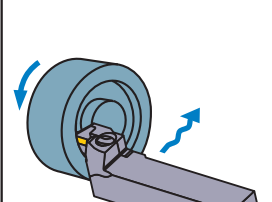
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M	Insert GY2M
Insert GY2M	Insert GY2M
Insert GY1G	



Insert GY2M-BM



Left hand tool holder shown.

FACE GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number					
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock		
G	.157	*3 L	1.575	1.969	.551	(4K1L4G11)	GYM25LD-G14-040	●	GYHLUS20D00-M25L	●		
			1.969	2.362	.551	(4K1L4G12)	GYM25LD-G14-050	●				
			2.362	3.346	.551	(4K1L4G13)	GYM25LD-G14-060	●				
					.984 *1	(4K1L4G23)	GYM25LD-G25-060	●				
			3.346	4.921	.551	(4K1L4G14)	GYM25LD-G14-085	●				
					.984 *1	(4K1L4G24)	GYM25LD-G25-085	●				
			4.921	7.874	.551	(4K1L4G15)	GYM25LD-G14-125	●				
					.984 *1	(4K1L4G25)	GYM25LD-G25-125	●				
			7.087	11.024	.551	(4K1L4G16)	GYM25LD-G14-180	●				
					.984 *1	(4K1L4G26)	GYM25LD-G25-180	●				
			9.843	39.331	.551	(4K1L4G17)	GYM25LD-G14-250	●				
					.984 *1	(4K1L4G27)	GYM25LD-G25-250	●				
			1.575	1.969	.551	(4M1L4G11)	GYM25LD-G14-040	●			GYHLUS24E00-M25L	●
			1.969	2.362	.551	(4M1L4G12)	GYM25LD-G14-050	●				
2.362	3.346	.551	(4M1L4G13)	GYM25LD-G14-060	●							
		.984 *1	(4M1L4G23)	GYM25LD-G25-060	●							
3.346	4.921	.551	(4M1L4G14)	GYM25LD-G14-085	●							
		.984 *1	(4M1L4G24)	GYM25LD-G25-085	●							
4.921	7.874	.551	(4M1L4G15)	GYM25LD-G14-125	●							
		.984 *1	(4M1L4G25)	GYM25LD-G25-125	●							
7.087	11.024	.551	(4M1L4G16)	GYM25LD-G14-180	●							
		.984 *1	(4M1L4G26)	GYM25LD-G25-180	●							
9.843	39.331	.551	(4M1L4G17)	GYM25LD-G14-250	●							
		.984 *1	(4M1L4G27)	GYM25LD-G25-250	●							

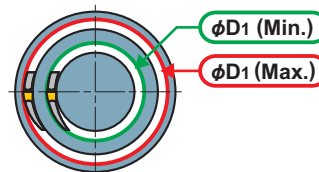
\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.




\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.

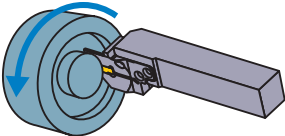
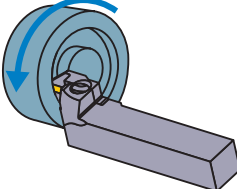
\*3 Refer to page 63 for right hand tools.

## Notes when selecting a modular blade (1)

● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



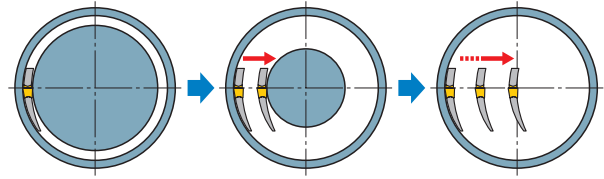
SPARE PARTS			
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHLUS20D00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS24E00-M25L</b>			

	Dimensions (inch) *2						Fig.	Cutting Mode	Insert	
	H1	B	L1	L2	H2	F1			Geometry / Insert Number	Page
	1.250	1.250	6.000	1.535	1.250	1.375	1			P11 P12
	1.250	1.250	6.000	1.535	1.250	1.375	1			
	1.250	1.250	6.000	1.535	1.250	1.375	1			
	1.250	1.250	6.433	1.969	1.250	1.375	2			
	1.250	1.250	6.000	1.535	1.250	1.375	1			
	1.250	1.250	6.433	1.969	1.250	1.375	2			
	1.250	1.250	6.000	1.535	1.250	1.375	1			
	1.250	1.250	6.433	1.969	1.250	1.375	2			
	1.250	1.250	6.000	1.535	1.250	1.375	1			
	1.250	1.250	6.433	1.969	1.250	1.375	2			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.433	1.969	1.500	1.625	2			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.433	1.969	1.500	1.625	2			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.433	1.969	1.500	1.625	2			
	1.500	1.500	7.000	1.535	1.500	1.625	1			
	1.500	1.500	7.433	1.969	1.500	1.625	2			

-  **GY2M0400G020N-GS**
-  **GY2M0400G030N-GM**
-  **GY2M0400G030R05-GM**  
**GY2M0400G030L05-GM**
-  **GY2M0400G020N-MS**  
**GY2M0400G040N-MS**  
(Gauge insert)
-  **GY2M0400G040N-MM**  
**GY2M0400G080N-MM**
-  **GY2M0400G200N-BM**
-  **GY1G0400G020N-GFGS**

**Notes when selecting a modular blade (2)**

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



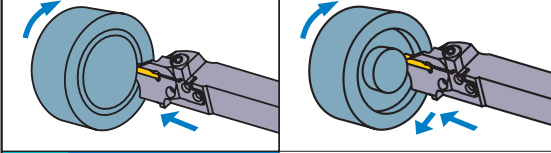
# GY SERIES (FACE GROOVING)

**3-1**

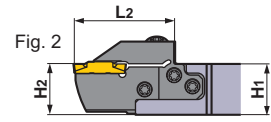
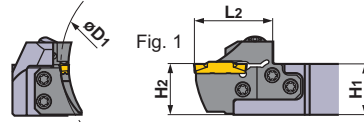
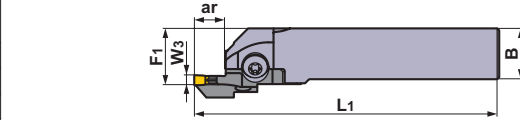
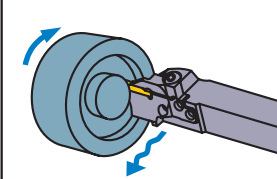
00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M	Insert GY2M
Insert GY2M	Insert GY2M
Insert GY1G	



Insert GY2M



Right hand tool holder shown.

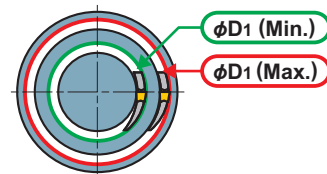
FACE GROOVING

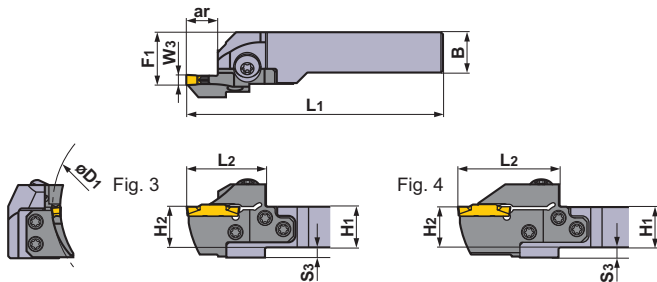
Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
H	.187 .197	*3 R	1.969	2.362	.551	(4F1R4H11)	GYM25RD-H14-050	●	GYHRUS12C00-M25R	●
			2.362	3.346	.551 .984 *1	(4F1R4H12) (4F1R4H22)	GYM25RD-H14-060 GYM25RD-H25-060	● ●		
			3.346	4.921	.551 .984 *1	(4F1R4H13) (4F1R4H23)	GYM25RD-H14-085 GYM25RD-H25-085	● ●		
			4.921	7.874	.551 .984 *1	(4F1R4H14) (4F1R4H24)	GYM25RD-H14-125 GYM25RD-H25-125	● ●		
			7.087	11.024	.551 .984 *1	(4F1R4H15) (4F1R4H25)	GYM25RD-H14-180 GYM25RD-H25-180	● ●		
			9.843	39.331	.551 .984 *1	(4F1R4H16) (4F1R4H26)	GYM25RD-H14-250 GYM25RD-H25-250	● ●		
			1.969	2.362	.551	(4H1R4H11)	GYM25RD-H14-050	●		
	2.362	3.346	.551 .984 *1	(4H1R4H12) (4H1R4H22)	GYM25RD-H14-060 GYM25RD-H25-060	● ●				
	3.346	4.921	.551 .984 *1	(4H1R4H13) (4H1R4H23)	GYM25RD-H14-085 GYM25RD-H25-085	● ●				
	4.921	7.874	.551 .984 *1	(4H1R4H14) (4H1R4H24)	GYM25RD-H14-125 GYM25RD-H25-125	● ●				
	7.087	11.024	.551 .984 *1	(4H1R4H15) (4H1R4H25)	GYM25RD-H14-180 GYM25RD-H25-180	● ●				
	9.843	39.331	.551 .984 *1	(4H1R4H16) (4H1R4H26)	GYM25RD-H14-250 GYM25RD-H25-250	● ●				

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 73 for left hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





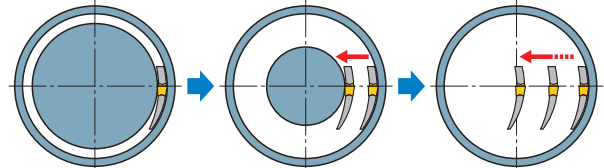
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS12C00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHRUS16D00-M25R</b>			

Dimensions (inch) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>	P11 P12	
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b>		
.750	.750	5.433	1.969	.750	1.000	.250	4		<b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b> (Gauge insert)		
.750	.750	5.433	1.969	.750	1.000	.250	4		<b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>		
.750	.750	5.433	1.969	.750	1.000	.250	4		<b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>		
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



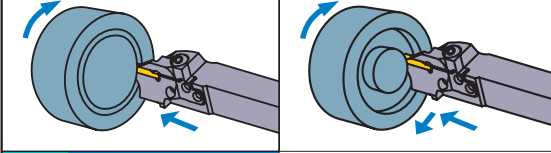
# GY SERIES (FACE GROOVING)

**3-1**

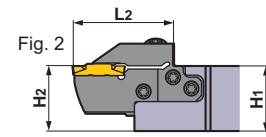
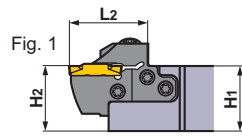
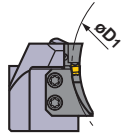
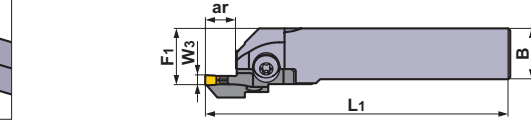
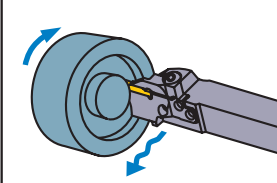
00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-0000000000-GS  
 Insert GY2M-0000000000-MM  
 Insert GY2M-0000000000-GM  
 Insert GY2M-0000000000-MS  
 Insert GY1G-0000000000-GF  
 Insert GY1G-0000000000-GS



Insert GY2M-0000000000-BM



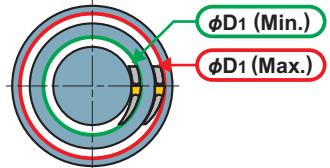
Right hand tool holder shown.

Seat Size	Insert Width W3 (inch)	Hand (R/L)	First Cut Diameter D1 (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
H	.187 .197	*3 R	1.969	2.362	.551	(4K1R4H11)	GYM25RD-H14-050	●	GYHRUS20D00-M25R	●
			2.362	3.346	.551 .984 *1	(4K1R4H12) (4K1R4H22)	GYM25RD-H14-060 GYM25RD-H25-060	● ●		
			3.346	4.921	.551 .984 *1	(4K1R4H13) (4K1R4H23)	GYM25RD-H14-085 GYM25RD-H25-085	● ●		
			4.921	7.874	.551 .984 *1	(4K1R4H14) (4K1R4H24)	GYM25RD-H14-125 GYM25RD-H25-125	● ●		
			7.087	11.024	.551 .984 *1	(4K1R4H15) (4K1R4H25)	GYM25RD-H14-180 GYM25RD-H25-180	● ●		
			9.843	39.331	.551 .984 *1	(4K1R4H16) (4K1R4H26)	GYM25RD-H14-250 GYM25RD-H25-250	● ●		
			1.969	2.362	.551	(4M1R4H11)	GYM25RD-H14-050	●		
	2.362	3.346	.551 .984 *1	(4M1R4H12) (4M1R4H22)	GYM25RD-H14-060 GYM25RD-H25-060	● ●				
	3.346	4.921	.551 .984 *1	(4M1R4H13) (4M1R4H23)	GYM25RD-H14-085 GYM25RD-H25-085	● ●				
	4.921	7.874	.551 .984 *1	(4M1R4H14) (4M1R4H24)	GYM25RD-H14-125 GYM25RD-H25-125	● ●				
	7.087	11.024	.551 .984 *1	(4M1R4H15) (4M1R4H25)	GYM25RD-H14-180 GYM25RD-H25-180	● ●				
	9.843	39.331	.551 .984 *1	(4M1R4H16) (4M1R4H26)	GYM25RD-H14-250 GYM25RD-H25-250	● ●				
									GYHRUS24E00-M25R	●

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L1, L2, F1 and D1 values may vary.  
 \*3 Refer to page 75 for left hand tools.




### Notes when selecting a modular blade (1)

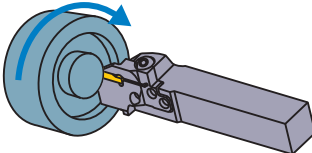







● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D1 minimum and D1 maximum that are described in the table of dimensions.





## SPARE PARTS

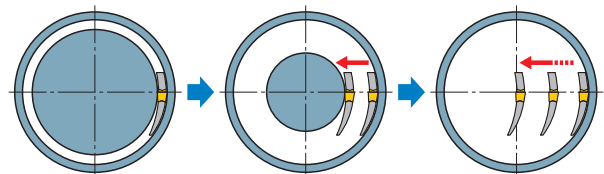
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS20D00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHRUS24E00-M25R</b>			

Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>	P11 P12	
1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b>		
1.250	1.250	6.433	1.969	1.250	1.375	2		 <b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b> (Gauge insert)		
1.250	1.250	6.433	1.969	1.250	1.375	2		 <b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>		
1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>		
1.250	1.250	6.433	1.969	1.250	1.375	2		 <b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>		
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

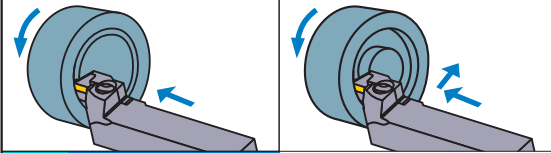


# GY SERIES (FACE GROOVING)

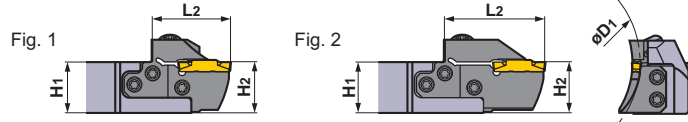
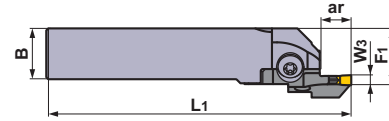
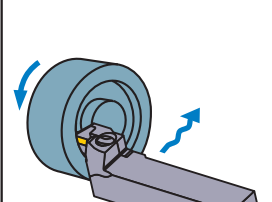
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M	Insert GY2M
Insert GY2M	Insert GY2M
Insert GY1G	



Insert GY2M



Left hand tool holder shown.

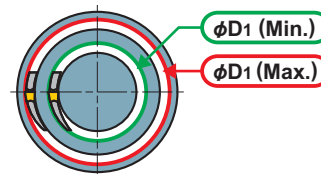
FACE GROOVING

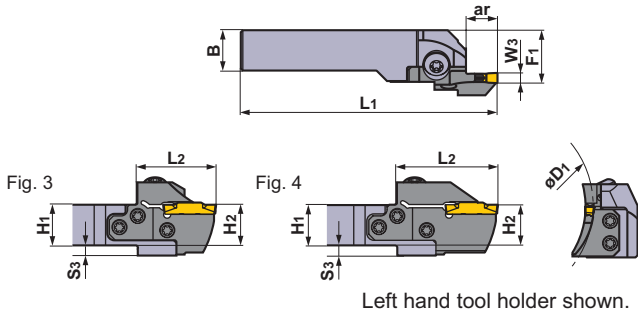
Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
H	.187 .197	*3 L	1.969	2.362	.551	(4F1L4H11)	GYM25LD-H14-050	●	GYHLUS12C00-M25L	●
			2.362	3.346	.551 .984 *1	(4F1L4H12) (4F1L4H22)	GYM25LD-H14-060 GYM25LD-H25-060	● ●		
			3.346	4.921	.551 .984 *1	(4F1L4H13) (4F1L4H23)	GYM25LD-H14-085 GYM25LD-H25-085	● ●		
			4.921	7.874	.551 .984 *1	(4F1L4H14) (4F1L4H24)	GYM25LD-H14-125 GYM25LD-H25-125	● ●		
			7.087	11.024	.551 .984 *1	(4F1L4H15) (4F1L4H25)	GYM25LD-H14-180 GYM25LD-H25-180	● ●		
			9.843	39.331	.551 .984 *1	(4F1L4H16) (4F1L4H26)	GYM25LD-H14-250 GYM25LD-H25-250	● ●		
	1.969	2.362	.551	(4H1L4H11)	GYM25LD-H14-050	●	GYHLUS16D00-M25L	●		
	2.362	3.346	.551 .984 *1	(4H1L4H12) (4H1L4H22)	GYM25LD-H14-060 GYM25LD-H25-060	● ●				
	3.346	4.921	.551 .984 *1	(4H1L4H13) (4H1L4H23)	GYM25LD-H14-085 GYM25LD-H25-085	● ●				
	4.921	7.874	.551 .984 *1	(4H1L4H14) (4H1L4H24)	GYM25LD-H14-125 GYM25LD-H25-125	● ●				
	7.087	11.024	.551 .984 *1	(4H1L4H15) (4H1L4H25)	GYM25LD-H14-180 GYM25LD-H25-180	● ●				
	9.843	39.331	.551 .984 *1	(4H1L4H16) (4H1L4H26)	GYM25LD-H14-250 GYM25LD-H25-250	● ●				

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 69 for right hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





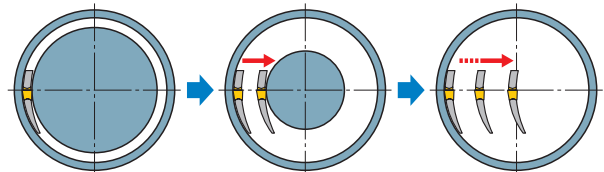
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHLUS12C00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS16D00-M25L</b>			

Dimensions (inch) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>	P11 P12	
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b>		
.750	.750	5.433	1.969	.750	1.000	.250	4		<b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
.750	.750	5.433	1.969	.750	1.000	.250	4		<b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b> (Gauge insert)		
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>		
.750	.750	5.433	1.969	.750	1.000	.250	4		<b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3		<b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>		
.750	.750	5.433	1.969	.750	1.000	.250	4				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

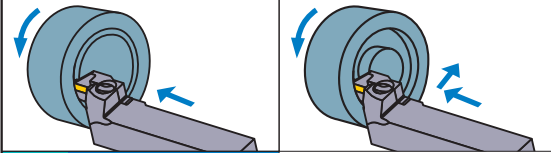


# GY SERIES (FACE GROOVING)

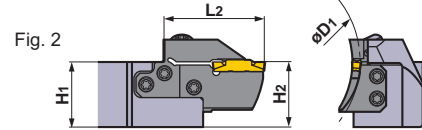
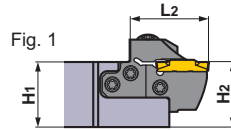
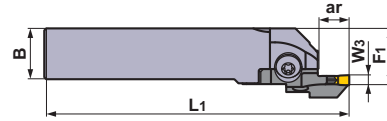
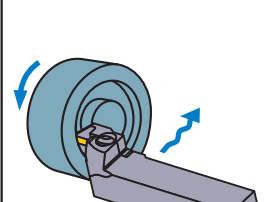
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M-0000000000-GS    Insert GY2M-0000000000-MM  
 Insert GY2M-0000000000-GM    Insert GY2M-0000000000-MS  
 Insert GY1G-0000000000-GF  
 Insert GY1G-0000000000-GS



Insert GY2M-0000000000-BM



Left hand tool holder shown.

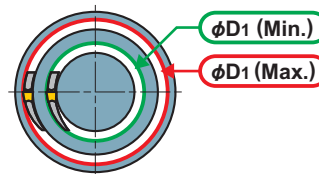
FACE GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
H	.187 .197	*3 L	1.969	2.362	.551	(4K1L4H11)	GYM25LD-H14-050	●	GYHLUS20D00-M25L	●
			2.362	3.346	.551 .984 *1	(4K1L4H12) (4K1L4H22)	GYM25LD-H14-060 GYM25LD-H25-060	● ●		
			3.346	4.921	.551 .984 *1	(4K1L4H13) (4K1L4H23)	GYM25LD-H14-085 GYM25LD-H25-085	● ●		
			4.921	7.874	.551 .984 *1	(4K1L4H14) (4K1L4H24)	GYM25LD-H14-125 GYM25LD-H25-125	● ●		
			7.087	11.024	.551 .984 *1	(4K1L4H15) (4K1L4H25)	GYM25LD-H14-180 GYM25LD-H25-180	● ●		
			9.843	39.331	.551 .984 *1	(4K1L4H16) (4K1L4H26)	GYM25LD-H14-250 GYM25LD-H25-250	● ●		
	1.969	2.362	.551	(4M1L4H11)	GYM25LD-H14-050	●	GYHLUS24E00-M25L	●		
	2.362	3.346	.551 .984 *1	(4M1L4H12) (4M1L4H22)	GYM25LD-H14-060 GYM25LD-H25-060	● ●				
	3.346	4.921	.551 .984 *1	(4M1L4H13) (4M1L4H23)	GYM25LD-H14-085 GYM25LD-H25-085	● ●				
	4.921	7.874	.551 .984 *1	(4M1L4H14) (4M1L4H24)	GYM25LD-H14-125 GYM25LD-H25-125	● ●				
	7.087	11.024	.551 .984 *1	(4M1L4H15) (4M1L4H25)	GYM25LD-H14-180 GYM25LD-H25-180	● ●				
	9.843	39.331	.551 .984 *1	(4M1L4H16) (4M1L4H26)	GYM25LD-H14-250 GYM25LD-H25-250	● ●				




- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 71 for right hand tools.

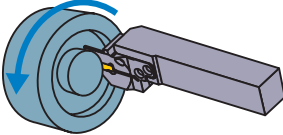

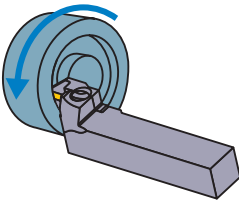





## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

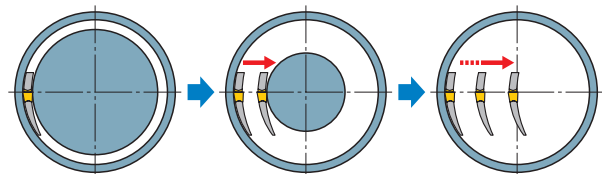
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHLUS20D00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS24E00-M25L</b>			

Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
1.250	1.250	6.000	1.535	1.250	1.375	1		 <b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>	P11 P12	
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.250	1.250	6.000	1.535	1.250	1.375	1				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.250	1.250	6.433	1.969	1.250	1.375	2				
1.500	1.500	7.000	1.535	1.500	1.625	1		 <b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1				
1.500	1.500	7.433	1.969	1.500	1.625	2				
1.500	1.500	7.000	1.535	1.500	1.625	1		 <b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b> (Gauge insert)		
1.500	1.500	7.000	1.535	1.500	1.625	1		 <b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>		
1.500	1.500	7.433	1.969	1.500	1.625	2		 <b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>		
1.500	1.500	7.000	1.535	1.500	1.625	1		 <b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>		
1.500	1.500	7.433	1.969	1.500	1.625	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

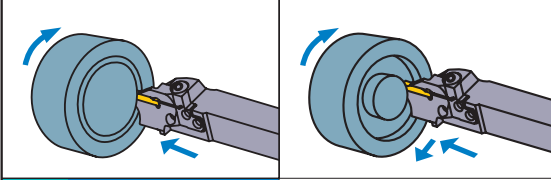


# GY SERIES (FACE GROOVING)

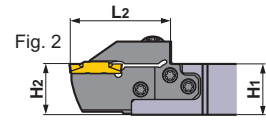
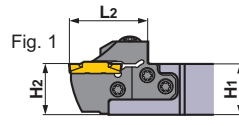
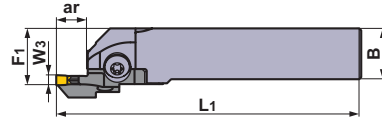
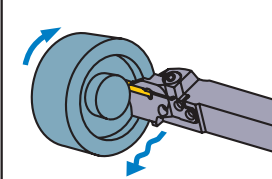
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-00000000-GS    Insert GY2M-00000000-MM  
 Insert GY2M-00000000-GM    Insert GY2M-00000000-MS



Insert GY2M-00000000-BM



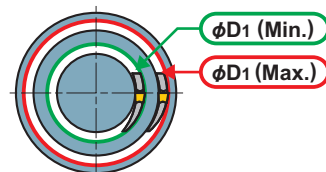
Right hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
J	.236 .250	*3 R	1.969	2.756	.551	(4F1R4J11)	GYM25RD-J14-050	●	GYHRUS12C00-M25R	●
			2.756	4.331	.551	(4F1R4J12)	GYM25RD-J14-070	●		
					.984 *1	(4F1R4J22)	GYM25RD-J25-070	●		
			4.331	7.874	.551	(4F1R4J13)	GYM25RD-J14-110	●		
					.984 *1	(4F1R4J23)	GYM25RD-J25-110	●		
			6.693	11.024	.551	(4F1R4J14)	GYM25RD-J14-170	●		
					.984 *1	(4F1R4J24)	GYM25RD-J25-170	●		
			9.843	39.331	.551	(4F1R4J15)	GYM25RD-J14-250	●		
					.984 *1	(4F1R4J25)	GYM25RD-J25-250	●		
			1.969	2.756	.551	(4H1R4J11)	GYM25RD-J14-050	●		
			2.756	4.331	.551	(4H1R4J12)	GYM25RD-J14-070	●		
					.984 *1	(4H1R4J22)	GYM25RD-J25-070	●		
	4.331	7.874	.551	(4H1R4J13)	GYM25RD-J14-110	●				
			.984 *1	(4H1R4J23)	GYM25RD-J25-110	●				
	6.693	11.024	.551	(4H1R4J14)	GYM25RD-J14-170	●				
			.984 *1	(4H1R4J24)	GYM25RD-J25-170	●				
	9.843	39.331	.551	(4H1R4J15)	GYM25RD-J14-250	●				
			.984 *1	(4H1R4J25)	GYM25RD-J25-250	●				
	1.969	2.756	.551	(4K1R4J11)	GYM25RD-J14-050	●				
	2.756	4.331	.551	(4K1R4J12)	GYM25RD-J14-070	●				
			.984 *1	(4K1R4J22)	GYM25RD-J25-070	●				
	4.331	7.874	.551	(4K1R4J13)	GYM25RD-J14-110	●				
			.984 *1	(4K1R4J23)	GYM25RD-J25-110	●				
	6.693	11.024	.551	(4K1R4J14)	GYM25RD-J14-170	●				
		.984 *1	(4K1R4J24)	GYM25RD-J25-170	●					
9.843	39.331	.551	(4K1R4J15)	GYM25RD-J14-250	●					
		.984 *1	(4K1R4J25)	GYM25RD-J25-250	●					
1.969	2.756	.551	(4M1R4J11)	GYM25RD-J14-050	●					
2.756	4.331	.551	(4M1R4J12)	GYM25RD-J14-070	●					
		.984 *1	(4M1R4J22)	GYM25RD-J25-070	●					
4.331	7.874	.551	(4M1R4J13)	GYM25RD-J14-110	●					
		.984 *1	(4M1R4J23)	GYM25RD-J25-110	●					
6.693	11.024	.551	(4M1R4J14)	GYM25RD-J14-170	●					
		.984 *1	(4M1R4J24)	GYM25RD-J25-170	●					
9.843	39.331	.551	(4M1R4J15)	GYM25RD-J14-250	●					
		.984 *1	(4M1R4J25)	GYM25RD-J25-250	●					

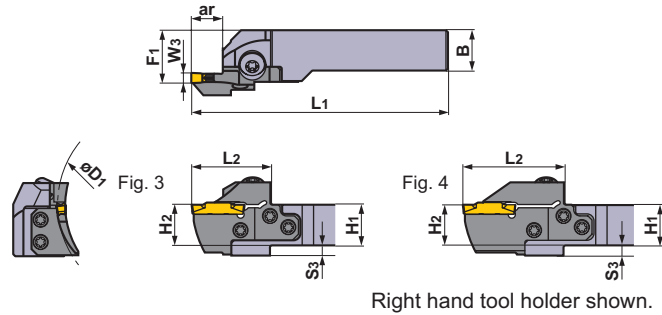
- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 79 for left hand tools.

### Notes when selecting a modular blade (1)

● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



● : Inventory maintained.



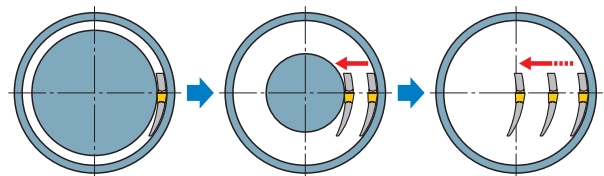
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHRUS12C00-M25R			
GYHRUS16D00-M25R	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
GYHRUS20D00-M25R			
GYHRUS24E00-M25R			

Dimensions (inch) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
.750	.750	5.000	1.535	.750	1.000	.250	3			GY2M0600J030N-GS GY2M0635J030N-GS	P11 P12
.750	.750	5.000	1.535	.750	1.000	.250	3				
.750	.750	5.433	1.969	.750	1.000	.250	4				
.750	.750	5.000	1.535	.750	1.000	.250	3				
.750	.750	5.433	1.969	.750	1.000	.250	4				
.750	.750	5.000	1.535	.750	1.000	.250	3				
.750	.750	5.433	1.969	.750	1.000	.250	4				
.750	.750	5.000	1.535	.750	1.000	.250	3				
.750	.750	5.433	1.969	.750	1.000	.250	4				
.750	.750	5.433	1.969	.750	1.000	.250	4				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.000	1.000	6.000	1.535	1.000	1.125	—	1				
1.000	1.000	6.433	1.969	1.000	1.125	—	2				
1.250	1.250	6.000	1.535	1.250	1.375	—	1				
1.250	1.250	6.000	1.535	1.250	1.375	—	1				
1.250	1.250	6.433	1.969	1.250	1.375	—	2				
1.250	1.250	6.000	1.535	1.250	1.375	—	1				
1.250	1.250	6.433	1.969	1.250	1.375	—	2				
1.250	1.250	6.000	1.535	1.250	1.375	—	1				
1.250	1.250	6.433	1.969	1.250	1.375	—	2				
1.250	1.250	6.000	1.535	1.250	1.375	—	1				
1.250	1.250	6.433	1.969	1.250	1.375	—	2				
1.500	1.500	7.000	1.535	1.500	1.625	—	1				
1.500	1.500	7.000	1.535	1.500	1.625	—	1				
1.500	1.500	7.433	1.969	1.500	1.625	—	2				
1.500	1.500	7.000	1.535	1.500	1.625	—	1				
1.500	1.500	7.433	1.969	1.500	1.625	—	2				
1.500	1.500	7.000	1.535	1.500	1.625	—	1				
1.500	1.500	7.433	1.969	1.500	1.625	—	2				
1.500	1.500	7.000	1.535	1.500	1.625	—	1				
1.500	1.500	7.433	1.969	1.500	1.625	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

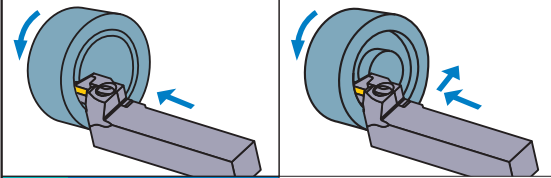


# GY SERIES (FACE GROOVING)

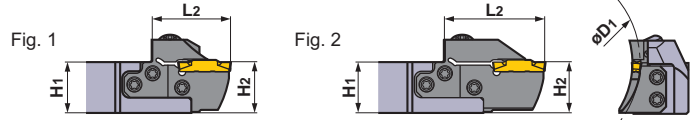
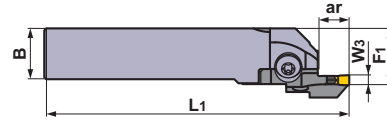
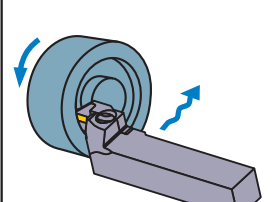
**3-1** 00° type holder (Inch) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M-○○○○○○○○-GS    Insert GY2M-○○○○○○○○-MM  
Insert GY2M-○○○○○○○○-GM    Insert GY2M-○○○○○○○○-MS



Insert GY2M-○○○○○○○○-BM



Left hand tool holder shown.

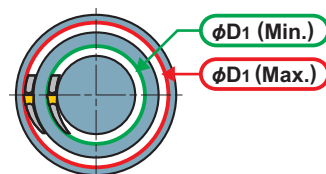
FACE GROOVING

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
J	.236 .250	*3 L	1.969	2.756	.551	(4F1L4J11)	GYM25LD-J14-050	●	GYHLUS12C00-M25L	●
			2.756	4.331	.551	(4F1L4J12)	GYM25LD-J14-070	●		
					.984 *1	(4F1L4J22)	GYM25LD-J25-070	●		
			4.331	7.874	.551	(4F1L4J13)	GYM25LD-J14-110	●		
					.984 *1	(4F1L4J23)	GYM25LD-J25-110	●		
			6.693	11.024	.551	(4F1L4J14)	GYM25LD-J14-170	●		
					.984 *1	(4F1L4J24)	GYM25LD-J25-170	●		
			9.843	39.331	.551	(4F1L4J15)	GYM25LD-J14-250	●		
					.984 *1	(4F1L4J25)	GYM25LD-J25-250	●		
			1.969	2.756	.551	(4H1L4J11)	GYM25LD-J14-050	●		
			2.756	4.331	.551	(4H1L4J12)	GYM25LD-J14-070	●		
					.984 *1	(4H1L4J22)	GYM25LD-J25-070	●		
	4.331	7.874	.551	(4H1L4J13)	GYM25LD-J14-110	●				
			.984 *1	(4H1L4J23)	GYM25LD-J25-110	●				
	6.693	11.024	.551	(4H1L4J14)	GYM25LD-J14-170	●				
			.984 *1	(4H1L4J24)	GYM25LD-J25-170	●				
	9.843	39.331	.551	(4H1L4J15)	GYM25LD-J14-250	●				
			.984 *1	(4H1L4J25)	GYM25LD-J25-250	●				
	1.969	2.756	.551	(4K1L4J11)	GYM25LD-J14-050	●				
	2.756	4.331	.551	(4K1L4J12)	GYM25LD-J14-070	●				
			.984 *1	(4K1L4J22)	GYM25LD-J25-070	●				
	4.331	7.874	.551	(4K1L4J13)	GYM25LD-J14-110	●				
			.984 *1	(4K1L4J23)	GYM25LD-J25-110	●				
	6.693	11.024	.551	(4K1L4J14)	GYM25LD-J14-170	●				
		.984 *1	(4K1L4J24)	GYM25LD-J25-170	●					
9.843	39.331	.551	(4K1L4J15)	GYM25LD-J14-250	●					
		.984 *1	(4K1L4J25)	GYM25LD-J25-250	●					
1.969	2.756	.551	(4M1L4J11)	GYM25LD-J14-050	●					
2.756	4.331	.551	(4M1L4J12)	GYM25LD-J14-070	●					
		.984 *1	(4M1L4J22)	GYM25LD-J25-070	●					
4.331	7.874	.551	(4M1L4J13)	GYM25LD-J14-110	●					
		.984 *1	(4M1L4J23)	GYM25LD-J25-110	●					
6.693	11.024	.551	(4M1L4J14)	GYM25LD-J14-170	●					
		.984 *1	(4M1L4J24)	GYM25LD-J25-170	●					
9.843	39.331	.551	(4M1L4J15)	GYM25LD-J14-250	●					
		.984 *1	(4M1L4J25)	GYM25LD-J25-250	●					

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 77 for right hand tools.

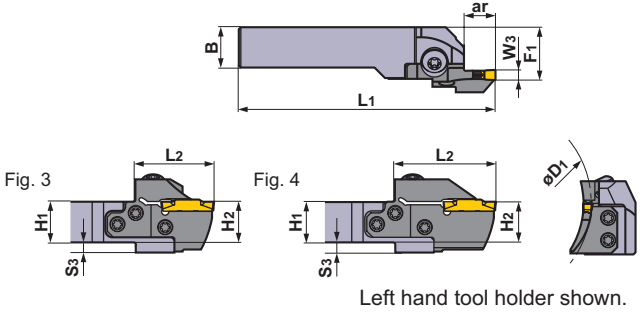
### Notes when selecting a modular blade (1)

● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



● : Inventory maintained.





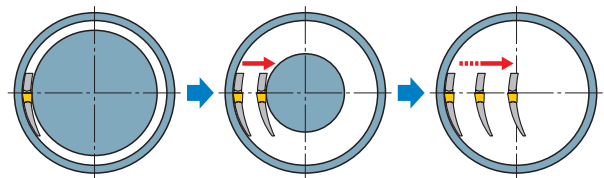
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHLUS12C00-M25L</b>			
<b>GYHLUS16D00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS20D00-M25L</b>			
<b>GYHLUS24E00-M25L</b>			

Dimensions (inch) *2								Fig.	Cutting Mode	Insert				
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page				
.750	.750	5.000	1.535	.750	1.000	.250	3			P11 P12				
.750	.750	5.000	1.535	.750	1.000	.250	3				<b>GY2M0600J030N-GS</b> <b>GY2M0635J030N-GS</b>			
.750	.750	5.433	1.969	.750	1.000	.250	4					<b>GY2M0600J040N-GM</b> <b>GY2M0635J040N-GM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3					<b>GY2M0600J040N-MS</b> <b>GY2M0600J080N-MS</b> (Gauge insert)		
.750	.750	5.433	1.969	.750	1.000	.250	4					<b>GY2M0600J040N-MM</b> <b>GY2M0600J080N-MM</b>		
.750	.750	5.000	1.535	.750	1.000	.250	3						P11 P12	
.750	.750	5.433	1.969	.750	1.000	.250	4							<b>GY2M0600J300N-BM</b> <b>GY2M0635J318N-BM</b>
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.433	1.969	1.000	1.125	—	2							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.433	1.969	1.000	1.125	—	2							
1.000	1.000	6.000	1.535	1.000	1.125	—	1							
1.000	1.000	6.433	1.969	1.000	1.125	—	2							
1.250	1.250	6.000	1.535	1.250	1.375	—	1							
1.250	1.250	6.000	1.535	1.250	1.375	—	1							
1.250	1.250	6.433	1.969	1.250	1.375	—	2							
1.250	1.250	6.000	1.535	1.250	1.375	—	1							
1.250	1.250	6.433	1.969	1.250	1.375	—	2							
1.250	1.250	6.000	1.535	1.250	1.375	—	1							
1.250	1.250	6.433	1.969	1.250	1.375	—	2							
1.250	1.250	6.000	1.535	1.250	1.375	—	1							
1.250	1.250	6.433	1.969	1.250	1.375	—	2							
1.500	1.500	7.000	1.535	1.500	1.625	—	1							
1.500	1.500	7.000	1.535	1.500	1.625	—	1							
1.500	1.500	7.433	1.969	1.500	1.625	—	2							
1.500	1.500	7.000	1.535	1.500	1.625	—	1							
1.500	1.500	7.433	1.969	1.500	1.625	—	2							
1.500	1.500	7.000	1.535	1.500	1.625	—	1							
1.500	1.500	7.433	1.969	1.500	1.625	—	2							
1.500	1.500	7.000	1.535	1.500	1.625	—	1							
1.500	1.500	7.433	1.969	1.500	1.625	—	2							

FACE GROOVING

**Notes when selecting a modular blade (2)**

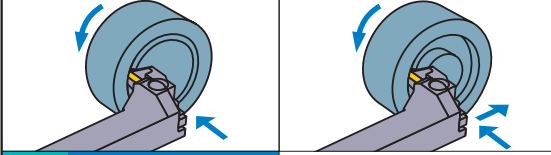
- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



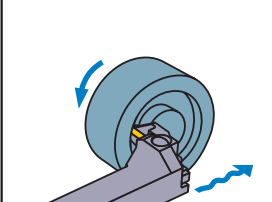
# GY SERIES (FACE GROOVING)

## 4-1 90° type holder (Inch) NEW

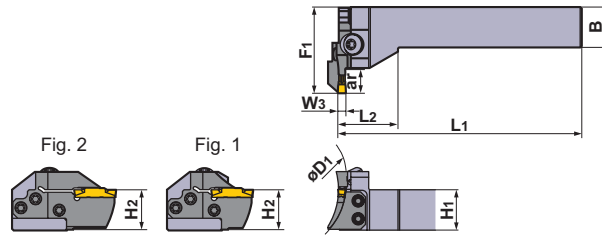
Insert	GY2M <sup>0000000000</sup> -GS	Insert	GY2M <sup>0000000000</sup> -MM
Insert	GY2M <sup>0000000000</sup> -GM	Insert	GY2M <sup>0000000000</sup> -MS
Insert	GY1G <sup>0000000000</sup> -GS		



Insert GY2M<sup>0000000000</sup>-BM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



Right hand tool holder shown.

FACE GROOVING

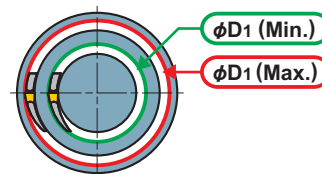
Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
F	.118 .125	R	1.378	1.575	.472	(5H1R4F11)	GYM25LD-F12-035	●	GYHRUS16D90-M25L	●
			1.575	1.969	.472	(5H1R4F12)	GYM25LD-F12-040	●		
			1.969	2.362	.472	(5H1R4F13)	GYM25LD-F12-050	●		
			2.362	2.953	.472	(5H1R4F14)	GYM25LD-F12-060	●		
			2.953	3.937	.472	(5H1R4F15)	GYM25LD-F12-075	●		
			3.937	5.906	.787 *1	(5H1R4F16)	GYM25LD-F12-100	●		
			5.315	7.874	.787 *1	(5H1R4F17)	GYM25LD-F12-135	●		
			7.087	9.843	.787 *1	(5H1R4F18)	GYM25LD-F12-180	●		
	L	1.378	1.575	.472	(5H1L4F11)	GYM25RD-F12-035	●	GYHLUS16D90-M25R	●	
		1.575	1.969	.472	(5H1L4F12)	GYM25RD-F12-040	●			
		1.969	2.362	.472	(5H1L4F13)	GYM25RD-F12-050	●			
		2.362	2.953	.472	(5H1L4F14)	GYM25RD-F12-060	●			
		2.953	3.937	.472	(5H1L4F15)	GYM25RD-F12-075	●			
		3.937	5.906	.787 *1	(5H1L4F16)	GYM25RD-F12-100	●			
		5.315	7.874	.787 *1	(5H1L4F17)	GYM25RD-F12-135	●			
		7.087	9.843	.787 *1	(5H1L4F18)	GYM25RD-F12-180	●			

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.




\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.

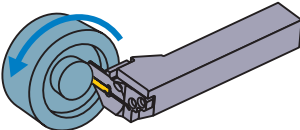

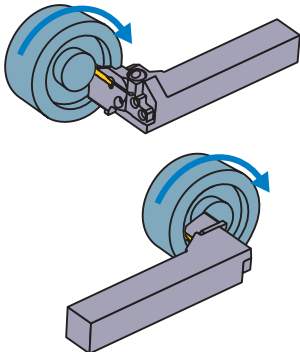

### Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

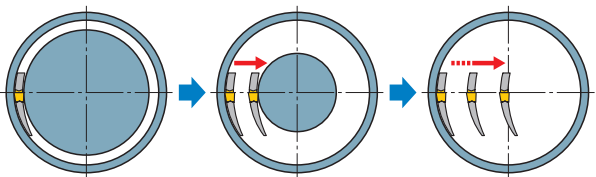
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS16D90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS16D90-M25R</b>			

Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>	P11 P12	
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> (Gauge insert)	P11 P12	
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.330	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

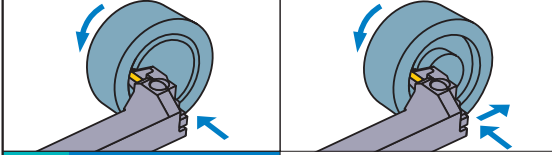
- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



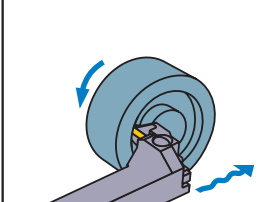
# GY SERIES (FACE GROOVING)

## 4-1 90° type holder (Inch) NEW

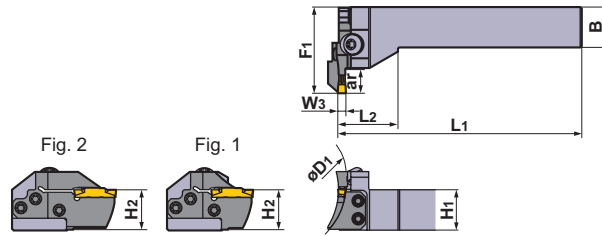
Insert	GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -GS	Insert	GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -MM
Insert	GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -GM	Insert	GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -MS
Insert	GY1G $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -GF		
	GS		



Insert GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -BM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



Right hand tool holder shown.

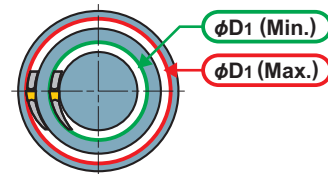
Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
G	.157	R	1.575	1.969	.551	(5H1R4G11)	GYM25LD-G14-040	●	GYHRUS16D90-M25L	●
			1.969	2.362	.551	(5H1R4G12)	GYM25LD-G14-050	●		
			2.362	3.346	.551	(5H1R4G13)	GYM25LD-G14-060	●		
					.984 *1	(5H1R4G23)	GYM25LD-G25-060	●		
			3.346	4.921	.551	(5H1R4G14)	GYM25LD-G14-085	●		
					.984 *1	(5H1R4G24)	GYM25LD-G25-085	●		
			4.921	7.874	.551	(5H1R4G15)	GYM25LD-G14-125	●		
				.984 *1	(5H1R4G25)	GYM25LD-G25-125	●			
		7.087	11.024	.551	(5H1R4G16)	GYM25LD-G14-180	●			
				.984 *1	(5H1R4G26)	GYM25LD-G25-180	●			
		9.843	39.331	.551	(5H1R4G17)	GYM25LD-G14-250	●			
				.984 *1	(5H1R4G27)	GYM25LD-G25-250	●			
		L	1.575	1.969	.551	(5H1L4G11)	GYM25RD-G14-040	●	GYHLUS16D90-M25R	●
			1.969	2.362	.551	(5H1L4G12)	GYM25RD-G14-050	●		
2.362	3.346		.551	(5H1L4G13)	GYM25RD-G14-060	●				
			.984 *1	(5H1L4G23)	GYM25RD-G25-060	●				
3.346	4.921		.551	(5H1L4G14)	GYM25RD-G14-085	●				
			.984 *1	(5H1L4G24)	GYM25RD-G25-085	●				
4.921	7.874		.551	(5H1L4G15)	GYM25RD-G14-125	●				
		.984 *1	(5H1L4G25)	GYM25RD-G25-125	●					
7.087	11.024	.551	(5H1L4G16)	GYM25RD-G14-180	●					
		.984 *1	(5H1L4G26)	GYM25RD-G25-180	●					
9.843	39.331	.551	(5H1L4G17)	GYM25RD-G14-250	●					
		.984 *1	(5H1L4G27)	GYM25RD-G25-250	●					

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.




\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.

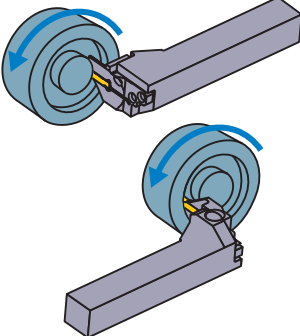







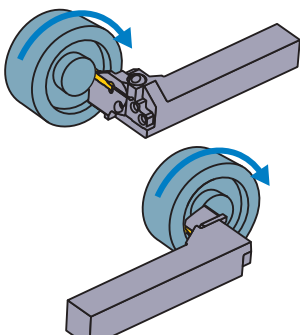
### Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

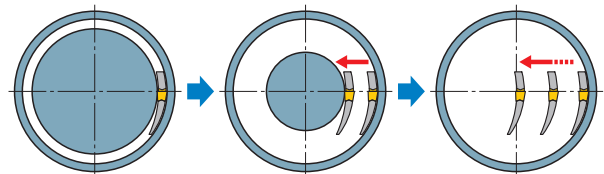
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS16D90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS16D90-M25R</b>			

Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0400G020N-GS</b>  <b>GY2M0400G030N-GM</b>  <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b>  <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> <small>(Gauge insert)</small>  <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b>  <b>GY2M0400G200N-BM</b>  <b>GY1G0400G020N-GFGS</b>	P11 P12	
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1		P11 P12		
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				

FACE GROOVING




### Notes when selecting a modular blade (2)

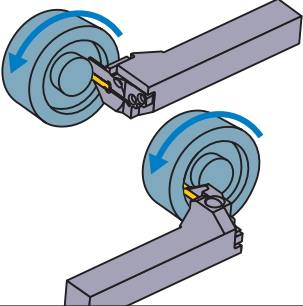







- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.





## SPARE PARTS

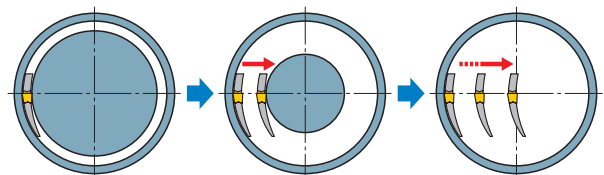
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS16D90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS16D90-M25R</b>			

Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>	P11 P12	
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b>		
1.000	1.000	6.000	1.500	1.000	2.527	2		 <b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b> (Gauge insert)		
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>		
1.000	1.000	6.000	1.500	1.000	2.527	2		 <b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>		
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>		
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

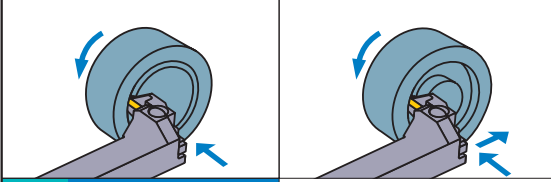
- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



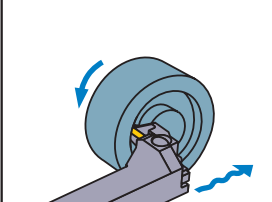
# GY SERIES (FACE GROOVING)

## 4-1 90° type holder (Inch) NEW

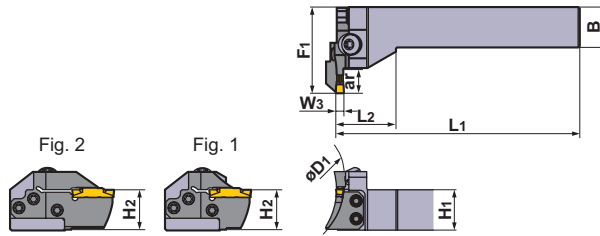
Insert GY2M-○○○○○○○○○○-GS    Insert GY2M-○○○○○○○○○○-MM  
 Insert GY2M-○○○○○○○○○○-GM    Insert GY2M-○○○○○○○○○○-MS



Insert GY2M-○○○○○○○○○○-BM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



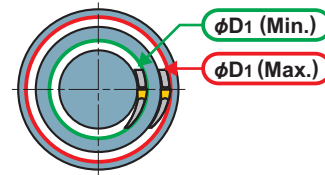
Right hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (inch)		Max. Groove Depth ar (inch)	ID	Order Number					
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock		
J	.236 .250	R	1.969	2.756	.551	(5H1R4J11)	GYM25LD-J14-050	●	GYHRUS16D90-M25L	●		
			2.756	4.331	.551 .984 *1	(5H1R4J12) (5H1R4J22)	GYM25LD-J14-070 GYM25LD-J25-070	● ●				
			4.331	7.874	.551 .984 *1	(5H1R4J13) (5H1R4J23)	GYM25LD-J14-110 GYM25LD-J25-110	● ●				
			6.693	11.024	.551 .984 *1	(5H1R4J14) (5H1R4J24)	GYM25LD-J14-170 GYM25LD-J25-170	● ●				
			9.843	39.331	.551 .984 *1	(5H1R4J15) (5H1R4J25)	GYM25LD-J14-250 GYM25LD-J25-250	● ●				
		L	1.969	2.756	.551	(5H1L4J11)	GYM25RD-J14-050	●			GYHLUS16D90-M25R	●
			2.756	4.331	.551 .984 *1	(5H1L4J12) (5H1L4J22)	GYM25RD-J14-070 GYM25RD-J25-070	● ●				
			4.331	7.874	.551 .984 *1	(5H1L4J13) (5H1L4J23)	GYM25RD-J14-110 GYM25RD-J25-110	● ●				
			6.693	11.024	.551 .984 *1	(5H1L4J14) (5H1L4J24)	GYM25RD-J14-170 GYM25RD-J25-170	● ●				
			9.843	39.331	.551 .984 *1	(5H1L4J15) (5H1L4J25)	GYM25RD-J14-250 GYM25RD-J25-250	● ●				

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.




### Notes when selecting a modular blade (1)

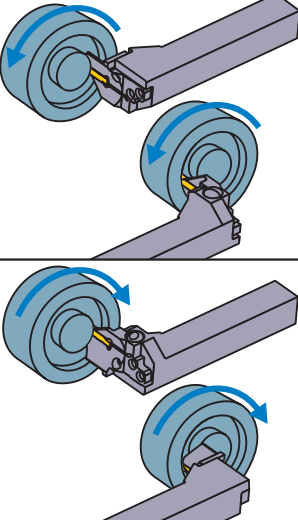





- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





## SPARE PARTS

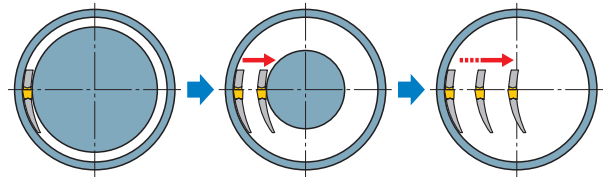
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHRUS16D90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHLUS16D90-M25R</b>			

H1	Dimensions (inch) *2					F1	Fig.	Cutting Mode	Insert	
	B	L1	L2	H2	Geometry / Insert Number				Page	
1.000	1.000	6.000	1.500	1.000	2.094	1		 <b>GY2M0600J030N-GS</b> <b>GY2M0635J030N-GS</b>   <b>GY2M0600J040N-GM</b> <b>GY2M0635J040N-GM</b>   <b>GY2M0600J040N-MS</b> <b>GY2M0600J080N-MS</b> (Gauge insert)   <b>GY2M0600J040N-MM</b> <b>GY2M0600J080N-MM</b>   <b>GY2M0600J300N-BM</b> <b>GY2M0635J318N-BM</b>	P11 P12	
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				
1.000	1.000	6.000	1.500	1.000	2.094	1				
1.000	1.000	6.000	1.500	1.000	2.527	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

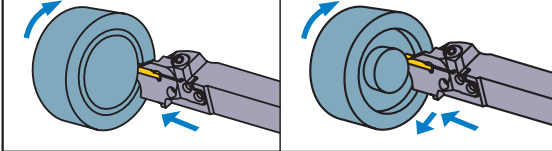


# GY SERIES (FACE GROOVING)

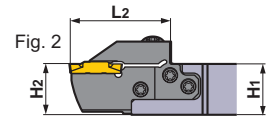
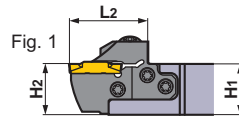
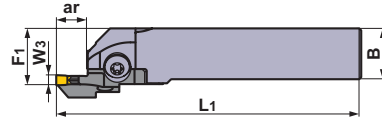
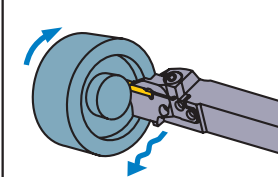
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-00000000-GS    Insert GY2M-00000000-MM  
 Insert GY2M-00000000-GM    Insert GY2M-00000000-MS  
 Insert GY1G-00000000-GS



Insert GY2M-00000000-BM



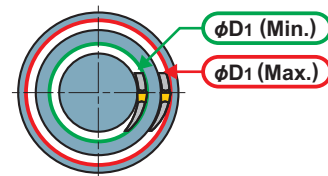
Right hand tool holder shown.

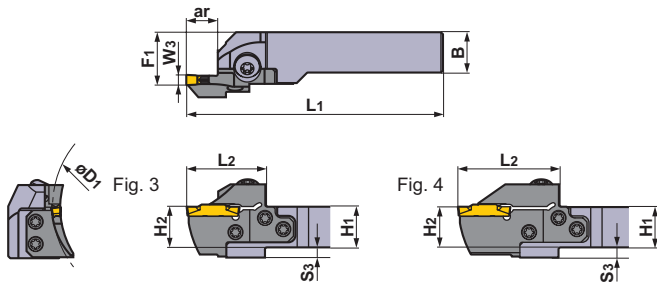
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number				
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock	
F	3.00 3.18	R <sup>*3</sup>	35	40	12	(4E1R4F11)	GYM25RD-F12-035	●	GYHR2020K00-M25R	●	
			40	50	12	(4E1R4F12)	GYM25RD-F12-040	●			
			50	60	12	(4E1R4F13)	GYM25RD-F12-050	●			
			60	75	12	(4E1R4F14)	GYM25RD-F12-060	●			
			75	100	12	(4E1R4F15)	GYM25RD-F12-075	●			
			100	150	12	(4E1R4F16)	GYM25RD-F12-100	●			
			135	200	12	(4E1R4F17)	GYM25RD-F12-135	●			
			180	250	12	(4E1R4F18)	GYM25RD-F12-180	●			
	35	40	12	(4E1R4F24)	GYM25RD-F20-060	●					
	75	100	12	(4E1R4F25)	GYM25RD-F20-075	●					
	100	150	12	(4E1R4F26)	GYM25RD-F20-100	●					
	135	200	12	(4E1R4F27)	GYM25RD-F20-135	●					
	180	250	12	(4E1R4F28)	GYM25RD-F20-180	●					
				35	40	12	(4G1R4F11)	GYM25RD-F12-035	●	GYHR2525M00-M25R	●
				40	50	12	(4G1R4F12)	GYM25RD-F12-040	●		
				50	60	12	(4G1R4F13)	GYM25RD-F12-050	●		
60				75	12	(4G1R4F14)	GYM25RD-F12-060	●			
75				100	12	(4G1R4F15)	GYM25RD-F12-075	●			
100				150	12	(4G1R4F16)	GYM25RD-F12-100	●			
135				200	12	(4G1R4F17)	GYM25RD-F12-135	●			
180				250	12	(4G1R4F18)	GYM25RD-F12-180	●			
					(4G1R4F25)	GYM25RD-F20-075	●				
					(4G1R4F26)	GYM25RD-F20-100	●				
					(4G1R4F27)	GYM25RD-F20-135	●				
					(4G1R4F28)	GYM25RD-F20-180	●				

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.  
 \*3 Refer to page 93 for left hand tools.

## Notes when selecting a modular blade (1)

● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





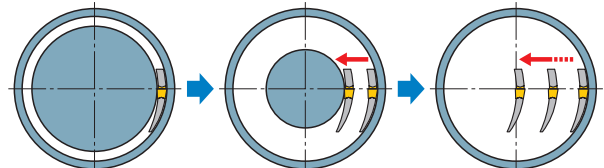
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2020K00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHR2525M00-M25R</b>			

Dimensions (mm) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
20	20	125	39	20	26	5	3		GY2M0300F020N-GS GY2M0318F020N-GS	P11 P12	
20	20	125	39	20	26	5	3				
20	20	125	39	20	26	5	3				
20	20	125	39	20	26	5	3				
20	20	131	45	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	131	45	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	131	45	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	131	45	20	26	5	4				
25	25	150	39	25	28	—	1		GY2M0300F030N-GM GY2M0318F030N-GM	P11 P12	
25	25	150	39	25	28	—	1				
25	25	150	39	25	28	—	1				
25	25	150	39	25	28	—	1				
25	25	156	45	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	156	45	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	156	45	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	156	45	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	156	45	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	156	45	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	156	45	25	28	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

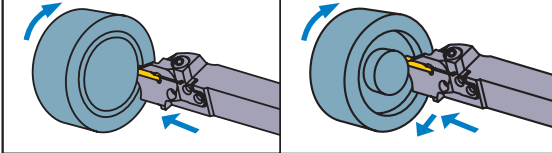


# GY SERIES (FACE GROOVING)

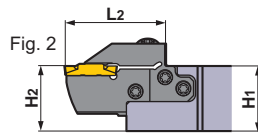
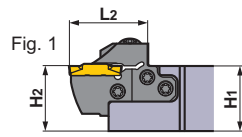
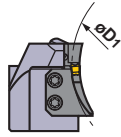
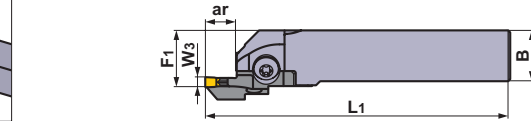
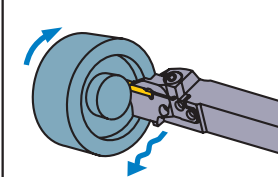
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-00000000-GS    Insert GY2M-00000000-MM  
 Insert GY2M-00000000-GM    Insert GY2M-00000000-MS  
 Insert GY1G-00000000-GS



Insert GY2M-00000000-BM



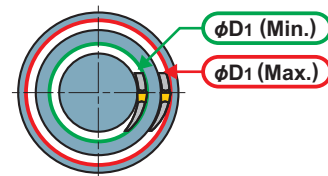
Right hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number				
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock	
F	3.00 3.18	R <sup>*3</sup>	35	40	12	(4Q1R4F11)	GYM25RD-F12-035	●	GYHR3225P00-M25R	★	
			40	50	12	(4Q1R4F12)	GYM25RD-F12-040	●			
			50	60	12	(4Q1R4F13)	GYM25RD-F12-050	●			
			60	75	12	(4Q1R4F14)	GYM25RD-F12-060	●			
			75	100	12	(4Q1R4F15)	GYM25RD-F12-075	●			
			100	150	12	(4Q1R4F16)	GYM25RD-F12-100	●			
			135	200	12	(4Q1R4F17)	GYM25RD-F12-135	●			
			180	250	12	(4Q1R4F18)	GYM25RD-F12-180	●			
	35	40	12	(4Q1R4F24)	GYM25RD-F20-060	●					
	75	100	12	(4Q1R4F25)	GYM25RD-F20-075	●					
	100	150	12	(4Q1R4F26)	GYM25RD-F20-100	●					
	135	200	12	(4Q1R4F27)	GYM25RD-F20-135	●					
	180	250	12	(4Q1R4F28)	GYM25RD-F20-180	●					
				35	40	12	(4J1R4F11)	GYM25RD-F12-035	●	GYHR3232P00-M25R	★
				40	50	12	(4J1R4F12)	GYM25RD-F12-040	●		
				50	60	12	(4J1R4F13)	GYM25RD-F12-050	●		
60				75	12	(4J1R4F14)	GYM25RD-F12-060	●			
75				100	12	(4J1R4F15)	GYM25RD-F12-075	●			
100				150	12	(4J1R4F16)	GYM25RD-F12-100	●			
135				200	12	(4J1R4F17)	GYM25RD-F12-135	●			
180				250	12	(4J1R4F18)	GYM25RD-F12-180	●			




- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 95 for left hand tools.

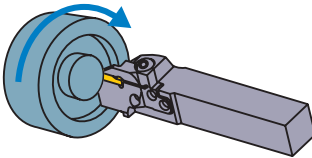






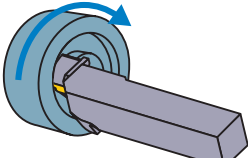

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

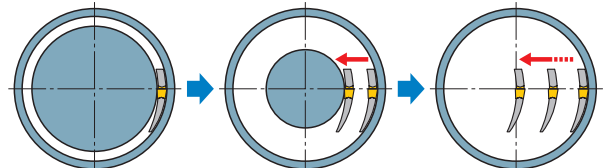
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR3225P00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHR3232P00-M25R</b>			

Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
32	25	170	39	32	28	1		 <b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>	P11 P12	
32	25	170	39	32	28	1		 <b>GY2M0300F030N-GM</b> <b>GY2M0318F030N-GM</b>		
32	25	170	39	32	28	1		 <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b>		
32	25	170	39	32	28	1		 <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> (Gauge insert)		
32	25	170	39	32	28	1		 <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b>		
32	25	170	39	32	28	1		 <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b>		
32	25	176	45	32	28	2				
32	25	176	45	32	28	2				
32	25	176	45	32	28	2				
32	25	176	45	32	28	2				
32	32	170	39	32	35	1		 <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>		
32	32	170	39	32	35	1				
32	32	170	39	32	35	1				
32	32	176	45	32	35	2				
32	32	170	39	32	35	1				
32	32	176	45	32	35	2				
32	32	176	45	32	35	2				
32	32	176	45	32	35	2				
32	32	170	39	32	35	1				
32	32	176	45	32	35	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

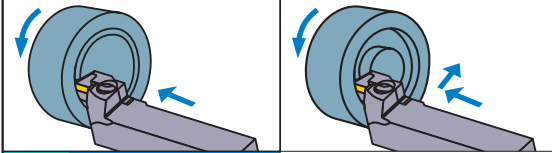


# GY SERIES (FACE GROOVING)

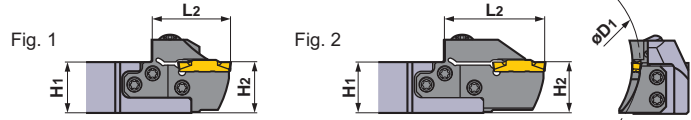
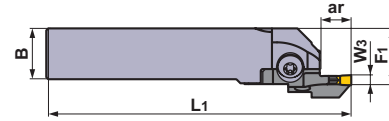
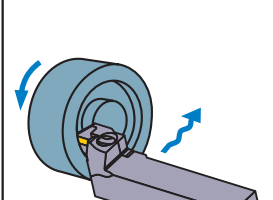
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

- Insert GY2M-○○○○○○○○○○-GS
- Insert GY2M-○○○○○○○○○○-MM
- Insert GY2M-○○○○○○○○○○-GM
- Insert GY2M-○○○○○○○○○○-MS
- Insert GY1G-○○○○○○○○○○-GS
- Insert GY2M-○○○○○○○○○○-BM



Insert GY2M-○○○○○○○○○○-BM



Left hand tool holder shown.

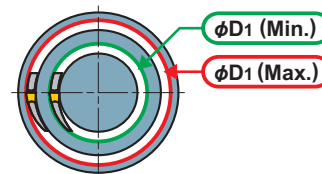
FACE GROOVING

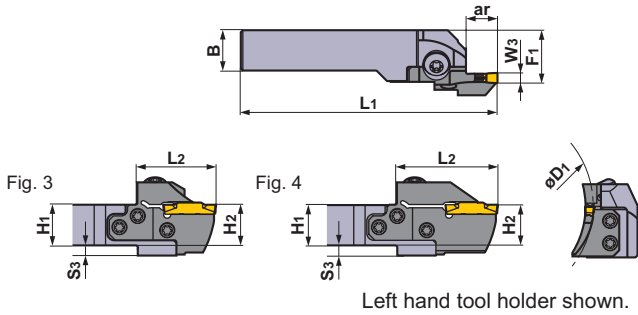
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number				
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock	
F	3.00 3.18	L *3	35	40	12	(4E1L4F11)	GYM25LD-F12-035	●	GYHL2020K00-M25L	●	
			40	50	12	(4E1L4F12)	GYM25LD-F12-040	●			
			50	60	12	(4E1L4F13)	GYM25LD-F12-050	●			
			60	75	12	(4E1L4F14)	GYM25LD-F12-060	●			
			75	100	12	(4E1L4F15)	GYM25LD-F12-075	●			
			100	150	12	(4E1L4F16)	GYM25LD-F12-100	●			
			135	200	12	(4E1L4F17)	GYM25LD-F12-135	●			
			180	250	12	(4E1L4F18)	GYM25LD-F12-180	●			
	35	40	12	(4E1L4F24)	GYM25LD-F20-060	●					
	75	100	12	(4E1L4F25)	GYM25LD-F20-075	●					
	100	150	12	(4E1L4F26)	GYM25LD-F20-100	●					
	135	200	12	(4E1L4F27)	GYM25LD-F20-135	●					
	180	250	12	(4E1L4F28)	GYM25LD-F20-180	●					
				35	40	12	(4G1L4F11)	GYM25LD-F12-035	●	GYHL2525M00-M25L	●
				40	50	12	(4G1L4F12)	GYM25LD-F12-040	●		
				50	60	12	(4G1L4F13)	GYM25LD-F12-050	●		
60				75	12	(4G1L4F14)	GYM25LD-F12-060	●			
75				100	12	(4G1L4F15)	GYM25LD-F12-075	●			
100				150	12	(4G1L4F16)	GYM25LD-F12-100	●			
135				200	12	(4G1L4F17)	GYM25LD-F12-135	●			
180				250	12	(4G1L4F18)	GYM25LD-F12-180	●			
					(4G1L4F24)	GYM25LD-F20-060	●				
					(4G1L4F25)	GYM25LD-F20-075	●				
					(4G1L4F26)	GYM25LD-F20-100	●				
					(4G1L4F27)	GYM25LD-F20-135	●				
					(4G1L4F28)	GYM25LD-F20-180	●				

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 89 for right hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHL2020K00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL2525M00-M25L</b>			

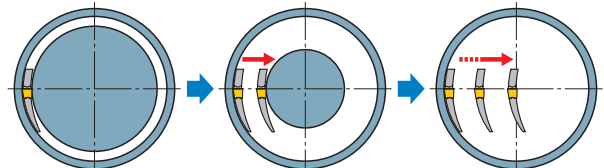
	Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
	H1	B	L1	L2	H2	F1	S3			Geometry / Insert Number	Page
	20	20	125	39	20	26	5	3			
	20	20	125	39	20	26	5	3			
	20	20	125	39	20	26	5	3			
	20	20	125	39	20	26	5	3			
	20	20	131	45	20	26	5	4			
	20	20	125	39	20	26	5	3			
	20	20	131	45	20	26	5	4			
	20	20	125	39	20	26	5	3			
	20	20	131	45	20	26	5	4			
	20	20	125	39	20	26	5	3			
	20	20	131	45	20	26	5	4			
	20	20	131	45	20	26	5	4			
	25	25	150	39	25	28	—	1			
	25	25	150	39	25	28	—	1			
	25	25	150	39	25	28	—	1			
	25	25	150	39	25	28	—	1			
	25	25	156	45	25	28	—	2			
	25	25	150	39	25	28	—	1			
	25	25	156	45	25	28	—	2			
	25	25	150	39	25	28	—	1			
	25	25	156	45	25	28	—	2			
	25	25	150	39	25	28	—	1			
	25	25	156	45	25	28	—	2			
	25	25	150	39	25	28	—	1			
	25	25	156	45	25	28	—	2			

FACE GROOVING

P11  
P12

**Notes when selecting a modular blade (2)**

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



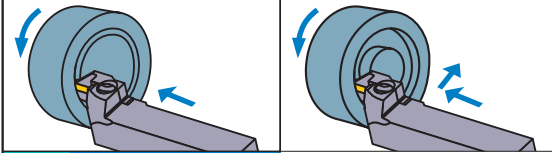
# GY SERIES (FACE GROOVING)

**3-2**

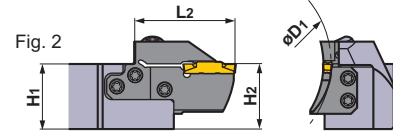
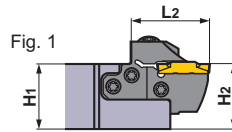
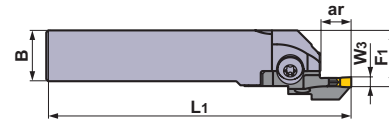
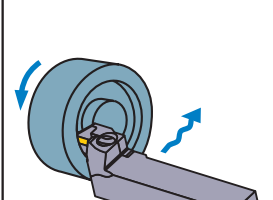
00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M-00000000-GS	Insert GY2M-00000000-MM
Insert GY2M-00000000-GM	Insert GY2M-00000000-MS
Insert GY1G-00000000-GS	



Insert GY2M-00000000-BM



Left hand tool holder shown.

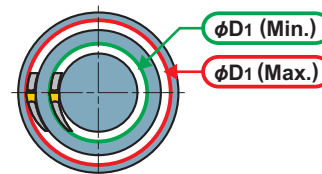
FACE GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number				
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock	
F	3.00 3.18	*3 L	35	40	12	(4Q1L4F11)	GYM25LD-F12-035	●	GYHL3225P00-M25L	★	
			40	50	12	(4Q1L4F12)	GYM25LD-F12-040	●			
			50	60	12	(4Q1L4F13)	GYM25LD-F12-050	●			
			60	75	12	(4Q1L4F14)	GYM25LD-F12-060	●			
			75	100	12	(4Q1L4F15)	GYM25LD-F12-075	●			
					20 *1	(4Q1L4F24)	GYM25LD-F20-060	●			
					20 *1	(4Q1L4F25)	GYM25LD-F20-075	●			
					20 *1	(4Q1L4F26)	GYM25LD-F20-100	●			
	100	150	12	(4Q1L4F16)	GYM25LD-F12-100	●					
			20 *1	(4Q1L4F26)	GYM25LD-F20-100	●					
	135	200	12	(4Q1L4F17)	GYM25LD-F12-135	●					
			20 *1	(4Q1L4F27)	GYM25LD-F20-135	●					
	180	250	12	(4Q1L4F18)	GYM25LD-F12-180	●					
			20 *1	(4Q1L4F28)	GYM25LD-F20-180	●					
				35	40	12	(4J1L4F11)	GYM25LD-F12-035	●	GYHL3232P00-M25L	★
				40	50	12	(4J1L4F12)	GYM25LD-F12-040	●		
			50	60	12	(4J1L4F13)	GYM25LD-F12-050	●			
			60	75	12	(4J1L4F14)	GYM25LD-F12-060	●			
			75	100	12	(4J1L4F15)	GYM25LD-F12-075	●			
					20 *1	(4J1L4F24)	GYM25LD-F20-060	●			
					20 *1	(4J1L4F25)	GYM25LD-F20-075	●			
					20 *1	(4J1L4F26)	GYM25LD-F20-100	●			
			100	150	12	(4J1L4F16)	GYM25LD-F12-100	●			
					20 *1	(4J1L4F26)	GYM25LD-F20-100	●			
			135	200	12	(4J1L4F17)	GYM25LD-F12-135	●			
					20 *1	(4J1L4F27)	GYM25LD-F20-135	●			
			180	250	12	(4J1L4F18)	GYM25LD-F12-180	●			
					20 *1	(4J1L4F28)	GYM25LD-F20-180	●			

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 91 for right hand tools.




## Notes when selecting a modular blade (1)

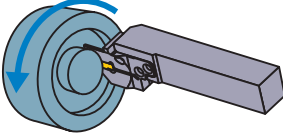







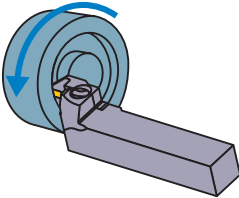
- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





## SPARE PARTS

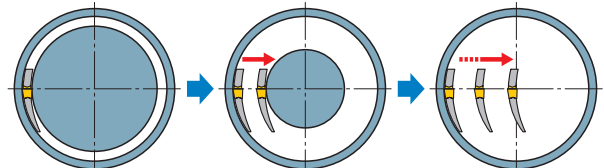
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHL3225P00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL3232P00-M25L</b>			

Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
32	25	170	39	32	28	1		 <b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>	P11 P12	
32	25	170	39	32	28	1		 <b>GY2M0300F030N-GM</b> <b>GY2M0318F030N-GM</b>		
32	25	170	39	32	28	1		 <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b>		
32	25	170	39	32	28	1		 <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> (Gauge insert)		
32	25	176	45	32	28	2		 <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b>		
32	25	170	39	32	28	1		 <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b>		
32	25	176	45	32	28	2		 <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>		
32	25	176	45	32	28	2				
32	25	170	39	32	28	1				
32	25	176	45	32	28	2				
32	32	170	39	32	35	1				
32	32	170	39	32	35	1				
32	32	170	39	32	35	1				
32	32	176	45	32	35	2				
32	32	170	39	32	35	1				
32	32	176	45	32	35	2				
32	32	170	39	32	35	1				
32	32	176	45	32	35	2				
32	32	170	39	32	35	1				
32	32	176	45	32	35	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

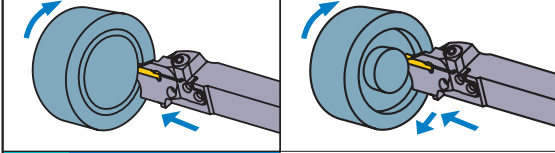


# GY SERIES (FACE GROOVING)

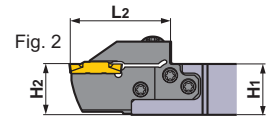
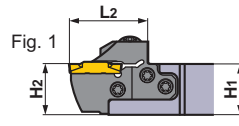
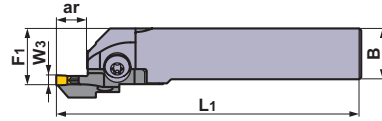
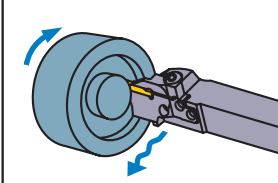
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-0000000000-GS    Insert GY2M-0000000000-MM  
 Insert GY2M-0000000000-GM    Insert GY2M-0000000000-MS  
 Insert GY1G-0000000000-GS



Insert GY2M-0000000000-BM



Right hand tool holder shown.

FACE GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number					
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock		
G	4.00	R <sup>*3</sup>	40	50	14	(4E1R4G11)	GYM25RD-G14-040	●	GYHR2020K00-M25R	●		
			50	60	14	(4E1R4G12)	GYM25RD-G14-050	●				
			60	85	14	(4E1R4G13)	GYM25RD-G14-060	●				
					25 *1	(4E1R4G23)	GYM25RD-G25-060	●				
			85	125	14	(4E1R4G14)	GYM25RD-G14-085	●				
					25 *1	(4E1R4G24)	GYM25RD-G25-085	●				
			125	200	14	(4E1R4G15)	GYM25RD-G14-125	●				
					25 *1	(4E1R4G25)	GYM25RD-G25-125	●				
			180	280	14	(4E1R4G16)	GYM25RD-G14-180	●				
					25 *1	(4E1R4G26)	GYM25RD-G25-180	●				
			250	999	14	(4E1R4G17)	GYM25RD-G14-250	●				
					25 *1	(4E1R4G27)	GYM25RD-G25-250	●				
			40	50	14	(4G1R4G11)	GYM25RD-G14-040	●			GYHR2525M00-M25R	●
			50	60	14	(4G1R4G12)	GYM25RD-G14-050	●				
60	85	14	(4G1R4G13)	GYM25RD-G14-060	●							
		25 *1	(4G1R4G23)	GYM25RD-G25-060	●							
85	125	14	(4G1R4G14)	GYM25RD-G14-085	●							
		25 *1	(4G1R4G24)	GYM25RD-G25-085	●							
125	200	14	(4G1R4G15)	GYM25RD-G14-125	●							
		25 *1	(4G1R4G25)	GYM25RD-G25-125	●							
180	280	14	(4G1R4G16)	GYM25RD-G14-180	●							
		25 *1	(4G1R4G26)	GYM25RD-G25-180	●							
250	999	14	(4G1R4G17)	GYM25RD-G14-250	●							
		25 *1	(4G1R4G27)	GYM25RD-G25-250	●							

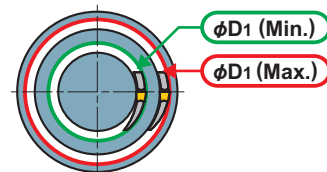
\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.

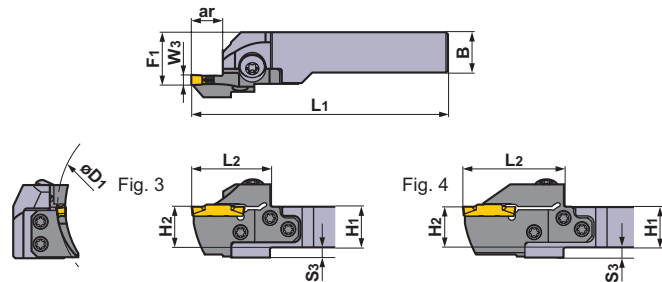
\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.

\*3 Refer to page 101 for left hand tools.

## Notes when selecting a modular blade (1)

● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





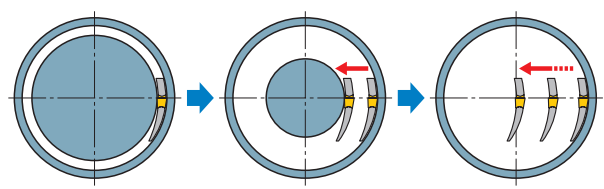
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2020K00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHR2525M00-M25R</b>			

Dimensions (mm) *2								Fig.	Cutting Mode	Insert		
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page		
20	20	125	39	20	26	5	3			<b>GY2M0400G020N-GS</b>	P11 P12	
20	20	125	39	20	26	5	3					<b>GY2M0400G030N-GM</b>
20	20	125	39	20	26	5	3					<b>GY2M0400G030R05-GM</b>
20	20	125	39	20	26	5	3					<b>GY2M0400G030L05-GM</b>
20	20	136	50	20	26	5	4					<b>GY2M0400G020N-MS</b>
20	20	136	50	20	26	5	4					<b>GY2M0400G040N-MS</b> (Gauge insert)
20	20	136	50	20	26	5	4					<b>GY2M0400G040N-MM</b>
20	20	136	50	20	26	5	4					<b>GY2M0400G080N-MM</b>
20	20	125	39	20	26	5	3					<b>GY2M0400G200N-BM</b>
20	20	136	50	20	26	5	4					<b>GY1G0400G020N-GFGS</b>
25	25	150	39	25	28	—	1				P11 P12	
25	25	150	39	25	28	—	1					<b>GY2M0400G040N-MM</b>
25	25	150	39	25	28	—	1					<b>GY2M0400G080N-MM</b>
25	25	161	50	25	28	—	2					
25	25	150	39	25	28	—	1					
25	25	161	50	25	28	—	2					
25	25	150	39	25	28	—	1					
25	25	161	50	25	28	—	2					
25	25	150	39	25	28	—	1					
25	25	161	50	25	28	—	2					

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

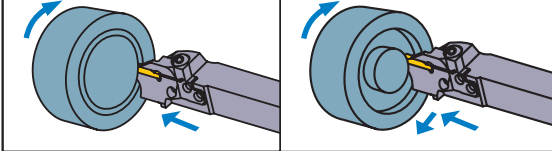


# GY SERIES (FACE GROOVING)

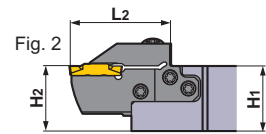
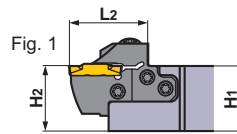
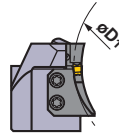
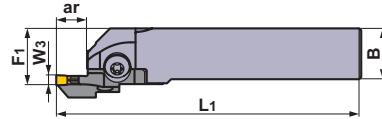
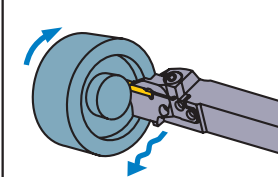
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-00000000-GS    Insert GY2M-00000000-MM  
 Insert GY2M-00000000-GM    Insert GY2M-00000000-MS  
 Insert GY1G-00000000-GS



Insert GY2M-00000000-BM



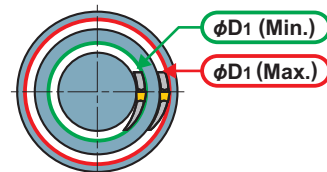
Right hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number					
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock		
G	4.00	*3 R	40	50	14	(4Q1R4G11)	GYM25RD-G14-040	●	GYHR3225P00-M25R	★		
			50	60	14	(4Q1R4G12)	GYM25RD-G14-050	●				
			60	85	14	(4Q1R4G13)	GYM25RD-G14-060	●				
					25 *1	(4Q1R4G23)	GYM25RD-G25-060	●				
			85	125	14	(4Q1R4G14)	GYM25RD-G14-085	●				
					25 *1	(4Q1R4G24)	GYM25RD-G25-085	●				
			125	200	14	(4Q1R4G15)	GYM25RD-G14-125	●				
					25 *1	(4Q1R4G25)	GYM25RD-G25-125	●				
			180	280	14	(4Q1R4G16)	GYM25RD-G14-180	●				
					25 *1	(4Q1R4G26)	GYM25RD-G25-180	●				
			250	999	14	(4Q1R4G17)	GYM25RD-G14-250	●				
					25 *1	(4Q1R4G27)	GYM25RD-G25-250	●				
			40	50	14	(4J1R4G11)	GYM25RD-G14-040	●			GYHR3232P00-M25R	★
			50	60	14	(4J1R4G12)	GYM25RD-G14-050	●				
60	85	14	(4J1R4G13)	GYM25RD-G14-060	●							
		25 *1	(4J1R4G23)	GYM25RD-G25-060	●							
85	125	14	(4J1R4G14)	GYM25RD-G14-085	●							
		25 *1	(4J1R4G24)	GYM25RD-G25-085	●							
125	200	14	(4J1R4G15)	GYM25RD-G14-125	●							
		25 *1	(4J1R4G25)	GYM25RD-G25-125	●							
180	280	14	(4J1R4G16)	GYM25RD-G14-180	●							
		25 *1	(4J1R4G26)	GYM25RD-G25-180	●							
250	999	14	(4J1R4G17)	GYM25RD-G14-250	●							
		25 *1	(4J1R4G27)	GYM25RD-G25-250	●							




- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 103 for left hand tools.

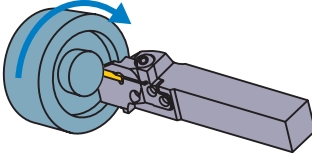



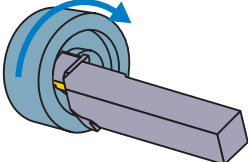



## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

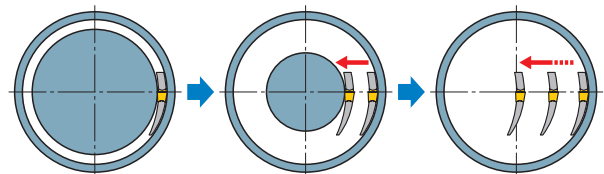
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR3225P00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHR3232P00-M25R</b>			

	Dimensions (mm) *2						Fig.	Cutting Mode	Insert	
	H1	B	L1	L2	H2	F1			Geometry / Insert Number	Page
	32	25	170	39	32	28	1		 <b>GY2M0400G020N-GS</b>  <b>GY2M0400G030N-GM</b>  <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b>	P11 P12
	32	25	170	39	32	28	1			
	32	25	170	39	32	28	1			
	32	25	170	39	32	28	1			
	32	25	181	50	32	28	2			
	32	25	181	50	32	28	2			
	32	25	170	39	32	28	1			
	32	25	181	50	32	28	2			
	32	25	170	39	32	28	1			
	32	25	181	50	32	28	2			
	32	32	170	39	32	35	1		 <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> (Gauge insert)	
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1	 <b>GY2M0400G200N-BM</b>  <b>GY1G0400G020N-GFGS</b>		
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

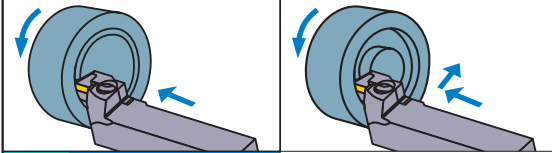


# GY SERIES (FACE GROOVING)

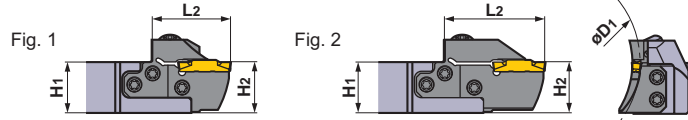
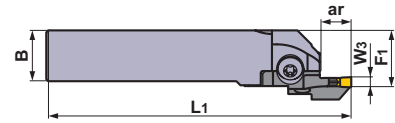
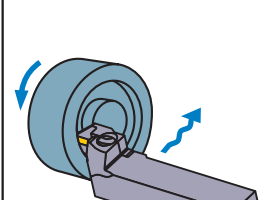
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M	GS	Insert GY2M	MM
Insert GY2M	GM	Insert GY2M	MS
Insert GY1G	GF		MS



Insert GY2M



Left hand tool holder shown.

FACE GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number					
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock		
G	4.00	*3 L	40	50	14	(4E1L4G11)	GYM25LD-G14-040	●	GYHL2020K00-M25L	●		
			50	60	14	(4E1L4G12)	GYM25LD-G14-050	●				
			60	85	14	(4E1L4G13)	GYM25LD-G14-060	●				
					25 *1	(4E1L4G23)	GYM25LD-G25-060	●				
			85	125	14	(4E1L4G14)	GYM25LD-G14-085	●				
					25 *1	(4E1L4G24)	GYM25LD-G25-085	●				
			125	200	14	(4E1L4G15)	GYM25LD-G14-125	●				
					25 *1	(4E1L4G25)	GYM25LD-G25-125	●				
			180	280	14	(4E1L4G16)	GYM25LD-G14-180	●				
					25 *1	(4E1L4G26)	GYM25LD-G25-180	●				
			250	999	14	(4E1L4G17)	GYM25LD-G14-250	●				
					25 *1	(4E1L4G27)	GYM25LD-G25-250	●				
			40	50	14	(4G1L4G11)	GYM25LD-G14-040	●			GYHL2525M00-M25L	●
			50	60	14	(4G1L4G12)	GYM25LD-G14-050	●				
60	85	14	(4G1L4G13)	GYM25LD-G14-060	●							
		25 *1	(4G1L4G23)	GYM25LD-G25-060	●							
85	125	14	(4G1L4G14)	GYM25LD-G14-085	●							
		25 *1	(4G1L4G24)	GYM25LD-G25-085	●							
125	200	14	(4G1L4G15)	GYM25LD-G14-125	●							
		25 *1	(4G1L4G25)	GYM25LD-G25-125	●							
180	280	14	(4G1L4G16)	GYM25LD-G14-180	●							
		25 *1	(4G1L4G26)	GYM25LD-G25-180	●							
250	999	14	(4G1L4G17)	GYM25LD-G14-250	●							
		25 *1	(4G1L4G27)	GYM25LD-G25-250	●							

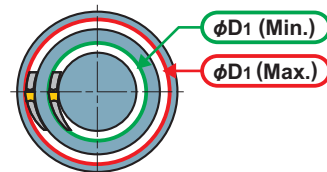
\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.

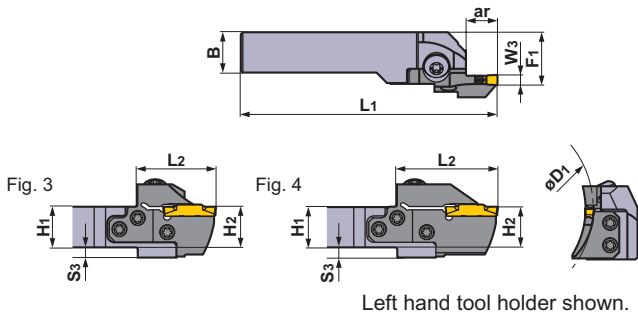
\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.

\*3 Refer to page 97 for right hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHL2020K00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL2525M00-M25L</b>			

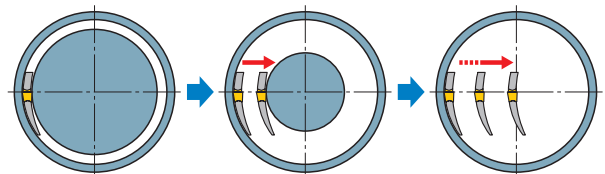
	Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
	H1	B	L1	L2	H2	F1	S3			Geometry / Insert Number	Page
	20	20	125	39	20	26	5	3			
	20	20	125	39	20	26	5	3			
	20	20	125	39	20	26	5	3			
	20	20	136	50	20	26	5	4			
	20	20	125	39	20	26	5	3			
	20	20	136	50	20	26	5	4			
	20	20	125	39	20	26	5	3			
	20	20	136	50	20	26	5	4			
	20	20	125	39	20	26	5	3			
	20	20	136	50	20	26	5	4			
	25	25	150	39	25	28	—	1			
	25	25	150	39	25	28	—	1			
	25	25	150	39	25	28	—	1			
	25	25	161	50	25	28	—	2			
	25	25	150	39	25	28	—	1			
	25	25	161	50	25	28	—	2			
	25	25	150	39	25	28	—	1			
	25	25	161	50	25	28	—	2			
	25	25	150	39	25	28	—	1			
	25	25	161	50	25	28	—	2			

FACE GROOVING

P11  
P12

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

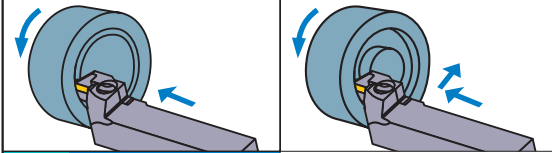


# GY SERIES (FACE GROOVING)

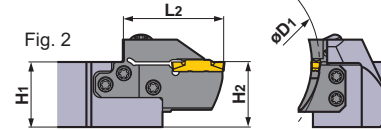
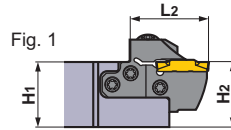
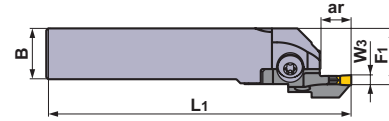
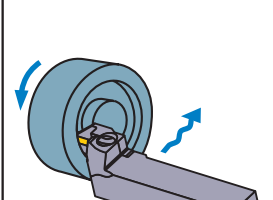
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M-00000000-GS    Insert GY2M-00000000-MM  
 Insert GY2M-00000000-GM    Insert GY2M-00000000-MS  
 Insert GY1G-00000000-GS



Insert GY2M-00000000-BM



Left hand tool holder shown.

FACE GROOVING

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number					
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock		
G	4.00	L <sup>*3</sup>	40	50	14	(4Q1L4G11)	GYM25LD-G14-040	●	GYHL3225P00-M25L	★		
			50	60	14	(4Q1L4G12)	GYM25LD-G14-050	●				
			60	85	14	(4Q1L4G13)	GYM25LD-G14-060	●				
					25 *1	(4Q1L4G23)	GYM25LD-G25-060	●				
			85	125	14	(4Q1L4G14)	GYM25LD-G14-085	●				
					25 *1	(4Q1L4G24)	GYM25LD-G25-085	●				
			125	200	14	(4Q1L4G15)	GYM25LD-G14-125	●				
					25 *1	(4Q1L4G25)	GYM25LD-G25-125	●				
			180	280	14	(4Q1L4G16)	GYM25LD-G14-180	●				
					25 *1	(4Q1L4G26)	GYM25LD-G25-180	●				
			250	999	14	(4Q1L4G17)	GYM25LD-G14-250	●				
					25 *1	(4Q1L4G27)	GYM25LD-G25-250	●				
			40	50	14	(4J1L4G11)	GYM25LD-G14-040	●			GYHL3232P00-M25L	★
			50	60	14	(4J1L4G12)	GYM25LD-G14-050	●				
60	85	14	(4J1L4G13)	GYM25LD-G14-060	●							
		25 *1	(4J1L4G23)	GYM25LD-G25-060	●							
85	125	14	(4J1L4G14)	GYM25LD-G14-085	●							
		25 *1	(4J1L4G24)	GYM25LD-G25-085	●							
125	200	14	(4J1L4G15)	GYM25LD-G14-125	●							
		25 *1	(4J1L4G25)	GYM25LD-G25-125	●							
180	280	14	(4J1L4G16)	GYM25LD-G14-180	●							
		25 *1	(4J1L4G26)	GYM25LD-G25-180	●							
250	999	14	(4J1L4G17)	GYM25LD-G14-250	●							
		25 *1	(4J1L4G27)	GYM25LD-G25-250	●							

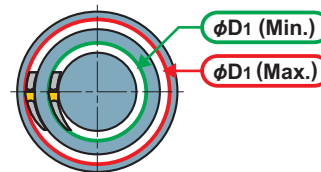
\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.

\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.

\*3 Refer to page 99 for right hand tools.




## Notes when selecting a modular blade (1)

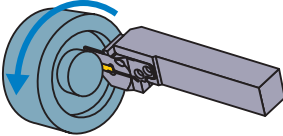



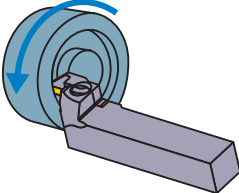



● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





## SPARE PARTS

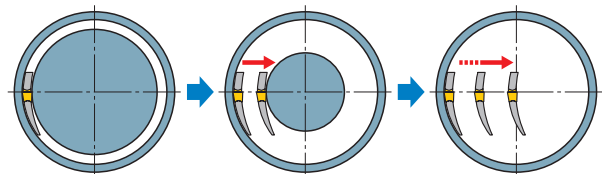
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHL3225P00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL3232P00-M25L</b>			

	Dimensions (mm) *2						Fig.	Cutting Mode	Insert	
	H1	B	L1	L2	H2	F1			Geometry / Insert Number	Page
	32	25	170	39	32	28	1		 <b>GY2M0400G020N-GS</b>  <b>GY2M0400G030N-GM</b>  <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b>	P11 P12
	32	25	170	39	32	28	1			
	32	25	170	39	32	28	1			
	32	25	181	50	32	28	2			
	32	25	170	39	32	28	1			
	32	25	181	50	32	28	2			
	32	25	170	39	32	28	1			
	32	25	181	50	32	28	2			
	32	25	170	39	32	28	1			
	32	25	181	50	32	28	2			
	32	32	170	39	32	35	1		 <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> (Gauge insert)	P11 P12
	32	32	170	39	32	35	1			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1	 <b>GY2M0400G200N-BM</b>  <b>GY1G0400G020N-GFGS</b>	P11 P12	
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			
	32	32	181	50	32	35	2			
	32	32	170	39	32	35	1			

FACE  
GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

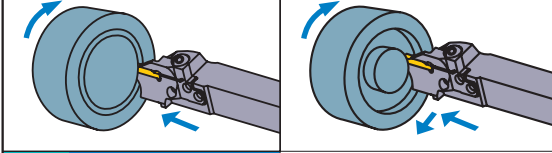


# GY SERIES (FACE GROOVING)

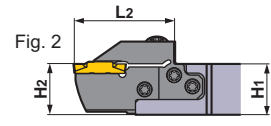
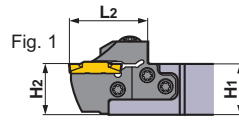
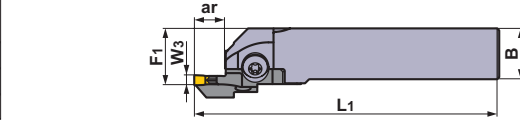
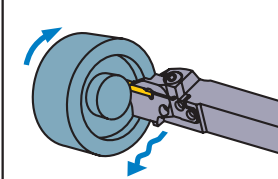
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-0000000000-GS  
 Insert GY2M-0000000000-MM  
 Insert GY2M-0000000000-GM  
 Insert GY2M-0000000000-MS  
 Insert GY1G-0000000000-GF  
 Insert GY1G-0000000000-GS



Insert GY2M-0000000000-BM



Right hand tool holder shown.

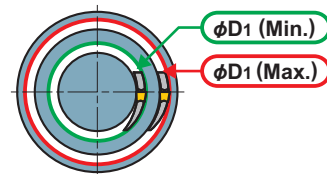
FACE GROOVING

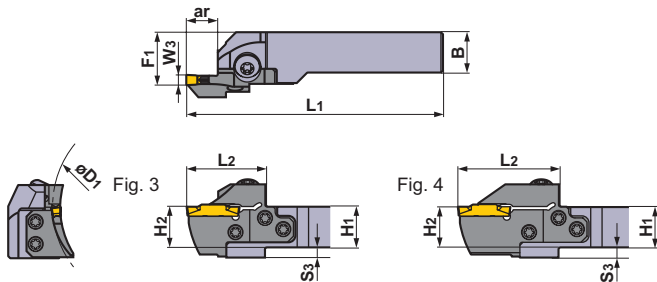
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
H	4.75 5.00	*3 R	50	60	14	(4E1R4H11)	GYM25RD-H14-050	●	GYHR2020K00-M25R	●
			60	85	14	(4E1R4H12)	GYM25RD-H14-060	●		
					25 *1	(4E1R4H22)	GYM25RD-H25-060	●		
			85	125	14	(4E1R4H13)	GYM25RD-H14-085	●		
					25 *1	(4E1R4H23)	GYM25RD-H25-085	●		
			125	200	14	(4E1R4H14)	GYM25RD-H14-125	●		
			25 *1	(4E1R4H24)	GYM25RD-H25-125	●				
			14	(4E1R4H15)	GYM25RD-H14-180	●				
			25 *1	(4E1R4H25)	GYM25RD-H25-180	●				
			14	(4E1R4H16)	GYM25RD-H14-250	●				
			25 *1	(4E1R4H26)	GYM25RD-H25-250	●				
			14	(4G1R4H11)	GYM25RD-H14-050	●	GYHR2525M00-M25R	●		
			14	(4G1R4H12)	GYM25RD-H14-060	●				
			25 *1	(4G1R4H22)	GYM25RD-H25-060	●				
		14	(4G1R4H13)	GYM25RD-H14-085	●					
		25 *1	(4G1R4H23)	GYM25RD-H25-085	●					
		14	(4G1R4H14)	GYM25RD-H14-125	●					
		25 *1	(4G1R4H24)	GYM25RD-H25-125	●					
		14	(4G1R4H15)	GYM25RD-H14-180	●					
		25 *1	(4G1R4H25)	GYM25RD-H25-180	●					
		14	(4G1R4H16)	GYM25RD-H14-250	●					
		25 *1	(4G1R4H26)	GYM25RD-H25-250	●					

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 109 for left hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





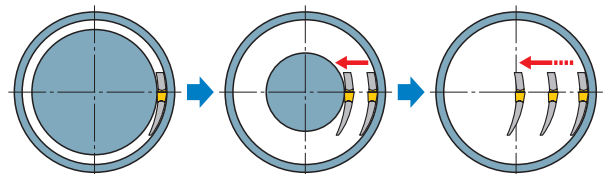
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2020K00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHR2525M00-M25R</b>			

Dimensions (mm) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
20	20	125	39	20	26	5	3		GY2M0475H030N-GS GY2M0500H030N-GS	P11 P12	
20	20	125	39	20	26	5	3		GY2M0475H040N-GM GY2M0500H040N-GM		
20	20	136	50	20	26	5	4		GY2M0500H040R05-GM GY2M0500H040L05-GM		
20	20	125	39	20	26	5	3		GY2M0500H040N-MS GY2M0500H080N-MS (Gauge insert)		
20	20	136	50	20	26	5	4		GY2M0500H040N-MM GY2M0500H080N-MM		
20	20	125	39	20	26	5	3		GY2M0475H238N-BM GY2M0500H250N-BM		
20	20	136	50	20	26	5	4		GY1G0475H020N-GFGS GY1G0500H020N-GFGS		
25	25	150	39	25	28	—	1				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

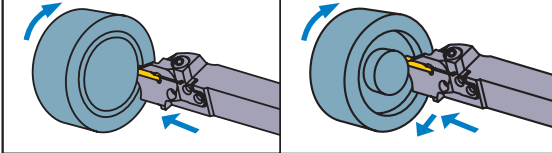


# GY SERIES (FACE GROOVING)

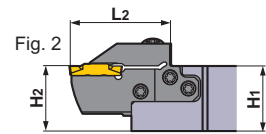
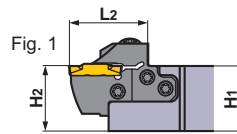
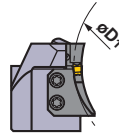
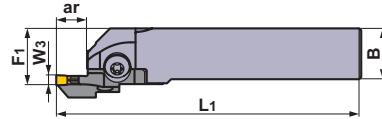
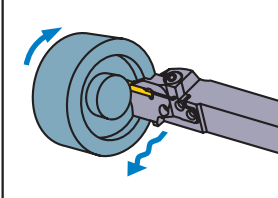
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-○○○○○○○○○○-GS  
 Insert GY2M-○○○○○○○○○○-GM  
 Insert GY1G-○○○○○○○○○○-GF  
 Insert GY2M-○○○○○○○○○○-MM  
 Insert GY2M-○○○○○○○○○○-MS



Insert GY2M-○○○○○○○○○○-BM



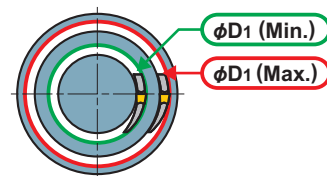
Right hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
H	4.75 5.00	*3 R	50	60	14	(4Q1R4H11)	GYM25RD-H14-050	●	GYHR3225P00-M25R	★
			60	85	14	(4Q1R4H12)	GYM25RD-H14-060	●		
					25 *1	(4Q1R4H22)	GYM25RD-H25-060	●		
			85	125	14	(4Q1R4H13)	GYM25RD-H14-085	●		
					25 *1	(4Q1R4H23)	GYM25RD-H25-085	●		
			125	200	14	(4Q1R4H14)	GYM25RD-H14-125	●		
			25 *1	(4Q1R4H24)	GYM25RD-H25-125	●				
	180	280	14	(4Q1R4H15)	GYM25RD-H14-180	●				
			25 *1	(4Q1R4H25)	GYM25RD-H25-180	●				
	250	999	14	(4Q1R4H16)	GYM25RD-H14-250	●				
			25 *1	(4Q1R4H26)	GYM25RD-H25-250	●				
				50	60	14	(4J1R4H11)	GYM25RD-H14-050		
			60	85	14	(4J1R4H12)	GYM25RD-H14-060	●		
					25 *1	(4J1R4H22)	GYM25RD-H25-060	●		
			85	125	14	(4J1R4H13)	GYM25RD-H14-085	●		
					25 *1	(4J1R4H23)	GYM25RD-H25-085	●		
			125	200	14	(4J1R4H14)	GYM25RD-H14-125	●		
					25 *1	(4J1R4H24)	GYM25RD-H25-125	●		
			180	280	14	(4J1R4H15)	GYM25RD-H14-180	●		
					25 *1	(4J1R4H25)	GYM25RD-H25-180	●		
			250	999	14	(4J1R4H16)	GYM25RD-H14-250	●		
					25 *1	(4J1R4H26)	GYM25RD-H25-250	●		




- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 111 for left hand tools.

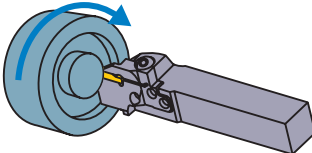














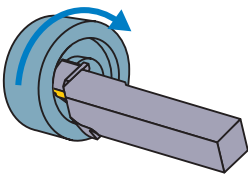
## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

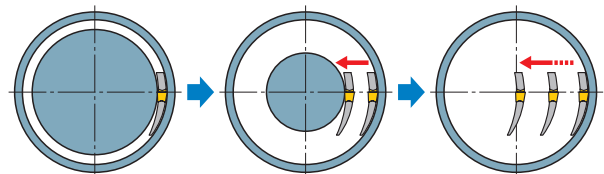
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR3225P00-M25R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHR3232P00-M25R</b>			

Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
32	25	170	39	32	28	1		 <b>GY2M0475H030N-GS</b>  <b>GY2M0500H030N-GS</b>	P11 P12	
32	25	170	39	32	28	1		 <b>GY2M0475H040N-GM</b>  <b>GY2M0500H040N-GM</b>		
32	25	181	50	32	28	2		 <b>GY2M0500H040R05-GM</b>  <b>GY2M0500H040L05-GM</b>		
32	25	170	39	32	28	1		 <b>GY2M0500H040N-MS</b>  <b>GY2M0500H080N-MS</b> (Gauge insert)		
32	25	181	50	32	28	2		 <b>GY2M0500H040N-MM</b>  <b>GY2M0500H080N-MM</b>		
32	25	170	39	32	28	1		 <b>GY2M0475H238N-BM</b>  <b>GY2M0500H250N-BM</b>		
32	25	181	50	32	28	2		 <b>GY1G0475H020N-GFGS</b>  <b>GY1G0500H020N-GFGS</b>		
32	32	170	39	32	35	1				
32	32	170	39	32	35	1				
32	32	181	50	32	35	2				
32	32	170	39	32	35	1				
32	32	181	50	32	35	2				
32	32	170	39	32	35	1				
32	32	181	50	32	35	2				
32	32	170	39	32	35	1				
32	32	181	50	32	35	2				
32	32	170	39	32	35	1				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

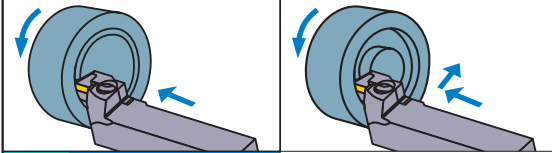


# GY SERIES (FACE GROOVING)

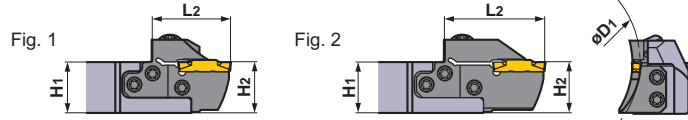
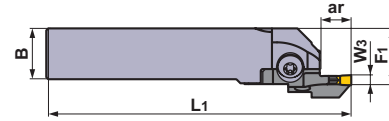
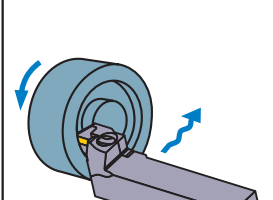
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M-00000000-GS    Insert GY2M-00000000-MM  
 Insert GY2M-00000000-GM    Insert GY2M-00000000-MS  
 Insert GY1G-00000000-GF  
 GS



Insert GY2M-00000000-BM



Left hand tool holder shown.

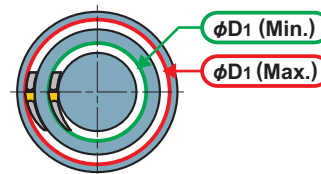
FACE GROOVING

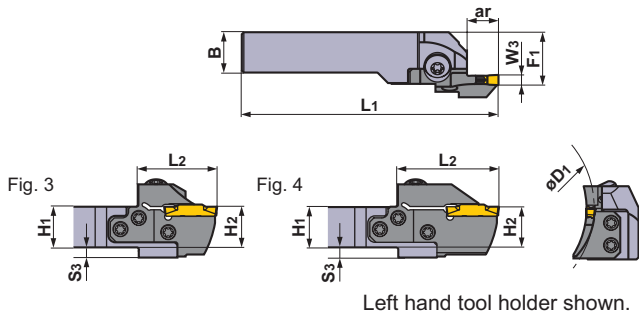
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
H	4.75 5.00	*3 L	50	60	14	(4E1L4H11)	GYM25LD-H14-050	●	GYHL2020K00-M25L	●
			60	85	14	(4E1L4H12)	GYM25LD-H14-060	●		
					25 *1	(4E1L4H22)	GYM25LD-H25-060	●		
			85	125	14	(4E1L4H13)	GYM25LD-H14-085	●		
					25 *1	(4E1L4H23)	GYM25LD-H25-085	●		
			125	200	14	(4E1L4H14)	GYM25LD-H14-125	●		
			25 *1	(4E1L4H24)	GYM25LD-H25-125	●				
	180	280	14	(4E1L4H15)	GYM25LD-H14-180	●				
			25 *1	(4E1L4H25)	GYM25LD-H25-180	●				
	250	999	14	(4E1L4H16)	GYM25LD-H14-250	●				
			25 *1	(4E1L4H26)	GYM25LD-H25-250	●				
				50	60	14	(4G1L4H11)	GYM25LD-H14-050	●	GYHL2525M00-M25L
			60	85	14	(4G1L4H12)	GYM25LD-H14-060	●		
					25 *1	(4G1L4H22)	GYM25LD-H25-060	●		
			85	125	14	(4G1L4H13)	GYM25LD-H14-085	●		
					25 *1	(4G1L4H23)	GYM25LD-H25-085	●		
			125	200	14	(4G1L4H14)	GYM25LD-H14-125	●		
					25 *1	(4G1L4H24)	GYM25LD-H25-125	●		
			180	280	14	(4G1L4H15)	GYM25LD-H14-180	●		
					25 *1	(4G1L4H25)	GYM25LD-H25-180	●		
			250	999	14	(4G1L4H16)	GYM25LD-H14-250	●		
					25 *1	(4G1L4H26)	GYM25LD-H25-250	●		

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 105 for right hand tools.

## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





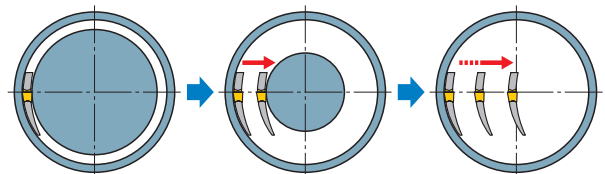
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHL2020K00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL2525M00-M25L</b>			

Dimensions (mm) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
20	20	125	39	20	26	5	3		GY2M0475H030N-GS GY2M0500H030N-GS	P11 P12	
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
25	25	150	39	25	28	—	1		GY2M0500H040N-MS GY2M0500H080N-MS (Gauge insert)	P11 P12	
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

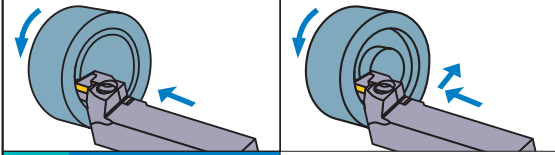


# GY SERIES (FACE GROOVING)

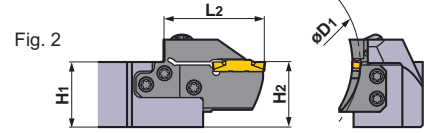
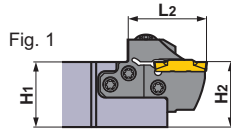
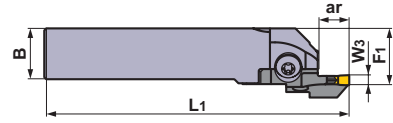
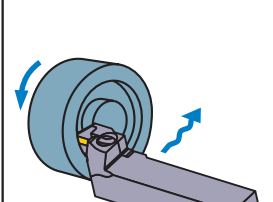
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

- Insert GY2M $\text{\textcircled{0000000000}}$ -GS
- Insert GY2M $\text{\textcircled{0000000000}}$ -MM
- Insert GY2M $\text{\textcircled{0000000000}}$ -GM
- Insert GY2M $\text{\textcircled{0000000000}}$ -MS
- Insert GY1G $\text{\textcircled{0000000000}}$ -GS



Insert GY2M $\text{\textcircled{0000000000}}$ -BM



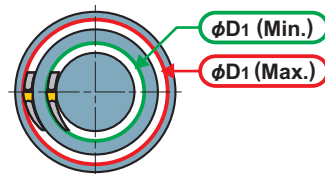
Left hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
H	4.75 5.00	*3 L	50	60	14	(4Q1L4H11)	GYM25LD-H14-050	●	GYHL3225P00-M25L	★
			60	85	14	(4Q1L4H12)	GYM25LD-H14-060	●		
					25 *1	(4Q1L4H22)	GYM25LD-H25-060	●		
			85	125	14	(4Q1L4H13)	GYM25LD-H14-085	●		
					25 *1	(4Q1L4H23)	GYM25LD-H25-085	●		
			125	200	14	(4Q1L4H14)	GYM25LD-H14-125	●		
			25 *1	(4Q1L4H24)	GYM25LD-H25-125	●				
	180	280	14	(4Q1L4H15)	GYM25LD-H14-180	●				
			25 *1	(4Q1L4H25)	GYM25LD-H25-180	●				
	250	999	14	(4Q1L4H16)	GYM25LD-H14-250	●				
			25 *1	(4Q1L4H26)	GYM25LD-H25-250	●				
				50	60	14	(4J1L4H11)	GYM25LD-H14-050		
			60	85	14	(4J1L4H12)	GYM25LD-H14-060	●		
					25 *1	(4J1L4H22)	GYM25LD-H25-060	●		
			85	125	14	(4J1L4H13)	GYM25LD-H14-085	●		
					25 *1	(4J1L4H23)	GYM25LD-H25-085	●		
			125	200	14	(4J1L4H14)	GYM25LD-H14-125	●		
					25 *1	(4J1L4H24)	GYM25LD-H25-125	●		
			180	280	14	(4J1L4H15)	GYM25LD-H14-180	●		
					25 *1	(4J1L4H25)	GYM25LD-H25-180	●		
			250	999	14	(4J1L4H16)	GYM25LD-H14-250	●		
					25 *1	(4J1L4H26)	GYM25LD-H25-250	●		

- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 107 for right hand tools.




## Notes when selecting a modular blade (1)

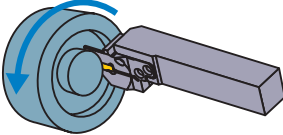







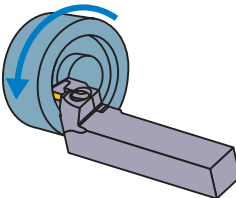
- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





## SPARE PARTS

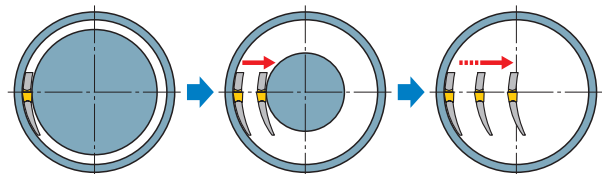
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHL3225P00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL3232P00-M25L</b>			

Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
32	25	170	39	32	28	1		 <b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>	P11 P12	
32	25	170	39	32	28	1		 <b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b>		
32	25	181	50	32	28	2		 <b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
32	25	170	39	32	28	1		 <b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b> (Gauge insert)		
32	25	181	50	32	28	2		 <b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>		
32	25	170	39	32	28	1		 <b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>		
32	25	181	50	32	28	2		 <b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>		
32	32	170	39	32	35	1				
32	32	170	39	32	35	1				
32	32	181	50	32	35	2				
32	32	170	39	32	35	1				
32	32	181	50	32	35	2				
32	32	170	39	32	35	1				
32	32	181	50	32	35	2				
32	32	170	39	32	35	1				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.

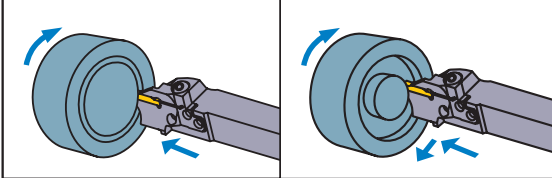


# GY SERIES (FACE GROOVING)

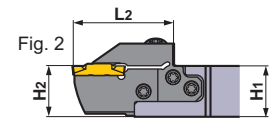
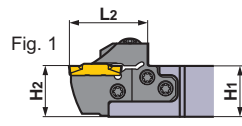
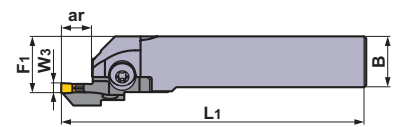
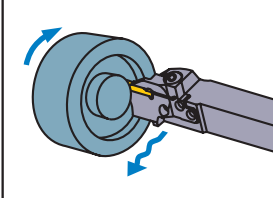
**3-2** 00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use right hand modular blade for right hand modular holder.

Insert GY2M-○○○○○○○○○○-GS    Insert GY2M-○○○○○○○○○○-MM  
 Insert GY2M-○○○○○○○○○○-GM    Insert GY2M-○○○○○○○○○○-MS



Insert GY2M-○○○○○○○○○○-BM



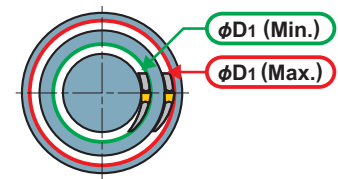
Right hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
J	6.00 6.35	*3 R	50	70	14	(4E1R4J11)	GYM25RD-J14-050	●	GYHR2020K00-M25R	●
			70	110	14	(4E1R4J12)	GYM25RD-J14-070	●		
					25 *1	(4E1R4J22)	GYM25RD-J25-070	●		
			110	200	14	(4E1R4J13)	GYM25RD-J14-110	●		
					25 *1	(4E1R4J23)	GYM25RD-J25-110	●		
			170	280	14	(4E1R4J14)	GYM25RD-J14-170	●		
					25 *1	(4E1R4J24)	GYM25RD-J25-170	●		
			250	999	14	(4E1R4J15)	GYM25RD-J14-250	●		
					25 *1	(4E1R4J25)	GYM25RD-J25-250	●		
			50	70	14	(4G1R4J11)	GYM25RD-J14-050	●		
			70	110	14	(4G1R4J12)	GYM25RD-J14-070	●		
					25 *1	(4G1R4J22)	GYM25RD-J25-070	●		
	110	200	14	(4G1R4J13)	GYM25RD-J14-110	●				
			25 *1	(4G1R4J23)	GYM25RD-J25-110	●				
	170	280	14	(4G1R4J14)	GYM25RD-J14-170	●				
			25 *1	(4G1R4J24)	GYM25RD-J25-170	●				
	250	999	14	(4G1R4J15)	GYM25RD-J14-250	●				
			25 *1	(4G1R4J25)	GYM25RD-J25-250	●				
	50	70	14	(4Q1R4J11)	GYM25RD-J14-050	●				
	70	110	14	(4Q1R4J12)	GYM25RD-J14-070	●				
			25 *1	(4Q1R4J22)	GYM25RD-J25-070	●				
	110	200	14	(4Q1R4J13)	GYM25RD-J14-110	●				
			25 *1	(4Q1R4J23)	GYM25RD-J25-110	●				
	170	280	14	(4Q1R4J14)	GYM25RD-J14-170	●				
		25 *1	(4Q1R4J24)	GYM25RD-J25-170	●					
250	999	14	(4Q1R4J15)	GYM25RD-J14-250	●					
		25 *1	(4Q1R4J25)	GYM25RD-J25-250	●					
50	70	14	(4J1R4J11)	GYM25RD-J14-050	●					
70	110	14	(4J1R4J12)	GYM25RD-J14-070	●					
		25 *1	(4J1R4J22)	GYM25RD-J25-070	●					
110	200	14	(4J1R4J13)	GYM25RD-J14-110	●					
		25 *1	(4J1R4J23)	GYM25RD-J25-110	●					
170	280	14	(4J1R4J14)	GYM25RD-J14-170	●					
		25 *1	(4J1R4J24)	GYM25RD-J25-170	●					
250	999	14	(4J1R4J15)	GYM25RD-J14-250	●					
		25 *1	(4J1R4J25)	GYM25RD-J25-250	●					

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.  
 \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.  
 \*3 Refer to page 115 for left hand tools.

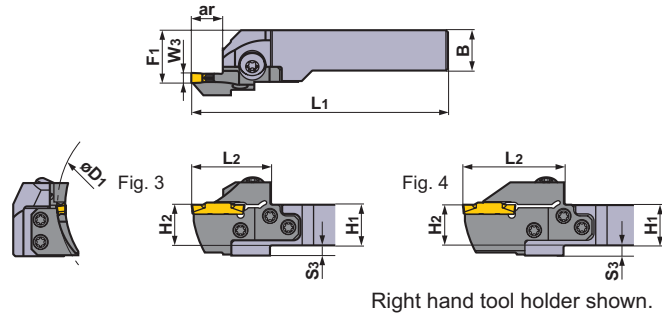
### Notes when selecting a modular blade (1)

● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



● : Inventory maintained. ★ : Inventory maintained in Japan.

FACE GROOVING



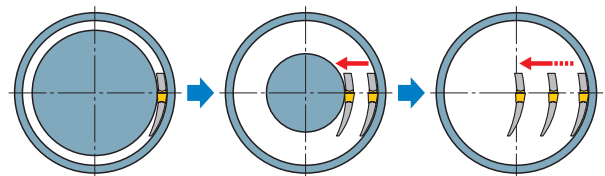
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYHR2020K00-M25R			
GYHR2525M00-M25R	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
GYHR3225P00-M25R			
GYHR3232P00-M25R			

Dimensions (mm) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
20	20	125	39	20	26	5	3			GY2M0600J030N-GS GY2M0635J030N-GS	P11 P12
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	136	50	20	26	5	4				
25	25	150	39	25	28	—	1				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
32	25	170	39	32	28	—	1				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	25	170	39	32	28	—	1				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	32	170	39	32	35	—	1				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



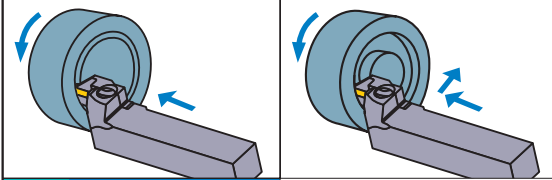
# GY SERIES (FACE GROOVING)

**3-2**

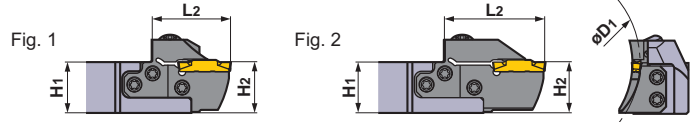
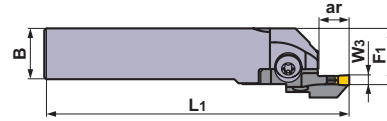
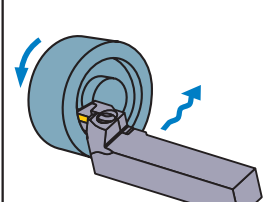
00° type holder (Metric) **NEW**

Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for left hand modular holder.

Insert GY2M-00000000-GS    Insert GY2M-00000000-MM  
 Insert GY2M-00000000-GM    Insert GY2M-00000000-MS



Insert GY2M-00000000-BM



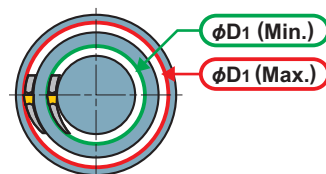
Left hand tool holder shown.

Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
J	6.00 6.35	*3 L	50	70	14	(4E1L4J11)	GYM25LD-J14-050	●	GYHL2020K00-M25L	●
			70	110	14	(4E1L4J12)	GYM25LD-J14-070	●		
					25 *1	(4E1L4J22)	GYM25LD-J25-070	●		
			110	200	14	(4E1L4J13)	GYM25LD-J14-110	●		
					25 *1	(4E1L4J23)	GYM25LD-J25-110	●		
			170	280	14	(4E1L4J14)	GYM25LD-J14-170	●		
					25 *1	(4E1L4J24)	GYM25LD-J25-170	●		
			250	999	14	(4E1L4J15)	GYM25LD-J14-250	●		
					25 *1	(4E1L4J25)	GYM25LD-J25-250	●		
			50	70	14	(4G1L4J11)	GYM25LD-J14-050	●		
			70	110	14	(4G1L4J12)	GYM25LD-J14-070	●		
					25 *1	(4G1L4J22)	GYM25LD-J25-070	●		
	110	200	14	(4G1L4J13)	GYM25LD-J14-110	●				
			25 *1	(4G1L4J23)	GYM25LD-J25-110	●				
	170	280	14	(4G1L4J14)	GYM25LD-J14-170	●				
			25 *1	(4G1L4J24)	GYM25LD-J25-170	●				
	250	999	14	(4G1L4J15)	GYM25LD-J14-250	●				
			25 *1	(4G1L4J25)	GYM25LD-J25-250	●				
	50	70	14	(4Q1L4J11)	GYM25LD-J14-050	●				
	70	110	14	(4Q1L4J12)	GYM25LD-J14-070	●				
			25 *1	(4Q1L4J22)	GYM25LD-J25-070	●				
	110	200	14	(4Q1L4J13)	GYM25LD-J14-110	●				
			25 *1	(4Q1L4J23)	GYM25LD-J25-110	●				
	170	280	14	(4Q1L4J14)	GYM25LD-J14-170	●				
		25 *1	(4Q1L4J24)	GYM25LD-J25-170	●					
250	999	14	(4Q1L4J15)	GYM25LD-J14-250	●					
		25 *1	(4Q1L4J25)	GYM25LD-J25-250	●					
50	70	14	(4J1L4J11)	GYM25LD-J14-050	●					
70	110	14	(4J1L4J12)	GYM25LD-J14-070	●					
		25 *1	(4J1L4J22)	GYM25LD-J25-070	●					
110	200	14	(4J1L4J13)	GYM25LD-J14-110	●					
		25 *1	(4J1L4J23)	GYM25LD-J25-110	●					
170	280	14	(4J1L4J14)	GYM25LD-J14-170	●					
		25 *1	(4J1L4J24)	GYM25LD-J25-170	●					
250	999	14	(4J1L4J15)	GYM25LD-J14-250	●					
		25 *1	(4J1L4J25)	GYM25LD-J25-250	●					

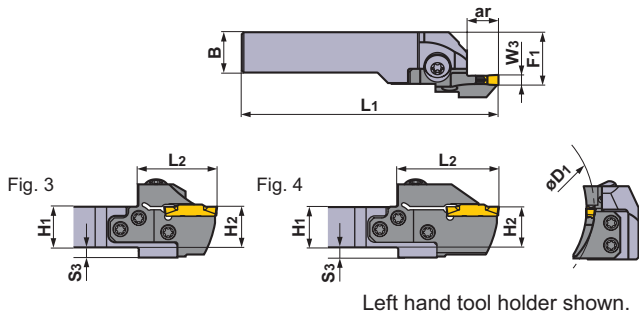
- \*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.
- \*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.
- \*3 Refer to page 113 for right hand tools.

## Notes when selecting a modular blade (1)

● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



● : Inventory maintained. ★ : Inventory maintained in Japan.



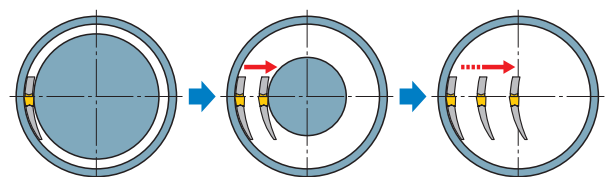
SPARE PARTS			
Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYHL2020K00-M25L</b>			
<b>GYHL2525M00-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL3225P00-M25L</b>			
<b>GYHL3232P00-M25L</b>			

Dimensions (mm) *2								Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	S3	Geometry / Insert Number			Page	
20	20	125	39	20	26	5	3			P11 P12	
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
20	20	125	39	20	26	5	3				
20	20	136	50	20	26	5	4				
25	25	150	39	25	28	—	1				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
25	25	150	39	25	28	—	1				
25	25	161	50	25	28	—	2				
32	25	170	39	32	28	—	1				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	25	170	39	32	28	—	1				
32	25	181	50	32	28	—	2				
32	32	170	39	32	35	—	1				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				
32	32	170	39	32	35	—	1				
32	32	181	50	32	35	—	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

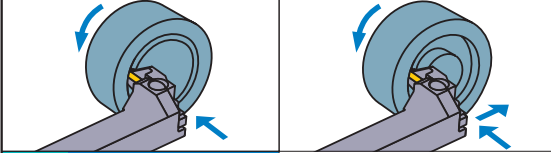
- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



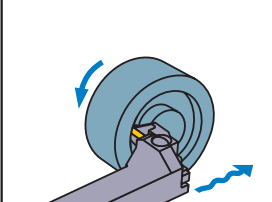
# GY SERIES (FACE GROOVING)

**4-2** 90° type holder (Metric) **NEW**

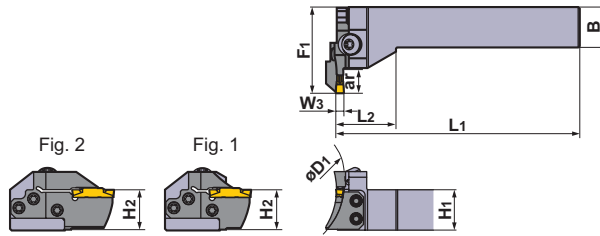
Insert	GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -GS	Insert	GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -MM
Insert	GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -GM	Insert	GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -MS
Insert	GY1G $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -GF		
	GS		



Insert GY2M $\circ\circ\circ\circ\circ\circ\circ\circ\circ$ -BM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



Right hand tool holder shown.

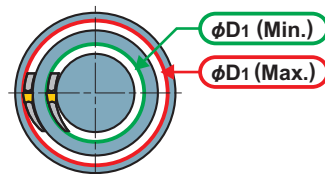
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number				
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock	
F	3.00 3.18	R	35	40	12	(5G1R4F11)	GYM25LD-F12-035	●	GYHR2525M90-M25L	●	
			40	50	12	(5G1R4F12)	GYM25LD-F12-040	●			
			50	60	12	(5G1R4F13)	GYM25LD-F12-050	●			
			60	75	12	(5G1R4F14)	GYM25LD-F12-060	●			
			75	100	12	(5G1R4F15)	GYM25LD-F12-075	●			
					20 *1	(5G1R4F24)	GYM25LD-F20-060	●			
					20 *1	(5G1R4F25)	GYM25LD-F20-075	●			
					20 *1	(5G1R4F26)	GYM25LD-F20-100	●			
	100	150	12	(5G1R4F16)	GYM25LD-F12-100	●					
			20 *1	(5G1R4F27)	GYM25LD-F20-135	●					
			20 *1	(5G1R4F28)	GYM25LD-F20-180	●					
			20 *1	(5G1R4F28)	GYM25LD-F20-180	●					
			L	35	40	12	(5G1L4F11)	GYM25RD-F12-035	●	GYHL2525M90-M25R	●
				40	50	12	(5G1L4F12)	GYM25RD-F12-040	●		
				50	60	12	(5G1L4F13)	GYM25RD-F12-050	●		
				60	75	12	(5G1L4F14)	GYM25RD-F12-060	●		
			75	100	12	(5G1L4F15)	GYM25RD-F12-075	●			
					20 *1	(5G1L4F24)	GYM25RD-F20-060	●			
					20 *1	(5G1L4F25)	GYM25RD-F20-075	●			
					20 *1	(5G1L4F26)	GYM25RD-F20-100	●			
			100	150	12	(5G1L4F16)	GYM25RD-F12-100	●			
					20 *1	(5G1L4F27)	GYM25RD-F20-135	●			
					20 *1	(5G1L4F27)	GYM25RD-F20-135	●			
					20 *1	(5G1L4F28)	GYM25RD-F20-180	●			
					20 *1	(5G1L4F28)	GYM25RD-F20-180	●			

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.




\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.

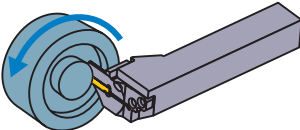







## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

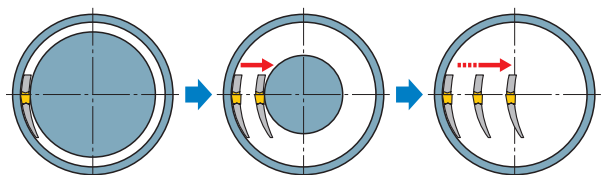
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2525M90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL2525M90-M25R</b>			

	Dimensions (mm) *2						Fig.	Cutting Mode	Insert	
	H1	B	L1	L2	H2	F1			Geometry / Insert Number	Page
	25	25	150	38	25	53	1		 <b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b>	P11 P12
	25	25	150	38	25	53	1		 <b>GY2M0300F030N-GM</b> <b>GY2M0318F030N-GM</b>	
	25	25	150	38	25	53	1		 <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b>	
	25	25	150	38	25	53	1		 <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> (Gauge insert)	
	25	25	150	38	25	59	2		 <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b>	
	25	25	150	38	25	53	1		 <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b>	
	25	25	150	38	25	59	2		 <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>	
	25	25	150	38	25	53	1			
	25	25	150	38	25	59	2			
	25	25	150	38	25	53	1			
	25	25	150	38	25	59	2			
	25	25	150	38	25	53	1			
	25	25	150	38	25	59	2			
	25	25	150	38	25	53	1			
	25	25	150	38	25	59	2			
	25	25	150	38	25	53	1			
	25	25	150	38	25	59	2			

FACE GROOVING

### Notes when selecting a modular blade (2)

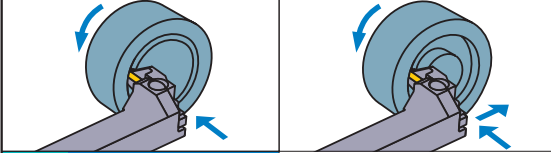
- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



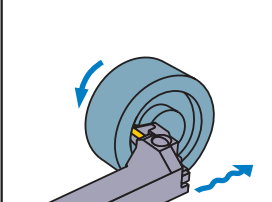
# GY SERIES (FACE GROOVING)

**4-2** 90° type holder (Metric) **NEW**

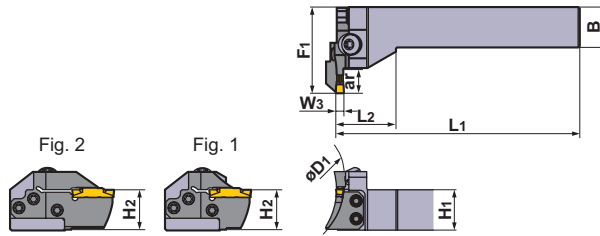
Insert	GY2M $\text{\textcircled{00000000}}$ -GS	Insert	GY2M $\text{\textcircled{00000000}}$ -MM
Insert	GY2M $\text{\textcircled{00000000}}$ -GM	Insert	GY2M $\text{\textcircled{00000000}}$ -MS
Insert	GY1G $\text{\textcircled{00000000}}$ -GF		
	GS		



Insert GY2M $\text{\textcircled{00000000}}$ -BM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



Right hand tool holder shown.

FACE GROOVING

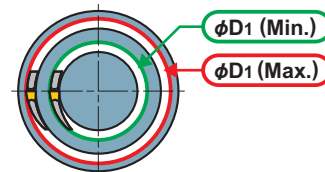
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
G	4.00	R	40	50	14	(5G1R4G11)	GYM25LD-G14-040	●	GYHR2525M90-M25L	●
			50	60	14	(5G1R4G12)	GYM25LD-G14-050	●		
			60	85	14	(5G1R4G13)	GYM25LD-G14-060	●		
					25 *1	(5G1R4G23)	GYM25LD-G25-060	●		
			85	125	14	(5G1R4G14)	GYM25LD-G14-085	●		
					25 *1	(5G1R4G24)	GYM25LD-G25-085	●		
			125	200	14	(5G1R4G15)	GYM25LD-G14-125	●		
				25 *1	(5G1R4G25)	GYM25LD-G25-125	●			
		180	280	14	(5G1R4G16)	GYM25LD-G14-180	●			
				25 *1	(5G1R4G26)	GYM25LD-G25-180	●			
		250	999	14	(5G1R4G17)	GYM25LD-G14-250	●			
				25 *1	(5G1R4G27)	GYM25LD-G25-250	●			
		L	40	50	14	(5G1L4G11)	GYM25RD-G14-040	●	GYHL2525M90-M25R	●
			50	60	14	(5G1L4G12)	GYM25RD-G14-050	●		
60	85		14	(5G1L4G13)	GYM25RD-G14-060	●				
			25 *1	(5G1L4G23)	GYM25RD-G25-060	●				
85	125		14	(5G1L4G14)	GYM25RD-G14-085	●				
			25 *1	(5G1L4G24)	GYM25RD-G25-085	●				
125	200		14	(5G1L4G15)	GYM25RD-G14-125	●				
		25 *1	(5G1L4G25)	GYM25RD-G25-125	●					
180	280	14	(5G1L4G16)	GYM25RD-G14-180	●					
		25 *1	(5G1L4G26)	GYM25RD-G25-180	●					
250	999	14	(5G1L4G17)	GYM25RD-G14-250	●					
		25 *1	(5G1L4G27)	GYM25RD-G25-250	●					

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.

\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.




## Notes when selecting a modular blade (1)

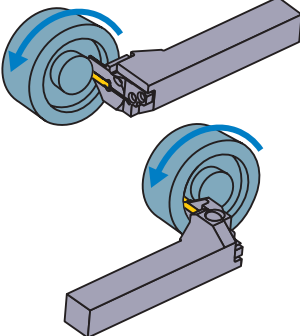







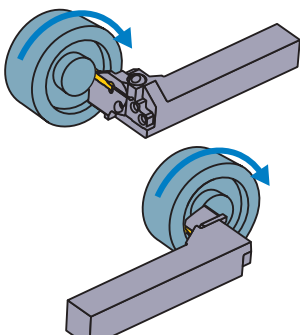







- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.





## SPARE PARTS

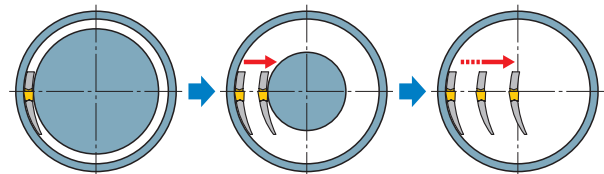
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2525M90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL2525M90-M25R</b>			

Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
25	25	150	38	25	53	1		 <b>GY2M0400G020N-GS</b>  <b>GY2M0400G030N-GM</b>  <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b>  <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> <small>(Gauge insert)</small>  <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b>  <b>GY2M0400G200N-BM</b>  <b>GY1G0400G020N-GFGS</b>	P11 P12	
25	25	150	38	25	53	1				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1		 <b>GY2M0400G020N-GS</b>  <b>GY2M0400G030N-GM</b>  <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b>  <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> <small>(Gauge insert)</small>  <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b>  <b>GY2M0400G200N-BM</b>  <b>GY1G0400G020N-GFGS</b>	P11 P12	
25	25	150	38	25	53	1				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				

FACE GROOVING




### Notes when selecting a modular blade (2)

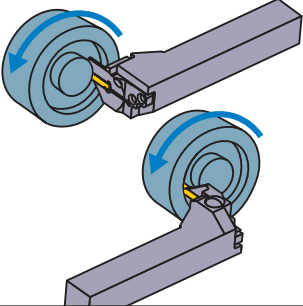







- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.





## SPARE PARTS

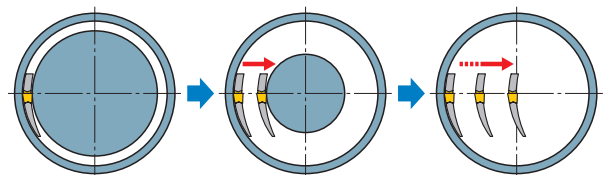
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2525M90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL2525M90-M25R</b>			

Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
25	25	150	38	25	53	1		 <b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>	P11 P12	
25	25	150	38	25	53	1		 <b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b>		
25	25	150	38	25	64	2		 <b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
25	25	150	38	25	53	1		 <b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b> (Gauge insert)		
25	25	150	38	25	64	2		 <b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>		
25	25	150	38	25	53	1		 <b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>		
25	25	150	38	25	64	2		 <b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>		
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				

FACE GROOVING

### Notes when selecting a modular blade (2)

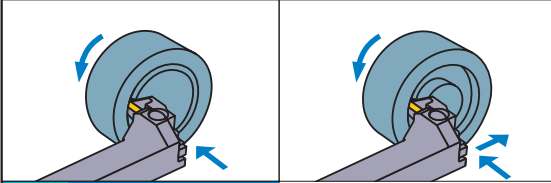
- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



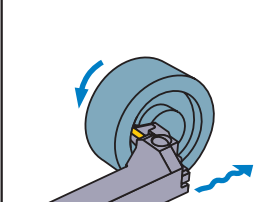
# GY SERIES (FACE GROOVING)

**4-2** 90° type holder (Metric) **NEW**

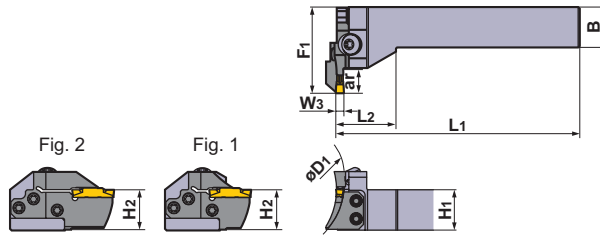
Insert GY2M-○○○○○○○○○○-GS Insert GY2M-○○○○○○○○○○-MM  
 Insert GY2M-○○○○○○○○○○-GM Insert GY2M-○○○○○○○○○○-MS



Insert GY2M-○○○○○○○○○○-BM



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.



Right hand tool holder shown.

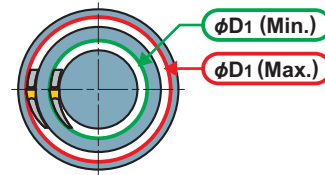
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	First Cut Diameter D <sub>1</sub> (mm)		Max. Groove Depth ar (mm)	ID	Order Number			
			Min.	Max.			Modular Blade	Stock	Modular Holder	Stock
J	6.00	R	50	70	14	(5G1R4J11)	GYM25LD-J14-050	●	GYHR2525M90-M25L	●
			70	110	14	(5G1R4J12)	GYM25LD-J14-070	●		
					25 *1	(5G1R4J22)	GYM25LD-J25-070	●		
			110	200	14	(5G1R4J13)	GYM25LD-J14-110	●		
					25 *1	(5G1R4J23)	GYM25LD-J25-110	●		
			14	(5G1R4J14)	GYM25LD-J14-170	●				
			25 *1	(5G1R4J24)	GYM25LD-J25-170	●				
	250	999	14	(5G1R4J15)	GYM25LD-J14-250	●				
			25 *1	(5G1R4J25)	GYM25LD-J25-250	●				
		6.35	L	50	70	14	(5G1L4J11)	GYM25RD-J14-050	●	GYHL2525M90-M25R
70	110			14	(5G1L4J12)	GYM25RD-J14-070	●			
				25 *1	(5G1L4J22)	GYM25RD-J25-070	●			
110	200			14	(5G1L4J13)	GYM25RD-J14-110	●			
				25 *1	(5G1L4J23)	GYM25RD-J25-110	●			
		14	(5G1L4J14)	GYM25RD-J14-170	●					
		25 *1	(5G1L4J24)	GYM25RD-J25-170	●					
		14	(5G1L4J15)	GYM25RD-J14-250	●					
		25 *1	(5G1L4J25)	GYM25RD-J25-250	●					

\*1 The maximum groove depth varies according to the insert used. Please refer to the maximum groove depth of inserts on pages 11 and 12.




\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>2</sub>, F<sub>1</sub> and D<sub>1</sub> values may vary.

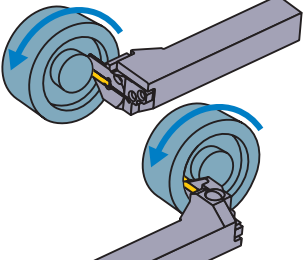





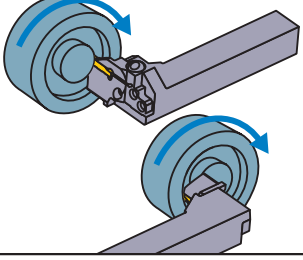
## Notes when selecting a modular blade (1)

- Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D<sub>1</sub> minimum and D<sub>1</sub> maximum that are described in the table of dimensions.



## SPARE PARTS

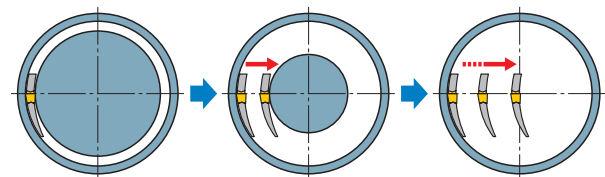
Modular Holder Number		 (5 pcs.)	
	Clamp Screw	Blade Screw	Wrench
<b>GYHR2525M90-M25L</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS55 (Clamp Torque : 44 lbf-in)	TKY30R TKY25R
<b>GYHL2525M90-M25R</b>			

Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
H1	B	L1	L2	H2	F1	Geometry / Insert Number			Page	
25	25	150	38	25	53	1		 <b>GY2M0600J030N-GS</b> <b>GY2M0635J030N-GS</b>  <b>GY2M0600J040N-GM</b> <b>GY2M0635J040N-GM</b>  <b>GY2M0600J040N-MS</b> <b>GY2M0600J080N-MS</b> (Gauge insert)  <b>GY2M0600J040N-MM</b> <b>GY2M0600J080N-MM</b>  <b>GY2M0600J300N-BM</b> <b>GY2M0635J318N-BM</b>	P11 P12	
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				
25	25	150	38	25	64	2				
25	25	150	38	25	53	1				

FACE GROOVING

### Notes when selecting a modular blade (2)

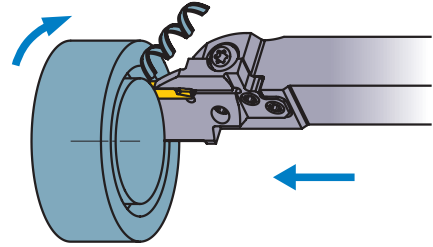
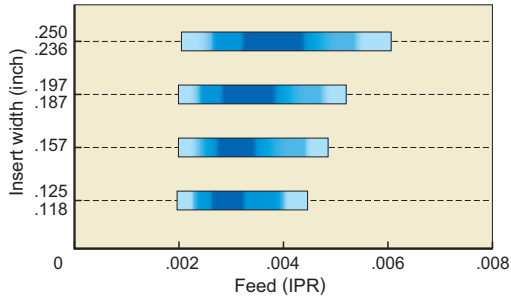
- When machining wide face grooves, select a modular blade suitable for the maximum diameter and machine from the outer diameter towards the center.
- When machining toward the center, there is no restriction cutting diameter.
- For details, please refer to page 127.



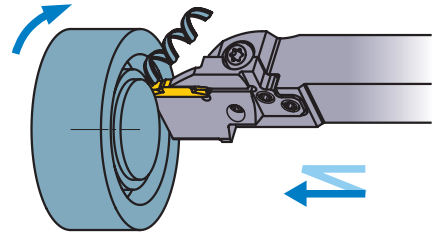
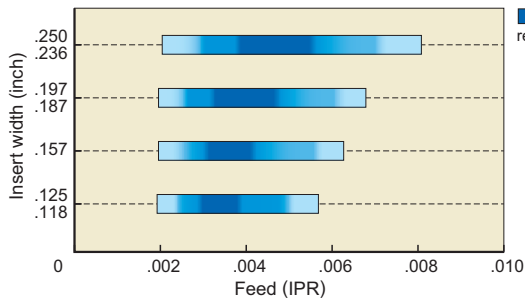
# GROOVING SYSTEM

## Recommended Cutting Conditions (Face Grooving)

### Grooving

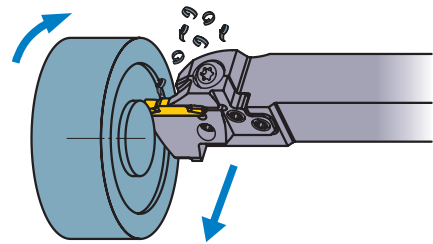
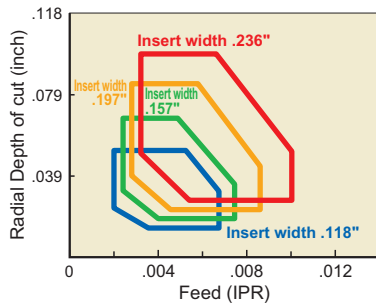


### Plunging

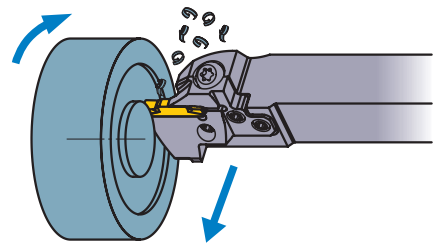
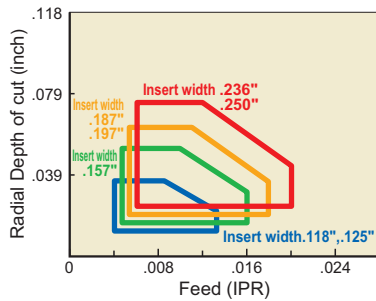


\* Machining the width of cut narrower than the insert width  $W_3$ .

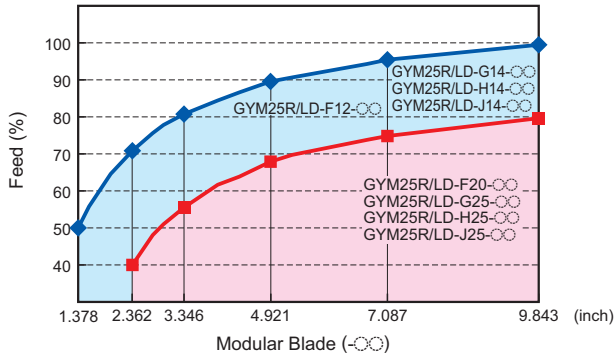
### Traverse Machining (MM/MS Breaker)



### Traverse Machining (BM Breaker)



## Relationship between the modular blade and feed per rotation



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

## Recommended Cutting Speed (SFM)

Work Material	Hardness	Insert Grade	Cutting Speed (SFM)					
			165	330	495	660	825	990
P Mild Steel	≤ 160HB	VP20RT		260	590			
		VP10RT		295	625			
		MY5015		360	825			
		NX2525	230	560				
	Carbon Steel Alloy Steel	160-280HB	VP20RT	195	460			
			VP10RT	230	495			
		MY5015	295	690				
		NX2525	180	440				
≥ 280HB	VP20RT	165	360					
	VP10RT	195	295					
	MY5015	260	525					
	NX2525	150	345					
M Stainless Steel	≤ 270HB	VP20RT	165	360				
		VP10RT	195	295				
K Cast Iron	Tensile Strength ≤ 300MPa	VP20RT	195	460				
		VP10RT	230	495				
		MY5015	295	690				
	Ductile Cast Iron	Tensile Strength ≤ 800MPa	VP20RT	165	360			
			VP10RT	195	295			
			MY5015	260	525			
S Heat Resistant Alloy Titanium Alloy	-	VP20RT	100	195				
		VP10RT	130	230				
H Hardened steel	≥ 50HRC	MB8025	195	330				

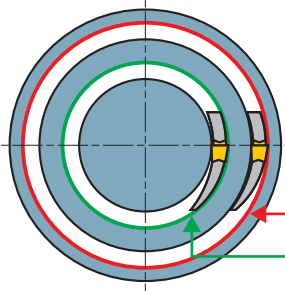
Note 1) VP20RT is the first recommended grade for materials other than hardened steel.

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

## Tool Selection

### Notes when selecting the tool body

#### Modular blade (1)

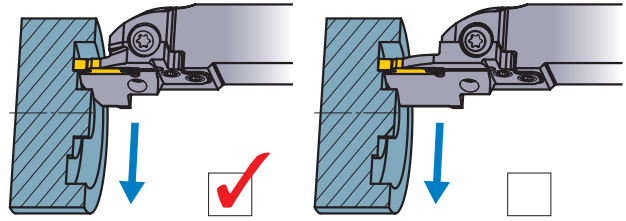


● Select a modular blade for face grooving, so that the cutting diameter at the first pass is within the range of D1 minimum and D1 maximum that are described in the table of dimensions.

φD1 (Max.)

φD1 (Min.)

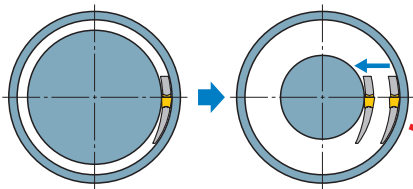
#### Modular blade (2)



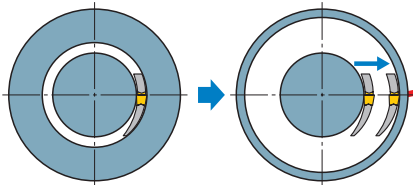
● Select the shortest possible blade suitable for the application.

#### Modular blade (3)

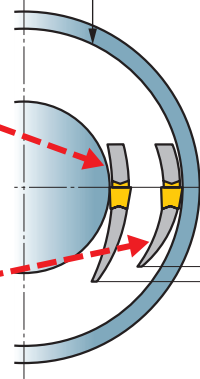
**Good**



**NG**



The maximum cutting diameter



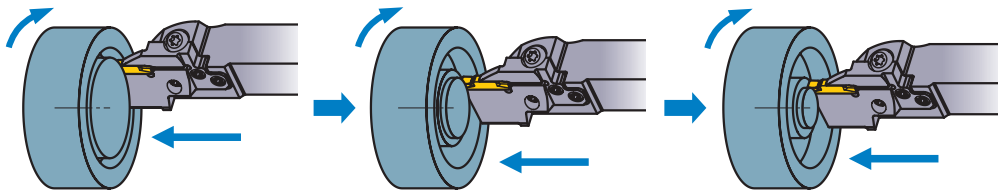
● Select the largest size blade within the maximum cutting diameter of the workpiece.  
● Machine from the outer diameter towards the center.



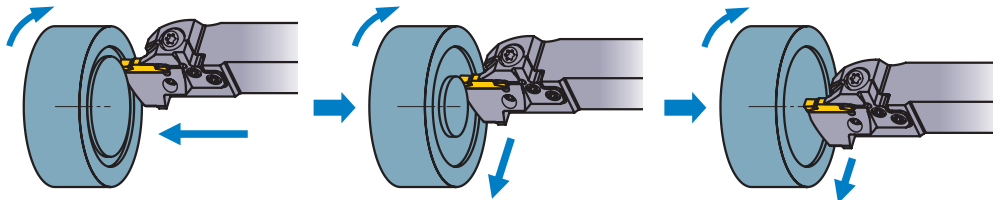
● Increased machining stability and rigidity is possible if a modular blade with the largest possible back metal is used.

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

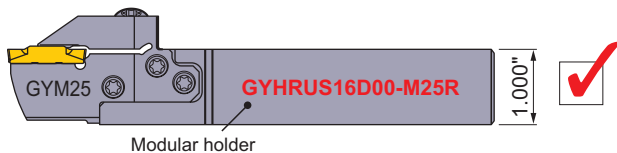
● When plunging in several passes.



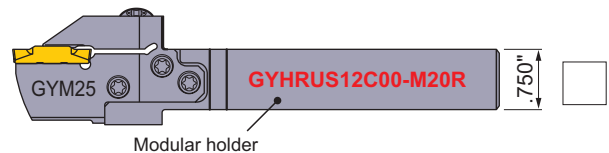
● When combining plunging and infeed machining.



#### Modular holder



Modular holder



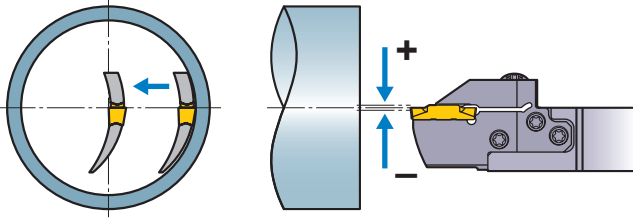
Modular holder

● To ensure sufficient clamping rigidity, select a modular holder with the largest possible shank size.



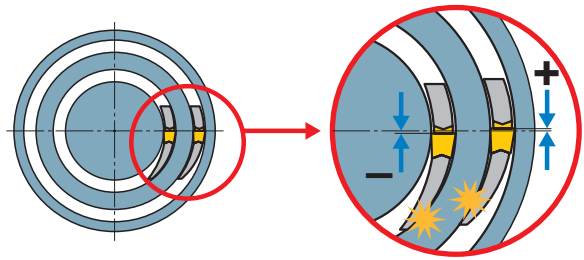
## Notes when setting the tool

### Setting the cutting edge height



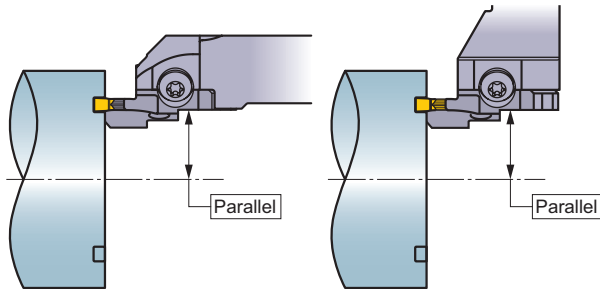
- Set the cutting edge height to  $\pm 0.004$ " parallel to the central axis.
- Cutting edge center height check should be done by traverse machining towards the center with a very small depth of cut and ensure that an even surface and no material remains at the center point afterwards.

### When intertering the wall of groove and the Modular blade



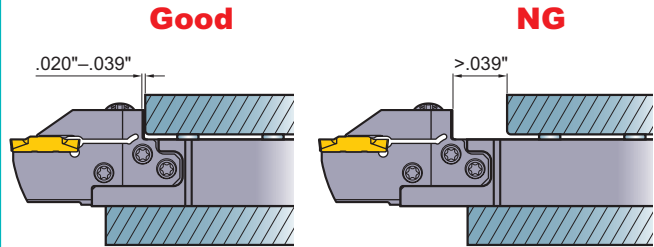
- If interference occurs even when the correct blade is used, the cutting edge height could be incorrect.
  - When interference occurs on the inner side of the blade, the cutting edge height is set too high.
  - When interference occurs on the outer side of the blade, the cutting edge height is set too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

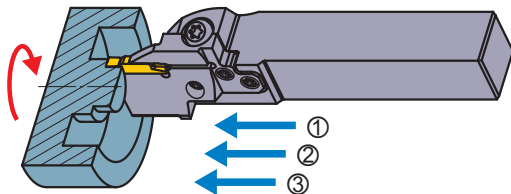
FACE GROOVING

## Machining Recommendations

### Notes when face grooving (1)

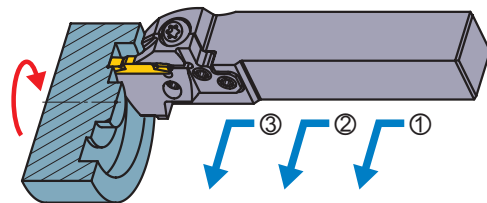
- Always machine from the outer diameter towards the center.

#### Machining narrow grooves



- Plunging in several passes is recommended.

#### Machining wide grooves



- Cross feed machining is recommended.

## Machining Recommendations

### Notes when face grooving (2)

#### 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.

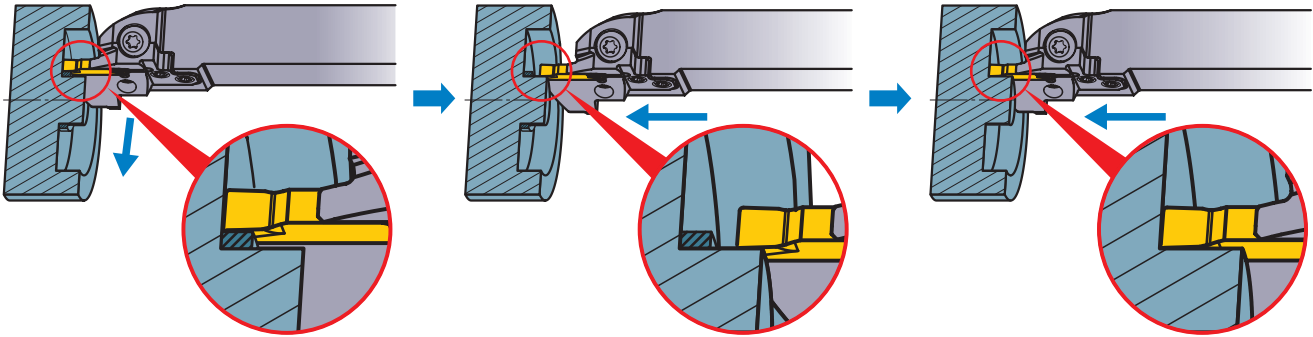
#### Notes when wide face grooving by plunging in several passes.

● When machining a face groove in several passes, machine from the outer diameter towards the center 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 chipbreaker 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 center 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)



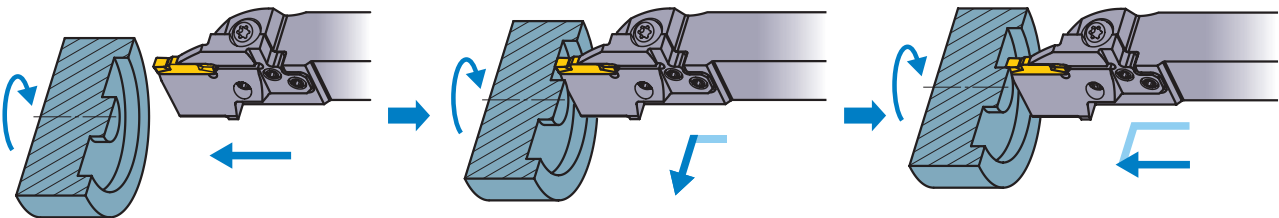
- When infeed machining at the bottom of deep groove, chips may interfere on the cutting edge near the center wall. In such cases, stop infeed machining just before the center wall (at a point less than the insert width) then remove the remaining material by plunging.

### Notes when copying (BM Breaker)



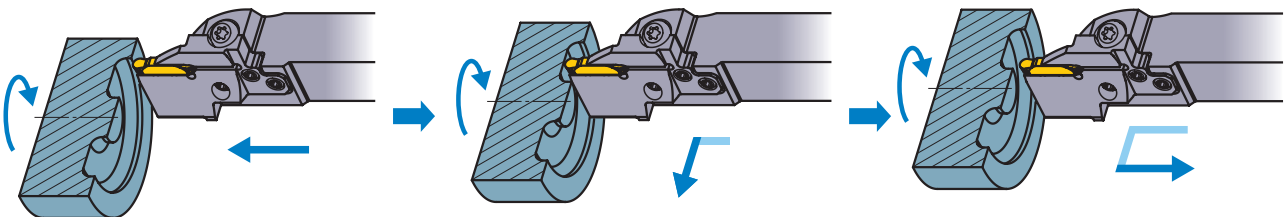
- With the BM breaker insert, 3 dimensional copying is possible. Set the depth of cut ( $a_p$ ) to 30% less than the insert width.

### Finishing (1)

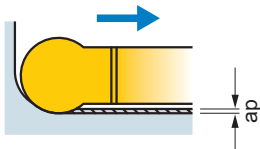


- When finish cutting, machine continuously from the outer wall to the bottom of the groove, then finally plunge cut the center wall.

### Finishing (2) (BM Breaker)



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



Insert	$a_p$ (inch)
GY2M0300F150N-BM	.004
GY2M0318F159N-BM	.004
GY2M0400G200N-BM	.006
GY2M0475H238N-BM	.008
GY2M0500H250N-BM	.008
GY2M0600J150N-BM	.010
GY2M0635J318N-BM	.010

# ASSEMBLY INSTRUCTION

● Assembly procedure

**A**

(b) Wrench

(d) Wrench

(a) Insert clamp screw x 1pc.

(c) Modular blade setscrew x 5pcs.

(Ex.) GYHR2525M00 - **M25R**

**Holder**

**Modular Blade**

(Ex.) **2** GY **M25R** D - **F** 20-060

GY **M25R** D - **F** 12-060

Long Medium

**Insert**

(Ex.) GY2M0300 **F** 040N-MS

GY2M0318 **F** 030N-GM

Note 1) ③ and ④ are changed by the insert size.

**B**

Side screws (3 screws)

Long modular blade (5 holes)

Note 2) ① and ② should be matched. (See caption A)

**C**

Front screws (2 screws)

Note 3) Please tighten the modular blade set screws in order of [Side screws] → [Front screws].

**D**

Note 4) Please clean the insert-seat before installing the insert.

Note 5) ③ and ④ should be matched. (See caption A)

**E**

Note 6) Don't tighten the insert clamp screw without installing the insert. Modular blade might be damaged.

**Note 7)**

The insert clamp screw is inclined. Ensure that the wrench is perpendicular to the screw tightening.

**F**

**Assembled**

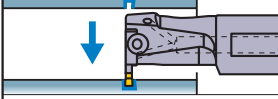
# Application Examples for Face Grooving

Modular Holder	GYHRUS16D00-M25R	GYHRUS16D00-M25R	
Modular Blade	GYM25RD-G14-060	GYM25RD-H14-180	
Insert	GY2M0400G040N-MM	GY2M0500H250N-BM	
Insert Grade	VP10RT	MY5015	
Workpiece			
Component	Construction equipment parts	Automotive flywheel	
Cutting Conditions	Cutting Speed (SFM)	490	490
	Feed (IPR)	①③: .004 ②④: .005	.008
	Radial Depth of Cut (inch)	①③: .157 ②④: .138	Machining allowance: .039
	Axial Depth of Cut (inch)	.295	Machining allowance: .039
	Coolant	Wet	Wet
Results	<p>GY achieved 1.5 times greater tool life compared to conventional products and with less machining noise.</p>	<p>The rigid design allowed an increase in cutting conditions compared to conventional tools. The grade MY5015 also reduced tool costs with double tool life over conventional grades.</p>	
Modular Holder	GYHLUS24E00-M25L	GYHLUS16D00-M25L	
Modular Blade	GYM25LD-J14-250	GYM25LD-H14-085	
Insert	GY2M0600J040N-MM	GY2M0500H080N-MM	
Insert Grade	VP20RT	MY5015	
Workpiece			
Component	Windturbine parts	Automotive parts	
Cutting Conditions	Cutting Speed (SFM)	①: 330 ②③: 490	490
	Feed (IPR)	①: .004 ②③: .003	①: .012 ②: .006
	Radial Depth of Cut (inch)	①: - ②③: Machining allowance .020	①: - ②: Machining allowance .012-.020
	Axial Depth of Cut (inch)	①: .098 ②③: -	①: .039 ②: -
	Coolant	Wet	Wet
Results	<p>The ability to traverse instead of just plunging produced better chip control.</p>	<p>MY5015 grade produced an improved surface finish over a longer period than conventional tools that only gave a dull finish.</p>	
Modular Holder	GYHRUS12C00-M25R	GYHLUS16D00-M25L	
Modular Blade	GYM25RD-F12-050	GYM25LD-H25-125	
Insert	GY2M0300F020N-MS	GY2M0500H040N-MS	
Insert Grade	NX2525	VP20RT	
Workpiece			
Component	Automotive clutch parts	Plant pipe nut	
Cutting Conditions	Cutting Speed (SFM)	395	215
	Feed (IPR)	①: .006 ②③: .005	①: .002 (Step feed) ②③: .031
	Radial Depth of Cut (inch)	①: .118 ②③: Machining allowance .008	①: .118-.197 ②③: Machining allowance .012
	Axial Depth of Cut (inch)	①: .110 ②③: Machining allowance .008	①: .906 ②③: -
	Coolant	Wet	Wet
Results	<p>Cermet grades were used traditionally to give good surface finishes.</p> <p>Conventional operations ① and ② needed to be stopped frequently due to bad chip control because conventional grades were produced without chip breakers.</p>	<p>Conventional groove machining produced inconsistent diameters in operation 1 due to tool deflection.</p> <p>With higher rigidity, GY gave consistent, high precision results for finishing operations ② and ③.</p>	

# GY SERIES (INTERNAL GROOVING)

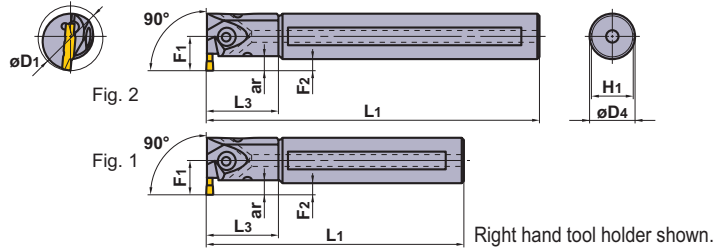
## 5-1 90° type holder (Inch)

- Insert GY2M○○○○○○○○-GS
- Insert GY2M○○○○○○○○-GM
- Insert GY1G○○○○○○○○-GF



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.

● Mono block type (Through air / coolant)



INTERNAL GROOVING

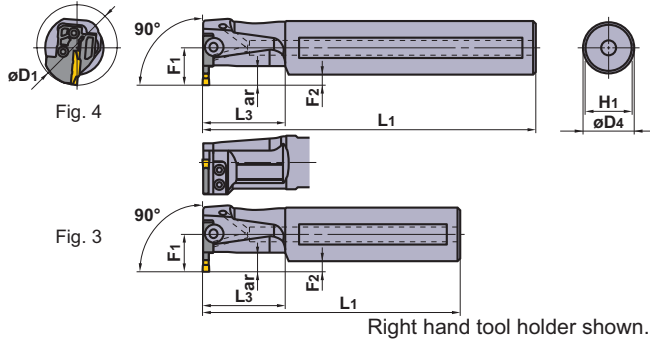
Seat Size	Insert Width W3 (inch)	Hand (R/L)	Max. Groove Depth ar *1 (inch)	Min. Cutting Diameter D1 (inch)	ID	Order Number					
						Holder / Modular Holder	Stock	Modular Blade	Stock		
D	.079	R	.236	1.000	(6F2R9D1) (6F1R9D1)	GYARUS12K90A-D06 GYARUS12Q90A-D06	●	—	—		
			.236	1.250	(6H2R9D1) (6H1R9D1)	GYARUS16K90B-D06 GYARUS16R90B-D06	●	—	—		
			.157— .374 *1	1.625	(6K2R3D1) (6K1R3D1)	GYDRUS20L90C-M20L GYDRUS20S90C-M20L	●	GYM20LA-D10	●		
			.217— .374 *1	2.000	(6M2R3D1) (6M1R3D1)	GYDRUS24M90D-M20L GYDRUS24T90D-M20L	●	GYM20LA-D10	●		
			.276— .453 *1	2.500	(6M2R4D1) (6M1R4D1)	GYDRUS24M90D-M25L GYDRUS24T90D-M25L	●	GYM25LA-D12	●		
			.276— .453 *1	2.750	(6P2R4D1) (6P1R4D1)	GYDRUS32P90F-M25L GYDRUS32T90F-M25L	●	GYM25LA-D12	●		
			.236	1.000	(6F2L9D1) (6F1L9D1)	GYALUS12K90A-D06 GYALUS12Q90A-D06	●	—	—		
		.236	1.250	(6H2L9D1) (6H1L9D1)	GYALUS16K90B-D06 GYALUS16R90B-D06	●	—	—			
		.157— .374 *1	1.625	(6K2L3D1) (6K1L3D1)	GYDLUS20L90C-M20R GYDLUS20S90C-M20R	●	GYM20RA-D10	●			
		.217— .374 *1	2.000	(6M2L3D1) (6M1L3D1)	GYDLUS24M90D-M20R GYDLUS24T90D-M20R	●	GYM20RA-D10	●			
		.276— .453 *1	2.500	(6M2L4D1) (6M1L4D1)	GYDLUS24M90D-M25R GYDLUS24T90D-M25R	●	GYM25RA-D12	●			
		.276— .453 *1	2.750	(6P2L4D1) (6P1L4D1)	GYDLUS32P90F-M25R GYDLUS32T90F-M25R	●	GYM25RA-D12	●			
		E	.094 .098	R	.236	1.000	(6F2R9E1) (6F1R9E1)	GYARUS12K90A-E06 GYARUS12Q90A-E06	●	—	—
					.236	1.250	(6H2R9E1) (6H1R9E1)	GYARUS16K90B-E06 GYARUS16R90B-E06	●	—	—
.157— .374 *1	1.625				(6K2R3E1) (6K1R3E1)	GYDRUS20L90C-M20L GYDRUS20S90C-M20L	●	GYM20LA-E10	●		
.217— .374 *1	2.000				(6M2R3E1) (6M1R3E1)	GYDRUS24M90D-M20L GYDRUS24T90D-M20L	●	GYM20LA-E10	●		
.276— .453 *1	2.500				(6M2R4E1) (6M1R4E1)	GYDRUS24M90D-M25L GYDRUS24T90D-M25L	●	GYM25LA-E12	●		
.276— .453 *1	2.750				(6P2R4E1) (6P1R4E1)	GYDRUS32P90F-M25L GYDRUS32T90F-M25L	●	GYM25LA-E12	●		
.236	1.000				(6F2L9E1) (6F1L9E1)	GYALUS12K90A-E06 GYALUS12Q90A-E06	●	—	—		
.236	1.250			(6H2L9E1) (6H1L9E1)	GYALUS16K90B-E06 GYALUS16R90B-E06	●	—	—			
.157— .374 *1	1.625			(6K2L3E1) (6K1L3E1)	GYDLUS20L90C-M20R GYDLUS20S90C-M20R	●	GYM20RA-E10	●			
.217— .374 *1	2.000			(6M2L3E1) (6M1L3E1)	GYDLUS24M90D-M20R GYDLUS24T90D-M20R	●	GYM20RA-E10	●			
.276— .453 *1	2.500			(6M2L4E1) (6M1L4E1)	GYDLUS24M90D-M25R GYDLUS24T90D-M25R	●	GYM25RA-E12	●			
.276— .453 *1	2.750			(6P2L4E1) (6P1L4E1)	GYDLUS32P90F-M25R GYDLUS32T90F-M25R	●	GYM25RA-E12	●			

\*1 The maximum groove depth varies according to the cutting diameter D1. For details, please refer to page 145.

\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L1, L3, F1 and F2 values may vary.

● : Inventory maintained.

● Modular blade type (Through air / coolant)



SPARE PARTS

Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYAR/LUS12090A-000	GY05016S (Clamp Torque : 40 lbf-in)	—	TKY20R
GYAR/LUS16090B-000	—	—	—
GYDR/LUS20090C-M20L/R	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY15R TKY30R
GYDR/LUS24090D-M20L/R		TS55 (Clamp Torque : 44 lbf-in)	TKY25R TKY30R
GYDR/LUS24090D-M25L/R			
GYDR/LUS32090F-M25L/R	—	—	—

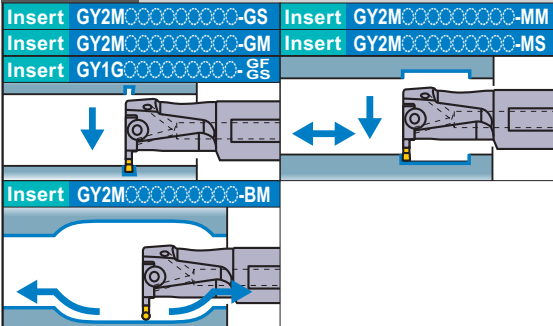
Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
D4	L1	L3	F1	F2	H1	Geometry / Insert Number			Page	
.750	5.000	1.250	.605	.230	.671	1			GY2M0200D020N-GS	P11 P12
.750	7.000	1.250	.605	.230	.671	2				
1.000	5.000	1.500	.730	.230	.921	1				
1.000	8.000	1.500	.730	.230	.921	2				
1.250	5.500	2.000	.875	.250	1.171	3			GY2M0200D020N-GM (Gauge insert)	
1.250	10.000	2.000	.875	.250	1.171	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
1.500	6.000	2.500	1.125	.375	1.382	3			GY2M0200D020R05-GM GY2M0200D020L05-GM	
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				
.750	5.000	1.250	.605	.230	.671	1			P11 P12	
.750	7.000	1.250	.605	.230	.671	2				
1.000	5.000	1.500	.730	.230	.921	1				
1.000	8.000	1.500	.730	.230	.921	2				
1.250	5.500	2.000	.875	.250	1.171	3				GY2M0239E020N-GS GY2M0250E020N-GS
1.250	10.000	2.000	.875	.250	1.171	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
1.500	6.000	2.500	1.125	.375	1.382	3				GY2M0239E020N-GM GY2M0250E020N-GM (Gauge insert)
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				
.750	5.000	1.250	.605	.230	.671	1			P11 P12	
.750	7.000	1.250	.605	.230	.671	2				
1.000	5.000	1.500	.730	.230	.921	1				
1.000	8.000	1.500	.730	.230	.921	2				
1.250	5.500	2.000	.875	.250	1.171	3				GY2M0250E020R05-GM GY2M0250E020L05-GM
1.250	10.000	2.000	.875	.250	1.171	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
1.500	6.000	2.500	1.125	.375	1.382	3				GY1G0239E020N-GFGS GY1G0250E020N-GFGS
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				

\*3 The maximum groove depth (ar) is a value within the dimension L3.

INTERNAL GROOVING

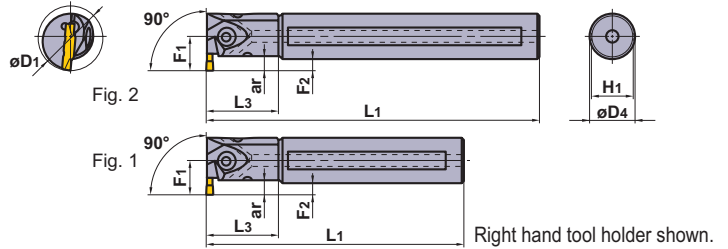
# GY SERIES (INTERNAL GROOVING)

## 5-1 90° type holder (Inch)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.

● Mono block type (Through air / coolant)



Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar * <sub>1</sub> (inch)	Min. Cutting Diameter D <sub>1</sub> (inch)	ID	Order Number					
						Holder / Modular Holder	Stock	Modular Blade	Stock		
F	.118 .125	R	.236	1.000	(6F2R9F1) (6F1R9F1)	GYARUS12K90A-F06 GYARUS12Q90A-F06	●	—	—		
			.236	1.250	(6H2R9F1) (6H1R9F1)	GYARUS16K90B-F06 GYARUS16R90B-F06	●	—	—		
			.157— .374 * <sub>1</sub>	1.625	(6K2R3F1) (6K1R3F1)	GYDRUS20L90C-M20L GYDRUS20S90C-M20L	●	GYM20LA-F10	●		
			.217— .374 * <sub>1</sub>	2.000	(6M2R3F1) (6M1R3F1)	GYDRUS24M90D-M20L GYDRUS24T90D-M20L	●	GYM20LA-F10	●		
			.276— .453 * <sub>1</sub>	2.500	(6M2R4F1) (6M1R4F1)	GYDRUS24M90D-M25L GYDRUS24T90D-M25L	●	GYM25LA-F12	●		
			.276— .453 * <sub>1</sub>	2.750	(6P2R4F1) (6P1R4F1)	GYDRUS32P90F-M25L GYDRUS32T90F-M25L	●	GYM25LA-F12	●		
			L	.236	1.000	(6F2L9F1) (6F1L9F1)	GYALUS12K90A-F06 GYALUS12Q90A-F06	●	—	—	
		.236		1.250	(6H2L9F1) (6H1L9F1)	GYALUS16K90B-F06 GYALUS16R90B-F06	●	—	—		
		.157— .374 * <sub>1</sub>		1.625	(6K2L3F1) (6K1L3F1)	GYDLUS20L90C-M20R GYDLUS20S90C-M20R	●	GYM20RA-F10	●		
		.217— .374 * <sub>1</sub>		2.000	(6M2L3F1) (6M1L3F1)	GYDLUS24M90D-M20R GYDLUS24T90D-M20R	●	GYM20RA-F10	●		
		.276— .453 * <sub>1</sub>		2.500	(6M2L4F1) (6M1L4F1)	GYDLUS24M90D-M25R GYDLUS24T90D-M25R	●	GYM25RA-F12	●		
		.276— .453 * <sub>1</sub>		2.750	(6P2L4F1) (6P1L4F1)	GYDLUS32P90F-M25R GYDLUS32T90F-M25R	●	GYM25RA-F12	●		
		G		.157	R	.276	1.250	(6H2R9G1) (6H1R9G1)	GYARUS16K90B-G07 GYARUS16R90B-G07	●	—
			.197— .453 * <sub>1</sub>			1.625	(6K2R3G1) (6K1R3G1)	GYDRUS20L90C-M20L GYDRUS20S90C-M20L	●	GYM20LA-G12	●
.236— .453 * <sub>1</sub>	2.000		(6M2R3G1) (6M1R3G1)			GYDRUS24M90D-M20L GYDRUS24T90D-M20L	●	GYM20LA-G12	●		
.315— .512 * <sub>1</sub>	2.500		(6M2R4G1) (6M1R4G1)			GYDRUS24M90D-M25L GYDRUS24T90D-M25L	●	GYM25LA-G14	●		
.295— .512 * <sub>1</sub>	2.750		(6P2R4G1) (6P1R4G1)			GYDRUS32P90F-M25L GYDRUS32T90F-M25L	●	GYM25LA-G14	●		
L	.276		1.250			(6H2L9G1) (6H1L9G1)	GYALUS16K90B-G07 GYALUS16R90B-G07	●	—	—	
	.197— .453 * <sub>1</sub>		1.625			(6K2L3G1) (6K1L3G1)	GYDLUS20L90C-M20R GYDLUS20S90C-M20R	●	GYM20RA-G12	●	
	.236— .453 * <sub>1</sub>		2.000		(6M2L3G1) (6M1L3G1)	GYDLUS24M90D-M20R GYDLUS24T90D-M20R	●	GYM20RA-G12	●		
	.315— .512 * <sub>1</sub>		2.500		(6M2L4G1) (6M1L4G1)	GYDLUS24M90D-M25R GYDLUS24T90D-M25R	●	GYM25RA-G14	●		
	.295— .512 * <sub>1</sub>		2.750		(6P2L4G1) (6P1L4G1)	GYDLUS32P90F-M25R GYDLUS32T90F-M25R	●	GYM25RA-G14	●		

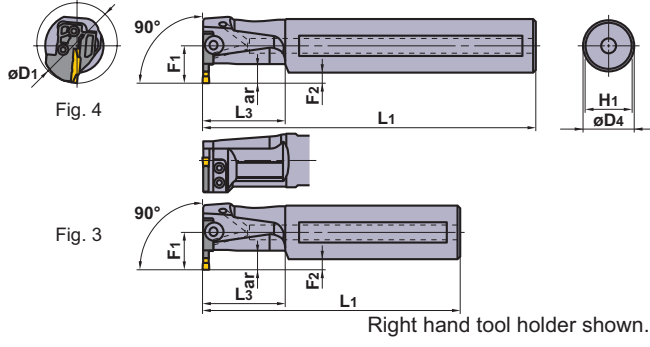
\*<sub>1</sub> The maximum groove depth varies according to the cutting diameter D<sub>1</sub>. For details, please refer to page 145.

\*<sub>2</sub> Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>3</sub>, F<sub>1</sub> and F<sub>2</sub> values may vary.

● : Inventory maintained.



● Modular blade type (Through air / coolant)



**SPARE PARTS**

Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYAR/LUS12 $\odot$ 90A- $\odot\odot\odot$	GY05016S (Clamp Torque : 40 lbf-in)	—	TKY20R
GYAR/LUS16 $\odot$ 90B- $\odot\odot\odot$	—	—	—
GYDR/LUS20 $\odot$ 90C-M20L/R	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY15R
GYDR/LUS24 $\odot$ 90D-M20L/R			TKY30R
GYDR/LUS24 $\odot$ 90D-M25L/R	—	TS55 (Clamp Torque : 44 lbf-in)	TKY25R
GYDR/LUS32 $\odot$ 90F-M25L/R			TKY30R

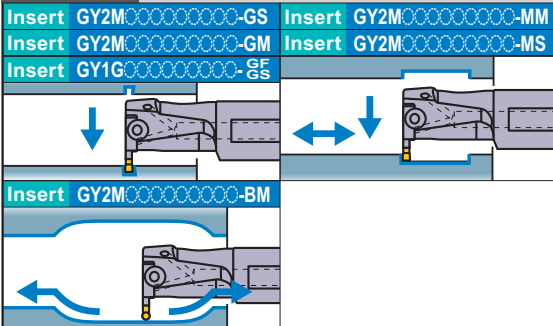
Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
D4	L1	L3	F1	F2	H1	Geometry / Insert Number			Page	
.750	5.000	1.250	.605	.230	.671	1		GY2M0300F020N-GS GY2M0318F020N-GS GY2M0300F030N-GM (Gauge insert) GY2M0318F030N-GM GY2M0300F030R05-GM GY2M0300F030L05-GM GY2M0300F020N-MS GY2M0300F040N-MS GY2M0300F020N-MM GY2M0300F040N-MM GY2M0300F150N-BM GY2M0318F159N-BM GY1G0300F020N-GFGS GY1G0318F020N-GFGS	P11 P12	
.750	7.000	1.250	.605	.230	.671	2				
1.000	5.000	1.500	.730	.230	.921	1				
1.000	8.000	1.500	.730	.230	.921	2				
1.250	5.500	2.000	.875	.250	1.171	3				
1.250	10.000	2.000	.875	.250	1.171	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				
.750	5.000	1.250	.605	.230	.671	1		GY2M0400G020N-GS GY2M0400G030N-GM (Gauge insert) GY2M0400G030R05-GM GY2M0400G030L05-GM GY2M0400G020N-MS GY2M0400G040N-MS GY2M0400G040N-MM GY2M0400G080N-MM GY2M0400G200N-BM GY1G0400G020N-GFGS	P11 P12	
.750	7.000	1.250	.605	.230	.671	2				
1.000	5.000	1.500	.730	.230	.921	1				
1.000	8.000	1.500	.730	.230	.921	2				
1.250	5.500	2.000	.875	.250	1.171	3				
1.250	10.000	2.000	.875	.250	1.171	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				
1.000	5.000	1.500	.730	.230	.921	1		GY2M0400G020N-MS GY2M0400G040N-MS GY2M0400G040N-MM GY2M0400G080N-MM GY2M0400G200N-BM GY1G0400G020N-GFGS	P11 P12	
1.000	8.000	1.500	.730	.230	.921	2				
1.250	5.500	2.000	.875	.250	1.171	3				
1.250	10.000	2.000	.875	.250	1.171	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				

\*3 The maximum groove depth (ar) is a value within the dimension L3.

INTERNAL GROOVING

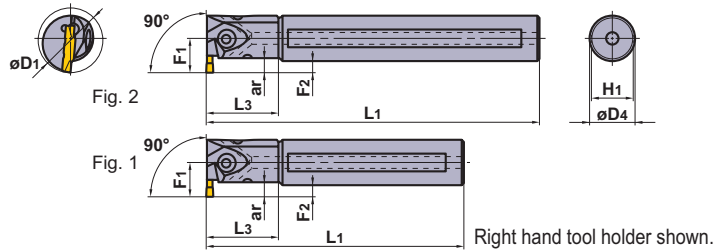
# GY SERIES (INTERNAL GROOVING)

## 5-1 90° type holder (Inch)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.

● Mono block type (Through air / coolant)



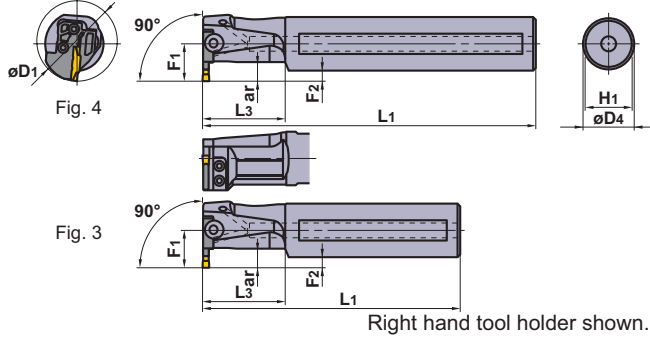
Seat Size	Insert Width W <sub>3</sub> (inch)	Hand (R/L)	Max. Groove Depth ar * <sub>1</sub> (inch)	Min. Cutting Diameter D <sub>1</sub> (inch)	ID	Order Number				
						Holder / Modular Holder	Stock	Modular Blade	Stock	
H	.187 .197	R	.276	1.250	(6H2R9H1) (6H1R9H1)	GYARUS16K90B-H07 GYARUS16R90B-H07	●	—	—	
			.197— .453 * <sub>1</sub>	1.625	(6K2R3H1) (6K1R3H1)	GYDRUS20L90C-M20L GYDRUS20S90C-M20L	●	GYM20LA-H12	●	
			.236— .453 * <sub>1</sub>	2.000	(6M2R3H1) (6M1R3H1)	GYDRUS24M90D-M20L GYDRUS24T90D-M20L	●	GYM20LA-H12	●	
			.315— .512 * <sub>1</sub>	2.500	(6M2R4H1) (6M1R4H1)	GYDRUS24M90D-M25L GYDRUS24T90D-M25L	●	GYM25LA-H14	●	
			.295— .512 * <sub>1</sub>	2.750	(6P2R4H1) (6P1R4H1)	GYDRUS32P90F-M25L GYDRUS32T90F-M25L	●	GYM25LA-H14	●	
		L	.276	1.250	(6H2L9H1) (6H1L9H1)	GYALUS16K90B-H07 GYALUS16R90B-H07	●	—	—	
			.197— .453 * <sub>1</sub>	1.625	(6K2L3H1) (6K1L3H1)	GYDLUS20L90C-M20R GYDLUS20S90C-M20R	●	GYM20RA-H12	●	
			.236— .453 * <sub>1</sub>	2.000	(6M2L3H1) (6M1L3H1)	GYDLUS24M90D-M20R GYDLUS24T90D-M20R	●	GYM20RA-H12	●	
			.315— .512 * <sub>1</sub>	2.500	(6M2L4H1) (6M1L4H1)	GYDLUS24M90D-M25R GYDLUS24T90D-M25R	●	GYM25RA-H14	●	
	J	.236 .250	R	.315— .512 * <sub>1</sub>	2.500	(6M2R4J1) (6M1R4J1)	GYDRUS24M90D-M25L GYDRUS24T90D-M25L	●	GYM25LA-J14	●
				.295— .512 * <sub>1</sub>	2.750	(6P2R4J1) (6P1R4J1)	GYDRUS32P90F-M25L GYDRUS32T90F-M25L	●	GYM25LA-J14	●
L			.315— .512 * <sub>1</sub>	2.500	(6M2L4J1) (6M1L4J1)	GYDLUS24M90D-M25R GYDLUS24T90D-M25R	●	GYM25RA-J14	●	
			.295— .512 * <sub>1</sub>	2.750	(6P2L4J1) (6P1L4J1)	GYDLUS32P90F-M25R GYDLUS32T90F-M25R	●	GYM25RA-J14	●	

\*<sub>1</sub> The maximum groove depth varies according to the cutting diameter D<sub>1</sub>. For details, please refer to page 145.

\*<sub>2</sub> Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>3</sub>, F<sub>1</sub> and F<sub>2</sub> values may vary.

● : Inventory maintained.

● Modular blade type (Through air / coolant)



**SPARE PARTS**

Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYAR/LUS16 $\odot$ 90B- $\odot\odot\odot$	GY05016S (Clamp Torque : 40 lbf-in)	—	TKY20R
GYDR/LUS20 $\odot$ 90C-M20L/R	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY15R
GYDR/LUS24 $\odot$ 90D-M20L/R			TKY30R
GYDR/LUS24 $\odot$ 90D-M25L/R		TS55 (Clamp Torque : 44 lbf-in)	TKY25R
GYDR/LUS32 $\odot$ 90F-M25L/R			TKY30R

Dimensions (inch) *2							Fig.	Cutting Mode	Insert	
D4	L1	L3	F1	F2	H1	Geometry / Insert Number			Page	
1.000	5.000	1.500	.730	.230	.921	1		<b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>  <b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b> (Gauge insert)  <b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>  <b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b>  <b>GY2M0500H040N-MM</b> <b>GY2M0500H080N-MM</b>  <b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>  <b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>	P11 P12	
1.000	8.000	1.500	.730	.230	.921	2				
1.250	5.500	2.000	.875	.250	1.171	3				
1.250	10.000	2.000	.875	.250	1.171	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				
1.500	6.000	2.500	1.125	.375	1.382	3		<b>GY2M0600J030N-GS</b> <b>GY2M0635J030N-GS</b>  <b>GY2M0600J040N-GM</b> (Gauge insert) <b>GY2M0635J040N-GM</b>  <b>GY2M0600J040N-MS</b> <b>GY2M0600J080N-MS</b>  <b>GY2M0600J040N-MM</b> <b>GY2M0600J080N-MM</b>  <b>GY2M0600J300N-BM</b> <b>GY2M0635J318N-BM</b>	P11 P12	
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				
1.500	6.000	2.500	1.125	.375	1.382	3				
1.500	12.000	2.500	1.125	.375	1.382	4				
2.000	6.750	3.250	1.250	.250	1.882	3				
2.000	12.000	3.250	1.250	.250	1.882	4				

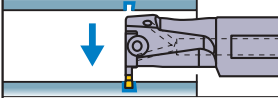
\*3 The maximum groove depth (ar) is a value within the dimension L3.

INTERNAL GROOVING

# GY SERIES (INTERNAL GROOVING)

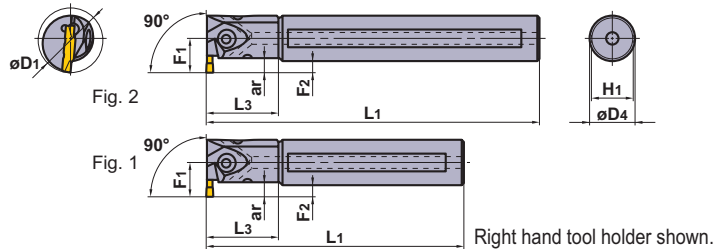
## 5-2 90° type holder (Metric)

Insert GY2M-○○○○○○○○-GS  
 Insert GY2M-○○○○○○○○-GM  
 Insert GY1G-○○○○○○○○-GF  
 GS



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.

● Mono block type (Through air / coolant)



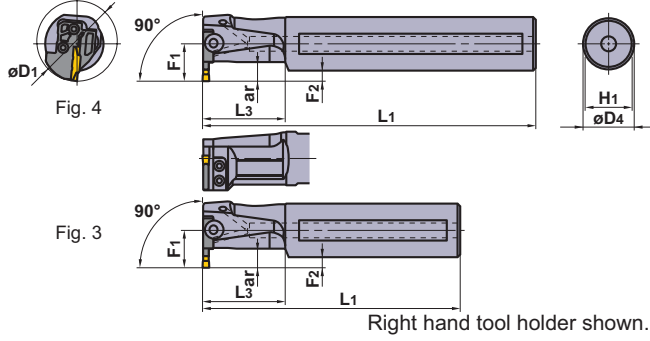
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar *3 (mm)	Min. Cutting Diameter D <sub>1</sub> (mm)	ID	Order Number					
						Holder / Modular Holder	Stock	Modular Blade	Stock		
D	2.00	R	6	25	(6E2R9D1) (6E1R9D1)	GYAR20K90A-D06 GYAR20Q90A-D06	●	—	—		
			6	32	(6G2R9D1) (6G1R9D1)	GYAR25K90B-D06 GYAR25R90B-D06	●	—	—		
			4—9.5 *1	40	(6J2R3D1) (6J1R3D1)	GYDR32L90C-M20L GYDR32S90C-M20L	●	GYM20LA-D10	●		
			5.5—9.5 *1	50	(6L2R3D1) (6L1R3D1)	GYDR40M90D-M20L GYDR40T90D-M20L	●	GYM20LA-D10	●		
			7—11.5 *1	60	(6L2R4D1) (6L1R4D1)	GYDR40M90D-M25L GYDR40T90D-M25L	●	GYM25LA-D12	●		
			7—11.5 *1	70	(6N2R4D1) (6N1R4D1)	GYDR50P90F-M25L GYDR50T90F-M25L	●	GYM25LA-D12	●		
			6	25	(6E2L9D1) (6E1L9D1)	GYAL20K90A-D06 GYAL20Q90A-D06	●	—	—		
		6	32	(6G2L9D1) (6G1L9D1)	GYAL25K90B-D06 GYAL25R90B-D06	●	—	—			
		4—9.5 *1	40	(6J2L3D1) (6J1L3D1)	GYDL32L90C-M20R GYDL32S90C-M20R	●	GYM20RA-D10	●			
		5.5—9.5 *1	50	(6L2L3D1) (6L1L3D1)	GYDL40M90D-M20R GYDL40T90D-M20R	●	GYM20RA-D10	●			
		7—11.5 *1	60	(6L2L4D1) (6L1L4D1)	GYDL40M90D-M25R GYDL40T90D-M25R	●	GYM25RA-D12	●			
		7—11.5 *1	70	(6N2L4D1) (6N1L4D1)	GYDL50P90F-M25R GYDL50T90F-M25R	●	GYM25RA-D12	●			
		E	2.39 2.50	R	6	25	(6E2R9E1) (6E1R9E1)	GYAR20K90A-E06 GYAR20Q90A-E06	●	—	—
					6	32	(6G2R9E1) (6G1R9E1)	GYAR25K90B-E06 GYAR25R90B-E06	●	—	—
4—9.5 *1	40				(6J2R3E1) (6J1R3E1)	GYDR32L90C-M20L GYDR32S90C-M20L	●	GYM20LA-E10	●		
5.5—9.5 *1	50				(6L2R3E1) (6L1R3E1)	GYDR40M90D-M20L GYDR40T90D-M20L	●	GYM20LA-E10	●		
7—11.5 *1	60				(6L2R4E1) (6L1R4E1)	GYDR40M90D-M25L GYDR40T90D-M25L	●	GYM25LA-E12	●		
7—11.5 *1	70				(6N2R4E1) (6N1R4E1)	GYDR50P90F-M25L GYDR50T90F-M25L	●	GYM25LA-E12	●		
6	25				(6E2L9E1) (6E1L9E1)	GYAL20K90A-E06 GYAL20Q90A-E06	●	—	—		
6	32			(6G2L9E1) (6G1L9E1)	GYAL25K90B-E06 GYAL25R90B-E06	●	—	—			
4—9.5 *1	40			(6J2L3E1) (6J1L3E1)	GYDL32L90C-M20R GYDL32S90C-M20R	●	GYM20RA-E10	●			
5.5—9.5 *1	50			(6L2L3E1) (6L1L3E1)	GYDL40M90D-M20R GYDL40T90D-M20R	●	GYM20RA-E10	●			
7—11.5 *1	60			(6L2L4E1) (6L1L4E1)	GYDL40M90D-M25R GYDL40T90D-M25R	●	GYM25RA-E12	●			
7—11.5 *1	70			(6N2L4E1) (6N1L4E1)	GYDL50P90F-M25R GYDL50T90F-M25R	●	GYM25RA-E12	●			

\*1 The maximum groove depth varies according to the cutting diameter D<sub>1</sub>. For details, please refer to page 145.

\*2 Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>3</sub>, F<sub>1</sub> and F<sub>2</sub> values may vary.

● : Inventory maintained.

● Modular blade type (Through air / coolant)



**SPARE PARTS**

Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
GYAR/L20-90A-06	GY05016S (Clamp Torque : 40 lbf-in)	—	TKY20R
GYAR/L25-90B-06	—	—	—
GYDR/L32-90C-M20L/R	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY15R TKY30R
GYDR/L40-90D-M20L/R		TS55 (Clamp Torque : 44 lbf-in)	TKY25R TKY30R
GYDR/L40-90D-M25L/R			
GYDR/L50-90F-M25L/R	—	—	—

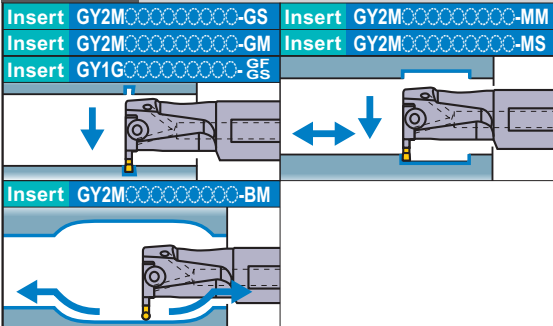
Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
D4	L1	L3	F1	F2	H1	Geometry / Insert Number			Page	
20	125	30	14.5	4.5	18	1		GY2M0200D020N-GS	P11 P12	
20	180	30	14.5	4.5	18	2				
25	125	40	19	6.5	23	1				
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				
20	125	30	14.5	4.5	18	1		GY2M0200D020R05-GM GY2M0200D020L05-GM		
20	180	30	14.5	4.5	18	2				
25	125	40	19	6.5	23	1				
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				
20	125	30	14.5	4.5	18	1		GY2M0239E020N-GS GY2M0250E020N-GS		
20	180	30	14.5	4.5	18	2				
25	125	40	19	6.5	23	1				
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				
20	125	30	14.5	4.5	18	1		GY2M0239E020N-GM GY2M0250E020N-GM (Gauge insert)		
20	180	30	14.5	4.5	18	2				
25	125	40	19	6.5	23	1				
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				
20	125	30	14.5	4.5	18	1		GY2M0250E020R05-GM GY2M0250E020L05-GM		
20	180	30	14.5	4.5	18	2				
25	125	40	19	6.5	23	1				
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				
20	125	30	14.5	4.5	18	1		GY1G0239E020N-GFGS GY1G0250E020N-GFGS		
20	180	30	14.5	4.5	18	2				
25	125	40	19	6.5	23	1				
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				

\*3 The maximum groove depth (ar) is a value within the dimension L3.

INTERNAL GROOVING

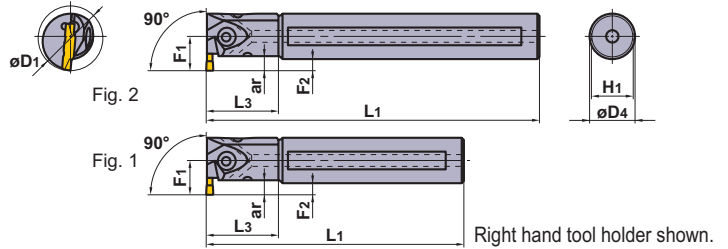
# GY SERIES (INTERNAL GROOVING)

## 5-2 90° type holder (Metric)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.

● Mono block type (Through air / coolant)



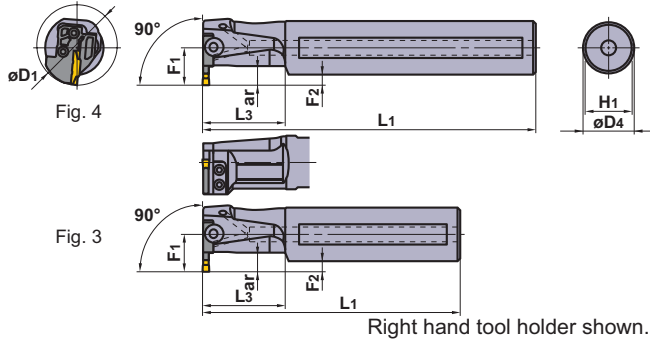
Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar * <sub>3</sub> (mm)	Min. Cutting Diameter D <sub>1</sub> (mm)	ID	Order Number					
						Holder / Modular Holder	Stock	Modular Blade	Stock		
F	3.00 3.18	R	6	25	(6E2R9F1) (6E1R9F1)	GYAR20K90A-F06 GYAR20Q90A-F06	●	—	—		
			6	32	(6G2R9F1) (6G1R9F1)	GYAR25K90B-F06 GYAR25R90B-F06	●	—	—		
			4—9.5 * <sub>1</sub>	40	(6J2R3F1) (6J1R3F1)	GYDR32L90C-M20L GYDR32S90C-M20L	●	GYM20LA-F10	●		
			5.5—9.5 * <sub>1</sub>	50	(6L2R3F1) (6L1R3F1)	GYDR40M90D-M20L GYDR40T90D-M20L	●	GYM20LA-F10	●		
			7—11.5 * <sub>1</sub>	60	(6L2R4F1) (6L1R4F1)	GYDR40M90D-M25L GYDR40T90D-M25L	●	GYM25LA-F12	●		
			7—11.5 * <sub>1</sub>	70	(6N2R4F1) (6N1R4F1)	GYDR50P90F-M25L GYDR50T90F-M25L	●	GYM25LA-F12	●		
			6	25	(6E2L9F1) (6E1L9F1)	GYAL20K90A-F06 GYAL20Q90A-F06	●	—	—		
		6	32	(6G2L9F1) (6G1L9F1)	GYAL25K90B-F06 GYAL25R90B-F06	●	—	—			
		4—9.5 * <sub>1</sub>	40	(6J2L3F1) (6J1L3F1)	GYDL32L90C-M20R GYDL32S90C-M20R	●	GYM20RA-F10	●			
		5.5—9.5 * <sub>1</sub>	50	(6L2L3F1) (6L1L3F1)	GYDL40M90D-M20R GYDL40T90D-M20R	●	GYM20RA-F10	●			
		7—11.5 * <sub>1</sub>	60	(6L2L4F1) (6L1L4F1)	GYDL40M90D-M25R GYDL40T90D-M25R	●	GYM25RA-F12	●			
		7—11.5 * <sub>1</sub>	70	(6N2L4F1) (6N1L4F1)	GYDL50P90F-M25R GYDL50T90F-M25R	●	GYM25RA-F12	●			
		G	4.00	R	7	32	(6G2R9G1) (6G1R9G1)	GYAR25K90B-G07 GYAR25R90B-G07	●	—	—
					4.5—11.5 * <sub>1</sub>	40	(6J2R3G1) (6J1R3G1)	GYDR32L90C-M20L GYDR32S90C-M20L	●	GYM20LA-G12	●
6—11.5 * <sub>1</sub>	50				(6L2R3G1) (6L1R3G1)	GYDR40M90D-M20L GYDR40T90D-M20L	●	GYM20LA-G12	●		
7.5—13 * <sub>1</sub>	60				(6L2R4G1) (6L1R4G1)	GYDR40M90D-M25L GYDR40T90D-M25L	●	GYM25LA-G14	●		
7.5—13 * <sub>1</sub>	70				(6N2R4G1) (6N1R4G1)	GYDR50P90F-M25L GYDR50T90F-M25L	●	GYM25LA-G14	●		
7	32				(6G2L9G1) (6G1L9G1)	GYAL25K90B-G07 GYAL25R90B-G07	●	—	—		
4.5—11.5 * <sub>1</sub>	40				(6J2L3G1) (6J1L3G1)	GYDL32L90C-M20R GYDL32S90C-M20R	●	GYM20RA-G12	●		
6—11.5 * <sub>1</sub>	50			(6L2L3G1) (6L1L3G1)	GYDL40M90D-M20R GYDL40T90D-M20R	●	GYM20RA-G12	●			
7.5—13 * <sub>1</sub>	60			(6L2L4G1) (6L1L4G1)	GYDL40M90D-M25R GYDL40T90D-M25R	●	GYM25RA-G14	●			
7.5—13 * <sub>1</sub>	70			(6N2L4G1) (6N1L4G1)	GYDL50P90F-M25R GYDL50T90F-M25R	●	GYM25RA-G14	●			

\*<sub>1</sub> The maximum groove depth varies according to the cutting diameter D<sub>1</sub>. For details, please refer to page 145.

\*<sub>2</sub> Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>3</sub>, F<sub>1</sub> and F<sub>2</sub> values may vary.

● : Inventory maintained.

● Modular blade type (Through air / coolant)



**SPARE PARTS**

Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYAR/L20<math>\circ</math>90A-F06</b>	GY05016S (Clamp Torque : 40 lbf-in)	—	TKY20R
<b>GYAR/L25<math>\circ</math>90B-<math>\circ</math><math>\circ</math><math>\circ</math></b>			
<b>GYDR/L32<math>\circ</math>90C-M20L/R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY15R TKY30R
<b>GYDR/L40<math>\circ</math>90D-M20L/R</b>			
<b>GYDR/L40<math>\circ</math>90D-M25L/R</b>			
<b>GYDR/L50<math>\circ</math>90F-M25L/R</b>		TS55 (Clamp Torque : 44 lbf-in)	TKY25R TKY30R

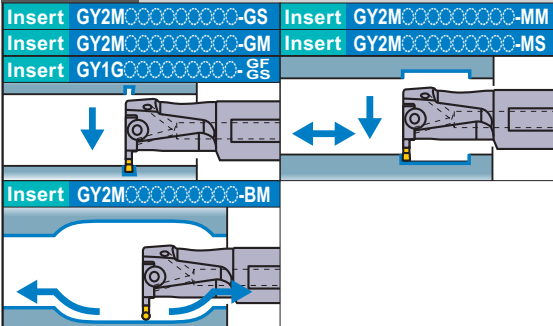
Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
D4	L1	L3	F1	F2	H1	Geometry / Insert Number			Page	
20	125	30	14.5	4.5	18	1		<b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b> <b>GY2M0300F030N-GM</b> (Gauge insert) <b>GY2M0318F030N-GM</b> <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b> <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b> <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b> <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>	P11 P12	
20	180	30	14.5	4.5	18	2				
25	125	40	19	6.5	23	1				
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				
20	125	30	14.5	4.5	18	1		<b>GY2M0300F020N-GS</b> <b>GY2M0318F020N-GS</b> <b>GY2M0300F030N-GM</b> (Gauge insert) <b>GY2M0318F030N-GM</b> <b>GY2M0300F030R05-GM</b> <b>GY2M0300F030L05-GM</b> <b>GY2M0300F020N-MS</b> <b>GY2M0300F040N-MS</b> <b>GY2M0300F020N-MM</b> <b>GY2M0300F040N-MM</b> <b>GY2M0300F150N-BM</b> <b>GY2M0318F159N-BM</b> <b>GY1G0300F020N-GFGS</b> <b>GY1G0318F020N-GFGS</b>	P11 P12	
20	180	30	14.5	4.5	18	2				
25	125	40	19	6.5	23	1				
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				
25	125	40	19	6.5	23	1		<b>GY2M0400G020N-GS</b> <b>GY2M0400G030N-GM</b> (Gauge insert) <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b> <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b> <b>GY2M0400G200N-BM</b> <b>GY1G0400G020N-GFGS</b>	P11 P12	
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				
25	125	40	19	6.5	23	1		<b>GY2M0400G020N-GS</b> <b>GY2M0400G030N-GM</b> (Gauge insert) <b>GY2M0400G030R05-GM</b> <b>GY2M0400G030L05-GM</b> <b>GY2M0400G020N-MS</b> <b>GY2M0400G040N-MS</b> <b>GY2M0400G040N-MM</b> <b>GY2M0400G080N-MM</b> <b>GY2M0400G200N-BM</b> <b>GY1G0400G020N-GFGS</b>	P11 P12	
25	200	40	19	6.5	23	2				
32	140	50	22	6.0	30	3				
32	250	50	22	6.0	30	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
40	150	60	28	8.0	37	3				
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				

\*3 The maximum groove depth (ar) is a value within the dimension L3.

INTERNAL GROOVING

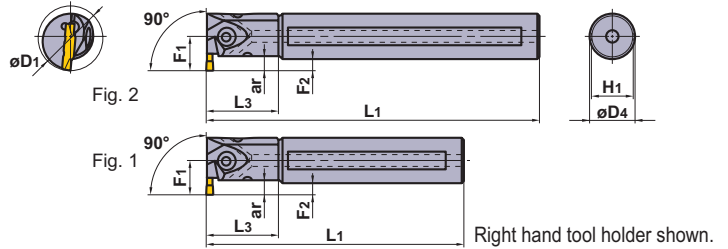
# GY SERIES (INTERNAL GROOVING)

## 5-2 90° type holder (Metric)



Note 1) For modular blades and modular holders, please order separately.  
 Note 2) Please use left hand modular blade for right hand modular holder and right hand modular blade for left hand modular holder.

● Mono block type (Through air / coolant)



Seat Size	Insert Width W <sub>3</sub> (mm)	Hand (R/L)	Max. Groove Depth ar * <sub>3</sub> (mm)	Min. Cutting Diameter D <sub>1</sub> (mm)	ID	Order Number				
						Holder / Modular Holder	Stock	Modular Blade	Stock	
H	4.75 5.00	R	7	32	(6G2R9H1) (6G1R9H1)	<b>GYAR25K90B-H07</b>	●	—	—	
			4.5—11.5 * <sub>1</sub>	40	(6J2R3H1) (6J1R3H1)	<b>GYDR32L90C-M20L</b>	●	<b>GYM20LA-H12</b>	●	
			6—11.5 * <sub>1</sub>	50	(6L2R3H1) (6L1R3H1)	<b>GYDR40M90D-M20L</b>	●	<b>GYM20LA-H12</b>	●	
			7.5—13 * <sub>1</sub>	60	(6L2R4H1) (6L1R4H1)	<b>GYDR40M90D-M25L</b>	●	<b>GYM25LA-H14</b>	●	
			7.5—13 * <sub>1</sub>	70	(6N2R4H1) (6N1R4H1)	<b>GYDR50P90F-M25L</b>	●	<b>GYM25LA-H14</b>	●	
		L	7	32	(6G2L9H1) (6G1L9H1)	<b>GYAL25K90B-H07</b>	●	—	—	
			4.5—11.5 * <sub>1</sub>	40	(6J2L3H1) (6J1L3H1)	<b>GYDL32L90C-M20R</b>	●	<b>GYM20RA-H12</b>	●	
			6—11.5 * <sub>1</sub>	50	(6L2L3H1) (6L1L3H1)	<b>GYDL40M90D-M20R</b>	●	<b>GYM20RA-H12</b>	●	
			7.5—13 * <sub>1</sub>	60	(6L2L4H1) (6L1L4H1)	<b>GYDL40M90D-M25R</b>	●	<b>GYM25RA-H14</b>	●	
	J	6.00 6.35	R	7.5—13 * <sub>1</sub>	60	(6L2R4J1) (6L1R4J1)	<b>GYDR40M90D-M25L</b>	●	<b>GYM25LA-J14</b>	●
				7.5—13 * <sub>1</sub>	70	(6N2R4J1) (6N1R4J1)	<b>GYDR50P90F-M25L</b>	●	<b>GYM25LA-J14</b>	●
L			7.5—13 * <sub>1</sub>	60	(6L2L4J1) (6L1L4J1)	<b>GYDL40M90D-M25R</b>	●	<b>GYM25RA-J14</b>	●	
			7.5—13 * <sub>1</sub>	70	(6N2L4J1) (6N1L4J1)	<b>GYDL50P90F-M25R</b>	●	<b>GYM25RA-J14</b>	●	

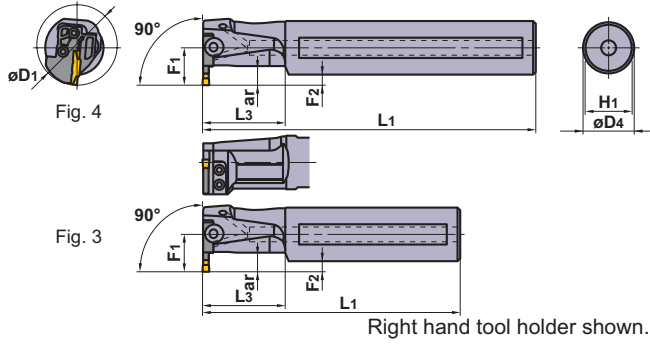
\*<sub>1</sub> The maximum groove depth varies according to the cutting diameter D<sub>1</sub>. For details, please refer to page 145.

\*<sub>2</sub> Dimensions shown are when the gauge insert is used. If other insert geometries are used then L<sub>1</sub>, L<sub>3</sub>, F<sub>1</sub> and F<sub>2</sub> values may vary.

● : Inventory maintained.



● Modular blade type (Through air / coolant)



**SPARE PARTS**

Modular Holder Number			
	Clamp Screw	Blade Screw	Wrench
<b>GYAR/L25 90B-H07</b>	GY05016S (Clamp Torque : 40 lbf-in)	—	TKY20R
<b>GYDR/L32 90C-M20L/R</b>	GY06013M (Clamp Torque : 53 lbf-in)	TS407 (Clamp Torque : 31 lbf-in)	TKY15R
<b>GYDR/L40 90D-M20L/R</b>			TKY30R
<b>GYDR/L40 90D-M25L/R</b>		TKY25R	
<b>GYDR/L50 90F-M25L/R</b>	TS55 (Clamp Torque : 44 lbf-in)	TKY30R	

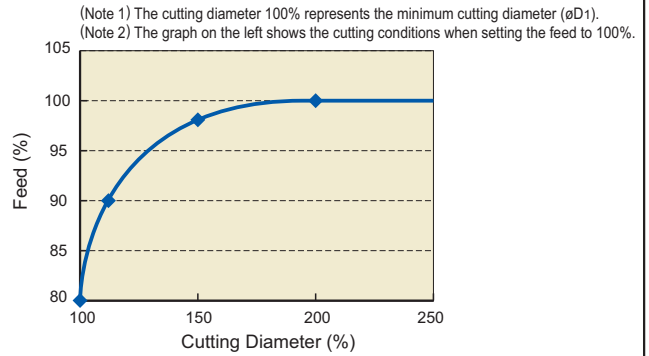
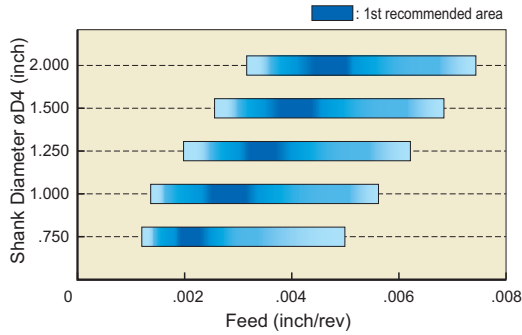
Dimensions (mm) *2							Fig.	Cutting Mode	Insert	
D4	L1	L3	F1	F2	H1	Geometry / Insert Number			Page	
25	125	40	19	6.5	23	1		<b>GY2M0475H030N-GS</b> <b>GY2M0500H030N-GS</b>	P11 P12	
25	200	40	19	6.5	23	2				<b>GY2M0475H040N-GM</b> <b>GY2M0500H040N-GM</b> (Gauge insert)
32	140	50	22	6.0	30	3		<b>GY2M0500H040R05-GM</b> <b>GY2M0500H040L05-GM</b>		
32	250	50	22	6.0	30	4				<b>GY2M0500H040N-MS</b> <b>GY2M0500H080N-MS</b>
40	150	60	28	8.0	37	3		<b>GY2M0475H238N-BM</b> <b>GY2M0500H250N-BM</b>		
40	300	60	28	8.0	37	4				<b>GY1G0475H020N-GFGS</b> <b>GY1G0500H020N-GFGS</b>
40	150	60	28	8.0	37	3		<b>GY2M0600J030N-GS</b> <b>GY2M0635J030N-GS</b>		
40	300	60	28	8.0	37	4				<b>GY2M0600J040N-GM</b> (Gauge insert) <b>GY2M0635J040N-GM</b>
50	170	80	34	9.0	47	3		<b>GY2M0600J040N-MS</b> <b>GY2M0600J080N-MS</b>		
50	300	80	34	9.0	47	4				<b>GY2M0600J040N-MM</b> <b>GY2M0600J080N-MM</b>
40	150	60	28	8.0	37	3		<b>GY2M0600J300N-BM</b> <b>GY2M0635J318N-BM</b>		
40	300	60	28	8.0	37	4				
50	170	80	34	9.0	47	3				
50	300	80	34	9.0	47	4				

\*3 The maximum groove depth (ar) is a value within the dimension L3.

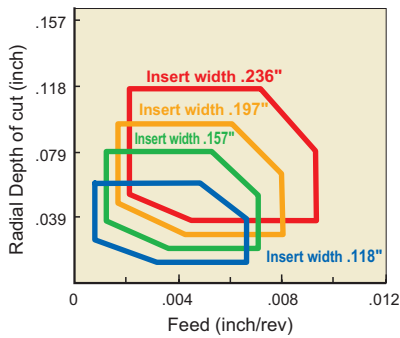
INTERNAL GROOVING

## Recommended Cutting Conditions [Internal Grooving]

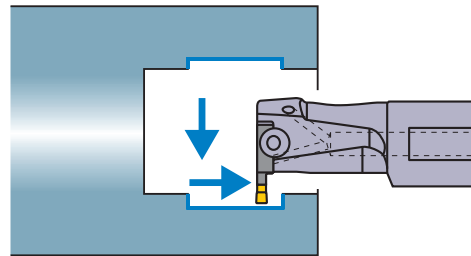
### Grooving



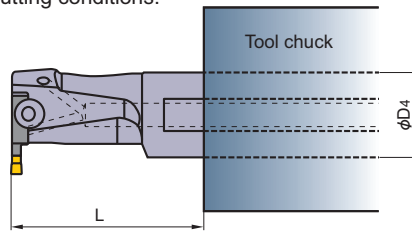
### Traverse Machining (MM/MS Breaker)



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



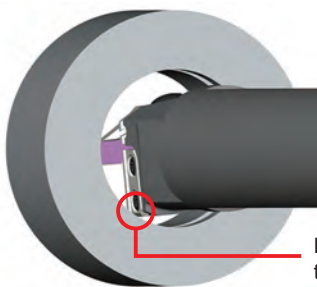
(Note) The above cutting conditions are for when using the tool overhang (L) 1.6-2.0 times larger than the shank diameter ( $\phi D4$ ). ( $L/D=1.6-2.0$ )  
 When using L/D larger than 2.0, reduce the cutting conditions.



INTERNAL GROOVING

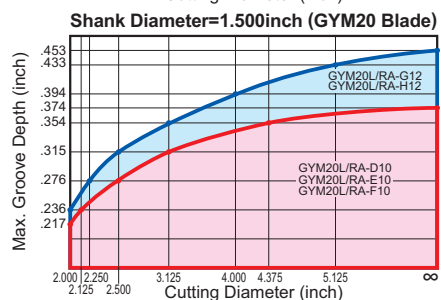
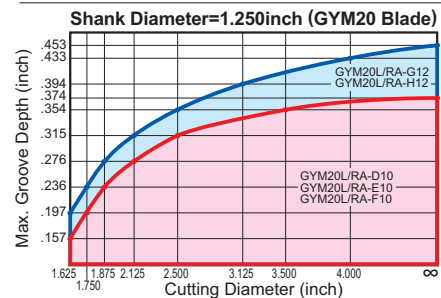
### Limitation of the Maximum Groove Depth

- 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.

### INCH SHANK

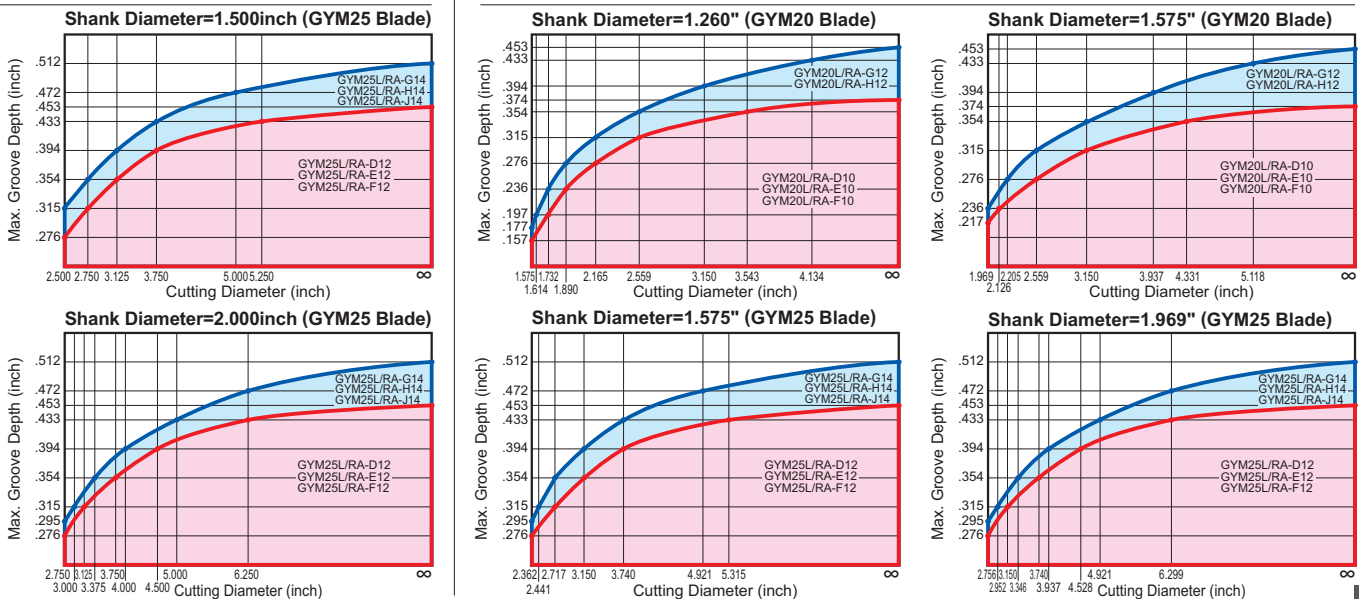


## Recommended Cutting Speed (SFM)

Work Material	Hardness	Insert Grade	Cutting Speed (SFM)						
			165	330	495	660	825	990	
P Mild Steel	≤ 160HB	VP20RT	260		590				
		VP10RT	295		625				
		MY5015	360		825				
		NX2525	230		560				
	160-280HB	VP20RT	195		460				
		VP10RT	230		495				
		MY5015	295		690				
		NX2525	180		440				
Carbon Steel Alloy Steel	≥ 280HB	VP20RT	165		360				
		VP10RT	195		395				
	MY5015	260		525					
	NX2525	150		345					
M Stainless Steel	≤ 270HB	VP20RT	165		360				
		VP10RT	195		395				
K Cast Iron	Tensile Strength ≤ 300MPa	VP20RT	165		460				
		VP10RT	230		495				
		MY5015	295		690				
	Ductile Cast Iron	Tensile Strength ≤ 800MPa	VP20RT	165		360			
			VP10RT	195		395			
			MY5015	260		525			
S Heat Resistant Alloy Titanium Alloy	-	VP20RT	100 195						
		VP10RT	130 230						
H Hardened steel	≥ 50HRC	MB8025	195 330						

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.

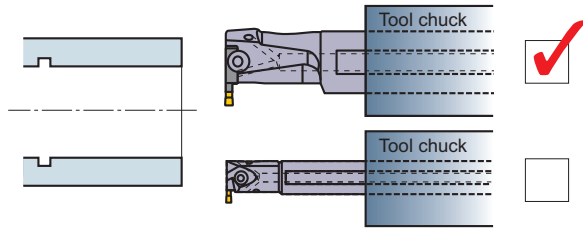
### METRIC SHANK



## Recommendations for internal grooving

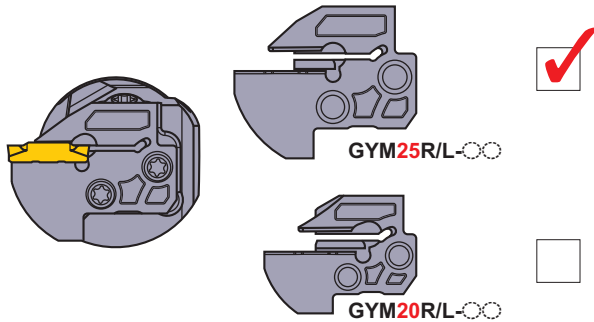
### Notes when selecting the tool body

#### Holder



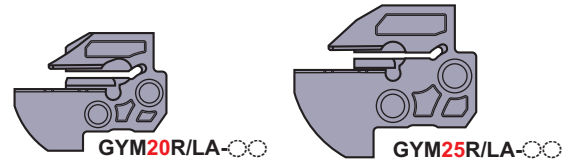
● When the overhang is the same, select a holder with the largest possible shank size to ensure sufficient clamping rigidity.

#### Modular blade (1)



● For a  $\phi 1.5"$  &  $\phi 40$ mm shank holder, if there is no restriction for use, select a holder suitable for GYM25 blade.

#### Modular blade (2)



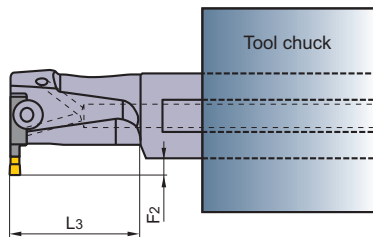
GYM20R/LA-D10  
GYM20R/LA-E10  
GYM20R/LA-F10  
GYM20R/LA-G12  
GYM20R/LA-H12

GYM25R/LA-D12  
GYM25R/LA-E12  
GYM25R/LA-F12  
GYM25R/LA-G14  
GYM25R/LA-H14  
GYM25R/LA-J14

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

### Notes when setting the tool

#### Over hang

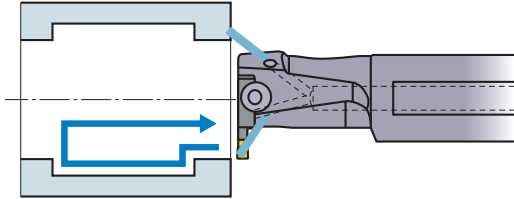


● The maximum groove depth is limited to the dimension L3. When machining with longer overhangs, refer to the dimension F2 of the tool used.

## ● Notes on multi-function machining (MS and MM breakers)

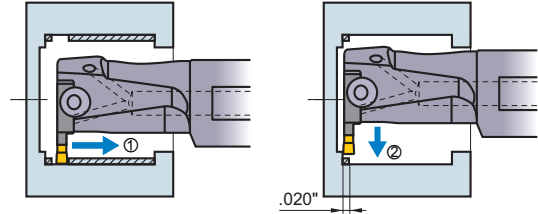
For internal grooving, the machining methods for external grooving (P48 – 49) can be used, but please note the following precautions.

### 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.

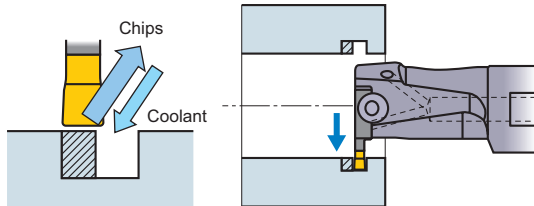
### Machining blind holes



- 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 .020".

## Machining Wide Grooves

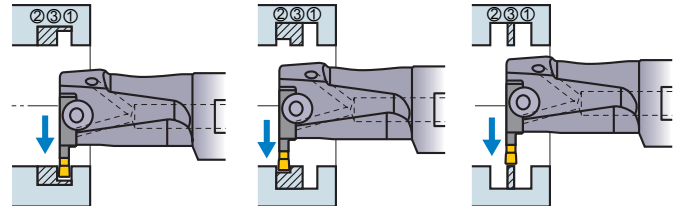
- When the cutting edge width is  $x 2 \geq$  groove width



- 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.

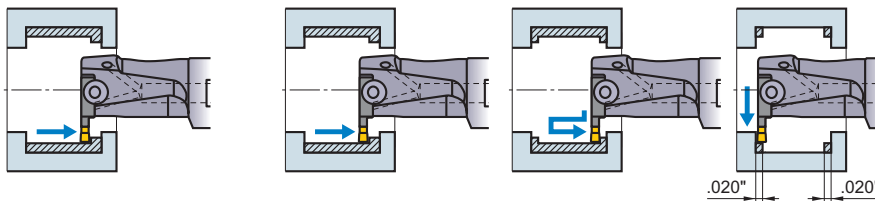
### Grooving

- 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.

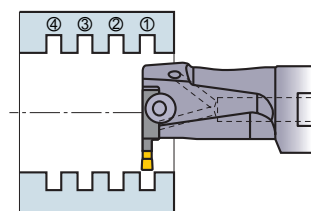
### Turning



- 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.

# ASSEMBLY INSTRUCTION

**A**

(a) Insert clamp screw x 1pc. **Modular Holder**

(b) Wrench

(c) Modular blade setscrew x 1pc.

(d) Wrench

(Ex.) GYDLUS24M90D - **M20R**  
 GYDLUS32P90F - **M25R**

**Modular Blade**

(Ex.) GY **M20R** A - **F 10**  
 GY **M25R** A - **F 12**

Short, Medium (4 holes)

**Insert**

(Ex.) GY2M0300 **F 040N-MS**  
 GY2M0318 **F 030N-GM**

Note 1) ③ and ④ are changed by the insert size.

**B**

2 side screws

**C**

Note 2)  
 Please tighten the modular blade set screws in order of [Side screws] → [Front screws].

2 front screws

**D**

Note 3)  
 Please clean the insert-seat before installing the insert.

**E**

Note 4)  
 Don't tighten the insert clamp screw without installing the insert. Modular blade might be damaged.

**F**

**Assembled**

Note 5)  
 The insert clamp screw is inclined. Ensure that the wrench is perpendicular to the screw tightening.

**Good** **NG**

# INSERT INSTALLATION

**A**

(a) Insert clamp screw x 1pc.

(b) Wrench

**Holder**

**Insert**

(Ex.)  
 GY2M0300 **F**<sup>①</sup>040N - MS  
 GY2M0318 **F**030N - GM

(Ex.)GYAL○○○○90○ - **F**<sup>②</sup>06

Note 1) ① and ② are changed by the insert size.

**B**

Note 2)  
Please clean the insert-seat before installing the insert.

**C**

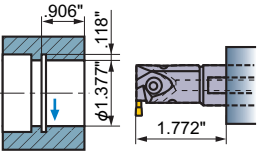
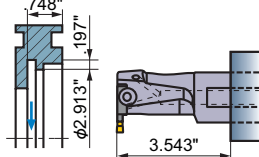
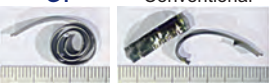
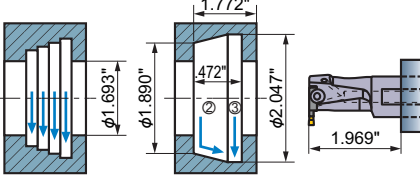
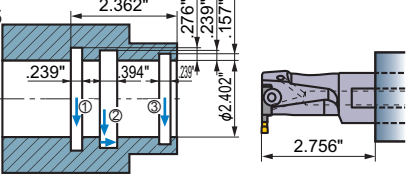
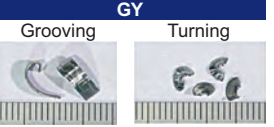
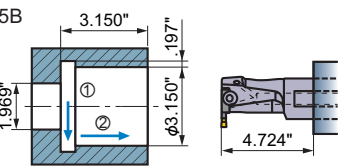
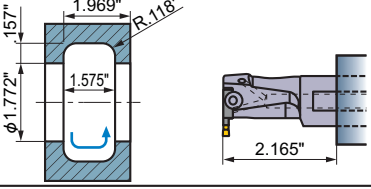
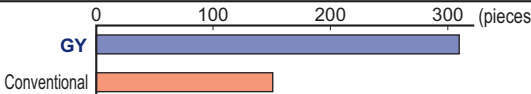
Note 3)  
Don't tighten the insert clamp screw without installing the insert.  
Body might be damaged.

**D**

**Assembled**

Note 4)  
The insert clamp screw is inclined.  
Ensure that the wrench is perpendicular to the screw tightening.

# Application Examples for Internal Grooving

Modular Holder	<b>GYALUS16R90B-E06</b>	<b>GYDRUS32P90F-M25L</b>	
Modular Blade	—	<b>GYM25LA-G14</b>	
Insert	<b>GY2M0239E020N-GM</b>	<b>GY2M0400G020N-GS</b>	
Insert Grade	<b>VP20RT</b>	<b>VP20RT</b>	
Workpiece	AISI 1043 	AISI 8620 	
Component	Machine parts	Transmission gear	
Cutting Conditions	Cutting Speed (SFM)	395	330
	Feed (IPR)	.005	.006
	Radial Depth of Cut (inch)	.118	.197
	Axial Depth of Cut (inch)	.094	.157
	Coolant	Wet	Wet
Results	In comparison with conventional products, GY showed excellent chip breaking. Additionally, low cutting resistance enabled stable machining even at high feeds.	With GY, chips were not burnt due to lower cutting resistance, resulting in longer tool life. Additionally, GY showed excellent chip disposal. 	
Modular Holder	<b>GYDLUS20L90C-M20R</b>	<b>GYDRUS24T90D-M25L</b>	
Modular Blade	<b>GYM20RA-F10</b>	<b>GYM25LA-J14</b>	
Insert	<b>GY2M0300F020N-MS</b>	<b>GY2M0600J040N-MS</b>	
Insert Grade	<b>VP20RT</b>	<b>VP20RT</b>	
Workpiece	AISI 304 	AISI 1025 	
Component	Machine parts	Cylinder	
Cutting Conditions	Cutting Speed (SFM)	260	490
	Feed (IPR)	①③: .004 ②: .005	.002
	Radial Depth of Cut (inch)	①: .079-.169 ②③: Machining allowance .008	①: .276 ②: .236 ③: .157
	Axial Depth of Cut (inch)	①: .094-.118 ②③: Machining allowance .008	①: .236 ②: .394 ③: .236
	Coolant	Wet	Wet
Results	A highly efficient disposal rate allowed stability even when machining stainless steel. The ability to traverse cut meant the same tools could be used for different size components which led to tool cost reductions.	GY could carry out machining higher feeds, resulting in a reduction in cycle time. Additionally, GY showed good chip disposal for both grooving and cross-feed machining. 	
Modular Holder	<b>GYDLUS32P90F-M25R</b>	<b>GYDRUS20L90C-M20L</b>	
Modular Blade	<b>GYM25RA-F12</b>	<b>GYM20LA-H12</b>	
Insert	<b>GY2M0300F040N-MM</b>	<b>GY2M0500H250N-BM</b>	
Insert Grade	<b>MY5015</b>	<b>NX2525</b>	
Workpiece	AISI No45B 	AISI 52100 	
Component	Machine parts	Bearing	
Cutting Conditions	Cutting Speed (SFM)	655	395
	Feed (IPR)	①: .005 ②: .006	.004
	Radial Depth of Cut (inch)	①: .197 ②: .020	Machining allowance : .008
	Axial Depth of Cut (inch)	①: .118 ②: —	Machining allowance : .008
	Coolant	Wet	Wet
Results	 <p>GY achieved double tool life, improved surface finish and vibration free machining.</p>	Traditional machining methods left a blend mark between passes. By using a BM type breaker the blend marks were eliminated and the surface finish was improved.	



# CORRESPONDING TABLE OF HOLDERS/MODULAR BLADES

● External grooving / Cutting off / Copying (00° type/90° type holder)

● External grooving / Cutting off / Copying (00° type holder)

● Face grooving / Copying (00° type holder)

Modular Holder Number	Modular Blade		Insert Width (inch)	Page				
	Modular Blade Number	Max. Groove Depth (inch)						
(Inch holder) <b>GYHRUS10B00-M20R</b>  (Metric holder) <b>GYHR1616J00-M20R</b>	For External Grooving	GYM20RA-D06	.236	.079	P.13			
		GYM20RA-D10	.394					
		GYM20RB-D18	.709					
		GYM20RA-E06	.236			.094		
		GYM20RA-E10	.394					
		GYM20RB-E18	.709					
		GYM20RA-F06	.236				.118	
		GYM20RA-F10	.394					
		GYM20RB-F18	.709					
		GYM20RA-G12	.472					.157
		GYM20RA-H12	.472					
		GYM20LA-D06	.236					
GYM20LA-D10	.394							
GYM20LB-D18	.709							
GYM20LA-E06	.236	.094						
GYM20LA-E10	.394							
GYM20LB-E18	.709							
GYM20LA-F06	.236		.118					
GYM20LA-F10	.394							
GYM20LB-F18	.709							
GYM20LA-G12	.472			.157				
GYM20LA-H12	.472							
(Inch holder) <b>GYHRUS12C00-M20R</b> <b>GYHLUS12C90-M20R</b>  (Metric holder) <b>GYHR2020K00-M20R</b> <b>GYHL2020K90-M20R</b>	For External Grooving				GYM20RA-D06	.236	.079	P.13
					GYM20RA-D10	.394		
					GYM20RB-D18	.709		
					GYM20RA-E06	.236		
		GYM20RA-E10			.394			
		GYM20RB-E18			.709			
		GYM20RA-F06			.236	.118		
		GYM20RA-F10	.394					
		GYM20RB-F18	.709					
		GYM20RA-G12	.472		.157			
		GYM20RA-H12	.472					
		(Inch holder) <b>GYHLUS12C00-M20L</b> <b>GYHRUS12C90-M20L</b>  (Metric holder) <b>GYHL2020K00-M20L</b> <b>GYHR2020K90-M20L</b>	For External Grooving	GYM20LA-D06				
GYM20LA-D10	.394							
GYM20LB-D18	.709							
GYM20LA-E06	.236			.094				
GYM20LA-E10	.394							
GYM20LB-E18	.709							
GYM20LA-F06	.236						.118	
GYM20LA-F10	.394							
GYM20LB-F18	.709							
GYM20LA-G12	.472					.157		
GYM20LA-H12	.472							

Modular Holder Number	Modular Blade		Insert Width (inch)	Page										
	Modular Blade Number	Max. Groove Depth (inch)												
(Inch holder) <b>GYHRUS12C00-M25R</b>  (Metric holder) <b>GYHR2020K00-M25R</b>	For External Grooving	GYM25RA-D06	.236	.079	P.13									
		GYM25RA-D12	.472											
		GYM25RA-D20	.787											
		GYM25RA-E06	.236			.094								
		GYM25RA-E12	.472											
		GYM25RA-E20	.787											
		GYM25RA-F06	.236				.118							
		GYM25RA-F12	.472											
		GYM25RA-F20	.787											
		GYM25RA-G08	.315					.157						
		GYM25RA-G14	.551											
		GYM25RA-G25	.984											
		GYM25RA-H08	.315						.187					
		GYM25RA-H14	.551											
		GYM25RA-H25	.984											
		GYM25RA-J08	.315							.236				
		GYM25RA-J14	.551											
		GYM25RA-J25	.984											
		(Inch holder) <b>GYHRUS12C00-M25R</b>  (Metric holder) <b>GYHR2020K00-M25R</b>	For Face Grooving								GYM25RD-F12-035	.472	.118	P.53
											GYM25RD-F12-040	.472		
GYM25RD-F12-050	.472													
GYM25RD-F12-060	.472													
GYM25RD-F20-060	.787			.125										
GYM25RD-F12-075	.472													
GYM25RD-F20-075	.787													
GYM25RD-F12-100	.472													
GYM25RD-F20-100	.787													
GYM25RD-F12-135	.472													
GYM25RD-F20-135	.787													
GYM25RD-F12-180	.472													
GYM25RD-F20-180	.787													
GYM25RD-G14-040	.551				.157									
GYM25RD-G14-050	.551													
GYM25RD-G14-060	.551													
GYM25RD-G25-060	.984													
GYM25RD-G14-085	.551													
GYM25RD-G25-085	.984													
GYM25RD-G14-125	.551													
GYM25RD-G25-125	.984													
GYM25RD-G14-180	.551													
GYM25RD-G25-180	.984													
GYM25RD-G14-250	.551													
GYM25RD-G25-250	.984													

Note) The modular blade number highlighted in red is also compatible with internal holders.

# CORRESPONDING TABLE OF HOLDERS/MODULAR BLADES

- External grooving / Cutting off / Copying (00° type holder)
- Face grooving / Copying (00° type holder)

Modular Holder Number	Modular Blade		Insert Width (inch)	Page			
	Modular Blade Number	Max. Groove Depth (inch)					
(Inch holder) <b>GYHRUS12C00-M25R</b>  (Metric holder) <b>GYHR2020K00-M25R</b>	For Face Grooving	GYM25RD-H14-050	.551	.187 .197	<b>P.69</b> <b>P.105</b>		
		GYM25RD-H14-060	.551				
		GYM25RD-H25-060	.984				
		GYM25RD-H14-085	.551				
		GYM25RD-H25-085	.984				
		GYM25RD-H14-125	.551				
		GYM25RD-H25-125	.984				
		GYM25RD-H14-180	.551				
		GYM25RD-H25-180	.984				
		GYM25RD-H14-250	.551				
		GYM25RD-H25-250	.984				
		GYM25RD-J14-050	.551				
		GYM25RD-J14-070	.551				
		GYM25RD-J25-070	.984				
		GYM25RD-J14-110	.551				
		GYM25RD-J25-110	.984				
		GYM25RD-J14-170	.551				
		GYM25RD-J25-170	.984				
		GYM25RD-J14-250	.551				
GYM25RD-J25-250	.984						
(Inch holder) <b>GYHLUS12C00-M25L</b>  (Metric holder) <b>GYHL2020K00-M25L</b>	For External Grooving	GYM25LA-D06	.236	.079	<b>P.13</b> <b>P.15</b> <b>P.17</b> <b>P.19</b> <b>P.21</b> <b>P.23</b> <b>P.29</b> <b>P.31</b> <b>P.33</b> <b>P.35</b> <b>P.37</b> <b>P.39</b>		
		<b>GYM25LA-D12</b>	.472				
		GYM25LA-D20	.787				
		GYM25LA-E06	.236				
		<b>GYM25LA-E12</b>	.472				
		GYM25LA-E20	.787				
		GYM25LA-F06	.236				
		<b>GYM25LA-F12</b>	.472				
		GYM25LA-F20	.787				
		GYM25LA-G08	.315				
		<b>GYM25LA-G14</b>	.551				
		GYM25LA-G25	.984				
		GYM25LA-H08	.315				
		<b>GYM25LA-H14</b>	.551				
		GYM25LA-H25	.984				
		GYM25LA-J08	.315				
		<b>GYM25LA-J14</b>	.551				
		GYM25LA-J25	.984				
			For Face Grooving	GYM25LD-F12-035	.472	.118 .125	<b>P.57</b> <b>P.93</b>
				GYM25LD-F12-040	.472		
GYM25LD-F12-050	.472						
GYM25LD-F12-060	.472						
GYM25LD-F20-060	.787						
GYM25LD-F12-075	.472						
GYM25LD-F20-075	.787						
GYM25LD-F12-100	.472						
GYM25LD-F20-100	.787						
GYM25LD-F12-135	.472						
GYM25LD-F20-135	.787						
GYM25LD-F12-180	.472						
GYM25LD-F20-180	.787						

Modular Holder Number	Modular Blade		Insert Width (inch)	Page	
	Modular Blade Number	Max. Groove Depth (inch)			
(Inch holder) <b>GYHLUS12C00-M25L</b>  (Metric holder) <b>GYHL2020K00-M25L</b>	For Face Grooving	GYM25LD-G14-040	.551	.157	<b>P.65</b> <b>P.101</b>
		GYM25LD-G14-050	.551		
		GYM25LD-G14-060	.551		
		GYM25LD-G25-060	.984		
		GYM25LD-G14-085	.551		
		GYM25LD-G25-085	.984		
		GYM25LD-G14-125	.551		
		GYM25LD-G25-125	.984		
		GYM25LD-G14-180	.551		
		GYM25LD-G25-180	.984		
		GYM25LD-G14-250	.551		
		GYM25LD-G25-250	.984		
		GYM25LD-H14-050	.551		
		GYM25LD-H14-060	.551		
		GYM25LD-H25-060	.984		
		GYM25LD-H14-085	.551		
		GYM25LD-H25-085	.984		
		GYM25LD-H14-125	.551		
		GYM25LD-H25-125	.984		
		GYM25LD-H14-180	.551		
		GYM25LD-H25-180	.984		
		GYM25LD-H14-250	.551		
		GYM25LD-H25-250	.984		
		GYM25LD-J14-050	.551		
		GYM25LD-J14-070	.551		
		GYM25LD-J25-070	.984		
		GYM25LD-J14-110	.551		
		GYM25LD-J25-110	.984		
GYM25LD-J14-170	.551				
GYM25LD-J25-170	.984				
GYM25LD-J14-250	.551				
GYM25LD-J25-250	.984				

Note) The modular blade number highlighted in red is also compatible with internal holders.

- External grooving / Cutting off / Copying (00° type/90° type holder)
- Face grooving / Copying (00° type/90° type holder)

Modular Holder Number	Modular Blade		Insert Width (inch)	Page		
	Modular Blade Number	Max. Groove Depth (inch)				
(Inch holder) <b>GYHRUS16D00-M25R</b> <b>GYHLUS16D90-M25R</b>	For External Grooving	GYM25RA-D06	.236	.079	P.13 P.15 P.17	
		<b>GYM25RA-D12</b>	.472			
		GYM25RA-D20	.787			
		GYM25RA-E06	.236	.094 .098	P.19 P.21 P.23	
		<b>GYM25RA-E12</b>	.472			
		GYM25RA-E20	.787			
		GYM25RA-F06	.236	.118 .125	P.25 P.27 P.29	
		<b>GYM25RA-F12</b>	.472			
		GYM25RA-F20	.787			
		GYM25RA-G08	.315	.157	P.31 P.33 P.35	
	<b>GYM25RA-G14</b>	.551				
	GYM25RA-G25	.984				
	GYM25RA-H08	.315	.187 .197	P.37 P.39 P.41		
	<b>GYM25RA-H14</b>	.551				
	GYM25RA-H25	.984				
	GYM25RA-J08	.315	.236 .250	P.43		
	<b>GYM25RA-J14</b>	.551				
	GYM25RA-J25	.984				
	(Metric holder) <b>GYHR2525M00-M25R</b> <b>GYHL2525M90-M25R</b>	For Face Grooving	GYM25RD-F12-035	.472	.118 .125	P.53 P.81 P.89 P.117
			GYM25RD-F12-040	.472		
GYM25RD-F12-050			.472			
GYM25RD-F12-060			.472			
GYM25RD-F20-060			.787			
GYM25RD-F12-075			.472			
GYM25RD-F20-075			.787			
GYM25RD-F12-100			.472			
GYM25RD-F20-100			.787			
GYM25RD-F12-135			.472			
GYM25RD-F20-135		.787				
GYM25RD-F12-180		.472	.157	P.61 P.83 P.97 P.119		
GYM25RD-F20-180		.787				
GYM25RD-G14-040		.551				
GYM25RD-G14-050		.551				
GYM25RD-G14-060		.551				
GYM25RD-G25-060		.984				
GYM25RD-G14-085		.551				
GYM25RD-G25-085		.984				
GYM25RD-G14-125		.551				
GYM25RD-G25-125	.984					
GYM25RD-G14-180	.551					
GYM25RD-G25-180	.984					
GYM25RD-G14-250	.551					
GYM25RD-G25-250	.984					

Note) The modular blade number highlighted in red is also compatible with internal holders.

Modular Holder Number	Modular Blade		Insert Width (inch)	Page		
	Modular Blade Number	Max. Groove Depth (inch)				
(Inch holder) <b>GYHRUS16D00-M25R</b> <b>GYHLUS16D90-M25R</b>	For Face Grooving	GYM25RD-H14-050	.551	.187 .197	P.69 P.85 P.105 P.121	
		GYM25RD-H14-060	.551			
		GYM25RD-H25-060	.984			
		GYM25RD-H14-085	.551			
		GYM25RD-H25-085	.984			
		GYM25RD-H14-125	.551			
		GYM25RD-H25-125	.984			
		GYM25RD-H14-180	.551			
		GYM25RD-H25-180	.984			
		GYM25RD-H14-250	.551			
	GYM25RD-H25-250	.984				
	(Metric holder) <b>GYHR2525M00-M25R</b> <b>GYHL2525M90-M25R</b>	For Face Grooving	GYM25RD-J14-050	.551	.236 .250	P.77 P.87 P.113 P.123
			GYM25RD-J14-070	.551		
			GYM25RD-J25-070	.984		
			GYM25RD-J14-110	.551		
			GYM25RD-J25-110	.984		
			GYM25RD-J14-170	.551		
			GYM25RD-J25-170	.984		
			GYM25RD-J14-250	.551		
			GYM25RD-J25-250	.984		
(Inch holder) <b>GYHLUS16D00-M25L</b> <b>GYHRUS16D90-M25L</b>			For External Grooving	GYM25LA-D06		
	<b>GYM25LA-D12</b>	.472				
	GYM25LA-D20	.787				
	GYM25LA-E06	.236		.094 .098	P.19 P.21 P.23	
	<b>GYM25LA-E12</b>	.472				
	GYM25LA-E20	.787				
	GYM25LA-F06	.236		.118 .125	P.25 P.27 P.29	
	<b>GYM25LA-F12</b>	.472				
	GYM25LA-F20	.787				
	GYM25LA-G08	.315		.157	P.31 P.33 P.35	
	<b>GYM25LA-G14</b>	.551				
	GYM25LA-G25	.984				
	GYM25LA-H08	.315	.187 .197	P.37 P.39 P.41		
	<b>GYM25LA-H14</b>	.551				
	GYM25LA-H25	.984				
	GYM25LA-J08	.315	.236 .250	P.43		
	<b>GYM25LA-J14</b>	.551				
	GYM25LA-J25	.984				
	(Metric holder) <b>GYHL2525M00-M25L</b> <b>GYHR2525M90-M25L</b>	For Face Grooving	GYM25LD-F12-035	.472	.118 .125	P.57 P.81 P.93 P.117
			GYM25LD-F12-040	.472		
GYM25LD-F12-050			.472			
GYM25LD-F12-060			.472			
GYM25LD-F20-060			.787			
GYM25LD-F12-075			.472			
GYM25LD-F20-075			.787			
GYM25LD-F12-100			.472			
GYM25LD-F20-100			.787			
GYM25LD-F12-135			.472			
GYM25LD-F20-135	.787					
GYM25LD-F12-180	.472					
GYM25LD-F20-180	.787					

# CORRESPONDING TABLE OF HOLDERS/MODULAR BLADES

- External grooving / Cutting off / Copying (00° type/90° type holder)
- Face grooving / Copying (00° type/90° type holder)

Modular Holder Number	Modular Blade		Insert Width (inch)	Page				
	Modular Blade Number	Max. Groove Depth (inch)						
(Inch holder) <b>GYHLUS16D00-M25L</b> <b>GYHRUS16D90-M25L</b>  (Metric holder) <b>GYHL2525M00-M25L</b> <b>GYHR2525M90-M25L</b>	For Face Grooving	GYM25LD-G14-040	.551	.157	P.65 P.83 P.101 P.119			
		GYM25LD-G14-050	.551					
		GYM25LD-G14-060	.551					
		GYM25LD-G25-060	.984					
		GYM25LD-G14-085	.551					
		GYM25LD-G25-085	.984					
		GYM25LD-G14-125	.551					
		GYM25LD-G25-125	.984					
		GYM25LD-G14-180	.551					
		GYM25LD-G25-180	.984					
		GYM25LD-G14-250	.551					
		GYM25LD-G25-250	.984					
	For Face Grooving	GYM25LD-H14-050	.551	.187 .197	P.73 P.85 P.109 P.121			
		GYM25LD-H14-060	.551					
		GYM25LD-H25-060	.984					
		GYM25LD-H14-085	.551					
		GYM25LD-H25-085	.984					
		GYM25LD-H14-125	.551					
		GYM25LD-H25-125	.984					
		GYM25LD-H14-180	.551					
		GYM25LD-H25-180	.984					
		GYM25LD-H14-250	.551					
		GYM25LD-H25-250	.984					
		For Face Grooving	GYM25LD-J14-050			.551	.236 .250	P.79 P.87 P.115 P.123
	GYM25LD-J14-070		.551					
	GYM25LD-J25-070		.984					
	GYM25LD-J14-110		.551					
	GYM25LD-J25-110		.984					
	GYM25LD-J14-170		.551					
	GYM25LD-J25-170		.984					
	GYM25LD-J14-250		.551					
	GYM25LD-J25-250		.984					
(Inch holder) <b>GYHRUS20D00-M25R</b>  (Metric holder) <b>GYHR3225P00-M25R</b>	For External Grooving		GYM25RA-D06	.236	.079	P.13 P.15 P.17 P.19 P.21 P.23 P.29 P.31 P.33 P.35 P.37 P.39		
			GYM25RA-D12	.472				
			GYM25RA-D20	.787				
		GYM25RA-E06	.236					
		GYM25RA-E12	.472					
		GYM25RA-E20	.787					
		GYM25RA-F06	.236					
		GYM25RA-F12	.472					
	For External Grooving	GYM25RA-F20	.787	.118 .125				
		GYM25RA-G08	.315					
		GYM25RA-G14	.551					
		GYM25RA-G25	.984					
		GYM25RA-H08	.315					
		GYM25RA-H14	.551					
		GYM25RA-H25	.984					
		GYM25RA-J08	.315					
GYM25RA-J14	.551							
GYM25RA-J25	.984	.236 .250						

Modular Holder Number	Modular Blade		Insert Width (inch)	Page	
	Modular Blade Number	Max. Groove Depth (inch)			
(Inch holder) <b>GYHRUS20D00-M25R</b>  (Metric holder) <b>GYHR3225P00-M25R</b>	For Face Grooving	GYM25RD-F12-035	.472	.118 .125	P.55 P.91
		GYM25RD-F12-040	.472		
		GYM25RD-F12-050	.472		
		GYM25RD-F12-060	.472		
		GYM25RD-F20-060	.787		
		GYM25RD-F12-075	.472		
		GYM25RD-F20-075	.787		
		GYM25RD-F12-100	.472		
		GYM25RD-F20-100	.787		
		GYM25RD-F12-135	.472		
		GYM25RD-F20-135	.787		
		GYM25RD-F12-180	.472		
	GYM25RD-F20-180	.787			
	For Face Grooving	GYM25RD-G14-040	.551	.157	P.63 P.99
		GYM25RD-G14-050	.551		
		GYM25RD-G14-060	.551		
		GYM25RD-G25-060	.984		
		GYM25RD-G14-085	.551		
		GYM25RD-G25-085	.984		
		GYM25RD-G14-125	.551		
		GYM25RD-G25-125	.984		
		GYM25RD-G14-180	.551		
		GYM25RD-G25-180	.984		
		GYM25RD-G14-250	.551		
		GYM25RD-G25-250	.984		
	For Face Grooving	GYM25RD-H14-050	.551	.187 .197	P.71 P.107
		GYM25RD-H14-060	.551		
		GYM25RD-H25-060	.984		
		GYM25RD-H14-085	.551		
		GYM25RD-H25-085	.984		
		GYM25RD-H14-125	.551		
		GYM25RD-H25-125	.984		
GYM25RD-H14-180		.551			
GYM25RD-H25-180		.984			
GYM25RD-H14-250		.551			
GYM25RD-H25-250		.984			
For Face Grooving		GYM25RD-J14-050	.551		
	GYM25RD-J14-070	.551			
	GYM25RD-J25-070	.984			
	GYM25RD-J14-110	.551			
	GYM25RD-J25-110	.984			
	GYM25RD-J14-170	.551			
	GYM25RD-J25-170	.984			
	GYM25RD-J14-250	.551			
	GYM25RD-J25-250	.984			



- External grooving / Cutting off / Copying (00° type holder)
- Face grooving / Copying (00° type holder)

Modular Holder Number	Modular Blade		Insert Width (inch)	Page			
	Modular Blade Number	Max. Groove Depth (inch)					
(Inch holder) <b>GYHLUS20D00-M25L</b>	For External Grooving	GYM25LA-D06	.236	.079	P.13 P.15 P.17 P.19 P.21 P.23 P.29 P.31 P.33 P.35 P.37 P.39		
		GYM25LA-D12	.472				
		GYM25LA-D20	.787				
		GYM25LA-E06	.236				
		GYM25LA-E12	.472				
		GYM25LA-E20	.787				
		GYM25LA-F06	.236				
		GYM25LA-F12	.472				
		GYM25LA-F20	.787				
		GYM25LA-G08	.315				
		GYM25LA-G14	.551				
		GYM25LA-G25	.984				
		GYM25LA-H08	.315				
		GYM25LA-H14	.551				
		GYM25LA-H25	.984				
		GYM25LA-J08	.315				
		GYM25LA-J14	.551				
		GYM25LA-J25	.984				
	For Face Grooving	GYM25LD-F12-035	.472	.118 .125	P.59 P.95		
		GYM25LD-F12-040	.472				
		GYM25LD-F12-050	.472				
		GYM25LD-F12-060	.472				
		GYM25LD-F20-060	.787				
		GYM25LD-F12-075	.472				
		GYM25LD-F20-075	.787				
		GYM25LD-F12-100	.472				
		GYM25LD-F20-100	.787				
		GYM25LD-F12-135	.472				
		GYM25LD-F20-135	.787				
		GYM25LD-F12-180	.472				
		GYM25LD-F20-180	.787				
		GYM25LD-G14-040	.551			.157	P.67 P.103
		GYM25LD-G14-050	.551				
		GYM25LD-G14-060	.551				
		GYM25LD-G25-060	.984				
		GYM25LD-G14-085	.551				
GYM25LD-G25-085		.984					
GYM25LD-G14-125		.551					
GYM25LD-G25-125		.984					
GYM25LD-G14-180		.551					
GYM25LD-G25-180		.984					
GYM25LD-G14-250		.551					
GYM25LD-G25-250	.984						
GYM25LD-H14-050	.551	.187 .197	P.75 P.111				
GYM25LD-H14-060	.551						
GYM25LD-H25-060	.984						
GYM25LD-H14-085	.551						
GYM25LD-H25-085	.984						
GYM25LD-H14-125	.551						
GYM25LD-H25-125	.984						
GYM25LD-H14-180	.551						
GYM25LD-H25-180	.984						
GYM25LD-H14-250	.551						
GYM25LD-H25-250	.984						
For Face Grooving	GYM25LD-J14-050			.551	.236 .250		
	GYM25LD-J14-070	.551					
	GYM25LD-J25-070	.984					
	GYM25LD-J14-110	.551					
	GYM25LD-J25-110	.984					
	GYM25LD-J14-170	.551					
	GYM25LD-J25-170	.984					
	GYM25LD-J14-250	.551					
	GYM25LD-J25-250	.984					

Modular Holder Number	Modular Blade		Insert Width (inch)	Page			
	Modular Blade Number	Max. Groove Depth (inch)					
(Inch holder) <b>GYHRUS24E00-M25R</b>	For External Grooving	GYM25RA-D06	.236	.079	P.13 P.15 P.17 P.19 P.21 P.23 P.29 P.31 P.33 P.35 P.37 P.39		
		GYM25RA-D12	.472				
		GYM25RA-D20	.787				
		GYM25RA-E06	.236				
		GYM25RA-E12	.472				
		GYM25RA-E20	.787				
		GYM25RA-F06	.236				
		GYM25RA-F12	.472				
		GYM25RA-F20	.787				
		GYM25RA-G08	.315				
		GYM25RA-G14	.551				
		GYM25RA-G25	.984				
		GYM25RA-H08	.315				
		GYM25RA-H14	.551				
		GYM25RA-H25	.984				
		GYM25RA-J08	.315				
		GYM25RA-J14	.551				
		GYM25RA-J25	.984				
	For Face Grooving	GYM25RD-F12-035	.472	.118 .125	P.55 P.91		
		GYM25RD-F12-040	.472				
		GYM25RD-F12-050	.472				
		GYM25RD-F12-060	.472				
		GYM25RD-F20-060	.787				
		GYM25RD-F12-075	.472				
		GYM25RD-F20-075	.787				
		GYM25RD-F12-100	.472				
		GYM25RD-F20-100	.787				
		GYM25RD-F12-135	.472				
		GYM25RD-F20-135	.787				
		GYM25RD-F12-180	.472				
		GYM25RD-F20-180	.787				
		GYM25RD-G14-040	.551			.157	P.63 P.99
		GYM25RD-G14-050	.551				
		GYM25RD-G14-060	.551				
		GYM25RD-G25-060	.984				
		GYM25RD-G14-085	.551				
GYM25RD-G25-085		.984					
GYM25RD-G14-125		.551					
GYM25RD-G25-125		.984					
GYM25RD-G14-180		.551					
GYM25RD-G25-180		.984					
GYM25RD-G14-250		.551					
GYM25RD-G25-250	.984						
GYM25RD-H14-050	.551	.187 .197	P.71 P.107				
GYM25RD-H14-060	.551						
GYM25RD-H25-060	.984						
GYM25RD-H14-085	.551						
GYM25RD-H25-085	.984						
GYM25RD-H14-125	.551						
GYM25RD-H25-125	.984						
GYM25RD-H14-180	.551						
GYM25RD-H25-180	.984						
GYM25RD-H14-250	.551						
GYM25RD-H25-250	.984						
For Face Grooving	GYM25RD-J14-050			.551	.236 .250		
	GYM25RD-J14-070	.551					
	GYM25RD-J25-070	.984					
	GYM25RD-J14-110	.551					
	GYM25RD-J25-110	.984					
	GYM25RD-J14-170	.551					
	GYM25RD-J25-170	.984					
	GYM25RD-J14-250	.551					
	GYM25RD-J25-250	.984					

# CORRESPONDING TABLE OF HOLDERS/MODULAR BLADES

- External grooving / Cutting off / Copying (00° type holder)
- Face grooving / Copying (00° type holder)

- Internal grooving / Copying (90° type holder)

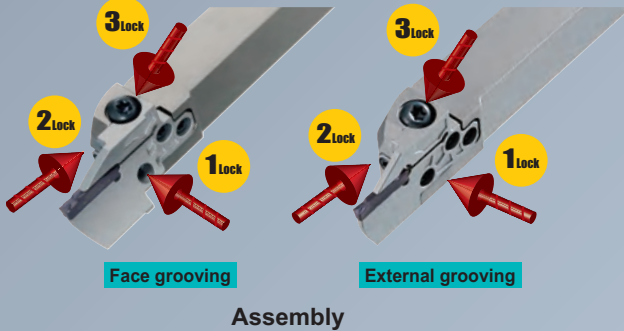
Modular Holder Number	Modular Blade		Insert Width (inch)	Page			
	Modular Blade Number	Max. Groove Depth (inch)					
(Inch holder) <b>GYHLUS24E00-M25L</b>	For External Grooving	GYM25LA-D06	.236	.079	P.13 P.15 P.17 P.19 P.21 P.23 P.29 P.31 P.33 P.35 P.37 P.39		
		GYM25LA-D12	.472				
		GYM25LA-D20	.787				
		GYM25LA-E06	.236				
		GYM25LA-E12	.472				
		GYM25LA-E20	.787				
		GYM25LA-F06	.236				
		GYM25LA-F12	.472				
		GYM25LA-F20	.787				
		GYM25LA-G08	.315				
	GYM25LA-G14	.551					
	GYM25LA-G25	.984					
	GYM25LA-H08	.315	.187 .197				
	GYM25LA-H14	.551					
	GYM25LA-H25	.984					
	GYM25LA-J08	.315					
	GYM25LA-J14	.551					
	GYM25LA-J25	.984					
	(Metric holder) <b>GYHL3232P00-M25L</b>	For External Grooving		GYM25LD-F12-035	.472	.118 .125	P.59 P.95
				GYM25LD-F12-040	.472		
GYM25LD-F12-050				.472			
GYM25LD-F12-060				.472			
GYM25LD-F20-060			.787				
GYM25LD-F12-075			.472				
GYM25LD-F20-075			.787				
GYM25LD-F12-100			.472				
GYM25LD-F20-100			.787				
GYM25LD-F12-135			.472				
GYM25LD-F20-135		.787					
GYM25LD-F12-180		.472					
GYM25LD-F20-180		.787					
GYM25LD-G14-040		.551	.157				
GYM25LD-G14-050		.551					
GYM25LD-G14-060		.551					
GYM25LD-G25-060		.984					
GYM25LD-G14-085		.551					
GYM25LD-G25-085		.984					
GYM25LD-G14-125		.551					
GYM25LD-G25-125	.984						
GYM25LD-G14-180	.551						
GYM25LD-G25-180	.984						
GYM25LD-G14-250	.551	.187 .197					
GYM25LD-G25-250	.984						
GYM25LD-H14-050	.551						
GYM25LD-H14-060	.551						
GYM25LD-H25-060	.984						
GYM25LD-H14-085	.551						
GYM25LD-H25-085	.984						
GYM25LD-H14-125	.551						
GYM25LD-H25-125	.984						
GYM25LD-H14-180	.551						
GYM25LD-H25-180	.984						
GYM25LD-H14-250	.551	.236 .250					
GYM25LD-H25-250	.984						
GYM25LD-J14-050	.551						
GYM25LD-J14-070	.551						
GYM25LD-J25-070	.984						
GYM25LD-J14-110	.551						
GYM25LD-J25-110	.984						
GYM25LD-J14-170	.551						
GYM25LD-J25-170	.984						
GYM25LD-J14-250	.551						
GYM25LD-J25-250	.984						

Modular Holder Number	Modular Blade		Insert Width (inch)	Page	
	Modular Blade Number	Max. Groove Depth (inch)			
(Inch holder) <b>GYDRUS20L90C-M20L</b> <b>GYDRUS20S90C-M20L</b>	For Internal Grooving	GYM20LA-D10	.157-.374	.079 .094 .098 .118 .125 .157 .187 .197	P.133 P.135 P.137 P.139 P.141 P.143
		GYM20LA-E10	.157-.374		
		GYM20LA-F10	.157-.374		
		GYM20LA-G12	.197-.453		
		GYM20LA-H12	.197-.453		
		GYM20LA-D10	.157-.374		
(Metric holder) <b>GYDR32L90C-M20L</b> <b>GYDR32S90C-M20L</b>	For Internal Grooving	GYM20RA-D10	.157-.374	.079 .094 .098 .118 .125 .157 .187 .197	P.133 P.135 P.137 P.139 P.141 P.143
		GYM20RA-E10	.157-.374		
		GYM20RA-F10	.157-.374		
		GYM20RA-G12	.197-.453		
		GYM20RA-H12	.197-.453		
		GYM20RA-D10	.157-.374		
(Inch holder) <b>GYDLUS20L90C-M20R</b> <b>GYDLUS20S90C-M20R</b>	For Internal Grooving	GYM20LA-D10	.217-.374	.079 .094 .098 .118 .125 .157 .187 .197	P.133 P.135 P.137 P.139 P.141 P.143
		GYM20LA-E10	.217-.374		
		GYM20LA-F10	.217-.374		
		GYM20LA-G12	.236-.453		
		GYM20LA-H12	.236-.453		
		GYM20LA-D10	.217-.374		
(Metric holder) <b>GYDL40M90D-M20R</b> <b>GYDL40T90D-M20R</b>	For Internal Grooving	GYM20RA-D10	.217-.374	.079 .094 .098 .118 .125 .157 .187 .197	P.133 P.135 P.137 P.139 P.141 P.143
		GYM20RA-E10	.217-.374		
		GYM20RA-F10	.217-.374		
		GYM20RA-G12	.236-.453		
		GYM20RA-H12	.236-.453		
		GYM20RA-D10	.217-.374		
(Inch holder) <b>GYDRUS24M90D-M20L</b> <b>GYDRUS24T90D-M20L</b>	For Internal Grooving	GYM25LA-D12	.276-.453	.079 .094 .098 .118 .125 .157 .187 .197 .236 .250	P.133 P.135 P.137 P.139 P.141 P.143
		GYM25LA-E12	.276-.453		
		GYM25LA-F12	.276-.453		
		GYM25LA-G14	.295-.512		
		GYM25LA-H14	.295-.512		
		GYM25LA-J14	.295-.512		
(Metric holder) <b>GYDR40M90D-M20L</b> <b>GYDR40T90D-M20L</b>	For Internal Grooving	GYM25RA-D12	.276-.453	.079 .094 .098 .118 .125 .157 .187 .197 .236 .250	P.133 P.135 P.137 P.139 P.141 P.143
		GYM25RA-E12	.276-.453		
		GYM25RA-F12	.276-.453		
		GYM25RA-G14	.295-.512		
		GYM25RA-H14	.295-.512		
		GYM25RA-J14	.295-.512		
(Inch holder) <b>GYDLUS24M90D-M25L</b> <b>GYDLUS24T90D-M25L</b> <b>GYDRUS32P90F-M25L</b> <b>GYDRUS32T90F-M25L</b>	For Internal Grooving	GYM25LA-D12	.276-.453	.079 .094 .098 .118 .125 .157 .187 .197 .236 .250	P.133 P.135 P.137 P.139 P.141 P.143
		GYM25LA-E12	.276-.453		
		GYM25LA-F12	.276-.453		
		GYM25LA-G14	.295-.512		
		GYM25LA-H14	.295-.512		
		GYM25LA-J14	.295-.512		
(Metric holder) <b>GYDR40M90D-M25L</b> <b>GYDR40T90D-M25L</b> <b>GYDR50P90F-M25L</b> <b>GYDR50T90F-M25L</b>	For Internal Grooving	GYM25RA-D12	.276-.453	.079 .094 .098 .118 .125 .157 .187 .197 .236 .250	P.133 P.135 P.137 P.139 P.141 P.143
		GYM25RA-E12	.276-.453		
		GYM25RA-F12	.276-.453		
		GYM25RA-G14	.295-.512		
		GYM25RA-H14	.295-.512		
		GYM25RA-J14	.295-.512		

# GY SERIES

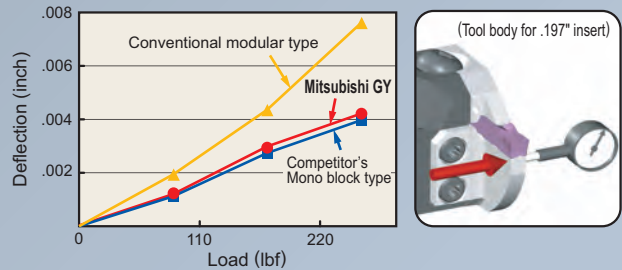
## The TRI-LOCK system gives excellent performance in comparison with conventional modular type holders.

● Achieve extreme rigidity using the TRI-LOCK system to demonstrate amazing cutting performance.



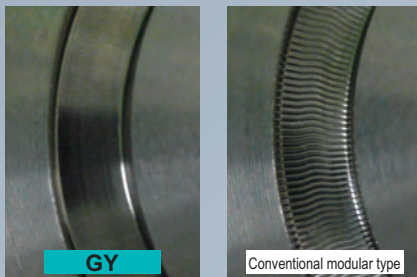
### ● Rigidity comparison

The GY series provides rigidity comparable to a mono block type grooving tool.



### ● Face grooving test results

GY series can achieve stable machining at the cutting conditions which created vibration with a conventional modular type tool.

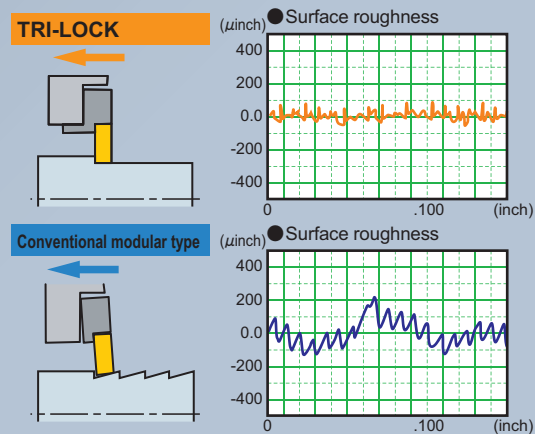


<Cutting conditions>

Workpiece : AISI 4140      Cutting speed : 490 SFM  
 Holder size : □1.0x1.0 inch      Feed : .008 IPR  
 Insert width : .197 inch      Groove depth : .906 inch

### ● External traverse machining test results

Excellent surface finish with the GY series.



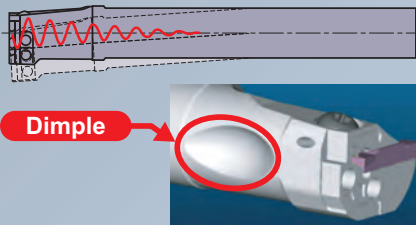
<Cutting conditions>

Workpiece : AISI 4140      Cutting speed : 490 SFM  
 Holder size : □1.0x1.0 inch      Feed : .008 IPR  
 Insert width : .197 inch      Depth of cut : .079 inch

### ● Unique dimple technology for dampening vibrations.

Mitsubishi Materials unique dimple configuration\* on the head improves vibration resistance. Excellent rigidity and dimple configuration\* results in reduced vibrations.

\*Patent registered.

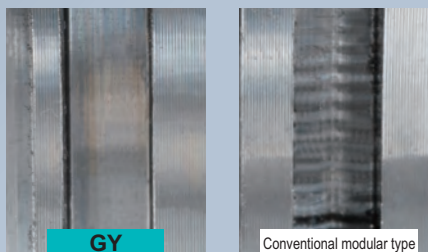


### ● Machining comparison

In comparison with conventional modular types, vibration and insert movement are eliminated resulting in higher quality surface finishes.

<Cutting conditions>

Workpiece : AISI 4140  
 Holder size : φ1.5 inch  
 Insert width : .197 inch  
 Cutting speed : 330 SFM  
 Feed : .005 IPR  
 Cutting dia. : φ2.0 inch  
 Groove depth : .276 inch

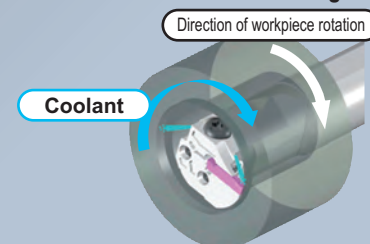


### ● Twin coolant for smoother machining.

● Two directional coolant gives superior chip disposal.



● Utilization of workpiece rotation helps coolant to flow on to the cutting edge.





# **GY** Grooving System **Series**

**For your safety**

●Don't touch breakers and chips without gloves. ●Please machine within recommended application range, and exchange expired tools with new parts in advance. ●Please use safety cover and wear safety glasses. ●When using compounded cutting oils, please take fire prevention. ●When attaching chips or spare parts, please use the attached wrench or spanner. ●When using tools in revolution machining, please make a trial run to check run-out, vibration, abnormal sounds etc.

## **MITSUBISHI MATERIALS CORPORATION**

### **MITSUBISHI MATERIALS U.S.A. CORPORATION**

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**Mitsubishi Carbide Home page : <http://www.mitsubishicarbide.com>**  
(Tools specifications subject to change without notice.)

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