

**NC ROTARY  
TABLE**

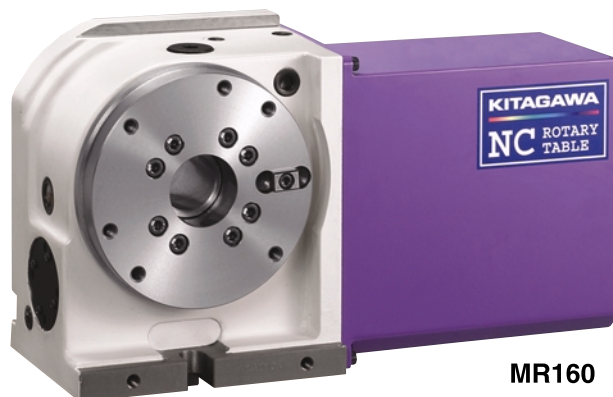
# NC Rotary Table

**MR** series

MR120·MR160·MR200

## Industry standard compact rotary table (Purple)

- Minimum size in its class
- Pneumatic spec
- Powerful pneumatic clamping torque by triple disk brake system
- High speed rotation
- High accuracy
- Rotary Joint built in as option
- Ideal for compact machining centres



**MR160**

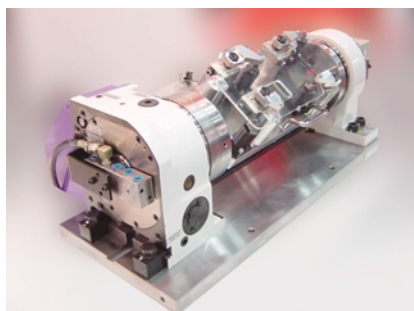


**MRM160**  
(With Kitagawa own controller)

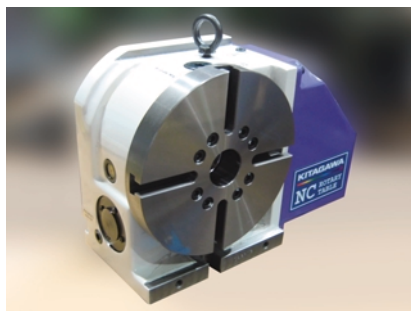


**MRM160**  
(Rotary Joint built in as option)

### Sample Application



▲ Various trunnion systems available.  
(See P.73).



▲ Table with T-slot can also be offered.



▲ Only Kitagawa can offer this combination of NC Rotary Table and chuck







### 4th axis specifications

Type	Table Size	Design No.	Motor type	Clamping method	Right/left hands
MR 160	120・160・200	L A * * *	Only Pneumatic		R: Right hand L: Left hand

### M signal specification

Type	Table Size	Design No.	Kitagawa own controller	Right/left hands
MR M 160 R 2 * *	120・160・200		2:MAC mini i 4:MAC mini iH	R: Right hand L: Left hand

## Specifications

Model		MR120	MR160	MR200
Right hand		○	○	○
Left hand		○	○	○
Table dia (mm)		φ 128	φ 165	φ 202
Register diameter on Face Plate (mm)		φ 50H7	φ 50H7	φ 65H7
Spindle through hole diameter (mm)		φ 32	φ 40	φ 45
Center Height (mm)		120	140	140
Clamping method		Pneumatic	Pneumatic	Pneumatic
Clamping torque (N・m) (In pneumatic 0.5MPa)		150	310	350
Motor axis reduced inertia (kg・m <sup>2</sup> )		0.00004	0.00008	0.00017
Servomotor (for FANUC specification)		α iF 2/5000	α iF 2/5000	α iF 4/4000
Gear ratio		1/60	1/72	1/90
Max. spindle speed	FANUC specification (for min <sup>-1</sup> /motor3000min <sup>-1</sup> )	50	41.6	33.3
	M signal specification (for min <sup>-1</sup> /motor3000min <sup>-1</sup> )	50	41.6	33.3
Allowable work inertia (kg・m <sup>2</sup> )		0.22	0.51	1.00
Indexing accuracy (sec)		20	20	20
Repeatability (sec)		4	4	4
Mass of product (kg)		33	41	61
Manual Tailstock (as an option・P69 reference)		MR120RN	MR160RN	MR200RN
Tail Spindle (as an option・P71 reference)		TSR121A	TSR142A	TSR142A
Rotary Joint (as an option・P75 reference)		RJ32-12Q04 Pneumatic3-port	RJ40H16Q Hydraulic/Pneumatic4-port	RJ40H20Q02 Hydraulic/Pneumatic4-port
Allowable Load	Horizontal (kg) 	120	160	200
	Vertical (kg) 	60	80	100
Allowable load	F (kN) 	8	10	17
	FxL (N・m) 	350	600	1100
	FxL (N・m) 	150	310	350
Allowable cutting torque T (N・m) 		180	220	270

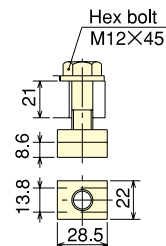
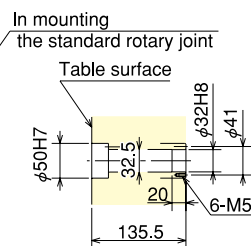
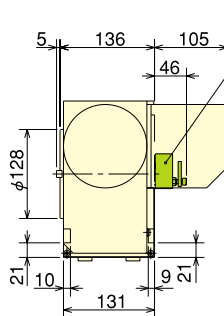
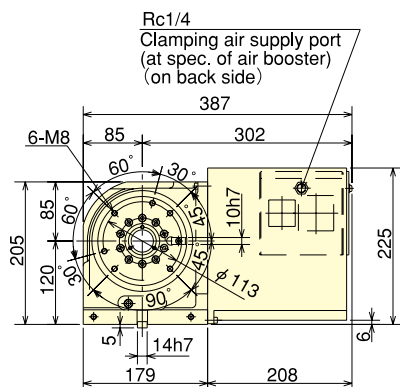
Note) 1. The switch for pressure checking is incorporated to all series except TC/DM of NC tables. 2. The solenoid valve for the table clamp is incorporated. 3. Neither cable nor hose is fitted between NC rotary table and machine tool... 4. In the port part on the table surface jig side of a rotary joint, MR120 or 200 is fixed to the rotary table side and MR160 to jig side. 5. Because a mounting pitch varies with the machines, refer to the pitch of the table spindle size drawing on P71. 6. Each product mass is determined by a Kitagawa M signal spec.



# MR series MR120·MR160·MR200

## ■Dimensions [4th axis specifications]

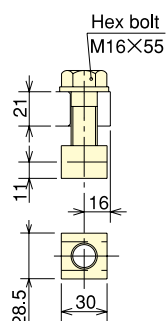
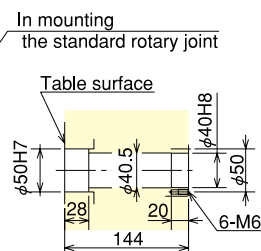
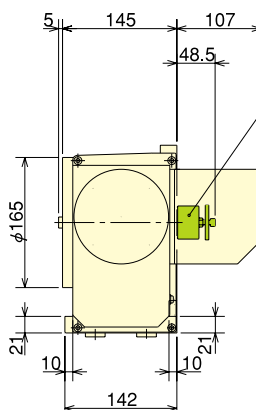
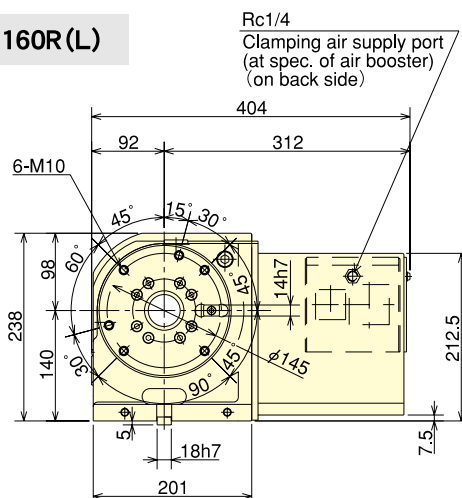
### MR120R(L)



Thru-Hole Diameter

Clamping device

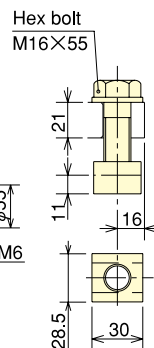
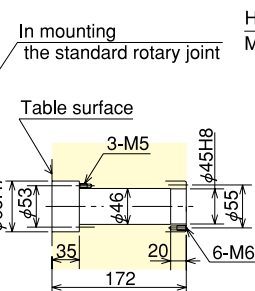
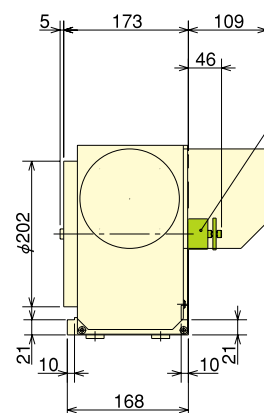
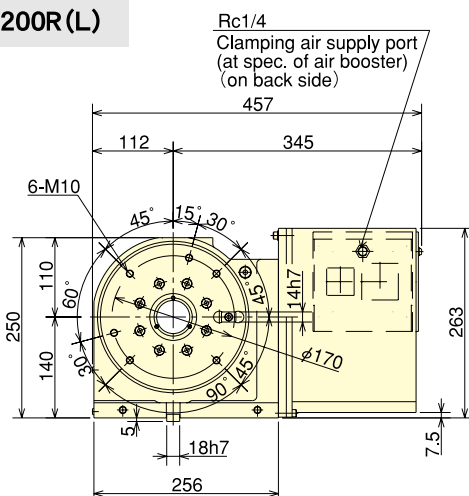
### MR160R(L)



Thru-Hole Diameter

Clamping device

### MR200R(L)



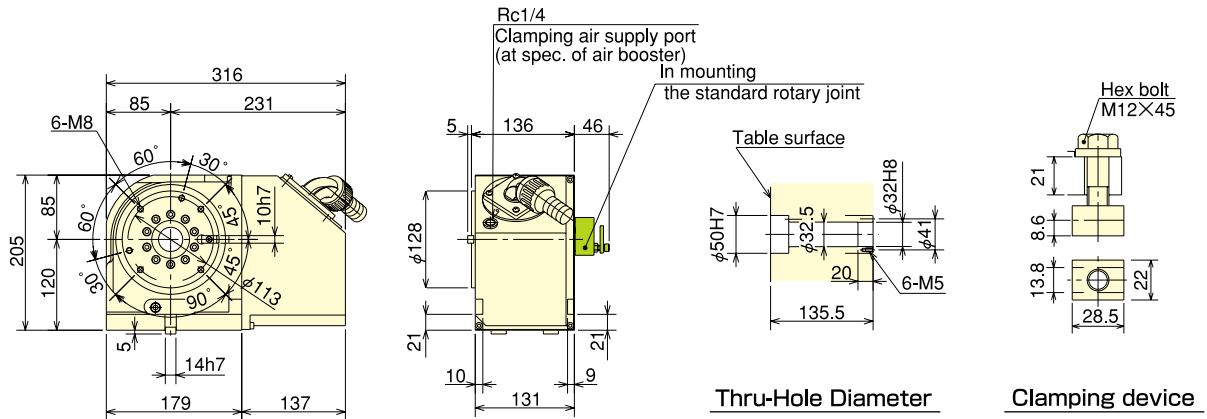
Thru-Hole Diameter

Clamping device

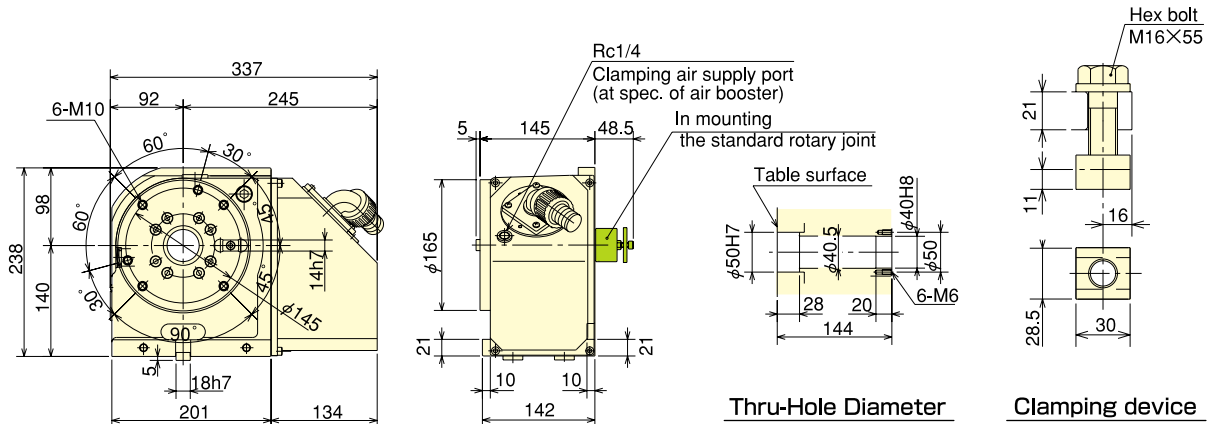
※The above dimensions are the same as FANUC specifications.  
In case of other maker motor specifications, dimensions may differ in length.  
R is a right hand spec. and L is a left hand spec.

# Dimensions [Kitagawa own controller]

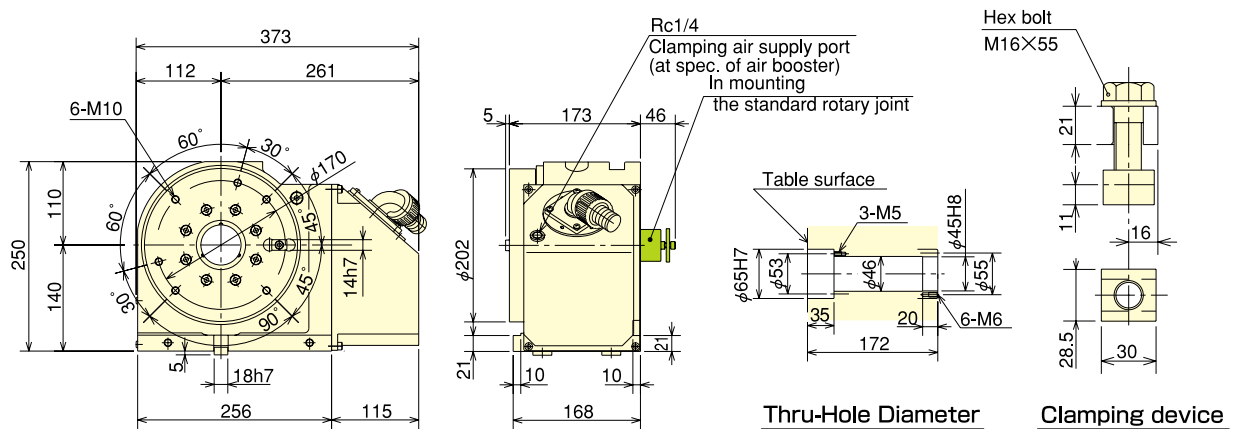
## MRM120R(L)



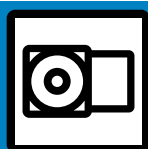
## MRM160R(L)



## MRM200R(L)



※R is a right hand spec. and L is a left hand spec.



**NC ROTARY  
TABLE**

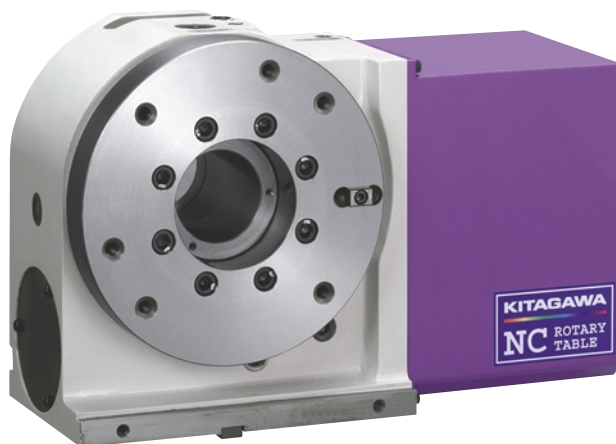
# NC Rotary Table

**MR** series

**MR250 • MR320**

## Industry standard compact rotary table (Purple)

- Compact design
- Pneumatic spec
- Powerful pneumatic clamping torque by triple disk brake system
- High speed rotation
- High accuracy
- Rotary Joint built in as option
- Ideal for compact machining centres

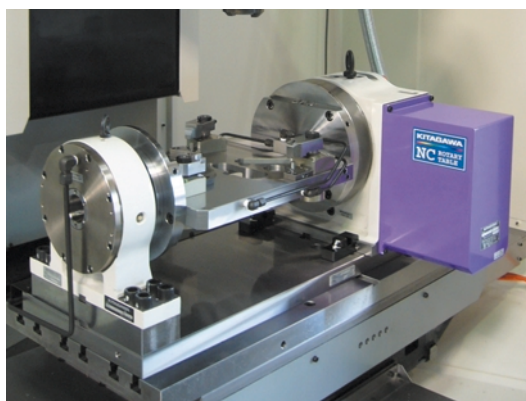
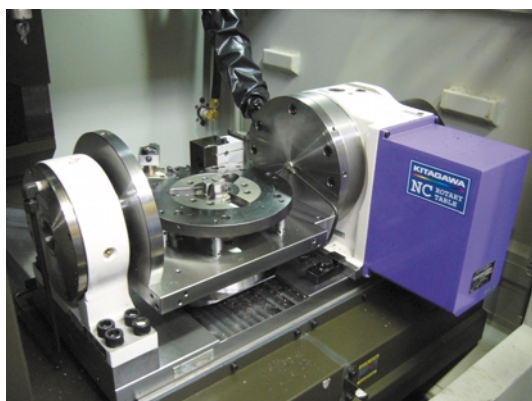


**MR250**



**MRM250**  
(With Kitagawa own controller)

### Sample Application



▲ Specialist trunnion systems allow for multi surface or simultaneous machining.



### 4th axis specifications

**MR 250 L A \* \* \***

Type      Table Size  
250・320

Design No.

Motor type

Clamping method  
Only Pneumatic

Right/left hands  
R: Right hand  
L: Left hand

### M signal specification

**MR M 250 R 2 \* \***







Type      Table Size  
250・320

Design No.

Kitagawa own controller  
2:MAC mini i  
4:MAC mini iH

Right/left hands  
R: Right hand  
L: Left hand

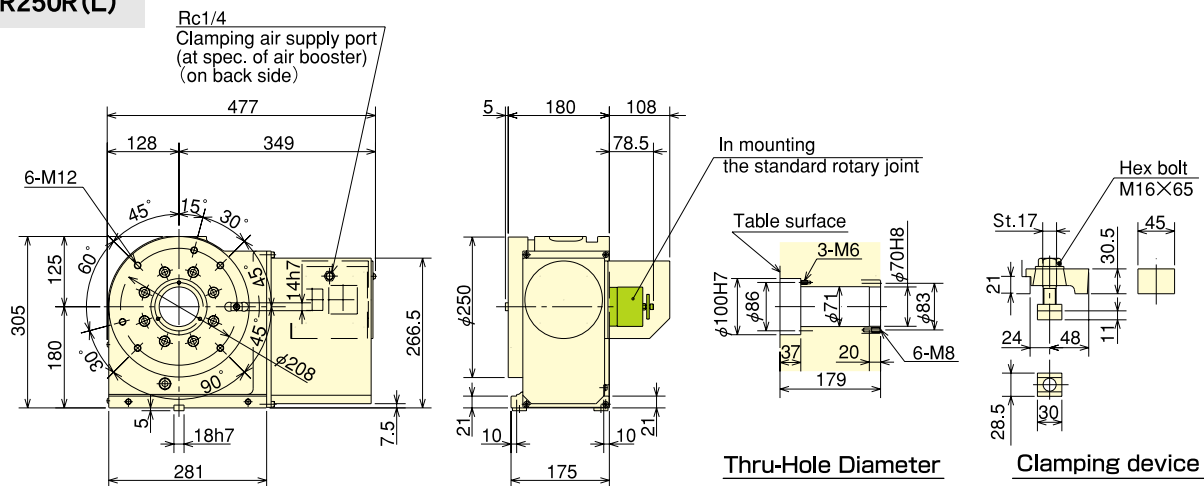
## Specifications

Model		MR250	MR320
Right hand		○	○
Left hand		○	○
Table dia (mm)		φ 250	φ 320
Register diameter on Face Plate (mm)		φ 100H7	φ 130H7
Spindle through hole diameter (mm)		φ 70	φ 105
Centre Height (mm)		180	225
Clamping method		Pneumatic	Pneumatic
Clamping torque (N・m) (In pneumatic 0.5MPa)		600	1200
Motor axis reduced inertia (kg・m <sup>2</sup> )		0.00031	0.00031
Servomotor (for FANUC specification)		α iF 4/4000	α iF 8/3000
Gear ratio		1/90	1/120
Max. spindle speed	FANUC specification (for min <sup>-1</sup> /motor3000min <sup>-1</sup> )	33.3	25
	M signal specification	33.3 (3000min <sup>-1</sup> )	16.6 (2000min <sup>-1</sup> )
Allowable work inertia (kg・m <sup>2</sup> )		1.95	4.49
Indexing accuracy (sec)		20	20
Repeatability (sec)		4	4
Mass of product (kg)		85	135
Manual Tailstock (as an option・P69 reference)		MR250RN	MR320RN
Tail Spindle (as an option・P71 reference)		TSR180A	TSR180A-45
Rotary Joint (as an option・P75 reference)		RJ70H25Q02	RJ70H32Q01
		Hydraulic/Pneumatic6-port	Hydraulic/Pneumatic6-port
Allowable Load	Horizontal (kg) 	250	350
	Vertical (kg) 	125	180
Allowable load	F (kN) 	21	25
	F×L (N・m) 	1600	2400
	F×L (N・m) 	600	1200
Allowable cutting torque	T (N・m) 	480	800

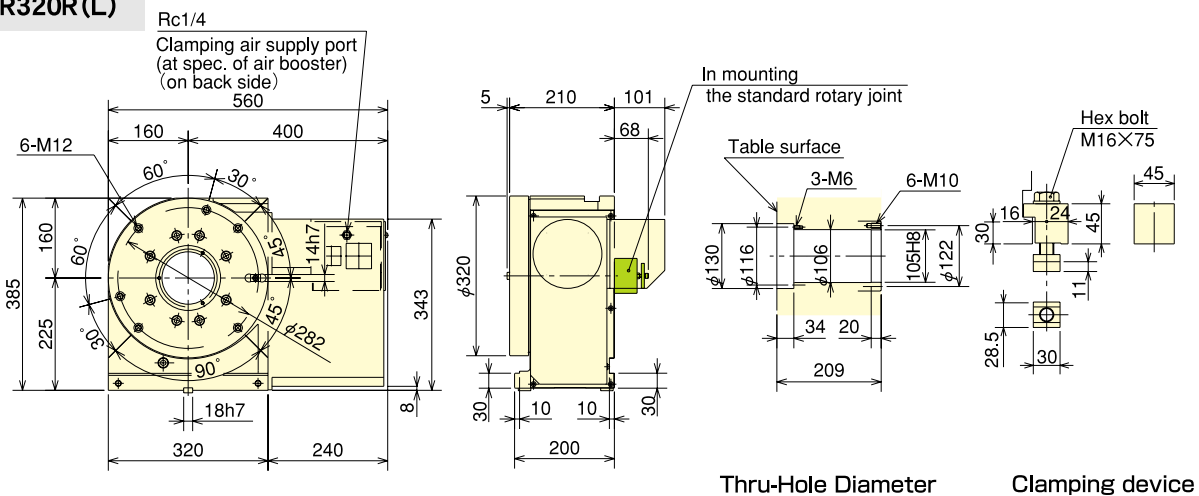
Note) 1. The switch for pressure checking is incorporated to all series except TC/DM of NC tables. 2. The solenoid valve for the table clamp is incorporated. 3. Neither cable nor hose is fitted between NC rotary table and machine tool... 4. In the port part on the table surface jig side of a rotary joint, MR120 or 320 is fixed to the rotary table side. 5. Because a mounting pitch varies with the machines, refer to the pitch of the table spindle size drawing on P71. 6. Each product mass is determined by a Kitagawa M signal spec.

## ■Dimensions [4th axis specifications]

### MR250R(L)



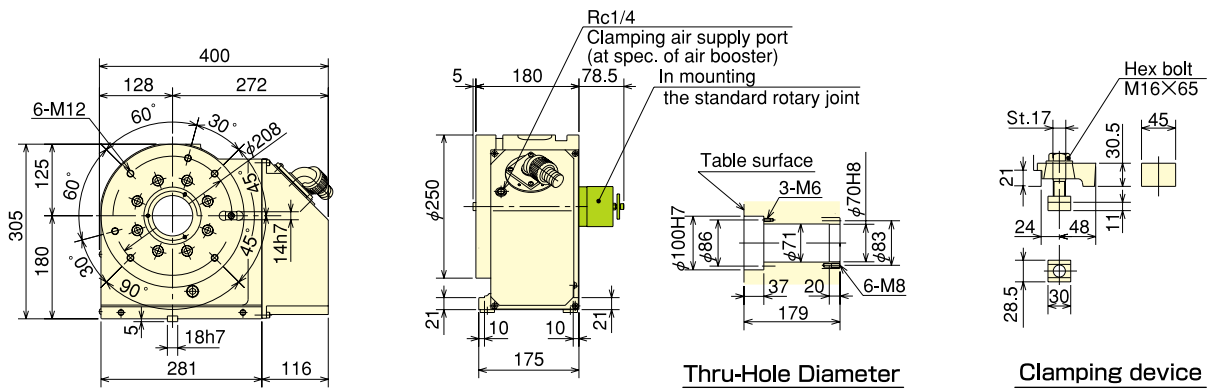
### MR320R(L)



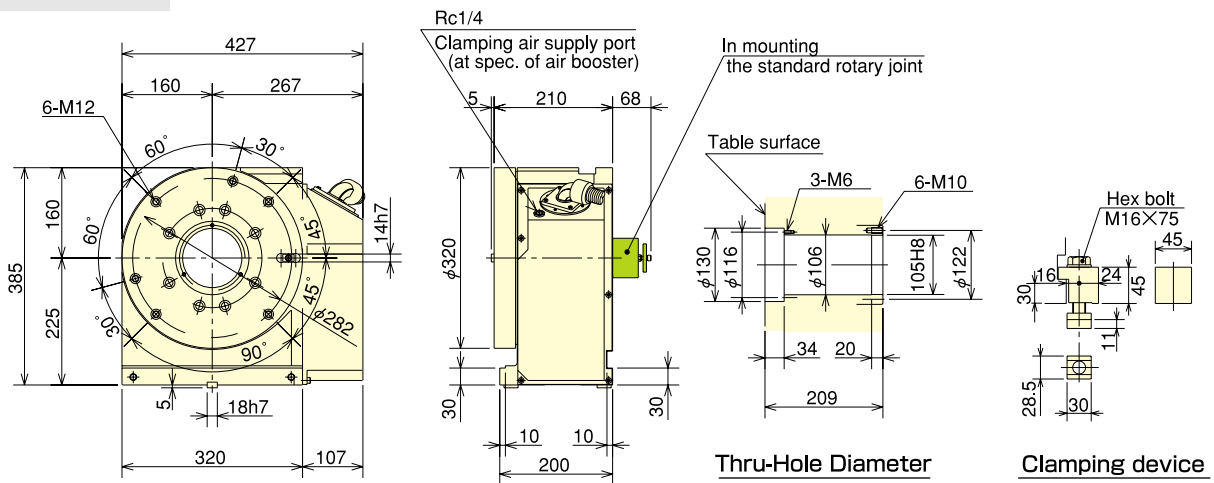
※The above dimensions are the same as FANUC specifications.  
In case of other maker motor specifications, dimensions may differ in length.  
R is a right hand spec. and L is a left hand spec.

■Dimensions [Kitagawa own controller]

MRM250R(L)



MRM320R(L)



※R is a right hand spec. and L is a left hand spec.