

**NC ROTARY TABLE**

# Tilting NC Rotary Table

# TT182 series

# TT182·TW182

※TW is the side motor type tilting table

## High stability tilting table to suit 5 axes machining (blue)

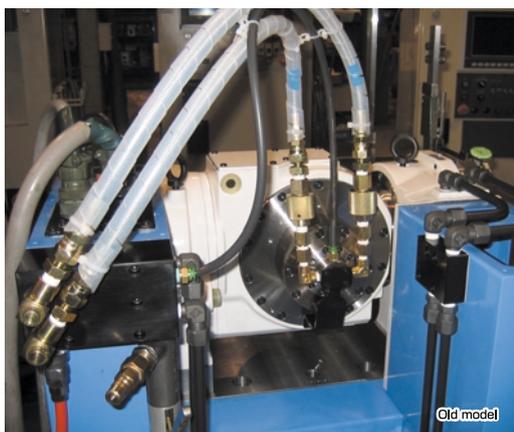
- Built in air hydraulic boosters deliver high clamping torque on both axes
- Compact design
- High speed
- High rigidity
- Built in rotary joint (option) allows simple and secure jig piping
- Air booster or direct hydraulic clamping options available



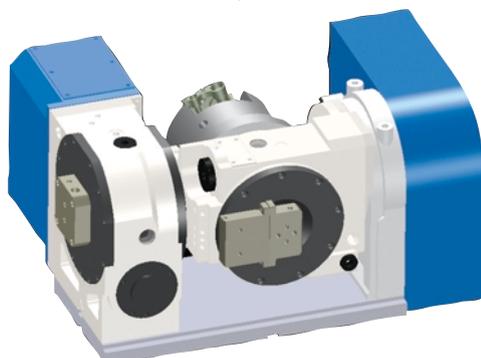
**TT182**

※In specification with the foreign trade control ordinance, permission of the ministry of economy, trade and industry is required when exporting twin axis products overseas.

### Complete built-in rotary joint (option)



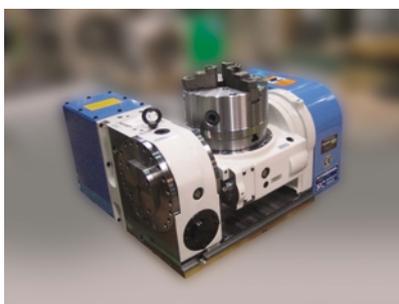
Simplified Pipework



### Sample Application



◀ Provided for high accuracy 5-axis machining.

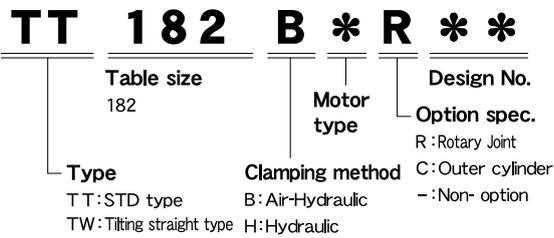


◀ Only Kitagawa can offer this combination of NC Rotary Table and chuck

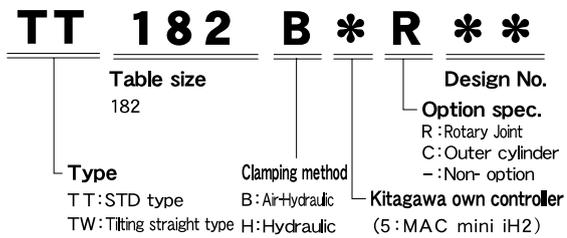
- Installation of optional rotary joint

TT

**4th axis specifications**



**M signal specification**



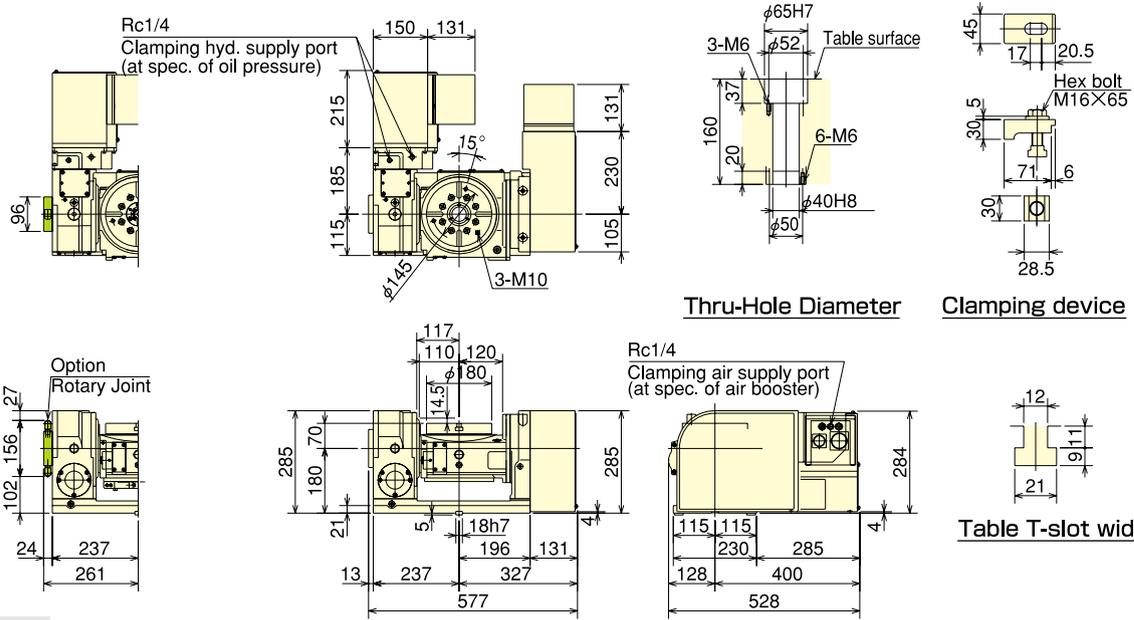
**Specifications**

Model		TT182/TW182	
Tilting angle		-35° ~ +110°	
Table dia (mm)		φ 180	
Register diameter on Face Plate (mm)		φ 65 H7	
Spindle through hole diameter (mm)		φ 40	
Centre height at verticality (mm)		180	
Clamping method		Air-Hydraulic/Hydraulic	
Clamping torque (N·m) (In pneumatic 0.5MPa/hydraulic 3.5MPa)	Rotating axis	450	
	Tilting axis	800	
Motor axis reduced inertia (kg·m <sup>2</sup> )	Rotating axis	0.000242	
	Tilting axis	0.000135	
Servomotor (for FANUC specification)		α iF 2/5000	
Gear ratio	Rotating axis	1/90	
	Tilting axis	1/180	
Max. spindle speed	for FANUC specification	Rotating axis (for min <sup>1</sup> /motor3000min <sup>1</sup> )	33.3
		Tilting axis (for min <sup>1</sup> /motor3000min <sup>1</sup> )	16.6
	M signal specification	Rotating axis (for min <sup>1</sup> /motor3000min <sup>1</sup> )	33.3
		Tilting axis (for min <sup>1</sup> /motor3000min <sup>1</sup> )	16.6
Allowable work inertia (kg·m <sup>2</sup> )		0.25	
Indexing accuracy (sec)	Rotating axis	20	
	Tilting axis	60	
Repeatability (sec)		4	
Mass of product TT/TW (kg)		155/170	
Built-in rotary joint (option)		RJ40FTT182 (Hyd./pneumatic 4-port + Exclusive pneumatic 1 port of air)	
Pneumatic outer cylinder (option · P43, 44 reference)		NY1312T18B	
Hydraulic outer cylinder (option · P43, 44 reference)		NY0912T18A	
Allowable Load	at horizontal (kg) 	60	
	at tilted (kg) 	40	
Allowable load	F (kN) 	5	
	F <sub>X</sub> L (N·m) 	800	
	F <sub>X</sub> L (N·m) 	450	
Allowable cutting torque	T (N·m) 	250	
Moment of tilting weight capacity	W <sub>X</sub> L (kgf · m) 	12	

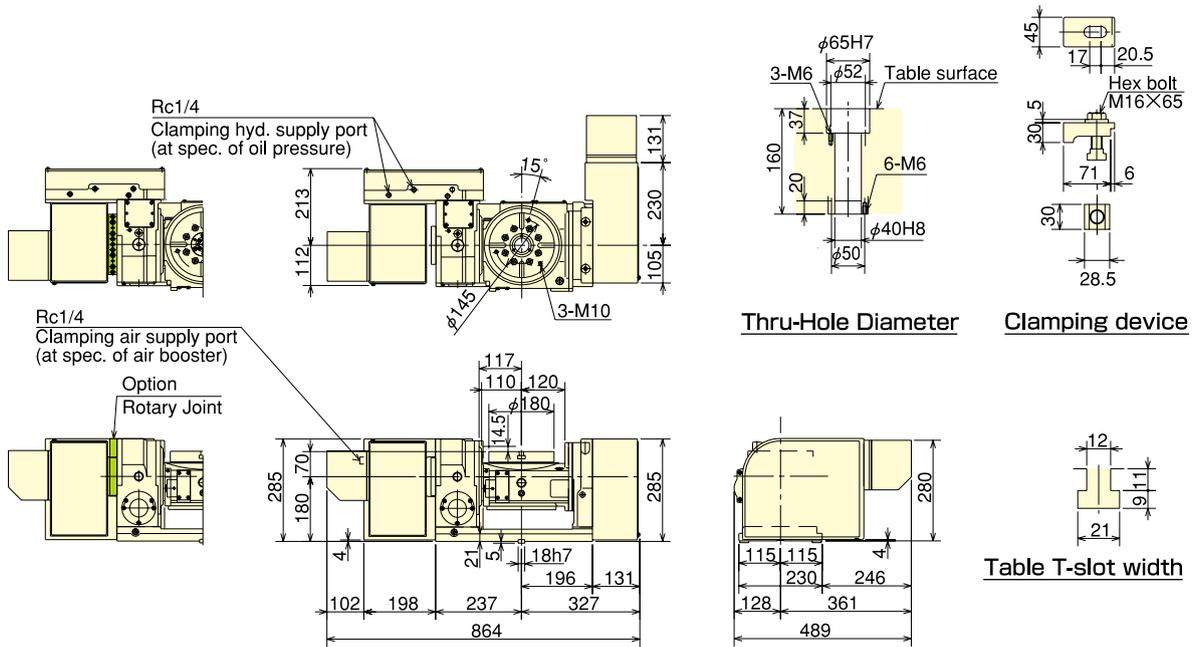
Note) 1. The switch for pressure checking is incorporated to all series except TC/DM of NC tables. 2. In case of air + hyd. clamp specification, the solenoid valve for table clamp is incorporated. 3. In a hyd. clamp spec., the solenoid valve is not incorporated. Consequently, customer shall prepare it. 4. Neither cable nor hose is fitted between NC rotary table and machine tool... 5. Each product mass is determined by a Kitagawa M signal spec.

## ■Dimensions [4th axis specifications]

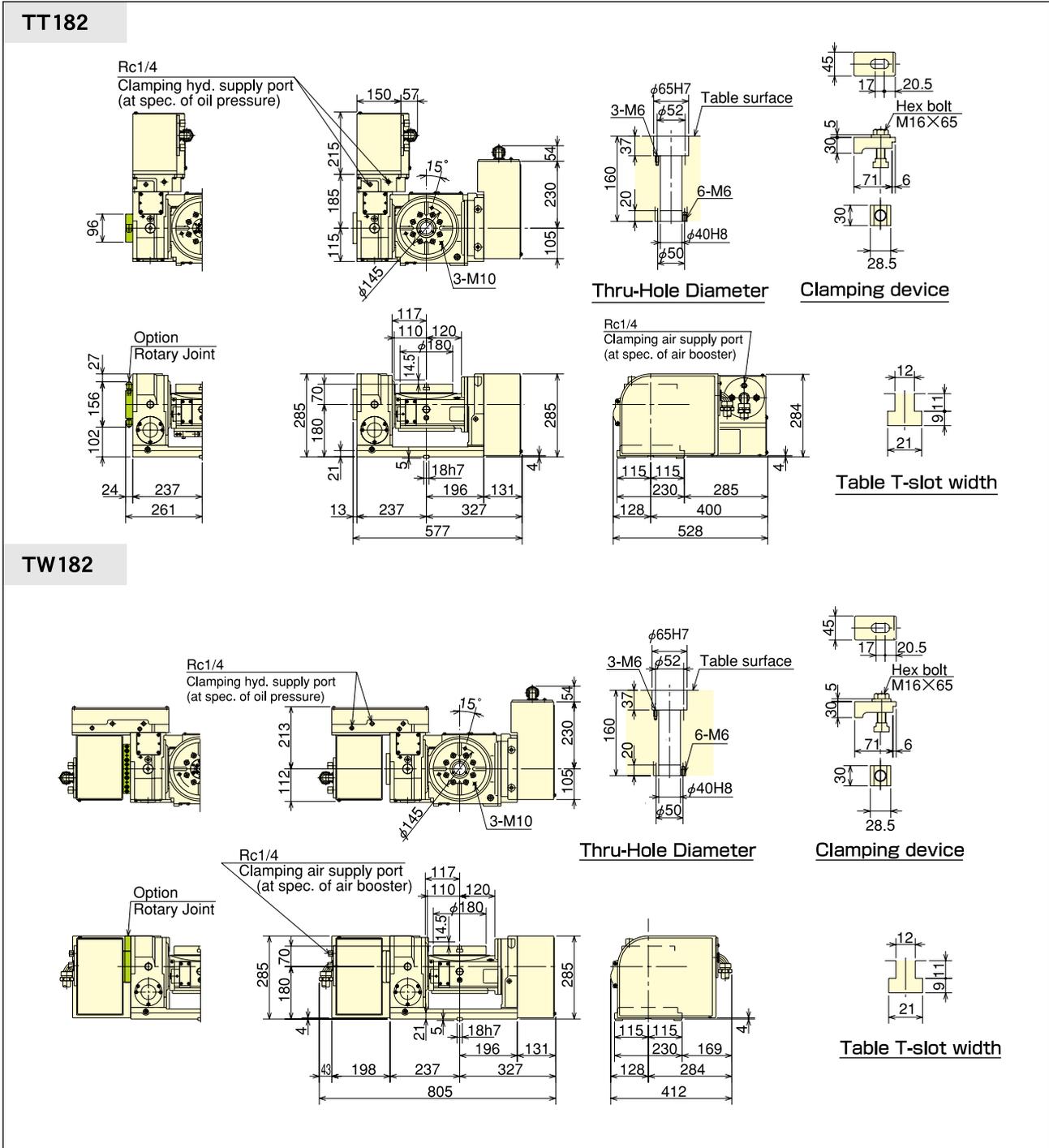
### TT182



### TW182

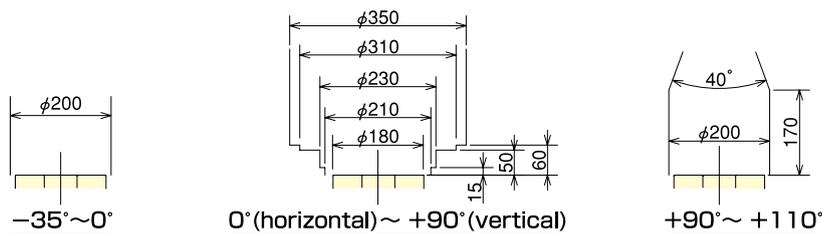


■Dimensions [Kitagawa own controller]



**DATA** Tilting NC table • Work loadable area

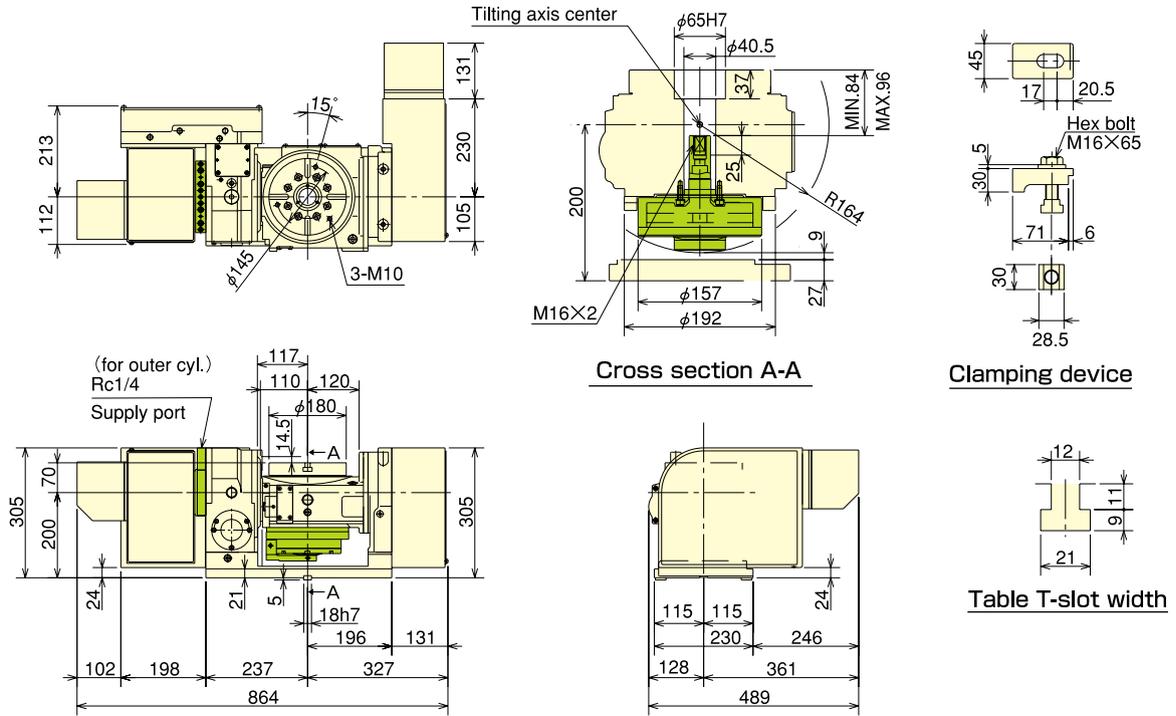
TT182/TW182



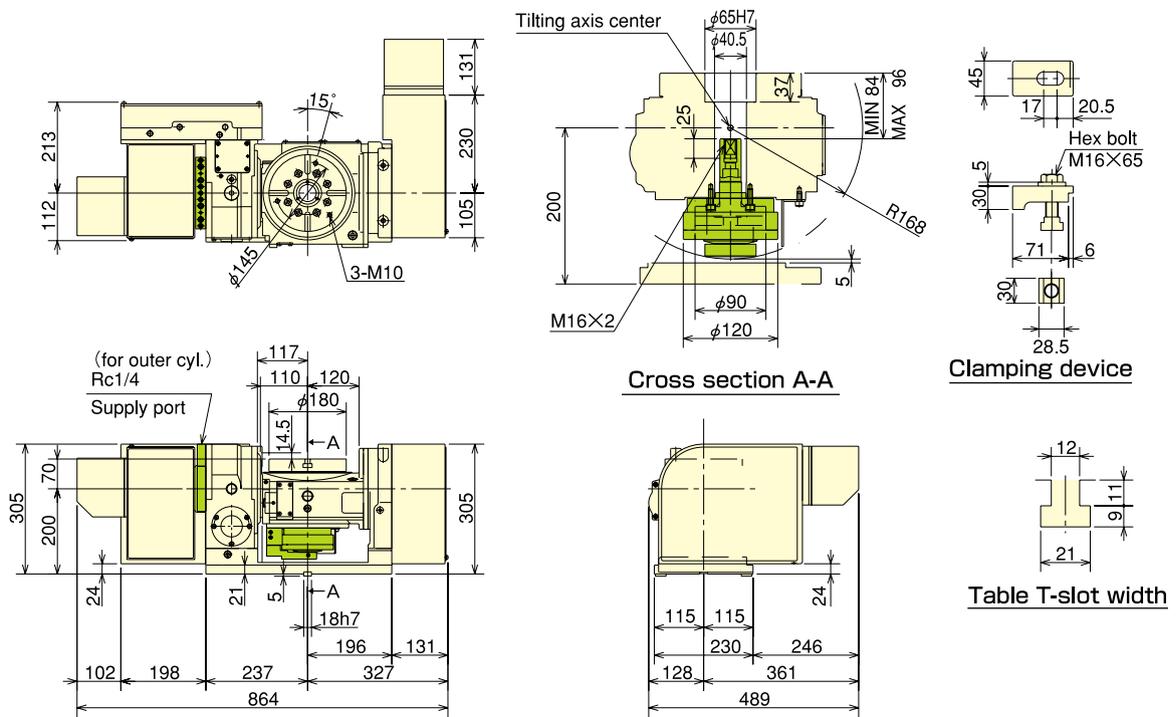


■Dimensions [4th axis specifications]

**TW182 [Pneumatic outer cylinder spec.]**



**TW182 [Hydraulic outer cylinder spec.]**



※ 1. The above outline dimensions are shown with FANUC motor specifications.  
2. In outer cylinder mounting spec., center height varies to 200 from 180.