

NC ROTARY TABLE

Tilting NC Rotary Table TT182·TW182

※TW is the side motor type tilting table

High stability tilting table to suit 5 axis machining

- 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

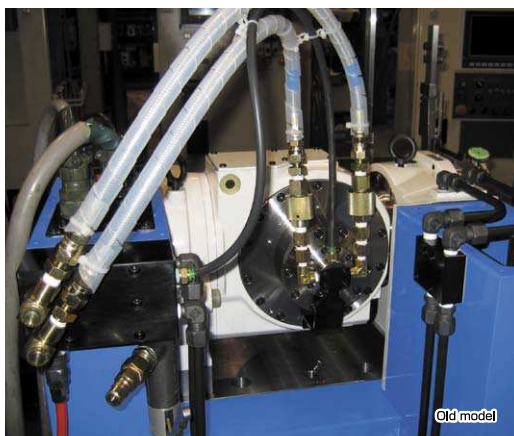
* CE correspondence

※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.



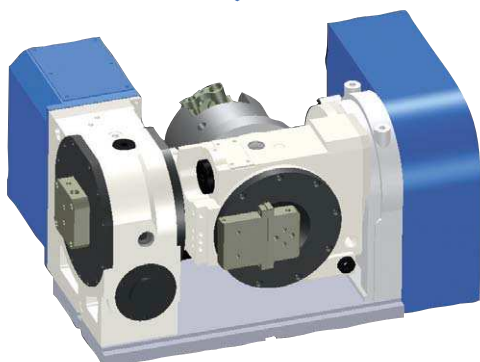
TT182

Complete built-in rotary joint (option)



Old model

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

4th axis specifications				M signal specification			
TT 182		B * R * *		TT 182		B V R * *	
Table size 182		Motor type		Table size 182		Design No.	
Type		Clamping method		Type		Option spec.	
T T: STD type TW: Tilting straight type		B: Air-Hydraulic (integrated air hydraulic booster) H: Hydraulic		T T: STD type TW: Tilting straight type		R: Rotary Joint C: Outer cylinder -: Non- option	
				Quinte specification			

Specifications

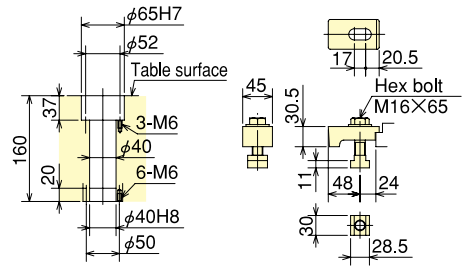
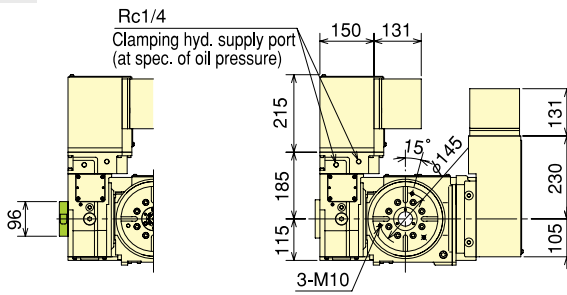
Model		TT182/TW182	
Tilting angle		-35° ~ +110°	
Table dia (mm)		φ 180	
Register diameter on Face Plate (mm)		φ 65 H7	
Spindle through hole diameter (mm)		φ 40	
Centre height at verticality (mm)		180	
Clamping method		Air-Hydraulic/Hydraulic	
Clamping torque (N·m) (In pneumatic 0.5MPa/hydraulic 3.5MPa)	Rotating axis	450	
	Tilting axis	800	
Motor axis reduced inertia (kg·m ²)	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 ¹ /motor3000min ¹)	33.3
		Tilting axis (for min ¹ /motor3000min ¹)	16.6
	M signal specification	Rotating axis (for min ¹ /motor3000min ¹)	33.3
		Tilting axis (for min ¹ /motor3000min ¹)	16.6
Allowable work inertia (kg·m ²)		0.25	
Indexing accuracy (sec)	Rotating axis	20	
	Tilting axis	60	
Repeatability (sec)		4	
Mass of product TT/TW (kg)		163/178	
Built-in rotary joint (option · P97 reference)		RJ40FTT182 Hyd./pneumatic 4-port + Exclusive pneumatic 1 port of air	
Pneumatic outer cylinder (option · P61, 62 reference)		NY1312T18B	
Hydraulic outer cylinder (option · P61, 62 reference)		NY0912T18A	
Allowable Load	at horizontal (kg)	60	
	at tilted (kg)	40	
Allowable load (When clamped to table)	F (kN)	5	
	F×L (N·m)	800	
	F×L (N·m)	450	
Allowable cutting torque	T (N·m)	250	
Moment of tilting weight capacity	W×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.

TT182·TW182

■Dimensions [4th axis specifications]

TT182



Thru-Hole Diameter Clamping Device

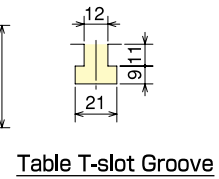
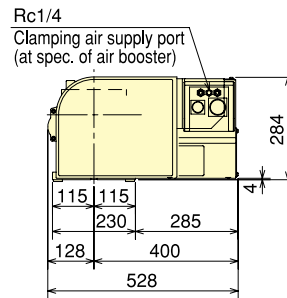
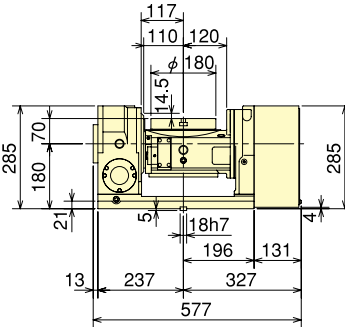
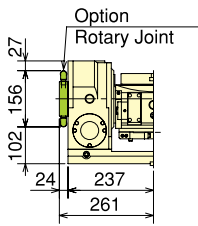
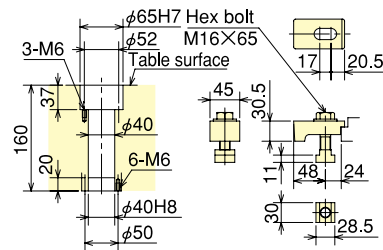
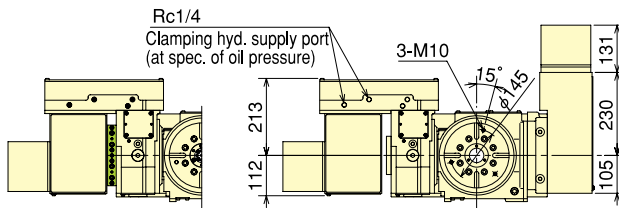


Table T-slot Groove

TW182



Thru-Hole Diameter Clamping Device

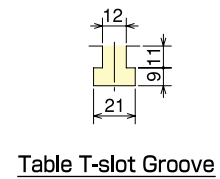
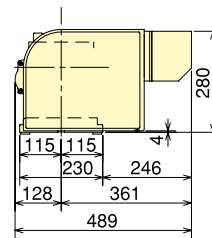
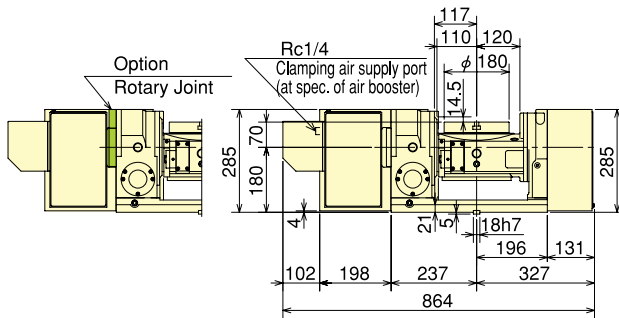
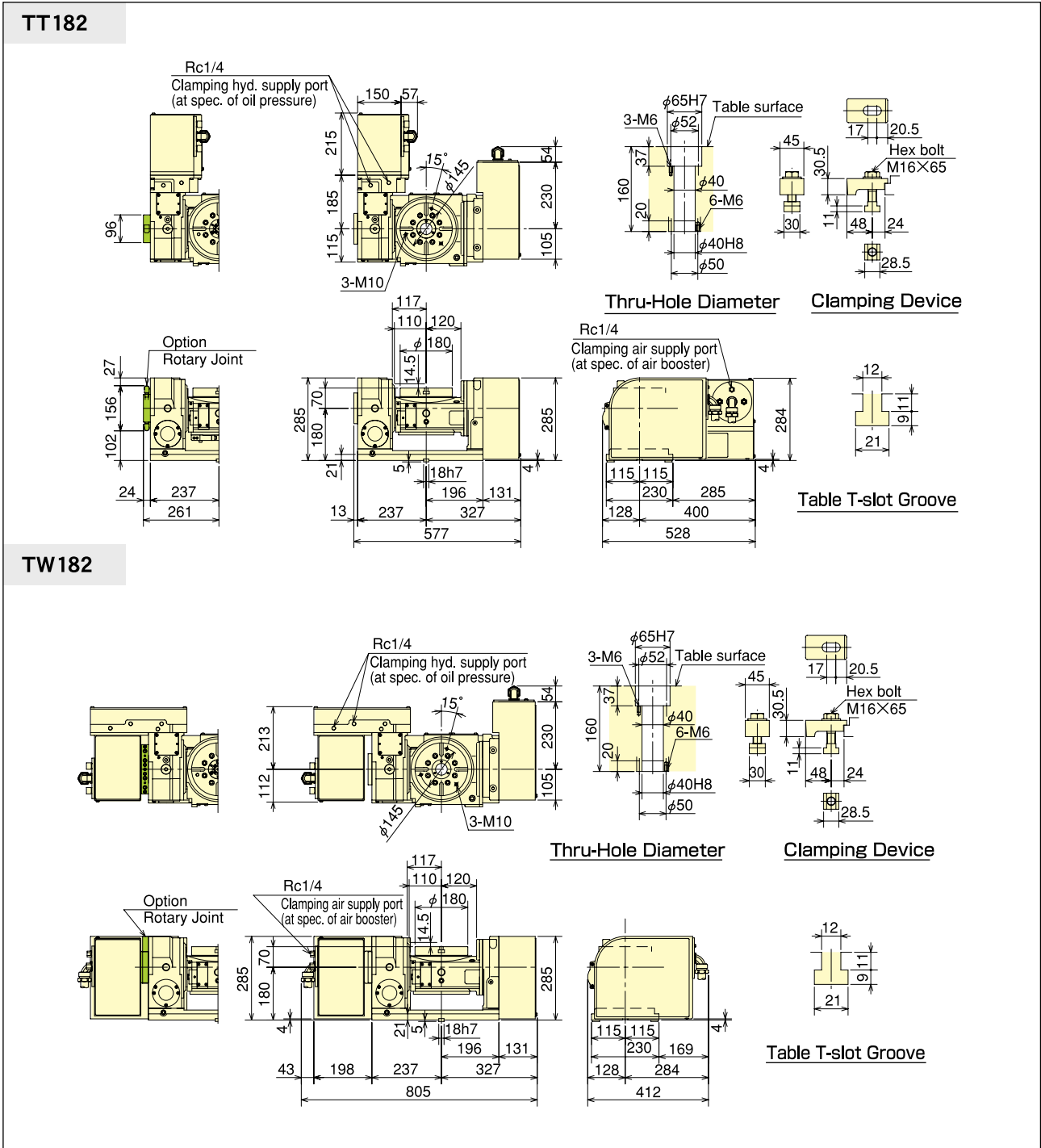


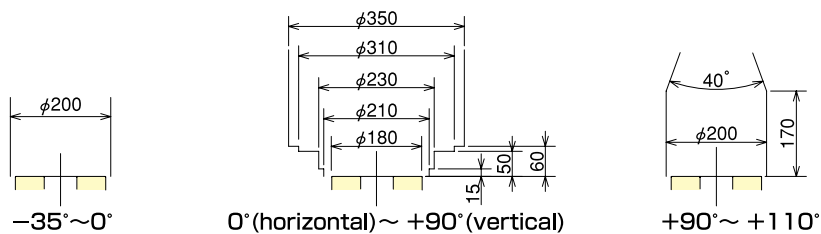
Table T-slot Groove

■Dimensions [Kitagawa own controller] *The dimensions may vary from motor to motor that is mounted.



DATA Tilting NC table • Work loadable area

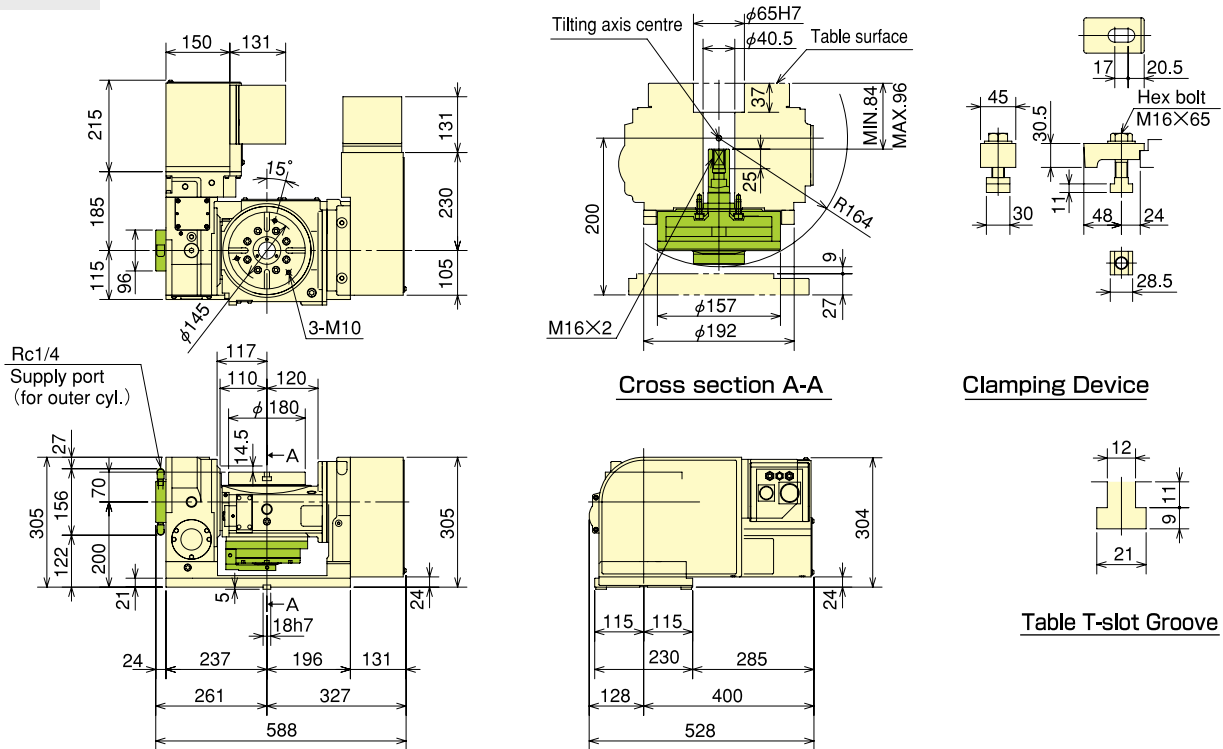
TT182/TW182



TT182·TW182

■Dimensions [4th axis specifications]

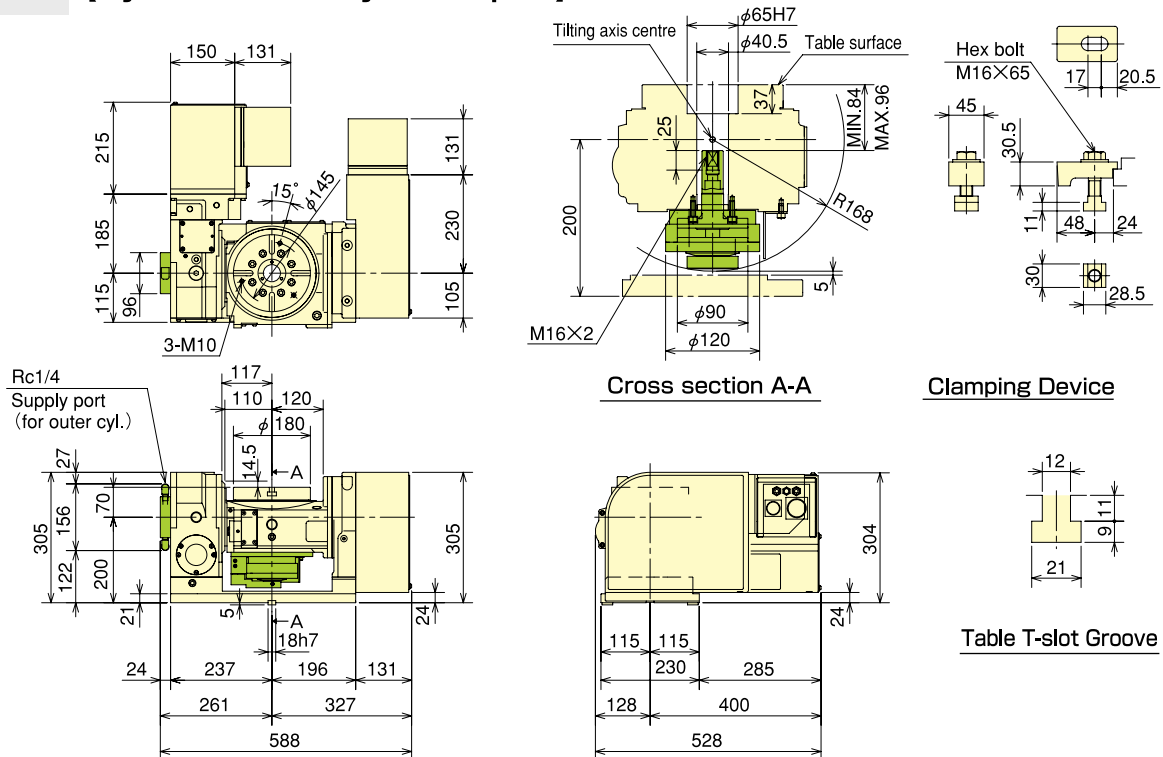
TT182 [Pneumatic outer cylinder spec.]



■Pneumatic outer cylinder spec.

Cylinder	Number of ports	Inner dia. of cyl. (mm)	Piston stroke (mm)	Piston thrust (kN)		Max. allowable air pressure (MPa)	Mass (kg)
				Air pressure 0.5MPa Push	Air pressure 1.0MPa Pull		
NY1312T18B	Air: 3-port	135	12	4.9	4.7	1.0	9.0

TT182 [Hydraulic outer cylinder spec.]



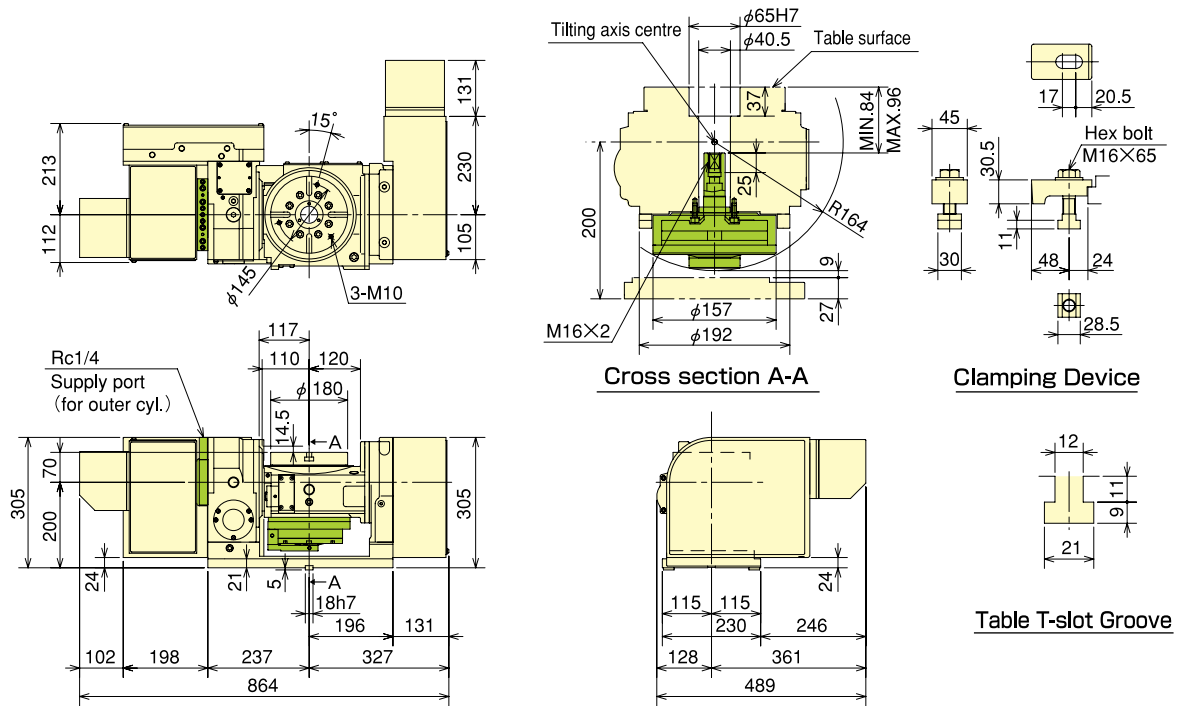
■Hydraulic outer cylinder spec.

Cylinder	Number of ports	Inner dia. of cyl. (mm)	Piston stroke (mm)	Piston thrust (kN)		Max. allowable hyd. pressure (MPa)	Mass (kg)
				Hydraulic pressure 3.5MPa Push	Hydraulic pressure 3.5MPa Pull		
NY0912T18A	Hyd.: 2-port+Air: 1-port	90	12	18.2	17.1	3.5	7.7

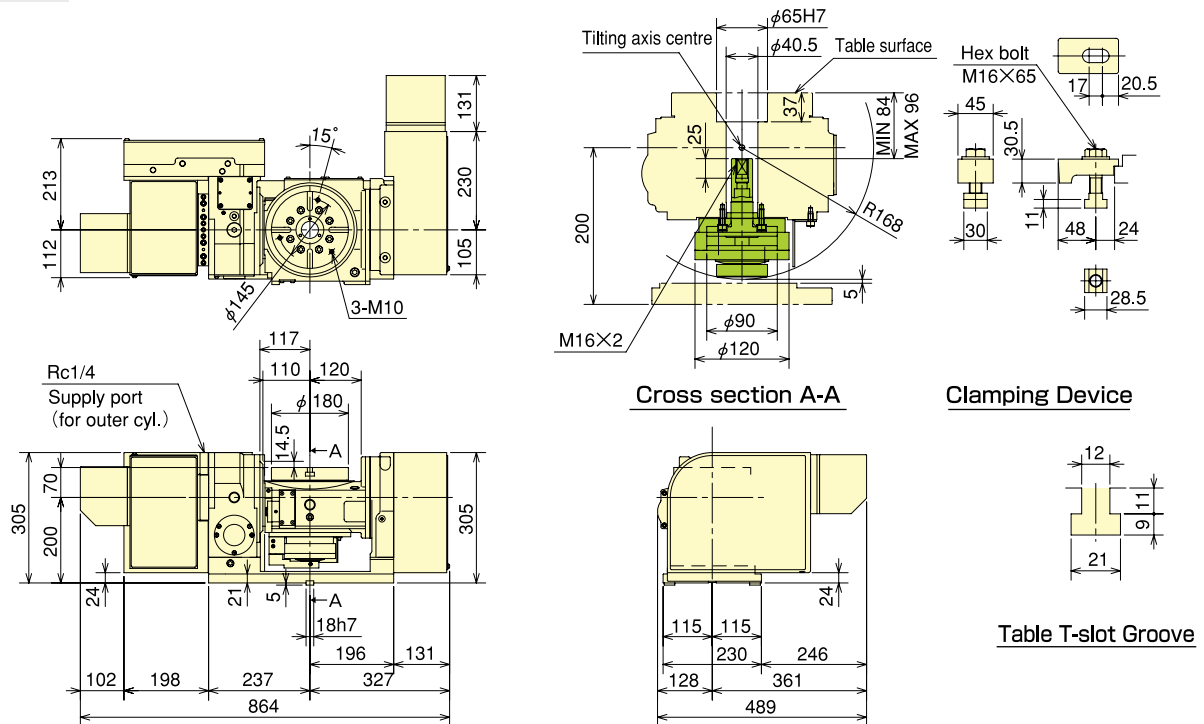
※ 1. The above dimensions are the same as FANUC spec. Those dimensions may vary from motor to motor that is mounted.
 2. In outer cylinder mounting spec., centre height varies to 200 from 180.

■Dimensions [4th axis specifications]

TW182 [Pneumatic outer cylinder spec.]



TW182 [Hydraulic outer cylinder spec.]



※ 1. The above dimensions are the same as FANUC spec. Those dimensions may vary from motor to motor that is mounted.
 2. In outer cylinder mounting spec., centre height varies to 200 from 180.