



**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.

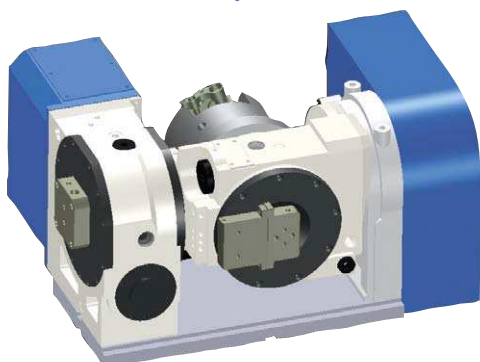


TT182

Complete built-in rotary joint (option)



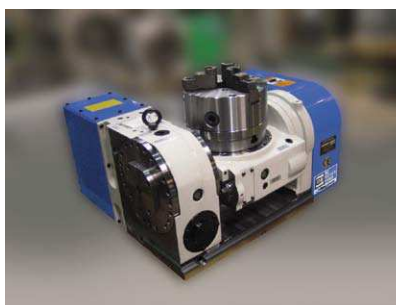
Simplified
Pipework



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

TT	182	B	*	R	*	*
Table size		Motor type	Design No.			
182			Option spec.			
Type		Clamping method	R :Rotary Joint			
TT:STD type			C:Outer cylinder			
TW:Tilting straight type			- :Non- option			
			(integrated air hydraulic booster)			
		H:Hydraulic				

M signal specification

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

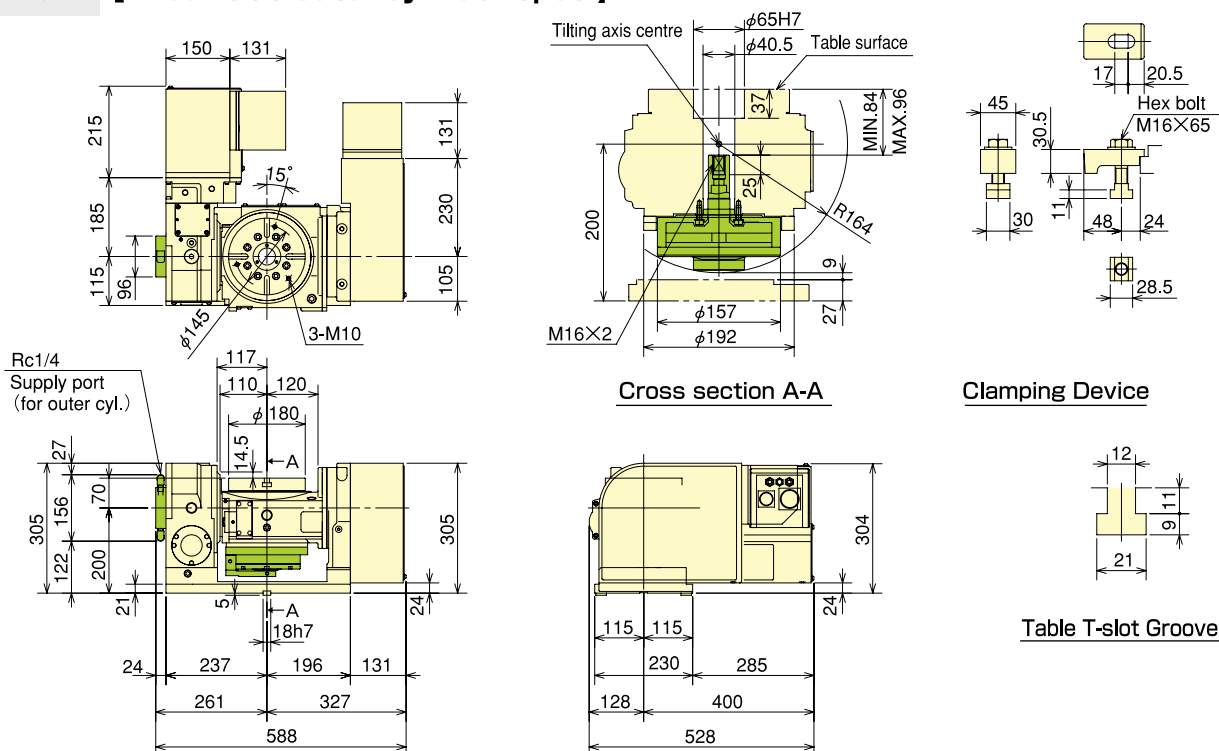
Specifications

Model			TT182／TW182	
Tilting angle			−35° ～+110°	
Table dia (mm)			φ 180	
Register diameter on Face Plate (mm)			φ 65 H 7	
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.

■Dimensions [4th axis specifications]

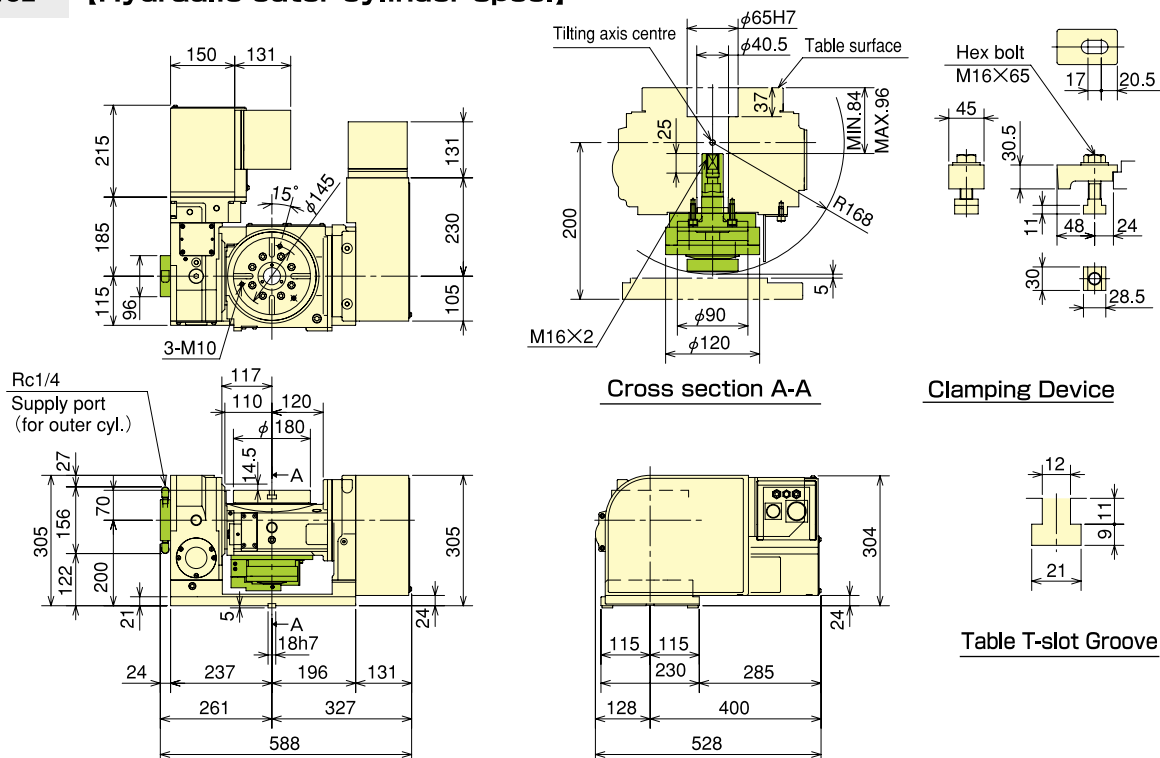
TT182 [Pneumatic outer cylinder spec.]



■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		Air pressure 1.0MPa			
				Push	Pull	Push	Pull		
NY1312T18B	Air: 3-port	135	12	4.9	4.7	9.8	9.4	1.0	9.0

TT182 [Hydraulic outer cylinder spec.]



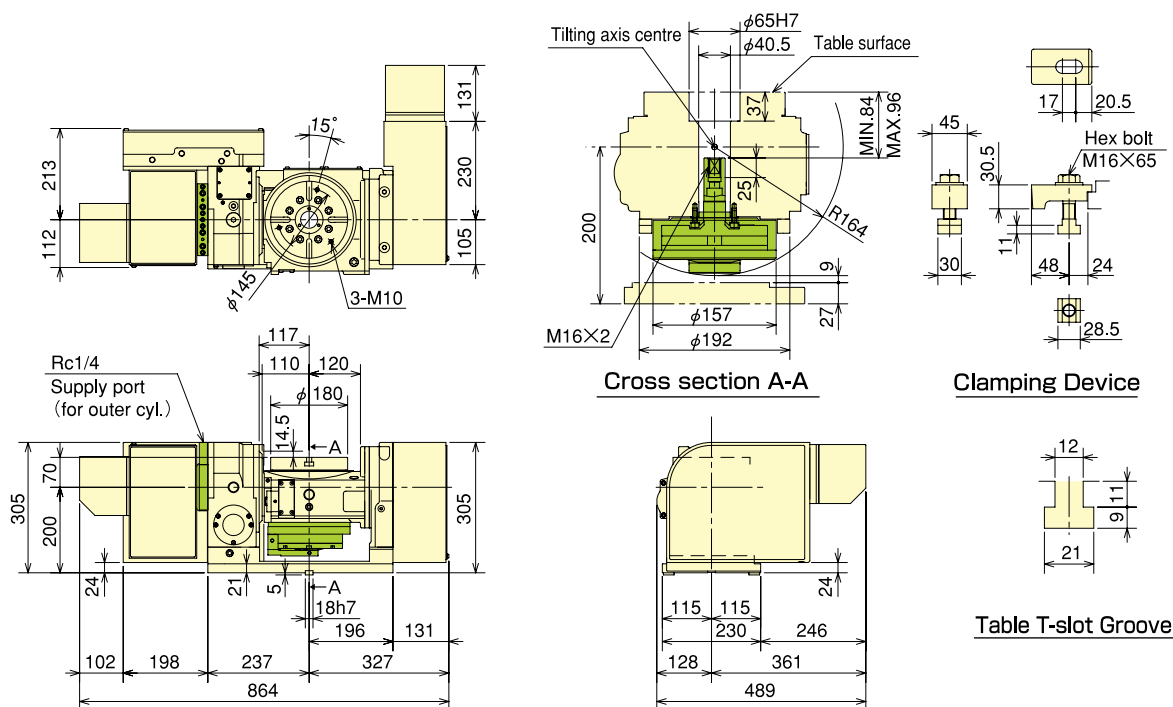
■Hydraulic outer cylinder spec.

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

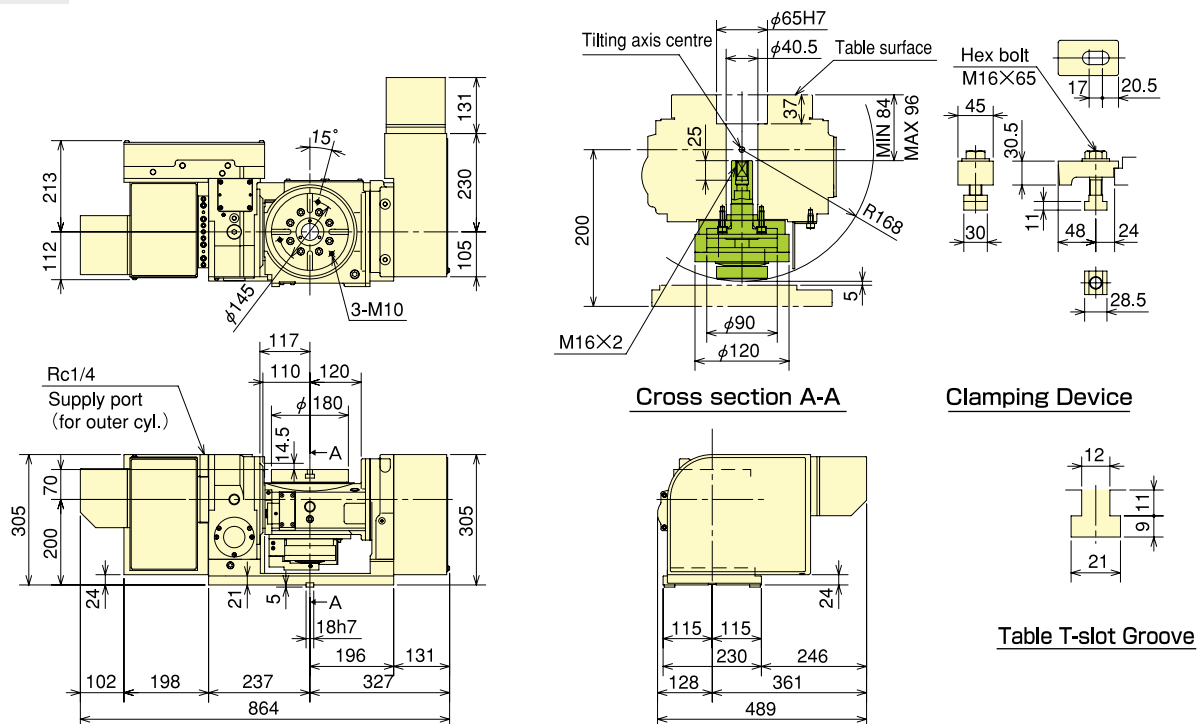
※ 1. The above dimensions are the same as FANUC spec. Those dimensions may vary from motor to motor that is mounted.
 2. In outer cylinder mounting spec., centre height varies to 200 from 180.

■Dimensions [4th axis specifications]

TW182 [Pneumatic outer cylinder spec.]



TW182 [Hydraulic outer cylinder spec.]



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 ※ 2. In outer cylinder mounting spec., centre height varies to 200 from 180.