High Performance NC Rotary Table – Side motor mounted, Vertical or Horizontal Usage –

TMX series

TMX160・TMX200・TMX250
THX160・THX200

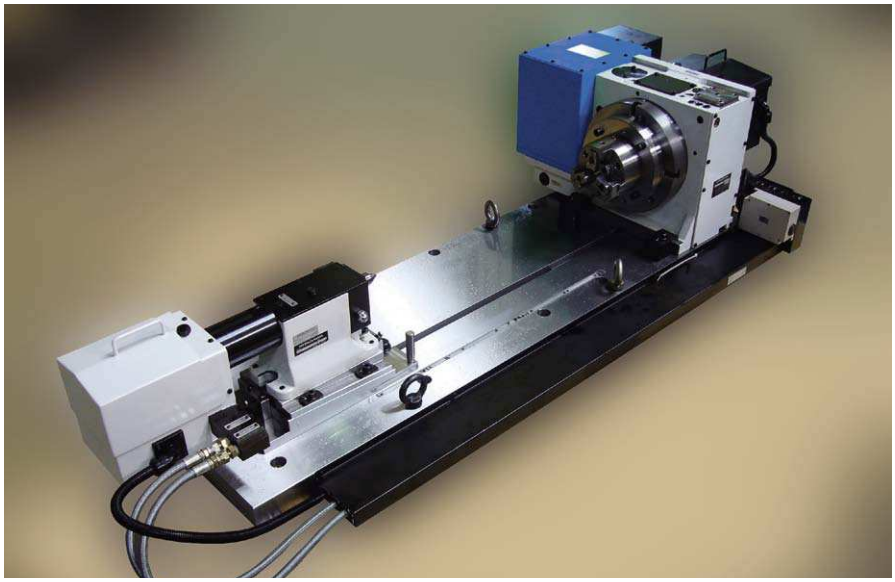
High performance range with high rigidity for heavy cutting

- ●High rigidity for heavy cutting
- ●High accuracy
- ●Integrated air booster provides high clamping torque (comparable to hydraulic) from a standard air supply
- ●Air booster or direct hydraulic clamping options available
- ●Rotary joint options available
- ●Can be used vertically and horizontally
- ●Rotary scale can be fitted to further increase accuracy

＊CE correspondence

TMX160

Sample Application



▲Combine with tailstocks on p75 and 76 to suit machining of long work pieces.

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

4th axis specifications

TMX 160 B ＊＊＊

- TMX 160: Table Size — TMX: 160・200・250 / THX: 160・200
- B: Clamping method — B: Air-Hydraulic (integrated air hydraulic booster) / H: Hydraulic
- ＊＊＊: Design No. / Motor type
- TMX: Type — Right hand: TMX / Left hand: THX

M signal specification

TMX 160 B V ＊＊

- TMX 160: Table Size — TMX: 160・200・250 / THX: 160・200
- B: Clamping method — B: Air-Hydraulic (integrated air hydraulic booster) / H: Hydraulic
- V: Quinte specification
- ＊＊: Design No.
- TMX: Type — Right hand: TMX / Left hand: THX

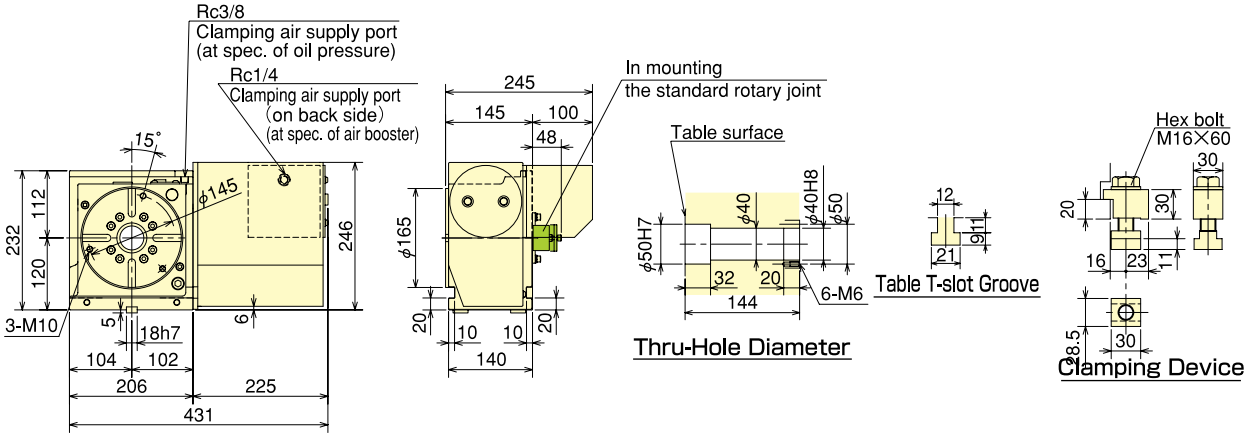
■Specifications

Model		TMX160	TMX200	TMX250
Right hand		○	○	○
Left hand		○	○	×
Table dia (mm)		φ165	φ200	φ250
Register diameter on Face Plate (mm)		φ50H7	φ75H7	φ105H7
Spindle through hole diameter (mm)		φ40	φ52	φ78
Centre Height (mm)		120	140	180
Clamping method		Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic
Clamping torque (N・m) (In pneumatic 0.5MPa/hydraulic 3.5MPa)		450	600	1100
Motor axis reduced inertia (kg・m²)		0.00012	0.00032	0.00056
Servomotor (for FANUC specification)		αiF 2/5000	αiF 4/5000	αiF 4/5000
Gear ratio		1／72	1／90	1／90
Max. spindle speed	FANUC specification (for min^{-1}/motor3000min^{-1})	41.6	33.3	33.3
	M signal specification (for min^{-1}/motor3000min^{-1})	41.6	33.3	33.3
Allowable work inertia (kg・m²)		0.51	1.00	1.95
Indexing accuracy (sec)		20	20	20
Repeatability (sec)		4	4	4
Mass of product (kg)		56	71	101
Manual Tailstock (as an option・P89 reference)		TS160RN	TS200RN	TS250RN
Tail Spindle (as an option・P93 reference)		TSR121A	TSR142A	TSR181A
Rotary Joint (as an option・P97 reference)		RJ40H16D01 Hydraulic/Pneumatic4-port	RJ40H20D03 Hydraulic/Pneumatic4-port	RJ70H25D05 Hydraulic/Pneumatic6-port
Allowable Load	Horizontal (kg) 	160	200	250
	Vertical (kg) 	80	100	125
Allowable load (When clamped to table)	F (kN) 	10	17	21
	FXL (N・m) 	600	1100	1600
	FXL (N・m) 	450	600	1100
Allowable cutting torque	T (N・m) 	240	310	730

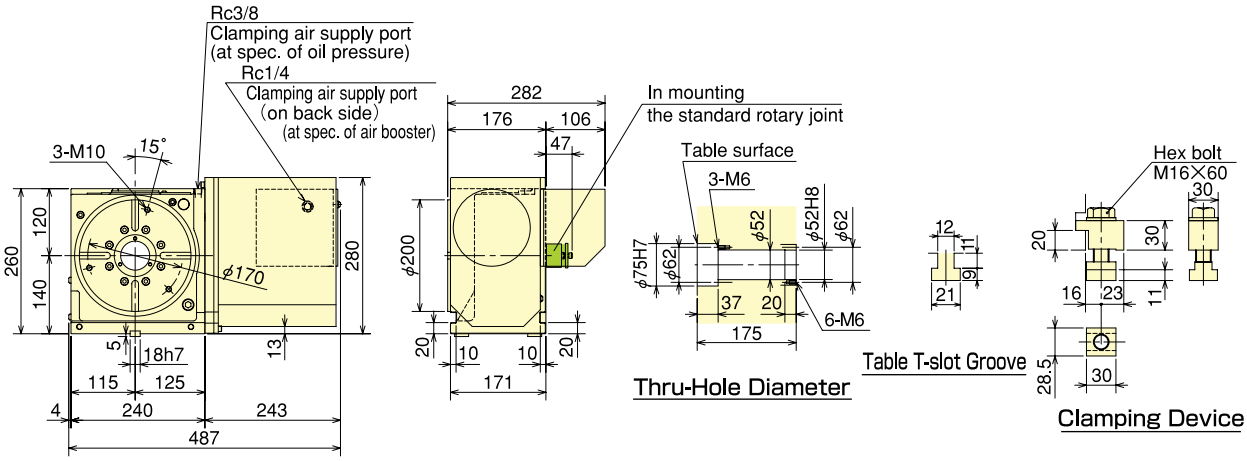
Note) 1. The switch for pressure checking is incorporated to all series except TC/DM of NC tables. 2. In case of air + hyd. clamp specification, the solenoid valve for table clamp is incorporated. 3. Solenoid valve is not incorporated in case of hydraulic clamp spec. Consequently, customer shall prepare it. 4. Neither cable nor hose is fitted between NC rotary table and machine tool... 5. In the port side on a table surface jig side of a rotary joint, TMX200 or 250 is fixed to the rotary table side, and TMX160 to jig side. 6. Because a mounting pitch varies with the machines, refer to the pitch of the table spindle size drawing on P93. 7. Each product mass is determined by a Kitagawa M signal spec.

■Dimensions【4th axis specifications】

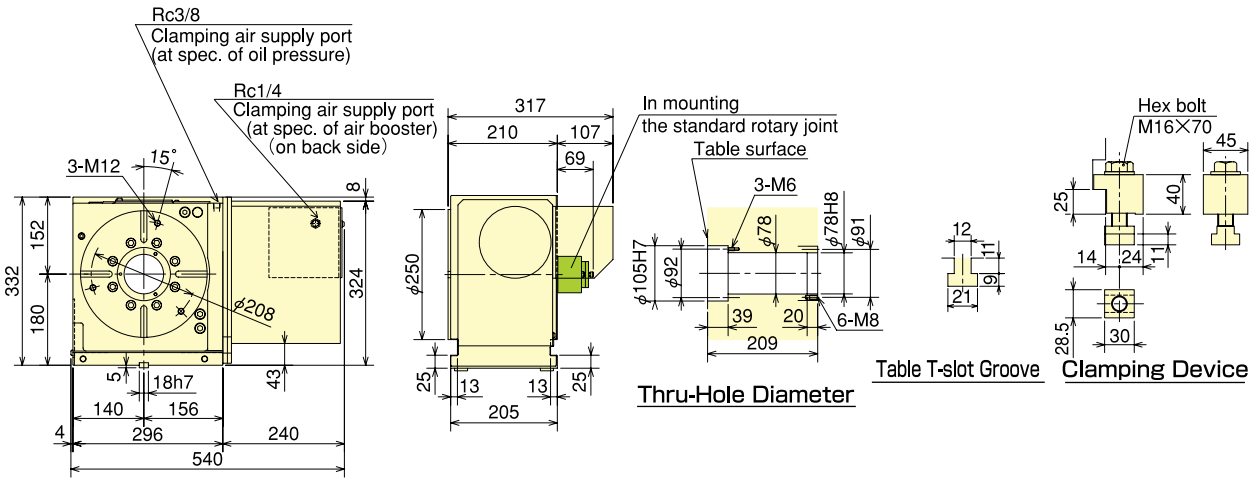
TMX160(THX)



TMX200(THX)



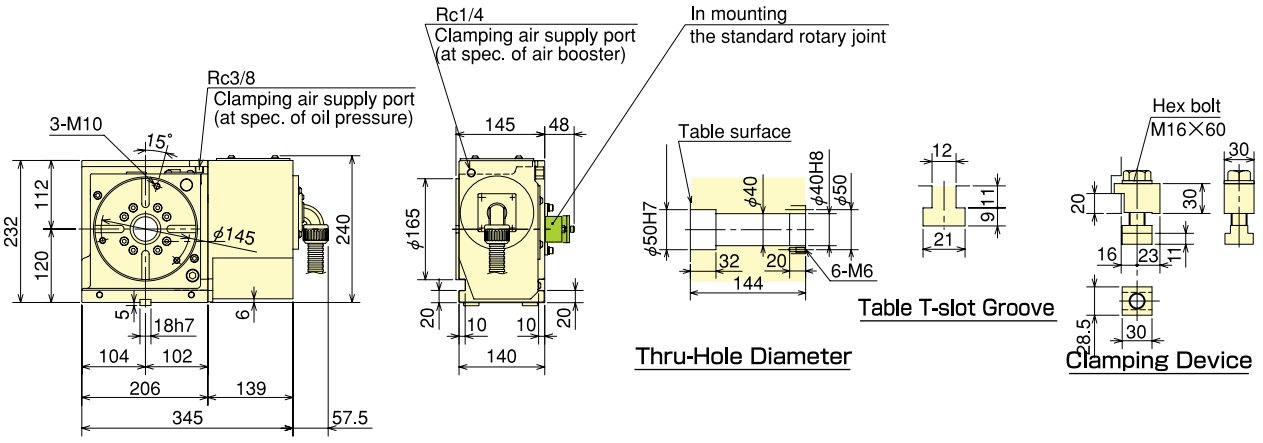
TMX250



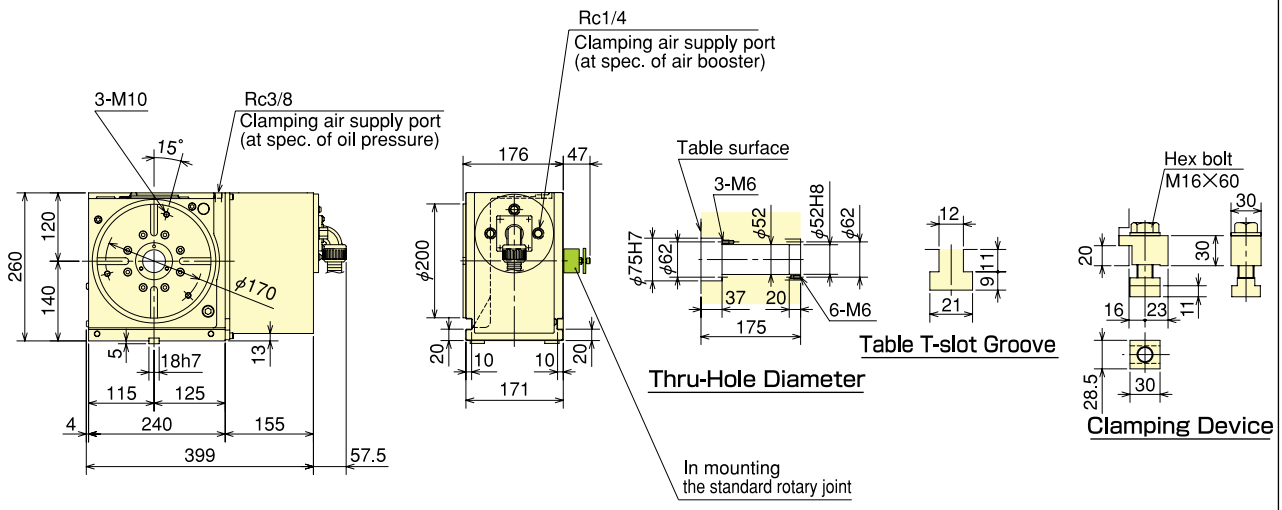
※The above outline dimensions are shown with FANUC motor specifications.
Those dimensions may vary from motor to motor that is mounted.
TMX is a right hand spec. and THX is a left hand spec.

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

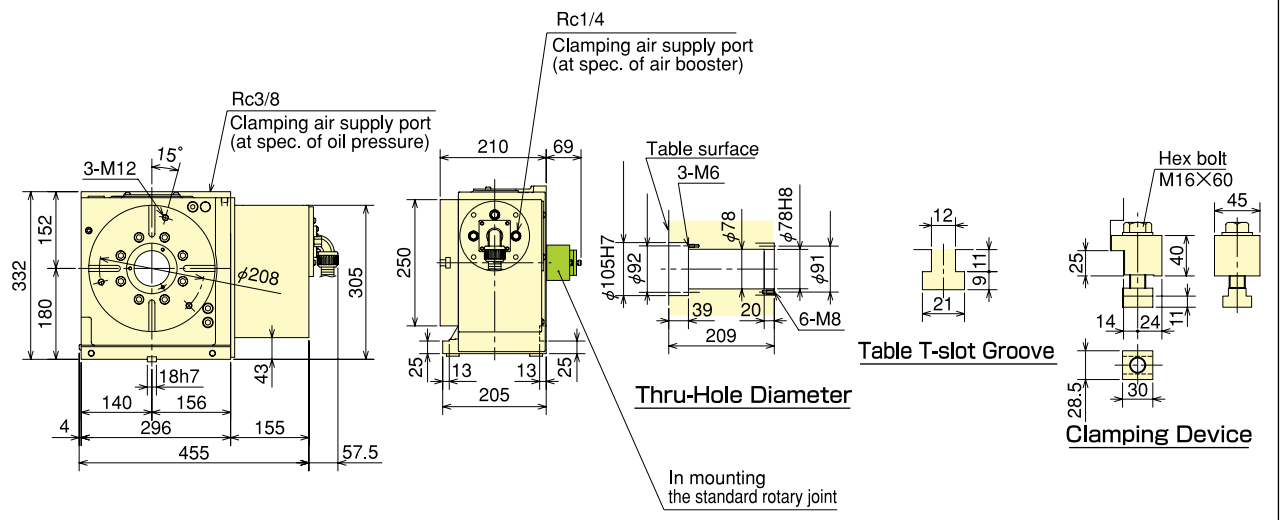
TMX160(THX)



TMX200(THX)



TMX250



※TMX is a right hand spec. and THX is a left hand spec.