

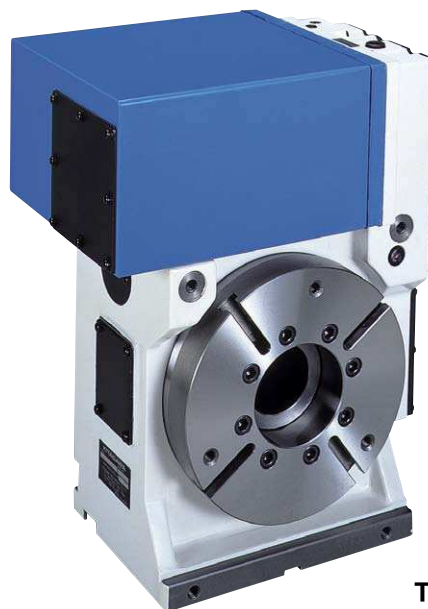


High Performance NC Rotary Table – Top-motor – TU series TUX200·TUX250·TUX320 TU400·TU500

High performance range suitable for 5th axis machining on horizontal machining centres

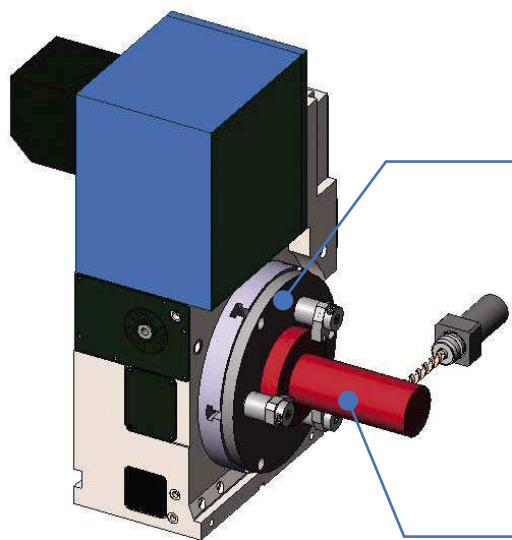
- High rigidity for heavy cutting
- High accuracy
- Top mounted motor position allows optimal machining area for vertical 5 axis machining
- Integrated air booster provides high clamping torque (comparable to hydraulic) from a standard air supply
- Rotary Joint built in as option

* CE correspondence



TUX200

Machining time shortened by high rigidity



● High rigidity

Original Kitagawa cross roller bearing provides high rigidity and allows for high cutting speeds.

● Large through hole

Suitable for machining long work pieces.

4th axis specifications

TUX 200 B * * *

Type Table Size 200·250·320

Design No. Motor type

Clamping method
B: Air-Hydraulic/Hydraulic(integrated air hydraulic booster)
H: Hydraulic

M signal specification

TUX 200 B V * *

Type Table Size 200·250·320

Design No. Quinte specification

Clamping method
B: Air-Hydraulic/Hydraulic (integrated air hydraulic booster)
H: Hydraulic

TU 400 H 4 * * *

Type Table Size 400·500

Design No. Motor type

Gear Ratio
2: 1/180
3: 1/120
4: 1/90

Clamping method
B: Air-Hydraulic/Hydraulic(external air hydraulic booster)
H: Hydraulic

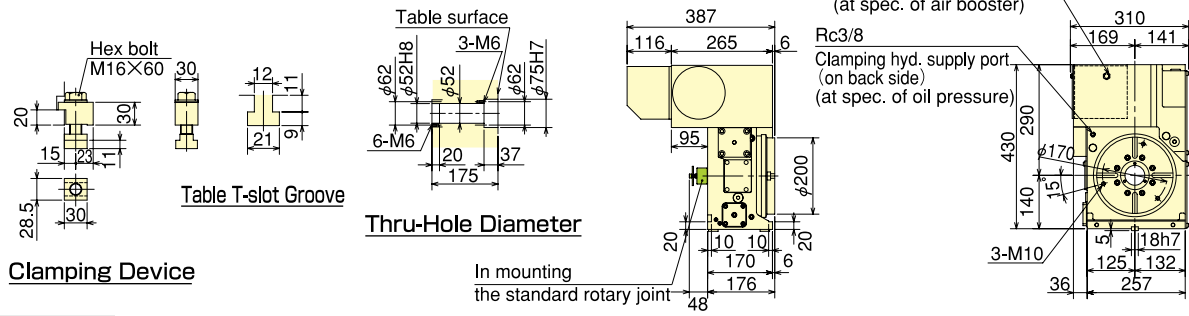
Specifications

Model		TUX200	TUX250	TUX320	TU400	TU500
Table dia (mm)		φ 200	φ 250	φ 320	φ 400	φ 500
Register diameter on Face Plate (mm)		φ 75 H7	φ 105 H7	φ 135 H7	φ 180 H7	φ 210 H7
Spindle through hole diameter (mm)		φ 52	φ 78	φ 110	φ 154	φ 182
Centre Height (mm)		140	180	225	255	310
Clamping method		Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic
Clamping torque (N·m)	(Pneumatic TUX 0.5MPa, TU 0.45MPa) (Hydraulic 3.5MPa)	600	1100	2600	2500	3200
Motor axis reduced inertia (kg·m ²)		0.00055	0.00068	0.00085	0.00293	0.00320
Servomotor (for FANUC specification)		α iF 4/5000	α iF 4/5000	α iF 8/3000	α iF 12/4000	α iF 12/4000
Gear ratio (Decel. Ratio in M signal)		1/90	1/90(1/120)	1/120	1/90	1/120
Max. spindle speed	FANUC specification (for min ⁻¹ /motor 3000min ⁻¹)	33.3(3000min ⁻¹)	33.3(3000min ⁻¹)	25(3000min ⁻¹)	22.2(2000min ⁻¹)	16.6(2000min ⁻¹)
	M signal specification (for min ⁻¹ /motor 3000min ⁻¹)	33.3(3000min ⁻¹)	25(3000min ⁻¹)	25(3000min ⁻¹)	16.6(1500min ⁻¹)	12.5(1500min ⁻¹)
Allowable work inertia (kg·m ²)		0.50	0.98	2.24	5.00	9.38
Indexing accuracy (sec)		20	20	20	20	20
Repeatability (sec)		4	4	4	4	4
Mass of product (kg)		87	142	200	350	550
Manual Tailstock (Option · P89 reference)		TS200RN	TS250RN	TS320RN	TS400RN	TS500RN
Tail Spindle (Option · P93 reference)		TSR142A	TSR181A	TSR181A-45	Order production	Order production
Rotary Joint (Option · P97 reference)		RJ40H20V02 Hydraulic/Pneumatic4-port	RJ70H25V01 Hydraulic/Pneumatic6-port	RJ70H32V01 Hydraulic/Pneumatic6-port	Order production	Order production
Allowable Load	Horizontal (kg)	—	—	—	—	—
	Vertical (kg)	100	125	180	250	300
Allowable load (When clamped to table)	F (kN)	17	21	26	32	50
	FXL (N·m)	1100	1600	2500	5000	8000
	FXL (N·m) (Note 5)	600	1100	2600	2500	3200
Allowable cutting torque	T (N·m)	310	730	1000	1700	2600

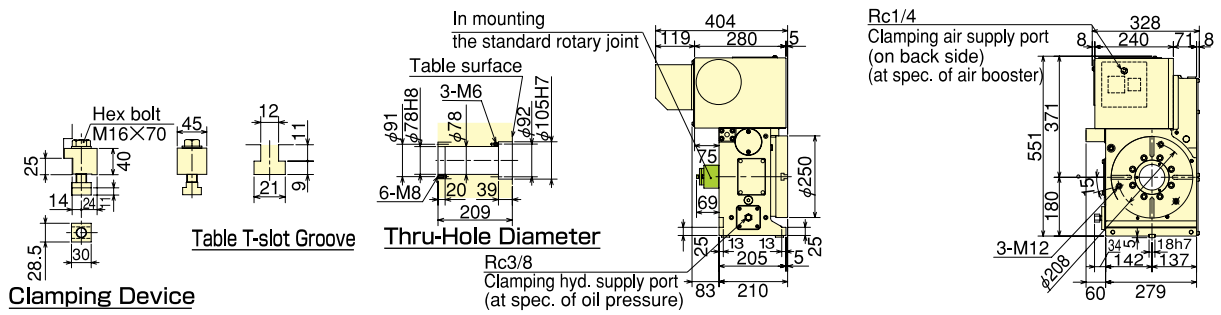
Note) 1. The switch for pressure checking is incorporated to all series except TC/DM of NC tables. 2. In case of air-hydraulic pressure clamp specification, the solenoid valve for table clamp is incorporated. 3. Solenoid valve(s) is (are) not incorporated in case of hydraulic clamp method. Consequently, customer shall prepare it. 4. Neither cable nor hose is fitted between NC rotary table and machine tool... 5. In the port part on the table surface jig side of a rotary joint, each TUX200, 250 or 320 is fixed to the rotary table side. 6. Because a mounting pitch varies with the machines, refer to the pitch of the table spindle size drawing on P93. 7. Contact to Kitagawa about rotary joint and tail spindle of 400-size or more. 8. Each product mass is determined by a Kitagawa M signal spec.

■Dimensions [4th axis specifications]

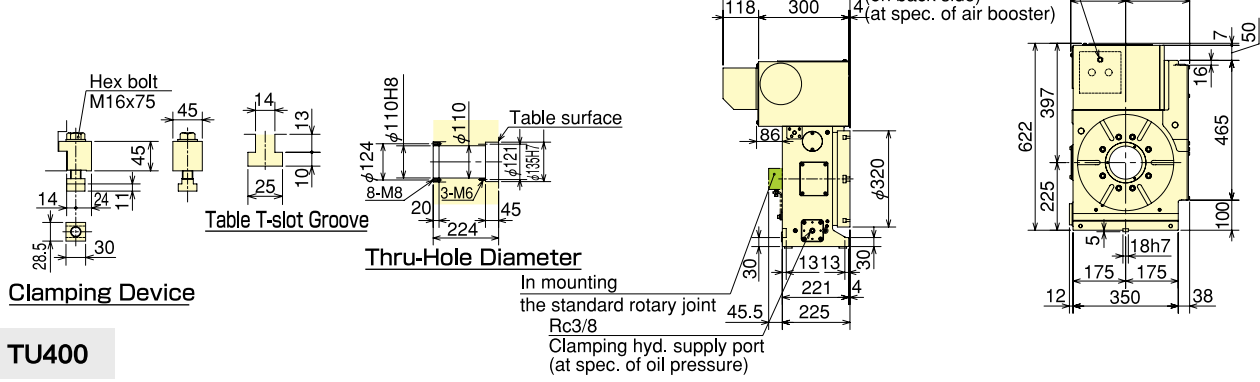
TUX200



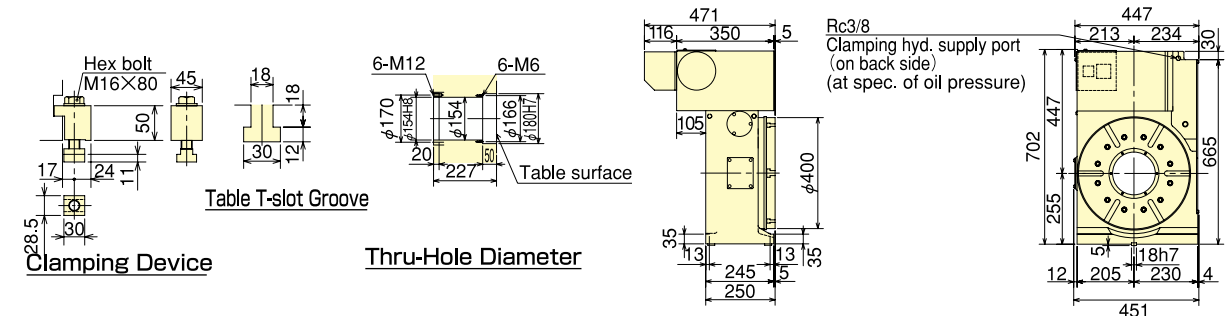
TUX250



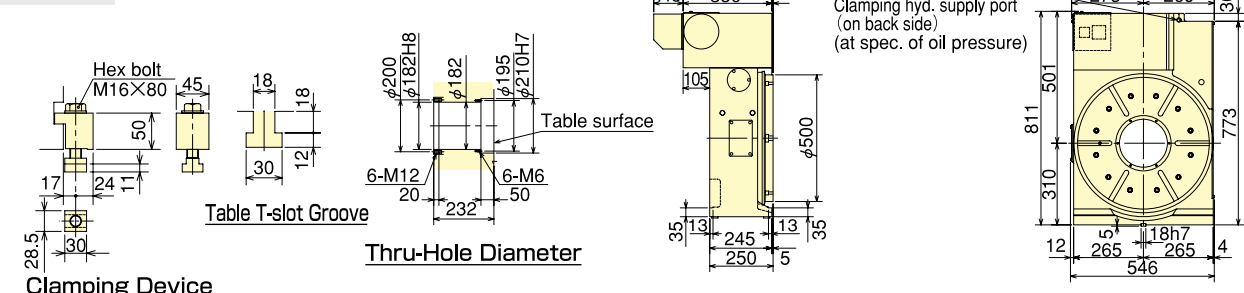
TUX320



TU400



TU500

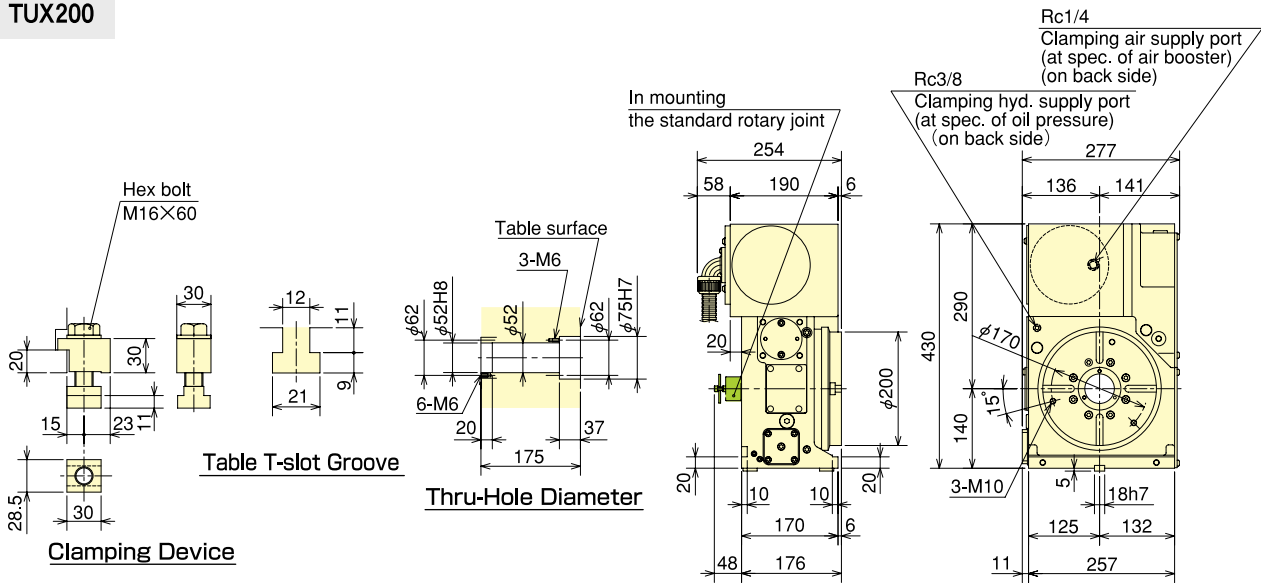


*The above outline dimensions are shown with FANUC motor specifications. Those dimensions may vary from motor to motor that is mounted.

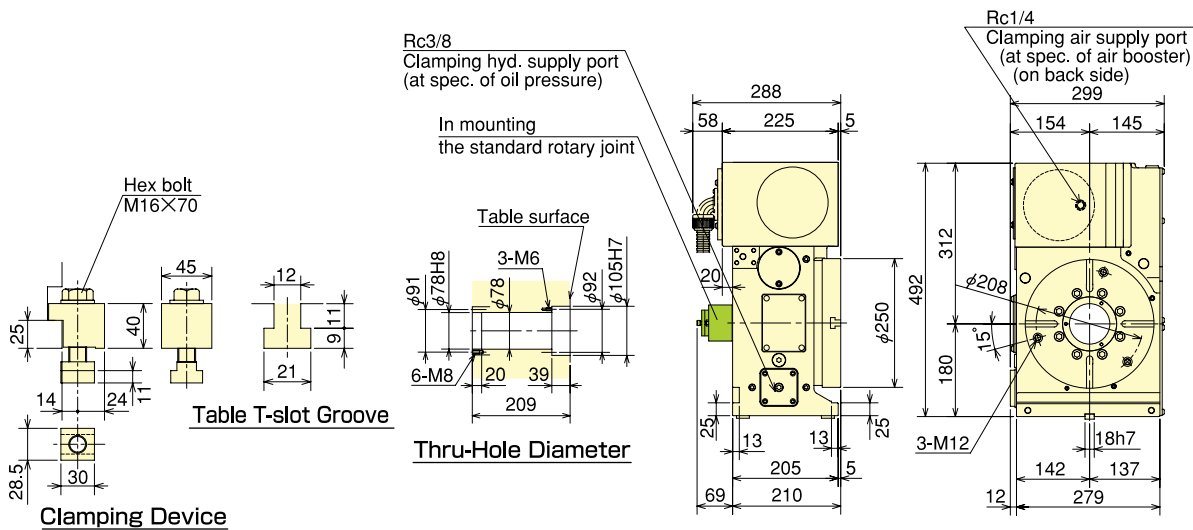
■Dimensions [Kitagawa own controller]

*The dimensions may vary from motor to motor that is mounted.

TUX200



TUX250



TUX320

