



NC ROTARY
TABLE

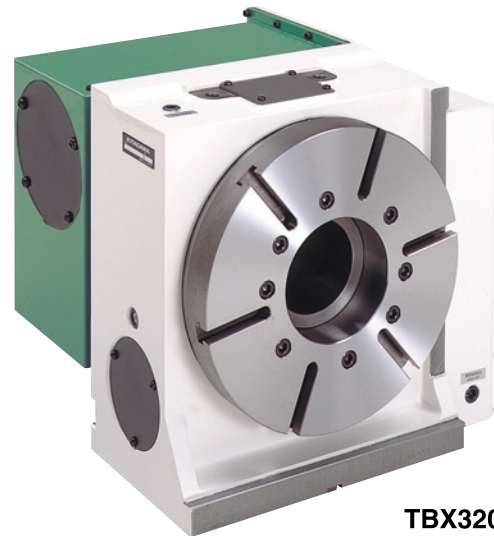
High Performance NC Rotary Table – Back side mounted motor

TBX series

TBX160·TBX200
TBX250·TBX320

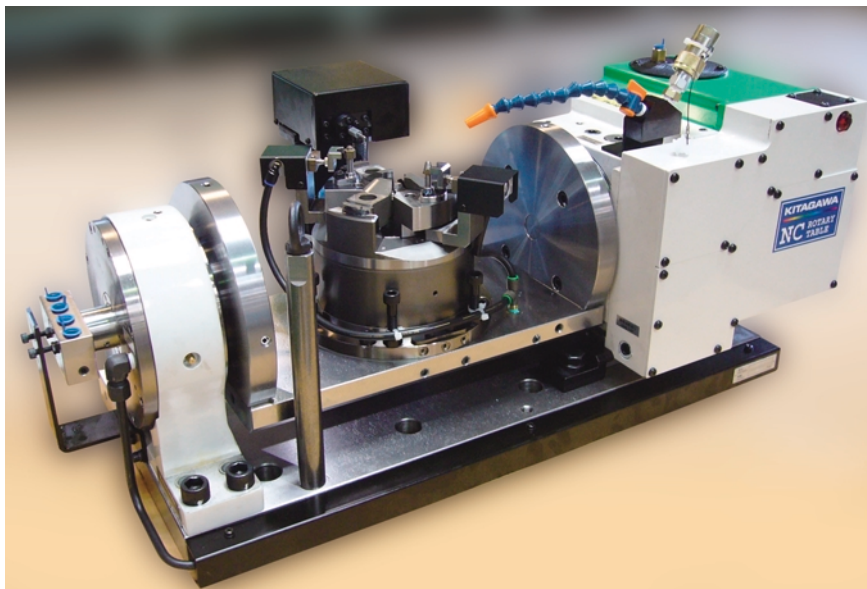
High performance range with back mounted motor to reduce interference with machining area

- High rigidity for heavy cutting
- High accuracy
- Space saving
- Integrated air booster provides high clamping torque (comparable to hydraulic) from a standard air supply
- Air booster or direct hydraulic clamping options available



TBX320

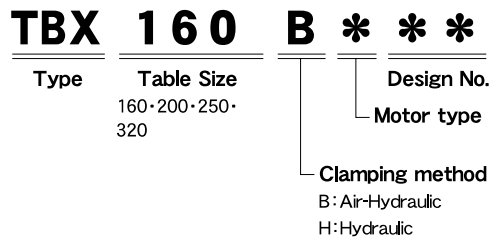
Sample Application



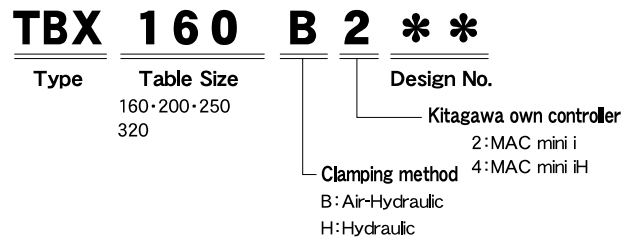
▲Space saving design reduces footprint size.

TBX







4th axis specifications



M signal specification



■ specifications

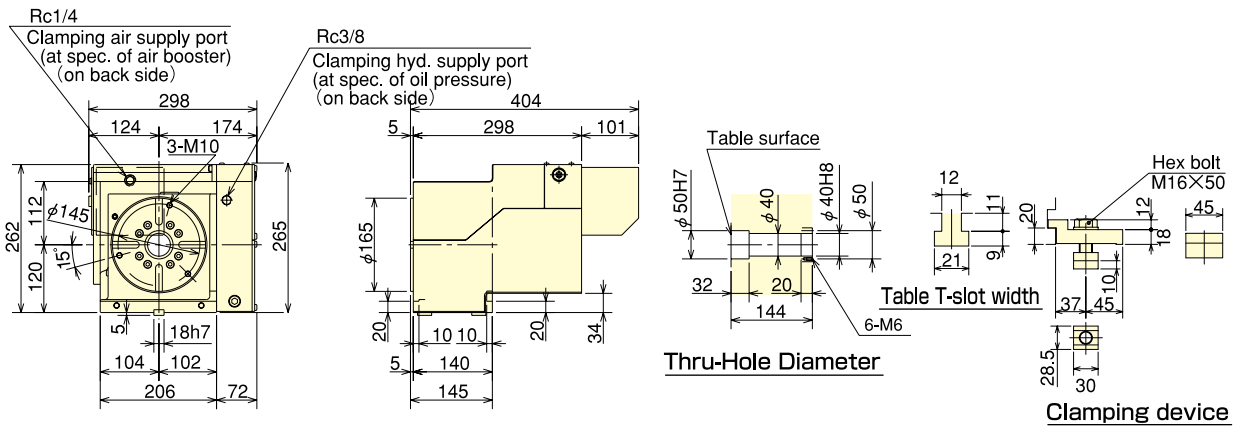
Model		TBX160	TBX200	TBX250	TBX320
Table dia (mm)		φ 165	φ 200	φ 250	φ 320
Register diameter on Face Plate (mm)		φ 50 H7	φ 75 H7	φ 105 H7	φ 135 H7
Spindle through hole diameter (mm)		φ 40	φ 52	φ 78	φ 110
Centre Height (mm)		120	140	180	225
Clamping method		Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic
Clamping torque (N·m) (In Pneumatic 0.5MPa / Hydraulic 3.5MPa)		450	600	1100	2600
Motor axis reduced inertia (kg·m ²)		0.00032	0.00087	0.00112	0.00147
Servomotor (for FANUC specification)		α iF 2/5000	α iF 4/4000	α iF 4/4000	α iF 8/3000
Gear ratio (Decel. Ratio in M signal)		1/72	1/90	1/90 (1/120)	1/120 (1/180)
Max. spindle speed	FANUC specification (for min ⁻¹ /motor 3000min ⁻¹)	41.6	33.3	33.3	25
	M signal specification (for min ⁻¹ /motor 3000min ⁻¹)	41.6	33.3	25	16.6
Allowable work inertia (kg·m ²)		0.26	0.50	0.98	2.24
Indexing accuracy (sec)		20	20	20	20
Repeatability (sec)		4	4	4	4
Mass of product (kg)		66	74	135	220
Manual Tailstock (as an option · p69 reference)		TS160RN	TS200RN	TS250RN	TS320RN
Tail Spindle (as an option · p71 reference)		TSR121A	TSR142A	TSR180A	TSR180A-45
Allowable load	Horizontal (kg) 	—	—	—	—
	Vertical (kg) 	80	100	125	180
Allowable load	F (kN) 	10	17	21	26
	FXL (N·m) 	600	1100	1600	2500
	FXL (N·m) 	450	600	1100	2600
Allowable cutting torque	T (N·m) 	240	310	730	1000

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. Neither cable nor hose is fitted between NC rotary table and machine tool... 4. Solenoid valve is not incorporated in case of hydraulic clamp method. Consequently, customer shall prepare it. 5. Because a mounting pitch varies with the machines, refer to the pitch of the table spindle size drawing on P71. 6. Each product mass is determined by a Kitagawa M signal spec.

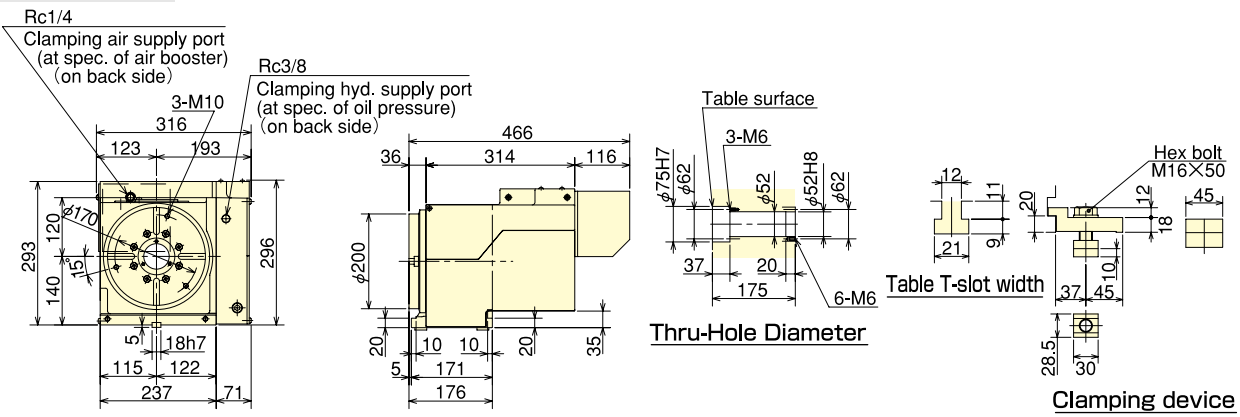
TBX

■Dimensions [4th axis specifications]

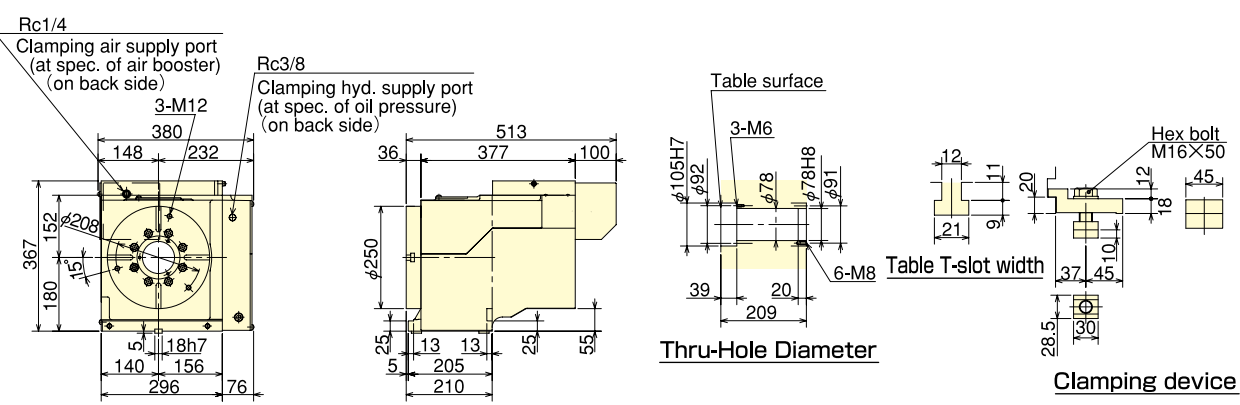
TBX160



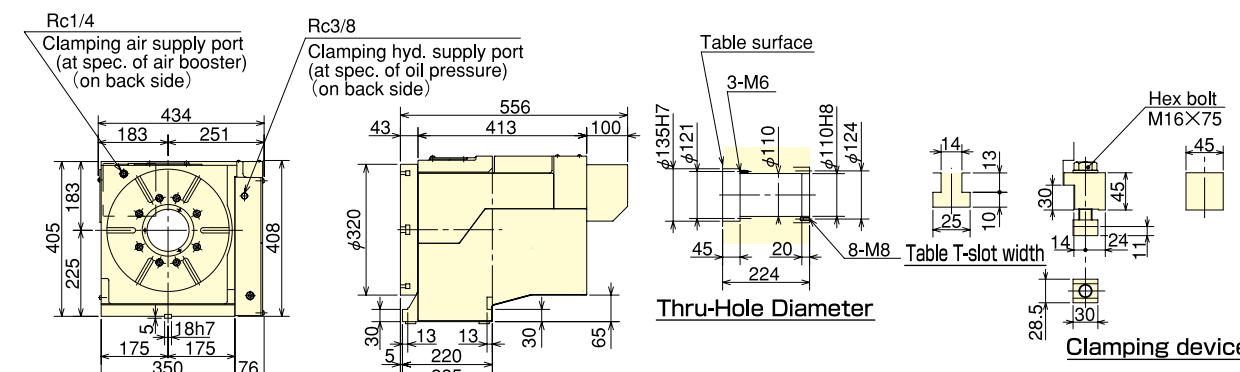
TBX200



TBX250



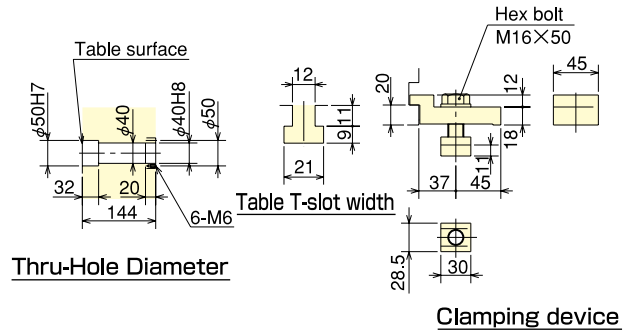
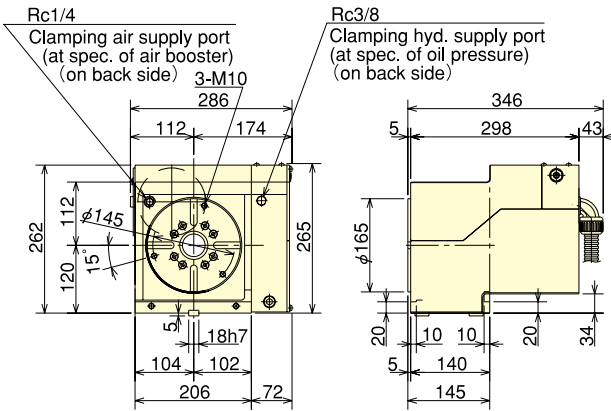
TBX320



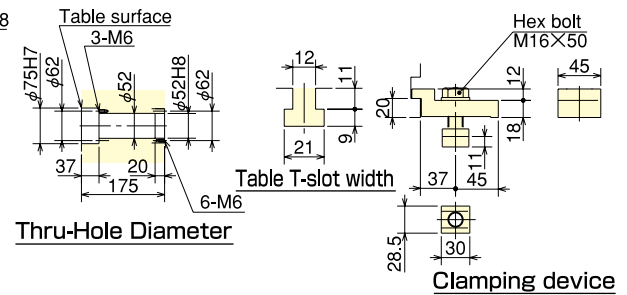
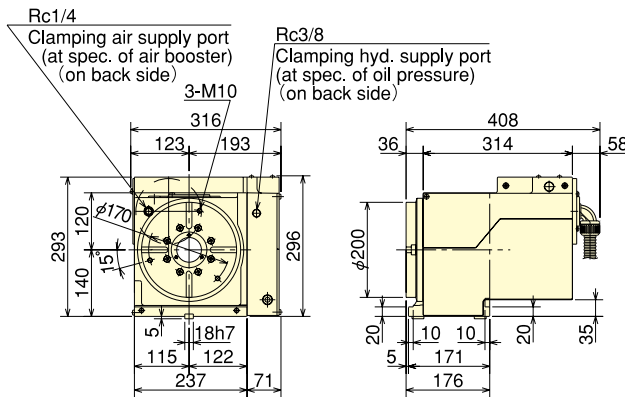
※The above outline dimensions are shown with FANUC motor specifications. In case of specifications with other makers, the dimensions may differ in length.

■Dimensions [Kitagawa own controller]

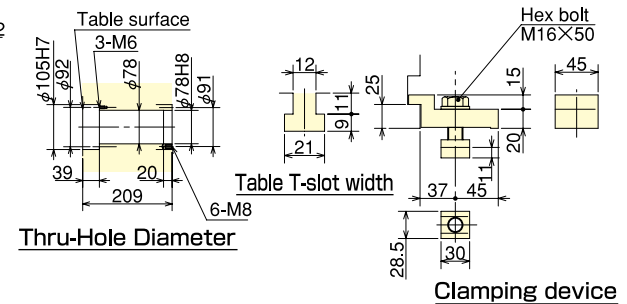
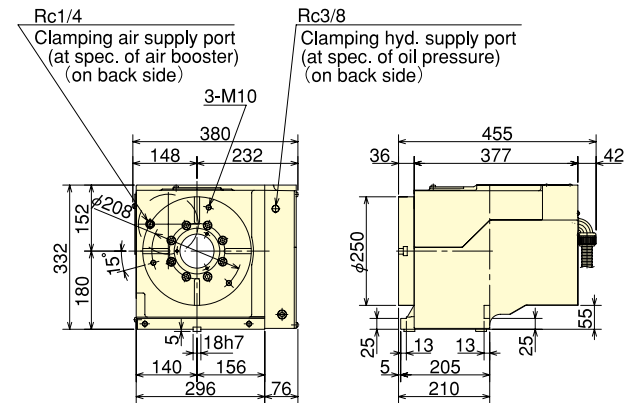
TBX160



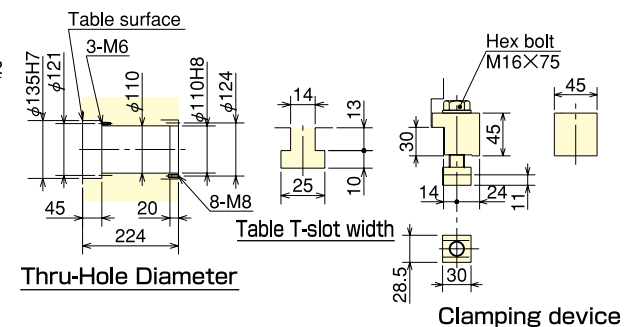
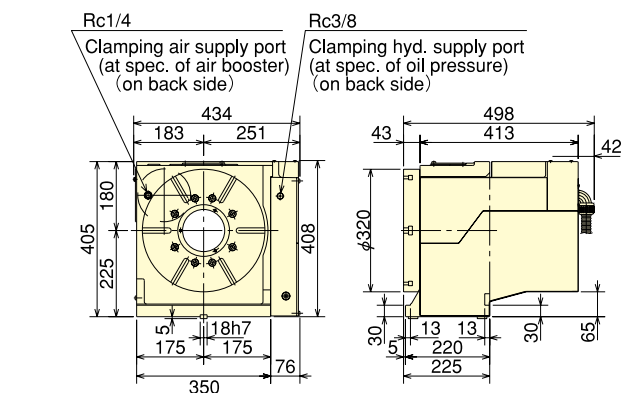
TBX200



TBX250



TBX320



TBX