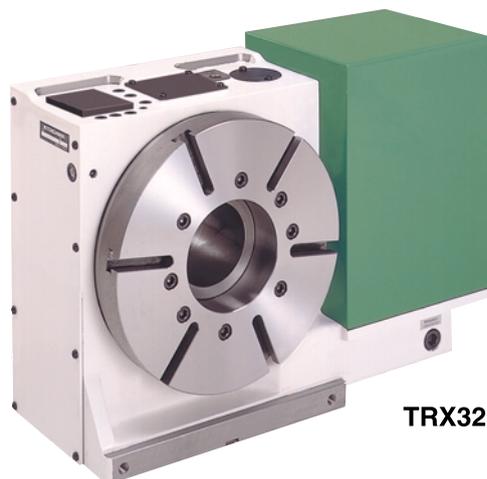


NC ROTARY TABLE

High Performance NC Rotary Table – Side motor mounted, Vertical or Horizontal Usage –
TR series TRX320·TR400·TR500·TR630
TLX250·TLX320·TL400

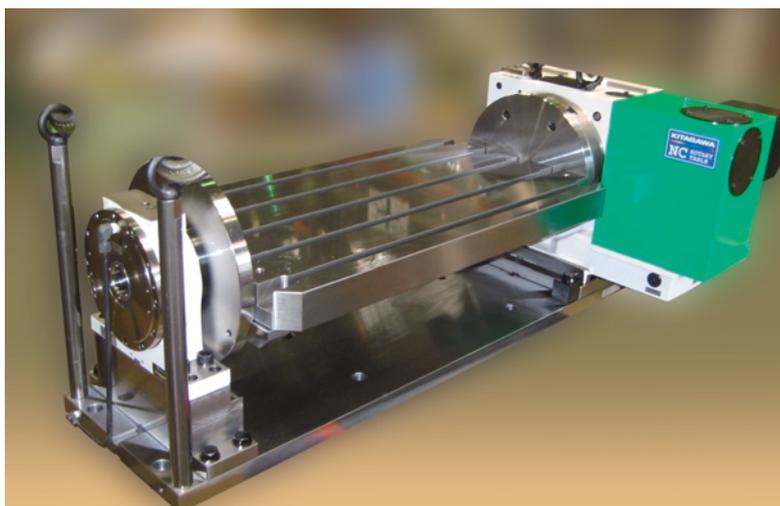
High performance range for machining large work pieces

- High rigidity for heavy cutting
- Hydraulic clamping method
- High accuracy
- Rotary joint options available
- Vertically and horizontally installed type
- Large thru-hole
- Vertical mounted motor
- Rotary scale can be fitted to further increase accuracy

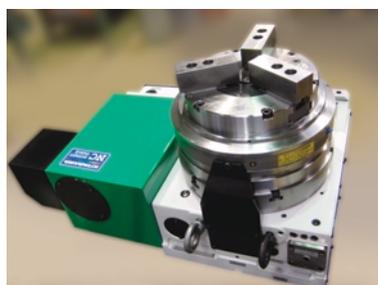


TRX320

Sample Application



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



▲ Can be used vertically and horizontally. Left and right hand versions available to suit machining area.

TR

4th axis specifications			M signal specification		
TRX 320 H * * *	<p>Table Size TRX: 320 TLX: 250·320</p> <p>Type Right hand: TRX Left hand: TLX</p>	<p>Design No.</p> <p>Motor type</p> <p>Clamping method B: Air-Hydraulic H: Hydraulic</p>	TRX 320 B 2 * *	<p>Table Size TRX: 320 TLX: 250·320</p> <p>Type Right hand: TRX Left hand: TLX</p>	<p>Design No. Kitagawa own controller 2: MAC mini i 4: MAC mini iH</p> <p>Clamping method B: Air-Hydraulic H: Hydraulic</p>
TR 400 H 2 * * *	<p>Table Size TR: 400·500·630 TL: 400</p> <p>Type Right hand: TR Left hand: TL</p>	<p>Design No.</p> <p>Motor type</p> <p>Clamping method B: Air-Hydraulic H: Hydraulic</p>	TR M 400 H 7 * *	<p>Table Size TR: 400·500·630 TL: 400</p> <p>Type Kitagawa own controller</p>	<p>Design No. Kitagawa own controller 7: MAC mini iHP</p> <p>Clamping method B: Air-Hydraulic H: Hydraulic</p>

Specifications

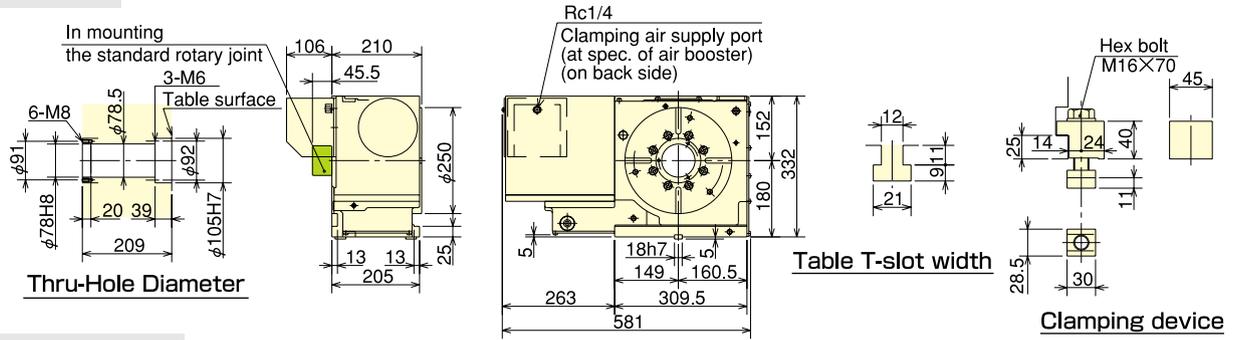
Model		TLX250	TRX320	TR400	TR500	TR630
Right hand		×	○	○	○	○
Left hand		○	○	○	×	×
Table dia (mm)		φ 250	φ 320	φ 400	φ 500	φ 630
Register diameter on Face Plate (mm)		φ 105H7	φ 135H7	φ 180H7	φ 200H7	φ 280H7
Spindle through hole diameter (mm)		φ 78	φ 110	φ 150	φ 170	φ 250
Centre Height (mm)		180	225	255	310	400
Clamping method		Air-Hydraulic/Hydraulic	Air-Hydraulic/Hydraulic	Hydraulic	Hydraulic	Hydraulic
Clamping torque (N·m) (Pneumatic 0.5MPa / Hydraulic 3.5MPa)		1100	2600	2500	3200	4000
Motor axis reduced inertia (kg·m ²)		0.00073	0.00085	0.0028	0.0028	0.0064
Servomotor (for FANUC specification)		α iF 4/4000	α iF 8/3000	α iF 12/3000	α iF 12/3000	α iF 22/3000
Gear ratio (Decel. Ratio in M signal)		1/90(1/120)	1/120(1/180)	1/180	1/180	1/180
Max. spindle speed	FANUC specification (min ⁻¹)	33.3(3000min ⁻¹)	25 (3000min ⁻¹)	11.1(2000min ⁻¹)	11.1(2000min ⁻¹)	11.1(2000min ⁻¹)
	M signal specification (min ⁻¹)	25 (3000min ⁻¹)	16.6(3000min ⁻¹)			
Allowable work inertia (kg·m ²)		1.95	4.48	10.00	18.73	49.62
Indexing accuracy (sec)		20	20	20	20	20
Repeatability (sec)		4	4	4	4	4
Mass of product (kg)		142	196	350	550	900
Manual Tailstock (as an option · P69 reference)		TS250RN	TS320RN	TS400RN	TS500RN	TS630RN
Tail Spindle (as an option · P71 reference)		TSR180A	TSR180A-45	Order production	Order production	Order production
Rotary Joint (as an option · P75 reference)		RJ70H25D05 Hydraulic/Pneumatic6-port	RJ70H32K02 Hydraulic/Pneumatic6-port	Order production	Order production	Order production
Allowable Load	Horizontal (kg)	250	350	500	600	1000
	Vertical (kg)	125	180	250	300	400
Allowable load	F (kN)	21	26	32	50	70
	F _{XL} (N·m)	1600	2500	5000	8000	10000
	F _{XL} (N·m)	1100	2600	2500	3200	4000
Allowable cutting torque	T (N·m)	730	1000	1700	2600	5000

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 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, TRX320 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 P71. 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.

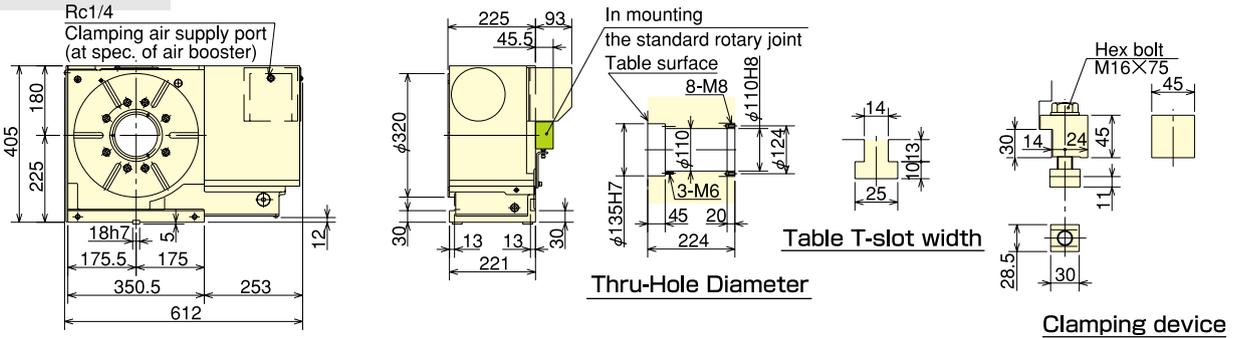
TR

■ Dimensions [4th axis specifications]

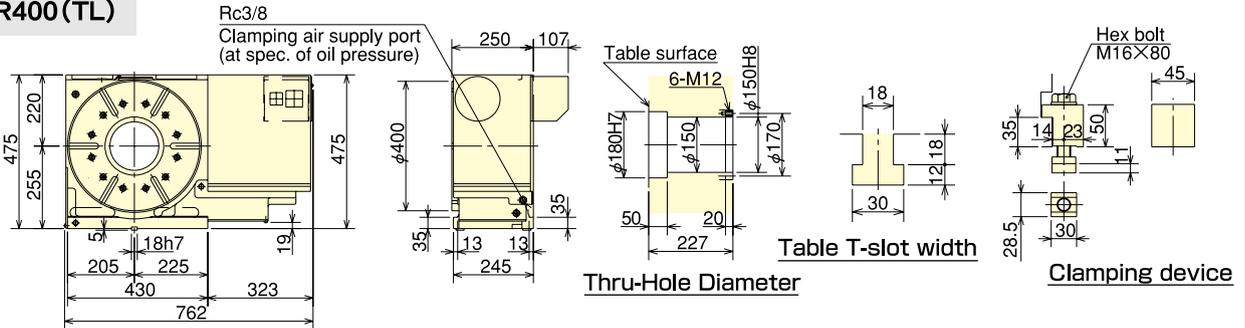
TLX250



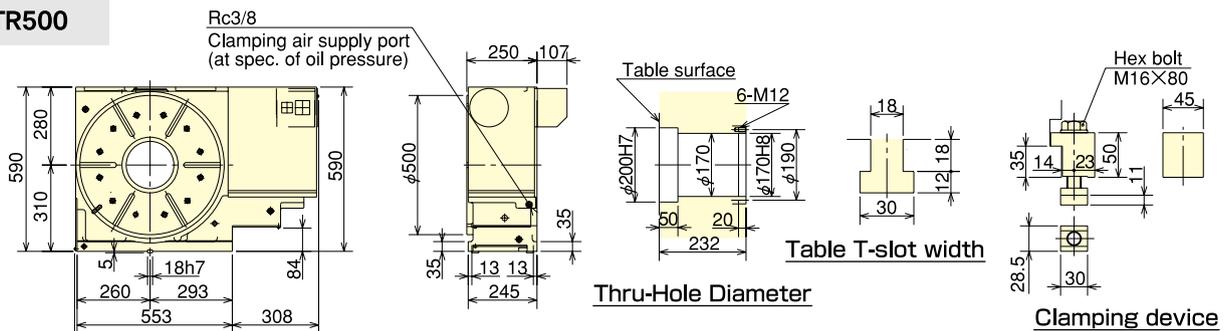
TRX320(TLX)



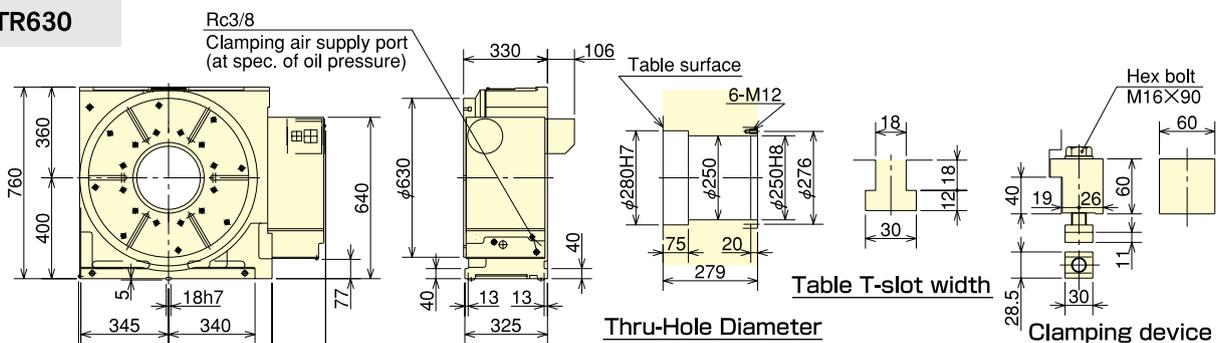
TR400(TL)



TR500



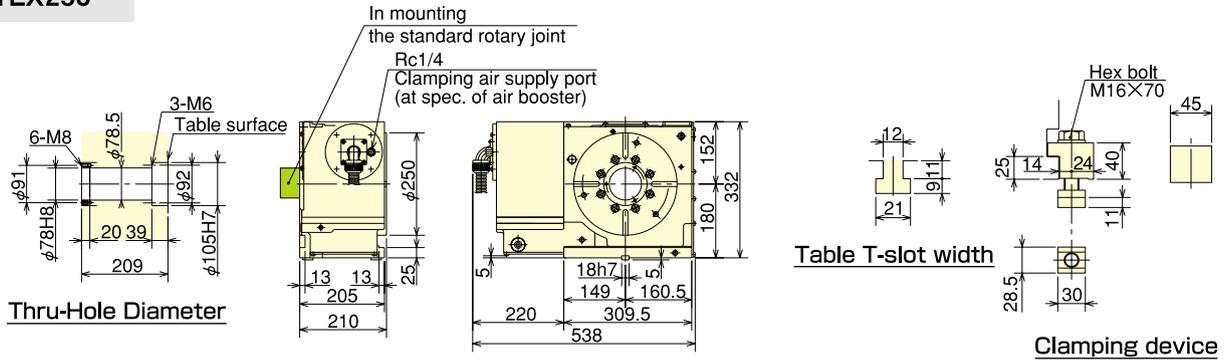
TR630



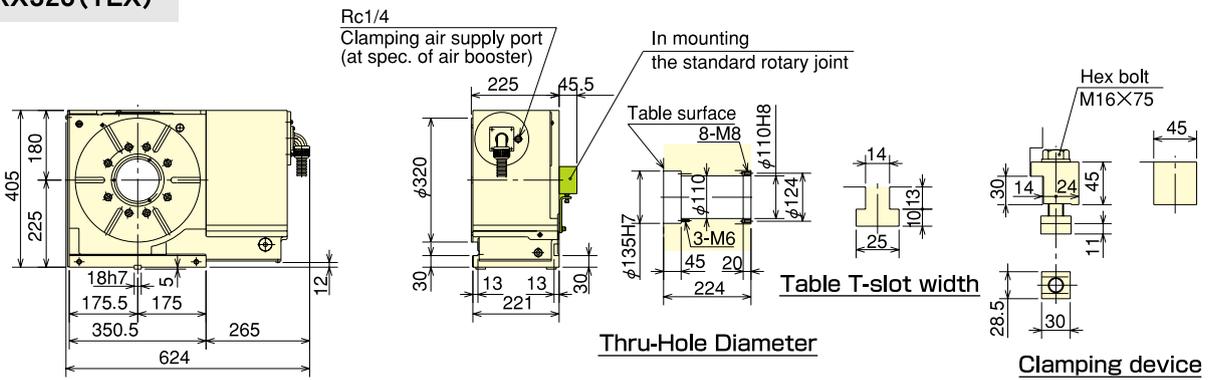
*The above outline dimensions are shown with FANUC motor specifications.
In case of specifications with other makers, the dimensions may differ in length.
TR·TRX : motor position on Right Hand side. TL·TLX : motor position on Left Hand side.

■Dimensions [Kitagawa own controller]

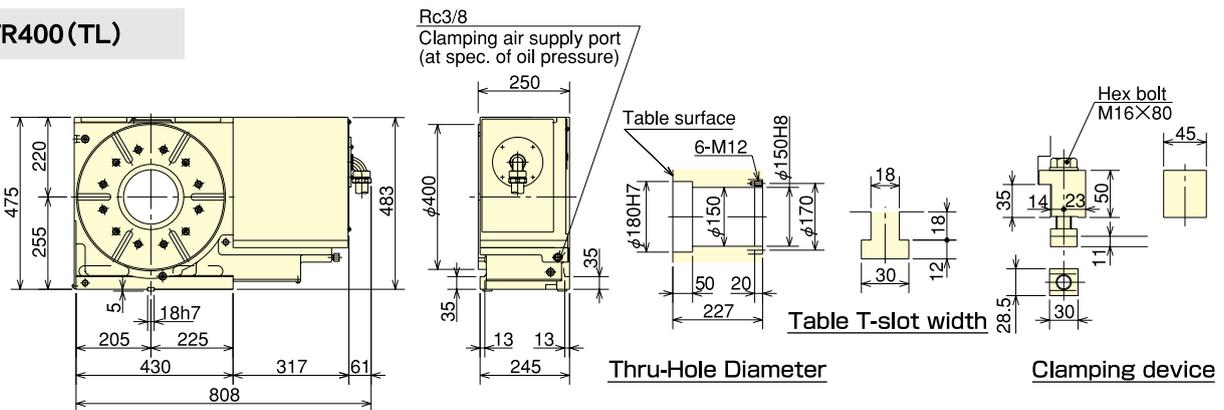
TLX250



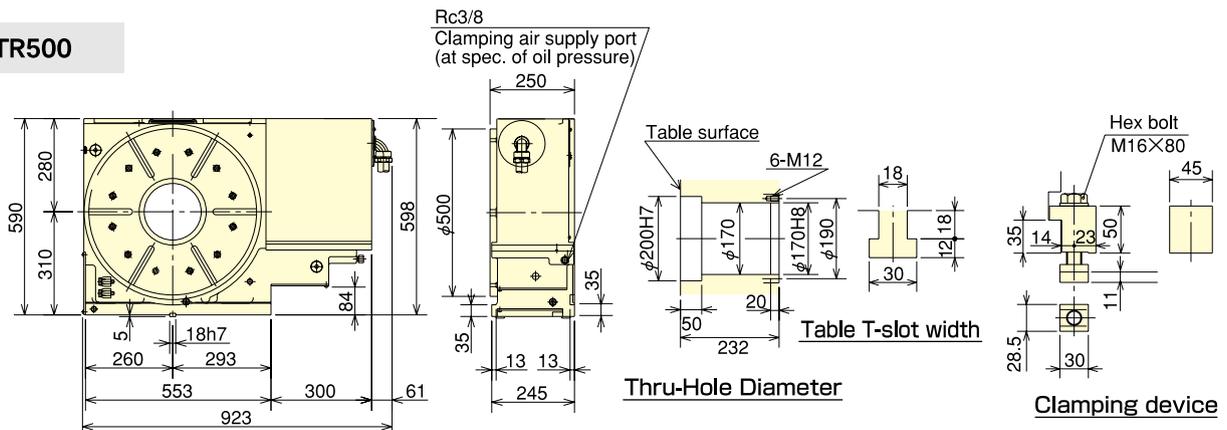
TRX320(TLX)



TR400(TL)



TR500



※TR · TRX : motor position on Right Hand side. TL · TLX : motor position on Left Hand side.
 ※Contact to Kitagawa on TR630 with MAC mini i Series. Kitagawa about M signal spec. of 630-size.