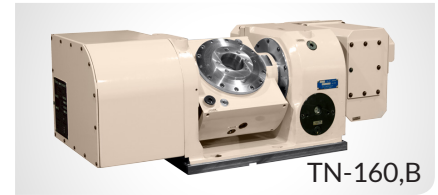




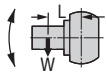

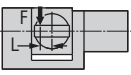

TN-160,B / 201,B

NARROW FOOTPRINT

The TN,B-Series tilting rotary tables feature a narrow footprint, powerful dual taper clamping, and a -30° ~ +110° tilt range. They are space saving rotary tables for narrow machining centers.



TN-160,B

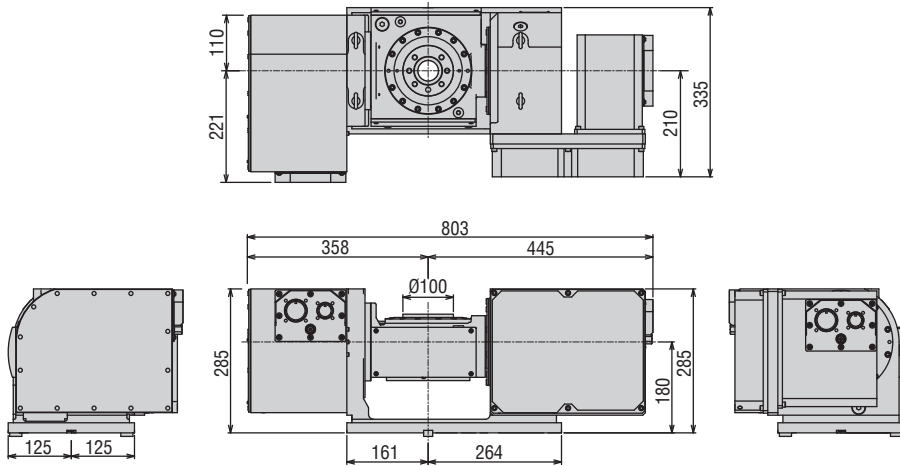
Model		TWA-160,B		TWA-200,B	
Tilt Range		-30° ~ +110°		-30° ~ +110°	
Spindle outer diameter		mm	100h7	120h7	
Table diameter (optional)		mm	160 (200)	200 (250)	
Table height at 0° position		mm	235 (260 w/ face plate)	270 (300 w/ face plate)	
Center height at 90° position		mm	180	210	
Center bore	Nose Diameter (w/ face plate)	mm	55H7 (50H7)	65H7 (60H7)	
	Thru Diameter	mm	40	45	
Table T-slot width		12H8 (w/ face plate)		12H8 (w/ face plate)	
Guide block width		18h7		18h7	
Servo motor (Fanuc)*		Rotary	Tilt	Rotary	Tilt
		Alpha 2i	Alpha 2i	Alpha 4i	Alpha 4i
Maximum motor speed		rpm	5,000	5,000	5,000
Speed reduction ratio			1/72	1/120	1/45
Maximum table speed		rpm	69.4	41.7	111.1
Clamp system			Pneumatic Dual Taper	Pneumatic Dual Taper	Pneumatic Dual Taper
Clamp torque @72psi		Nm (ft. lbs.)	500 (369)	800 (590)	800 (590)
Indexing accuracy		arc sec.	±15	-	±15
Tilting accuracy		arc sec.	-	±22.5	-
Net Weight		kg (lbs.)	127 (279)	190 (418)	
Allowable wheel torque - rotary		Nm (ft. lbs.)	200 (147)	450 (332)	
Allowable work inertia		kg·m ²	.19	.59	
Allowable work weight	0° tilt angle	 kg (lbs)	60 (132)	120 (264)	
	0° ~ 90° tilt angle	 kg (lbs)	40 (88)	70 (154)	
Allowable work moment	 Nm (ft. lbs.)	39.2 (28.9)	53.7 (39.6)		
Allowable load when table clamped	 N (lbf)	7,840 (1,756)	13,720 (3,073)		
	 Nm (ft. lbs.)	500 (369)	800 (590)		
	 Nm (ft. lbs.)	800 (590)	1,000 (737)		

* Other motors & RPM available • Specifications subject to change without notice

Dimensions

Drawings not to scale • Dimensions = mm

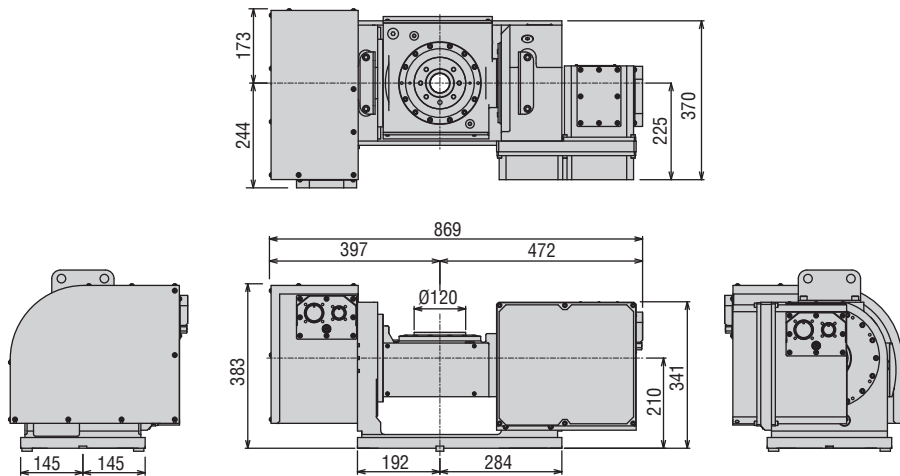
TN-160,B



OPTIONAL TPC-Jr
NC Controller



TN-200,B

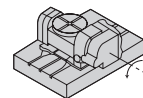


Options & Accessories

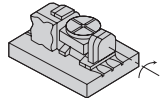
TPC NC Controller	p.68
Chucks	p.79
Tailstock	p.81
Support Spindle	p.81
Face Plate	p.83
Encoder / Scale	p.84
Pull Stud Device	p.85
Rotary Joint	p.85
PVC or Steel Cables	p.86

The dimensions above are for tables with a FANUC servo motor. Other motors available (dimensions may increase).

Layout a



Layout b



Clamping Block and Bolt

Dimensions = mm

	Type	Q'ty	Layout	T-Slot Width	A	B	C	D	E	F	G	H	I	J	K	L	M
TWA-160,B	I	4	a b	14	20	12	70	10	35	25	20	12	8	50	35	23	12
TWA-200,B	I	4	a b	18	25	12	80	12	33	35	22	21	11	65	40	28	16

Note 1: In the case of layout B, contact us for details about mounting.

Note 2: When using a machine with a T-slot pitch other than the above, use suitable clamping blocks and bolts that are available on the market, or order custom-made ones from KOMA (opt.)

Type I

