

Standard type

TWA/TN

TWA-100•130•160•200 TN-450



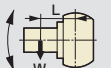

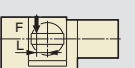
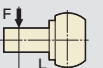

Compact tables for speedy and powerful five-axis machining. TWA-100 and TWA-130 are the most suitable models for drilling and tapping machines.






TWA-130

Unit: mm

Specifications

		TWA-100	TWA-130	TWA-160	TWA-200	TN-450
Tilt range		-17° to +107°	-17° to +107°	-30° to +110°	-30° to +110°	-10° to +95°
Spindle diameter		φ86h7	φ90h7	φ100h7	φ120h7	—
Table diameter		φ135 (Option)	φ135 (Option)	φ160 or 200 (Option)	φ200 or 250 (Option)	φ450
Table height at 0° position		180 (205 w/face plate)	210 (235 w/face plate)	235 (260 w/face plate)	270 (300 w/face plate)	425
Center height at 90° position		135	150	180	210	425
Center bore	Nose diameter	φ55H7 (φ40H7 w/face plate)	φ55H7 (φ40H7 w/face plate)	φ55H7 (φ50H7 w/face plate)	φ65H7 (φ60H7 w/face plate)	φ170H7
	Through-bore	φ35	φ37	φ40	φ45	φ136
Table T-slot width		12H8 (w/face plate)	12H8 (w/face plate)	12H8 (w/face plate)	12H8 (w/face plate)	14H7
Guide block width		14 h 7	14 h 7	18 h 7	18 h 7	18 h 7
Servo motors (for FANUC)	Rotary axis	αiS2	αiS2	αiS2	αiS2	αiF22
	Tilt axis	αiS2	αiS2	αiS2	αiS2	αiF22
Inertia converted into motor shaft	× 10 ⁻³ kg·m ²	0.072	0.078	0.074	0.17	0.18
Speed reduction ratio		1/60	1/120	1/60	1/120	1/45
Table max. rpm	min ⁻¹	41.6 (Motor rpm: 2,000min ⁻¹)	16.6	41.6 (Motor rpm: 2,500min ⁻¹)	16.6	27.7
						16.6
Clamp system	Supplied pressure	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
Clamp torque	/ pneumatic pressure 0.49MPa-hydraulic pressure 3.5MPa N·m	200	300	500	500	800
Indexing accuracy (the sum)	arcsec	40	—	40	—	30
Tilting accuracy (the sum)	Tilt 0° to 90°	arcsec	—	45	—	45
			—	45	—	45
Net weight	kg	75	85	135	195	1,200
Allowable work weight	0° (Horizontal)	 kg	35	35	60	120
	0° to 90° (Tilting)	 kg	20	20	40	70
Allowable work moment	W×L	 N·m	24	24	39.2	53.7
	F	 N	3,920	3,920	7,840	13,720
Allowable load (when table is clamped)	F×L	 N·m	200	500	500	800
	F×L	 N·m	300	500	800	1,000
Allowable work inertia	$J = \frac{W \cdot D^2}{8}$	 kg·m ²	0.08	0.08	0.19	0.59

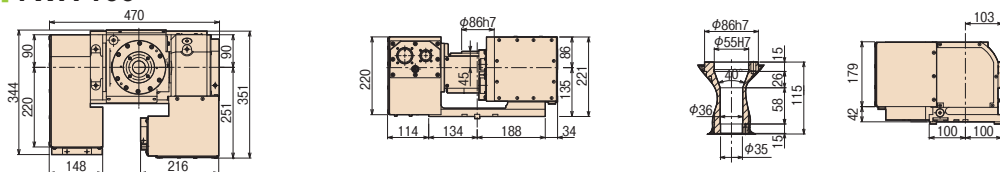
CE correspondence model (excluding TN)

-  Servo motors of other manufacturers **P.70** When assembling a faceplate or a fixture with the main spindle **P.81**
-  Workpiece mounting space for tilting rotary tables **P.72**
-  High-precision Spec. **P.66** Pull Stud **P.68** Rotary Joint **P.68**

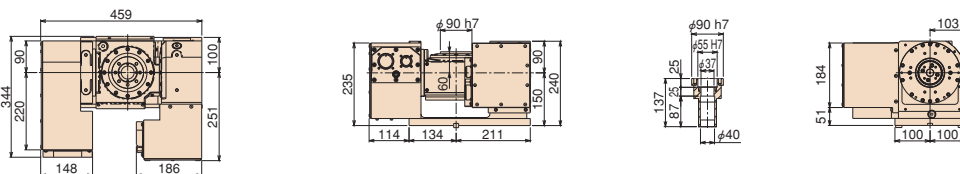
Dimensions

Unit: mm

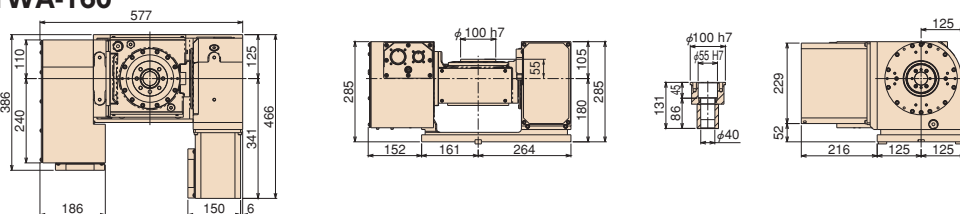
TWA-100



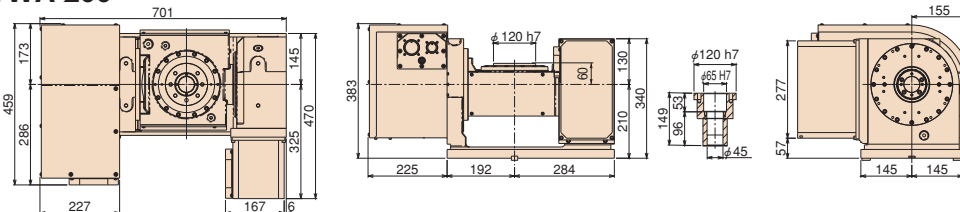
TWA-130



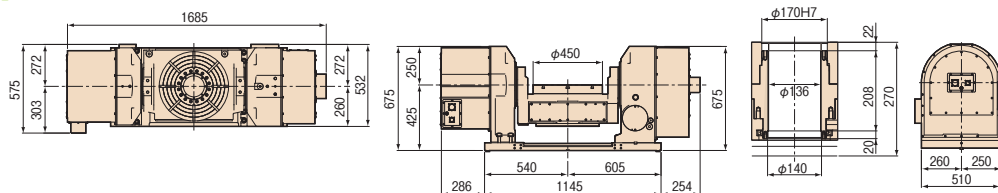
TWA-160



TWA-200



TN-450



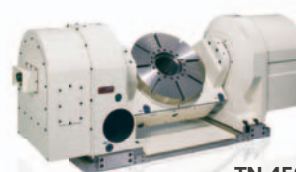
Note: The above dimensions are for FANUC servo motors. The dimensions of servo motors of other manufacturers may be larger.



TWA-130
Φ135mm face plate specification (option)



TWA-130
With pneumatic power chuck

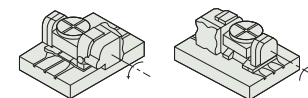


TN-450

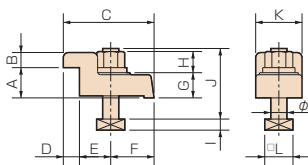
- RBS
- RBH
- RBM
- TBS
- RWE/RWA
- RN
- RWH
- RWA-B
- RWB
- RWB-K
- RCB
- RCH
- RCV
- Multi-Spindle
- RWM
- TWA/TN
- TWS
- TWB
- Multi-Spindle
- TWM
- RDS
- TDS
- TDB
- NC Controllers
- Accessories
- Options

Layout a

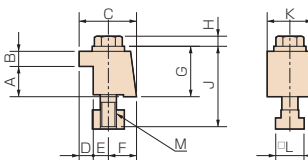
Layout b



Type I



Type IV



Clamping block and bolt

Unit: mm

	Type	Q'ty	Layout	T-slot pitch	T-slot width	A	B	C	D	E	F	G	H	I	J	K	L	M
TWA-100	I	4	a b	40 to 160 *	14	20	12	70	10	35	25	20	12	8	50	35	23	12
TWA-130	I	4	a b	40 to 190 *	14	20	12	70	10	35	25	20	17	8	55	35	23	12
TWA-160	I	4	a b	78 to 150 63 to 117	18	20	12	70	10	35	25	17	15	11	55	35	28	16
TWA-200	I	4	a b	80 to 180 78 to 125	18	25	12	80	12	33	35	22	21	11	65	40	28	16
TN-450	IV	4	a b	80 to 250 *	18	50	20	74	20	18	36	75	10	11	105	70	28	16

Note 1: * In the case of layout b, contact us for the 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 TSUDAKOMA. (Option)

Technical Information