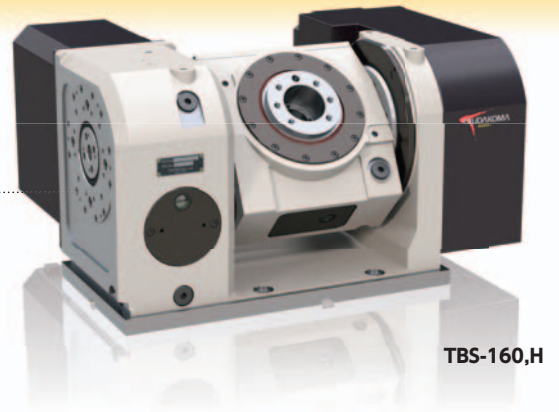


Standard type

TBS TBS-130•160•250



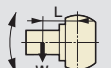

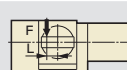




TBS-160,H




The latest technology, tilting rotary tables with TSUDAKOMA BallDrive system are joined in our line-up to provide perfect performance in 5-axis machining and to contribute to improve productivity.

Specifications

Unit: mm

		TBS-130,H		TBS-160,H		TBS-250,H		
Tilt range		-30° to +110°		-30° to +110°		-30° to +110°		
Spindle diameter		φ 90 h7		φ 100 h7		φ 140 h7		
Table diameter		φ 135 (Option)		φ 160 or 200 (Option)		φ 250 (Option)		
Table height at 0° position		225 (250 w/face plate)		270 (300 w/face plate)		290 (320 w/face plate)		
Center height at 90° position		160		200		235		
Center bore	Nose diameter	φ 55 H7 (φ 40 H7 w/face plate)		φ 55 H7 (φ 50 H7 w/face plate)		φ 80 H7 (φ 75 H7 w/face plate)		
	Through-bore	φ 40		φ 40		φ 50		
Table T-slot width		12H8 (w/face plate)		12H8 (w/face plate)		12H8 (w/face plate)		
Guide block width		14h7		18h7		18h7		
Servo motors (for FANUC)	Rotary axis		Tilt axis	Rotary axis	Tilt axis	Rotary axis	Tilt axis	
		α iS2	α iS2	α iS2	α iS4	α iS8	α iS8	
Inertia converted into motor shaft	× 10 ⁻³ kg·m ²	0.121	0.140	0.155	0.168	0.586	0.465	
Speed reduction ratio		1/48	1/60	1/60	1/60	1/45	1/60	
Table max. rpm	min ⁻¹ (Motor rpm: 3,000min ⁻¹)	62.5	50	50	50	66.6	50	
Clamp system	Supplied pressure	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	
Clamp torque	∕ pneumatic pressure 0.49MPa	N·m	500	500	500	500	1,000	1,000
Indexing accuracy (the sum)	arcsec	20	—	20	—	20	—	
	Tilting accuracy (the sum) Tilt 0° to 90°	arcsec	—	30	—	30	40	
Net weight	kg	120		160		280		
Allowable work weight	0° (Horizontal)	 kg	35	60	135			
	0° to 90° (Tilting)	 kg	20	40	85			
Allowable work moment	W×L	 N·m	61.1	59.6	186.7			
	F	 N	3,920	10,800	14,400			
Allowable load (when table is clamped)	F×L	 N·m	500	500	1,000			
	F×L	 N·m	500	500	1,000			
Allowable work inertia	$J = \frac{W \cdot D^2}{8}$	 kg·m ²	0.08	0.19	1.05			

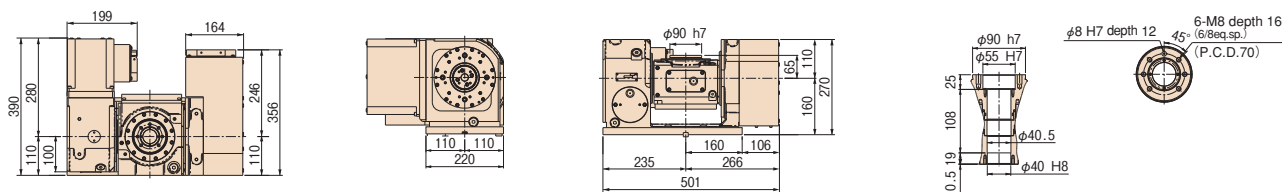
CE correspondence model

-  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** Rotary Joint **P.68** Pull Stud **P.68**

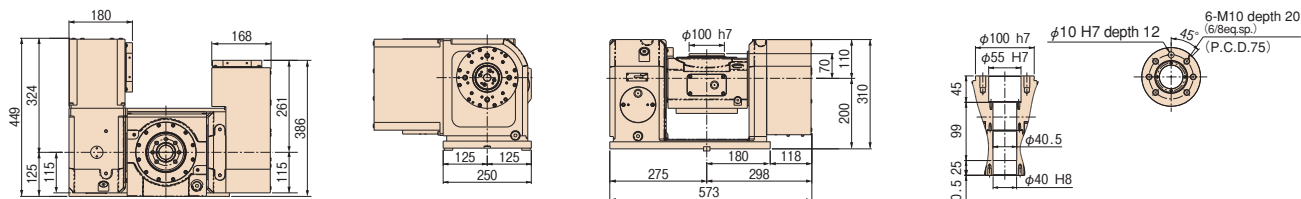
Dimensions

Unit:mm

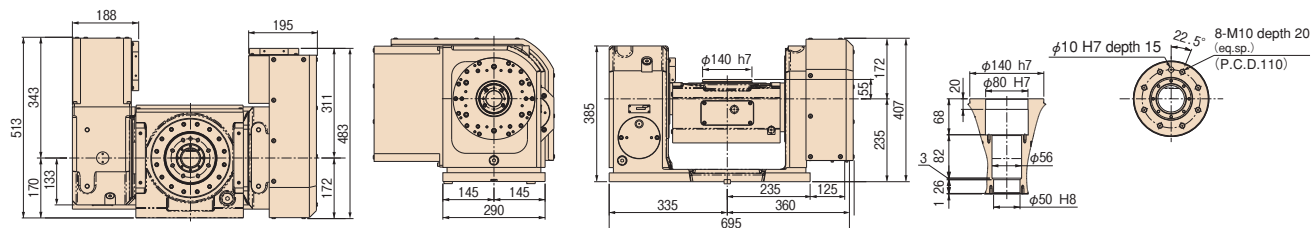
TBS-130



TBS-160



TBS-250



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

- 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
- Technical Information

Clamping block and bolt

Unit:mm

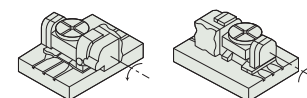
	Type	Q'ty	Layout	T-slot pitch	T-slot width	A	B	C	D	E	F	G	H	I	J	K	L	M
TBS-130	I	4	a b	40 to 134 *	14	20	12	70	10	35	25	20	17	8	55	35	23	12
TBS-160	I	4	a b	78 to 152 63 to 107	18	20	12	70	10	35	25	17	15	11	55	35	28	16
TBS-250	I	4	a b	130 to 215 78 to 125	18	25	12	80	12	33	35	22	21	11	65	40	28	16

Note 1: *In the case of layout b, contact us for 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)

Layout a

Layout b



Type I

