

Standard type

TBS TBS-130•160•250





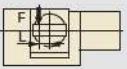




TBS-160


Unit: mm


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

	TBS-130	TBS-160	TBS-250			
Tilt range	-30°~+110°	-30°~+110°	-30°~+110°			
Spindle diameter	φ90 h7	φ100 h7	φ140 h7			
Table diameter *1	φ135	φ160 or 200 (Option)	φ250			
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	φ55H7 (φ40H7 W/face plate)	φ55H7 (φ50H7 W/face plate)	φ80H7 (φ75H7 W/face plate)		
	Through-bore	φ40	φ40	φ50		
Table T-slot width *1	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
	αiS2	αiS2	αiS2	αiS4	αiS8	αiS8
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	250 (500)*2	250 (500)*2	250 (500)*2	250 (500)*2	600 (1,000)*2	600 (1,000)*2
Indexing accuracy (the sum) arc sec	20	—	20	—	20	—
Tilting accuracy Tilt 0°~90° arc sec	—	30	—	30	—	40
Net weight kg	120	160	280			
Options	0° (Horizontal)  kg	35	60	135		
	Allowable work weight 0°~90° (Tilting)  kg	20	40	85		
Technical Information	Allowable work moment $W \times L$  N·m	61.1	59.6	186.7		
	Allowable load F  N	3,920	10,800	14,400		
Technical Information	Allowable load (when table is clamped) $F \times L$  N·m	250 (500)*2	250 (500)*2	600 (1,000)*2		
	$F \times L$  N·m	250 (500)*2	250 (500)*2	600 (1,000)*2		
Technical Information	Allowable work inertia $J = \frac{W \cdot D^2}{8}$  kg·m ²	0.08	0.19	1.05		

 Servo motors of other manufacturers **P.66**

 When assembling a faceplate or a fixture with the main spindle **P.76**

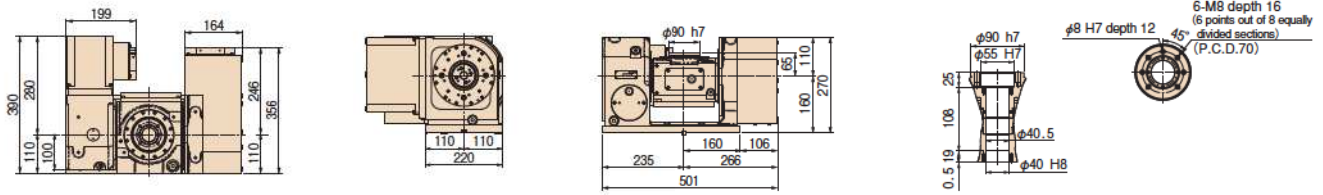
* 1 The tolerance of the table T-slot width is applicable to four standard slots arranged crosswise.  Dimensions **P.60**

* 2 High Clamp Torque model.

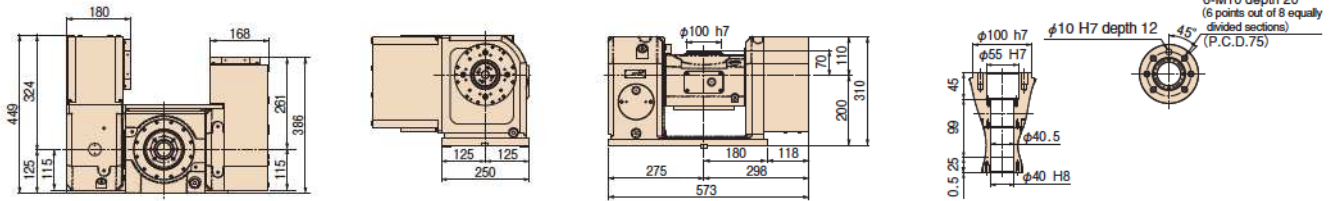
Dimensions

Unit:mm

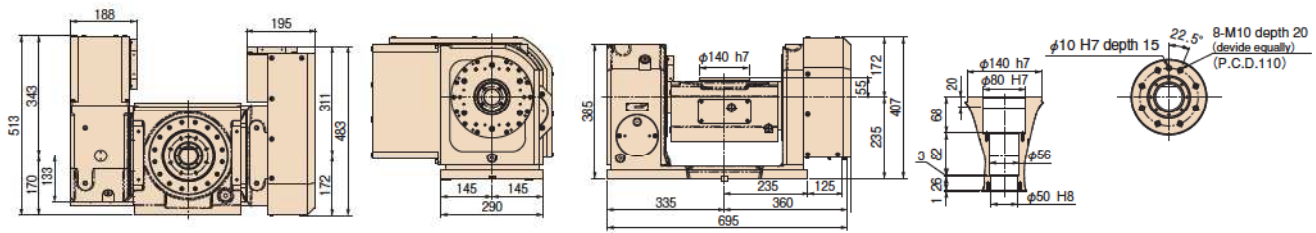
TBS-130



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

TBS

RWE/RWA
RN

RWE/RWA-B
RNCV-B

RNCM

RWB

RWB-K
RNCK

RCH

RNC

RCV
RNCV

Multi-Spindle
RWM

TWA/TN

TTNC

THNC

Multi-Spindle
TWM

RDS

RTV
RTT

RCB

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	40~134 *	14	20	12	70	10	35	25	20	17	8	55	35	23	12
TBS-160	I	4	a b	78~152 63~107	18	20	12	70	10	35	25	17	15	11	55	35	28	16
TBS-250	I	4	a b	130~215 78~125	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)

