

Multi-spindle Type

# TWM

## TWM-100•160•250



TWM-160,PS

Tilt type multi-spindle enables highly productive machining. Simultaneous machining of multiple workpieces with complex shapes and 5-face machining is possible.

### Specifications

Unit: mm

		TWM-100,PS	TWM-160	TWM-250			
RBS	Handedness (Tilt axis)	—	○	○			
		—	○	○			
		—	—	○			
RBH	Tilt range	-17° to +107°	-30° to +110°	-30° to +110°			
RBM	Spindle diameter	φ90h7	φ100h7	φ140h7			
TBS	Table diameter	φ135 (Option)	φ160 or φ200 (Option)	φ250 (Option)			
RWE/RWA RN	Distance between spindles	140	250 or 320	320 or 400			
RWH	Table height at 0° position	220 (245 w/face plate)	250 (280 w/face plate)	325 (355 w/face plate)			
RWA-B	Center height at 90° position	160	190	260			
RWB	Center bore	Nose diameter	φ55H7	φ55H7	φ80H7		
RWB-K		Through-bore	φ40	φ40	φ50		
RCB	Guide block width	14h7	18h7	18h7			
RCH	Servo motors (for FANUC)	Rotary axis	Tilt axis	Rotary axis	Tilt axis	Rotary axis	Tilt axis
RCV	Inertia converted into motor shaft × 10 <sup>-3</sup> kg·m <sup>2</sup>	αiF2	αiF2	αiF4	αiF8	αiF8	αiF12
Multi-Spindle RWM	Speed reduction ratio	0.13	0.14	0.52	0.50	0.69	4.40
TWA/TN	Table max. rpm	1/60	1/120	1/60	1/90	1/90	1/90
TWS	(Motor rpm: 3,000min <sup>-1</sup> )						
TWB	Clamp system Supplied pressure	50	25	50	33.3	33.3	33.3
Multi-Spindle TWM	Clamp torque	Pneumatic 0.49MPa	Pneumatic 0.49MPa	Pneumatic 0.49MPa	Pneumatic 0.49MPa	Pneumatic 0.49MPa	Hydraulic or air-hydraulic (Option) 3.5MPa
RDS	Clamp torque	200	500	500	1,000	1,000	3,100
TDS TDB	Indexing accuracy(the sum)	40	—	30	—	20	—
NC Controllers	Tilting accuracy(the sum)	Tilt 0° to 90° arcsec	—	45	—	60	—
Accessories		Tilt -30° to 90° arcsec	—	—	—	75	—
Options	Net weight	110	240 (PS) 260 (PL)	550 (PS) 595 (PL)			
Technical Information	Allowable work weight	0° (Horizontal)	35	40	100		
		0° to 90° (Tilting)	20	40	100		
	Allowable work moment	24	55.8	347.4			
	Allowable load (when table is clamped)	3,920	10,800	14,400			
	Allowable load (when table is clamped)	200	500	1,000			
	Allowable load (when table is clamped)	500	1,000	3,100			
	Allowable work inertia (per single-axis)	0.05	0.13	0.9			

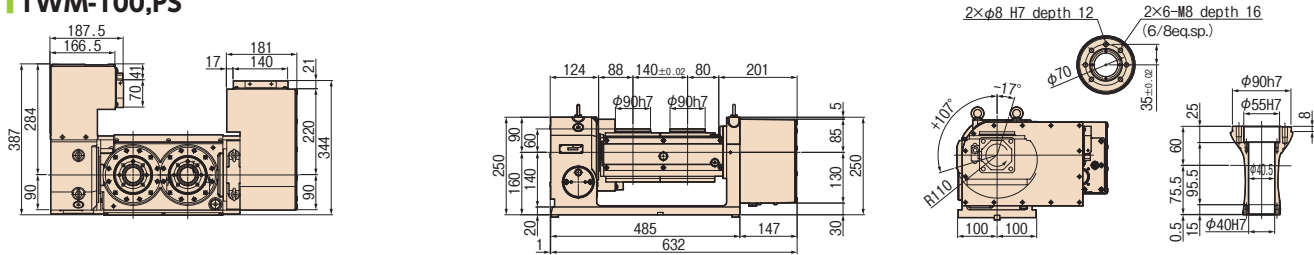
### CE correspondence model

- Tech.Info.** Servo motors of other manufacturers **P.70** Workpiece mounting space for tilting rotary tables **P.72**
- Option** Rotary Joint **P.68**

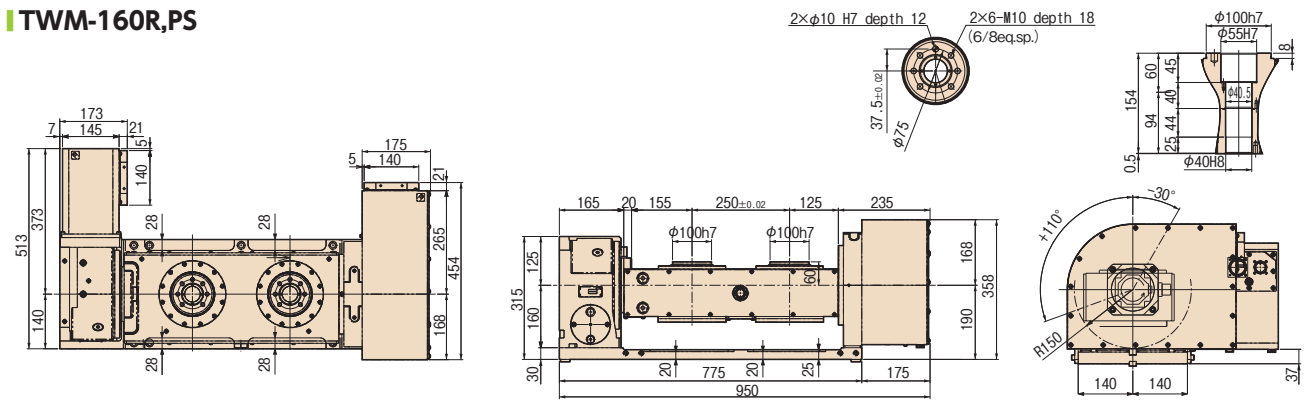
# Dimensions

Unit: mm

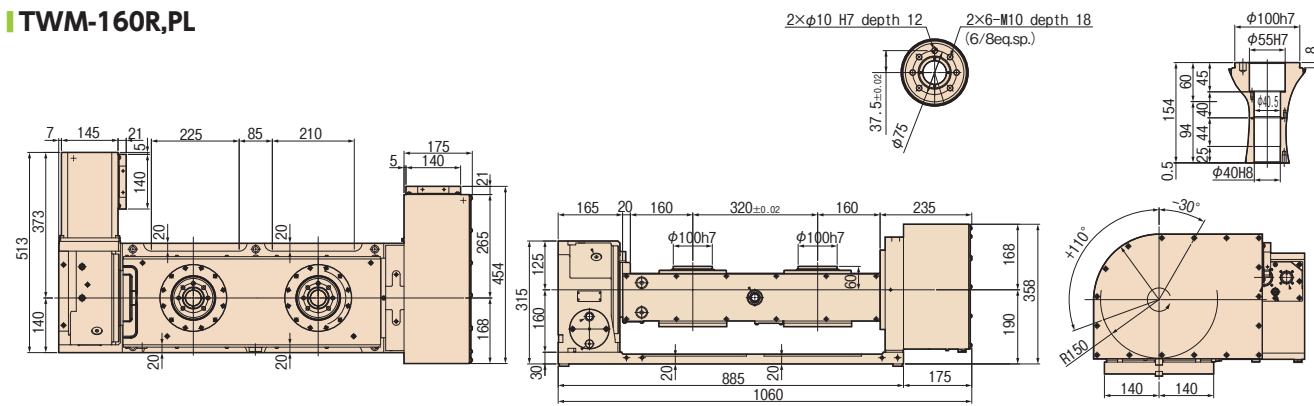
## TWM-100,PS



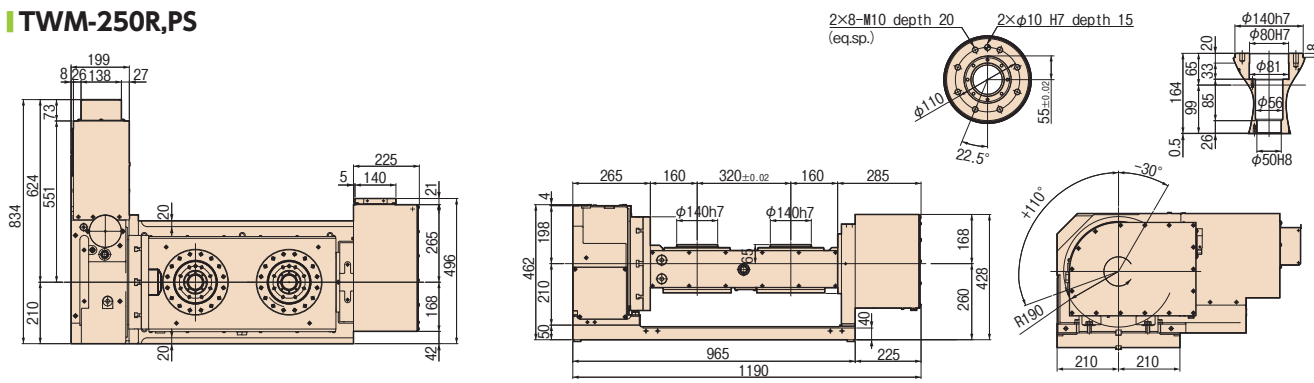
## TWM-160R,PS



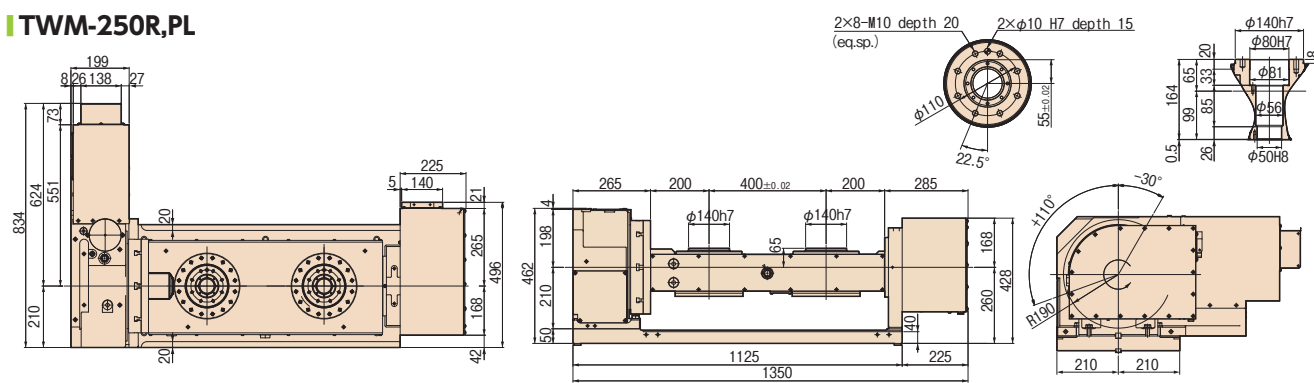
## TWM-160R,PL



## TWM-250R,PS



## TWM-250R,PL



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