

YK500TW

Orbit type



- Arm length 500mm
- Maximum payload 5kg

Ordering method

YK500TW-130

RCX340-4

Model	Z axis stroke 130: 130mm	Tool flange No entry: None F: With tool flange	Hollow shaft No entry: None S: With hollow shaft	Cable 3L: 3.5m 5L: 5m 10L: 10m	Controller / Number of controllable axes	Safety standard	Option A (OPA)	Option B (OPB)	Option C (OPC)	Option D (OPD)	Option E (OPE)	Absolute battery
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Specify various controller setting items. RCX340 ▶ **P.566**

Specifications

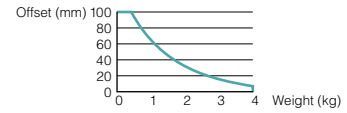
Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	250 mm	250 mm	250 mm	130 mm	-
	Rotation angle	+/-225 °	+/-225 °	-	+/-720 °
	AC servo motor output	750 W	400 W	200 W	105 W
Deceleration mechanism	Transmission method	Timing belt	Direct-coupled	Timing belt	Timing belt
	Motor to speed reducer				
	Speed reducer to output	Direct-coupled			
Repeatability	Note 1	+/-0.015 mm		+/-0.01 mm	+/-0.01 °
Maximum speed	Note 2	6.8 m/sec		1.5 m/sec	3000 °/sec
Maximum payload	Note 2	5 kg			
Standard cycle time: with 1kg payload	Note 3	0.29 sec			
R-axis tolerable moment of inertia	Rated	0.005 kgm ²			
	Maximum	0.05 kgm ²			
User wiring		0.15 sq × 8 wires			
User tubing (Outer diameter)		φ 6 × 2			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		27 kg			

Note 1. This is the value at a constant ambient temperature.
 Note 2. For the option specifications (tool flange mount type), the maximum payload becomes 4 kg.
 Note 3. When moving a 1 kg load back and forth 300 mm horizontally and 25 mm vertically (rough positioning arch motion).
 Note 4. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.

Controller

Controller	Power capacity (VA)	Operation method
RCX340	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

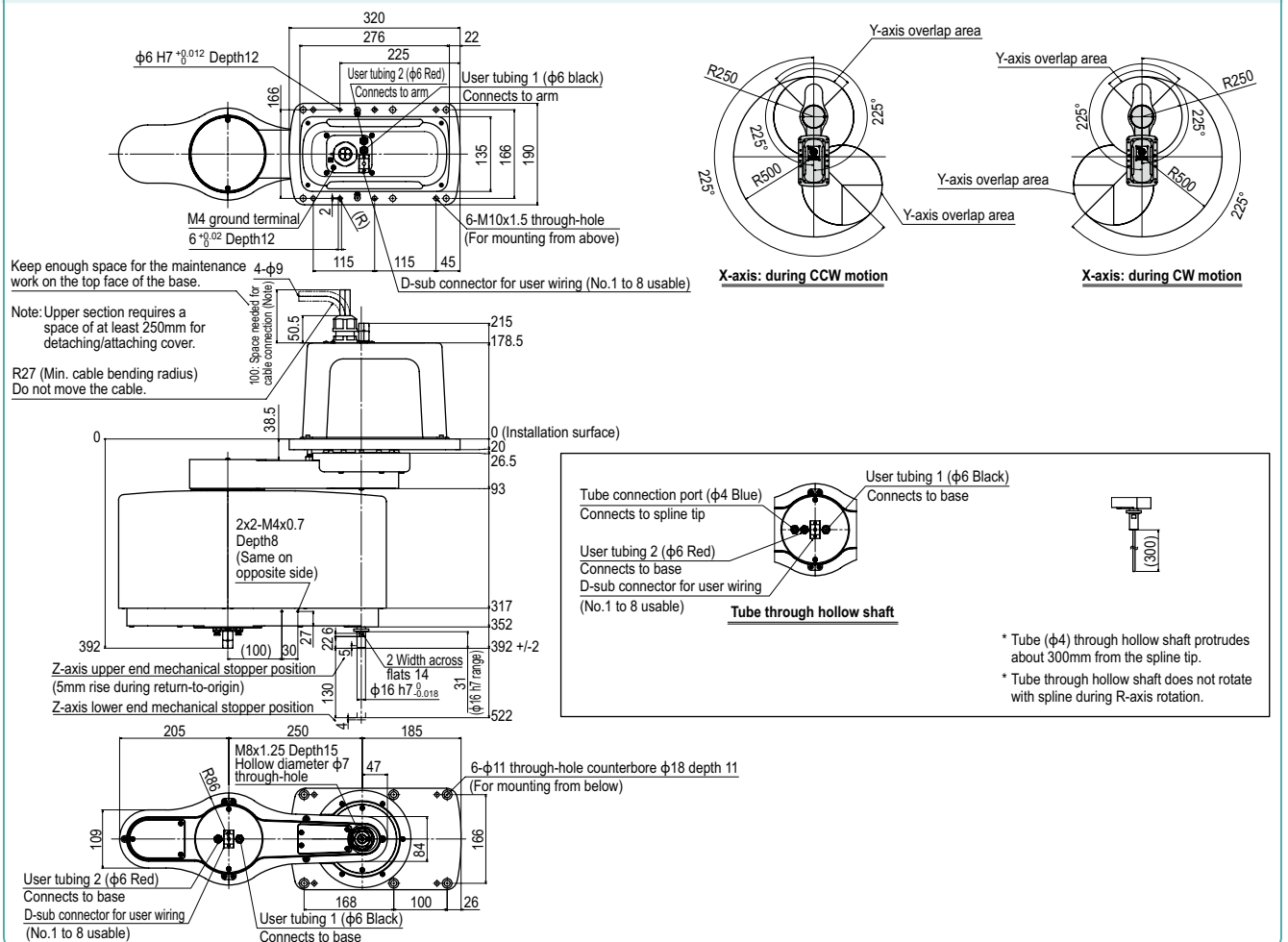
R-axis moment of inertia (load inertia)
 Recommended positional relationship between the load weight and the offset amount from the center of the R-axis (center of gravity position)



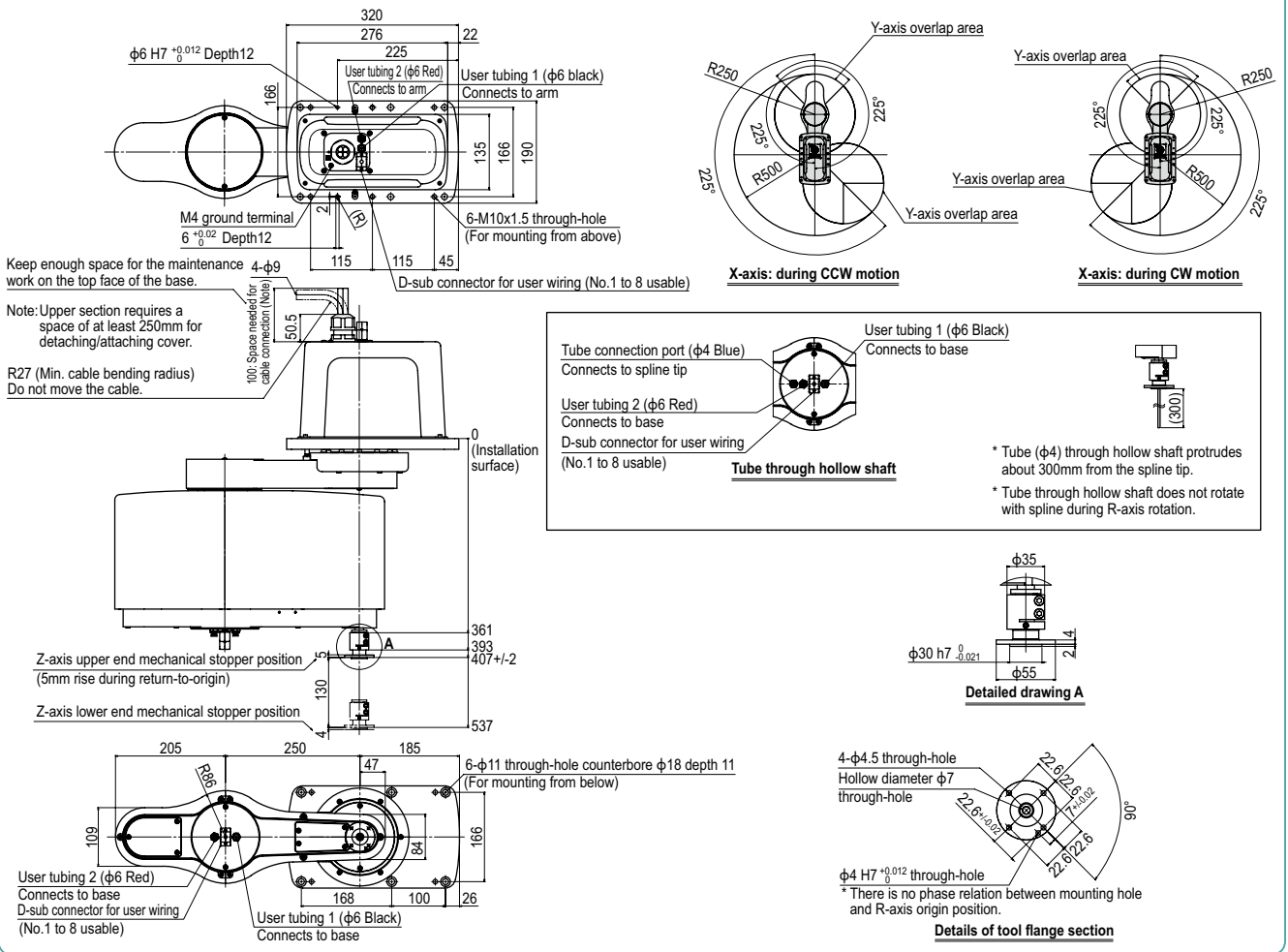
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<https://global.yamaha-motor.com/business/robot/>

YK500TW



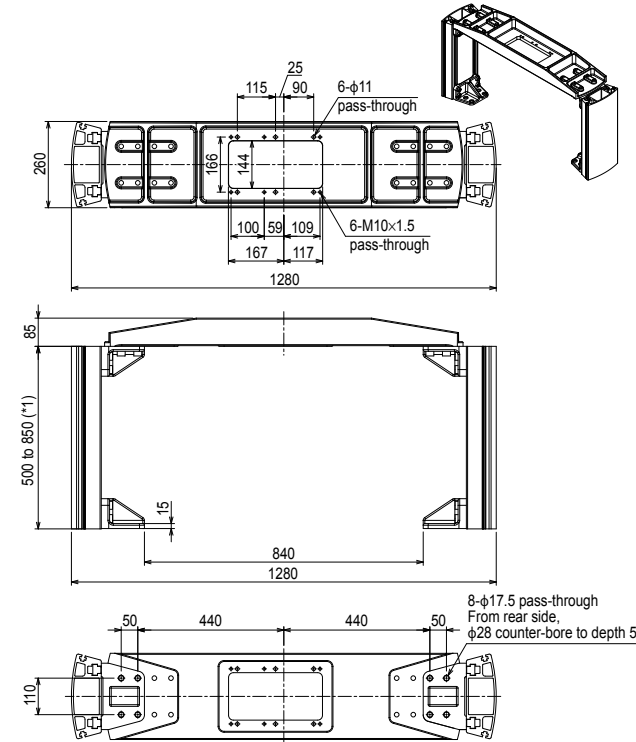
YK500TW Tool flange mount type



Dedicated mounting bracket for the YK-TW <BASE POST ASSY.>

The YK-TW can be easily installed on top of a customer-provided stand.

External diagram for the YK500TW



The mounting bracket is assembled by the customer. Refer to the included assembly diagram for assembly.

*1. Identical to the height of the robot mounting surface. The height of the stand can be selected at a 50 mm pitch.

Height (mm)	Model	Unit weight (kg)
500	KDU-M6100-P0	46
550	KDU-M6100-50	48
600	KDU-M6100-R0	50
650	KDU-M6100-60	51
700	KDU-M6100-S0	54
750	KDU-M6100-70	55
800	KDU-M6100-T0	57
850	KDU-M6100-80	59

* YK350TW and YK500TW are parts in common. * The top plate by itself weighs 19 kg.

- Articulated robots
- YA
- Linear conveyor modules
- LCM100
- Motor-less single-axis actuator
- Robonity
- Compact single-axis robots
- TRANSEVO
- Single-axis robots
- FLIP-X
- Linear motor single-axis robots
- PHASER
- Cartesian robots
- XY-X
- SCARA robots
- YK-X
- Pick & place robots
- YP-X
- CLEAN
- CONTROLLER INFORMATION
- Orbit type
- Small / Medium type
- Large type
- Wall mount / Inverse type
- Dust-proof & drip-proof type