

YK400XR

Standard type: Small type

● LOW COST HIGH PERFORMANCE MODEL

● Arm length 400mm ● Maximum payload 3kg



Ordering method

YK400XR		150			RCX340-4							
Model	Return-to-origin method S: Sensor T: Stroke end	Z axis stroke	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 (OP.A)	Option B (OP.B)	Option C (OP.C)	Option D (OP.D)	Option E (OP.E)	Absolute battery 4: 4 pcs. 3: 3 pcs. 2: 2 pcs. 1: 1 pc. 0: 0 pc.

Specify various controller setting items. RCX340 ▶ **P.544**

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Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	225 mm	175 mm	150 mm	-
		+/-132 °	+/-150 °	-	+/-360 °
AC servo motor output		200 W	100 W	100 W	100 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Belt speed reduction
	Transmission method	Direct-coupled	Direct-coupled	Timing belt	Timing belt
	Motor to speed reducer				
	Speed reducer to output				
Repeatability ^{Note 1}		+/-0.01 mm	+/-0.01 mm	+/-0.01 mm	+/-0.01 °
Maximum speed		6 m/sec	1.1 m/sec	2600 °/sec	
Maximum payload		3 kg (Standard specification), 2 kg (Option specifications) ^{Note 4}			
Standard cycle time: with 2kg payload ^{Note 2}		0.45 sec			
R-axis tolerable moment of inertia ^{Note 3}		0.05 kgm ² (0.5 kgfcm ²)			
User wiring		0.2 sq × 10 wires			
User tubing (Outer diameter)		φ 4 × 3			
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		17 kg			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)

Note 2. When reciprocating 300mm in horizontal and 25mm in vertical directions and performing the coarse positioning arch operation.

Note 3. It is necessary to input the moment of inertia in the actual operating environment.

Note 4. Maximum payload of option specifications (with user wiring/tubing through spline type) is 2kg.

Controller

Controller	Power capacity (VA)	Operation method
RCX340	1000	Programming / Remote command / Operation using RS-232C communication

Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.

Note. The movement range can be restricted by adding the X- and Y-axis mechanical stoppers. (The maximum movement range was set at shipment.)

See our robot manuals (installation manuals) for detailed information.

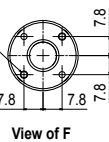
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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

YK400XR

4-M3 × 0.5 through-hole
(No phase relation to R-axis origin.)

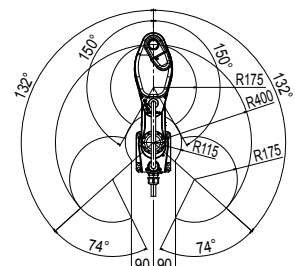
As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.



User wiring connector
(Numbers 1 to 10 are usable.)
J.S.T. Connector
SM connector: SMR-11V-B
Pin: SYM-001T-P0.6 is attached.
Use AP-K2N for the crimping machine.

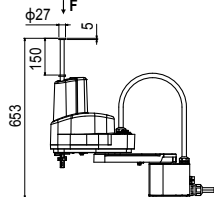
**XY-axis origin position
(Sensor specification)**

When performing return-to-origin, move both the X-axis and Y-axis counterclockwise in advance from the position shown above.

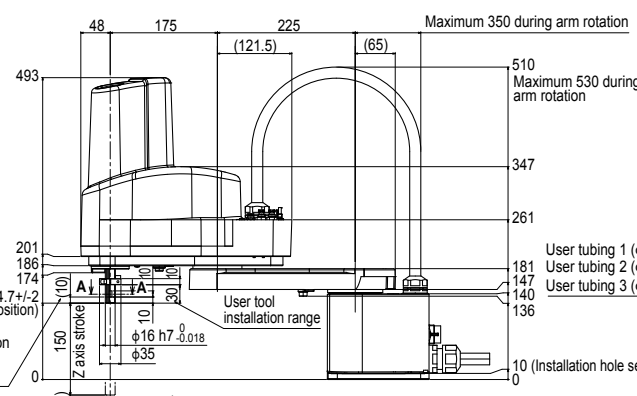
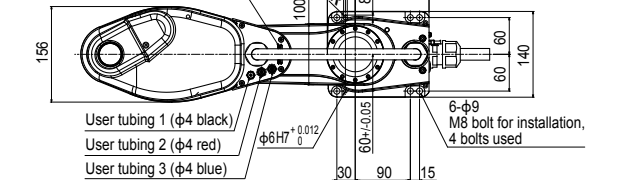


Working envelope

X-axis mechanical stopper position : 134°
Y-axis mechanical stopper position : 154°



Option
User wiring and tubing routed through spline shaft.



Standard type

Cross section A-A

Tapped hole for user wiring 4-M3 × 0.5 Depth 6
The weight of the tool attached here should be added to the tip mass.

**XY-axis origin position
(Stroke end specification)**

When performing return-to-origin, move the X-axis and Y-axis counterclockwise and clockwise, respectively in advance from the position shown above.

Keep enough space for the maintenance work at the rear of the base.
R27 (Min. cable bending radius)
Do not move the cable.

Controller

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