

YK400XE-4

Standard type: Small type

LOW COST HIGH PERFORMANCE MODEL



- Arm length 400mm
- Maximum payload 4kg

Ordering method

YK400XE	4		150			RCX340-4									
Model	Maximum payload	Return-to-origin method	Z axis stroke	Hollow shaft	Cable	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		
		S: Sensor T: Stroke end		No entry: None S: With hollow shaft	3L: 3.5m 5L: 5m 10L: 10m										

Note. For details about controller, refer to the RCX340 catalog or view YAMAHA's website.

Specifications

		X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length	225 mm	175 mm	150 mm	-
	Rotation angle	+/-132 °	+/-150 °	-	+/-360 °
AC servo motor output		200 W	100 W	100 W	100 W
Deceleration mechanism	Transmission method	Direct-coupled		Timing belt	
	Motor to speed reducer	Direct-coupled		Timing belt	
Repeatability	Speed reducer to output	Direct-coupled		Timing belt	
	Note 1	+/-0.01 mm		+/-0.01 mm	
Maximum speed		6 m/sec		1,1 m/sec	
Maximum payload		4 kg (Standard specification), 3 kg (Option specifications Note 4)			
Standard cycle time: with 2kg payload Note 2		0.41 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 axis)

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

Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and offset amount for R-axis moment of inertia settings.

Note 4. Maximum payload of option specifications (with user wiring/tubing through spline type) is 3kg.

Controller

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

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.

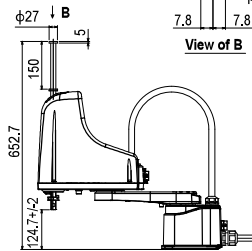
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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

YK400XE-4

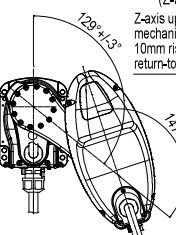
4-M3 × 0.5 through-hole (No phase relation to R-axis origin.)

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



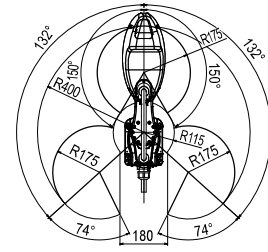
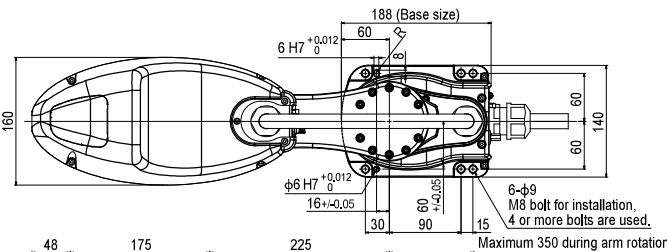
Option User wiring and tubing routed through spline shaft.

Width across flat: 15
Hollow diameter: φ11



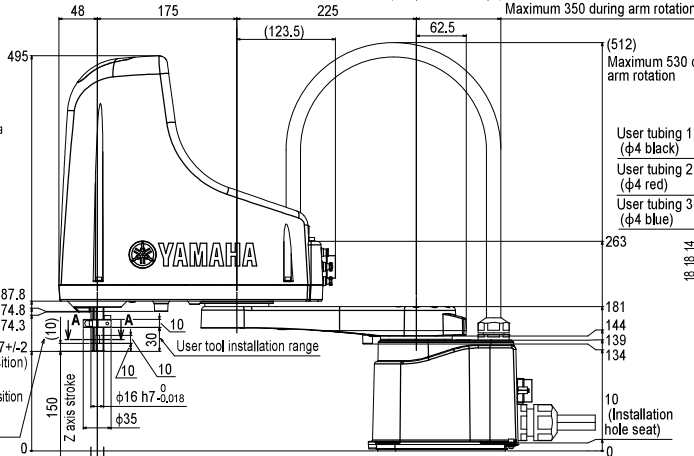
XY-axis origin position (Stroke end specification)

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



Working envelope

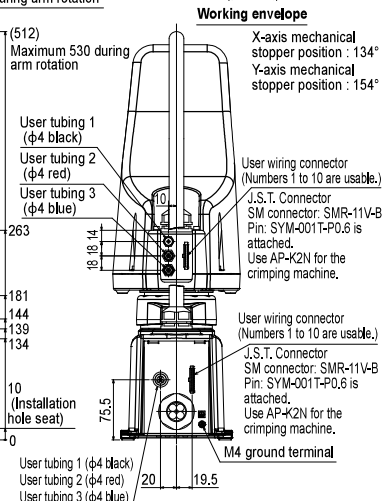
X-axis mechanical stopper position : 134°
Y-axis mechanical stopper position : 154°



Standard type

Tapped hole for user wiring: 6-M4 × 0.7 Depth 8
The weight of the tool attached here should be added to the tip mass.

4-φ9 Min. cable bending radius R27(*)
*Do not move the cable.



Keep enough space for the maintenance work at the rear of the base.