

YK400XEC-4

Clean type: Small type

LOW COST HIGH PERFORMANCE MODEL



- Arm length 400mm
- Maximum payload 4kg

Ordering method

YK400XEC	4	150			RCX340-4			
Model	Maximum payload	Z axis stroke	Brake release switch	Cable length	Controller / Number of controllable axes	Safety standard	Option A to E (OPA to E)	Absolute battery
			No entry: None BS: With brake release switch	3L: 3.5m 5L: 5m 10L: 10m				

Specify various controller setting items. RCX340 ▶ **P.636**

Basic specifications

Axis specifications	Arm length (mm)	X axis	Y axis	Z axis	R axis
		225	175	150	—
	Rotation angle (°)	+/-132	+/-145	—	+/-360
AC servo motor output (W)		200	100	100	100
Deceleration mechanism	Transmission method	Direct-coupled		Timing belt	
	Motor to speed reducer	Direct-coupled		Timing belt	
	Speed reducer to output	Direct-coupled		Timing belt	
Repeatability ^{Note 1} (XYZ: mm) (R: °)		+/-0.01	+/-0.01	+/-0.01	+/-0.01
Maximum speed (XYZ: m/sec) (R: °/sec)		6	1.1	2600	2600
Maximum payload (kg)		4			
Standard cycle time: with 2kg payload (sec) ^{Note 2}		0.45			
R-axis tolerable moment of inertia ^{Note 3} (kgm ²)		0.05			
User wiring (sq × wires)		0.2×10			
User tubing (Outer diameter)		φ4×3			
Travel limit		1.Soft limit, 2.Mechanical stopper (X, Y, Z axes)			
Robot cable length (m)		Standard: 3.5 Option: 5, 10			
Weight (kg)		18			
Degree of cleanliness		ISO CLASS 4 (ISO 14644-1)			
Intake air (Nl/min)		55 ^{Note 4}			

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

Note 4. Set within the range of ±1Nl/min. When the suction volume is not appropriate, it may adversely affect the cleanliness degree or deform the bellows.

Controller

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

Note. User wiring/tubing can be passed through from the top to the tip of the Z-axis shaft. For details, see the manual (installation manual).

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.

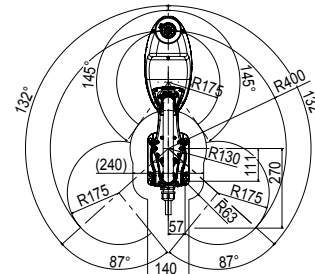
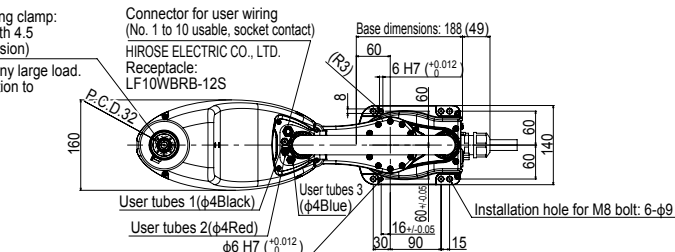
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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

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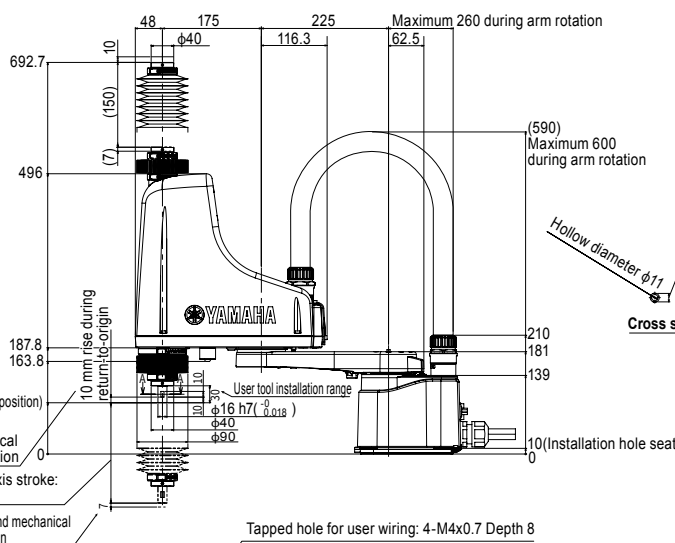
For wiring/tubing clamp:
4-M3x0.5 Depth 4.5
(90°-equal division)
Do not apply any large load.
No phase relation to
R-axis origin.

Connector for user wiring
(No. 1 to 10 usable, socket contact)
HIROSE ELECTRIC CO., LTD.
Receptacle:
LF10WBRB-12S



Working envelope(Standard)

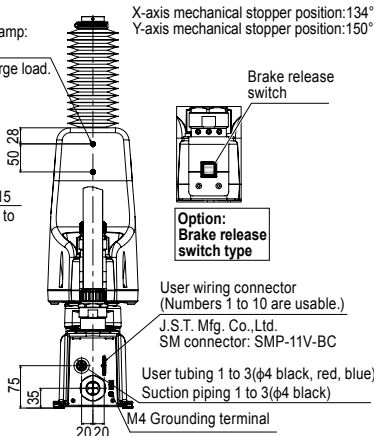
X-axis mechanical stopper position: 134°
Y-axis mechanical stopper position: 150°



For wiring/tubing clamp:
2-M4x0.7 Depth 5
Do not apply any large load.

Hollow diameter φ11
Width across flat 15
No phase relation to
R-axis origin.

Cross section A-A



Brake release switch
Option:
Brake release switch type

User wiring connector
(Numbers 1 to 10 are usable.)
J.S.T. Mfg. Co., Ltd.
SM connector: SMP-11V-BC

User tubing 1 to 3(φ4 black, red, blue)
Suction piping 1 to 3(φ4 black)
M4 Grounding terminal

Tapped hole for user wiring: 4-M4x0.7 Depth 8
The weight of the tool to be installed is included
in the tip weight, and be sure to use it so that it
does not interfere with the bellows.

Keep enough space for the maintenance
work at the rear of the base.
4-φ9/Minimum bending radius R27
Do not move the cable.