

YK510XE-10

Standard type: Medium type

● LOW COST HIGH PERFORMANCE MODEL



- Arm length 510mm
- Maximum payload 10kg

Ordering method

YK510XE-10-200

Model	Maximum payload	Z axis stroke	Tool flange	Hollow shaft/cap ^{Note 1}	Brake release switch	Cable	Controller / Number of controllable axes	Safety standard	Option A to E (OPA to E)	Absolute battery
			No entry: None F: With tool flange	No entry: None S: With hollow shaft C: With hollow cap	No entry: None BS: With brake release switch	3L: 3.5m 5L: 5m 10L: 10m				

RCX340-4

Specify various controller setting items.

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

Note. The return-to-origin method is provided only in the sensor specifications, but not in the stroke end specifications.

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
		235 mm	275 mm	200 mm	-
	Rotation angle	+/-134 °	+/-152 °	-	+/-360 °
AC servo motor output		400 W	200 W	200 W	200 W
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}		+/-0.01 mm		+/-0.01 mm	+/-0.01 °
Maximum speed		7.8 m/sec		2 m/sec	2600 °/sec
Maximum payload		10 kg (Standard specification, Option specifications ^{Note 4}), 9 kg (Option specifications ^{Note 5})			
Standard cycle time: with 2kg payload ^{Note 2}		0.38 sec			
R-axis tolerable moment of inertia ^{Note 3}		0.3 kgm ²			
User wiring		0.2 sq × 20 wires			
User tubing (Outer diameter)		φ 6 × 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		25 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. 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 the standard or option specifications (brake release switch type, user wiring/tubing through cap type) is 10 kg.

Note 5. Maximum payload of the option specifications (tool flange mount type, user wiring/tubing through shaft type) is 9 kg.

Controller

Controller	Power capacity (VA)	Operation method
RCX340	1700	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/>

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