

# YK510XEC-10

Clean type: Medium type

LOW COST HIGH PERFORMANCE MODEL



- Arm length 510mm
- Maximum payload 10kg

## Ordering method

<b>YK510XEC</b>	<b>- 10</b>	<b>200</b>				<b>RCX340-4</b>			
Model	Maximum payload	Z axis stroke	Tool flange	Brake release switch	Cable	Controller / Number of controllable axes	Safety standard	Option A to E (OP.A to E)	Absolute battery
			No entry: None F: With tool flange	No entry: None BS: With brake release switch	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items.			

## Basic specifications

Axis specifications	Arm length	X axis	Y axis	Z axis	R axis
Rotation angle		235 mm	275 mm	200 mm	-
		+/-134 °	+/-147.5 °	-	+/-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 <sup>Note 1</sup>		+/-0.01 mm		+/-0.01 mm	
Maximum speed		7.8 m/sec		2 m/sec	
Maximum payload		10 kg (Standard type), 9 kg (Optional: Tool flange mount type)			
Standard cycle time: with 2kg payload <sup>Note 2</sup>		0.42 sec			
R-axis tolerable moment of inertia <sup>Note 3</sup>		0.3 kgm <sup>2</sup>			
User wiring		0.2 sq × 10 wires			
User tubing		φ 6 × 3			
Travel limit		1.Soft limit, 2.Mechanical stopper (X, Y, Z axes)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		27 kg			
Degree of cleanliness		ISO CLASS 4 (ISO14644-1)			
Suction air flow		60 (Nl/min) <sup>Note 4</sup>			

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. Set within the range of ±1 Nl/min If the suction amount is not appropriate, the cleanliness may be adversely affected or the bellows may be deformed.

## Controller

Controller	Power capacity (VA)	Operation method
RCX340	1700	Programming / point trace / Remote command / Operation using RS-232C communication

Note. User wiring and user tubing can be passed through from the top of the Z-axis shaft to the tip.

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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