

YE10-51

Standard type: Medium type

● LOW COST HIGH PERFORMANCE MODEL



● Arm length 510mm ● Maximum payload 10kg

Ordering method

YE 10 - 51 Z20 - A

Model	Maximum payload	Arm length	Z axis stroke	Version	Return-to-origin method	Tool flange	Hollow shaft/Hollow cap	Brake release switch	Cable	Controller / Number of controllable axis	Safety standard	Option A to E (OP.A to E)
					S : Sensor T : Stroke end	No entry: None F : With tool flange	No entry: None S : With hollow shaft C : With hollow cap	No entry: None B : With brake release switch	3L : 3.5m 5L : 5m 10L : 10m	RCX440-4	N	

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	235 mm	275 mm	200 mm	-
		+/-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}		0.36 sec			
R-axis tolerable moment of inertia ^{Note 3}		0.3 kgm ²			
User wiring		0.2 sq x 20 wires			
User tubing (Outer diameter)		φ 6 x 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		23 kg			

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

Note 2. When reciprocating 300mm horizontally and 25mm vertically while conveying 2 kg with rough positioning in an arch motion.

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. Standard specification and optional specifications (brake release switch specification and user wiring/piping through-cap specification).

Note 5. Optional specification (tool flange and user wiring/piping through-shaft specification).

Controller

Controller	Power capacity (VA)	Operation method
RCX440	1700	Programming / I/O point trace / 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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