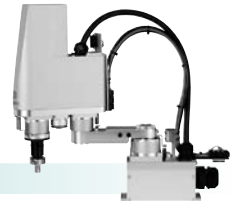


# YK180XG

Standard type: Tiny type



- Arm length 180mm
- Maximum payload 1kg

## Ordering method

**YK180XG - 50**

<b>Model</b>	<b>Z axis stroke</b>	<b>Cable</b>
	50: 50mm	2L: 2m
		3L: 3.5m
		5L: 5m
		10L: 10m

**RCX340-4**

<b>Controller / Number of controllable axes</b>	<b>Safety standard</b>	<b>Option A (OP.A)</b>	<b>Option B (OP.B)</b>	<b>Option C (OP.C)</b>	<b>Option D (OP.D)</b>	<b>Option E (OP.E)</b>	<b>Absolute battery</b>
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Specify various controller setting items. RCX340 ▶ **P.494**

**RCX240S**

<b>Controller</b>	<b>CE Marking</b>	<b>Expansion I/O</b>	<b>Network option</b>	<b>iVY System</b>	<b>Gripper</b>	<b>Battery</b>
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Specify various controller setting items. RCX240/RCX240S ▶ **P.481**

## Specifications

		X-axis	Y-axis	Z-axis	R-axis
<b>Axis specifications</b>	<b>Arm length</b>	105 mm	75 mm	50 mm	—
	<b>Rotation angle</b>	+/-125 °	+/-145 °	—	+/-360 °
<b>AC servo motor output</b>		30 W	30 W	30 W	30 W
<b>Deceleration mechanism</b>	<b>Speed reducer</b>	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	<b>Transmission method</b>	Direct-coupled			
	<b>Motor to speed reducer</b> <b>Speed reducer to output</b>	Direct-coupled			
<b>Repeatability</b> <sup>Note 1</sup>	+/-0.01 mm		+/-0.01 mm	+/-0.004 °	
<b>Maximum speed</b>	3.3 m/sec		0.9 m/sec	1700 °/sec	
<b>Maximum payload</b>		1.0 kg			
<b>Standard cycle time: with 0.1kg payload</b> <sup>Note 2</sup>		0.33 sec			
<b>R-axis tolerable moment of inertia</b> <sup>Note 3</sup>		0.01 kgm <sup>2</sup>			
<b>User wiring</b>		0.1 sq × 8 wires			
<b>User tubing (Outer diameter)</b>		φ 4 × 2			
<b>Travel limit</b>		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
<b>Robot cable length</b>		Standard: 2 m Option: 3.5 m, 5 m, 10 m			
<b>Weight (Excluding robot cable)</b> <sup>Note 4</sup>		4.1 kg			
<b>Robot cable weight</b>		0.9 kg (2 m)	1.5 kg (3.5 m)	2.1 kg (5 m)	4.2 kg (10 m)

Note 1. This is the value at a constant ambient temperature. (X,Y axes)  
 Note 2. When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.  
 Note 3. There are limits to acceleration coefficient settings. See P.522.  
 Note 4. The total robot weight is the sum of the robot body weight and the cable weight.

## Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240S	500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.  
 Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)  
 See our robot manuals (installation manuals) for detailed information.

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

## YK180XG

