

# YK700XGS

Wall-mount / inverse type

- Arm length 700mm
- Maximum payload 20kg

## Ordering method

**YK700XGS**

<b>Model</b>	<b>Installation method</b> W: Wall-mount (same as per external view) I: Inverse wall-mount (upside down)	<b>Z axis stroke</b> 200: 200mm 400: 400mm	<b>Tool flange</b> No entry: None F: With tool flange	<b>Cable</b> 3L: 3.5m 5L: 5m 10L: 10m
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**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.508**

**RCX240**

<b>Controller</b>	<b>CE Marking</b>	<b>Regenerative unit</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.495**

Note 1. When installing the robot, always follow the specifications.  
Do not install the ceiling-mount robot upside down or do not install the inverse type robot to a ceiling.  
Incorrect installation can cause trouble or malfunction.

## Specifications

		X-axis	Y-axis	Z-axis	R-axis
<b>Axis specifications</b>	<b>Arm length</b>	300 mm	400 mm	200 mm/400 mm	—
	<b>Rotation angle</b>	+/-130 °	+/-130 °	—	+/-360 °
<b>AC servo motor output</b>		750 W	400 W	400 W	200 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>	Direct-coupled			
	<b>Speed reducer to output</b>	Direct-coupled			
<b>Repeatability</b> <small>Note 1</small>		+/-0.02 mm	+/-0.01 mm	+/-0.004 °	
<b>Maximum speed</b>		8.4 m/sec	2.3 m/sec	1.7 m/sec	920 °/sec (wall-mount) 480 °/sec (inverse wall-mount)
<b>Maximum payload</b>		20 kg (Standard specification), 19 kg (Option specifications)			
<b>Standard cycle time: with 2kg payload</b> <small>Note 2</small>		0.42 sec			
<b>R-axis tolerable moment of inertia</b> <small>Note 3</small>		1.0 kgm <sup>2</sup>			
<b>User wiring</b>		0.2 sq × 20 wires			
<b>User tubing (Outer diameter)</b>		φ 6 × 3			
<b>Travel limit</b>		1. Soft limit 2. Mechanical stopper (X,Y,Z axis)			
<b>Robot cable length</b>		Standard: 3.5 m Option: 5 m, 10 m			
<b>Weight</b>		Z axis 200 mm: 50 kg Z axis 400 mm: 52 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.  
Note 3. There are limits to acceleration coefficient settings. See P.539.  
Note. Please consult YAMAHA when connecting other tubes and cables to the self-supporting machine harness.

## Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240-R3	2500	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/>

## YK700XGS

**Working envelope of left-handed system**

**Working envelope of right-handed system**

X-axis mechanical stopper position: 132°  
Y-axis mechanical stopper position: 132°

**Option: Tool flange mount type**

**View of B**

**Standard type**

**Stroke specification**

**Stroke specification**

Note. Inverse type is installed upside down.