

# YK700XGS

Wall-mount / inverse type

- Arm length 700mm
- Maximum payload 20kg

## Ordering method

<b>YK700XGS</b>				<b>RCX240</b>		<b>R3</b>				<b>BB</b>
<b>Model</b>	<b>Installation method</b> <sup>Note 1</sup>	<b>Z axis stroke</b>	<b>Cable</b>	<b>Controller</b>	<b>Usable for CE</b>	<b>Regenerative unit</b>	<b>Expansion I/O</b> <sup>Note 2</sup>	<b>Network option</b>	<b>iVY System</b>	<b>Battery</b>
	W: Wall-mount (same as per external view) U: Inverse wall-mount (upside down)	200: 200mm 400: 400mm	3L: 3.5m 5L: 5m 10L: 10m		No entry: Standard E: CE marking	R3: RGU-3	N, P: Standard I/O 16/8 N1, P1: 40/24 N2, P2: 64/40 N3, P3: 88/56 N4, P4: 112/72	No entry: None CC: CC-Link DN: DeviceNet PB: Profibus EN: Ethernet YC: YC-Link <sup>Note 3</sup>	No entry: None VY: iVY (Vision) TR: iVY+Light +Tracking LC: iVY+Light	BB: 4 pcs

- 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.
- Note 2. Use N to N4 when NPN is selected on the I/O board, and P to P4 when PNP is selected.
- Note 3. Available only for the master.

## Specifications

Axis specifications	Arm length (mm)	X-axis	Y-axis	Z-axis		R-axis
		Rotation angle (°)	300	400	200	400
AC servo motor output (W)		+/-130	+/-130	-	-	+/-360
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive	
	Transmission method	Direct-coupled				
	Motor to speed reducer	Direct-coupled				
Repeatability <sup>Note 1</sup> (XYZ: mm) (R: °)	Speed reducer to output	Direct-coupled				
		+/-0.02	+/-0.01	+/-0.004		
Maximum speed (XYZ: m/sec) (R: °/sec)		8.4	2.3	1.7	920 (wall-mount) 480 (inverse wall-mount)	
Maximum payload (kg)		20				
Standard cycle time: with 2kg payload <sup>Note 2</sup> (sec)		0.42				
R-axis tolerable moment of inertia <sup>Note 3</sup> (kgm <sup>2</sup> )		1.0				
User wiring (sq x wires)		0.2 x 20				
User tubing (Outer diameter)		φ6 x 3				
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)				
Robot cable length (m)		Standard: 3.5 Option: 5,10				
Weight (kg)		Z axis200mm: 50 Z axis400mm: 52				

- 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.
- Note. Please consult YAMAHA when connecting other tubes and cables to the self-supporting machine harness.

## Controller

Controller	Power capacity (VA)	Operation method
RCX240-R3	2500	Programming / I/O point trace / Remote command / Operation using RS-232C communication

## YK700XGS

**Working envelope of left-handed system**

**Working envelope of right-handed system**

**Cross section A-A**

**Z200mm Stroke**

**Z400mm Stroke**

**YK700XGS**

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**Z200mm Stroke specification**

**Z400mm Stroke specification**

Note. Inverse type is installed upside down.