

# YK300XGS

Wall-mount / inverse type

● Arm length 300mm

● Maximum payload 5kg

Note. Built-to-order product.  
Contact us for the delivery period.

## Ordering method

<b>YK300XGS</b>		<b>150</b>				<b>RCX240S</b>						<b>BB</b>
<b>Model</b>	<b>Installation method</b> <sup>Note1</sup> W: Wall-mount (same as per external view) U: Inverse wall-mount (upside down)	<b>Z axis stroke</b> 150: 150mm	<b>Tool flange</b> No entry: None F: With tool flange	<b>Hollow shaft</b> No entry: None S: With hollow shaft	<b>Cable</b> 3L: 3.5m 5L: 5m 10L: 10m	<b>Controller</b>	<b>Usable for CE</b> No entry: Standard E: CE marking	<b>Expansion I/O</b> <sup>Note2</sup> N, P: Standard I/O 16/8 N1, P1: 40/24 N2, P2: 64/40 N3, P3: 88/56 N4, P4: 112/72	<b>Network option</b> No entry: None CC: CC-Link DN: DeviceNet PB: Profibus EN: Ethernet EP: EtherNet/IP YC: YC-Link <sup>Note3</sup>	<b>iVY System</b> No entry: None VY: iVY (Vision) TR: iVY+Light +Tracking LC: iVY+Light	<b>Gripper</b> No entry: None GR: Gripper	<b>Battery</b> 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. See P.39 for details on YC-Link system.

## Specifications

Axis specifications	Arm length (mm)	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle (°)	+/-120	+/-130	-	+/-360
	AC servo motor output (W)	200	150	50	100
<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> <sup>Note 1</sup> (XYZ: mm) (R: °)		+/-0.01	+/-0.01	+/-0.01	+/-0.004
<b>Maximum speed</b> (XYZ: m/sec) (R: °/sec)		4.4	1.0	1020 (wall-mount) 720 (inverse wall-mount)	
<b>Maximum payload (kg)</b>		5 (Standard specification), 4 (Option specifications <sup>Note 4</sup> )			
<b>Standard cycle time: with 2kg payload</b> <sup>Note 2</sup> (sec)		0.49			
<b>R-axis tolerable moment of inertia</b> <sup>Note 3</sup> (kgm <sup>2</sup> )		0.05			
<b>User wiring (sq × wires)</b>		0.2 × 10			
<b>User tubing (Outer diameter)</b>		φ4 × 3			
<b>Travel limit</b>		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
<b>Robot cable length (m)</b>		Standard: 3.5 Option: 5,10			
<b>Weight (kg)</b>		19.5			

- Note 1. This is the value at a constant ambient temperature.
- Note 2. When reciprocating 25mm horizontally and 300mm horizontally (with a 2kg payload in rough-positioning arch motion).
- Note 3. There are limits to acceleration coefficient settings. See P.477.
- Note 4. Maximum payload of option specifications (with tool flange attached or with user wiring and tubing routed through spline shaft) is 4kg.

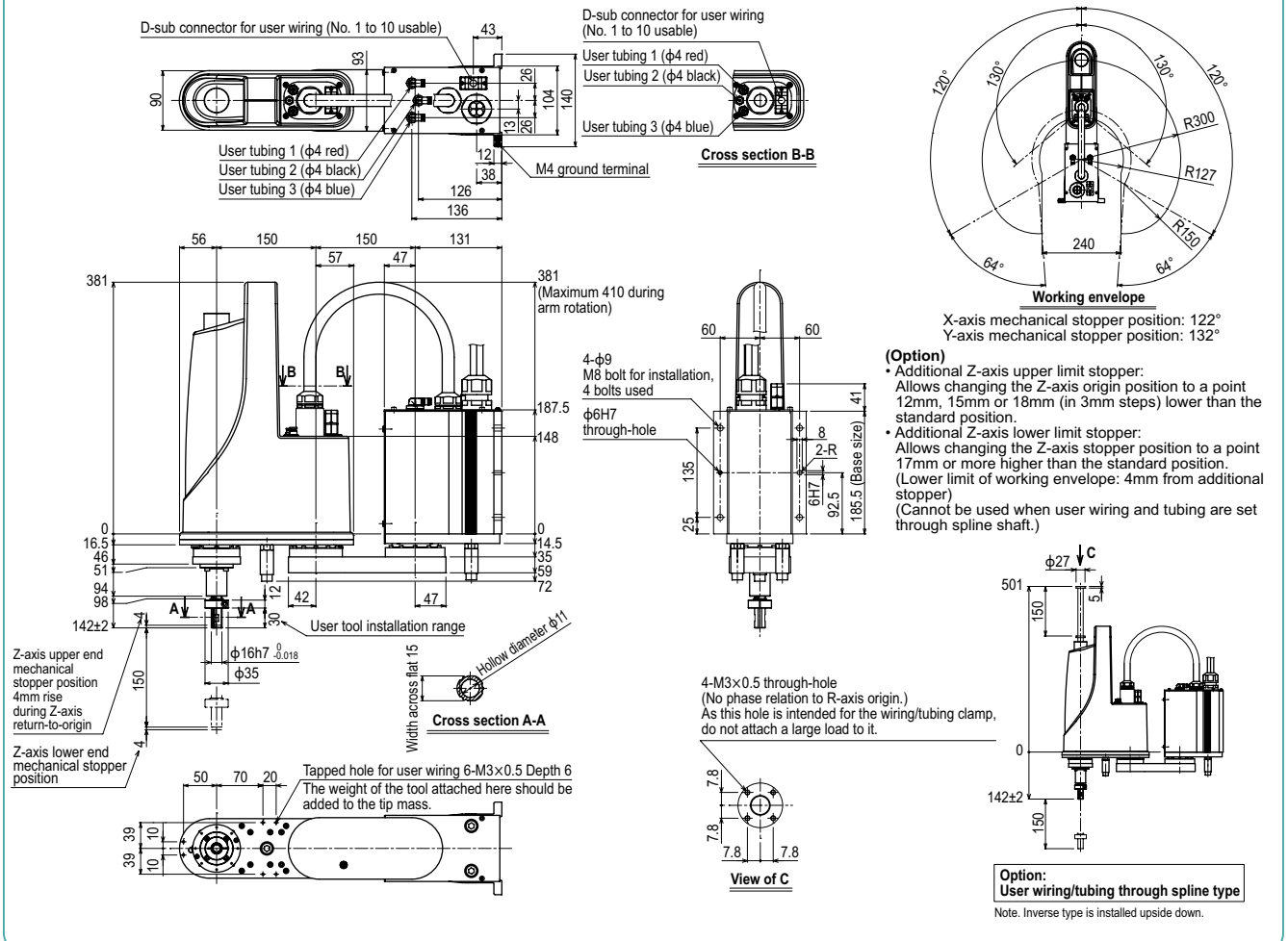
## Controller

Controller	Power capacity (VA)	Operation method
RCX240S	1000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

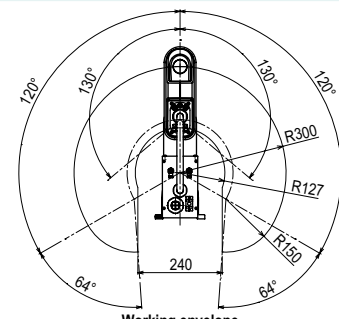
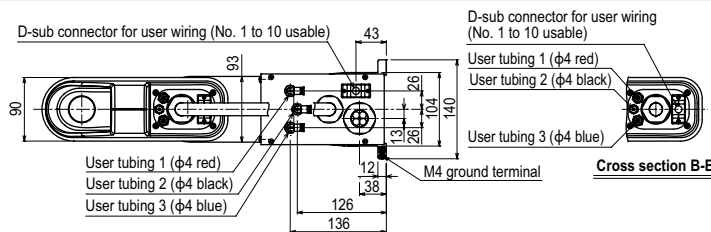
Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)  
See our robot manuals (installation manuals) for detailed information.

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

## YK300XGS



## YK300XGS Tool flange mount type



### Working envelope

X-axis mechanical stopper position: 120°  
Y-axis mechanical stopper position: 132°

### (Option)

- Additional Z-axis upper limit stopper:  
Allows changing the Z-axis origin position to a point 12mm, 15mm or 18mm (in 3mm steps) lower than the standard position.
- Additional Z-axis lower limit stopper:  
Allows changing the Z-axis stopper position to a point 17mm or more higher than the standard position. (Lower limit of working envelope: 4mm from additional stopper)  
(Cannot be used when user wiring and tubing are set through spline shaft.)

