

# YK600XGP

Dust-proof & drip-proof type

- Arm length 600mm
- Maximum payload 8kg

## Ordering method

<b>YK600XGP</b>	<b>F</b>	<b>RCX240</b>	<b>R3</b>	<b>BB</b>							
<b>Model</b>	<b>Z axis stroke</b>	<b>Tool flange</b>	<b>Cable</b>	<b>Controller</b>	<b>Usable for CE</b>	<b>Regenerative unit</b>	<b>Expansion I/O</b> <small>Note 1</small>	<b>Network option</b>	<b>iVY System</b>	<b>Gripper</b>	<b>Battery</b>
	200: 200mm 300: 300mm	F: With tool flange	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 EP: EtherNet/IP YC: YC-Link <small>Note 2</small>	No entry: None VY: iVY (Vision) TR: iVY+Light +Tracking LC: iVY+Light	No entry: None GR: Gripper	BB: 4 pcs

Note 1. Use N to N4 when NPN is selected on the I/O board, and P to P4 when PNP is selected.  
Note 2. Available only for the master.

## Specifications

		X-axis	Y-axis	Z-axis	R-axis
<b>Axis specifications</b>	<b>Arm length (mm)</b>	300	300	200 300	-
	<b>Rotation angle (°)</b>	+/-130	+/-145	-	+/-360
<b>AC servo motor output (W)</b>		400	200	200	200
<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> <small>Note 1</small> (XYZ: mm) (R: °)		+/-0.01		+/-0.01	+/-0.004
<b>Maximum speed</b> (XYZ: m/sec) (R: °/sec)		8.4		2.3 1.7	1700
<b>Maximum payload (kg)</b>		8			
<b>Standard cycle time: with 2kg payload</b> <small>Note 2</small> (sec)		0.56			
<b>R-axis tolerable moment of inertia</b> <small>Note 3</small> (kgm <sup>2</sup> )		0.3			
<b>Protection class</b> <small>Note 4</small>		Equivalent to IP65 (IEC 60529)			
<b>User wiring (sq x wires)</b>		0.2x20			
<b>User tubing (Outer diameter)</b>		φ6x3			
<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>		Z axis 200mm: 33 Z axis 300mm: 34			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)  
Note 2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).  
Note 3. There are limits to acceleration coefficient settings.  
Note 4. Do not use robots where the bellows section is directly exposed to water jet. Contact our distributor for information on drip-proof structure preventing liquid other than water.

## Controller

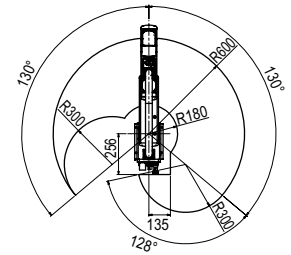
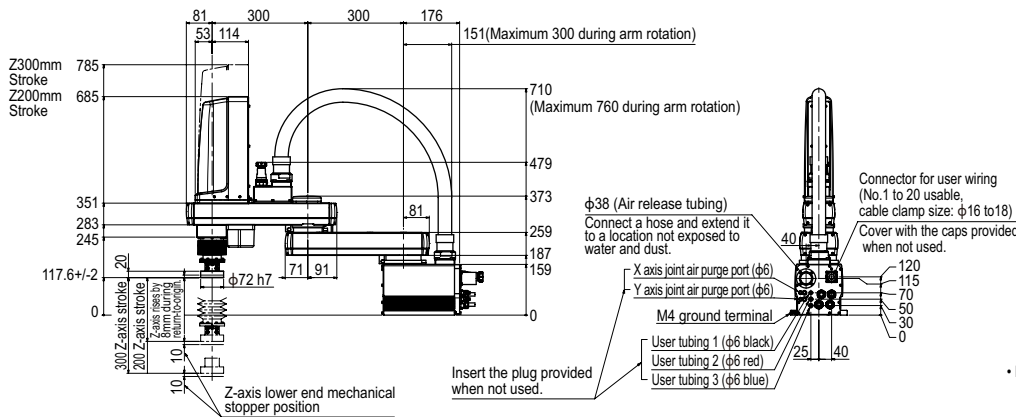
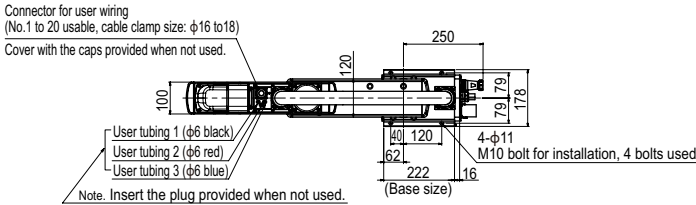
Controller	Power capacity (VA)	Operation method
RCX240-R3	1700	Programming / I/O point trace / Remote command / Operation using RS-232C communication

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.

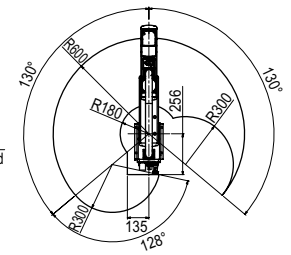
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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

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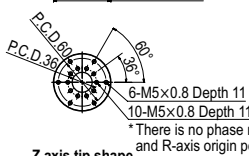
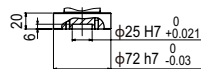


Working envelope of left-handed system



Working envelope of right-handed system

- Note that the robot cannot be used at a position where the base flange, robot cable, spline, and bellows interfere with each other in the working envelope shown above.
- X-axis mechanical stopper position : 132°
- Y-axis mechanical stopper position : 147°



Z axis tip shape

APPLICATION  
TRANSERO  
Compact  
single-axis robots  
FLIP-X  
Single-axis robots  
PHASER  
Linear motor  
single-axis robots  
XY-X  
Catenation  
robots  
YK-XG  
SCARA  
robots  
YP-X  
Pick & place  
robots  
CLEAN  
CONTROLLER INFORMATION  
Orbit type  
Trio type  
Small type  
Medium type  
Large type  
Wall-mount/  
inverse type  
Dust-proof  
& drip-proof  
type