

# YK1000XGP

Dust-proof & drip-proof type

- Arm length 1000mm
- Maximum payload 20kg

## Ordering method

<b>YK1000XGP</b>		<b>F</b>		<b>RCX340-4</b>							
<b>Model</b>	<b>Z axis stroke</b>	<b>Tool flange</b>	<b>Cable</b>	<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>
	200: 200mm 400: 400mm	F: With tool flange	3L: 3.5m 5L: 5m 10L: 10m								

Specify various controller setting items. RCX340 ▶ **P.566**

## Specifications

		X-axis	Y-axis	Z-axis	R-axis
<b>Axis specifications</b>	<b>Arm length</b>	600 mm	400 mm	200 mm	—
	<b>Rotation angle</b>	+/-130 °	+/-150 °	—	+/-360 °
<b>AC servo motor output</b>		750 W	400 W	400 W	200 W
<b>Deceleration mechanism</b>	<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>		+/-0.02 mm	+/-0.01 mm	+/-0.004 °	
<b>Maximum speed</b>		10.6 m/sec	2.3 m/sec	1.7 m/sec	920 °/sec
<b>Maximum payload</b>		20 kg			
<b>Standard cycle time: with 2kg payload</b> <sup>Note 2</sup>		0.59 sec			
<b>R-axis tolerable moment of inertia</b> <sup>Note 3</sup>		1.0 kgm <sup>2</sup>			
<b>Protection class</b> <sup>Note 4</sup>		Equivalent to IP65 (IEC 60529)			
<b>User wiring (sq × wires)</b>		0.2 × 20			
<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: 60 kg Z axis 400 mm: 62 kg			

- 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. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia 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
RCX340	2500	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.

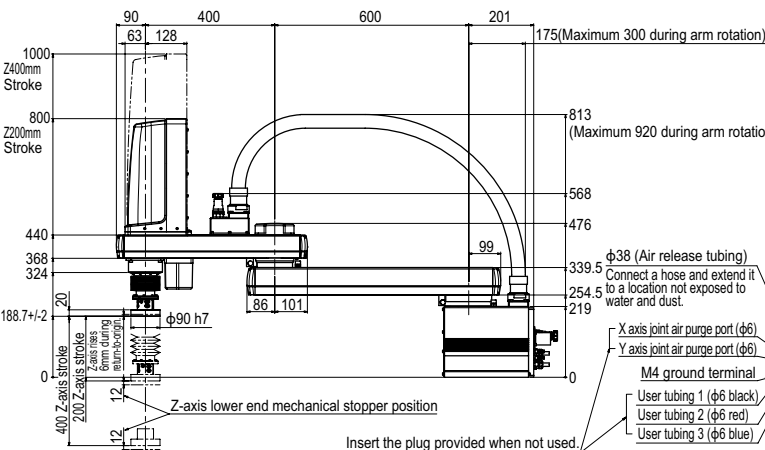
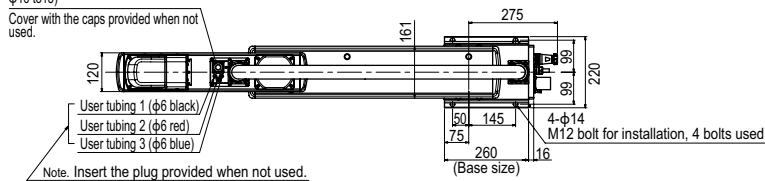
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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

## YK1000XGP

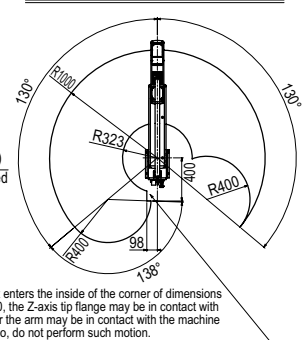
Connector for user wiring (No.1 to 20 usable, cable clamp size: φ16 to 18)

Cover with the caps provided when not used.



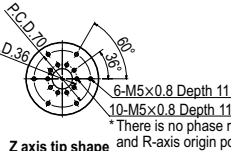
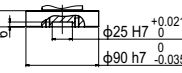
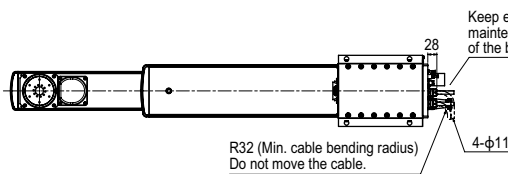
If the robot enters the inside of the corner of dimensions 98 and 400, the Z-axis tip flange may be in contact with the base of the arm may be in contact with the machine harness. So, do not perform such motion.

### 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 : 152°



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CONTROLLER INFORMATION  
Oht/Extra small type  
Small / Medium type  
Large type  
Wall mount / Inverse type  
Dust-proof & drip-proof type