

# YK800XGP

Dust-proof & drip-proof type

- Arm length 800mm
- Maximum payload 18kg

## Ordering method

**YK800XGP** **F** **RCX340-4**

Model	Z axis stroke	Tool flange	Cable	Controller / Number of controllable axes	Safety standard	Option A (OP.A)	Option B (OP.B)	Option C (OP.C)	Option D (OP.D)	Option E (OP.E)	Absolute battery
	200: 200mm 400: 400mm	F: With tool flange	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ <b>P.508</b>							

**RCX240** **R3** **BB**

Controller	CE Marking	Regenerative unit	Expansion I/O	Network option	iVY System	Gripper	Battery

Specify various controller setting items. RCX240/RCX240S ▶ **P.495**

## Specifications

		X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length	400 mm	400 mm	200 mm	400 mm
	Rotation angle	+/-130 °	+/-150 °	-	+/-360 °
AC servo motor output		750 W	400 W	400 W	200 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Direct-coupled			
	Motor to speed reducer	Direct-coupled			
	Speed reducer to output	Direct-coupled			
Repeatability <sup>Note 1</sup>		+/-0.02 mm	+/-0.01 mm		+/-0.004 °
Maximum speed		9.2 m/sec	2.3 m/sec	1.7 m/sec	920 °/sec
Maximum payload		18 kg			
Standard cycle time: with 2kg payload <sup>Note 2</sup>		0.58 sec			
R-axis tolerable moment of inertia <sup>Note 3</sup>		1.0 kgm <sup>2</sup>			
Protection class <sup>Note 4</sup>		Equivalent to IP65 (IEC 60529)			
User wiring		0.2 sq × 20 wires			
User tubing (Outer diameter)		φ 6 × 3			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 3.5 m Option: 5 m, 10 m			
Weight		Z axis 200 mm: 56 kg Z axis 400 mm: 58 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. There are limits to acceleration coefficient settings. See P.539.  
 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.

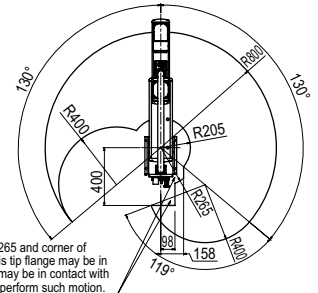
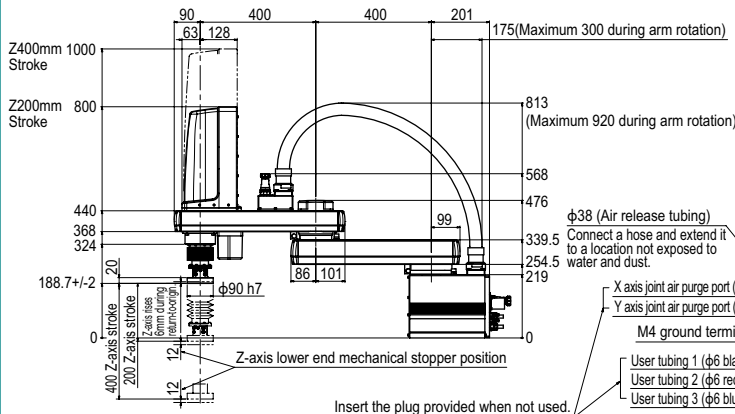
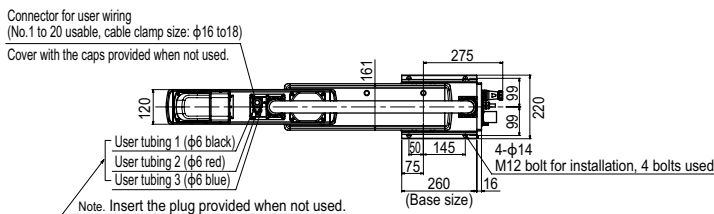
## Controller

Controller	Power capacity (VA)	Operation method
RCX340 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.  
 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.

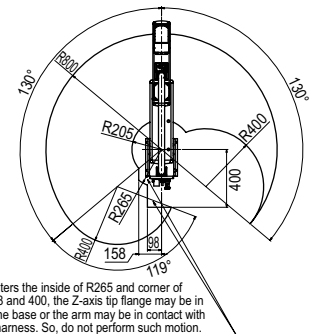
Our robot manuals (installation manuals) can be downloaded from our website at the address below:  
<http://global.yamaha-motor.com/business/robot/>

## YK800XGP



If the robot enters the inside of R265 and corner of dimensions 98 and 400, the Z-axis tip flange may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

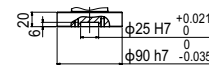
### Working envelope of left-handed system



If the robot enters the inside of R265 and corner of dimensions 98 and 400, the Z-axis tip flange may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

### 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°



### Z axis tip shape

APPLICATION  
 Linear conveyor/ modules  
 LCM100  
 Compact single-axis robots  
 TRANSERVO  
 Single-axis robots  
 FLIP-X  
 Linear motor single-axis robots  
 PHASER  
 Cartesian robots  
 XX-X  
 SCARA robots  
 YK-X  
 Pick & place robots  
 YP-X  
 CLEAN  
 CONTROLLER INFORMATION  
 Orbit / TriV type  
 Small / Medium type  
 Large type  
 Walk-mount / Inverse type  
 Dust-proof & drip-proof type