

YK500XGP

Dust-proof & drip-proof type

- Arm length 500mm
- Maximum payload 8kg

Ordering method

YK500XGP **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 300: 300mm	F: With tool flange	3L: 3.5m 5L: 5m 10L: 10m	Specify various controller setting items. RCX340 ▶ P.508							

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	200 mm	300 mm	200 mm/300 mm	—
	Rotation angle	+/-130 °	+/-145 °	—	+/-360 °
AC servo motor output		400 W	200 W	200 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 <small>Note 1</small>		+/-0.01 mm	+/-0.01 mm	+/-0.01 mm	+/-0.004 °
Maximum speed		7.6 m/sec	2.3 m/sec	1.7 m/sec	1700 °/sec
Maximum payload		8 kg			
Standard cycle time: with 2kg payload <small>Note 2</small>		0.55 sec			
R-axis tolerable moment of inertia <small>Note 3</small>		0.3 kgm ²			
Protection class <small>Note 4</small>		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: 32 kg Z axis 300 mm: 33 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

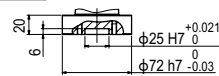
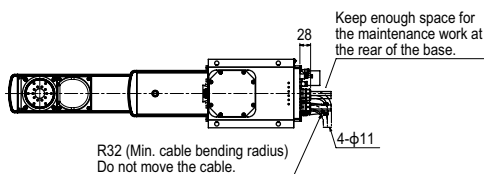
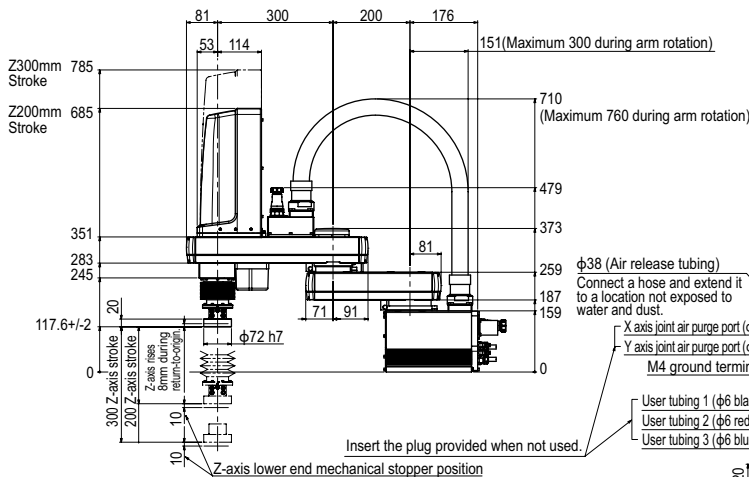
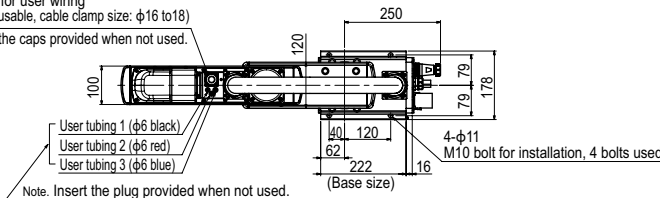
Controller	Power capacity (VA)	Operation method
RCX340 RCX240-R3	1700	Programming / I/O point trace / Remote command / Operation using RS-232C communication

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.

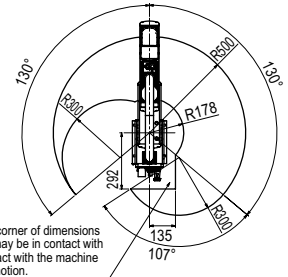
Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<http://global.yamaha-motor.com/business/robot/>

YK500XGP

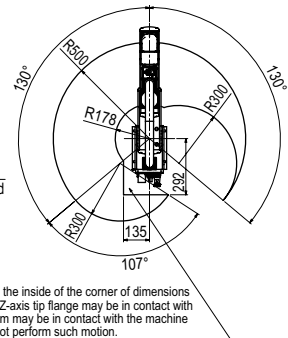
Connector for user wiring (No.1 to 20 usable, cable clamp size: φ16 to 18)
 Cover with the caps provided when not used.



Z axis tip shape



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°

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
 SCA RA robots
 YK-X
 Pick & place robots
 YP-X
 CLEAN
 CONTROLLER INFORMATION
 Orbit / TriV type
 Small / Medium type
 Large type
 Inverse type
 Walk-mount / Inverse type
 Dust-proof & drip-proof type