

YK1000XGP

Dust-proof & drip-proof type

- Arm length 1000mm
- Maximum payload 18kg

Ordering method

YK1000XGP	F	RCX240	R3	BB							
Model	Z axis stroke	Tool flange	Cable	Controller	Usable for CE	Regenerative unit	Expansion I/O <small>Note 1</small>	Network option	iVY System	Gripper	Battery
	200: 200mm 400: 400mm	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
Axis specifications	Arm length (mm)	600	400	200 400	-
	Rotation angle (°)	+/-130	+/-150	-	+/-360
AC servo motor output (W)		750	400	400	200
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> (XYZ: mm) (R: °)		+/-0.02	+/-0.01		+/-0.004
Maximum speed (XYZ: m/sec) (R: °/sec)		10.6	2.3 1.7		920
Maximum payload (kg)		18			
Standard cycle time with 2kg payload <small>Note 2</small> (sec)		0.59			
R-axis tolerable moment of inertia <small>Note 3</small> (kgm ²)		1.0			
Protection class <small>Note 4</small>		Equivalent to IP65 (IEC 60529)			
User wiring (sq x wires)		0.2x20			
User tubing (Outer diameter)		φ6x3			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length (m)		Standard: 3.5 Option: 5,10			
Weight (kg)		Z axis 200mm: 60 Z axis 400mm: 62			

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	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.

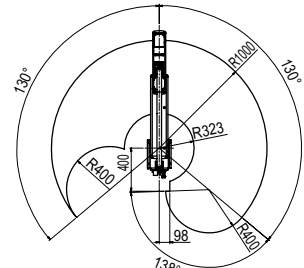
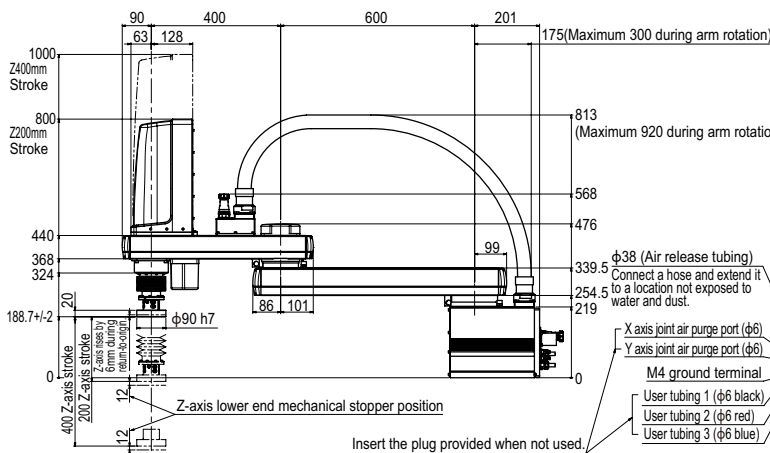
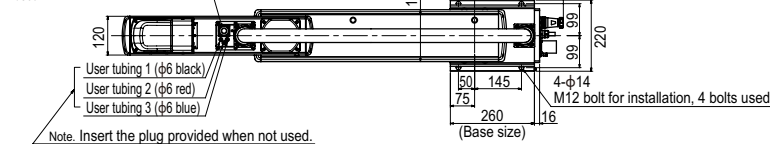
Note. To set the standard coordinates with high accuracy, use a standard coordinate setting jig (option). Refer to the user's manual (installation manual) for more details.

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

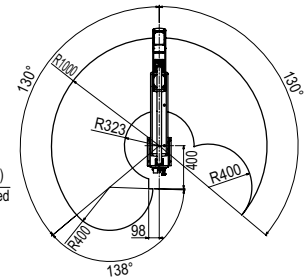
YK1000XGP

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

Cover with the caps provided when not used.

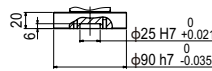


Working envelope of left-handed system



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°



Z axis tip shape

- 6-M5x0.8 Depth 11
- 10-M5x0.8 Depth 11

* There is no phase relation between each position of M5 tapped holes and R-axis origin position.

APPLICATION

TRANSERO

FLIP-X

PHASER

XY-X

YK-XG

YP-X

CLEAN

CONTROLLER INFORMATION

Orbit type

Tiny type

Small type

Medium type

Large type

Wall-mount / Inverse type

Compact single-axis robots

Single-axis robots

Linear motor single-axis robots

Catena robots

SCARA robots

Pick & place robots

CLEAN

CONTROLLER INFORMATION

Orbit type

Tiny type

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