

# YK150XG

Standard type: Tiny type

- Arm length 150mm
- Maximum payload 1kg

## Ordering method

**YK150XG - 50**

Model	Z axis stroke	Cable
	50: 50mm	2L: 2m
		3L: 3.5m
		5L: 5m
		10L: 10m

**RCX340-4**

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
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Specify various controller setting items. RCX340 ▶ **P.494**

**RCX240S**

Controller	CE Marking	Expansion I/O	Network option	iVY System	Gripper	Battery
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Specify various controller setting items. RCX240/RCX240S ▶ **P.481**

## Specifications

		X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length	75 mm	75 mm	50 mm	-
	Rotation angle	+/-125 °	+/-145 °	-	+/-360 °
AC servo motor output		30 W	30 W	30 W	30 W
Deceleration mechanism	Speed reducer	Harmonic drive	Harmonic drive	Ball screw	Harmonic drive
	Transmission method	Direct-coupled			
	Motor to speed reducer Speed reducer to output	Direct-coupled			
Repeatability <sup>Note 1</sup>		+/-0.01 mm	+/-0.01 mm		+/-0.004 °
Maximum speed		3.4 m/sec		0.9 m/sec	1700 °/sec
Maximum payload		1.0 kg			
Standard cycle time: with 0.1kg payload <sup>Note 2</sup>		0.33 sec			
R-axis tolerable moment of inertia <sup>Note 3</sup>		0.01 kgm <sup>2</sup>			
User wiring		0.1 sq × 8 wires			
User tubing (Outer diameter)		φ 4 × 2			
Travel limit		1.Soft limit 2.Mechanical stopper (X,Y,Z axis)			
Robot cable length		Standard: 2 m Option: 3.5 m, 5 m, 10 m			
Weight (Excluding robot cable) <sup>Note 4</sup>		4.0 kg			
Robot cable weight		0.9 kg (2 m)	1.5 kg (3.5 m)	2.1 kg (5 m)	4.2 kg (10 m)

Note 1. This is the value at a constant ambient temperature. (X,Y axes)  
 Note 2. When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.  
 Note 3. There are limits to acceleration coefficient settings. See P.522.  
 Note 4. The total robot weight is the sum of the robot body weight and the cable weight.

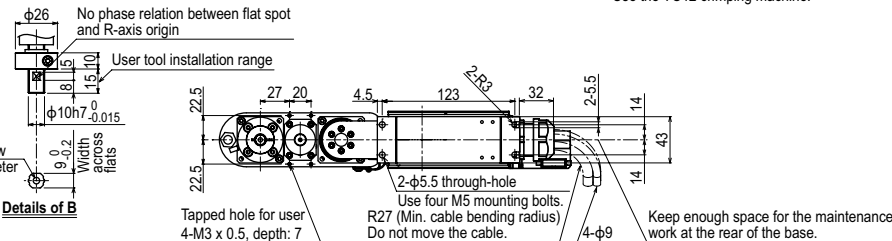
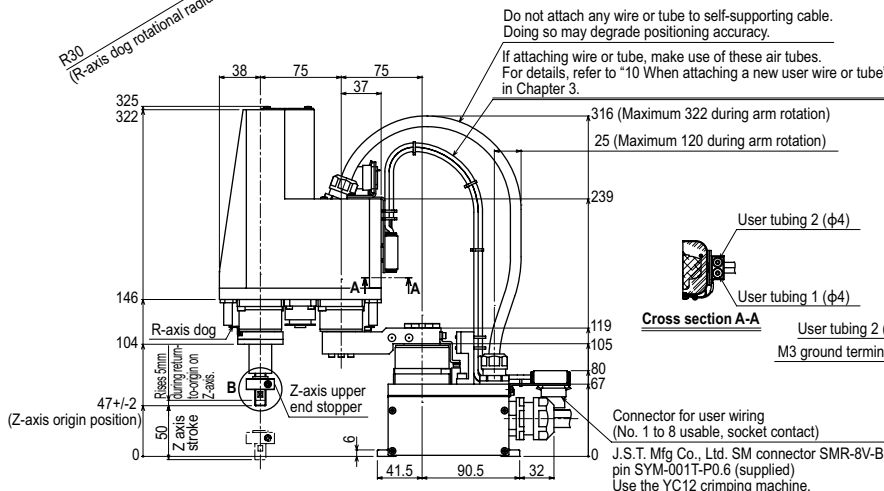
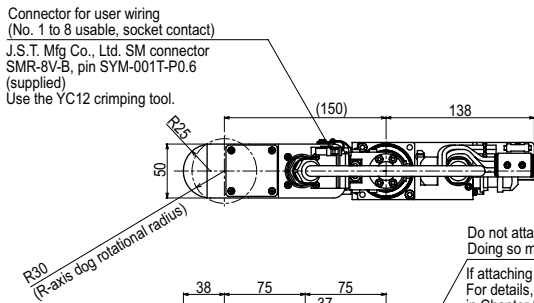
## Controller

Controller	Power capacity (VA)	Operation method
RCX340 RCX240S	300	Programming / I/O point trace / Remote command / Operation using RS-232C communication

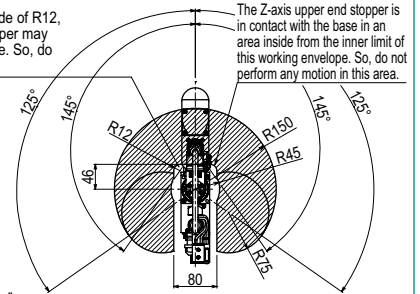
Note. "Harmonic" and "Harmonic drive" are the registered trademarks of Harmonic Drive Systems Inc.  
 Note. The movement range can be limited by changing the positions of X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)  
 See our robot manuals (installation manuals) for detailed information.

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

## YK150XG



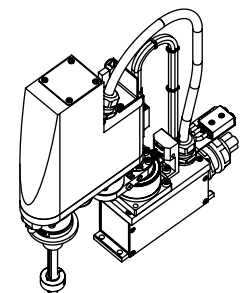
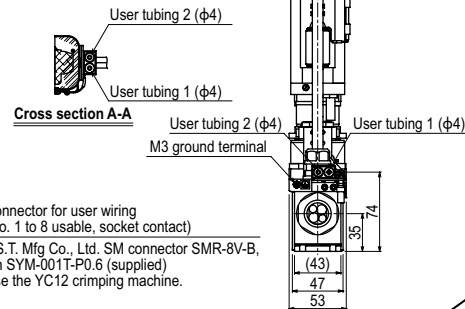
If the robot enters the inside of R12, the Z-axis upper end stopper may be in contact with the base. So, do not perform such motion.



### Working envelope

X, Y-axis origin is at ±5° with respect to front of robot base

When performing return-to-origin, move the axes counterclockwise in advance from the position shown above.



APPLICATION  
 TRANSERO  
 FLIP-X  
 PHASER  
 XY-X  
 YK-X  
 YP-X  
 CLEAN  
 CONTROLLER INFORMATION  
 Tiny type / Small / Medium type / Large type / Wash-mount / Inverse type / Dust-proof & drip-proof type