

Standard type: Small type

Arm length 400mm
Maximum payload 5kg

■ Ordering method

YK400XG - 150

Tool flange - Hollow shaft No entry: None
F: With tool flange
S: With hollow shaft RCX340-4

■ Controller

Specify various controller setting items. RCX340 ▶ P.678

■ Cpocifi	ootiono					
Specifi	cations					
			X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length		250 mm	150 mm	150 mm	-
	Rotation angle		+/-140 °	+/-144 °	-	+/-360 °
AC servo motor output			200 W	150 W	50 W	100 W
Deceleration mechanism	Transmission method	Motor to speed reducer	Direct-coupled			
		Speed reducer to output	Direct-coupled			
Repeatability Note 1			+/-0.01 mm		+/-0.01 mm	+/-0.004 °
Maximum speed			6.1 m/sec		1.1 m/sec	1020 °/sec
Maximum payload			5 kg (Standard specification), 4 kg (Option specifications Note 4)			
Standard cycle time: with 2kg payload Note 2			0.45 sec			
R-axis tolerable moment of inertia Note 3			0.05 kgm² (0.5 kgfcms²)			
User wiring			0.2 sq × 10 wires			
User tubing (Outer diameter)			ф 4 × 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			19.5 kg			

Controller Power capacity (VA) Operation method Programming / I/O point trace Remote command / RCX340 1000 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/

Option: User wiring/tubing through spline type

This is the value at a constant ambient temperature. (X,Y axes

Note 2. When reciprocating 300mm in horizontal and 25mm in vertical directions

Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.

Note 4. Maximum payload of option specifications (with tool flange attached or with user wiring and tubing routed through spline shaft) is 4kg.

YK400XG 142 If the robot enters the inside of the corner of R190 and dimension 148, the Z-axis upper end stopper may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion. 9 8 User tubing 1 (\$\phi4\$ black) 30 62 4-φ9 M8 bolt for installation, 4 bolts used User tubing 2 (φ4 red) 50 88 User tubing 3 (φ4 blue) 138 (Base size) D-sub connector for user wiring (No. 1 to 10 usable) Cross section B-B R190 129 Maximum 380 during arm rotation 250 Note that the robot cannot be used at a position where Machine harness 661 the base flange or robot cable interferes with the spline in the working envelope shown above.

*X-axis mechanical stopper position: 142°

*Y-axis mechanical stopper position: 146° Maximum 660 during arm rotation 613 468 428 $4\text{-M3} \times 0.5$ through-hole (No phase relation to R-axis origin.) User tubing 1 (\$\phi4\$ black) As this hole is intended for the wiring/tubing clamp, do not attach a large load to it User tubing 2 (\$4 red) 7.8 264 235 D-sub connector 7.8 for user wiring (No. 1 to 10 usable) User tubing 3 (\$4 blue View of F ф27 Α¥ 138.5+/-2 780.5 φ16 h7-0.018 User tool installation Z-axis upper end mechanica ф35 150 stopper position 4mm rise during Z-axis return-to-origin range M4 ground terminal across flat 15 Z-axis lower end mechanical stopper position 70 R27 (Min. cable bending radius) 138.5 +/-2 Do not move the cable Keep enough space for the maintenance work at the rear of the base. \bigcirc

Controller

Tapped hole for user wiring 6-M3 \times 0.5 Depth 6 $\frac{4-\Phi9}{}^{1/1}$ The weight of the tool attached here should be added to the tip mass.

Cross section A-A

