YK510XEC-10

Clean type: Medium type

LOW COST HIGH PERFORMANCE MODEL

Arm length 510mm **Maximum payload 10kg**

Ordering method

YK510XEC - 10 - 200 - [ ] - [ ] - [ ] - RCX340-4 - [ ] - [ ] - [ ]

Model	Maximum payload	Z axis stroke	Tool flange	Brake release switch	Cable length	Controller / Number of controllable axes	Safety standard	Option A to E (OP.A to E)	Absolute battery
			No entry: None F: With tool flange	No entry: None BS: With brake release switch	3L: 3.5m 5L: 5m 10L: 10m				

Specify various controller setting items. RCX340 ▶ P.636

Basic specifications

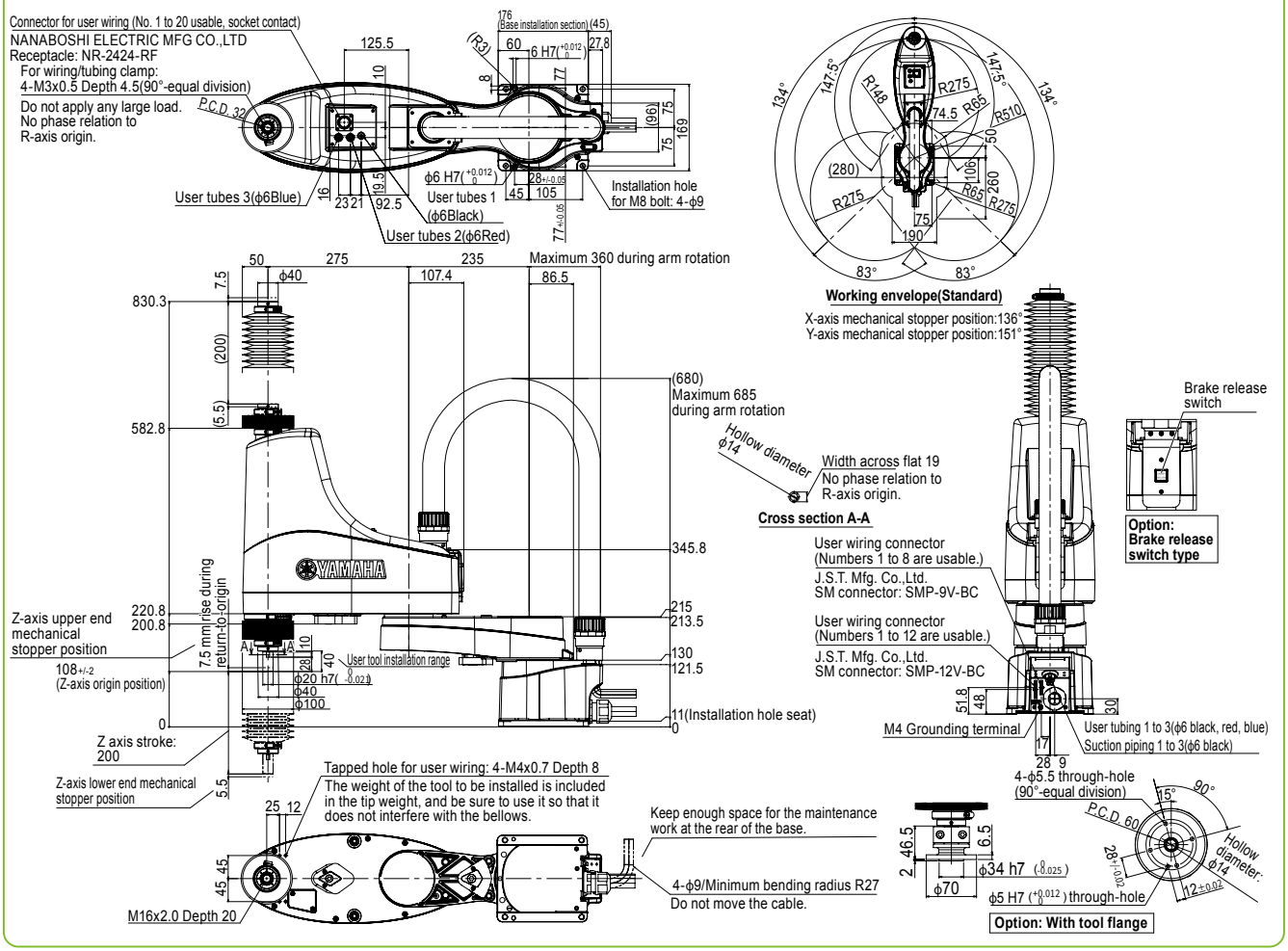
		X axis	Y axis	Z axis	R axis
Axis specifications	Arm length (mm)	235	275	200	–
	Rotation angle (°)	+/-134	+/-147.5	–	+/-360
AC servo motor output (W)		400	200	200	200
Deceleration mechanism	Transmission method: Motor to speed reducer	Direct-coupled		Timing belt	
	Transmission method: Speed reducer to output	Direct-coupled			Timing belt
Repeatability Note 1 (XYZ: mm) (R: °)		+/-0.01		+/-0.01	+/-0.01
Maximum speed (XYZ: m/sec) (R: °/sec)		7.8		2	2600
Maximum payload (kg)		10 kg (Standard specification) 9 kg (With tool flange)			
Standard cycle time: with 2kg payload (sec) Note 2		0.42			
R-axis tolerable moment of inertia Note 3 (kgm²)		0.3			
User wiring (sq × wires)		0.2×20			
User tubing (Outer diameter)		φ6×3			
Travel limit		1.Soft limit, 2.Mechanical stopper (X, Y, Z axes)			
Robot cable length (m)		Standard: 3.5 Option: 5, 10			
Weight (kg)		27			
Degree of cleanliness		ISO CLASS 4 (ISO 14644-1)			
Intake air (Nℓ/min)		60 Note 4			

Note 1. This is the value at a constant ambient temperature. (X,Y axes)
Note 2. When reciprocating 300mm in horizontal and 25mm in vertical directions and performing the coarse positioning arch operation.
Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
Note 4. Set within the range of ±1Nℓ/min. When the suction volume is not appropriate, it may adversely affect the cleanliness degree or deform the bellows.

Controller

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

Note. User wiring/tubing can be passed through from the top to the tip of the Z-axis shaft. For details, see the manual (installation manual).
Note. The movement range can be restricted by adding the X- and Y-axis mechanical stoppers. (The maximum movement range was set at 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/

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