

Standard type: Small type

● **LOW COST HIGH PERFORMANCE MODEL**



● Arm length 400mm

- **Maximum payload 4kg**

Ordering method

YK400XE	4		150				RCX340-4			
Model	Maximum payload	Return-to-origin method S: Sensor T: Stroke end	Z axis stroke	Hollow shaft No entry: None S: With hollow shaft C: With hollow cap	Brake release switch No entry: None BS: With brake release switch	Cable 3L: 3.5m 5L: 5m 10L: 10m	Controller / Number of controllable axes	Safety standard	Option A to E (OP.A to E)	Absolute battery

Specify various controller setting items.

Specify various controller setting items.

* For details about controller, refer to the RCX340 catalog or view YAMAHA' s website.

■ Specifications

			X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length		225 mm	175 mm	150 mm	-
	Rotation angle		+/-132 °	+/-150 °	-	+/-360 °
AC servo motor output			200 W	100 W	100 W	100 W
Deceleration mechanism	Transmission method	Motor to speed reducer	Direct-coupled		Timing belt	
		Speed reducer to output	Direct-coupled			Timing belt
Repeatability ^{Note 1}			+/-0.01 mm		+/-0.01 mm	+/-0.01 °
Maximum speed			6 m/sec		1.1 m/sec	2600 °/sec
Maximum payload			4 kg (Standard specification, Option specifications ^{Note 4}), 3 kg (Option specifications ^{Note 5})			
Standard cycle time: with 2kg payload ^{Note 2}			0.41 sec			
R-axis tolerable moment of inertia ^{Note 3}			0.05 kgm ²			
User wiring			0.2 sq × 10 wires			
User tubing (Outer diameter)			φ 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			17 kg			

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 offset amount for R-axis moment of inertia settings.

Note 4. Maximum payload of the standard or option specifications (brake release switch type) is 4 kg

Note 5. Maximum payload of the option specifications (user wiring/tubing through shaft type) is 3 kg.

■ Controller

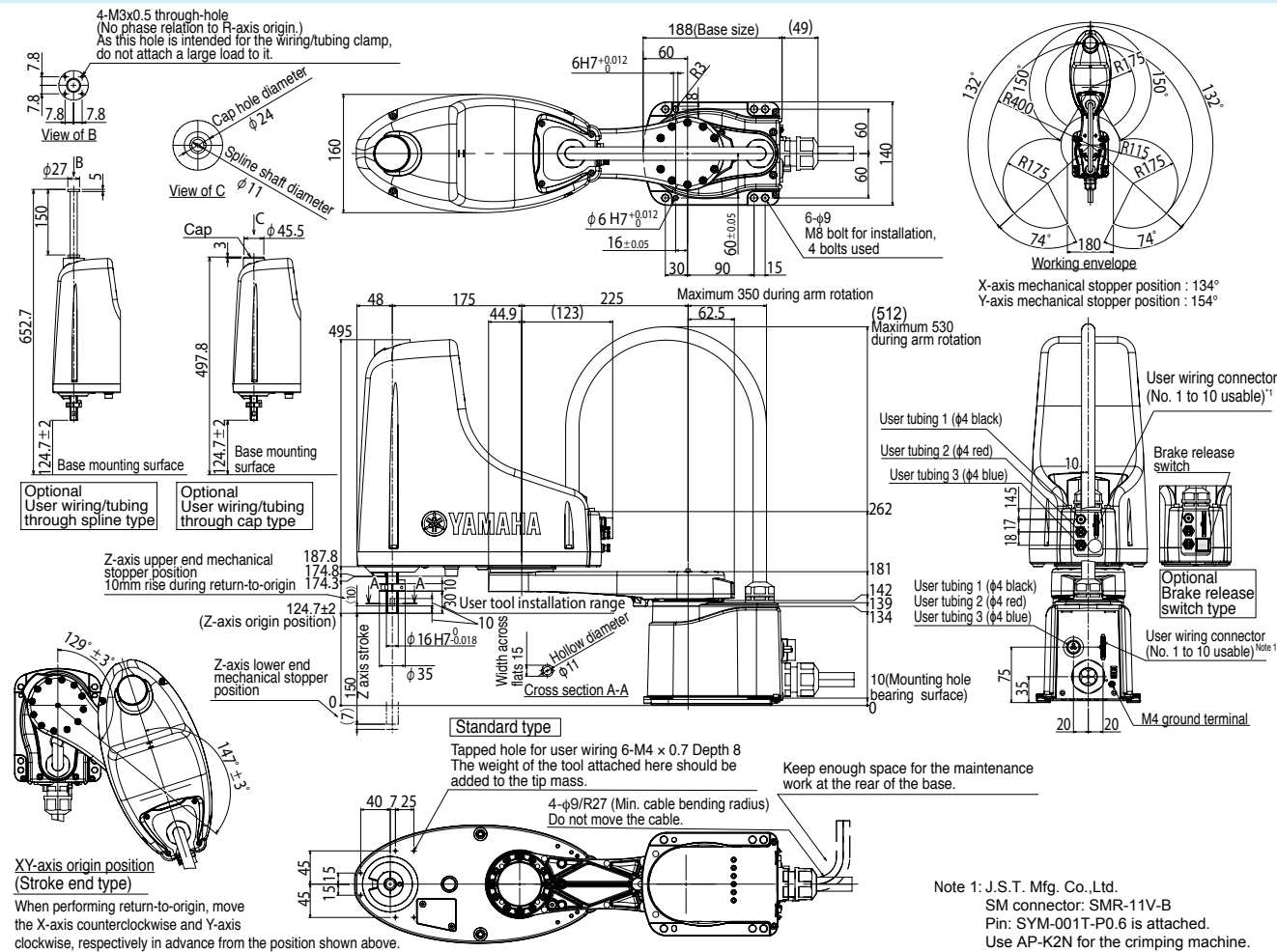
Controller	Power capacity (VA)	Operation method
RCX340	1000	Programming / I/O point trace / Remote command / Operation using RS-232C communication

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.

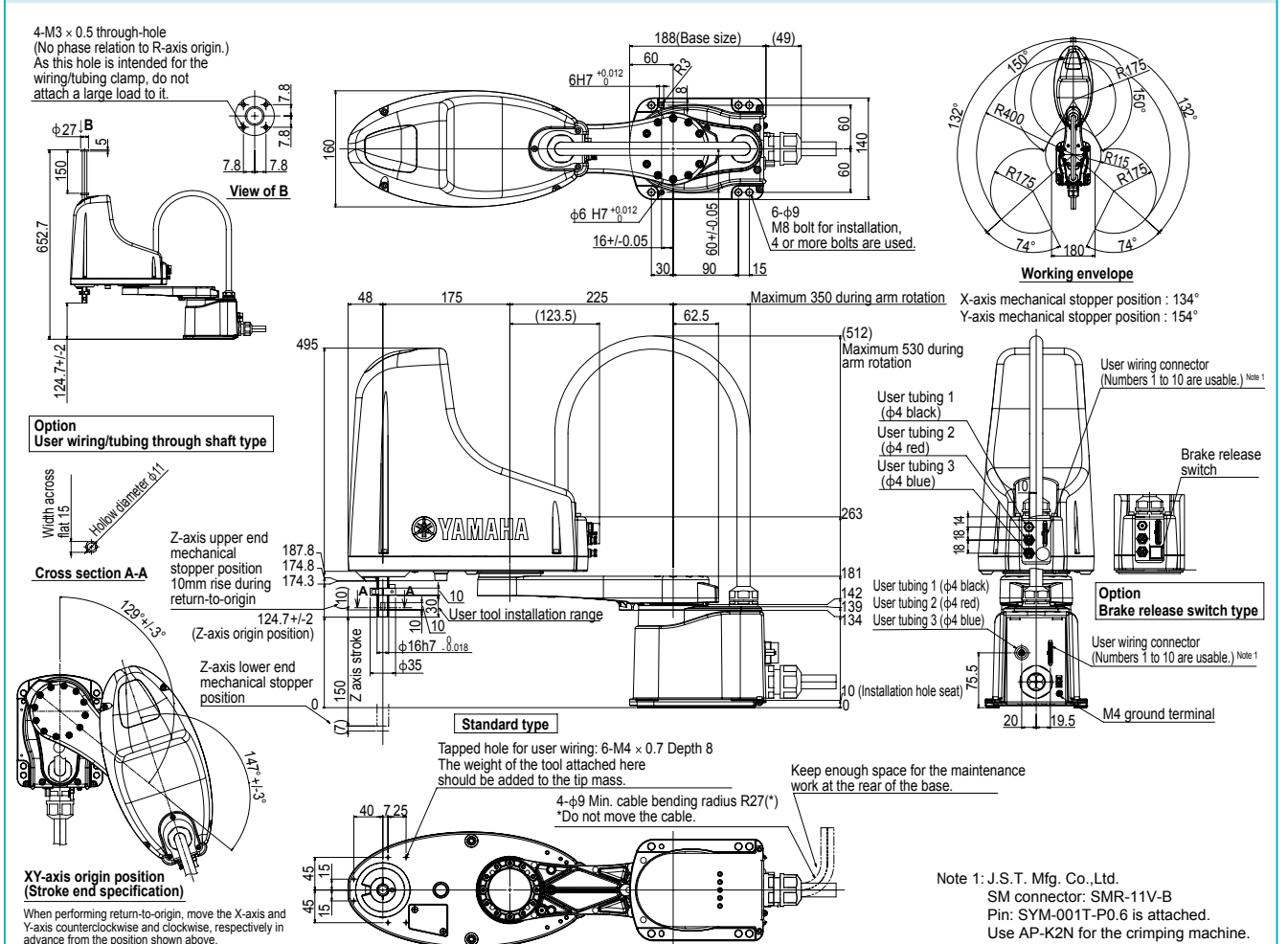
Our robot manuals (installation manuals) can be downloaded from our website at the address below:
<https://global.yamaha-motor.com/business/robot>

YK400XE-4 Shipment on February 2025 or later



Note 1: J.S.T. Mfg. Co.,Ltd.
SM connector: SMR-11V-B
Pin: SYM-001T-P0.6 is attached.
Use AP-K2N for the crimping machine.

YK400XE-4 Shipment on January 2025 or earlier



Note 1: J.S.T. Mfg. Co.,Ltd.
SM connector: SMR-11V-B
Pin: SYM-001T-P0.6 is attached.
Use AP-K2N for the crimping machine.

Standard type: Medium type

● **LOW COST HIGH PERFORMANCE MODEL**



● Arm length 510mm

- Maximum payload 10kg

Ordering method

YK510XE- 10 -200

Model	Maximum payload	Z axis stroke	Tool flange No entry: None F: With tool flange	Hollow shaft/cap Note No entry: None S: With hollow shaft C: With hollow cap	Brake release switch No entry: None BS: With brake release switch	Cable 3L: 3.5m 5L: 5m 10L: 10m	Controller / Number of controllable axes	Safety standard	Option A to E (O.P.A to E)	Absolute battery
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Specify various controller setting items.

Specify various controller setting items.

RCX340 ► **P.678**

Note. The return-to-origin method is provided only in the sensor specifications, but not in the stroke end specifications.

Specifications

			X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length		235 mm	275 mm	200 mm	-
	Rotation angle		+/-134 °	+/-152 °	-	+/-360 °
AC servo motor output			400 W	200 W	200 W	200 W
Deceleration mechanism	Transmission method	Motor to speed reducer	Direct-coupled		Timing belt	
		Speed reducer to output	Direct-coupled			Timing belt
Repeatability ^{Note 1}			+/-0.01 mm		+/-0.01 mm	+/-0.01 °
Maximum speed			7.8 m/sec		2 m/sec	2600 °/sec
Maximum payload			10 kg (Standard specification, Option specifications ^{Note 4}), 9 kg (Option specifications ^{Note 5})			
Standard cycle time: with 2kg payload ^{Note 2}			0.38 sec			
R-axis tolerable moment of inertia ^{Note 3}			0.3 kgm ²			
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			25 ka			

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 offset amount for R-axis moment of inertia settings.

Note 4. Maximum payload of the standard or option specifications (brake release switch type, user wiring/tubing through cap type) is 10 kg.

Note 5. Maximum payload of the option specifications (tool flange mount type, user wiring/tubing through shaft type) is 9 kg.

Controller

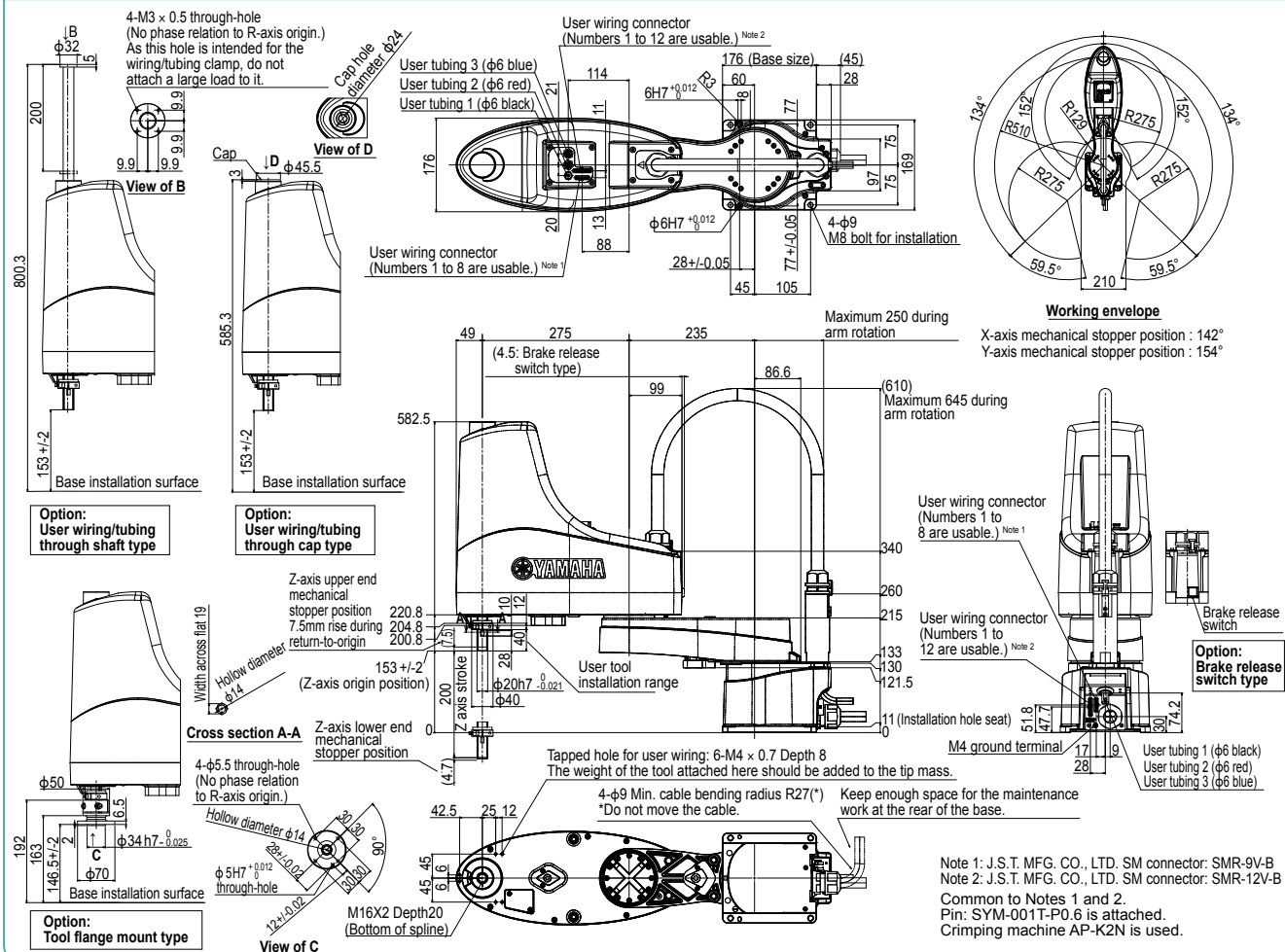
Controller	Power capacity (VA)	Operation method
RCX340	1700	Programming / I/O point trace / Remote command / Operation using RS-232C communication

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.

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YK510XE-10



Note 1: J.S.T. MFG. CO., LTD. SM connector: SMR-9V-B
 Note 2: J.S.T. MFG. CO., LTD. SM connector: SMR-12V-B
 Common to Notes 1 and 2.
 Pin: SYM-001T-P0.6 is attached.
 Crimping machine AP-K2N is used.

Controller

RCX340 ► 678

Standard type: Medium type

● **LOW COST HIGH PERFORMANCE MODEL**



- Arm length 610mm
- Maximum payload 10kg

Ordering method

YK610XE- 10 -200

Model	Maximum payload	Z axis stroke	Tool flange	Hollow shaft/cap Note	Brake release switch	Cable	Controller / Number of controllable axes	Safety standard	Option A to E (O.P.A to E)	Absolut battery
			No entry: None F: With tool flange	No entry: None S: With hollow shaft C: With hollow cap	No entry: None BS: With brake release switch	3L: 3.5m 5L: 5m 10L: 10m				

Specify various controller setting items.

Specify various controller setting items.

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Note. The return-to-origin method is provided only in the sensor specifications, but not in the stroke end specifications.

Specifications

			X-axis	Y-axis	Z-axis	R-axis
Axis specifications	Arm length		335 mm	275 mm	200 mm	-
	Rotation angle		+/-134 °	+/-152 °	-	+/-360 °
AC servo motor output			400 W	200 W	200 W	200 W
Deceleration mechanism	Transmission method	Motor to speed reducer	Direct-coupled		Timing belt	
		Speed reducer to output	Direct-coupled			Timing belt
Repeatability ^{Note 1}			+/-0.01 mm		+/-0.01 mm	+/-0.01 °
Maximum speed			8.6 m/sec		2 m/sec	2600 °/sec
Maximum payload			10 kg (Standard specification, Option specifications ^{Note 4}), 9 kg (Option specifications ^{Note 5})			
Standard cycle time: with 2kg payload ^{Note 2}			0.39 sec			
R-axis tolerable moment of inertia ^{Note 3}			0.3 kgm ²			
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			25 ka			

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 offset amount for R-axis moment of inertia settings.

Note 4. Maximum payload of the standard or option specifications (brake release switch type, user wiring/tubing through cap type) is 10 kg.

Note 5. Maximum payload of the option specifications (tool flange mount type, user wiring/tubing through shaft type) is 9 kg.

Controller

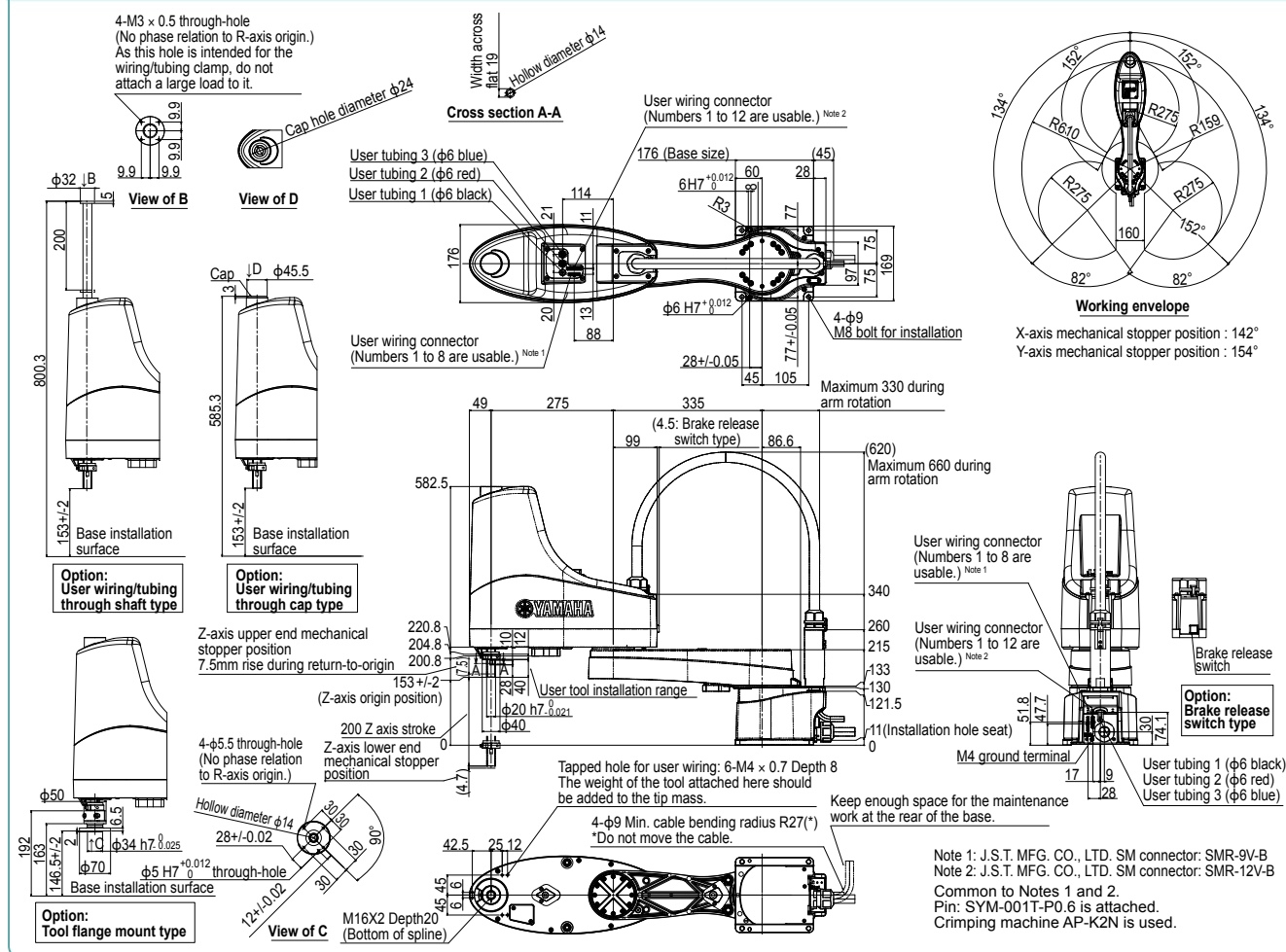
Controller	Power capacity (VA)	Operation method
RCX340	1700	Programming / I/O point trace / Remote command / Operation using RS-232C communication

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.

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YK610XE-10



Note 1: J.S.T. MFG. CO., LTD. SM connector: SMR-9V-B
 Note 2: J.S.T. MFG. CO., LTD. SM connector: SMR-12V-B
 Common to Notes 1 and 2.
 Pin: SYM-001T-P0.6 is attached.
 Crimping machine AP-K2N is used.

Controller

RCX340 ▶ 678

YK710XE-10

Standard type: Large type

● LOW COST HIGH PERFORMANCE MODEL



● Arm length 710mm ● Maximum payload 10kg

Ordering method

YK710XE - 10 - 200

Model	Maximum payload	Z axis stroke	Tool flange	Hollow shaft/cap	Brake release switch	Cable	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 S: With hollow shaft C: With hollow cap	No entry: None BS: With brake release switch	3L: 3.5m 5L: 5m 10L: 10m				

RCX340-4

Specify various controller setting items.

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Note. The return-to-origin method is provided only in the sensor specifications, but not in the stroke end specifications.

Specifications

Axis specifications	Arm length	X-axis	Y-axis	Z-axis	R-axis
	Rotation angle	435 mm	275 mm	200 mm	-
		+/-134 °	+/-152 °	-	+/-360 °
AC servo motor output		400 W	200 W	200 W	200 W
Deceleration mechanism	Transmission method	Direct-coupled		Timing belt	
	Motor to speed reducer	Direct-coupled		Timing belt	
	Speed reducer to output	Direct-coupled		Timing belt	
Repeatability	Note 1	+/-0.02 mm		+/-0.01 mm	+/-0.01 °
Maximum speed		9.5 m/sec		2 m/sec	2600 °/sec
Maximum payload		10 kg (Standard specification, Option specifications Note 4), 9 kg (Option specifications Note 5)			
Standard cycle time: with 2kg payload	Note 2	0.42 sec			
R-axis tolerable moment of inertia	Note 3	0.3 kgm ²			
User wiring		0.2 sq x 20 wires			
User tubing (Outer diameter)		φ 6 x 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		26 kg			

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 offset amount for R-axis moment of inertia settings.

Note 4. Maximum payload of the standard or option specifications (brake release switch type, user wiring/tubing through cap type) is 10 kg.

Note 5. Maximum payload of the option specifications (tool flange mount type, user wiring/tubing through shaft type) is 9 kg.

Controller

Controller	Power capacity (VA)	Operation method
RCX340	1700	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.

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YK710XE-10

