

# YK710XE-10

Standard type: Large type

● LOW COST HIGH PERFORMANCE MODEL



● Arm length 710mm ● Maximum payload 10kg

## Ordering method

**YK710XE-10-200**

**RCX340-4**

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

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              | 435 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     | Direct-coupled   |          | Timing belt |            |
|   | Motor to speed reducer  | Direct-coupled   |          | Timing belt |            |
|   | Speed reducer to output | Direct-coupled   |          | Timing belt |            |
| Repeatability <sup>Note 1</sup>                         |                         | +/-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 <sup>Note 4</sup> ),<br>9 kg (Option specifications <sup>Note 5</sup> ) |          |             |            |
| Standard cycle time: with 2kg payload <sup>Note 2</sup> |                         | 0.42 sec   |          |             |            |
| R-axis tolerable moment of inertia <sup>Note 3</sup>    |                         | 0.3 kgm <sup>2</sup>   |          |             |            |
| 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.

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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