### Ordering method

**YK180XC - 100**

<table>
<thead>
<tr>
<th>Model</th>
<th>RCX340-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z axis stroke</td>
<td>Cable length</td>
</tr>
<tr>
<td>L: 3.5m</td>
<td></td>
</tr>
</tbody>
</table>

### Basic specifications

<table>
<thead>
<tr>
<th>Axis specifications</th>
<th>X axis</th>
<th>Y axis</th>
<th>Z axis</th>
<th>R axis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length (mm)</td>
<td>55</td>
<td>30</td>
<td>105</td>
<td>100</td>
</tr>
<tr>
<td>Rotation angle (˚)</td>
<td>+/-120</td>
<td>+/-140</td>
<td>-</td>
<td>+/-360</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>50</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm (R: ˚))</td>
<td>+/-0.01</td>
<td>+/-0.01</td>
<td>+/-0.004</td>
<td></td>
</tr>
<tr>
<td>Maximum speed (XYZ: m/sec (R: ˚/sec))</td>
<td>3.3</td>
<td>0.7</td>
<td>1700</td>
<td></td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard cycle time: with 0.1kg payload</td>
<td>0.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-axis tolerable moment of inertia (kgm²)</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing (sq × wires)</td>
<td>0.3 × 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing (Outer diameter)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel limit</td>
<td>1.5kg (3.5m)</td>
<td>2.1kg (5m)</td>
<td>4.2kg (10m)</td>
<td></td>
</tr>
<tr>
<td>Robot cable length (m)</td>
<td>6.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg) (Excluding robot cable)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robot cable weight</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of cleanliness</td>
<td>CLASS 10 (0.1µm base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (Nl/min)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Controller

<table>
<thead>
<tr>
<th>Controller</th>
<th>Power capacity (VA)</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCX340</td>
<td>500</td>
<td>Programming / I/O point trace / Remote command / Operation using RS-232C communication</td>
</tr>
</tbody>
</table>

**YK180XC**

- **Clean type: Extra small type**
- **Note:** Built-to-order product. Contact us for the delivery period.

### D-sub connector for user cables 9 pin

- (Adapted to #1 to #8)
- D-sub connector for user cables 9 pin
- (Adapted to #1 to #6)
- Cover internal intake pipe (bulkhead union φ8)
- X, Y, R axis joint section intake pipe (bulkhead union φ6)
- User tubes 2 (bulkhead union φ3)
- User tubes 1 (bulkhead union φ3)

### Right-hand side system operation range

- D-sub connector for user cables 9 pin
- Cover internal intake pipe (bulkhead union φ8)
- X, Y, R axis joint section intake pipe (bulkhead union φ6)
- User tubes 2 (bulkhead union φ3)
- User tubes 1 (bulkhead union φ3)

### Left-hand side system operation range

- D-sub connector for user cables 9 pin
- Cover internal intake pipe (bulkhead union φ8)
- X, Y, R axis joint section intake pipe (bulkhead union φ6)
- User tubes 2 (bulkhead union φ3)
- User tubes 1 (bulkhead union φ3)

### Details of A

- User tool installation tap
- 4-M3 x 0.5 Depth 6
- Cover internal intake pipe (bulkhead union φ8)

### Details of B

- User tool installation tap
- 4-M3 x 0.5 Depth 6
- 4-M6 bolts used for installation

### Keep enough space for the maintenance work at the rear of the base.

- X-axis origin point is 0°/+1° from the base front surface

- X-axis and Y-axis origin positions
  - Move counterclockwise in advance from the above position when performing origin return.

- The user tool installation flange center line is offset within +/-5° relative to the R axis origin point.

- Do not move the cable.

- The user tool installation flange origin of Z axis
  - After returning to origin position, rise by 5mm

- User tubes 1 (Barb fitting)

- User tubes 2 (bulkhead union φ3)

- X, Y, R axis joint section intake pipe (bulkhead union φ6)

- Cover internal intake pipe (bulkhead union φ8)

- User tool installation tap
- 4-M3 x 0.5 Depth 6

### Note

1. This is the value at a constant ambient temperature. (X, Y axes)
2. When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.
3. The total robot weight is the sum of the robot body weight and the cable weight.
4. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.

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**Specifications**

- **Controller Power capacity (VA):** 500
- **Operation method:** Programming / I/O point trace / Remote command / Operation using RS-232C communication

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**Dimensions**

- **Arm length 180mm**
- **Maximum payload 1kg**

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**Company Information**

- Robonity
- LCM100
- YA
- Linear conveyor modules
- LCM100
- Compact single-axis robots
- TRANSERVO
- Motor-less single-axis robots
- XY-X
- SCARA robots
- YK-X
- Pick & place robots
- YP-X
- CLEAN CONTROLLER

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**Additional Information**

- YK180XC
- 5.3
- 92
- Z axis
- 24
- 71
- ϕ
- 140
- Cable length
- R180
- 100
- Note 4. The total robot weight is the sum of the robot body weight and the cable weight.
- Note 3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
- Note 2. When moving 25mm in vertical direction and 100mm in horizontal direction reciprocally.
- Note 1. This is the value at a constant ambient temperature. (X, Y axes)