CLEAN ROBOTS
CLEAN TYPE

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**CLEAN ROBOTS SPECIFICATION SHEET**

### Clean single-axis robots

**TRANSERVO**
- Degree of cleanliness: CLASS 10
- Intake air: 15 to 80Nl/min

<table>
<thead>
<tr>
<th>Model</th>
<th>Payload (kg)</th>
<th>Stroke (mm) and maximum speed (mm/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Horizontal</td>
<td>Vertical</td>
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<tr>
<td>SSC05H</td>
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</tr>
<tr>
<td></td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

### FLIP-X
- Degree of cleanliness: C4L/C4LH/C5L/C5LH/C6L
- Intake air: 20 to 90Nl/min

<table>
<thead>
<tr>
<th>Model</th>
<th>AC servo motor output (W)</th>
<th>Payload (kg)</th>
<th>Stroke (mm) and maximum speed (mm/sec)</th>
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</thead>
<tbody>
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<td></td>
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<td></td>
<td>Horizontal</td>
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<tr>
<td></td>
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<tr>
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</tr>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>C5L</td>
<td>+/-0.02</td>
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<td>20</td>
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<td></td>
<td></td>
<td>6</td>
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</tr>
<tr>
<td>C6L</td>
<td>+/-0.02</td>
<td>20</td>
<td>20</td>
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<td></td>
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<tr>
<td>C8L</td>
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<td>2</td>
<td>2</td>
</tr>
<tr>
<td>C8LH</td>
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<tr>
<td>C14</td>
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<td>6</td>
</tr>
<tr>
<td>C14H</td>
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<td>20</td>
<td>20</td>
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<td>C17</td>
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<td>C17L</td>
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<td>10</td>
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<tr>
<td>C20</td>
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<tr>
<td></td>
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<td>10</td>
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</tr>
</tbody>
</table>

**Note**
- Class 10 (0.1µm) equivalent to FED-STD-209D
### Articulated robots

- **YA**

### Linear conveyor modules

- **LCM100**

### Compact single-axis robots

- **TRANSERVO**

### Motor-less single-axis actuator

- **Robonity**

### Single-axis robots

- **FLIP-X**

### Linear motor single-axis robots

- **PHASER**

### Cartesian robots

- **XY-X**

- **SCARA**

### Pick & place robots

- **YP-X**

### CLEAN INFORMATION

**CLEAN ROBOTS SPECIFICATION SHEET**

**Clean single-axis robots**

**TRANSERVO**

- **Degree of cleanliness**: CLASS 10
- **Intake air**: 15 to 80 N/min

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Payload</th>
<th>Stroke (mm)</th>
<th>Maximum Speed (mm/sec)</th>
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<tbody>
<tr>
<td>SSC04</td>
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<td></td>
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<td>600</td>
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<td></td>
<td>6</td>
<td>12</td>
<td>–</td>
<td>300</td>
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</table>

**FLIP-XC**

- **Degree of cleanliness**: C4L/C4LH/C5L/C5LH/C6L (ISO CLASS 3)

- **Intake air**: 20 to 90 N/min

<table>
<thead>
<tr>
<th>Model</th>
<th>AC servo motor output (W)</th>
<th>Repeatability (mm)</th>
<th>Lead (mm)</th>
<th>Payload (kg)</th>
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<tbody>
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<td>2.4</td>
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<td>C4LH</td>
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<td>+/-0.02</td>
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<td>2.4</td>
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<tr>
<td>C5LH</td>
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<td>C8L</td>
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<td>10</td>
<td>4.0</td>
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<td>+/-0.01</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>4.0</td>
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</tbody>
</table>
Clean cartesian robots

- **XY-SCARA**
  - Degree of cleanliness: **CLASS 10**
  - Intake air: 60 to 90NL/min
  - Aperture designed to minimal dimensions by use of stainless steel sheet
  - Installed clean robot dedicated cable duct

<table>
<thead>
<tr>
<th>Type</th>
<th>Model</th>
<th>Axis</th>
<th>Moving range (mm)</th>
<th>Maximum speed (m/min)</th>
<th>Maximum payload (kg)</th>
<th>Detailed info page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 axes</td>
<td>SXYXC</td>
<td>X</td>
<td>150 to 1050mm</td>
<td>1000</td>
<td>20</td>
<td>P.476</td>
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<tr>
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<td>SXYXC (ZSC12)</td>
<td>X</td>
<td>150 to 1050mm</td>
<td>1000</td>
<td>3</td>
<td>P.478</td>
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<td>SXYXC (ZSC6)</td>
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<td>150 to 1050mm</td>
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<td>5</td>
<td>P.478</td>
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<td>3 axes</td>
<td>SXYXC (ZRSC12)</td>
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<td>1000</td>
<td>3</td>
<td>P.480</td>
</tr>
<tr>
<td></td>
<td>SXYXC (ZRSC6)</td>
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<td>1000</td>
<td>5</td>
<td>P.480</td>
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<tr>
<td>4 axes</td>
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<td>1000</td>
<td>3</td>
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<tr>
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<td>SXYXC (ZRSC6)</td>
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<td>150 to 1050mm</td>
<td>1000</td>
<td>5</td>
<td>P.480</td>
</tr>
</tbody>
</table>

Clean SCARA robots

- **YK-XC/YK-XGC/YK-XGLC**
  - Degree of cleanliness: **CLASS 10**
  - Intake air: 30 to 60NL/min
  - Bellows cover fitted in axial tip
  - Harness placed completely on inside

<table>
<thead>
<tr>
<th>Type</th>
<th>Model</th>
<th>Arm length (mm) and XY axis combined maximum speed (m/s)</th>
<th>Standard cycle time (sec)</th>
<th>Maximum payload (kg)</th>
<th>Axis tolerable moment of inertia (kgm^2)</th>
<th>Detailed info page</th>
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<tbody>
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<td>YK180XG</td>
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<td>0.01</td>
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<td></td>
<td>YK220XG</td>
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<td>1.0</td>
<td>0.01</td>
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<td>YK350XG</td>
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<td>YK600XGLC</td>
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<td>YK1000XG</td>
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<td>20.0</td>
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</table>
**SSC04 Slider type**

**CE compliance**

**Origin on the non-motor side is selectable**

### Ordering method

<table>
<thead>
<tr>
<th>SSC04</th>
<th>Lead</th>
<th>Type</th>
<th>Brake</th>
<th>Direction of air source (installation)</th>
<th>Linear conveyor modules</th>
<th>Compact single-axis robots</th>
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</thead>
<tbody>
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</tbody>
</table>

### Basic specifications

- **Motor**: 42 [ ] Step motor
- **Repeatability (mm)**: +/-0.02
- **Deceleration mechanism**: Ball screw φ8
- **Maximum motor torque (N-m)**: 0.27
- **Ball screw lead (mm)**: 12, 6, 2
- **Maximum speed (mm/sec)**: 600, 300, 100
- **Maximum payload (kg)**:
  - Horizontal: 2, 4, 6
  - Vertical: 1, 2, 4
- **Max. pressing force (N)**: 45, 90, 150
- **Stroke (mm)**: 50 to 400 (50mm pitch)
- **Overall length (mm)**: Stroke+116
- **Maximum overall dimension of body cross-section (mm)**: W49 x H59
- **Cable length (m)**: Standard: 1 / Option: 3, 5, 10
- **Degree of cleanliness**: CLASS 10
- **Intake air (N/m²/min)**: 12, 6, 2

### Allowable overhang

- **Note**: Distance from center of slider to surface to conveyor center-of-gravity at a guide service life of 10,000 km (Service life is calculated for 400mm stroke models).

### Static loading moment

- **Controller**
  - **Remote command**
  - **Pulse train control**

### Controller operation method

<table>
<thead>
<tr>
<th>TS-S2</th>
<th>TS-SH</th>
<th>TS-SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>492</td>
<td>492</td>
<td>502</td>
</tr>
</tbody>
</table>

---

**Note 1. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.**

**Note 2. The robot cable is flexible and resists bending.**

**Note 3. Secure the cable with a tie-band 100mm or less from unit’s end face to prevent the cable from being subjected to excessive loads.**

**Note 4. The cable’s minimum bend radius is R30.**

**Note 5. These are the weights without a brake. The weights are 0.2kg heavier when equipped with a brake.**
**SSC05** 

**Sliding type**

- High lead: Lead 20
- CE compliance
- Origin on the non-motor side is selectable

### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Type</th>
<th>Brake</th>
<th>Direction of air counter installation</th>
<th>Origin position</th>
<th>Stroke</th>
<th>Cable length</th>
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</tr>
</tbody>
</table>

**Note:**
1. Only the model with a lead of 12mm or 6mm can select specifications with brake.
2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
3. The robot cable is flexible and resists bending.
4. See P.500 for DIN rail mounting bracket.
5. Select this selection when using the gateway function. For details, see P.62.

### Basic specifications

- Motor: 42 [Step motor]
- Repeatability: +/±0.02
- Deceleration mechanism: Ball screw Ø12
- Maximum motor torque (N·m): 0.27
- Ball screw lead (mm): 20, 12, 6
- Maximum speed (mm/sec): 5000, 6000, 3000
- Maximum payload (kg): 4, 6, 10
- Horizontal: 60, 90
- Maximum pressing force (N): 27, 45, 90
- Overall length: Stroke+230, Stroke+270
- Maximum outside dimension of body cross-section (mm): W55 x H56
- Cable length (m): Standard: 1 / Option: 3, 5, 10
- Intake air (M(6/min)): Lead 20, Lead 12, Lead 6
- Degree of cleanliness: Class AS 10
- Effective stroke: 17W±2: When origin is on motor side
- **Note:**
1. Positioning repeatability is one direction.
2. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
3. Per 1cf (0.1 µm base), when suction blower is used.

### Allowable overhang

**Note:**
- Distance from center of upper surface to convex center of gravity at a guide service life of 10,000 km (Service life is calculated for 600mm stroke models).

- Horizontal installation (mm): A 2 kg, B 4 kg, C 6 kg
- Wall installation (mm): A 2 kg, B 4 kg, C 6 kg
- Vertical installation (mm): Stroke+270, Stroke+230

### Static loading moment

**Note:**
- Maximum moment (N·m): M: 578, 579
- Maximum moment (N·m): P: 544
- Maximum moment (N·m): R: 495

### Controller

- Controller: TS-S2, TS-SH, TS-SD
- Operation method: Pulse train control

---

**Image:**

- Approx. 200 (Cable securing length)
- 17W±2: When origin is on motor side
- Effective stroke
  - 17W±2: When origin is on motor side
  - (52): When origin is on non-motor side
- **Note:**
1. Stop positions are determined by the mechanical switchers at both ends.
2. Either right or left can be selected for suction air port mounting direction. This drawing shows the RJ (standard) direction.
3. Secure the cable with a tie-band 100mm or less from unit’s end face to prevent the cable from being subjected to excessive loads.
4. The cable’s minimum bend radius is R30.
5. The robot cable is flexible. A brake is not set during operation. The weights are 0.2kg heavier when equipped with a brake.
6. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
### SSC05H

**Slider type**

#### High lead: Lead 20

#### CE compliance

#### Origin on the non-motor side is selectable

## Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Type</th>
<th>Brake</th>
<th>Direction of air channel (Options: 1A, 2A, 3A)</th>
<th>Origin position</th>
<th>Stroke (mm)</th>
<th>Cable length (mm)</th>
<th>Robot positioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC05H</td>
<td>S</td>
<td>Straight</td>
<td>With</td>
<td>Vertical</td>
<td>Non-motor side</td>
<td>20-800</td>
<td>235+600</td>
<td>1D</td>
</tr>
</tbody>
</table>

### Note

1. Only the model with a lead of 12mm or 6mm can select specifications with brake.
2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.
3. The robot cable is flexible and resists bending. The robot cable is flexible and resists bending.
4. Per 1cf (0.1 µm base), when suction blower is used.
5. Stop positions are determined by the mechanical stops at both ends.
6. Either right or left can be selected for the suction air joint mounting direction. This drawing shows the RJ (standard) direction.

## Basic specifications

<table>
<thead>
<tr>
<th>Motor</th>
<th>Repeatability (mm)</th>
<th>Deceleration mechanism</th>
<th>Maximum motor torque (N-m)</th>
<th>Ball screw lead (mm)</th>
<th>Maximum speed (mm/sec)</th>
<th>Motor-less single-axis robots</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.47</td>
<td>20</td>
<td>600</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>500</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>600</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1200</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>900</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>600</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>500</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>400</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>300</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>250</td>
<td>62.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>150</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
<td>30</td>
<td></td>
</tr>
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<td></td>
<td>50</td>
<td>20</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Note

1. Note 1: Positioning repeatability in one direction.
2. Note 2: When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below. Note 3. Per 1cf (0.1 µm base), when suction blower is used.
4. Note 5. These are the weights without a brake. The weights are 0.2 kg heavier when equipped with a brake.
5. Only the model with a lead of 12mm or 6mm can select specifications with brake.
6. Note 6. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below. Note 3. Per 1cf (0.1 µm base), when suction blower is used.

## Allowable overhang

- **Horizontal installation (Unit: mm)**
  - Wall installation: 1000, 600, 300, 250, 200, 150, 100, 50, 0
  - Vertical installation: 1200, 800, 600, 400, 300, 200, 100, 50, 0

## Static loading moment

### Horizontal installation (Unit: mm)

<table>
<thead>
<tr>
<th>Motor</th>
<th>Static loading moment (Unit: N.m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Vertical installation (Unit: mm)

<table>
<thead>
<tr>
<th>Motor</th>
<th>Static loading moment (Unit: N.m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Controller

<table>
<thead>
<tr>
<th>Controller</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS-S2</td>
<td>I/O point trace</td>
</tr>
<tr>
<td>TS-SH</td>
<td>Remote command</td>
</tr>
<tr>
<td>TS-SD</td>
<td>Pulse train control</td>
</tr>
</tbody>
</table>

Note: Distance from center of slider upper surface to conveyor center of gravity at a guide service life of 10,000 km (Service life is calculated for 600mm stroke models).
### Ordering method

<table>
<thead>
<tr>
<th>C4L</th>
<th>Model</th>
<th>Lateral installation position</th>
<th>Brake type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Left: LJ (Note 4) Right: RJ (Note 4)</td>
<td>None: Standard 50 to 400 (50mm pitch)</td>
</tr>
</tbody>
</table>

### Basic specifications

- **AC servo motor output (W):** 30
- **Repeatability (mm):** +/-0.02
- **Deceleration mechanism:** Ball screw 6:6
- **Maximum speed (mm/sec):**
  - Vertical: 1.2, 2.4, 7.2
- **Rated thrust (N):**
  - Leader: 32 kgf, 64 kgf, 100 kgf
  - Lead 6: 32 kgf, 64 kgf, 100 kgf
- ** stuffed length (mm):**
  - Vertical: Stroke+245
- **Maximum outside dimension of body cross-section (mm):** W45×H55
- **Overall length (mm):**
  - Horizontal: Stroke+243
- **Degree of cleanliness:** ISO CLASS 3 (ISO14644-1)
- **Cable length (m):**
  - 720, 360, 120
- **Maximum speed (mm/sec):** 30
- **AC servo motor output (W):**
  - Standard: 3.5 / Option: 1, 5, 10
- **Allowable overhang:**
  - Vertical: Stroke+205

### Controller

- **Operation method:**
  - ERCD

### Static loading moment

- **MY:** 15, 19, 18
- **MP:** 51, 55
- **MR:** 6, 6

### Notes:

1. Positioning repeatability in one direction.
2. CLASS 10 (0.1 µm) FED-STD-209D or equivalent when a suction blower is used.
3. The necessary intake air amount varies depending on the use conditions and environment.

---

**Note:**
- **Effective stroke:**
  - 50, 100, 150, 200, 250, 300, 350, 400
  - A: 4, 6, 8, 10, 12, 14
  - B: 1, 2, 3, 4
  - E: 50, 100, 150, 200, 250, 300, 400
  - Maximum speed (mm/sec):
    - Lead 12: 1.4
    - Lead 6: 1.8
    - Lead 2: 2.1

---

**Controller Operation method**

- ERCD
- Pulse train control
- Programming
- Remote command
- RS-232C communication

---

**Allowable overhang**

- **Vertical installation (Unit: mm):**
  - Horizontal installation (Unit: mm):
  - Wall installation (Unit: mm):

---

**Note 1:** Stop positions are determined by the mechanical stoppers at both ends.

**Note 2:** Minimum bend radius of motor cable is R30.

**Note 3:** Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.

**Note 4:** Either right or left can be selected for the installation direction for the 6 intake air joint. (The left side is the standard.)

**Note 5:** External view of C4LH is identical to C4L.
### Ordering method

<table>
<thead>
<tr>
<th>C4LH</th>
<th>Brake</th>
<th>Direction of air</th>
<th>Linear conveyor modules</th>
<th>LCM100</th>
<th>Compact single-axis robots</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TRANSERVO Motor-less single axis robots</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YK-X Pick &amp; place robots</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YP-X CLEAN CONTROLLER INFORMATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Single-axis Cartesian SCARA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>YX-X FLIP-X PHASER</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SR1-X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Power-supply voltage</td>
</tr>
</tbody>
</table>

Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable.
Note 2. See P.500 for details on robot cable.
Note 3. Select this selection when using the gateway function. For details, see P.62.

### Basic specifications

<table>
<thead>
<tr>
<th>AC servo motor output (W)</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeatability (mm)</td>
<td>+/-0.02</td>
</tr>
<tr>
<td>Deceleration mechanism</td>
<td>Ball screw 48</td>
</tr>
<tr>
<td>Ball screw lead (mm)</td>
<td>12 6 2</td>
</tr>
<tr>
<td>Maximum speed (mm/sec)</td>
<td>720 360 120</td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>4.5 6 7.2</td>
</tr>
<tr>
<td>Rated thrust (N)</td>
<td>32 64 153</td>
</tr>
<tr>
<td>Stroke (mm)</td>
<td>50 to 400 (50mm pitch)</td>
</tr>
<tr>
<td>Overall length (mm)</td>
<td>130</td>
</tr>
<tr>
<td>Maximum outside dimension of body cross-section (mm)</td>
<td>W45 x H55</td>
</tr>
<tr>
<td>Cable length (m)</td>
<td>Standard: 3.5 / Option: 5, 10</td>
</tr>
<tr>
<td>Degree of cleanliness</td>
<td>ISO CLASS 3 (ISO14644-1)</td>
</tr>
<tr>
<td>Intake air (mm)</td>
<td>50 30 15</td>
</tr>
</tbody>
</table>

Note 1. Positioning repeatability in one direction.
Note 2. CLASS 10 (0.1 µm) FED-STD-209D or equivalent when a brake is used.
Note 3. The necessary intake amount varies depending on the use conditions and environment.

### Allowable overhang

<table>
<thead>
<tr>
<th>Horizontal installation (unit:mm)</th>
<th>Vertical installation (unit:mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>2kg</td>
<td>339</td>
</tr>
<tr>
<td>4.5kg</td>
<td>169</td>
</tr>
<tr>
<td>6kg</td>
<td>234</td>
</tr>
<tr>
<td>8kg</td>
<td>1105</td>
</tr>
<tr>
<td>6kg</td>
<td>520</td>
</tr>
</tbody>
</table>

Note 1. When origin is on motor side
Note 2. When origin is on non-motor side
Note 3. Select this selection when using the gateway function. For details, see P.62.
Note 4. Either right or left can be selected for the installation direction for the coupling.
Note 5. External view of C4LH is identical to C4L.

### Static loading moment

<table>
<thead>
<tr>
<th>Controller</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR1-X</td>
<td>Programming / I/O point trace / Remote command / Operation using RS-232C</td>
</tr>
<tr>
<td>RDV-X</td>
<td>Pulse train control</td>
</tr>
</tbody>
</table>

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Minimum bend radius of motor cable is R30.
Note 3. Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.
Note 4. Either right or left can be selected for the installation direction for the suction air joint. (The left side is the standard.)
Note 5. External view of C4LH is identical to C4L.

### C4LH

Approx. 250 (Motor cable length)

<table>
<thead>
<tr>
<th>Effective stroke</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>350</th>
<th>400</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>258</td>
<td>305</td>
<td>355</td>
<td>405</td>
<td>455</td>
<td>505</td>
<td>555</td>
<td>605</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>150</td>
<td>100</td>
<td>100</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>E</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>100</td>
<td>25</td>
<td>75</td>
<td>9</td>
</tr>
<tr>
<td>S</td>
<td>110</td>
<td>170</td>
<td>220</td>
<td>270</td>
<td>320</td>
<td>370</td>
<td>420</td>
<td>470</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>7.0</td>
<td>120</td>
<td>170</td>
<td>220</td>
<td>270</td>
<td>320</td>
<td>370</td>
<td>420</td>
</tr>
</tbody>
</table>

Note 1. When origin is on motor side
Note 2. When origin is on non-motor side
Note 3. Select this selection when using the gateway function. For details, see P.62.
Note 4. Either right or left can be selected for the installation direction for the suction air joint. (The left side is the standard.)
Note 5. External view of C4LH is identical to C4L.
Note 1. The model with a lead of 20mm cannot select specifications with brake (vertical specifications).
Note 2. Minimum bend radius of motor cable is R30.
Note 3. Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.
Note 4. Either right or left can be selected for the installation direction for the 46 intake air joint. (The left side is the standard.)
Note 5. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed).
In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
Note 6. External view of C5LH is identical to C5L.
**C5LH**

- **High lead**: Lead 20
- **Origin on the non-motor side is selectable**

### Ordering method

**C5LH**

<table>
<thead>
<tr>
<th>Model</th>
<th>Use designation</th>
<th>Brake <strong>Note 1</strong></th>
<th>Direction of actuator rotation</th>
<th>Origin position</th>
<th>Stroke</th>
<th>Cable length <strong>Note 2</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TSX**

- **Controller**
- **Driver**
  - **Power-supply voltage**
  - **Power capacity**

**SR1-X**

- **Controller**
- **Driver**
  - **Power-supply voltage**
  - **Power capacity**

### Basic specifications

**AC servo motor output (W)**

- 30

**Repeatability (mm)**

- +/-0.02

**Ball screw lead (mm)**

- 20
- 12
- 6

**Maximum speed (mm/sec)**

- 1000
- 800
- 400

**Overall length (mm)**

- Horizontal
  - Stroke: +239.5 mm
- Vertical
  - Stroke: +239.5 mm

**Maximum outside dimension of body cross-section (mm)**

- W55×H65

**Cable length (m)**

- Standard: 3.5
- Option: 5, 10

### Allowable overheat

**Note**

- Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
- Service life is calculated for 600mm stroke models.

### Static loading moment

**Note**

- 1. Stop positions are determined by the mechanical stoppers at both ends.
- 3. Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.
- 4. Either right or left can be selected for the installation direction for the 4 suction air joint. (The left side is the standard.)
- 5. When the stroke is longer than 600 mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
- 6. External view of C5LH is identical to C5L.

---

**Note 1**: The model with a lead of 20mm cannot select specifications with brake (vertical specifications).

**Note 2**: The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable.

**Note 3**: When origin is on motor side

**Note 4**: Weight and degrees of cleanliness

**Note 5**: The necessary intake amount varies depending on the use conditions and environment.

**Note 6**: External view of C5LH is identical to C5L.
C6L

- High lead: Lead 20
- Origin on the non-motor side is selectable

### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead angle</th>
<th>Brake</th>
<th>Stroke</th>
<th>Cable length</th>
</tr>
</thead>
<tbody>
<tr>
<td>C6L</td>
<td>0°</td>
<td>100°</td>
<td>0°</td>
<td>0°</td>
</tr>
</tbody>
</table>

### Basic specifications

- Repeatability: +/-0.02
- Ball screw lead (mm): 12
- Maximum speed (mm/sec): 60
- Rated thrust (N): 51
- Stroke (mm): 50 to 800
- Rated thrust (N): 300
- Effective stroke: 200
- Stroke: 400
- Rated thrust (N): 450
- Lead: 6
- Rated thrust (N): 600
- Rated thrust (N): 700
- Rated thrust (N): 750
- Rated thrust (N): 800

### Allowable overhang

- Horizontal installation (unit: mm)
  - A: 2kg, 4.33
  - B: 6kg, 8.3
  - C: 10kg, 12kg

- Vertical installation (unit: mm)
  - A: 2kg, 3kg
  - B: 5kg, 6kg
  - C: 7kg, 8kg

### Static loading moment

- MY: 35, MP: 40, MR: 50

### Controller

- SR1-X05
- TS-X105
- RDV-X506

### Regenerative unit

- SR1-X05: 100W or less
- TS-X105: 200V/100W or less
- RDV-X506: Pulse train control

#### Controller Operation method

- SR1-X05
- TS-X105: RS-232C
- RDV-X506: Using RS-232C

### Motor:

- Power-supply voltage
  - SR1-X05: DC 24V
  - TS-X105: 200V/100W or less
  - RDV-X506: Pulse train control

### Source:

- Driver Power-supply voltage
  - SR1-X05: 24V
  - TS-X105: 200V/100W or less
  - RDV-X506: Pulse train control

### Regenerative unit

- 4H7: DeviceNet
- 4H8: DeviceNet

### Feedback

- MR: 100V/100W or less
- MP: 100V/100W or less
- MY: 100V/100W or less
- MY: 100V/100W or less
- MR: 100V/100W or less

### Notes:

1. Stop positions are determined by the mechanical stoppers at both ends.
3. Weight of models with no brake. The weight of brake-equipped models is 0.2 kg heavier than the models with no brake shown in the table.
4. Either right or left can be selected for the installation direction for the 4H7 intake air joint. (The left side is the standard.)
5. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed).

### Additional information

- When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions (critical speed).
- In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

### Accessories

- Linear motor
- Compact single-axis robots
- TRANSERVO
- Motor-less single-axis robots
- SCARA robots
- Pick & place robots
- Single-axis robots
- Cartesian robots
- Articulated robots

### Specifications

- Cable length:
  - Note 2: CLASS 10 (0.1 µm) FED-STD-209D or equivalent when a regenerative unit is used.
  - Note 1: Positioning repeatability in one direction.

### Parameters

- Stroke:
  - Horizontal installation (unit: mm)
  - Vertical installation (unit: mm)

### Weight

- Weight: 2.5 to 6.8 kg
- Rated thrust (N): 2kg, 4.33
- Rated thrust (N): 6kg, 8.3
- Rated thrust (N): 10kg, 12kg

### Additional specifications

- Maximum speed for each stroke (mm/sec)
- Lead: 20
- Lead: 12
- Lead: 6
### Basic specifications

- **AC servo motor output (W)**: 100
- **Repeatability (mm)**: +/-0.02
- **Deceleration mechanism**: Ball screw Ø12
- **Ball screw (mm)**: 20, 12, 6
- **Maximum speed (mm/sec)**: 1000, 720, 360
- **Maximum payload (kg)**: Vertical – 8, Horizontal – 9
- **Rated thrust (N)**: Vertical 84, 141, 283
- **Stroke (mm)**: 150 to 800 (50mm pitch)
- **Overall length (mm)**: Stroke+330
- **Maximum outside dimension of body cross-section (mm)**: W80 × H75
- **Ball screw lead (mm)**: 15kg, 20kg, 22kg, 25kg, 30kg, 40kg
- **Intake air (N/min)**: 30 to 90

#### Allowing overhang

- **Horizontal installation** (Unit: mm)
  - A: 5kg
  - B: 10kg
  - C: 15kg
- **Vertical installation** (Unit: mm)
  - A: 20kg
  - B: 25kg
  - C: 30kg

#### Static loading moment

- **Controller**: SR1-X05
- **Operation method**: Programming / I/O point trace / Remote command / Operation using RS-232C communication

#### Controller

- **Controller Operation method**: SR1-X05
  - RDV-X205-RBR1 Pulse train control

### Ordering method

**Model**

- C8

**Lead**

- 20

**Brake**

- N: NPN
  - B: With battery

**Option**

- 05

**Stroke**

- 150 to 800 (50mm pitch)

**Controller**

- SR1-X05

**I/O selection**

- 50

**Battery**

- 10kg

**Regenerative unit**

- 670

### Note

1. The model with a lead of 20mm cannot select specifications with brake (vertical specifications).
2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.69 for details on robot cable.
3. See P.500 for DIN rail mounting bracket.
4. Select this selection when using the gateway function. For details, see P.62.

---

**Effective stroke**


**Weight (kg)**

- 3.6: 3.9: 4.1: 4.4: 4.7: 5.0: 5.3: 5.6: 5.9: 6.2: 6.4: 6.7: 7.0: 7.3

**Speed setting (mm/sec)**

- Lead 20: 1000
  - 360
  - 324
  - 234
  - 216
  - 180

---

**Note**

1. Positioning repeatability in one direction.
2. When the stroke is longer than 600mm, resonance of the ball screw may occur depending on the operation conditions. (Critical speed). In this case, reduce the speed setting on the program referring to the maximum speeds shown in the table.
3. Per 1cf (0.1 µm base), when suction blower is used.
4. Select this selection when using the gateway function. For details, see P.62.
5. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Brake</th>
<th>Option</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>C8L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Basic specifications

- **AC servo motor output (W):** 100
- **Repeatability (mm):** +/-0.01
- **Deceleration mechanism:** Ball screw 1/15
- **Motor load (mm):** 20
- **Maximum speed (mm/sec):** 1000, 600, 300
- **Maximum horizontal payload (kg):** 40
- **Rated thrust (N):** 168, 169
- **Overall length (mm):** 150 to 1050 (50mm pitch)
- **Overall weight (kg):** 260
- **Maximum outside dimension of body cross-section (mm):** W80 × H75
- **Degree of cleanliness:** CLASS 10
- **Cable length (m):** 3.5K/5K/10K
- **Max air intake (m³/min):** 30 to 90

**Note 1:** Positioning repeatability in one direction.

**Note 2:** When the stroke is longer than 300mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.

**Note 3:** Per 1/15 (0.5mm/sec), on the maximum stroke.

**Note 4:** The necessary intake amount varies depending on the use conditions and environment.

### Allowable overhang

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Brake</th>
<th>Option</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>C8L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note 1:** Stop positions are determined by the mechanical stoppers at both ends.

**Note 2:** Minimum bend radius of motor cable is 50mm.

**Note 3:** Weight of models with no brake. The weight of brake-attached models is 0.3 kg heavier than the models with no brake shown in the table.

**Note 4:** When the stroke is longer than 700mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
### Ordering method

| Model | Lead | Option | Stroke | Cable length (mm) | Code
|-------|------|--------|--------|-------------------|------
| C8LH  |      |        |        |                   |      

Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.596 for details on robot cable.

Note 2. See P.500 for DIN rail mounting bracket.

Note 3. Select this selection when using the gateway function. For details, see P.62.

### Basic specifications

- **AC servo motor output (W)**: 100
- **Repeatability (mm)**: +/-0.01
- **Deceleration mechanism**: Ball screw Ø15
- **Ball screw lead (mm)**: 20, 16, 5
- **Maximum speed (mm/sec)**: 1000
- **Maximum payload (kg)**: 30, 60, 80
- **Stroke (mm)**: 150 to 1050 (500mm pitch)
- **Overall length (mm)**: Stroke+389
- **Maximum outside dimension of body cross-section (mm)**: W80 × H75
- **Cable length (m)**: Standard: 3.5 / Option: 5, 10
- **Degree of cleanliness**: CLASS 10
- **Stroke repeatability in one direction**: +/-0.01
- **Positioning repeatability in one direction**: +/-0.01
- **Positioning repeatability in one direction**: +/-0.01
- **Velocity accuracy**: +/-0.01
- **Positioning accuracy**: +/-0.01
- **Intake air (N/sec)**: 300
- **Rated thrust (N)**: 20, 10, 5
- **Ball screw lead (mm)**: 5
- **Deceleration mechanism**: Ball screw
- **Speed setting**: 30 to 90
- **Lead**: 20
- **Maximum speed (mm/sec)**: 1000
- **Allowable overhang (kg)**: 10kg: 15 18 505
- **Controller**: SR1-X
- **Operation method**: SR1-X05
- **Programming / I/O point trace / Remote command / Operation**: RCX320
- **Using RS-232C communication**: RCX340
- **Controller / Operation method**: TS-X105
- **I/O point trace / Remote command**: TS-X205
- **RDV-X / RBR1**: Pulse train control

### Allowable overhang

<table>
<thead>
<tr>
<th>Payload (kg)</th>
<th>Effective stroke (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10kg</td>
<td>1405 ± 10</td>
</tr>
<tr>
<td>20kg</td>
<td>1805 ± 10</td>
</tr>
<tr>
<td>30kg</td>
<td>2305 ± 10</td>
</tr>
<tr>
<td>40kg</td>
<td>2805 ± 10</td>
</tr>
<tr>
<td>50kg</td>
<td>3305 ± 10</td>
</tr>
<tr>
<td>60kg</td>
<td>3805 ± 10</td>
</tr>
<tr>
<td>70kg</td>
<td>4305 ± 10</td>
</tr>
<tr>
<td>80kg</td>
<td>4805 ± 10</td>
</tr>
<tr>
<td>90kg</td>
<td>5305 ± 10</td>
</tr>
<tr>
<td>100kg</td>
<td>5805 ± 10</td>
</tr>
</tbody>
</table>

### Static loading moment

- **Controller**: SR1-X05
- **Operation method**: SR1-X05
- **Programming / I/O point trace / Remote command / Operation**: RCX320
- **Using RS-232C communication**: RCX340
- **Controller / Operation method**: TS-X105
- **I/O point trace / Remote command**: TS-X205
- **RDV-X / RBR1**: Pulse train control

Note 1. Stop positions are determined by the mechanical stoppers at both ends.

Note 2. The minimum bend radius of motor cable is 500.

Note 3. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Brake</th>
<th>Option</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>C10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lead</th>
<th>Brake</th>
<th>Option</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>X, A</td>
<td>X, A</td>
<td>X, A</td>
<td>X, A</td>
</tr>
</tbody>
</table>

### Basic specifications

- **AC servo motor output (W)**: 100
- **Repeatability (mm)**: +/-0.01
- **Deceleration mechanism**: Ball screw 0.15
- **Maximum speed (mm/sec)**: 1000, 500, 250
- **Stroke (mm)**: 150 to 1050 (50mm pitch)
- **Rated thrust (N)**: 20, 10, 5
- **Ball screw lead (mm)**: 20, 10, 5
- **Overall length (mm)**: Stroke +283

### Allowable overhang

- **Horizontal installation**: A, B, C, A, B, C, A, C
- **Wall installation**: A
- **Vertical installation**: A

### Static loading moment

- **Note 1**: Positioning repeatability in one direction.
- **Note 2**: When the stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program referring to the maximum speeds shown in the table below.
- **Note 3**: Per 1cf (0.1 µm base), when suction blower is used.
- **Note 4**: The necessary intake amount varies depending on the use conditions and environment.

### Controller

- **SR1-X**: RS-232/422/485/422C communication
- **TS-X**: 7-point command
- **RDV-X**: RS-232/422/485/422C communication

### Note

- Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.56 for details on robot cable.
Note 2. See P.500 for DIN rail mounting bracket.
Note 3. Select this selection when using the gateway function. For details, see P.62.

### Ordering method

<table>
<thead>
<tr>
<th>C14</th>
<th>Lead</th>
<th>Brake</th>
<th>Option</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Basic specifications

- AC servo motor output (W): 100
- Repeatability (mm): ±0.01
- Deceleration mechanism: Ball screw<br />
- Ball screw lead (mm): 20
- Maximum speed (mm/sec): 1000, 500, 250
- Maximum payload (kg): 15
- Rated thrust (N): 84
- Stroke (mm): 150 to 1050 (50mm pitch)
- Overall length (mm): 84 169 339
- Cable length (m): Standard: 3.5 / Option: 5, 10
- Intake air (N/min): 30 to 90

**Note:**
1. For each (5) ton base, when section Olivier is used.
2. The necessary intake amount varies depending on the use conditions and environment.

### Allowable overhang

- Horizontal installation (Unit: mm): 150 (60mm pitch)
- Vertical installation (Unit: mm): 150 (70mm pitch)
- Allowable overhang: 15kg

### Static loading moment

- Controller Operation method: SR1-X
- Operation using RS-232C communication / Remote command / Operation using RS-232C communication / Remote command

### Controller

- Driver Power-supply voltage: Driver: Power-supply voltage / Driver: Power capacity / MR: 200V / 100W or less
- Operation method: Controller Operation method
- SR1-X-05 / RCX320 / RCX212 / RCX340
- Operation using RS-232C communication / Remote command

### Note

- Note 1: Positioning repeatability in one direction.
- Note 2: When the stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table above.
- Note 3: Per 1cf (0.1 µm base), when suction blower is used.
- Note 4: Weight of models with no brake. The weight of brake-attached models is 0.4 kg heavier than the models with no brake shown in the table.
C14H

### Ordering method

<table>
<thead>
<tr>
<th>C14H</th>
<th>Lead</th>
<th>Brake</th>
<th>Option</th>
<th>Stroke</th>
<th>TSX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1. If selecting 5mm lead specifications then the origin point cannot be changed to the non-motor-side.

Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.506 for details on robot cable.

Note 3. See P.500 for DIN rail mounting bracket.

Note 4. Select this selection when using the gateway function. For details, see P.62.

### Basic specifications

- **AC servo motor output (W):** 200
- **Repeatability (mm):** ±0.01
- **Deceleration mechanism:** Ball screw 1/15
- **Ball screw lead (mm):**
  - Linear: 20 10 5
  - Vertical: 8 20 30
- **Maximum speed (mm/sec):**
  - Linear: 1000 500 250
  - Vertical: 40 80 100
- **payoff (kg/m):**
  - Linear: 8 20 30
  - Vertical: 20 30
- **Rated thrust (N):**
  - Linear: 170 341 683
  - Vertical: 150 to 1050 (50mm pitch)
- **Overall length (mm):**
  - Linear: Stroke+349
  - Vertical: Stroke+349
- **Cable length (m):**
  - Standard: 3.5 / Option: 5, 10
  - Cable length (m):
    - Flexible cable: 8 20 30
  - Regenerative unit:
    - 472
    - Battery:
    - Cable:

### Allowable overhang

- **Horizontal installation:**
  - (unit: mm)
    - A: 10kg 2247 1675 958
    - B: 20kg 1397 855 528
    - C: 30kg 1037 443 318
- **Vertical installation:**
  - (unit: mm)
    - A: 10kg 1937 583 478
    - B: 20kg 1637 364 323
    - C: 30kg 1171 242 235
- **Horizontal installation (unit: mm):**
  - A: Stroke+349
  - B: Stroke+349
  - C: Stroke+349
- **Cable length (m):**
  - Standard: 3.5 / Option: 5, 10
  - Cable length (m):
    - Flexible cable: 8 20 30
  - Regenerative unit:
    - 472
    - Battery:
    - Cable:

### Static loading moment

- **Controller:** SR1-X
- **Driver:** Power capacity
  - 200W or less
- **Regenerative unit:**
  - 2K/5K/10K

### Controller

- **Controller Operation method:**
  - SR1-X: 320/300/320W
  - Remote command / Operation using RS-232C communication
  - TS-X110: 320/300/320W
  - Remote command / Pulse train control

### Notes

- **Note 1:** Stop positions are determined by the mechanical stoppers at both ends.
- **Note 2:** Minimum bend radius of motor cable is 30mm.
- **Note 3:** Weight of models with brake.
- **Note 4:** When the stroke is longer than 750mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
### Ordering method

<table>
<thead>
<tr>
<th>C17</th>
<th>Lead</th>
<th>Brake</th>
<th>Option</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1. The robot cable is standard cable (3L/SL/10L), but can be changed to flexible cable. See P.596 for details on robot cable.

Note 2. See P.500 for DIN rail mounting bracket.

Note 3. Select this selection when using the gateway function. For details, see P.62.

### Basic specifications

<table>
<thead>
<tr>
<th>AC servo motor output (W)</th>
<th>400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeatability (mm)</td>
<td>+/-0.01</td>
</tr>
<tr>
<td>Deceleration mechanism</td>
<td>Ball screw 6/20</td>
</tr>
<tr>
<td>Ball screw lead (mm)</td>
<td>20</td>
</tr>
<tr>
<td>Maximum speed (mm/sec)</td>
<td>1000</td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>80</td>
</tr>
<tr>
<td>Rated thrust (N)</td>
<td>539</td>
</tr>
<tr>
<td>Stroke (mm)</td>
<td>200 to 1250 (50mm pitch)</td>
</tr>
<tr>
<td>Overall length (mm)</td>
<td>Stroke=395</td>
</tr>
</tbody>
</table>
| Cable length (m) | Standard: 3L/5L/10L, but can be changed to flexible cable. See P.596 for details on robot cable.
| Intake air (N/m^3) | 30 to 90 |

Note 1. Positioning repeatability in one direction.

Note 2. When the stroke is longer than 900mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program referring to the maximum speeds shown in the table below.

Note 3. Per 1cf (0.1 µm base), when suction blower is used.

Note 4. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.

### Allowable overhang

<table>
<thead>
<tr>
<th>Horizontal installation (unit: mm)</th>
<th>Vertical installation (unit: mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>30kg</td>
<td>2650</td>
</tr>
<tr>
<td>60kg</td>
<td>1911</td>
</tr>
<tr>
<td>80kg</td>
<td>1541</td>
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<tr>
<td>100kg</td>
<td>2443</td>
</tr>
<tr>
<td>120kg</td>
<td>2030</td>
</tr>
<tr>
<td>140kg</td>
<td>1841</td>
</tr>
</tbody>
</table>

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

### Controller

<table>
<thead>
<tr>
<th>Controller</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR1-X 518</td>
<td>TSX 492</td>
</tr>
<tr>
<td>RDV-X 506</td>
<td></td>
</tr>
</tbody>
</table>

### Static loading moment

<table>
<thead>
<tr>
<th>Effective stroke</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>50</td>
</tr>
<tr>
<td>B</td>
<td>100</td>
</tr>
<tr>
<td>C</td>
<td>150</td>
</tr>
<tr>
<td>D</td>
<td>200</td>
</tr>
<tr>
<td>E</td>
<td>250</td>
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<tr>
<td>F</td>
<td>300</td>
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<tr>
<td>G</td>
<td>350</td>
</tr>
<tr>
<td>H</td>
<td>400</td>
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<td>I</td>
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<td>W</td>
<td>1150</td>
</tr>
<tr>
<td>X</td>
<td>1200</td>
</tr>
<tr>
<td>Y</td>
<td>1250</td>
</tr>
</tbody>
</table>

Note 1. Stop positions are determined by the mechanical stoppers at both ends.

Note 2. Minimum bend radius of motor cable is R50.

Note 3. Weight of model with no brakes. The weight of brake-attached models is 1.5 kg heavier than the models with no brake shown in the table.

Note 4. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.556 for details on robot cable.
Note 2. See P.500 for DIN rail mounting bracket.
Note 3. Acceleration / deceleration is different depending on the Positioner or Controller or Driver.
Note 4. Select this selection when using the gateway function. For details, see P.62.

### Ordering method

**C17L - 50**

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Option</th>
<th>Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>C17L</td>
<td>50</td>
<td>-</td>
<td>1150 to 2050 (100 pitch)</td>
</tr>
</tbody>
</table>

**Allowable overhang**

<table>
<thead>
<tr>
<th>Positioner</th>
<th>Stroke (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10kg</td>
<td>4000</td>
</tr>
<tr>
<td>20kg</td>
<td>3436</td>
</tr>
</tbody>
</table>

**Static loading moment**

<table>
<thead>
<tr>
<th>Controller</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR1-X20-R</td>
<td>Programmable I/O</td>
</tr>
<tr>
<td>TS-X220-R</td>
<td>Remote command</td>
</tr>
</tbody>
</table>

### Basic specifications

- **AC servo motor output (W)**: 600
- **Repeatability** (mm): +/-0.02
- **Deceleration mechanism**: Ball screw φ25
- **Ball screw lead (mm)**: 50
- **Maximum speed (mm/sec)**: 1000
- **Maximum payload (kg)**: 5
- **Horizontal Stroke (mm)**: 485
- **Vertical Stroke (mm)**: 510
- **Maximum outside dimension of body cross-section (mm)**: W168 × H114
- **Cable length (m)**: Standard: 3.5 / Option: 5, 10
- **Degree of cleanliness**: CLASS 10

### Controller

- **Controller**: SR1-X20-R
- **Power-supply voltage**: Driver: 200V
- **Power capacity**: 200W or less
- **Regenerative unit**: RDV-X

**Intake air (N/min)**: 30 to 90

Note 1. Positioning-repeatability in one direction.
Note 2. When the stroke is longer than 1850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
Note 3. Per 1cf (0.1 µm base), when suction blower is used.
Note 4. The necessary intake amount varies depending on the use conditions and environment.

### Effect of stroke

**Effective stroke**

<table>
<thead>
<tr>
<th>Effective stroke</th>
<th>1150</th>
<th>1250</th>
<th>1350</th>
<th>1450</th>
<th>1550</th>
<th>1650</th>
<th>1750</th>
<th>1850</th>
<th>1950</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
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<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Weight (kg)<strong>$$</strong></td>
<td>39.1</td>
<td>41.2</td>
<td>43.2</td>
<td>45.2</td>
<td>47.3</td>
<td>49.3</td>
<td>51.3</td>
<td>53.4</td>
<td>55.4</td>
<td>57.4</td>
</tr>
<tr>
<td>Maximum speed (mm/sec)<strong>$$</strong></td>
<td>1000</td>
<td>900</td>
<td>800</td>
<td>800</td>
<td>800</td>
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<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Minimum bend radius of motor cable is R50.
Note 3. Weight of models with no brake. The weight of brake-attached models is 1.5 kg heavier than the models with no brake shown in the table.
Note 4. When the stroke is longer than 1850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
Note 1. Only the model with specifications with brake (vertical specifications) can select a lead of 10mm.

Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible or Driver. See P.98 for details on robot cables.

Note 3. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.

Note 4. The necessary intake amount varies depending on the use conditions and environment.

Note 5. Positioning repeatability in one direction.

Note 1. Stop positions are determined by mechanical stoppers at both ends.

Note 2. Minimum bend radius of motor cable is 5R0.

Note 3. Weight of models with no brake. The weight of brake-attached models is 2.0 kg heavier than the model with no brake shown in the table.

Note 4. When the stroke is longer than 950mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
### Basic specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Cable Combination</th>
<th>X-axis stroke (mm)</th>
<th>Y-axis stroke (mm)</th>
<th>Cable length (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SXYxC</td>
<td>D</td>
<td>282 ±3</td>
<td>152 ±3</td>
<td>3.5</td>
</tr>
</tbody>
</table>

#### Axis construction

- X axis: C14H
- Y axis: C14

#### AC servo motor output (W)

- X axis: 200
- Y axis: 100

#### Repeatability (mm)

- X axis: ±0.01
- Y axis: ±0.01

#### Ball screw lead (mm)

- X axis: Ball screw φ15
- Y axis: Ball screw φ15

#### Maximum speed (mm/sec)

- X axis: 1000
- Y axis: 1000

#### Moving range (mm)

- X axis: 150 to 1050
- Y axis: 150 to 650

#### Robot cable length (m)

- Standard: 3.5
- Option: 5, 10

#### Degree of cleanliness

- CLASS 10

#### Intake air (Nl/min)

- X axis: 60

#### Note 1

- Use caution that the frame machining (installation holes, tap holes) differs from single-axis robots.

#### Note 2

- Positioning repeatability in one direction.

#### Note 3

- Leads not listed in the catalog are also available. Contact us for details.

#### Note 4

- When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.

#### Note 5

- Per 1cf (0.1 µm base), when suction blower is used.

#### Note 6

- The necessary intake amount varies depending on the use conditions and environment.

### Controller

- **Model**: RCX320
- **Operation method**: Programming / I/O point trace / Remote command / Operation using RS-232C communication

#### Controller specifications

<table>
<thead>
<tr>
<th>Controller</th>
<th>Occurrence</th>
<th>Option A (OP.A)</th>
<th>Option B (OP.B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCX320</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCX222</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Maximum payload (kg)

<table>
<thead>
<tr>
<th>Y stroke (mm)</th>
<th>XY 2 axes</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>196</td>
</tr>
<tr>
<td>250</td>
<td>256</td>
</tr>
<tr>
<td>350</td>
<td>350</td>
</tr>
<tr>
<td>450</td>
<td>450</td>
</tr>
<tr>
<td>550</td>
<td>550</td>
</tr>
</tbody>
</table>

#### Y stroke (mm)

- 150
- 250
- 350
- 450
- 550
- 650

#### X stroke (mm)

- 150
- 250
- 350
- 450
- 550
- 650
- 750
- 850
- 950
- 1050

#### Maximum speed for each stroke (mm/sec)

<table>
<thead>
<tr>
<th>Stroke speed (mm/sec)</th>
<th>Speed settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>80% 65% 55%</td>
</tr>
</tbody>
</table>

#### Note 1

- The moving range when returning to origin and the stop position when stopping by mechanical stopper.

#### Note 2

- When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
SXYx C 2 axes

<table>
<thead>
<tr>
<th>X stroke</th>
<th>150</th>
<th>250</th>
<th>350</th>
<th>450</th>
<th>550</th>
<th>650</th>
<th>750</th>
<th>850</th>
<th>950</th>
<th>1050</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>528</td>
<td>728</td>
<td>928</td>
<td>1028</td>
<td>1128</td>
<td>1228</td>
<td>1328</td>
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<td>1528</td>
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</tr>
<tr>
<td>K</td>
<td>200</td>
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<td>200</td>
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<tr>
<td>Y stroke</td>
<td>150</td>
<td>250</td>
<td>350</td>
<td>450</td>
<td>550</td>
<td>650</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1. The moving range when returning to origin and the stop position when stopping by mechanical stopper.

Note 2. When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Cable</th>
<th>Controller</th>
<th>Safety standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>SXYxC-3</td>
<td>RCX340</td>
<td>D</td>
<td>OP.A, OP.B, OP.C, OP.D, OP.E, OP.F</td>
</tr>
</tbody>
</table>

Specify various controller setting items. RCX340 P544

### Basic specifications

<table>
<thead>
<tr>
<th>X axis</th>
<th>Y axis</th>
<th>Z axis: ZSC12</th>
<th>Z axis: ZSC6</th>
</tr>
</thead>
<tbody>
<tr>
<td>C14H</td>
<td>C14</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

**Axis construction**
- C14H
- C14

**AC servo motor output (W)**
- 200
- 100
- 60

**Repeatability**
- +/-0.01
- +/-0.01
- +/-0.02

**Drive system**
- Ball screw φ15
- Ball screw φ15
- Ball screw φ12

**Ball screw lead (Deceleration ratio) (mm)**
- 20
- 20
- 20

**Maximum speed** (mm/sec)
- 1000
- 1000
- 1000
- 500

**Moving range** (mm)
- 150 to 1050
- 150 to 650
- 150

**Robot cable length (m)**
- Standard: 3.5
- Option: 5, 10

**Degree of cleanliness**
- CLASS 10

**Intake air (Nl/min)**
- 90

**Specifications**

- **Maximum payload** (kg)
  - Y stroke (mm)
  - ZSC12: 3
  - ZSC6: 5

- **Maximum speed for each stroke (mm/sec)**
  - X axis: 1000
  - Y stroke: 800
  - Z stroke: 550
  - Speed setting: 80%

- **Controller**
  - RCX340
  - Programming / I/O point trace / Remote command / Operation using RS-232C communication

**Note 1.** Use caution that the frame machining (installation holes, tap holes) differs from single-axis robots.

**Note 2.** Positioning repeatability in one direction.

**Note 3.** Leads not listed in the catalog are also available. Contact us for details.

**Note 4.** When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.

**Note 5.** Per 1cf (0.1 µm base), when suction blower is used.

**Note 6.** The necessary intake amount varies depending on the use conditions and environment.
**SXYxC 3 axes / ZSC**

<table>
<thead>
<tr>
<th>X stroke</th>
<th>150</th>
<th>250</th>
<th>350</th>
<th>450</th>
<th>550</th>
<th>650</th>
<th>750</th>
<th>850</th>
<th>950</th>
<th>1050</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>628</td>
<td>728</td>
<td>828</td>
<td>928</td>
<td>1028</td>
<td>1128</td>
<td>1228</td>
<td>1328</td>
<td>1428</td>
<td>1528</td>
</tr>
<tr>
<td>K</td>
<td>200</td>
<td>100</td>
<td>200</td>
<td>100</td>
<td>200</td>
<td>100</td>
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<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Y stroke</td>
<td>150</td>
<td>250</td>
<td>350</td>
<td>450</td>
<td>550</td>
<td>650</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>150</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maximum speed for each stroke [mm/sec]

<table>
<thead>
<tr>
<th>X axis</th>
<th>1000</th>
<th>800</th>
<th>650</th>
<th>550</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed setting</td>
<td>–</td>
<td>80%</td>
<td>65%</td>
<td>55%</td>
</tr>
</tbody>
</table>

**Note 1:** The moving range when returning to origin and the stop position when stopping by mechanical stopper.

**Note 2:** When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
### Ordering method

**SXYxC - D**

<table>
<thead>
<tr>
<th>Controller</th>
<th>RCX340-4</th>
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<tbody>
<tr>
<td>Number of controllable axes</td>
<td>15</td>
</tr>
<tr>
<td>Y stroke (mm)</td>
<td>ZRSC12 ZRSC6</td>
</tr>
<tr>
<td>150</td>
<td>5</td>
</tr>
<tr>
<td>250</td>
<td>3</td>
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<td>350</td>
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<tr>
<td>450</td>
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<tr>
<td>550</td>
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</tr>
<tr>
<td>650</td>
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</table>

### Basic specifications

<table>
<thead>
<tr>
<th>Axis</th>
<th>X axis (mm)</th>
<th>Y axis (mm)</th>
<th>Z axis (mm)</th>
<th>R axis (mm)</th>
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</thead>
<tbody>
<tr>
<td>X axis</td>
<td>C14H</td>
<td>C14</td>
<td>ZRSC12</td>
<td>ZRSC6</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>200</td>
<td>100</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>Repeatability <strong>a</strong> (XYZ: mm)</td>
<td>+/-0.01</td>
<td>+/-0.01</td>
<td>+/-0.02</td>
<td>+/-0.005</td>
</tr>
<tr>
<td>Drive system</td>
<td>Ball screw φ15</td>
<td>Ball screw φ15</td>
<td>Ball screw φ12</td>
<td></td>
</tr>
<tr>
<td>Ball screw lead <strong>a</strong> (Deceleration ratio) (mm)</td>
<td>20</td>
<td>20</td>
<td>12</td>
<td>12 (150)</td>
</tr>
<tr>
<td>Maximum speed <strong>b</strong> (XYZ: mm/sec)</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>500</td>
</tr>
<tr>
<td>Moving range (XYZ: mm)</td>
<td>150 to 1050</td>
<td>150 to 650</td>
<td>150</td>
<td>360</td>
</tr>
<tr>
<td>Robot cable length (m)</td>
<td>Standard: 3.5</td>
<td>Option: 5, 10</td>
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<tr>
<td>Intake air (Nm3/min)</td>
<td>90</td>
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<td>Intake air (Nm3/min)</td>
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<td>Intake air (Nm3/min)</td>
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<td>Intake air (Nm3/min)</td>
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<td>Intake air (Nm3/min)</td>
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<td>Intake air (Nm3/min)</td>
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<td>Intake air (Nm3/min)</td>
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<tr>
<td>Intake air (Nm3/min)</td>
<td>5</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (Nm3/min)</td>
<td>3</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (Nm3/min)</td>
<td>1</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Maximum payload (kg)

<table>
<thead>
<tr>
<th>Y stroke (mm)</th>
<th>ZRSC12</th>
<th>ZRSC6</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>350</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>450</td>
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<tr>
<td>550</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>650</td>
<td>4</td>
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</tr>
</tbody>
</table>

### Controller

**Controller**

RCX340

**Operation method**

Programming / I/O point trace / 
Remote command / 
Operation using RS-232C communication

**Detail of section A**

**Note 1.** The moving range when returning to origin and the stop position when stopping by mechanical stopper.

**Note 2.** When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
SXYxC 4 axes / ZRSC

<table>
<thead>
<tr>
<th>X stroke</th>
<th>150</th>
<th>250</th>
<th>350</th>
<th>450</th>
<th>550</th>
<th>650</th>
<th>750</th>
<th>850</th>
<th>950</th>
<th>1050</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>628</td>
<td>728</td>
<td>828</td>
<td>928</td>
<td>1028</td>
<td>1128</td>
<td>1228</td>
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<td>1428</td>
<td>1528</td>
</tr>
<tr>
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<td>100</td>
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</tr>
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<td>6</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

Note 1. The moving range when returning to origin and the stop position when stopping by mechanical stopper.

Note 2. When the X-axis stroke is longer than 850mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table at the left.
YK220XC
Clean type: Extra small type

Note. Built-to-order product. Contact us for the delivery period.

Ordering method
YK220XC-100

RCX340-4

Specify various controller setting items. RCX340 ➤ P.544

Basic specifications

<table>
<thead>
<tr>
<th>Axis specification</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>111</td>
<td>109</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>Rotation angle (°)</td>
<td>+1/120</td>
<td>+1/140</td>
<td>+1/360</td>
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</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 σXYZ (mm) (R:°)</td>
<td>±0.01</td>
<td>±0.01</td>
<td>±0.004</td>
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<td>Maximum speed (XYZ: m/sec) (R: °/sec)</td>
<td>3.4</td>
<td>0.7</td>
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<td>Maximum payload (kg)</td>
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<tr>
<td>Standard cycle time: with 0.1kg payload</td>
<td>0.1 x 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing (sq × wires)</td>
<td>0.1 × 8</td>
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</tr>
<tr>
<td>User tubing (Outer diameter)</td>
<td>8 x 3</td>
<td></td>
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</tr>
<tr>
<td>Travel limit</td>
<td>1. Soft limit, 2. Mechanical stopper (X, Y, Z axes)</td>
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<td></td>
</tr>
<tr>
<td>Robot cable length (m)</td>
<td>Standard: 3.5, Option: 5, 10</td>
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<td></td>
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</tr>
<tr>
<td>Weight (kg) (Excluding robot cable)</td>
<td>6.5</td>
<td></td>
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</tr>
<tr>
<td>Robot cable weight</td>
<td>1.5kg (3.5m) 2.1kg (5m) 4.2kg (10m)</td>
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</tr>
<tr>
<td>Degree of cleanliness</td>
<td>CLASS 10 (0.1 µm base)</td>
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<tr>
<td>Intake air (N4/min)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1. This is the value at a constant ambient temperature.
Note 2. When reciprocating 100mm 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. The total robot weight is the sum of the robot body weight and the cable weight.

YK220XC

D-sub connector for user cables 9 pin (Adapted to R1 to 9)
Note 6: The necessary intake amount varies depending on the use conditions and environment.

Note 4: Class 10 (0.1µm) equivalent to FED-STD-209D

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

Note 2: When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

Note 1: This is the value at a constant ambient temperature. (X/Y axis)

Note 2: When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

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

Note 4: Class 10 (0.1µm) equivalent to FED-STD-209D

Note 5: ES2D (ElectroStatic Discharge) prevention is an option. Please contact our distributor.

Note 6: The necessary intake amount varies depending on the use conditions and environment.

Note. To set the standard coordinates with high accuracy, use a manual (installation manual) for more details.

Note 1: 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 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/

Controller

RCX340

1000

Programming / I/O point trace /
Remote command / Operation
using RS-232C communication

Controller

RCX340

1000

Programming / I/O point trace /
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Our robot manuals (installation manuals) can be downloaded from our website at the address below:
https://global.yamaha-motor.com/business/robot/
**Ordering method**

**YK350XGC - 150**

- **Model**
- **Axis stroke (mm)**
- **Tool range**
- **Hollow shaft**
- **Cable length (m)**
- **Controller**
- **Number of controllable axes**
- **Safety standard**
- **Operating method**

*Specify various controller setting items.*

**Controller**

- **Controller**
- **Power capacity (VA)**
- **Operation method**

<table>
<thead>
<tr>
<th>Controller</th>
<th>Power capacity (VA)</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1000</td>
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</tr>
</tbody>
</table>

**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 all the time of shipment.)
- See our robot manuals (installation manuals) for detailed information.
- 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/

---

**YK350XGC**

- **Arm length 350mm**
- **Maximum payload 4kg**

**Basic specifications**

<table>
<thead>
<tr>
<th>Axis</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>200</td>
<td>150</td>
<td>150</td>
<td>-</td>
</tr>
<tr>
<td>Rotation angle (°)</td>
<td>+/-1.29</td>
<td>+/-1.34</td>
<td>+/-0.91</td>
<td>+/-0.01</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>200</td>
<td>150</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Repeatability <strong>max</strong> (XY: mm; Z: °)</td>
<td>5.6</td>
<td>1.1</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
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<td></td>
</tr>
<tr>
<td>Standard cycle time: with 2kg payload (sec)</td>
<td>0.52</td>
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<td></td>
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</tr>
<tr>
<td>R-axis tolerable moment of inertia <strong>max</strong> (kgm²)</td>
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<tr>
<td>User wiring (sq × wires)</td>
<td>0.2×10</td>
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<tr>
<td>User tubing (Outer diameter)</td>
<td>1.6</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Traverse limit: X, Y, Z (mm)</td>
<td>Standard: 3.5</td>
<td>Option: 5, 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robot cable length (m)</td>
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<tr>
<td>Intake air (Nm³/min)</td>
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**Controller**

- **Controller**
- **Power capacity (VA)**
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**YK350XGC**

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<td></td>
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**YK350XGC**

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### Ordering method

**YK400XGC - 150**

- **Model**
- **Zone stroke**
- **Hollow shaft**
- **Cable length**
- **Controller**
- **Number of controllable axes**
- **Safety standard**
- **Number of code handles**
- **User tubing**
- **User wiring**
- **End effector options**
- **Absolute battery**

Specify various controller setting items. RCX340 → P.544

### Basic specifications

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<th>Y axis</th>
<th>Z axis</th>
<th>R axis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length (mm)</td>
<td>250</td>
<td>150</td>
<td>150</td>
<td>–</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>200</td>
<td>150</td>
<td>50</td>
<td>100</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>6.1</td>
<td>1.1</td>
<td>1.020</td>
<td></td>
</tr>
<tr>
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<td>4</td>
<td></td>
<td></td>
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<tr>
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</tr>
<tr>
<td>R-axis tolerable moment of inertia (kgm²)</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User wiring (sq × wires)</td>
<td>2.0 × 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel limit (Outer diameter)</td>
<td>64.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing</td>
<td>Standard: 3.5, Option: 5, 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>22.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of cleanliness</td>
<td>ISO CLASS 3 (ISO 14644-1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (Nm³/min)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**

1. This is the value at a constant ambient temperature (X, Y axes).
2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (circular positioning arm motion).
3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
4. Class 10 (0.1µm) equivalent to FED-STD-209D
5. 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.)
6. 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.

### Controller

**Controller**

<table>
<thead>
<tr>
<th>Controller</th>
<th>Power capacity (VA)</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCX340</td>
<td>1000</td>
<td>Programming / I/O point trace / Remote command / Operation using RS-232C communication</td>
</tr>
</tbody>
</table>

**Note**

- Our robot manuals (installation manuals) can be downloaded from our website at the address below:

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**YK400XGC**

- **Model**
- **Zone stroke**
- **Hollow shaft**
- **Cable length**
- **Controller**
- **Number of code handles**
- **User tubing**
- **User wiring**
- **End effector options**
- **Absolute battery**

Specify various controller setting items. RCX340 → P.544

### Basic specifications

<table>
<thead>
<tr>
<th>Axis</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>250</td>
<td>150</td>
<td>150</td>
<td>–</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>200</td>
<td>150</td>
<td>50</td>
<td>100</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>6.1</td>
<td>1.1</td>
<td>1.020</td>
<td></td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard cycle time: with 2kg payload (sec)</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-axis tolerable moment of inertia (kgm²)</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User wiring (sq × wires)</td>
<td>2.0 × 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel limit (Outer diameter)</td>
<td>64.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing</td>
<td>Standard: 3.5, Option: 5, 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>22.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of cleanliness</td>
<td>ISO CLASS 3 (ISO 14644-1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (Nm³/min)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**

1. This is the value at a constant ambient temperature (X, Y axes).
2. When reciprocating 25mm in vertical direction and 300mm in horizontal direction (circular positioning arm motion).
3. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
4. Class 10 (0.1µm) equivalent to FED-STD-209D
5. 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.)
6. 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.

---

**User tubing**

<table>
<thead>
<tr>
<th>Cross section A-A</th>
<th>With arm (φ 3.5)</th>
<th>Without arm (φ 3.5)</th>
<th>Z axis tip shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tapped hole for user wiring 6M3 x 0.5 Depth 5&quot;</td>
<td>The weight of the tool attached here should be added to the tip mass.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R32 (M6, cable bending radius)</td>
<td>Do not move the cable.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Controller**

<table>
<thead>
<tr>
<th>Controller</th>
<th>Power capacity (VA)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>RCX340</td>
<td>1000</td>
<td>Programming / I/O point trace / Remote command / Operation using RS-232C communication</td>
</tr>
</tbody>
</table>

**Note**

- Our robot manuals (installation manuals) can be downloaded from our website at the address below:
YK400XGC  Tool flange mount type

Connector for user wiring (No. 1 to 10 usable, cable clamp size: \( \phi 3.1 \text{ to } 5 \))
Cover the caps provided when not used.

User tubing 1 (\( \phi 4 \text{ black} \))
Insert the plug provided when not used.
User tubing 2 (\( \phi 4 \text{ red} \))

User tubing 3 (\( \phi 4 \text{ blue} \))
User tubing 4 (\( \phi 4 \text{ white} \))

4-M3 \( \times 0.5 \) Depth 5
(No phase relation to R-axis origin.)
As this hole is intended for the wire/tubing clamp, do not attach a large load to it.

4-M3 \( \times 0.5 \) \( \phi 11 \) through-hole
If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

Note that the robot cannot be used at a position where the base flange, robot cable, spline, bellows, and tool flange interfere with each other in the working envelopes shown above.
X-axis mechanical stopper position : 131°
Y-axis mechanical stopper position : 146°

User tubing 1 (\( \phi 4 \text{ black} \))
Insert the plug provided when not used.
User tubing 2 (\( \phi 4 \text{ red} \))
User tubing 3 (\( \phi 4 \text{ blue} \))
User tubing 4 (\( \phi 4 \text{ white} \))

4-M3 \( \times 0.5 \) \( \phi 11 \) through-hole
4-M3 \( \times 0.5 \) \( \phi 13 \) through-hole
4-M3 \( \times 0.5 \) \( \phi 15 \) through-hole

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

Connector for user wiring (No. 1 to 10 usable, cable clamp size: \( \phi 3.1 \text{ to } 5 \))
Cover the caps provided when not used.

M4 ground terminal

If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

X-axis mechanical stopper position : 131°
Y-axis mechanical stopper position : 146°

User tubing 1 (\( \phi 4 \text{ black} \))
Insert the plug provided when not used.
User tubing 2 (\( \phi 4 \text{ red} \))
User tubing 3 (\( \phi 4 \text{ blue} \))
User tubing 4 (\( \phi 4 \text{ white} \))

4-M3 \( \times 0.5 \) \( \phi 11 \) through-hole

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

Tapped hole for user wiring 4-M3 \( \times 0.5 \) Depth 6
This weight of the tool attached here should be added to the tip mass.

R32 (Min. cable bending radius)
Do not move the cable.

4-H7 through-hole

Machine Harness
R32 (Min. cable bending radius)
Do not move the cable.

Detailed drawing D

View of E

Screws used for the base flange, tool flange, and frame:
M6 \( \times 0.5 \) Depth 5

YK400XGC

Controller RCX340  544
YK500XGLC

**Clean type: Medium type**

### Ordering method

<table>
<thead>
<tr>
<th>YK500XGLC-150</th>
<th>RCX340-4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td><strong>RCX340</strong></td>
</tr>
<tr>
<td><strong>Z axis stroke</strong></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td><strong>Hollow shaft</strong></td>
<td><strong>500</strong></td>
</tr>
<tr>
<td><strong>Cable length</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Controller / Number of controllable axes</strong></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td><strong>Safety standard</strong></td>
<td><strong>Standard</strong></td>
</tr>
<tr>
<td><strong>Controller Power capacity (VA)</strong></td>
<td><strong>1000</strong></td>
</tr>
<tr>
<td><strong>Operation method</strong></td>
<td><strong>Programming / (I/O point trace / Remote command / Operation using RS-232C communication)</strong></td>
</tr>
</tbody>
</table>

Specify various controller setting items. RCX340 → P544

---

### 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>250</td>
<td>250</td>
<td>150</td>
<td>360</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>200</td>
<td>150</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Repeatability (mm)</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>5.1</td>
<td>1.1</td>
<td>1020</td>
<td></td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-axis tolerable moment of inertia (kg·mm²)</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing (sq × wires)</td>
<td>4×4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing (Outer diameter)</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel limit</td>
<td>1. Soft limit, 2. Mechanical stopper (X, Y, Z axes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robot cable length (m)</td>
<td>Standard: 3.5 Opt: 5, 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>2.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of cleanliness</td>
<td>ISO CLASS 3 (ISO 14644-1) + ESD + ESDF+ESD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (Nm/min)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: This is the value at a constant ambient temperature. (X, Y axes)
Note 2: When reciprocating 2mm in vertical direction and 300mm in horizontal direction (rough-positioning axis motion)
Note 3: The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
Note 4: Class 10 (0.1µm) equivalent to FED-STD-209D
Note 5: ESD (ElectroStatic Discharge) prevention is an option. Please contact our distributor.
Note 6: The necessary intake amount varies depending on the use conditions and environment.

---

### Controller

<table>
<thead>
<tr>
<th>Controller Power capacity (VA)</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCX340</td>
<td>1000</td>
</tr>
<tr>
<td>Programming / (I/O point trace / Remote command / Operation using RS-232C communication)</td>
<td></td>
</tr>
</tbody>
</table>

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/
YK500XGLC Tool flange mount type

Connector for user wiring
(No. 1 to 10 usable, cable clamp size: φ13.1 to 15)
Cover with the caps provided when not used.

User tubing 1 (φ4 black)
Insert the plug provided when not used.

User tubing 2 (φ4 red)

User tubing 3 (φ4 blue)

User tubing 4 (φ4 white)

4-φ8 M8 bolt for installation, 4 bolts used

4-M3 x 0.5 Depth 5
(No phase relation to R-axis origin.)
As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.

If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

• Note that the robot cannot be used at a position where the base flange, robot cable, spline, bellows, and tool flange interfere with each other in the working envelope shown above.
• X-axis mechanical stopper position : 131°
• Y-axis mechanical stopper position : 146°

Since this port is not used, cover it with the cap supplied with the joint.

Connector for user wiring
(No. 1 to 10 usable, cable clamp size: φ13.1 to 15)
Cover with the caps provided when not used.

User tubing 1 (φ4 black)
Insert the plug provided when not used.

User tubing 2 (φ4 red)

User tubing 3 (φ4 blue)

User tubing 4 (φ4 white)

4-M5 × 0.5 Depth 6
(No phase relation to R-axis origin.)
As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.

If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

Since this port is not used, cover it with the cap supplied with the joint.

Connector for user wiring
(No. 1 to 10 usable, cable clamp size: φ13.1 to 15)
Cover with the caps provided when not used.

User tubing 1 (φ4 black)
Insert the plug provided when not used.

User tubing 2 (φ4 red)

User tubing 3 (φ4 blue)

User tubing 4 (φ4 white)

4-M5 × 0.5 Depth 6
(No phase relation to R-axis origin.)
As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.

If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

Since this port is not used, cover it with the cap supplied with the joint.

Connector for user wiring
(No. 1 to 10 usable, cable clamp size: φ13.1 to 15)
Cover with the caps provided when not used.

User tubing 1 (φ4 black)
Insert the plug provided when not used.

User tubing 2 (φ4 red)

User tubing 3 (φ4 blue)

User tubing 4 (φ4 white)

4-M5 × 0.5 Depth 6
(No phase relation to R-axis origin.)
As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.

If the robot enters the inside from the inner limit of the working envelope, the Z-axis bellows may be in contact with the base or the arm may be in contact with the machine harness. So, do not perform such motion.

Since this port is not used, cover it with the cap supplied with the joint.

Connector for user wiring
(No. 1 to 10 usable, cable clamp size: φ13.1 to 15)
Cover with the caps provided when not used.
YK500XC

Ordering method

YK500XC

Controller

RCX340

RCX340

Controller

Power capacity (VA)

1500

Operation method

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.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:

https://global.yamaha-motor.com/business/robot/

Note: For details about tubing work, refer to the User’s Manual.

Note 1. This is the value at a constant ambient temperature. (XY axes)

Note 2. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.

Note 3. Per 1cf (0.1 µm base), when suction blower is used.

Note 4. The necessary intake amount varies depending on the use conditions and environment.

Basic specifications

<table>
<thead>
<tr>
<th>Axis specifications</th>
<th>X axis (mm)</th>
<th>Y axis (mm)</th>
<th>Z axis (mm)</th>
<th>R axis (°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm length (mm)</td>
<td>250</td>
<td>250</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Rotation angle (°)</td>
<td>+/-120</td>
<td>+/-142</td>
<td>+/-180</td>
<td></td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>400</td>
<td>200</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm)</td>
<td>+/-0.02</td>
<td>+/-0.01</td>
<td>+/-0.005</td>
<td></td>
</tr>
<tr>
<td>Maximum speed (XYZ: m/sec)</td>
<td>4.9</td>
<td>1.7</td>
<td>876</td>
<td></td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard cycle time (sec) with 2kg payload</td>
<td>0.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-axis tolerable moment of inertia (kgm)</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User wiring (sq × wires)</td>
<td>0.2 × 20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing (Outer diameter) (mm)</td>
<td>7.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel limit (mm)</td>
<td>1: Soft limit, 2: Mechanical stopper (X, Y, Z axes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robot cable length (m) (mm)</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of cleanliness (Class)</td>
<td>10**-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (Nm³/min)</td>
<td>60**-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: This is the value at a constant ambient temperature. (XY axes)

Note 2: The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.

Note 3: Per 1cf (0.1 µm base), when suction blower is used.

Note 4: The necessary intake amount varies depending on the use conditions and environment.

Controller

RCX340

Controller

Power capacity (VA)

1500

Operation method

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.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:

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Note: For details about tubing work, refer to the User’s Manual.

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<tr>
<td>Arm length (mm)</td>
<td>250</td>
<td>250</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Rotation angle (°)</td>
<td>+/-120</td>
<td>+/-142</td>
<td>+/-180</td>
<td></td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>400</td>
<td>200</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm)</td>
<td>+/-0.02</td>
<td>+/-0.01</td>
<td>+/-0.005</td>
<td></td>
</tr>
<tr>
<td>Maximum speed (XYZ: m/sec)</td>
<td>4.9</td>
<td>1.7</td>
<td>876</td>
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</tr>
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<td></td>
</tr>
<tr>
<td>Standard cycle time (sec) with 2kg payload</td>
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</tr>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Travel limit (mm)</td>
<td>1: Soft limit, 2: Mechanical stopper (X, Y, Z axes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robot cable length (m) (mm)</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of cleanliness (Class)</td>
<td>10**-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (Nm³/min)</td>
<td>60**-4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: This is the value at a constant ambient temperature. (XY axes)

Note 2: The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.

Note 3: Per 1cf (0.1 µm base), when suction blower is used.

Note 4: The necessary intake amount varies depending on the use conditions and environment.

Controller

RCX340

Controller

Power capacity (VA)

1500

Operation method

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.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:

https://global.yamaha-motor.com/business/robot/

Note: For details about tubing work, refer to the User’s Manual.
### Ordering method

YK600XGLC - 150

**Model**
- **YK600XGLC**
- **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**

**Controller**
- **RCX340**
- **Number of controllable axes**
  - **OP.D**
  - **OP.C**
  - **OP.B**
  - **OP.E**
  - **Absolute battery**

Specify various controller setting items. RCX340 ▶ 544

### 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>350</td>
<td>250</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Rotation angle (°)</td>
<td>+/-129</td>
<td>+/-144</td>
<td></td>
<td>+/-360</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>200</td>
<td>150</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Repeatability (XY: 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>4.9</td>
<td>1.1</td>
<td>1020</td>
<td></td>
</tr>
</tbody>
</table>

**Note 1:** This is the value at a constant ambient temperature. (X, Y axes)

**Note 2:** When reciprocating 25mm in vertical direction and 300mm in horizontal direction (rough-positioning arch motion).

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

**Note 4:** Class 10 (0.1µm) equivalent to FED-STD-209D

**Note 5:** ESD (ElectroStatic Discharge) prevention is an option. Please contact our distributor.

**Note 6:** The necessary intake amount varies depending on the use conditions and environment.

---

**Controller**

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

Note: The movement range can be limited by changing the positions of the X and Y axis mechanical stoppers. (The movement range is set to the maximum at the time of shipment.)

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 detailed information.

Our robot manuals (installation manuals) can be downloaded from our website at the address below:

https://global.yamaha-motor.com/business/robot/

---

**YK600XGLC**

- **Connector for user wiring**
  - (No. 1 to 10 usable, cable clamp size: φ13.1 to 15)
  - Cover with the caps provided when not used.

- **User tubing 1** (φ4 black)
  - Insert the plug provided when not used.

- **User tubing 2** (φ4 red)
  - User tubing 3 (φ4 blue)
  - User tubing 4 (φ4 white)

- **R32 (Min. cable bending radius)**: Do not move the cable.

- **Maximum 170 during arm rotation**

- **R600**

- **Machine Harness**

- **Z-axis belows**

- **Z-axis upper end mechanical stopper position**

- **Z-axis lower end mechanical stopper position**

- **4.43 x 0.5 Depth 5**

- **As this hole is intended for the wiring/tubing clamp, do not attach a large load to it.**

- **No. 1 to 10 usable, cable clamp size: φ13.1 to 15**

- **Cover with the caps provided when not used.**

- **The arm may be in contact with the machine harness in an area inside from the inner limit of this area.**

- **The arm may be in contact with the machine harness in an area inside from the inner limit of this area.**

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

---

**Controller**

- **RCX340** ▶ 544
YK600XC

Clean type: Medium type

- Arm length 600mm
- Maximum payload 10kg

### Ordering method

<table>
<thead>
<tr>
<th>YK600XC</th>
<th>RCX340-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
</tr>
<tr>
<td>Z axis stroke</td>
<td></td>
</tr>
<tr>
<td>Cable length</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Number of controllable axes</td>
<td></td>
</tr>
<tr>
<td>Safety standard</td>
<td></td>
</tr>
<tr>
<td>(OP.A)</td>
<td></td>
</tr>
<tr>
<td>(OP.B)</td>
<td></td>
</tr>
<tr>
<td>(OP.C)</td>
<td></td>
</tr>
<tr>
<td>(OP.D)</td>
<td></td>
</tr>
<tr>
<td>(OP.E)</td>
<td></td>
</tr>
<tr>
<td>Absolute battery</td>
<td></td>
</tr>
</tbody>
</table>

Specify various controller setting items. RCX340

### 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>350</td>
<td>250</td>
<td>200</td>
<td>305</td>
</tr>
<tr>
<td>Rotation angle (°)</td>
<td>+/−120</td>
<td>+/−145</td>
<td></td>
<td>+/−180</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>400</td>
<td>200</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm) (R: °)</td>
<td>+/-0.02</td>
<td>+/-0.01</td>
<td>+/-0.005</td>
<td></td>
</tr>
<tr>
<td>Maximum speed (XYZ: m/sec) (R: °/sec)</td>
<td>5.6</td>
<td>1.7</td>
<td>876</td>
<td></td>
</tr>
</tbody>
</table>

- Maximum payload (kg): 10
- Standard cycle time: with 2kg payload (sec): 10
- 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): 33
- 5. Degree of cleanliness: CLASS 10
- 6. Intake air (Nl/min): 60

Note 1: This is the value at a constant ambient temperature. (X, Y axes)
Note 2: The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
Note 3: Per 1cf (0.1 µm base), when suction blower is used.
Note 4: The necessary intake amount varies depending on the use conditions and environment.

### Controller

<table>
<thead>
<tr>
<th>Controller</th>
<th>RCX340</th>
<th>Power capacity (VA)</th>
<th>1500</th>
<th>Operation method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Programming / I/O point trace / Remote command / Operation using RS-232C communication</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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:

Our robot manuals (installation manuals) can be downloaded from our website at the address below:

https://global.yamaha-motor.com/business/robot/
YK700XC

### 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>350</td>
<td>350</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Rotation angle (˚)</td>
<td>+120</td>
<td>+145</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>800</td>
<td>400</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm) (R: ˚)</td>
<td>+/-0.02</td>
<td>+/-0.01</td>
<td>+/-0.005</td>
<td></td>
</tr>
<tr>
<td>Maximum speed (XYZ: m/sec) (R: /sec)</td>
<td>6.7</td>
<td>1.7</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>20</td>
<td>57</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Standard cycle time: with 2kg payload (sec)</td>
<td>0.57</td>
<td>147</td>
<td>147</td>
<td>123</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>800</td>
<td>400</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm) (R: ˚)</td>
<td>+/-0.02</td>
<td>+/-0.01</td>
<td>+/-0.005</td>
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</tr>
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<td>Maximum speed (XYZ: m/sec) (R: /sec)</td>
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<td>147</td>
<td>123</td>
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<tr>
<td>AC servo motor output (W)</td>
<td>800</td>
<td>400</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm) (R: ˚)</td>
<td>+/-0.02</td>
<td>+/-0.01</td>
<td>+/-0.005</td>
<td></td>
</tr>
<tr>
<td>Maximum speed (XYZ: m/sec) (R: /sec)</td>
<td>6.7</td>
<td>1.7</td>
<td>600</td>
<td></td>
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<td>20</td>
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<td>147</td>
<td>147</td>
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</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>800</td>
<td>400</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm) (R: ˚)</td>
<td>+/-0.02</td>
<td>+/-0.01</td>
<td>+/-0.005</td>
<td></td>
</tr>
<tr>
<td>Maximum speed (XYZ: m/sec) (R: /sec)</td>
<td>6.7</td>
<td>1.7</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>20</td>
<td>57</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Standard cycle time: with 2kg payload (sec)</td>
<td>0.57</td>
<td>147</td>
<td>147</td>
<td>123</td>
</tr>
</tbody>
</table>

### Controller

- **Controller**: RCX340
- **Power capacity (VA)**: 2000
- **Operation method**:
  - Programming
  - I/O point trace
  - Remote command
  - Operation using RS-232C communication

### Notes

1. This is the value at a constant ambient temperature. (X,Y axes)
2. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
3. Per 1cf (0.1 µm base), when suction blower is used.
4. The necessary intake amount varies depending on the use conditions and environment.

---

**YK700XC**

- **Ordering method**
- **Model**: YK700XC
- **Controller**: RCX340

**Note**: For details about tubing work, refer to the User’s Manual.
### YK800XC

**Clean type: Large type**

- **Arm length**: 800mm
- **Maximum payload**: 20kg

#### Ordering method

**Model**

- YK800XC
- YK800XC-1

**Cable length**

- 10L: 10m
- 3L: 3.5m
- 5L: 5m

**Controller**

- RCX340

#### 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>450</td>
<td>300</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Rotation angle (°)</td>
<td>+/-120</td>
<td>+/-145</td>
<td></td>
<td>+/-180</td>
</tr>
<tr>
<td>AC servo motor output (W)</td>
<td>800</td>
<td>400</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Repeatability (XYZ: mm) (R: °)</td>
<td>+/-0.02</td>
<td>+/-0.01</td>
<td>+/-0.005</td>
<td></td>
</tr>
<tr>
<td>Maximum speed (XYZ: m/sec) (R: °/sec)</td>
<td>7.3</td>
<td>1.7</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Maximum payload (kg)</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard cycle time: with 2kg payload (sec)</td>
<td>0.2 x 20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User tubing (Outer diameter)</td>
<td>ø6 x 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel limit</td>
<td>1. Soft limit, 2. Mechanical stopper (X, Y, Z axes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robot cable length (m)</td>
<td>Standard: 3.5</td>
<td>Option: 5, 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree of cleanliness</td>
<td>CLASS 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intake air (N/min)</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**: For details about tubing work, refer to the User’s Manual.

#### Controller

- **Controller**: RCX340
- **Power capacity (VA)**: 2000
- **Operation method**: 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. Our robot manuals (installation manuals) can be downloaded from our website at the address below:

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### Diagram

- **YK800XC**
  - User tubes 1 (ø6 Black)
  - User tubes 2 (ø6 Red)
  - User tubes 3 (ø6 Blue)
  - D-sub connector for user wiring (Adapted to No.1 to 20)
  - M12 x 1.75 Depth 10
  - R27 (Min. cable bending radius)
  - Do not move the cable.
  - Joint (Note) (ø12)
  - User tubes 1 (ø6 Black)
  - User tubes 2 (ø6 Red)
  - User tubes 3 (ø6 Blue)
  - M4 grounding terminal
  - D-sub connector for user wiring (Adapted to No.1 to 20)
  - Note: For details about tubing work, refer to the User’s Manual.
YK1000XC

Clean type: Large type

Arm length 1000mm
Maximum payload 20kg

Ordering method

YK1000XC
RCX340-4

Specify various controller setting items. RCX340 P.544

Basic specifications

<table>
<thead>
<tr>
<th>X axis</th>
<th>Y axis</th>
<th>Z axis</th>
<th>R axis</th>
</tr>
</thead>
<tbody>
<tr>
<td>550</td>
<td>450</td>
<td>200</td>
<td>400</td>
</tr>
</tbody>
</table>

Axis specifications

Arm length (mm): 550
Rotation angle (°): +/-120
AC servo motor output (W): 800
Repeatability (XYZ: mm) (R: °): +/-0.02
Maximum speed (XYZ: m/sec) (R: °/sec): 8.0
Maximum payload (kg): 20

Other specifications

Standard cycle time: with 2kg payload (sec): 0.60
R-axis tolerable moment of inertia (kgm²): 0.32
User tubing (Outer diameter): ø6 × 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): 59
Degree of cleanliness: CLASS 10
Intake air (Nm³/min): 80

Controller

Controller: RCX340
Power capacity (VA): 2000
Operation method:
- 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.)
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Note 1. This is the value at a constant ambient temperature. (X,Y axes)
Note 2. The acceleration coefficient is set automatically in accordance with the tip weight and R-axis moment of inertia settings.
Note 3. Per 1cf (0.1 µm base), when suction blower is used.
Note 4. The necessary intake amount varies depending on the use conditions and environment.

User tubes:
- User tubes 1 (ø6 Black)
- User tubes 2 (ø6 Red)
- User tubes 3 (ø6 Blue)

D-sub connector for user wiring
(Adapted to No.1 to 20)

M12 x 1.75 Depth 10
Joint (Note) (ø12)

R27 (Min. cable bending radius)
Do not move the cable.

Note: For details about tubing work, refer to the User’s Manual.