**Ordering method**

**YK500XGL - 150**

<table>
<thead>
<tr>
<th>Model</th>
<th>specifications</th>
<th>AX</th>
<th>YX</th>
<th>ZX</th>
<th>RX</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arm length</td>
<td>X-axis 250 mm</td>
<td>Y-axis 250 mm</td>
<td>Z-axis 150 mm</td>
<td>R-axis 360°</td>
</tr>
<tr>
<td></td>
<td>AC servo motor output</td>
<td>200 W</td>
<td>150 W</td>
<td>50 W</td>
<td>100 W</td>
</tr>
<tr>
<td></td>
<td>Deceleration</td>
<td>Transmission</td>
<td>Motor to speed reducer</td>
<td>Speed reducer to output</td>
<td>Direct-coupled</td>
</tr>
<tr>
<td></td>
<td>Repeatability</td>
<td>+/-0.001 mm</td>
<td>+/-0.001 mm</td>
<td>+/-0.004°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum speed</td>
<td>5.1 m/s</td>
<td>1.1 m/s</td>
<td>10.2 m/s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum payload</td>
<td>5 kg (Standard specification), 4 kg (Option specifications)<strong>Note 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard cycle time:</td>
<td>0.48 sec</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>R-axis tolerable moment of inertia<strong>Note 1</strong></td>
<td>0.05 kg·m² (0.5 kg·cm²)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User wiring</td>
<td>User tubing (Outer diameter)</td>
<td>0.2 sq × 10 wires</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User tubing</td>
<td>4 blue</td>
<td>4 red</td>
<td>4 black</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Robot cable length</td>
<td>Standard: 3.5 m</td>
<td>Option: 5 m, 10 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weight</td>
<td>21 kg</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Specifications**

- **Axes specifications**
- **Motor rating**
- **Deceleration**
  - Transmission method: Direct-coupled
- **Repeatability**
  - +/-0.001 mm
- **Maximum speed**
  - 5.1 m/s
- **Maximum payload**
  - 5 kg (Standard specification), 4 kg (Option specifications)**Note 1**
- **Standard cycle time**
  - with 2kg payload: 0.48 sec
- **R-axis tolerable moment of inertia**
  - 0.05 kg·m² (0.5 kg·cm²)
- **User wiring**
  - 0.2 sq × 10 wires
- **Travel limit**
  - 1. Soft limit, 2. Mechanical stopper (X, Y, Z axis)
- **Robot cable length**
  - Standard: 3.5 m Option: 5 m, 10 m
- **Weight**
  - 21 kg

**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 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.

**Specifying various controller setting items. RCX340 [P.566]**

**Controller Information**

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

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**YK500XGL**

- User tubing 1 (4 blue)
- User tubing 2 (4 red)
- User tubing 3 (4 black)
- D-sub connector for user wiring (No. 1 to 10 usable)
- D-sub connector for user wiring (No. 11 to 10 usable)
- 4-M3 x 0.5 through-hole
- Machine harness
- Maximum 315 during arm rotation
- Absolute battery
- Remote command / I/O point trace / Using RS-232C communication

**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 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.

**Specifying various controller setting items. RCX340 [P.566]**

**Controller Information**

- 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 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.

**Specifying various controller setting items. RCX340 [P.566]**
YK500XGL Tool flange mount type

User tubing 1 (ϕ4 black)
User tubing 2 (ϕ4 red)
User tubing 3 (ϕ4 blue)

D-sub connector for user wiring (No. 1 to 10 usable)

If the robot enters the inside of corners of R200 and R250, the arm may be in contact with the machine harness. So, do not perform such motions.

Note that the robot cannot be used at a position where the base flange or robot cable interferes with the tool flange in the working envelope shown above.

• X-axis mechanical stopper position : 142°
• Y-axis mechanical stopper position : 146°

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

Tapped hole for user wiring 6-M3 × 0.5 Depth 6
The weight of the tool attached here should be added to the tip mass.

4-M3 × 0.5 through-hole (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.

4-M3 × 0.5 through-hole
Hollow diameter: ϕ11

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

Detailed drawing D

View of E

Option:
User wiring/tubing through spline type

View of F

If the robot enters the inside of corners of R200 and R250, the arm may be in contact with the machine harness. So, do not perform such motions.

Note that the robot cannot be used at a position where the base flange or robot cable interferes with the tool flange in the working envelope shown above.

• X-axis mechanical stopper position : 142°
• Y-axis mechanical stopper position : 146°

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4-M3 × 0.5 through-hole
Hollow diameter: ϕ11